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SURNAME:

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

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OCT 16 1951

A.E.C.

Memorandum:

To: Administrative Management Division

From: Director, Supply Division

Subject: Application for exploration aid of Mr. Gus Gavin, Ruby Star Route, Box 28, Tucson, Arizona, DMA-1310X Commodity-Copper

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

1. There is no exposed ore at the mine

2. No geological evidence to indicate that any mineralization may be found.

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

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

2 Forms XF-100
3 Forms XF-103
1 Field Team Report on Scorpio Annex Copper Project
1 Form letter from Tom Lyon to J. H. East, June 28, 1951
1 DMA Review of Application for Exploration Assistance
2 Original letters from G. Gavin to Dr. James Boyd
May 19, 1951 with assay sheet attached
May 19, 1951
1 Original letter from Mellenry Hosier to J.R.Gowen, June 19, 1951
1 Carbon letter from L. F. Strobel to Gus Gavin, May 31, 1951

Tom Lyon

Tom Lyon, Director
Supply Division

Attachments

HVVaughn:sx
10/10/51
Copy to: Administrator's Reading File
Executive Officer, Region IV
J.R.Gowen
C.H.Johnson
D.Maclaren
Files - DMA Docket

310

FILE COPY
SURNAME:

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

A.E.C.

RVWaugh
Gowen
Nelson
Johnson Hm

OCT 16 1951

Mr. Gus Gavin
Ruby Star Route
Box 28
Tucson, Arizona

Re: Docket No. DMA-1310X

Dear Mr. Gavin:

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 of the property do not warrant Government participation in further exploration at this time.

Very truly yours,

10/16

Tom Lyon
Tom Lyon, Director
Supply Division

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

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

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2 Original letters from G. Gavin to Dr. James Boyd
May 19, 1951 with assay sheet attached
May 19, 1951
1 Original letter from McHenry Mosier to J.B.Gowen, June 19, 1951
1 Carbon letter from L. F. Strobel to Gus Gavin, May 31, 1951

Tom Lyon

Tom Lyon, Director
Supply Division

Attachments

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF MINES

OFFICE OF
REGIONAL DIRECTOR

REGION IV

224 NEW CUSTOMHOUSE
DENVER 2, COLORADO

August 13, 1951

Memorandum

To: Executive Secretary, Defense Minerals Administration

From: DMA Field Team, Region IV

Subject: DMA Docket 1310X, Scorpio Annex Copper Project, Twin Buttes (Pima) Mining District, Pima County, Arizona

Enclosed are the brochure and original and two copies of the report on the above docket.

We concur with the examining team and recommend that the application for a loan of $10,000 be denied.

J. H. East, Jr.

A. H. Koschmann

Enclosures

Mining Division
Region IV

August 13, 1951

Memorandum

To: DMA Field Team, Region IV

From: Chief, Mining Division, Region IV

Subject: DMA Docket 1316X, Scorpio Amax Copper Project, Twin Buttes (Pima) Mining District, Pima County, Arizona

We concur with the examining team in recommending a denial of the above application for a loan of $10,000.

Paul T. Allaman

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
AUG 16 1951

MINING DIVISION
REGION IV

August 6, 1951

Memorandum

To: Paul T. Allsman, Denver, Colorado

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

Subject: Final Report, DMA Docket 1310X, Scorpio Annex Copper Project, Twin Buttes (Pima) Mining District, Pima County, Ariz.

Enclosed are original and 7 copies of the section on Summary, Conclusions and Recommendations by John N. Faick of the Geological Survey and Grant R. Rubly of the Bureau of Mines, and the section on Engineering by Rubly. The brochure for this docket also is enclosed.

The report has my approval.

Walter R. Storms

CC P.T. Allsman (7)
C. A. Anderson
DMA 1310X
DF

WRStorms:als

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY
Defense Minerals Administration
200 New Customhouse
Denver 2, Colorado

August 9, 1951

Memorandum

To: DMA Field Team, Region IV

From: A. H. Koschmann

Subject: DMA Docket 1310X, Scorpio Annex Claim (Gus Gavin), Twin Buttes District, Pima County, Arizona

Enclosed are the original and 7 copies of the geologic report by J. N. Faick of the Geological Survey covering the above docket.

A. H. Koschmann
A. H. Koschmann
Supervising Geologist
Colorado-Wyoming

Enclosures (8)

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY
P.O.Box 4126, University Station
Tucson, Arizona

August 6, 1951

Memorandum

To: Mr. A. H. Koschmann, Denver, Colorado

From: Mr. A. F. Shride, Tucson, Arizona

Subject: Geologic Report, DMA 131KK, Scorpio Annex Claim (Gus Gavin), Twin Buttes District, Pima County, Arizona

Enclosed are the original and 7 copies of the above report by J. N. Faick of the Geological Survey. This report and the recommendations that an exploration loan be denied, because of the geologic improbability of finding ore, have my approval.

