DMA

NATIONAL DIRECTOR'S
OFFICE
REGION IV
OCT 31 1951
BUREAU OF MINES
DENVER, COLORADO

OCT 29 1951

Mr. Mervin J. Pavlacky
Box 979
Globe, Arizona

In reply please refer to
DMA-1565X-Tungsten

Dear Mr. Pavlacky:

We have received the field report on your property and regret that we must deny your application.

The cost of mining and shipping the ore would be extremely high because of the narrow vein and isolated location. The cost of production is certain to be much higher than the value of the ore.

Very truly yours,

SIGNED

A. E. Parsons
Acting Director, Supply Division

J.A.S.

MJE
cwm

DMA

REGIONAL DIRECTOR'S OFFICE 340
REGION IV
OCT 31 1951
BUREAU OF MINES
PERTH AMBOY, N.J.

OCT 29 1951

Memorandum

To: Reports and Records Unit

Through: Director, Supply Division

From: Tungsten Branch

Subject: DMA-1565X Tungsten, Exploration project $9,579.50
Marvin J. Pavlicky
Box 979
Globe, Arizona

Property: Twentieth Century Mine
Gila County, Arizona

The subject application has been reviewed by the field team and is denied.

The applicant proposed exploration on the main vein which averages about two feet wide, one hundred feet long, and contains about 1.0 percent WO_3. Inferred ore is estimated as about 1,500 tons 1.0 percent WO_3.

The applicant does not know where he can sell the ore, and it is doubtful if any payment would be received for the small gold-silver value.

The cost of mining and shipping the ore would be extremely high because of the narrow vein and isolated location. The cost of production is certain to be much higher than the value of the ore.

J.F.S.
JFE
WAM

George B. Holderer
Chief, Tungsten Branch

Attachments

Approved:

SIGNED

Acting Director, Supply Division

225 New Customhouse
Denver 2, Colorado

October 17, 1951

Memorandum

To: Executive Secretary, Defense Minerals Administration

From: DMA Field Team, Region IV

Subject: Final Report, DMA Docket 15651, Marvin J. Pankosky, Twentieth Century Tungsten Mine, Gila County, Arizona

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

We concur with the conclusions and recommendations of the examining team that the exploration loan of $9,979.50 be denied.

The brochure is enclosed.

J. H. Rock, Jr.

A. H. Koschmann

Enclosure

WDM:oj
cc: DMA Subject and Chron.
AHKoschmann

Mining Division
Region IV

September 12, 1951

Mr. Marvin J. Pavlacky
Globe, Arizona

Dear Mr. Pavlacky:

Your letter of September 6th to Mr. East has come to me for reply.

The brochure on your application 1565X has been sent to Tucson, Arizona. A copy of your letter will also be sent in order that they will have your address in order to contact you prior to the time that the field team makes an examination of your property.

Very truly yours,

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

cc: Storms (w/copy incoming letter)
Sub
Chron
Shaw
Koschmann (2)

PTA:bh

Allerman
Pls handle
JHE

1951
DENVER

Globe, Arizona

Sept. 6, 1951

Mr. J. H. East, Jr.

D.M.A. Field Team Region 4

224 New Custom house Building

Denver 2, Colorado

DMA-1565X Tungsten

Dear Mr. East:

My application for an exploration loan on my Tungsten property has been referred to you. I am enclosing a duplicate copy of the letter I received from D.M.A. in Washington.

I will be glad to give you any assistance that I can, when the Engineers arrive in Globe.

Please let me know a few days in advance just when the Engineers will arrive in Globe. My address in Globe is 374 South Deveroux St., my telephone number is 596-M.

Yours truly

Marvin J. Pavlacky

Marvin J. Pavlacky

DUPLICATE COPY

DEFENSE MINERALS ADMINISTRATION
WASHINGTON 25, D.C.

AUG. 27, 1951

Mr. Marvin J. Pavlacky
Box 979
Globe, Arizona

In reply please refer to
DMA-1565X Tungsten

Dear Mr. Pavlacky:

We are referring your application to Mr. J. H. East, Jr., Executive Officer, DMA Field Team Region 4, 224 New Custom house Building, Denver 2, Colorado for a field examination.

Please contact Mr. East and offer your assistance in the examination.

