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

224 New Customhouse
Denver 2, Colorado

September 14, 1951

Memorandum

To: Executive Secretary, Defense Minerals Administration

From: DMA Field Team, Region IV

Subject: Final Report, DMA Docket 1223-I, H. L. Barkey, applicant, Bulldozer Copper Mine, Helvetia Mining District, Pima County, Arizona

Enclosed herewith are the original and two copies of the report on the subject docket.

We concur with the conclusions and recommendations of the examining team that the exploration loan of $8,000 be denied.

The brochure is enclosed.

Paul T. Allman, Alternate

A. H. Koschmann

Enclosures

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF MINES

Mining Division
Region IV

224 NEW CUSTOMHOUSE
DENVER 2, COLORADO

September 11, 1951

Memorandum

To: DMA Field Team, Region IV

From: Chief, Mining Division, Region IV

Subject: Final Report, Docket DMA-1223-X, H. L. Berkey, Applicant, Bulldozer Copper Mine, Helvetia Mining District, Pima County, Arizona

The original application of the subject docket was for exploration of the mine by shaft sinking and cross-cutting at an estimated cost of $30,000. This work was started by a lessee before the examination, and a 70 foot vertical shaft and a 35 foot crosscut was completed. All the work was in altered granite without any copper mineralization.

The lessee submitted an alternative program consisting of a 60 to 100 foot shaft at the granite limestone contact with 100 feet of drifts and cross-cuts at an estimated cost of $8,000.

The ore occurs as pockets and discontinuous veins in fracture zones in a highly altered lines. The ore minerals are principally malachite and azurite, with small amounts of chyscolla, black copper, sulphide and native copper. The limestone is a roof-pendent underlain by unmineralized granite at a shallow depth.

Past production consisted of 35,000 tons of 7 to 10 percent copper ore during World War I and 3,050 tons of 3.87 percent copper ore during 1944 and 1945.

Field evidence and information received from R. E. Chilson regarding the inaccessible workings indicate that all but a very small portion of the favorable ore zone has been explored.

There are not any measured or indicated reserves, and criteria for finding new deposits are lacking .

The examining engineer recommends denial of the application, with which we concur.

Paul T. Allsman

Paul T. Allsman

Mining Division
Date Rec'd.
SEP 10 1951
BUREAU OF MINES
Denver, Colorado Tucson, ARIZONA

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF MINES
MINING DIVISION
REGION IV

Arizona-New Mexico Branch
[redacted]
Box 4097
UNIVERSITY STATION

September 6, 1951

Memorandum

Register

To : Paul T. Allsman, Denver, Colorado

From : Chief, Arizona-New Mexico Br., Mining Div., Region IV
Tucson, Ariz.

Subject : Final Report, DMA Docket 1223X, H. L. Berkey's Bulldozer Copper Mine, Helvetia Mining District, Pima County, Ariz.

Enclosed are original and 7 copies of the above report by T. M. Romslo of the Bureau of Mines. No separate geological report will be submitted.

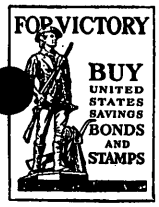
This report has my approval.

Brochure is enclosed.

Walter R. Storms

Walter R. Storms

CC P. T. Allsman (7)
C. A. Anderson
DMA-1223X
DF



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

DEFENSE MINERALS ADMINISTRATION

REPORT OF EXAMINATION BY FIELD TEAM
REGION IV

DMA-1223K, H. L. Berkey's Bulldozer Copper Mine

Helvetia Mining District, Pima County, Ariz.

T. M. Nomalo, Mining Engineer
U. S. Bureau of Mines

September 1951

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

By T. M. Manzolo 1/

The Bulldozer copper mine, Helvetia mining district, Pima County, Ariz., was examined in response to a request for Governmental aid by H. L. Berkey, 1749 South 6th Ave., Tucson, Ariz. The examination was made by a Defense Minerals Administration examiner, under docket DMA-12231, as part of the program authorized by the Defense Production Act of 1950.

The applicant proposed an exploratory project at the Bulldozer mine that was designed to partially develop reserves of copper ore and that could be completed at an estimated cost of $30,000. During the investigation it was found that the proposed project already had been completed by P. J. Rainey, 834 W. Thomas Road, Phoenix, Ariz. Rainey, a lessee of the property, had sunk a 70-foot vertical shaft and completed 35 feet of crosscutting before abandoning the operations due to heavy ground and because the workings had not encountered any sign of copper mineralization. He submitted an alternate program, in the applicant's name, that called for the sinking of a 60 to 100-foot shaft at a site near the abandoned shaft and for the driving of 100 feet of drifts and crosscuts. He estimated the new program could be completed in 5 months at a cost of $8,000.

1/ Mining Engineer, Bureau of Mines.

The Bulldozer mine first produced a small amount of copper ore between 1879 and 1883 when the property was explored by a few surface excavations and by about 350 feet of underground workings. It next was worked during world war I. During that period the property further was explored by about 500 feet of underground workings and according to the applicant, 35,000 tons of 7 to 10 percent copper ore was produced. The property then lay idle until world war II. During 1944 and 1945 about 200 feet of underground workings were driven and 3,030 tons of ore, containing 3.87 percent copper and about 0.20 ounce of silver a ton, was produced.

The ore occurs as pockets and discontinuous veins in fracture zones in a highly altered limestone. The limestone, as a roof-pendent, is in contact at a shallow depth with unmineralized granite.

There are no measured nor indicated ore reserves. Field evidence and information obtained from a reliable source indicate that all but a very small portion of the favorable ore zone has been explored and that little or no developed ore remains in the inaccessible workings. The examination also shows that there are no criteria for determining where mineralized zones may occur within the unexplored portion of the limestone. It also indicates that any mineralized zone that may be present cannot be developed and mined at a profit. Any deposit that occurs probably is of limited extent and low copper content.

