MF-500

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS ADMINISTRATION

REFERENCE SLIP

DATE 8/24/53

REFERRED TO:

1. ~~Mr. Hedges~~
2. ~~O Bowles 3576~~
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: Field Report & Denial
For Agenda 8/26/53

Check (X) before the items needing attention.

Ernest Wm. Ellis

Initials of sender.

GPO 16—63815-1

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

COPY

August 14, 1953.

224 New Customhouse
Denver 2, Colorado

Memorandum

To: Administrator, Defense Minerals Exploration Administration
Attention: 200

From: Field Team, Region IV

Subject: Final Report, DMEA Docket 3039 (Asbestos), Walter W. Henderson, G. & H. Mine No. 1, Gila County, Arizona.

Enclosed are four copies of the final report on the subject docket, a copy of the letter of denial to the applicant, and two copies of Form 3b.

/s/ W. H. KING
W. H. King

/s/ A. H. KOSCHMANN
A. H. Koschmann

Enclosures

DMEA-3039
Asbestos
Region IV

WALTER W. HENDERSON, GLOBE, ARIZONA. G. & H. Mine No. 1, Gila County, Arizona.
Field Report and Denial. The report was referred to the Commodity Group.

8-26053
#260

DMEA COMMODITY COMMITTEE

(date)

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

COPY

August 14, 1953.

224 New Customhouse
Denver 2, Colorado

Mr. Walter W. Henderson
Box 2282
Globe, Arizona

Re: Docket DMEA-3039

Dear Mr. Henderson:

Reference is made to your application for Government aid on the G. & H. Mine No. 1.

Projects approved by the Defense Minerals Exploration Administration must, in its judgment, show definite promise of yielding material of acceptable grade, and in quantities that will significantly improve the mineral supply position for the National Defense Program.

A careful study of your property and data available to this agency reveals that the probability of disclosing mineable reserves of asbestos by your proposed exploration program is not considered sufficiently promising to justify Government participation. Under these circumstances, we regret to advise that your application for exploration aid is denied.

Very truly yours,

/s/ W. H. KING
W. H. King
Field Team, Region IV

/s/ A. H. KOSCHMANN
A. H. Koschmann
Field Team, Region IV

HMC:cwm

cc: Administrator, DMEA
WRStorms
RFRobinson
Subject
AHKoschmann (2)

Chron.

Reviewed by
DMEA OPERATING COMMITTEE

(date)

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF MINES

Mining Division
Region IV

August 14, 1953.

Memorandum

To: Field Team, Region IV

From: Chief, Mining Division, Region IV

Subject: Final Report, DMEA Docket 3039 (Asbestos), Walter W. Henderson, G. & H. Mine No. 1, Gila County, Arizona.

Enclosed are nine copies of the final engineering report on the subject docket.

The applicant requested $21,700.00 to explore an asbestos deposit on the property by the construction of an access road, benching, and drifting.

The examiners found no justification for any exploration and recommend that the application be denied. We concur in this recommendation.

W. H. King
W. H. King

Enclosures

Endorsed by
DMEA OPERATING COMMITTEE

(date)

Copies Made
Recorded
Release Date

MINING DIVISION
REGION IV

July 29, 1953

Memorandum

To : W. H. King, Chief, Mining Division, Region IV

From : Chief, Mining Methods Br., Mining Div, Region IV

Subject : Report on Docket DMEA-3039, Walter W. Henderson's G. & H. No. 1 Asbestos Prospect, Gila County, Ariz.

Enclosed are original and 8 copies of the section on Summary, Conclusions and Recommendations by L. A. Stewart of the Bureau of Mines and A. F. Shride of the Geological Survey, and the section on Engineering by Stewart for the above report. A section on geology was submitted late in June by the Geological Survey.

As there seems little chance of discovering any asbestos of strategic quality in this prospect, the examiners recommend that a loan be denied. I concur with this recommendation.

Brochure is enclosed.

Walter R. Storms

Walter R. Storms

cc W. H. King (8)
R. F. Robinson
DMEA-3039
DF

WRStorms:frj

Reviewed by
DMEA CLEARING COMMITTEE

(date)

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION
WASHINGTON 25, D. C.
2 W. New Customhouse
Denver 2, Colorado

July 3, 1953

Memorandum

To: DMEA Field Team, Region IV

From: A. H. Koschmann

Subject: DMEA Docket 3019, G. & H. No. 1 Prospect, Gila County, Arizona

Enclosed are the original and 3 copies of the geologic report by A. F. Stride of the U. S. Geological Survey covering the above docket.

It has been recommended that the loan be denied.

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

Enclosures (3)

Reviewed by
DMEA OPERATING COMMITTEE

(date)

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

P.O. Box 5126, University Station
Tucson 5, Arizona

June 29, 1953

Memorandum

To: A. L. Konzmann, Denver, Colorado

From: R. F. Robinson, Tucson, Arizona

Subject: Geologic report, [illegible] 3039, D [illegible] H. L. Project, Gila County, Arizona

[illegible] report by A. [illegible] of the Geological Survey.

[illegible] recommends [illegible] loan, [illegible].

Raymond F. Robinson
Raymond F. Robinson
Acting District Engineer
Arizona - New Mexico

Enclosures 9

Reviewed by
DMEA OPERATING COMMITTEE

(date)

UNITED STATES
DEPARTMENT OF THE INTERIOR
DOUGLAS McKAY, SECRETARY

DEFENSE MINERALS EXPLORATION ADMINISTRATION

REPORT OF EXAMINATION BY FIELD MEN
REGION IV

DMEA-3039, Walter W. Henderson's G. & H. No. 1 Asbestos Prospect

Gila County, Arizona

Lincoln A. Stewart, Mining Engineer
U. S. Bureau of Mines

A. F. Snride, Geologist
U. S. Geological Survey

July 1953

Reviewed by
DMEA OPERATING COMMITTEE

(date)

SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS

By Lincoln A. Stewart[1] and A. F. Shride[2]

An application from Walter W. Henderson for a $21,700 exploratory lean on his G. & H. No. 1 asbestos property was received May 29, 1953 by the Tucson office of the Defense Minerals Exploration Administration as Docket DMEA-3039. The purpose of the lean was to explore an asbestos deposit by 700 feet of drifting. Included in the request was construction of a 2.5 mile access road.

The property consists of 2 unpatented claims about 12 airmiles northwest of Globe, Gila County, Ariz. There has been no production from this area.

An investigation was made on June 12, 1953 by the writer and Robert W. Ageton, engineers of the Bureau of Mines, and A. F. Shride and Dayton E. Dickey, geologists of the Geological Survey.

The area in which the deposit is located has been deformed by faulting and tilting. Short, harsh slip-fiber was present in the debris of the discovery cut on the west face of a ridge, but only one veinlet of 1/8-inch glassy harsh asbestos was found in place. The limestone bedding is cut off on the south by a fault. On the northeastern back slope of the ridge, a 6-inch zone of weathered serpentine contained a 1-inch vein of harsh weak slip-fiber.

The 2 occurrences are in the thin-bedded shaley Mescal limestone unit that never has produced commercial fiber anywhere in the district. For this reason and because the asbestos is not of strategic quality, it is recommended that this application for exploration be denied.

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

[illegible]
[illegible]
[illegible]
[illegible]

[illegible] NO. 1 [illegible]
[illegible] W. H [illegible]
[illegible] COUNTY, [illegible]
[illegible]

[illegible] A 3039

Geology

By
A. F. [illegible]
Geologist, U. S. Geological Survey

G [illegible] H NO. 1 PROSPECT
W. V. [illegible]
GILA COUNTY, ARIZONA
DR [illegible] 3039

CONTENTS

	Page
[illegible] GY	1
[illegible] H. [illegible]	1
[illegible]	2
CONCLUSIONS	3

The Hazel G. and Bonnie H. claims, which comprise the applicant's Group No. 1 property, are in [illegible], Section 1, T.2 N., R.11 E., in an area underlain by intricately faulted formations ranging from pre-Cambrian to Tertiary in age. The rocks of the area under consideration are flipping spring quartzite and Hazel limestone of pre-Cambrian age and diabase sills intrusive into these formations. These rocks are offset and bounded by northeast-trending high-angle faults.

Bonnie H. Deposit

The southernmost deposit, the Bonnie H. deposit, is exposed by two small pits. The lower pit exposes much brecciated limestone a few inches of which contain asbestos veinlets totaling 1/16 to 1/8 inch of fibrous asbestos. This deposit is bounded on the west by a 20-foot wide northeast-trending fracture zone. To the west of this zone the basal 15-foot stratigraphic section of the Hazel limestone is little mineralized. The asbestos-bearing limestone is bounded 15 feet southwest of the pits by a discordant diabase sill. Thus, even if the asbestos-bearing zone were of sufficient - which is it not - the area for potential deposits is limited.

The upper pit, which is 40 feet west-east and approximately 20 feet north-south in dimension, exposes a zone of fibrous asbestos 1/8 inch thick in limestone that dips 20° S. to 60° S. The limestones

exposed by this pit [illegible] only the [illegible] units exposed in the lower pit but offset by a small northwestward [illegible] fault. The [illegible] of the upper pit is to the left northwest of [illegible] high-angle discordant contact with diabase that strikes N. 30° [illegible]. Considerable shattered shattering material usually observed [illegible] be equivalent to [illegible] a brecciated limestone [illegible] in the vicinity of the upper pit, but no other [illegible] are seen. These [illegible] occurrences are in thin-bedded limestone that [illegible] approximately 25 feet above [illegible] the [illegible] limestone and the underlying [illegible] shale.