Very truly yours

Tom Lyon
Director, Supply Division

August 31, 1951

Memorandum

To: W. R. Storms (with brochure)

(Through Chief, Mining Division, Region IV)

Charles Anderson

From: DMA Field Team, Region IV

Subject: DMA Docket 1564X, Marvin J. Zaslansky, Twentieth Century Mine (Tungsten) Globe, Arizona

Enclosed is the brochure on the above application for an exploration loan estimated to cost $9,579.50. A field examination is required.

Consideration should be given to the possibilities of surface exploration, rather than sinking a shaft to 200 feet.

Please return the brochure with your report.

J. E. Eaton

J. E. Eaton, Jr.

A. H. Kuschmann

A. H. Kuschmann

Enclosure

Id

cc: DMA
Kuschmann

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF MINES

REFERENCE SLIP

DATE 8/29/51

REFERRED TO:

1. Allsman
2.
3.
4.

FOR:

..... Action	..... Recommendation
..... Approval	..... Record of .....
..... Comment	..... Referring to .....
..... Conference	..... Reply for signature of .....
..... Consideration	..... Rewriting
..... Filing	..... Signature
..... Instructions	..... Suggestions
..... Investigation	..... Your information
..... Initials	
..... Mailing	
..... Previous correspondence	

REMARKS: Brochure DMA ~~14~~ 1565X, Tungsten
Marvin J. Pavlacky, Box 979, Globe, Ariz.,
Total $95.79.60, Gov't. $7184.61-75%
Location: 15 miles south of Globe

Check (X) before the items needing attention.

JHE
Initials of sender.

GPO 16—51162-1

WOM

File copy to McMillan for review.

mailed by
[illegible]
5-11-51

May 11, 1951

Mr. Marvin J. Pavlacky
Box 979
Globe, Arizona

Dear Mr. Pavlacky:

This will acknowledge receipt of your letter and four copies of form MF-100, which are being forwarded to the Defense Minerals Administration, Interior Building, Washington 25, D. C.

Sincerely yours,

P. T. Allsman
Chief, Mining Division

/el
cc-Dma files
list file

May 11, 1951

Memorandum

To: Landon Strobel, Executive Secretary, Defense Minerals Administration

From: DMA Field Team, Region IV

Subject: Application, Marvin J. Pavlacky, Box 979, Globe, Arizona

We are enclosing three copies of MF-100 submitted by the above applicant.

P. T. Allsman, Alternate

Enclosures

/el
cc-DMA files
List files

Globe, Arizona

May 8, 1951

Bureau Of Mines

224 New Custom House Building

Denver 2, Colorado

Dear Sirs:

I am enclosing four copies of form MF-100 and attached sheets with information and Technical data for use under the Defense Production act of 1950.

I am interested mainly in being assigned a serial number so that I can obtain priorities for allocation of mining machinery and supplies and other Government assistance if I need it.

My plans are to apply for a loan on my Tungsten property under the matching principle plan, I will send in the appropiate forms later.

Yours truly,

Marvin J. Pavlacky

Box 979

Globe, Arizona

Marvin J. Pavlacky
Box 979
Globe, Arizona

Globe, Arizona
May 8, 1951

General Technical Data numbered and
answered in the same order as on Form MF-100.

1. Materials produced:
   (a) Chief product is Tungsten, although none produced as yet because this is a new mine location.
   (b(Zinc, Lead, Gold and Silver.
2. The name of this mine is "Twentieth Century Mine" It is an Underground ~~mine~~ metal mine, but future exploration can only determine this exactly.
   (a) 35 ft. inclined shaft.
   (b) None
   (c) 30 ft. of adits.
   (d) Since this property is in the prospect stage, this accounts for the small amount of Linear feet of workings.
   The workings are not flooded and there is no pumping problem.
   I am unable to answer what the productive capacity is.
3. For each operation listed above supply the following:
   (a) The property is located 15 miles south of Globe, Arizona which is the shipping point.
   (b) The Globe Mining District.
   (c) I do not know.
   (d) Gila, Arizona
4. (A) Limited part time exploration work, testing and sampling at this time by Marvin J. Pavlacky, owner.
   (b) I am working this property as owner.
5. Answered on form MF-100.
6. Marvin J. pavlacky is the owner and manager of this property and I have had 8 years under ground and open pit mining experience. I have had 1 years experience in milling of ores, working as shift boss and foreman in mills. I have leased and operated small mining properties.
7. History:
   (a) All exploration done is answered in Question 2 and no. 5. The reason for suspension of exploration and developement work is due to lack of financing and low metal prices until just recently.
   (b) The Mariana Mine formerly known as Gila-Pinal mines Company in 1898 and later the Bobtail Mine has produced many carloads of direct shipping ore to the El Paso smelter and later to the International smelter at Miami, Arizona. Values were in Gold Silver and Copper, Lead Zinc and Tungsten. My property is located on the extension veins of this above mentioned property.
   In the neighborhood Mrs Brice Westlake recently sold her Tungsten property to H.B. Piggott of San Francisco. This property has produced small amounts of Tungsten. In an article in the Phoenix Gazette dated May 2, 1951 H. B. Piggott stated as a result of recent tests the above mentioned property was one of the nations greatest potential sources of Tungsten. In the same article at Phoenix, Charles H. Dunning, Director of the State Department of Mineral resources, said. We have always thought the Pinal Mountains were a good Tungsten Prospect.