It is recommended that the request for a Governmental loan to assist the applicant in carrying out an exploratory project at an estimated cost of $8,000 be denied. This recommendation is based on the foregoing conclusions.

H. L. SENKEY'S BULLDOZER COPPER MINE
HELVETIA MINING DISTRICT, PIMA COUNTY, ARIZ.
DMA-1923X

Engineering Report

By T. H. Smalo
Mining Engineer
U. S. Bureau of Mines

September 1951

M. L. BERKEY'S BULLDOZER COPPER MINE
HELVETIA MINING DISTRICT, PIMA COUNTY, ARIZ.
BMA 1233K

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INTRODUCTION

This report contains information obtained during the course of an examination of the Bulldozer mine, Pima County, Ariz. The examination was made in response to a request for Governmental assistance by E. L. Berkey, 1749 So. 6th Ave., Tucson, Ariz. It was carried out by the Defense Minerals Administration, under docket DMA-1232K, as part of its program authorized by the Defense Production Act of 1950.

The applicant proposed an exploratory project designed to partially develop reserves of copper ore. The program involved the purchase of equipment, the sinking of a 50 to 100-foot shaft, the driving of crosscuts and tunnels from the shaft, and the construction of an ore bin. The estimated cost of the project was $36,000. During the examination it was found that the property was being operated by a lessee, F. J. Rainey, 834 W. Thomas Road, Phoenix, Ariz. Rainey had equipped the property, sunk the proposed shaft to a depth of 70 feet and had abandoned it when a 35-foot crosscut from the bottom of the shaft encountered "heavy" ground. Another reason for terminating the operations was because the workings had failed to encounter any sign of copper mineralization. Rainey stated that he wished to continue operations and would submit, in the applicant's name, an alternate exploratory program. After a delay of a few weeks he submitted a program that involved the sinking of a 50- to 100-foot shaft at a new location, and the driving of 100 feet of drifts and crosscuts at an estimated cost of $8,000.

The writer visited and made a cursory examination of the Bulldozer mine on August 8 and 10, 1941. A more detailed study of the property was made by the writer August 13, and the examination was completed the following day by mapping the property, assisted by R. C. Brown, Bureau of Mines.

ACKNOWLEDGMENTS

The writer wishes to thank R. E. Chilson, Tucson, Ariz., for information regarding one of the inaccessible ore deposits of the Bulldozer mine. Chilson supervised operations at this deposit during World War II. He is well informed on the geology and the ore deposition of the Helvetia mining district and has conducted successful operations, mainly under lease agreements, in this and other nearby districts. At present he is producing ore from two small mines near the Bulldozer property.

LOCATION, TOPOGRAPHY AND CLIMATE

The Bulldozer mine is about 30 air-miles southeast of Tucson, Ariz. (fig. 1). The property is accessible from Tucson by traveling south for 20 miles to the village of Sahuarita, and thence 13.4 miles southeasterly on the graded, dirt road that leads to the Helvetia mining camp. From that point that has a sign "Bulldozer mine", the property is about 1.5 miles over a winding, unimproved road.

Sahuarita on the Nogales branch of the Southern Pacific Railroad is the railroad shipping point.

The property is on the western slope and near the northern extremity of the Santa Rita Mountains. It is at an altitude of about 4,100 feet on the northwest slope of Tipsup Mountain. This Mountain is connected to the main range by a crest ridge. The area of the property is moderately rugged and has a range in relief of about 300 feet. About 3 miles east of the property the mountains have a crest-line altitude of about 5,000 feet.

The climate is arid, with hot summers and mild winters.

There are no permanent streams in the district.

Vegetation is confined to native grasses, scattered bushes and cacti, mainly ocotillo. Pines, juniper pine and other conifers appear at higher altitudes.

HISTORY AND PRODUCTION

The Bulldozer mine first was active between 1879 and 1883. During that period, development work consisted of a 90-foot tunnel, a 40-foot winze, several shafts, and several open cuts. From the deepest shaft, bottomed at 115 feet from the surface, a 100-foot drift and a 130-foot crosscut was driven. The 3 principal open cuts were each about 40 feet long, 25 feet wide and 35 feet deep. The next period of activity was from 1904 to 1906 when the Tipsup Copper Co. worked the mine sporadically. Schrader[1] visited the property in 1909 and found that most of the workings were inaccessible. He stated that production was not learned, but it was not large.

1/ Schrader, Frank C., Mineral Deposits of the Santa Rita and Patagonia Mountains, Arizona. U.S.Geol. Surv. Bull. 582.

The mine next was worked during World War I. The present owner of the property stated that 300 feet of drifts and crosscuts were run from the 90-foot tunnel mentioned by Schrader during this period. He also stated production amounted to 35,000 tons of 7 to 8 percent copper ore and reported operations ceased when metal prices dropped at the end of the war. The next period of activity was during 1944 and 1945 when an 80-foot shaft was sunk, 180 feet of crosscuts and drifts were driven, and ore was produced from a timbered stope. Operations were terminated late in 1945 when a drift caved in and killed one of the workmen. Production records show that 3,030 tons of ore, containing 3.87 percent copper and about 0.20 ounce silver a ton, was produced during that period.

PROPERTY AND OWNERSHIP

The property consists of a group of 4 lode mining claims, one of which is patented, in the Helvetia Mining District, Pima County, Ariz. It is owned by M. L. Bailey, 1740 South 6th Ave., Tucson, Arizona.

