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

[illegible] New Customhouse
Denver 2, Colorado

October 14, 1952

Memorandum

To: Administrator, Defense Minerals Exploration Administration
Attention: 210

From: Field Team, Region IV

Subject: Final Report, DMEA Docket 8593, (Copper) Charles La Turco, Ruby Mine Group, Gila County, Arizona

Enclosed are the original and three copies of the final report on DMEA-8593, the original and one copy of Form 3b, and a copy of the letter of denial to the applicant.

John F. Shaw
John F. Shaw for
J. E. King

A. H. Koschmann
A. H. Koschmann

Enclosures

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
OCT 21 1952

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF MINES

Mining Division
Region IV

October 14, 1952

Memorandum

To: Field Team, Region IV

From: Acting Chief, Mining Division, Region IV

Subject: Final Report, [illegible] Docket [illegible], (Copper) Charles La Torre, Ruby Mine Group, Gila County, Arizona

Enclosed are nine copies of the final engineering report on [illegible] by John L. Searle[illegible] of the Bureau of Mines.

The applicant requested $[illegible] for exploration to consist of drilling and mining.

The examining engineer concludes that a significant discovery is not probable and he recommends the application be denied.

We concur in this recommendation.

John F. Shaw
John F. Shaw for
W. L. King

Enclosures

Arizona-New Mexico Branch
XXXXXXXXXXXXXXXXXXXX

Mining Division
Region IV

October 10, 1952

Memorandum

To : W. H. King, Denver, Colorado

From : Chief, Arizona-New Mexico Branch, Mining Div., Region IV

Subject : Final Report, Docket DMLA-2593, Chas. A Turse's Baby Copper Prospect, Sunner Mining District, Gila County, Ariz.

Enclosed are original and 4 copies of the above report by John H. Soule' of the Bureau of Mines. A separate report will not be submitted by the Geological Survey.

Because of the small amount of base-metal mineralization and because it seems doubtful if any significant mineral discovery would be made by further exploration work, the examiner recommends that the lease application be denied. I concur with his recommendation.

Brochure is enclosed.

Walter R. Storms

Walter R. Storms

CC: W. H. King (8)
A. F. Shride
DMLA-2593
DF

WRStorms:als

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

DEFENSE MINERALS EXPLORATION ADMINISTRATION

REPORT OF EXAMINATION BY FIELD TEAM
REGION IV

DMEA-2493, Chas. La Turno's Baby Copper Prospect

Banner Mining District, Gila County, Ariz.

John R. Soule', Mining Engineer
U. S. Bureau of Mines

October 1952

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

By John H. Soule[1]

Charles La Turco of Tucson, Ariz. applied to the Defense Minerals Exploration Administration for Government assistance to explore a group of claims in which he is interested in the Banner Mining District, Gila County, Ariz. He proposed to do about 500 feet of underground work that was to cost $24,000. An examination of the property was made on August 29, 1952 (Docket DMEA-2593) and the results herein reported.

The mine is situated in rugged desert country but is accessible by motor vehicle. Rainfall and vegetation is scant. The altitude is about 3,300 feet. Poor living accomodations exist on the property.

There has been no production of copper from the mine although a little gold ore was reportedly shipped. All of the copper mineralization was noted near the contact of Devonian and Mississippian limestones which are the oldest rocks that outcrop in the immediate area. Overlying these formations are a Cretaceous agglomerate and the Gila conglomerate. Intruded into them are a diorite porphyry sill and narrow rhyolite dikes.

The mineralization seems to be related to the diorite sill and occurs beneath it at the intersection of steep faults with a relatively flat bedding-plane fault. A porous quartz impregnated with iron oxide with subordinate manganese oxides constitutes most of the mineral

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1/ Mining Engineer, U. S. Bureau of Mines

material. The mineralized zones are very narrow. Scant copper mineralization was seen. Outside of small pods of chrysocolla, the copper content of the mineralized zone is very low.

Measured, indicated and inferred ore reserves containing copper are insignificant or non-existant. The mine workings were driven in the search for gold ores. The mine is now idle. About 500 feet of work was done in the past.

The applicant proposed to do about 500 feet of underground work consisting of 300 feet of drifting, 100 feet of raising, and 100 feet of shaft sinking. He estimated $12,000 for this work, plus an additional $12,000 for equipment and supplies. As he owns all of the necessary equipment and most of the hardware supplies, the cost estimates are excessive. The work should be done for a little over $14,000. The program is not warranted by the present stage of development of the mine and by geological features. Preliminary exploration costing not more than $500 and using hand tools would be all that would be necessary to explore the property and a more extensive program could be done later if results warranted it.

It is concluded that although copper occurs in small quantities in sections of the mine, a significant discovery, although possible, is not probable. It is likely that any discovery would be small in size. The applicant has the necessary equipment and any supplies needed are not critical in supply. The property is accessible and the applicant seems capable of doing the work he proposed.

Because a significant discovery is not probable, it is recommended that the application, Docket DMEA 2593, be denied.

DMEA-2593, CHAS. LA TURK'S BABY COPPER PROSPECT
BANNER MINING DISTRICT, GILA COUNTY, ARIZ.

Engineering Report

By John M. Soule', Mining Engineer
U. S. Bureau of Mines

October 1952

DMRA-2593, CHAS. LA TURCO'S BABY COPPER PROSPECT
BANNER MINING DISTRICT, GILA COUNTY, ARIZ.

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INTRODUCTION

Charles La Turco of Tucson, Ariz., interested party in a group of mining claims in the Banner Mining District, Gila County, Ariz., applied to the Defense Minerals Exploration Administration for Government assistance to explore the property. The application, Docket DMEA-2593, requested aid for a project to cost $24,000. The work was to consist of about 300 feet of adit extension, thence about 100 feet of raise to connect with the upper level of the mine and 100 feet of shaft.

A field examination was made by the author August 29, 1952. A second visit was made on September 29, 1952.

ACKNOWLEDGMENTS

Acknowledgments is made of the assistance rendered by Charles La Turco, his brother, and his brother-in-law for showing the property to the examining engineer. Acknowledgment is made of maps leased by the applicant. Acknowledgment also is made of the assistance given by Robert W. Ageton, Mining Engineer, Bureau of Mines, during the second visit to the property.

LOCATION, TOPOGRAPHY AND PHYSICAL FEATURES

The La Turco property, called the "Baby Mine" group, is situated in the northern part of the Banner Mining District in southern Gila County, Ariz. The mine is located near the center of the SW ¼, Sec. 13, T. 4 S., R. 15 E. This township is unsurveyed (see figure 1).

The property is reached from Winkelman, Ariz., the nearest town, by travelling on the unpaved State Highway 77 northeasterly for 8.8