Marvin J. Pavlacky
Box 979
Globe, Arizona

Globe, Arizona
May 8, 1951

7. History Cont. part (b)
   (3) Another property in the neighborhood, is known as the Sampsel Mine which has produced Tungsten concentrates and still is a potential producer.
   (4) There are many small to medium sized properties in the vicinity of my property which have produced Gold, Silver, Lead, Zinc and Copper, also within a few miles are such Huge producers as Miami Copper Co. and Inspiration Copper Co.
   (c) There are no private reports that apply to this application. I do want to state that from my own examinations of other mines adjoining my property that the outcrops of veins and what work has been done, my porperty compares favorably.

8, 9, and 10 not applicable.

11, Answered on form MF-100

12, Ore or Mineral reserves.
   (a) There are two ore zones showing on the main vein of 175 ft. and 200 ft. long on the surface and from a few inches to 5 ft.wide. There are at least two other veins on the property with commercial possibilities but they have had less testing and work done on them.

   In writing of the Geology of the adjoining Mariana Mine formerly known as the Bobtail Mine. F.L. Ransome of the U.S. Geological Survey refers to the Bobtail Mine in the Globe Folio No. 111, on pages 14 and 15: " As examples of lode deposits, may be cited the Summit, Cola and Goodwin and the Bobtail lodes, carrying sulphides in Pinal Schist."

   The mariana Mine formerly known as the Bobtail Mine adjoins my property and I believe my claims are on the extension of the same vein system as the Mariana Mine.

   The Geology in general from my own study on my claims is; the veins are fissure veins and the valuable minerals are Tungsten Gold, Silver, Copper, Zinc and Lead. The country rock which encases the veins are Rhyolite and Pinal Schist and in some places it is Schist on both walls. There is a large Granite area on the eastern edge of the property and is within a few hundred feet of the main vein.

   (b) Samples were cut across the main vein and an average of assays are shown below and Gross value shown on form MF-100. Tungsten 1.10% WO3. Gold $2.94 Silver $4.34 per short ton. Probable or mineral reserve estimated from answer (a) Question No. 12.

13. Access roads:
   (a) The roads are secondary dirt roads and it is 15 miles to Globe, Arizona the shipping point, resident and supply points.

14. Water Supply:
   (a) Source of water is one of the mine locations and it is sufficient for all seasons of the year but will need some additional developement for milling purposes.

15. Power:
   (a) No power used at present. Diesel or Gasoline engines would have to be used.

16. Labor:
   Not Applicable.

Marvin J. Pavlacky
Box 979
Globe, Arizona

Globe, Arizona

May 8, 1951

17. Equipment and facilities:
The only equipment I have at the present is hand tools. I plan on buying an air compressor, hoist and machines for my share of a loan under the Matching Principle plan providing the loan goes through.

18. Particular conditions I want to mention are, in answering Question no. 12,(2)(b) I want to make it clear I have no tonnage proved or blocked out, the 2000 short tons is estimated ore.

The Gross value per ton is rather high and it is quite probable that this figure will be considerably lower when the mine comes into production.

The byproducts Lead, Zinc and Copper have not been assayed enough to get an average value. I believe with further testing and assaying these metals will prove worth saving.

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. .....

Date received .....

