FILE COPY
SURNAME:

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

JAN 31 1952

Mr. C. L. Maguire, President
United Mine Operators, Inc.
P.O. Box 836
Hickenburg, Arizona

Re: Docket [illegible]-443 (Co[illegible]er)
Unite Mine
Yavapai County, Arizona

Dear Mr. Maguire:

We have received your letter of January 25th in which you advise us that you have discontinued the operations at the Unite Mine.

We regret that your development work was not successful in finding new ore bodies, and that you were therefore obliged to suspend operations.

As the project, for which the subject application was made, is now of no further interest to your company, Docket [illegible]-443 will be considered closed.

We wish to thank you for your cooperation with this agency.

Sincerely yours,

C. O. Mittendorf (for) 1-31-52

C. O. Mittendorf
Acting Administrator
Defense Minerals Exploration Administration

HFKeller/jem
1-30-52
cc to: Adm. Reading File
Docket
Messrs. Johnson, CH Rm. 3621
Nelson, Ned Rm. 4216 G.S.
Ellis
Keller
Field Team, Region IV (2)

UNITED MINE OPERATORS, INC.

WICKENBURG, ARIZONA

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
JAN 28 1952

January 25, 1952.

Ernest Wm. Ellis, Acting Chief,
Rare & Misc. Metals Division
Dfense Minerals Exploration Administration,
Washington 25, D.C.

Dear Mr. Ellis:

Re: Docket DMA-443X (Copper)
Unida Mine
Yavapai County, Arizona

This will acknowledge receipt of your letter of the 15th.

We discontinued operations of the Unida Mine the latter part of August, due to the fact that the expected Ore bodies did not develop, so that operation has ceased.

Should any further development take place on other properties, we will contact you.

Yours very truly,

UNITED MINE OPERATORS, INC.

By C. L. Maguire
C. L. Maguire,
President.

DMA-443
United Mine Operators, Inc. (Unida Group)

January 10, 1952

Memo file file:

Lack of further action since May, 1951, called to the attention of Mr. Ellis.

He phoned Mr. Gowen's office (DMPA) and talked with Mr. Waugh, who gave following information from their records:

It came in as a production loan and that was denied April 24, 1951, amount $135,000. It also came in for a Tax Amortization, which was recommended on May 10, 1951. DMPA sent exploration forms to applicant.

Mr. Ellis informed him application forms MF-100 and MF-103 (3 copies each) were in our file, dated April 30, 1951, received by DMA May 7, 1951, amount $315.506.

Mr. Waugh said DMPA had done nothing from there on. Mr. Ellis raised question why no inquiry had been received from applicant since then. Mr. Waugh said he thought DMPA's reaction was that amount asked for is too high and that smaller amount should be arranged.

gla

(Mrs.) Grace L. Ault
Secretary to Mr. Ellis

Dma - 44 3X

~~LANDON F. STROBEL~~

Mr. Gowen

LYNN HERSEY
CONSULTING MINING ENGINEER

P. O. BOX 1115
MIAMI, ARIZONA

May 1, 1951

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

Dear Mr. Gowen:

At the request of Mr. C. L. Maguire, President, United Mine Operators Inc. I am forwarding herewith Forms MF 100 and MF 103 together with the necessary estimates and other data covering.

I have spent considerable time in the mapping and geological study of the area covered by this application and in my opinion it offers an excellent probability of producing copper needed by Defense Minerals Administration.

I recommend approval of the application.

Yours very truly,

Lynn Hersey

CONSULTING ENGINEER

LH-mms

BUREAU OF MINES
WASHINGTON, D. C.

MAY 7 9 29 AM '51

LANDON F. STROBEL

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF MINES

OFFICE OF
REGIONAL DIRECTOR

REGION IV

224 NEW CUSTOMHOUSE
DENVER 2, COLORADO

April 24, 1951

Memorandum

To: Tom Lyon, Director, Supply Division, Defense Minerals Administration

From: Field Team, DMA, Region IV

Subject: Report on Docket 443

Our report on DMA Docket 443, C. L. Maguire, Unida Copper Group, Yavapai county, Arizona, was forwarded to Washington on April 11. We received your memorandum today, dated April 9, requesting that the report be sent to Washington. Please advise if the report has not been received.

P. T. Allsman
Alternate, Field Team

BUREAU OF MINES
WASHINGTON, D. C.
APR 30 3 39 PM '51

FOR VICTORY
BUY UNITED STATES WAR BONDS AND STAMPS

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF MINES

April 24, 1951

Memorandum

To: Tom Lyon, Director, Supply Division, Defense Minerals Administration

From: Field Team, DMA, Region IV

Subject: Report on Docket 443

Our report on DMA Docket 443, C. L. Maguire, Unida Copper Group, Yavapai county, Arizona, was forwarded to Washington on April 11. We received your memorandum today, dated April 9, requesting that the report be sent to Washington. Please advise if the report has not been received.

P. T. Allsman
Alternate, Field Team

FILE COPY
SURNAME:

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

JAN 15 1952

Mr. G. F. Maguire, President
United Mine Operators, Inc.
Post Office Box 836
Hackenbury, Arizona

Re: Docket DM-443 (Copper)
Loida Mine
Yavapai County, Arizona

Dear Mr. Maguire:

Your subject application for exploration aid in the amount of $315,505.00 has only recently been transfered to this department from the former Supply Division of the Defense Minerals Administration, and has now been reviewed.

In order that we may make our final decision on your application, kindly furnish us the following information:

1. Monitor returns on any ore shipments during the past six months.

2. Map showing proposed exploration work and any recent development work.

3. Any revisions that may effect the original estimate of expenditures.

Upon the receipt of this information we shall continue the study of your application.

Sincerely yours,

Ernest Wm. Ellis

S.W.
1-15-52

Ernest Wm. Ellis, Acting Chief
Core & Misc. Metals Division
Defense Minerals Exploration
Administration

HFKeller/jem
1-11-52
cc to: Adm. Reading File
Docket
Messrs. Johnson, CH Rm.3621
Ned Nelson Rm.4216 GS.
Ellis
Keller
Field Team, Region IV (2)

REGIONAL DIRECTOR

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF MINES

224 NEW CUSTOMHOUSE
DENVER 2, COLORADO

CONFIDENTIAL

April 11, 1951

Memorandum

To: Landon S. Strobel, Executive Secretary, Defense Minerals Administration

From: DMA Field Team, Region IV

Subject: DMA Docket 443, C. L. Maguire, Unida Copper Group, Yavapai county, Arizona.

We are enclosing three copies of the report on DMA Docket 443, Unida Copper Group, Yavapai county, Arizona. Also enclosed is the original application.

We concur with the conclusions of the field man and recommend that the application be denied.

J. H. East, Jr.

A. H. Koschmann

Enclosures
One copy by air mail
Two copies of regular mail

UNIDA GROUP (COPPER)
YAVAPAI COUNTY, ARIZONA

DEFENSE MINERALS ADMINISTRATION
DMA DOCKET 443

APPROVED:

J. H. East, Jr.

A. H. Koschmann

UNITED STATES DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS ADMINISTRATION
James Boyd, Administrator

Mining Division
Region IV

April 10, 1951

Memorandum

To: DMA Field Team, Region IV

From: Chief, Mining Division, Region IV

Subject: DMA Docket 443, C. L. Maguire, Unida Copper Group, Yavapai county, Arizona, final report

Enclosed are the original and 11 copies of the final report on the above subject.

This report rejects both the requested Certificate of Necessity and a subsequent application for a loan due to the low copper values and only moderate reserves. On March 21, 1951, the loan was denied by the Supply Division of the DMA.

We concur with the conclusions of the engineer and the geologist in the rejection of both applications.

F. T. Allsman

April 3, 1951

Memorandum

To : Paul T. Allaman, Chief, Mining Div., Region IV, Denver, Colorado

From : Chief, Arizona-New Mexico Br., Mining Div., Region IV, Bureau of Minos
and
Acting District Supervisor, Geological Survey

Subject : Final Report, DMA Docket 4A3, Unida Copper Group, Yavapai County, Ariz.

Enclosed are original and 11 copies of the above report by Grant R. Bubly of the Bureau of Mines and John N. Faick of the Geological Survey. Please return one copy of this report to C. A. Anderson and one to W. R. Storms.

This report has our approval.

Walter R. Storms

Andrew F. Shride

cc P. T. Allaman
C. A. Anderson
DMA - 4A3
DF

WRStorms:nlp

UNIDA GROUP (COPPER)

YAVAPAI COUNTY, ARIZONA

By Grant R. Rubly[1] and John N. Faick[2]

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1/ Mining Engineer, Arizona-New Mexico Branch, Mining Division, Region IV, Bureau of Mines, Tucson, Ariz.
2/ Geologist, Geological Survey, Tucson, Ariz.

SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS

On January 2, 1951, Mr. C. L. Maguire made application to the National Security Resources Board for a certificate of necessity pursuant to provisions of Sec. 124 A (Amortization Deduction) of Internal Revenue Code. This application was referred to the Field Team, Region IV, Defense Minerals Administration, as DMA Docket No. 443 with the additional notation that the applicant is preparing to request a loan from the Government and to make an investigation for determining whether a loan would be justified. The field examination was made March 19 - 21, 1951.

The Unida Group is located approximately 11 miles northeast of Wickenburg on the road to Constellation in Yavapai County, Arizona.

The Unida mine develops the Bloo Neeley vein, a small but relatively persistent quartz vein, that has formed along a moderately strong fault zone striking N. 50° W. and dipping 60° S.W. The country rock in the vicinity of this fault-vein zone appears to be a biotite-quartz monzonite that has intruded into earlier schistose and granitoid rocks but is in turn cut by later andesitic and basaltic dikes.

The Bloo Neeley vein is irregular both on strike and dip, and pinches and swells from a few inches to about 6 feet in thickness. The principle values consist of about 0.03 ounces of gold and about 2 percent copper. The observed minerals are largely supergene

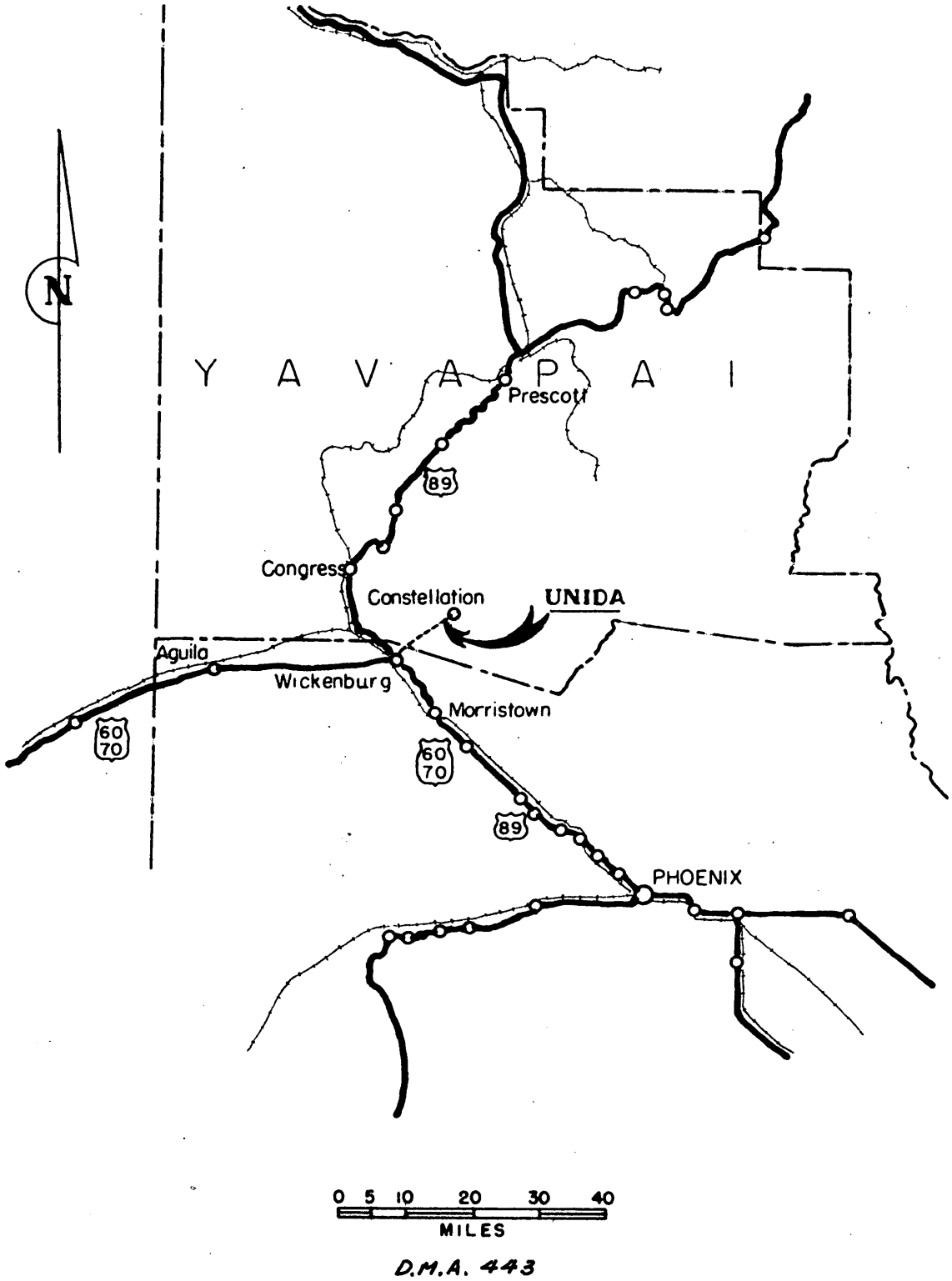


Figure 1.- Location map, Unida Group, Yavapai County, Ariz.

malachite and chrysocolla although minor amounts of chalcocite and traces of chalcopyrite were seen.

Most of the equipment listed in the application was on the property or in process of delivery at the time the examination was made. Considerable work has been done in building roads and making other improvements. The value of the facilities is estimated to be close to that claimed by the applicant.

The mine was examined in 1943 by Reconstruction Finance Corporation engineers and reported under R.F.C. B-439 and, although this report is not presently available, certain observations were noted. A weighted average of 5 samples over an average width of 28 inches gave 0.11 ounces gold, 2.21 percent copper, and 62.5 percent silica. It was estimated at that time that no more than 500 tons of ore existed in the mine. The loan was not granted.

It is recommended at this time that the application for certificate of necessity be denied and that application for a loan from the Government be likewise denied when such application is made.

INTRODUCTION

Mr. C. L. Maguire made application to the National Security Resources Board for a certificate of necessity pursuant to provisions of Sec. 124 A (Amortization Deduction) of Internal Revenue Code. It is understood that the applicant is also preparing a request for a loan for exploitation of the Unida Group.

The purpose of this examination was to ascertain the actual and estimated value of equipment, roads, discovery, patenting, and development work as claimed in the application, and in addition to determine whether a loan could be justified when such a loan request is made.

The original application has been docketed as EMA Docket No. 443.

ACKNOWLEDGMENT

Acknowledgment is hereby made to Mr. C. L. Maguire, President, Mr. Lynn Hersey, Consulting Engineer, and Mr. Ernest Sturrock, Superintendent of United Mine Operators, Inc., for their courteous and cooperative assistance in making the examination and in releasing maps of the mine workings that are incorporated in this report as figures 2, 3, 4, and 5. Further acknowledgment is made to Mr. Lynn Hersey in furnishing a copy of his report on the Unida Group, a copy of which is attached in the Appendix.

LOCATION, TOPOGRAPHY AND PHYSICAL FEATURES

The Unida Group, consisting of ten contiguous patented lode mining claims is located in the Black Rock Mining District about 11 miles northeasterly from Wickenburg, in Yavapai County, Arizona, on the dirt road to the old camp of Constellation. This road crosses the property between the lower and middle adits. The claims are approximately in Sec. 5, T. 3N., R. 8 W., Gila and Salt River Base and Meridian. A claim map of the Unida Group is in process of preparation by William Waare, Deputy Mineral Surveyor, Prescott, Arizona.

The mean altitude of the property is about 3,600 feet above sea level. The terrain is rugged with no timber and with only the usual semi-arid vegetation of shrubs and grasses.

HISTORY AND PRODUCTION

The vein was worked many years ago, and while accurate production figures are not available, total production could hardly have exceeded 1,000 tons. Averages of smelter settlement sheets indicate 0.32 ounces of gold, 64.4 percent silica, 6.9 percent alumina, 2.11 percent copper, 10.1 percent iron. (This data is taken from a report by Lynn Hersey, dated February 17, 1951, see Appendix.)

The property has been known as Arizona Copper and Gold Mining Co., Nick S. Oberon, President, Wickenburg, Ariz. A report by J. G. Johannas, Phoenix, Arizona, dated March 21, 1925, and another by Victor J. Pimental, Los Angelas, California, dated October 9, 1931, were examined.

OWNERSHIP

The ten lode mining claims composing the Unida Group were acquired by Mr. C. L. Maguire by deed dated November 22, 1950, from Joe Pouquette et al.

The United Mine Operators, Inc., has been set up as an operating company to operate the Unida Group. The personnel of this latter company are C. L. Maguire, President, Mrs. C. L. Maguire, Secretary and Treasurer, Mr. Harper, Vice-President, Lynn hersey, Consulting Engineer and Manager, and Ernest Sturrock, Superintendent.

GEOLOGY

The Unida mine is developed on a narrow persistant fault zone cutting a granitic type igneous rock that is tentatively classified as biotite quartz-monzonite. This appears to be intrusive into earlier schistose and granitoid rocks and is cut by later andesitic and basaltic dikes. The Unida fault zone is a relatively narrow zone commonly 2 to 4 feet in width, but locally thickens to about 10 feet. Occasional small branch faults are observed to enter or leave the main structure at random. The main Unida structure trends N. 50° W. and dips about 60° S.W. and the associated dikes appear to be approximately parallel to the same zone.

Scattered along the Unida fault zone, and commonly referred to as the Bleo Neeley vein, are numerous small lenticular masses of quartz. These lenses are commonly rather narrow in width, varying from a few inches to about 6 feet, but frequently have a relatively persistent strike length and often are linked in such a way as to form a nearly continuous vein for as much as about 300 feet. The lenticular nature of the vein is characteristic along both the strike and dip of the structure and results in a distinct pinching or swelling. Some of the enlargements are of sufficient magnitude to form bodies that might contain as much as about five thousand tons of vein material. Associated with the quartz are moderate quantities of supergene copper minerals, largely malachite and chrysocolla. Minor amounts of hematite are distributed unevenly along the entire vein-fault structure. Some

dark gray copper sulfide, probably chalcocite, and traces of chalcopyrite were observed. The vein contains minor values in gold.

Some late movement has taken place along the vein as is shown by the locally somewhat brecciated character. The breccia zones contain fragments of the associated andesitic and basaltic dikes as well as vein material. Alteration of the country rock along the vein appears to be negligible. However, along with post-vein faulting it may cause minor difficulties in mining.

Numerous other quartz veins are present in and near the Unida Group in the Black Rock district. These, however, were not examined since it is the intention of the present operators to concentrate all their efforts on current development work on the Bloo Neeley vein.

ORE RESERVES

In arriving at a value of the ore reserves the samples taken by Mr. Lynn Hersey are accepted as being reliable. These are shown on a longitudinal projection (Fig. 4) and have been used in estimating the tonnage of ore, none of which can be considered as measured ore. Approximately 3,000 to 5,000 tons with a grade of 0.03 ounces gold and 3.3 percent copper are indicated. The amount of inferred ore is highly conjectural.

It is to be noted that a discrepancy exists between these gold assays (0.03 ounces gold) and the gold assay values (0.32 ounces) of former shipments as given under History and Production. These assays may be compared with the 5 samples taken by the Reconstruction Finance Corporation (page 2) that yielded 0.11 ounces gold. The

higher gold values in the early shipments is accounted for by the fact that this ore was mined from the near-surface enriched zone. Future production must come from lower grade parts of the vein containing less gold per ton than indicated by the past shipments.

PRESENT STATUS

At the time of the examination the operations consisted of cleaning up the No. 1 and No. 2 adits (see Figs. 2, 3, and 4), constructing an ore bin near the portal of No. 2 adit, making roads to No. 1 adit, and installing surface facilities. No. 1 adit has been cleaned out to the raise connecting it with No. 2 adit but inasmuch as no ore shows in the No. 1 adit no further exploratory work is contemplated here for some time.

It is planned to develop the No. 2 adit for mining purposes as the best ore showings occur on this level. Some work also is planned for the N o. 3 adit but it will be subordinated to the work on the No. 2 adit.

As the primary purpose of the examination was to determine how much of the equipment listed in the application for a necessity certificate was actually on the ground the following detail is made.

1 - International Harvester Bulldozer TD 24. Used but in good condition. On the property.

1 - Worthington Blue Brute Compressor, 500 cfm. Used but in good condition (1100 hours). On the property and running.

1 - Caterpillar Generator, D 8800 instead of D 11,000 as listed, 63 kva. direct connected. Used and in good condition. On the property.

1 - Caterpillar Compressor D 13,000, 500 cfm, used. This compressor is in process of purchase and is not yet available.

2 - Eimco Loaders, 12 B, 18 in. gage. Used but in good condition. On the property.

2 - Goodman Mfg. Co. Little Mancha Trammers, 18 in. gage, with extra battery, charging equipment, etc. Used but in good condition. Trammers are on dock in Wickenburg, some charging equipment on property.

1 - Willys-Overland Jeep truck, 1-ton capacity. New and in use on property.

2 - Ingersoll Rand Stopers, R-48 and not R-58 as listed, with accessories. On the property.

2 - Gardner Denver 3 in. drifters with columns, arms, saddles, and long shells, air hose, etc. New. On the property.

11 - Card Rocker bottom side dump 1-ton ore cars, Timken bearing. Used but in good condition. On the property.

3 - Card-type rocker bottom side dump 1½-ton ore cars. Timken bearing. New and on the property.

(The above were listed as 12 Card 1-ton side dump ore cars.)

1 - International H arvester truck T-180, 3-ton dump body, gasoline engine. This truck has not been delivered and order for dump bed has been placed with Allison Steel in Phoenix.

1 - Gardner Denver jackhammer 163. Used and in good condition. On the property.

Various engineering and office equipment, tools, small machinery, etc. too numerous to list are on the property or at the offices of United Mine Operators Inc. in Wickenburg.

In addition to the above listed equipment there is one International Harvester' 38 flatrack truck valued at $750.00, one Washington Blue Brute 105 cfm gasoline-powered air compressor valued at $3,200.00, and two carloads of Douglas Fir mining timber of various sizes.

A great deal of work has been done on the property in building roads and rebuilding old structures for warehouse, powder magazine, and cap house. A new ore bin is being built below the No. 2 adit for loading trucks.

The access road from Wickenburg has several steep grades against the load but in general is a fairly good road.

There is adequate manpower, housing, transportation, and community facilities in Wickenburg.

Water sufficient for mining operations is developed close to the workings and is pumped to a tank on the hilltop thus providing water under pressure.

PRODUCTION PLAN

Production is scheduled at 50 tons per day and preparations are being made to meet such a schedule.

The method of mining this vein will have to be determined as work progresses. There is a good possibility that open stopes using stulls may prove adequate. Shrinkage stoping with subsequent filling also could be employed.

It would be difficult at this time to predict mining costs. As the ore would be a direct shipping one, no milling costs are anticipated.

COST OF PROJECT

Reference is made to Mr. Lynn Hersey's report (see Appendix) regarding net value of ore at the smelter. It is to be noted that no mining cost has been indicated in his report.

It is estimated that mining and freight charges to Wickenburg would be about $10 per ton. This cost added to about $8.45 for smelting and freight from Wickenburg to Magma Copper Co. at Superior, Ariz., indicate an extremely narrow margin of profit, if any.

RECOMMENDATIONS

In view of the low-grade of this vein and its narrow width, the small amount of indicated ore and the small likelihood of any more ore being found in workable quantities, we recommend that the application be refused. The amount of copper that might be produced by this operation would be small and at very high cost. The net result would be adding but a negligible amount of copper for the defense effort at a cost far out of line with its real worth.

In the event that an application for a loan from the Government for exploiting this property is made, it is recommended that such application be refused for the reasons stated above.

UNIDA GROUP (COPPER)
YAVAPAI COUNTY, ARIZONA

By Grant H. Bably and John N. Faick

* * * * * * * * * * * * * * * * APPENDIX
DMA Docket 443

COPY COPY

LYNN HERSEY

CONSULTING MINING ENGINEER

P. O. Box 1115
Miami, Arizona February 17, 1951

Mr. C. L. Maguire, President,
United Mine Operators, Inc.,
Wickenburg, Arizona

Dear Sir:

Please find herewith a report covering my examination and sampling of the UNIDA mining property located on the Constellation road near Wickenburg, Ariz.

The investigation consisted of the taking of some 150 samples in the three adits; in the sub-level between the middle and lower adits, and in old stopes from which production in prior years was obtained; and of a careful and detailed examination and study of surface exposures along the vein to the southeast.

I estimate that there are 15,600 short tons of proven and probable ore with an average grade at the present prices of metals of $18.70 per dry ton. I think this grade can be improved by selective mining as was done in previous shipments from the property.

The cost of bringing this mine into production at 50 tons per day is estimated at $150,000 including working capital. Of this; $74,500 or about one-half, will be equipment and machinery of a salvagable nature.