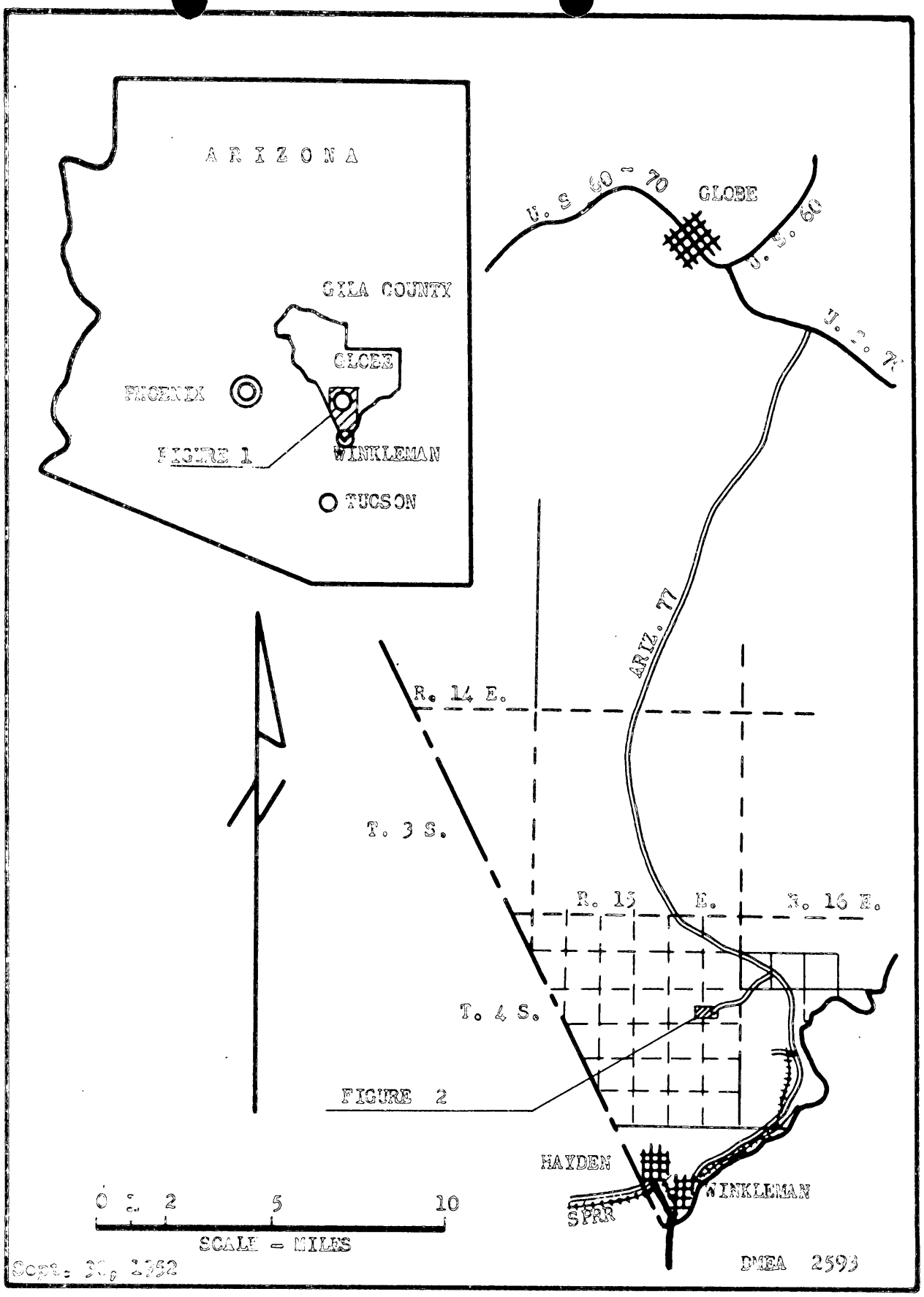

FIGURE 1. - LOCATION MAP, LA TURCO COPPER PROSPECT, GILA COUNTY, ARIZONA

miles to the Christmas turnoff. Continue on Highway 77 by taking the right turn at this junction for just 3.9 miles. Turn sharply left or south at that point on an easily missed ungraded road and follow this road southwesterly for 4 miles, take the right fork and continue an additional 0.3 mile to an old shack. The lower adit is near the end of the road, about 0.3 mile from the shack. Additional mine workings are located directly west of the lower adit and above the steep cliffs just above this adit.

The terrain is rugged, marked by steep cliffs and deep canyons. Vegetation is sparse and consists of the usual desert flora. Rainfall is scant, averaging about 13 inches per year. There are no permanent streams in the area. The Gila River lies about 5 miles east of the property.

Minor supplies may be obtained at Winkelman and mine supplies may be obtained at Globe, Arizona, some 34 miles to the north. The nearest rail shipping point is at Christmas siding, about 6 miles from the mine.

Other than two very disreputable shacks, there are no living accomodations at or near the property. Labor, skilled or unskilled must be imported. According to the applicant, the required labor is available, with the applicant doing some of the work.

HISTORY AND PRODUCTION

The first of the group of claims was reportedly located in 1932. Small discontinuous operations were reported since that time. Other than a small amount of gold ore reportedly shipped, there has been no production of base metal ores from the property.

OWNERSHIP AND EXTENT

The Baby Mine group of claims consists of 10 lode locations, none of which are patented. Charles La Turco owns a one-third interest in the claim group and has an option to purchase the remaining two-thirds interest owned by Charles Guarelli of Winkleman, Ariz. The claim group is shown in Figure 2.

DESCRIPTION OF THE DEPOSITS

The country rock in the immediate area consists of a series of Paleozoic sedimentary rocks. The Devonian (Martin) formation consists of a series of thin bedded dolomitic limestone with shaly and sandy members toward the top. At the Baby mine, only the top of the Martin limestone is exposed and this for approximately 60 feet. The bulk of the material is a brown siltstone that grades upward into shale beds, then into a sandy shale near the contact with the overlying strata.

The Mississippian (Escabrosa, or locally, the Tornado) formation consists of a series of limestones. Many of the beds are massive and form steep cliffs that are characteristic. Gentle southerly dips are usual. Northeast of the Baby mine are a series of Cretaceous agglomerates that occupy an area about 2,000 feet long by about 1,000 feet wide. These volcanic rocks are characterized by a dark color. A few rhyolite porphyry dikes were noted which present a marked contrast when traversing the dark agglomerates. Intruded into the lower part of the Escabrosa limestone near its base and just above the mine is a diorite porphyry sill

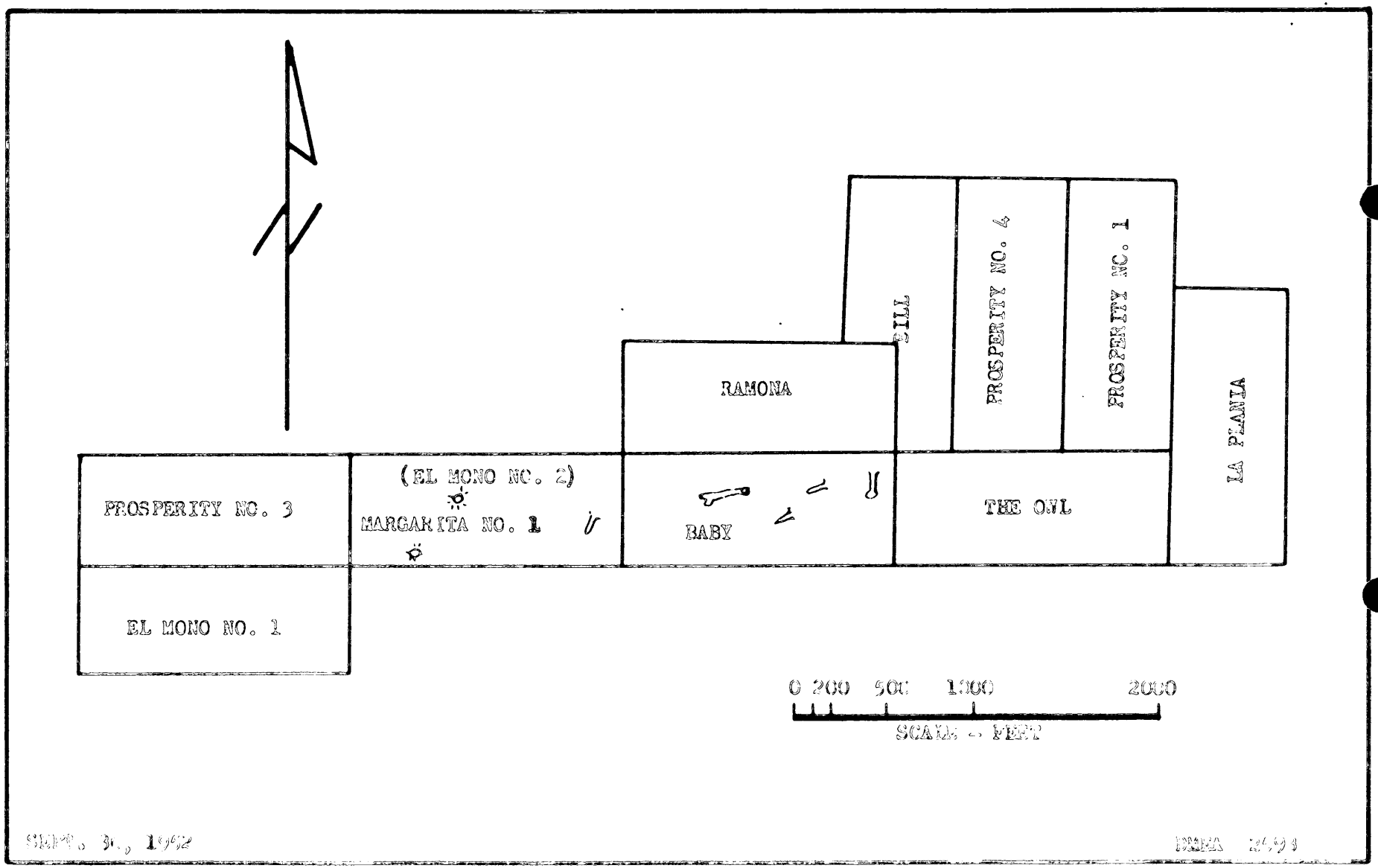

FIGURE [illegible] - SKETCH CLAIM MAP, LA TORCO COPPER PROSPECT

that was traced for a considerable distance to the east and west. The latest formation of the area is the Gila conglomerate that laps the mountains just north of the mine. A geologic sketch of the area is shown in Figure 3.