A. F. Shride
Acting District Supervisor
Arizona-New Mexico

Enclosures 8

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

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

DEFENSE MINERALS ADMINISTRATION

REPORT OF EXAMINATION BY FIELD TEAM
REGION IV

DMA-1310X, Scorpio Annex, Copper Project

Twin Buttes (Pima) Mining District

Pima County, Arizona

John N. Faick, Geologist
U. S. Geological Survey

Grant R. Rubly, Mining Engineer
U. S. Bureau of Mines

August 1951

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

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

On May 19, 1951, Gus Gavin filed an application for aid with the Defense Minerals Administration in the amount of $10,000 for an exploration loan pursuant to Mineral Order 5 under the Defense Production Act of 1950. This application, as DMA Docket 1310X, was reviewed and referred to the Fueld Team of Region IV for further investigation. The applicant proposed to sink a shaft and crosscut limestone beds in search of a copper-zinc deposit on the Scorpio Annex Claim.

Limestone beds, dipping about 60° to the north, crop out on the Scorpio Annex Claim. The limestone has been altered to white marble. Very small cross-breaks occur in this limestone, and some iron and manganese minerals are present in small quantities. Garnet zones, which seem to be normally associated with the productive zones of the Twin Buttes area, are lacking.

A 30-foot shaft on the Scorpio Annex Claim, a trench exposing steeply tilted limestone beds on the Well No. 2 Claim, and a 400-foot churn drill hole on the Well Claim, together with some location holes, represent the extent of the work done on the property.

The possibility of finding ore in this area is very remote as geologic conditions are very unfavorable.

It is recommended that the loan be denied.

1/ Geologist, Geological Survey
2/ Mining Engineer, Bureau of Mines

Geology

SCORPIO ANNEX CLAIM, COPPER PROJECT
TWIN BUTTES MINING DISTRICT
PIMA COUNTY, ARIZONA

Geology

By John N. Faick
Geologist, U. S. Geological Survey

SCORPIO ANNEX CLAIM, COPPER PROJECT
TWIN BUTTES MINING DISTRICT
PIMA COUNTY, ARIZONA

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Geology	Page
Introduction	1
General Geology	1
Ore Occurrence	2
The Gavin Prospect	3
Conclusions	4

INTRODUCTION

The Scorpio Annex claim, for which Mr. Gus Gavin made application for an exploration loan, is in the Twin Buttes district located on the east side of the Sierrita Mountains about 30 miles south of Tucson. This area has been the subject of three short papers listed below:

Twin Buttes Camp, Pima County, Arizona: War Minerals Report 47, 1943

Wilson, Eldred D., Pima District: Univ. Ariz., Ariz. Bur. Mines Bull. No. 31, pp. 39-50, 1950.

Cummings, J. B. and Romslo, T. D., Investigation of Twin Buttes Copper Mines, Pima County, Arizona: U. S. Bureau of Mines R. I. 4732, 1950.

In addition to these brief papers which have been very useful, there is in the office of the Arizona Bureau of Mines an excellent geologic map of the area prepared by Eldred Wilson, Geologist of the Arizona Bureau of Mines. This map proved to be valuable in making the examination and in preparing this report.

GENERAL GEOLOGY

In the Twin Buttes area a thick series of sediments have been folded, faulted, and intruded by granitic igneous rocks. The sedimentary rocks represent nearly all of the Paleozoic, with the exception of those of the Ordovician and Silurian which are not present. These formations are overlain by Upper Cretaceous sedimentary beds and volcanics. The formations of greatest importance to this investigation are the Devonian Martin limestone, Mississippian Escabrosa limestone and the Pennsylvanian Naco limestones.

The principal host rocks for ore in the Twin Buttes area appear to be the Escabrosa and Naco limestones. The Escabrosa formation is a

massive, granular, relatively pure, light gray to white limestone reported to be about 375 feet thick. This formation is overlain with the Naco limestone; a thin bedded cherty limestone interstratified with thin shale. This formation is about 1200 feet thick at Twin Buttes.

The structure of the Twin Buttes area is exceedingly complex. The Paleozoic limestone formations are folded into tight isoclinal folds that strike about N. 60° W. and dip between 45 and 80 degrees to the northeast. This structure has been further complicated by low-angle faults and by steeply dipping faults in northeasterly, northwesterly, and easterly trending systems.

The folded strata have been intruded by coarse-textured igneous rocks ranging in composition from granite to quartz monzonite and granodiorite. These granitic rocks underlie a very large part of the Sierrita Mountains west of the Twin Buttes district and are found at several places within the district. Intrusion of the granite has caused widespread metamorphism of the sediments, resulting principally in the forming of great quantities of garnet along the contacts. The ores of the district apparently are genetically related to the granitic intrusion and associated metamorphism.

ORE OCCURRENCE

There are many small mines in the district, and contact metamorphic, limestone replacement deposits, and vein types of deposits are represented. The contact metamorphic type deposit is most common and several mines in the vicinity have exploited this type of ore. The ores are dominantly copper, but in some mines zinc is important. The ore minerals are chalcopyrite and sphalerite, and these usually occur on the limestone side of massive garnet that commonly lies along the contact between the limestone and granite. No important ore bodies

have been discovered at the surface, and those developed were discovered by sinking on small fissure veins to the contact zone. The ores are most commonly associated with faults and fractures of the northeast and east systems. Small fissures that intersect the contact and cut the limestones appear to have been controlling factors in ore deposition.