It is recommended that you proceed with the development and operation of this property as outlined herein.

Yours very truly,

/s/ Lynn Hersey

CONSULTING ENGINEER

LH:ry

February 17, 1951

REPORT
on the
UNIDA GROUP OF CLAIMS
Black Rock Mining District
Yavapai County, Arizona

Lynn Harsey by Consulting Engineer

LOCATION AND GENERAL CONDITIONS

This property consists of ten contiguous patented and one unpatented mining claims located about eleven miles northeasterly of Wickenburg, Arizona and is connected with Wickenburg by a good dirt trucking road maintained by Yavapai County; which road passes between the middle and lower adits.

The mean elevation of the property is about 3,800 feet above sea level. The terrain is extremely rugged with no timber and only the usual semi-arid vegetation of shrubs and grasses.

GENERAL GEOLOGY

The entire area covered by these claims is made up of igneous rocks; the plutonic rocks being granite, syenite and diorite in which fractures have been filled by intrusive dikes of rhyolite, trachite and andesite sometimes cutting each other. The BlooNeeley vein, on which three adits have been driven, appears to be the latest major fracture in the area and seems to cut all grantitic rocks and intrusives. It is a strong and persistent vein, observed and sampled on the surface for approximately 4,000 feet. It strikes about north 50 degrees west actual, and is consistent in it's strike throughout it's observed length. Due to the steep topography, the vein appears to strike N 60 W on the western side of the mountain and about N .40 W on the eastern side; and the claims are laid out parallel to these apparent strikes.

The vein dips to the southwest at about 58 degrees. It is composed of gouge and brecciated matter caused by the faulting movement and has been impregnated, hardened, and partly solidified by secondary silicification. A preliminary examination of the gouge does not clearly indicate the direction of the movement but, since the phenocrysts of feldspars on the foot-wall side of the vein seem to average considerably larger than those on the hanging-wall side, it is reasonable to assume that it was a normal fault.

MINERALOGY

The copper minerals making up the exposed ore consist of the carbonates malachite and azurite, and the silicate chrysocolla. A stope near the breast of the middle adit shows some primary chalcocite; the mineral where exposed being in the process of alteration to carbonates and silicates.

The precious metals are gold and silver with the preponderant value in gold which occurs in native form and appears to be connected with the limonite and hematite seams in the vein, and with the free quartz. The gold is easily panned. For the purpose of economy the silver was not assayed. Previous assaying has demonstrated that the ore does not contain enough silver to materially influence its value.

ORE OCCURRENCE

The ore seems to occur in a shoot, the outer edge of which roughly parallels the surface. However, since the native gold on the

surface exposures samples about the same as underground, it is possible that the copper may have been leached from the vein near the surface. No secondary enrichment has been encountered to date. The extent of the shoot has not been determined because the upper two adits stopped in ore. The face of the lower adit is not on the vein, and it will be necessary to cross cut or diamond drill before drifting further on this level.

ORE RESERVES

In my preliminary sampling of the vein on the levels only (before the raises and stopes were made accessible) I obtained an average gold assay of 0.35 oz. and an average for copper of 3.03%. A composite of the 13 preliminary samples taken showed the following analysis:

Au 0.35 oz. SiO_2 59.9% Al_2O_3 7.7% Cu 3.03% Fe 10.2%.

These samples were taken in areas between and beyond the previously operated stoped. The vein as sampled averaged 3 feet in width. Since the previous operators, no doubt, mined the better and wider portions of the vein, my preliminary sampling may have tended toward the conservative side both as to vein width and grade. The average of all available smelter settlement sheets from previous shipments were as follows;

Au 0.23 oz. SiO_2 64.4% Al_2O_3 6.9% Cu 2.11% Fe 10.1%.

Inspection and measurement of the old stopes shows that mining was done to an average width of 4.8 feet in area where the profitable vein averages only about 3.4 feet. This, no doubt, caused some unnecessary dilution which may have been partly offset by a certain amount of hand sorting. It is my opinion, from careful inspection of the walls, that the vein can be mined much cleaner than was previously done.

Based on a mean of the above analysis, inquiries were made to 5 Southwestern smelters of which the Magma Copper Company smelter at Superior, Arizona, and International Smelting & Refining Company at Miami, Arizona were the closest. The reply from Magma smelter is quoted below:

COPY

MAGMA COPPER COMPANY
Superior, Ariz.

June 30, 1950.

Mr. Lynn Hersey
P. O. Box 1115
Miami, Arizona

Dear Mr. Hersey:

This is in reply to your letter of June 28th relative to gold copper ore you propose to ship from Wickenburg next October.

From the assay and analysis given the smelter return per dry ton at present metal prices would be as follows:

Payment for metals:		
Gold 0.33 Oz. at $32.20	$10.63	
Copper, 51 lb. less 8, or 43 lb @ 19.45¢	8.36	$18.99
Estimated Charges:		
Smelting charge per dry ton	5.27	
Freight from Wickenburg (wet ton)	3.17	8.44
Estimated net return per dry ton		$10.55

It is suggested that when you are ready to ship that you send us a trial car and if the ore is suitable to our operation we will advise you as to the amount of shipments that we can accept.

Enclosed is a copy of our present treatment schedule.

Yours truly,

J. H. Rose

Metallurgical Supt.

JHR/r
Encl—1

As of the date of the above letter, the price of copper was 22.5 cents per pound. At the present price per pound of 24.5 cents the "estimated net return per dry ton" would be $11.41. The net return estimated by International was $9.14 per ton; the difference being due to a deduction of 10# of copper from gross by International as compared with 8 by Magma and a freight deduction of $4.25 per ton. At the new price of copper the Inspiration net return will be exactly $10.00 per ton. The Magma smelter is most in need of silica flux and will probably be favored.

Thorough sampling of adits, raises, stopes and surface open cuts has now been completed and has shown the existence of the following ore reserves:-

PROVEN BLOCKS

For the purpose of this report it is considered that proven and blocked out ore should have an average assay value of approximately $18.00 per ton to be considered as commercial. A block at the eastern end of #2 adit, where stoping has been done in an area showing some copper sulfide minerals, a block projected 50 feet above and below the level and 50 feet beyond the end of the drift (which stopped in ore) figures to have 3,100 tons with a grade of 0.04 Au and 3.37% Cu. This gives a gross value at present prices of metal of $17.93 per ton.

It was noted in sampling this block that the higher assays seemed to come from the most freshly broken areas. The older workings are extremely hard to sample due to the presence of large quantities of sealing and decomposed rocks which appears to have lost a part at least

of its original mineralization. All of these samples are used, however, at the values obtained and may later prove to have been conservatively calculated.

A second block averaging $19.21 per ton is calculated around, above and below the stopes on the upper level. This block, 180 feet in length is estimated to contain 2,925 tons in the triangular section from the level to near the surface. Previously extracted tonnage from stoped out areas and ore removed by drifting reduces this to 1900 tons. The remainder of this block lies below the level where it is estimated to extend 60 feet or one half way to the middle adit which, sampling indicated, is marginal in grade and will be later discussed under that heading. This rectangular block is estimated to contain 2800 tons at $19.21 per ton.

PROVEN MARGINAL BLOCKS

In the area below the N o. 2 or middle adit lies a block which sampling to date is below commercial grade. This block as shown by 32 samples, averages $6.12 per ton. The vein averages 2 feet 2 inches in width and the block is estimated to contain 2,600 tons. Similarly a block close to the breast of the No. 3 or upper adit averages $9.37 in grade and is estimated to contain 1,300 tons. The total tonnage and grade in this category is therefore 3,900 tons at $7.20. If further explorato work exposes areas similar to these where the copper is present as chalcocite (as the evidence of the changing ore in the end of No. 2 adit seems to indicate) sulfide ore of this tenor would be considered of milling grade. There will no doubt be areas sorted out in these

marginal carbonate blocks that can be mined profitably. For the purpose of this report, marginal blocks are not considered as ore.

PROBABLE AND POSSIBLE ORE

In view of the persistent nature of the fracture as observed on the surface above and beyond the present workings the probability that additional ore exists is quite reasonable. In this case, as in nearly all similar ones, the estimation of probable ore is based most entirely on the experience and judgment of the engineer, coupled with, and influenced by, his careful study of surface and underground as compared with his previous experience with deposits of a similar nature.

I estimate that there is an amount of probable ore beyond and above present workings in an amount equal to the blocks already proven.

SUMMARY AND RECOMMENDATIONS.

It is estimated that there are 15,600 tons of proven and probable ore in the Unida property that can be mined and treated at a profit.

Preparations should continue to prepare the property for a production of 50 tons per day for shipment to the Magma smelter at Superior, Arizona.

As soon as track and pipe is laid and machinery installed, the No. 2 or middle adit should be advanced beyond the sulfide stope southeastward on this strong vein. Simultaneously a sub-level should be drifted northwestward to the surface from a point in the raise connecting the middle and upper adits about 100 feet above the middle adit.

This drift can be driven inward to the raise from the surface if later investigation proves this more practicable. This drift should maintain a track grade of ½ of one percent toward the portal so that this adit can later replace the upper adit (where the grade is excessive) as a tramming level. From this new level the block of ore above can be mined including the pillars of the old high grade stopes above the top or No. 3 adit.

In mining the two proven areas, production from the upper block, high in gold and medium grade in copper, should be mixed with production from the lower block, low in gold values and higher in copper, so that the shipments will meet the requirements at the smelter where this ore can be mixed with barren silica for use as a converter flux.

The other veins from which ore has been shipped from this group are accessible only through shafts in bad state of repair. No work is recommended on these veins, at least for the present.

/s/ Lynn Hersey

LYNN HERSEY,
Registered Engineer
State of Arizona

6/5/51

Defense Minerals Administration

Review of Application for Exploration Assistance

Docket No. DMA-443-X

Commodity Copper

Total Amount $315,506

Govt. Participation 50%

1. Name and Address of Applicant United Mine Operators, Inc.
PO Box 836, Wickenburg, Arizona

2. Location of Property Black Rock Mining District, Yavapai County, Arizona,
T-8-N, R-3-W, Secs 3,4,5, 8, 9, 10, 15, 16, 17

3. Mineral or metal Copper Is it listed in Section 9 of MO-5?
yes If not, application will be rejected.

4. Geologic probability of discovery—based on data in application
(question #16, 17, 18, 20 and 22)*

Mines or Survey reports, etc., do you rate chances:

a) Good

b) Poor ✓

c) None

d) Don't know—needs field examination

e) Is there an alternative and favorable project?
(If so, attach an explanation)

5. Is the applicant's right to the property clearly stated? yes
(question 5, 6, 7)*

6. If applicant is a lessee, is a copy of the lease attached? Owner

Does the lease have sufficient time to run to cover a future

productive period? —

*question numbers are those of MF-103

7. Are subordination agreements necessary? No

a) MF-201? No

b) MF-202 No

8. From the data presented, does the proposed project appear feasible from the point of view of:

a) Available manpower yes

b) Equipment and supplies yes
(Question 14 plus general knowledge of availability)*

c) Accessibility (question 12)* yes

d) Water (question 13)* yes

e) Power (question 13)* yes

Is a field check needed on any of these points? No

9. Does the experience of the applicant appear to be adequate to assure that he can properly conduct the proposed project? (question 4)* yes

Is a field check needed on this point? No

10. Exhibit A. (questions 21 and 22)*

a) Is the project adequately described? No

If not, are there sufficient data given so that you can describe the project? No If so, attach a draft.

b) Is there an adequate map or sketch of the proposed work? No

c) Is the proposed work "exploration" under the definition of Section 8, MO-5? Partly

If not, what part of it is? Drifting on #2 level, raising outside of known ore blocks, diamond drilling

Attachment A

Lynn Hinzy, consultant for applicant, estimates 15,600 tons of minerable ore, proven and probable. He also states that to be commercial, ore must run approximately $18.00 per ton, and indicates only 6,900 tons of $18.63 ore within this category. The Field Team estimates 3,000 to 5,000 tons as indicated ore, averaging 3.3% copper

	Tons commercial ore	Feet to expose this	Tons discovered per linear foot
Applicant	6,900	1,895	3.64
Field Team	5,000	1,895	2.64

From this past showing, this appears to be a poor prospect and does not warrant ~~[illegible]~~ further expenditure. ~~$315,506~~

Is this part a worthwhile exploration project? No (see attachment A)

d) Are the cost estimates detailed? Yes - insufficiently

Can they be summarized, as on page 2 of Procedural Instruction 5-A, from the available data? No If so, attach a draft.

e) Are the cost estimates reasonable? No

f) Should more information be requested from applicant? No

g) Is a field examination necessary to complete Exhibit A? No

11. Exhibit B (question 23-d)*

a) Is it applicable? _____

b) If so, are sufficient data furnished? _____ If so, attach a draft.

c) Is a field check needed? _____

12. Exhibit C (question 23-e, f and g)*

a) Is it applicable? _____

b) Sufficient data? _____ If so, attach a draft.

c) Are rents and charges reasonable? _____

d) Is a field check needed? _____

13. Exhibit D (question 23-a, b)*

a) Are there sufficient data? _____

b) Is the schedule adequate for the work proposed? _____

c) Is the schedule excessive for the work proposed? _____

d) Are the proposed wages and salaries reasonable? _____

e) Is a field check needed? _____

14. Exhibit E (question 23-c)*

a) Is it applicable?_____

b) Sufficient data?_____

c) Reasonable?_____

d) Field check needed?_____

15. In your judgment, can the proposed work be done in the proposed time?_____

(All exploration must be completed within two years)

16. If field examination is not needed, attach your recommendation.

17. If field examination is needed, do you have any special instructions for the field team not indicated by your answers to the foregoing question?_____

Reviewed by:_____

D R Wyckoff

Date_____

97692

6/5/51

Defense Minerals Administration

Review of Application for Exploration Assistance

Docket No. DMA-443-X

Commodity Copper

Total Amount $315,506

Govt. Participation 50%

1. Name and Address of Applicant United Mine Operators, Inc.
PO Box 836, Wickenburg, Arizona

2. Location of Property Black Rock Mining District, Yavapai County, Arizona,
T-8-N, R-3-W, Secs. 3,4,5,8,9,10,15,16,17

3. Mineral or metal Copper Is it listed in Section 9 of MO-5?
yes If not, application will be rejected.

4. Geologic probability of discovery—based on data in application
(question #16, 17, 18, 20 and 22)*

Mines or Survey reports, etc., do you rate chances:

a) Good

b) Poor ✓

c) None

d) Don't know—needs field examination

e) Is there an alternative and favorable project?
(If so, attach an explanation)

5. Is the applicant's right to the property clearly stated? yes
(question 5, 6, 7)*

6. If applicant is a lessee, is a copy of the lease attached? Owner

Does the lease have sufficient time to run to cover a future

productive period? —

*question numbers are those of MF-103

7. Are subordination agreements necessary? No

a) MF-201? No

b) MF-202 No

8. From the data presented, does the proposed project appear feasible from the point of view of:

a) Available manpower yes

b) Equipment and supplies yes
(Question 14 plus general knowledge of availability)*

c) Accessibility (question 12)* yes

d) Water (question 13)* yes

e) Power (question 13)* yes

Is a field check needed on any of these points? No

9. Does the experience of the applicant appear to be adequate to assure that he can properly conduct the proposed project? (question 4)* yes

Is a field check needed on this point? No

10. Exhibit A. (questions 21 and 22)*

a) Is the project adequately described? No

If not, are there sufficient data given so that you can describe the project? No If so, attach a draft.

b) Is there an adequate map or sketch of the proposed work? No

c) Is the proposed work "exploration" under the definition of Section 8, MO-5? Partly

If not, what part of it is? Drifting on #2 level, raising outside of known ore blocks, diamond drilling

Attachment A

Lynn Hovey, consultant for applicant, estimates 15,600 tons of mineable ore, proven and probable. He also states that to be commercial, ore must run approximately $18.00 per ton, and indicates only 6,900 tons of $18.63 ore within this category. The Field Team estimates 3,000 to 5,000 tons of indicated ore, averaging 3.3 percent copper.

	Tons commercial ore	Feet to expose this	Tons discovered per linear foot
Applicant	6,900	1,895	3.64
Field Team	5,000	1,895	2.64

From this past showing, this appears to be a poor prospect and does not warrant further expenditure.

Is this part a worthwhile exploration project? No (see attachment A)

d) Are the cost estimates detailed? Yes - insufficiently

Can they be summarized, as on page 2 of Procedural Instruction 5-A, from the available data? No If so, attach a draft.

e) Are the cost estimates reasonable? No

f) Should more information be requested from applicant? No

g) Is a field examination necessary to complete Exhibit A? No

11. Exhibit B (question 23-d)*

a) Is it applicable? .

b) If so, are sufficient data furnished? _____ If so, attach a draft.

c) Is a field check needed? _____

12. Exhibit C (question 23-e, f and g)*

a) Is it applicable? _____

b) Sufficient data? _____ If so, attach a draft.

c) Are rents and charges reasonable? _____

d) Is a field check needed? _____

13. Exhibit D (question 23-a, b)*

a) Are there sufficient data? _____

b) Is the schedule adequate for the work proposed? _____

c) Is the schedule excessive for the work proposed? _____

d) Are the proposed wages and salaries reasonable? _____

e) Is a field check needed? _____

14. Exhibit E (question 23-c)*

a) Is it applicable?_____

b) Sufficient data?_____

c) Reasonable?_____

d) Field check needed?_____

15. In your judgment, can the proposed work be done in the proposed time?_____

(All exploration must be completed within two years)

16. If field examination is not needed, attach your recommendation.

17. If field examination is needed, do you have any special instructions for the field team not indicated by your answers to the foregoing question?_____

Reviewed by:_____

D B Wachsen

Date_____

97692

No. 443

Form MF-103
(April 1951)

U. S. DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS ADMINISTRATION

Budget Bureau No. 42-R1035.
Approval expires 6-30-51.

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

DO NOT FILL IN THIS BLOCK

Docket No. Dma-443 X

Date received

Participation

United Mine Operators, Inc.
Post Office Box 836
Wickenburg, Arizona

Name and address of applicant

Date April 30, 1951

FILL IN THIS BLOCK

Date of application April 30, 1951

Estimated cost $315,506.00

Mineral or metal Copper

Percentage of Government participation 50%

Location of mine 11 Miles North East of Wickenburg, Arizona

Date of filing MF-100 April 30, 1951

DMA Docket Number, if available Dma-443X

INSTRUCTIONS

Read Mineral Order 5, Regulations Governing Government Aid in Defense Projects, before completing this application. Submit four signed copies of the application to Defense Minerals Administration, Department of the Interior, Washington 25, D. C., or to the nearest field executive officer thereof, with your name and address on each sheet of the application and all accompanying papers. If any question is inapplicable, or if you cannot answer it, so state on the form. Where the space provided for answer is insufficient, answer on a separate sheet, annex it to the application form, and refer to it in space for answer. If the application is approved, you will be presented with an exploration project contract on Form MF-200, for your signature.

THE APPLICANT

*1. Is applicant an individual, partnership, or corporation?
*2. If a partnership, state names and addresses of partners.
*3. If a corporation, state names and addresses of officers, directors, and five largest stockholders.
*4. Describe the mining and general business experience of (*a*) the applicant, and (*b*) the person or persons who will manage the project.
*5. Are you the owner or the lessee of the property?
6. If owner, state what claims, liens, or encumbrances, if any, are against the property.
7. If lessee, attach a copy of the lease and state if it is in good standing.

NOTE.—It will be necessary to procure and attach to the exploration project contract agreements of claimants, lienors, encumbrances and lessors subordinating their interests in the property to the interest of the Government under the contract.

8. Furnish current financial statement, showing assets and liabilities, and a profit and loss statement. Attached
9. How much money is applicant prepared to invest in proposed project? Is it sufficient to pay your part of the cost of the project as detailed in question 23 of this application form, in accordance with the regulations on Government participation (Section 9 of Mineral Order 5)?

*If you have already answered these questions on MF-100, you are not required to answer the questions for this application.

16—64067-1

THE PROPERTY

10. (*a*) Give a description of the real property that will be in any way involved in the exploration project, including any existing mine or operating property.
    (*b*) Give the legal description of the exact parcel, plot, or area upon which the exploration is to be conducted.

    NOTE.—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 (*b*) 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.

*11. State the present and former names of the property, if any.

*12. State, in detail, the location of the property with reference to towns, railroads, roads, shipping points, including distances and directions and kinds and conditions of roads.

*13. State source and quantity of water available for operations and its sufficiency at all seasons.
State amount of power to be used, rate per hour or other cost, and source.

*14. Describe any existing useable facilities, equipment, buildings, or structure now on the property that will be devoted to the exploration work.

15. State in detail how the ore could be shipped and how and where milled.

*16. History:
    (*a*) Give a statement, as complete as possible, of previous exploration, development, operation, and production of property, with reasons for any past suspensions of operations.
    (*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.

*17. Production:
    (*a*) If mine is in production, furnish the following information:

	Tons per day	*Grade or analysis*	*Cost per ton*	*Net value per ton*
(1) Mining				
(2) Milling				
(3) Shipped or sold				

*18. Ore or mineral reserves: (If property is or has been operating.)
    (*a*) Describe the ore or mineral deposits briefly.
    (*b*) Submit available maps and assay data.
    (*c*) Give estimated tonnage and grade of each class of ore reserves.

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

THE EXPLORATION

20. For what mineral or minerals and for what types of deposits and ores will the exploration be conducted?

21. Describe briefly, but concisely, the proposed work and the estimated time required to complete it.

    NOTE.—The Government will not participate in a project that will require more than 2 years to complete.

22. Furnish statement of the geological basis of the project with particular emphasis on factors leading the operator to expect the finding of commercial ore bodies. This statement should be accompanied by supporting maps such as geological maps, maps of the proposed openings and assay maps, sample lists, and other pertinent data.

THE REQUIREMENTS AND COSTS

23. Tabulate in the form of an itemized statement with a sum for each item the estimated requirements and costs of the project so that the total will give the estimated cost of the project in which the Government will participate, as follows:
    (*a*) Labor, by numbers and classes (miners, muckers, millmen, etc.), with wages of each.
    (*b*) Supervisors, by numbers and positions, with salaries of each.
    (*c*) Cost of necessary repairs to existing facilities, structures, and buildings.
    (*d*) Cost of necessary installation or construction of additional facilities, structures, and buildings.
    (*e*) Cost of items of equipment, not now owned by the applicant which must be purchased for operations at a cost of $50 or more each.
    (*f*) Cost of rental for equipment which the operator proposes to rent.
    (*g*) Rental value of items of equipment which the operator now owns and which will be devoted to the work.
    (*h*) Cost of materials and supplies, including items of equipment costing less than $50 each.
    (*i*) Cost of power, water, utilities, and any other items not provided for above.

24. Furnish a time schedule of the project, stated in terms of months after project is approved, showing progress expected to be accomplished and the money expected to be spent.

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.

United Mine Operators, Inc. (Name of company) By [signature] (Signature of authorized official)

April 30, 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.

*Same as footnote on page 1.

16—64067-1 U. S. GOVERNMENT PRINTING OFFICE

UNITED MINE OPERATORS, INC.
WICKENBURG, ARIZONA

April 30, 1951

Detailed Sheets to Accompany Form MF-103

Items 1 to 7, inclusive, all covered in MF-100, herewith.

Item 8. Financial statement attached.

Items 9 to 22, inclusive, all covered in MF-100, herewith.

Item 23. Tabulate in the form of an itemized statement with a sum for each item the estimated requirements and costs of the project so that the total will give the estimated cost of the project in which the Government will participate, as follows:

BASIS OF ESTIMATE

COST RECAPITULATION
Total Project - See Details Following:

(a)	Direct Labor	$132,340.00
(b)	Supervision ($1125.00 per month)	22,500.00
(c)	Repair tools shed	500.00
(d)	Change room	4,000.00
(e)	New equipment	21,670.00
(f)	None	
(g)	Rental value applicant's equipment	61,825.00
(h)	Materials and Supplies	60,550.00
(i)	Power, fuel and other items	12,121.00
	TOTAL	$315,506.00

Applicant's portion:

Cash	$95,928.00	
Equipment rental	61,825.00	
TOTAL		$157,753.00

Government portion	$157,753.00
Less one-half estimated salvage value of new equipment at end of project	8,000.00
Actual estimated cost, U. S. Government	$149,753.00

NOTE: Government cost to be repaid at official rates per Section 14 MO-5 of April 6, 1951.

UNITED MINE OPERATORS, INC.

WICKENBURG, ARIZONA

April 30, 1951

Detailed Sheets to Accompany Form MF-103

REQUIREMENTS AND COSTS

BASIS OF ESTIMATE

Drifting:- 6000 lineal feet.
Raising:- 4500 feet.
Diamond Drilling:- 4000 feet.

Drifting average 4 feet per operating shift, 25 days per month, giving 100 feet per month per heading. Due to installation of track and pipe, missed rounds and timbering, use 75% or 75' per month per heading. Total 300' drift average developement per month in four headings. Program on drifting 20 months. Raising average per month, per operating raise, 75 feet. Average three crews going total of 225 feet per month.

23. Tabulate in the form of an itemized statement with a sum for each item the estimated requirements and costs of the project so that the total will give the estimated cost of the project in which the Government will participate, as follows:

COST DETAILS

(a) Labor, by numbers and classes (miners, muckers, millmen, etc.), with wages of each.