Two faults of large displacement were noted in the area. Both dip steeply and are downthrown to the northeast. Minor faults with small displacement were noted near the mine. These minor faults seem to be associated with the mineralization and the upper Baby mine workings are along these faults.

The mineralization noted was confined to the contact between the Devonian and Mississippian rocks. Although not evident, there probably was bedding plane faulting between the two formations and it is at the intersection of the probable bedding plane faults with the steep minor faults that mineralization is noted. The mineralization consists of porous quartz, heavily impregnated with iron oxides. In places, the rock is so dark in color that the presence of manganese is suspected. The mineralized zones average about a foot in thickness in both the vertical and horizontal distances between the fault walls. The width along the faults may be as much as 10 feet in extent. The strike length exposed is a little over 300 feet.

Copper mineralization is sparingly present as small, rare blebs of chrysocolla throughout most of the mineralized zones. However, at the far end of the workings as shown in Figure 4, a small winze shows more of a concentration of the chrysocolla. There four irregular, lenticular bodies occur that average 6 inches in width and may be as long as two feet down the dip. They are

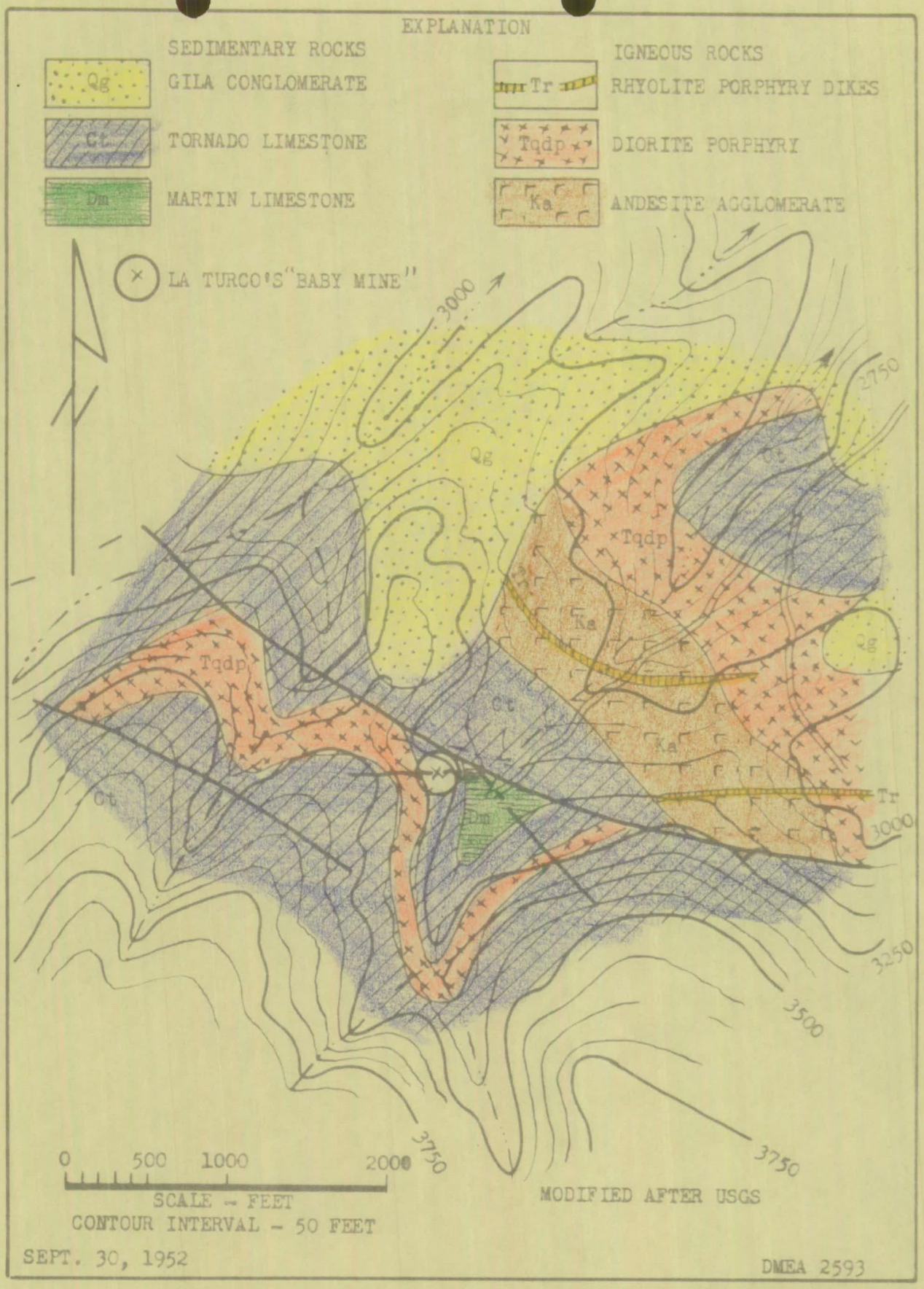

FIGURE 3. - TOPOGRAPHIC AND GEOLOGIC SKETCH, LA TURCO COPPER PROSPECT

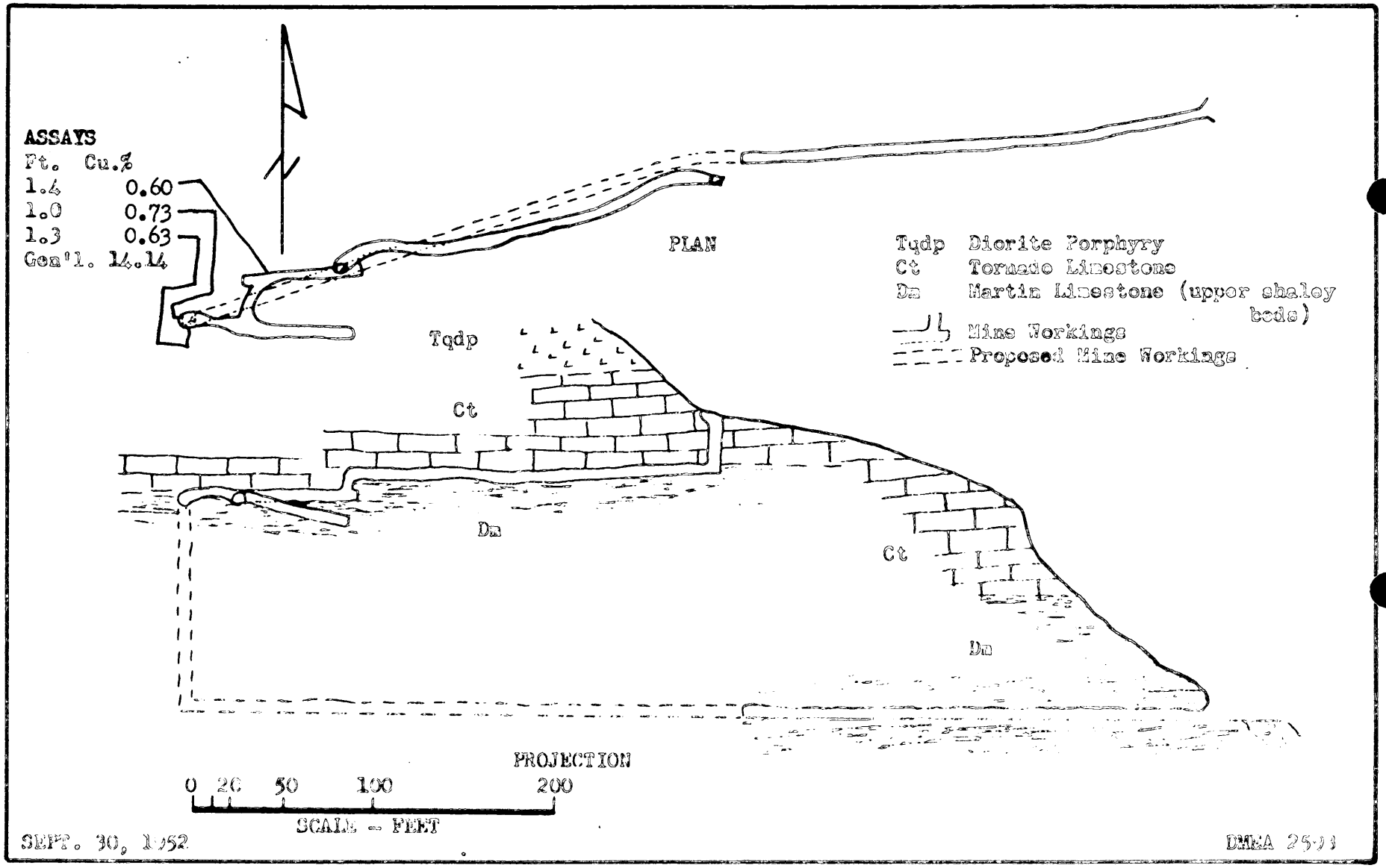

FIGURE 4. - SKETCH MAP, LA TURCO'S "BABY MINE" COPPER PROSPECT

roughly vertical and have a strike length of less than 4 feet. Four samples were taken, one of the copper bearing pods and three others outside of the pods. The results are shown on Figure 4.