The Minnie, Copper Butte, Copper King, Copper Queen, Copper Glance, and Copper Bullion deposits are of the contact metamorphic type and are along a single contact about 1000 feet north of the Gavin prospect. They lie along the north side of an east-west ridge that is thought to be completely surrounded by granite. The claims containing these mines lie end to end, their sidelines roughly parallel a nearly east-west segment of the granite-limestone contact that is about 8000 feet long. The position of this contact has been determined underground at intervals for about 6000 feet and was found to dip steeply to the south.

THE GAVIN PROSPECT

The Gavin prospect lies about 1000 feet south of the mineralized east-west contact zone mentioned above. The prospect is completely outside of the contact zone along which the known ore bodies are localized. The prospect is in massive to thick-bedded, coarse crystalline, light gray and white limestone. The prospect where Gavin proposes to do his exploration work has been opened by a vertical shaft 30 feet deep in limestone. Near the collar of the shaft a very narrow fracture dips steeply to the south. A small amount of iron and manganese stain is localized along this fracture. It was this small iron and manganese stained fracture that encouraged Gavin to sink the shaft, and he was unduly influenced by the fact that the important ore bodies of the

district did not crop out, but were found by sinking on small mineralized fractures near the granite-limestone contact. Gavin is of the opinion that he might find ore by the same method, i.e. by sinking and crosscutting. This is a very unlikely possibility, however, because the prospect is not near a favorable contact.

At the Gavin prospect the formations strike N. 70° W. and dip 60° NE. The limestone has appreciable thickness and the contact with the granite which is thought to underlie the area must be at a depth of at least several hundred feet. This is partly substantiated by a 400 foot churn drill hole that was drilled 200 or 300 feet south of the prospect and found only unaltered limestone extending to that depth. About 500 feet southeast of this prospect is a small trench that exposed some copper stained thin-bedded limestones. This is about the only mineralization of any importance exposed on Gavin's Scorpio-Well group of claims, and it is doubtful if this occurrence of mineralization justifies exploration. The mineralization is weak, and Gavin is not interested in exploring this area.

CONCLUSIONS

Gavin's prospect on the Scorpio Annex claim lies about 1000 feet south of the mineralized contact along which is located several formerly productive min es including the Copper Queen, Copper Glance and other mines. The prospect is on a narrow, steeply dipping fracture containing manganese and iron stain in a massive barren limestone. There is no ore exposed at the mine and no geological reason to expect any. It is therefore recommended that the application for a loan be denied.

SCORPIO ANNEX COPPER PROJECT
TWIN BUTTES (PIMA) MINING DISTRICT
PIMA COUNTY, ARIZONA
DMA DOCKET 1310X

Engineering Report

By Grant R. Rubly
Mining Engineer
U.S. Bureau of Mines

August 1951

Engineering

SCORPIO ANNEX COPPER PROJECT
TWIN BUTTES(PIMA) MINING DISTRICT
PIMA COUNTY, ARIZONA
DMA DOCKET 1310X

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Engineering report

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ILLUSTRATIONS

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1	Location Map, Scorpio Annex Claim	1

INTRODUCTION

On May 19, 1951, Gus Gavin filed an application for aid with the Defense Minerals Administration for an exploration loan pursuant to Mineral Order 5 under the Defense Production Act of 1950. This application, as DMA Docket 1310X, was reviewed, then referred to the Defense Minerals Administration Field Team of Region IV for further investigation.

The applicant requested aid amounting to $10,000 to cover cost of exploring for copper and zinc ores on the Scorpio Annex Claim of the Scorpio-Well group of claims in the Twin Buttes District, (Pima Mining District), Pima County, Arizona. The proposed work comprises sinking and cross cutting to delimit copper-zinc ore which occurs on the surface.

Since this is a copper-zinc project the costs would be shared on a 50-50 basis by the applicant and the Government.

ACKNOWLEDGEMENTS

The examining engineers are indebted to Gus Gavin for his assistance and the courtesies which he extended during the examination.

LOCATION, TOPOGRAPHY AND CLIMATE

The Scorpio-Well group of claims is in the Twin Buttes district, a part of the Pima Mining District, 28 miles south of Tucson, Arizona. A graded road about nine miles in length connects the claims with Sahuarita. Sahuarita is on the Nogales branch of the Southern Pacific Railroad, and on paved highway U.S. 89 (Fig. 1).