Marvin J. Pavlacky
Box 979
Globe, Arizona

Name and address of applicant

Date May 8, 1951

INSTRUCTIONS

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

GENERAL TECHNICAL DATA

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

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

   Indicate whether mine is flooded or not. Describe any pumping problems. Give size or productive capacity.
3. For each operation listed above supply the following:
   (*a*) Distance and direction from nearest town and shipping point.
   (*b*) Mining district.
   (*c*) Township, Section, Range.
   (*d*) County, State.
4. (*a*) State whether or not property is now in operation, and if in operation, by whom operated.
   (*b*) Are you operating this property as:
   - ☒ Owner.
   - ☐ Lessee.
   - ☐ Contractor.
5. Number of years in production None

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

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

Name and Address (a)	Official Title (If officer is also director indicate by "D") (b)	Total of Annual Salary, Commissions, Bonuses, Etc., Received From Applicant and Affiliates During Last Fiscal Year (c)	Estimated Net Worth Outside of Interest in Applicant (d)	Number of Shares Held in Applicant Corporation		Life Insurance Carried for Benefit of Applicant	
				Common (e)	Preferred (f)	Amount (g)	Net Cash Surrender Value After Loans (h)
Not Applicable							
	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 Not Applicable	$	$	$		
Preferred stock Not Applicable	$	$	$		

*Indicate period covered.

10. Production:
Not Applicable

Item	Kind of Product (a)	1948 Total (b)	1949 Total (c)	1950 Total (d)	Present Average Monthly (e)
1. Quantity of product mined or quarried (Short, long, metric tons; barrels; pounds; etc.)	None				
2. Quantity of product processed (specify unit of measure and type of process)	None				
3. Quantity and grade of product sold or shipped (specify units of measure)	None				

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. Since the mine has not produced this does not apply

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)	2000	See Attached sheet	$ 85.28	90%	Not known

(*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 Marvin J. Pavlacky
(Signature of authorized official)

May 8, 1951
(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

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

March 3, 1914, New Customhouse
Denver 2, Colorado

October 17, 1951

Memorandum

To: Executive Secretary, Defense Minerals Administration

From: DMA Field Team, Region IV

Subject: Final Report, DMA Docket 1565X, Marvin J. Pavlacky, Twentieth Century Tungsten Mine, Gila County, Arizona

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

We concur with the conclusions and recommendations of the examining team that the exploration loan of $9,579.50 be denied.

The brochure is enclosed.

J. H. East, Jr.

for A. H. Koschmann

Enclosure

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

200 New Customhouse
Denver 2, Colorado

October 16, 1951

Memorandum

To: DMA Field Team, Region IV

From: Ogden Tweto

Subject: DMA Docket 1565X, Twentieth Century Mine, (Tungsten), Gila County, Arizona

Enclosed are the original and 7 copies of the geologic report by J. A. MacKallor and J. N. Faick of the U. S. Geological Survey covering the above docket. It has been recommended that the loan be denied.

The U. S. Bureau of Mines will not submit a separate report on this docket.

The brochure is enclosed.

Ogden Tweto

Ogden Tweto, Alternate
Supervising Geologist
Colorado-Wyoming

Enclosures (9)

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

October 11, 1951

Memorandum

To: Field Team, Region IV, Denver, Colorado
Through: Mr. A. H. Koschmann

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

Subject: Final Report on Docket DMA 1565X, Twentieth Century Mine (Tungsten), Gila County, Arizona

Enclosed are the original and 7 copies of the above report by J. A. MacKallor and J. N. Faick of the Geological Survey. The Bureau of Mines will not submit a separate report on this docket.

This report and the recommendation that an exploration loan be denied for lack of geological possibility of discovering minable tungsten ore have my approval.

The brochure is enclosed.

A. F. Shride

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

Enclosures 9

TWENTIETH CENTURY MINE
GILA COUNTY, ARIZONA
DMA 1565X

TUNGSTEN

Geology

By Jules A. MacKellor
and
John N. Falck

Geologists, U. S. Geological Survey

TWENTIETH CENTURY MINE
GILA COUNTY, ARIZONA
DMA 1565X

TUNGSTEN

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ILLUSTRATIONS

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SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS

The Twentieth Century mining claims, located about 15 miles by road south of Globe, Arizona have been prospected to a limited extent for low grade tungsten ores. Wolframite is the dominant tungsten mineral but a little scheelite is present. The applicant, Mr. Marvin . . Pavlacky, proposes exploration on a vein averaging about 2 feet wide, and about 100 feet long and containing about one percent tungsten. This is too small and too low grade to justify exploration, especially in a geographically isolated area such as this. The cost of production is certain to be higher than the value of the ore, therefore it is recommended that application DMA 1565X be denied.