ORE RESERVES

There are no measured reserves of copper ore in the mine. A few pounds of ore containing about 14 percent copper may be indicated. There are no data from which to calculate indicated or inferred reserves, which probably are insignificant.

PRESENT STATUS

The property is idle at the present time. The older workings total about 340 feet as shown in plan and projection on Figure 4. Later work consisted of driving an adit from near the end of the road to alleviate the steep haul to the upper mine. This adit had been advanced about 250 feet and a short raise started near the face. This work also is shown on Figure 4. There are other cuts and adits on the property which are barren, or nearly so, of mineralization.

PROJECT PROPOSALS WITH COSTS

The project proposals submitted with the application consist of driving the lower adit an additional 300 feet and raising to the workings above as shown on Figure 4. They then wanted to sink a shaft (winze) 100 feet below the adit level. The estimated costs totalled $24,000. Drifting and raising was to cost $25.00 per foot while the shaft sinking was to cost $45.00 per foot. The estimates do not check with the amount of work to be done as shown by the following tabulation:

Work to be done	Cost
Drifting, 300 feet @ $25.00	$ 7,500
Raising, 100 feet @ $25.00	2,500
Winze, 100 feet @ $45.00	4,500
Total	$14,500

In addition to the above error, the estimates of the footages necessary are too low. About 365 feet of drifting and 105 feet of raise would be necessary.

In addition to the above costs, an additional $12,000 was requested for machinery, tools and "etc." This has the effect of doubling the unit costs, $50.00 for drifting and raising and $90.00 for the shaft. The drift cost estimates are exorbitant.

None of the proposed work is necessary at this time. In the first place, the drifting and raising serve no purpose of exploration and only make the upper workings accessible from below and better the ventilation. The shaft cannot be recommended because the mineralization is confined to near the upper contact of the Martin limestone and no mineralization was noted below that horizon. This does not imply that no mineralization could exist below the adit but it seems that the mineralization present was derived from the diorite porphyry sill above the upper workings.

As the applicant has all of the equipment and hardware supplies necessary for the project, a little pipe excepted, it is unnecessary to purchase this material. Although living accomodations are most primitive, they would serve for a short time as they have in the past.

A re-estimation of the applicant's proposal would show that the project could be done for $14,100 which includes the 365 feet of drifting and 105 feet of raising. The unit cost for each of these items would be $30.00 per foot. No shaft sinking would be done.

Because the copper mineralization is so weak and limited in extent, a better project would be to extend the copper mineralized end of the drift in the upper mine by the use of hand tools and equipment in all lateral directions and downward to see if the small pods continue. Such a project should not cost over $500. Waste disposal would be in the stub drift near the work site. If such a project were successful, then consideration could be given to a more extended job.

CONCLUSIONS

The following conclusions were derived from an examination of the La Turco Baby mine property:

1. The strategic mineral copper is present in small quantities in the upper workings of the mine. A small amount of gold ore was produced in the past.

2. Although a significant discovery is possible in the area, it does not seem to be indicated by the meager extent of copper mineralization. It also is indicated that any possible deposits would be small in size. This can be determined by much less work than proposed.

3. The applicant has all of the major equipment necessary and lacks only a small amount of critical pipe to carry out the project. Non-critical fuels and explosives are readily available.

4. The property is easily accessible.

5. The applicant, judging by the previous work done on the property, is capable of doing the work he proposed.

RECOMMENDATIONS

Base on Conclusions 1 and 2, it is recommended that the application for Government assistance, Docket DMEA 2593, be denied.

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

224 New Customhouse
Denver 2, Colorado

October 14, 1952

Memorandum

To: Administrator, Defense Minerals Exploration Administration
Attention: 210

From: Field Team, Region IV

Subject: Final Report, DMEA Docket 2593, (Copper) Charles La Turco, Ruby Mine Group, Gila County, Arizona

Enclosed are the original and three copies of the final report on DMEA-2593, the original and one copy of Form 3b, and a copy of the letter of denial to the applicant.

John F. Shaw
John F. Shaw for
W. R. King

A. H. Koschmann
A. H. Koschmann

Enclosures

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
DENVER
OCT 21 1952

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF MINES

Mining Division
Region IV

October 14, 1952

Memorandum

To: Field Team, Region IV

From: Acting Chief, Mining Division, Region IV

Subject: Final Report, DMA Project [illegible], (Copper) Charles La Torre, Ruby Mine Group, Gila County, Arizona

Enclosed are nine copies of the final engineering report on DMA [illegible] by John H. Beale[illegible] of the Bureau of Mines.

The applicant requested $[illegible],000 for exploration to consist of drilling and raising.

The examining engineer estimates that a significant discovery is not probable and he recommends the application be denied.

We concur in this recommendation.

John F. Shaw
John F. Shaw for
W. H. King

Enclosures

Arizona-New Mexico Branch
XXXXXXXXXXXXXXXXXXXX

Mining Division
Region IV

October 10, 1952

Memorandum

To : W. H. King, Denver, Colorado

From : Chief, Arizona-New Mexico Branch, Mining Div., Region IV

Subject : Final Report, Docket DMA-2593, Chas. A Turco's Baby Copper Prospect, Banner Mining District, Gila County, Ariz.

Enclosed are original and 4 copies of the above report by John A. Soule' of the Bureau of Mines. A separate report will not be submitted by the Geological Survey.

Because of the small amount of base-metal mineralization and because it seems doubtful if any significant mineral discovery would be made by further exploration work, the examiner recommends that the loan application be denied. I concur with his recommendation.

Brochure is enclosed.

Walter R. Storms

Walter R. Storms

CC: W. H. King (8)
A. F. Shride
DMA-2593
DF

WRStorms:als

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

DEFENSE MINERALS EXPLORATION ADMINISTRATION

REPORT OF EXAMINATION BY FIELD TEAM
DMEA IV

DMEA-2591, Chas. La Turno's Baby Copper Prospect

Banner Mining District, Gila County, Ariz.

John H. Soule', Mining Engineer
U. S. Bureau of Mines

October 1952

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

By J. M. M. Soule[1]

Charles La Turco of Tucson, Ariz. applied to the Defense Minerals Exploration Administration for Government assistance to explore a group of claims in which he is interested in the Banner Mining District, Gila County, Ariz. He proposed to do about 500 feet of underground work that was to cost $24,000. An examination of the property was made on August 29, 1952 (Docket DMEA-2593) and the results herein reported.

The mine is situated in rugged desert country but is accessible by motor vehicle. Rainfall and vegetation is scant. The altitude is about 3,300 feet. Poor living accomodations exist on the property.

There has been no production of copper from the mine although a little gold ore was reportedly shipped. All of the copper mineralization was noted near the contact of Devonian and Mississippian limestones which are the oldest rocks that outcrop in the immediate area. Overlying these formations are a Cretaceous agglomerate and the Gila conglomerate. Intruded into them are a diorite porphyry sill and narrow rhyolite dikes.

The mineralization seems to be related to the diorite sill and occurs beneath it at the intersection of steep faults with a relatively flat bedding-plane fault. A porous quartz impregnated with iron oxide with subordinate manganese oxides constitutes most of the mineral

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1/ Mining Engineer, U. S. Bureau of Mines

material. The mineralized zones are very narrow. Scant copper mineralization was seen. Outside of small pods of chrysocolla, the copper content of the mineralized zone is very low.

Measured, indicated and inferred ore reserves containing copper are insignificant or non-existant. The mine workings were driven in the search for gold ores. The mine is now idle. About 500 feet of work was done in the past.

The applicant proposed to do about 500 feet of underground work consisting of 300 feet of drifting, 100 feet of raising, and 100 feet of shaft sinking. He estimated $12,000 for this work, plus an additional $12,000 for equipment and supplies. As he owns all of the necessary equipment and most of the hardware supplies, the cost estimates are excessive. The work should be done for a little over $14,000. The program is not warranted by the present stage of development of the mine and by geological features. Preliminary exploration costing not more than $500 and using hand tools would be all that would be necessary to explore the property and a more extensive program could be done later if results warranted it.