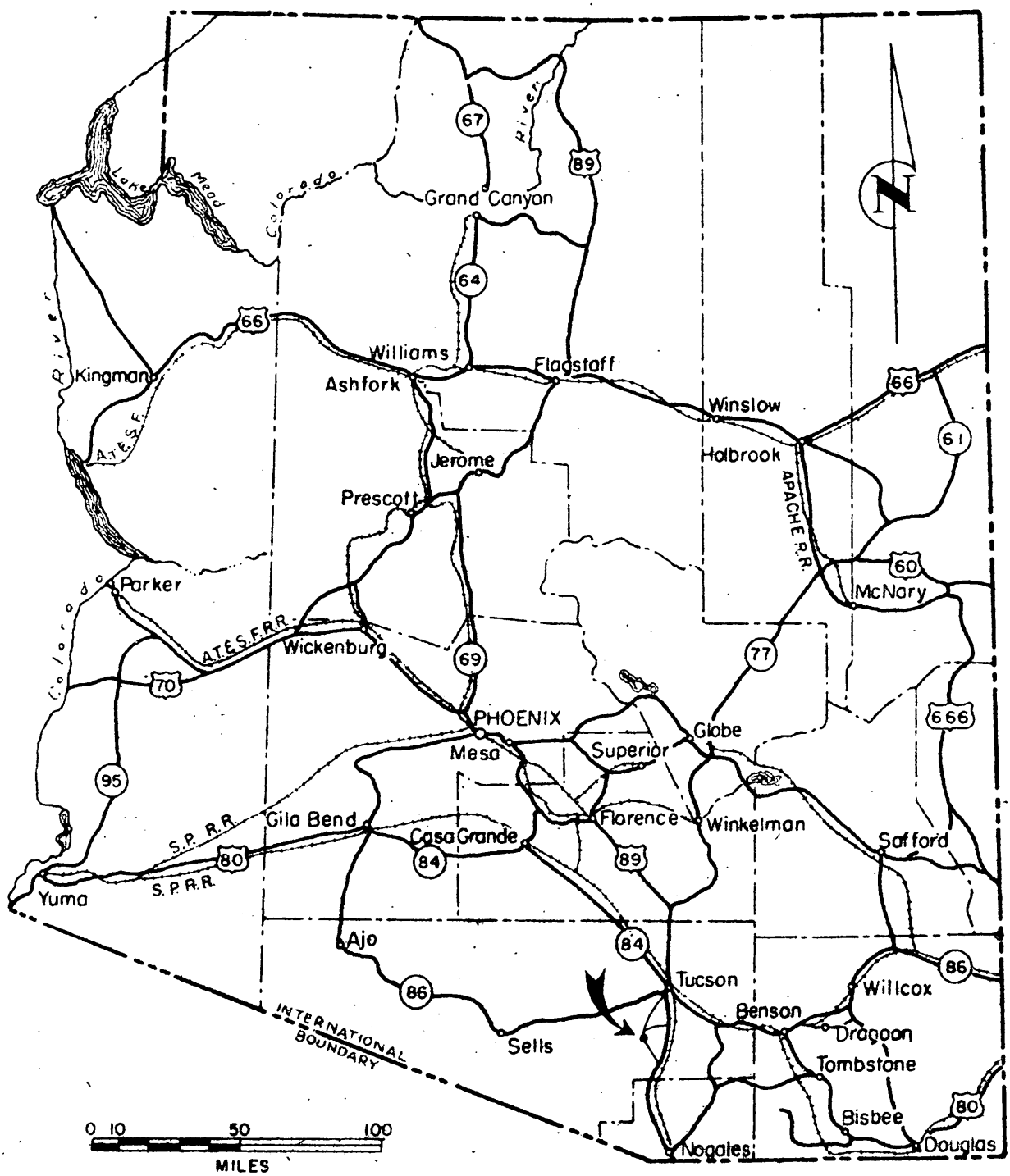

FIG. 1 - LOCATION MAP
SCORPIO ANNEX GROUP
TWIN BUTTES DISTRICT
PIMA COUNTY, ARIZONA

DMA 1310 X AUG 1951

The Scorpio-Well group of claims lies just south and adjacent to the Copper Queen and Copper Glance mines of the Twin Buttes claims.[1] The Twin Buttes mines are credited with a production of over 48,000,000 pounds of copper.

Topographic relief is not great. The altitude is about 3,500 feet. The climate is characteristic of Southern Arizona, with hot summers and mild winters. Vegetation is of the desert variety. Water is obtained from three old prospect shafts in the Twin Buttes area and from deep wells on the Gavin Homestead.

HISTORY

The first mining claims in the district are said to have been located in 1876. The Scorpio-Well group of claims has been held by Gavin for over twenty years. There has been no production of any kind from these claims.

OWNERSHIP AND EXTENT

The 10 lode mining claims comprising the Scorpio-Well group are held by location by the applicant and lie within his homestead. There is considerable over-lapping of claims. The Scorpio Annex is not a full sized claim.

DESCRIPTION OF DEPOSITS

The Scorpio Annex claim, on which the Gavin prospect is located, lies about 1,000 feet south of the Copper Queen mine. The prospect is on a narrow, steeply dipping fracture in massive limestone on

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1/ Cummings, Jos. B. & Romslo, T.M., Investigation of Twin Buttes Copper Mines, Pima County, Arizona, Bur. of Mines. Report of Investigations 4732.

which are localized thin films of iron and manganese oxides. These oxides are reported to assay about one percent copper, although no copper could be seen. No ore is exposed at the prospect, and there is no geological reason to expect any as tactite zones with which most of the ore in this locality are associated are absent on the Scorpio Annex Claim.

ORE RESERVES

There are no ore reserves, measured, indicated or inferred.

PRESENT STATUS

A 30-foot shaft was sunk on the Scorpio Annex claims for assessment work, and a slightly mineralized zone in the limestone was opened. However, mineralization does not continue to depth. The assay of a sample taken in 1945 showed 1.2 per cent copper and no zinc. The copper is probably in the form of cuprite with hematite, as no staining is visible. A trench about 50 feet long has been dug through a couple of feet of valley fill. This trench exposes steeply dipping shaly limestones, with a little copper staining.

On the Well claim, a churn drill hole some 400 feet deep was sunk to prospect for water. The hole is reported to have been in limestone at that depth. No water was found.

