DMA Form 2

DEFENSE MINERALS ADMINISTRATION
Status Change Notice

DMA Docket No. 2185

To: Reports and Records Branch

From: ~~Tungsten Branch~~

Date: ~~November 5, 1951~~

The following action has been taken this date on the above Controlled Document.

Forwarded to Field Team Region II Through Coord. Comm

Type of request changed to:

Denied ☐ Withdrawn ☐

Approved in amount of $

Other action, specify:

2185

See Map Cabinet.

Packed to archives

DMA Form 2

DEFENSE MINERALS ADMINISTRATION
Status Change Notice

DMA Docket No. 2185

To: Reports and Records Branch

From: **Ferro-Alloys Branch**

Date: **November 2, 1951**

The following action has been taken this date on the above Controlled Document.

Forwarded to **Field Team, Region II** **Through: Director, Supply Division**

Type of request changed to:

Denied ☐ Withdrawn ☐

Approved in amount of $

Other action, specify:

DMA Form 1

DEFENSE MINERALS ADMINISTRATION
Control Slip

CONTROLLED DOCUMENT

DMA Docket No. 2185

DO NOT DETACH THIS SLIP

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

This document has been recorded as

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

Routing Slip

To:	F. T. Region II	Date	11/2/51
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DMA Form 1

DEFENSE MINERALS ADMINISTRATION
Control Slip Tungsten.

CONTROLLED DOCUMENT

DMA Docket No. 2185

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This document has been recorded as

EXPLORATION PROJECT

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

Routing Slip

To:	Ferro-Alloys Br.	Date	10/29/51
To:	P.E. Div.	Date	11/30/51
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DO NOT DETACH

CONTROLLED DOCUMENT

DMA Form 2

DEFENSE MINERALS ADMINISTRATION
Status Change Notice

DMA Docket No. 2185

To: Reports and Records Branch

From: Tungsten Branch

Date: November 5, 1951

The following action has been taken this date on the above Controlled Document.

Forwarded to Field Team Region II Through Coord. Comm.

Type of request changed to:

Denied ☐ Withdrawn ☐

Approved in amount of $

Other action, specify:

November 13, 1967

Mr. C. W. Turner
P. O. Box 568
Arcadia, California 91006

Dear Mr. Turner:

In response to your letter of October 31, 1967, I have had a search made of archives of the Office of Minerals Exploration (successor to DMA and DMEA agencies). The Golden Anchor Mine docket (DMA No. 2185X) has been found and in it a copy of the report by J. D. Forrester on the Golden Anchor mine. This report is enclosed herewith, in conformance to your request.

I have checked Forrester's report and believe it is complete except for his Map No. 1, "Ownership claim map," at scale of 1 to 400, and his Map No. 5, "Sherman Howe Workings," at scale of 1 to 50. However, I found a copy of the ownership map in the application you submitted, so I removed a copy of the map and have included it in the packet that is being returned to you. I could not find the Sherman Howe map and suspect it never was included with the application. The geologic map is barely readable, as it is a reduced print of the original colored map. I recall seeing the original of this map on the wall of your mine office. I hope you still have the original as it is a valuable map.

It has been a long time since we wincheed our way through the snow to the Golden Anchor mine. I often think of the trip because I remember how hungry we were when we arrived at the mine and that Jim Quinlan could not eat the delicious steak you had brought with you because it was Friday. Jim displayed a fine example of will power, but, as I recall, his steak tasted pretty good.

I wish you every success in your efforts to reactivate the Golden Anchor.

Sincerely yours,

Thor H. Kiilsgaard

Thor H. Kiilsgaard, Chief
Branch of Resources Research

Enclosures

cc:
Director's reading — OME files ✓
Division — BRR Chron.
Economic Geology — BRR Files

THKiilsgaard:jeh

BUSINESS PHONE:
Los Angeles 681-6943
Pasadena 793-8161

RES. PHONE 359-8565

C. W. TURNER
P. O. BOX 568
ARCADIA, CALIFORNIA 91006

October 31, 1967

Mr. Thor Kiilsgaard
Chief of Resources Research Branch
U. S. Geological Survey
Room 4230, G.S.A. Building
18th & R Streets, N.W.
Washington, D. C.

Dear Mr. Kiilsgaard:

Back in the early '50s you were headquartered in Spokane, Washington and engaged in mine evaluation work under some particular governmental program which was then being actively pushed in connection with the Korean War effort.

I think it was during late November or early December 1950 that you and an associate made an evaluation trip into the Golden Anchor Mine, Marshall Lake Mining District, Idaho County, Idaho.

In connection with this work, the geological study and report of Dr. J. D. Forrester made by him during the late 1930s - early 1940s was used quite extensively.

I have never been able to find this report since that time. As you no doubt don't remember, the results of your findings were forwarded to Washington, D.C. and I spent considerable futile time and money back there in an effort to pull the negative classification back into neutral ground.

I'm quite sure this Forrester report went back to Washington along with your evaluation results.

Do you know of any way to determine whether this Forrester report is still in existence back there, perhaps in some old long forgotten archives? It would be of great help to me in my present efforts to again place the property in a position to produce.

Please don't misunderstand...I don't ask that you personally try to dig up this long lost document. But you may know or have some good ideas of where to look for it.

I've contacted Dr. Forrester at Tucson but he has no duplicate. Suggested I try University of Idaho. They claim they have no duplicate but I think in this case it's an excuse for not wanting to go digging into old ancient archives.

Much water has gone over the dam since you were at the Anchor. Life seems to have treated you fairly good and may it continue to do so. As for myself, I can't complain, as long as I got that next round to put in and the hope and stimulation that goes along with it.

Yours very truly,

C. W. Turner

CWT:ed

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W 286-68V5417		6	S	02-54-30-6-2	02-54-30-7-1	SAN	RCS/PRM		U	1965	BOX	152-157	576 1
W 286-68X5417		1	S	02-54-02-5-4	02-54-32-1-1	SAN	RCS/PRC		U	1967	BOX	160	576 1
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W 286-68Z5417		5	S	02-54-38-4-2	02-54-38-5-1	SAN	RCS/PRC/B		U	1966	BOX	173-177	576 1
W 286-68Z5417	A	4	S	02-54-32-4-1	02-54-32-4-4	SAN	RCS/PRC		U	1964	BOX	178-181	576 1
W 286-68Z5417	B	1	S	02-54-02-2-4	02-54-32-4-5	SAN	RCS/FPC		U	1965	BOX	182	576 1
W 286-68Z5417	C	6	S	02-54-32-4-6	02-54-32-5-5	SAN	RCS/FPC		U	1967	BOX	183-188	576 1
W 286-68Z5417	E	1	S	02-54-34-3-4	02-54-34-2-1	SAN	RCS/TRG9/3C		C80	1962	BOX	205	N76 1
W 286-68Z5417	F	10	S	02-54-34-2-2	02-54-34-3-5	SAN	RCS/ADM6/5		U	1967	BOX	206-215	576 1
W 286-68Z5417	G	5	S	02-54-34-3-6	02-54-34-4-4	SAN	RCS/PRM7/4		U	1964	BOX	216-220	576 1
W 286-68Z5417	H	5	S	02-54-34-4-5	02-54-34-5-3	SAN	RCS/LGP/A		U	1968	BOX	221-225	576 1
W 286-68Z5417	I	27	S	02-54-34-5-4	02-54-36-3-3	SAN	RCS/LGP		U	1967	BOX	226-252	576 1
W 286-68Z5417	K	39	S	02-54-36-4-1	02-54-38-3-6	SAN	RCS/PRM		U	1967	BOX	256-296	576 1
W 286-68Z5417	L	1	S	02-54-02-5-4	02-54-38-4-1	SAN	RCS/AGR		U	1966	BOX	297	576 1
W 286-68Z5417	M	6		02-54-22-7-0		SAN	RCS/FIS14/5		U	1968	BOX	298-303	576 1
W 286-69A0468		38		08-74-50-4-0		RAN	RCS/PRC		U	1954-65	BOX	1-73	576 1
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FILE COPY
SURNAME:

Mittendorf

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

May 19, 1952

Memorandum

To: Mr. Robert R. Rose, Jr.
Assistant Secretary

From: C. O. Mittendorf
Acting Administrator

Subject: C. W. Turner, docket DMA-2185X - Golden Anchor Mines, Idaho County, Idaho

The purpose of this memorandum is to record a brief summary of the actions taken on the applicant's request and to summarize discussions between the applicant and myself during the period April 29 to May 13.

Statement of the Current Problem

Mr. Turner applied for financial assistance to undertake an exploration project for tungsten, estimated to cost $376,513.40, of which the Government would contribute 75 percent. After a very thorough investigation of the case, the request was denied on February 8, 1952. The notice of denial reached the applicant at a time when he was in the midst of raising finances for the reactivation of his mine. The applicant has frankly admitted that he intended to prepare a prospectus, which I presume must have approval of the Corporation Commission of the State of California and the Securities and Exchange Commission. The prospectus, I understand, will be used for a stock-selling campaign. The applicant has submitted that he is obliged to reveal the fact that his application for an exploration contract has been denied, and by so doing his financing program will be ruined. The applicant, therefore, has requested that I furnish him an additional letter drafted in a manner so as to nullify our previous denial of his application.

On May 1, 1952 I furnished the applicant a letter advising him that DMEA would consider any additional information he wished to submit, but I would not recite that we had withdrawn our denial of February 8. My letter of May 1 attempted to compromise the issue in that it did not make any reference to a previous denial, as is customarily done in all similar cases. Mr. Turner has pleaded for a written statement on my part that his case has been reinstated, and I have refused to comply with his request.

Brief Summary of the Case

1. On May 28, 1951 the applicant filed form MF-100 for the purpose of obtaining a mine serialization number to be used by active mines for obtaining controlled materials. On July 20, 1951 the Requirements Division of the DMA advised the applicant that they could not take action on his request for the reason that the mine was not in operation. He was advised to resubmit his application when mining operations were resumed and priority assistance was required.

2. On August 17, 1951 the DMA advised the applicant that the Government could not provide funds for milling facilities unless an adequate ore reserve of critical minerals was demonstrated. The letter stated that the information available about the district in which his mine was located did not suggest that sufficient tungsten ore was available to justify Government funds for milling facilities. The applicant was further informed that if adequate reserves of tungsten ore could be demonstrated at the Anchor Mine, financial assistance for his milling program might be obtained on a direct loan basis through the RFC. Our docket does not contain a copy of the letter to which the above reply was made; however, it is known that the applicant contacted the Regional Office, who referred the question of the probability of granting financial assistance for a mill expansion program to the Washington office.

3. On October 24, 1951 the applicant filed form MF-103 requesting approval of an exploration project estimated to cost $376,513.40, to explore for tungsten.

4. The Tungsten Branch of the DMA reviewed the exploration application in cooperation with the commodity specialists of the U.S. Geological Survey and the Bureau of Mines, who joined in the recommendation that the case should be sent to the Regional Office for field examination. On November 7 the docket was referred to the Field with specific instructions to verify the claims made in the applicant's engineer's (Dykes) report, and to carefully lamp and examine the mine dumps, tungsten-bearing adits for possible ore occurrences, tailing dumps of former operations, examine stope fills underground, and to revamp the proposal submitted by the applicant and recommend an alternative program, giving the estimated cost figures.

5. The Field Team arranged with the applicant to undertake an examination of his properties commencing November 23, 1951. A formal report of the findings made during the examination was forwarded to Washington on January 11, 1952. The conclusions reached in the Field Team report were that the tungsten content of the veins was insignificant and the application should be denied.

6. The commodity specialists in the USGS and USBM reviewed the Field Team report and concurred with their recommendations that the application should be denied. The Chief of the Ferro-Alloys Branch of the DMEA reviewed all of the recommendations made and prepared his memorandum setting forth the reasons why the application should be denied. The Operating Committee reviewed the case, and each member agreed that the applicant should be advised that his application was denied. On February 8 I signed such a letter of denial, after it had first been surnamed by 5 professional men of the Bureau and Survey, who had previously reviewed the case.

7. On January 30, 1952, while the DMEA was considering the exploration application, the applicant's representative again contacted DMPA for a direct loan to revamp an existing milling plant which was designed for gold and silver ores. On February 4, 1952 DMPA requested a copy of our Field Team report for the purpose of arriving at a decision. The Chief of the Tungsten Division of DMPA informs me that he explained to the applicant's representative that there would be absolutely no chance of his Division recommending approval of the mill expansion program. The applicant thereupon decided not to file the formal application for the loan, thus avoiding having a denial of his request on record.

General Description of the Case

The Golden Anchor is a gold mine which was operated successfully from 1935 until 1942, when the mine closed due to limitation order 208. During that period of operation dividends of $1.20 per share were paid on 40,000 shares of stock. The present ore reserves of the mine are estimated at about 72,000 tons, with a gross value of $13.65 per ton in gold. A quick examination of their balance sheet indicates that mining costs were $13.60 during 1941 and $17.31 per ton for the four-month period that the mine operated during 1942. If the $13.60 mining cost for 1941 is adjusted according to the Wholesale Commodity Indices prevailing, the cost of present-day operations would be about $21 per ton. If we assume that the $376,000 requested for the exploration project is a reliable estimate of the cost necessary to place the mine in production, then the amortization charge per ton of ore reserves would be about $5.20 per ton, or a total operating cost of $26 per ton to mine gold ores having a gross value of $13.65 per ton.

Because of these adverse economic conditions, the mine has been unable to operate successfully since termination of World War II.

It has long been known that scattered occurrences of scheelite are present as grains along the hanging wall or the footwall of the gold veins; however, no attempt was made to recover scheelite during the former mining operations.

As of April 30, 1952, a total of 503 applications for exploration assistance have been denied. Many of these denials concerned gold and silver mines where the applicant endeavored to establish the existence of sufficient quantities of copper, lead, zinc, or tungsten in order to qualify for financial assistance under the Defense Production Act. Many of those cases were similar to the Golden Anchor case, but a great number were denied on the basis of the established production record of the mine and our knowledge of the ore occurrences clearly indicated that no significant quantity of critical materials could be expected. The Golden Anchor case, however, received very careful consideration by the Washington office and a thorough field examination by the Regional office at Spokane, Washington before a decision of denial was made.

Summary of Recent Discussions with Mr. Turner

Mr. Turner first called on me on April 29, 1952. He had received our letter of denial dated February 8, 1952 and thereafter proceeded to Spokane to discuss the matter with the Executive Officer of the Field Team. Apparently the main point of discussion was the wide difference of opinion between the Government engineers and Turner's consultant, Mr. Dykes, who had prepared a rebuttal to the Field Team's conclusions which were briefly summarized in letter from them to the applicant. There is indication that members of the Field Team did agree that the most reliable way of determining the scheelite content of the Golden Anchor gold ores would be by conducting a bulk sampling program on a mill test scale. However, by so agreeing, there was no implication made that the Field Team was leaning toward a possible admission that their former conclusions might be wrong. It was their acknowledgment of a practical sampling method which would prove that the applicant's estimation of the scheelite content of his ores was too optimistic. Mr. Turner proposes to conduct such a test at his own expense, but as a prerequisite, he desires that our denial of his exploration application be abrogated.

I have endeavored to point out all the reasons why we cannot submit to his request, and have told him that our denial is of official record and appears in the minutes of the Operating Committee, which minutes have received wide distribution. I have explained to him that nine engineers and geologists have carefully investigated his application and each has recommended an unequivocal denial, based on numerous

individual memoranda which are also of official record. I have explained to Mr. Turner that, since we ourselves did not make a conditional denial based on submission of additional information, I had no ethical grounds for considering the case as being in abeyance, nor any justification for its reinstatement.

Members of the Field Team were in Washington during the time of Turner's visit and I had the opportunity to again discuss the case with them. I was informed that the Field Team endeavored to reconcile Turner to the fact that his mine is a gold mine and that it had little hope of producing significant quantities of tungsten. It was after my discussions with the Field Team that my letter of May 1, 1952 was prepared and handed to Mr. Turner. He discussed the letter at length in an attempt to persuade me to redraft it in language designed by himself. I insisted that I had gone as far as I could and that I had, in fact, ignored the advice of my General Counsel, who was of the opinion that my letter should contain a reference that his case had been denied, which I had intentionally omitted.

Mr. Turner returned on May 13 and proposed an alternative method of solving his financial problem. He became upset when he learned that I considered my letter of May 1 to be an official action and that copies of it had been distributed in accordance with our normal procedures. He then endeavored to persuade me to furnish him with an additional letter which would say that his application was obviously not of an exploratory nature, and that I was therefore transmitting the entire docket to DMPA for their consideration.

He apparently had learned that the Eureka Consolidated case was first considered as an exploration project, was denied as such, and referred to DMPA for their consideration on a production loan basis. I explained in detail to Mr. Turner that there was no similarity between his case and Eureka Consolidated, because the latter was considered to have substantial ore reserves of lead and zinc and had already been granted a procurement contract by the General Services Administration. I explained further that the Eureka case was handled by the DMA at a time when all types of aid under the Defense Production Act were centralized, and that after consideration of the case we merely transferred it within our organization from the Exploration Branch to the Loan Branch. I explained that it was only a coincidence that the Eureka case was now in another agency, which occurred as a result of segregating exploration cases and loan cases when the DMEA and DMPA were formed. I explained why his case was dissimilar and the reasons why I had no cause to take the course of action he wished.

Mr. Turner argued that I did have cause to refer the case to DMPA, since it would be obvious, after he obtained additional information, that his project would clearly be beyond the exploratory phase. I told him that I had absolutely no reason to believe that statement, because at this point no one knew when and how he would undertake to get additional information, nor could anyone predict the results. I suggested that Mr. Turner contact the DMEA to see if they wished to consider his application within the scope of their delegated authority, and provided they did, that the proper procedure would be to have DMPA formally request the file from DMEA. (It was after I made this suggestion to Mr. Turner that I learned that DMEA had already reviewed our field report and discouraged Turner's representative to pursue aid from them as mentioned previously herein.)

In leaving, Mr. Turner indicated that the entire matter was of such vital importance to him that he intended to carry it back to the Secretary.

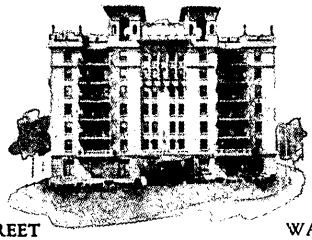
C. O. Mittendorf (fw)

C. O. MITTENDORF

COMittendorf/fw/pa
5/20/52

cc: Secretary's Reading File
Admr's Reading File, DMEA
C. O. Mittendorf, DMEA
Mails & Files, DMEA
G. C. Selfridge, DMEA
D. M. Lemmon, USGS
R. W. Geehan, USBM
Field Team, Reg. II (2)

Anchor Vignes



HOTEL 2400

SIXTEENTH STREET WASHINGTON 9, D. C.

H. E. PERPER, *General Manager*

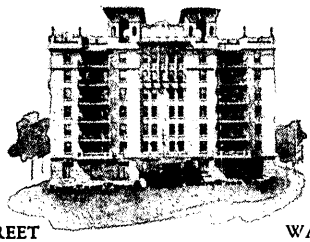
May 3, 1952

Mr. C. O. Mittendorf
New Interior Bldg
Rm D 6.

Dear Mr. Mittendorf

I'm leaving Washington today for Maplewood, New Jersey. I intend to return here next Monday week, in the interim, I'm going to catch up on some pleasant social affairs that have been long neglected.

Before leaving I want to let you know I appreciate the courtesy, patience, and understanding, you have extended to me this week, I know that it hasn't been an easy job at times. I know you wish to assist in anything constructive

HOTEL  2400

SIXTEENTH STREET WASHINGTON 9, D. C.

H. E. PERPER, *General Manager*

2

within the limits of your responsibilities and I certainly admire your attitude.

Late yesterday a thought came to me, which at this writing, appears to be a simple solution to my mission here. If it holds water untill I return I would like to get your slant on it.

All success to you

Sincerely

D. W. Turner

President, Anchor Mines, Inc

ANCHOR MINES, INC.

530 WEST SIXTH STREET • LOS ANGELES 14, CALIFORNIA

OWNERS AND OPERATORS
GOLDEN ANCHOR MINE
IDAHO COUNTY, IDAHO

May 1, 1952

United States Department
of the Interior
Defense Minerals Administration
Washington 25, D. C.

Attention: C. O. Mittendorf
Acting Administrator
Defense Minerals Exploration Administration

Re: Docket No. DMA 2185X - Tungsten
Golden Anchor ~~Mine~~
Idaho County, Idaho

Dear Mr. Mittendorf:

Thank you for your letter of February 8th.

Since its receipt, the management of this corporation has given thorough consideration to its present position and has reappraised its future program. As a result, we herewith respectfully request reinstatement and reconsideration of our above-numbered application. In this connection, we enclose herewith copy of a letter dated February 20, 1952, addressed to the writer, signed by Mr. Leland H. Dykes. Mr. Dykes is the independent consulting geologist whose report accompanies our application.

As a means of resolving the wide differences of geological opinion that now exists concerning the commercial tungsten potential of the ore bodies of the Golden Anchor Mine, we are inclined to regard the suggestion which Mr. Dykes makes in the last paragraph of his letter with favor. The success of the program he suggests, as you will agree, depends entirely upon retaining an independent consulting geologist to do the job whose qualifications are satisfactory to all concerned. As an initial step, we have therefore discussed this plan with Mr. Weissenborn and Mr. Kiilsgaard of your Spokane office.

They mentioned that the Field Team report stated a more reliable way of determining the scheelite content of such a deposit as the Golden Anchor would be by running a mill test. They agree that a bulk sampling program, conducted under the direction of a competent engineer, such as J. D. Forrester, would be more informative.

It is therefore our present intention to retain Mr. Forrester, provided your department is also satisfied with this selection, to carry out this program during the coming summer and to implement his efforts in obtaining the facts by making available to him the results of mill run or bulk sampling taken under his direction.

As a prerequisite, we would greatly appreciate it if you would therefore reinstate the above-numbered application on your active file and reconsider it when the results of the above work have been made available to you.

Thanking you in anticipation of your courtesy and expecting your early reply, I am

Yours truly,

C. W. Turner, President

FILE COPY
SURNAME:

Selfridge

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

MAY 1 1952

Mr. C. W. Turner
530 West Sixth Street
Los Angeles 14, California

Re: Docket No. DMA 2185X - Tungsten
Golden Anchor Mine
Idaho County, Idaho

Dear Mr. Turner:

This is in confirmation of our discussion of April 29 with regard to your letter directed to me which transmitted a letter by Mr. Leland H. Dykes and which suggested a proposed program for the coming summer at the Golden Anchor Mine, to be undertaken by you, to resolve the wide difference of geological opinion that now exists concerning the commercial tungsten potential of the property.

As mentioned to you during our conversation, the Defense Minerals Exploration Administration will welcome any additional information which you wish to submit and will give it due consideration along with that which you have already submitted in the present application.

Sincerely yours,

C. O. Mittendorf (fw)

Acting Administrator
Defense Minerals Exploration
Administration

N.S. in R. & R.

GCSelfridge:ls
5/1/52

cc: Admn. Reading File
Docket
G. C. Selfridge
Field Team, Region 2
D. M. Lemmon, USGS
R. W. Geehan, USBM

February 20, 1952

Mr. C. W. Turner
530 West Sixth Street
Los Angeles 14, California

Dear Mr. Turner:

I have given consideration to your letter of February 15, 1952, together with the copies of the letters from Mr. Thor H. Kiilsgaard dated January 11, 1952, and Mr. C. O. Mittemdorf dated February 8, 1952.

I would like to state that my conception of the present D.M.E. program is to help prove through financial assistance in exploration any meritorius indication of strategic material. The inherent nature of this program, then, is exploration and accordingly all geological deductions with regard to ore bodies during the primary stages of exploration must of necessity confine themselves within the scope of scientific speculation.

I was surprised to learn the decision of the field team with regard to the Golden Anchor mine. In considering this decision I wish to call attention to several apparent discrepancies between their report and known information covering the property.

In the Golden Anchor mine as a potential source of tungsten, we are not dealing with erratic ore bodies formed by the digestion of roof pendants in an igneous mass. The mineralization as observed follows the general vein pattern, which vein pattern is well-known and continuous. With this in mind we fall back to the primary question, "Is there sufficient evidence that tungsten mineralization will be found distributed through the Anchor vein system?".

Last August I made a field examination of the property and you have my report covering that examination. The striking feature observed was the occurrence of scheelite in the vein system at such points where gold values were low. I wish to call attention to the fact that this point was not used to establish the existence of large tungsten ore bodies, but that it justified exploration, with the finding of such bodies a

more than fair possibility. Sampling was undertaken to prove: (a) the existence of tungsten in workings now caved; (b) the existence of tungsten values within the Anchor vein where exposed.

In this connection I refer you to my report of September 10, Page 11, Chapter V, which reads as follows: "Sampling is intended to be indicative."..... "In sampling gob or back-fill, no accurate estimate of total value would be possible unless several tons were handled. Such samples as taken were to prove the presence of values only."..... At a point approximately 135' east of the cross-cut on the 600' level a near commercial scheelite concentrate was observed to be running through the lagging. Samples from various dumps were taken in order to estimate if it was worthwhile to open the caved portals and examine the ore in place. These samples also demonstrate the distribution of tungsten value throughout the vein system."..... "Any estimate of tonnage at present is problematical. Much of the workings is timbered and no inspection is possible with the exception that in many sections scheelite is observed that has worked down through the lagging."

It is well to consider that within the general knowledge of tungsten geology little is known of the exact mode of tungsten mineralization, other than it is associated with an igneous source rock, and bears a direct relation to structural features. In the case of the Anchor mine the Idaho batholith probably represents the source rock. Points of deposition follow the main vein factor. Throughout the Anchor mine workings and adjoining properties, scheelite can be seen in place as well as being found both in the back-fill and the waste dumps. It was upon these facts that I based my conclusion that the property justified systematic investigation and, therefore, our primary question is answered in the affirmative.

Considering the letter of Mr. Kiilsgaard and his enclosed sample list, it appears that the majority of the samples that were taken (if this is his entire sample list) covered a section of the Anchor vein that was considered of little value, namely, the area west of Station TB (given as Station 78 in assay report). I took one sample (No. 527) which showed 1.11 WO_3 content. This sample was just west of Station TB. This point was noted and the sample taken because it was one of the rare occurrences of scheelite associated with high grade gold values. The mineralite disclosed a spotty scheelite occurrence which rapidly diminished to the west. See page 8, Chapter IV (1) of my report as follows: "Minor sections were observed following this pattern along the Golden Anchor vein just west of the 600' level cross-cut".

We now come to the decision of the Committee that the property shows little or no tungsten and geologically does not justify further exploration. I am at a loss to understand this because of the following points:

1. There is considerable scheelite found in the dumps. This material came from the Golden Anchor vein system.

2. During the summer of 1951 the Sherman Howe property produced scheelite concentrate from a dump derived from the Golden Anchor vein west. From what I was informed by the operator this production was in excess of 1,500 pounds of 70% WO_3 concentrate. Judging from my personal observation of his concentrating methods, his recovery was not in excess of 30%.

3. As you have recently informed me, at the present time the same operator is mining commercial tungsten ore from gob-fill and ore in place from the underground working of the Golden Anchor vein west on Sherman Howe property.

4. In the Pritchett raise Golden Anchor 200' level, there exists economic ore in place (this occurrence was noted by C. W. Pritchett in 1928, and again is noted by S. H. Lorain in the Bureau of Mines Circular No. 7039 - 1930).

5. A good grade of tungsten ore was observed in the 400' level.

6. Tungsten ore is observed east of Station TB beyond the limit of sampling as undertaken by Mr. Kiilsgaard.

7. There is a large section of the Anchor workings that cannot be examined due to the caved and flooded condition. It is reasonable to assume that these sections will also bear tungsten mineralization.

I do not believe it possible for any man to say positively what will be or will not be beyond a certain point in mining. With the widespread indication of tungsten mineralization found, we can say that exploration for economic ore bodies is justified.

I also wish to state that due to the erratic nature of most tungsten mineralization, that hand-cut samples are at best indicative, and that accurate sampling should be done in mill run lots. This also applies to both gob and dump samples. You will note that throughout my report I stress this point. I

believe that as an additional constructive step the Golden Anchor property should be further examined and mill run samples taken.

Due to the statement of the field team that little or no tungsten mineralization is present, I wish to make the following suggestion. It would be well to have a third party examine the Golden Anchor workings and render an opinion. Either Mr. J. D. Forrester or Mr. Stuart Ingram would be satisfactory as they are both reputable men and have a working knowledge of the Golden Anchor property. In case neither of these two parties are available, I would recommend Mr. J. M. Hill, formerly of the U. S. Vanadium Corporation. Mr. Hill, to my mind, is one of our outstanding geologists, particularly on tungsten mineralization. It has been my good fortune to have worked for and with Mr. Hill since 1947, chiefly on tungsten problems.

Yours very truly,

lhd;ac

Leland H. Dykes

February 20, 1952

Mr. C. W. Turner
530 West Sixth Street
Los Angeles 14, California

Dear Mr. Turner:

I have given consideration to your letter of February 15, 1952, together with the copies of the letters from Mr. Thor H. Kiilsgaard dated January 11, 1952, and Mr. C. O. Mittemdorf dated February 8, 1952.

I would like to state that my conception of the present D.M.E. program is to help prove through financial assistance in exploration any meritorius indication of strategic material. The inherent nature of this program, then, is exploration and accordingly all geological deductions with regard to ore bodies during the primary stages of exploration must of necessity confine themselves within the scope of scientific speculation.

I was surprised to learn the decision of the field team with regard to the Golden Anchor mine. In considering this decision I wish to call attention to several apparent discrepancies between their report and known information covering the property.

In the Golden Anchor mine as a potential source of tungsten, we are not dealing with erratic ore bodies formed by the digestion of roof pendants in an igneous mass. The mineralization as observed follows the general vein pattern, which vein pattern is well-known and continuous. With this in mind we fall back to the primary question, "Is there sufficient evidence that tungsten mineralization will be found distributed through the Anchor vein system?".

Last August I made a field examination of the property and you have my report covering that examination. The striking feature observed was the occurrence of scheelite in the vein system at such points where gold values were low. I wish to call attention to the fact that this point was not used to establish the existence of large tungsten ore bodies, but that it justified exploration, with the finding of such bodies a

more than fair possibility. Sampling was undertaken to prove: (a) the existence of tungsten in workings now caved; (b) the existence of tungsten values within the Anchor vein where exposed.

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Yours very truly,

Leland H. Dykes

lhd;ac

Leland H. Dykes

United States Department
of the Interior
Defense Minerals Administration
Washington 25, D. C.

Attention: C. O. Mittendorf
Acting Administrator
Defense Minerals Exploration Administration

Re: Docket No. DMA 2185X - Tungsten
Golden Anchor Mine
Idaho County, Idaho

Dear Mr. Mittendorf:

Thank you for your letter of February 8th.

Since its receipt, the management of this corporation has given thorough consideration to its present position and has reappraised its future program. As a result, we herewith respectfully request reinstatement and reconsideration of our above-numbered application. In this connection, we enclose herewith copy of a letter dated February 20, 1952, addressed to the writer, signed by Mr. Leland H. Dykes. Mr. Dykes is the independent consulting geologist whose report accompanies our application.

As a means of resolving the wide differences of geological opinion that now exists concerning the commercial tungsten potential of the ore bodies of the Golden Anchor Mine, we are inclined to regard the suggestion which Mr. Dykes makes in the last paragraph of his letter with favor. The success of the program he suggests, as you will agree, depends entirely upon retaining an independent consulting geologist to do the job whose qualifications are satisfactory to all concerned. As an initial step, we have therefore discussed this plan with Mr. W. Weissenborn and Mr. K. Seegard of your Spokane office.

They mentioned that the Field Team report stated a more reliable way of determining the scheelite content of such a deposit as the Golden Anchor would be by running a mill test. They agree that a bulk sampling program, conducted under the direction of a competent engineer, such as J. D. Forrester, would be more informative.

It is therefore our present intention to retain Mr. Forrester, provided your department is also satisfied with this selection, to carry out this program during the coming summer and to implement his efforts in obtaining the facts by making available to him the results of mill run or bulk sampling taken under his direction.

As a prerequisite, we would greatly appreciate it if you would therefore reinstate the above-numbered application on your active file and reconsider it when the results of the above work have been made available to you.

Thanking you in anticipation of your courtesy and expecting your early reply, I am

Yours truly,

C. W. Turner, President

[illegible]

4/29/52

George:

Mr. Turner will phone me at 9:30 Wednesday morning in the hope that we can arrange for him to have a short talk with you. He seems to be a very reasonable person, and I do not believe we will have any difficulty in satisfying his immediate request since he only desires a letter stating that we will be glad to reconsider his case on the submission of new information.

C.O.M.

COM

Anchor Mine

DMA 2185 x

Tungsten

2/8

see file

Advise

Ken Walker

follow up

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

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
FEB 11 1952

February 1, 1952

Memorandum

To: Acting Administrator, Defense Minerals Exploration Administration

From: Iron and Ferro-Alloy Division, Defense Minerals Exploration Administration

Subject: Denial of exploration project in the amount of $376,513.40, as amended
Docket No. DMA 2185X - Tungsten
Golden Anchor Mine
Idaho County, Idaho

The subject application was denied by this Division for the following reasons:

1. Scheelite in the mine ore is sparse and scattered and does not occur in sufficient quantity to be considered as ore shoots.

2. There is little reason to believe that continued exploration would result in a substantial tungsten discovery.

3. Weighted assay of the most continuous showings of scheelite returned 0.15 percent WO_3.

4. There is no evidence indicating that the concentration of tungsten values are in any way associated with the gold-silver content of the mine ore.

5. The field report shows clearly that the tungsten content of the veins is insignificant and could be recovered only as a by-product of gold mining. The average width of the vein is only 21 inches. Consequently, the cost of producing gold ore would be so high that material containing only 0.5 ounces gold per ton is not now commercial ore.

6. Owing to the narrow width of the vein and scattered scheelite occurrence, it is not believed that selective mining would be economically feasible in raising the tungsten grade in the mill heads.

G. C. Selfridge.

G. C. Selfridge, Acting Chief
Iron and Ferro-Alloy Division

FILE COPY
SURNAME:

2-11-52

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

Feb 8, 1952
FEB 8 1952

Copy
Selfridge
Geehan
Mayer
Holderer

Mr. O. W. Turner, President
Anchor Mines, Inc.
530 West Sixth Street
Los Angeles 14, California

Re: Docket No. DMA 2185X - Tungsten
Golden Anchor Mine
Idaho County, Idaho

Dear Mr. Turner:

Your application for aid for an exploration project and other data relating to your application available to us in Washington have been carefully reviewed.

This information, while noting a small amount of scheelite mineralization on your property, indicates that, geologically, there is little probability of making a significant mineral discovery.

We regret, therefore, to inform you that your application is denied.

We wish to thank you for your interest in the Defense Minerals Program, and for bringing this property to our attention.

Sincerely yours,

C. O. Mittendorf (for) 2-8-52

Acting Administrator
Defense Minerals Exploration
Administration

GGGentry'lm
1/31/52

cc: Admn. Reading File
Docket
R. W. Geehan, USBM
D. M. Lemmon, USGS
Field Team Reg. II
G. B. Holderer - 7105 GSA
G. C. Selfridge
G. G. Gentry

S.a.
FILE COPY
SURNAME:

200

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

February 4, 1952

Memorandum

To: Tom Lyon, Director, Domestic Expansion Division

From: Robert Adams, Acting Administrative Officer, DMEA

Subject: Field Team Report, Anchor Mines, Inc. - DMEA - 2185

In accordance with your request to Mr. Mittendorf, dated January 30, 1952, there is attached hereto a copy of the Field Team Report on Docket No. DMEA - 2185.

It is requested that this report be returned to this office when it has served its purpose.

ROBERT E. ADAMS

Robert E. Adams
Acting Administrator
Defense Minerals Exploration
Administration

Enclosure
REAdams/meb
cc to: Adm.Reading File
Docket File Copy
Mr. Johnson

2-457
J.D.

400

FILE COPY
SURNAME:

Selfridge

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

FEB 4

Hon. Herman Welker
United States Senate
Washington 25, D. C.

Re: DMA Docket 2185 - Tungsten
Anchor Mines, Inc.
530 West 6th Street
Los Angeles 14, California

Dear Senator Welker:

Your letter of January 18 to Mr. Jess Larson, Administrator, Defense Materials Procurement Agency, regarding the above-referenced application, has been referred to the Defense Minerals Exploration Administration for reply.

The application is being processed now for final decision. As soon as available, we shall advise you regarding the decision reached.

On January 25, Mr. Farrow informed us that Anchor Mines, Inc., will submit an application for an exploration loan to sample the dumps of the Golden Anchor, Sherman Howe, Gold Crest, and Kimberly properties. Possibly the Company now views the dumps more favorably than the underground exploration.

Sincerely yours,

2-4-52

C. O. Mittendorf

Acting Administrator
Defense Minerals Exploration
AdministrTation

GCSelfridge:ls

Copy to: Admn. Reading File
Docket
G. C. Selfridge

OLIN D. JOHNSTON, S. C., CHAIRMAN
KENNETH MC KELLAR, TENN.
MATTHEW M. NEELY, W. VA.
JOHN O. PASTORE, R. I.
MIKE MONRONEY, OKLA.
GEORGE A. SMATHERS, FLA.
THOMAS R. UNDERWOOD, KY.
WILLIAM LANGER, N. DAK.
FRANK CARLSON, KANS.
EVERETT MC KINLEY DIRKSEN, ILL.
HERMAN WELKER, IDAHO
JOHN MARSHALL BUTLER, MD.
JAMES H. DUFF, PA.

J. AUSTIN LATIMER, CHIEF CLERK
H. W. BRAWLEY, STAFF DIRECTOR

United States Senate

COMMITTEE ON POST OFFICE
AND CIVIL SERVICE

January 18, 1952

RECEIVED
JAN 22 1952

Defense Minerals Procurement Agency
Jess Larson, Administrator
General Services Building
Washington, D. C.

Dear Sir:

It has come to my attention through many inquiries from McCall, Idaho, and vicinity that the Golden Anchor Mines, of McCall has applied for a loan through your agency.

It is my opinion that if the tests which I understand have been made by your agency show that tungsten exists in quantities to justify approval of the loan, particular attention should be given to getting the present mill into immediate operation. There seems to be a large tonnage of tungsten ore in the dumps of the Golden Anchor and neighboring properties. The tonnage in the existing dumps of the area would seem to me to justify a milling operation without the necessity of further exploration, and in fact would aid materially in the exploration program.

I believe that the processing of this loan should be expedited with particular emphasis placed on the early rehabilitation and operation of the present mills.

This mill would be a boon to many small operators in the vicinity and would also furnish employment to many people.

I know that because of the scarcity of tungsten you are also interested in bringing any legitimate property into production. I feel that this is potentially a great tungsten producing area and believe that the tests will bear out this opinion.

Will you please advise me of progress in this matter.

Yours truly,

Herman Welker

HERMAN WELKER
U. S. Senator, Idaho

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
JAN 22 1952

HW:cs-3

GSA FORM OA-2
Sept. 1951 ADMINISTRATOR'S COMMUNICATIONS CONTROL SLIP

DATE 1-10-52 | A 40

FROM
Kelhor, Norman
U. S. Senate

SUBJECT
Writes behalf of Golden Anchor Mines of McCall, Idaho who has applied for a loan thru RFC.

RFRD	RFRD	RFRD	RFRD
[illegible]	Young 6-7		
DATE	DATE	DATE	DATE
1-21-52			
REPLY DUE	REPLY DISPATCHED	FILE DESIGNATION	

ADMINISTRATOR'S MAIL

RECORD COPY 6

GSA FORM OA-2
Sept. 1951 ADMINISTRATOR'S COMMUNICATIONS CONTROL SLIP

DATE 1-10-52 | A 40

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[illegible]	Young 6-7		
DATE	DATE	DATE	DATE
1-21-52			
REPLY DUE	REPLY DISPATCHED	FILE DESIGNATION	

ADMINISTRATOR'S MAIL

FOLLOW-UP COPY 5

GSA FORM OA-2
Sept. 1951 ADMINISTRATOR'S COMMUNICATIONS CONTROL SLIP

DATE 1-10-52 | A 40

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U. S. Senate

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RFRD	RFRD	RFRD	RFRD
[illegible]	Young 6-7		
DATE	DATE JAN 21 1952	DATE	DATE
1-21-52			
REPLY DUE	REPLY DISPATCHED	FILE DESIGNATION	

ADMINISTRATOR'S MAIL

FOLLOW-UP COPY 4

United States Senate

COMMITTEE ON
POST OFFICE AND CIVIL SERVICE

FREE

WASHINGTON, D.C.
JAN 18
8 30PM
1952

Herman Walker
FROM
U. S. S.
INFANTILE PARALYSIS
JOIN MARCH OF DIMES

Defense Minerals Procurement Agency
Jess Larson, Administrator
General Services Building
Washington, D. C.

GENERAL SERVICES ADM
COMM. & RECORDS BR.
SECTION I

JAN 21 9 31 AM '55

RECEIVED

11:25 a.m. 1-23-52

Mr. Selfridge:

Mr. Kennedy of Senator Welker's (Idaho) office (Code 190 Extension 2155) requests that you telephone him concerning progress of the Golden ~~Hand~~ Anchor Mine application. He stated that in this potential tungsten producing area there are several dumps in the area in addition to the Golden Hand Mine, and the Senator's office is interested in getting a mill there.

L. S.

2213
817
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Docket 400
FILE COPY
SURNAME:

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

February 1, 1952

Memorandum

To: Acting Administrator, Defense Minerals Exploration Administration

From: Iron and Ferro-Alloy Division, Defense Minerals Exploration Administration

Subject: Denial of exploration project in the amount of $376,513.40, as amended
Docket No. DMA 2185X - Tungsten
Golden Anchor Mine
Idaho County, Idaho

The subject application was denied by this Division for the following reasons:

1. Scheelite in the mine ore is sparse and scattered and does not occur in sufficient quantity to be considered as ore shoots.

2. There is little reason to believe that continued exploration would result in a substantial tungsten discovery.

3. Weighted assay of the most continuous showings of scheelite returned 0.15 percent WO_3.

4. There is no evidence indicating that the concentration of tungsten values are in any way associated with the gold-silver content of the mine ore.

5. The field report shows clearly that the tungsten content of the veins is insignificant and could be recovered only as a by-product of gold mining. The average width of the vein is only 21 inches. Consequently, the cost of producing gold ore would be so high that material containing only 0.5 ounces gold per ton is not now commercial ore.

6. Owing to the narrow width of the vein and scattered scheelite occurrence, it is not believed that selective mining would be economically feasible in raising the tungsten grade in the mill heads.