It is concluded that although copper occurs in small quantities in sections of the mine, a significant discovery, although possible, is not probable. It is likely that any discovery would be small in size. The applicant has the necessary equipment and any supplies needed are not critical in supply. The property is accessible and the applicant seems capable of doing the work he proposed.

Because a significant discovery is not probable, it is recommended that the application, Docket DMA 2593, be denied.

DMEA-2393, CHAS. LA TORRE'S DAISY COPPER PROJECT
HANNER MINING DISTRICT, GILA COUNTY, ARIZ.

Engineering Report

By John H. Soule', Mining Engineer
U. S. Bureau of Mines

October 1952

DMEA-2593, CHAS. LA TURCO'S BABY COPPER PROSPECT
BARBER MINING DISTRICT, GILA COUNTY, ARIZ.

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ILLUSTRATIONS

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1 Location map 1
2 Claim map 3
3 Topographic and geologic sketch 4
4 Mine map 4

INTRODUCTION

Charles La Turco of Tucson, Ariz., interested party in a group of mining claims in the Banner Mining District, Gila County, Ariz., applied to the Defense Minerals Exploration Administration for Government assistance to explore the property. The application, Docket DMEA-2593, requested aid for a project to cost $24,000. The work was to consist of about 300 feet of adit extension, thence about 100 feet of raise to connect with the upper level of the mine and 100 feet of shaft.

A field examination was made by the author August 29, 1952. A second visit was made on September 29, 1952.

ACKNOWLEDGMENTS

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LOCATION, TOPOGRAPHY AND PHYSICAL FEATURES

The La Turco property, called the "Baby Mine" group, is situated in the northern part of the Banner Mining District in southern Gila County, Ariz. The mine is located near the center of the SW ¼, Sec. 13, T. 4 S., R. 15 E. This township is unsurveyed (see figure 1).

The property is reached from Winkelman, Ariz., the nearest town, by travelling on the unpaved State Highway 77 northeasterly for 8.8

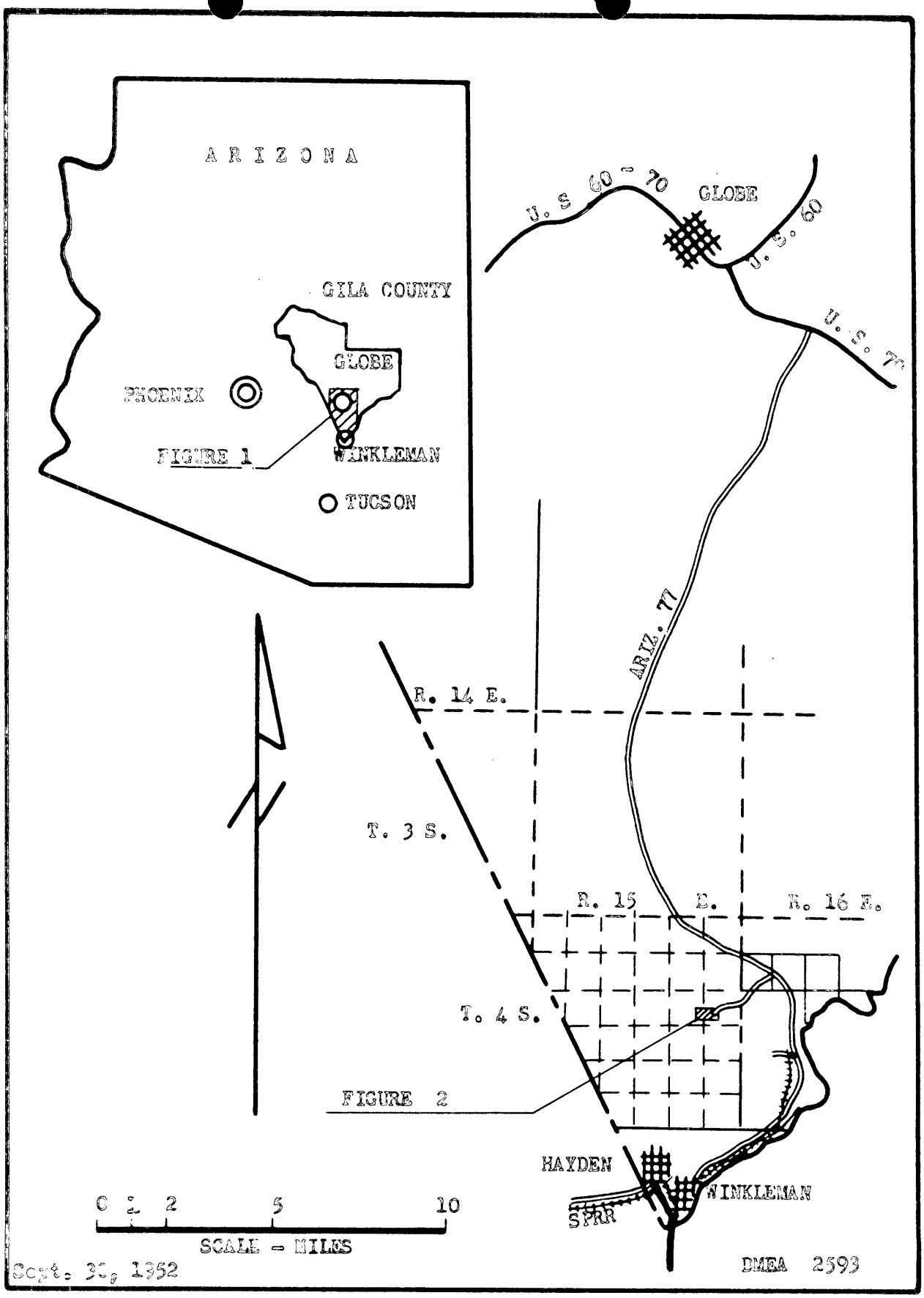

FIGURE 1. - LOCATION MAP, LA TURCO COPPER PROSPECT, GILA COUNTY, ARIZONA

miles to the Christmas turnoff. Continue on Highway 77 by taking the right turn at this junction for just 3.9 miles. Turn sharply left or south at that point on an easily missed ungraded road and follow this road southwesterly for 2 miles, take the right fork and continue an additional 0.3 mile to an old shack. The lower adit is near the end of the road, about 0.3 mile from the shack. Additional mine workings are located directly west of the lower adit and above the steep cliffs just above this adit.

The terrain is rugged, marked by steep cliffs and deep canyons. Vegetation is sparse and consists of the usual desert flora. Rainfall is scant, averaging about 13 inches per year. There are no permanent streams in the area. The Gila River lies about 5 miles east of the property.

Minor supplies may be obtained at Winkleman and mine supplies may be obtained at Globe, Arizona, some 36 miles to the north. The nearest rail shipping point is at Christmas siding, about 6 miles from the mine.

Other than the very disreputable shacks, there are no living accomodations at or near the property. Labor, skilled or unskilled must be imported. According to the applicant, the required labor is available, with the applicant doing some of the work.

HISTORY AND PRODUCTION

The first of the group of claims was reportedly located in 1932. Small discontinuous operations were reported since that time. Other than a small amount of gold ore reportedly shipped, there has been no production of base metal ores from the property.

OWNERSHIP AND CONTRACT

The Baby Mine group of claims consists of 11 lode locations, none of which are patented. Charles La Turco owns a one-third interest in the claim group and has an option to purchase the remaining two-thirds interest owned by Charles Guarelli of Winkelman, Ariz. The claim group is shown in Figure 2.

DESCRIPTION OF THE DEPOSITS

The country rock in the immediate area consists of a series of Paleozoic sedimentary rocks. The Devonian (Martin) formation consists of a series of thin bedded dolomitic limestone with shaly and sandy members toward the top. At the Baby mine, only the top of the Martin limestone is exposed and this for approximately 60 feet. The bulk of the material is a brown siltstone that grades upward into shale beds, then into a sandy shale near the contact with the overlying strata.