Drifting - 4 miners @ $13.00 per day 52.00
4 helpers @ $11.91 per day 47.64
Raising - 3 miners, 3 helpers. 39, 35,73
3 men - Utility, Motorman, Nipper @ $11.91 per day. 35.73
1 general man, repair and maintenance of motors, cars and the machinery used on developement @ $13.00 per day. 13.00

223.10

18 Men Total, charged to direct developement.

Diamond Drilling - KEYSTONE

14.67 Three holes per setup; Total 430' per setup.
11.91 Drill from 7 setups; 3,000 feet of drilling.
28.58 Labor - 2 men, driller @ $16.67 and helper @ $11.91 per day.
13.00 1 man shift per day, service and supplies plus men used to cut stations @ $13.00 per day.

Diamond Drilling - MISPAH

Estimate 1000 feet drilling.
Total footage both areas; 4,000 feet.
10 feet per day, 20 days per month;-200 feet per month.

(Diamond Drilling - MISPAH, Continued)

Total time; 20 months.
Direct Labor cost per day---$ 264.68 105,872.00
Direct Labor cost for total project----$132,340.00

(b) Supervisors, by numbers and positions, with salaries of each.
One Developement foreman to supervise drifting, raising and diamond drilling. Salary;- $375.00 per month.

One-half of Superintendent's time;- $200.00 per month.

One Engineer, including surveying, sampling and mapping;- $300.00 per month.
One Engineer's helper;- $250.00 per month.

Supervision cost per month--$ 1125.00
Supervision cost for total project----------$ 22,500.00

(c) Cost of necessary repairs to existing facilities, structures, and buildings.
Most of repairs are now completed. Developement program would require repairing of a tool shed, at an estimated cost of $500.00.

(d) Additional Construction:
A change room is to be built as an addition on the North end of the present compressor house; to contain 4 shower stalls, toilets and wash basins, and lockers;-$4,000.00

(e) Cost of equipment, not now owned by applicant which must be purchased for operations:
Diamond drilling equipment;- Drill, posts, column and arm, drill rods, case barrels, bits and miscellaneous fittings and equipment;- $4,450.00
Sampling equipment, including core splitter, small crusher, disc grinder, sludge splitters, etc.;- $600.00
Air operated water pump and pressure tank;- $300.00
2 Model HB Gardner Denver air tugger hoists with 3½" columns and arm @ $740.00 ;- $1480.00
4 Ingersoll Rand stopers @ $753.00;- $3012.00
2 CP 59 mounted jack hammers, columns and arms @ $645.00;- $1290.00
1 Little Mancha Trammer and equipment ;- $4900.00
5 One-ton side dump mine cars @ $465.00 ;- $2325.00
1 12B Eimco Loader ;- $2813.00
2 Mine timber cars ;- $500.00
Total----------$ 21,670.00

April 30, 1951

(g) Rental value operations equipment; See Photostat Western Machinery. Rates attached.

Using Western Machinery Company AED rental rates as a basis, and pro-rating the equipment, onepthird to stoping in presently developed area and two-thirds to proposed developement program; Charges on the various pieces of equipment now owned by operator are set up as follows:-

1 - 500 cfm Worthington diesel compressor--	$ 459.00
1 - 650 cfm CP diesel compressor ----------	545.00
1 - 105 cfm Worthington gasoline compressor-	50.00
1 - 63 KVA diesel light plant ----------	72.00
1 - Jeep pickup ----------	100.00
1 - International Flat rock truck ----------	117.00
2 - Storage battery locomotives @ $433.33---	867.00
1 - Ingersoll Rand EVA Tugger Hoist --------	50.00
2 - 12B Eimco Loaders @ $166.67 ----------	334.00
14 - 1-Ton mine cars @ $8.33 ----------	117.00
2 - 3" Gardner Denver Drifters @ $49.00 ----	98.00
1 - Gardner Denver Jack hammer----------	31.00
1 - Electric charging MG set with panel ----	60.00

Rental Cost Per Month ----------$2900.00
Rental Cost for 20 Months ---------- $58,000.00

Rental TD24 International Bulldozer for three months road work and diamond drill station preparation @ full rate of$1,275.00 per month----------$3,825.00
Total rental - 20 Months ----------$ 61,825.00

NOTE:- In case ore is shipped from areas developed in this program an appropriate pro-rated rental cost will be set up, covering the T195 - 9 yard International dump truck, used in shipping ore.

WESTERN MACHINERY COMPANY

OFFICES AND WAREHOUSES
SAN FRANCISCO, CALIFORNIA
LOS ANGELES, CALIFORNIA
SACRAMENTO, CALIFORNIA
SALT LAKE CITY, UTAH
SPOKANE, WASHINGTON
HIBBING, MINNESOTA
DENVER, COLORADO
POCATELLO, IDAHO
PHOENIX, ARIZONA
CHICAGO, ILLINOIS
BARTOW, FLORIDA
NEW YORK, N.Y.

"Wemco Products"

TELEPHONE 3-4101
124 EAST BUCHANAN STREET
P. O. BOX 3465
PHOENIX, ARIZONA

CABLE ADDRESS
"WEMACHY"

April 28, 1951

Mr. Lynn Hersey
Wickenburg, Arizona

Dear Mr. Hersey:

As per your request we are pleased to quote you on AED rental rates on the following equipment:

1 - 500 cu. ft. Diesel Air Compressor - $688.00 per month
1 - 650 cu. ft. Diesel Air Compressor - $818.00 per month
1 - 63 KVA Diesel Light Plant - $108.00 per month
1 - International TD 24 Tractor and Bull Dozer - $1,275.00 per month
1 - 8 to 9 cu. yard Dump Truck - $750.00 per month
1 - Jeep Pickup - $150.00 per month
1 - International 3-ton Flat Rack Truck - $175.00 per month
2 - Locomotives - $650.00 each, per month
1 - Ingersoll Rand EUA Tugger Hoist, 2,000-lb. capacity - $73.00 per month
2 - Eimco 12B Muckers - $250.00 each, per month
14 - 1-ton Mine Cars - $12.50 each, per month
2 - 3" Drifters - $73.50 each, per month
1 - Heavy Jackhammer - $46.25 per month
1 - Electric Charging MG Set with panel - $90.00 per month

We hope this is all the information you have requested. If anything further is needed, please call on us.

Very truly yours,

WESTERN MACHINERY COMPANY

By R. B. George
R. B. George
Sales Manager

RBG:eg

(h) Cost Materials and Supplies:

Track, 6,000ft. ----------	$ 4030.00
Air and Water pipe, 8,000'--	8670.00
Timber, 600'(10% of drifting estimated)-	3000.00
Powder caps and fuse -------	31600.00
Drill steel and bits -------	10650.00
Hoses and machine parts ----	1800.00
Miscellaneous tools and equipment ----------	800.00
TOTAL ----------	$ 60,550.00

(i) Cost of Power, Water, Utilities, and other items not provided above:

3 Diesel engines fuel consumption, proportional amount to 1/3 production, 2/3 development. 65 gallons diesel fuel per day 32,500 gallons @$0.159--$ 5168.00

Lubricating Oil - 1700 Gallons @ 90¢ --------- 1500.00

Compressor Oil - 10bbls @ $27.50 ---------- 275.00

Road construction to #4 adit and diamond drill stations;-

Labor:

Bulldozer operation 39 days @ $13.00 ---	$507.00
Miners, 20 days @ $13.00 ----------	260.00
Helpers, 20 days @ $11.91 ----------	238.00
Diesel Fuel, 1560gal. @ 15.9 ¢ ----------	248.00
Lubricating Oil ----	29.00
Gasoline, 105 compressor, 180 gal @24¢-	143.00
Contingencies ------	132.00
Total ----------	$ 1457.00

Repairs diesels and compressors, overhaul out of 3 engines-- 720.00

UNITED MINE OPERATORS, INC.

WICKENBURG, ARIZONA

April 30, 1951

Lubrication of all mining equipment, including locomotives, mucking machines cars, drills, motors, tugger hoists and automotive equipment:	
Rock drill oil - 1bbl each 6 months. 3bbls ----------$	75.00
General Lubrication ----------	125.00
Gasoline - Truck and 105 compressor:	
Pickup - 3 gal. per day x 500;- 1500 gal @ 24¢ ----------	360.00
International - 4 gal. per day x 500 ;- 2000 @ 24¢ ----------	480.00
105 Compressor - 15 gal. x 7500-	1800.00
Motor Oil - Jeep $15.00 International $15.00 105 Compressor $21.00 ---------	51.00
Transmission and Differantial--	50.00
Greasing ----------	60.00
TOTAL ----------$	12,121.00

April 30, 1951 Sheet one of two sheets

Detailed Sheets to Accompany Form MF-103

Item 24. Furnish a time schedule of the project, stated in terms of months after project is approved, showing progress expected to be accomplished, and the money expected to be spent.

PROGRESS	1st Month	2nd Month	3rd Month	4th Month	5th Month	6th Month	7th Month	8th Month	9th Month	10th Month
Drifting-feet	225	225	300	300	300	350	350	350	300	300
Raising - feet	0	225	225	225	225	225	225	225	250	250
Diamond Drilling	0	200	200	250	250	250	250	200	200	200
COSTS										
Labor:										
Drifting	$ 2750	2750	3687	3687	3687	4320	4320	4300	3687	3687
Raising	0	2765	2765	2765	2765	2765	2765	2765	3072	3072
Drilling	0	1290	1290	1610	1610	1610	1610	1290	1290	1290
Tool Room	500									
Change Room	2000	2000								
Equipment	21,670									
Supplies, Track	4030									
Pipe	8670					1000				
Timber	1000					1580	1580	1580	1580	1580
Powder, etc.	1580	1580	1580	1580	1580	2200	200	200	200	400
Steel, Bits	2200	200	200	200	200	100	100	100		
Hose & Mach. Pts.	100	100	100	100	100					
Miscellaneous	400	200	200							
Power Fuel, etc.	606	606	606	606	606	606	606	606	606	606
Equip. Rental	3091	3091	3091	3091	3091	3091	3091	3091	3091	3091
TOTAL	48597	14582	13519	13639	13639	17372	14272	13932	13526	13726

April 30, 1951

Detailed Sheets to Accompany Form MF-103

	11th Month	12th Month	13th Month	14th Month	15th Month	16th Month	17th Month	18th Month	19th Month	20th Month
PROGRESS										
Drifting - feet	300	300	300	300	300	300	300	300	300	300
Raising - feet	250	250	250	250	250	250	250	225	225	225
Diamond Drilling	200	200	200	200	200	200	200	200	200	200
COSTS										
Labor:										
Drifting	3687	3687	3687	3687	3687	3687	3687	3687	3687	3687
Drilling	1290	1290	1290	1290	1290	1290	1290	1290	1290	1290
Raising	3072	3072	3072	3072	3072	3072	3079	2765	2765	2765
SUPPLIES										
Timber		1000								
Powder, etc.	1580	1580	1580	1580	1580	1580	1580	1580	1580	1580
Steel, Bits	200	2200	200	200	200	200	200	1050		
Hoses & Mach.	100	100	100	100	100	100	100	100	100	100
Parts										
Powder, Fuel, etc.	606	606	606	606	606	606	606	606	606	607
Equip. Rental	3091	3091	3091	3091	3091	3091	3091	3091	3091	3096
TOTAL	$13626	13636	13626	13626	13626	13626	13633	14169	13119	13125

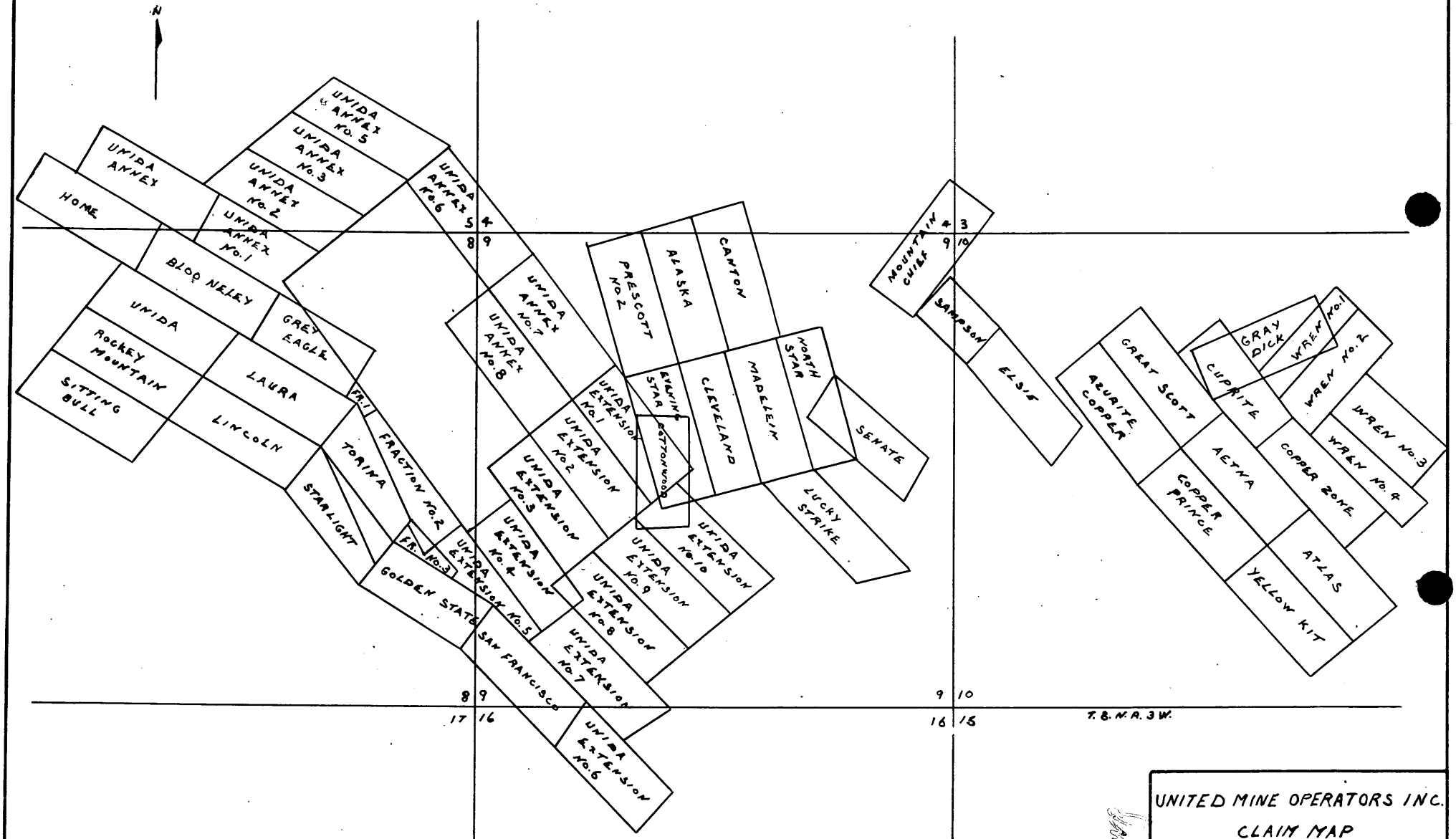
UNITED MINE OPERATORS, INC.

WICKENBURG, ARIZONA

BALANCE SHEET

March 31, 1951.

ASSETS			
Cash in Bank		19,235.98	
Accts. Receivable		48,131.22	
Heavy Equipment Acct.	46,894.68		
Less: Depr. Reserve	3,907.89	42,986.79	
Auto Account	2,125.50		
Less: Depr. Reserve	177.12	1,948.38	
Office Furniture & Fixtures		1,198.03	
Insurance Deposit (Arizona Industrial Comm.)		607.00	
TOTAL ASSETS			$ 114,107.40
LIABILITIES			
Notes Payable to Stockholders		85,648.53	
Accts. Payable		314.27	
Accrued Taxes		944.04	
Accrued Insurance		809.42	
		87,716.26	
Capital Stock			
Common Stock outstanding		10,000.00	
Surplus 3/31/51		16,391.14	
		26,391.14	
TOTAL LIABILITIES			$ 114,107.40



UNITED MINE OPERATORS INC.

CLAIM MAP

SCALE	1 IN = 1500 FT
DATE	4-27-51
DRAWN BY	R. C. S.

Map 44-X

Form MF-103
(April 1951)

U. S. DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS ADMINISTRATION

Budget Bureau No. 42-R1035.
Approval expires 6-30-51.

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

DO NOT FILL IN THIS BLOCK

Docket No. dma-443X

Date received 5/7/51

Participation

United Mine Operators, Inc.
Post Office Box 836
Wickenburg, Arizona

Name and address of applicant

Date April 30, 1951

FILL IN THIS BLOCK

Date of application April 30, 1951

Estimated cost 315,506.00

Mineral or metal Copper

Percentage of Government participation 50%

Location of mine 11 Miles North East of Wickenburg, Arizona

Date of filing MF-100 April 30, 1951

DMA Docket Number, if available dma-443X

INSTRUCTIONS

Read Mineral Order 5, Regulations Governing Government Aid in Defense Projects, before completing this application. Submit four signed copies of the application to Defense Minerals Administration, Department of the Interior, Washington 25, D. C., or to the nearest field executive officer thereof, with your name and address on each sheet of the application and all accompanying papers. If any question is inapplicable, or if you cannot answer it, so state on the form. Where the space provided for answer is insufficient, answer on a separate sheet, annex it to the application form, and refer to it in space for answer. If the application is approved, you will be presented with an exploration project contract on Form MF-200, for your signature.

THE APPLICANT

*1. Is applicant an individual, partnership, or corporation?
*2. If a partnership, state names and addresses of partners.
*3. If a corporation, state names and addresses of officers, directors, and five largest stockholders.
*4. Describe the mining and general business experience of (*a*) the applicant, and (*b*) the person or persons who will manage the project.
*5. Are you the owner or the lessee of the property?
6. If owner, state what claims, liens, or encumbrances, if any, are against the property.
7. If lessee, attach a copy of the lease and state if it is in good standing.

NOTE.—It will be necessary to procure and attach to the exploration project contract agreements of claimants, lienors, encumbrances and lessors subordinating their interests in the property to the interest of the Government under the contract.

8. Furnish current financial statement, showing assets and liabilities, and a profit and loss statement. Attached
9. How much money is applicant prepared to invest in proposed project? Is it sufficient to pay your part of the cost of the project as detailed in question 23 of this application form, in accordance with the regulations on Government participation (Section 9 of Mineral Order 5)?

*If you have already answered these questions on MF-100, you are not required to answer the questions for this application.

16—64067-1

THE PROPERTY

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

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

NOTE.—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 (*b*) 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.

*11. State the present and former names of the property, if any.

*12. State, in detail, the location of the property with reference to towns, railroads, roads, shipping points, including distances and directions and kinds and conditions of roads.

*13. State source and quantity of water available for operations and its sufficiency at all seasons.
State amount of power to be used, rate per hour or other cost, and source.

*14. Describe any existing useable facilities, equipment, buildings, or structure now on the property that will be devoted to the exploration work.

15. State in detail how the ore could be shipped and how and where milled.

*16. History:

(*a*) Give a statement, as complete as possible, of previous exploration, development, operation, and production of property, with reasons for any past suspensions of operations.

(*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.

*17. Production:

(*a*) If mine is in production, furnish the following information:

	Tons per day	*Grade or analysis*	*Cost per ton*	*Net value per ton*
(1) Mining				
(2) Milling				
(3) Shipped or sold				

*18. Ore or mineral reserves: (If property is or has been operating.)

(*a*) Describe the ore or mineral deposits briefly.

(*b*) Submit available maps and assay data.

(*c*) Give estimated tonnage and grade of each class of ore reserves.

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

THE EXPLORATION

20. For what mineral or minerals and for what types of deposits and ores will the exploration be conducted?

21. Describe briefly, but concisely, the proposed work and the estimated time required to complete it.

NOTE.—The Government will not participate in a project that will require more than 2 years to complete.

22. Furnish statement of the geological basis of the project with particular emphasis on factors leading the operator to expect the finding of commercial ore bodies. This statement should be accompanied by supporting maps such as geological maps, maps of the proposed openings and assay maps, sample lists, and other pertinent data.

THE REQUIREMENTS AND COSTS

23. Tabulate in the form of an itemized statement with a sum for each item the estimated requirements and costs of the project so that the total will give the estimated cost of the project in which the Government will participate, as follows:

(*a*) Labor, by numbers and classes (miners, muckers, millmen, etc.), with wages of each.

(*b*) Supervisors, by numbers and positions, with salaries of each.

(*c*) Cost of necessary repairs to existing facilities, structures, and buildings.

(*d*) Cost of necessary installation or construction of additional facilities, structures, and buildings.

(*e*) Cost of items of equipment, not now owned by the applicant which must be purchased for operations at a cost of $50 or more each.

(*f*) Cost of rental for equipment which the operator proposes to rent.

(*g*) Rental value of items of equipment which the operator now owns and which will be devoted to the work.

(*h*) Cost of materials and supplies, including items of equipment costing less than $50 each.

(*i*) Cost of power, water, utilities, and any other items not provided for above.

24. Furnish a time schedule of the project, stated in terms of months after project is approved, showing progress expected to be accomplished and the money expected to be spent.

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.

United Mine Operators, Inc. (Name of company) By [signature] (Signature of authorized official)

April 30, 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.

*Same as footnote on page 1.

16—64067-1 U. S. GOVERNMENT PRINTING OFFICE

UNITED MINE OPERATORS, INC.

WICKENBURG, ARIZONA

April 30, 1951

Detailed Sheets to Accompany Form MF-103

Items 1 to 7, inclusive, all covered in MF-100, herewith.

Item 8. Financial statement attached.

Items 9 to 22, inclusive, all covered in MF-100, herewith.

Item 23. Tabulate in the form of an itemized statement with a sum for each item the estimated requirements and costs of the project so that the total will give the estimated cost of the project in which the Government will participate, as follows:

BASIS OF ESTIMATE

COST RECAPITULATION
Total Project - See Details Following:

(a)	Direct Labor	$132,340.00
(b)	Supervision ($1125.00 per month)	22,500.00
(c)	Repair tools shed	500.00
(d)	Change room	4,000.00
(e)	New equipment	21,670.00
(f)	None	
(g)	Rental value applicants equipment	61,825.00
(h)	Materials and Supplies	60,550.00
(i)	Power, fuel and other items	12,121.00
	TOTAL	$315,506.00

Applicant's portion:

Cash	$95,928.00	
Equipment rental	61,825.00	
TOTAL		$157,753.00

Government portion	157,753.00
Less one-half estimated salvage value of new equipment at end of project-	8,000.00
Actual estimated cost, U. S. Government	$149,753.00

NOTE: Government cost to be repaid at official rates per Section 14 MO-5 of April 6, 1951.

UNITED MINE OPERATORS, INC.
WICKENBURG, ARIZONA

April 30, 1951

Detailed Sheets to Accompany Form MF-103

REQUIREMENTS AND COSTS

BASIS OF ESTIMATE

Drifting:- 6000 lineal feet.
Raising:- 4500 feet.
Diamond Drilling:- 4000 feet.

Drifting average 4 feet per operating shift, 25 days per month, giving 100 feet per month per heading. Due to installation of track and pipe, missed rounds and timbering, use 75% or 75' per month per heading. Total 300' drift average developement per month in four headings. Program on drifting 20 months. Raising average per month, per operating raise, 75 feet. Average three crews going total of 225 feet per month.

23. Tabulate in the form of an itemized statement with a sum for each item the estimated requirements and costs of the project so that the total will give the estimated cost of the project in which the Government will participate, as follows:

COST DETAILS

(a) Labor, by numbers and classes (miners, muckers, millmen, etc.), with wages of each.

Drifting - 4 miners @ $13.00 per day
4 helpers @ $11.91 per day

Raising - 3 miners, 3 helpers.
3 men - Utility, Motorman, Nipper @ $11.91 per day.
1 general man, repair and maintenance of motors, cars and the machinery used on developement @ $13.00 per day.

18 Men Total, charged to direct developement.

Diamond Drilling - KEYSTONE
Three holes per setup; Total 430' per setup.
Drill from 7 setups; 3,000 feet of drilling.
Labor - 2 men, driller @ $16.67 and helper @ $11.91 per day.
1 man shift per day, service and supplies plus men used to cut stations @ $13.00 per day.

Diamond Drilling - MISPAH
Estimate 1000 feet drilling.
Total footage both areas; 4,000 feet.
10 feet per day, 20 days per month;-200 feet per month.

(Diamond Drilling - MISPAH, Continued)

Total time; 20 months.
Direct Labor cost per day---$ 264.69
Direct Labor cost for total project----$132,340.00

(b) Supervisors, by numbers and positions, with salaries of each.
One Developement foreman to supervise drifting, raising and diamond drilling. Salary;- $375.00 per month.

One-half of Superintendent's time;- $200.00 per month.

One Engineer, including surveying, sampling and mapping;- $300.00 per month.
One Engineer's helper;- $250.00 per month.

Supervision cost per month--$ 1125.00
Supervision cost for total project----$ 22,500.00

(c) Cost of necessary repairs to existing facilities, structures, and buildings.
Most of repairs are now completed. Developement program would require repairing of a tool shed, at an estimated cost of $500.00.