[illegible]

[illegible] approximately 200 feet [illegible] of the [illegible] deposit and adjacent to high-angle discordant [illegible] that [illegible] strike [illegible] 20° [illegible]. Small [illegible] of [illegible] and [illegible] are exposed in the [illegible] [illegible] 25, the thicknesses are greater than [illegible] from the others, but [illegible] exist sparingly in [illegible] [illegible]. The limestone is weathered to a soft chalky soil and probably represents partly serpentinized or [illegible] argillaceous limestone, which is not a favorable host for extensive asbestos deposits. A few [illegible] of harsh asbestos as much as 1½ inches long were observed on the dump.

Thirty feet to the south and 10 feet [illegible] a [illegible] pit exposes a [illegible] inlet of asbestos that has a maximum width of [illegible] inche

This vein is in unfavorable thin-bedded limestone and exists only within 2 feet of the diabase.

These are the only occurrences of injection ores on the Hazel G. claim. Both occurrences are in thin-bedded limestone and exist only sporadically in a narrow belt near the contact with the diabase. Neither form this deposit could warrant further consideration.

[illegible]

No substitute for a geologist setting forth where a significant deposit has been found on the Lorraine N. or Hazel G. claims. The substitute claim has been found in the small quantities and of poor quality. The writer has observed several tons of like deposits. These have been well prospected and exposed. Some have proved valuable. Therefore it is concluded that the application, or an exploration lease be denied.

DMEA-3039, WALTER W. HENDERSON'S G. & H. NO. 1 ASBESTOS PROSPECT
GILA COUNTY, ARIZONA

Engineering Report

By Lincoln A. Stewart
Mining Engineer
U. S. Bureau of Mines.

July 1953

BMRA-3039, WALTER M. HENDERSON'S G. & M. NO. 1 ASBESTOS PROSPECT
GILA COUNTY, ARIZONA

CONTENTS

Engineering report — Page

Introduction — 1
Location and accessibility — 1
Ownership and extent — 2
History and production — 2
Description of deposit — 2
Conclusions — 3
Recommendations — 4

ILLUSTRATIONS

Figure — Following page

1 Location map — 1

INTRODUCTION

An application was submitted to the Defense Minerals Exploration Administration for a $21,700 exploratory loan by Walter W. Henderson, Globe, Ariz. for the G. & H. No. 1 prospect. This application, docketed as DMEA-3039, was received by the Tucson, Ariz., office of the Defense Minerals Exploration Administration on May 29, 1953. The purpose of the requested loan was to explore an asbestos deposit on the property by 700 feet of drifting. Included in the request was the construction of a 2.3-mile access road.

Field investigation was made on June 12, 1953 by the writer and Robert W. Ageton, engineers of the Bureau of Mines, and A. F. Shride and Dayton D. Dickey, geologists of the Geological Survey.

LOCATION AND ACCESSIBILITY

The G. & H. No. 1 property is situated in the Crook National Forest about 12 airmiles northwest of Globe, Gila County, Ariz. (figure 1). Access to the property is gained by traveling northward on State Highway 88 (the Apache Trail), from its junction with U. S. Highway 60-70 for 11.1 miles to De Vere wash. Drive northeastward up this wide, sandy wash for 1.6 miles. The property, on top of the ridge to the east, is reached by ½ mile of rough trail that rises 500 feet in this distance.

According to the Rockinstraw Mountain quadrangle sheet, this location would be in sec. 1, T. 2 N., R. 14 E., unsurveyed. The average altitude of the claims is about 3,600 feet.

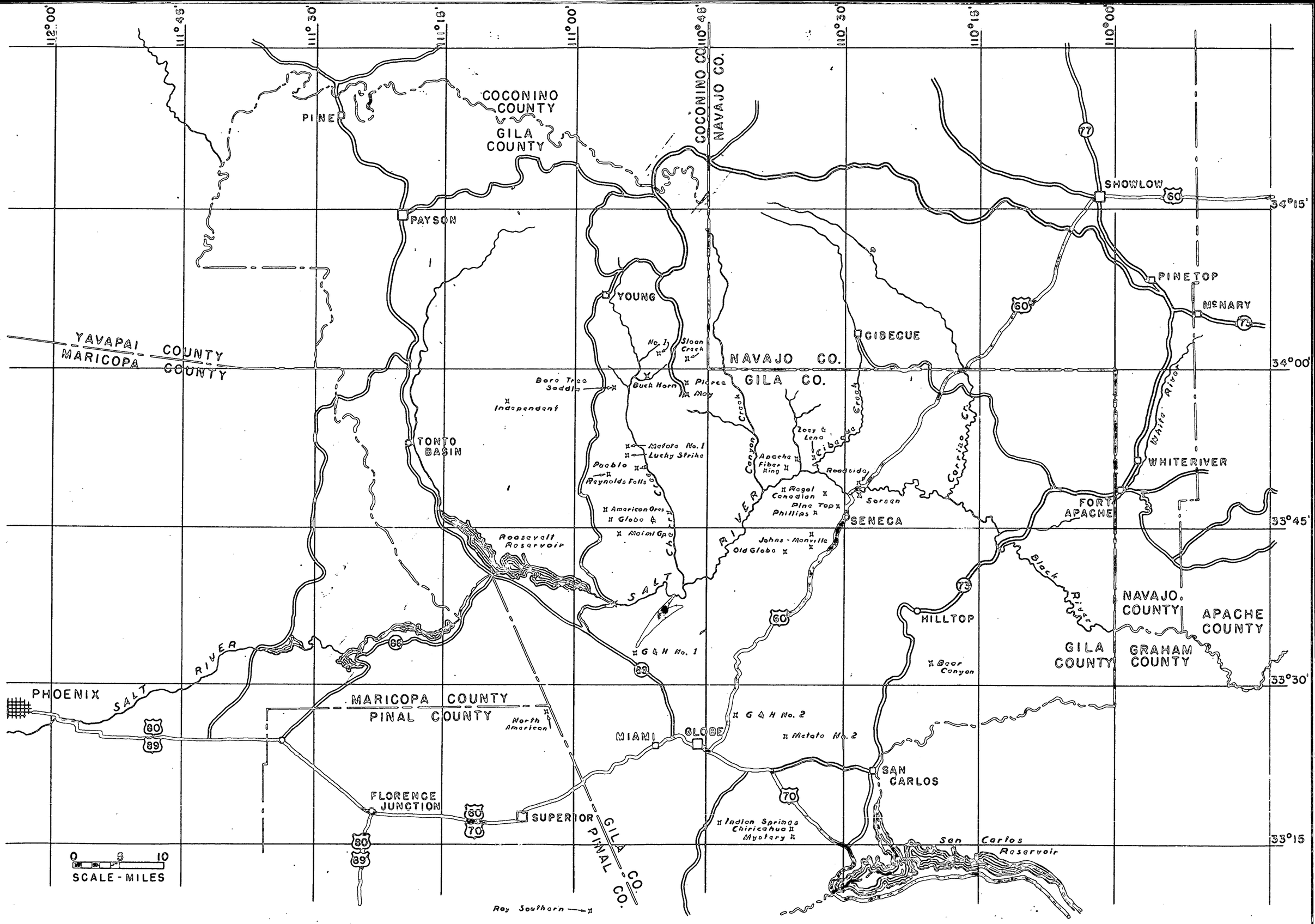

FIGURE 1. - LOCATION MAP - ASBESTOS DEPOSITS - CENTRAL ARIZONA DMEA 3039

OWNERSHIP AND EXTENT

The property consists of 2 unpatented mining claims, recorded at the Gila County Courthouse at Globe, Ariz., as follows:

	Book of Mines	Page
Bonnie B.	49	79
Hazel G.	49	482

The claims are owned by a partnership composed of Walter W. and Jack B. Henderson, Box 2232, Globe; Steve Ciomo, Box 1029, Globe; and Henry L. Ramsey, Box 788, Clarkdale, Ariz.

HISTORY AND PRODUCTION

There are several old pits on the property that indicate previous but unknown ownership. There has been no production from this area.

DESCRIPTION OF THE DEPOSIT

The area in which the deposit is located has been deformed apparently by pre-mineral faulting, complicated by post mineral faulting and tilting. The Mescal limestone segment that contains the asbestos mineralization is exposed in the saddle of a north-trending ridge, on the west face of a steep escarpment. The beds strike N. 30° E. and dip 28° SE. Short, harsh, slip-fiber is found in the discovery cut in gouge and broken material of a bedding plane fault, but the vein was not seen. About 50 feet south of this point the limestone formations are cut off by a thick diabase dike that appeared to be emplaced in a pre-mineral (?) fault, with

the underlying dripping spring quartzite exposed on the opposite side. At about 40 feet up the slope from the discovery cut a second pit exposed one veinlet of 1/8-inch glassy harsh fiber in shaley beds.