George C. Selfridge

G. C. Selfridge, Acting Chief
Iron and Ferro-Alloy Division

GGGentry'lm
~~XX/XXX~~ 1/2/52

cc: Admn. Reading File
Docket
G. C. Selfridge
G. G. Gentry

STANDARD FORM NO. 64

Office Memorandum • UNITED STATES GOVERNMENT

TO : C. O. Mittendorf, Chairman, Operating Committee, DMEA DATE: JAN 3 0 1952

FROM : Tom Lyon, Director, Domestic Expansion Division

SUBJECT: DMEA Field Team Report, Anchor Mines, Inc. - DMA-2185 - Tungsten

Mr. Clyde Farrow, of the Anchor Mines, Inc., has approached the Ferro-Alloys Branch in regard to the possibility of a mill loan. This loan would be for the purpose of revamping and reconditioning the existing mill.

For the purpose of advising Mr. Farrow and informing ourselves we would like a copy of D.M.E.A.'s field team report, dated January 11, 1952.

Tom Lyon

DEFENSE MATERIALS PROCUREMENT AGENCY
WASHINGTON 25, D. C.

January 28, 1952

Mr. Thos. H. MacDonald
Commissioner of Public Roads
Bureau of Public Roads
Department of Commerce
Washington 25, D. C.

Dear Mr. MacDonald: Your File No. H-1

Mr. Mittendorf has asked this office to make direct reply to your letter of January 23 concerning the access road from the Nevada Scheelite Mine and Mill to U S 50, approximately 33 miles east of Fallon in the Sunnyside Mining District, Mineral County, Nevada.

We appreciate the advisability of the realignment of the northerly 2.5 miles of this road as proposed by your engineers, and are glad to concur in this change.

Very truly yours,

Francis B. Speaker
Acting Director
Mining Requirements
Division

Copy to: Mr. H. C. Miller
Region III

Mr. C. O. Mittendorf
Administrator, DMEA

DMPA Files
Mr. Howard Young
Mr. Walker

DMEA-2185

1-25-52

Memo for the Record:

Mr. Farrow phoned 4:10 p.m. on Friday, January 25, to state the Golden Anchor will submit application for an exploration loan on the dumps of the Golden Anchor, the Sherman-Howe, the Gold Crest, and theKimberly properties in the Marshall Lake District of Idaho. Stated they want to assay the dumps to determine what assay will be and whether it would warrant milling on the dumps.

C. W. Turner is President of Golden Anchor.

L. S.

STANDARD FORM NO. 64

Office Memorandum • UNITED STATES GOVERNMENT

TO : George Selfridge, DMEA DATE: January 23, 1952

FROM : D. M. Lemmon, U.S.G.S.

SUBJECT: Field Team Report DMEA 2185 - Tungsten, Gold
Anchor Mines, Inc.
Golden Anchor Mine
Secs. 16 and 17
T. 24 N., R. 5 E., Marshall Lake Mining District
Idaho County, Idaho

The Golden Anchor mine was examined by Thor H. Kiilsgaard and J. J. Quinlan of DMEA Field Team, Region 2. They examined the accessible workings in ultraviolet light and plotted the scheelite occurrences on the accompanying map. They also examined the dumps.

The field report shows clearly that the tungsten content of the veins is insignificant and could be recovered only as a by-product of gold mining. The average width of the vein is only 21 inches. Consequently the costs of producing gold are so high that material containing 0.5 ounce gold per ton is not now commercial ore.

I concur with the recommendation of the field team that the application for an exploration loan be denied.

Dwight M. Lemmon

1-29-52

Mr. R.W. Geehan, USBM
Room 3521-

Re: Docket No. DMA 2185-Tungsten
Golden Anchor Mine
Idaho County, Idaho

Attached Hereto, please find maps and Reports Pertaining to the Subject docket. Will you please let us have your opinion on the project.

G.C. Selfridge, Acting Chief
Iron and Steel-Alloy Division

By: Coleman J. Gentry

George Selfridge, DMEA

January 23, 1952

D. M. Lemmon, U.S.G.S.

Field Team Report
Anchor Mines, Inc.
Golden Anchor Mine
Secs. 16 and 17
T. 24 N., R. 5 E., Marshall Lake Mining District
Idaho County, Idaho

DMEA 2185 - Tungsten, Gold

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I concur with the recommendation of the field team that the application for an exploration lease be denied.

DM Lemmon

DMLemmon:gt

Copies to: Director's read. file
Branch read. file
Geo.Holderer

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

So. 157 Howard Street
Spokane 4, Washington

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
JAN 17 1952

January 11, 1952

Reviewed by
DMEA OPERATING COMMITTEE
1-23-52
(date)

MEMORANDUM

To: Chairman, Operating Committee, DMEA

From: Field Team, DMEA, Region II

Subject: Anchor Mines, Inc., Idaho County, Idaho, DMEA Docket 2185

Enclosed are the original and three copies of a Field Team report on the Golden Anchor mine, by Thor H. Kiilsgaard and J. J. Quinlan, U. S. Geological Survey. Also enclosed is the original docket material forwarded to the Field Team from DMEA, Washington D. C.

The examining party calls attention to the fact that the Golden Anchor mine operated at a profit as a gold mine prior to the forced cessation of operation in 1942, but that the mine has since been unable to resume operations because of economic conditions.

Scheelite occurs sparingly in the mine ore but the amount is so limited that the mine cannot be considered as a potential tungsten producer. In view of the sparse scheelite mineralization in the Golden Anchor ore, and the improbability of appreciable scheelite-bearing ore shoots being developed by further exploration of the mine holdings, the examining party regretfully recommends denial of the subject application and the Field Team concurs.

DMEA Field Team, Region II

Thor H. Kiilsgaard
Thor H. Kiilsgaard
For: A. E. Weissenborn
Executive Officer

M. E. Volin
M. E. Volin
Member

c.c. to: USBM-Albany
USBM-Spokane

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY
So. 157 Howard Street
Spokane 4, Washington

Reviewed by
DMEA OPERATING COMMITTEE

(date)

January 11, 1952

Memorandum

To: DMEA Field Team, Region II

From: Thor H. Kiilsgaard and J. J. Quinlan, Geologists, U. S. Geological Survey, Region II

Subject: Report of field examination of Anchor Mines, Inc., property, Idaho County, Idaho, Docket No. 2185.

INTRODUCTION

Anchor Mines, Incorporated, filed an application for DMEA exploration assistance, dated October 24, 1951, concerning the Golden Anchor mine, Idaho County, Idaho. The corporation planned to expend funds allocated to the exploration program as follows:

1.	Total estimated direct cost of exploration work on various mine levels ----------	$295,773.40
2.	Rehabilitation costs to existing buildings, installations, facilities and fixtures---------	20,250.00
3.	Additional facilities, buildings, and fixtures to be installed or constructed ----------	5,290.00
4.	Operating equipment to be purchased ----------	55,200.00
	Total estimated cost	$376,513.40

A copy of the application with accompanying docket material and enclosing letter was forwarded from DMEA, Washington, D. C., to the Field Team on November 7, 1951. The Field Team was advised to:

1. Lamp and examine the mine dumps.
2. Examine tungsten-bearing adits for possible ore shoots.
3. Carefully examine tailing dumps of former gold-silver operations.
4. Verify the Dykes Report, copy of which accompanied the application.

5. Examine stope gob for tungsten content.

6. Revamp proposal of applicant and submit a recommended program with cost figures.

Mr. C. W. Turner, representative of Anchor Mines, Inc., was contacted by the Field Office on November 13, 1951, and arrangements were made to examine the corporation's property on November 23, 1951. Three days were spent in examining the property. A 3-foot snow cover prevented surface examination; however, snow was bulldozed from most of the mine dumps, and these dumps were lamped. All accessible mine workings were lamped except the 300 and 400 levels on the east side, which could only be reached with considerable difficulty and which were reported to contain no tungsten showings. Geology of the mine workings was not mapped but all tungsten occurrences were plotted on a plan map, copy of which is enclosed.

RECOMMENDATIONS

It is recommended that the Anchor Mines, Inc., application for large scale exploration assistance be denied.

The Golden Anchor property could undoubtedly operate at a profit if the price of gold were raised or if mining expenses were lowered, and it would probably produce a small amount of tungsten in mill concentrates as a by-product. Scheelite in the mine ore is sparse and scattered and does not occur in sufficient quantity to be considered as ore shoots. There is little reason to believe that continued exploration of the property would result in a substantial tungsten discovery.

LOCATION

The Golden Anchor mine is in unsurveyed secs. 16 and 17, T. 24 N., R. 5 E., B.M., Marshall Lake mining district, Idaho County, Idaho. The property is comprised of a number of patented and unpatented mining claims, the names and location of which are shown in the Anchor Mines, Inc., application. A U.S. Forest Service road to the property by way of McCall and Burgdorf, Idaho, is accessible during the summer season; the distance by way of this road is about 46 miles. During the winter months the property is more accessible by way of the road up the Salmon River gorge from Riggens, Idaho, for 25 miles to the mouth of Carey Creek, thence south up Carey Creek and up the south side of the Salmon River gorge by a steep, bulldozed road for 9 miles to the mine. The latter road can be kept open to the mine during winter months but only by constant maintenance. The grade on this road makes it unfeasible for use during summer months.

HISTORY AND PRODUCTION

U. S. Bureau of Mines Information Circular 7039, Gold Mining and Milling in Idaho County, Idaho, by S. H. Lorain, dated December 1938, states the following information concerning the Golden Anchor mine:

> "The vein was discovered in 1914 by a man named Fox, who sold it to L. T. Holte. Holte drove the adit now known as the 200-level, built a camp and mill, and mined the ore above this level; he then sank a shaft to the 300-foot level and ran into financial difficulties. The Golden Anchor Mining Co. was then organized; a 1,600-foot crosscut adit was driven and the vein was cut on the 600-foot level. In 1932 the United Verde Extension Mining Co. purchased a controlling interest and developed the mine intermittently until the summer of 1935, when a 50-ton mill was constructed at the portal of the 600-foot level crosscut."

On an unknown date, believed to be in 1940, the Golden Anchor Mining Company was reorganized with control of the property passing from the United Verde Extension Mining Company to the new organization. The mine continued to operate until May 1942 when it closed down because of difficulties in obtaining priorities on needed mining equipment.

The following is a summary of operating statistics for the years 1935 through 1942 as presented by Anchor Mines, Inc.:

DEVELOPMENT

Mine workings consist of about 15,000 feet of drifts and 2,000 feet of crosscuts, most of which have been driven on the 200, 245, 300, 400, 600, 800, 900, and 1,000 levels. A 250-foot vertical winze extends from the 600 level to the 800 level, and a 450 inclined winze extends from the 600 level to the 1,000 level. The 600 level, which is the main working level, is entered by a 1,600-foot adit; all workings below this level were flooded at the time of the examination. Most of the 600 level was accessible and could be put in operation at a relatively small expense. Track and pipe has been removed from most of the upper levels and these were in a state of disrepair. Many parts of these levels were inaccessible chiefly from caved gob that had run from overlying stopes.

Short adits have been driven on the Dunn, Swede, and Higrade veins but these workings were inaccessible at the time of the visit.

There is a 50-ton amalgamation-flotation mill at the portal of the 600 level. The mill has been inactive since 1942 and much of the machinery needs replacing before the mill will be ready to resume operations. The applicant estimates that $10,000 to $15,000 is needed to reinstall milling machinery; however, the cost of a Diesel power unit for the mill would raise this figure considerably.

There is a fair camp on the property complete with sufficient buildings to house both a mine crew and what mining and milling machinery that is necessary for operations. Many of the buildings are suitable for an exploration program. If full scale mining operations were to be resumed, a few thousand dollars would have to be spent in rehabilitating the camp for general use.

GEOLOGY

The geology of the Golden Anchor property is accurately described in J. D. Forrester's report, copies of which accompany the subject application; therefore, this subject will be only briefly described in this report.

The area surrounding the Golden Anchor mine is underlain by pre-Cambrian schists, gneisses, and quartzites which have been intruded by granitic rocks of the Idaho batholith and also by pegmatic and aplitic dikes somewhat younger in age than the batholith. A series of quartz veins cross the area striking roughly N. 65° to 85° W., and dipping 40° to 60° SW. In sequence from north to south, the following veins are recognized:

High-grade vein
Swede vein
Dunn vein
Huckleberry vein
Golden Anchor vein
Crystal vein
Digger or Gold Crest vein

Of these, the Golden Anchor is the more prominent and the only one that has been developed to any extent.

The Golden Anchor vein has been mined from the surface to the 1,000 level and for a considerable distance along the strike. (See accompanying plan map). The vein has an average width of about 21 inches, although in some places the vein widens to 7 feet and elsewhere pinches to a mere stringer. Vein filling consists almost entirely of quartz; other minerals include very spotty galena, sphalerite, tetrahedrite, pyrite, free gold, and traces of scheelite.

There is no apparent rake to the ore shoots, although Forrester reports that ore blocks diminish in strike length with depth. The vein is reported to split below the 800 level but the gold values are reported to hold up well in these areas. Forrester states that there is no evidence on the lower levels indicating that the vein is being bottomed.

During the mine examination all accessible workings were lamped for scheelite but very little scheelite was seen. Where found, the scheelite was distributed as fairly coarse grains and aggregates of grains along either the hanging wall and the footwall of the vein. In those places where scheelite is more abundant, the grain aggregates commonly have a lenticular shape, the discontinuous pods and lentils forming a rather thin band-like zone parallel and close to the wall. The largest exposure of scheelite noted was a lenticular band in the West 400 level drift that measured 7 inches at the widest point, and was about 12 feet in length. Scheelite composed half of the material in this band. Most of the scheelite occurrences are very scattered. (See accompanying map). In some parts of the mine several hundred feet of drift may be traversed without seeing more than an occasional speck of scheelite. Better scheelite showings were noted in the Prichett raise off the East 200 level drift, the west end of the 200 level in the Sherman-Howe workings, the east end of the 300 level, and on the 600 level near the intersection of that level with the 600 level adit. The most continuous scheelite showings were in a thin band averaging about 2 inches in thickness on the vein hanging wall at the aforementioned 600 level site. At this locality, seven samples taken at measured intervals along the drift for a distance of 45 feet gave a weighted assay of 1.71 ozs. Au per ton, 6.9 ozs. Ag per ton, and 0.15 percent WO_3. Throughout this distance the samples were taken across the quartz vein which had a mean width of 17 inches.

There is little geologic evidence to substantiate the presence of scheelite-bearing split structures that curve off into the hanging wall, as described in Dykes' report. Most of the scheelite occurs parallel and near to the vein walls, possibly associated with an early pegmatic phase of deposition that preceded deposition of the bulk vein quartz. Some splits in the vein are reported below the 800 level and there are possibly some in the western end of the mine workings; however, there is little reason to expect these splits to form high-grade scheelite ore shoots. Certainly, the many crosscuts and mine workings in the walls of the vein do not expose scheelite concentrations in splits from the vein.

ORE RESERVES

The longitudinal section map of the Golden Anchor mine, as supplied by the applicant, was used to compute ore reserves.

Copies of the map accompany this report. No attempt was made to differentiate the various types of ore reserves and calculate the tonnage of each individually. Instead, blocked out, indicated, and inferred reserves between the surface and the 1,000 level were lumped together as a composite. These reserves aggregate 72,212 tons, having a weighted assay value of 0.39 oz. Au per ton.

Past mining operations attempted to hold the mill heads at 0.50 oz. Au per ton. Inasmuch as gold values are erratically distributed throughout the vein, such mining practices resulted in very uneven stope patterns. If future mining operations should be forced economically to hold the cut off point on the grade of ore at 0.50 oz. Au per ton, there would be substantially less than 72,212 tons of reserve ore available. A lower cut off point would, of course, raise the available tonnage appreciably.

There is no way of estimating or measuring the overall tungsten content in the reserve ore blocks. Scheelite occurs sparingly scattered as grains and aggregates of grains along the vein walls, but at no place was it found to be in sufficient quantity to constitute an ore shoot. The most continuous scheelite exposure in the mine is the hanging wall band on the 600 level where that level is joined by the 600 level adit. The weighted tungsten assay in this area is 0.15 percent WO_3. At the east end of this scheelite streak, in the raise connecting the 600 and 400 levels, a 10-inch sample across the vein at a point 8 feet above the 600 level sill assayed 0.31 percent WO_3. Further up the raise, a gob sample taken from the adjacent stope assayed 0.24 percent WO_3. On the basis of the aforementioned assays and the position of the mine workings, it is possible to calculate an inferred block of 1,000 tons above the 600 level and west of the 400 level raise. If the assay value of this block averages 0.15 percent WO_3 throughout, the block should contain about 150 units of WO_3.

Owing to the narrow width of the vein and scattered scheelite occurrence, it is not believed that selective mining would be economically feasible in raising the tungsten grade in the mill heads. Hand cobbing might be used to raise the grade of ore but the expense of such practice would outweigh any values received for the tungsten.

All mine dumps with the exception of the 200 level East dump were bulldozed free of snow and lamped for scheelite. In addition, a cut was bulldozed in the main mine dump, off the 600 adit, thus presenting a good section of the dump for examination. The north end of this dump lamps some scheelite. A grab sample taken across a 10-foot section of this portion of the dump assayed 0.28 percent WO_3. No attempt was made to estimate the tonnage

of this area but it would probably be quite limited. The lower Swede dump contained a few scattered flecks of scheelite but the others were barren.

All tailings from previous mill operations were fed into Bear Creek and washed down the canyon; none were available for examination.

PROPOSED EXPLORATION WORK

The subject application describes a considerable amount of exploration work to be done if DMEA assistance is granted. Much of this work would be justified if the property was to be further explored; however, in the light of the tungsten showings, it is doubtful whether the mine may be considered as a potential tungsten producer. Thus, further exploration is probably unwarranted under present economic conditions. The applicant stated at the time of the mine examination that Anchor Mines, Inc., would be agreeable to a more moderate exploration program if DMEA believed such a program to be more warranted.

COMPETENCE OF APPLICANT

Mr. C. W. Turner, President of Golden Anchor Mines, Inc., has been connected with the company since 1939, chiefly in an advisory capacity. He is very well informed on mining problems and presumably quite competent. If the mine should resume operations he would engage a technical man to supervise the work; however, Turner would be quite capable of managing an exploration program.

CONCLUSIONS

The Golden Anchor is a gold mine that operated at a profit prior to 1942, but which has been shut down since that date and which has, because of economic conditions, been unable to operate successfully since termination of World War II. If the price of gold were raised or if mining costs were to decline, the property would undoubtedly be able to operate profitably again.

Scattered scheelite in the mine ore might be recoverable in a mill concentrate but the amount would be small. No attempt was made to recover scheelite during former mining operations. It is possible that scheelite from some parts of the mine might make the difference between sub-marginal and marginal ore inasmuch as the scheelite is amenable to concentration and could be recovered without difficulty.

Former mining operations tried to hold mill heads at 0.50 oz. Au per ton in order to work the mine at a profit. To maintain

the ore grade at such a figure required selective mining in many of the mine areas and the bypassing of lower grade areas in other instances. Selective mining practices gobbed some of the sub-marginal ore in old stopes. This gob would be quick mill feed in event the mine resumes operations. However, with the low gold content and the dubious amount of scheelite, it is believed that such gob would be sub-marginal and economically unfeasible to concentrate.

The Dykes' report, which accompanies the application, is believed to be too optimistic insofar as scheelite values are concerned. The high-grade scheelite samples given in the Dykes' report are believed to have been taken from lamped specimens and thus do not constitute a true measure of the vein's tungsten value. The few samples taken by the examining party, shown on the accompanying longitudinal section, are not believed to represent the tungsten content of the vein either, but they are probably more representative than assays noted in Dykes' report. With sporadic scheelite distribution, as the Golden Anchor vein has, the only reliable way of determining the scheelite content, would be to run a mill test on a certain tonnage of ore and from the results calculate the tungsten content of the mill heads.

There is no evidence indicating that the concentration of tungsten values are in any way associated with gold-silver content of the mine ore. Scheelite was apparently deposited at an earlier period of mineral deposition. On the 600 level, in that part of the vein with the most continuous scheelite showing, the weighted assay of ore is 1.71 ozs. Au and 6.90 ozs. Ag per ton, which does not indicate that tungsten content increases with a decrease in gold-silver values.

cc: USBM, Spokane
Enclosures

DMA - 2185

Abstract of data in Files - 12/12 QFB - Anchor Mines -

May 28 1951 - date of form MF 100 - Received 10-29-1951

Oct 24 - 1951 ✓ ✓ ✓ MF 103 - ✓ ✓ ✓ ✓

Oct 29 - letter by Adams to App - noting receipt of application

Nov 2 - Ferro alloys Br - to Field team, Thru - Director, Supply div -

dated Nov 7 - 1951 - letter to App - relating referred to Field Team - sgd - Tom Lyon Supply Div - Thru Coord. Comm. -

Nov 19 - 1951 received letter dated Nov 2 1951 - from Anchor mines - asking to be informed of decisions affecting this land

Nov 9 - 1951 - letter from Lyons to Weissenborn (Field team, Spokane) referring projects to him - by Lyon as Chairman Coord Comm. -

12/12/195?

Crescent stations 7 2185

Sent to Field team, Spokane,
by letter dated Nov 7 –

No reply as yet from Field team

QBB

Detailed data, see this sheet

340
FILE COPY
SURNAME:

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

Holdeen
Jacoby
Thayer

NOV 7 1951

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

Subject: DMA-2185, Tungsten
Anchore Mines, Inc.
c/o Mr. C. W. Turner
530 West Sixth Street
Los Angeles 14, California

Dear Mr. Weissenborn:

We are referring the above docket to you for your consideration. The Anchor or Holt Mine is situated in T. 24N,R5E., Boise Meridian, Marshall Lake Mining District, Idaho County, Idaho.

The property formerly produced gold and silver. The workings consist of 450 feet of inclined shaft, 250 feet of vertical shaft, 15,000 feet of drifts, and 2,000 feet of crosscuts. Levels have been driven at 200, 250, 300, 400, 600, 700, 800, 900, and 1,000 feet. The 600 foot level and workings above are drained by a 1,600 foot adit.

A very large tonnage of material of unknown value is contained in the dumps. The surfaces of these dumps reportedly have been high-graded for tungsten. We request that these dumps be thoroughly lamped and shallow pitted if necessary, to determine: (1) the necessity of sampling so that portions or all of this material may be classified as tungsten ore and; (2) the adit source from which the ore was derived. These particular adits should be examined for tungsten ore shoots.

Tailings dumps of former gold-silver operations should be carefully examined to determine the feasibility of complete sampling leading to the retreatment of this material.

Insofar as possible we would like a verification of the Dykes Report, a copy of which is enclosed. It is our opinion that tungsten values may be found to increase with a decrease in the gold-

silver values. It is reported that back fill contains tungsten. We would like an opinion as to the possible value of this material.

We feel certain that the proposal of the applicant will require revamping. Therefore, it is desired that the field team submit a recommended program with cost figures.

Very truly yours,

SIGNED

B J 11-7

Tom Lyon, Chairman
Coordinating Committee

Enclosures

Bureau of Mines

Geological Survey

CHJacoby:ll 11/5/51
CC: DMA Docket File
Adm. Reading File
Mr. Holderer
Mr. Geehan
Mr. Lemmon

FILE COPY
SURNAME:

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

Thayer
Holderer
Jacoby
Thayer

NOV 7 1951

Anchor Mines Inc.
c/o Mr. C. W. Turner
530 West Sixth Street
Los Angeles 14, California

In reply please refer to
DMA-2185, Tungsten

Dear Mr. Turner:

We have referred yourapplication to the field for additional study. It is suggested that you contact Mr. A. E. Weissenborn, Executive Officer, DMA Field Team, Region II, South 157, Howard Street, Spokane 8, Washington, and offer whatever assistance may be required.

Very truly yours,
SIGNED By 11-7

Tom Lyon, Director
Supply Division

CHJacoby:ll 11/2/51
CC: DMA Docket File
Adm. Reading File
Mr. Holderer
Field Team, Region II

Iron & Ferroalloys Br.

ANCHOR MINES, INC.

530 WEST SIXTH STREET • LOS ANGELES 14, CALIFORNIA

NOV 5 1951

HEAD OFFICE:
ANCHOR MINES, INC.
RIGGINS, IDAHO

OWNERS AND OPERATORS
GOLDEN ANCHOR MINE
IDAHO COUNTY, IDAHO

Region II

November 2, 1951

DEPARTMENT OF THE INTERIOR
RECEIVED
NOV 19 1951
Defense Minerals Administration,
Production Expansion Division

United States Department of the Interior
Defense Minerals Administration
Washington 25, D. C.

Subject: DMA-2185
Re: Exploration

Attn: Robert E. Adams, Chief
Reports and Records Unit

Gentlemen:

In order to become more closely in contact with your department in regard to the progress and present disposition of our application for a loan under the Defense Production Act of 1950, we would greatly appreciate your advising this office all the past or future decisions affecting this application.

Thank you for your letter of October 29 acknowledging receipt of our application.

Yours very truly,

C. W. Turner

cwt;ac

OFFICIAL COPY

To		Date
210		

STANDARD FORM NO. 64

Office Memorandum • UNITED STATES GOVERNMENT

TO : George B. Holderer DATE: October 31, 1951

FROM : T. P. Thayer

SUBJECT: DMA-2185 Tungsten. Golden Anchor Mine, Idaho County, Idaho

Despite Forrester's statement (p. 7 of his report) that scheelite ".....appears to be localized and relatively unimportant.", the evidence presented in the application justifies more investigation. Forrester and Dykes agree on the basic geologic factors, such as continuity of veins. The major question boils down to the best way to determine the tungsten reserves, if significant.

The applicant admits that the present sampling information is inadequate, and even indicates that systematic lamping has not been done. It appears to me, therefore, that before all the rehabilitation work is undertaken a thorough lamping and sampling job is in order, with careful geological mapping to get possible evidence regarding scheelite ore shoots. The dumps in the area should be systematically lamped, and the promising ones should be sampled, both as potential mill feed, and as indicators of possible ore in place.

New work underground should be predicated on the completed lamping and sampling, and geological work, in order that the most promising spots can be picked first, and explored with a maximum of geologic guidance.

The application will have to go to the field for agreement on a more reasonable program than the one now submitted.

October 29, 1951

Mr. C. W. Turner, President
Anchor Mines, Inc.
530 West Sixth Street
Los Angeles 14, California

Subject: DMA-2185
Re: Exploration

My dear Mr. Turner:

This will acknowledge receipt of your application dated October 24, 1951 for a loan under the Defense Production Act of 1950.

Your application was assigned Docket Number DMA-2185 and referred to the Ferro-Alloys Branch.

Kindly refer to DMA-2185 in any future correspondence relating to your application.

Sincerely yours,

Robert E. Adams

Robert E. Adams, Chief
Reports and Records Unit

340
FILE COPY
SURNAME:

Holderer
Lemmon
Thayer

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

AUG 17 1951

Mr. C. W. Turner, President
Anchor Mines, Inc.
530 West Sixth Street
Los Angeles 14, California

Dear Mr. Turner:

This in reply to your letter of July 10, 1951, which was referred to this office by the DMA Field Team, Region II, South 157 Howard Street, Spokane, Washington.

The Government cannot provide funds for milling facilities unless an adequate ore reserve is demonstrated. The information that we have about the Marshall Lake Mining District does not suggest that enough tungsten ore is present to provide feed for the mill of Anchor Mines if it were converted to tungsten concentration.

If Anchor Mines can demonstrate adequate reserves of tungsten ore, financing of the mill conversion could be attempted by DMA through RFC.

Very truly yours,

Tom Lyon BJ 8/17

Tom Lyon
Director, Supply Division

DMLemmon:bl

CC: Adm. Reading File
Reports & Records Unit
Mr. Holderer
Mr. Lemmon
Field Team - Region II
GSA, Seattle
Files

Form MF-103
(Revised June 1951)

UNITED STATES DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS ADMINISTRATION

Budget Bureau No. 42-R1035.1.

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

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

Not To Be Filled in by Applicant

Docket No. DMA 2185
Metal or Mineral
Date Received 10-29-51
Amount $
Participation (Government %)

Name and address of applicant

ANCHOR MINES, INC.
550 West Sixth Street
Los Angeles 14, California

Date October 24, 1951

If you have already filed MF-100, give date filed June 4, 1951, type of assistance requested Priority allocation of equipment, etc. but returned and submitted herewith

DMA Docket Number (if available)

INSTRUCTIONS

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

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

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

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

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

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

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

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

See attached statements.

16—64067-2

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

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

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

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

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

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

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

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

   (*a*) Rented

   (*b*) Purchased

   (*c*) Furnished by you

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

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

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

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

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

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

CERTIFICATION

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

ANCHOR MINES, INC.
(Name of company)

By [signature]
(Signature of authorized official)

October 24, 1951
(Date)

President
(Title)

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

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

ANCHOR MINES, INC.

Answers to Questions - Form MF-105
Defense Minerals Administration

Answer to Question 1(a) - Form MF-105

The real property involved in this exploration project is situated in the State of Idaho, County of Idaho, Marshall Lake Mining District - Township 24 North, Range 5 East, Boise Meridian, and in the interest of economy and simplicity in answering this question, we enclose photostatic copies of Legal Opinion of Title covering all mining claims pertinent to this application to October 1946, together with photostatic copies of registered filings of Affidavit of Proof of Labor or Notice of Intent to Hold covering such claims from the date of the abovementioned Opinion to July 1, 1951.

Answer to Question 1(b)

Not applicable.

Answer to Question 1(c)

The exact area upon which the exploration work shall be conducted, with the use of the funds received from this application to cover costs of such exploratory work, shall be that portion of all of the mining claims listed in the photostatic copies submitted in support of 1(a) above which lie above the horizon of the Golden Anchor Mine 600' adit cross cut haulage level.

Answer to Question 2(a)

Scheelite.

Answer to Question 2(b)

Please refer to geological report and maps of Leland H. Dykes, Geologist.

EXHIBIT "D"

HAWLEY & HAWLEY
ATTORNEYS AND COUNSELORS
EASTMAN BUILDING
BOISE, IDAHO

JESS B. HAWLEY

JESS B. HAWLEY, JR.

CLAUDE V. MARCUS

October 28, 1946.

California State Corporation Commissioner,
Sacramento, California.

Dear Sir:

Re: Opinion on Title to Certain Lode Mining Claims Constituting Mining Groups of the Anchor Mines, Inc. an Idaho corporation.

We have examined abstracts, bound in one volume, Number 12365, Number 12961, Number 12967, number 15232; also abstracts Number 11987, Number 15198, Number 11978, Number 18237 and Number 18285 each separately bound.

These abstracts were compiled from the official records of Idaho County, State of Idaho, by Inland Abstract Company, of Grangeville, Idaho. We will hereafter refer to the names of the claims, and other data contained in the abstracts.

Our opinion is limited to these abstracts and does not include any water rights, nor the rights of anyone, whether in possession or occupancy of the property, or claiming an interest therein, whose claims or rights are not of record, or any of the ground that may be covered by names other than those of the specified claims.

Abstract Number 12365 is certified to by the Inland Abstract Company as of two o'clock P. M., August 25, 1939.

Abstract Number 18237, which is a continuation of the above abstract is certified to as of five o'clock P. M. October 1, 1946.

The mining claims and locations covered by the original abstract, Number 12365, and the supplement, Number 18237, are named in their respective original and/or Amended Location Notices as follows:

Sherman
Sherman No. 3
Sherman No. 4
Sherman No. 5

Jumbo No. 9
Jumbo No. 10
Jumbo No. 10 Fraction
Old Corporal
Old Corporal No. 2
Old Corporal No. 3
Old Corporal No. 3 Fraction
Crystal Fraction
Gold Coin
Gold Coin No. 2
Gold Coin No. 3
Gold Coin No. 4
Gold Coin No. 5
Bengal No. 1
Bengal No. 2
Bengal No. 3
Bengal No. 4
Mohawk

All of the above claims are unpatented lode mining claims situate in the Marshall Lake Mining District of the State of Idaho, excepting the Sherman, Sherman No. 3, Sherman No. 4, Sherman No. 5, Old Corporal and Crystal Fraction, and these are patented lode mining claims.

Abstract Number 11987 is the abstractor's record of location and other subsequent instruments of record as to the following named lode mining claims:

Sherman
Jumbo No. 9
Jumbo No. 10
Old Corporal No. 3
Old Corporal
Old Corporal No. 2
Crystal Fraction
Sherman No. 3
Sherman No. 4
Sherman No. 5
Gold Coin
Gold Coin No. 2
Gold Coin No. 3
Gold Coin No. 4
Gold Coin No. 5
Bengal No. 1
Bengal No. 2
Bengal No. 3
Bengal No. 4

Mohawk
Old Corporal No. 3 Fraction
Jumbo No. 10 Fraction

All of the above are unpatented lode mining claims with the exception of the Sherman, Sherman No. 3, Sherman No. 4 and Sherman No. 5.

This abstract Number 11987, is certified as of five o'clock P. M. January 30, 1929, and is brought to date by Abstract Number 18237, certified as of five o'clock P. M. October 1, 1946.

This abstract Number 15198 is the abstractor's record of location and subsequent instruments of record as to the following named lode mining claims:

Long Fraction
Lucky Swede
Lucky Swede No. 3
Lucky Swede Fraction
Lucky Swede Fraction No. 2
Jumbo No. 7
Jumbo No. 8
Jumbo Fraction
Old Andy
July Fourth.

All of these are unpatented lode mining claims.

This abstract, Number 15198 is certified as of five o'clock P. M. July 6, 1939 and is brought to date by abstract Number 18237, as of five o'clock P. M. October 1, 1946.

Abstract Number 18285 is certified as of October 24, 1946 at nine o'clock A. M. It is the abstract of location and subsequent instruments of record as to the following unpatented lode mining claims:

Missing Link
Gold Coin No. 6
Jumbo No. 11
Jumbo No. 12
Lucky Swede No. 3
Lucky Swede No. 4

While there are defects of conveyances, mismeters, failure to indicate marital status and defective annual report certificates, these, in our judgment, are not of importance and may be ignored. The unimportance of these defects; moreover

of the Idaho statute of limitations, together with possession by the Anchor Mining Company and its predecessors and successors in interest, including the Anchor Mines, Inc., in our opinion, cure whatever defects as above suggested, may exist.

We give it as our opinion, therefore, that good and merchantable title to each of the hereinbefore named lode mining claims, both patented and unpatented, is in the

ANCHOR MINES, INC.,
a qualified Idaho corporation.

The unpatented mining claims, however, are subject to the paramount title of the United States of America. They are held, however, in full compliance with existing laws, Federal and State.

The title to the patented claims is not so subject.

DATED this 28th day of October, 1946.

HAWLEY AND HAWLEY

By Jesse Hawley

Office Address: Suite 810
Eastman Building, Boise, Idaho.

JH/r

EXHIBIT "D"

First Security Bank of Idaho

NATIONAL ASSOCIATION
BOISE BRANCH

Boise, Idaho

J. L. DRISCOLL
PRESIDENT

October 23, 1956

California State Corporation Commissioner
Sacramento, California

Dear Sir:

The law firm of Hedley and Hedley, and its senior member, Jess Hedley, have been known to me for over a period of [illegible] years.

They are [illegible] in civil law and the practice of [illegible]. They have an excellent reputation in this section of the State of Idaho and in my opinion are qualified to render an opinion upon matters of title to [illegible].
They have been practicing law in Idaho for more than forty years and their offices are in the [illegible] Building, Boise, Idaho.

Any questions you may desire to ask concerning this firm, I will be to answer.

Yours truly,

J. L. Driscoll
President

JLD:[illegible]

DMA-2185 Fil 10

DEFENSE MINERALS ADMINISTRATION WASHINGTON, D.C.

Nov 9 3 57 PM '51

ANCHOR MINES, INC.

530 WEST SIXTH STREET • LOS ANGELES 14, CALIFORNIA

HEAD OFFICE:
ANCHOR MINES, INC.
RIGGINS, IDAHO

OWNERS AND OPERATORS
GOLDEN ANCHOR MINE
IDAHO COUNTY, IDAHO

October 25, 1951

TUNGSTEN

AIR MAIL

RECEIVED by Mr. Hedberg

NOV 19 1951

Mr. Charles H. Jacoby
New Interior Building
Washington, D. C.

File sent to Field Office

Dear Mr. Jacoby:

Last night we delivered to Mr. Farrow for forwarding to you, four copies of Form MF-103, as well as Form MF-100 which is the exact one filed earlier this year and returned to us.

We trust you will find these applications in order and are looking forward to receiving advice of their disposition from the proper department handling these matters.

Please accept our expression of thanks for the courtesy and cooperation you have extended our Mr. Farrow. It is indeed appreciated.

Yours truly,

C. W. Turner, President.

CWT:L

F.

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

July 20, 1951

Anchor Mines, Inc.
530 West Sixth Street
Los Angeles 14, California

We cannot take final action on your application for serial number for the reason(s) checked below:

__ 1. You have not submitted four copies of MF-100 as requested. We are returning your original submission, together with _____ copies of MF-100 for your use in submitting a complete application.

__ 2. Certification unsigned by authorized official.

__ 3. Question(s) _____ of MF-100 not completely answered.

__ 4. Please indicate kind and quantity of product mined or processed during 1948, 1949 and 1950, and present monthly average.

__ 5. Your operation exceeds limitations for "Small Producer" as set forth in Sec. 5 of MO-7. We enclose a set of Form MF-100 for your use in making proper application.

__ 6. Your letter application does not give all the information requested in Sec. 5 of MO-7, copy of which is enclosed.

__ 7. Your letter indicates your operations would class you as a "Producer" as defined in Sec. 2 of MO-7. If you will need any priorities assistance, it would be well to file application for a serial number.

__ 8. Not in operation. Please resubmit when operation is resumed and priorities assistance is required.

__ 9. This office will appreciate it if you will break down your operations by states, filing a separate application for your operations in each state. Metallic and non-metallic mines should not be grouped under one application. _____ additional sets of MF-100 are enclosed for your use in making this breakdown.

Any reply to this request should be addressed to:

Defense Minerals Administration
Requirements Division -- MO-7
New Interior Building
Washington 25, D. C.

99310

NOTICE OF INTENTION TO HOLD MINING CLAIMS

NOTICE IS HEREBY GIVEN that the undersigned corporation, ANCHOR MINES, INC., an Idaho corporation, intends to hold the following lode mining claims situated in the Marshall Lake Mining District, in Idaho County, State of Idaho:

(2)

Bengal	No. 1	Book	59	Mining	Claims	Page 202
Bengal	No. 2	"	59	"	"	" 203
Bengal	No. 3	"	59	"	"	" 332
Bengal	No. 4	"	59	"	"	" 333
July Fourth	(July Forth)	"	61	"	"	" 134
Gold Coin		"	58	"	"	" 462
Gold Coin	No. 2	"	58	"	"	" 461
Gold Coin	No. 3	"	58	"	"	" 478
Gold Coin	No. 4	"	58	"	"	" 479
Gold Coin	No. 5	"	58	"	"	" 430
Gold Coin	No. 6	"	72	"	"	" 69
Jumbo	No. 7	"	58	"	"	" 78
Jumbo	No. 8	"	58	"	"	" 183
Jumbo	No. 9	"	58	"	"	" 288
Jumbo	No. 10	"	58	"	"	" 389
Jumbo	No. 11	"	72	"	"	" 93
Jumbo	No. 12	"	72	"	"	" 94
Jumbo Fraction		"	59	"	"	" 224
Jumbo	No. 10 Fraction	"	59	"	"	" 226
Long Fraction		"	58	"	"	" 458
Lucky Swede		"	58	"	"	" 455
Lucky Sweed Fraction (Lucky Swede Fraction)		"	58	"	"	" 457
Lucky Swede No. 2		"	58	"	"	" 456
Lucky Swede No. 3		"	72	"	"	" 70
Lucky Swede Fraction	No. 2	"	58	"	"	" 571
Lucky Swede	No. 4	"	72	"	"	" 71
Missing Link		"	63	"	"	" 468
Mohawk		"	67	"	"	" 70
Old Andy		"	61	"	"	" 133
Old Corporal	No. 2	"	58	"	"	" 332
Old Corporal	No. 3	"	58	"	"	" 333
Old Corporal Fraction	No. 3	"	59	"	"	" 225

said claims being contiguous and forming a common group.

THIS NOTICE is given under and pursuant to the Moratorium Act of May 3, 1941.

DATED: June 23, 1947.

The original of this copy
was filed in the office of
County Recorder, June 27, 1947

Carl T. Reuter
Recorder

By Nancy Telchin
Deputy

ANCHOR MINES, INC.

By: [signature]
President

STATE OF CALIFORNIA)
County of Los Angeles) ss

On this 23rd day of June, 1947, before me, Lillian M. Deverey, a Notary Public in and for the said County and State, personally appeared C. W. TURNER, known to me to be the President of ANCHOR MINES, INC., the corporation that executed the within instrument, known to me to be the person who executed the within instrument, on behalf of the corporation herein named, and acknowledged to me that such corporation executed the same.

WITNESS my hand and official seal.

Lillian M. Deverey
Notary Public in and for said
County and State
My commission expires 7-11-50

AFFIDAVIT OF ANNUAL LABOR

STATE OF CALIFORNIA)
) ss.
COUNTY OF LOS ANGELES)

Before me, the undersigned Notary Public, personally appeared C. W. Turner, President of Anchor Mines, Inc., an Idaho corporation, who, being first duly sworn, says:

That at least One Hundred Dollars ($100.00) worth of work or improvements were performed or made upon and for the benefit of each of the following lode mining claims as listed below, and each situated in the Marshall Lake Mining District, in Idaho County, State of Idaho as follows:

Claims held under mineral locations in the name of Anchor Mines, Inc., an Idaho Corporation

Bengal	No. 1	Book	59	Mining Claims		Page	202
Bengal	No. 2	"	59	"	"	"	203
Bengal	No. 3	"	59	"	"	"	332
Bengal	No. 4	"	59	"	"	"	333
July Fourth	(July Forth)	"	61	"	"	"	134
Gold Coin		"	58	"	"	"	462
Gold Coin	No. 2	"	58	"	"	"	461
Gold Coin	No. 3	"	58	"	"	"	478
Gold Coin	No. 4	"	58	"	"	"	479
Gold Coin	No. 5	"	58	"	"	"	480
Gold Coin	No. 6	"	72	"	"	"	69
Jumbo	No. 7	"	58	"	"	"	78
Jumbo	No. 8	"	58	"	"	"	183
Jumbo	No. 9	"	58	"	"	"	288
Jumbo	No. 10	"	58	"	"	"	389
Jumbo	No. 11	"	72	"	"	"	93
Jumbo	No. 12	"	72	"	"	"	94
Jumbo Fraction		"	59	"	"	"	224
Jumbo	No. 10 Fraction	"	59	"	"	"	226
Long Fraction		"	58	"	"	"	458
Lucky Swede		"	58	"	"	"	455
Lucky Sweed Fraction (Lucky Swede Fraction		"	58	"	"	"	457
Lucky Swede No. 2		"	58	"	"	"	456
Lucky Swede No. 3		"	72	"	"	"	70
Lucky Swede Fraction	No. 2	"	58	"	"	"	571
Lucky Swede	No. 4	"	72	"	"	"	71
Missing Link		"	63	"	"	"	459
Mohawk		"	57	"	"	"	70
Old Andy		"	61	"	"	"	133
Old Corporal	No. 2	"	58	"	"	"	332
Old Corporal	No. 3	"	58	"	"	"	333
Old Corporal Fraction	No. 3	"	59	"	"	"	225

That all the stakes, monuments or trees marking boundaries of said claims, and each of them, are in proper place and position.