The Mississippian (Escabrosa, or locally, the Tornado) formation consists of a series of limestones. Many of the beds are massive and form steep cliffs that are characteristic. Gentle southerly dips are usual. Northeast of the Baby mine are a series of Cretaceous agglomerates that occupy an area about 2,000 feet long by about 1,000 feet wide. These volcanic rocks are characterized by a dark color. A few rhyolite porphyry dikes were noted which present a marked contrast when traversing the dark agglomerates. Intruded into the lower part of the Escabrosa limestone near its base and just above the mine is a diorite porphyry sill

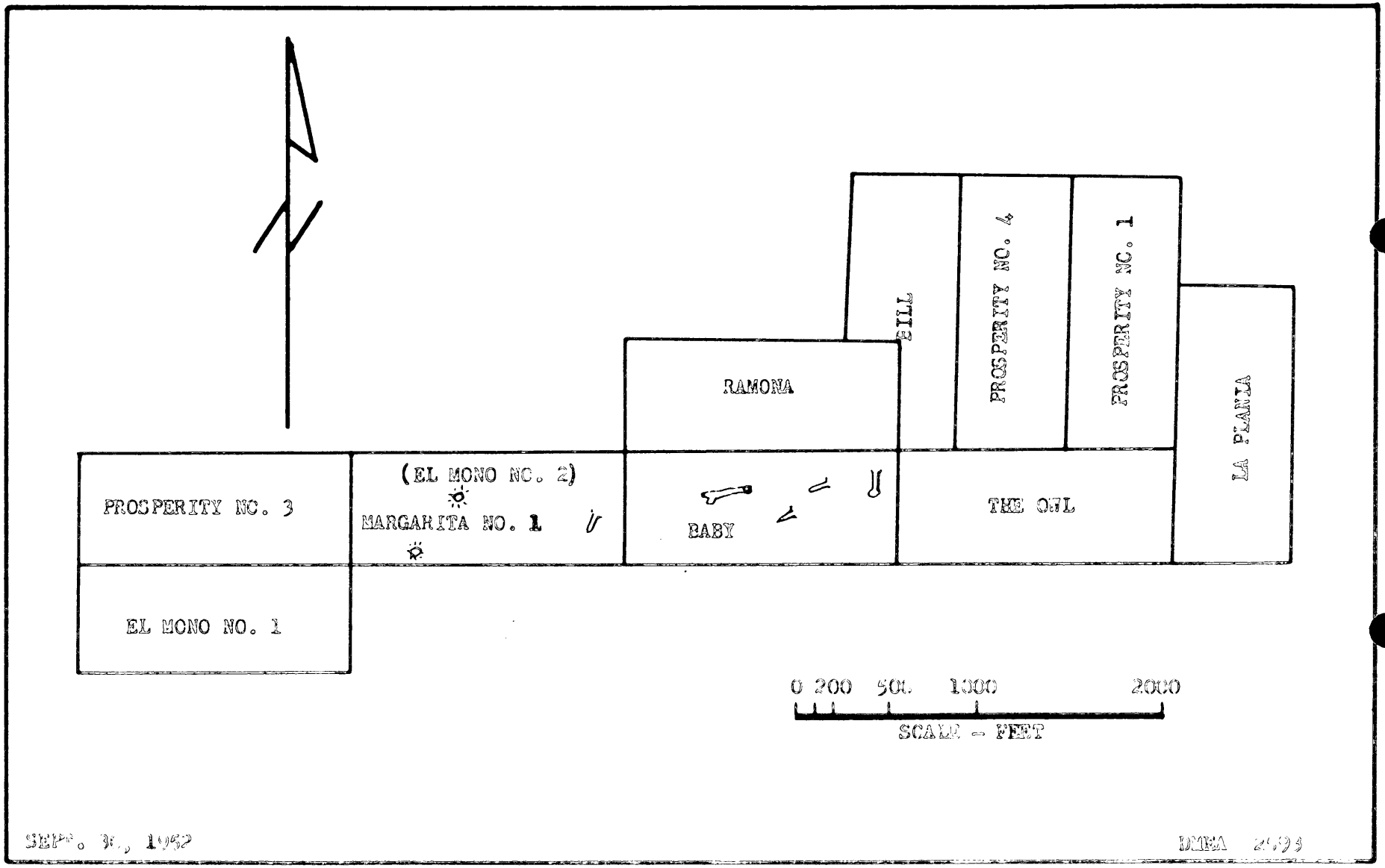

FIGURE 2. SKETCH GRAPH MAP, LA TORCO COPPER PROSPECT

that was traced for a considerable distance to the east and west. The latest formation of the area is the Gila conglomerate that laps the mountains just north of the mine. A geologic sketch of the area is shown in Figure 3.

Two faults of large displacement were noted in the area. Both dip steeply and are downthrown to the northeast. Minor faults with small displacement were noted near the mine. These minor faults seem to be associated with the mineralization and the upper Many mine workings are along these faults.

The mineralization noted was confined to the contact between the Devonian and Mississippian rocks. Although not evident, there probably was bedding plane faulting between the two formations and it is at the intersection of the probable bedding plane faults with the steep minor faults that mineralization is noted. The mineralization consists of porous quartz, heavily impregnated with iron oxides. In places, the rock is so dark in color that the presence of manganese is suspected. The mineralized zones average about a foot in thickness in both the vertical and horizontal distances between the fault walls. The width along the faults may be as much as 10 feet in extent. The strike length exposed is a little over 300 feet.

Copper mineralization is sparingly present as small, rare blebs of chrysocolla throughout most of the mineralized zones. However, at the far end of the workings as shown in Figure 4, a small winze shows more of a concentration of the chrysocolla. There four irregular, lenticular bodies occur that average 6 inches in width and may be as long as two feet down the dip. They are