(d) Additional Construction:
A change room is to be built as an addition on the North end of the present compressor house; to contain 4 shower stalls, toilets and wash basins, and lockers;-$4,000.00

(e) Cost of equipment, not now owned by applicant which must be purchased for operations:
Diamond drilling equipment;- Drill, posts, column and arm, drill rods, case barrels, bits and miscellaneous fittings and equipment;- $4,450.00
Sampling equipment, including core splitter, small crusher, disc grinder, sludge splitters, etc.;- $600.00
Air operated water pump and pressure tank;- $300.00
2 Model HB Gardner Denver air tugger hoists with 3½" columns and arm @ $740.00 ;- $1480.00
4 Ingersoll Rand stopers @ $753.00;- $3012.00
2 CP 59 mounted jack hammers, columns and arms @ $645.00;- $1290.00
1 Little Mancha Trammer and equipment ;- $4900.00
5 One-ton side dump mine cars @ $465.00 ;- $2325.00
1 12B Eimco Loader ;- $2815.00
2 Mine timber cars ;- $500.00
Total----$ 21,670.00

(g) Rental value operations equipment; See Photostat Western Machinery. Rates attached.

Using Western Machinery Company AED rental rates as a basis, and pro-rating the equipment, onepthird to stoping in presently developed area and two-thirds to proposed developement program; Charges on the various pieces of equipment now owned by operator are set up as follows:-

1 - 500 cfm Worthington diesel compressor--	$ 459.00
1 - 650 cfm CP diesel compressor ----------	545.00
1 - 105 cfm Worthington gasoline compressor-	50.00
1 - 63 KVA diesel light plant ----------	72.00
1 - Jeep pickup ----------	100.00
1 - International Flat rock truck ----------	117.00
2 - Storage battery locomotives @ $433.33---	867.00
1 - Ingersoll Rand KVA Tugger Hoist --------	50.00
2 - 12B Eimco Loaders @ $166.67 ----------	334.00
14 - 1-Ton mine cars @ $8.33 ----------	117.00
2 - 3" Gardner Denver Drifters @ $49.00 ----	98.00
1 - Gardner Denver Jack hammer----------	31.00
1 - Electric charging MG set with panel ----	60.00
Rental Cost Per Month ----------	$2900.00
Rental Cost for 20 Months ----------	$58,000.00

Rental TD24 International Bulldozer
for three months road work and diamond
drill station preparation @ full rate
of $1,275.00 per month----------$3,825.00
Total rental - 20 Months ----------$ 61,825.00

NOTE:- In case ore is shipped from areas developed in this program an appropriate pro-rated rental cost will be set up, covering the T195 - 9 yard International dump truck, used in shipping ore.

WESTERN MACHINERY COMPANY

OFFICES AND WAREHOUSES
SAN FRANCISCO, CALIFORNIA
LOS ANGELES, CALIFORNIA
SACRAMENTO, CALIFORNIA
SALT LAKE CITY, UTAH
SPOKANE, WASHINGTON
HIBBING, MINNESOTA
DENVER, COLORADO
POCATELLO, IDAHO
PHOENIX, ARIZONA
CHICAGO, ILLINOIS
BARTOW, FLORIDA
NEW YORK, N.Y.

"Wemco Products"

TELEPHONE 3-4101
124 EAST BUCHANAN STREET
P. O. BOX 3465
PHOENIX, ARIZONA

CABLE ADDRESS
"WEMACHY"

April 28, 1951

Mr. Lynn Hersey
Wickenburg, Arizona

Dear Mr. Hersey:

As per your request we are pleased to quote you on AED rental rates on the following equipment:

1 - 500 cu. ft. Diesel Air Compressor - $688.00 per month
1 - 650 cu. ft. Diesel Air Compressor - $818.00 per month
1 - 63 KVA Diesel Light Plant - $108.00 per month
1 - International TD 24 Tractor and Bull Dozer - $1,275.00 per month
1 - 8 to 9 cu. yard Dump Truck - $750.00 per month
1 - Jeep Pickup - $150.00 per month
1 - International 3-ton Flat Rack Truck - $175.00 per month
2 - Locomotives - $650.00 each, per month
1 - Ingersoll Rand EUA Tugger Hoist, 2,000-lb. capacity - $73.00 per month
2 - Eimco 12B Muckers - $250.00 each, per month
14 - 1-ton Mine Cars - $12.50 each, per month
2 - 3" Drifters - $73.50 each, per month
1 - Heavy Jackhammer - $46.25 per month
1 - Electric Charging MG Set with panel - $90.00 per month

We hope this is all the information you have requested. If anything further is needed, please call on us.

Very truly yours,

WESTERN MACHINERY COMPANY

By R. B. George
R. B. George
Sales Manager

RBG:eg

(h) Cost Materials and Supplies:

Track, 6,000ft. ----------	$ 4030.00
Air and Water pipe, 8,000'--	8670.00
Timber, 600'(10% of drifting estimated)-	3000.00
Powder caps and fuse -------	31600.00
Drill steel and bits -------	10650.00
Hoses and machine parts ----	1800.00
Miscellaneous tools and equipment ----------	800.00
TOTAL ----------	$ 60,550.00

(i) Cost of Power, Water, Utilities, and other items not provided above:

3 Diesel engines fuel consumption, proportional amount to 1/3 production, 2/3 development. 65 gallons diesel fuel per day 32,500 gallons @$0.159--$ 5168.00

Lubricating Oil - 1700 Gallons @ 90¢ --------- 1500.00

Compressor Oil - 10bbls @ $27.50 ---------- 275.00

Road construction to #4 adit and diamond drill stations;-
Labor:

Bulldozer operation 39 days @ $13.00 ---$507.00	
Miners, 20 days @ $13.00 ----------	260.00
Helpers, 20 days @ $11.91 ----------	238.00
Diesel Fuel, 1560gal. @ 15.9 ¢ ----------	248.00
Lubricating Oil ----	29.00
Gasoline, 105 compressor, 180 gal @24¢-	43.00
Contingencies ------	132.00
Total ----------	$ 1457.00

Repairs diesels and compressors, overhaul out of 3 engines-- 720.00

UNITED MINE OPERATORS, INC.

WICKENBURG, ARIZONA

April 30, 1951

Lubrication of all mining equipment, including locomotives, mucking machines cars, drills, motors, tugger hoists and automotive equipment: Rock drill oil - 1bbl each 6 months. 3bbls ----------	$ 75.00
General Lubrication ----------	125.00
Gasoline - Truck and 105 compressor: Pickup - 3 gal. per day x 500;- 1500 gal @ 24¢ ----------	360.00
International - 4 gal. per day x 500 ;- 2000 @ 24¢ ----------	480.00
105 Compressor - 15 gal. x 7500-	1800.00
Motor Oil - Jeep $15.00 International $15.00 105 Compressor $21.00 ----------	51.00
Transmission and Differential--	50.00
Greasing ----------	60.00
TOTAL ----------	$ 12,121.00

April 30, 1951 Sheet one of two sheets

Detailed Sheets to Accompany Form MF-103

Item 24. Furnish a time schedule of the project, stated in terms of months after project is approved, showing progress expected to be accomplished, and the money expected to be spent.

PROGRESS	1st Month	2nd Month	3rd Month	4th Month	5th Month	6th Month	7th Month	8th Month	9th Month	10th Month
Drifting-feet	225	225	300	300	300	350	350	350	300	300
Raising - feet	0	225	225	225	225	225	225	225	250	250
Diamond Drilling	0	200	200	250	250	250	250	200	200	200
COSTS										
Labor:										
Drifting	$ 2750	2750	3687	3687	3687	4320	4320	4300	3687	3687
Raising	0	2765	2765	2765	2765	2765	2765	2765	3072	3072
Drilling	0	1290	1290	1610	1610	1610	1610	1290	1290	1290
Tool Room	500									
Change Room	2000	2000								
Equipment	21,670									
Supplies, Track	4030									
Pipe	8670									
Timber	1000					1000				
Powder, etc.	1580	1580	1580	1580	1580	1580	1580	1580	1580	1580
Steel, Bits	2200	200	200	200	200	2200	200	200	200	400
Hose & Mech. Pts.	100	100	100	100	100	100	100	100		
Miscellaneous	400	200	200							
Power Fuel, etc.	606	606	606	606	606	606	606	606	606	606
Equip. Rental	3091	3091	3091	3091	3091	3091	3091	3091	3091	3091
TOTAL	48597	16582	13519	13639	13659	17372	14272	13932	13526	13726

Detailed Sheets to Accompany Form MP-10S

	11th Month	12th Month	13th Month	14th Month	15th Month	16th Month	17th Month	18th Month	19th Month	20th Month
PROGRESS										
Drifting - feet	300	300	300	300	300	300	300	300	300	300
Raising - feet	250	250	250	250	250	250	250	225	225	225
Diamond Drilling	200	200	200	200	200	200	200	200	200	200
COSTS										
Labor:										
Drifting	3687	3687	3687	3687	3687	3687	3687	3687	3687	3687
Drilling	1290	1290	1290	1290	1290	1290	1290	1290	1290	1290
Raising	3072	3072	3072	3072	3072	3072	3079	2765	2765	2765
SUPPLIES										
Timber		1000								
Powder, etc.	1580	1580	1580	1580	1580	1580	1580	1580	1580	1580
Steel, Bits	200	2200	200	200	200	200	200	1030		
Hoses & Mach.	100	100	100	100	100	100	100	100	100	100
Parts										
Powder, Fuel, etc.	606	606	606	606	606	606	606	606	606	607
Equip. Rental	3091	3091	3091	3091	3091	3091	3091	3091	3091	3096
TOTAL	$13526	13636	13626	13625	13625	13626	13633	14189	13119	13125

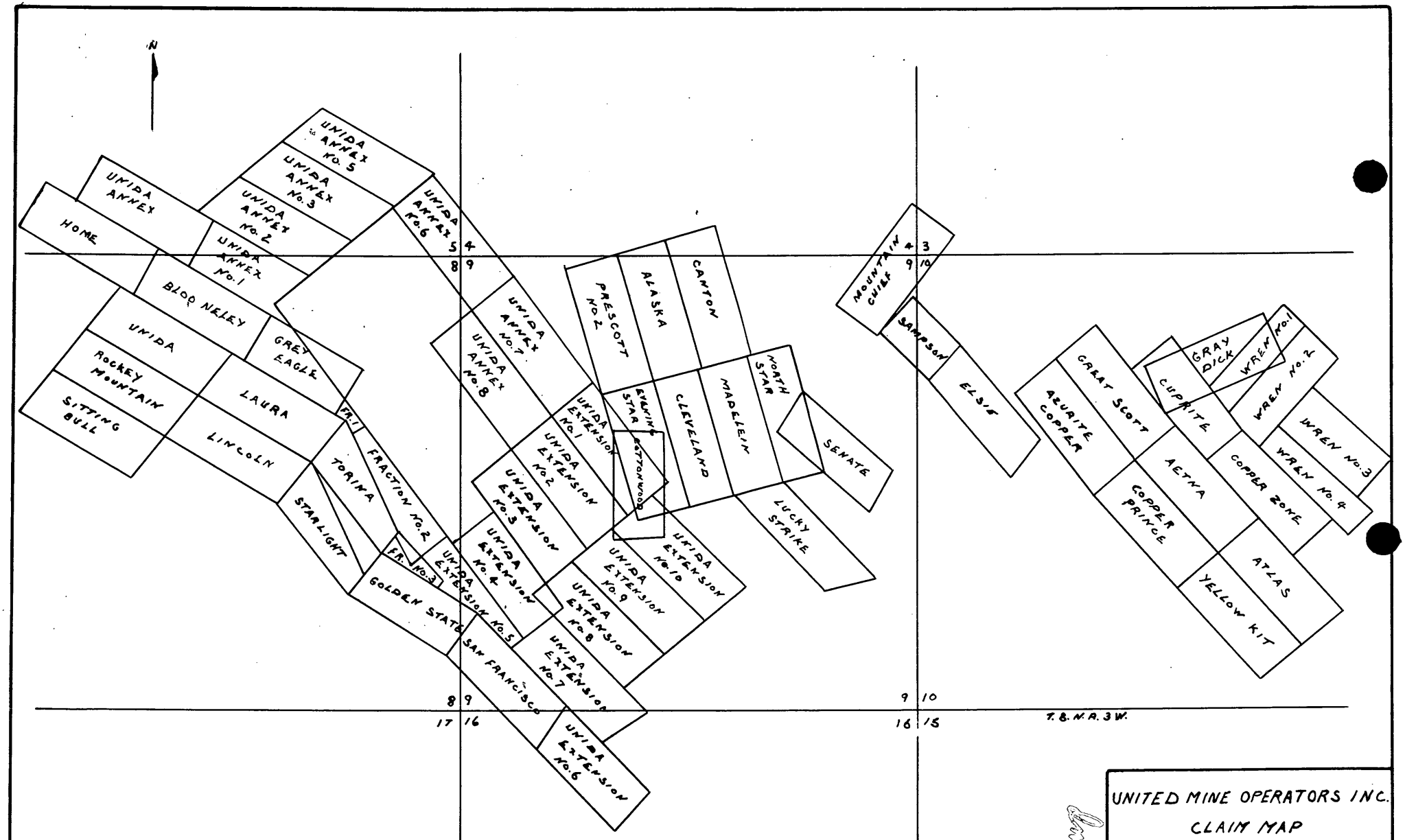
UNITED MINE OPERATORS, INC.

WICKENBURG, ARIZONA

BALANCE SHEET

March 31, 1951.

ASSETS			
Cash in Bank		19,235.98	
Accts. Receivable		46,131.22	
Heavy Equipment Acct.	46,894.68		
Less: Depr. Reserve	3,907.89	42,986.79	
Auto Account	2,125.50		
Less: Depr. Reserve	177.12	1,948.38	
Office Furniture & Fixtures		1,198.03	
Insurance Deposit (Arizona Industrial Comm.)		607.00	
TOTAL ASSETS			$ 114,107.40
LIABILITIES			
Notes Payable to Stockholders		85,648.53	
Accts. Payable		314.27	
Accrued Taxes		944.04	
Accrued Insurance		809.42	
		87,716.26	
Capital Stock			
Common Stock outstanding		10,000.00	
Surplus 3/31/51		16,391.14	
		26,391.14	
TOTAL LIABILITIES			$ 114,107.40



UNITED MINE OPERATORS INC.

CLAIM MAP

SCALE	1 IN = 1500 FT
DATE	9-27-51
DRAWN BY	R. C. S.

Form MF-103
(April 1951)

U. S. DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS ADMINISTRATION

Budget Bureau No. 42-R1035.
Approval expires 6-30-51.

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

DO NOT FILL IN THIS BLOCK

Docket No. Dma-443X

Date received 5/7/51

Participation

United Mine Operators, Inc.
Post Office Box 836
Wickenburg, Arizona

Name and address of applicant

Date April 30, 1951

FILL IN THIS BLOCK

Date of application April 30, 1951

Estimated cost $315,506.00

Mineral or metal Copper

Percentage of Government participation 50%

Location of mine 11 Miles North East of Wickenburg, Arizona

Date of filing MF-100 April 30, 1951

DMA Docket Number, if available Dma-443X

INSTRUCTIONS

Read Mineral Order 5, Regulations Governing Government Aid in Defense Projects, before completing this application. Submit four signed copies of the application to Defense Minerals Administration, Department of the Interior, Washington 25, D. C., or to the nearest field executive officer thereof, with your name and address on each sheet of the application and all accompanying papers. If any question is inapplicable, or if you cannot answer it, so state on the form. Where the space provided for answer is insufficient, answer on a separate sheet, annex it to the application form, and refer to it in space for answer. If the application is approved, you will be presented with an exploration project contract on Form MF-200, for your signature.

THE APPLICANT

*1. Is applicant an individual, partnership, or corporation?
*2. If a partnership, state names and addresses of partners.
*3. If a corporation, state names and addresses of officers, directors, and five largest stockholders.
*4. Describe the mining and general business experience of (*a*) the applicant, and (*b*) the person or persons who will manage the project.
*5. Are you the owner or the lessee of the property?
6. If owner, state what claims, liens, or encumbrances, if any, are against the property.
7. If lessee, attach a copy of the lease and state if it is in good standing.

NOTE.—It will be necessary to procure and attach to the exploration project contract agreements of claimants, lienors, encumbrances and lessors subordinating their interests in the property to the interest of the Government under the contract.

8. Furnish current financial statement, showing assets and liabilities, and a profit and loss statement. Attached
9. How much money is applicant prepared to invest in proposed project? Is it sufficient to pay your part of the cost of the project as detailed in question 23 of this application form, in accordance with the regulations on Government participation (Section 9 of Mineral Order 5)?

*If you have already answered these questions on MF-100, you are not required to answer the questions for this application.

16—64067-1

THE PROPERTY

10. (*a*) Give a description of the real property that will be in any way involved in the exploration project, including any existing mine or operating property.
    (*b*) Give the legal description of the exact parcel, plot, or area upon which the exploration is to be conducted.

    NOTE.—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 (*b*) 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.

*11. State the present and former names of the property, if any.

*12. State, in detail, the location of the property with reference to towns, railroads, roads, shipping points, including distances and directions and kinds and conditions of roads.

*13. State source and quantity of water available for operations and its sufficiency at all seasons.
State amount of power to be used, rate per hour or other cost, and source.

*14. Describe any existing useable facilities, equipment, buildings, or structure now on the property that will be devoted to the exploration work.

15. State in detail how the ore could be shipped and how and where milled.

*16. History:
    (*a*) Give a statement, as complete as possible, of previous exploration, development, operation, and production of property, with reasons for any past suspensions of operations.
    (*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.

*17. Production:
    (*a*) If mine is in production, furnish the following information:

	Tons per day	*Grade or analysis*	*Cost per ton*	*Net value per ton*
(1) Mining				
(2) Milling				
(3) Shipped or sold				

*18. Ore or mineral reserves: (If property is or has been operating.)
    (*a*) Describe the ore or mineral deposits briefly.
    (*b*) Submit available maps and assay data.
    (*c*) Give estimated tonnage and grade of each class of ore reserves.

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

THE EXPLORATION

20. For what mineral or minerals and for what types of deposits and ores will the exploration be conducted?

21. Describe briefly, but concisely, the proposed work and the estimated time required to complete it.

    NOTE.—The Government will not participate in a project that will require more than 2 years to complete.

22. Furnish statement of the geological basis of the project with particular emphasis on factors leading the operator to expect the finding of commercial ore bodies. This statement should be accompanied by supporting maps such as geological maps, maps of the proposed openings and assay maps, sample lists, and other pertinent data.

THE REQUIREMENTS AND COSTS

23. Tabulate in the form of an itemized statement with a sum for each item the estimated requirements and costs of the project so that the total will give the estimated cost of the project in which the Government will participate, as follows:
    (*a*) Labor, by numbers and classes (miners, muckers, millmen, etc.), with wages of each.
    (*b*) Supervisors, by numbers and positions, with salaries of each.
    (*c*) Cost of necessary repairs to existing facilities, structures, and buildings.
    (*d*) Cost of necessary installation or construction of additional facilities, structures, and buildings.
    (*e*) Cost of items of equipment, not now owned by the applicant which must be purchased for operations at a cost of $50 or more each.
    (*f*) Cost of rental for equipment which the operator proposes to rent.
    (*g*) Rental value of items of equipment which the operator now owns and which will be devoted to the work.
    (*h*) Cost of materials and supplies, including items of equipment costing less than $50 each.
    (*i*) Cost of power, water, utilities, and any other items not provided for above.

24. Furnish a time schedule of the project, stated in terms of months after project is approved, showing progress expected to be accomplished and the money expected to be spent.

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.

United Mine Operators, Inc. (Name of company) — By [signature] (Signature of authorized official)

April 30, 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.

*Same as footnote on page 1.

16—64067-1 U. S. GOVERNMENT PRINTING OFFICE

UNITED MINE OPERATORS, INC.

WICKENBURG, ARIZONA

April 30, 1951

Detailed Sheets to Accompany Form MP-100

Item 1 to 7, inclusive, all covered in MP-100, herewith.

Item 8. Financial statement attached.

Items 9 to 22, inclusive, all covered in MP-100, herewith.

Item 23. Tabulate in the form of an itemized statement with a sum for each item the estimated requirements and costs of the project so that the total will give the estimated cost of the project in which the Government will participate, as follows:

BASIS OF ESTIMATE

COST RECAPITULATION
Total Project - See Details Following:

(a)	Direct Labor	$152,640.00
(b)	Supervision ($1125.00 per month)	22,500.00
(c)	Repair tools shed	500.00
(d)	Change room	6,000.00
(e)	New equipment	21,370.00
(f)	None	
(g)	Rental value applicants equipment	31,825.00
(h)	Materials and Supplies	60,500.00
(i)	Power, Fuel and other items	12,121.00
	TOTAL	$315,565.00

Applicant's portion:

Cash	$93,925.00	
Equipment rental	64,525.00	
TOTAL		$157,755.00

Government portion ---------- 157,755.00
Less one-half estimated
salvage value of new
equipment at end of project- 8,000.00

Actual estimated cost, U. S. Government ---------- $149,755.00

NOTE: Government cost to be repaid at official rates per Section 16 EO-5 of April 6, 1951.

UNITED MINE OPERATORS, INC.

WICKENBURG, ARIZONA

April 30, 1951

Detailed Sheets to Accompany Form [illegible]

REQUIREMENTS AND COSTS

PLAN OF ESTIMATE

Drifting:- 6000 linear feet.
Raising:- 4000 feet.
Diamond Drilling:- 4000 feet.

Drifting average 4 feet per operating shift, 28 days per month, giving 100 feet per month per heading. Due to installation of track and pipe, mixed rounds and timbering, use 75% or 75' per month per heading. Total 300' drift average development per month in four headings. Program on drifting 20 months. Raising average per month, per operating raise, 95 feet. Average three crews going total of 285 feet per month.

29. Tabulate in the form of an itemized statement with a sum for each item the estimated requirements and costs of the project so that the total will give the estimated cost of the project in which the Government will participate, as follows:

COST DETAILS

(a) Labor, by numbers and classes (miners, workers, millmen, etc.), with wages of each.

Drifting - 4 miners @ $15.00 per day
4 helpers @ $11.91 per day

Raising - 3 miners, 3 helpers.
3 men - Utility, Motorman, Hipper @ $11.91 per day.
1 general man, repair and maintenance of motors, cars and the machinery used in development @ $13.00 per day.

18 Men Total, charged to direct development.

Diamond Drilling - SURFACE
Three holes per setup; Total 450' per setup.
Drill from 7 setups; 3,000 feet of drilling.
Labor - 2 men, driller @ $16.67 and helper @ $11.91 per day.
1 man shift per day, service and supplies plus man used to set stations @ $13.00 per day.

Diamond Drilling - UNDER
Estimate 1000 feet drilling.
Total footage both areas; 4,000 feet.
10 feet per day, 28 days per month;-300 feet per month.

(Diamond Drilling - WIGFAN, Continued)

Total time; 20 months.
Direct labor cost per day---$ 224.00
Direct labor cost for total project----$133,440.00

(b) Supervisors, by numbers and positions, with salaries of each.
One Development foreman to supervise drifting, raising and diamond drilling. Salary;- $375.00 per month.

One-half of Superintendent's time;- $200.00 per month.

One Engineer, including surveying, sampling and mapping;- $300.00 per month.
One Engineer's helper;- $250.00 per month.

Supervision cost per month--$ 1125.00
Supervision cost for total project----------$ 22,500.00

(c) Cost of necessary repairs to existing facilities, structures, and buildings.
Most of repairs are now completed. Development program would require repairing of a tool shed, at an estimated cost of $500.00.

(d) Additional Construction:
A change room is to be built as an addition on the North end of the present compressor house; to contain 6 shower stalls, toilets and wash basins, and lockers;- $4,000.00

(e) Cost of equipment, not now owned by applicant which must be purchased for operations:
Diamond drilling equipment;- Drill, posts, column and arm, drill rods, core barrels, bits and miscellaneous fittings and equipment;- $4,470.00
Sampling equipment, including core splitter, small crusher, disc grinder, sludge splitters, etc.;- $500.00
Air operated water pump and pressure tank;- $200.00
2 Model HD Gardner Denver air trigger hoists with 5½" column and arm @ $750.00 ;- $1500.00
4 Ingersoll Rand stopers @ $755.00;- $3020.00
2 of 30 mounted jack hammers, column and arm @ $360.00;- $720.00
1 Little Eureka Trammer and equipment ;- $6000.00
5 One-ton side dump mine cars @ $665.00 ;- $3325.00
1 1½B Eimco loader ;- $2313.00
2 Mine timber cars ;- $500.00
Total----------$ 21,970.00

UNITED MINE OPERATORS, INC.

WICKENBURG, ARIZONA

April 30, 1961

Page Three

(e) Rental value operations equipment; See Photostat Western Machinery, Rates attached.