F. J. Rainey, 834 Thomas Road, Phoenix, Ariz., is operating the property under a lease and option agreement. The lessee stated that the agreement calls for the payment of production royalties of 10 percent on ore containing up to 10 percent copper. The royalty payments on high-grade ore were not learned. Royalty payments may be applied toward purchase of the property for $50,000.

GENERAL GEOLOGY

A coarse granite, probably of pre-Cambrian age, is the basement rock of the district. It is overlain, successively, by Cambrian (?) quartzite, and Paleozoic limestones. Both the granite and the sedimentary rocks have been intruded by a stock of aplaskite granite-porphyry and by dikes, principally of the aplaskite and aplite types. The granite occurs in both normal and fault contact with the overlying rocks.

At the Bulldozer mine the exposed rocks are confined to limestone and granite (fig. 2). The most extensive workings are located in Copper Duke hill that rises about 100 feet above the surrounding lowland. It has a diameter of a few hundred feet and its upper portion is composed of crushed and altered limestone. The limestone, where the bedding is identifiable, dips about 45° to the south. It rests on a floor of granite that slopes downward to the west at a small angle. Overburden covers much of the property west of Copper Duke hill.

ORE DEPOSITS

Production of the Bulldozer mine has been from open cuts and underground workings in Copper Duke hill and from underground workings a few hundred feet west of the hill (fig. 2).

The ore of Copper Duke hill occurred as a filling of open spaces in fractured masses of highly altered limestone. Schrader 2/

2/ Previously cited in Footnote 1.

stated that the ore minerals were malachite, azurite and small amounts of chrysocolla, black copper sulfide, and native copper. Significant mineralization on the surface at present is confined to a few small pockets in the walls of the open pits. The ore in these pockets, none of which contain more than a few tons, is present mainly as malachite. Ore production from the surface excavations, based on the size of dumps, probably amounted to a few thousand tons. There are no available records on the grade of ore produced from these excavations. However, a reputable miner of the district told the writer that he had mined one of the open cuts. From this operation he produced several carloads of run-of-mine ore containing 1.7 percent copper. He said the highest grade ones contained as much as 4 percent copper. He also had inspected the workings from the adit that now are inaccessible. He found that the degree and extent of mineralization was similar to that of the surface. He said little or no developed ore remained in the underground workings and that these workings yielded only a few thousand tons of selectively mined ore.

Significant mineralization on the south side of the hill, in the area of the proposed exploratory work, is confined to a zone of fractured limestone at the inaccessible inclined shaft. The shaft was sunk at the contact of granite with overlying limestone. Rainey, the lessee, said that a test of the ore in this shaft showed 4 percent

copper. The writer found by visual inspection that this grade of ore is probably present and is confined to a zone 3 to 4 feet thick. The inspection also indicated that the mineralized zone does not extend laterally more than a few feet beyond the shaft and that it is cut off near the bottom of the shaft by granite.

The deposit north of the hill was described to the writer by Chilson[3/] as follows: Exploratory work that resulted in discovery of the deposit was carried out under his supervision from the bottom of 115-foot shaft (fig. 2). After much drifting and crosscutting in barren limestone, the deposit was encountered at a vertical depth of 75 feet from the surface by a raise. The deposit then was mined from an inclined shaft. The widest part of the deposit was at the intersection of 2 fairly strong shear zones. Mineralization persisted southeasterly along one of the shears. The ore occurred as small pockets and discontinuous veins in a zone composed mainly of gouge-like material and boulders of limestone. It consisted of granular chrysocolla, and its occurrence suggested that it had been transported by water and redeposited in open spaces. Selective mining yielded some high-grade ore in the widest section of the deposit but the degree and extent of mineralization decreased as the working was extended to the southeast. Very low-grade ore was being produced when operations were terminated by a collapse of part of the workings.

3/ Previously cited under Acknowledgments.

Production records submitted by the applicant substantiate Chilson's statements regarding the grade of ore produced. The records show that ore containing about 7 percent copper was produced from January to March 16, 1943. The grade of ore for the following 3 months averaged about 5 percent copper and the remaining shipments contained about 2 percent copper. The ore contained little or no silver.

ORE RESERVES

The Bulldogger mine contains no measured nor indicated ore reserves other than a few hundred tons of material, containing 3 to 5 percent copper, that is present on the dumps and in the open cuts.

There are no criteria for determining the tonnage and grade of inferred ore reserves. However, these reserves are believed to be insignificant for the following reasons: The favorable ore zone probably is cut off at a shallow depth by granite that is not receptive to ore mineralization at this mine; and all but a very small portion of the zone has been rather thoroughly explored and exploited.

PRESENT STATUS

Three men under Rainey's supervision are presently engaged in sorting ore from the dumps. The sorted ore was being trucked to Scharrina for railroad shipment to a smelter at Hayden, Ariz. The writer's estimated cost of producing this ore, the most easily obtainable ore on the property, indicates this operation will be uneconomic.

Rainey also is removing timber from the crosscut driven from the recently completed shaft.

PROPOSED EXPLORATORY PROGRAM

The shaft of the original proposal was sunk at a site designated by the applicant. Both the shaft and crosscut were in decomposed granite. The granite contained no copper mineralization.

The alternate proposal calls for the sinking of a 50-to 100-foot vertical shaft and for the driving of 100 feet of drifts and crosscuts on ore intersected by the shaft. The shaft would be sunk from the location shown on figure 2.

Rainey, the lessee, estimated the proposed work could be completed in 5 months at a cost of $9,000. He expressed a willingness to share the costs of the work with the Government on a 50-50 basis. As part of his share of the cost, he proposed to supervise the work for $300 a month and to furnish all necessary equipment. This equipment is valued at $3,410.