About 900 feet over the hill, on the back slope, a cut had exposed a 1-inch vein of yellow, harsh, slip fiber in a 6-inch zone of weathered serpentine about 3 feet below an apparently concordant diabase sill that had a strike of N. 25° E., dipping 30° to 40° southeast.

These 2 occurrences are in the thin-bedded shaley mescal limestone unit that never has produced commercial fiber anywhere in the district.

CONCLUSIONS

The little asbestos that was seen at this deposit occurs in the broken and deformed thin bedded mescal unit that no where in the district has produced commercial fiber. On one side of the deposit, the vein that produced the slip fiber mixed with soil had not been found. On the opposite side of the hill slip fiber was exposed under a diabase sill. The fiber is harsh and weak, consequently not of strategic quality.

There is no justification for any exploration, consequently it is not necessary to discuss the estimated exploration costs detailed in the proposal.

RECOMMENDATIONS

From the above conclusions it is evident that there is no justification for consideration of exploration on this property. It is the poorest prospect that we have seen in our asbestos work.

It is recommended that the exploratory loan to Walter S. Henderson for his S. & H. No. 1 prospect be denied.

August 27, 1953

Memorandum

Docket No. DMEA-3039 - Asbestos
Walter W. Henderson
G & H Mine #1
Gila County, Arizona

To: Administrator

From: Nonmetallic Minerals Division

Subject: Resume of Docket No. DMEA-3039 under Region IV delegation.

5/18/53 Received application to explore the G & H Mine #1, consisting of the Hazel G and Bonnie H unpatented mining claims in Gila County, Arizona. The request was for $ 21,700.00. 700 feet of drifting at $25.00 per foot - $17,500. 2 1/2 miles of road at $3,750.00. $450.00 for benching and facing the outcrop.

8/20/53 Field Team Report received. Engineering and Geology Reports recommend denial of application because the fiber is harsh and weak and there is no continuity to the limestone units that contain the asbestos.

8/25/53 Received recommendation of denial from the Geological Survey and the Bureau of Mines.

8/27/53 Memo to Administrator from the Nonmetallic Minerals Division concurring in denial of application. Letter of denial of application to the applicant.

LGHouk:gad 8/27/53
Copy to: Admr. R. File
Docket File
Mr. Houk

August 27, 1953

Memorandum

Docket No. DMEA-3039 - Asbestos
Walter W. Henderson
G & H Mine #1
Gila County, Arizona

To: Administrator

From: Nonmetallic Minerals Division

Subject: Concurrence in denial of application.

The Geological Survey and the Bureau of Mines recommend denial of the subject application for $21,700.00 following a similar recommendation by the Field Team.

The Nonmetallic Minerals Division concurs in the denial of this application because it is apparent that the possibilities of making a significant discovery are not sufficiently encouraging to justify Government participation.

LGHouk:gad 8/27/53
Copy to: Admr. R. File
Docket File
Mr. Houk

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF MINES
WASHINGTON 25, D. C.

August 25, 1953

Memorandum

To: Director, Non-Metallic Minerals Division, DMEA

From: Oliver Bowles, Commodity Specialist, Construction and Chemical Materials Branch

Subject: DMEA Docket 3039, Walter W. Henderson, G. & H. Mine No. 1, Gila County, Arizona

In view of the information contained in the reports on this property I concur in the recommendation that the application for an exploration loan be denied.

Signed

Oliver Bowles, Commodity Specialist
Construction and Chemical Materials Branch

Attachment

IN REPLY REFER TO:

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY
WASHINGTON 25, D. C.

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
AUG 25 1953

August 24, 1953

Memorandum

REVIEW OF FIELD TEAM REPORT ON APPLICATION DMEA-3039 (asbestos)

To: L. G. Houk, Defense Minerals Exploration Administration
From: D. M. Larrabee, U. S. Geological Survey
Applicant: W. W. Henderson
Name of property: G. & H. Mine No. 1.
Location of property: Gila County, Arizona.
Date of field team report: July 1953.
Authorship of field team report: A. F. Bartide and J. A. Stewart.
Field team's recommendation: Denial.
Comments: None.
ACTION SUGGESTED: Follow field team's recommendation.

D. M. Larrabee

Larrabee:jeh
8/24/53
cc: Director's reading 4212
Branch reading 4212
DMEA 3 ✓
Larrabee G-230

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION
WASHINGTON 25, D. C. 600

August 27, 1953

Memorandum

Docket No. DMEA-3039 - Asbestos
Walter W. Henderson
G & H Mine #1
Gila County, Arizona

To: Administrator

From: Nonmetallic Minerals Division

Subject: Resume of Docket No. DMEA-3039 under Region IV delegation.

5/18/53 Received application to explore the G & H Mine #1, consisting of the Hazel G and Bonnie H unpatented mining claims in Gila County, Arizona. The request was for $ 21,700.00. 700 feet of drifting at $25.00 per foot - $17,500. 2 1/2 miles of road at $3,750.00. $450.00 for benching and facing the outcrop.

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FILE COPY
SURNAME:

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

600

August 27, 1953

Memorandum

Docket No. DMEA-3039 - Asbestos
Walter W. Henderson
G & H Mine #1
Gila County, Arizona

To: Administrator

From: Nonmetallic Minerals Division

Subject: Resume of Docket No. DMEA-3039 under Region IV delegation.

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LGHouk:gad 8/27/53
Copy to: Admr. R. File
Docket File
Mr. Houk

R.C.H. 8-31-53

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION
WASHINGTON 25, D. C. 600

August 27, 1953

Memorandum

Docket No. DMEA-3039 - Asbestos
Walter W. Henderson
G & H Mine #1
Gila County, Arizona

To: Administrator

From: Nonmetallic Minerals Division

Subject: Concurrence in denial of application.

The Geological Survey and the Bureau of Mines recommend denial of the subject application for $21,700.00 following a similar recommendation by the Field Team.

The Nonmetallic Minerals Division concurs in the denial of this application because it is apparent that the possibilities of making a significant discovery are not sufficiently encouraging to justify Government participation.

FILE COPY
SURNAME:

Hauk

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

600

August 27, 1953

Memorandum

Docket No. DMEA-3039 - Asbestos
Walter W. Henderson
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LGHouk:gad 8/27/53
Copy to: Admr. R. File
Docket File
Mr. Houk

R.C.G. 8-31-53

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF MINES
WASHINGTON 25, D. C.

August 25, 1953

Memorandum

To: Director, Non-Metallic Minerals Division, DMEA

From: Oliver Bowles, Commodity Specialist, Construction and Chemical Materials Branch

Subject: DMEA Docket 3039, Walter W. Henderson, G. & H. Mine No. 1, Gila County, Arizona

In view of the information contained in the reports on this property I concur in the recommendation that the application for an exploration loan be denied.

Oliver Bowles

Oliver Bowles, Commodity Specialist
Construction and Chemical Materials Branch

Attachment

IN REPLY REFER TO:

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY
WASHINGTON 25, D. C.

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
AUG 25 1953

August 24, 1953

Memorandum

REVIEW OF FIELD TEAM REPORT ON APPLICATION DMEA-3039 (asbestos)

To: L. G. Houk, Defense Minerals Exploration Administration
From: D. M. Larrabee, U. S. Geological Survey
Applicant: W. W. Henderson
Name of property: G. & H. Mine No. 1.
Location of property: Gila County, Arizona.
Date of field team report: July 1953.
Authorship of field team report: A. F. Shride and L. A. Stewart.
Field team's recommendation: Denial.
Comments: None.
ACTION SUGGESTED: Follow field team's recommendation.

D. M. Larrabee

D. M. Larrabee

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

DEPARTMENT OF THE INTERIOR
RECEIVED
AUG 20 1953

224 New Customhouse
Denver 2, Colorado

August 14, 1953.

Mr. Walter W. Henderson
Box 2282
Globe, Arizona

Re: Docket DMEA-3039

Dear Mr. Henderson:

Reference is made to your application for Government aid on the G. & H. Mine No. 1.

Projects approved by the Defense Minerals Exploration Administration must, in its judgment, show definite promise of yielding material of acceptable grade, and in quantities that will significantly improve the mineral supply position for the National Defense Program.

A careful study of your property and data available to this agency reveals that the probability of disclosing mineable reserves of asbestos by your proposed exploration program is not considered sufficiently promising to justify Government participation. Under these circumstances, we regret to advise that your application for exploration aid is denied.

Very truly yours,

W. H. King
W. H. King
Field Team, Region IV

HMC:cwm

cc: Administrator, DMEA
WRStorms
RFRobinson
Subject
AHKoschmann (2)
Chron.

A. H. Koschmann
A. H. Koschmann
Field Team, Region IV

Reviewed by
DMEA OPERATING COMMITTEE
8-26-53
(date)

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

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
AUG 20 1953

224 New Customhouse
Denver 2, Colorado

August 14, 1953.

Memorandum

To: Administrator, Defense Minerals Exploration Administration
Attention: 200

From: Field Team, Region IV

Subject: Final Report, DMEA Docket 3039 (Asbestos), Walter W. Henderson, G. & H. Mine No. 1, Gila County, Arizona.

Enclosed are four copies of the final report on the subject docket, a copy of the letter of denial to the applicant, and two copies of Form 3b.