The work noted above, along with a few location holes, represents the extent of any exploration done thus far on these claims.

PROPOSED EXPLORATION PROGRAM

The applicant proposed to sink the shaft on the Scorpio Annex claim for another 70 feet or more, and then do some crosscutting through the limestone beds. In view of the fact that there is no geologic evidence to indicate that any mineralization may be found, such work would be a waste of money. The applicant still is faced

with annual assessment work in order to hold the claims so he may do some of this sinking himself.

PROPOSED FINANCING

The applicant is financially able and willing to conduct an exploration program.

CONCLUSIONS

Since geologic evidence is such that probably no orebodies will be found by exploration in this area, any money spent in additional shaft sinking would be wasted. The same conclusions would apply to a proposed diamond drilling program.

RECOMMENDATIONS

It is recommended that the loan for exploration be denied because geological conditions are entirely unfavorable.

[illegible]

[illegible]

REGIONAL [illegible]
OFFICE
[illegible]
JUL 1 1951
BUREAU OF MINES
DENVER, COLORADO

JUN 28 1951

Mr. J. H. East, Jr.
Executive Officer, DMA Field Team
224 New Customhouse
Denver 2, Colorado

Dear Sir:

We attach "Review of Application for Exploration Assistance" on:

Project No. DMA 1310X

Commodity: Copper

Applicant: Mr. Gus Gavin, Ruby Star Route, Box 28, Tucson, Arizona

Please give the consideration of this application with particular reference to the points set in the attached "Review".

Very truly yours,

Tom Lyon
Tom Lyon, Chairman
Coordinating Committee

Lowell B. Moon
For Bureau of Mines

E. T. McKnight
For Geological Survey

Defense Minerals Administration

Review of Application for Exploration Assistance

Docket No. DMA-1310 X

Commodity Copper-Zinc

Total Amount 10,000.

Govt. Participation 5,000.

1. Name and Address of Applicant Gus Gavin

Ruby Star Rt. Box 28, Tucson, Arizona

2. Location of Property Twin Buttes, Arizona - Pima County

3. Mineral or metal Copper-Zinc 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 X

e) Is there an alternative and favorable project? No
(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? Not lessee

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

productive period? Not lease

*Question numbers are those of MF-103

[illegible] No

c) [illegible]

d) [illegible]

8. Have the [illegible] proposed, or the engineer's reports appear feasible from the point of view of:

a) Available water No data

b) Irrigation and supplies (question 17, plus points [illegible] [illegible] of availability)

c) Accessibility (question 18) Not enough data

d) Water (question 19) ~~No~~ ✓ Yes

e) Power (question 20) No data

Is a field check needed on any of these points? Yes

9. Does the experience of the applicant appear to be adequate to secure that has been properly studied the proposed project? (question 4) No data

Is a field check needed on this point? Yes

10. Results to (questions 21 and 22)

a) Is the project adequately described? No

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

b) Is there an adequate map or sketch of the proposed works? ~~No~~ Yes

c) Is the proposed [illegible] in [illegible] under the definition of Section 2, [illegible]? Yes

If not, what part is [illegible]?

Is this part a worthwhile exploration project? No

d) Are the cost estimates detailed? No

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 data

f) Should more information be requested from applicant? Yes

g) Is a field examination necessary to complete Exhibit A? Yes

11. Exhibit B (question 23-d)

a) Is it applicable? No

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

c) Is a field check needed? No

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

a) Is it applicable? Yes

b) Sufficient data? No If so, attach a draft.

c) Are rents and charges reasonable? No data

d) Is a field check needed? Yes

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

a) Are there sufficient data? No

b) Is the schedule adequate for the work proposed? No schedule

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

d) Are the proposed wages and salaries reasonable? _____

e) Is a field check needed? Yes

14. Section 1 (question 13-c)

a) Is it applicable? No

b) Sufficient data?

c) Reasonable?

d) Field check needed? No

15. In your judgment, can the proposed work be done in the proposed time? No time given - but probable

(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 questions? No geologic data given. - No recorded U.S.B.M. examinations found - The only assay given is not located and shows no Zinc. A field team would need to locate any records or examination reports from owner + make decisions on ground. - A field check is recommended.

Reviewed by: [illegible]

[illegible]

[illegible]

Date 6/18/51

Page 4, [illegible] pages

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS ADMINISTRATION
~~WASHINGTON 25, D.C.~~
College Park, Maryland

June 19, 1951

Memorandum

To: J. B. Gowen, Chief
Copper Branch, Supply Division

From: Executive Officer
Field Team, Region VIII

Subject: Review of Docket DMA 1310X.

Attached is Docket DMA 1310X which was sent to College Park for review.

Reference to the Field Team is recommended.

McHenry Mosier

Attachments

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
JUN 20 1951
LAUREN F. STROBEL
Executive Secretary

dmd 13101

Form 174-A

PHELPS DODGE CORPORATION, Copper Queen Branch

MINE DEPARTMENT, BISBEE, ARIZONA

Assay and Analysis Certificate

DIVISION Geol. Dept. SAMPLES ASSAYED Mar., 15th., 1945

LEVEL	STOPE OR DRIFT	GOLD OZ.	SILVER OZ.	COPPER %	LEAD %	SiO_2 %	AL_2O_3 %	Fe %	CaO %	S % Mn	S % Zn
J.Valanzuelo	Special	.03	1.00	1.2	Nil	6.6	0.2	14.9	24.6	6.8	Nil

Tucson, Ariz. — May 19 - 51.