President

Subscribed and sworn to before me this 10th. day of June, 1948.

Lillian M. Weverey

Notary Public in and for the County of Los Angeles, State of California

My Commission Expires July 11, 1950

INDEXED COMPARED

[illegible]

[illegible] for record
[illegible]
[illegible] Mineral
[illegible] 9 [illegible]
[illegible] A. D. 1948 14 [illegible]
June [illegible] 1948 and duly
recorded in Book 7 of Proof
of Labor
at Page 208 [illegible]

CARL T. REUTER

By Bob J. Waite
Deputy

Fee $5.00

NOTICE OF INTENTION TO HOLD MINING CLAIMS

NOTICE IS HEREBY GIVEN that the undersigned corporation, ANCHOR MINES, INC., an Idaho corporation, intends to hold the following lode mining claims situated in the Marshall Lake Mining District, in Idaho County, State of Idaho:

Bengal	No. 1	Book	59	Mining	Claims	Page	202
Bengal	No. 2	"	59	"	"	"	203
Bengal	No. 3	"	59	"	"	"	332
Bengal	No. 4	"	59	"	"	"	333
July Fourth	(July Forth)	"	61	"	"	"	134
Gold Coin		"	58	"	"	"	462
Gold Coin	No. 2	"	58	"	"	"	461
Gold Coin	No. 3	"	58	"	"	"	478
Gold Coin	No. 4	"	58	"	"	"	479
Gold Coin	No. 5	"	58	"	"	"	480
Gold Coin	No. 6	"	72	"	"	"	69
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Jumbo	No. 8	"	58	"	"	"	183
Jumbo	No. 9	"	58	"	"	"	288
Jumbo	No. 10	"	58	"	"	"	389
Jumbo	No. 11	"	72	"	"	"	93
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Jumbo Fraction		"	59	"	"	"	224
Jumbo	No. 10 Fraction	"	59	"	"	"	226
Long Fraction		"	58	"	"	"	458
Lucky Swede		"	58	"	"	"	455
Lucky Sweed Fraction (Lucky Swede Fraction)		"	58	"	"	"	457
Lucky Swede No. 2		"	58	"	"	"	456
Lucky Swede No. 3		"	72	"	"	"	70
Lucky Swede Fraction	No. 2	"	58	"	"	"	571
Lucky Swede	No. 4	"	72	"	"	"	71
Missing Link		"	63	"	"	"	459
Mohawk		"	57	"	"	"	70
Old Andy		"	61	"	"	"	133
Old Corporal	No. 2	"	58	"	"	"	332
Old Corporal	No. 3	"	58	"	"	"	333
Old Corporal Fraction	No. 3	"	59	"	"	"	225

said claims being contiguous and forming a common group.

THIS NOTICE is given under and pursuant to H. R. 1754 of June, 1949.

DATED: June 24, 1949.

ANCHOR MINES, INC.

By: D. W. [illegible]

President

STATE OF CALIFORNIA)
) ss
County of Los Angeles)

On this 24th day of June, 1949, before me, Ruth H. Lewis, a Notary Public in and for the said County and State, personally appeared C. W. TURNER, known to me to be the President of ANCHOR MINES, INC., the corporation that executed the within instrument, known to me to be the person who executed the within instrument on behalf of the corporation herein named, and acknowledged to me that such corporation executed the same.

WITNESS my hand and official seal.

Ruth H. Lewis
Notary Public in and for said
County and State

3401

Anchor Mines Inc.
2
P 27
June 49

Nella Basinger
Fee 50¢

AFFIDAVIT OF ANNUAL LABOR

STATE OF CALIFORNIA)
) ss.
County of Los Angeles)

Before me, the undersigned, Notary Public in and for said County and State, personally appeared C. W. Turner, President of Anchor Mines, Inc., an Idaho corporation, who, being first duly sworn, deposes and says:

That at least One Hundred Dollars ($100.00) worth of work or improvements were performed or made upon and for the benefit of each of the following lode mining claims as listed below and each situated in the Marshall Lake Mining District, in Idaho County, State of Idaho, as follows:

Bengal	No. 1	Book	59	Mining Claims		Page 202
Bengal	No. 2	"	59	"	"	" 203
Bengal	No. 3	"	59	"	"	" 332
Bengal	No. 4	"	59	"	"	" 333
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Gold Coin		"	58	"	"	" 462
Gold Coin	No. 2	"	58	"	"	" 461
Gold Coin	No. 3	"	58	"	"	" 478
Gold Coin	No. 4	"	58	"	"	" 479
Gold Coin	No. 5	"	58	"	"	" 480
Gold Coin	No. 6	"	72	"	"	" 69
Jumbo	No. 7	"	58	"	"	" 78
Jumbo	No. 8	"	58	"	"	" 183
Jumbo	No. 9	"	58	"	"	" 288
Jumbo	No. 10	"	58	"	"	" 389
Jumbo	No. 11	"	72	"	"	" 93
Jumbo	No. 12	"	72	"	"	" 94
Jumbo Fraction		"	59	"	"	" 224
Jumbo	No. 10 Fraction	"	59	"	"	" 226
Long Fraction		"	58	"	"	" 458
Lucky Swede		"	58	"	"	" 455
Lucky Sweed Fraction (Lucky Swede Fraction)		"	58	"	"	" 457
Lucky Swede No. 2		"	58	"	"	" 456
Lucky Swede No. 3		"	72	"	"	" 70
Lucky Swede Fraction	No. 2	"	58	"	"	" 571
Lucky Swede	No. 4	"	72	"	"	" 71
Missing Link		"	63	"	"	" 459
Mohawk		"	57	"	"	" 70
Old Andy		"	61	"	"	" 133
Old Corporal	No. 2	"	58	"	"	" 332
Old Corporal	No. 3	"	58	"	"	" 333
Old Corporal Fraction	No. 3	"	59	"	"	" 225

All of said claims being contiguous and forming a common group with the following described mining claims; pursuant to that mining option contract dated the

the 21st day of November, 1941, recorded in Book 4 of Min. B.L. & Agr. at Page 173 of Records of Idaho County, Idaho, Anchor Mines, Inc. on its own behalf and as agent of Herbert H. Hackett and Clara D. Hackett, his wife, has also performed at least One Hundred Dollars ($100.00) worth of work or improvements for the benefit of each of the following lode mining claims:

The Old Kentuck Amended	Book 57	Mining Claims		Page	144
The Old Kentuck No. 2 Amended	" 57	"	"	"	145
The Old Kentuck No. 3	" 58	"	" Quartz	"	622
The Old Kentuck No. 4 Fraction	" 58	"	" "	"	578
The Old Kentuck Extension Fraction	" 58	"	" "	"	577
The Old Kentuck No. 5 Fraction	" 59	"	" "		22
The Mother Lode	" 56	"	" "	"	523

all of said claims forming a group known as the Old Kentuck Group quartz lode mining claims situated across the middle fork of Bear Creek and about 2000 feet northwest of Twin Lakes, being contiguous and forming a common group.

That said expenditures were made by, for and at the expense of Anchor Mines, Inc, the owner of said claims or agent of owner of said claims, for the purpose of holding said claims, and that said work was done between the first day of July of 1949 and the first day of July, 1950.

That all the states, monuments or trees marking boundaries of said claims, and each of them, are in proper place and position.

C. W. Turner
President, Anchor Mines, Inc.

Subscribed and sworn to before me
this 23rd day of June, 1950.

Notary Public in and for said
County and State.

STATE of IDAHO }
COUNTY of IDAHO } SS

I hereby certify that this Instrument was filed for record in the office of the Recorder of Idaho County, at the request of Anchor Mines, Inc at 9 ~~minutes past~~ o'clock A. M. this 5 day of July A.D. 1950, and duly recorded in Book 7 of Pri of Labor at page 493 Records of said County.

Lare J. Reuter
County Recorder

By Bob J. Haite
Deputy

Fee $.50¢

530 West Sixth St.
Los Angeles 14, Calif.

AFFIDAVIT OF ANNUAL LABOR

STATE OF CALIFORNIA)
) ss.
County of Los Angeles)

Before me, the undersigned, Notary Public in and for said County and State, personally appeared C. W. TURNER, President of Anchor Mines Inc., an Idaho corporation, who, being first duly sworn, deposes and says:

That at least One Hundred Dollars ($100.00) worth of work or improvements were performed or made upon and for the benefit of each of the following lode mining claims as listed below and each is situated in the Marshall Lake Mining District, Idaho County, State of Idaho, as follows:

Bengal	No. 1	Book	59	Mining	Claims	Page	202
Bengal	No. 2	"	59	"	"	"	203
Bengal	No. 3	"	59	"	"	"	332
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July Fourth (July Forth)		"	61	"	"	"	134
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Jumbo	No. 10	"	58	"	"	"	389
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Jumbo	No. 12	"	72	"	"	"	94
Jumbo Fraction		"	59	"	"	"	224
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Lucky Swede		"	58	"	"	"	455
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Old Corporal	No. 2	"	58	"	"	"	332
Old Corporal	No. 3	"	58	"	"	"	333
Old Corporal Fraction	No. 3	"	59	"	"	"	225

That said expenditures were made by, for and at the expense of Anchor Mines, Inc. the owner of said claims, for the purpose of holdin said claims, and that said work was done between the first day of July 1950 and the first day of July 1951.

That all the stakes, monuments or trees marking boundaries of said claims, and each of them, are in proper place and position.

C. W. TURNER
President, Anchor Mines, Inc.

Subscribed and sworn to before me this 22nd day of June, 1951.

Notary Public in and for said County and State.

Expires

170375

STATE of IDAHO
ss
COUNTY of IDAHO

I hereby certify that this instrument was filed for record in the office of the Recorder of Idaho County at the request of Anchor Mines, Inc

at 2 ~~minutes past~~ o'clock P.M. this 27 day of June A.D. 1957, and duly recorded in Book ____ of ____ at page ____ Records of said County

Carl T. Reutter
County Recorder

By Bob J. Waite
Deputy

Fee $1.50

530 West Sixth St
Los Angeles 14, Calif

Answer to Question 5(a) - Form MF 103

SUMMARY

Footage Min.	Footage Max.		Cost
1660 to	5890	Exploration work on 600' level	$ 92,005.92
545 to	2145	" " " 400' "	44,855.14
650 to	1600	" " " 300' "	41,577.02
750 to	2200	" " " 200' "	54,260.52
1000 to	4000	" " " Dunn, Swede, Higrade and Huckleberry Veins	63,075.00
4625'	15825'	Total estimated direct cost	$295,773.40

Answer to Question 5(a) Form MF 105 (Cont'd)

EXPLORATION SUMMARY - 600' LEVEL

	Min.	Max.
Total estimated exploratory footage - 600' level	1680'	3880'
Average estimated exploratory footage - 600' level	2780'	
Estimated direct cost per foot of exploration work (See pg. 26)	$24.45	
$24.45 x 2780' = Estimated direct cost of exploration work - 600' level	$67,915.40	
Estimated cost to pick up old drifts and cross cuts and make safe and accesible for exploration work (See pages 6 and 7)	21,690.52	
Estimated cost of sampling and assaying - 600 samples @ $4.00	2,400.00	
Total estimated direct cost of exploration - 600' level	$92,005.92	

Answer to Question 5(a) Form MF 103 (Cont'd)

600' LEVEL EXPLORATION

It is proposed to carry on a systematic lamping and sampling of all underground work. Exploration will thus be guided by sampling, hence any present proposals for exploration may have to be modified in the light of subsequent greater knowledge.

		Footage Min.	Footage Max.
A.	A cross cut into the hangingwall opposite an existing footwall cross-cut about seventy-five feet west of the Vertical Raise, and raise from this work if sampling discloses the scheelite showings justify	250	250
B.	Approximately 100 feet further west opposite an existing cross-cut into the hangingwall, a cross-cut into the foot-wall, and if scheelite is found, a raise to explore upper extension	50	250
C.	Approximately 180 feet west of B above, an exploratory raise to prospect a large area believed to be ore bearing, but on which there is little data	200	250
D.	Approximately 150 feet west of C above, an exploratory footwall cross-cut opposite an existing hangingwall cross-cut, and if justified by sampling of any scheelite showings, a raise to explore upward extensions	50	250
E.	At least two more cross-cuts and raises to the west of D above, positions to be determined by the results of above work and sampling	100	500

		Footage Min.	Footage Max.
F.	Continuation of the second raise east of the Vertical Raise, to explore easterly extension. Good showings of scheelite	75	100
G.	Cross-cuts into both hanging and foot walls at 150-foot intervals to the east to explore for possible ore-bearing splits as suggested by Dykes (see his report page 15) - exact location to depend on assaying	600	1200
H.	Raises to explore upward extensions in connection with G above where assaying of G work justifies	500	600
I.	An exploratory drift west into virgin ground from the Vertical Raise half way between the 600' and the 400' levels, and continue as far as sampling indicates good exploratory prospects for tungsten ore	75	500
	Total footage	1680	5880

ANCHOR MINES, INC.

Golden Anchor Mine
Idaho County, Idaho

Adit Haulage Cross Cut and Portal

Estimate of Cost to Clean Up and Make Safe and Accessible for Exploratory Work - 1800'

Estimated feet of timbered cross cut - 400'
Estimated feet of nontimbered cross cut - 1400'

Items	Cost Per Ft. of Tunnel	Total Direct Cost	Cost 400 ft. Timbered Tunnel Per Ft. of Tunnel	Cost 400 ft. Timbered Tunnel Total	Cost 1400 ft. Nontimbered Tunnel Per Ft. of Tunnel	Cost 1400 ft. Nontimbered Tunnel Total
Direct labor (Note 1)	$1.56	$2,442.00	$2.22	$ 888.00	$1.11	$1,554.00
Mine Timber (Note 2)	.218	392.00	.98	392.00		
Track Ties (Note 3)	.023	41.40	.023	9.20	.023	32.20
Rail 30# (Note 4)	1.80	3,240.00	1.80	720.00	1.80	2,520.00
Fish Plates (Note 4)	.10	180.00	.10	40.00	.10	140.00
Track Bolts 30# (Note 4)	.024	43.20	.024	9.60	.024	33.60
Track Spikes 30# (Note 4)	.044	79.20	.044	17.60	.044	61.60
Air Line 3" (Note 5)	.141	253.44	.141	56.32	.141	197.12
Water Line 2" (Note 5)	.069	123.48	.069	27.44	.069	96.04
	$3.78	$6,794.72	$5.40	$2,160.16	$3.31	$4,634.56
Safety Factor 20%	.75	1,358.94				
Total	$4.53	$8,153.66				

Note references appear on pages 21 to 25, inclusive.

Answer to Question 3(a) Form MF 103 (Cont'd)

600' Level Haulage Drift

Estimate of Cost to Clean Up and Make Safe and Accessible for Exploratory Work - 2800'

Items	Costs Per Ft. of Drift	Total Direct Cost	Cost 1000' Timbered Tunnel Per Foot	Cost 1000' Timbered Tunnel Total	Cost 1800' Nontimbered Tunnel Per Foot	Cost 1800' Nontimbered Tunnel Total
Direct Labor (Note 1)	$1.51	$ 4,218.00	$2.22	$2,220.00	$1.11	$1,998.00
Mine Timber (Note 2)	.35	980.00	.98	980.00		
Track Ties (Note 3)	.023	64.40	.023	23.00	.023	41.40
Rail 30# (Note 4)	1.80	5,040.00	1.80	1,800.00	1.80	3,240.00
Fish Plates (Note 4)	.10	280.00	.10	100.00	.10	180.00
Track Bolts 30# (Note 4)	.024	67.20	.024	24.00	.024	43.20
Track Spikes 30# (Note 4)	.044	123.20	.044	44.00	.044	79.20
Air Line 3" (Note 5)	.141	394.24	.141	140.80	.141	253.44
Water Line 2" (Note 5)	.041	113.68	.041	40.60	.041	73.08
	$4.03	$11,280.72	$5.37	$5,372.40	$3.28	$5,908.32
Safety Factor 20%	.81	2,256.14				
Total Direct Cost (est.)	$4.84	$13,536.86				

Note references appear on pages 21 to 25, inclusive.

Answer to Question 5(a) Form MF 105 (Cont'd)

EXPLORATION SUMMARY - 400' LEVEL

	Min.	Max.
Total estimated exploratory footage - 400' level	545'	2145'
Average estimated exploratory footage - 400' level	1345'	
Estimated direct cost per foot of exploratory work (See pg. 26)	$24.45	
$24.45 x 1345' = Estimated direct cost of exploration work - 400' level	$32,858.55	
Estimated cost to pick up old drifts and workings and make safe and accessible for exploratory work (see page 10)	9,196.79	
Estimated cost of sampling and assaying 700 samples @ $4.00	2,800.00	
Total estimated direct cost of exploration - 400' level	$44,855.14	

Answer to Question 5(a) Form MF 105 (Cont'd)

400' LEVEL EXPLORATION

	Footage Min.	Footage Max.
A. To the west of the Vertical Raise exploratory cross-cuts into both hanging and foot walls, below Block 4D, and raises from this work where assaying justifies	60	160
B. At least two cross-cuts into hanging and foot walls below Block 4C, and raises where scheelite mineralisation disclosed by sampling of this exploratory work justifies	60	360
C. Extension of the 400' Level to the west, depending upon results of sampling of exploratory work as it progresses	00	500
D. Two cross-cuts below Block 4E and one below Block F into hanging and foot walls with raises from these exploratory openings if sampling justifies. In this area stringers carrying scheelite run into both hangingwall and footwall, and ground is very promising, hence cross-cuts may have to be run further than usual	225	225
E. Cross-cuts into both hanging and foot walls beneath each of Blocks 4J, 4K, 4L and 4M, positions to be determined by sampling, and raises run from them to explore any upward extensions, if justified by sampling	200	600
Total footage	545	2145

ANCHOR MINES, INC.

Golden Anchor Mine
Idaho County, Idaho

400' Level Drift

Estimate of Cost to Clean Up and Make Safe and Accessible for Exploratory Work - 5200'

Items	Cost Per Ft. of Drift	Total Cost	Cost 800' Timbered Drift Per Foot	Cost 800' Timbered Drift Total	Cost 2400' Nontimbered Drift Per Foot	Cost 2400' Nontimbered Drift Total
Direct Labor (Note 6)	$1.05	$5,574.40	$2.22	$1,776.00	$ .666	$1,598.40
Mine Timber (Note 2)	.245	784.00	.98	784.00		
Track Ties (Note 7)	.069	220.80	.069	55.20	.069	165.60
Rail 16# (Note 8)	-o-	-o-	-o-	-o-	-o-	-o-
Fish Plates 16# (Note 8)	-o-	-o-	-o-	-o-	-o-	-o-
Track Bolts 16# (Note 8)	-o-	-o-	-o-	-o-	-o-	-o-
Track Spikes 16# (Note 8)	-o-	-o-	-o-	-o-	-o-	-o-
Air Line 2" (Exh. D)	.343	1,097.60	.343	274.40	.343	823.20
Water Line 1" (Exh. D)	.203	649.60	.203	162.40	.203	487.20
	$1.92	$6,126.40	$3.82	$3,052.00	$1.28	$3,074.40
Safety Factor 20%	.38	1,225.28				
Total Direct Cost (est.)	$2.30	$7,351.68				
Add 1/5 cost of working raises (see pgs. 19 & 20)		1,845.11				
		$9,196.79				

Note references appear on pages 21 to 25, inclusive.

Answer to Question 5(a) Form MF 105 (Cont'd)

EXPLORATION SUMMARY - 500' LEVEL

	Min.	Max.
Total estimated exploratory footage - 500' level	650'	1800'
Average estimated exploratory footage - 500' level	1225'	
Estimated direct cost per foot of exploratory work (See pg. 26)	$24.45	
$24.45 x 1225' = Estimated direct cost of exploration work - 500' level	$29,926.75	
Estimated cost to pick up old drifts and workings and make safe and accessible for exploratory work (see page 15 for detail)	11,695.27	
Estimated cost of sampling and assaying 600 samples @ $4.00	2,400.00	
Total estimated direct cost of exploration 500' level	$44,020.02	

500' LEVEL EXPLORATION

	Footage Min.	Footage Max.
A. Continuation of west heading to explore the west area, the extent of westward progress to be determined by sampling of ground opened	00	200
B. Raise from near present west face to explore for downward extension of showings on 200' level	100	100
C. Cross-cuts to hanging and foot walls beneath Block 5E, and raises where justified by sampling of this exploratory work	00	150
D. Dykes' samples from this level beneath Blocks 5J, 5K and 5L indicate good prospects for opening up immediately available ore. It is contemplated exploring this area by means of at least six cross-cuts into both hanging and foot walls, and probably three raises to explore upward extensions	500	700
E. To the east of Block 5L no sampling has been done. This area should be explored, and will probably require six cross-cuts and two to four raises where sampling dictates	250	650
Total footage	650	1800

500' Level Drift

Estimate of Cost to Clean Up and Make Safe and Accessible for Exploratory Work - 2800'

Items	Cost Per Ft. of Drift	Total Cost	Cost 1400' Timbered Drift Per foot	Cost 1400' Timbered Drift Total	Cost 1400' Nontimbered Drift Per Foot	Cost 1400' Nontimbered Drift Total
Direct Labor (Note 6)	$1.44	$4,040.40	$2.22	$3,108.00	$ .66	$ 932.40
Mine Timber (Note 2)	.49	1,372.00	.98	1,372.00		
Track Ties (Note 7)	.069	193.20	.069	96.60	.069	96.60
Rail 16# (Note 9)	.48	1,344.00	.48	672.00	.48	672.00
Fish Plates 16# (Note 9)	.075	210.00	.075	105.00	.075	105.00
Track Bolts 16# (Note 9)	.01	28.00	.01	14.00	.01	14.00
Track Spikes 16# (Note 9)	.013	38.40	.013	18.20	.013	18.20
Air Line 2" (Note 10)	.22	617.40	.22	308.70	.22	308.70
Water Line 1" (Note 10)	.13	365.40	.13	182.70	.13	182.70
	$2.93	$8,206.80	$4.20	$5,877.20	$1.66	$2,329.60
Safety Factor 20%	.59	1,641.36				
Total Direct Cost (est.)	$3.52	$9,848.16				
Add 1/3 cost of working raises (see pages 19 and 20)		1,845.11				
		$11,693.27				

Note references appear on Pages 21 to 25, inclusive.

EXPLORATION SUMMARY - 200' LEVEL

	Min.	Max.
Total estimated exploratory footage - 200' level	750'	2200'
Average estimated exploratory footage - 200' level	1475'	
Estimated direct cost per foot of exploratory work (see pg. 26)	$24.45	
$24.45 x 1475' = Estimated direct cost of exploration work - 200' level	$36,054.25	
Estimated cost to pick up old drifts and workings and make safe and accessible for exploratory work (see page 16 for detail)	15,826.07	
Estimated cost of sampling and assaying 600 samples @ $4.00	2,400.00	
Total estimated direct cost of exploration - 200' level	$54,260.32	

200' LEVEL EXPLORATION

	Footage Min.	Footage Max.
A. Near the western end of the 200' Level a cross-cut was driven into the hangingwall in Sherman-Howe ground about 400', from the end of which a drift was driven east 300', its face being less than 50' west of the Anchor Mines boundary. Dykes' samples 502 and 503, taken from parallel stringers in the face of that drift, show high grade tungsten ore and its continuance into Anchor should be sought. This should be done by exploratory drifting and cross-cutting from Anchor's hanging wall cross-cut about 200 feet to the east. (This area is beyond the limits of the Assay Map hence is not shown)	200	500
B. Samples to the west of Block 2B indicate scheelite ore of good grade. To thoroughly explore this area several cross-cuts into hanging and foot wall, as well as raises, should be driven, their location and extent to depend on results of sampling	300	700
C. This level should be sampled from the area covered by B above to its portal. Where assays justify it, the ground should be explored requiring at least three exploratory cross-cuts and two raises	150	500
D. Nothing is known regarding tungsten occurrence in Tunnel 200 East. However, some exploration will be advisable in that area, its amount depending on sampling results	100	500
Total footage	750	2200

200' Level Drift

Estimate of Cost to Clean Up and Make Safe and Accessible for Exploratory Work - 2800'

Items	Cost Per Ft. of Drift	Total Cost	Cost 2000' Timbered Drift		Cost 800' Nontimbered Drift	
			Per Foot	Total	Per Foot	Total
Direct Labor (Note 6)	$1.78	$ 4,972.80	$2.22	$4,440.00	$ .666	$ 532.80
Mine Timber (Note 2)	.70	1,960.00	.98	1,960.00		
Track Ties (Note 7)	.069	193.20	.069	138.00	.069	55.20
Rail 16# (Exh. C)	.96	2,688.00	.96	1,920.00	.96	768.00
Fish Plates 16# (Note 9)	.075	210.00	.075	150.00	.075	60.00
Track Bolts 16# (Note 9)	.01	28.00	.01	20.00	.01	8.00
Track Spikes 16# (Note 9)	.025	70.00	.025	50.00	.025	20.00
Air Line 2" (Exh. D)	.343	960.40	.343	686.00	.343	274.40
Water Line 1" (Exh. D)	.203	568.40	.203	406.00	.203	162.40
	$4.16	$11,650.80	$4.89	$9,770.00	$2.55	$1,880.80
Safety Factor 20%	.83	2,330.16				
Total Direct Cost (Est.)	$4.99	$13,980.96				
Add 1/3 cost of working raises (see pages 19 and 20)		1,845.11				
		$15,826.07				

Note references appear on pages 21 to 25, inclusive.

EXPLORATION SUMMARY
Dunn, Swede, Higrade and Huckleberry Veins

	Min.	Max.
Total estimated exploratory footage	1000'	1000'
Average estimated exploratory footage - above veins	2500'	
Estimated direct cost per foot of exploratory work (See pg. 26)	$24.43	
$24.43 x 2500' = Estimated direct cost of exploration work on Dunn, Swede, Higrade and Huckleberry Veins	$61,075.00	
Estimated cost of sampling and assaying 500 samples @ $4.00	2,000.00	
Total estimated direct costs of exploration - Dunn, Swede, Higrade and Huckleberry Veins	$63,075.00	

EXPLORATION OF OTHER VEINS
Dunn, Swede, Higrade and Huckleberry

	Footage Min.	Footage Max.
All of these veins are geologically similar to the Anchor Vein, and from three, the Swede, Dunn and Higrade, Dykes took samples that showed substantial tungsten mineralization. These veins were only intermittantly worked during gold mining operations, hence development work is insufficient on which to base more than an approximate estimate of justifiable exploration. An assumption that each of these would require 1000 feet of underground drifting, raising and cross-cutting would seem to be in order	1000'	4000'

Working and Access Raise
500' Vertical Raise and Ore Pass - 600' to 200' Level

Estimate of Cost to Clean Up and Make Safe and Accessible for Exploratory Work - 500'

Items	Cost Per Ft. of Raise	Total Cost	Cost 500' Timbered Raise Per Foot	Total
Direct Labor (Note 11)	$3.33	$1,665.00	$3.33	$1,665.00
Mine Timber (Note 12)	1.254	627.00	1.254	627.00
Air Line 3" (Exh. D)	.704	352.00	.704	352.00
Water Line 2" (Exh. D)	.343	171.50	.343	171.50
	$5.63	$2,815.50	$5.63	$2,815.50
Safety Factor 20%	1.13	563.10		
Total Direct Cost (Est.)	$6.76	$3,378.60		

Note: Cost distributed 1/3 each to 200, 300 and 400 level costs of exploration.

200 level	$1,126.20
300 level	1,126.20
400 level	1,126.20

Working and Access Raise
575' 64 E Raise - 800' to 300' Level

Estimate of Cost to Clean Up and Make Safe
and Accessible for Exploratory Work - 575'

Items	Cost Per Ft. of Raise	Total Cost	Cost 575' Timbered Raise Per Foot	Total
Direct Labor (Note 11)	$3.33	$1,248.75	$3.33	$1,248.75
Mine Timber (Note 12)	1.254	470.25	1.254	470.25
Air Line 3" (Note 5)	.141	52.87	.141	52.87
Water Line 2" (Note 5)	.069	25.73	.069	25.73
	$4.79	$1,797.60	$4.79	$1,797.60
Safety Factor 20%	.96	359.52		
Total Direct Cost (Est.)	$5.75	$2,157.12		

Note: Cost distributed 1/3 each to 200, 300 and 400 level cost of exploration.

200 level	$719.04
300 level	719.04
400 level	719.04

Exhibit A - Estimate Direct Labor Cost

*Estimate miners' wage scale per hr.		$ 1.75
Add increase for 48 hr. week " "		.146
Estimate miners' wage scale, 48 hr. wk basis, per hr.		$ 1.896
Add - F.O.A. insurance 1½%	$ .028	
State employment insurance 2.7%	.051	
Industrial compensation insurance 5.50%	.104	.183
		$ 2.079

*Present going scale in district

Exhibit B - Estimate of Mine Timber Costs

*Estimated cost 1 cord mine timber (16' logs, minimum diameter 6")
delivered at mine - $15.00
Estimate 1¼ cords mine timber equals 1000 B.F.
15 x 1.25 = cost 1000 B.F. mine timber
delivered at the mine $16.25
Add sawmill costs:
Estimate 2 man hours to saw 1000 B.F.

Labor rate per hr. (See Exh. A) 2.08 x 2	$4.16	
Power costs estimate	.50	4.66
Total cost mine timber per 1000 B.F. at mine		$20.91

*Recent nominal quotation

Exhibit C - Estimate rail costs

*All rail estimated at $180.00 per ton

30# rail at	$180 per ton	= .90	per foot of raise
24#	do	= .72	do
16#	do	= .48	do
12#	do	= .36	do

*Recent quotation for new rail. Believe used rail in good condition can be located cheaper.

Exhibit D - Estimate of Pipe Costs

* 3	inch black iron pipe, new	$70.41	per 100 ft.	.704	per ft.
* 2	do	54.27	do	.545	do
* 1	gal.	20.28	do	.205	do

*Recent nominal quotation

Note #1 - Underground crews to work with aid of trammer, mucker, cherry-picker and any other practical and economic mining equipment and methods. Under these conditions it is estimated two men at a working face can restore to safe workable condition on an average of 50 feet of nontimbered tunnel per eight-hour shift, including air line, water line, track, ditch and any low backs.

2 men x 8 hrs = 16 M.H. @ $2.08 per hr. (See Exhibit A) $33.30
33.30 ÷ 50 ft.= $1.11 labor cost per foot untimbered tunnel

Working under duplicate conditions as above, it is estimated that the same two-man crew will restore to safe workable condition on an average of 15 feet (3 timber sets) of timbered tunnel per eight-hour shift.

2 men x 8 hrs. = 16 M.H. @ $2.08 per hr. (See Exhibit A) $33.30
33.30 ÷ 15 ft. = $2.22 labor cost per foot timbered tunnel

Note #2 - Board feet in one five foot timber set 5 x 7 in the clear

	Board Feet	Estimate % to be replaced	Board feet to replace
2 Caps - 8x8x6	64	50%	32
4 Posts 8x8x8	170	50	85
2 Spreaders 4x8x5	26	50	13
2 Sills 8x8x6	64	20	13
95 sq.ft. lagging (3" material)	285	25	71
	609		214
Safety factor - 10%			21
Estimated total board feet to repair 1 timber set			235

Cost of timber per set

235 B.F. x $20.91 cost per 1000 B.F. (See Exhibit B) = $4.91

Cost of timber per foot of timbered tunnel

$4.91 ÷ 5 ft. timber set = .98

Note #3 - Track to be restored, 18 inch gauge. Ties to be 4"x6"x36", or six board feet to one tie.

Estimate 1 tie to each 18" of track
Estimate 25% of ties to be replaced
18 inches x 4 ties = 72 inches or 6 feet
25% of ties to be replaced equals one in four, or one to each six feet of tunnel
6 B.F. (1 tie) = 6 feet of tunnel, or 1 B.F. to each foot of tunnel
1 B.F. x $20.91 per 1000 B.F. (See Exhibit B) = .021 cost of 1 B.F.
Add safety factor .002
Tie repair cost per foot of tunnel .023 cost of 1 B.F.

Note #4 - Rail - 30#

At present time is equipped with 16# rail. However, in view of past experience with electric trammer operation on these light rails, it is considered imperative that they be replaced with heavier rail, using the present 16" rail at other places in the mine (see estimate of exploration costs of 400' level). 30# rail has been used in this estimate but believe 24# might do the job as well (See Exhibit C).

Fish Plates - 30#

Rail lengths 20 ft. - 2 rail joints per 20 ft. track
2 pair fish plates per 20 ft. track @ $1.00* per pair = $2.00
2.00 ÷ 20 ft. = 10¢ cost of fish plates per ft. of track

Track Bolts

250 - 30# track bolts (5/8 x 3) = 100 lbs.
2 rail joints per 20 feet of track, 4 bolts per joint = 8 bolts
8 bolts equals 3.2 lbs. x $1.45* per lb. = .464 cost of bolts per 20' track - .464 ÷ 20 = .024, bolt cost per ft. of track

Track Spikes

690 - 30# track spikes (5/8 x 5) = 100 lbs.
1 - " " " " = .145 "
4 spikes per tie - 1 tie to each 18 inches of track
66% of 4 = 2.66 spikes per foot of track
2.66 x .145 = .386 pound per 2.66 spikes
.386 x $1.14* per lb. = .044 cost of spikes per foot of track

*Recent nominal quotation

Note #5 - Estimate 20% of footage of present air and water line to be replaced (See Exhibit D).

Note #6 - Estimate 2 man shifts can restore to safe workable condition 50' nontimbered drift on this level because of light track, ties, pipe and installation.

2 man shifts @ $2.08 per hr. (see Exhibit A) = $33.30
33.30 ÷ 50 ft. = .666 per foot nontimbered drift

For details of estimate of labor costs timbered drift this level refer to Note #1.

Note #7 - Ties to be 4"x6"x36" = 6 board feet
Estimate 1 tie to each 24" of track
6 B.F. ÷ 2 ft. of track = 3 B.F. per foot of drift
.023 cost of 1 B.F. (see Note #3) x 3 B.F. = .069 cost per foot of drift

Note #8 - No cost for this item, it being provided partly by material already in place plus balance of material available from 600' level.

Note #9 - <u>Rails 16#</u>
Estimate approximately 2800' 16# rail required on this level after using any surplus from 600' level
2800' of 16# rail x .48 (see Exh. C) = $1,344.00
$1,344.00 ÷ 2800' = .48 per ft. drift

<u>Fish Plates 16#</u>
Rail length 20 ft. - 2 rail joints per 20 ft. track, 2 pair fish plates per 20 ft. track @ 75¢* per pair equals $1.50 fish plate costs per 20 feet track
$1.50 ÷ 20 = .075, fish plate cost per foot of track

<u>Track Bolts 16#</u>
900 - 16# track bolts per cwt.
100 lbs. of 16# track bolts - $16.50* ÷ 900 = .0183 cost of 1 bolt
2 rail joints, 4 bolts per joint, per 20 feet of track.
8 bolts per 20 ft. track 8 ÷ 20 = .4 bolts per foot of track - .4 x .0183 = .00732 cost of 16# bolts per foot track

<u>Track Spikes 16#</u>
825 - 16# track spikes per cwt. - $10.40* per cwt.
4 spikes per tie, 1 tie to 2 ft. of drift, 2 spikes per ft. drift
10.40 ÷ 825 = .0127 cost one spike x 2 = .0254 cost of spikes per foot of drift

*Recent nominal quotation

Note #10 - Estimate 1000' of serviceable air line now present on this level
2800' - 1000' = 1800' air line @ .343 (see Exhibit D) = $617.40
617.40 ÷ 2800 = 22¢ per ft. drift

Estimate 1000' of serviceable water line now present on this level
2800' - 1000' = 1800' 1" water line @ .203 per ft. (see Exhibit D) =
365.40 ÷ 2800' = .13¢ cost per foot of drift

Note #11 - Estimate 2 man shifts can only restore to safe workable condition 10 feet of timbered raise under operating conditions outlined in Note #1 due to the inaccessible nature of the operation.

2 man shifts x 2.08 per M.H. (see Exhibit A) = $55.30
55.30 ÷ 10 = 5.55 per foot of raise

Note #12 - Increase estimate of timber consumption as set out in Note #2 from 255 B.F. per 5 ft. timber set to 300 B.F. per 5 ft. timber set. This increase indicated due to condition of raise and structural requirements of timber used in raises.

300 B.F. ÷ 5 = 60 B.F. per linear foot of raise
60 B.F. x 20.91 = 1.254 timber cost per linear foot of raise

In answer to Question 5(a) of Form MF-105

Analysis of Estimate of Per
Footage Cost of Exploration

Estimates for computing cost of exploration work are taken from results actually obtained in pre-war operations as set out in Bureau of Mines Information Circular No. IC 7024, corrected by setting up present actual labor and explosives costs, which are definitely known, and calculating other items, ratios past and present between each, and explosives costs.

Per day - Labor

1 miner @ $1.75/hr. plus estimated overtime, S.S. etc.		$16.65
1 mucker		16.65
Explosives		
40 lbs. powder @ $24.00/cwt.	$9.60	
Caps and fuse	1.50	11.10
Power		
Approximately equal to explosives		11.10
Supplies - timber, steel, etc. approximately 1.5 times explosives		16.65
Overhead - superintendence, engineering, etc. approximately 50% of explosives		5.55
Total per shift		$76.35

In former experience, progress was made at the rate of 3.75 feet per shift in drifting, and 2.5 feet per shift in raising. The work proposed, it is assumed, will be 50% of each type, or an average of 3.125 feet per shift.

3.125 feet @ $76.35 or $24.45 per foot.

In answer to Question 5(b) of Form MF-105

Time Required

Applicant is ready to start project on availability of funds. Due to the heavy winter, initial progress will be slower than if the project was started during summer months, this factor, however, will have no ultimate effect on time schedule.

Nine drill shifts daily are planned with estimated average advance of 3.125 feet per face (see page 26 for details). Total advance per day will, therefore, be 9 x 3.125 or 28.125 feet daily. The 9225 feet average of exploration set out will require 328 working days. Allowing 60 days for moving in and setting up, a time schedule to complete the project of approximately 1 year is expected.

Answer to Question 5 - Form MF-105

Existing Buildings, Installations, Facilities & Fixtures

In the ten years since closing the mine, damage by the elements to buildings and facilities has been considerable. The following tables itemize existing facilities and estimated rehabilitation costs:

	Item	To be Used in Connection With Exploration Project	Estimated Costs of Repairs and Rehabilitation
2000'	Camp water lines	Yes	$ 1,800
20	Sewer lines and sanitation	Yes	5,700
5000'	Electric and telephone lines	Yes	1,500
1	Bunk house building	Yes	2,500
1	Cook house building	Yes	2,500
16	Family cabins	10	5,000
1	School house building	No	-o-
1	Office building	Yes	500
1	General store building	No	-o-
1	Camp work shop & maintenance building	Yes	500
1	Supply room, compressor room and dry room building	Yes	2,000
1	Machine shop, Diesel room and assay office building	Yes	1,000
1	Blacksmith shop building	Yes	250
1	Timber framing shed	Yes	250
1	Machinery warehouse building	Yes	500
1	Mill building	No	-o-
1	Bit grinding room building	Yes	250
	Track in place underground (see Ans. to 5(a))	Yes	
	Water lines in place underground "	Yes	
	Air lines in place underground "	Yes	
	Total rehabilitation cost to place in condition to carry out the exploration project		$20,250

Answer to Question 6 - Form MF-105

Additional Facilities, Buildings and Fixtures

5	Additional telephones	$ 90.00
10	Single beds, springs & mattresses	1,000.00
	Additional cooking utensils, dishes and miscellaneous kitchen equipment	300.00
10	Electric light meters for cabins	400.00
1	Lube oil and grease warehouse	1,000.00
1	Sawmill building	500.00
250'	Snow sheds	1,000.00
1	Addition to office building for engineering office	1,000.00
	Total Additional Facilities	$5,290.00

Answer to Question 7 - Form MF-103

Question 7(a)
Operating Equipment to be Rented

No.	Item	Estimated Monthly Rental
1	Compressor 550 CFM Electric	$ 80.00

Question 7(b)
Operating Equipment to be Purchased

No.	Item	Estimated Purchase Price
2	Diesel power units 150 KW	$15,000.00
1	Compressor 400 CFM Electric	4,000.00
1	D8 Cat Dozer	8,000.00
1	6 x 6 5-ton truck	4,000.00
1	Snow Plow (truck attachment)	5,000.00
1	Small saw mill	4,500.00
1	Electric trammer, batteries and charging equipment	5,000.00
2	Leyners	1,800.00
1	Tugger hoist	400.00
4	Mine cars	1,500.00
1	Mine car loader	2,200.00
2	Jumbos	2,000.00
1	Cherrie picker	500.00
1	Accounting posting machine	1,000.00
	Power saws and motors (timber framing shed)	500.00
		$55,200.00

Answer to Question 7 - Form MF-105 (Cont'd)

Question 7(c)
Operating Equipment to be Furnished by Applicant

No.	Item	Rehabilitation Cost(a)	Proposed Monthly Rental(b)
Underground Equipment			
55	Miners' Edison Lamps, batteries, charger & belts	$400.00	$ 70.00
2	I.R.D.A. 30 Leyners	100.00	60.00
4	I.R. 51 stopers	400.00	88.00
1	Jack hammer JA55	100.00	18.00
6	Air line oilers	-o-	2.00
1	Leadville portable hoist, Model #5	100.00)	
1	Ingersol Rand tugger hoise IR-9	50.00)	
1	" " utility hoist D6U	100.00)-	90.00
1	" " tugger hoist EHA	100.00)	
12	Mine cars	1,200.00	140.00
1	Cherry picker	25.00	10.00
1	Mine car loader 009	250.00	100.00
6	Drill columns (4 - 5½") (2 - 5")	150.00)	
4	" " arms 5½"	75.00)	
5	" " arm saddles 5½"	75.00)-	50.00
2	" " clamps 5½"	50.00)	
1	" " " 5"	25.00)	
Repair shop Equipment			
1	Acetylene generator with hoses gauges and nozzles	75.00	12.00
Blacksmith Shop Equipment			
1	I.R. Oil furnace - Model 6F	100.00)	
1	I.R. Model 34 drill sharpener, equipped for 7/8" hex and 1" Q.O. steel complete with punch	100.00)	
1	Anvil 180#	-o-)	140.00
1	20" Champion post drill press	-o-)	
1	I.R. bit grinder Model J2 and motor	-o-)	
Diesel Operating Equipment			
8	Columbia Steel bolted tanks, Diesel storage	600.00	50.00
Camp Equipment			
	Cook house range, tables, benches, sinks, heating stove	100.00	10.00
Office Equipment			
1	Adding machine	-o-)	
1	Comptometer	-o-)	50.00
2	Typewriters	-o-)	
1	Steel, letter size, 4-drawer file	-o-)-	
2	Victor visible files, 10 drawers, 8-3/8" pocket	-o-)	15.00
1	Steel file, 27 - 3x9x12½ drawers	-o-)	

Answer to Question 7 - Form MF-103 (Cont'd)

Question 7(c) Cont'd

No.	Item	Rehabilitation Cost(a)	Proposed Monthly Rental(b)
Engineering Equipment			
1	Fairchilds Stereoscope - Model 4, No. 16	$ -o-	
2	" " small pocket size	-o-	
1	Transit and tripod	100.00	
1	Stadia 15' folding	-o-	$ 50.00
1	" Board 15'	-o-	
1	" 5' folding	-o-	
1	1000' steel tape	-o-	
1	500' " "	-o-	
Assay Office Equipment			
1	Denver fire clay, muffle furnace, blower and motor	250.00	
1	Keller Mfg. Co. button balance scales	50.00	
1	Wm. Ainsworth & Sons pulp balance scales	50.00	50.00
1	Braun sample pulveriser, bolt drive	-o-	
1	Chipmunk crusher 5 x 3	-o-	
1	18 x 24 bucking board with muller	-o-	
	Total rehabilitation cost	$4,625.00	
	Total monthly rental		$935.00

Note (a) - Applicant is not clear in its understanding of just how this cost is handled under the terms of the exploration project contract. These costs are set out here as they must be expended as outlined in order for the items to be placed in useful and operable condition to carry out exploration project.