W. H. King
W. H. King

A. H. Koschmann
A. H. Koschmann

Enclosures

Reviewed by
DMEA OPERATING COMMITTEE
8-26-53
(date)

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF MINES

Mining Division
Region IV

August 14, 1953.

Memorandum

To: Field Team, Region IV

From: Chief, Mining Division, Region IV

Subject: Final Report, DMEA Docket 3039 (Asbestos), Walter W. Henderson, G. & H. Mine No. 1, Gila County, Arizona.

Enclosed are nine copies of the final engineering report on the subject docket.

The applicant requested $21,700.00 to explore an asbestos deposit on the property by the construction of an access road, benching, and drifting.

The examiners found no justification for any exploration and recommend that the application be denied. We concur in this recommendation.

W. H. King
W. H. King

Enclosures

Reviewed by
DMEA OPERATING COMMITTEE
8-26-53
(date)

Bureau Library & Information Services
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MINING DIVISION
REGION IV

July 29, 1953

Memorandum

To : W. H. King, Chief, Mining Division, Region IV

From : Chief, Mining Methods Br., Mining Div, Region IV

Subject : Report on Docket DMEA-3039, Walter W. Henderson's G. & H. No. 1 Asbestos Prospect, Gila County, Ariz.

Enclosed are original and 8 copies of the section on Summary, Conclusions and Recommendations by L. A. Stewart of the Bureau of Mines and A. F. Shride of the Geological Survey, and the section on Engineering By Stewart for the above report. A section on geology was submitted late in June by the Geological Survey.

As there seems little chance of discovering any asbestos of strategic quality in this prospect, the examiners recommend that a loan be denied. I concur with this recommendation.

Brochure is enclosed.

Walter R. Storms

Walter R. Storms

CC W. H. King (8)
R. F. Robinson
DMEA-3039
DF

WRStorms:frj

Reviewed by
DMEA OPERATING COMMITTEE
8-26-53
(date)

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION
WASHINGTON 25, D. C.
230 New Customhouse
Denver 2, Colorado

July 3, 1953

Memorandum

To: DMEA Field Team, Region IV

From: A. H. Koschmann

Subject: DMEA Docket 3039, G. & H. No. 1 Prospect, Gila County, Arizona

Enclosed are the original and 8 copies of the geologic report by A. F. Shride of the U. S. Geological Survey covering the above docket.

It has been recommended that the loan be denied.

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

Enclosures (9)

Reviewed by
DMEA OPERATING COMMITTEE
8-26-53
(date)

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY
P.O. Box 4126, University Station
Tucson 5, Arizona

June 29, 1953

Memorandum

To: A. H. Koschmann, Denver, Colorado

From: R. F. Robinson, Tucson, Arizona

Subject: Geologic report, DMEA 3039, G & H No. 1 Prospect, Gila County, Arizona

Enclosed are the original and 8 copies of the above report by A. F. Shride of the Geological Survey.

This report, which recommends denial of an exploration loan, has my approval.

Raymond F. Robinson
Raymond F. Robinson
Acting District Supervisor
Arizona - New Mexico

Enclosures 9

Reviewed by
DMEA OPERATING COMMITTEE
8-26-53
(date)

UNITED STATES
DEPARTMENT OF THE INTERIOR
DOUGLAS McKAY, SECRETARY

DEFENSE MINERALS EXPLORATION ADMINISTRATION

REPORT OF EXAMINATION BY FIELD MEN
REGION IV

DMEA-3039, Walter W. Henderson's G. & H. No. 1 Asbestos Prospect

Gila County, Arizona

Lincoln A. Stewart, Mining Engineer
U. S. Bureau of Mines

A. F. Snride, Geologist
U. S. Geological Survey

July 1953

Reviewed by
DMEA OPERATING COMMITTEE
8-26-53
(date)

SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS

By Lincoln A. Stewart[1] and A. F. Shride[2]

An application from Walter W. Henderson for a $21,700 exploratory loan on his G. & H. No. 1 asbestos property was received May 29, 1953 by the Tucson office of the Defense Minerals Exploration Administration as Docket DMEA-3039. The purpose of the loan was to explore an asbestos deposit by 700 feet of drifting. Included in the request was construction of a 2.5 mile access road.

The property consists of 2 unpatented claims about 12 airmiles northwest of Globe, Gila County, Ariz. There has been no production from this area.

An investigation was made on June 12, 1953 by the writer and Robert W. Ageton, engineers of the Bureau of Mines, and A. F. Shride and Dayton D. Dickey, geologists of the Geological Survey.

The area in which the deposit is located has been deformed by faulting and tilting. Short, harsh slip-fiber was present in the debris of the discovery cut on the west face of a ridge, but only one veinlet of 1/8-inch glassy harsh asbestos was found in place. The limestone bedding is cut off on the south by a fault. On the northeastern back slope of the ridge, a 6-inch zone of weathered serpentine contained a 1-inch vein of harsh weak slip-fiber.

The 2 occurrences are in the thin-bedded shaley Mescal limestone unit that never has produced commercial fiber anywhere in the district. For this reason and because the asbestos is not of strategic quality, it is recommended that this application for exploration be denied.

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

DEPARTMENT OF THE INTERIOR
Bureau Land Management
RECEIVED
AUG 26 1958

G & H NO. 1 PROSPECT
D. W. HENDERSON
GILA COUNTY, ARIZONA
ASBESTOS

DILA 3039

Geology

By
A. F. Shride
Geologist, U. S. Geological Survey

G & H NO. 1 PROSPECT
W. W. HENDERSON
GILA COUNTY, ARIZONA
DNA 3039

ASBESTOS

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GEOLOGY

The Hazel G. and Bonnie H. claims, which comprise the applicant's G & H No. 1 prospect are in the SW¼, Section 1, T.2 N., R.14 E., in an area underlain by intricately faulted formations ranging from pre-Cambrian to Tertiary in age. The rocks of the area under consideration are crippling Spring quartzite and Hesel limestone of pre-Cambrian age and diabase sills intrusive into these formations. These rocks are offset and brecciated by northeast-trending high-angle faults.

Bonnie H. Deposit

The southernmost deposit, the Bonnie H. deposit, is exposed by two shallow pits. The lower pit exposes much brecciated limestone a few pieces of which contain asbestos veinlets totalling 1/16 to 1/8 inch of harsh asbestos. This exposure is bounded on the west by a 20-foot wide northeast-trending breccia zone. To the west of this zone the basal 15-foot stratigraphic section of the Hesel limestone is little serpentinized. The asbestos-bearing limestone is bounded 15 feet southeast of the pit by a discordant diabase sill. Thus, even if the asbestos-serpentine zone were significant - which is it not - the area for a potential deposit is limited.

The upper pit, which is 50 feet northeast and approximately 30 feet higher in elevation, exposes a vein of harsh asbestos 1/8 inch thick in limestone that dips 23° S. 60° E. The limestones

exposed by this pit are probably the same stratigraphic units exposed in the lower pit but offset by a small north-trending fault. The asbestos of the upper pit is 25 feet northwest of a high-angle discordant contact with diabase that strikes N. 30° E. Considerable chalky-weathering material usually observed to be equivalent to partly serpentinized limestone was seen in the vicinity of the upper pit, but no other asbestos was seen. These asbestos occurrences are in thin-bedded limestones that are approximately 25 feet above the contact between the Mescal limestone and the underlying Dripping Spring quartzite.

Hazel G. Deposit

Approximately 300 feet northeast of the Bonnie H. deposit and adjacent to a high-angle discordant diabase-limestone contact which strikes N. 10° E., small amounts of weathered asbestos are exposed in two pits 30 feet apart. In the lower pit, at distances no greater than 5 feet from the diabase, traces of asbestos exist sparingly in fragments of limestone breccia. The limestone is weathered to a soft chalky soil and probably represents partly serpentinized thin-bedded argillaceous limestone, which is not a favorable host for extensive asbestos deposits. A few pounds of harsh asbestos as much as 1½ inches long was observed on the dump.

Thirty feet to the south and 10 feet higher a small pit exposes a veinlet of asbestos that has a maximum width of ¼ inch.

This vein is in unfavorable thin-bedded limestone and exists only within 8 feet of the diabase.

These are the only occurrences of asbestos known on the Hazel G. claim. Both occurrences are in thin-bedded limestone and exist only sporadically in a narrow belt near the contact with the diabase. Therefore this deposit does not warrant further consideration.

CONCLUSIONS

No asbestos in a geologic setting favorable to a significant deposit has been found on the Bonnie H. or Hazel G. claims. The asbestos that has been found is in small quantities and of poor quality. The writer has observed several tens of like deposits. Some have been well prospected and exposed. None have ever proved minable. Therefore it is recommended that the application for an exploration loan be denied.

DMEA-3039, WALTER W. HENDERSON'S G. & H. NO. 1 ASBESTOS PROSPECT
GILA COUNTY, ARIZONA

Engineering Report

By Lincoln A. Stewart
Mining Engineer
U. S. Bureau of Mines.