ROBERT F. STROBEL
dwa 1310 X

Dr. James Boyd Adm.
Defence Prod Adm.
Interior Bldg.
Washington 25, D.C.

Following up the advise of Mr. Storms, representing DMA in the State of Arizona I the undersigned herewith submit my Application for Aid for an Exploration Project Pursuant to Mineral Order 5 under Defence Production Act of 1950.

The property to be explored is the Scorpio-Hell Group, the Scorpio Annex claim specifically. This property is situated in Twin Buttes Arizona, adjoining + running alongside the Queen + Glance Mines, which are well known copper producers, at present under lease by the Banner Copper Company. The Scorpio Annex claim + also the other claims of which there are six belonging to the Scorpio-Hell group have been investigated by the U.S.B. of Mines in 1942 under the supervision of Dr Hilson + Mr Cummings, and again in 1945 under the supervision of Dr. Sandburg. Dr Sandburg spent over a month on the above mentioned mine making Geo-physical tests. Lately

the United Geophysical Company a California corporation has been exploring the claims for several months. Both the Banner Copper Company + the United Geophysical Company are very much interested in the property. However we, Mrs Gavin + I have decided to do some exploration work at our own expence. Our consulting engineer is Mr J. B. Tenney of Tucson, Ariz. He intend to sink a shaft on the Scorpio Auner claim _ 30 feet as our assessment work. Should the findings below the surface be as encouraging as they are on the surface (am enclosing assay of outcropping) we intend to continue 70 feet sinking, or more, if advisable, and do some crosscutting He feel that such an exploration program would cost more or less $10,000.00. Whatever the amount maybe we intend to go ahead. However if the U.S. Government should be so good to assist us in our undertaking so much the better. In such a case we intend to put up 50 per cent or $5000.00, if the U.S. Government grants us the same amount. Should it happen so the work could be done without interruption instead, as we are at present planing, by stages.

He would have to buy a hoist and a com-

pressor plus other tools and equipments necessary for drilling. Needless to say that the advise direction & supervision of and by the Defence Production Administration would not be only welcome but very much asked for.

Due to the fact that the time for expediting the enclosed Applications is very short and also admitting that we really dont know what further informations you wish to obtain we wish to assure you that we gladly will furnish you with all the datas you wish to receive.

Thanking you for your kind interest in our behalf

I beg to remain
Sincerely Yours

G. Gavin
Ruby Star Pte Box 28
Tucson, Ariz.

FILE COPY
SURNAME:

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

May 31, 1951

Gus Gavin
Ruby Star Route
Box 28
Tucson, Arizona

Subject: DMA-1310X
Re: Exploration Loan
Scorpio Annex claim

My dear Mr. Gavin:

Receipt is acknowledged of your application and attachments of May 19, 1951 for an exploration loan under the Defense Production Act of 1950.

The application was assigned Docket Number DMA-1310X and was referred to Mr. J. B. Gowen, Chief, Copper Branch on May 29, 1951.

In any future correspondence relating to your application, kindly refer to DMA-1310X.

Sincerely yours,

LANDON F. STROBEL

Landon F. Strobel
Executive Secretary

LFSTROBEL:jhs
cc: Strobel-2
Files
Gowen
Lyon

DMA 1310

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 1310 X

Date received 5-26-51

Participation

Gus Gavin
Ruby Star Box 28
Tucson, Ariz

Name and address of applicant

Date May 19-51

FILL IN THIS BLOCK

Date of application May 19-51

Estimated cost $10,000.00

Mineral or metal Copper - Zinc

Percentage of Government participation 50 per cent

Location of mine Twin Buttes, Ariz.
Pima County

Date of filing MF-100 May 19-51

DMA Docket Number, if available dma 1310 X
Not received as yet.

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? Partnership: Husband & Wife
*2. If a partnership, state names and addresses of partners. Gus Gavin, Sofie Gavin Ruby Star 28 Tucson, Ariz
*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. a, b, G. G. experienced practical mining man for past 26 years
*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. None
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. Not in operation
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)? 50 per cent — $5000.00

*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. The Scorpio Queen Claim of The Scorpio - Well Group

(*b*) Give the legal description of the exact parcel, plot, or area upon which the exploration is to be conducted. The Scorpio Queen adjoins the South Side Line of The Queen Mine at Twin Buttes.

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. The Scorpio - Well Group

*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. nearest R.R. Sahuarita - 9 Miles from Twin Buttes

*13. State source and quantity of water available for operations and its sufficiency at all seasons. Well on my adjoining homestead.
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. Truck to Sahuarita to El Paso or Hayden

*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. On Well claim panic Shaft for water struck Copper instead.

(*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. by enclosed

*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? Copper in lime stone

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 by enclosed letter.

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.

---------- (Name of company)	By Gus Gavin ---------- (Signature of authorized official)
---------- (Date)	Owner ---------- (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

May 31, 1951

Gus Gavin
Ruby Star Route
Box 28
Tucson, Arizona

Subject: DMA-1310X
Re: Exploration Loan
Scorpio Annex claim

My dear Mr. Gavin:

Receipt is acknowledged of your application and attachments of May 19, 1951 for an exploration loan under the Defense Production Act of 1950.