Using Western Machinery Company ARD rental rates as a basis, and pro-rating the equipment, amplified to stoping in presently developed area and tie-ahead to proposed development program; charges on the various pieces of equipment now owned by operator are set up as follows:-

1 -	600 cfm Worthington diesel compressor	$ 650.00
1 -	650 cfm CP diesel compressor	645.00
1 -	105 cfm Worthington gasoline compressor	60.00
1 -	65 KVA diesel light plant	78.00
1 -	Jeep pickup	100.00
1 -	International Flat rock truck	117.00
2 -	Storage battery locomotives @ $428.50	857.00
1 -	Ingersoll Rand EVA Tugger Hoist	50.00
2 -	125 Eimco Loaders @ $166.67	334.00
14 -	1-Ton mine cars @ $8.35	117.00
8 -	6" Gardner Denver Drifters @ $49.00	98.00
1 -	Gardner Denver Jack hammer	31.00
1 -	Electric charging 50 cell with panel	50.00
	Rental Cost Per Month	$3359.00
	Rental Cost for 20 Months	$67,000.00

Rental TD24 International Bulldozer for three months road work and diamond drill station preparation @ full rate of $1,275.00 per month $3,825.00

Total rental - 60 Months $ 81,825.00

NOTE:- In case ore is shipped from areas developed in this program an appropriate pro-rated rental cost will be set up, covering the T133 - 9 yard International dump truck, used in shipping ore.

WESTERN MACHINERY COMPANY

"Wemco Products"

OFFICES AND WAREHOUSES
SAN FRANCISCO, CALIFORNIA
LOS ANGELES, CALIFORNIA
SACRAMENTO, CALIFORNIA
SALT LAKE CITY, UTAH
SPOKANE, WASHINGTON
HIBBING, MINNESOTA
DENVER, COLORADO
POCATELLO, IDAHO
PHOENIX, ARIZONA
CHICAGO, ILLINOIS
BARTOW, FLORIDA
NEW YORK, N.Y.

TELEPHONE 3-4101
124 EAST BUCHANAN STREET
P. O. BOX 3465
PHOENIX, ARIZONA

CABLE ADDRESS
"WEMACHY"

April 28, 1951

Mr. Lynn Hersey
Wickenburg, Arizona

Dear Mr. Hersey:

As per your request we are pleased to quote you on AED rental rates on the following equipment:

1 - 500 cu. ft. Diesel Air Compressor - $688.00 per month
1 - 650 cu. ft. Diesel Air Compressor - $818.00 per month
1 - 63 KVA Diesel Light Plant - $108.00 per month
1 - International TD 24 Tractor and Bull Dozer - $1,275.00 per month
1 - 8 to 9 cu. yard Dump Truck - $750.00 per month
1 - Jeep Pickup - $150.00 per month
1 - International 3-ton Flat Rack Truck - $175.00 per month
2 - Locomotives - $650.00 each, per month
1 - Ingersoll Rand EUA Tugger Hoist, 2,000-lb. capacity - $73.00 per month
2 - Euco 12B Muckers - $250.00 each, per month
14 - 1-ton Mine Cars - $12.50 each, per month
2 - 3" Drifters - $73.50 each, per month
1 - Heavy Jackhammer - $46.25 per month
1 - Electric Charging MG Set with panel - $90.00 per month

We hope this is all the information you have requested. If anything further is needed, please call on us.

Very truly yours,

WESTERN MACHINERY COMPANY

By R. B. George
R. B. George
Sales Manager

RBG:eg

UNITED MINE OPERATORS, INC.

WICKENBURG, ARIZONA

April 20, 1981

Fogo Pine

Lubrication of all mining equipment, including locomotives, mucking machines cars, drills, motors, tugger hoists and automotive equipment:	
Rock drill oil - 1bbl each 6 months. 5bbls ----------	75.00
General Lubrication ----------	125.00
Gasoline - Truck and 105 compressor:	
Pickup - 3 gal. per day x 500;- 1500 gal @ 24¢ ----------	360.00
International - 4 gal. per day x 500 ;- 2000 @ 24¢ ----------	480.00
105 Compressor - 15 gal. x 7500-1125.00	
Motor Oil - Jeep $10.00 International $15.00 105 Compressor $61.00 ----------	91.00
Transmission and Differential--	80.00
Greasing ----------	40.00
TOTAL ----------	12,161.00

April 30, 1951 Sheet one of two sheets

Detailed Sheets to Accompany Form [illegible]-103

Item 24. Furnish a time schedule of the project, stated in terms of months after project is approved, showing progress expected to be accomplished, and the money expected to be spent.

Elements	1st Month	2nd Month	3rd Month	4th Month	5th Month	6th Month	7th Month	8th Month	9th Month	10th Month
Drifting-feet	325	625	500	500	500	550	550	550	500	500
Raising - feet	0	225	250	625	625	625	625	625	250	250
Diamond Drilling	0	200	200	250	250	250	250	200	250	200
Costs										
Labor:										
Drifting	0	8750	5687	5687	5687	6320	6320	6320	5687	5687
Raising	0	8755	8755	8755	8750	8750	8755	8755	5672	5672
Drilling	0	1600	1600	1610	1610	1610	1610	1590	1600	1600
Pool Room	500									
Change Room	2000	2000								
Equipment	21,670									
Supplies, Tools	4050									
Pipe	6370									
Timber	1000					1010				
Powder, etc.	1600	1600	1600	1600	1560	1050	1600	1600	1600	1600
Steel, Bits	2000	200	200	200	200	200	200	200	200	200
Hose & Mech. Pts.	100	100	100	100	100	100	100	100		
Miscellaneous	200	200	200							
Power Fuel, etc.	600	600	600	600	600	600	600	600	600	600
Equip. Rental	3001	3001	3001	3001	3001	3001	3001	3001	3001	3001
TOTAL	48697	14952	18618	19088	18159	17570	16878	16958	15523	15700

Detailed Sheets to Accompany Form [illegible]-101

	11th Month	12th Month	13th Month	14th Month	15th Month	16th Month	17th Month	18th Month	19th Month	20th Month
PROGRESS										
Drifting - feet	300	300	300	300	300	300	300	300	300	300
Raising - feet	250	250	250	250	250	300	250	225	225	200
Diamond Drilling	200	200	200	200	200	200	200	200	200	200
COSTS										
Labor:										
Drifting	3307	3307	3307	3307	3307	3307	3457	3307	3307	3307
Drilling	1300	1300	1300	1300	1300	1300	1300	1300	1300	1300
Hoisting	3772	3772	3772	3772	3772	3772	3776	3705	3705	3705
SUPPLIES										
Timber		1000								
Powder, etc.	1560	1560	1560	1560	1560	1560	1560	1560	1560	1560
Steel, bits	220	2200	200	200	200	200	200	1050		
Hoses & Mchn.	100	100	100	100	100	110	100	100	100	100
Parts										
Fuel, etc.	600	600	600	600	600	600	600	600	600	607
Equip. Rental	2001	2001	2001	2001	2001	2001	2001	2001	2001	2000
Total	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]

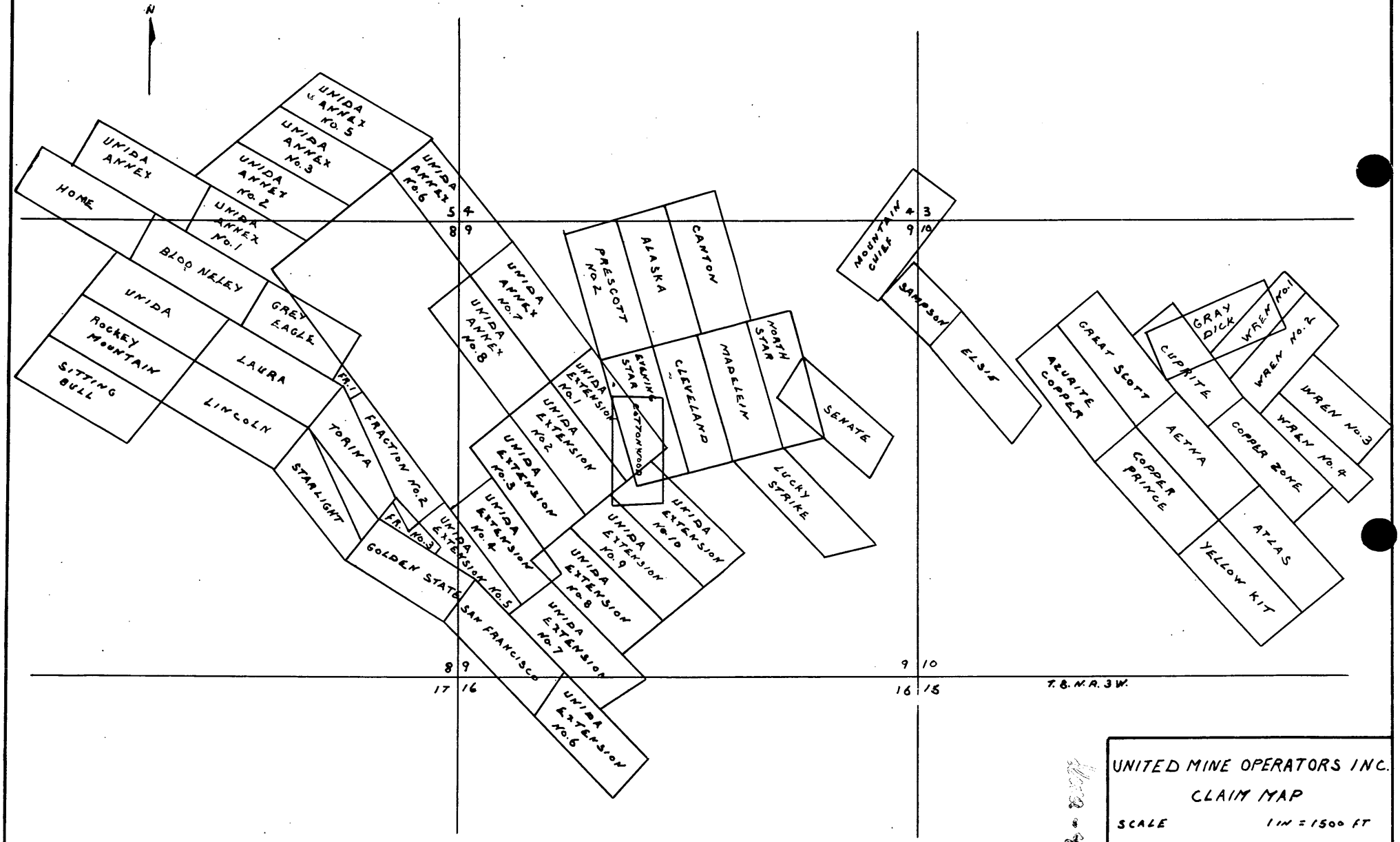
UNITED MINE OPERATORS, INC.

WICKENBURG, ARIZONA

BALANCE SHEET

March 31, 1951

ASSETS			
Cash in Bank		19,235.98	
Accts. Receivable		48,131.22	
Heavy Equipment Account	46,894.68		
Less: Depr. Reserve	3,907.89	42,986.79	
Auto Account	2,125.50		
Less: Depr. Reserve	177.12	1,948.38	
Office Furn. & Fixtures		1,198.03	
Insurance Deposit (Arizona Industrial Comm.)		607.00	
TOTAL ASSETS			$114,107.40
LIABILITIES			
Notes Payable to Stockholders		85,648.53	
Accts. Payable		314.27	
Accrued Taxes		944.04	
Accrued Insurance		809.42	
		$ 87,716.26	
Capital Stock			
Common stock outstanding		10,000.00	
Surplus 3/31/51		16,391.14	
		$ 26,391.14	
TOTAL LIABILITIES			$114,107.40



UNITED MINE OPERATORS INC.

CLAIM MAP

SCALE	1 IN = 1500 FT
DATE	9-27-51
DRAWN BY	R. C. L.

Form MF-100
(March 1951)

U. S. DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS ADMINISTRATION

Form approved.
Budget Bureau No. 42-R1026.

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

NOT TO BE FILLED IN BY APPLICANT

Docket No. dma-443 X

Date received 5/7/51

United Mine Operators, Inc.
Post Office Box 836
Wickenburg, Arizona

Name and address of applicant

See attached detail answers to following. "General TechnicalData" attached hereto, except 8 and 9 shown hereon.

Date April 30, 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. L. Maguire	President-"D"	None	50,000	500	-0-	None	
J. P. Harper	Vice Pres.,D	None	50,000	-0-	-0-	None	
S. P. Maguire	Secy-Treas. "D"	None	50,000	500	-0-	None	
Lynn Hersey, Consulting Eng. "D"		4500		-0-	-0-	None	
N. S. Oberan, Sr.	"D"			-0-	-0-	None	
L. M. Winter		None		1000	-0-	None	
	Total	4500	x x x x x	2000	-0-	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	$100,000	$5,000	$5.00	1000	None
Preferred stock	$	$	$		

*Indicate period covered.

10. Production:

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.

(*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.

United Mine Operators, Inc.
(Name of company)

By [signature]
(Signature of authorized official)

April 30, 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—63792-1

UNITED MINE OPERATORS, INC.

WICKENBURG, ARIZONA

April 30, 1951

Detailed sheets to accompany Form MP-100

1. Materials produced:

(a) What are the chief mine, mill, or smelter products?

Copper

(b) What are the byproducts, if any?

Silicious ore containing small amounts of gold, desirable as flux at Arizona copper smelters handling concentrates from major copper producers. Silicious flux containing no copper is often mined for silica alone by smelters, thus using manpower needed in mining of critical metals.

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:

"UNIDA", "HISPAH", and "KEYSTONE", related group of 36 patented and 21 unpatented mining claims.

(a) Linear feet of shafts.

1432 linear feet

(b) Linear feet of drifts and crosscuts.

730 linear feet

(c) Linear feet of tunnels or adits.

1670 linear feet

(d) Indicate whether mine is flooded or not. Describe any pumping problems. Give size or productive capacity.

Active portion of property not flooded. Shafts in inactive portion contain some water. Inactive areas to be tested by diamond drilling from surface before any plans are made for unwatering or repair of existing workings.

Present production capacity 1300 tons silicious fluxing ore per month. Production can increase as drifting opens additional areas.

3. For each operation listed above supply the following:

(a) Distance and direction from nearest town and shipping point:

Eleven miles Northeast of Wickenburg, Arizona. Good trucking road.

(b) Mining district:

Black Rock Mining district.

(c) Township, Section, Range:

Township 8N; Sections 3,4,5,8,9,10,15,16,17; Range 3 West.

(d) County, State:

Yavapai County, Arizona.

4. (a) State whether or not property is now in operation, and if in operation, by whom operated.

Property not now in production, machinery being installed and adit workings being repaired preparatory to operation.

(b) Are you operating this property as Owner, Lessee, Contractor?

Operating for Owner.

5. If not in production or operation, estimated date when production will begin.

Production estimated to begin latter part of May, 1951.

6. Experience of operators:

(a) C. L. Maguire, President, United Mine Operators, has no mining experience. He was in the Petroleum business from September, 1910 to August, 1948, and retired then for health reasons when the three companies he had built up (C. L. Maguire Inc. Production, Simrall Corp. Pipe Lines, and Roosevelt Oil Company, refining) were consolidated as the Roosevelt Oil and Refining Company by F. Eberstadt and Company of New York. C. L. Maguire is a Director of Roosevelt Oil and Refining Co.

(b) Mr. Jene Harper, Vice President, United Mine Operators. Mr. Harper is the President of the Franklin Supply Co. Chicago, Illinois, suppliers of construction and petroleum equipment.

(c) S. P. Maguire, Secretary-Treasurer, United Mine Operators. S. P. Maguire, wife of C. L. Maguire, has had thirty years of successful business experience, both before and after 1931 when she joined the above companies and became Secretary-Treasurer of them.

(d) Lynn Horsey, Consulting Engineer, fifteen years mining and Chief Engineer, Phelps Dodge Corporation. General Manager, Copper Range Company. Twenty-seven years mining management and consulting experience. Graduate of University of Idaho, 1923.

(e) E. E. Sturrock, Mine Superintendent, Eight years mining and engineering experience at Howe Sound Company and Miami Copper Company. Graduate of Washington State College, 1943.

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.

The Unida, Mispah, and Keystone workings were all originally opened up in 1900 and 1910. They all produced some copper during Worl War O and closed down when the price of copper dropped following the war. The Mispah and Keystone openings, being developed by verticle shafts could not be easily reopened when the copper price improved. The Unida, having been developed by three adits, iperated in the 1920's and closed during the depression when copper dropped to 6 cents per pound. From the excavations remaining in the three adits on this vein some 5000 to 10,000 tons appear to have been mined. Copies of smelter shipment sheets, in the hands of present owners, show average of .33 oz. gold and 2.56% copper on some 750 tons represented on the sheets.

(b) State briefly the known history and production of adjoining and neighboring properties.

No records are available on adjacent 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.

See Report by Lynn Horsey, Consulting Engineer, attached hereto.

8. See MF-100 Form itself.

9. " " " " "

10. Production:

See Number 7 above.

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.

Scheduled 50 tons per day. May go to 100 tons as developement progresses.

12. Ore or Mineral Reserves:

See Horsey's Report, attached hereto.

13. Access Roads:

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

See Question Number 3.
Yavapai County road passes across property below middle adit.

14. Water Supply:

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

Adequate water in well on property. Well equipped with electric pump and pipeline to 3,000 gallon storage tank located on hill above top adit. Believed adequate year around for present plans.

15. Power:

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

Have 63KVA deisel generator which will adequately handle power needs.

16. Labor:

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

(Labor, Continued from page four)

Eight men working on rehabilitation and installation of machinery. These men are all experienced miners or miners' helpers; four of each.

17. Equipment and Facilities:

(a) Buildings:

One mine office and supplies building, 12 x 20 feet in size.
One building, 20 x 30 feet, housing deisel generator and two deisel compressors.
One tool shed at portal No. 2 adit, 10 x 10 feet in size.
All in first class condition.
One quanset in the town of Wickenburg in use as general office, 20 x 30 feet in size with rooms for Consulting Engineer, Mine Superintendent, and Secretary-Bookkeeper.

(b) The following operating equipment all in first class condition:

1 - 500 cfm Worthington compressor D13,000 caterpillar engine.
1 - 650 cfm C. P. compressor D13,000 caterpillar deisel engine
1 - 63 KVA generator, D8,800 caterpillar deisel engine.
1 - 105 cfm Worthington Compressor.
1 - TD 24 International Bulldozer.
1 - International Dump truck.
1 - Jeep pickup truck.
1 - International flat bed truck.
2 - Little Marsha storage battery locomotives with two extra battery charging racks, charging panels, etc.
1 - EUA Ingersoll Rand hoist.
2 - 12 B Eimco shovel loaders.
14 - One-ton side dump mine cars.
2 - Gardner Denver 3" drifters complete.
2 - Ingersoll Rand stopers.
2 - Chicago Pneumatic light drifters.
1 - Gardner Denver Jack hammer.
1 - Set 25 Edison lamps with charging panel.
1 - KAB Worthington well pump.
1 - Berger Mine Transit.
1 - Monroe Calculator.
Complete Installation.

Form MF-103
(April 1951)

U. S. DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS ADMINISTRATION

Budget Bureau No. 42-R1035.
Approval expires 6-30-51.

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

DO NOT FILL IN THIS BLOCK

Docket No. dma-443X

Date received 5/7/51

Participation

United Mine Operators, Inc.
Post Office Box 836
Wickenburg, Arizona

Name and address of applicant

Date April 30, 1951

FILL IN THIS BLOCK

Date of application April 30, 1951

Estimated cost $315,506

Mineral or metal Copper

Percentage of Government participation 50%

Location of mine 11 Miles North East of Wickenburg, Arizona

Date of filing MF-100 April 30, 1951

DMA Docket Number, if available dma-443X

INSTRUCTIONS

Read Mineral Order 5, Regulations Governing Government Aid in Defense Projects, before completing this application. Submit four signed copies of the application to Defense Minerals Administration, Department of the Interior, Washington 25, D. C., or to the nearest field executive officer thereof, with your name and address on each sheet of the application and all accompanying papers. If any question is inapplicable, or if you cannot answer it, so state on the form. Where the space provided for answer is insufficient, answer on a separate sheet, annex it to the application form, and refer to it in space for answer. If the application is approved, you will be presented with an exploration project contract on Form MF-200, for your signature.

THE APPLICANT

*1. Is applicant an individual, partnership, or corporation?
*2. If a partnership, state names and addresses of partners.
*3. If a corporation, state names and addresses of officers, directors, and five largest stockholders.
*4. Describe the mining and general business experience of (*a*) the applicant, and (*b*) the person or persons who will manage the project.
*5. Are you the owner or the lessee of the property?
6. If owner, state what claims, liens, or encumbrances, if any, are against the property.
7. If lessee, attach a copy of the lease and state if it is in good standing.

NOTE.—It will be necessary to procure and attach to the exploration project contract agreements of claimants, lienors, encumbrances and lessors subordinating their interests in the property to the interest of the Government under the contract.

8. Furnish current financial statement, showing assets and liabilities, and a profit and loss statement. Attached
9. How much money is applicant prepared to invest in proposed project? Is it sufficient to pay your part of the cost of the project as detailed in question 23 of this application form, in accordance with the regulations on Government participation (Section 9 of Mineral Order 5)?

*If you have already answered these questions on MF-100, you are not required to answer the questions for this application.

16—64067-1

THE PROPERTY

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

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

NOTE.—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 (*b*) 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.

*11. State the present and former names of the property, if any.

*12. State, in detail, the location of the property with reference to towns, railroads, roads, shipping points, including distances and directions and kinds and conditions of roads.

*13. State source and quantity of water available for operations and its sufficiency at all seasons. State amount of power to be used, rate per hour or other cost, and source.

*14. Describe any existing useable facilities, equipment, buildings, or structure now on the property that will be devoted to the exploration work.

15. State in detail how the ore could be shipped and how and where milled.

*16. History:

(*a*) Give a statement, as complete as possible, of previous exploration, development, operation, and production of property, with reasons for any past suspensions of operations.

(*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.

*17. Production:

(*a*) If mine is in production, furnish the following information:

	Tons per day	*Grade or analysis*	*Cost per ton*	*Net value per ton*
(1) Mining				
(2) Milling				
(3) Shipped or sold				

*18. Ore or mineral reserves: (If property is or has been operating.)

(*a*) Describe the ore or mineral deposits briefly.

(*b*) Submit available maps and assay data.

(*c*) Give estimated tonnage and grade of each class of ore reserves.

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

THE EXPLORATION

20. For what mineral or minerals and for what types of deposits and ores will the exploration be conducted?

21. Describe briefly, but concisely, the proposed work and the estimated time required to complete it.

NOTE.—The Government will not participate in a project that will require more than 2 years to complete.

22. Furnish statement of the geological basis of the project with particular emphasis on factors leading the operator to expect the finding of commercial ore bodies. This statement should be accompanied by supporting maps such as geological maps, maps of the proposed openings and assay maps, sample lists, and other pertinent data.

THE REQUIREMENTS AND COSTS

23. Tabulate in the form of an itemized statement with a sum for each item the estimated requirements and costs of the project so that the total will give the estimated cost of the project in which the Government will participate, as follows:

(*a*) Labor, by numbers and classes (miners, muckers, millmen, etc.), with wages of each.

(*b*) Supervisors, by numbers and positions, with salaries of each.

(*c*) Cost of necessary repairs to existing facilities, structures, and buildings.

(*d*) Cost of necessary installation or construction of additional facilities, structures, and buildings.

(*e*) Cost of items of equipment, not now owned by the applicant which must be purchased for operations at a cost of $50 or more each.

(*f*) Cost of rental for equipment which the operator proposes to rent.

(*g*) Rental value of items of equipment which the operator now owns and which will be devoted to the work.

(*h*) Cost of materials and supplies, including items of equipment costing less than $50 each.

(*i*) Cost of power, water, utilities, and any other items not provided for above.

24. Furnish a time schedule of the project, stated in terms of months after project is approved, showing progress expected to be accomplished and the money expected to be spent.

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.

United Mine Operators, Inc. (Name of company) By [signature] (Signature of authorized official)

April 30, 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.

*Same as footnote on page 1.

16—64067-1 U. S. GOVERNMENT PRINTING OFFICE

UNITED MINE OPERATORS, INC.

WICKENBURG, ARIZONA

April 30, 1951

Detailed Sheets to Accompany Form MP-100

Items 1 to 7, inclusive, all covered in MP-100, herewith.

Item 8. Financial statement attached.

Items 9 to 22, inclusive, all covered in MP-100, herewith.

Item 23. Tabulate in the form of an itemized statement with a sum for each item the estimated requirements and costs of the project so that the total will give the estimated cost of the project in which the Government will participate, as follows:

BASIS OF ESTIMATE

COST RECAPITULATION
Total Project - See Details Following:

(a)	Direct Labor	$162,340.00
(b)	Supervision ($1125.00 per month)	22,500.00
(c)	Repair tools shed	500.00
(d)	Change room	4,000.00
(e)	New equipment	21,670.00
(f)	None	
(g)	Rental value applicants equipment	61,825.00
(h)	Materials and Supplies	60,550.00
(i)	Power, fuel and other items	12,121.00
	TOTAL	$315,506.00

Applicant's portion:

Cash	$96,928.00	
Equipment rental	61,825.00	
TOTAL		$157,753.00

Government portion	157,753.00
Less one-half estimated salvage value of new equipment at end of project-	8,000.00
Actual estimated cost, U. S. Government	$149,753.00

NOTE: Government cost to be repaid at official rates per Section 14 MO-5 of April 6, 1951.

UNITED MINE OPERATORS, INC.

WICKENBURG, ARIZONA

April 30, 1951

Detailed Sheets to Accompany Form MF-103

REQUIREMENTS AND COSTS

BASIS OF ESTIMATE

Drifting:- 6000 lineal feet.
Raising:- 4500 feet.
Diamond Drilling:- 4000 feet.