Note (b) - Rentals are based on the rental quotations supplied by machinery dealers on the same or similar equipment.

Answer to Question 8 - Form MF-105

Schedule of Operating Personnel and Estimated Costs

No.	Position	Rate
1	General Manager - Superintendent	$750.00 per mo.
1	Geologist (Consulting Basis) - avg. 1 week per mo.	250.00 " "
1	Junior Engineer, geologist assistant, surveying, mapping, etc.	475.00 "
1	Comptroller, accountant, auditor, etc.	400.00 " "
1	Clerk, stenographer, etc.	250.00 "
1	Warehouse-inventory control, and payroll clerk	300.00 " "
1	Assayer sampler) Per assay contract	
1	" " assistant) $4.00	
1	Underground superintendent (Mine Foreman)	500.00 " "
1	Mechanic - plant superintendent	1.90 per hr.
2	Diesel operators - mechanics	1.75 " "
2	Shifters	1.90 " "
9	Miners	1.75 " "
9	Muckers	1.60 " "
2	Hand trammers	1.60 " "
1	Motor trammer	1.60 " "
1	Timber framer	1.90 " "
1	Blacksmith	1.90 " "
2	Roustabouts	1.60 " "
39		

Answer to Question 9 - Form MF-105

Other Costs

It is intended to keep lower mine access road open to automobile traffic during winter months. This will require the disposal of snow from approximately 3 to 4 miles of road. It is expected to accomplis this with a snow plow attached to the 6 x 6 truck. In the event of extreme snow conditions the Cat Dozer would be put into use. A cost of $550.00 per month for the period November to March, inclusive, should be set up to cover this activity.

Answer to Question 10 - Form FM-103

(a) At the present time Applicant is prepared to invest the equipment outlined in answer to Question 7(c) in the project. In addition, it is in possession of between 20 and 25 thousand dollars worth of new and used mining supplies that it can invest in the project as these supplies are sold to the project according to the project's needs.

(b) If the total cost of the project as actually performed equals the amount set out in this application, then in that event the resources referred to above which the Applicant is prepared to invest at this time will not be sufficient to cover its share pursuant to Sec. 9 of MO-5. However, the exploration project herein was laid out from the sole standpoint of strict academic mine engineering. Economics were not considered, thus cost estimates as set up in this application are maximums. In addition, due to the uncertainty inherent in any exploration project, it may and usually does become prudent to revise the program in the light of information gained during its primary stages.

Accordingly, Applicant feels that the total funds to be expended, of which Applicant will have invested his proportionate share, as set out above, are sufficient to carry the program forward a considerable distance.

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Form MF-100
(March 1951)

U. S. DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS ADMINISTRATION

Form approved.
Budget Bureau No. 42-R1026.

RECEIVED
OCT 29 1951
DEPARTMENT OF THE INTERIOR
Defense Minerals Administration

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

NOT TO BE FILLED IN BY APPLICANT

Docket No. dma 2185

Date received 10-29-51

ANCHOR MINES, INC.
530 West Sixth Street
Los Angeles 14, California

Name and address of applicant

Date May 28, 1951

INSTRUCTIONS

This form is to be filed with Defense Minerals Administration, Department of the Interior, Washington 25, D. C. It should be accompanied by appropriate application form when a specific type of Government assistance is requested, in the form of (1) loan, (2) purchase contract, (3) Government guarantee of a private loan, (4) Necessity Certificate pursuant to the provisions of Sec. 124-A (Amortization Deduction) of Internal Revenue Code, 1950, (5) priorities or allocation of mining equipment, and maintenance, repair and operating supplies, and (6) other forms of Government assistance that might arise under the Act. Submit four (4) signed copies of the form and accompanying papers. Name and address should be stamped or typed on each sheet of this form and all accompanying papers. *When a question is inapplicable it should be so stated on the form.* Additional sheets may be attached in answering any questions or in supplying additional information. (IF YOU CANNOT ANSWER A QUESTION, SO STATE.) If a question is answered elsewhere indicate where answered. It is not necessary to answer it again.

GENERAL TECHNICAL DATA

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

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

   Indicate whether mine is flooded or not. Describe any pumping problems. Give size or productive capacity.
3. For each operation listed above supply the following:
   (*a*) Distance and direction from nearest town and shipping point.
   (*b*) Mining district.
   (*c*) Township, Section, Range.
   (*d*) County, State.
4. (*a*) State whether or not property is now in operation, and if in operation, by whom operated.
   (*b*) Are you operating this property as:
   - ☐ Owner.
   - ☐ Lessee.
   - ☐ Contractor.
5. Number of years in production .....

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

8. Names and addresses of Officers, Directors, or Partners, and in addition thereto, the five largest stockholders if applicant is a corporation.

Name and Address (a)	Official Title (If officer is also director indicate by "D") (b)	Total of Annual Salary, Commissions, Bonuses, Etc., Received From Applicant and Affiliates During Last Fiscal Year (c)	Estimated Net Worth Outside of Interest in Applicant (d)	Number of Shares Held in Applicant Corporation: Common (e)	Number of Shares Held in Applicant Corporation: Preferred (f)	Life Insurance Carried for Benefit of Applicant: Amount (g)	Life Insurance Carried for Benefit of Applicant: Net Cash Surrender Value After Loans (h)
C. W. Turner 550 W. 6th St., L.A. 14	President-D	$4200	$5000	218,000	-	None	
Jay A. Czizek 491 Crescent Dr., Oakland	VicePres.-D	-	Unknown	5,750	-	"	
Wm. H. Buckingham 901 S. Kensington, L.A.	Secy - D	-	"	5	-	"	
Wm. L. Cozzens 912 E. Palm St., Altadena	Director	-	"	5	-	"	
Elis. M. Czizek R.R.#5, Fontana, Calif.	Stkholder	-	"	64,160	-	"	
F. H. Coble 1085 Prospect Pl., Pasadena	"	-	"	5,946	-	"	
James Harris Burgdorf, Idaho	"	-	"	6,621	-	"	
Harland F. Beardslee 412 W. 6th St., L.A. 14	" ~~Treas~~	-	x x " x x	64,450	-	x x " x x x	x x x x x
		$4200		362,937			

If more lines are needed continue on separate sheet.

9. Capital Stock Issues:

For Corporate Applicants

Item	Authorized (a)	Outstanding (b)	Par Value (c)	Number of Shares Outstanding (d)	Dividend Rate Last Paid* (e)
Common stock	$2,000,000	$ 528,222	$ .25¢	552,222	Year 1941 .10¢
Preferred stock	$	$	$		

*Indicate period covered.

10. Production: Not applicable

Item	Kind of Product (a)	1948 Total (b)	1949 Total (c)	1950 Total (d)	Present Average Monthly (e)
1. Quantity of product mined or quarried (Short, long, metric tons; barrels; pounds; etc.)					
2. Quantity of product processed (specify unit of measure and type of process)					
3. Quantity and grade of product sold or shipped (specify units of measure)					

11. Do you contemplate a change in the present average monthly rate of production? If so, state estimated maximum monthly production and basis of change.

12. Ore or Mineral Reserves:

(a) Describe the ore or mineral deposit briefly. Accompany the application by any available report on the geology and ore reserves.

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(*b*) If deposit is other than placer:

(1) Submit assay plans and/or sections showing location and size of proved (measured) and probable (indicated) ore or mineral reserve.

(2) State the tonnage (indicate type of ton) and grade of each class of ore reserve, as above, and show how computed. Tabulated total ore reserve as follows:

TOTAL ORE OR MINERAL RESERVES

Ore or Mineral Reserve	Estimated Tons (a)	Metal or Mineral Content Per Ton (Grade) (b)	Gross Value Per Ton (c)	Recoverable Unit Value Per Ton (d)	Estimated Cost of Production Per Ton (e)
Measured (proved)					
Indicated (probable)					

(*c*) If placer:

(1) Give estimated total yardage and average marketable mineral content of each deposit.

(2) Submit map showing location of placer deposit and surrounding area, with all test holes or pits. Submit logs of each hole and test pit with depth and average value of each.

(3) Describe gravel, stating whether fine, medium or coarse; loose, tight, cemented, or frozen, and whether it contains stumps or boulders more than 1 foot in diameter; if so, how large, and in what proportion.

(4) Describe bedrock, giving type (granite, sandstone, shale, etc.) and state whether it is hard or soft, smooth, uneven or rough.

(5) Describe overburden, stating whether loose, tight, or cemented; fine or coarse textured; furnish estimate of average thickness and total amount.

(6) Tabulate the reserves using the form outlined above for ore or mineral reserves.

13. Access Roads:

Give road distances to shipping, supply and residence points, stating kind and condition of roads.

14. Water Supply:

State source and quantity of water available for operations and whether sufficient for all seasons of year.

15. Power:

State amount of power used, rate per hour, and source thereof.

16. Labor:

State number and classes (miners, muckers, millmen, etc.) of men employed during a recent representative payroll period.

17. Equipment and Facilities:

Describe present equipment on the property, including buildings. (State condition.) List major pieces of equipment now owned or controlled and in serviceable condition available for this operation.

18. Are there any particular conditions or circumstances affecting your operations that are not described above? If so, explain.

CERTIFICATION

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

ANCHOR MINES, INC.
(Name of company)

By [signature]
(Signature of authorized official)

May 28, 1951
(Date)

President.
(Title)

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

U. S. GOVERNMENT PRINTING OFFICE 10—63792-1

ANCHOR MINES, INC.

Answers to Questions on Form MF-100

1. Materials Produced
   (a) Gold and silver
   (b) See Answer to Question 7 below

2. Golden Anchor Mine - Lode mine - 50-Ton Flotation mill. Originally known as Holt Mine.
   (a) Incline shaft 450 feet
   (b) Vertical shaft 250 feet
   (c) Approximately 15,000 feet of drift
   Approximately 2,000 feet of adit cross cuts
   Property worked through 1600 foot adit crosscut - intersecting the vein 750 feet below its outcrop as measured on the dip of the vein. Approximately 15,000 feet of drifts open the veing on the 200, 250, 300, 400, 600, 700, 800, 900, 1000 feet levels.
   Mine is flooded below the 600-ft. adit level. No mining activity contemplated below drainage level. Production, mining and milling, was approximately 50 tons per day when operations were terminated in 1942.

3. (a) Property located 55 miles north of Union Pacific R.R. shipping point of McCall, Idaho. Property is approximately 50 miles east of Riggins, Idaho. Contact with this truck shipping point is made over county road open to truck traffic for about 8 months out of year.

   (b) Located in Marshall Lake Mining District, Idaho County, Idaho.

   (c) Township 24 North, Range 5 East, Boise Meridian

   (d) Idaho County, Idaho

4. (a) Property is not now in operation

   (b) Applicant's own property through mineral locations and patented claims.

5. Property produced steadily from November 1935 to May 1942. Also considerable unknown production prior to 1918. Applicant intends to make an application to D.M.A. for financial aid in a defense exploration project involving the search for scheelite ore on the above property. Production resumption will depend on the outcome of this project.

6. The writer has been identified with the property since 1939, during which period it was producing for 3-1/4 years. Also identified with other enterprises as General Manager.

ANCHOR MINES, INC.

Answers to Questions on Form MF-100

7. (a) Property past history dates from 1902 and all past production has been gold and silver. Production terminated in 1942 because of war. During this production considerable scheelite was present in ore but no attempt to recover was made due to commercial economies at the time. For the same reason no geological or petrological work was done in connection with scheelite.

(b) Property is largest producer in the District although several properties in the District have had production in the past. Most notable are the Sherman-Howe , Goodenough, and Mount Marshall Mines.

(c) See enclosed Bureau of Mines Information circular 7024. Although this report is not up to date it will provide the answers called for here and at the same time furnish a background to contemplated subsequent application. Attention is called to the mention of the presence of scheelite on page 4 of circular.

8. See Form MF-100

9. See Form MF-100

10. Not applicable

11. See reply to Questions 4 & 5

12. All present existing mineral reserves are evaluated on their gold value only, and are conservatively estimated at approximately 55,000 tons at $18.50 per ton.

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
JUN 4 - 1951
LANDON F. STROBEL
Executive Secretary

ANCHOR MINES, INC.

Answer to Questions on Form FM100

12. (b) (1) & (2) As far as is known at this time the ore reserves of this property consist of gold and silver values only. Therefore, no detailed answer to these questions shall be submitted for the present. Complete detail will be supplied in future when application for financial assistance for exploration for scheelite is filed.

13. See reply to question 3(a) above.

14. Abundant water supply from local creeks and lakes. Corporation holds prior water rights on source of supply.

15. Diesel electric power used in past. Large potential hydro-electric power available however.

16. Not applicable because nature of any future operation will not remotely compare with past operations that were terminated in 1942.

17. Company has, with exception of Diesel electric generating plant, classifier for mill and electric trammer, substantially all the necessary mining and milling machinery, buildings and equipment to operate at the rate of 50 tons per day.

18. This property can be placed in production with very little trouble and expense. The important reason for not resuming production has been the lack of a commercially profitable product when produced.

Past records of operation show considerable scheelite in the mill heads at varying periods. In view of present commercial profit in scheelite ore as well as government exploration financing program, Corporation is now contemplating exploring for scheelite, and will make application for government assistance in this effort in the near future.

Form MF-103
(Revised June 1951)

UNITED STATES DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS ADMINISTRATION

Budget Bureau No. 42-R1035.1.

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

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

Not To Be Filled in by Applicant

Docket No. dma 2185
Metal or Mineral
Date Received 10-29-51
Amount $
Participation (Government %)

RECEIVED OCT 29 1951 Department of the Interior Defense Minerals Administration

ANCHOR MINES, INC.
550 West Sixth Street
Los Angeles 14, California

Name and address of applicant

Date October 24, 1951

If you have already filed MF-100, give date filed June 4, 1951, but returned and submitted herewith, type of assistance requested Priority allocation of equipment, etc.

DMA Docket Number (if available)

INSTRUCTIONS

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

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

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

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

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

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

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

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

   See attached statements.

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

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

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

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

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

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

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

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

   (*a*) Rented

   (*b*) Purchased

   (*c*) Furnished by you

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

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

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

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

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

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

CERTIFICATION

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

ANCHOR MINES, INC.
(Name of company)

By [signature]
(Signature of authorized official)

October 24, 1951
(Date)

President
(Title)

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

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

ANCHOR MINES, INC.

Answers to Questions - Form MF-105
Defense Minerals Administration

Answer to Question 1(a) - Form MF-105

The real property involved in this exploration project is situated in the State of Idaho, County of Idaho, Marshall Lake Mining District - Township 24 North, Range 5 East, Boise Meridian, and in the interest of economy and simplicity in answering this question, we enclose photostatic copies of Legal Opinion of Title covering all mining claims pertinent to this application to October 1946, together with photostatic copies of registered filings of Affidavit of Proof of Labor or Notice of Intent to Hold covering such claims from the date of the abovementioned Opinion to July 1, 1951.

Answer to Question 1(b)

Not applicable.

Answer to Question 1(c)

The exact area upon which the exploration work shall be conducted, with the use of the funds received from this application to cover costs of such exploratory work, shall be that portion of all of the mining claims listed in the photostatic copies submitted in support of 1(a) above which lie above the horizon of the Golden Anchor Mine 600' adit cross cut haulage level.

Answer to Question 2(a)

Scheelite.

Answer to Question 2(b)

Please refer to geological report and maps of Leland H. Dykes, Geologist.

EXHIBIT "D"

First Security Bank of Idaho

NATIONAL ASSOCIATION

BOISE BRANCH

Boise, Idaho

J. L. BRISCOLL
PRESIDENT

October 15, 1976

California State Employees Credit Commission
Sacramento, California

Dear Sir:

The law firm of Hawley and Hawley, and its senior partner, Cecil Hawley, have been known to me for over a quarter of a century.

They have been engaged in private law and the practice of it. They have an excellent reputation in this locality of the State of Idaho and in my opinion are qualified to render an opinion upon questions of title to mining claims. They have been practicing law in Idaho for more than forty years and their offices are in the Boise Building, Boise, Idaho.

Any questions you may desire to ask concerning this firm, I will be to answer.

Yours very truly,

J. L. Briscoll
President

JLB:

EXHIBIT "D"

HAWLEY & HAWLEY
ATTORNEYS AND COUNSELORS
EASTMAN BUILDING
BOISE, IDAHO

JESS B. HAWLEY

JESS B. HAWLEY, JR.

CLAUDE V. MARCUS

October 28, 1946.

California State Corporation Commissioner,
Sacramento, California.

Dear Sir:

Re: Opinion on Title to Certain Lode Mining Claims Constituting Mining Groups of the Anchor Mines, Inc. an Idaho corporation.

We have examined abstracts, bound in one volume, Number 12365, Number 12961, Number 12967, number 15232; also abstracts Number 11987, Number 15198, Number 11978, Number 18237 and Number 18285 each separately bound.

These abstracts were compiled from the official records of Idaho County, State of Idaho, by Inland Abstract Company, of Grangeville, Idaho. We will hereafter refer to the names of the claims, and other data contained in the abstracts.

Our opinion is limited to these abstracts and does not include any water rights, nor the rights of anyone, whether in possession or occupancy of the property, or claiming an interest therein, whose claims or rights are not of record, or any of the ground that may be covered by names other than those of the specified claims.

Abstract Number 12365 is certified to by the Inland Abstract Company as of two o'clock P. M., August 25, 1939.

Abstract Number 18237, which is a continuation of the above abstract is certified to as of five o'clock P. M. October 1, 1946.

The mining claims and locations covered by the original abstract, Number 12365, and the supplement, Number 18237, are named in their respective original and/or Amended Location Notices as follows:

Sherman
Sherman No. 3
Sherman No. 4
Sherman No. 5

Jumbo No. 9
Jumbo No. 10
Jumbo No. 10 Fraction
Old Corporal
Old Corporal No. 2
Old Corporal No. 3
Old Corporal No. 3 Fraction
Crystal Fraction
Gold Coin
Gold Coin No. 2
Gold Coin No. 3
Gold Coin No. 4
Gold Coin No. 5
Bengal No. 1
Bengal No. 2
Bengal No. 3
Bengal No. 4
Mohawk

All of the above claims are unpatented lode mining claims situate in the Marshall Lake Mining District of the State of Idaho, excepting the Sherman, Sherman No. 3, Sherman No. 4, Sherman No. 5, Old Corporal and Crystal Fraction, and these are patented lode mining claims.

Abstract Number 11987 is the abstractor's record of location and other subsequent instruments of record as to the following named lode mining claims:

Sherman
Jumbo No. 9
Jumbo No. 10
Old Corporal No. 3
Old Corporal
Old Corporal No. 2
Crystal Fraction
Sherman No. 3
Sherman No. 4
Sherman No. 5
Gold Coin
Gold Coin No. 2
Gold Coin No. 3
Gold Coin No. 4
Gold Coin No. 5
Bengal No. 1
Bengal No. 2
Bengal No. 3
Bengal No. 4

Mohawk
Old Corporal No. 3 Fraction
Jumbo No. 10 Fraction

All of the above are unpatented lode mining claims with the exception of the Sherman, Sherman No. 3, Sherman No. 4 and Sherman No. 5.

This abstract Number 11987, is certified as of five o'clock P. M. January 30, 1929, and is brought to date by Abstract Number 18237, certified as of five o'clock P. M. October 1, 1946.

This abstract Number 15198 is the abstractor's reco d of location and subsequent instruments of record as to the following named lode mining claims:

Long Fraction
Lucky Swede
Lucky Swede No. 3
Lucky Swede Fraction
Lucky Swede Fraction No. 2
Jumbo No. 7
Jumbo No. 8
Jumbo Fraction
Old Andy
July Fourth.

All of these are unpatented lode mining claims.

This abstract, Number 15198 is certified as of five o'clock P. M. July 6, 1939 and is brought to date by abstract Number 18237, as of five o'clock P. M. October 1, 1946.

Abstract Number 18285 is certified as of October 24, 1946 at nine o'clock A. M. It is the abstract of location and subsequent instruments of record as to the following unpatented lode mining claims:

Missing Link
Gold Coin No. 6
Jumbo No. 11
Jumbo No. 12
Lucky Swede No. 3
Lucky Swede No. 4

While there are defects of conveyances, misnomers, failure to indicate marital status and defective annual report certificates, those, in our judgment, are not of importance and may be ignored. The unimportance of these defects; operation

of the Idaho statute of limitations, together with possession by the Anchor Mining Company and its predecessors and successors in interest, including the Anchor Mines, Inc., in our opinion, cure whatever defects as above suggested, may exist.

We give it as our opinion, therefore, that good and merchantable title to each of the hereinbefore named lode mining claims, both patented and unpatented, is in the

ANCHOR MINES, INC.,
a qualified Idaho corporation.

The unpatented mining claims, however, are subject to the paramount title of the United States of America. They are held, however, in full compliance with existing laws, Federal and State.

The title to the patented claims is not so subject.

DATED this 28th day of October, 1946.

HAWLEY AND HAWLEY

By Jesse Hawley

Office Address: Suite 810
Hasman Building, Boise, Idaho.

JH/r

NOTICE OF INTENTION TO HOLD MINING CLAIMS

NOTICE IS HEREBY GIVEN that the undersigned corporation, ANCHOR MINES, INC., an Idaho corporation, intends to hold the following lode mining claims situated in the Marshall Lake Mining District, in Idaho County, State of Idaho:

Bengal	No. 1	Book	59	Mining	Claims	Page 202
Bengal	No. 2	"	59	"	"	" 203
Bengal	No. 3	"	59	"	"	" 332
Bengal	No. 4	"	59	"	"	" 333
July Fourth	(July Forth)	"	61	"	"	" 134
Gold Coin		"	58	"	"	" 462
Gold Coin	No. 2	"	58	"	"	" 461
Gold Coin	No. 3	"	58	"	"	" 478
Gold Coin	No. 4	"	58	"	"	" 479
Gold Coin	No. 5	"	58	"	"	" 480
Gold Coin	No. 6	"	72	"	"	" 69
Jumbo	No. 7	"	58	"	"	" 78
Jumbo	No. 8	"	58	"	"	" 183
Jumbo	No. 9	"	58	"	"	" 288
Jumbo	No. 10	"	58	"	"	" 389
Jumbo	No. 11	"	72	"	"	" 93
Jumbo	No. 12	"	72	"	"	" 94
Jumbo Fraction		"	59	"	"	" 224
Jumbo	No. 10 Fraction	"	59	"	"	" 226
Long Fraction		"	58	"	"	" 458
Lucky Swede		"	58	"	"	" 455
Lucky Sweed Fraction (Lucky Swede Fraction)		"	58	"	"	" 457
Lucky Swede No. 2		"	58	"	"	" 456
Lucky Swede No. 3		"	72	"	"	" 70
Lucky Swede Fraction	No. 2	"	58	"	"	" 571
Lucky Swede	No. 4	"	72	"	"	" 71
Missing Link		"	63	"	"	" 459
Mohawk		"	57	"	"	" 70
Old Andy		"	61	"	"	" 133
Old Corporal	No. 2	"	58	"	"	" 332
Old Corporal	No. 3	"	58	"	"	" 333
Old Corporal Fraction	No. 3	"	59	"	"	" 225

said claims being contiguous and forming a common group.

THIS NOTICE is given under and pursuant to the Moratorium Act of May 3, 1941.

DATED: June 23, 1947.

The original of this copy
was filed in the office of
County Recorder, June 27, 1947

Earl T. Reuter
Recorder

By Nancy Telchu
Deputy

ANCHOR MINES, INC.

By: O. W. Weimer
President

STATE OF CALIFORNIA)
) ss
County of Los Angeles)

On this 23rd day of June, 1947, before me, Lillian M. Deverey, a Notary Public in and for the said County and State, personally appeared C. W. TURNER, known to me to be the President of ANCHOR MINES, INC., the corporation that executed the within instrument, known to me to be the person who executed the within instrument, on behalf of the corporation herein named, and acknowledged to me that such corporation executed the same.

WITNESS my hand and official seal.

Lillian M. Deverey
Notary Public in and for said
County and State
My commission expires 7-11-50

AFFIDAVIT OF ANNUAL LABOR

STATE OF CALIFORNIA)
) ss.
COUNTY OF LOS ANGELES)

Before me, the undersigned Notary Public, personally appeared C. W. Turner, President of Anchor Mines, Inc., an Idaho corporation, who, being first duly sworn, says:

That at least One Hundred Dollars ($100.00) worth of work or improvements were performed or made upon and for the benefit of each of the following lode mining claims as listed below, and each situated in the Marshall Lake Mining District, in Idaho County, State of Idaho as follows:

Claims held under mineral locations in the name of Anchor Mines, Inc., an Idaho Corporation

Bengal	No. 1	Book 59	Mining Claims	"	Page	202
Bengal	No. 2	" 59	"	"	"	203
Bengal	No. 3	" 59	"	"	"	332
Bengal	No. 4	" 59	"	"	"	333
July Fourth	(July Forth)	" 61	"	"	"	134
Gold Coin		" 58	"	"	"	462
Gold Coin	No. 2	" 58	"	"	"	461
Gold Coin	No. 3	" 58	"	"	"	478
Gold Coin	No. 4	" 58	"	"	"	479
Gold Coin	No. 5	" 58	"	"	"	480
Jumbo	No. 6	" 72	"	"	"	69
Jumbo	No. 7	" 58	"	"	"	78
Jumbo	No. 8	" 58	"	"	"	183
Jumbo	No. 9	" 58	"	"	"	288
Jumbo	No. 10	" 58	"	"	"	389
Jumbo	No. 11	" 72	"	"	"	93
Jumbo Fraction	No. 12	" 72	"	"	"	94
Jumbo		" 59	"	"	"	224
Long Fraction	No. 10 Fraction	" 59	"	"	"	226
Lucky Swede		" 58	"	"	"	458
Lucky Sweed Fraction		" 58	"	"	"	455
(Lucky Swede Fraction						
Lucky Swede No. 2		" 58	"	"	"	457
Lucky Swede No. 3		" 58	"	"	"	456
Lucky Swede Fraction	No. 2	" 72	"	"	"	70
Lucky Swede	No. 4	" 58	"	"	"	571
Missing Link		" 72	"	"	"	71
Mohawk		" 63	"	"	"	459
Old Andy		" 57	"	"	"	70
Old Corporal		" 61	"	"	"	133
Old Corporal	No. 2	" 58	"	"	"	332
Old Corporal	No. 3	" 58	"	"	"	333
Old Corporal Fraction	No. 3	" 59	"	"	"	225

That all the stakes, monuments or trees marking boundaries of said claims, and each of them, are in proper place and position.

President

Subscribed and sworn to before me this 10th. day of June, 1948.

Lillian M. Deverey
Notary Public in and for the County of Los Angeles, State of California

My Commission Expires July 11, 1950

COMPARED

INDEXED

STATE OF IDAHO, ss.

COUNTY OF BONNEVILLE

I hereby certify that the within instrument was filed for record in my office at 9 o'clock A.M. this 14 day of June and duly recorded in Book 48 of Proof of Labor at Page 208 records of said County.

CARL T. REUTER
County Recorder

By Bob J. Waite
Deputy

Fee $5.00

NOTICE OF INTENTION TO HOLD MINING CLAIMS

NOTICE IS HEREBY GIVEN that the undersigned corporation, ANCHOR MINES, INC., an Idaho corporation, intends to hold the following lode mining claims situated in the Marshall Lake Mining District, in Idaho County, State of Idaho:

Bengal	No. 1	Book 59	Mining Claims		Page 202
Bengal	No. 2	" 59	"	"	" 203
Bengal	No. 3	" 59	"	"	" 332
Bengal	No. 4	" 59	"	"	" 333
July Fourth	(July Forth)	" 61	"	"	" 134
Gold Coin		" 58	"	"	" 462
Gold Coin	No. 2	" 58	"	"	" 461
Gold Coin	No. 3	" 58	"	"	" 478
Gold Coin	No. 4	" 58	"	"	" 479
Gold Coin	No. 5	" 58	"	"	" 480
Gold Coin	No. 6	" 72	"	"	" 69
Jumbo	No. 7	" 58	"	"	" 78
Jumbo	No. 8	" 58	"	"	" 183
Jumbo	No. 9	" 58	"	"	" 288
Jumbo	No. 10	" 58	"	"	" 389
Jumbo	No. 11	" 72	"	"	" 93
Jumbo	No. 12	" 72	"	"	" 94
Jumbo Fraction		" 59	"	"	" 224
Jumbo	No. 10 Fraction	" 59	"	"	" 226
Long Fraction		" 58	"	"	" 458
Lucky Swede		" 58	"	"	" 455
Lucky Sweed Fraction (Lucky Swede Fraction)		" 58	"	"	" 457
Lucky Swede No. 2		" 58	"	"	" 456
Lucky Swede No. 3		" 72	"	"	" 70
Lucky Swede Fraction	No. 2	" 58	"	"	" 571
Lucky Swede	No. 4	" 72	"	"	" 71
Missing Link		" 63	"	"	" 459
Mohawk		" 57	"	"	" 70
Old Andy		" 61	"	"	" 133
Old Corporal	No. 2	" 58	"	"	" 332
Old Corporal	No. 3	" 58	"	"	" 333
Old Corporal Fraction	No. 3	" 59	"	"	" 225

said claims being contiguous and forming a common group.

THIS NOTICE is given under and pursuant to H. R. 1754 of June, 1949.

DATED: June 24, 1949.

ANCHOR MINES, INC.

By: _____ President.

STATE OF CALIFORNIA)
) ss
County of Los Angeles)

On this 24th day of June, 1949, before me, Ruth H. Lewis, a Notary Public in and for the said County and State, personally appeared C. W. TURNER, known to me to be the President of ANCHOR MINES, INC., the corporation that executed the within instrument, known to me to be the person who executed the within instrument on behalf of the corporation herein named, and acknowledged to me that such corporation executed the same.

WITNESS my hand and official seal.

Ruth H. Lewis

Notary Public in and for said
County and State
Commission Expires

163401

Asclar Mines Inc.
2 P 27
June 49

Nella Basinger
Fee 50¢

AFFIDAVIT OF ANNUAL LABOR

STATE OF CALIFORNIA)
) ss.
County of Los Angeles)

Before me, the undersigned, Notary Public in and for said County and State, personally appeared C. W. Turner, President of Anchor Mines, Inc., an Idaho corporation, who, being first duly sworn, deposes and says:

That at least One Hundred Dollars ($100.00) worth of work or improvements were performed or made upon and for the benefit of each of the following lode mining claims as listed below and each situated in the Marshall Lake Mining District, in Idaho County, State of Idaho, as follows:

Bengal	No. 1	Book	59	Mining	Claims	Page 202
Bengal	No. 2	"	59	"	"	" 203
Bengal	No. 3	"	59	"	"	" 332
Bengal	No. 4	"	59	"	"	" 333
July Fourth	(July Forth)	"	61	"	"	" 134
Gold Coin		"	58	"	"	" 462
Gold Coin	No. 2	"	58	"	"	" 461
Gold Coin	No. 3	"	58	"	"	" 478
Gold Coin	No. 4	"	58	"	"	" 479
Gold Coin	No. 5	"	58	"	"	" 480
Gold Coin	No. 6	"	72	"	"	" 69
Jumbo	No. 7	"	58	"	"	" 78
Jumbo	No. 8	"	58	"	"	" 183
Jumbo	No. 9	"	58	"	"	" 288
Jumbo	No. 10	"	58	"	"	" 389
Jumbo	No. 11	"	72	"	"	" 93
Jumbo	No. 12	"	72	"	"	" 94
Jumbo Fraction		"	59	"	"	" 224
Jumbo	No. 10 Fraction	"	59	"	"	" 226
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Lucky Swede		"	58	"	"	" 455
Lucky Sweed Fraction (Lucky Swede Fraction)		"	58	"	"	" 457
Lucky Swede No. 2		"	58	"	"	" 456
Lucky Swede No. 3		"	72	"	"	" 70
Lucky Swede Fraction	No. 2	"	58	"	"	" 571
Lucky Swede	No. 4	"	72	"	"	" 71
Missing Link		"	63	"	"	" 459
Mohawk		"	57	"	"	" 70
Old Andy		"	61	"	"	" 133
Old Corporal	No. 2	"	58	"	"	" 332
Old Corporal	No. 3	"	58	"	"	" 333
Old Corporal Fraction	No. 3	"	59	"	"	" 225

All of said claims being contiguous and forming a common group with the following described mining claims; pursuant to that mining option contract dated the

the 21st day of November, 1941, recorded in Book 4 of Min. B.L. & Agr. at Page 173 of Records of Idaho County, Idaho, Anchor Mines, Inc. on its own behalf, and as agent of Herbert H. Hackett and Clara D. Hackett, his wife, has also performed at least One Hundred Dollars ($100.00) worth of work or improvements for the benefit of each of the following lode mining claims:

The Old Kentuck Amended	Book 57	Mining Claims		Page	144
The Old Kentuck No. 2 Amended	" 57	"	"	"	145
The Old Kentuck No. 3	" 58	"	" Quartz	"	622
The Old Kentuck No. 4 Fraction	" 58	"	" "	"	578
The Old Kentuck Extension Fraction	" 58	"	" "	"	577
The Old Kentuck No. 5 Fraction	" 59	"	" "	"	22
The Mother Lode	" 56	"	" "	"	523

all of said claims forming a group known as the Old Kentuck Group quartz lode mining claims situated across the middle fork of Bear Creek and about 2000 feet northwest of Twin Lakes, being contiguous and forming a common group.

That said expenditures were made by, for and at the expense of Anchor Mines, Inc, the owner of said claims or agent of owner of said claims, for the purpose of holding said claims, and that said work was done between the first day of July of 1949 and the first day of July, 1950.

That all the states, monuments or trees marking boundaries of said claims, and each of them, are in proper place and position.

C. W. Turner
President, Anchor Mines, Inc.

Subscribed and sworn to before me
this 23rd day of June, 1950.

Notary Public in and for said
County and State.

STATE of IDAHO }
COUNTY of IDAHO } SS

I hereby certify that this Instrument was filed for record in the office of the Recorder of Idaho County, at the request of Anchor Mines, Inc at 9 ~~minutes past~~ o'clock A M. this 5 day of July A.D. 1950, and duly recorded in Book 7 of Pri of Labor at page 493 Records of said County.

Clare J. Reuter
County Recorder

By Bob J. Waite
Deputy

Fee $5.00

530 West Fifth St.
Los Angeles 14, Calif.

AFFIDAVIT OF ANNUAL LABOR

STATE OF CALIFORNIA)
) ss.
County of Los Angeles)

Before me, the undersigned, Notary Public in and for said County and State, personally appeared C. W. TURNER, President of Anchor Mines, Inc., an Idaho corporation, who, being first duly sworn, deposes and says:

That at least One Hundred Dollars ($100.00) worth of work or improvements were performed or made upon and for the benefit of each of the following lode mining claims as listed below and each is situated in the Marshall Lake Mining District, Idaho County, State of Idaho, as follows:

Bengal	No. 1	Book	59	Mining	Claims	Page	202
Bengal	No. 2	"	59	"	"	"	203
Bengal	No. 3	"	59	"	"	"	332
Bengal	No. 4	"	59	"	"	"	333
July Fourth (July Forth)		"	61	"	"	"	134
Gold Coin		"	58	"	"	"	462
Gold Coin	No. 2	"	58	"	"	"	461
Gold Coin	No. 3	"	58	"	"	"	478
Gold Coin	No. 4	"	58	"	"	"	479
Gold Coin	No. 5	"	58	"	"	"	480
Gold Coin	No. 6	"	72	"	"	"	69
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Jumbo	No. 8	"	58	"	"	"	183
Jumbo	No. 9	"	58	"	"	"	288
Jumbo	No. 10	"	58	"	"	"	389
Jumbo	No. 11	"	72	"	"	"	93
Jumbo	No. 12	"	72	"	"	"	94
Jumbo Fraction		"	59	"	"	"	224
Jumbo	No. 10 Fraction		59	"	"	"	226
Long Fraction		"	58	"	"	"	458
Lucky Swede		"	58	"	"	"	455
Lucky Sweed Fraction (Lucky Swede Fraction)		"	58	"	"	"	457
Lucky Swede No. 2		"	58	"	"	"	456
Lucky Swede No. 3		"	72	"	"	"	70
Lucky Swede Fraction	No. 2	"	58	"	"	"	571
Lucky Swede	No. 4	"	72	"	"	"	71
Missing Link		"	63	"	"	"	459
Mohawk		"	57	"	"	"	70
Old Andy		"	61	"	"	"	133
Old Corporal	No. 2	"	58	"	"	"	332
Old Corporal	No. 3	"	58	"	"	"	333
Old Corporal Fraction	No. 3	"	59	"	"	"	225

That said expenditures were made by, for and at the expense of Anchor Mines, Inc. the owner of said claims, for the purpose of holding said claims, and that said work was done between the first day of July 1950 and the first day of July 1951.

That all the stakes, monuments or trees marking boundaries of said claims, and each of them, are in proper place and position.

C. W. TURNER
President, Anchor Mines, Inc.

Subscribed and sworn to before me this 22nd day of June, 1951.

Notary Public in and for said County and State.

Expires

170375

STATE of IDAHO
ss
COUNTY of IDAHO

I hereby certify that this instrument was recorded in the office of the Recorder of Idaho County at the request of Anchor Mines, Inc

on page 2 ~~[illegible]~~

o'clock P.M. this 27 day of June A.D. 19 57, and duly recorded in Book ... of ... on page ... Records of said County

Earl J. Reuter
County Recorder

By Bob J. Waite
Deputy

Fee $7.50

530 West Sixth St
Los Angeles 14, Calif

ANCHOR MINES, INC.

Golden Anchor Mine
Idaho County, Idaho

Answer to Question 5(a) - Form MF 105

SUMMARY

Footage Min.	Footage Max.		Cost
1680 to	3880	Exploration work on 600' level	$ 92,005.92
545 to	2145	" " " 400' "	44,855.14
650 to	1600	" " " 300' "	41,577.02
750 to	2200	" " " 200' "	54,260.32
1000 to	4000	" " " Dunn, Swede, Higrade and Huckleberry Veins	63,075.00
4625'	13825'	Total estimated direct cost	$295,773.40

Answer to Question 3(a) Form MF 103 (Cont'd)

EXPLORATION SUMMARY - 600' LEVEL

	Min.	Max.
Total estimated exploratory footage - 600' level	1680'	3880'
Average estimated exploratory footage - 600' level	2780'	
Estimated direct cost per foot of exploration work (See pg. 26)	$24.45	
$24.45 x 2780'= Estimated direct cost of exploration work - 600' level	$67,915.40	
Estimated cost to pick up old drifts and cross cuts and make safe and accesible for exploration work (See pages 6 and 7)	21,690.52	
Estimated cost of sampling and assaying - 600 samples @ $4.00	2,400.00	
Total estimated direct cost of exploration - 600' level	$92,005.92	

Answer to Question 5(a) Form MF 103 (Cont'd)

600' LEVEL EXPLORATION

It is proposed to carry on a systematic lamping and sampling of all underground work. Exploration will thus be guided by sampling, hence any present proposals for exploration may have to be modified in the light of subsequent greater knowledge.

		Footage Min.	Footage Max.
A.	A cross cut into the hangingwall opposite an existing footwall cross-cut about seventy-five feet west of the Vertical Raise, and raise from this work if sampling discloses the scheelite showings justify	250	250
B.	Approximately 100 feet further west opposite an existing cross-cut into the hangingwall, a cross-cut into the foot-wall, and if scheelite is found, a raise to explore upper extension	50	250
C.	Approximately 180 feet west of B above, an exploratory raise to prospect a large area believed to be ore bearing, but on which there is little data	200	250
D.	Approximately 150 feet west of C above, an exploratory footwall cross-cut opposite an existing hangingwall cross-cut, and if justified by sampling of any scheelite showings, a raise to explore upward extensions	30	250
E.	At least two more cross-cuts and raises to the west of D above, positions to be determined by the results of above work and sampling	100	500

ANCHOR MINES, INC.

Answer to Question 3(a) Form MF 103 (Cont'd)

		Footage Min.	Footage Max.
F.	Continuation of the second raise east of the Vertical Raise, to explore easterly extension. Good showings of scheelite	75	100
G.	Cross-cuts into both hanging and foot walls at 150-foot intervals to the east to explore for possible ore-bearing splits as suggested by Dykes (see his report page 15) - exact location to depend on assaying	600	1200
H.	Raises to explore upward extensions in connection with G above where assaying of G work justifies	500	600
I.	An exploratory drift west into virgin ground from the Vertical Raise half way between the 600' and the 400' levels, and continue as far as sampling indicates good exploratory prospects for tungsten ore	75	500
	Total footage	1680	3880

ANCHOR MINES, INC.

Golden Anchor Mine
Idaho County, Idaho

Adit Haulage Cross Cut and Portal

Estimate of Cost to Clean Up and Make Safe and Accessible for Exploratory Work - 1800'

Estimated feet of timbered cross cut - 400'
Estimated feet of nontimbered cross cut - 1400'

Items	Cost Per Ft. of Tunnel	Total Direct Cost	Cost 400 ft. Timbered Tunnel Per Ft. of Tunnel	Cost 400 ft. Timbered Tunnel Total	Cost 1400 ft. Nontimbered Tunnel Per Ft. of Tunnel	Cost 1400 ft. Nontimbered Tunnel Total
Direct labor (Note 1)	$1.36	$2,442.00	$2.22	$ 888.00	$1.11	$1,554.00
Mine Timber (Note 2)	.218	392.00	.98	392.00		
Track Ties (Note 3)	.023	41.40	.023	9.20	.023	32.20
Rail 30# (Note 4)	1.80	3,240.00	1.80	720.00	1.80	2,520.00
Fish Plates (Note 4)	.10	180.00	.10	40.00	.10	140.00
Track Bolts 30# (Note 4)	.024	43.20	.024	9.60	.024	33.60
Track Spikes 30# (Note 4)	.044	79.20	.044	17.60	.044	61.60
Air Line 3" (Note 5)	.141	253.44	.141	56.32	.141	197.12
Water Line 2" (Note 5)	.069	123.48	.069	27.44	.069	96.04
	$3.78	$6,794.72	$5.40	$2,160.16	$3.31	$4,634.56
Safety Factor 20%	.75	1,358.94				
Total	$4.53	$8,153.66				

Note references appear on pages 21 to 25, inclusive.