CONCLUSIONS

The ore occurs in fractured zones of a thin section of altered limestone that overlies unmineralized granite. Field evidence and information obtained from a reliable source regarding inaccessible workings indicate that only a very small part of one favorable zone has not been explored. There are no criteria for determining the location of mineralized zones that may occur in the unexplored limestone. Furthermore, any mineralized zones that may occur cannot be developed and mined at a cost commensurate with their potential value.

The mine contains no measured nor indicated ore reserves.

RECOMMENDATIONS

It is recommended that the request for a loan to carry out exploratory work at the Bulldozer mine, at an estimated cost of $8,000, be denied for the reasons presented in the conclusions of this investigation.

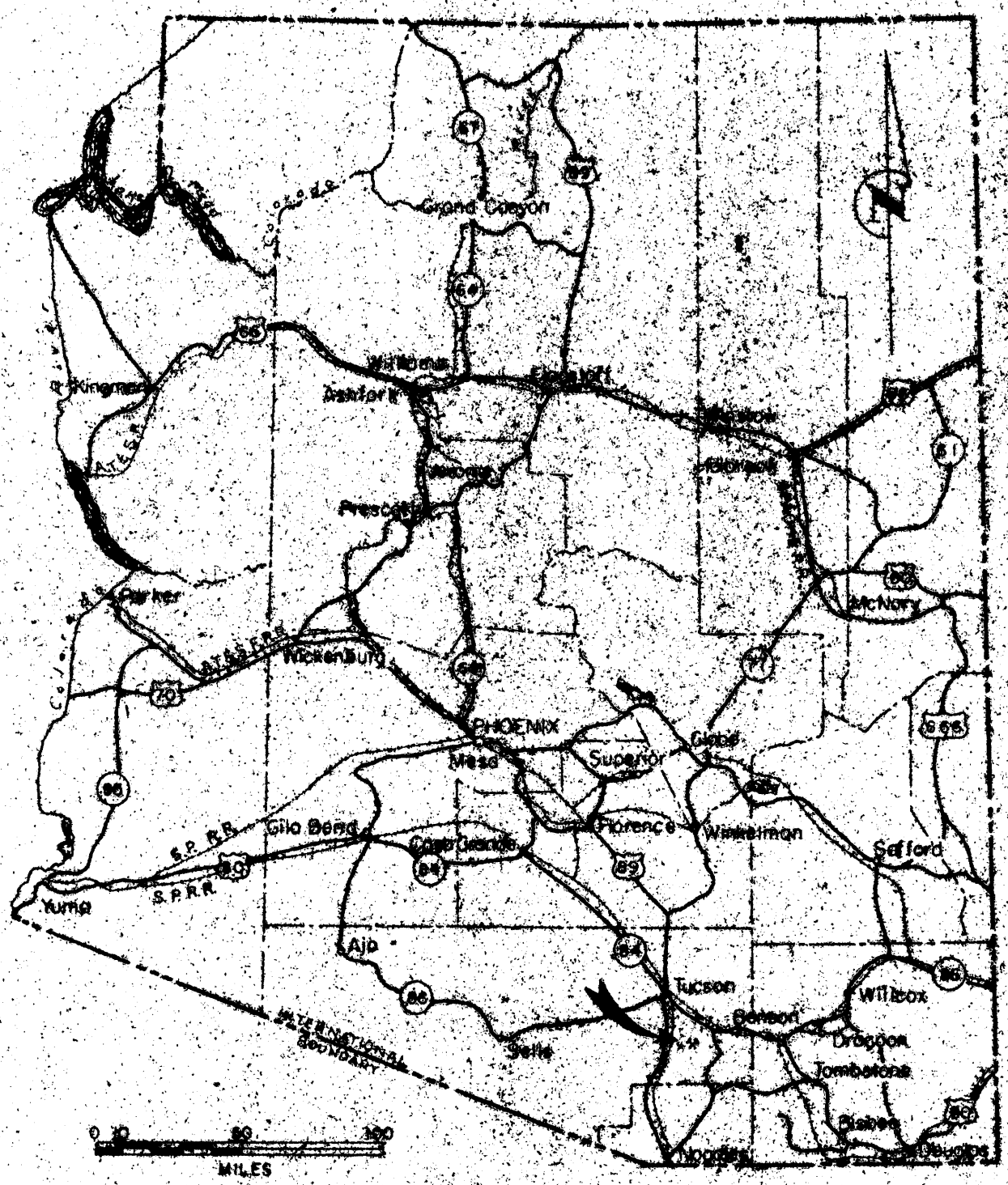


FIG. 1 LOCATION MAP, BULLDOZER MINE
HELVITIA MINING DISTRICT,
PIMA COUNTY, ARIZONA
DMA 1223X

Mining Division
Date Rec'd
AUG 4 1954
BUREAU OF MINES
Denver Colo.

August 2, 1954

Mr. H. L. Berkey
Gates Hotel
6th, Figueroa & Wilshire
Los Angeles, Calif.

My dear Mr. Berkey:

Your letter of July 28 to Travis T. Lane, Phoenix, Ariz., U. S. Mines of Federal Gov., has been referred to this office for a reply. In your letter you state: "I am writing you for some information on Stockpiling of copper ore at Tucson, Ariz. We have a property out in the Helvetia Mining Dist. 32 miles from south & east of Tucson, just 12 miles east of Sharetia (Sahuarita?), known as the Bulldozer mine." So far as we know, the Government is not stockpiling copper ore at this time. However, the General Services Administration supervises Government stockpiling, so I would suggest that you write to Mr. Robert Bradford, Regional Director, General Services Administration, 630 Sansome Street, San Francisco 11, California. Mr. Bradford supervises GSA work in Arizona.