Drifting average 4 feet per operating shift, 25 days per month, giving 100 feet per month per heading. Due to installation of track and pipe, missed rounds and timbering, use 75% or 75' per month per heading. Total 300' drift average development per month in four headings. Progress on drifting 20 months. Raising average per month, per operating raise, 75 feet. Average three areas going total of 225 feet per month.

23. Tabulate in the form of an itemized statement with a sum for each item the estimated requirements and costs of the project so that the total will give the estimated cost of the project in which the Government will participate, as follows:

COST DETAILS

(a) Labor, by numbers and classes (miners, muckers, millmen, etc.), with wages of each.

Drifting - 6 miners @ $13.00 per day
4 helpers @ $11.91 per day
Raising - 5 miners, 5 helpers.
3 men - Utility, Motorman, Nipper @ $11.91 per day.
1 general man, repair and maintenance of motors, cars and the machinery used on development @ $13.00 per day.

18 Men Total, charged to direct development.

Diamond Drilling - MAYSTONE
Three holes per setup; Total 450' per setup.
Drill from 7 setups; 3,000 feet of drilling.
Labor - 2 men, driller @ $16.97 and helper @ $11.91 per day.
1 man shift per day, service and supplies plus man used to cut stations @ $13.00 per day.

Diamond Drilling - MISPAH
Estimate 1000 feet drilling.
Total footage both areas; 4,000 feet.
10 feet per day, 20 days per month;-200 feet per month.

(Diamond Drilling - MISPAH, Continued)

Total time; 20 months.
Direct Labor cost per day---$ 234.60
Direct Labor cost for total project-----$132,340.00

(b) Supervisors, by numbers and positions, with salaries of each.
One Development foreman to supervise drifting, raising and diamond drilling. Salary;- $375.00 per month.

One-half of Superintendents time;- $200.00 per month.

One Engineer, including surveying, sampling and mapping;- $300.00 per month.
One Engineer's helper;- $250.00 per month.

Supervision cost per month--$ 1125.00
Supervision cost for total project-----$ 22,500.00

(c) Cost of necessary repairs to existing facilities, structures, and buildings.
Most of repairs are now completed. Development program would require repairing of a tool shed, at an estimated cost of $500.00.

(d) Additional Construction:
A change room is to be built as an addition on the North end of the present compressor house; to contain 4 shower stalls, toilets and wash basins, and lockers;-$4,000.00

(e) Cost of equipment, not now owned by applicant which must be purchased for operations:
Diamond drilling equipment;- Drill, posts, column and arm, drill rods, case barrels, bits and miscellaneous fittings and equipment;- $4,650.00
Sampling equipment, including core splitter, small crusher, disc grinder, sludge splitters, etc.;- $600.00
Air operated water pump and pressure tank;- $300.00
2 Model HB Gardner Denver air tugger hoists with 3½" columns and arm @ $740.00 ;- $1480.00
4 Ingersoll Rand stopers @ $753.00;- $3012.00
2 CP 50 mounted jack hammers, columns and arms @ $645.00;- $1290.00
1 Little Wonder Pronger and equipment ;- $4000.00
5 One-ton side dump mine cars @ $465.00 ;- $2325.00
1 125 Eimco Loader ;- $2913.00
2 Mine timber cars ;- $500.00
Total-----$ 21,670.00

UNITED MINE OPERATORS, INC.
WICKENBURG, ARIZONA

April 30, 1961

(g) Rental value operations equipment; See Photostat Western Machinery. Rates attached.

Using Western Machinery Company A&D rental rates as a basis, and pro-rating the equipment, one-third to stoping in presently developed area and two-thirds to proposed development program; Charges on the various pieces of equipment now owned by operator are set up as follows:-

1 - 500 cfm Worthington diesel compressor	$ 450.00	
1 - 650 cfm CP diesel compressor	540.00	
1 - 105 cfm Worthington gasoline compressor	60.00	
1 - 63 KVA diesel light plant	72.00	
1 - Jeep pickup	100.00	
1 - International Flat rock truck	117.00	
2 - Storage battery locomotives @ $458.33	837.00	
1 - Ingersoll Rand 5KA Tugger Hoist	50.00	
2 - 1RB Eimco Loaders @ $186.67	554.00	
14 - 1-Ton mine cars @ $8.35	117.00	
2 - 8" Gardner Denver drifters @ $47.00	94.00	
1 - Gardner Denver jack hammer	31.00	
1 - Electric charging MG set with panel	60.00	
Rental Cost Per Month	$3900.00	
Rental Cost for 20 Months		$80,000.00

Rental T24 International Bulldozer for three months road work and diamond drill station preparation @ full rate of $1,275.00 per month $3,825.00
Total rental - 20 Months $ 61,825.00

NOTE:- In case ore is shipped from areas developed in this program an appropriate pro-rated rental cost will be set up, covering the F195 - 9 yard International dump truck, used in shipping ore.

WESTERN MACHINERY COMPANY

"Wemco Products"

OFFICES AND WAREHOUSES
SAN FRANCISCO, CALIFORNIA
LOS ANGELES, CALIFORNIA
SACRAMENTO, CALIFORNIA
SALT LAKE CITY, UTAH
SPOKANE, WASHINGTON
HIBBING, MINNESOTA
DENVER, COLORADO
POCATELLO, IDAHO
PHOENIX, ARIZONA
CHICAGO, ILLINOIS
BARTOW, FLORIDA
NEW YORK, N.Y.

TELEPHONE 3-4101
124 EAST BUCHANAN STREET
P. O. BOX 3465
PHOENIX, ARIZONA

CABLE ADDRESS
"WEMACHY"

April 28, 1951

Mr. Lynn Hersey
Wickenburg, Arizona

Dear Mr. Hersey:

As per your request we are pleased to quote you on AED rental rates on the following equipment:

1 - 500 cu. ft. Diesel Air Compressor - $688.00 per month
1 - 650 cu. ft. Diesel Air Compressor - $818.00 per month
1 - 63 KVA Diesel Light Plant - $108.00 per month
1 - International TD 24 Tractor and Bull Dozer - $1,275.00 per month
1 - 8 to 9 cu. yard Dump Truck - $750.00 per month
1 - Jeep Pickup - $150.00 per month
1 - International 3-ton Flat Rack Truck - $175.00 per month
2 - Locomotives - $650.00 each, per month
1 - Ingersoll Rand EUA Tugger Hoist, 2,000-lb. capacity - $73.00 per month
2 - Eimco 12B Muckers - $250.00 each, per month
14 - 1-ton Mine Cars - $12.50 each, per month
2 - 3" Drifters - $73.50 each, per month
1 - Heavy Jackhammer - $46.25 per month
1 - Electric Charging MG Set with panel - $90.00 per month

We hope this is all the information you have requested. If anything further is needed, please call on us.

Very truly yours,

WESTERN MACHINERY COMPANY

By R. B. George
R. B. George
Sales Manager

RBG:eg

(h) Cost Materials and Supplies:

Track, 6,000ft. ----------	$ 4080.00
Air and Water pipe, 8,000'--	8070.00
Timber, 600'(10% of drift-ing estimated)-	3000.00
Powder caps and fuse -------	31600.00
Drill steel and bits -------	10680.00
Hoses and machine parts ----	1800.00
Miscellaneous tools and equipment ----------	800.00
TOTAL ----------	$ 60,550.00

(i) Cost of Power, Water, Utilities, and other items not provided above:

3 Diesel engines fuel consumption, proportional amount to 1/3 production, 2/3 development. 65 gallons diesel fuel per day 32,500 gallons @$0.159--	$ 5168.00
Lubricating Oil - 1700 Gallons @ .90¢ ----------	1500.00
Compressor Oil - 10bbls @ $27.50 ----------	275.00

Road construction to #4 adit and diamond drill stations;-

Labor:	
Bulldozer operation 39 days @ $13.00 ---	$507.00
Miners, 20 days @ $13.00 ----------	260.00
Helpers, 20 days @ $11.91 ----------	238.00
Diesel Fuel, 1530gal. @ 15.9 ¢ ----------	243.00
Lubricating Oil ----	29.00
Gasoline, 105 compressor, 180 gal @24¢-	43.00
Contingencies ------	132.00
Total ----------	$ 1457.00

Repairs diesels and compressors, overhaul out of 3 engines--	720.00

UNITED MINE OPERATORS, INC.

WICKENBURG, ARIZONA

April 30, 1951

Page Five

Lubrication of all mining equipment, including locomotives, mucking machines cars, drills, motors, tugger hoists and automotive equipment:	
Rock drill oil - 1bbl each 6 months. 5bbls ----------	75.00
General Lubrication ----------	125.00
Gasoline - Truck and 105 compressor:	
Pickup - 3 gal. per day x 500;- 1500 gal @ 24¢ ----------	$30.00
International - 4 gal. per day x 500 ;- 2000 @ 24¢ ----------	480.00
105 Compressor - 15 gal. x 7500-1800.00	
Motor Oil - Jeep $15.00 International $15.00 105 Compressor $21.00 ----------	51.00
Transmission and Differential--	60.00
Greasing ----------	60.00
TOTAL ----------	12,121.00

April 30, 1951 Sheet one of two sheets

Detailed Sheets to Accompany Form MP-103

Item 26. Furnish a time schedule of the project, stated in terms of months after project is approved, showing progress expected to be accomplished, and the money expected to be spent.

PROGRESS	1st Month	2nd Month	3rd Month	4th Month	5th Month	6th Month	7th Month	8th Month	9th Month	10th Month
Drifting-feet	325	325	300	300	300	350	350	350	300	300
Raising - feet	0	325	225	225	225	225	225	225	250	250
Diamond Drilling	0	200	250	250	250	250	250	250	200	200
COSTS										
Labor:										
Drifting	$ 2700	2750	3387	3387	3387	4320	4320	4300	3387	3387
Raising	0	2765	2765	2765	2765	2765	2765	2765	3072	3072
Drilling	0	1290	1290	1610	1610	1610	1610	1290	1290	1290
Tool Room	500									
Change Room	2000	2000								
Equipment	21,670									
Supplies, Track	4030									
Pipe	5570									
Timber	1000					1000				
Powder, etc.	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500
Steel, Bits	2000	200	200	200	200	3200	200	200	200	400
Hose & Mach. Pts.	100	100	100	100	100	100	100	100		
Miscellaneous	600	200	200							
Power Fuel, etc.	600	600	600	600	600	600	600	600	600	600
Equip. Rental	3091	3091	3091	3091	3091	3091	3091	3091	3091	3091
TOTAL	48597	14682	13819	13639	13439	17873	16872	15952	13800	15720

Detailed Sheets to Accompany Form MP-103

	11th Month	12th Month	13th Month	14th Month	15th Month	16th Month	17th Month	18th Month	19th Month	20th Month
PROGRESS										
Drifting - feet	300	300	300	300	300	300	300	300	300	300
Raising - feet	250	250	250	250	250	250	250	225	225	225
Diamond Drilling	200	200	200	200	200	200	200	200	200	200
COSTS										
Labor:										
Drifting	3387	3387	3387	3387	3387	3387	3387	3387	3387	3387
Drilling	1200	1200	1200	1200	1200	1200	1200	1200	1200	1200
Raising	2072	2072	2072	2072	2072	2072	2072	2765	2765	2765
SUPPLIES										
Timber		1000								
Powder, etc.	1580	1580	1580	1580	1580	1580	1580	1580	1580	1580
Steel, Bits	200	2200	200	200	200	200	200	1000		
Hoses & Meth.	100	100	100	100	100	100	100	100	100	100
Parts										
Powder, Fuel, etc.	606	606	606	606	606	606	606	606	606	607
Equip. Rental	2001	2001	2001	2001	2001	2001	2001	2001	2001	2000
TOTAL	$13326	15530	13326	13326	13326	13326	13326	14130	13117	13125

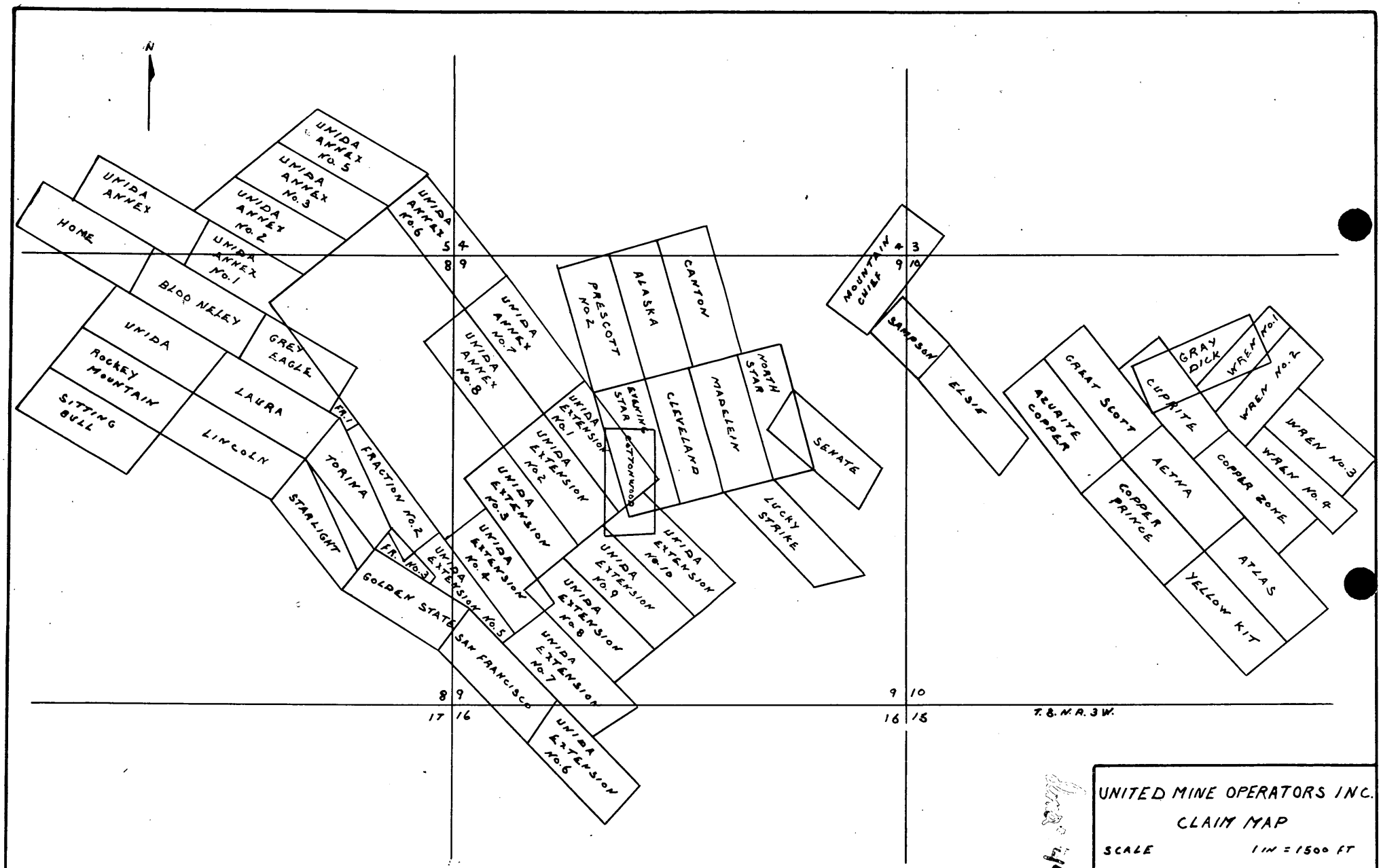
UNITED MINE OPERATORS, INC.

WICKENBURG, ARIZONA

BALANCE SHEET

March 31, 1951

ASSETS			
Cash in Bank		19,235.98	
Accts. Receivable		48,131.22	
Heavy Equipment Account	46,894.68		
Less: Depr. Reserve	3,907.89	42,986.79	
Auto Account	2,125.50		
Less: Depr. Reserve	177.12	1,948.38	
Office Furn. & Fixtures		1,198.03	
Insurance Deposit (Arizona Industrial Comm.)		607.00	
TOTAL ASSETS			$114,107.40
LIABILITIES			
Notes Payable to Stockholders		85,648.53	
Accts. Payable		314.27	
Accrued Taxes		944.04	
Accrued Insurance		809.42	
		$ 87,716.26	
Capital Stock			
Common stock outstanding		10,000.00	
Surplus 3/31/51		16,391.14	
		$ 26,391.14	
TOTAL LIABILITIES			$114,107.40



UNITED MINE OPERATORS INC.

CLAIM MAP

SCALE	1 IN = 1500 FT
DATE	9-27-51
DRAWN BY	R. C. S.

Form MF-100
(March 1951)

U. S. DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS ADMINISTRATION

Form approved.
Budget Bureau No. 42-R1026.

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

NOT TO BE FILLED IN BY APPLICANT

Docket No. Dma-443X

Date received 5/7/51

United Mine Operators, Inc.
Post Office Box 836
Wickenburg, Arizona

Name and address of applicant

See attached detail answers to following. "General Techinical Data" attached hereto, except Items 8 and 9 shown hereon.

Date April 30, 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. L. Maguire	President-"D"	None	50,000	500	-0-	None	
J. P. Harper	Vice Pres.,D	None	50,000	-0-	-0-	None	
S. F. Maguire	Secy-Treas. "D"	None	50,000	500	-0-	None	
Lynn Hersey, Consulting Eng. "D"		4500		-0-	-0-	None	
N. S. Oberan, Sr.	"D"			-0-	-0-	None	
L. M. Winter		None		1000	-0-	None	
	Total	4500	x x x x x	2000	-0-	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	$ 100,000	$ 5,000	$ 5.00	1000	None
Preferred stock	$	$	$		

*Indicate period covered.

10. Production:

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.

(*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.

United Mine Operators, Inc.
(Name of company)

By [signature]
(Signature of authorized official)

April 30, 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—63792-1

UNITED MINE OPERATORS, INC.
WICKENBURG, ARIZONA

April 30, 1951

Detailed sheets to accompany Form MF-100

1. Materials produced:

(a) What are the chief mine, mill, or smelter products?

Copper

(b) What are the byproducts, if any?

Silicious ore containing small amounts of gold, desirable as flux at Arizona copper smelters handling concentrates from major copper producers. Silicious flux containing no copper is often mined for silica alone by smelters, thus using manpower needed in mining of critical metals.

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:

"UNIDA","MISPAH", and "KEYSTONE", related group of 36 patented and 21 unpatented mining claims.

(a) Linear feet of shafts.

1432 linear feet

(b) Linear feet of drifts and crosscuts.

730 linear feet

(c) Linear feet of tunnels or adits.

1670 linear feet

(d) Indicate whether mine is flooded or not. Describe any pumping problems. Give size or productive capacity.

Active portion of property not flooded. Shafts in inactive portion contain some water. Inactive areas to be tested by diamond drilling from surface before any plans are made for unwatering or repair of existing workings.

Present production capacity 1300 tons silicious fluxing ore per month. Production can increase as drifting opens additional areas.

3. For each operation listed above supply the following:

(a) Distance and direction from nearest town and shipping point.

Eleven miles Northeast of Wickenburg, Arizona. Good trucking road.

(b) Mining district.

Black Rock Mining district.

(c) Township, Section, Range.

Township 8N; Sections 3,4,5,8,9,10,15,16,17; Range 3 West.

(d) County, State.
Yavapai County, Arizona.

4. (a) State whether or not property is now in operation, and if in operation, by whom operated.

Property not now in production, machinery being installed and adit workings being repaired preparatory to operation.

(b) Are you operating this property as Owner, Lessee, Contractor?

Operating for Owner.

5. If not in production or operation, estimated date when production will begin.

Production estimated to begin latter part of May, 1951.

6. Experience of operators:

(a) C. L. Maguire, President, United Mine Operators, has no mining experience. He was in the Petroleum business from September, 1910 to August, 1948, and retired then for health reasons when the three companies he had built up (C. L. Maguire, Inc. Production, Simrall Corp. Pipe Lines, and Roosevelt Oil Co., Refining) were all consolidated as the Roosevelt Oil and Refining Company by F. Eberstadt and Company of New York. C. L. Maguire is a Director of Roosevelt Oil and Refining Company.

(b) Mr. Jene Harper, Vice President, United Mine Operators. Mr. Harper is the President of the Franklin Supply Company, Chicago, Illinois, suppliers of construction and petroleum equipment.

(c) S. F. Maguire, Secretary-Treasurer, United Mine Operators. S. F. Maguire, wife of C. L. Maguire, has had thirty years of successful business experience, both before and after 1931 when she joined the above companies and became Secretary-Treasurer of them.

(d) Lynn Hersey, Consulting Engineer, fifteen years mining and Chief Engineer, Phelps Dodge Corporation. General Manager, Copper Range Company. Twenty-seven years mining management and consulting experience. Graduate of University of Idaho, 1923.

(e) E. E. Sturrock, Mine Superintendent, Eight years mining and engineering experience at Howe Sound Company and Miami Copper Company. Graduate of Washington State College, 1943.

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:

The Unida, Mispah, and Keystone workings were all originally opened up in 1909 and 1910. They all produced some copper during World War I and closed down when the price of copper dropped following the war. The Mispah and Keystone openings, being developed by verticle shafts could not be easily reopened when the copper price improved. The Unida, having been developed by three adits, operated in the 1920's and closed during the depression when copper dropped to 6 cents per pound. From the excavations remaining in the three adits on this vein some 5000 to 10,000 tons appear to have been mined. Copies of smelter shipment sheets, in the hands of present owners, show average of .33 oz. gold and 2.56% copper on some 750 tons represented on the sheets.

(b) State briefly the known history and production of adjoining and neighboring properties.

No records are available on adjacent 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.

See Report by Lynn Hersey, Consulting Engineer, attached hereto.

8. See MF-100 Form itself.

9. " " " " " .

10. Production:

See Number 7, above.

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.

Scheduled @ 50 tons per day. May go to 100 tons as developement progresses.

12. Ore or Mineral Reserves:

See Hersey's Report, attached hereto.

13. Access Roads:

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

See Question Number 3.
Yavapai County road passes across property below middle adit.

14. Water Supply:

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

Adequate water in well on property. Well equipped with electric pump and pipeline to 3,000 gallon storage tank located on hill above top adit. Believed adequate year around for present plans.

15. Power:

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

Have 63KVA deisel generator which will adequately handle power needs.

16. Labor:

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

(Labor, Continued from page four)

Eight men working on rehabilitation and installation of machinery. These men are all experienced miners or miners helpers; four of each.

17. Equipment and facilities:

(a) Buildings:

One mine office and supplies building, 12 x 20 feet in size.
One building, 20 x 30 feet, housing deisel generator and two deisel compressors.
One tool shed at portal No. 2 adit, 10 x 10 feet in size.
All in first class condition.
One quanset in the town of Wickenburg in use as general office, 20 x 30 feet in size with rooms for Consulting Engineer, Mine Superintendent, and Secretary-Bookkeeper.

(b) The following operating equipment all in first class condition.

1 - 500 cfm Worthington compressor D13,000 caterpillar engine.
1 - 650 cfm C. P. compressor D13,000 caterpillar deisel engine.
1 - 63 KVA generator, D8,800 caterpillar deisel engine.
1 - 105 cfm Worthington Compressor.
1 - TD 24 International Bulldozer.
1 - International Dump truck.
1 - Jeep pickup truck.
1 - International flat bed truck.
2 - Little Marsha storage battery locomotives with two extra battery charging racks, charging panels, etc.
1 - EUA Ingersoll Rand hoist.
2 - 12 B Eimco shovel loaders.
14.- One-ton side dump mine cars.
2 - Gardner Denver 3" drifters complete.
2 - Ingersoll Rand stopers.
2 - Chicago Neumatic light drifters.
1 - Gardner Denver Jack hammer.
1 - Set 25 Edison lamps with charging panel.
1 - KAB Worthington well pump.
1 - Berger Mine Transit.
1 - Monroe Calculator
Complete Installation.

LYNN HERSEY
CONSULTING MINING ENGINEER

P.O. BOX 1115
MIAMI, ARIZONA

February 17, 1951

Mr. C. L. Maguire, President,
United Mine Operators, Inc.,
Wickenburg, Arizona

Dear Sir:

Please find herewith a report covering my examination and sampling of the UNIDA mining property located on the Constellation road near Wickenburg, Ariz.

The investigation consisted of the taking of some 150 samples in the three adits; in the sub-level between the middle and lower adits, and in old stopes from which production in prior years was obtained; and of a carefull and detailed examination and study of surface exposures along the vein to the southeast.

I estimate that there are 15,600 short tons of proven and probably ore with an average grade at the present prices of metals of $18.70 per dry ton. I think this grade can be improved by selective mining as was done in previous shipments from the property.

The cost of bringing this mine into production at 50 tons per day is estimated at $150,000 including working capital. Of this; $74,500 or about one-half, will be equipment and machinery of a salvagable nature.

It is recommended that you proceed with the development and operation of this property as outlined herein.

Yours very truly,
Lynn Hersey
CONSULTING ENGINEER

LH:ry

February 17, 1951

REPORT
on the
UNIDA GROUP OF CLAIMS
Black Rock Mining District
Yavapai County, Arizona

by

Lynn Hersey Consulting Engineer

LOCATION AND GENERAL CONDITIONS

This property consists of ten contiguous patented and one unpatented mining claims located about eleven miles northeasterly of Wickenburg, Arizona and is connected with Wickenburg by a good dirt trucking road maintained by Yavapai County; which road passes between the middle and lower adits.