Answer to Question 3(a) Form MF 103 (Cont'd)

600' Level Haulage Drift

Estimate of Cost to Clean Up and Make Safe and Accessible for Exploratory Work - 2800'

Items	Costs Per Ft. of Drift	Total Direct Cost	Cost 1000' Timbered Tunnel Per Foot	Cost 1000' Timbered Tunnel Total	Cost 1800' Nontimbered Tunnel Per Foot	Cost 1800' Nontimbered Tunnel Total
Direct Labor (Note 1)	$1.51	$ 4,218.00	$2.22	$2,220.00	$1.11	$1,998.00
Mine Timber (Note 2)	.35	980.00	.98	980.00		
Track Ties (Note 3)	.023	64.40	.023	23.00	.023	41.40
Rail 30# (Note 4)	1.80	5,040.00	1.80	1,800.00	1.80	3,240.00
Fish Plates (Note 4)	.10	280.00	.10	100.00	.10	180.00
Track Bolts 30# (Note 4)	.024	67.20	.024	24.00	.024	43.20
Track Spikes 30# (Note 4)	.044	123.20	.044	44.00	.044	79.20
Air Line 3" (Note 5)	.141	394.24	.141	140.80	.141	253.44
Water Line 2" (Note 5)	.041	113.68	.041	40.60	.041	73.08
	$4.03	$11,280.72	$3.37	$3,372.40	$3.28	$5,908.32
Safety Factor 20%	.81	2,256.14				
Total Direct Cost (est.)	$4.84	$13,536.86				

Note references appear on pages 21 to 25, inclusive.

Answer to Question 5(a) Form MF 105 (Cont'd)

EXPLORATION SUMMARY - 400' LEVEL

	Min.	Max.
Total estimated exploratory footage - 400' level	545'	2145'
Average estimated exploratory footage - 400' level	1345'	
Estimated direct cost per foot of exploratory work (See pg. 26)	$24.43	
$24.43 x 1345' = Estimated direct cost of exploration work - 400' level	$32,858.55	
Estimated cost to pick up old drifts and workings and make safe and accessible for exploratory work (see page 10)	9,196.79	
Estimated cost of sampling and assaying 700 samples @ $4.00	2,800.00	
Total estimated direct cost of exploration - 400' level	$44,855.14	

Answer to Question 3(a) Form MF 103 (Cont'd)

400' LEVEL EXPLORATION

	Footage Min.	Footage Max.
A. To the west of the Vertical Raise exploratory cross-cuts into both hanging and foot walls, below Block 4D, and raises from this work where assaying justifies	60	160
B. At least two cross-cuts into hanging and foot walls below Block 4C, and raises where scheelite mineralization disclosed by sampling of this exploratory work justifies	60	560
C. Extension of the 400' Level to the west, depending upon results of sampling of exploratory work as it progresses	00	500
D. Two cross-cuts below Block 4E and one below Block F into hanging and foot walls with raises from these exploratory openings if sampling justifies. In this area stringers carrying scheelite run into both hangingwall and footwall, and ground is very promising, hence cross-cuts may have to be run further than usual	225	225
E. Cross-cuts into both hanging and foot walls beneath each of Blocks 4J, 4K, 4L and 4M, positions to be determined by sampling, and raises run from them to explore any upward extensions, if justified by sampling	200	600
Total footage	545	2145

ANCHOR MINES, INC.

Golden Anchor Mine
Idaho County, Idaho

400' Level Drift

Estimate of Cost to Clean Up and Make Safe and Accessible for Exploratory Work - 3200'

Items	Cost Per Ft. of Drift	Total Cost	Cost 800' Timbered Drift Per Foot	Cost 800' Timbered Drift Total	Cost 2400' Nontimbered Drift Per Foot	Cost 2400' Nontimbered Drift Total
Direct Labor (Note 6)	$1.05	$3,374.40	$2.22	$1,776.00	$ .666	$1,598.40
Mine Timber (Note 2)	.245	784.00	.98	784.00		
Track Ties (Note 7)	.069	220.80	.069	55.20	.069	165.60
Rail 16# (Note 8)	-o-	-o-	-o-	-o-	-o-	-o-
Fish Plates 16# (Note 8)	-o-	-o-	-o-	-o-	-o-	-o-
Track Bolts 16# (Note 8)	-o-	-o-	-o-	-o-	-o-	-o-
Track Spikes 16# (Note 8)	-o-	-o-	-o-	-o-	-o-	-o-
Air Line 2" (Exh. D)	.343	1,097.60	.343	274.40	.343	823.20
Water Line 1" (Exh. D)	.203	649.60	.203	162.40	.203	487.20
	$1.92	$6,126.40	$3.82	$3,052.00	$1.28	$3,074.40
Safety Factor 20%	.38	1,225.28				
Total Direct Cost (est.)	$2.30	$7,351.68				
Add 1/3 cost of working raises (see pgs. 19 & 20)		1,845.11				
		$9,196.79				

Note references appear on pages 21 to 25, inclusive.

Answer to Question 3(a) Form MF 103 (Cont'd)

EXPLORATION SUMMARY - 500' LEVEL

	Min.	Max.
Total estimated exploratory footage - 500' level	650'	1800'
Average estimated exploratory footage - 500' level	1225'	
Estimated direct cost per foot of exploratory work (See pg. 26)	$24.45	
$24.45 x 1225' = Estimated direct cost of exploration work - 500' level	$29,926.75	
Estimated cost to pick up old drifts and workings and make safe and accessible for exploratory work (see page 13 for detail)	11,693.27	
Estimated cost of sampling and assaying 600 samples @ $4.00	2,400.00	
Total estimated direct cost of exploration 500' level	$44,020.02	

300' LEVEL EXPLORATION

	Footage Min.	Footage Max.
A. Continuation of west heading to explore the west area, the extent of westward progress to be determined by sampling of ground opened	00	200
B. Raise from near present west face to explore for downward extension of showings on 200' level	100	100
C. Cross-cuts to hanging and foot walls beneath Block 3E, and raises where justified by sampling of this exploratory work	00	150
D. Dykes' samples from this level beneath Blocks 3J, 3K and 3L indicate good prospects for opening up immediately available ore. It is contemplated exploring this area by means of at least six cross-cuts into both hanging and foot walls, and probably three raises to explore upward extensions	300	700
E. To the east of Block 3L no sampling has been done. This area should be explored, and will probably require six cross-cuts and two to four raises where sampling dictates	250	650
Total footage	650	1800

500' Level Drift

Estimate of Cost to Clean Up and Make Safe and Accessible for Exploratory Work - 2800'

Items	Cost Per Ft. of Drift	Total Cost	Cost 1400' Timbered Drift		Cost 1400' Nontimbered Drift	
			Per foot	Total	Per Foot	Total
Direct Labor (Note 6)	$1.44	$4,040.40	$2.22	$3,108.00	$ .66	$ 932.40
Mine Timber (Note 2)	.49	1,372.00	.98	1,372.00		
Track Ties (Note 7)	.069	193.20	.069	96.60	.069	96.60
Rail 16# (Note 9)	.48	1,344.00	.48	672.00	.48	672.00
Fish Plates 16# (Note 9)	.075	210.00	.075	105.00	.075	105.00
Track Bolts 16# (Note 9)	.01	28.00	.01	14.00	.01	14.00
Track Spikes 16# (Note 9)	.013	36.40	.013	18.20	.013	18.20
Air Line 2" (Note 10)	.22	617.40	.22	308.70	.22	308.70
Water Line 1" (Note 10)	.13	365.40	.13	182.70	.13	182.70
	$2.93	$8,206.80	$4.20	$5,877.20	$1.66	$2,329.60
Safety Factor 20%	.59	1,641.36				
Total Direct Cost (est.)	$3.52	$9,848.16				
Add 1/5 cost of working raises (see pages 19 and 20)		1,845.11				
		$11,693.27				

Note references appear on Pages 21 to 25, inclusive.

EXPLORATION SUMMARY - 200' LEVEL

	Min.	Max.
Total estimated exploratory footage - 200' level	750'	2200'
Average estimated exploratory footage - 200' level	1475'	
Estimated direct cost per foot of exploratory work (see pg. 26)	$24.43	
$24.43 x 1475'= Estimated direct cost of exploration work - 200' level	$36,034.25	
Estimated cost to pick up old drifts and workings and make safe and accessible for exploratory work (see page 16 for detail)	15,826.07	
Estimated cost of sampling and assaying 600 samples @ $4.00	2,400.00	
Total estimated direct cost of exploration - 200' level	$54,260.32	

200' LEVEL EXPLORATION

	Footage Min.	Footage Max.
A. Near the western end of the 200' Level a cross-cut was driven into the hangingwall in Sherman-Howe ground about 400', from the end of which a drift was driven east 300', its face being less than 50' west of the Anchor Mines boundary. Dykes' samples 502 and 503, taken from parallel stringers in the face of that drift, show high grade tungsten ore and its continuance into Anchor should be sought. This should be done by exploratory drifting and cross-cutting from Anchor's hanging wall cross-cut about 200 feet to the east. (This area is beyond the limits of the Assay Map hence is not shown)	200	500
B. Samples to the west of Block 2B indicate scheelite ore of good grade. To thoroughly explore this area several cross-cuts into hanging and foot wall, as well as raises, should be driven, their location and extent to depend on results of sampling	300	700
C. This level should be sampled from the area covered by B above to its portal. Where assays justify it, the ground should be explored requiring at least three exploratory cross-cuts and two raises	150	500
D. Nothing is known regarding tungsten occurrence in Tunnel 200 East. However, some exploration will be advisable in that area, its amount depending on sampling results	100	500
Total footage	750	2200

200' Level Drift

Estimate of Cost to Clean Up and Make Safe and Accessible for Exploratory Work - 2800'

Items	Cost Per Ft. of Drift	Total Cost	Cost 2000' Timbered Drift		Cost 800' Nontimbered Drift	
			Per Foot	Total	Per Foot	Total
Direct Labor (Note 6)	$1.78	$ 4,972.80	$2.22	$4,440.00	$ .666	$ 532.80
Mine Timber (Note 2)	.70	1,960.00	.98	1,960.00		
Track Ties (Note 7)	.069	193.20	.069	138.00	.069	55.20
Rail 16# (Exh. C)	.96	2,688.00	.96	1,920.00	.96	768.00
Fish Plates 16# (Note 9)	.075	210.00	.075	150.00	.075	60.00
Track Bolts 16# (Note 9)	.01	28.00	.01	20.00	.01	8.00
Track Spikes 16# (Note 9)	.025	70.00	.025	50.00	.025	20.00
Air Line 2" (Exh. D)	.343	960.40	.343	686.00	.343	274.40
Water Line 1" (Exh. D)	.203	568.40	.203	406.00	.203	162.40
	$4.16	$11,650.80	$4.89	$9,770.00	$2.35	$1,880.80
Safety Factor 20%	.83	2,330.16				
Total Direct Cost (Est.)	$4.99	$13,980.96				
Add 1/3 cost of working raises (see pages 19 and 20)		1,845.11				
		$15,826.07				

Note references appear on pages 21 to 25, inclusive.

EXPLORATION SUMMARY
Dunn, Swede, Higrade and Huckleberry Veins

	Min.	Max.
Total estimated exploratory footage	1000'	1000'
Average estimated exploratory footage - above veins	2500'	
Estimated direct cost per foot of exploratory work (See pg. 26)	$24.43	
$24.43 x 2500' = Estimated direct cost of exploration work on Dunn, Swede, Higrade and Huckleberry Veins	$61,075.00	
Estimated cost of sampling and assaying 500 samples @ $4.00	2,000.00	
Total estimated direct costs of exploration - Dunn, Swede, Higrade and Huckleberry Veins	$63,075.00	

EXPLORATION OF OTHER VEINS
Dunn, Swede, Higrade and Huckleberry

	Footage Min.	Footage Max.
All of these veins are geologically similar to the Anchor Vein, and from three, the Swede, Dunn and Higrade, Dykes took samples that showed substantial tungsten mineralization. These veins were only intermittantly worked during gold mining operations, hence development work is insufficient on which to base more than an approximate estimate of justifiable exploration. An assumption that each of these would require 1000 feet of underground drifting, raising and cross-cutting would seem to be in order	1000'	4000'

Working and Access Raise
500' Vertical Raise and Ore Pass - 600' to 200' Level

Estimate of Cost to Clean Up and Make Safe and Accessible for Exploratory Work - 500'

Items	Cost Per Ft. of Raise	Total Cost	Cost 500' Timbered Raise Per Foot	Total
Direct Labor (Note 11)	$3.33	$1,665.00	$3.33	$1,665.00
Mine Timber (Note 12)	1.254	627.00	1.254	627.00
Air Line 3" (Exh. D)	.704	352.00	.704	352.00
Water Line 2" (Exh. D)	.343	171.50	.343	171.50
	$5.63	$2,815.50	$5.63	$2,815.50
Safety Factor 20%	1.13	563.10		
Total Direct Cost (Est.)	$6.76	$3,378.60		

Note: Cost distributed 1/3 each to 200, 300 and 400 level costs of exploration.

200 level	$1,126.20
300 level	1,126.20
400 level	1,126.20

ANCHOR MINES, INC.

Golden Anchor Mine
Idaho County, Idaho

Working and Access Raise
375' 64 E Raise - 600' to 300' Level

Estimate of Cost to Clean Up and Make Safe
and Accessible for Exploratory Work - 375'

Items	Cost Per Ft. of Raise	Total Cost	Cost 375' Timbered Raise Per Foot	Total
Direct Labor (Note 11)	$3.33	$1,248.75	$3.33	$1,248.75
Mine Timber (Note 12)	1.254	470.25	1.254	470.25
Air Line 3" (Note 5)	.141	52.87	.141	52.87
Water Line 2" (Note 5)	.069	25.73	.069	25.73
	$4.79	$1,797.60	$4.79	$1,797.60
Safety Factor 20%	.96	359.52		
Total Direct Cost (Est.)	$5.75	$2,157.12		

Note: Cost distributed 1/3 each to 200, 300 and 400 level cost of exploration.

200 level	$719.04
300 level	719.04
400 level	719.04

Exhibit A - Estimate Direct Labor Cost

*Estimate miners' wage scale per hr.		$ 1.75
Add increase for 48 hr. week " "		.146
Estimate miners' wage scale, 48 hr. wk basis, per hr.		$ 1.896
Add - F.O.A. insurance 1½%	$ .028	
State employment insurance 2.7%	.051	
Industrial compensation insurance 5.50%	.104	.183
		$ 2.079

*Present going scale in district

Exhibit B - Estimate of Mine Timber Costs

*Estimated cost 1 cord mine timber (16' logs, minimum diameter 6")
delivered at mine - $13.00

Estimate 1¼ cords mine timber equals 1000 B.F.		
13 x 1.25 = cost 1000 B.F. mine timber delivered at the mine		$16.25
Add sawmill costs:		
Estimate 2 man hours to saw 1000 B.F.		
Labor rate per hr. (See Exh. A) 2.08 x 2	$4.16	
Power costs estimate	.50	4.66
Total cost mine timber per 1000 B.F. at mine		$20.91

*Recent nominal quotation

Exhibit C - Estimate rail costs

*All rail estimated at $180.00 per ton

30# rail	at $180 per ton	= .90	per foot of raise
24#	do	= .72	do
16#	do	= .48	do
12#	do	= .36	do

*Recent quotation for new rail. Believe used rail in good condition can be located cheaper.

Exhibit D - Estimate of Pipe Costs

* 3 inch	black iron pipe, new	$70.41	per 100 ft.	.704 per ft.
* 2	do	34.27	do	.343 do
* 1	gal.	20.28	do	.203 do

*Recent nominal quotation

Note #1 - Underground crews to work with aid of trammer, mucker, cherry-picker and any other practical and economic mining equipment and methods. Under these conditions it is estimated two men at a working face can restore to safe workable condition on an average of 50 feet of nontimbered tunnel per eight-hour shift, including air line, water line, track, ditch and any low backs.

2 men x 8 hrs = 16 M.H. @ $2.08 per hr. (See Exhibit A) $33.30
33.30 ÷ 30 ft.= $1.11 labor cost per foot untimbered tunnel

Working under duplicate conditions as above, it is estimated that the same two-man crew will restore to safe workable condition on an average of 15 feet (3 timber sets) of timbered tunnel per eight-hour shift.

2 men x 8 hrs. = 16 M.H. @ $2.08 per hr. (See Exhibit A) $33.30
33.30 ÷ 15 ft. = $2.22 labor cost per foot timbered tunnel

Note #2 - Board feet in one five foot timber set 5 x 7 in the clear

	Board Feet	Estimate % to be replaced	Board feet to replace
2 Caps - 8x8x6	64	50%	32
4 Posts 8x8x8	170	50	85
2 Spreaders 4x8x5	26	50	13
2 Sills 8x8x6	64	20	13
95 sq.ft. lagging (3" material)	285	25	71
	609		214
Safety factor - 10%			21
Estimated total board feet to repair 1 timber set			235

Cost of timber per set

235 B.F. x $20.91 cost per 1000 B.F. (See Exhibit B) = $4.91

Cost of timber per foot of timbered tunnel

$4.91 ÷ 5 ft. timber set = .98

Note #3 - Track to be restored, 18 inch gauge. Ties to be 4"x6"x36", or six board feet to one tie.

Estimate 1 tie to each 18" of track
Estimate 25% of ties to be replaced
18 inches x 4 ties = 72 inches or 6 feet
25% of ties to be replaced equals one in four, or one to each six feet of tunnel
6 B.F. (1 tie) = 6 feet of tunnel, or 1 B.F. to each foot of tunnel
1 B.F. x $20.91 per 1000 B.F. (See Exhibit B) = .021 cost of 1 B.F.
Add safety factor .002
Tie repair cost per foot of tunnel .023 cost of 1 B.F.

Note #4 - Rail - 30#

At present time is equipped with 16# rail. However, in view of past experience with electric trammer operation on these light rails, it is considered imperative that they be replaced with heavier rail, using the present 16" rail at other places in the mine (see estimate of exploration costs of 400' level). 30# rail has been used in this estimate but believe 24# might do the job as well (See Exhibit C).

Fish Plates - 30#

Rail lengths 20 ft. - 2 rail joints per 20 ft. track
2 pair fish plates per 20 ft. track @ $1.00* per pair = $2.00
2.00 ÷ 20 ft. = 10¢ cost of fish plates per ft. of track

Track Bolts

250 - 30# track bolts (5/8 x 3) = 100 lbs.
2 rail joints per 20 feet of track, 4 bolts per joint = 8 bolts
8 bolts equals 5.2 lbs. x $1.45* per lb. = .464 cost of bolts per 20' track - .464 ÷ 20 = .024, bolt cost per ft. of track

Track Spikes

690 - 30# track spikes (3/8 x 3) = 100 lbs.
1 - " " " " = .145 "
4 spikes per tie - 1 tie to each 18 inches of track
66% of 4 = 2.66 spikes per foot of track
2.66 x .145 = .386 pound per 2.66 spikes
.386 x $1.14* per lb. = .044 cost of spikes per foot of track

*Recent nominal quotation

Note #5 - Estimate 20% of footage of present air and water line to be replaced (See Exhibit D).

Note #6 - Estimate 2 man shifts can restore to safe workable condition 50' nontimbered drift on this level because of light track, ties, pipe and installation.

2 man shifts @ $2.08 per hr. (see Exhibit A) = $33.30
33.30 ÷ 50 ft. = .666 per foot nontimbered drift

For details of estimate of labor costs timbered drift this level refer to Note #1.

Note #7 - Ties to be 4"x6"x36" = 6 board feet
Estimate 1 tie to each 24" of track
6 B.F. ÷ 2 ft. of track = 3 B.F. per foot of drift
.023 cost of 1 B.F. (see Note #3) x 3 B.F. = .069 cost per foot of drift

Note #8 - No cost for this item, it being provided partly by material already in place plus balance of material available from 600' level.

Note #9 - <u>Rails 16#</u>
Estimate approximately 2800' 16# rail required on this level after using any surplus from 600' level
2800' of 16# rail x .48 (see Exh. C) = $1,344.00
$1,344.00 ÷ 2800' = .48 per ft. drift

<u>Fish Plates 16#</u>
Rail length 20 ft. - 2 rail joints per 20 ft. track, 2 pair fish plates per 20 ft. track @ 75¢* per pair equals $1.50 fish plate costs per 20 feet track
$1.50 ÷ 20 = .075, fish plate cost per foot of track

<u>Track Bolts 16#</u>
900 - 16# track bolts per cwt.
100 lbs. of 16# track bolts - $16.50* ÷ 900 = .0183 cost of 1 bolt
2 rail joints, 4 bolts per joint, per 20 feet of track.
8 bolts per 20 ft. track 8 ÷ 20 = .4 bolts per foot of track - .4 x .0183 = .00732 cost of 16# bolts per foot track

<u>Track Spikes 16#</u>
825 - 16# track spikes per cwt. - $10.40* per cwt.
4 spikes per tie, 1 tie to 2 ft. of drift, 2 spikes per ft. drift
10.40 ÷ 825 = .0127 cost one spike x 2 = .0254 cost of spikes per foot of drift

*Recent nominal quotation

Note #10 - Estimate 1000' of serviceable air line now present on this level
2800' - 1000' = 1800' air line @ .343 (see Exhibit D) = $617.40
617.40 ÷ 2800 = 22¢ per ft. drift

Estimate 1000' of serviceable water line now present on this level
2800' - 1000' = 1800' 1" water line @ .203 per ft. (see Exhibit D) =
365.40 ÷ 2800' = .13¢ cost per foot of drift

Note #11 - Estimate 2 man shifts can only restore to safe workable condition 10 feet of timbered raise under operating conditions outlined in Note #1 due to the inaccessible nature of the operation.

2 man shifts x 2.08 per M.H. (see Exhibit A) = $33.30
33.30 ÷ 10 = 3.33 per foot of raise

Note #12 - Increase estimate of timber consumption as set out in Note #2 from 235 B.F. per 5 ft. timber set to 300 B.F. per 5 ft. timber set. This increase indicated due to condition of raise and structural requirements of timber used in raises.

300 B.F. ÷ 5 = 60 B.F. per linear foot of raise
60 B.F. x 20.91 = 1.254 timber cost per linear foot of raise

In answer to Question 3(a) of Form MF-103

Analysis of Estimate of Per Footage Cost of Exploration

Estimates for computing cost of exploration work are taken from results actually obtained in pre-war operations as set out in Bureau of Mines Information Circular No. IC 7024, corrected by setting up present actual labor and explosives costs, which are definitely known, and calculating other items, ratios past and present between each, and explosives costs.

Per day - Labor

1 miner @ $1.75/hr. plus estimated overtime, S.S. etc.		$16.63
1 mucker		16.63
Explosives		
40 lbs. powder @ $24.00/cwt.	$9.60	
Caps and fuse	1.50	11.10
Power		
Approximately equal to explosives		11.10
Supplies - timber, steel, etc. approximately 1.5 times explosives		16.65
Overhead - superintendence, engineering, etc. approximately 50% of explosives		5.55
Total per shift		$76.35

In former experience, progress was made at the rate of 3.75 feet per shift in drifting, and 2.5 feet per shift in raising. The work proposed, it is assumed, will be 50% of each type, or an average of 3.125 feet per shift.

3.125 feet @ $76.35 or $24.43 per foot.

In answer to Question 3(b) of Form MF-105

Time Required

Applicant is ready to start project on availability of funds. Due to the heavy winter, initial progress will be slower than if the project was started during summer months, this factor, however, will have no ultimate effect on time schedule.

Nine drill shifts daily are planned with estimated average advance of 3.125 feet per face (see page 26 for details). Total advance per day will, therefore, be 9 x 3.125 or 28.125 feet daily. The 9225 feet average of exploration set out will require 328 working days. Allowing 60 days for moving in and setting up, a time schedule to complete the project of approximately 1 year is expected.

Answer to Question 5 - Form MF-103

Existing Buildings, Installations, Facilities & Fixtures

In the ten years since closing the mine, damage by the elements to buildings and facilities has been considerable. The following tables itemize existing facilities and estimated rehabilitation costs:

	Item	To be Used in Connection With Exploration Project	Estimated Costs of Repairs and Rehabilitation
2000'	Camp water lines	Yes	$ 1,800
20	Sewer lines and sanitation	Yes	3,700
3000'	Electric and telephone lines	Yes	1,500
1	Bunk house building	Yes	2,500
1	Cook house building	Yes	2,500
16	Family cabins	10	3,000
1	School house building	No	-o-
1	Office building	Yes	500
1	General store building	No	-o-
1	Camp work shop & maintenance building	Yes	500
1	Supply room, compressor room and dry room building	Yes	2,000
1	Machine shop, Diesel room and assay office building	Yes	1,000
1	Blacksmith shop building	Yes	250
1	Timber framing shed	Yes	250
1	Machinery warehouse building	Yes	500
1	Mill building	No	-o-
1	Bit grinding room building	Yes	250
	Track in place underground (see Ans. to 3(a))	Yes	
	Water lines in place underground "	Yes	
	Air lines in place underground "	Yes	
	Total rehabilitation cost to place in condition to carry out the exploration project		$20,250

Answer to Question 6 - Form MF-105

Additional Facilities, Buildings and Fixtures

3	Additional telephones	$ 90.00
10	Single beds, springs & mattresses	1,000.00
	Additional cooking utensils, dishes and miscellaneous kitchen equipment	300.00
10	Electric light meters for cabins	400.00
1	Lube oil and grease warehouse	1,000.00
1	Sawmill building	500.00
250'	Snow sheds	1,000.00
1	Addition to office building for engineering office	1,000.00
	Total Additional Facilities	$5,290.00

Answer to Question 7 - Form MF-103

Question 7(a)
Operating Equipment to be Rented

No.	Item	Estimated Monthly Rental
1	Compressor 350 CFM Electric	$ 80.00

Question 7(b)
Operating Equipment to be Purchased

No.	Item	Estimated Purchase Price
2	Diesel power units 150 KW	$15,000.00
1	Compressor 400 CFM Electric	4,000.00
1	D8 Cat Dozer	8,000.00
1	6 x 6 5-ton truck	4,000.00
1	Snow Plow (truck attachment)	5,000.00
1	Small saw mill	4,500.00
1	Electric trammer, batteries and charging equipment	5,000.00
2	Leyners	1,800.00
1	Tugger hoist	400.00
4	Mine cars	1,500.00
1	Mine car loader	2,200.00
2	Jumbos	2,000.00
1	Cherrie picker	300.00
1	Accounting posting machine	1,000.00
	Power saws and motors (timber framing shed)	500.00
		$55,200.00

Answer to Question 7 - Form MF-103 (Cont'd)

Question 7(c)
Operating Equipment to be Furnished by Applicant

No.	Item	Rehabilitation Cost(a)	Proposed Monthly Rental(b)
Underground Equipment			
35	Miners' Edison Lamps, batteries, charger & belts	$400.00	$ 70.00
2	I.R.D.A. 30 Leyners	100.00	60.00
4	I.R. 51 stopers	400.00	88.00
1	Jack hammer JA55	100.00	18.00
6	Air line oilers	-o-	2.00
1	Leadville portable hoist, Model #3	100.00)	
1	Ingersol Rand tugger hoise IR-9	50.00)	
1	" " utility hoist D6U	100.00)-	90.00
1	" " tugger hoist EHA	100.00)	
12	Mine cars	1,200.00	140.00
1	Cherry picker	25.00	10.00
1	Mine car loader G09	250.00	100.00
6	Drill columns (4 - 3½") (2 - 3")	150.00)	
4	" " arms 3½"	75.00)	
3	" " arm saddles 3½"	75.00)-	50.00
2	" " clamps 3½"	50.00)	
1	" " " 3"	25.00)	
Repair shop Equipment			
1	Acetylene generator with hoses gauges and nozzles	75.00	12.00
Blacksmith Shop Equipment			
1	I.R. Oil furnace - Model 6F	100.00)	
1	I.R. Model 34 drill sharpener, equipped for 7/8" hex and 1" R.O. steel complete with punch	100.00)	
1	Anvil 180#	-o-)	140.00
1	20" Champion post drill press	-o-)	
1	I.R. bit grinder Model J2 and motor	-o-)	
Diesel Operating Equipment			
3	Columbia Steel bolted tanks, Diesel storage	600.00	50.00
Camp Equipment			
	Cook house range, tables, benches, sinks, heating stove	100.00	10.00
Office Equipment			
1	Adding machine	-o-)	
1	Comptometer	-o-)	50.00
2	Typewriters	-o-)	
1	Steel, letter size, 4-drawer file	-o-)	
2	Victor visible files, 10 drawers, 8-3/8" pocket	-o-)	15.00
1	Steel file, 27 - 3x9x12½ drawers	-o-)	

Answer to Question 7 - Form MF-103 (Cont'd)

Question 7(e) Cont'd

No.	Item	Rehabilitation Cost(a)	Proposed Monthly Rental(b)
Engineering Equipment			
1	Fairchilds Stereoscope - Model 4, No. 16	$ -o-	
2	" " small pocket size	-o-	
1	Transit and triped	100.00	
1	Stadia 15' folding	-o-	$ 50.00
1	" Board 15'	-o-	
1	" 5' folding	-o-	
1	1000' steel tape	-o-	
1	500' " "	-o-	
Assay Office Equipment			
1	Denver fire clay, muffle furnace, blower and motor	250.00	
1	Keller Mfg. Co. button balance scales	50.00	
1	Wm. Ainsworth & Sons pulp balance scales	50.00	50.00
1	Braun sample pulverizer, bolt drive	-o-	
1	Chipmunk crusher 3 x 3	-o-	
1	18 x 24 bucking board with muller	-o-	
	Total rehabilitation cost	$4,625.00	
	Total monthly rental		$985.00

Note (a) - Applicant is not clear in its understanding of just how this cost is handled under the terms of the exploration project contract. These costs are set out here as they must be expended as outlined in order for the items to be placed in useful and operable condition to carry out exploration project.

Note (b) - Rentals are based on the rental quotations supplied by machinery dealers on the same or similar equipment.

Answer to Question 8 - Form MF-105

Schedule of Operating Personnel and Estimated Costs

No.	Position	Rate
1	General Manager - Superintendent	$750.00 per mo.
1	Geologist (Consulting Basis) - avg. 1 week per mo.	250.00 " "
1	Junior Engineer, geologist assistant, surveying, mapping, etc.	475.00 " "
1	Comptroller, accountant, auditor, etc.	400.00 " "
1	Clerk, stenographer, etc.	250.00 " "
1	Warehouse-inventory control, and payroll clerk	300.00 " "
1	Assayer sampler) Per assay contract	
1	" " assistant) $4.00	
1	Underground superintendent (Mine Foreman)	500.00 " "
1	Mechanic - plant superintendent	1.90 per hr.
2	Diesel operators - mechanics	1.75 " "
2	Shifters	1.90 " "
9	Miners	1.75 " "
9	Muckers	1.60 " "
2	Hand trammers	1.60 " "
1	Motor trammer	1.60 " "
1	Timber framer	1.90 " "
1	Blacksmith	1.90 " "
2	Roustabouts	1.60 " "
39		

Answer to Question 9 - Form MF-103

Other Costs

It is intended to keep lower mine access road open to automobile traffic during winter months. This will require the disposal of snow from approximately 3 to 4 miles of road. It is expected to accomplis this with a snow plow attached to the 6 x 6 truck. In the event of extreme snow conditions the Cat Dozer would be put into use. A cost of $550.00 per month for the period November to March, inclusive, should be set up to cover this activity.

Answer to Question 10 - Form FM-103

(a) At the present time Applicant is prepared to invest the equipment outlined in answer to Question 7(c) in the project. In addition, it is in possession of between 20 and 25 thousand dollars worth of new and used mining supplies that it can invest in the project as these supplies are sold to the project according to the project's needs.

(b) If the total cost of the project as actually performed equals the amount set out in this application, then in that event the resources referred to above which the Applicant is prepared to invest at this time will not be sufficient to cover its share pursuant to Sec. 9 of MO-5. However, the exploration project herein was laid out from the sole standpoint of strict academic mine engineering. Economics were not considered, thus cost estimates as set up in this application are maximums. In addition, due to the uncertainty inherent in any exploration project, it may and usually does become prudent to revise the program in the light of information gained during its primary stages.

Accordingly, Applicant feels that the total funds to be expended, of which Applicant will have invested his proportionate share, as set out above, are sufficient to carry the program forward a considerable distance.

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Form MF-100
(March 1951)

U. S. DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS ADMINISTRATION

Form approved.
Budget Bureau No. 42-R1026.

RECEIVED
OCT 29 1951
Defense Minerals Administration

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

NOT TO BE FILLED IN BY APPLICANT

Docket No. dma 2185

Date received 10-29-51

ANCHOR MINES, INC.
530 West Sixth Street
Los Angeles 14, California

Name and address of applicant

Date May 28, 1951

INSTRUCTIONS

This form is to be filed with Defense Minerals Administration, Department of the Interior, Washington 25, D. C. It should be accompanied by appropriate application form when a specific type of Government assistance is requested, in the form of (1) loan, (2) purchase contract, (3) Government guarantee of a private loan, (4) Necessity Certificate pursuant to the provisions of Sec. 124-A (Amortization Deduction) of Internal Revenue Code, 1950, (5) priorities or allocation of mining equipment, and maintenance, repair and operating supplies, and (6) other forms of Government assistance that might arise under the Act. Submit four (4) signed copies of the form and accompanying papers. Name and address should be stamped or typed on each sheet of this form and all accompanying papers. *When a question is inapplicable it should be so stated on the form.* Additional sheets may be attached in answering any questions or in supplying additional information. (IF YOU CANNOT ANSWER A QUESTION, SO STATE.) If a question is answered elsewhere indicate where answered. It is not necessary to answer it again.

GENERAL TECHNICAL DATA

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

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

   Indicate whether mine is flooded or not. Describe any pumping problems. Give size or productive capacity.
3. For each operation listed above supply the following:
   (*a*) Distance and direction from nearest town and shipping point.
   (*b*) Mining district.
   (*c*) Township, Section, Range.
   (*d*) County, State.
4. (*a*) State whether or not property is now in operation, and if in operation, by whom operated.
   (*b*) Are you operating this property as:
   - ☐ Owner.
   - ☐ Lessee.
   - ☐ Contractor.
5. Number of years in production .....

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

8. Names and addresses of Officers, Directors, or Partners, and in addition thereto, the five largest stockholders if applicant is a corporation.

Name and Address (a)	Official Title (If officer is also director indicate by "D") (b)	Total of Annual Salary, Commissions, Bonuses, Etc., Received From Applicant and Affiliates During Last Fiscal Year (c)	Estimated Net Worth Outside of Interest in Applicant (d)	Number of Shares Held in Applicant Corporation: Common (e)	Number of Shares Held in Applicant Corporation: Preferred (f)	Life Insurance Carried for Benefit of Applicant: Amount (g)	Life Insurance Carried for Benefit of Applicant: Net Cash Surrender Value After Loans (h)
G. W. Turner 550 W. 6th St., L.A. 14	President-D	$4200	$5000	213,000	-	None	
Jay A. Calnek 491 Crescent Dr., Oakland	Vice-Pres.-D	-	Unknown	5,750	-	0	
W. N. Hodgington 901 S. Kensington, L.A.	Secy - D	-	0	5	-	0	
W. L. Cozzens 912 E. Palm St., Altadena	Director	-	0	5	-	0	
Lila M. Calnek R.F.D. 5, Fontana, Calif.	Stkholder	-	0	64,100	-	0	
F. H. Cobb 1065 Prospect Pl., Pasadena	0	-	0	5,946	-	0	
James Harris Burgdorf, Idaho	0	-	0	8,621	-	0	
Harland F. Beardslee 412 W. 6th St., L.A. 14	0	-	0	54,450	-	0	
	Total	$4200	x x x x x	352,387		x x x x x	x x x x x

If more lines are needed continue on separate sheet.

9. Capital Stock Issues:

For Corporate Applicants

Item	Authorized (a)	Outstanding (b)	Par Value (c)	Number of Shares Outstanding (d)	Dividend Rate Last Paid* (e)
Common stock	$2,000,000	$ 525,232	$ .25¢	352,222	Year 1941 .10¢
Preferred stock	$	$	$		

*Indicate period covered.

10. Production: Not applicable

Item	Kind of Product (a)	1948 Total (b)	1949 Total (c)	1950 Total (d)	Present Average Monthly (e)
1. Quantity of product mined or quarried (Short, long, metric tons; barrels; pounds; etc.)					
2. Quantity of product processed (specify unit of measure and type of process)					
3. Quantity and grade of product sold or shipped (specify units of measure)					

11. Do you contemplate a change in the present average monthly rate of production? If so, state estimated maximum monthly production and basis of change.

12. Ore or Mineral Reserves:

(a) Describe the ore or mineral deposit briefly. Accompany the application by any available report on the geology and ore reserves.

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(*b*) If deposit is other than placer:

(1) Submit assay plans and/or sections showing location and size of proved (measured) and probable (indicated) ore or mineral reserve.

(2) State the tonnage (indicate type of ton) and grade of each class of ore reserve, as above, and show how computed. Tabulated total ore reserve as follows:

TOTAL ORE OR MINERAL RESERVES

Ore or Mineral Reserve	Estimated Tons (a)	Metal or Mineral Content Per Ton (Grade) (b)	Gross Value Per Ton (c)	Recoverable Unit Value Per Ton (d)	Estimated Cost of Production Per Ton (e)
Measured (proved)					
Indicated (probable)					

(*c*) If placer:

(1) Give estimated total yardage and average marketable mineral content of each deposit.

(2) Submit map showing location of placer deposit and surrounding area, with all test holes or pits. Submit logs of each hole and test pit with depth and average value of each.

(3) Describe gravel, stating whether fine, medium or coarse; loose, tight, cemented, or frozen, and whether it contains stumps or boulders more than 1 foot in diameter; if so, how large, and in what proportion.

(4) Describe bedrock, giving type (granite, sandstone, shale, etc.) and state whether it is hard or soft, smooth, uneven or rough.

(5) Describe overburden, stating whether loose, tight, or cemented; fine or coarse textured; furnish estimate of average thickness and total amount.

(6) Tabulate the reserves using the form outlined above for ore or mineral reserves.

13. Access Roads:

Give road distances to shipping, supply and residence points, stating kind and condition of roads.

14. Water Supply:

State source and quantity of water available for operations and whether sufficient for all seasons of year.

15. Power:

State amount of power used, rate per hour, and source thereof.

16. Labor:

State number and classes (miners, muckers, millmen, etc.) of men employed during a recent representative payroll period.

17. Equipment and Facilities:

Describe present equipment on the property, including buildings. (State condition.) List major pieces of equipment now owned or controlled and in serviceable condition available for this operation.

18. Are there any particular conditions or circumstances affecting your operations that are not described above? If so, explain.

CERTIFICATION

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

ANCHOR MINES, INC.
(Name of company)

By [signature]
(Signature of authorized official)

May 23, 1951
(Date)

President.
(Title)

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

U. S. GOVERNMENT PRINTING OFFICE 10—63792-1

ANCHOR MINES, INC.

Answers to Questions on Form MF-100

1. Materials Produced
   (a) Gold and silver
   (b) See Answer to Question 7 below

2. Golden Anchor Mine - Lode mine - 50-Ton Flotation mill. Originally known as Holt Mine.
   (a) Incline shaft 450 feet
   (b) Vertical shaft 250 feet
   (c) Approximately 15,000 feet of drift
   Approximately 2,000 feet of adit cross cuts
   Property worked through 1600 foot adit crosscut - intersecting the vein 750 feet below its outcrop as measured on the dip of the vein. Approximately 15,000 feet of drifts open the veing on the 200, 250, 300, 400, 600, 700, 800, 900, 1000 foot levels.
   Mine is flooded below the 600-ft. adit level. No mining activity contemplated below drainage level. Production, mining and milling, was approximately 50 tons per day when operations were terminated in 1942.

3. (a) Property located 55 miles north of Union Pacific R.R. shipping point of McCall, Idaho. Property is approximately 50 miles east of Riggins, Idaho. Contact with this truck shipping point is made over county road open to truck traffic for about 8 months out of year.

   (b) Located in Marshall Lake Mining District, Idaho County, Idaho.

   (c) Township 24 North, Range 5 East, Boise Meridian

   (d) Idaho County, Idaho

4. (a) Property is not now in operation

   (b) Applicant's own property through mineral locations and patented claims.

5. Property produced steadily from November 1935 to May 1942. Also considerable unknown production prior to 1918. Applicant intends to make an application to D.M.A. for financial aid in a defense exploration project involving the search for scheelite ore on the above property. Production resumption will depend on the outcome of this project.

6. The writer has been identified with the property since 1939, during which period it was producing for 3-1/4 years. Also identified with other enterprises as General Manager.

ANCHOR MINES, INC.

Answers to Questions on Form MF-100

7. (a) Property past history dates from 1902 and all past production has been gold and silver. Production terminated in 1942 because of War. During this production considerable scheelite was present in ore but no attempt to recover was made due to commercial economies at the time. For the same reason no geological or petrological work was done in connection with scheelite.

(b) Property is largest producer in the District although several properties in the District have had production in the past. Most notable are the Sherman-Howe , Goodenough, and Mount Marshall Mines.

(c) See enclosed Bureau of Mines Information circular 7024. Although this report is not up to date it will provide the answers called for here and at the same time furnish a background to contemplated subsequent application. Attention is called to the mention of the presence of scheelite on page 4 of circular.

8. See Form MF-100

9. See Form MF-100

10. Not applicable

11. See reply to Questions 4 & 5

12. All present existing mineral reserves are evaluated on their gold value only, and are conservatively estimated at approximately 55,000 tons at $13.50 per ton.

ANCHOR MINES, INC.

Answer to Questions on Form FM100

12. (b) (1) & (2) As far as is known at this time the ore reserves of this property consist of gold and silver values only. Therefore, no detailed answer to these questions shall be submitted for the present. Complete detail will be supplied in future when application for financial assistance for exploration for scheelite is filed.

13. See reply to question 5(a) above.

14. Abundant water supply from local creeks and lakes. Corporation holds prior water rights on source of supply.

15. Diesel electric power used in past. Large potential hydro-electric power available however.

16. Not applicable because nature of any future operation will not remotely compare with past operations that were terminated in 1948.

17. Company has, with exception of Diesel electric generating plant, classifier for mill and electric trammer, substantially all the necessary mining and milling machinery, buildings and equipment to operate at the rate of 50 tons per day.

18. This property can be placed in production with very little trouble and expense. The important reason for not resuming production has been the lack of a commercially profitable product when produced.