In regard to possible uranium deposits on your property, I would suggest that you write to Mr. A. J. Rambosek, Atomic Energy Commission, P. O. Box 4336, Commerce Station, Phoenix, Arizona. Mr. Rambosek supervises AEC field work in Arizona so he may already know about your property.

The Bureau of Mines has been making field examinations of copper and uranium deposits only for the Defense Minerals Exploration Administration and I believe we examined your Bulldozer mine in August 1951 under Defense Minerals Exploration Administration's Docket DMEA-1223. Mr. P. J. Rainey was operating the mine at that time.

If we can be of further help, do not hesitate to write us.

Sincerely yours,

Walter R. Storms

Walter R. Storms, Chief
Mining Methods Branch
Mining Division, Region IV

CC W. H. King
DMA-1223X
DF

WRStorms:frj

700

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

Mining Division
Date Rec'd.
OCT 1 - 1952
BUREAU OF MINES
Denver, Colorado

SEP 29 1952

Completed

Mr. H. L. Berkey
830 W. 6th Street
Los Angeles 17, California

Re: Docket No. DMA-1223X (Copper)
Bulldozer Mine
Pima County, Arizona

Dear Mr. Berkey:

This acknowledges receipt of your letter of September 19, 1952, inquiring about the possibilities of obtaining a $30,000 exploration contract.

It is noted that you received the letter dated October 16, 1951, denying your application of May 10, 1951, for $30,000.00.

The file on this application containing the field reports have again been carefully reviewed. I regret to inform you that there is no available data either in the reports or in your letter of September 19, 1952, that would justify this office to change the decision of denial.

In the event that any recent work has materially added to the merits of the project, this office would be pleased to give it the fullest consideration.

Sincerely yours,

C. O. Mittendorf

Administrator

FSSchmidt/jem
9/29/52
cc to: Adm. Reading File
Docket
Messrs. CHJohnson, Rm. 3621
Ned Nelson-Rm. 4216 GSA
Ellis Schmidt
Field Team, Region IV (2)

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

REGIONAL DIRECTOR'S OFFICE
REGION IV
OCT 22 1951
OCT 16 1951
BUREAU OF MINES
DENVER, COLORADO

Mr. H. L. Berkey
1749 S. 6th Avenue
Tucson, Arizona

Re: Docket No. DMA-1223X

Dear Mr. Berkey:

Your application for exploration aid has been reviewed by the Defense Minerals Administration and we are sorry to inform you that it must be denied.

On the basis of the material submitted with your application and the material available to the Government it is felt that the geological possibilities are not such as to justify Government participation in an exploration project at this time.

Very truly yours,

Tom Lyon

Tom Lyon, Director
Supply Division

JTL

RVWaugh:ez
10/11/51
Copy to: Administrator's Reading File
Executive Officer, Region IV
J.B.Gowen
C.H.Johnson
D.MacLaren
Files - DMA Docket

Attached

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

REGIONAL DIRECTOR'S OFFICE REGION IV
OCT 18 1951
BUREAU OF MINES DENVER, COLORADO

OCT 16 1951

Memorandum:

To: Administrative Management Division

From: Director, Supply Division

Subject: Application for exploration aid of Mr. H. L. Berkey, 1749 S. 6th. Avenue, Tucson, Arizona, DMA-1223X, Commodity-Copper

Denial of this application is recommended by Field Team Region IV for the following reasons:

1. The ore occurs in fractured zones of a thin section of altered limestone that overlies unmineralized granite.

2. Field evidence and information obtained from a reliable source regarding inaccessible workings indicate that only a very small part of favorable ore zone has not been explored.

3. There are no criteria for determining the location of mineralized zones that may occur in the unexplored limestone.

4. Any mineralized zones that may occur cannot be developed and mined at a cost commensurate with their potential value.

5. The mine contains no measured nor indicated ore reserves.

A letter has been prepared to the applicant notifying him of this denial.

Transmitted herewith for your disposal is the entire file consisting of the following.

2 MF-100 with answer sheets
2 MF-103 with answer sheet
1 DMA Review of Application for Exploration Assistance
1 Form letter Tom Lyon to Mr. J. H. East, June 28, 1951
3 Carbon letters to Mr. H. L. Berkey, from
G.F. Strobel, June 8, 1951
~~James Boyd, June 26, 1951~~
J. B. Gowen, August 6, 1951 with letter attached from Berkey to DMA July 25, 1951

3 Original letters of Berkey to DMA
May 16, 1951
June 6, 1951
June 17, 1951
1 DMA Status Change Notice
1 Field Team Report on Bulldozer Copper Mine.

Tom Lyon

Tom Lyon, Director
Supply Division

Attachments

RVWaugh:ez
10/11/51

Copy to: Administrator's Reading File
Executive Officer, Region IV
J.B.Gowen
C.H.Johnson
D.MacLaren
Files - DMA Docket

204 New Customhouse
Denver 2, Colorado

September 14, 1951

Memorandum

To: Executive Secretary, Defense Minerals Administration

From: DMA Field Team, Region IV

Subject: Final Report, DMA Docket 1:23-N, H. L. Bawley, applicant, Bullsnose Copper Mine, Helvetia Mining District, Pima County, Arizona

Enclosed herewith are the original and two copies of the report on the subject docket.

We concur with the conclusions and recommendations of the examining team that the exploration loan of $5,000 be denied.

The brochure is enclosed.

Paul T. Allsman

Paul T. Allsman, Alternate

A. H. Koschmann

A. H. Koschmann

Enclosures

WDM:oj
cc: Subject and Chronological

MINING DIVISION
REGION IV

August 24, 1951

Re: DMA Docket
1223X

Mr. P. J. Rainey
Arizona Court
1749 S. 6th Ave.,
Tucson, Arizona

Dear Mr. Rainey

Please find attached the sketch map of underground workings at the Bulldozer mine that you loaned to Mr. Romslo.