The mean elevation of the property is about 3,800 feet above sea level. The terrain is extremely rugged with no timber and only the usual semi-arid vegetation of shrubs and grasses.

GENERAL GEOLOGY

The entire area covered by these claims is made up of igneous rocks; the plutonic rocks being granite, syenite and diorite in which fractures have been filled by intrusive dikes of rhyolite, trachite and andesite sometimes cutting each other. The Bloo Neley vein, on which three adits have been driven, appears to be the latest major fracture in the area and seems to cut all granitic rocks and intrusives. It is a strong and persistent vein, observed and sampled on the surface for approximately 4,000 feet. It strikes about north 50 degrees west actual, and is consistent in it's strike throughout it's observed length. Due to the steep topography, the vein appears to strike N 60 W

on the western side of the mountain and about N.40 W on the eastern side; and the claims are laid out parallel to these apparent strikes.

The vein dips to the southwest at about 58 degrees. It is composed of gouge and brecciated matter caused by the faulting movement and has been impregnated, hardened, and partly solidified by secondary silicification. A preliminary examination of the gouge does not clearly indicate the direction of the movement but, since the phenocrysts of feldspars on the foot-wall side of the vein seem to average considerably larger than those on the hanging-wall side, it is reasonable to assume that it was a normal fault.

MINERALOGY

The copper minerals making up the exposed ore consist of the carbonates malachite and azurite, and the silicate crysocolla. A stope near the breast of the middle adit shows some primary chalcocite; the mineral where exposed being in the process of alteration to carbonates and silicates.

The precious metals are gold and silver with the preponderant value in gold which occurs in native form and appears to be connected with the limonite and hematite seams in the vein, and with the free quartz. The gold is easily panned. For the purpose of economy the silver was not assayed. Previous assaying has demonstrated that the ore does not contain enough silver to materially influence its value.

ORE OCCURRENCE

The ore seems to occur in a shoot, the outer edge

of which roughly parallels the surface. However, since the native gold on the surface exposures samples about the same as underground, it is possible that the copper may have been leached from the vein near the surface. No secondary enrichment has been encountered to date. The extent of the shoot has not been determined because the upper two adits stopped in ore. The face of the lower adit is not on the vein, and it will be necessary to cross cut or diamond drill before drifting further on this level.

ORE RESERVES

In my preliminary sampling of the vein on the levels only (before the raises and stopes were made accessible) I obtained an average gold assay of 0.35 oz. and an average for copper of 3.03%. A composite of the 13 preliminary samples taken showed the following analysis:

Au 0.35 oz. SiO_2 59.9% Al_2O_3 7.7% Cu 3.03% Fe 10.2%.

These samples were taken in areas between and beyond the previously operated stoped. The vein as sampled averaged 3 feet in width. Since the previous operators, no doubt, mined the better and wider portions of the vein, my preliminary sampling may have tended toward the conservative side both as to vein width and grade. The average of all available smelter settlement sheets from previous shipments were as follows;

Au 0.32 oz. SiO_2 64.4% Al_2O_3 6.9% Cu 2.11% Fe 10.1%.

Inspection and measurement of the old stopes shows that mining was done to an average width of 4.8 feet in

area where the profitable vein averages only about 3.4 feet. This, no doubt, caused some unnecessary dilution which may have been partly offset by a certain amount of hand sorting. It is my opinion, from careful inspection of the walls, that the vein can be mined much cleaner than was previously done.

Based on a mean of the above analysis, inquiries were made to 5 Southwestern smelters of which the Magma Copper Company smelter at Superior, Arizona, and International Smelting & Refining Company at Miami, Arizona were the closest. The reply from Magma smelter is quoted below:

C O P Y

MAGMA COPPER COMPANY
Superior, Ariz.

June 30, 1950.

Mr. Lynn Hersey
P. O. Box 1115
Miami, Arizona

Dear Mr. Hersey:

This is in reply to your letter of June 28th relative to gold copper ore you propose to ship from Wickenburg next October.

From the assay and analysis given the smelter return per dry ton at present metal prices would be as follows:

Payment for metals:		
Gold 0.33 Oz. at $32.20	$10.63	
Copper, 51 lb. less 8, or 43 l b @ 19.45¢	8.36	$18.99
Estimated Charges:		
Smelting charge per dry ton	5.27	
Freight from Wickenburg (wet ton)	3.17	8.44
Estimated net return per dry ton		$10.55

It is suggested that when you are ready to ship that you send us a trial car and if the ore is suitable to our operation we will advise you as to the amount of shipments that we can accept.

Enclosed is a copy of our present treatment schedule.

Yours truly,

J. H. Rose

Metallurgical Supt.

JHR/r
Encl--1

As of the date of the above letter, the price of copper was 22.5 cents per pound. At the present price per pound of 24.5 cents the "estimated net return per dry ton" would be $11.41. The net return estimated by International was $9.14 per ton; the difference being due to a deduction of 10# of copper from gross by International as compared with 8 by Magma and a freight deduction of $4.25 per ton. At the new price of copper the Inspiration net return will be exactly $10.00 per ton. The Magma smelter is most in need of silica flux and will probably be favored.

Thorough sampling of adits, raises, stopes and surface open cuts has now been completed and has shown the existence of the following ore reserves:-

PROVEN BLOCKS

For the purpose of this report it is considered that proven and blocked out ore should have an average assay value of approximately $18.00 per ton to be considered as commercial. A block at the eastern end of #2 adit, where stoping has been done in an area showing some copper sulfide minerals, a block projected 50 feet above and below the level and 50 feet beyond the end of the drift (which stopped in ore) figures to have 3,100 tons with a grade of 0.04 Au and 3.37% Cu. This gives a gross value at present prices of metal of $17.93 per ton.

It was noted in sampling this block that the higher assays seemed to come from the most freshly broken areas. The older workings are extremely hard to sample due to the presence of large quantities of scaling and decomposed rock

which appears to have lost a part at least of its original mineralization. All of these samples are used, however, at the values obtained and may later prove to have been conservatively calculated.

A second block averaging $19.21 per ton is calculated around, above and below the stopes on the upper level. This block, 180 feet in length is estimated to contain 2,925 tons in the triangular section from the level to near the surface. Previously extracted tonnage from stoped out areas and ore removed by drifting reduces this to 1900 tons. The remainder of this block lies below the level where it is estimated to extend 60 feet or one half way to the middle adit which, sampling indicated, is marginal in grade and will be later discussed under that heading. This rectangular block is estimated to contain 2800 tons at $19.21 per ton.

PROVEN MARGINAL BLOCKS

In the area below the No. 2 or middle adit lies a block which sampling to date is below commercial grade. This block as shown by 32 samples, averages $6.12 per ton. The vein averages 2 feet 2 inches in width and the block is estimated to contain 2,600 tons. Similarly a block close to the breast of the No. 3 or upper adit averages $9.37 in grade and is estimated to contain 1,300 tons. The total tonnage and grade in this category is therefore 3,900 tons at $7.20. If further exploratory work exposes areas similar to these where the copper is present as chalcocite (as the evidence of the changing ore in the end of No. 2 adit seems to indicate) sulfide ore of this tenor would be considered of milling grade. There will

no doubt be areas sorted out in these marginal carbonate blocks that can be mined profitably. For the purpose of this report, marginal blocks are not considered as ore.

PROBABLE AND POSSIBLE ORE

In view of the persistant nature of the fracture as observed on the surface above and beyond the present workings the probability that additional ore exists is quite reasonable. In this case, as in nearly all similar ones, the estimation of probable ore is based most entirely on the experience and judgment of the engineer, coupled with, and influenced by, his careful study of surface and underground as compared with his previous experience with deposits of a similar nature.

I estimate that there is an amount of probable ore beyond and above present workings in an amount equal to the blocks already proven.

SUMMARY AND RECOMMENDATIONS.

It is estimated that there are 15,600 tons of proven and probable ore in the Unida property that can be mined and treated at a profit.

Preparations should continue to prepare the property for a production of 50 tons per day for shipment to the Magma smelter at Superior, Arizona.

As soon as track and pipe is laid and machinery installed, the No. 2 or middle adit should be advanced beyond the sulfide stope southeastward on this strong vein. Simultaneously a sub-level should be drifted northwestward to the surface from a point in the raise connecting the middle and upper adits

about 100 feet above the middle adit. This drift can be driven inward to the raise from the surface if later investigation proves this more practicable. This drift should maintain a track grade of ½ of one percent toward the portal so that this adit can later replace the upper adit (where the grade is excessive) as a tramming level. From this new level the block of ore above can be mined including the pillars of the old high grade stopes above the top or No. 3 adit.

In mining the two proven areas, production from the upper block, high in gold and medium grade in copper, should be mixed with production from the lower block, low in gold values and higher in copper, so that the shipments will meet the requirements at the smelter where this ore can be mixed with baren silica for use as a converter flux.

The other viens from which ore has been shipped from this group are accessible only through shafts in bad state of repair. No work is recommended on these veins, at least for the present.

Lynn Hersey

LYNN HERSEY,
Registered Engineer
State of Arizona

Form MF-100
(March 1951)

U. S. DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS ADMINISTRATION

Form approved.
Budget Bureau No. 42-R1026.

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

NOT TO BE FILLED IN BY APPLICANT

Docket No. Oma-443X

Date received 5/7/51

United Mine Operators, Inc.
Post Office Box 836
Wickenburg, Arizona

Name and address of applicant

See attached detail answers to following. "General Technical Data" attached hereto, except Items 8 and 9, shown heron.

Date April 30, 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. L. Maguire	President-"D	None	50,000	500	-0-	None	
J. P. Harper	Vice Pres,D	None	50,000	-0-	-0-	None	
S. F. Maguire	Secy-Tres."D"	None	50,000	500	-0-	None	
Lynn Hersey, Consulting Eng. "D"		$4500		-0-	-0-	None	
N. S. Oberan, Sr.	"D"			-0-	-0-	None	
L. M. Winter		None		1000	-0-	None	
	Total	$4500	x x x x x	2000	-0-	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	$ 100,000	$ 5,000	$ 5.00	1000	None
Preferred stock	$	$	$		

*Indicate period covered.

10. Production:

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.

(*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.

United Mine Operators, Inc.
(Name of company)

By C. Magnuson
(Signature of authorized official)

April 30, 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—63792-1

UNITED MINE OPERATORS, INC.

WICKENBURG, ARIZONA

April 30, 1951

Detailed sheets to accompany Form MF-100

1. Materials produced:

   (a) What are the chief mine, mill, or smelter products?

   Copper

   (b) What are the byproducts, if any?

   Silicious ore containing small amounts of gold, desirable as flux at Arizona copper smelters handling concentrates from major copper producers. Silicious flux containing no copper is often mined for silica alone by smelters, thus using manpower needed in mining of critical metals.

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:

   "UNIDA","MISPAH", and "KEYSTONE", related group of 36 patented and 21 unpatented mining claims.

   (a) Linear feet of shafts.

   1432 linear feet

   (b) Linear feet of drifts and crosscuts.

   730 linear feet

   (c) Linear feet of tunnels or adits.

   1670 linear feet

   (d) Indicate whether mine is flooded or not. Describe any pumping problems. Give size or productive capacity.

   Active portion of property not flooded. Shafts in inactive portion contain some water. Inactive areas to be tested by diamond drilling from surface before any plans are made for unwatering or repair of existing workings.

   Present production capacity 1300 tons silicious fluxing ore per month. Production can increase as drifting opens additional areas.

3. For each operation listed above supply the following:

(a) Distance and direction from nearest town and shipping point.

Eleven miles Northeast of Wickenburg, Arizona. Good trucking road.

(b) Mining district.

Black Rock Mining district.

(c) Township, Section, Range.

Township 8N; Sections 3,4,5,8,9,10,15,16,17; Range 3 West.

(d) County, State.
Yavapai County, Arizona.

4. (a) State whether or not property is now in operation, and if in operation, by whom operated.

Property not now in production, machinery being installed and adit workings being repaired preparatory to operation.

(b) Are you operating this property as Owner, Lessee, Contractor?

Operating for Owner.

5. If not in production or operation, estimated date when production will begin.

Production estimated to begin latter part of May, 1951.

6. Experience of operators:

(a) C. L. Maguire, President, United Mine Operators, has no mining experience. He was in the Petroleum business from September, 1910 to August, 1948, and retired then for health reasons when the three companies he had built up (C. L. Maguire, Inc. Production, Simrall Corp. Pipe Lines, and Roosevelt Oil Co., Refining) were all consolidated as the Roosevelt Oil and Refining Company by F. Eberstadt and Company of New York. C. L. Maguire is a Director of Roosevelt Oil and Refining Company.

(b) Mr. Jene Harper, Vice President, United Mine Operators. Mr. Harper is the President of the Franklin Supply Company, Chicago, Illinois, suppliers of construction and petroleum equipment.

(c) S. F. Maguire, Secretary-Treasurer, United Mine Operators. S. F. Maguire, wife of C. L. Maguire, has had thirty years of successful business experience, both before and after 1931 when she joined the above companies and became Secretary-Treasurer of them.

(d) Lynn Hersey, Consulting Engineer, fifteen years mining and Chief Engineer, Phelps Dodge Corporation. General Manager, Copper Range Company. Twenty-seven years mining management and consulting experience. Graduate of University of Idaho, 1923.

(e) E. E. Sturrock, Mine Superintendent, Eight years mining and engineering experience at Howe Sound Company and Miami Copper Company. Graduate of Washington State College, 1943.

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:

The Unida, Mispah, and Keystone workings were all originally opened up in 1909 and 1910. They all produced some copper during World War I and closed down when the price of copper dropped following the war. The Mispah and Keystone openings, being developed by verticle shafts could not be easily reopened when the copper price improved. The Unida, having been developed by three adits, operated in the 1920's and closed during the depression when copper dropped to 6 cents per pound. From the excavations remaining in the three adits on this vein some 5000 to 10,000 tons appear to have been mined. Copies of smelter shipment sheets, in the hands of present owners, show average of .33 oz. gold and 2.56% copper on some 750 tons represented on the sheets.

(b) State briefly the known history and production of adjoining and neighboring properties.

No records are available on adjacent 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.

See Report by Lynn Hersey, Consulting Engineer, attached hereto.

8. See MF-100 Form itself.

9. " " " " " .

10. Production:

See Number 7, above.

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.

Scheduled @ 50 tons per day. May go to 100 tons as developement progresses.

12. Ore or Mineral Reserves:

See Hersey's Report, attached hereto.

13. Access Roads:

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

See Question Number 3.
Yavapai County road passes across property below middle adit.

14. Water Supply:

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

Adequate water in well on property. Well equipped with electric pump and pipeline to 3,000 gallon storage tank located on hill above top adit. Believed adequate year around for present plans.

15. Power:

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

Have 63KVA deisel generator which will adequately handle power needs.

16. Labor:

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

(Labor, Continued from page four)

Eight men working on rehabilitation and installation of machinery. These men are all experienced miners or miners helpers; four of each.

17. Equipment and facilities:

(a) Buildings:

One mine office and supplies building, 12 x 20 feet in size.
One building, 20 x 30 feet, housing deisel generator and two deisel compressors.
One tool shed at portal No. 2 adit, 10 x 10 feet in size.
All in first class condition.
One quanset in the town of Wickenburg in use as general office, 20 x 30 feet in size with rooms for Consulting Engineer, Mine Superintendent, and Secretary-Bookkeeper.

(b) The following operating equipment all in first class condition.

1 - 500 cfm Worthington compressor D13,000 caterpillar engine.
1 - 650 cfm C. P. compressor D13,000 caterpillar deisel engine.
1 - 63 KVA generator, D8,800 caterpillar deisel engine.
1 - 105 cfm Worthington Compressor.
1 - TD 24 International Bulldozer.
1 - International Dump truck.
1 - Jeep pickup truck.
1 - International flat bed truck.
2 - Little Marsha storage battery locomotives with two extra battery charging racks, charging panels, etc.
1 - EUA Ingersoll Rand hoist.
2 - 12 B Eimco shovel loaders.
14.- One-ton side dump mine cars.
2 - Gardner Denver 3" drifters complete.
2 - Ingersoll Rand stopers.
2 - Chicago Neumatic light drifters.
1 - Gardner Denver Jack hammer.
1 - Set 25 Edison lamps with charging panel.
1 - KAB Worthington well pump.
1 - Berger Mine Transit.
1 - Monroe Calculator
Complete Installation.

LYNN HERSEY
CONSULTING MINING ENGINEER

P.O. BOX 1115
MIAMI, ARIZONA

February 17, 1951

Mr. C. L. Maguire, President,
United Mine Operators, Inc.,
Wickenburg, Arizona

Dear Sir:

Please find herewith a report covering my examination and sampling of the UNIDA mining property located on the Constellation road near Wickenburg, Ariz.

The investigation consisted of the taking of some 150 samples in the three adits; in the sub-level between the middle and lower adits, and in old stopes from which production in prior years was obtained; and of a carefull and detailed examination and study of surface exposures along the vein to the southeast.

I estimate that there are 15,600 short tons of proven and probably ore with an average grade at the present prices of metals of $18.70 per dry ton. I think this grade can be improved by selective mining as was done in previous shipments from the property.

The cost of bringing this mine into production at 50 tons per day is estimated at $150,000 including working capital. Of this; $74,500 or about one-half, will be equipment and machinery of a salvagable nature.

It is recommended that you proceed with the development and operation of this property as outlined herein.

Yours very truly,
Lynn Hersey
CONSULTING ENGINEER

LH:ry

February 17, 1951

REPORT
on the
UNIDA GROUP OF CLAIMS
Black Rock Mining District
Yavapai County, Arizona

by

Lynn Hersey Consulting Engineer

LOCATION AND GENERAL CONDITIONS

This property consists of ten contiguous patented and one unpatented mining claims located about eleven miles northeasterly of Wickenburg, Arizona and is connected with Wickenburg by a good dirt trucking road maintained by Yavapai County; which road passes between the middle and lower adits.

The mean elevation of the property is about 3,800 feet above sea level. The terrain is extremely rugged with no timber and only the usual semi-arid vegetation of shrubs and grasses.

GENERAL GEOLOGY

The entire area covered by these claims is made up of igneous rocks; the plutonic rocks being granite, syenite and diorite in which fractures have been filled by intrusive dikes of rhyolite, trachite and andesite sometimes cutting each other. The Bloo Neley vein, on which three adits have been driven, appears to be the latest major fracture in the area and seems to cut all granitic rocks and intrusives. It is a strong and persistent vein, observed and sampled on the surface for approximately 4,000 feet. It strikes about north 50 degrees west actual, and is consistent in it's strike throughout it's observed length. Due to the steep topography, the vein appears to strike N 60 W

on the western side of the mountain and about N.40 W on the eastern side; and the claims are laid out parallel to these apparent strikes.

The vein dips to the southwest at about 58 degrees. It is composed of gouge and brecciated matter caused by the faulting movement and has been impregnated, hardened, and partly solidified by secondary silicification. A preliminary examination of the gouge does not clearly indicate the direction of the movement but, since the phenocrysts of feldspars on the foot-wall side of the vein seem to average considerably larger than those on the hanging-wall side, it is reasonable to assume that it was a normal fault.

MINERALOGY

The copper minerals making up the exposed ore consist of the carbonates malachite and azurite, and the silicate crysocolla. A stope near the breast of the middle adit shows some primary chalcocite; the mineral where exposed being in the process of alteration to carbonates and silicates.

The precious metals are gold and silver with the preponderant value in gold which occurs in native form and appears to be connected with the limonite and hematite seams in the vein, and with the free quartz. The gold is easily panned. For the purpose of economy the silver was not assayed. Previous assaying has demonstrated that the ore does not contain enough silver to materially influence its value.

ORE OCCURRENCE

The ore seems to occur in a shoot, the outer edge

of which roughly parallels the surface. However, since the native gold on the surface exposures samples about the same as underground, it is possible that the copper may have been leached from the vein near the surface. No secondary enrichment has been encountered to date. The extent of the shoot has not been determined because the upper two adits stopped in ore. The face of the lower adit is not on the vein, and it will be necessary to cross cut or diamond drill before drifting further on this level.

ORE RESERVES

In my preliminary sampling of the vein on the levels only (before the raises and stopes were made accessible) I obtained an average gold assay of 0.35 oz. and an average for copper of 3.03%. A composite of the 13 preliminary samples taken showed the following analysis:

Au 0.35 oz. SiO_2 59.9% Al_2O_3 7.7% Cu 3.03% Fe 10.2%.

These samples were taken in areas between and beyond the previously operated stoped. The vein as sampled averaged 3 feet in width. Since the previous operators, no doubt, mined the better and wider portions of the vein, my preliminary sampling may have tended toward the conservative side both as to vein width and grade. The average of all available smelter settlement sheets from previous shipments were as follows;

Au 0.32 oz. SiO_2 64.4% Al_2O_3 6.9% Cu 2.11% Fe 10.1%.

Inspection and measurement of the old stopes shows that mining was done to an average width of 4.8 feet in

area where the profitable vein averages only about 3.4 feet. This, no doubt, caused some unnecessary dilution which may have been partly offset by a certain amount of hand sorting. It is my opinion, from careful inspection of the walls, that the vein can be mined much cleaner than was previously done.

Based on a mean of the above analysis, inquiries were made to 5 Southwestern smelters of which the Magma Copper Company smelter at Superior, Arizona, and International Smelting & Refining Company at Miami, Arizona were the closest. The reply from Magma smelter is quoted below:

C O P Y

MAGMA COPPER COMPANY
Superior, Ariz.

June 30, 1950.

Mr. Lynn Hersey
P. O. Box 1115
Miami, Arizona

Dear Mr. Hersey:

This is in reply to your letter of June 28th relative to gold copper ore you propose to ship from Wickenburg next October.

From the assay and analysis given the smelter return per dry ton at present metal prices would be as follows:

Payment for metals:		
Gold 0.33 Oz. at $32.20	$10.63	
Copper, 51 lb. less 8, or 43 l b @ 19.45¢	8.36	$18.99
Estimated Charges:		
Smelting charge per dry ton	5.27	
Freight from Wickenburg (wet ton)	3.17	8.44
Estimated net return per dry ton		$10.55

It is suggested that when you are ready to ship that you send us a trial car and if the ore is suitable to our operation we will advise you as to the amount of shipments that we can accept.

Enclosed is a copy of our present treatment schedule.

Yours truly,

J. H. Rose

Metallurgical Supt.

JHR/r
Encl--1

As of the date of the above letter, the price of copper was 22.5 cents per pound. At the present price per pound of 24.5 cents the "estimated net return per dry ton" would be $11.41. The net return estimated by International was $9.14 per ton; the difference being due to a deduction of 10# of copper from gross by International as compared with 8 by Magma and a freight deduction of $4.25 per ton. At the new price of copper the Inspiration net return will be exactly $10.00 per ton. The Magma smelter is most in need of silica flux and will probably be favored.

Thorough sampling of adits, raises, stopes and surface open cuts has now been completed and has shown the existence of the following ore reserves:-

PROVEN BLOCKS

For the purpose of this report it is considered that proven and blocked out ore should have an average assay value of approximately $18.00 per ton to be considered as commercial. A block at the eastern end of #2 adit, where stoping has been done in an area showing some copper sulfide minerals, a block projected 50 feet above and below the level and 50 feet beyond the end of the drift (which stopped in ore) figures to have 3,100 tons with a grade of 0.04 Au and 3.37% Cu. This gives a gross value at present prices of metal of $17.93 per ton.

It was noted in sampling this block that the higher assays seemed to come from the most freshly broken areas. The older workings are extremely hard to sample due to the presence of large quantities of scaling and decomposed rock

which appears to have lost a part at least of its original mineralization. All of these samples are used, however, at the values obtained and may later prove to have been conservatively calculated.

A second block averaging $19.21 per ton is calculated around, above and below the stopes on the upper level. This block, 180 feet in length is estimated to contain 2,925 tons in the triangular section from the level to near the surface. Previously extracted tonnage from stoped out areas and ore removed by drifting reduces this to 1900 tons. The remainder of this block lies below the level where it is estimated to extend 60 feet or one half way to the middle adit which, sampling indicated, is marginal in grade and will be later discussed under that heading. This rectangular block is estimated to contain 2800 tons at $19.21 per ton.

PROVEN MARGINAL BLOCKS

In the area below the No. 2 or middle adit lies a block which sampling to date is below commercial grade. This block as shown by 32 samples, averages $6.12 per ton. The vein averages 2 feet 2 inches in width and the block is estimated to contain 2,600 tons. Similarly a block close to the breast of the No. 3 or upper adit averages $9.37 in grade and is estimated to contain 1,300 tons. The total tonnage and grade in this category is therefore 3,900 tons at $7.20. If further exploratory work exposes areas similar to these where the copper is present as chalcocite (as the evidence of the changing ore in the end of No. 2 adit seems to indicate) sulfide ore of this tenor would be considered of milling grade. There will

no doubt be areas sorted out in these marginal carbonate blocks that can be mined profitably. For the purpose of this report, marginal blocks are not considered as ore.

PROBABLE AND POSSIBLE ORE

In view of the persistant nature of the fracture as observed on the surface above and beyond the present workings the probability that additional ore exists is quite reasonable. In this case, as in nearly all similar ones, the estimation of probable ore is based most entirely on the experience and judgment of the engineer, coupled with, and influenced by, his careful study of surface and underground as compared with his previous experience with deposits of a similar nature.