Past records of operation show considerable scheelite in the mill heads at varying periods. In view of present commercial profit in scheelite ore as well as government exploration financing program, Corporation is now contemplating exploring for scheelite, and will make application for government assistance in this effort in the near future.

Form MF-103
(Revised June 1951)

UNITED STATES DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS ADMINISTRATION

Budget Bureau No. 42-R1035.1.

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

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

Not To Be Filled in by Applicant

Docket No. dma/2185
Metal or Mineral
Date Received 10-29-51
Amount $
Participation (Government %)

RECEIVED OCT 29 1951 Defense Minerals Administration DEPARTMENT OF THE INTERIOR

ANCHOR MINES, INC.
530 West Sixth Street
Los Angeles 14, California

Name and address of applicant

Date October 24, 1951

If you have already filed MF-100, give date filed June 4, 1951, type of assistance requested Priority allocation but returned and submitted herewith of equipment, etc.

DMA Docket Number (if available)

INSTRUCTIONS

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

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

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

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

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

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

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

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

See attached statements.

16—64067-2

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

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

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

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

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

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

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

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

   (*a*) Rented

   (*b*) Purchased

   (*c*) Furnished by you

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

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

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

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

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

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

CERTIFICATION

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

ANCHOR MINES, INC.
(Name of company)

By
(Signature of authorized official)

October 24, 1951
(Date)

President
(Title)

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

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

ANCHOR MINES, INC.

Answers to Questions - Form MF-103
Defense Minerals Administration

Answer to Question 1(a) - Form MF-103

The real property involved in this exploration project is situated in the State of Idaho, County of Idaho, Marshall Lake Mining District - Township 24 North, Range 5 East, Boise Meridian, and in the interest of economy and simplicity in answering this question, we enclose photostatic copies of Legal Opinion of Title covering all mining claims pertinent to this application to October 1946, together with photostatic copies of registered filings of Affidavit of Proof of Labor or Notice of Intent to Hold covering such claims from the date of the abovementioned Opinion to July 1, 1951.

Answer to Question 1(b)

Not applicable.

Answer to Question 1(c)

The exact area upon which the exploration work shall be conducted, with the use of the funds received from this application to cover costs of such exploratory work, shall be that portion of all of the mining claims listed in the photostatic copies submitted in support of 1(a) above which lie above the horizon of the Golden Anchor Mine 600' adit cross cut haulage level.

Answer to Question 2(a)

Scheelite.

Answer to Question 2(b)

Please refer to geological report and maps of Leland H. Dykes, Geologist.

EXHIBIT "D"

First Security Bank of Idaho

NATIONAL ASSOCIATION
BOISE BRANCH

Boise, Idaho

J. L. DRISCOLL
PRESIDENT

October 23, 1946

California State Corporation Commissioner
Sacramento, California

Dear Sir:

The law firm of Hawley and Hawley, and the senior member, Jesse Hawley, have been known to me for over a quarter of a century.

This firm is experienced in mining law and the practice of it. They have an excellent reputation in this section of the State of Idaho and in my opinion are qualified to render an opinion upon the rights of title to mining claims. They have been practicing law in Idaho for more than forty years and their present offices are in the Boise Building, Boise, Idaho.

Any questions you may desire to ask concerning this firm, I will be to answer.

Yours very truly,

J. L. Driscoll
President

J.L.D.

EXHIBIT "D"

HAWLEY & HAWLEY
ATTORNEYS AND COUNSELORS
EASTMAN BUILDING
BOISE, IDAHO

JESS B. HAWLEY

JESS B. HAWLEY, JR.

CLAUDE V. MARCUS

October 28, 1946.

California State Corporation Commissioner,
Sacramento, California.

Dear Sir:

Re: Opinion on Title to Certain Lode Mining Claims Constituting Mining Groups of the Anchor Mines, Inc. an Idaho corporation.

We have examined abstracts, bound in one volume, Number 12365, Number 12961, Number 12967, number 15232; also abstracts Number 11987, Number 15198, Number 11978, Number 18237 and Number 18285 each separately bound.

These abstracts were compiled from the official records of Idaho County, State of Idaho, by Inland Abstract Company, of Grangeville, Idaho. We will hereafter refer to the names of the claims, and other data contained in the abstracts.

Our opinion is limited to these abstracts and does not include any water rights, nor the rights of anyone, whether in possession or occupancy of the property, or claiming an interest therein, whose claims or rights are not of record, or any of the ground that may be covered by names other than those of the specified claims.

Abstract Number 12365 is certified to by the Inland Abstract Company as of two o'clock P. M., August 25, 1939.

Abstract Number 18237, which is a continuation of the above abstract is certified to as of five o'clock P. M. October 1, 1946.

The mining claims and locations covered by the original abstract, Number 12365, and the supplement, Number 18237, are named in their respective original and/or Amended Location Notices as follows:

Sherman
Sherman No. 3
Sherman No. 4
Sherman No. 5

Jumbo No. 9
Jumbo No. 10
Jumbo No. 10 Fraction
Old Corporal
Old Corporal No. 2
Old Corporal No. 3
Old Corporal No. 3 Fraction
Crystal Fraction
Gold Coin
Gold Coin No. 2
Gold Coin No. 3
Gold Coin No. 4
Gold Coin No. 5
Bengal No. 1
Bengal No. 2
Bengal No. 3
Bengal No. 4
Mohawk

All of the above claims are unpatented lode mining claims situate in the Marshall Lake Mining District of the State of Idaho, <u>excepting</u> the Sherman, Sherman No. 3, Sherman No. 4, Sherman No. 5, Old Corporal and Crystal Fraction, and these are patented lode mining claims.

Abstract Number 11987 is the abstractor's record of location and other subsequent instruments of record as to the following named lode mining claims:

Sherman
Jumbo No. 9
Jumbo No. 10
Old Corporal No. 3
Old Corporal
Old Corporal No. 2
Crystal Fraction
Sherman No. 3
Sherman No. 4
Sherman No. 5
Gold Coin
Gold Coin No. 2
Gold Coin No. 3
Gold Coin No. 4
Gold Coin No. 5
Bengal No. 1
Bengal No. 2
Bengal No. 3
Bengal No. 4

Mohawk
Old Corporal No. 3 Fraction
Jumbo No. 10 Fraction

All of the above are unpatented lode mining claims with the exception of the Sherman, Sherman No. 3, Sherman No. 4 and Sherman No. 5.

This abstract Number 11987, is certified as of five o'clock P. M. January 30, 1929, and is brought to date by Abstract Number 18237, certified as of five o'clock P. M. October 1, 1946.

This abstract Number 15198 is the abstractor's record of location and subsequent instruments of record as to the following named lode mining claims:

Long Fraction
Lucky Swede
Lucky Swede No. 3
Lucky Swede Fraction
Lucky Swede Fraction No. 2
Jumbo No. 7
Jumbo No. 8
Jumbo Fraction
Old Andy
July Fourth.

All of these are unpatented lode mining claims.

This abstract, Number 15198 is certified as of five o'clock P. M. July 6, 1939 and is brought to date by abstract Number 18237, as of five o'clock P. M. October 1, 1946.

Abstract Number 18285 is certified as of October 24, 1946 at nine o'clock A. M. It is the abstract of location and subsequent instruments of record as to the following unpatented lode mining claims:

Missing Link
Gold Coin No. 6
Jumbo No. 11
Jumbo No. 12
Lucky Swede No. 3
Lucky Swede No. 4

While there are defects of conveyances, misnomers, failure to indicate marital status and defective annual report certificates, these, in our judgment, are not of importance and may be ignored. The unimportance of these defects; operation

of the Idaho statute of limitations, together with possession by the Anchor Mining Company and its predecessors and successors in interest, including the Anchor Mines, Inc., in our opinion, cure whatever defects as above suggested, may exist.

We give it as our opinion, therefore, that good and merchantable title to each of the hereinbefore named lode mining claims, both patented and unpatented, is in the

ANCHOR MINES, INC.,
a qualified Idaho corporation.

The unpatented mining claims, however, are subject to the paramount title of the United States of America. They are held, however, in full compliance with existing laws, Federal and State.

The title to the patented claims is not so subject.

DATED this 28th day of October, 1946.

HAWLEY AND HAWLEY

By Jess Hawley

Office Address: Suite 810
Eastman Building, Boise, Idaho.

JH/r

NOTICE OF INTENTION TO HOLD MINING CLAIMS

NOTICE IS HEREBY GIVEN that the undersigned corporation, ANCHOR MINES, INC., an Idaho corporation, intends to hold the following lode mining claims situated in the Marshall Lake Mining District, in Idaho County, State of Idaho:

Bengal	No. 1	Book 59	Mining Claims	Page 202
Bengal	No. 2	" 59	" "	" 203
Bengal	No. 3	" 59	" "	" 332
Bengal	No. 4	" 59	" "	" 333
July Fourth	(July Forth)	" 61	" "	" 134
Gold Coin		" 58	" "	" 462
Gold Coin	No. 2	" 58	" "	" 461
Gold Coin	No. 3	" 58	" "	" 478
Gold Coin	No. 4	" 58	" "	" 479
Gold Coin	No. 5	" 58	" "	" 480
Gold Coin	No. 6	" 72	" "	" 69
Jumbo	No. 7	" 58	" "	" 78
Jumbo	No. 8	" 58	" "	" 183
Jumbo	No. 9	" 58	" "	" 288
Jumbo	No. 10	" 58	" "	" 389
Jumbo	No. 11	" 72	" "	" 93
Jumbo	No. 12	" 72	" "	" 94
Jumbo Fraction		" 59	" "	" 224
Jumbo	No. 10 Fraction	" 59	" "	" 226
Long Fraction		" 58	" "	" 458
Lucky Swede		" 58	" "	" 455
Lucky Sweed Fraction (Lucky Swede Fraction)		" 58	" "	" 457
Lucky Swede No. 2		" 58	" "	" 456
Lucky Swede No. 3		" 72	" "	" 70
Lucky Swede Fraction	No. 2	" 58	" "	" 571
Lucky Swede	No. 4	" 72	" "	" 71
Missing Link		" 63	" "	" 459
Mohawk		" 57	" "	" 70
Old Andy		" 61	" "	" 133
Old Corporal	No. 2	" 58	" "	" 332
Old Corporal	No. 3	" 58	" "	" 333
Old Corporal Fraction	No. 3	" 59	" "	" 225

said claims being contiguous and forming a common group.

THIS NOTICE is given under and pursuant to the Moratorium Act of May 3, 1941.

DATED: June 23, 1947.

The original of this copy
was filed in the office of
County Recorder, June 27, 1947

Carl T. Reuter
Recorder

By Kenny Telchu
Deputy

ANCHOR MINES, INC.

By: [signature]
President

STATE OF CALIFORNIA)
) ss
County of Los Angeles)

On this 23rd day of June, 1947, before me, Lillian M. Deverey, a Notary Public in and for the said County and State, personally appeared C. W. TURNER, known to me to be the President of ANCHOR MINES, INC., the corporation that executed the within instrument, known to me to be the person who executed the within instrument, on behalf of the corporation herein named, and acknowledged to me that such corporation executed the same.

WITNESS my hand and official seal.

Lillian M. Deverey
Notary Public in and for said
County and State
My commission expires 7-11-50

AFFIDAVIT OF ANNUAL LABOR

STATE OF CALIFORNIA)
) ss.
COUNTY OF LOS ANGELES)

Before me, the undersigned Notary Public, personally appeared C. W. Turner, President of Anchor Mines, Inc., an Idaho corporation, who, being first duly sworn, says:

That at least One Hundred Dollars ($100.00) worth of work or improvements were performed or made upon and for the benefit of each of the following lode mining claims as listed below, and each situated in the Marshall Lake Mining District, in Idaho County, State of Idaho as follows:

Claims held under mineral locations in the name of Anchor Mines, Inc., an Idaho Corporation

Bengal	No. 1	Book	59	Mining Claims	Page	202
Bengal	No. 2	"	59	"	"	203
Bengal	No. 3	"	59	"	"	332
Bengal	No. 4	"	59	"	"	333
July Fourth	(July Forth)	"	61	"	"	134
Gold Coin		"	58	"	"	462
Gold Coin	No. 2	"	58	"	"	461
Gold Coin	No. 3	"	58	"	"	478
Gold Coin	No. 4	"	58	"	"	479
Gold Coin	No. 5	"	58	"	"	480
Gold Coin	No. 6	"	72	"	"	69
Jumbo	No. 7	"	58	"	"	78
Jumbo	No. 8	"	58	"	"	183
Jumbo	No. 9	"	58	"	"	288
Jumbo	No. 10	"	58	"	"	389
Jumbo	No. 11	"	72	"	"	93
Jumbo	No. 12	"	72	"	"	94
Jumbo Fraction		"	59	"	"	224
Jumbo	No. 10 Fraction	"	59	"	"	226
Long Fraction		"	58	"	"	458
Lucky Swede		"	58	"	"	455
Lucky Sweed Fraction		"	58	"	"	457
(Lucky Swede Fraction		"	58	"	"	456
Lucky Swede No. 2		"	72	"	"	70
Lucky Swede No. 3		"	58	"	"	571
Lucky Swede Fraction	No. 2	"	72	"	"	71
Lucky Swede	No. 4	"	63	"	"	459
Missing Link		"	57	"	"	70
Mohawk		"	61	"	"	133
Old Andy		"	58	"	"	332
Old Corporal	No. 2	"	58	"	"	333
Old Corporal	No. 3	"	59	"	"	335
Old Corporal Fraction	No. 3					

That all the stakes, monuments or trees marking boundaries of said claims, and each of them, are in proper place and position.

President

Subscribed and sworn to before me this 10th. day of June, 1948.

Lillian M. Dewerey

Notary Public in and for the County of Los Angeles, State of California

My Commission Expires July 11, 1950

COMPARED

INDEXED

for record

A. D. 1914

June 48 and duly recorded in Book 7 of Proof of Labor at Page 208

CARL T. REUTER

Boty J. Waite

Fee $50¢

NOTICE OF INTENTION TO HOLD MINING CLAIMS

NOTICE IS HEREBY GIVEN that the undersigned corporation, ANCHOR MINES, INC., an Idaho corporation, intends to hold the following lode mining claims situated in the Marshall Lake Mining District, in Idaho County, State of Idaho:

Bengal	No. 1	Book	59	Mining	Claims	Page	202
Bengal	No. 2	"	59	"	"	"	203
Bengal	No. 3	"	59	"	"	"	332
Bengal	No. 4	"	59	"	"	"	333
July Fourth	(July Forth)	"	61	"	"	"	134
Gold Coin		"	58	"	"	"	462
Gold Coin	No. 2	"	58	"	"	"	461
Gold Coin	No. 3	"	58	"	"	"	478
Gold Coin	No. 4	"	58	"	"	"	479
Gold Coin	No. 5	"	58	"	"	"	480
Gold Coin	No. 6	"	72	"	"	"	69
Jumbo	No. 7	"	58	"	"	"	78
Jumbo	No. 8	"	58	"	"	"	183
Jumbo	No. 9	"	58	"	"	"	288
Jumbo	No. 10	"	58	"	"	"	389
Jumbo	No. 11	"	72	"	"	"	93
Jumbo	No. 12	"	72	"	"	"	94
Jumbo Fraction		"	59	"	"	"	224
Jumbo	No. 10 Fraction	"	59	"	"	"	226
Long Fraction		"	58	"	"	"	458
Lucky Swede		"	58	"	"	"	455
Lucky Sweed Fraction (Lucky Swede Fraction)		"	58	"	"	"	457
Lucky Swede No. 2		"	58	"	"	"	456
Lucky Swede No. 3		"	72	"	"	"	70
Lucky Swede Fraction	No. 2	"	58	"	"	"	571
Lucky Swede	No. 4	"	72	"	"	"	71
Missing Link		"	63	"	"	"	459
Mohawk		"	57	"	"	"	70
Old Andy		"	61	"	"	"	133
Old Corporal	No. 2	"	58	"	"	"	332
Old Corporal	No. 3	"	58	"	"	"	333
Old Corporal Fraction	No. 3	"	59	"	"	"	225

said claims being contiguous and forming a common group.

THIS NOTICE is given under and pursuant to H. R. 1754 of June, 1949.

DATED: June 24, 1949.

ANCHOR MINES, INC.

By: _____
President.

STATE OF CALIFORNIA)
) ss
County of Los Angeles)

On this 24th day of June, 1949, before me, Ruth H. Lewis, a Notary Public in and for the said County and State, personally appeared C. W. TURNER, known to me to be the President of ANCHOR MINES, INC., the corporation that executed the within instrument, known to me to be the person who executed the within instrument on behalf of the corporation herein named, and acknowledged to me that such corporation executed the same.

WITNESS my hand and official seal.

Ruth H. Lewis

Notary Public in and for said
County and State
Commission expires

163401

Anchor Mines Inc.
2 P
June 27
49

Nella Basinger
Fee 50¢

AFFIDAVIT OF ANNUAL LABOR

STATE OF CALIFORNIA)
) ss.
County of Los Angeles)

Before me, the undersigned, Notary Public in and for said County and State, personally appeared C. W. Turner, President of Anchor Mines, Inc., an Idaho corporation, who, being first duly sworn, deposes and says:

That at least One Hundred Dollars ($100.00) worth of work or improvements were performed or made upon and for the benefit of each of the following lode mining claims as listed below and each situated in the Marshall Lake Mining District, in Idaho County, State of Idaho, as follows:

Bengal	No. 1	Book 59	Mining Claims		Page 202
Bengal	No. 2	" 59	"	"	" 203
Bengal	No. 3	" 59	"	"	" 332
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Gold Coin		" 58	"	"	" 462
Gold Coin	No. 2	" 58	"	"	" 461
Gold Coin	No. 3	" 58	"	"	" 478
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Jumbo	No. 10	" 58	"	"	" 389
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Jumbo Fraction		" 59	"	"	" 224
Jumbo	No. 10 Fraction	" 59	"	"	" 226
Long Fraction		" 58	"	"	" 458
Lucky Swede		" 58	"	"	" 455
Lucky Sweed Fraction (Lucky Swede Fraction)		" 58	"	"	" 457
Lucky Swede No. 2		" 58	"	"	" 456
Lucky Swede No. 3		" 72	"	"	" 70
Lucky Swede Fraction	No. 2	" 58	"	"	" 571
Lucky Swede	No. 4	" 72	"	"	" 71
Missing Link		" 63	"	"	" 459
Mohawk		" 57	"	"	" 70
Old Andy		" 61	"	"	" 133
Old Corporal	No. 2	" 58	"	"	" 332
Old Corporal	No. 3	" 58	"	"	" 333
Old Corporal Fraction	No. 3	" 59	"	"	" 225

All of said claims being contiguous and forming a common group with the following described mining claims; pursuant to that mining option contract dated the

the 21st day of November, 1941, recorded in Book 4 of Min. B.L. & Agr. at Page 173 of Records of Idaho County, Idaho, Anchor Mines, Inc. on its own behalf and as agent of Herbert H. Hackett and Clara D. Hackett, his wife, has also performed at least One Hundred Dollars ($100.00) worth of work or improvements for the benefit of each of the following lode mining claims:

The Old Kentuck Amended	Book 57	Mining Claims		Page 144
The Old Kentuck No. 2 Amended	" 57	"	"	" 145
The Old Kentuck No. 3	" 58	"	" Quartz	" 622
The Old Kentuck No. 4 Fraction	" 58	"	" "	" 578
The Old Kentuck Extension Fraction	" 58	"	" "	" 577
The Old Kentuck No. 5 Fraction	" 59	"	" "	22
The Mother Lode	" 56	"	" "	" 523

all of said claims forming a group known as the Old Kentuck Group quartz lode mining claims situated across the middle fork of Bear Creek and about 2000 feet northwest of Twin Lakes, being contiguous and forming a common group.

That said expenditures were made by, for and at the expense of Anchor Mines, Inc, the owner of said claims or agent of owner of said claims, for the purpose of holding said claims, and that said work was done between the first day of July of 1949 and the first day of July, 1950.

That all the states, monuments or trees marking boundaries of said claims, and each of them, are in proper place and position.

C. W. Turner
President, Anchor Mines, Inc.

Subscribed and sworn to before me
this 23rd day of June, 1950.

Notary Public in and for said
County and State.

STATE of IDAHO } SS.
COUNTY of IDAHO }

I hereby certify that this Instrument was filed for record in the office of the Recorder of Idaho County, at the request of Anchor Mines Inc

at 9 ~~minutes past~~ o'clock A M. this 5 day of July A.D. 1950 and duly recorded in Book 7 of Prof Labor at page 493 Records of said County.

Clare I. Reuter
County Recorder

By Bob J. Hunter
Deputy

Fee $.50

530 West Sixth St.
Los Angeles 14, Calif.

AFFIDAVIT OF ANNUAL LABOR

STATE OF CALIFORNIA)
) ss.
County of Los Angeles)

Before me, the undersigned, Notary Public in and for said County and State, personally appeared C. W. TURNER, President of Anchor Mines, Inc., an Idaho corporation, who, being first duly sworn, deposes and says:

That at least One Hundred Dollars ($100.00) worth of work or improvements were performed or made upon and for the benefit of each of the following lode mining claims as listed below and each is situated in the Marshall Lake Mining District, Idaho County, State of Idaho, as follows:

Bengal	No. 1	Book	59	Mining Claims	Page	202
Bengal	No. 2	"	59	"	"	203
Bengal	No. 3	"	59	"	"	332
Bengal	No. 4	"	59	"	"	333
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Lucky Sweed Fraction (Lucky Swede Fraction)		"	58	"	"	457
Lucky Swede No. 2		"	58	"	"	456
Lucky Swede No. 3		"	72	"	"	70
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Old Corporal	No. 2	"	58	"	"	332
Old Corporal	No. 3	"	58	"	"	333
Old Corporal Fraction	No. 3	"	59	"	"	225

That said expenditures were made by, for and at the expense of Anchor Mines, Inc. the owner of said claims, for the purpose of holding said claims, and that said work was done between the first day of July 1950 and the first day of July 1951.

That all the stakes, monuments or trees marking boundaries of said claims, and each of them, are in proper place and position.

C. W. TURNER
President, Anchor Mines, Inc.

Subscribed and sworn to before me this 22nd day of June, 1951.

Notary Public in and for said County and State.

Expires

[illegible]

[illegible] ss

[illegible]

[illegible] office of [illegible] County of the requ[illegible]

Anchor Mines, Inc

2 ~~[illegible]~~

[illegible] M. this 27 day of

June A.D. 19[illegible], and in [illegible] Book [illegible] of [illegible]

[illegible] page [illegible] Records of said County

Earl T. Crouter
County Recorder

By Bob C. Martin
Deputy

Fee $1.50

530 West Sixth St
Los Angeles 14, Calif

Answer to Question 3(a) - Form MF 103

SUMMARY

Footage Min.	Footage Max.		Cost
1680 to	3880	Exploration work on 600' level	$ 92,005.92
545 to	2145	" " " 400' "	44,855.14
650 to	1600	" " " 300' "	41,577.02
750 to	2200	" " " 200' "	54,260.32
1000 to	4000	" " " Dunn, Swede, Higrade and Huckleberry Veins	63,075.00
4625'	13825'	Total estimated direct cost	$295,773.40

Answer to Question 3(a) Form MF 103 (Cont'd)

EXPLORATION SUMMARY - 600' LEVEL

	Min.	Max.
Total estimated exploratory footage - 600' level	1680'	3880'
Average estimated exploratory footage - 600' level	2780'	
Estimated direct cost per foot of exploration work (See pg. 26)	$24.43	
$24.43 x 2780'= Estimated direct cost of exploration work - 600' level	$67,915.40	
Estimated cost to pick up old drifts and cross cuts and make safe and accesible for exploration work (See pages 6 and 7)	21,690.52	
Estimated cost of sampling and assaying - 600 samples @ $4.00	2,400.00	
Total estimated direct cost of exploration - 600' level	$92,005.92	

Answer to Question 3(a) Form MF 103 (Cont'd)

600' LEVEL EXPLORATION

It is proposed to carry on a systematic lamping and sampling of all underground work. Exploration will thus be guided by sampling, hence any present proposals for exploration may have to be modified in the light of subsequent greater knowledge.

		Footage Min.	Footage Max.
A.	A cross cut into the hangingwall opposite an existing footwall cross-cut about seventy-five feet west of the Vertical Raise, and raise from this work if sampling discloses the scheelite showings justify	250	250
B.	Approximately 100 feet further west opposite an existing cross-cut into the hangingwall, a cross-cut into the foot-wall, and if scheelite is found, a raise to explore upper extension	50	250
C.	Approximately 180 feet west of B above, an exploratory raise to prospect a large area believed to be ore bearing, but on which there is little data	200	250
D.	Approximately 150 feet west of C above, an exploratory footwall cross-cut opposite an existing hangingwall cross-cut, and if justified by sampling of any scheelite showings, a raise to explore upward extensions	30	230
E.	At least two more cross-cuts and raises to the west of D above, positions to be determined by the results of above work and sampling	100	500

ANCHOR MINES, INC.

Answer to Question 3(a) Form MF 103 (Cont'd)

		Footage Min.	Footage Max.
F.	Continuation of the second raise east of the Vertical Raise, to explore easterly extension. Good showings of scheelite	75	100
G.	Cross-cuts into both hanging and foot walls at 150-foot intervals to the east to explore for possible ore-bearing splits as suggested by Dykes (see his report page 15) - exact location to depend on assaying	600	1200
H.	Raises to explore upward extensions in connection with G above where assaying of G work justifies	300	600
I.	An exploratory drift west into virgin ground from the Vertical Raise half way between the 600' and the 400' levels, and continue as far as sampling indicates good exploratory prospects for tungsten ore	75	500
	Total footage	1680	3880

ANCHOR MINES, INC.

Golden Anchor Mine
Idaho County, Idaho

Adit Haulage Cross Cut and Portal

Estimate of Cost to Clean Up and Make Safe
and Accessible for Exploratory Work - 1800'

Estimated feet of timbered cross cut - 400'
Estimated feet of nontimbered cross cut - 1400'

Items	Cost Per Ft. of Tunnel	Total Direct Cost	Cost 400 ft. Timbered Tunnel Per Ft. of Tunnel	Cost 400 ft. Timbered Tunnel Total	Cost 1400 ft. Nontimbered Tunnel Per Ft. of Tunnel	Cost 1400 ft. Nontimbered Tunnel Total
Direct labor (Note 1)	$1.36	$2,442.00	$2.22	$ 888.00	$1.11	$1,554.00
Mine Timber (Note 2)	.218	392.00	.98	392.00		
Track Ties (Note 3)	.023	41.40	.023	9.20	.023	32.20
Rail 30# (Note 4)	1.80	3,240.00	1.80	720.00	1.80	2,520.00
Fish Plates (Note 4)	.10	180.00	.10	40.00	.10	140.00
Track Bolts 30# (Note 4)	.024	43.20	.024	9.60	.024	33.60
Track Spikes 30# (Note 4)	.044	79.20	.044	17.60	.044	61.60
Air Line 3" (Note 5)	.141	253.44	.141	56.32	.141	197.12
Water Line 2" (Note 5)	.069	123.48	.069	27.44	.069	96.04
	$3.78	$6,794.72	$5.40	$2,160.16	$3.31	$4,634.56
Safety Factor 20%	.75	1,358.94				
Total	$4.53	$8,153.66				

Note references appear on pages 21 to 25, inclusive.

Answer to Question 3(a) Form MF 103 (Cont'd)

600' Level Haulage Drift

Estimate of Cost to Clean Up and Make Safe and Accessible for Exploratory Work - 2800'

Items	Costs Per Ft. of Drift	Total Direct Cost	Cost 1000' Timbered Tunnel Per Foot	Cost 1000' Timbered Tunnel Total	Cost 1800' Nontimbered Tunnel Per Foot	Cost 1800' Nontimbered Tunnel Total
Direct Labor (Note 1)	$1.51	$ 4,218.00	$2.22	$2,220.00	$1.11	$1,998.00
Mine Timber (Note 2)	.35	980.00	.98	980.00		
Track Ties (Note 3)	.023	64.40	.023	23.00	.023	41.40
Rail 30# (Note 4)	1.80	5,040.00	1.80	1,800.00	1.80	3,240.00
Fish Plates (Note 4)	.10	280.00	.10	100.00	.10	180.00
Track Bolts 30# (Note 4)	.024	67.20	.024	24.00	.024	43.20
Track Spikes 30# (Note 4)	.044	123.20	.044	44.00	.044	79.20
Air Line 3" (Note 5)	.141	394.24	.141	140.80	.141	253.44
Water Line 2" (Note 5)	.041	113.68	.041	40.60	.041	73.08
	$4.03	$11,280.72	$5.37	$5,372.40	$3.28	$5,908.32
Safety Factor 20%	.81	2,256.14				
Total Direct Cost (est.)	$4.84	$13,536.86				

Note references appear on pages 21 to 25, inclusive.

Answer to Question 3(a) Form MF 103 (Cont'd)

EXPLORATION SUMMARY - 400' LEVEL

	Min.	Max.
Total estimated exploratory footage - 400' level	545'	2145'
Average estimated exploratory footage - 400' level	1345'	
Estimated direct cost per foot of exploratory work (See pg. 26)	$24.43	
$24.43 x 1345' = Estimated direct cost of exploration work - 400' level	$32,858.35	
Estimated cost to pick up old drifts and workings and make safe and accessible for exploratory work (see page 10)	9,196.79	
Estimated cost of sampling and assaying 700 samples @ $4.00	2,800.00	
Total estimated direct cost of exploration - 400' level	$44,855.14	

Answer to Question 3(a) Form MF 103 (Cont'd)

400' LEVEL EXPLORATION

	Footage Min.	Footage Max.
A. To the west of the Vertical Raise exploratory cross-cuts into both hanging and foot walls, below Block 4D, and raises from this work where assaying justifies	60	160
B. At least two cross-cuts into hanging and foot walls below Block 4C, and raises where scheelite mineralization disclosed by sampling of this exploratory work justifies	60	360
C. Extension of the 400' Level to the west, depending upon results of sampling of exploratory work as it progresses	00	500
D. Two cross-cuts below Block 4E and one below Block F into hanging and foot walls with raises from these exploratory openings if sampling justifies. In this area stringers carrying scheelite run into both hangingwall and footwall, and ground is very promising, hence cross-cuts may have to be run further than usual	225	225
E. Cross-cuts into both hanging and foot walls beneath each of Blocks 4J, 4K, 4L and 4M, positions to be determined by sampling, and raises run from them to explore any upward extensions, if justified by sampling	200	600
Total footage	545	2145

ANCHOR MINES, INC.

Golden Anchor Mine
Idaho County, Idaho

400' Level Drift

Estimate of Cost to Clean Up and Make Safe
and Accessible for Exploratory Work - 3200'

Items	Cost Per Ft. of Drift	Total Cost	Cost 800' Timbered Drift		Cost 2400' Nontimbered Drift	
			Per Foot	Total	Per Foot	Total
Direct Labor (Note 6)	$1.05	$3,374.40	$2.22	$1,776.00	$ .666	$1,598.40
Mine Timber (Note 2)	.245	784.00	.98	784.00		
Track Ties (Note 7)	.069	220.80	.069	55.20	.069	165.60
Rail 16# (Note 8)	-o-	-o-	-o-	-o-	-o-	-o-
Fish Plates 16# (Note 8)	-o-	-o-	-o-	-o-	-o-	-o-
Track Bolts 16# (Note 8)	-o-	-o-	-o-	-o-	-o-	-o-
Track Spikes 16# (Note 8)	-o-	-o-	-o-	-o-	-o-	-o-
Air Line 2" (Exh. D)	.343	1,097.60	.343	274.40	.343	823.20
Water Line 1" (Exh. D)	.203	649.60	.203	162.40	.203	487.20
	$1.92	$6,126.40	$3.82	$3,052.00	$1.28	$3,074.40
Safety Factor 20%	.38	1,225.28				
Total Direct Cost (est.)	$2.30	$7,351.68				
Add 1/3 cost of working raises (see pgs. 19 & 20)		1,845.11				
		$9,196.79				

Note references appear on pages 21 to 25, inclusive.

Answer to Question 3(a) Form MF 103 (Cont'd)

EXPLORATION SUMMARY - 300' LEVEL

	Min.	Max.
Total estimated exploratory footage - 300' level	650'	1800'
Average estimated exploratory footage - 300' level	1225'	
Estimated direct cost per foot of exploratory work (See pg. 26)	$24.43	
$24.43 x 1225' = Estimated direct cost of exploration work - 300' level	$29,926.75	
Estimated cost to pick up old drifts and workings and make safe and accessible for exploratory work (see page 13 for detail)	11,693.27	
Estimated cost of sampling and assaying 600 samples @ $4.00	2,400.00	
Total estimated direct cost of exploration 300' level	$44,020.02	

300' LEVEL EXPLORATION

	Footage Min.	Footage Max.
A. Continuation of west heading to explore the west area, the extent of westward progress to be determined by sampling of ground opened	00	200
B. Raise from near present west face to explore for downward extension of showings on 200' level	100	100
C. Cross-cuts to hanging and foot walls beneath Block 3E, and raises where justified by sampling of this exploratory work	00	150
D. Dykes' samples from this level beneath Blocks 3J, 3K and 3L indicate good prospects for opening up immediately available ore. It is contemplated exploring this area by means of at least six cross-cuts into both hanging and foot walls, and probably three raises to explore upward extensions	300	700
E. To the east of Block 3L no sampling has been done. This area should be explored, and will probably require six cross-cuts and two to four raises where sampling dictates	250	650
Total footage	650	1800

300' Level Drift

Estimate of Cost to Clean Up and Make Safe and Accessible for Exploratory Work - 2800'

Items	Cost Per Ft. of Drift	Total Cost	Cost 1400' Timbered Drift		Cost 1400' Nontimbered Drift	
			Per foot	Total	Per Foot	Total
Direct Labor (Note 6)	$1.44	$4,040.40	$2.22	$3,108.00	$ .66	$ 932.40
Mine Timber (Note 2)	.49	1,372.00	.98	1,372.00		
Track Ties (Note 7)	.069	193.20	.069	96.60	.069	96.60
Rail 16# (Note 9)	.48	1,344.00	.48	672.00	.48	672.00
Fish Plates 16# (Note 9)	.075	210.00	.075	105.00	.075	105.00
Track Bolts 16# (Note 9)	.01	28.00	.01	14.00	.01	14.00
Track Spikes 16# (Note 9)	.013	36.40	.013	18.20	.013	18.20
Air Line 2" (Note 10)	.22	617.40	.22	308.70	.22	308.70
Water Line 1" (Note 10)	.13	365.40	.13	182.70	.13	182.70
	$2.93	$8,206.80	$4.20	$5,877.20	$1.66	$2,329.60
Safety Factor 20%	.59	1,641.36				
Total Direct Cost (est.)	$3.52	$9,848.16				
Add 1/3 cost of working raises (see pages 19 and 20)		1,845.11				
		$11,693.27				

Note references appear on Pages 21 to 25, inclusive.

EXPLORATION SUMMARY - 200' LEVEL

	Min.	Max.
Total estimated exploratory footage - 200' level	750'	2200'
Average estimated exploratory footage - 200' level	1475'	
Estimated direct cost per foot of exploratory work (see pg. 26)	$24.43	
$24.43 x 1475' = Estimated direct cost of exploration work - 200' level	$36,034.25	
Estimated cost to pick up old drifts and workings and make safe and accessible for exploratory work (see page 16 for detail)	15,826.07	
Estimated cost of sampling and assaying 600 samples @ $4.00	2,400.00	
Total estimated direct cost of exploration - 200' level	$54,260.32	

200' LEVEL EXPLORATION

	Footage Min.	Footage Max.
A. Near the western end of the 200' Level a cross-cut was driven into the hangingwall in Sherman-Howe ground about 400', from the end of which a drift was driven east 300', its face being less than 50' west of the Anchor Mines boundary. Dykes' samples 502 and 503, taken from parallel stringers in the face of that drift, show high grade tungsten ore and its continuance into Anchor should be sought. This should be done by exploratory drifting and cross-cutting from Anchor's hanging wall cross-cut about 200 feet to the east. (This area is beyond the limits of the Assay Map hence is not shown)	200	500
B. Samples to the west of Block 2B indicate scheelite ore of good grade. To thoroughly explore this area several cross-cuts into hanging and foot wall, as well as raises, should be driven, their location and extent to depend on results of sampling	300	700
C. This level should be sampled from the area covered by B above to its portal. Where assays justify it, the ground should be explored requiring at least three exploratory cross-cuts and two raises	150	500
D. Nothing is known regarding tungsten occurrence in Tunnel 200 East. However, some exploration will be advisable in that area, its amount depending on sampling results	100	500
Total footage	750	2200

200' Level Drift

Estimate of Cost to Clean Up and Make Safe
and Accessible for Exploratory Work - 2800'

Items	Cost Per Ft. of Drift	Total Cost	Cost 2000' Timbered Drift		Cost 800' Nontimbered Drift	
			Per Foot	Total	Per Foot	Total
Direct Labor (Note 6)	$1.78	$ 4,972.80	$2.22	$4,440.00	$ .666	$ 532.80
Mine Timber (Note 2)	.70	1,960.00	.98	1,960.00		
Track Ties (Note 7)	.069	193.20	.069	138.00	.069	55.20
Rail 16# (Exh. C)	.96	2,688.00	.96	1,920.00	.96	768.00
Fish Plates 16# (Note 9)	.075	210.00	.075	150.00	.075	60.00
Track Bolts 16# (Note 9)	.01	28.00	.01	20.00	.01	8.00
Track Spikes 16# (Note 9)	.025	70.00	.025	50.00	.025	20.00
Air Line 2" (Exh. D)	.343	960.40	.343	686.00	.343	274.40
Water Line 1" (Exh. D)	.203	568.40	.203	406.00	.203	162.40
	$4.16	$11,650.80	$4.89	$9,770.00	$2.35	$1,880.80
Safety Factor 20%	.83	2,330.16				
Total Direct Cost (Est.)	$4.99	$13,980.96				
Add 1/3 cost of working raises (see pages 19 and 20)		1,845.11				
		$15,826.07				

Note references appear on pages 21 to 25, inclusive.

EXPLORATION SUMMARY
Dunn, Swede, Higrade and Huckleberry Veins

	Min.	Max.
Total estimated exploratory footage	1000'	1000'
Average estimated exploratory footage - above veins	2500'	
Estimated direct cost per foot of exploratory work (See pg. 26)	$24.43	
$24.43 x 2500' = Estimated direct cost of exploration work on Dunn, Swede, Higrade and Huckleberry Veins	$61,075.00	
Estimated cost of sampling and assaying 500 samples @ $4.00	2,000.00	
Total estimated direct costs of exploration - Dunn, Swede, Higrade and Huckleberry Veins	$63,075.00	

EXPLORATION OF OTHER VEINS
Dunn, Swede, Higrade and Huckleberry

	Footage Min.	Footage Max.
All of these veins are geologically similar to the Anchor Vein, and from three, the Swede, Dunn and Higrade, Dykes took samples that showed substantial tungsten mineralization. These veins were only intermittantly worked during gold mining operations, hence development work is insufficient on which to base more than an approximate estimate of justifiable exploration. An assumption that each of these would require 1000 feet of underground drifting, raising and cross-cutting would seem to be in order	1000'	4000'

Working and Access Raise
500' Vertical Raise and Ore Pass - 600' to 200' Level

Estimate of Cost to Clean Up and Make Safe
and Accessible for Exploratory Work - 500'

Items	Cost Per Ft. of Raise	Total Cost	Cost 500' Timbered Raise Per Foot	Total
Direct Labor (Note 11)	$3.33	$1,665.00	$3.33	$1,665.00
Mine Timber (Note 12)	1.254	627.00	1.254	627.00
Air Line 3" (Exh. D)	.704	352.00	.704	352.00
Water Line 2" (Exh. D)	.343	171.50	.343	171.50
	$5.63	$2,815.50	$5.63	$2,815.50
Safety Factor 20%	1.13	563.10		
Total Direct Cost (Est.)	$6.76	$3,378.60		

Note: Cost distributed 1/3 each to 200, 300 and 400 level costs of exploration.

200 level	$1,126.20
300 level	1,126.20
400 level	1,126.20

Working and Access Raise
375' 64 E Raise - 600' to 300' Level

Estimate of Cost to Clean Up and Make Safe
and Accessible for Exploratory Work - 375'

Items	Cost Per Ft. of Raise	Total Cost	Cost 375' Timbered Raise Per Foot	Total
Direct Labor (Note 11)	$3.33	$1,248.75	$3.33	$1,248.75
Mine Timber (Note 12)	1.254	470.25	1.254	470.25
Air Line 3" (Note 5)	.141	52.87	.141	52.87
Water Line 2" (Note 5)	.069	25.73	.069	25.73
	$4.79	$1,797.60	$4.79	$1,797.60
Safety Factor 20%	.96	359.52		
Total Direct Cost (Est.)	$5.75	$2,157.12		

Note: Cost distributed 1/3 each to 200, 300 and 400 level cost of exploration.

200 level	$719.04
300 level	719.04
400 level	719.04

Exhibit A - Estimate Direct Labor Cost

*Estimate miners' wage scale per hr.		$ 1.75
Add increase for 48 hr. week " "		.146
Estimate miners' wage scale, 48 hr. wk basis, per hr.		$ 1.896
Add - F.O.A. insurance 1½%	$ .028	
State employment insurance 2.7%	.051	
Industrial compensation insurance 5.50%	.104	.183
		$ 2.079

*Present going scale in district

Exhibit B - Estimate of Mine Timber Costs

*Estimated cost 1 cord mine timber (16' logs, minimum diameter 6") delivered at mine - $13.00		
Estimate 1¼ cords mine timber equals 1000 B.F.		
13 x 1.25 = cost 1000 B.F. mine timber delivered at the mine		$16.25
Add sawmill costs:		
Estimate 2 man hours to saw 1000 B.F.		
Labor rate per hr. (See Exh. A) 2.08 x 2	$4.16	
Power costs estimate	.50	4.66
Total cost mine timber per 1000 B.F. at mine		$20.91

*Recent nominal quotation

Exhibit C - Estimate rail costs

*All rail estimated at $180.00 per ton

30# rail	at $180 per ton	= .90	per foot of raise
24#	do	= .72	do
16#	do	= .48	do
12#	do	= .36	do

*Recent quotation for new rail. Believe used rail in good condition can be located cheaper.

Exhibit D - Estimate of Pipe Costs

* 3 inch	black iron pipe, new	$70.41	per 100 ft.	.704 per ft.
* 2	do	34.27	do	.343 do
* 1	gal.	20.28	do	.203 do

*Recent nominal quotation

Note #1 - Underground crews to work with aid of trammer, mucker, cherry-picker and any other practical and economic mining equipment and methods. Under these conditions it is estimated two men at a working face can restore to safe workable condition on an average of 30 feet of nontimbered tunnel per eight-hour shift, including air line, water line, track, ditch and any low backs.

2 men x 8 hrs = 16 M.H. @ $2.08 per hr. (See Exhibit A) $33.30
33.30 ÷ 30 ft.= $1.11 labor cost per foot untimbered tunnel

Working under duplicate conditions as above, it is estimated that the same two-man crew will restore to safe workable condition on an average of 15 feet (3 timber sets) of timbered tunnel per eight-hour shift.