Thank you for the use of the sketch map.

Sincerely yours

Walter R. Storms, Chief
Arizona-New Mexico Branch

CC P. T.Allsman
DMA 1223X
DF

WRStorms:als

Mining Division
Date Rec'd
AUG 27 1951
BUREAU OF MINES
Denver, Colorado

MINING DIVISION
REGION IV

August 24, 1951

Re: DMA Docket 1223X Bulldozer
Mine, Cochise County, Ariz.

Mr. H. L. Berkey
Hotel Gates
Sixth, Figueroa and Wilshire
Los Angeles 14, California

My dear Mr. Berkey:

In answer to your letter of August 22, asking about the status of your loan application on the Bulldozer mine in Cochise County, Arizona, our engineer has examined your property with Mr. Rainey, and now is writing his report. This report will be sent to our Regional Office ih Denver, then on to the Defense Minerals Admihistration in Washington.

The Defense Minerals Administration in Washington eventually will notify you regarding your application. We cannot tell you whether the loan will be approved or denied.

Sincerely yours

Walter R. Storms, Chief
Arizona-New Mexico Branch

CC P. T. Allsman
DMA 1223X
DF

WRStorms:als

Mining Division
Region IV

September 11, 1951

Memorandum

To: DMA Field Team, Region IV

From: Chief, Mining Division, Region IV

Subject: Final Report, Denial DMA-ARIZ-2, H. L. Berkey, Applicant, Bullsnaper Copper Mine, Kelvin Mining District, Pima County, Arizona

The original application of the subject denial was for exploration of the mine by shaft sinking and cross-cutting at an estimated cost of $50,000. This work was started by a lessee before the application, and a 70 foot vertical shaft and a 35 foot crosscut was completed. All the work was in altered granite without any copper mineralization.

The lessee submitted an alternative program consisting of a 60 to 100 foot shaft at the grading limestone contact with 100 feet of drifts and cross-cuts at an estimated cost of $6,000.

The ore occurs as pockets and discontinuous veins in fracture zones in a highly altered limes. The ore samples are predominantly malachite and azurite, with small amounts of chrysocolla, black copper, cuprite and native copper. The limestone is a rock-product underlain by metamorphosed granite at a shallow depth.

Past production consisted of 35,000 tons of 7 to 10 percent copper ore during World War I and 3,000 tons of 3.67 percent copper ore during 1944 and 1945.

Field evidence and information received from H. H. Children regarding the inaccessible workings indicate that all but a very small portion of the favorable ore zone has been explored.

There are not any measured or indicated reserves, and criteria for finding new deposits are lacking .

The examining engineer recommends denial of the application, with which we concur.

Paul Z. Allman

WDM:oj
cc: DMA Subject and Chron.

Mining Division
Date Rec'd.

AUG 17 1951

BUREAU OF MINES
Denver, Colorado

MINING DIVISION
REGION IV

August 15, 1951

Re: DMA Docket 1223X,
Bulldozer Mine,
Pima County, Ariz.

Mr. H. L. Berkey
Hotel Gates
6th, Figueroa & Wilshire
Los Angeles 14, Calif.

My dear Mr. Berkey:

In answer to your letter of August 14, I assume you refer to your application for a Government exploration loan on the Bulldozer mine in Pima County, Arizona, DMA Docket 1223X. One of our engineers visited your mine last week and was shown over the property by the lessee, Mr. P. J. Rainey.

As Mr. Rainey evidently has completed the exploratory work that you outlined in your loan application, our engineer suggested that a revised program be drawn up. I had a letter from Mr. Rainey last Monday (August 13), stating that a modified application was to be prepared. No doubt you have heard from him by this time.

Sincerely yours,

Walter R. Storms, Chief
Arizona-New Mexico Branch

CC P. T. Allsman
C. A. Anderson
DMA 1223X
DF

WRStorms:frj

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

REGIONAL DIRECTOR'S OFFICE
REGION IV
AUG 9 1951
BUREAU OF MINES
DENVER, COLORADO

Mr. H. L. Berkey
Gates Hotel
Sixth, Figueroa & Wilshire
Los Angles 14, California

Re: Docket No. DMA-1223X

Dear Mr. Berkey:

This is to acknowledge your letter of July 25, 1951 written to Mr. Tom Lyon and which was referred to the Copper Branch, Defense Minerals Administration for reply.

Our records show that your application for exploration aid docket number DMA 1223X is still in the hands of the field team. If you have not yet heard from Mr. East it is because of the tremendous backlog of work now confronting his staff, which is undermanned.

Your application is being given every consideration for possible exploration aid, but no decision can be made before the Field Team report is received in Washington D. C.

Very truly yours,

J. B. Gowen

J. B. Gowen, Chief
Copper Branch

RVaugh:jp

Copy to: Reports and Records Branch, w.c.i.
Executive Officer, Region IV, w.c.i.
Administrator's Reading File, w.c.i.
Copper Branch, w.c.i.
Files-DMA Docket

Hotel Gates
Sixth, Figueroa & Wilshire
Los Angeles 14

July 25, 1951

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

DMA 1223X

Mr. Tom Lyon:

Your letter of June 28 was received after some delay and I do hope that there will be a consideration, on thir exploration loan in the near future, as to their writing I have not heard from Mr. J. E. East, Jr., as to his decision on this matter. I would like to have a line from you by return mail. Please send all letters to this address, Gates Hotel

Waiting your reply

Respuctfully

/s/ H. L. Berkey

COPY

Mining Division
Region IV

August 10, 1951

Mr. H. L. Berkey
Hotel Gates
Sixth, Figueroa & Wilshire
Los Angeles 14, California

Re: BMA Docket 1223X

Dear Mr. Berkey:

This is in reply to your letter of August 6, concerning the above docket.