The application was assigned Docket Number DMA-1310X and was referred to Mr. J. B. Gowen, Chief, Copper Branch on May 29, 1951.

In any future correspondence relating to your application, kindly refer to DMA-1310X.

Sincerely yours,

LANDON F. STROBEL

Landon F. Strobel
Executive Secretary

LFSTROBEL:jhs
cc: Strobel-2
Files
Gowen
Lyon

~~LANDON F. STROBEL~~

Tucson, May 19 51 Speake

LAN 3 - 1951

Gower

Mr. James Boyd Adm.
Defence Prod. Adm.
Interior Bldg
Washington 25, D.C.

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
JUN 1 8 1951
LANDON F. STROBEL
Executive Secretary

Dear Sir:-

Mr. Storms, in charge of DMA of the U.S. Bureau of Mines at University of Ariz., Tucson Arizona advised me to mail to you the enclosed Forms MF-100 for the purpose of applying for Serial numbers for certain mining properties which my wife + I jointly own. The names of the properties are as follows:

a/ The Scorpio-Wells group, comprising of six (6) Claims located in Pima County Mining District, Tucson Arizona. These claims are adjoining the Queen + Glance Mines, (patented Claims) located in Twin Buttes, Ariz. Pima County.

b/ The Taurus Group comprising two (2) Claims also in Pima Mining District, adjoining the Morgan Mine (patented Mining Claims) also located in Twin Buttes, Ariz. Pima County.

2/

Materials produced: Copper.

Byproducts: Zinc, some silver.

2/ The Scorpio-Wells group has one Shaft 150' deep with a 6' vein containing an average of 5 per cent copper. We intend to sink an other shaft closer to the Queen Mine (leased by the Banner Copper Company)

The Taurus Group has 2 Shafts, one a vertical 125 feet deep, the other an incline Shaft 90 feet deep. The incline shaft is in 4 per cent Copper.

Both Groups being prospects at present, have not shipped any ore up to the present time. But as stated above we intend to sink a shaft in the nearest future at the Scorpio-Wells group. Right now we are repairing the incline shaft at the Taurus group.- Realizing that eventually we will need mining machineries & other operating supplies we herewith apply for Serial numbers for the above mentioned mining properties.

Thanking you for your kind interest in our behalf, I am Sincerely yours

G. Gavin
Ruby Star Rte Box 28
Tucson, Ariz.

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-1310 X

Date received ~~DMA~~ 0066

33720

G. Gavin
Ruby Star Rte Box 28
Tucson, Ariz

Name and address of applicant

Application for:
Serial Number

Date May 19-51

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) XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX ~~ration Deduction) of Internal Revenue Code, 1950, (5)~~ XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX 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.

X
5

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? Copper, Zinc
   (*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. no water at present
3. For each operation listed above supply the following:
   (*a*) Distance and direction from nearest town and shipping point. Sahuarita - 9 miles from Twin Buttes
   (*b*) Mining district. Pima Mining Dist.
   (*c*) Township, Section, Range.
   (*d*) County, State. Pima County, Ariz
4. (*a*) State whether or not property is now in operation and if in operation, by whom operated. not in operation
   (*b*) Are you operating this property as:
   - [x] 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: Owner: practical mining man for past 26 years
   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.

Morgan - Queen - Glance Mines old well known Copper producers.
My property investigated by U.S.B. of Mines in 1942 (Mr. Wilson) & 1945 (Mr. Sandberg)

16—63792-1

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		Life Insurance Carried for Benefit of Applicant	
				Common (e)	Preferred (f)	Amount (g)	Net Cash Surrender Value After Loans (h)
	Total		x x x x x			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	$	$	$		
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.

(Name of company)

By Gus Gavin
Sofia Gavin
(Signature of authorized official)

May 19-57
(Date)

Owners
(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

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-1310X

Date received DMA 0066

33720

G. Gavin
Ruby Star Pkt Box 28
Tucson, Arizona

Name and address of applicant

application for: Serial number

Date May 19-51

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) [illegible] Section 1071 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.

X
5

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? Copper, Zinc.
   (*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. no yeter at present
3. For each operation listed above supply the following:
   (*a*) Distance and direction from nearest town and shipping point. Sahuarita, - 9 miles from Twin - Buttes
   (*b*) Mining district. Pima Mining District
   (*c*) Township, Section, Range.
   (*d*) County, State. Pima County, Arizona
4. (*a*) State whether or not property is now in operation, and if in operation, by whom operated. not in operation
   (*b*) Are you operating this property as:
   - [X] 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: Owner: practical mining man for past 26 years
   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.

Morgan-Queen - Glance Mines old well known Copper Producers.
My Property investigated by U.S.B. of Mines in 1942 (Fr. Wilson) + 1945 (Fr. Sandberg)

16—63792-1

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		Life Insurance Carried for Benefit of Applicant	
				Common (e)	Preferred (f)	Amount (g)	Net Cash Surrender Value After Loans (h)
	Total		x x x x x			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	$	$	$		
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.