INTRODUCTION AND ACKNOWLEDGMENTS

At the request of the Defense Minerals Administration a field examination was made of the Twentieth Century claims near Globe, Arizona in order to determine if the property warranted an exploration loan for tungsten. The afternoon and evening of September 26, 1951 was devoted to interviewing the owner and applicant, Mr. Marvin . . Pavlacky, 374 S. Deveroux St., Globe, Arizona, and in examining his claims.

The assistance of Mr. Pavlacky in making this examination is greatly appreciated for the claims could not have been found without a guide. Published works of F. L. Ransome were freely drawn upon for this report.

LOCATION

The Twentieth Century claims are located in Sec. 7, T. 2 S., R. 15 E., on the south side of the Pinal Mountains at an altitude of 5300 feet. The property is in the southern half of the Globe quadrangle, Gila County, Arizona, and is about one mile north of the

abandoned mining town of Deak. By road the property is approximately 15 miles southwest of Globe, Arizona, the nearest shipping point.

The Twentieth Century claims can be reached from Globe by following the Ice House Canyon road approximately three miles to the end of the pavement, then turn right on the Ferndale-Signal Peak road. This is maintained by the county and is usually in a fair condition. After travelling approximately nine miles on the county road, turn right on the Deak road and go about three miles to reach the claims. In most places the Deak road is wide enough for only one car, but is in fair condition and passable for passenger automobiles.

HISTORY AND EXTENT OF CLAIMS

Mr. Pavlacky owns three unpatented claims for which he has made an application for a loan. The claims are the Twentieth Century numbers 2, 6, and 7. Figure 1 shows the approximate location of the claims.

These three claims were acquired by Mr. Pavlacky by relocation of old abandoned claims. Only a small amount of work has been done on the claims and there is no evidence of any production.

An old shaft is located in the center of the Twentieth Century #6 claim. The shaft is inclined 43°, following the dip of a quartz vein, and extends approximately 60 feet from the surface. The shaft has been partially cleaned out by Mr. Pavlacky but still is in poor condition, and could not be satisfactorily examined.

GENERAL GEOLOGY

The Pinal schist of early Precambrian age exposed over more than 50 percent of the southern half of the Globe quadrangle. In the Pinal