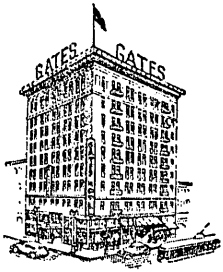
The brochure and application were sent to W. R. Storms, U. S. Bureau of Mines, Box 4097, University Station, Tucson, Arizona, and C. A. Anderson, U. S. Geological Survey, Box 4126, University Station, Tucson, Arizona. One of these men will assign an engineer or geologist to contact whoever you designate when they are ready to make an examination.

Yours very truly,

P. T. Allsman, Chief,
Mining Division, Region IV

14

cc: [redacted]
[redacted]



Hotel GATES
SIXTH, FIGUEROA & WILSHIRE
LOS ANGELES 14

Aug 6 - 1951

Mining Division
Date Rec'd.
AUG 6 1951
BUREAU OF MINES
Denver, Colorado

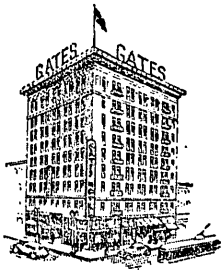
United States
Department of The Interior
Bureau of Mines

Mining Div
Region IV

Paul F. Allsman
224 New Customhouse
Denver, 2, Colorado.

Dear Sir;
your letter received of July 26th Concerning the Exploration loan, DMA Docket No. 1223X has been sent on to the DMA Field Team in Tucson, Which I appreciate Very Much, Now if you Will give me the Man name

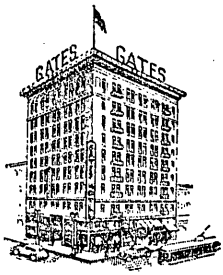
FIREPROOF



Hotel
GATES
SIXTH, FIGUEROA & WILSHIRE
LOS ANGELES 14

That is Working on
The Tucson Denision I Will
Write to my Man that is in
Charge of my Mine and have
him to take him around on
the Property, but I would like
to be there my self when
the Engineer Comes to be of some
assistance to him, as I have owned the Property 36 years
Please send me the Name of
the Man in Tucson on that
denision I was in his office
but did not get his Name
and address, he seem to be
a very fine Man

FIREPROOF ®



3

Hotel
GATES
SIXTH, FIGUEROA & WILSHIRE
LOS ANGELES 14

and I hope he will
Coporate with me in
getting the loan
Waiting your reply at
the earliest date by return Mail
Thanking you for your
Coporation

Respectfully yours
H. L. Berkey

FIREPROOF

Mining Division
Region IV

July 26, 1951

Mr. H. L. Berkey
Hotel Gates
Sixth, Figueroa & Wilshire
Los Angeles 17, California

Dear Mr. Berkey:

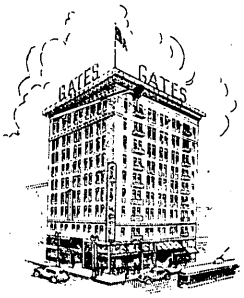
Your letter of recent date concerning BMA Docket No. 1223X has come to my attention.

This is to advise you that the application has been sent to the BMA Field Team in Tucson, Arizona for their investigation and recommendations. The Arizona group have a large backlog of examinations to be made, and there may be some delay in investigating your property, however, they will advise you when they are able to make the examination.

Sincerely yours,

Paul T. Allsman
Chief, Mining Division

PTA:oj
cc: W.R. Sterns
BMA Files, Sub. & Chron.



Hotel
GATES
SIXTH, FIGUEROA & WILSHIRE
LOS ANGELES 17
CALIFORNIA

REGIONAL DIRECTOR'S OFFICE
REGION IV
JUL 25 1951
BUREAU OF MINES
DENVER, COLORADO

Mr J. H. East, Jr.,
224 New Customhouse,
Denver, 2, Colorado.

Dear Sir;

A letter I received from Tom Lyon, Written June 28-51 which I had Made an application to Defence Minerals Administration for and exploration loan, Which I received a letter from Mr Lyon, Director Supply Division Which he inform me that he had sent all information to you in Denver

Hotel
GATES
SIXTH, FIGUEROA & WILSHIRE
LOS ANGELES 17
CALIFORNIA

and as to yet We have not heard from you, up to this date, We are depending on this loan to Complete the Work, and I am anxiously Waiting to here from you, to know whither this loan Will be granted or not, let me here from you by return Mail as my address now is at this Hotel, and address all Mail at this address

Respectfully
H. T. Berkey

FIREPROOF

224 New Customhouse
Denver 2, Colorado

July 6, 1951

WOM

Memorandum

To: W. R. Storms (with brochure)

(Through Chief, Mining Division)

Charles Anderson

From: DMA Field Team, Region IV

Subject: DMA 1223K, H. L. Barney, 1749 South 6th Avenue
Tucson, Arizona

Herewith is brochure on the above application for aid for exploration in the amount of $30,000 to cover costs of exploration for copper on the Bulldozer Mine, Helvetia Mining District, Pima County, Arizona. The proposed work comprises sinking a new shaft 50 to 100 feet to contact the main ore vein and crosscutting and drifting to delineate the ore if found.

The application is not specific in the amount and location of the proposed work.

Please make the necessary examination to determine whether the project is geologically favorable and technically feasible. If the project is to be recommended favorably, the information necessary to complete a contract should be supplied with the report.