July 1953

DMEA-3039, WALTER M. HENDERSON'S G. & H. NO. 1 ASBESTOS PROSPECT
GILA COUNTY, ARIZONA

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ILLUSTRATIONS

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INTRODUCTION

An application was submitted to the Defense Minerals Exploration Administration for a $21,700 exploratory loan by Walter W. Henderson, Globe, Ariz. for the G. & H. No. 1 prospect. This application, docketed as DMEA-3039, was received by the Tucson, Ariz., office of the Defense Minerals Exploration Administration on May 29, 1953. The purpose of the requested loan was to explore an asbestos deposit on the property by 700 feet of drifting. Included in the request was the construction of a 2.5-mile access road.

Field investigation was made on June 12, 1953 by the writer and Robert W. Ageton, engineers of the Bureau of Mines, and A. F. Shride and Dayton D. Dickey, geologists of the Geological Survey.

LOCATION AND ACCESSIBILITY

The G. & H. No. 1 property is situated in the Crook National Forest about 12 airmiles northwest of Globe, Gila County, Ariz. (figure 1). Access to the property is gained by traveling northward on State Highway 88 (the Apache Trail), from its junction with U. S. Highway 60-70 for 11.1 miles to De Vore wash. Drive northeastward up this wide, sandy wash for 1.6 miles. The property, on top of the ridge to the east, is reached by ½ mile of rough trail that rises 500 feet in this distance.

According to the Rockinstraw Mountain quadrangle sheet, this location would be in sec. 1, T. 2 N., R. 14 E., unsurveyed. The average altitude of the claims is about 3,600 feet.

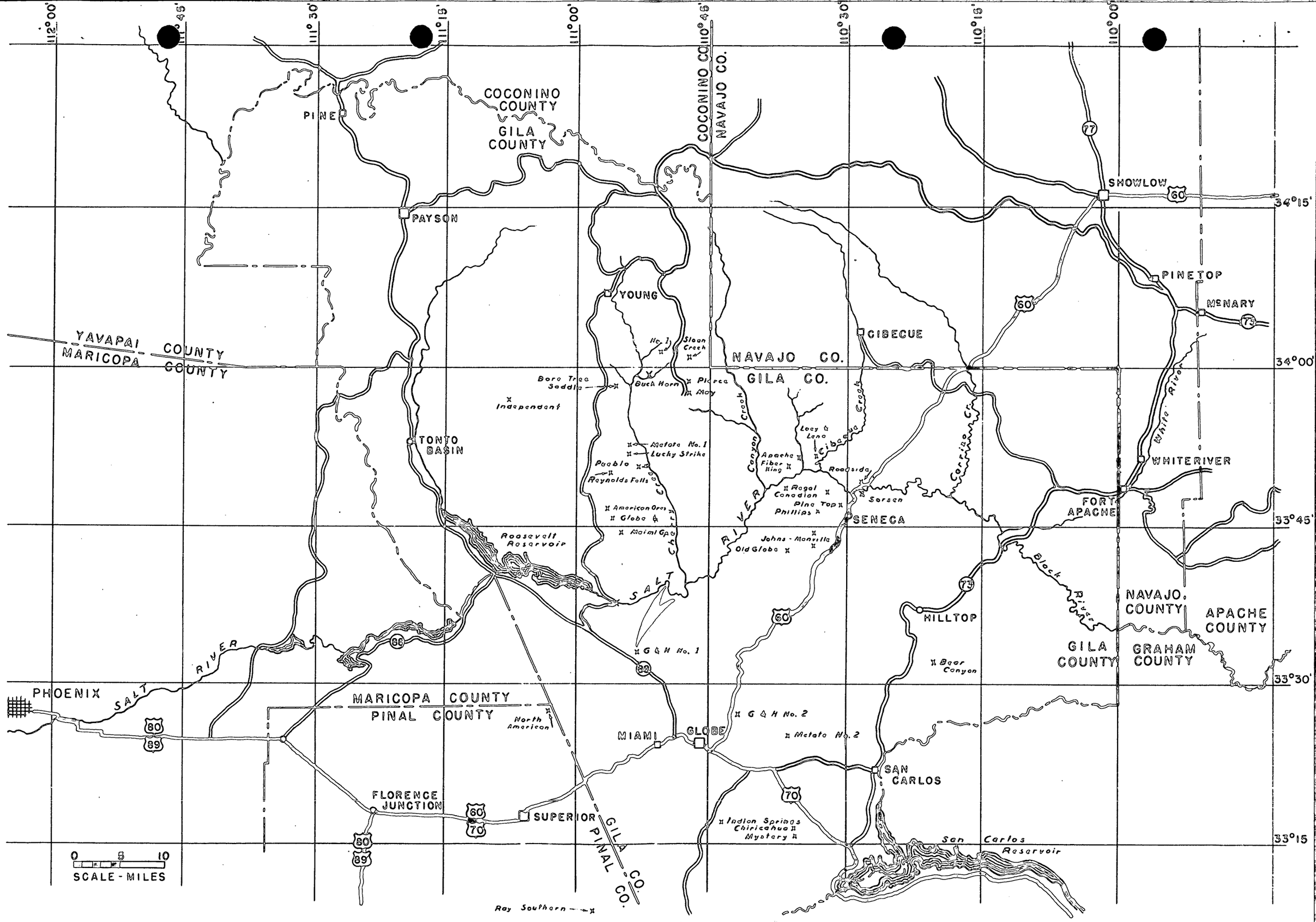

FIGURE 1. - LOCATION MAP - ASBESTOS DEPOSITS - CENTRAL ARIZONA DMEA 3039

OWNERSHIP AND EXTENT

The property consists of 2 unpatented mining claims, recorded at the Gila County Courthouse at Globe, Ariz., as follows:

	Book of Mines	Page
Lonnie M.	49	79
Hazel G.	49	482

The claims are owned by a partnership composed of Walter M. and Jack B. Henderson, Box 2282, Globe; Steve Ciono, Box 1029, Globe; and Henry L. Ramsey, Box 788, Clarkdale, Ariz.

HISTORY AND PRODUCTION

There are several old pits on the property that indicate previous but unknown ownership. There has been no production from this area.

DESCRIPTION OF THE DEPOSIT

The area in which the deposit is located has been deformed apparently by pre-mineral faulting, complicated by post mineral faulting and tilting. The Mescal limestone segment that contains the asbestos mineralization is exposed in the saddle of a north-trending ridge, on the west face of a steep escarpment. The beds strike N. 30° E. and dip 28° SE. Short, harsh, slip-fiber is found in the discovery cut in gouge and broken material of a bedding plane fault, but the vein was not seen. About 50 feet south of this point the limestone formations are cut off by a thick diabase dike that appeared to be emplaced in a pre-mineral (?) fault, with

the underlying Dripping Spring quartzite exposed on the opposite side. At about 40 feet up the slope from the discovery cut a second pit exposed one veinlet of 1/8-inch glassy harsh fiber in shaley beds.

About 906 feet over the hill, on the back slope, a cut had exposed a 1-inch vein of yellow, harsh, slip fiber in a 6-inch zone of weathered serpentine about 3 feet below an apparently concordant diabase sill that had a strike of N. 25° E., dipping 30° to 40° southeast.

These 2 occurrences are in the thin-bedded shaley Mescal limestone unit that never has produced commercial fiber anywhere in the district.

CONCLUSIONS

The little asbestos that was seen at this deposit occurs in the broken and deformed thin bedded Mescal unit that no where in the district has produced commercial fiber. On one side of the deposit, the vein that produced the slip fiber mixed with soil had not been found. On the opposite side of the hill slip fiber was exposed under a diabase sill. The fiber is harsh and weak, consequently not of strategic quality.

There is no justification for any exploration, consequently it is not necessary to discuss the estimated exploration costs detailed in the proposal.

RECOMMENDATIONS

From the above conclusions it is evident that there is no justification for consideration of exploration on this property. It is the poorest prospect that we have seen in our asbestos work.

It is recommended that the exploratory loan to Walter W. Henderson for his G. & H. No. 1 prospect be denied.

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

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
AUG 20 1953

224 New Customhouse
Denver 2, Colorado

August 14, 1953.

Memorandum

To: Administrator, Defense Minerals Exploration Administration
Attention: 200

From: Field Team, Region IV

Subject: Final Report, DMEA Docket 3039 (Asbestos), Walter W. Henderson, G. & H. Mine No. 1, Gila County, Arizona.

Enclosed are four copies of the final report on the subject docket, a copy of the letter of denial to the applicant, and two copies of Form 3b.

W. H. King
W. H. King

A. H. Koschmann
A. H. Koschmann

Enclosures

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF MINES

Mining Division
Region IV

August 14, 1953.

Memorandum

To: Field Team, Region IV

From: Chief, Mining Division, Region IV

Subject: Final Report, DMEA Docket 3039 (Asbestos), Walter W. Henderson, G. & H. Mine No. 1, Gila County, Arizona.

Enclosed are nine copies of the final engineering report on the subject docket.

The applicant requested $21,700.00 to explore an asbestos deposit on the property by the construction of an access road, benching, and drifting.

The examiners found no justification for any exploration and recommend that the application be denied. We concur in this recommendation.

W. H. King
W. H. King

Enclosures

MINING DIVISION
REGION IV

July 29, 1953

Memorandum

To : W. H. King, Chief, Mining Division, Region IV

From : Chief, Mining Methods Br., Mining Div, Region IV

Subject : Report on Docket DMEA-3039, Walter W. Henderson's G. & H. No. 1 Asbestos Prospect, Gila County, Ariz.