Gus Gavin

By Sofia Gavin
(Signature of authorized official)

(Name of company)

May 19-51
(Date)

Owner
(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

Defense Minerals Administration
Reference Slip

Date 5/29/51

To: 1. Mr. Gowen

2. MAY 31 1951

3.

4.

DMA 1310 X

For Action ✓
Reply
Information
Remarks:

Sender Strobel (WD)

3
Mr. Strobel DMA
Forwarded to

Branch

Date

Sender

2
Mr. Strobel DMA
Forwarded to

Branch

Date

Sender

1
Mr. Strobel DMA
Forwarded to

Branch

Date

Sender

92758

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 1310 X

Date received 5/26/51

Participation

Gus Gavin
Ruby Star Rte Box 28
Tucson, Ariz

Name and address of applicant

Date May 19-51

FILL IN THIS BLOCK

Date of application May 19-51

Estimated cost $10,000.00

Mineral or metal Copper - Zinc

Percentage of Government participation 50 per cent

Location of mine Twin Buttes, Ariz
Pima County

Date of filing MF-100 May 19-51

DMA Docket Number, if available dma 1310X not received as yet

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? Partnership: Husband & Wife

*2. If a partnership, state names and addresses of partners. Gus & Sofia Gavin, Ruby Star 28 Tucson, Ariz

*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? Owners

6. If owner, state what claims, liens, or encumbrances, if any, are against the property. none

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. not in operation

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)? 50 per cent — $5000.00

*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. "Scorpio Amer Claim" of the Scorpio-Well group is involved

(*b*) Give the legal description of the exact parcel, plot, or area upon which the exploration is to be conducted. Scorpio Amer adjoins the S.S. de Line of the Cuzco Mine at Iron Butte

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. The Scorpio-Well Group

*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. nearest P.O. at Saluarita - 9 miles from Iron Butte. Credit 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. Well on my adjoining homestead

*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. Truck to Saluarita P.O. to El Paso or Hayden

*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. On Well Claim sunk Shaft for water, struck Copper instead.

(*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. by enclosed letter.

*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? Copper in Lime stone

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 by enclosed letter.

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.

(Name of company)

By Geo Gavin
(Signature of authorized official)

(Date)

Owner
(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.

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Participation

Gus Gavin
Ruby Star Box 28
Tucson, Ariz

Name and address of applicant

Date May 19-51

FILL IN THIS BLOCK

Date of application May 19-51

Estimated cost $ 10,000.00

Mineral or metal Copper - Zinc

Percentage of Government participation 50 per cent

Location of mine Twin Buttes, Ariz
Pima County

Date of filing MF-100 May 19-51

DMA Docket Number, if available DMA 1310 X not received as yet

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? Partnership: Husband & Wife
*2. If a partnership, state names and addresses of partners. Gus & Sofie Gavin, Ruby Star 28 Tucson, Ariz
*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? Owners
6. If owner, state what claims, liens, or encumbrances, if any, are against the property. None
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. Not in operation
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)? 50 per cent — $ 5000.00

*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. Scorpio Owner * Claim of the Scorpio Well group is involved
    (*b*) Give the legal description of the exact parcel, plot, or area upon which the exploration is to be conducted. Scorpio Owner adjoins the S. Sideline of the Queen Mine at Tyrone Butte.
    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. The Scorpio - Well Group

*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. nearest R.R. at Sahuarita - 9 Miles from Tyrone Butte. Excellent Roads

*13. State source and quantity of water available for operations and its sufficiency at all seasons. Well on my adjoining homestead.
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. Truck to Sahuarita, R.R. to El Paso or Hayden.

*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. On Well Claim sunk Shaft for Water, struck Copper instead.
    (*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. by enclosed letter

*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? Copper in Lime stone

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 by enclosed letter

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.

---------- (Name of company)	By ---------- (Signature of authorized official)
---------- (Date)	Owner (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.

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Mineral or metal Copper-Zinc

Percentage of Government participation 50 percent

Location of mine Twin Buttes, Ariz
Pima County

Date of filing MF-100 May 19-51

DMA Docket Number, if available dma 1310X not received as yet

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*2. If a partnership, state names and addresses of partners. Gus & Sofia Gavin, Ruby Star 28, Tucson Ariz
*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. a, b.: G. G. experienced practical mining man for past 26 years
*5. Are you the owner or the lessee of the property? Owners
6. If owner, state what claims, liens, or encumbrances, if any, are against the property. None
7. If lessee, attach a copy of the lease and state if it is in good standing.

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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. "Scorpio Annex" Claim of the Scorpio Well Group is involved

(*b*) Give the legal description of the exact parcel, plot, or area upon which the exploration is to be conducted. Scorpio Annex adjoins the S. Side Line of the Queen Mine at Twin Buttes.

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. The Scorpio-Well Group

*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. nearest R.R at Sahuarita - 9 miles from Twin Buttes. Excellent Roads.

*13. State source and quantity of water available for operations and its sufficiency at all seasons. Well on my adjoining mine ahead.
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. Truck to Sahuarita, R.R. to El Paso or Sayden

*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. On Well Claim sunk shaft for water, struck Copper in ahead.

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*17. Production:

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

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Gus Gavin

By _____ (Signature of authorized official)

_____ (Name of company)

Owners.

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_____ (Date)

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