I estimate that there is an amount of probable ore beyond and above present workings in an amount equal to the blocks already proven.

SUMMARY AND RECOMMENDATIONS.

It is estimated that there are 15,600 tons of proven and probable ore in the Unida property that can be mined and treated at a profit.

Preparations should continue to prepare the property for a production of 50 tons per day for shipment to the Magma smelter at Superior, Arizona.

As soon as track and pipe is laid and machinery installed, the No. 2 or middle adit should be advanced beyond the sulfide stope southeastward on this strong vein. Simultaneously a sub-level should be drifted northwestward to the surface from a point in the raise connecting the middle and upper adits

about 100 feet above the middle adit. This drift can be driven inward to the raise from the surface if later investigation proves this more practicable. This drift should maintain a track grade of ½ of one percent toward the portal so that this adit can later replace the upper adit (where the grade is excessive) as a tramming level. From this new level the block of ore above can be mined including the pillars of the old high grade stopes above the top or No. 3 adit.

In mining the two proven areas, production from the upper block, high in gold and medium grade in copper, should be mixed with production from the lower block, low in gold values and higher in copper, so that the shipments will meet the requirements at the smelter where this ore can be mixed with baren silica for use as a converter flux.

The other viens from which ore has been shipped from this group are accessible only through shafts in bad state of repair. No work is recommended on these veins, at least for the present.

Lynn Hersey

LYNN HERSEY,
Registered Engineer
State of Arizona

Form MF-100
(March 1951)

DMA

U. S. DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS ADMINISTRATION

Form approved.
Budget Bureau No. 42-R1026.

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

NOT TO BE FILLED IN BY APPLICANT

Docket No. dma-443 X

Date received 5/7/51

United Mine Operators, Inc.
Post Office Box 836
Wickenburg, Arizona

Name and address of applicant

See attached detail answers to following. "General Technicall Data" attached hereto, except 8 and 9 shown hereon.

Date April 30, 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)
S. L. Maguire	President-"D"	None	30,000	500	-0-	None	
J. R. Morgor	Vice Pres. D	None	30,000	-0-	-0-	None	
S. P. Maguire	Secy-Treas. "D"	None	30,000	500	-0-	None	
Lynn Morgoy, Consulting Eng. "D"		4500		-0-	-0-	None	
J. S. Oboran, Sr.	"D"			-0-	-0-	None	
L. M. Winter		None		1000	-0-	None	
	Total	4500	x x x x x	2000	-0-	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	$100,000	$5,000	$5.00	1000	None
Preferred stock	$	$	$		

*Indicate period covered.

10. Production:

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.

(*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.

United Mine Operators, Inc.
(Name of company)

By [signature]
(Signature of authorized official)

April 30, 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—63792-1

UNITED MINE OPERATORS, INC.
WICKENBURG, ARIZONA

April 30, 1951

Detailed sheets to accompany Form MP-100

1. Materials produced:

(a) What are the chief mine, mill, or smelter products?

Copper

(b) What are the byproducts, if any?

Silicious ore containing small amounts of gold, desirable as flux at Arizona copper smelters handling concentrates from major copper producers. Silicious flux containing no copper is often mined for silica alone by smelters, thus using manpower needed in mining of critical metals.

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:

"UNIDA","HISPAN", and "KEYSTONE", related group of 36 patented and 21 unpatented mining claims.

(a) Linear feet of shafts.

1432 linear feet

(b) Linear feet of drifts and crosscuts.

730 linear feet

(c) Linear feet of tunnels or adits.

1670 linear feet

(d) Indicate whether mine is flooded or not. Describe any pumping problems. Give size or productive capacity.

Active portion of property not flooded. Shafts in inactive portion contain some water. Inactive areas to be tested by diamond drilling from surface before any plans are made for unwatering or repair of existing workings.

Present production capacity 1300 tons silicious fluxing ore per month. Production can increase as drifting opens additional areas.

3. For each operation listed above supply the following:

(a) Distance and direction from nearest town and shipping point.

Eleven miles Northeast of Wickenburg, Arizona. Good trucking road.

(b) Mining district.

Black Rock Mining district.

(c) Township, Section, Range.

Township 8N; Sections 3,4,5,8,9,10,15,16,17; Range 3 West.

(d) County, State.
Yavapai County, Arizona.

4. (a) State whether or not property is now in operation, and if in operation, by whom operated.

Property not now in production, machinery being installed and adit workings being repaired preparatory to operation.

(b) Are you operating this property as Owner, Lessee, Contractor?

Operating for Owner.

5. If not in production or operation, estimated date when production will begin.

Production estimated to begin latter part of May, 1951.

6. Experience of operators:

(a) C. L. Maguire, President, United Mine Operators, has no mining experience. He was in the Petroleum business from September, 1910 to August, 1948, and retired then for health reasons when the three companies he had built up (C. L. Maguire, Inc. Production, Simrall Corp. Pipe Lines, and Roosevelt Oil Co., Refining) were all consolidated as the Roosevelt Oil and Refining Company by F. Eberstadt and Company of New York. C. L. Maguire is a Director of Roosevelt Oil and Refining Company.

(b) Mr. Jone Harper, Vice President, United Mine Operators. Mr. Harper is the President of the Franklin Supply Company, Chicago, Illinois, suppliers of construction and petroleum equipment.

(c) S. P. Maguire, Secretary-Treasurer, United Mine Operators. S. P. Maguire, wife of C. L. Maguire, has had thirty years of successful business experience, both before and after 1931 when she joined the above companies and became Secretary-Treasurer of them.

(d) Lynn Hersey, Consulting Engineer, fifteen years mining and Chief Engineer, Phelps Dodge Corporation. General Manager, Copper Range Company. Twenty-seven years mining management and consulting experience. Graduate of University of Idaho, 1923.

(e) E. E. Sturrock, Mine Superintendent, Eight years mining and engineering experience at Howe Sound Company and Miami Copper Company. Graduate of Washington State College, 1943.

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:

The Unida, Hispah, and Keystone workings were all originally opened up in 1909 and 1910. They all produced some copper during World War I and closed down when the price of copper dropped following the war. The Hispah and Keystone openings, being developed by verticle shafts could not be easily reopened when the copper price improved. The Unida, having been developed by three adits, operated in the 1920's and closed during the depression when copper dropped to 6 cents per pound. From the excavations remaining in the three adits on this vein some 5000 to 10,000 tons appear to have been mined. Copies of smelter shipment sheets, in the hands of present owners, show average of .33 oz. gold and 2.56% copper on some 750 tons represented on the sheets.

(b) State briefly the known history and production of adjoining and neighboring properties.

No records are available on adjacent 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.

See Report by Lynn Hersey, Consulting Engineer, attached hereto.

8. See MP-100 Form itself.

9. " " " " " .

10. Production:

See Number 7, above.

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.

Scheduled @ 50 tons per day. May go to 100 tons as developement progresses.

12. Ore or Mineral Reserves:

See Hersey's Report, attached hereto.

13. Access Roads:

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

See Question Number 3.
Yavapai County road passes across property below middle adit.

14. Water Supply:

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

Adequate water in well on property. Well equipped with electric pump and pipeline to 3,000 gallon storage tank located on hill above top adit. Believed adequate year around for present plans.

15. Power:

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

Have 63KVA deisel generator which will adequately handle power needs.

16. Labor:

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

(Labor, Continued from page four)

Eight men working on rehabilitation and installation of machinery. These men are all experienced miners or miners helpers; four of each.

17. Equipment and facilities:

(a) Buildings:

One mine office and supplies building, 12 x 20 feet in size.
One building, 20 x 30 feet, housing deisel generator and two deisel compressors.
One tool shed at portal No. 2 adit, 10 x 10 feet in size.
All in first class condition.
One quanset in the town of Wickenburg in use as general office, 20 x 30 feet in size with rooms for Consulting Engineer, Mine Superintendent, and Secretary-Bookkeeper.

(b) The following operating equipment all in first class condition.

1 - 500 cfm Worthington compressor D13,000 caterpillar engine.
1 - 650 cfm C. P. compressor D13,000 caterpillar deisel engine.
1 - 63 KVA generator, D8,800 caterpillar deisel engine.
1 - 105 cfm Worthington Compressor.
1 - TD 24 International Bulldozer.
1 - International Dump truck.
1 - Jeep pickup truck.
1 - International Flat bed truck.
2 - Little Marsha storage battery locomotives with two extra battery charging racks, charging panels, etc.
1 - EUA Ingersoll Rand hoist.
2 - 12 B Eimco shovel loaders.
14.- One-ton side dump mine cars.
2 - Gardner Denver 3" drifters complete.
2 - Ingersoll Rand stopers.
2 - Chicago Neumatic light drifters.
1 - Gardner Denver Jack hammer.
1 - Set 25 Edison lamps with charging panel.
1 - KAB Worthington well pump.
1 - Berger Mine Transit.
1 - Monroe Calculator
<u>Complete Installation</u>.

LYNN HERSEY
CONSULTING MINING ENGINEER

P.O. BOX 1115
MIAMI, ARIZONA

February 17, 1951

Mr. C. L. Maguire, President,
United Mine Operators, Inc.,
Wickenburg, Arizona

Dear Sir:

Please find herewith a report covering my examination and sampling of the UNIDA mining property located on the Constellation road near Wickenburg, Ariz.

The investigation consisted of the taking of some 150 samples in the three adits; in the sub-level between the middle and lower adits, and in old stopes from which production in prior years was obtained; and of a carefull and detailed examination and study of surface exposures along the vein to the southeast.

I estimate that there are 15,600 short tons of proven and probably ore with an average grade at the present prices of metals of $18.70 per dry ton. I think this grade can be improved by selective mining as was done in previous shipments from the property.

The cost of bringing this mine into production at 50 tons per day is estimated at $150,000 including working capital. Of this; $74,500 or about one-half, will be equipment and machinery of a salvagable nature.

It is recommended that you proceed with the development and operation of this property as outlined herein.

Yours very truly,
Lynn Hersey
CONSULTING ENGINEER

LH:ry

February 17, 1951

REPORT
on the
UNIDA GROUP OF CLAIMS
Black Rock Mining District
Yavapai County, Arizona

by

Lynn Hersey Consulting Engineer

LOCATION AND GENERAL CONDITIONS

This property consists of ten contiguous patented and one unpatented mining claims located about eleven miles northeasterly of Wickenburg, Arizona and is connected with Wickenburg by a good dirt trucking road maintained by Yavapai County; which road passes between the middle and lower adits.

The mean elevation of the property is about 3,800 feet above sea level. The terrain is extremely rugged with no timber and only the usual semi-arid vegetation of shrubs and grasses.

GENERAL GEOLOGY

The entire area covered by these claims is made up of igneous rocks; the plutonic rocks being granite, syenite and diorite in which fractures have been filled by intrusive dikes of rhyolite, trachite and andesite sometimes cutting each other. The Bloo Neley vein, on which three adits have been driven, appears to be the latest major fracture in the area and seems to cut all granitic rocks and intrusives. It is a strong and persistent vein, observed and sampled on the surface for approximately 4,000 feet. It strikes about north 50 degrees west actual, and is consistent in it's strike throughout it's observed length. Due to the steep topography, the vein appears to strike N 60 W

on the western side of the mountain and about N.40 W on the eastern side; and the claims are laid out parallel to these apparent strikes.

The vein dips to the southwest at about 58 degrees. It is composed of gouge and brecciated matter caused by the faulting movement and has been impregnated, hardened, and partly solidified by secondary silicification. A preliminary examination of the gouge does not clearly indicate the direction of the movement but, since the phenocrysts of feldspars on the foot-wall side of the vein seem to average considerably larger than those on the hanging-wall side, it is reasonable to assume that it was a normal fault.

MINERALOGY

The copper minerals making up the exposed ore consist of the carbonates malachite and azurite, and the silicate crysocolla. A stope near the breast of the middle adit shows some primary chalcocite; the mineral where exposed being in the process of alteration to carbonates and silicates.

The precious metals are gold and silver with the preponderant value in gold which occurs in native form and appears to be connected with the limonite and hematite seams in the vein, and with the free quartz. The gold is easily panned. For the purpose of economy the silver was not assayed. Previous assaying has demonstrated that the ore does not contain enough silver to materially influence its value.

ORE OCCURRENCE

The ore seems to occur in a shoot, the outer edge

of which roughly parallels the surface. However, since the native gold on the surface exposures samples about the same as underground, it is possible that the copper may have been leached from the vein near the surface. No secondary enrichment has been encountered to date. The extent of the shoot has not been determined because the upper two adits stopped in ore. The face of the lower adit is not on the vein, and it will be necessary to cross cut or diamond drill before drifting further on this level.

ORE RESERVES

In my preliminary sampling of the vein on the levels only (before the raises and stopes were made accessible) I obtained an average gold assay of 0.35 oz. and an average for copper of 3.03%. A composite of the 13 preliminary samples taken showed the following analysis:

Au 0.35 oz. SiO_2 59.9% Al_2O_3 7.7% Cu 3.03% Fe 10.2%.

These samples were taken in areas between and beyond the previously operated stopes. The vein as sampled averaged 3 feet in width. Since the previous operators, no doubt, mined the better and wider portions of the vein, my preliminary sampling may have tended toward the conservative side both as to vein width and grade. The average of all available smelter settlement sheets from previous shipments were as follows;

Au 0.32 oz. SiO_2 64.4% Al_2O_3 6.9% Cu 2.11% Fe 10.1%.

Inspection and measurement of the old stopes shows that mining was done to an average width of 4.8 feet in

area where the profitable vein averages only about 3.4 feet. This, no doubt, caused some unnecessary dilution which may have been partly offset by a certain amount of hand sorting. It is my opinion, from careful inspection of the walls, that the vein can be mined much cleaner than was previously done.

Based on a mean of the above analysis, inquiries were made to 5 Southwestern smelters of which the Magma Copper Company smelter at Superior, Arizona, and International Smelting & Refining Company at Miami, Arizona were the closest. The reply from Magma smelter is quoted below:

C O P Y

MAGMA COPPER COMPANY
Superior, Ariz.

June 30, 1950.

Mr. Lynn Hersey
P. O. Box 1115
Miami, Arizona

Dear Mr. Hersey:

This is in reply to your letter of June 28th relative to gold copper ore you propose to ship from Wickenburg next October.

From the assay and analysis given the smelter return per dry ton at present metal prices would be as follows:

Payment for metals:		
Gold 0.33 Oz. at $32.20	$10.63	
Copper, 51 lb. less 8, or 43 l b @ 19.45¢	8.36	$18.99
Estimated Charges:		
Smelting charge per dry ton	5.27	
Freight from Wickenburg (wet ton)	3.17	8.44
Estimated net return per dry ton		$10.55

It is suggested that when you are ready to ship that you send us a trial car and if the ore is suitable to our operation we will advise you as to the amount of shipments that we can accept.

Enclosed is a copy of our present treatment schedule.

Yours truly,

J. H. Rose

Metallurgical Supt.

JHR/r
Encl--1

As of the date of the above letter, the price of copper was 22.5 cents per pound. At the present price per pound of 24.5 cents the "estimated net return per dry ton" would be $11.41. The net return estimated by International was $9.14 per ton; the difference being due to a deduction of 10# of copper from gross by International as compared with 8 by Magma and a freight deduction of $4.25 per ton. At the new price of copper the Inspiration net return will be exactly $10.00 per ton. The Magma smelter is most in need of silica flux and will probably be favored.

Thorough sampling of adits, raises, stopes and surface open cuts has now been completed and has shown the existence of the following ore reserves:-

PROVEN BLOCKS

For the purpose of this report it is considered that proven and blocked out ore should have an average assay value of approximately $18.00 per ton to be considered as commercial. A block at the eastern end of #2 adit, where stoping has been done in an area showing some copper sulfide minerals, a block projected 50 feet above and below the level and 50 feet beyond the end of the drift (which stopped in ore) figures to have 3,100 tons with a grade of 0.04 Au and 3.37% Cu. This gives a gross value at present prices of metal of $17.93 per ton.

It was noted in sampling this block that the higher assays seemed to come from the most freshly broken areas. The older workings are extremely hard to sample due to the presence of large quantities of scaling and decomposed rock.

which appears to have lost a part at least of its original mineralization. All of these samples are used, however, at the values obtained and may later prove to have been conservatively calculated.

A second block averaging $19.21 per ton is calculated around, above and below the stopes on the upper level. This block, 180 feet in length is estimated to contain 2,925 tons in the triangular section from the level to near the surface. Previously extracted tonnage from stoped out areas and ore removed by drifting reduces this to 1900 tons. The remainder of this block lies below the level where it is estimated to extend 60 feet or one half way to the middle adit which, sampling indicated, is marginal in grade and will be later discussed under that heading. This rectangular block is estimated to contain 2800 tons at $19.21 per ton.

PROVEN MARGINAL BLOCKS

In the area below the No. 2 or middle adit lies a block which sampling to date is below commercial grade. This block as shown by 32 samples, averages $6.12 per ton. The vein averages 2 feet 2 inches in width and the block is estimated to contain 2,600 tons. Similarly a block close to the breast of the No. 3 or upper adit averages $9.37 in grade and is estimated to contain 1,300 tons. The total tonnage and grade in this category is therefore 3,900 tons at $7.20. If further exploratory work exposes areas similar to these where the copper is present as chalcocite (as the evidence of the changing ore in the end of No. 2 adit seems to indicate) sulfide ore of this tenor would be considered of milling grade. There will

no doubt be areas sorted out in these marginal carbonate blocks that can be mined profitably. For the purpose of this report, marginal blocks are not considered as ore.

PROBABLE AND POSSIBLE ORE

In view of the persistant nature of the fracture as observed on the surface above and beyond the present workings the probability that additional ore exists is quite reasonable. In this case, as in nearly all similar ones, the estimation of probable ore is based most entirely on the experience and judgment of the engineer, coupled with, and influenced by, his careful study of surface and underground as compared with his previous experience with deposits of a similar nature.

I estimate that there is an amount of probable ore beyond and above present workings in an amount equal to the blocks already proven.

SUMMARY AND RECOMMENDATIONS.

It is estimated that there are 15,600 tons of proven and probable ore in the Unida property that can be mined and treated at a profit.

Preparations should continue to prepare the property for a production of 50 tons per day for shipment to the Magma smelter at Superior, Arizona.

As soon as track and pipe is laid and machinery installed, the No. 2 or middle adit should be advanced beyond the sulfide stope southeastward on this strong vein. Simultaneously a sub-level should be drifted northwestward to the surface from a point in the raise connecting the middle and upper adits

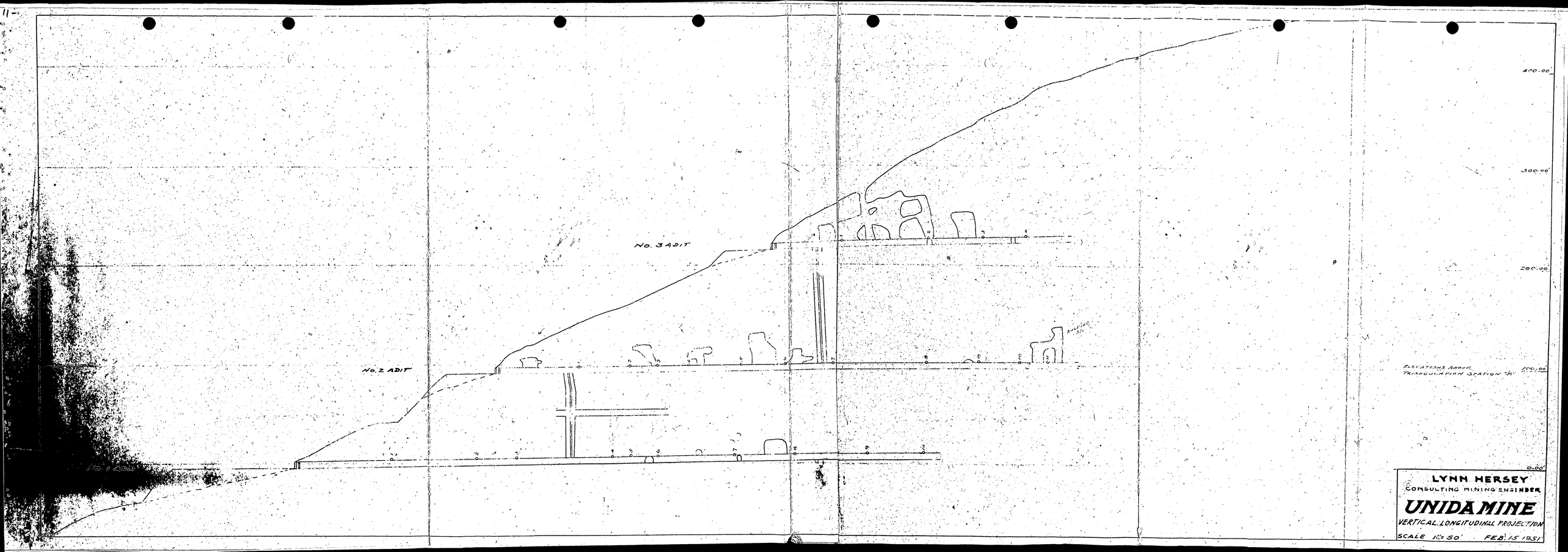
about 100 feet above the middle adit. This drift can be driven inward to the raise from the surface if later investigation proves this more practicable. This drift should maintain a track grade of ½ of one percent toward the portal so that this adit can later replace the upper adit (where the grade is excessive) as a tramming level. From this new level the block of ore above can be mined including the pillars of the old high grade stopes above the top or No. 3 adit.

In mining the two proven areas, production from the upper block, high in gold and medium grade in copper, should be mixed with production from the lower block, low in gold values and higher in copper, so that the shipments will meet the requirements at the smelter where this ore can be mixed with baren silica for use as a converter flux.

The other viens from which ore has been shipped from this group are accessible only through shafts in bad state of repair. No work is recommended on these veins, at least for the present.

Lynn Hersey

LYNN HERSEY,
Registered Engineer
State of Arizona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ELEVATIONS ABOVE
TRIANGULATION STATION "A"
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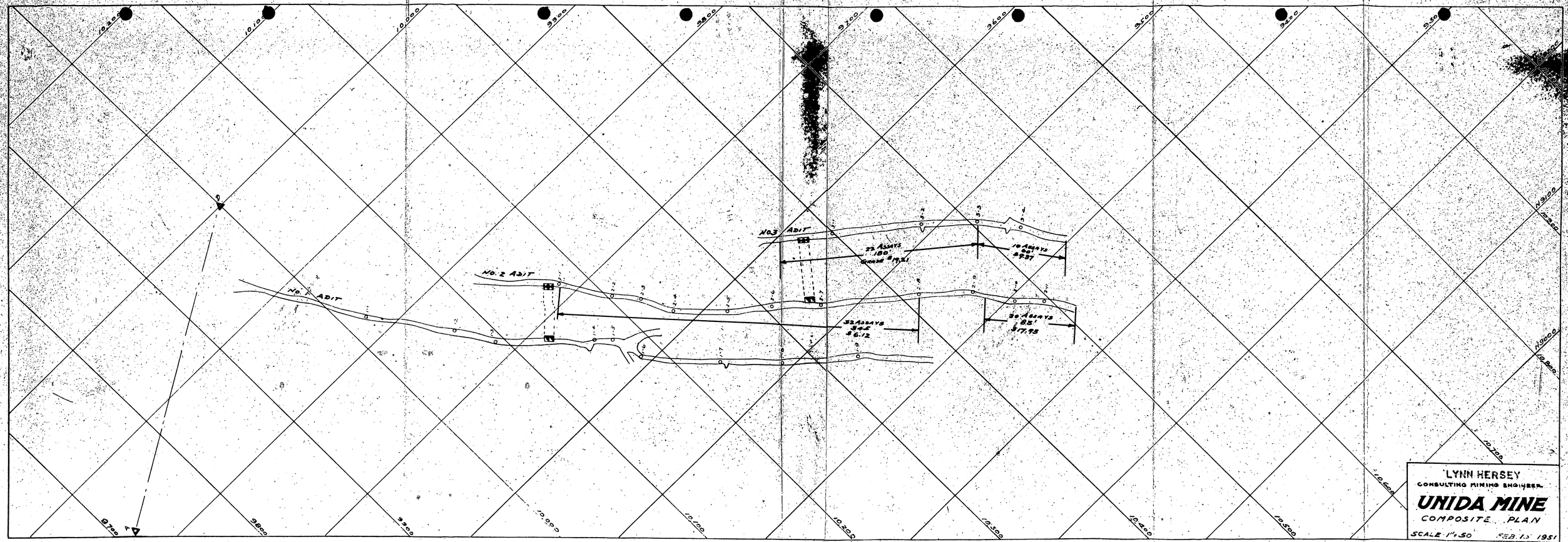
LYNN HERSEY
CONSULTING MINING ENGINEER
UNIDA MINE
VERTICAL LONGITUDINAL PROJECTION
SCALE 1" = 50'
FEB. 15 1951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32 ASSAYS
.062'
$6.12
30 ASSAYS
.025'
$171.93
LYNN HERSEY
CONSULTING MINING ENGINEER
UNIDA MINE
COMPOSITE PLAN
SCALE 1" = 50'
FEB. 15 1951