2 men x 8 hrs. = 16 M.H. @ $2.08 per hr. (See Exhibit A) $33.30
33.30 ÷ 15 ft. = $2.22 labor cost per foot timbered tunnel

Note #2 - Board feet in one five foot timber set 5 x 7 in the clear

	Board Feet	Estimate % to be replaced	Board feet to replace
2 Caps - 8x8x6	64	50%	32
4 Posts 8x8x8	170	50	85
2 Spreaders 4x8x5	26	50	13
2 Sills 8x8x6	64	20	13
95 sq.ft. lagging (3" material)	285	25	71
	609		214
Safety factor - 10%			21
Estimated total board feet to repair 1 timber set			235

Cost of timber per set
235 B.F. x $20.91 cost per 1000 B.F. (See Exhibit B) = $4.91

Cost of timber per foot of timbered tunnel
$4.91 ÷ 5 ft. timber set = .98

Note #3 - Track to be restored, 18 inch gauge. Ties to be 4"x6"x36", or six board feet to one tie.

Estimate 1 tie to each 18" of track
Estimate 25% of ties to be replaced
18 inches x 4 ties = 72 inches or 6 feet
25% of ties to be replaced equals one in four, or one to each six feet of tunnel
6 B.F. (1 tie) = 6 feet of tunnel, or 1 B.F. to each foot of tunnel
1 B.F. x $20.91 per 1000 B.F. (See Exhibit B) = .021 cost of 1 B.F.
Add safety factor .002
Tie repair cost per foot of tunnel .023 cost of 1 B.F.

Note #4 - Rail - 30#

At present time is equipped with 16# rail. However, in view of past experience with electric trammer operation on these light rails, it is considered imperative that they be replaced with heavier rail, using the present 16" rail at other places in the mine (see estimate of exploration costs of 400' level). 30# rail has been used in this estimate but believe 24# might do the job as well (See Exhibit C).

Fish Plates - 30#

Rail lengths 20 ft. - 2 rail joints per 20 ft. track
2 pair fish plates per 20 ft. track @ $1.00* per pair = $2.00
2.00 ÷ 20 ft. = 10¢ cost of fish plates per ft. of track

Track Bolts

250 - 30# track bolts (5/8 x 3) = 100 lbs.
2 rail joints per 20 feet of track, 4 bolts per joint = 8 bolts
8 bolts equals 3.2 lbs. x $1.45* per lb. = .464 cost of bolts per 20' track - .464 ÷ 20 = .024, bolt cost per ft. of track

Track Spikes

690 - 30# track spikes (3/8 x 3) = 100 lbs.
1 - " " " " = .145 "
4 spikes per tie - 1 tie to each 18 inches of track
66% of 4 = 2.66 spikes per foot of track
2.66 x .145 = .386 pound per 2.66 spikes
.386 x $1.14* per lb. = .044 cost of spikes per foot of track

*Recent nominal quotation

Note #5 - Estimate 20% of footage of present air and water line to be replaced (See Exhibit D).

Note #6 - Estimate 2 man shifts can restore to safe workable condition 50' nontimbered drift on this level because of light track, ties, pipe and installation.

2 man shifts @ $2.08 per hr. (see Exhibit A) = $33.30
33.30 ÷ 50 ft. = .666 per foot nontimbered drift

For details of estimate of labor costs timbered drift this level refer to Note #1.

Note #7 - Ties to be 4"x6"x36" = 6 board feet
Estimate 1 tie to each 24" of track
6 B.F. ÷ 2 ft. of track = 3 B.F. per foot of drift
.023 cost of 1 B.F. (see Note #3) x 3 B.F. = .069 cost per foot of drift

Note #8 - No cost for this item, it being provided partly by material already in place plus balance of material available from 600' level.

Note #9 - <u>Rails 16#</u>
Estimate approximately 2800' 16# rail required on this level after using any surplus from 600' level
2800' of 16# rail x .48 (see Exh. C) = $1,344.00
$1,344.00 ÷ 2800' = .48 per ft. drift

<u>Fish Plates 16#</u>
Rail length 20 ft. - 2 rail joints per 20 ft. track, 2 pair fish plates per 20 ft. track @ 75¢* per pair equals $1.50 fish plate costs per 20 feet track
$1.50 ÷ 20 = .075, fish plate cost per foot of track

<u>Track Bolts 16#</u>
900 - 16# track bolts per cwt.
100 lbs. of 16# track bolts - $16.50* ÷ 900 = .0183 cost of 1 bolt
2 rail joints, 4 bolts per joint, per 20 feet of track.
8 bolts per 20 ft. track 8 ÷ 20 = .4 bolts per foot of track - .4 x .0183 = .00732 cost of 16# bolts per foot track

<u>Track Spikes 16#</u>
825 - 16# track spikes per cwt. - $10.40* per cwt.
4 spikes per tie, 1 tie to 2 ft. of drift, 2 spikes per ft. drift
10.40 ÷ 825 = .0127 cost one spike x 2 = .0254 cost of spikes per foot of drift

*Recent nominal quotation

Note #10 - Estimate 1000' of serviceable air line now present on this level
2800' - 1000' = 1800' air line @ .343 (see Exhibit D) = $617.40
617.40 ÷ 2800 = 22¢ per ft. drift

Estimate 1000' of serviceable water line now present on this level
2800' - 1000' = 1800' 1" water line @ .203 per ft. (see Exhibit D) =
365.40 ÷ 2800' = .13¢ cost per foot of drift

Note #11 - Estimate 2 man shifts can only restore to safe workable condition 10 feet of timbered raise under operating conditions outlined in Note #1 due to the inaccessible nature of the operation.

2 man shifts x 2.08 per M.H. (see Exhibit A) = $33.30
33.30 ÷ 10 = 3.33 per foot of raise

Note #12 - Increase estimate of timber consumption as set out in Note #2 from 235 B.F. per 5 ft. timber set to 300 B.F. per 5 ft. timber set. This increase indicated due to condition of raise and structural requirements of timber used in raises.

300 B.F. ÷ 5 = 60 B.F. per linear foot of raise
60 B.F. x 20.91 = 1.254 timber cost per linear foot of raise

In answer to Question 3(a) of Form MF-103

Analysis of Estimate of Per Footage Cost of Exploration

Estimates for computing cost of exploration work are taken from results actually obtained in pre-war operations as set out in Bureau of Mines Information Circular No. IC 7024, corrected by setting up present actual labor and explosives costs, which are definitely known, and calculating other items, ratios past and present between each, and explosives costs.

Per day - Labor		
1 miner @ $1.75/hr. plus estimated overtime, S.S. etc.		$16.63
1 mucker		16.63
Explosives		
40 lbs. powder @ $24.00/cwt.	$9.60	
Caps and fuse	1.50	11.10
Power		
Approximately equal to explosives		11.10
Supplies - timber, steel, etc. approximately 1.5 times explosives		16.65
Overhead - superintendence, engineering, etc. approximately 50% of explosives		5.55
Total per shift		$76.35

In former experience, progress was made at the rate of 3.75 feet per shift in drifting, and 2.5 feet per shift in raising. The work proposed, it is assumed, will be 50% of each type, or an average of 3.125 feet per shift.

3.125 feet @ $76.35 or $24.43 per foot.

In answer to Question 3(b) of Form MF-103

Time Required

Applicant is ready to start project on availability of funds. Due to the heavy winter, initial progress will be slower than if the project was started during summer months, this factor, however, will have no ultimate effect on time schedule.

Nine drill shifts daily are planned with estimated average advance of 3.125 feet per face (see page 26 for details). Total advance per day will, therefore, be 9 x 3.125 or 28.125 feet daily. The 9225 feet average of exploration set out will require 328 working days, Allowing 60 days for moving in and setting up, a time schedule to complete the project of approximately 1 year is expected.

Answer to Question 5 - Form MF-103

Existing Buildings, Installations, Facilities & Fixtures

In the ten years since closing the mine, damage by the elements to buildings and facilities has been considerable. The following tables itemize existing facilities and estimated rehabilitation costs:

	Item	To be Used in Connection With Exploration Project	Estimated Costs of Repairs and Rehabilitation
2000'	Camp water lines	Yes	$ 1,800
20	Sewer lines and sanitation	Yes	3,700
3000'	Electric and telephone lines	Yes	1,500
1	Bunk house building	Yes	2,500
1	Cook house building	Yes	2,500
16	Family cabins	10	3,000
1	School house building	No	-o-
1	Office building	Yes	500
1	General store building	No	-o-
1	Camp work shop & maintenance building	Yes	500
1	Supply room, compressor room and dry room building	Yes	2,000
1	Machine shop, Diesel room and assay office building	Yes	1,000
1	Blacksmith shop building	Yes	250
1	Timber framing shed	Yes	250
1	Machinery warehouse building	Yes	500
1	Mill building	No	-o-
1	Bit grinding room building	Yes	250
	Track in place underground (see Ans. to 3(a))	Yes	
	Water lines in place underground "	Yes	
	Air lines in place underground "	Yes	
	Total rehabilitation cost to place in condition to carry out the exploration project		$20,250

Answer to Question 6 - Form MF-103

Additional Facilities, Buildings and Fixtures

3	Additional telephones	$ 90.00
10	Single beds, springs & mattresses	1,000.00
	Additional cooking utensils, dishes and miscellaneous kitchen equipment	300.00
10	Electric light meters for cabins	400.00
1	Lube oil and grease warehouse	1,000.00
1	Sawmill building	500.00
250'	Snow sheds	1,000.00
1	Addition to office building for engineering office	1,000.00
	Total Additional Facilities	$5,290.00

Answer to Question 7 - Form MF-103

Question 7(a)
Operating Equipment to be Rented

No.	Item	Estimated Monthly Rental
1	Compressor 350 CFM Electric	$ 80.00

Question 7(b)
Operating Equipment to be Purchased

No.	Item	Estimated Purchase Price
2	Diesel power units 150 KW	$15,000.00
1	Compressor 400 CFM Electric	4,000.00
1	D8 Cat Dozer	8,000.00
1	6 x 6 3-ton truck	4,000.00
1	Snow Plow (truck attachment)	5,000.00
1	Small saw mill	4,500.00
1	Electric trammer, batteries and charging equipment	5,000.00
2	Leyners	1,800.00
1	Tugger hoist	400.00
4	Mine cars	1,500.00
1	Mine car loader	2,200.00
2	Jumbos	2,000.00
1	Cherrie picker	300.00
1	Accounting posting machine	1,000.00
	Power saws and motors (timber framing shed)	500.00
		$55,200.00

Answer to Question 7 - Form MF-103 (Cont'd)

Question 7(c)
Operating Equipment to be Furnished by Applicant

No.	Item	Rehabilitation Cost(a)	Proposed Monthly Rental(b)
	Underground Equipment		
35	Miners' Edison Lamps, batteries, charger & belts	$400.00	$ 70.00
2	I.R.D.A. 30 Leyners	100.00	60.00
4	I.R. 51 stopers	400.00	88.00
1	Jack hammer JA55	100.00	18.00
6	Air line oilers	-o-	2.00
1	Leadville portable hoist, Model #3	100.00)	
1	Ingersol Rand tugger hoise IR-9	50.00)	
1	" " utility hoist D6U	100.00)-	90.00
1	" " tugger hoist EHA	100.00)	
12	Mine cars	1,200.00	140.00
1	Cherry picker	25.00	10.00
1	Mine car loader G09	250.00	100.00
6	Drill columns (4 - 3½") (2 - 3")	150.00)	
4	" " arms 3½"	75.00)	
3	" " arm saddles 3½"	75.00)-	50.00
2	" " clamps 3½"	50.00)	
1	" " " 3"	25.00)	
	Repair shop Equipment		
1	Acetylene generator with hoses gauges and nozzles	75.00	12.00
	Blacksmith Shop Equipment		
1	I.R. Oil furnace - Model 6F	100.00)	
1	I.R. Model 34 drill sharpener, equipped for 7/8" hex and 1" Q.O. steel complete with punch	100.00)	
1	Anvil 180#	-o-)	140.00
1	20" Champion post drill press	-o-)	
1	I.R. bit grinder Model J2 and motor	-o-)	
	Diesel Operating Equipment		
8	Columbia Steel bolted tanks, Diesel storage	600.00	50.00
	Camp Equipment		
	Cook house range, tables, benches, sinks, heating stove	100.00	10.00
	Office Equipment		
1	Adding machine	-o-)	
1	Comptometer	-o-)	50.00
2	Typewriters	-o-)	
1	Steel, letter size, 4-drawer file	-o-)	
2	Victor visible files, 10 drawers, 8-3/8" pocket	-o-)	15.00
1	Steel file, 27 - 3x9x12½ drawers	-o-)	

Answer to Question 7 - Form MF-103 (Cont'd)

Question 7(c) Cont'd

No.	Item	Rehabilitation Cost(a)	Proposed Monthly Rental(b)
Engineering Equipment			
1	Fairchilds Stereoscope - Model 4, No. 16	$ -o-	
2	" " small pocket size	-o-	
1	Transit and tripod	100.00	
1	Stadia 13' folding	-o-	$ 30.00
1	" Board 13'	-o-	
1	" 5' folding	-o-	
1	1000' steel tape	-o-	
1	300' " "	-o-	
Assay Office Equipment			
1	Denver fire clay, muffle furnace, blower and motor	250.00	
1	Keller Mfg. Co. button balance scales	50.00	
1	Wm. Ainsworth & Sons pulp balance scales	50.00	50.00
1	Braun sample pulverizer, bolt drive	-o-	
1	Chipmunk crusher 3 x 3	-o-	
1	18 x 24 bucking board with muller	-o-	
	Total rehabilitation cost	$4,625.00	
	Total monthly rental		$985.00

Note (a) - Applicant is not clear in its understanding of just how this cost is handled under the terms of the exploration project contract. These costs are set out here as they must be expended as outlined in order for the items to be placed in useful and operable condition to carry out exploration project.

Note (b) - Rentals are based on the rental quotations supplied by machinery dealers on the same or similar equipment.

Answer to Question 8 - Form MF-103

Schedule of Operating Personnel and Estimated Costs

No.	Position	Rate
1	General Manager - Superintendent	$750.00 per mo.
1	Geologist (Consulting Basis) - avg. 1 week per mo.	250.00 " "
1	Junior Engineer, geologist assistant, surveying, mapping, etc.	475.00 " "
1	Comptroller, accountant, auditor, etc.	400.00 " "
1	Clerk, stenographer, etc.	250.00 " "
1	Warehouse-inventory control, and payroll clerk	300.00 " "
1	Assayer sampler) Per assay contract	
1	" " assistant) $4.00	
1	Underground superintendent (Mine Foreman)	500.00 " "
1	Mechanic - plant superintendent	1.90 per hr.
2	Diesel operators - mechanics	1.75 " "
2	Shifters	1.90 " "
9	Miners	1.75 " "
9	Muckers	1.60 " "
2	Hand trammers	1.60 " "
1	Motor trammer	1.60 " "
1	Timberframer	1.90 " "
1	Blacksmith	1.90 " "
2	Roustabouts	1.60 " "
39		

Answer to Question 9 - Form MF-103

Other Costs

It is intended to keep lower mine access road open to automobile traffic during winter months. This will require the disposal of snow from approximately 3 to 4 miles of road. It is expected to accomplis this with a snow plow attached to the 6 x 6 truck. In the event of extreme snow conditions the Cat Dozer would be put into use. A cost of $350.00 per month for the period November to March, inclusive, should be set up to cover this activity.

Answer to Question 10 - Form FM-103

(a) At the present time Applicant is prepared to invest the equipment outlined in answer to Question 7(c) in the project. In addition, it is in possession of between 20 and 25 thousand dollars worth of new and used mining supplies that it can invest in the project as these supplies are sold to the project according to the project's needs.

(b) If the total cost of the project as actually performed equals the amount set out in this application, then in that event the resources referred to above which the Applicant is prepared to invest at this time will not be sufficient to cover its share pursuant to Sec. 9 of MO-5. However, the exploration project herein was laid out from the sole standpoint of strict academic mine engineering. Economics were not considered, thus cost estimates as set up in this application are maximums. In addition, due to the uncertainty inherent in any exploration project, it may and usually does become prudent to revise the program in the light of information gained during its primary stages.

Accordingly, Applicant feels that the total funds to be expended, of which Applicant will have invested his proportionate share, as set out above, are sufficient to carry the program forward a considerable distance.

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Form MF-100
(March 1951)

U. S. DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS ADMINISTRATION

Form approved.
Budget Bureau No. 42-R1026.

RECEIVED
OCT 29 1951
Defense Minerals Administration

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

NOT TO BE FILLED IN BY APPLICANT

Docket No. dma 2185

Date received 10-29-51

ANCHOR MINES, INC.
550 West Sixth Street
Los Angeles 14, California

Name and address of applicant

Date May 28, 1951

INSTRUCTIONS

This form is to be filed with Defense Minerals Administration, Department of the Interior, Washington 25, D. C. It should be accompanied by appropriate application form when a specific type of Government assistance is requested, in the form of (1) loan, (2) purchase contract, (3) Government guarantee of a private loan, (4) Necessity Certificate pursuant to the provisions of Sec. 124–A (Amortization Deduction) of Internal Revenue Code, 1950, (5) priorities or allocation of mining equipment, and maintenance, repair and operating supplies, and (6) other forms of Government assistance that might arise under the Act. Submit four (4) signed copies of the form and accompanying papers. Name and address should be stamped or typed on each sheet of this form and all accompanying papers. *When a question is inapplicable it should be so stated on the form.* Additional sheets may be attached in answering any questions or in supplying additional information. (IF YOU CANNOT ANSWER A QUESTION, SO STATE.) If a question is answered elsewhere indicate where answered. It is not necessary to answer it again.

GENERAL TECHNICAL DATA

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

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

   Indicate whether mine is flooded or not. Describe any pumping problems. Give size or productive capacity.
3. For each operation listed above supply the following:
   (*a*) Distance and direction from nearest town and shipping point.
   (*b*) Mining district.
   (*c*) Township, Section, Range.
   (*d*) County, State.
4. (*a*) State whether or not property is now in operation, and if in operation, by whom operated.
   (*b*) Are you operating this property as:
   - ☐ Owner.
   - ☐ Lessee.
   - ☐ Contractor.
5. Number of years in production .....

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

8. Names and addresses of Officers, Directors, or Partners, and in addition thereto, the five largest stockholders if applicant is a corporation.

Name and Address (a)	Official Title (If officer is also director indicate by "D") (b)	Total of Annual Salary, Commissions, Bonuses, Etc., Received From Applicant and Affiliates During Last Fiscal Year (c)	Estimated Net Worth Outside of Interest in Applicant (d)	Number of Shares Held in Applicant Corporation: Common (e)	Number of Shares Held in Applicant Corporation: Preferred (f)	Life Insurance Carried for Benefit of Applicant: Amount (g)	Life Insurance Carried for Benefit of Applicant: Net Cash Surrender Value After Loans (h)
C. W. Turner 550 W. 6th St., L.A. 14	President-D	$4200	$5000	218,000	-	None	
Jay A. Caisek 481 Crescent Dr., Oakland	VicePres.-D	-	Unknown	3,750	-	"	
Wm. H. Buckingham 901 S. Kensington, L.A.	Secy - D	-	"	5	-	"	
Wm. L. Cozzens 912 E. Palm St., Altadena	Director	-	"	5	-	"	
Elia. M. Caisek R.R.#3, Fontana, Calif.	Stkholder	-	"	64,180	-	"	
F. H. Cobb 1085 Prospect Pl., Pasadena	"	-	"	5,948	-	"	
James Harris Burgdorf, Idaho	"	-	"	6,621	-	"	
Harland F. Beardsley 412 W. 6th St., L.A. 14	" Treas	-	x x x x x	64,450	-	x x x x x	x x x x x
		$4200		362,957			

If more lines are needed continue on separate sheet.

9. Capital Stock Issues:

For Corporate Applicants

Item	Authorized (a)	Outstanding (b)	Par Value (c)	Number of Shares Outstanding (d)	Dividend Rate Last Paid* (e)
Common stock	$2,000,000	$ 528,222	$ .25¢	582,222	Year 1941 .10¢
Preferred stock	$	$	$		

*Indicate period covered.

10. Production: Not applicable

Item	Kind of Product (a)	1948 Total (b)	1949 Total (c)	1950 Total (d)	Present Average Monthly (e)
1. Quantity of product mined or quarried (Short, long, metric tons; barrels; pounds; etc.)					
2. Quantity of product processed (specify unit of measure and type of process)					
3. Quantity and grade of product sold or shipped (specify units of measure)					

11. Do you contemplate a change in the present average monthly rate of production? If so, state estimated maximum monthly production and basis of change.

12. Ore or Mineral Reserves:

(a) Describe the ore or mineral deposit briefly. Accompany the application by any available report on the geology and ore reserves.

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(*b*) If deposit is other than placer:

(1) Submit assay plans and/or sections showing location and size of proved (measured) and probable (indicated) ore or mineral reserve.

(2) State the tonnage (indicate type of ton) and grade of each class of ore reserve, as above, and show how computed. Tabulated total ore reserve as follows:

TOTAL ORE OR MINERAL RESERVES

Ore or Mineral Reserve	Estimated Tons (a)	Metal or Mineral Content Per Ton (Grade) (b)	Gross Value Per Ton (c)	Recoverable Unit Value Per Ton (d)	Estimated Cost of Production Per Ton (e)
Measured (proved)					
Indicated (probable)					

(*c*) If placer:

(1) Give estimated total yardage and average marketable mineral content of each deposit.

(2) Submit map showing location of placer deposit and surrounding area, with all test holes or pits. Submit logs of each hole and test pit with depth and average value of each.

(3) Describe gravel, stating whether fine, medium or coarse; loose, tight, cemented, or frozen, and whether it contains stumps or boulders more than 1 foot in diameter; if so, how large, and in what proportion.

(4) Describe bedrock, giving type (granite, sandstone, shale, etc.) and state whether it is hard or soft, smooth, uneven or rough.

(5) Describe overburden, stating whether loose, tight, or cemented; fine or coarse textured; furnish estimate of average thickness and total amount.

(6) Tabulate the reserves using the form outlined above for ore or mineral reserves.

13. Access Roads:

Give road distances to shipping, supply and residence points, stating kind and condition of roads.

14. Water Supply:

State source and quantity of water available for operations and whether sufficient for all seasons of year.

15. Power:

State amount of power used, rate per hour, and source thereof.

16. Labor:

State number and classes (miners, muckers, millmen, etc.) of men employed during a recent representative payroll period.

17. Equipment and Facilities:

Describe present equipment on the property, including buildings. (State condition.) List major pieces of equipment now owned or controlled and in serviceable condition available for this operation.

18. Are there any particular conditions or circumstances affecting your operations that are not described above? If so, explain.

CERTIFICATION

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

ANCHOR MINES, INC.
(Name of company)

By [signature]
(Signature of authorized official)

May 28, 1951
(Date)

President.
(Title)

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

U. S. GOVERNMENT PRINTING OFFICE 10—63792-1

ANCHOR MINES, INC.

Answers to Questions on Form MF-100

1. Materials Produced
   (a) Gold and silver
   (b) See Answer to Question 7 below

2. Golden Anchor Mine - Lode mine - 50-Ton Flotation mill. Originally known as Holt Mine.
   (a) Incline shaft 450 feet
   (b) Vertical shaft 250 feet
   (c) Approximately 15,000 feet of drift
   Approximately 2,000 feet of adit cross cuts
   Property worked through 1600 feet adit crosscut - intersecting the vein 750 feet below its outcrop as measured on the dip of the vein. Approximately 15,000 feet of drifts open the veing on the 200, 250, 300, 400, 600, 700, 800, 900, 1000 foot levels.
   Mine is flooded below the 600-ft. adit level. No mining activity contemplated below drainage level. Production, mining and milling, was approximately 50 tons per day when operations were terminated in 1942.

3. (a) Property located 55 miles north of Union Pacific R.R. shipping point of McCall, Idaho. Property is approximately 50 miles east of Riggins, Idaho. Contact with this truck shipping point is made over county road open to truck traffic for about 8 months out of year.

   (b) Located in Marshall Lake Mining District, Idaho County, Idaho.

   (c) Township 24 North, Range 5 East, Boise Meridian

   (d) Idaho County, Idaho

4. (a) Property is not now in operation

   (b) Applicant's own property through mineral locations and patented claims.

5. Property produced steadily from November 1935 to May 1942. Also considerable unknown production prior to 1918. Applicant intends to make an application to D.M.A. for financial aid in a defense exploration project involving the search for scheelite ore on the above property. Production resumption will depend on the outcome of this project.

6. The writer has been identified with the property since 1939, during which period it was producing for 3-1/4 years. Also identified with other enterprises as General Manager.

ANCHOR MINES, INC.

Answers to Questions on Form MF-100

7. (a) Property past history dates from 1902 and all past production has been gold and silver. Production terminated in 1942 because of War. During this production considerable scheelite was present in ore but no attempt to recover was made due to commercial economies at the time. For the same reason no geological or petrological work was done in connection with scheelite.

(b) Property is largest producer in the District although several properties in the District have had production in the past. Most notable are the Sherman-Howe , Goodenough, and Mount Marshall Mines.

(c) See enclosed Bureau of Mines Information circular 7024. Although this report is not up to date it will provide the answers called for here and at the same time furnish a background to contemplated subsequent application. Attention is called to the mention of the presence of scheelite on page 4 of circular.

8. See Form MF-100

9. See Form MF-100

10. Not applicable

11. See reply to Questions 4 & 5

12. All present existing mineral reserves are evaluated on their gold value only, and are conservatively estimated at approximately 55,000 tons at $18.50 per ton.

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
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LANDON F. STROBEL
Executive Secretary

ANCHOR MINES, INC.

Answer to Questions on Form FM100

12. (b) (1) & (2) As far as is known at this time the ore reserves of this property consist of gold and silver values only. Therefore, no detailed answer to these questions shall be submitted for the present. Complete detail will be supplied in future when application for financial assistance for exploration for scheelite is filed.

13. See reply to question 5(a) above.

14. Abundant water supply from local creeks and lakes. Corporation holds prior water rights on source of supply.

15. Diesel electric power used in past. Large potential hydro-electric power available however.

16. Not applicable because nature of any future operation will not remotely compare with past operations that were terminated in 1942.

17. Company has, with exception of Diesel electric generating plant, classifier for mill and electric tramser, substantially all the necessary mining and milling machinery, buildings and equipment to operate at the rate of 50 tons per day.

18. This property can be placed in production with very little trouble and expense. The important reason for not resuming production has been the lack of a commercially profitable product when produced.

Past records of operation show considerable scheelite in the mill heads at varying periods. In view of present commercial profit in scheelite ore as well as government exploration financing program, Corporation is now contemplating exploring for scheelite, and will make application for government assistance in this effort in the near future.

dma 2185

I. C. 7024

JUNE 1938

UNITED STATES
DEPARTMENT OF THE INTERIOR
HAROLD L. ICKES, SECRETARY

BUREAU OF MINES
JOHN W. FINCH, DIRECTOR

INFORMATION CIRCULAR

MINING AND MILLING METHODS AND COSTS OF THE GOLDEN ANCHOR MINING CO., BURGDORF, IDAHO

BY

S. H. LORAIN AND W. BUFORD DAVIS

AFTER THIS REPORT HAS SERVED YOUR PURPOSE AND IF YOU HAVE NO FURTHER NEED FOR IT, PLEASE RETURN IT TO THE BUREAU OF MINES, USING THE OFFICIAL MAILING LABEL ON THE INSIDE OF THE BACK COVER.

I.C. 7024,
June 1938.

INFORMATION CIRCULAR

UNITED STATES DEPARTMENT OF THE INTERIOR - BUREAU OF MINES

MINING AND MILLING METHODS AND COSTS OF THE GOLDEN ANCHOR MINING CO., BURGDORF, IDAHO[1]

By S. H. Lorain[2] and W. Buford Davis[3]

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1/ The Bureau of Mines will welcome reprinting of this paper provided the following footnote acknowledgment is used: "Reprinted from Bureau of Mines Information Circular 7024."

2/ Mining engineer, Mining Division, Metal Mining Methods Section, Bureau of Mines, Moscow, Idaho.

3/ One of the consulting engineers, Bureau of Mines, and manager, Golden Anchor Mining Co.

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INTRODUCTION

This paper is one of a series on mining and milling methods and costs being published by the Bureau of Mines. It describes the operations at a successful small-tonnage gold mine in one of the newer and more inaccessible mining districts of central Idaho.

LOCATION

The Golden Anchor mine is in the Marshall Lake mining district, Idaho County, Idaho. It is 50 miles by road north and a little east of the nearest railroad point at McCall, Idaho, and 17 miles north of the nearest post office at Burgdorf, Idaho, in the high mountains of central Idaho; the region has been opened to automobile travel only within recent years. The mine is on the south slope of the main Salmon River canyon at an altitude of 6,500 feet, and 4,500 feet above the Salmon River.

HISTORY

The vein was discovered in 1914 by a man named Fox who sold it to L. T. Holte. Holte drove the adit now known as the 200-foot level, built a camp and mill, and mined the ore above this level; he then sank a shaft to the 300-foot level but ran into financial difficulties. The Golden Anchor Mining Co. was then organized; a 1,600-foot crosscut adit was driven and the vein cut on the 600-foot level. In 1932 the United Verde Extension Mining Co. purchased a controlling interest and developed the mine intermittently until the summer of 1935, when a 50-ton mill was constructed at the portal of the 600-foot level crosscut. A production of approximately 30 tons a day has been maintained since the completion of the mill.

CLIMATE AND VEGETATION

The climate is characteristic of the high mountains of central Idaho; the summers are cool and short, the winters long and cold; a winter temperature of 40° below zero is recorded frequently. Snow may fall during any month of the year; at the altitude of the mine it covers the ground from November to May, inclusive; on the nearby higher ridges and in sheltered valleys the winter snow does not melt until late June or early July.

Although the country is rugged and the mountain slopes are steep, there is in most places a thick covering of soil, which often renders prospecting difficult. Timber suitable for mining purposes grows abundantly in the stream valleys and on the less precipitous slopes.

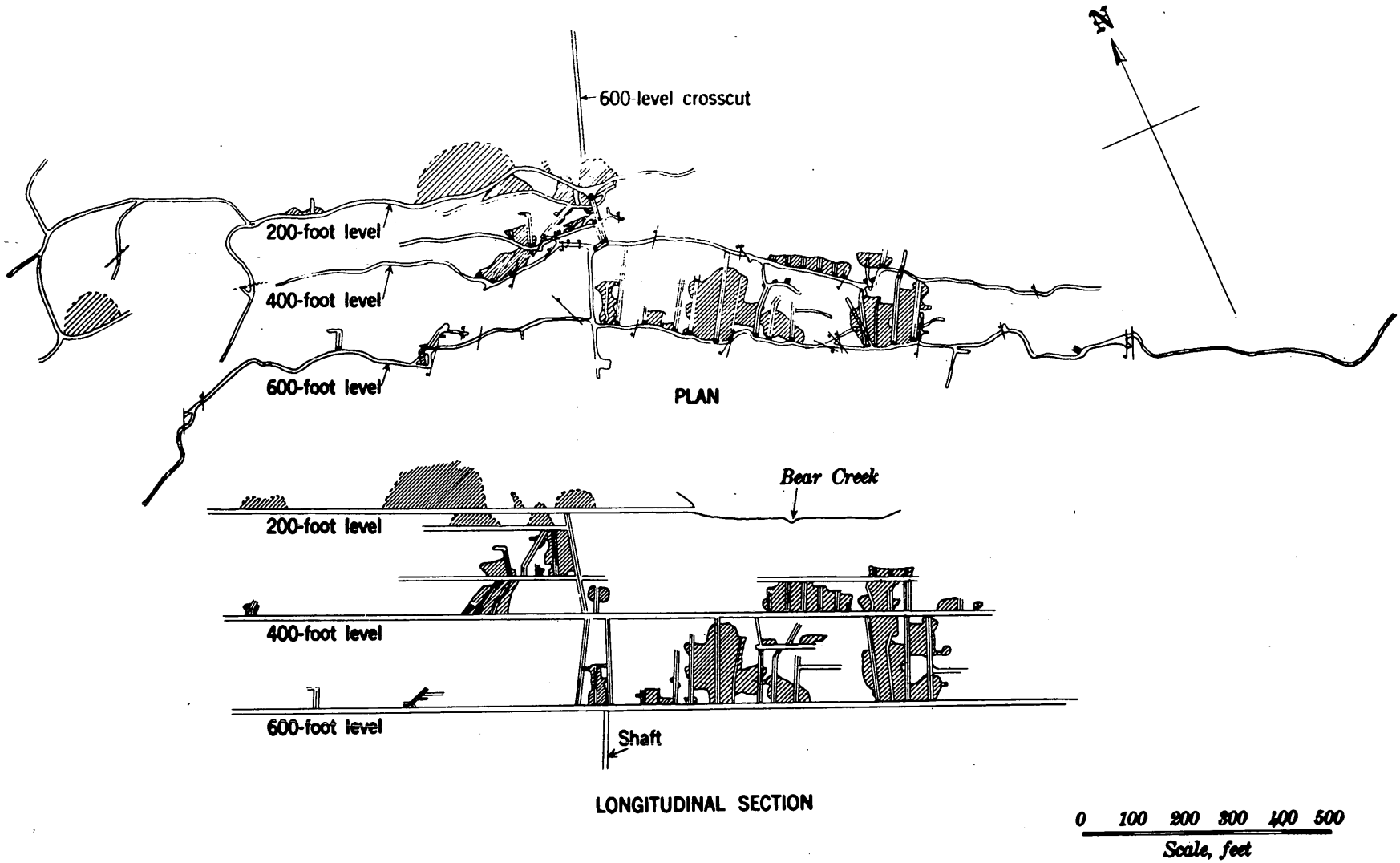


Figure 1.—Underground workings, Golden Anchor mine.

TRANSPORTATION

The mine is reached from the railroad at McCall, Idaho, by 38 miles of graded dirt road and 12 miles of narrow, ungraded mountain road, which crosses an 8,000-foot summit; it is closed to wheeled motor travel for seven months of the year. The road from McCall is nowhere less than 5,000 feet above sea level and is entirely closed to wheeled motor travel for about 5 months of the year. During the winter, a regular mail and passenger service is maintained between Burgdorf and McCall by a tractor-drawn sled; however, no effort is made to maintain regular communication between Burgdorf and the mine except by foot travel or dog team. In emergencies, a caterpillar "22" tractor owned by the mining company has hauled a sled and 4,000 pounds of supplies from Burgdorf to the mine in one day after the trail had been broken. In the summer of 1936 an emergency winter landing field was cleared near the mine to facilitate the air transport of sick or accident cases to the hospital.

Food and other supplies sufficient to last through the seven winter months must be stocked before the roads are closed in the fall; this requires careful planning and accurate control of operations to insure against enforced shutdowns. Since the mine is not provided with cold-storage facilities, animals to supply fresh meat for winter use must be brought in on the hoof and fed until freezing weather.

At present a Forest Service road is being built up the Salmon River canyon from Riggins; in a few years it probably will be possible to build a tractor trail or truck road 8-1/2 miles long from the mine to connect with the Forest Service road on the Salmon River, thus greatly lengthening the transportation season; such a road could probably be kept open without excessive cost during the entire year.

Road Construction

In preparation for ultimate connection with the Salmon River road, 2 miles of 6-1/2-foot tractor trail was built during the summer of 1937 with the "22" tractor equipped with an angledozer. On open side-hill construction this small tractor, with a crew of two men, built 800 feet of trail per day at a daily cost of $11.50 for fuel, oil, and wages. The excavation averaged 3-1/2 feet deep on the inner side.

GEOLOGY

The Marshall Lake mining district is in the heart of a great mass of granitic rock known as the Idaho batholith. In the vicinity of the mine are a number of small areas of schist and gneiss, which apparently are remnants of the pre-Cambrian rock into which the batholith was intruded.

The Golden Anchor ore occurs in a quartz vein that has a general strike of N. 50° E. (fig. 1) and a dip of about 50° southwesterly; however, there are many local variations in strike and dip. The ore-bearing parts of the vein average about 2 feet wide; however, the width may vary from 8 to 36 inches within a very short distance. Both walls of the vein may be schist, gneiss, or quartzite; in other places one wall may be quartzite and the

other wall schist or gneiss. The planes of foliation of the schist and gneiss strike at right angles to the vein and dip 30° to 60° westerly. The vein is always stronger where one wall is schist or gneiss; where both walls are quartzite it often becomes a mere slip plane carrying very low values. Gangue is almost entirely absent along the productive ore shoots.

The vein is cut by a series of faults, most of which strike North 30° to 60° East and dip 30° to 70° northwesterly. These faults displace the vein from a few inches to 50 feet horizontally; most of them are evidently premineral and have had a strong effect on the localization of ore shoots. In many cases the ore shoots have apparently been localized by damming of the mineralizing solution below the intersection of a northeast fault with the vein fracture. It is also noticeable that the strongest ore bodies are formed in those parts of the vein fracture where the fault movement has been strong and nearly at right angles to the vein fracture; on the other hand, there is relatively little ore where the fault movement is weak or forms an acute angle with the vein fracture. Furthermore, the ore usually is cut off abruptly against the right angle faults but pinches out gradually as it approaches those faults that intersect the vein at more acute angles. These facts suggest the assumption that the vein fracture was formed by the tensional stresses set up by movement along the northeast faults, with the result that the strongest ore bodies are in those parts of the fracture subject to the least shearing and the greatest direct tensional movement.

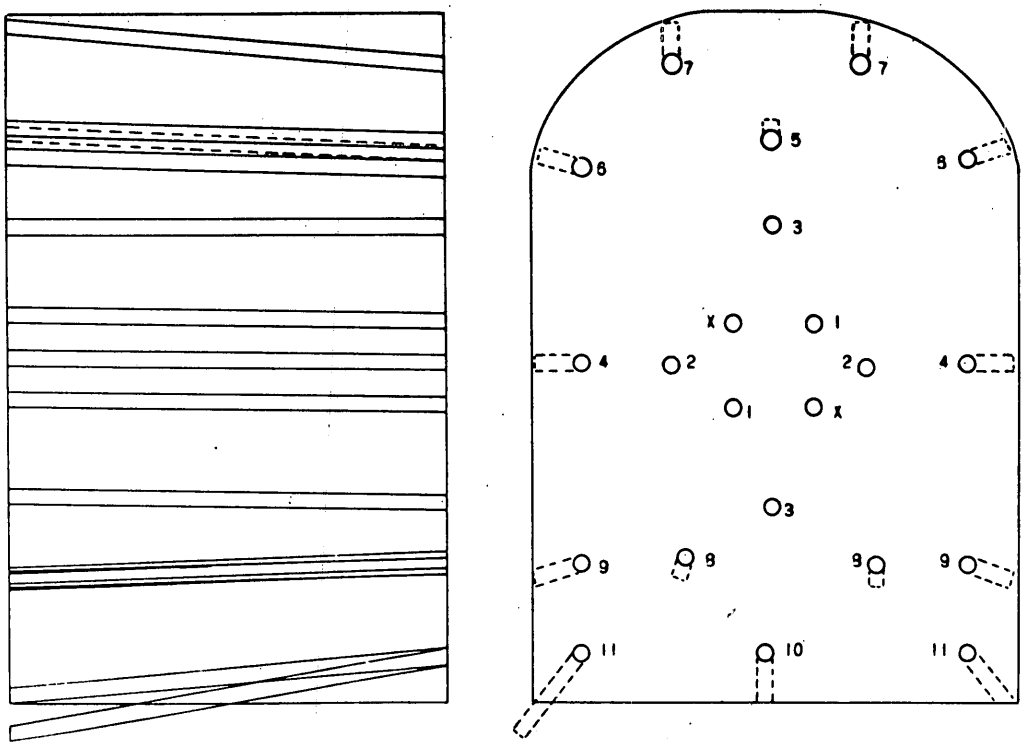
Oxidation has been strong near the surface and has continued along certain channels to the lowest workings; the surface ores and percolation channels are often stained with cerargyrite, malachite, and ferrous sulphate. In the lower levels, sulphide mineralization consists of tetrahedrite, galena, sphalerite, molybdenite, and pyrite with free gold. There is considerable scheelite in the upper workings. The ratio of silver to gold in the upper workings is about 2 to 1; in the lower levels this ratio rises to 4 to 1 and sometimes is as high as 20 to 1. It is believed that this erratic distribution of silver is due to solution (and subsequent precipitation) by downward percolating surface waters.

DEVELOPMENT AND MINING

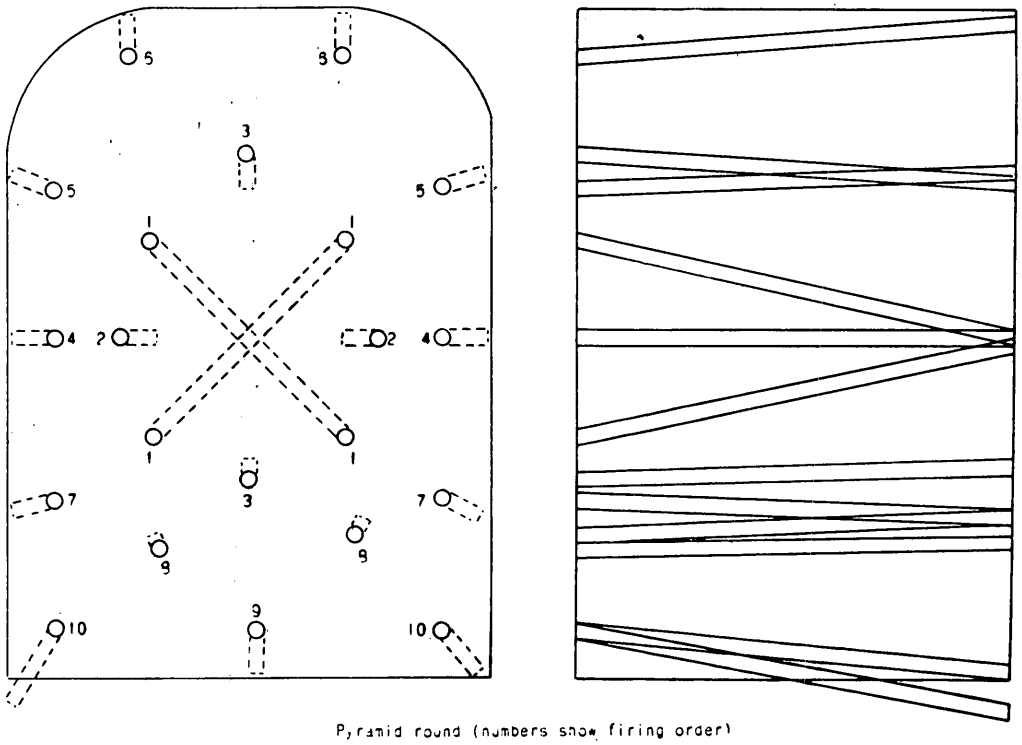
Development Openings

The mine is developed through a 1,600-foot adit crosscut to the vein on the 600-foot level and through several shorter adits on the upper levels.