J. H. East, Jr.

A. H. Koschmann

Enclosure

cc: DMA, Allison, Koschmann

224 New Customhouse
Denver 2, Colorado

July 6, 1951

Memorandum

To: W. R. Storms (with brochure)

(Through Chief, Mining Division)

Charles Anderson

From: DMA Field Team, Region IV

Subject: DMA 1223K, H. L. Berkey, 1749 South 6th Avenue
Tucson, Arizona

Herewith is brochure on the above application for aid for exploration in the amount of $30,000 to cover costs of exploration for copper on the Bulldozer Mine, Helvetia Mining District, Pima County, Arizona. The proposed work comprises sinking a new shaft 50 to 100 feet to contact the main ore vein and crosscutting and drifting to delineate the ore if found.

The application is not specific in the amount and location of the proposed work.

Please make the necessary examination to determine whether the project is geologically favorable and technically feasible. If the project is to be recommended favorably, the information necessary to complete a contract should be supplied with the report.

J. H. East, Jr.

A. H. Koschmann

Enclosure

cc: DMA, Allsman, Koschmann

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

BUREAU OF ... DENVER, COLORADO

June 26, 1951

Dma-1223X

Mr. H. L. Berkey
Arizona Courts
1749 South 6th Avenue
Tucson, Arizona

Dear Mr. Berkey:

Your letter addressed to President Harry S. Truman and dated June 5, 1951 was received on June 12 and referred to the Defense Minerals Administration for reply.

Your application for Exploration Aid was referred to the Copper Branch of the Supply Division for study and consideration. It is now being referred to the DMA Field Team for further investigation.

You should shortly hear from Mr. J. E. East, Jr., Executive Officer, DMA Field Team, Region IV, or one of his staff.

Sincerely yours,

JAMES BOYD
Administrator

JBGowen:pk

Copy to: Executive Secretary
Executive Officer, DMA Field Team, Region IV
Copper Branch
Administrator's Reading File
File

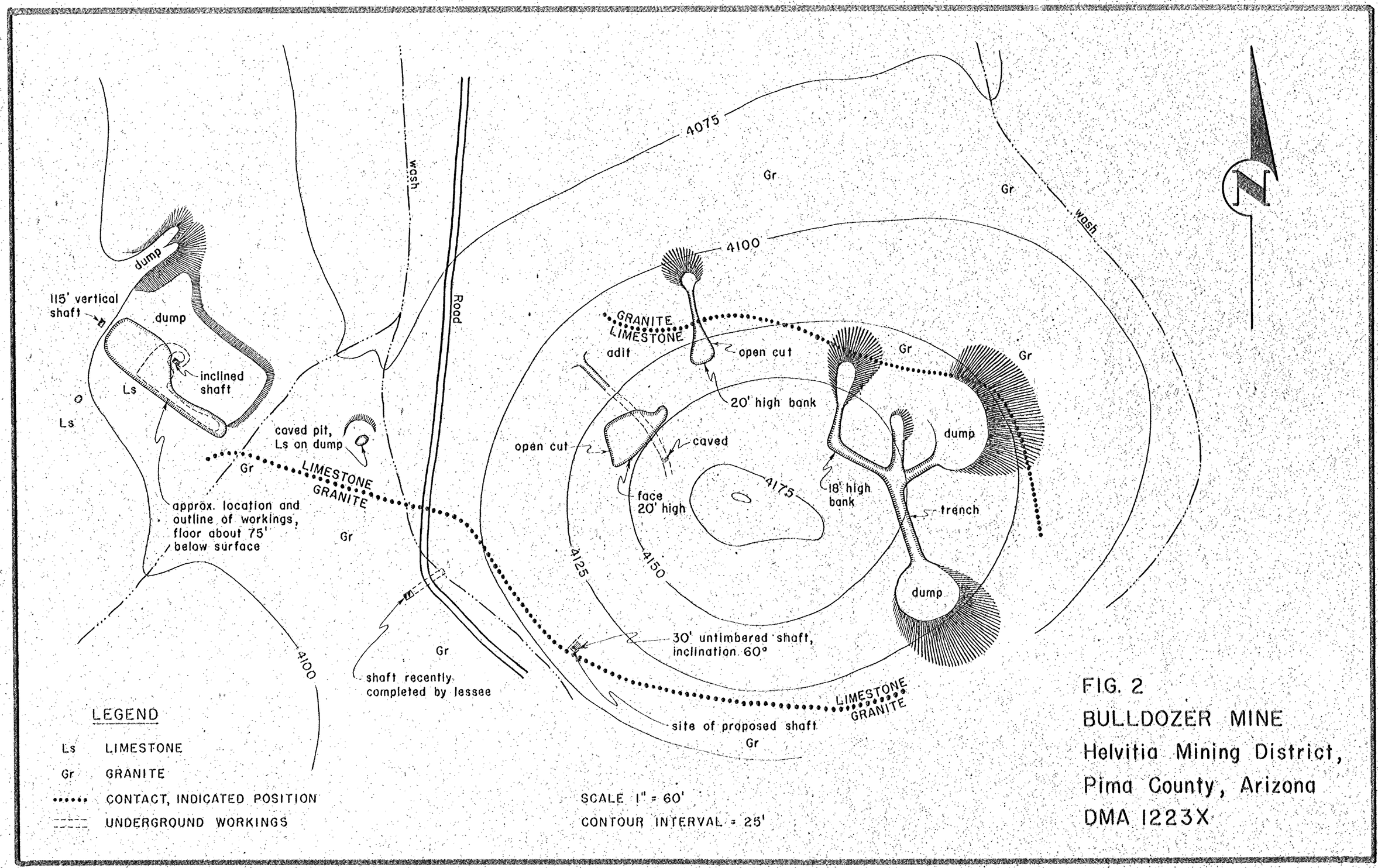


FIG. 2
BULLDOZER MINE
Helvitia Mining District,
Pima County, Arizona
DMA 1223X