Enclosed are original and 8 copies of the section on Summary, Conclusions and Recommendations by L. A. Stewart of the Bureau of Mines and A. F. Shride of the Geological Survey, and the section on Engineering By Stewart for the above report. A section on geology was submitted late in June by the Geological Survey.

As there seems little chance of discovering any asbestos of strategic quality in this prospect, the examiners recommend that a loan be denied. I concur with this recommendation.

Brochure is enclosed.

Walter R. Storms

Walter R. Storms

CC W. H. King (8)
R. F. Robinson
DMEA-3039
DF

WRStorms:frj

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION
WASHINGTON 25, D. C.
200 New Customhouse
Denver 2, Colorado

July 3, 1953

Memorandum

To: DMEA Field Team, Region IV

From: A. H. Koschmann

Subject: DMEA Docket 3039, G. & H. No. 1 Prospect, Gila County, Arizona

Enclosed are the original and 8 copies of the geologic report by A. F. Shride of the U. S. Geological Survey covering the above docket.

It has been recommended that the loan be denied.

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

Enclosures (9)

DEPARTMENT OF THE INTERIOR
Bureau of Mines
Denver
FEB 10 1953

UNITED STATES
DEPARTMENT OF THE INTERIOR
DOUGLAS McKAY, SECRETARY

DEFENSE MINERALS EXPLORATION ADMINISTRATION

REPORT OF EXAMINATION BY FIELD MEN
REGION IV

DMEA-3039, Walter W. Henderson's G. & H. No. 1 Asbestos Prospect

Gila County, Arizona

Lincoln A. Stewart, Mining Engineer
U. S. Bureau of Mines

A. F. Snride, Geologist
U. S. Geological Survey

July 1953

SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS

By Lincoln A. Stewart[1] and A. F. Shride[2]

An application from Walter W. Henderson for a $21,700 exploratory loan on his G. & H. No. 1 asbestos property was received May 29, 1953 by the Tucson office of the Defense Minerals Exploration Administration as Docket DMEA-3039. The purpose of the loan was to explore an asbestos deposit by 700 feet of drifting. Included in the request was construction of a 2.5 mile access road.

The property consists of 2 unpatented claims about 12 airmiles northwest of Globe, Gila County, Ariz. There has been no production from this area.

An investigation was made on June 12, 1953 by the writer and Robert W. Ageton, engineers of the Bureau of Mines, and A. F. Shride and Dayton D. Dickey, geologists of the Geological Survey.

The area in which the deposit is located has been deformed by faulting and tilting. Short, harsh slip-fiber was present in the debris of the discovery cut on the west face of a ridge, but only one veinlet of 1/8-inch glassy harsh asbestos was found in place. The limestone bedding is cut off on the south by a fault. On the northeastern back slope of the ridge, a 6-inch zone of weathered serpentine contained a 1-inch vein of harsh weak slip-fiber.

The 2 occurrences are in the thin-bedded shaley Mescal limestone unit that never has produced commercial fiber anywhere in the district. For this reason and because the asbestos is not of strategic quality, it is recommended that this application for exploration be denied.

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

G & H NO. 1 PROSPECT
W. W. HENDERSON
GILA COUNTY, ARIZONA
ASBESTOS

DMEA 3039

Geology

By
A. F. Shride
Geologist, U. S. Geological Survey

G & H NO. 1 PROSPECT
W. W. HENDERSON
GILA COUNTY, ARIZONA
DMIA 3039

ASBESTOS

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GEOLOGY

The Hazel G. and Bonnie H. claims, which comprise the applicant's G & H No. 1 prospect are in the SE$\frac{1}{4}$, Section 1, T.2 N., R.14 E., in an area underlain by intricately faulted formations ranging from pre-Cambrian to Tertiary in age. The rocks of the area under consideration are Dripping Spring quartzite and Mescal limestone of pre-Cambrian age and diabase sills intrusive into these formations. These rocks are offset and brecciated by northeast-trending high-angle faults.

Bonnie H. Deposit

The southernmost deposit, the Bonnie H. deposit, is exposed by two shallow pits. The lower pit exposes much brecciated limestone a few pieces of which contain asbestos veinlets totaling 1/16 to 1/8 inch of harsh asbestos. This exposure is bounded on the west by a 20-foot wide northeast-trending breccia zone. To the west of this zone the basal 15-foot stratigraphic section of the Mescal limestone is little serpentinized. The asbestos-bearing limestone is bounded 15 feet southeast of the pit by a discordant diabase sill. Thus, even if the asbestos-serpentine zone were significant - which is it not - the area for a potential deposit is limited.

The upper pit, which is 50 feet northeast and approximately 30 feet higher in elevation, exposes a vein of harsh asbestos 1/8 inch thick in limestone that dips 28° S. 60° E. The limestones

exposed by this pit are probably the same stratigraphic units exposed in the lower pit but offset by a small north-trending fault. The asbestos of the upper pit is 25 feet northwest of a high-angle discordant contact with diabase that strikes N. 30° E. Considerable chalky-weathering material usually observed to be equivalent to partly serpentinized limestone was seen in the vicinity of the upper pit, but no other asbestos was seen. These asbestos occurrences are in thin-bedded limestones that are approximately 25 feet above the contact between the Mescal limestone and the underlying Dripping Spring quartzite.

Hazel G. Deposit

Approximately 500 feet northeast of the Bonnie H. deposit and adjacent to a high-angle discordant diabase-limestone contact which strikes N. 10° E., small amounts of weathered asbestos are exposed in two pits 30 feet apart. In the lower pit, at distances no greater than 5 feet from the diabase, traces of asbestos exist sparingly in fragments of limestone breccia. The limestone is weathered to a soft chalky soil and probably represents partly serpentinized thin-bedded argillaceous limestone, which is not a favorable host for extensive asbestos deposits. A few pounds of harsh asbestos as much as 1½ inches long was observed on the dump.

Thirty feet to the south and 10 feet higher a small pit exposes a veinlet of asbestos that has a maximum width of ¼ inch.

This vein is in unfavorable thin-bedded limestone and exists only within 8 feet of the diabase.

These are the only occurrences of asbestos known on the Hazel G. claim. Both occurrences are in thin-bedded limestone and exist only sporadically in a narrow belt near the contact with the diabase. Therefore this deposit does not warrant further consideration.

CONCLUSIONS

No asbestos in a geologic setting favorable to a significant deposit has been found on the Bonnie H. or Hazel G. claims. The asbestos that has been found is in small quantities and of poor quality. The writer has observed several tens of like deposits. Some have been well prospected and exposed. None have ever proved minable. Therefore it is recommended that the application for an exploration loan be denied.

DMEA-3039, WALTER W. HENDERSON'S G. & H. NO. 1 ASBESTOS PROSPECT
GILA COUNTY, ARIZONA

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
AUG 20 1953

Engineering Report

By Lincoln A. Stewart
Mining Engineer
U. S. Bureau of Mines.

July 1953

DMEA-3039, WALTER W. HENDERSON'S G. & H. NO. 1 ASBESTOS PROSPECT
GILA COUNTY, ARIZONA

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ILLUSTRATIONS

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1	Location map	1

INTRODUCTION

An application was submitted to the Defense Minerals Exploration Administration for a $21,700 exploratory loan by Walter W. Henderson, Globe, Ariz. for the G. & H. No. 1 prospect. This application, docketed as DMEA-3039, was received by the Tucson, Ariz., office of the Defense Minerals Exploration Administration on May 29, 1953. The purpose of the requested loan was to explore an asbestos deposit on the property by 700 feet of drifting. Included in the request was the construction of a 2.5-mile access road.

Field investigation was made on June 12, 1953 by the writer and Robert W. Ageton, engineers of the Bureau of Mines, and A. F. Shride and Dayton D. Dickey, geologists of the Geological Survey.

LOCATION AND ACCESSIBILITY

The G. & H. No. 1 property is situated in the Crook National Forest about 12 airmiles northwest of Globe, Gila County, Ariz. (figure 1). Access to the property is gained by traveling northward on State Highway 88 (the Apache Trail), from its junction with U. S. Highway 60-70 for 11.1 miles to De Vore wash. Drive northeastward up this wide, sandy wash for 1.6 miles. The property, on top of the ridge to the east, is reached by ½ mile of rough trail that rises 500 feet in this distance.

According to the Rockinstraw Mountain quadrangle sheet, this location would be in sec. 1, T. 2 N., R. 14 E., unsurveyed. The average altitude of the claims is about 3,600 feet.