On the main or 600-foot level are 2,400 feet of drifting on the vein in Golden Anchor ground and an additional several hundred feet in adjoining Sherman-Howe ground. Four other levels of varying lengths develop the vein between the 600-foot level and the surface. These levels have been driven at intervals of 45 to 200 feet; on the basis of past experience it is now planned to drive future levels at 120-foot intervals, measured along the vein.



Burn-out round (numbers show firing order)



Pyramid round (numbers show firing order)

0 1 2 3 4
Scale, feet

Figure 2.- Drift rounds at Golden Anchor mine.

During 1937 a 2-compartment vertical shaft was sunk about 200 feet vertically (equivalent to 260 feet on the vein) below the 600-foot level. The shaft cut the vein approximately half-way between the 600- and 800-foot levels. The skip compartment is 4-1/2 by 5 feet and the manway compartment is 4-1/2 by 3 feet in the clear.

Drifting Methods

Drifts and crosscuts are 5 by 7 feet in cross section. Crosscuts are nearly always untimbered; drifts must frequently be timbered with full sets when going through broken ground, but in ordinary ground they may be untimbered or the back may be supported with an occasional stull. Stope filling usually is supported entirely on stulls.

Ingersoll-Rand L-74 drifters, using 1-1/8-inch round lugged steel, are used for drifting; bit gages start at 1-7/8-inch and are reduced by 1/8 inch for each change. Rounds are drilled by one miner on day shift and are mucked out by one mucker on night shift; an average of 4.25 feet is broken per round drilled. The average advance per day is 3.75 feet, including all delays. Nearly all drifting is on company account.

The number of holes per round varies from 12 in soft ground to 22 in hard ground in drifts and in crosscuts. A "toe" cut is used in soft ground; in hard ground a pyramid cut or burned cut is used. The burned cut is found to be particularly advantageous in blasting hard ground near timber; the two diagonally opposed holes of a four-hole cut drilled at the corner of a 9-inch square are each loaded with 8 sticks of 60-percent gelatin and blasted simultaneously; the other two cut holes, x - x, are not loaded. The two types of drift round are illustrated in figure 2.

In most drift rounds an average of 5 sticks (1-1/8- by 8-inch) of gelatin dynamite is used per hole; 40-percent strength is used in soft and ordinary ground, 60-percent strength in hard ground.

Raising Methods

All raises have two compartments; one is used for a manway and supplies, the other for an ore chute. A few raises in especially favorable ground are stulled and lagged; each compartment is 3 by 4 feet in the clear. All other raises are cribbed with 4-1/2-inch half-round timber; each compartment is 3 by 3 feet in the clear. Although the stulled and lagged raises require less timber, careful cost studies have shown them to be more expensive in over-all costs than the cribbed raises, which require less labor.

Stope raises are carried up with the stope; development and exploratory raises are driven with hand-rotated Ingersoll-Rand N 79 stopers using 1-inch quarter-octagon steel. Because of the isolation of the mine and the consequent difficulty of obtaining spare parts in emergency, the comparative mechanical simplicity of the hand-rotated stoper is considered to outweigh the advantages of the self-rotated stoper.

A 5-foot round is pulled with 15 holes, using a V-cut; the usual powder charge is 5 sticks of 40-percent-strength gelatin dynamite to the hole. One miner and a helper drill and blast one day and timber the next; this results in an average of 2-1/2 feet per day.

Sinking Methods

Shaft rounds are drilled with Ingersoll-Rand BCRW 430 jackhammers using 7/8-inch hexagon steel in soft ground; in hard ground an L 74 drifter fitted with "plugger" handles is used. Rounds 3-1/2 feet deep are pulled by a round of 24 holes, using a V-cut; the holes are arranged in 8 rows of 3 holes each, the two center rows constituting the cut. The usual powder charge is 90 sticks of 40-percent gelatin dynamite per round; all shaft rounds are fired electrically.

Two miners drill and blast a round on day shift and two muckers clean out the round on night shift; timber sets on 6-foot centers are placed in two shifts. This results in an average advance of approximately 2-1/2 feet per day.

Locally cut Douglas fir is used for shaft timbers; wall plates and posts are 8 by 8 inches and dividers 8 by 6 inches in section.

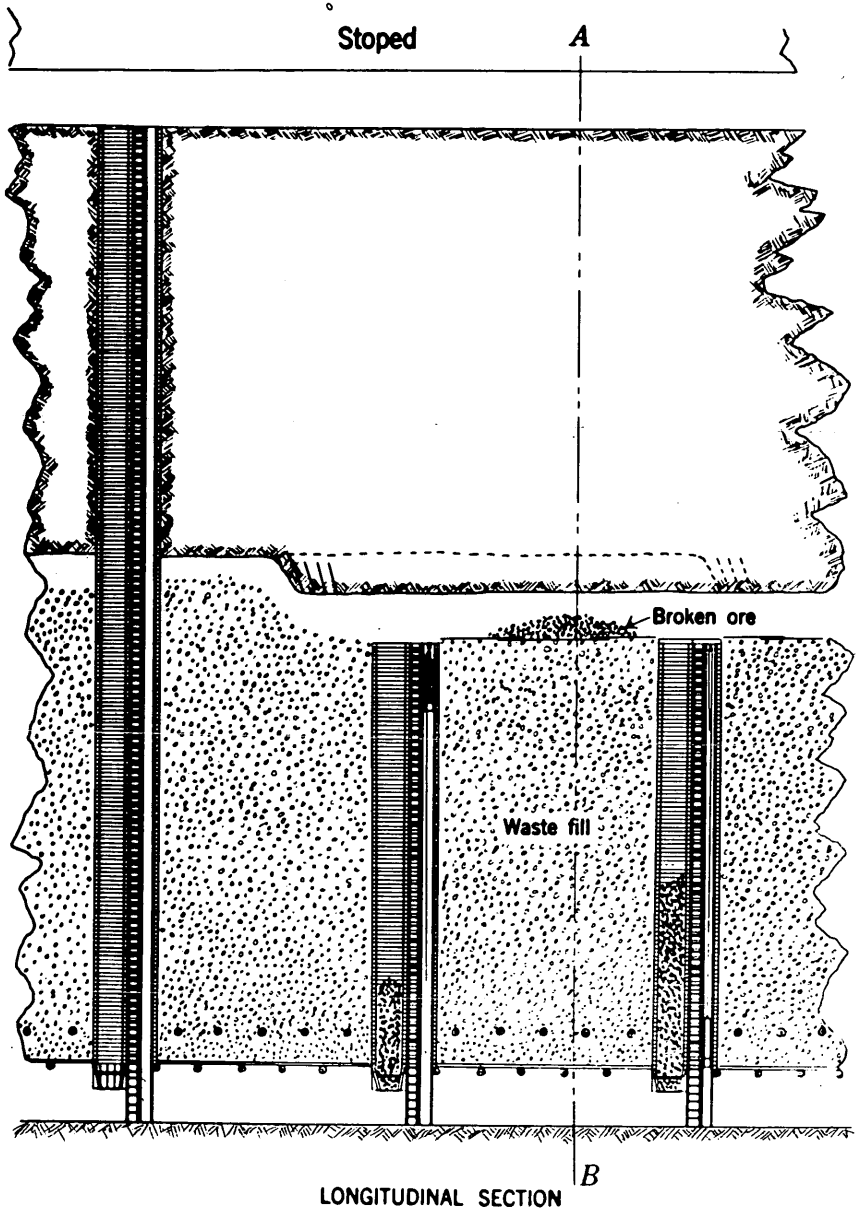
Stoping Methods

Ore is broken by resuing in flat-back cut-and-fill stopes as illustrated in figure 3. Stopes are started directly from the drifts; the stope fill is supported on 8-inch stulls placed 5 feet apart and covered with 3-inch round or sawed lagging. Another row of stulls, without lagging, is placed 5 feet above the first row for the purpose of arching the fill and relieving the load on the drift timbers; stulls in the second row are staggered with relation to those in the first row.

Two compartment cribbed raises spaced about 35 feet, center to center, or 30 feet from inside to inside of the ore compartment are carried up with the stope. One compartment is used for ore, the other for men and supplies. Tugger hoists with 3/8-inch steel cables are used to hoist supplies in small steel skips running on wooden slides in the manway compartment.

Stopes are carried 4 feet wide, measured at right angles to the vein; inasmuch as the vein averages about 2 feet wide, the ore and waste usually are broken alternately by resuing. In 65 to 70 percent of the working faces the ore is first broken onto overlapping steel mucking plates and shoveled into the ore raise; the plates are then taken up and either the hangingwall or footwall broken and allowed to lie for stope filling; in other places the process is reversed by breaking the waste first; ore is carefully sorted in the stopes. Occasionally, where the vein is exceptionally wide, it is necessary to place extra shots in the footwall to fill a stope.

Stope filling is kept within about 6 feet of the face; an occasional stull is required to support weak sections of the hangingwall until a stope is filled. It is seldom, if ever, necessary to draw waste from the stopes, nor is filling brought into stopes from other working places.



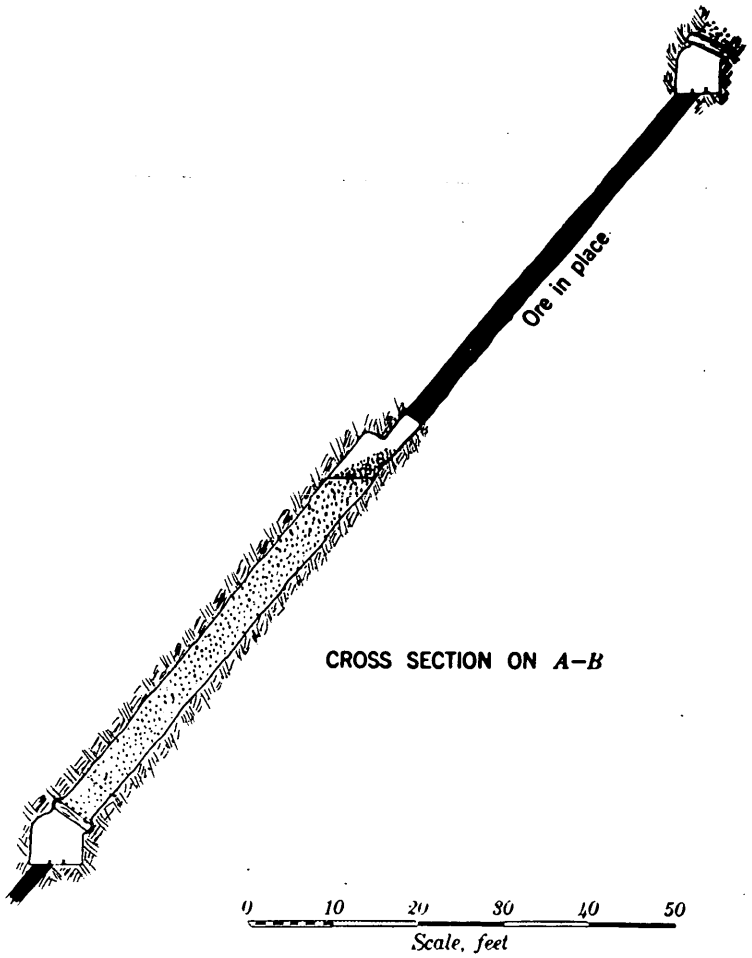


Figure 3.—Stoping method at Golden Anchor mine.

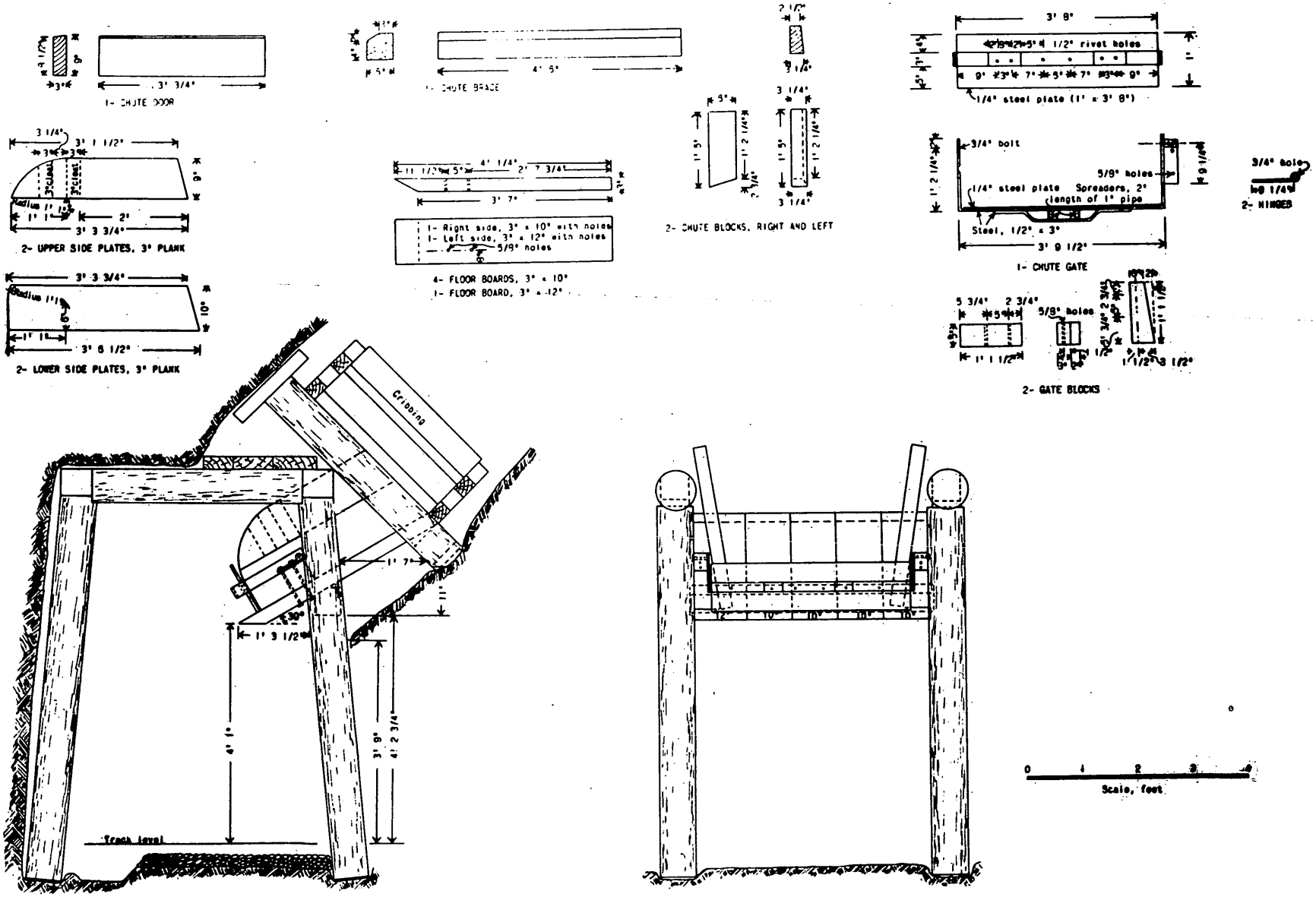


Figure 4.- Details of chute construction, Golden Anchor mine.

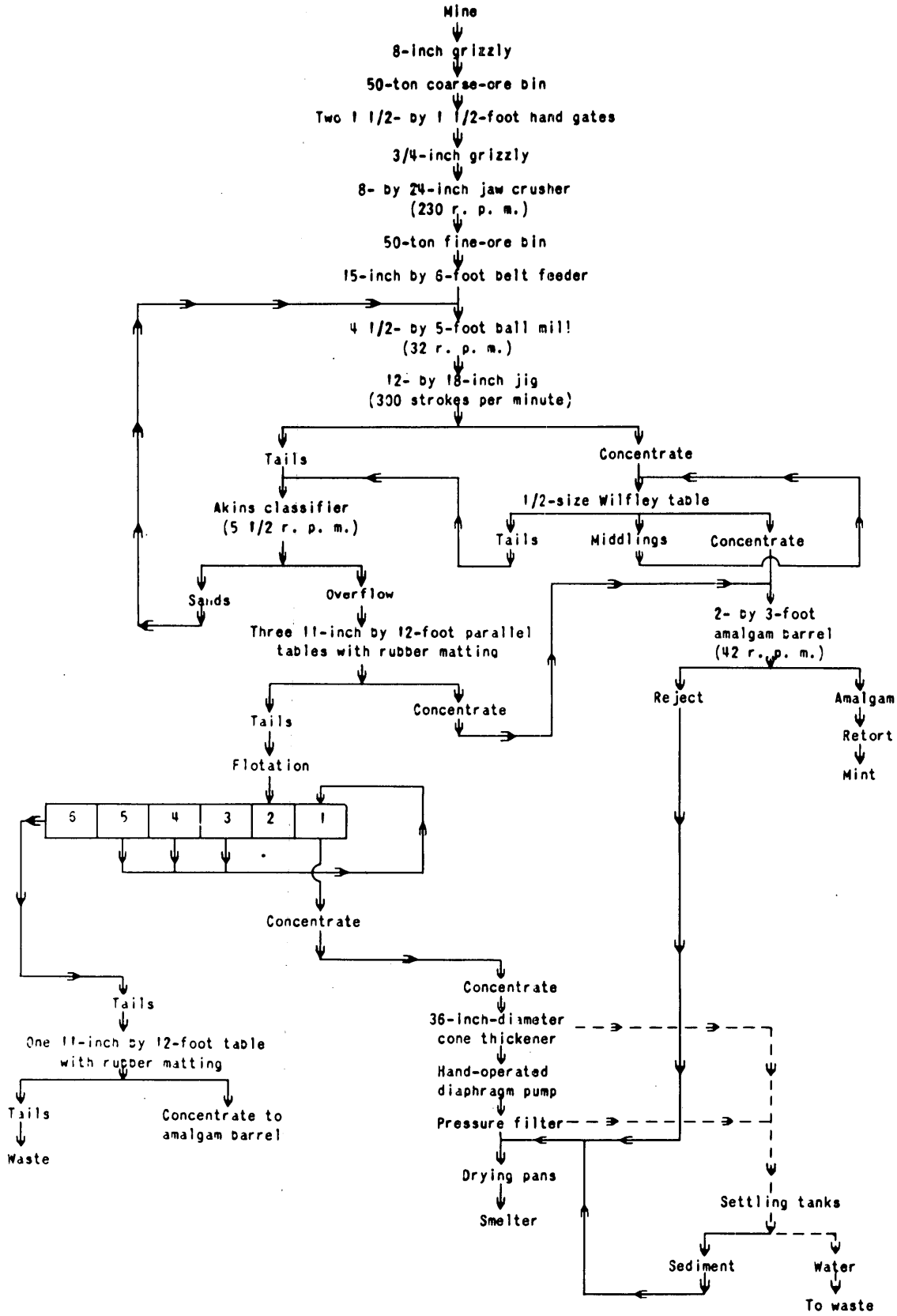


Figure 5.- Flow sheet, Golden Anchor mill.

Each miner, assisted by a mucker, does all drilling, timbering, and other work required in his working place. Hand-rotated stopers are used, as in raising; an average of eight 4-foot holes are drilled and blasted per machine shift; the usual powder charge is three sticks of 40-percent-strength gelatin dynamite per hole. In some working places blasting is done twice a shift; all drilling and blasting is done on day shift. Inasmuch as there is insufficient air to operate all drills at the same time, drilling time is alloted to each miner by the shift boss.

On the main level, steel and other supplies are delivered to the stopes and transfer raises by the motorman. Supplies for the upper levels are hoisted through the transfer raise by the hand trammer and distributed by him to the stope raises. The main transfer raise is an old stope raise extending to the 400-foot level; this raise has been equipped with a small skip running on a 24-inch-gage track and pulled by an air hoist. Stope miners or muckers take their supplies from the bottom of the stope raises.

Tramming

Ore from the upper levels is trammed to a transfer raise by hand in 20-cubic-foot-capacity cars. On the main or 600-foot level a Mancha "little trammer" pulls a train of 12 cars of 16-cubic-foot capacity each. Up to 50 cars of ore are trammed on day shift and about 50 cars of waste on night shift. One motorman on each shift pulls all ore chutes on the main level or trams waste from development and handles all supplies.

Chutes are 3 feet wide at the lip and flare to a width of 4 feet at the back, as illustrated in figure 4; they are built of 3-inch plank throughout. A simple and efficient steel chute gate, which may be made by any blacksmith (fig. 4), can be operated safely and quickly by the trammer standing at one side of the chute and inserting a bar in the handle shown in the sketch.

Sampling

Development faces are sampled at 5-foot intervals by channels samples taken by the manager. Stope faces are sampled only when there is a doubt as to their value. A careful check of the results of channel sampling against actual mill recoveries plus tailings assay indicated a dilution of 7.1 percent by value.

MILLING METHODS

Ore is treated in a 50-ton amalgamation-flotation mill operated two shifts a day. The flow sheet is shown in figure 5.

Ore from the mine is received in a 50-ton bin covered with an 8-inch grizzly on which oversize is broken by hand. Two hand-operated gates control the flow of ore from the coarse-ore bin onto a grizzly with a 3/4-inch space between the bars. The oversize is crushed in an 8- by 24-inch Allis-Chalmers-Blake type jaw crusher run at 230 rotations per minute, set for 1/2-inch discharge. Crushed ore and grizzly undersize fall into a 50-ton fine-ore bin.

From the fine-ore bin the ore is fed by a 15-inch by 6-foot Denver belt ore feeder traveling at 18 inches per minute to a 4-1/2- by 5-foot open discharge ball mill loaded with forged-steel balls of 3-inch maximum size. The ball mill is lined with wave-type liners and is operated at 32 rotations per minute, through a Texrope drive. It is operated in closed circuit with a 12- by 18-inch Denver mineral jig and an Akins classifier. The jig pulsates at 300 strokes per minute and the classifier rotates at 5-1/2 rotations per minute. A jig bed 2 inches deep, composed of 3/8-inch ball bearings, has been found much more satisfactory than the shot bed originally used. About 15 pounds of jig hutch is drawn on each shift, and the jig concentrate is run over a half-size Wilfley table, which produces a tail, middling, and concentrate; the middling is accumulated and run over the table again and the tails from the two runs are returned to the classifier. Concentrates from both runs and middling from the second run are amalgamated in the amalgam barrel.

Classifier overflow passes over three 11-inch by 12-foot tables arranged in parallel and covered with rubber matting; tables slope 1-1/4 inches per foot. Concentrates are removed from the matting every two days and amalgamated in the amalgam barrel with the jig concentrates.

The amalgam barrel is operated when sufficient concentrates have accumulated, usually about twice a month. The concentrates are ground for 6 hours with mercury, lye, and about a dozen 4-inch steel balls. The amalgam is retorted, and the rejects, which assay about 14 ounces of gold to the ton, are shipped to the smelter.

Tails from the blanket tables are fed to the second cell of a 6-cell, 15-inch, Denver sub-A flotation machine; this cell is used as a conditioner only. The pulp then goes to the last four cells in series; the concentrates from these cells are returned to the first cell for cleaning. Reagents are added to the feed to the conditioner cell by a Denver reagent feeder in the quantities shown in the table under the section on Metallurgical Data. Soda ash was used formerly but was definitely found to depress gold; consequently, its use was discontinued; the present flotation circuit is virtually neutral.

Flotation concentrates from the first cell are thickened in a 36-inch diameter cone, from which the pulp is discharged by a hand-operated diaphragm pump and filtered in a pressure filter of local design and construction. The filter consists essentially of a round iron box 18 inches in diameter and 18 inches high, in the bottom of which is a spirally grooved plate covered with filter cloth. The box is nearly filled with concentrate, air pressure is applied, and the moisture is forced out through the spiral grooves. The filtered concentrate contains 10 percent moisture; it is then dried more thoroughly in pans and sacked for shipment in lined sacks of 100 pounds capacity with cemented ends.

The sacked concentrates are trucked 17 miles to Burgdorf in 3-ton loads; they are then reloaded in 10-ton trucks and hauled the remaining 550 miles to the smelter at Garfield, Utah. The total cost of trucking from the mine to the smelter is $26 per ton of concentrate.

Metallurgical data for 1937

	Gold	Silver
Head assay, ounces per ton	0.711	2.583
Tail assay, ounces per ton	.0488	.670

Tons crushed per hour of crusher operation	7.908
Tons milled per hour of mill operation	2.025

Reagents per ton of ore milled:

	Pounds per ton of ore
Aerofloat No. 25	0.298
Xanthate Z-3	.224
Pine oil	.099
Forged steel balls	3.55

Sample screen analysis of tails

Mesh	Percent	Gold	Assay (ounces/ton silver)
On 60	0	0	0
Through 60, on 100	2.44	Trace	Trace
Through 100, on 200	34.10	0.03	1.48
Through 200	63.46	.07	2.92

Extraction

Gold:

	Percent
By amalgamation:	
From jig concentrate	73.3
From table concentrate	2.34
Total	75.64
By flotation:	17.39
Total	93.03

Total extraction, gold and silver, for 1937:

Gold	93.03
Silver	80.71

Ratio of concentration ..... 272.42 to 1.

Sample concentrate assay

	Ounces per ton
Gold	36.45
Silver	537.8
	Percent
Lead	4.5
Copper	1.3
Moisture	5.6

GENERAL OPERATING DATA

Labor

Average labor distribution for 1937:

Mining:		
Exploration and development:		
Miners on drifting and raising	4	
Muckers on drifting and raising	4	
Miners in shaft	2	
Muckers in shaft	3	
Hoistmen for shaft	2	
Outside prospecting (hand mining)	4	
Total		19
Stoping (including tramming):		
Miners in stopes	5	
Muckers in stopes	5	
Muckers on general mine labor	3	
Hand trammers (on upper levels)	1	
Motormen	2	
Shift boss	1	
Total		17
Outside labor:		
Blacksmith	1	
Compressor and warehouse man (Millman takes care of compressor on night shift)	1	
Timber framer	1	
Power plant operators	3	
General surface labor	2	
Total		8
Milling:		
Crusherman	1	
Mill foreman - operator	1	
Mill operator	1	
Total		3
General supervision:		
Manager	1	
Assayer, engineer, bookkeeper	1	
Total		2
Total on direct operation		49

Wage Scale

The following wage scale was in effect in September 1937:

	Per shift
Miners	$5.50
Muckers	5.00
Motormen	5.50
Timber framers	5.00
Shaft miners	5.75
Hoistmen	5.50
Millmen	5.50
Crushermen	5.00
Blacksmith	5.50
Compressormen	5.00
Outside labor	4.40
Power-plant operators	5.50

Power

Power requirements

Connected power:

	Horsepower	
Mine:		
Compressor, single-stage Chicago Pneumatic, 200-cubic-foot capacity	50	
Compressor, 2-stage, 8- by 10-inch, 14- by 10-inch, 460-cubic-foot capacity at elevation of mine (6,500 feet)	75	
Underground hoist motor driving Eimco hoist, 5,000-pound rope pull at 150 feet per minute	25	
Battery charger	5	
Wedge and cribbing saw	5	
Centrifugal pump	15	
Total mine		175
Outside:		
Sawmill driven by take-off from tractor		
Mill:		
Crusher	25	
Feeder	1/2	
Ball mill and jig	50	
Classifier	1-1/2	
Flotation (three 3-horsepower motors)	9	
Miscellaneous	6	
Total mill		92
Total connected		267

Power consumption: - A metered record of power consumption is not kept. The usual load at the power house is 175 horsepower on day shift, 182 horsepower on afternoon shift, and 112 horsepower on night shift. This gives an approximate daily power consumption of 2,799 kilowatt hours, or about 91.66 kilowatt-hours per ton mined and milled. These power requirements are figured on the basis of operation in late 1937 and include shaft development.

Power Supply

Power is obtained from a power plant 4 miles from the mine. This plant was built originally for a neighboring mine but is now leased by the Golden Anchor Mining Co. Power is generated by a Rathbun-Jones Diesel engine direct-connected to a 175 kilowatt generator; the Diesel has a sea-level rating of 250 horsepower; at the elevation of the power plant (6,000 feet) it develops 212 horsepower. Power is transmitted at 2,200 volts and is reduced to 440 volts at the mine.

Cost of Power Generation

The plant consumes an average of 5,500 gallons of fuel oil per month and requires the attendance of three operators when operating three shifts a day. The following table gives the cost of generating power, in cents per kilowatt hour:

Labor	0.548
Supplies	.045
Fuel oil	.760
Rents	.226
Total	1.579

Timber and Firewood

Timber and firewood are cut locally and sawed at the mine; native pine and fir are used for most purposes.

Mine timber is cut in 16-foot lengths with 6-inch tops at a contract price of $5 a cord; the larger pieces are sawed into lumber and the rest is cut and framed for various mine purposes.

Sawing and framing are performed in a shed at the mine portal by the timber framer assisted, when sawing lumber, by an extra man as off-bearer. With the American No. 1 sawmill driven by the caterpillar tractor, two men can saw 8,000 feet of lumber per day with a fuel consumption of about 10 gallons of gasoline. The direct cost of rough-sawed lumber is approximately as follows:

	Per 1,000 board feet
Cut and deliver 1,000 board feet (about 1-1/4 cords at $5 a cord)	$6.25
Gasoline, 1.25 gallons at $0.19, delivered	.24
Labor, 2 men 1/8 of a day	1.25
Total direct	7.79

Slabs from sawmill operation are used for lagging and cribbing; however, they are not included in the 1,000 board feet on which the above cost is based.

This compares with a cost of $27 a thousand for lumber delivered from the nearest commercial sawmill.

In the fall, 400 cords of mine timber is laid in for the winter's supply. About 50 cords of wood is required to heat the mill during the winter. This wood is cut and delivered on contract in 5-foot lengths at a cost of $5.50 a cord. About 35 cords of wood is required for the cook house during the year; during the same period, about 215 cords is required to heat the two bunkhouses, 10 family cabins, manager's office, engineering office, and assay office. This wood is cut and delivered in 18-inch lengths at a contract price of $6 a cord.

Cost of Freight and General Mining Supplies

The cost of the principal mining supplies delivered to the mine in 1937 was as follows:

Dynamite;	
40-percent strength	$13.54 per 100 pounds.
60-percent strength	15.34 do.
Fuse	6.19 per 1,000 feet.
Caps	1.313 per 100.
Fuel oil	0.11 per gallon.
Timber (see section on timber and fire wood)	

Miscellaneous supplies cost the regular city prices plus a freight charge of $0.90 a hundred from Boise (176 miles); or $0.50 a hundred from McCall (47 miles).

OPERATING COSTS

The following costs are averaged for 1937. During this period 9,546.63 tons of ore was mined and milled, 11,243 tons of waste trammed, and 2,933.11 feet of development drifting and raising completed. A shaft was also started and sunk 200 feet; sinking costs, however, are not included in the per-ton costs given below. Liability insurance and social-security taxes are included in the costs given; other taxes, depreciation, depletion, etc., are not included.

Mining Costs Per Ton of Ore Mined

Item	Stoping	Development 1/	Mine maintenance	Total
Labor	$2.40	$1.83	$0.06	$4.29
Explosives	.20	.24		.44
Timber	.07	.04		.11
Power and air	.31	.27		.58
Other supplies	.37	.37		.74
Liability insurance	.12	.09		.21
Overhead 2/	.31	.31		.62
Total	3.78	3.15	0.06	6.99

1/ Includes tramming.
2/ Includes supervision, assaying, engineering, office, and social-security taxes.

Milling Costs Per Ton of Ore Milled

Labor	$0.57
Power	.72
Wood for heat	.03
Other supplies	.47
Maintenance	.02
Express and mint (bullion)	.13
Freight and smelter (concentrates)	.15
Overhead 1/	.61
Total	2.70

1/ Includes supervision, assaying, engineering, office, and social-security taxes.

Summary of Mining and Milling Costs

	Per ton
Mining:	
Development	$3.15
Stoping	3.78
Maintenance	0.06
Total	6.99
Milling	2.70
Mining and milling	9.69

Cost of Sinking, Per Foot 1/

Labor	$32.34
Explosives	2.82
Power and air	4.51
Timber	.59
Other supplies	1.92
Liability insurance	1.61
Total	43.79

1/ Based on cost of sinking approximately 200 feet. This does not include cost of equipment or preparation but does include a heavy pumping cost. Operations were generally handicapped by heavy water flow.

Operating Costs in Units of Labor, Power, and Supplies

Mining

Item	Development (exclusive of sinking)	Stoping	Total
Labor, man-hours per ton:			
Drilling, blasting, and timbering	0.89	1.52	2.41
Mucking	.89	1.72	2.61
Tramming	.28	.26	.54
Supervision	.26	.26	.52
General 1/	.33	.34	.67
Total	2.65	4.10	6.75
Average tons per man-shift	0.467	0.723	1.19
Power and supplies:			
Explosives, pounds per ton:			
40-percent strength	1.08	1.49	2.57
60-percent strength	.26	---	.26
Total	1.34	1.49	2.83
Timber, board feet per ton	200	257	457
Power, kw.-hrs. per ton	2/22.15	25.10	47.25
Other supplies, percent of total supplies and power	40.21	38.90	39.5
Total supplies and power, percent of total cost	29.2	25.1	26.8

Milling

Labor, man-hours per ton milled:	
Crushing	0.17
Operating	.40
General labor	.02
Total	0.59
Power, kw-hrs. per ton milled	30.23
Reagents, pounds per ton milled	.621
Steel, pounds per ton milled:	
Balls	3.55
Liners	.857
Total	4.407
Wood for heat, cords per ton	.0268

1/ Includes outside labor directly chargeable to underground operation.
2/ Power consumption for sinking was 14.18 kw.-hrs. per ton mined during the period of sinking.

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SUMMARY OF OPERATING STATISTICS

GOLDEN ANCHOR MINING COMPANY. Predecessor to ANCHOR MINES, INC.
Period from September 1, 1935 to April 30, 1942*

	4 months 1935	1936	1937	1938	1939	1940	1941	4 months 1942**
1. Tons ore mined	2,436.00	8,166.28	9,411.67	10,381.56	16,301.10	14,183.49	12,405.00	2,567.25
2. Tons ore milled	2,551.00	8,166.28	9,546.63	10,431.98	16,301.10	15,459.73	13,367.47	2,827.17
3. Average tons milled per day (360 day basis)	24.29	22.68	26.51	28.98	45.29	42.94	37.13	26.92
4. Per cent possible running time (360 day basis)	---	45 percent	53 percent	58 percent	91 percent	86 percent	74 percent	54 percent
5. Gold produced (fine ozs.)	1,580.82	7,023.93	6,282.96	5,869.49	10,194.13	7,441.74	5,478.86	1,361.13
6. Gold produced (dollars)	$54,798.98	$244,526.72	$218,624.66	$204,478.60	$354,284.87	$258,924.28	$191,371.45	$ 47,312.33
7. Silver produced (fine ozs.)	4,827.03	17,043.49	19,398.78	19,240.84	46,975.70	25,546.10	25,451.03	3,348.81
8. Silver produced (dollars)	$ 3,770.17	$ 13,054.86	$ 15,010.58	$ 12,201.41	$ 30,463.56	$ 17,183.80	$ 17,179.62	$ 2,223.31
9. Gross production (dollars)	$58,569.15	$257,581.58	$233,635.24	$216,680.01	$384,748.43	$276,108.08	$208,551.07	$ 49,535.64
10. Millheads wt. average assay (gold)	---	.920	.711	.590	.651	.500	.370	.404
11. Millheads wt. average assay (silver)	---	3.08	2.58	2.36	3.54	1.99	2.42	1.50
12. Stoping costs per ton ore mined (dollars)	$ 4.33	$ 4.10	$ 4.17	$ 5.57	$ 5.42	$ 5.88	$ 6.03	$ 9.56
13. Milling costs per ton ore milled (dollars)	$ 2.54	$ 2.51	$ 2.38	$ 2.47	$ 2.15	$ 2.46	$ 2.45	$ 2.19
14. Other costs per ton ore milled (dollars) (c)	$ 1.21	$ 1.44	$ 1.86	$ 1.36	$ 1.74	$ 1.40	$ 1.37	$ 1.15
15. Income taxes (federal and state) per ton (dollars)	$ 1.21	$ 2.89	$ 1.60	$ .37	$ 1.53	$ .42	$ .20	---
16. Depreciation per ton ore milled (dollars)	$ .73	$ .73	$ .69	$ .79	$ .83	$ .77	$ .56	$ .88
17. Development footage (feet)	845.57	3,420.90	2,933.11(b)	4,603.14(b)	3,373.02(b)	2,686.51(b)	3,962.68(d)	992.20(e)
18. Development costs per foot (dollars)	$ 14.82	$ 10.10	$ 16.52(a)	$ 14.64(a)	$ 17.05(a)	$ 23.29(a)	$ 9.99(f)	$ 8.62(g)
19. Development costs per ton ore mined (dollars)	$ 5.15	$ 4.23	$ 5.15(a)	$ 6.49(a)	$ 3.53(a)	$ 4.41(a)	$ 3.19	$ 3.33
20. Man shifts--total mine	---	7,082.00	7,925.49	11,277.10	14,912.99	13,384.17	10,016.00	2,620.00
21. Tons ore per man shift (tons)	---	1.15	1.19	.921	1.09	1.06	1.24	.98
22. Net income from production after all charges but before depletion (dollars)	$20,980.76	$127,686.30	$ 83,156.60	$ 40,473.67	$137,961.29	$ 52,089.36	$ 35,140.71	$ 3,878.24
23. Net income per tons (dollars)	$ 8.22	15.64	$ 8.71	$ 3.88	$ 8.46	$ 3.37	$ 2.63	1.37
24. Percentage net income to gross income	36 percent	50 percent	36 percent	19 percent	36 percent	19 percent	17 percent	8 percent
25. Earnings per share (400,000 shares)(dollars)	$ .05	.32	$ .21	$ .10	$ .35	$ .13	$ .09	$ .009
26. Dividends per share (400,000 shares)(dollars)	---	.35(h)	$ .20	---	$ .45	$ .10	$ .10	---

* During the period from December 31, 1935 to 1942 no allowance was made for amortization of prior development costs of the period from 1928 to 1935 because the deficit of $87,670.01 existing on December 31, 1935, was wiped out in November 1936 with a portion of the donated capital surplus resulting from the 1932 refinancing referred to on page 3 of this Prospectus.

** Statistics for this year are not representative since operations were frequently interrupted by the lack of sufficient experienced workers and difficulties and delay in obtaining materials, supplies and equipment. Furthermore, costs included the cost of preparing underground workings, camp, and machinery and equipment for an indefinite shutdown.

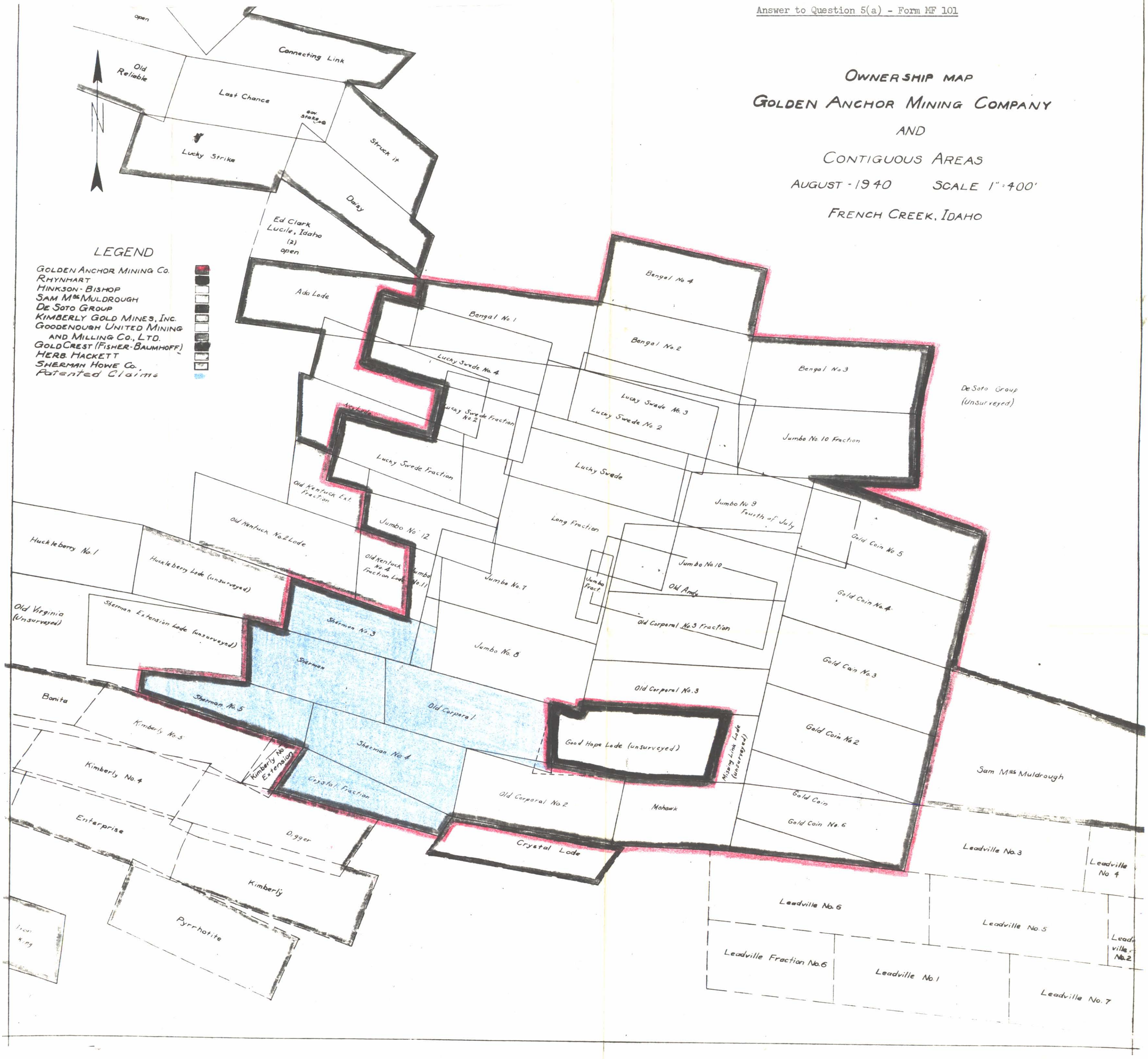
(a) Includes shaft sinking costs.
(b) Includes shaft footage.
(c) Taxes, other than income interest, administrative salaries and expense, legal expense, auditing, mine examinations, geological and other survey and research, general expense.
(d) Includes 2,108.17 feet of diamond drilling.
(e) Includes 617.40 feet of diamond drilling.
(f) Includes cost of 2,108.17 feet of diamond drilling.
(g) Includes cost of 617.40 feet of diamond drilling.
(h) Includes $50,000.00 notes payable repaid to stockholder (United Verde Extension Mining Company).

ANCHOR MINES, INC.

Answer to Question 5(a) - Form MF 101

MAP 1

OWNERSHIP MAP
GOLDEN ANCHOR MINING COMPANY
AND
CONTIGUOUS AREAS

AUGUST - 1940 SCALE 1" = 400'

FRENCH CREEK, IDAHO