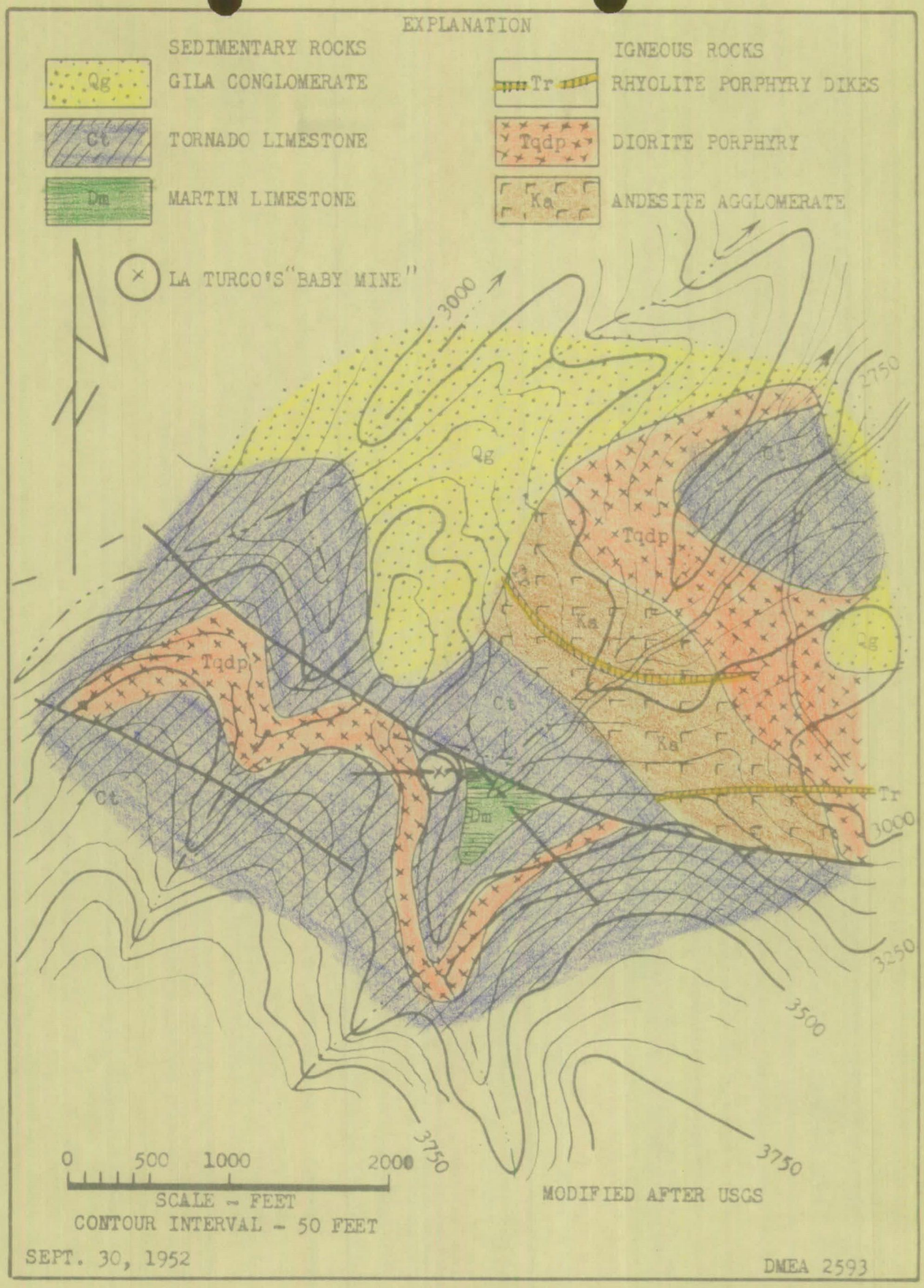

FIGURE 3. - TOPOGRAPHIC AND GEOLOGIC SKETCH, LA TURCO COPPER PROSPECT

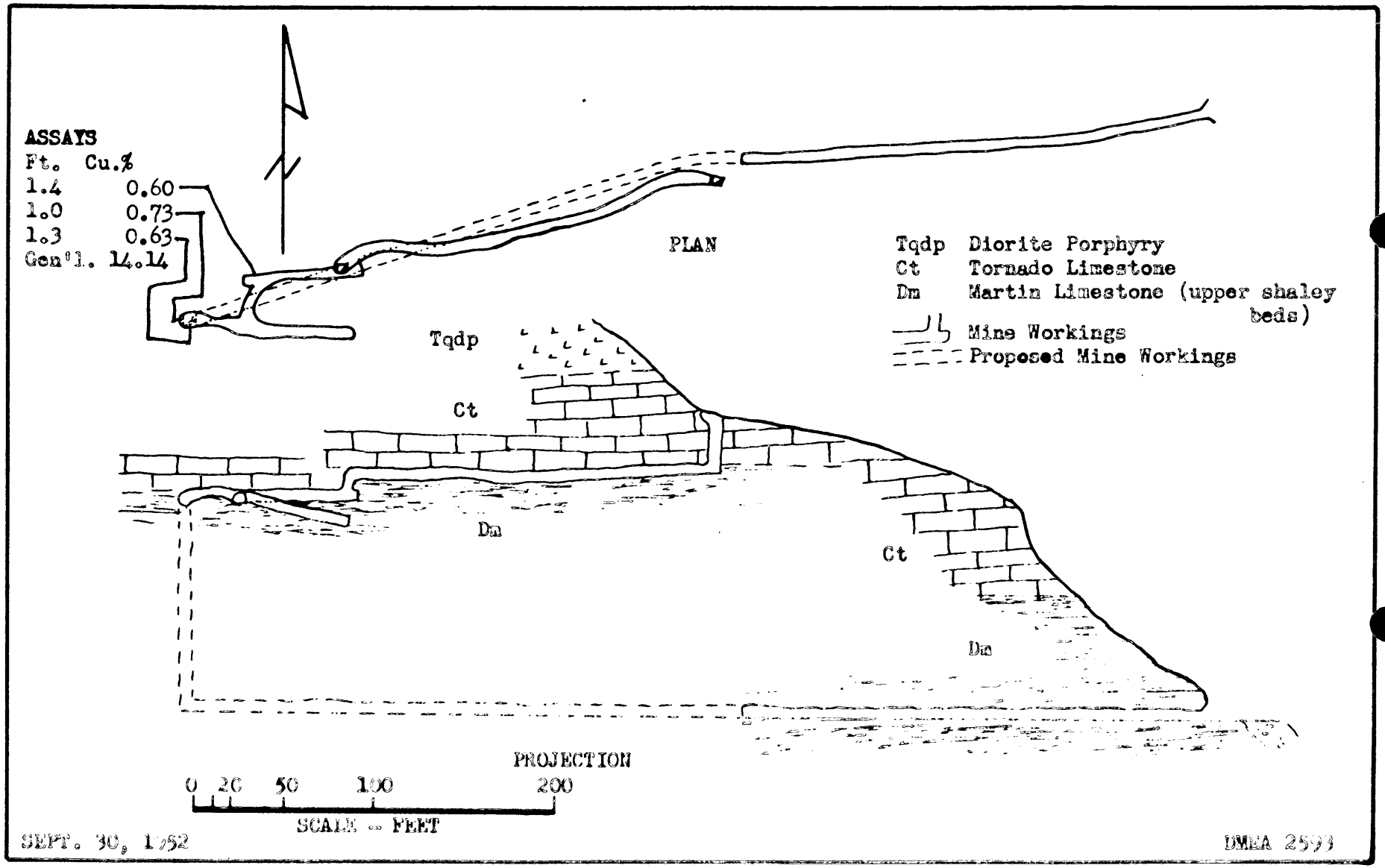

FIGURE 4. - SKETCH MAP, LA TURCO'S "BABY MINE" COPPER PROSPECT

roughly vertical and have a strike length of less than 4 feet. Four samples were taken, one of the copper bearing pods and three others outside of the pods. The results are shown on Figure 4.

ORE RESERVES

There are no measured reserves of copper ore in the mine. A few pounds of ore containing about 14 percent copper may be indicated. There are no data from which to calculate indicated or inferred reserves, which probably are insignificant.

PRESENT STATUS

The property is idle at the present time. The older workings total about 360 feet as shown in plan and projection on Figure 4. Later work consisted of driving an adit from near the end of the road to alleviate the steep haul to the upper mine. This adit had been advanced about 250 feet and a short raise started near the face. This work also is shown on Figure 4. There are other cuts and adits on the property which are barren, or nearly so, of mineralization.

PROJECT PROPOSALS WITH COSTS

The project proposals submitted with the application consist of driving the lower adit an additional 300 feet and raising to the workings above as shown on Figure 4. They then wanted to sink a shaft (winze) 100 feet below the adit level. The estimated costs totalled $24,000. Drifting and raising was to cost $45.00 per foot while the shaft sinking was to cost $45.00 per foot. The estimates do not check with the amount of work to be done as shown by the following tabulation:

Work to be done	Cost
Drifting, 300 feet @ $25.00	$ 7,500
Raising, 100 feet @ $25.00	2,500
Winze, 100 feet @ $45.00	4,500
Total	$14,500

In addition to the above error, the estimates of the footages necessary are too low. About 365 feet of drifting and 105 feet of raise would be necessary.

In addition to the above costs, an additional $12,000 was requested for machinery, tools and "etc." This has the effect of doubling the unit costs, $50.00 for drifting and raising and $90.00 for the shaft. The drift cost estimates are exorbitant.

None of the proposed work is necessary at this time. In the first place, the drifting and raising serve no purpose of exploration and only make the upper workings accessible from below and better the ventilation. The shaft cannot be recommended because the mineralization is confined to near the upper contact of the Martin limestone and no mineralization was noted below that horizon. This does not imply that no mineralization could exist below the adit but it seems that the mineralization present was derived from the diorite porphyry sill above the upper workings.

As the applicant has all of the equipment and hardware supplies necessary for the project, a little pipe excepted, it is unnecessary to purchase this material. Although living accomodations are most primitive, they would serve for a short time as they have in the past.

A re-estimation of the applicant's proposal would show that the project could be done for $14,100 which includes the 365 feet of drifting and 105 feet of raising. The unit cost for each of these items would be $30.00 per foot. No shaft sinking would be done.

Because the copper mineralization is so weak and limited in extent, a better project would be to extend the copper mineralized end of the drift in the upper mine by the use of hand tools and equipment in all lateral directions and downward to see if the small pods continue. Such a project should not cost over $500. Waste disposal would be in the stub drift near the work site. If such a project were successful, then consideration could be given to a more extended job.

CONCLUSIONS

The following conclusions were derived from an examination of the La Turco Baby mine property:

1. The strategic mineral copper is present in small quantities in the upper workings of the mine. A small amount of gold ore was produced in the past.

2. Although a significant discovery is possible in the area, it does not seem to be indicated by the meager extent of copper mineralization. It also is indicated that any possible deposits would be small in size. This can be determined by much less work than proposed.

3. The applicant has all of the major equipment necessary and lacks only a small amount of critical pipe to carry out the project. Non-critical fuels and explosives are readily available.

4. The property is easily accessible.

5. The applicant, judging by the previous work done on the property, is capable of doing the work he proposed.

RECOMMENDATIONS

Base on Conclusions 1 and 2, it is recommended that the application for Government assistance, Docket DMEA 2593, be denied.

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

224 New Customhouse
Denver 2, Colorado

June 27, 1952

Memorandum

To: Acting Administrator, Defense Minerals Exploration Administration
Attention: Code 210

From: Executive Officer, Field Team, Region IV

Subject: Docketing for Exploration Assistance

Enclosed herewith in duplicate are DMA Forms 3a and MF-103 in triplicate and supporting data pertaining to the following applications for Government assistance in exploration work:

Jack Pine Mining Co.
507 Boston Bldg. DMEA-2592
Denver, Colorado

Charles La Turco
3244 Cardi Blvd. DMEA-2593
Tucson, Arizona

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
JUN 30 1952

W. H. King

W. H. King

Enclosures:

Returned to Region IV -
DMEA-2592 - Two copies MF-103 and two copies of a map.
DMEA-2593 - Two copies MF-103.

sd

MF-103
(Revised April 1952)

UNITED STATES DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION

Form Approved.
Budget Bureau No. 42-R1035.2.