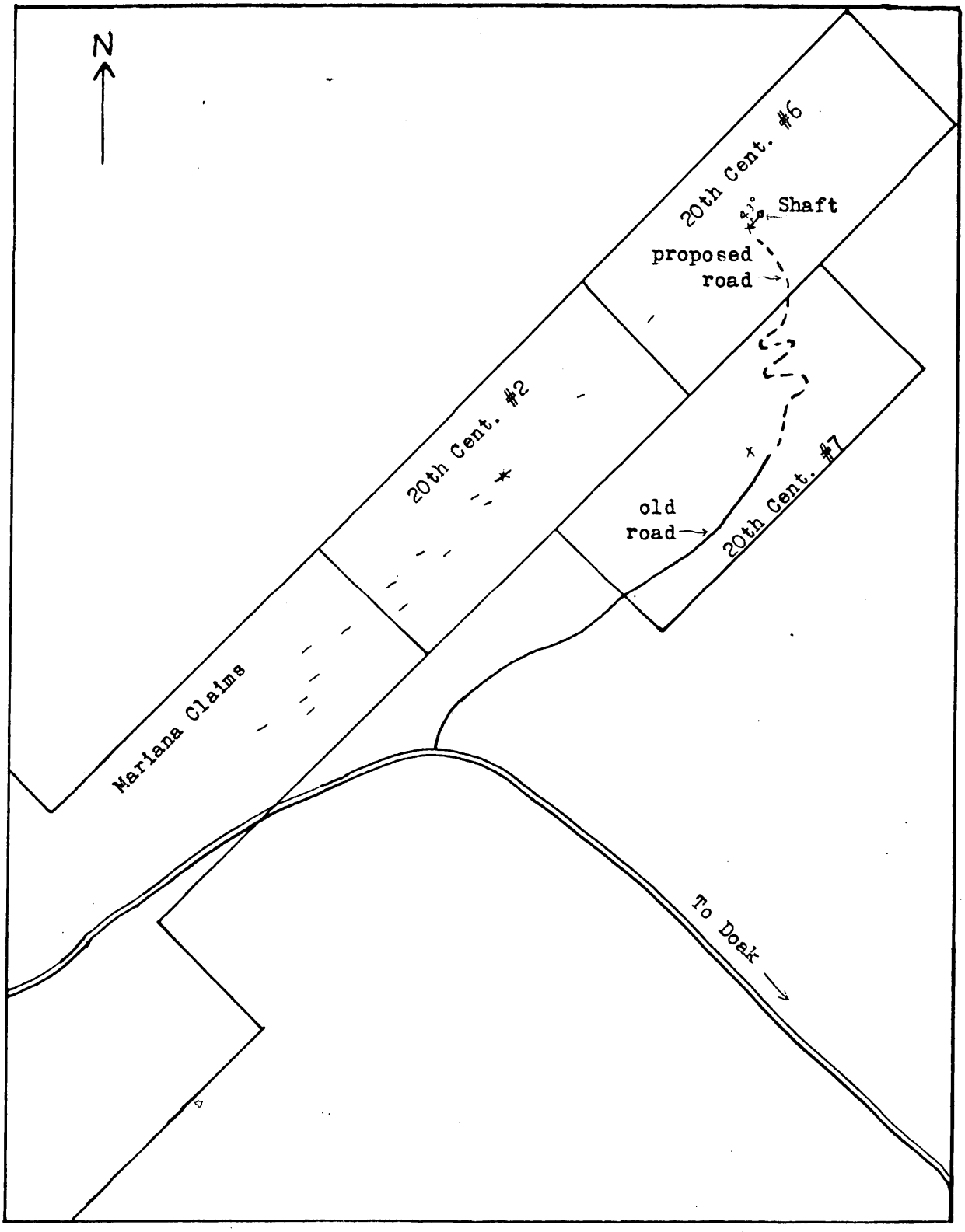

Fig. 1 D. M. A. 1565X
TWENTIETH CENTURY CLAIMS,
GILA COUNTY, ARIZONA
Scale: 1" = 600'

formation sericite schist is the most abundant type of rock, but quartzose grit is fairly common. The banding and cleavage of the schist strikes northeasterly and generally dips from 45° to 90° northwesterly.

The Pinal schist is intruded by Precambrian Madera diorite which is exposed in several irregular areas of a few square miles each. The outcrops of diorite are somewhat elongated in a northeast-southwest direction and contain numerous inclusions of Pinal schist.

The Madera diorite is a light grey, coarsely crystalline, intrusive rock, which in some places approaches granodiorite in composition. According to Ransome[1] quartz, biotite, and andesine are the principal minerals, and orthoclase and microcline are present.

The southern half of the Globe quadrangle is not heavily mineralized; however, small deposits of sulfides and other valuable minerals have been discovered.

The Mariana mine, formerly known as the Bobtail mine, lies nearly a mile southwest of the Twentieth Century claims. Ransome cited the Bobtail mine as an example of a mineralized fault breccia in Pinal schist and reported the presence of pyrite, chalcopyrite, sphalerite, galena, and huebnerite. The main quartz vein of the Bobtail strikes northeasterly and dips 62° to the northwest. According to Mr. Pavlacky, several carloads of ore were shipped from this mine to the El Paso Smelter and to the International Smelter at Miami, Arizona for their value of gold, silver, copper, lead, and zinc. No other production from this area is known to the writers.

1/ Ransome, F. L.: Globe Folio No. 111, 1904, p. 15.

A zone of narrow, short, northeasterly striking, quartz stringers on the Twentieth Century claims appear to be an a zone of weak structural deformation extending from the Bobtail mine. No fault brecciation was observed and only the small quartz-filled fissures prove the presence of earlier deformation.