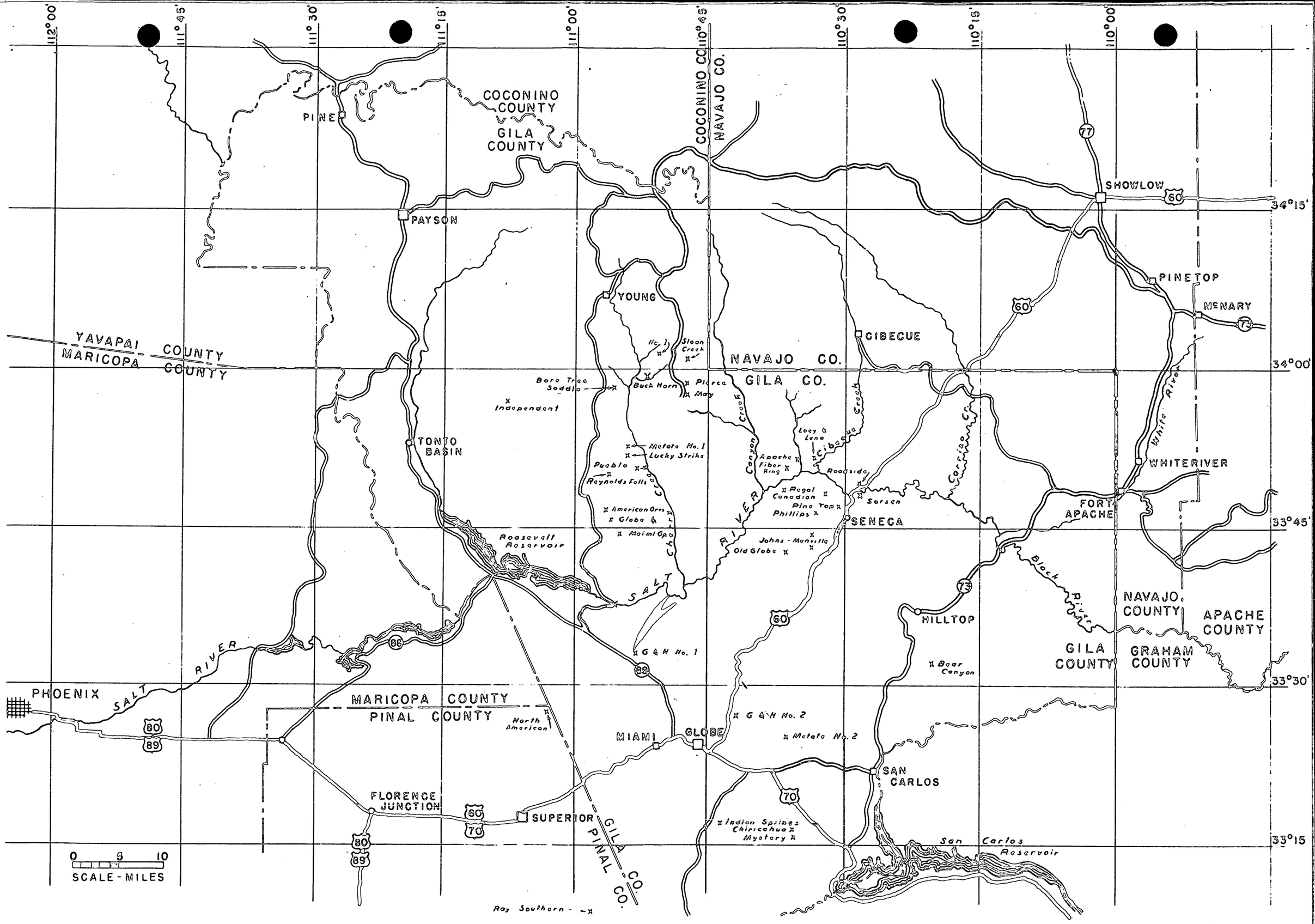


FIGURE 1. - LOCATION MAP - ASBESTOS DEPOSITS - CENTRAL ARIZONA DMEA 3039

OWNERSHIP AND EXTENT

The property consists of 2 unpatented mining claims, recorded at the Gila County Courthouse at Globe, Ariz., as follows:

	Book of Mines	Page
Bonnie H.	49	79
Hazel G.	49	482

The claims are owned by a partnership composed of Walter W. and Jack B. Henderson, Box 2282, Globe; Steve Giono, Box 1029, Globe; and Henry L. Ramsey, Box 788, Clarkdale, Ariz.

HISTORY AND PRODUCTION

There are several old pits on the property that indicate previous but unknown ownership. There has been no production from this area.

DESCRIPTION OF THE DEPOSIT

The area in which the deposit is located has been deformed apparently by pre-mineral faulting, complicated by post mineral faulting and tilting. The Mescal limestone segment that contains the asbestos mineralization is exposed in the saddle of a north-trending ridge, on the west face of a steep escarpment. The beds strike N. 30° E. and dip 28° SE. Short, harsh, slip-fiber is found in the discovery cut in gouge and broken material of a bedding plane fault, but the vein was not seen. About 50 feet south of this point the limestone formations are cut off by a thick diabase dike that appeared to be emplaced in a pre-mineral (?) fault, with

the underlying Dripping Spring quartzite exposed on the opposite side. At about 40 feet up the slope from the discovery cut a second pit exposed one veinlet of 1/8-inch glassy harsh fiber in shaley beds.

About 900 feet over the hill, on the back slope, a cut had exposed a 1-inch vein of yellow, harsh, slip fiber in a 6-inch zone of weathered serpentine about 3 feet below an apparently concordant diabase sill that had a strike of N. 25° E., dipping 30° to 40° southeast.

These 2 occurrences are in the thin-bedded shaley Mescal limestone unit that never has produced commercial fiber anywhere in the district.

CONCLUSIONS

The little asbestos that was seen at this deposit occurs in the broken and deformed thin bedded Mescal unit that no where in the district has produced commercial fiber. On one side of the deposit, the vein that produced the slip fiber mixed with soil had not been found. On the opposite side of the hill slip fiber was exposed under a diabase sill. The fiber is harsh and weak, consequently not of strategic quality.

There is no justification for any exploration, consequently it is not necessary to discuss the estimated exploration costs detailed in the proposal.

RECOMMENDATIONS

From the above conclusions it is evident that there is no justification for consideration of exploration on this property. It is the poorest prospect that we have seen in our asbestos work.

It is recommended that the exploratory loan to Walter W. Henderson for his G. & H. No. 1 prospect be denied.

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY
P.O. Box 4126, University Station
Tucson 5, Arizona

June 29, 1953

Memorandum

To: A. H. Koschmann, Denver, Colorado

From: R. F. Robinson, Tucson, Arizona

Subject: Geologic report, DMM 3039, G & H No. 1 Prospect, Gila County, Arizona

Enclosed are the original and 8 copies of the above report by A. F. Shride of the Geological Survey.

This report, which recommends denial of an exploration loan, has my approval.

Raymond F. Robinson
Raymond F. Robinson
Acting District Supervisor
Arizona - New Mexico

Enclosures 9

Globe, Arizona
May, 9, 1953

United States Department of Interior
224 New Customs House Building
U. S. Bureau of Mines

Attention; Mr. W. H. King

Dear Mr. King:

Please find enclosed our application for DMEA exploration loan at our G & H Mine #1, Globe, Arizona.

The exploration program will consist of approximately 15000' of road building and 3 days bulldozer work for benching and facing, and 700' of drifting to explore the depth and width of ore body.

The estimated cost of the drift work is $19,929.00 or $27.92 per foot.

The time necessary to complete the project is estimated to be a maximum of 24 months.

The G & H Mine #1 is prepared to contact the proposed drift work for $17,500.00, or $25.00 per foot, plus $3,750.00 for road building and $450.00 for benching and facing, Making a grand total of $21,700.00.

Yours very truly,

Walter W. Henderson

Walter W. Henderson

MF-103
(Revised April 1952)

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
MAY 18 1953

UNITED STATES DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION

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

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

Not to be filled in by applicant

Docket No. DMEA-3039
Metal or Mineral
Date Received 5/18/53
Estimated Cost
Participation (Government %)

INSTRUCTIONS

1. *Name of applicant.*—(*a*) State here your full legal name, in the form in which you will wish to contract, and your mailing address: Walter W. Henderson Box 2282 Globe, Arizona

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

(*c*) If a corporation, add to above statement, titles, names and addresses of officers. Does not apply.

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

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

3. *Applicant's property rights.*—(*a*) State the legal description of the land upon which you wish to explore, including all land which you possess or control that may be benefited by the exploration, and excluding any land or interest in land which is not to be included in the exploration project contract Two unpatented mineing claims the Bonnie H. and the Hazel G. located in Gila County Arizona, fifteen miles in a N.W. direction from Globe Arizona and one mile north of Apache Trail Highway at Devore Wash Crossing.

(*b*) State any mine name by which the property is known. G & H Mine

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

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

(*e*) If you own the land, describe any liens or encumbrances on it None

(*f*) If the land consists of unpatented claims, add to the description above, the book and page numbers for each recorded location notice. Bonnie H. book 49, page 79 Hazel G. book 49, page 482 Gila County, Arizona

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

(*b*) State past and current production, and ore reserves, if any, giving quantities and grades. None

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

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

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

5. *The exploration project.*—(*a*) State the mineral or minerals for which you wish to explore Asbestos Chrysotile

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

(*c*) The work will start within 60 days and be completed within 24 months from the date of an exploration project contract.

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

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

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

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

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

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

(*e*) *Rehabilitation and repairs.*—Furnish a detailed list showing the cost of any necessary initial rehabilitation or repairs of existing buildings, installations, fixtures, and movable operating equipment, now owned by the Operator and which will be devoted to the exploration project. None.

(*f*) *New buildings, improvements, installations.*—Furnish a detailed list showing the cost of any necessary buildings, fixed improvements, or installations to be purchased, installed or constructed for the benefit of the exploration project. None.