APPLICATION FOR AID IN AN EXPLORATION PROJECT, PURSUANT TO DMEA ORDER 1, UNDER THE DEFENSE PRODUCTION ACT OF 1950, AS AMENDED

Not to be filled in by applicant

Docket No. DMEA-2593
Metal or Mineral
Date Received 6-30-52
Estimated Cost
Participation (Government %)

INSTRUCTIONS

1. *Name of applicant.*—(*a*) State here your full legal name, in the form in which you will wish to contract, and your mailing address:

Charles La Turco
3244 Cardi Blvd. Tucson, Arizona

(*b*) If other than an individual, add to your name above whether a corporation, partnership, etc., and the name of the State in which incorporated or otherwise organized.

(*c*) If a corporation, add to above statement, titles, names and addresses of officers.

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

2. *General.*—Read DMEA Order 1, "Government Aid in Defense Exploration Projects," before completing this application. Submit this application and all accompanying papers in quadruplicate (four copies), with your name and address on each sheet of the application and on all accompanying papers. Where sufficient space is not provided on the form for all required information, state it on an accompanying paper, with a reference in each case to the instruction to which it refers by number. Comply with all applicable instructions; or, if not applicable, so state. File the application with Defense Minerals Exploration Administration, Department of the Interior, Washington 25, D. C., or with the nearest field executive officer thereof.

3. *Applicant's property rights.*—(*a*) State the legal description of the land upon which you wish to explore, including all land which you possess or control that may be benefited by the exploration, and excluding any land or interest in land which is not to be included in the exploration project contract

NO 1 Prosperity Bk 44 Page 585 record of Mines, Prosperity #3,Bk.44 pg.587.Prosperity# 4, BK.44pg587. La Plantz 44.p.508. THE OWL. 44 pg.507. BABY bk.41.pg.36.EL MONO.bk 44. pg.329.ROMONAbk.41pg.36.MARGARITA BK.[illegible] pg328,Gila County,Arizona

(*b*) Give any mine name by which the property is known.

(*c*) State your interest in the land, whether owner, lessee, purchaser under contract, or otherwise

Baby Banner Mining District

(*d*) If you are not the owner, submit with this application a copy of the lease, contract, or other document under which you control the property.

Option to buy

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

Copy of Option

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

Yes unpattented as name above

4. *Physical description.*—(*a*) Describe in detail any mining or exploration operations which have been or now are being conducted upon the land, including existing mine workings and production facilities. State your interest, if any, in such operations. Also describe accessibility of mine workings for examination purposes.

(*b*) State past and current production, and ore reserves, if any, giving quantities and grades.

(*c*) Describe the geologic features of the property, including mineralization, type of deposit (vein, bedded, etc.), and your reasons for wishing to explore. Illustrate with maps or sketches. Send with your application (but not necessarily as a part of it) any geologic or engineering report, assay maps, or other technologic information you may have, indicating on each whether you require its return to you.

(*d*) State the facts with respect to the accessibility of the project: Access roads, distances to shipping, supply and residence points.

(*e*) State the availability of manpower, materials, supplies, equipment, water, and power.

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
JUN 30 1952

16—66551-1

5. *The exploration project.*—(*a*) State the mineral or minerals for which you wish to explore COPPER with other minerals Gold & Silver

(*b*) Describe fully the proposed work, including a map or sketch of the property showing a plan (and cross sections if needed) of any present mine workings, and the location of the proposed exploration work as related to such features as contacts, veins, ore-bearing beds, etc.

(*c*) The work will start within 30 days and be completed within 4 months from the date of an exploration project contract.

(*d*) State the operating experience and background of the applicant with relation to the ability to carry out such exploration project, and also that of the person or persons who will supervise the operations.

6. *Estimate of costs.*—Furnish a detailed estimate of the costs of the proposed work (you will have to use a separate sheet), under the following headings. Add the totals under all headings to give the estimated total cost of the project:

(*a*) *Independent contracts.*—(Note.—If the applicant does not intend to let any of the work to contractors, write "none" after this item. To the extent that the work is to be contracted, do not repeat the cost of the contract-work in subsequent items.) State the cost of any proposed independent contracts for the performance of all or any part of the work, expressed in terms of units of work (such as per foot of drilling, per foot of drifting, per hour of bulldozer operations, per cubic yard of material moved, etc.).

(*b*) *Labor, supervision, consultants.*—Include an itemized schedule of numbers, classes and rates of wages, salaries or fees for necessary labor, supervision and engineering and geological consultants.

(*c*) *Operating materials and supplies.*—Furnish an itemized list, including items of equipment costing less than $50 each, and power, water and fuel.

(*d*) *Operating equipment.*—Furnish an itemized list of any operating equipment to be rented, purchased, or which is owned and will be furnished by the Operator, with the estimated rental, purchase price, or suggested use-allowance based on present value, as the case may be.

(*e*) *Rehabilitation and repairs.*—Furnish a detailed list showing the cost of any necessary initial rehabilitation or repairs of existing buildings, installations, fixtures, and movable operating equipment, now owned by the Operator and which will be devoted to the exploration project.

(*f*) *New buildings, improvements, installations.*—Furnish a detailed list showing the cost of any necessary buildings, fixed improvements, or installations to be purchased, installed or constructed for the benefit of the exploration project.

(*g*) *Miscellaneous.*—Furnish a detailed list showing the cost of repairs to and maintenance of operating equipment (not including initial rehabilitation or repairs of the Operator's equipment), analytical work, accounting, workmen's compensation and employers' liability insurance, and payroll taxes.

(*h*) *Contingencies.*—Give an estimate of any necessary allowances for contingencies not included in the costs stated above.

NOTE.—No items of general overhead, corporate management, interest, taxes (other than payroll and sales taxes), or any other indirect costs, or work performed or costs incurred before the date of the contract, should be included in the estimate of costs.

7. (*a*) Are you prepared to furnish your share of the cost of the proposed project in accordance with the regulations on Government participation (Sec. 7, DMEA No. 1)?

(*b*) How do you propose to furnish your share of the costs?

☒ Money ☒ Use of equipment owned by you ☐ Other

Explain in detail on acompanying paper.

CERTIFICATION

The undersigned, whether as an individual, corporate officer, partner, or otherwise, both in his own behalf and acting for the applicant, certifies that the information set forth in this form and accompanying papers is correct and complete, to the best of his knowledge and belief.

Dated June 18, 1952

Charles La Turco
(Applicant)

By

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

U. S. GOVERNMENT PRINTING OFFICE 16—66551-1

Tucson Arizona June 12

Article 4. Work done on property. One shaft about 40 feetdeep 300 feet of drifting.

In addition to above described work a tunnel was started 125' Vertically below and is in about 200'. The proposed work is to Continue this lower tunnel another 300' then raise to the workings Above and sink 100' below tunnel level,.The cost of drifting and Raising is $ 25.00 per foot. the cost of sinking is $ 45.00 per foot Cost of Machinery,tools.etc. $12000.00 A total of $ 24000.00. This Includes insurance and all foreseen expenses.

There is a fairly good chance to develop a large tonnage of copper Ore in this property.

Article (4 c) General formation is limestone near a granite porphry. The deposit is bedded altered limestone. has the appearance of being a leached copper ore.

A.L. Gorman.

[illegible], [illegible] June 17 1952

Article (4 b) Past products Silver. & gold between $ 30.00 & $ 40.00 per. ton ore. and several thousand ton left.

(D) 1/9/10 miles of road to the state highway and is in fair condition. to property line. one half mile of road up to the baby mine is not very good it neededs fixing.

(E) Manpower m is availabill, water is easy to get power is gasoline.

5. b the proposed work is for copperand zinfor exploration to develope the copper.

article (5 D) The operating experience about 3 years. in mining and has the ability to carry out such exploration project, the supervise has had 30 years experience in mining , and as a supt. of the christmas mine.

Article (6) Estimate of cost of the proposed work is as following. For road , tunnelwork. and the sinking of shaft. drifting. tetalof $ 24,000.00 this includes insurance and all forseen expenses.
(a) Independent contracts none.
(b) Labor includes in the above.

(C) Itemized list of equipment costing less than $ 50.00 are steel bits ,drills, rails, gasoline, water pipe & water.
(D) operating equipment owen are Air compressor. jack hamer. drills. drills bits, air hose, ore car, 270 of steel rail track. pick truck. and all orther equipment to operate the mine. all are in fair working condition.

(E) Rehabilitation and repairs None.

(F) New Building all cost are included in article (6) of the 24,000.00
(H) do not know.
Note several thOusand dollars of work as been put in on the tunnel. shaft and the drift.

(7)Yes he is preared to furnish his share of cost some money and use of equipment.