DESCRIPTION OF THE DEPOSITS

The Twentieth Century claims are so located as to include several very narrow, white massive quartz veins in Pinal schist. These veins are only a few hundred feet west of the contact between the Pinal schist and Madera diorite, and are nearly parallel to this contact. The veins are usually less than a foot wide and are exposed only for a length of a few feet; none were found to exceed 100 feet in length, although the veins may extend to greater distances under a cover of soil and vegetation.

The typical vein is white, massive quartz containing a few needles of wolframite and grains of chalcopyrite, and sphalerite. Traces of scheelite were seen under an ultraviolet light and values of combined gold and silver up to about $10.00 per ton are reported by the applicant.

On the southwestern half of the Twentieth Century No. 2 claim and the northeastern half of adjoining Mariana claim, the veins are only from two to three inches in thickness but are quite numerous. The Twentieth Century No. 7 claim shows practically no signs of mineralization. The material exposed in the discovery pit has been thoroughly altered and weathered but no vein material is exposed.

The longest vein observed is exposed for a distance of about 100 feet on the Twentieth Century No 6 claim. This vein cuts the Pinal

schist and strikes N. 50° E. with a dip of 43° to the northwest. The vein has been exposed for about 75 feet by a small prospect pit and a shallow shaft. At the prospect pit the vein is about 13 inches wide and at the collar of the shaft the vein is about 3 feet wide. According to Mr. Pavlacky the vein is irregular in width and thins to about 6 inches at a depth of 15 feet and again thickens to about 2 feet of the bottom of the shaft.

The vein consists principally of quartz but contains megascopic amounts of scheelite, wolframite, pyrite, and sphalerite. About 15 feet below the surface where the vein was 2 feet wide, Mr. Pavlacky collected a chip sample across the width of the vein. This sample assayed 1.20 percent WO_3. Another sample taken here assayed $1.43 in gold and $8.26 in silver. A sample taken from the shallow prospect pit showed 1 percent WO_3. Another sample from the same place showed $5.15 in gold and $4.13 in silver.

This is the most important vein on the Pavlacky property and it is too small, too low grade, and too isolated to be any value.

PROJECT PROPOSALS

The applicant has proposed an exploration project, costing $9579.50 for tungsten. The Government's share would be 75 percent of the total cost or $7184.61. The applicant originally proposed to spend 15 percent of the money in stripping with a bulldozer and exposing the small vein on Twentieth Century No. 2 claim. He has since decided to abandon this phase of the project and to spend all of the money on the vein in Twentieth Century No. 6 claim.

The applicant proposes to recondition, clean out, and deepen the old shaft on Twentieth Century No. 6 to a depth of 210 feet. It is now believed that the old shaft extends to a depth of 60 feet, rather than 35 feet, as stated in the original application.

An old logging road needs to be reconditioned for 3000 feet and 2000 feet of new road must be made before the shaft can be reached by truck. Mr. Pavlacky plans to rent a bulldozer and hire an operator for this work. No provisions are made for the work, but the money that was originally to be spent on surface excavation would cover the cost of road building.

If any exploration is to be done on the Twentieth Century claims, the applicant's proposal to recondition and deepen the shaft on the Twentieth Century No. 6 claim is the proper method. The exploration plan should contain provisions for 100 feet of drifting along the vein. The $9579.50 estimated cost of the exploration program would not be sufficient to allow any drifting. It appears that the applicant has stretched his financial resources to the limit in order to pay his cost of the proposed program.

ORE RESERVES

At the present time the Twentieth Century No. 6 claim has about 1500 tons of inferred "ore" thought to contain 1 percent WO_3 and a few dollars in gold and silver per ton. The inferred ore is in a vein 6 inches to 3 feet wide with an average width of two feet. The ore is thought to extend at least 100 feet along the strike and 100 feet down the dip of the vein.

The applicant does not know where he can sell ore containing 1 percent WO_3, as the writers have been advised that most of the custom buyers want ore containing at least 2 percent WO_3. It is extremely doubtful if any payments would be received for the small amount of gold and silver in the ore.

CONCLUSIONS AND RECOMMENDATIONS

The cost of mining and shipping the ore would be extremely high, because of the narrow width of the vein and the isolated location. The ore would have to be trucked 15 miles over secondary roads to the railroad and then shipped to a buyer. It is not certain that a buyer can be found for the 1 percent WO_3 ore. Since the cost of production is certain to be much higher than the value of the ore, it is recommended that application DMA 1565X be denied.