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

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

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

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

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

[X] Money [ ] Use of equipment owned by you [ ] Other

Explain in detail on acompanying paper.

CERTIFICATION

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

Dated May 9, 1953

Walter W. Henderson
(Applicant)

By

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

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

Member.
A. A. P. A.

1. (d)

Walter W. Henderson 787 North High Box 2282 Globe, Arizona.
Jack D. Henderson 787 North High Box 2282 Globe, Arizona.
Steve Giono Box 1029 Globe, Arizona.
Henry L. Ramsey B ox 788 Clarkdale, Arizona.

4. (a)

Bonnie H. Claim:

New location work done on claim consists of open cut going in on vein. This exposes fibre and serpentine bands across vein. Old location work on claim, which is small open cut, exposes one fibre band next to the contact.

Hazel G. Claim:

New location work done on claim consists of open cut going in on vein. This exposes fibre and serpentine bands across vein.
We are starting new open cut to face up for drift. This exposes vein and will open up at depth the main ore body when it is driven.

Partners share equally in mine.

Accessibility:

We will need 2½ miles of road in order to get equipement into mine.

4. (b)

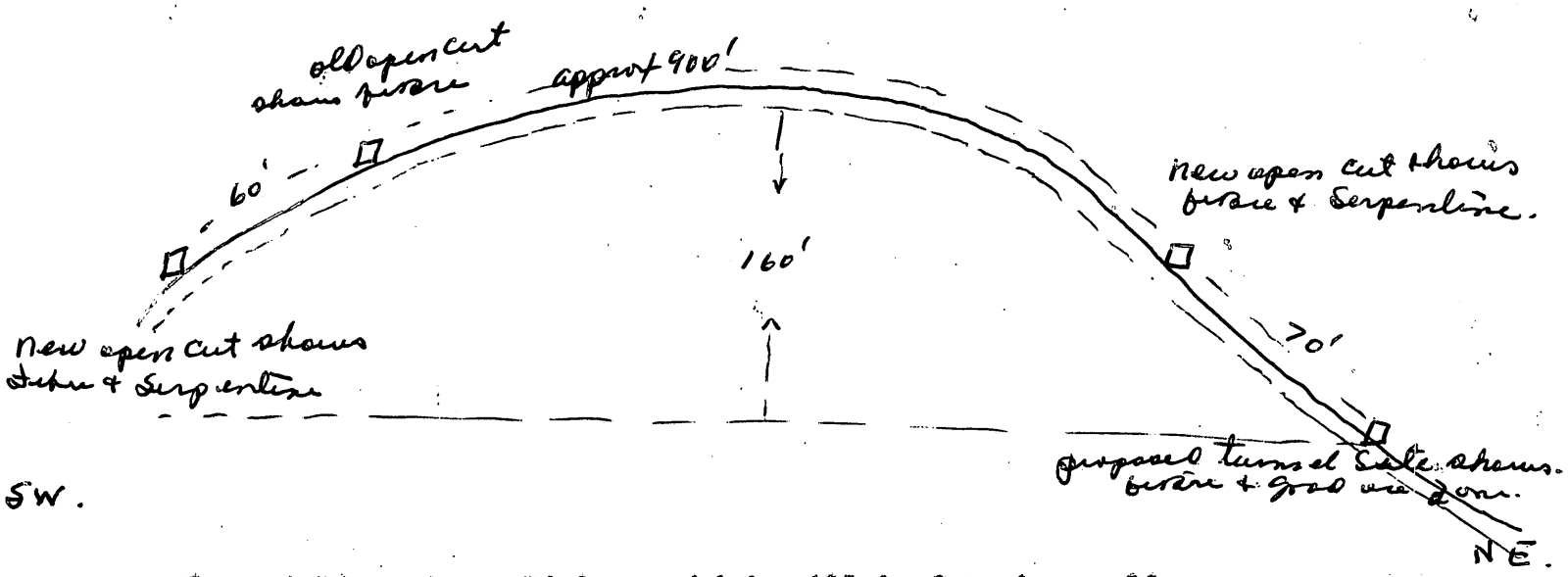
This is a new find and there is no past production and all present work has been done in order to open up property for exploration program.

4. (c)

Geologic Features:
Large sedimentary lime beds which have been split by upheaval of Diabase. The ore body lays below the Diabase. We have fibre showing in ore zones on surface and our work shows we have good ore zones. Therefore, a good chance to make a mine.

4. (c) Map:

Two claims long or 3000 feet. Bonnie H. and Hazel G. Overlaps on southwest end of Bonnie H.



Dotted line shows Diabase which will be hanging wall.

Solid line shows Ore bed.

At the proposed tunnel site the dip of the vein is approximately 65 . This gradually flattens to about 40 at the southwest open cut. At each of the four places shown on the map we have fibre showing and a very good ore zone. The Diabase on the surface will be our hanging wall to start with. Our idea is to drive 100 feet at the proposed tunnel site and if we have commerical ore , to then push on thru hill to open up balance of ore body. We then can raise on ore to check body above and put down winze on ore to check bed body below. We then will be able to pick our mineing method after we have opened up our ore body and see what type of ground we have to contend with. We wish to explore this property because we think we can make a mine.

4. (d)

We will need 3 miles of minimum access road to put us to main highway, which is fifteen miles from Globe, Arizona, our milling shipping, and residence point. See attached sheet for cost.

5. (b) See 4. (c).

5. (d)

Applicant will be supervisor of project. He has 23 years mineing experience. Ten years of which has been as supervisor for Anaconda Copper Mines, at Miami, Arizona. Applicant has had practical mineing experience in all types of mineing operations including, sinking, drifting, raising and stopeing, in Arizona, California, Nevada, and Idaho. Other partners are good practical miners with five to ten years experience.

CALCULATION OF COSTS
(Furnished by Hendersons)

Rental of Equipment

	Present Value
210 Cu. Ft. Compressor	$6,500.00
7½ H. P. Slusher	1,800.00
Jackhammer	500.00
Jackleg	200.00
Line oiler	20.00
3/4" Air line (rubber) 100'	50.00
1/2" Water hose " 50'	15.00
Water Gooseneck	10.00
2 Mine cars	500.00
	$9,295.00

Rental Basis per Month

$\frac{\$9,295.00}{60}$ = $154.91

Rental Basis per foot advance
3 ft./day x 25 days /month = 75'

$\frac{154.91}{75}$ = $2.07 per foot

Labor

1 miner @ $15.00 per shift	$15.00
2 muckers @ $13.00 per shift	26.00
	$41.00

Includes overtime, industerial insurance of 9.92% and social security tax of 4.5%.

On advance of 3' per day.

$\frac{\$41.00}{3}$ = $13. 67 per foot.

Supplies

Explosives (14 holes per round)

Dynamite, 28 pounds @ "0.21 / lb.	$5.88
Caps, 14 @ "0.02 each	.28
Fuse, 112' @ "0.12 /ft.	1.34
	$ 7.50

$\frac{\$7.50}{3}$ = $2.50 /ft.

Fuel fo Compressor

Compressor to be in operation 16 hours per day.
8 hours drilling and 8 hours slushing.

30 gal. gas @ $0.305/gal. 2 qts. oil @ $0.30 - $9.75.

$9.75 / 3 - $3.25 per foot.

Pipe and Track

Pipe and track to be purchased by G & H Mines and to remain in the company's possession upon the termination of the project. The project to be charged 40% of the estimated purchased price for these items.

	Per Foot
Rails, spikes, ties, fishplates, switches	1.25
2" air line, with valves and fittings	.50
1" water line, with valves and fittings	.25
	$2.00

$2.00 x 40% - $0.80 per foot

Drill Steel and Bits

Steel breakage estimated to be 1-4 foot piece per round, or 9 feet advance
4 Timken detachable bots per round; this also includes sharpening.

Steel - $6.00 / 9.0 - $0.67 per foot

Bits - 4x $0.56 / 3.0 - .74 per foot

Total $1.41 per foot

Other Supplies

	Per foot
Machine oil for drill and slusher	$0.15
Carbide	.10
Picks, shovels, flatsheet, wrenches jimcrow bars, moils, loading sticks and other small tools (This covers replacement and breakage)	.30
	$0.55

Repairs

Normal repairs on machinery to be rented from company, including breakage and absolesence
$0.75 per foot

Supervision and Engineering

Estimated at $1.25 per foot.

Water Haulage

Tank truck two trips per week $20.00 per trip

$40.00 per week / 18 feet advance = 2.22 per foot

The above includes rental on tank truck, labor and operating expense of truck.

Summary		Cost per Foot
Rental of equipment		$ 2.07
Labor		13.67
Supplies:		
Explosives	$2.50	
Fuel	3.25	
Pipe and track	.80	
Steel and bits	1.41	
		7.96
Repairs		.75
Supervision and Engineering		1.25
Water Haulage		2.22
	Total Cost	$27.92

Estimated Cost of Project

~~300' of drifting @ $25.00 per foot~~		~~$10,500.00~~
15000' of road	@ $0.25 per foot	3,750.00
24 hrs. dozer work	@ 18.75 per hour	450.00
		~~$23,944.00~~
700' of drifting	@$25.00 per foot	17,500.00
		$21,700.00

G & H Mining Co.	10% -	$ 2170.00
BMRA	90% -	19530.00
Total		$21700.00