400

FEB 27 1956

Messrs. Don Walker and Gus Packard
Box 185
Mesa, Arizona

Re: Docket No. DMEA 4003 - Mercury
The Cypress Group
Gila County, Arizona

Gentlemen:

Your application for aid for an exploration project and other data available to us in Washington concerning the above-referenced property have been reviewed.

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

Careful study of our information indicates that although mercury mineralization occurs on the property the probability of disclosing significant ore reserves is not sufficiently promising to justify Government participation. Under these circumstances, we regret to advise you that your application is denied.

We wish to thank you for your interest in the Defense Minerals Exploration Administration program and for bringing this property to our attention.

Sincerely yours,

G. O. Mitzender

Administrator

ADMcMahon/foc
2-21-56
cc to: Docket
Code 400
Adm. Read. File
Operating Comm.
FT. REG. III
H. M. Meyer, USBM
T. H. Kiilsgaard, USGS

400

February 21, 1956

MEMORANDUM

To: Administrator, DMEA

From: Iron and Ferro-Alloys Division, DMEA

Subject: Denial of request for exploration assistance in the amount of $5,879.00
Docket No. DMEA 4003 - Mercury
Don Walker and Gus Packard
The Cypress Group
Gila County, Arizona

Denial of the subject application is recommended by this Division based on the following information:

(1) The applicants, Don Walker and Gus Packard, Box 185, Mesa, Arizona, requested exploration assistance in the amount of $5,879.00 for 100 lineal feet of trenching and 150 feet of drifting, crosscutting, raising and sinking.

(2) The applicants are the owners of eleven (11) unpatented lode mining claims, namely Cypress Nos. 1 through 11, located in the NW. ¼ of unsurveyed T. 7 N., R. 9 E., Gila County, Arizona.

(3) The proposed program is to further explore a mineralized mercury-bearing zone previously indicated by an adit about 105 feet long, a 25 feet crosscut and a small surface pit.

(4) A field examination revealed that the main mineralized zone is somewhat brecciated, contains irregular veinlets of quartz, siderite and minor amounts of cinnabar; only a small amount of cinnabar is visible as most of it occurs in limonite where the zone is exposed. Alteration of the Cypress ore zone is not of the same high intensity of nearby producing ore bodies; the foliation is uniform with no indication of the strong structural deformation in which ore bodies are localized at adjacent properties. Assays of six samples taken by the Examiners showed a numerical average of only 0.45% mercury, the highest being 0.11% Hg.

(5) The examiners conclude and recommend that the application for Government assistance be denied because the deposit lacks the intensity of alteration and structural development associated with minable ore bodies at nearby properties and as the samples indicate that the ore is very low grade there is no geological basis on which Government participation can be justified. The Field Team and the Commodity Divisions of the Geological Survey and the Bureau of Mines concur in this recommendation.

W. S. Martin, Chief
Iron and Ferro-Alloys Division

AIMcMahon/foc
2-21-56
cc to: Docket
Code 400
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Operating Comm.

400

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FEB 1 3 1956

February 13, 1956

Copy retained 400

Memorandum

To: W. S. Martin, Defense Minerals Exploration Administration

From: J. W. Pennington, Branch of Base Metals

Subject: Review of Field Team Examination Report, Docket No. DMEA 4003 (mercury), Don Walker and Gus Packard, Cypress Group, Gila County, Arizona, $5,879.00

The applicant proposed to explore this property by 100 feet of trenching and 150 feet of drifting, crosscutting, raising and sinking at an estimated cost of $5,879.00.

Examination of the property by T. H. Kessle, Bureau of Mines, and J. T. Dutick, Geological Survey, revealed that the mercury content of the mineralized zone was much lower than the applicant had stated and averaged only about 1.0 pound of mercury per ton of material.

In addition, the examiners concluded that the exploration would not discover significant quantities of minable-grade ore.

I agree with the Field Team's recommendation that the application for assistance to explore the property be denied.

J. W. Pennington

J. W. Pennington

Copy to: Division of Minerals
Branch of Base Metals (2)
Thor Hildegard, U.S.G.S.
R. W. Worden
Files

400

IN REPLY REFER TO:

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

RECEIVED
FEB 10 1956

February 9, 1956

Copy retained 400

Re: DMEA 4003
Dan Walker and Gus Packard
Cypress Mercury Group
Gila County, Arizona
$5,879.00 - Mercury

Memorandum

To: W. S. Martin, Defense Minerals Exploration Administration

From: N. E. Nelson, U. S. Geological Survey

Subject: Review of Field Team report.

The applicant requested Government participation in a work program designed to explore a mercury-bearing fault zone by trenching, drifting, sinking and raising at an estimated cost of $5,879.00. The work proposed consists of 100 feet of trenching, 10 feet of raising, 30 feet of crosscutting, 40 feet of shaft and 70 feet of drift.

The examiners found that considerable work had been done on a fault zone along a dike. Open cuts and 125 feet of underground work had opened the low-grade mercury-bearing rock. Sampling showed up to 38 inches of 0.11 percent mercury material, but the average width and grade is much lower.

The examiners conclude that the prospect does not contain significant quantities of ore of minable grade and recommend that the application be denied. I concur with the recommendation.

N. E. Nelson

N. E. Nelson

NENelson:iml
G-2/9/56

cc: Director's reading, 4212
Branch reading, 4212
DMEA(3)
Docket file
H. M. Meyer, 3623

400

RECEIVED
OCT 31 1955

October 27, 1955

Copy retained 400

Memorandum

To: W. N. Storms

From: Superintendent, Denver Experiment Station, Reg. III

Subject: Docket DMEA-4003 (Mercury), Dan Walker and Gus Packard, Cypress group, Gila County, Arizona

The subject application in the amount of $5,819.00 is enclosed. The brochure consists of:

1. Form NF-103 and supplementary information sheets
2. Location map
3. Memo from J. W. Pennington to W. S. Martin (photocopy)
4. Photocopy of memo from E. N. Nelson to W. S. Martin
5. Photocopy of letter of transmittal from Chairman, Operating Committee to Executive Officer
6. Copy of memo of transmittal from Executive Officer to this office

A field examination and suitable report are required. The completed report should be forwarded directly to the Executive Officer with a copy of the memorandum of transmittal to this office.

W. H. KING

W. H. King

Enclosures

Copy to: E. N. Marshman
J. H. Faick
W. M. Traver (3)

400

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

RECEIVED
OCT 26 1955

224 New Customhouse
Denver 2, Colorado

October 21, 1955

Memorandum

To: W. H. King (w/brochure)
J. H. Faick

From: Executive Officer, DMEA Field Team, Region III

Subject: Docket DMEA-4003 (Mercury), Dan Walker and Gus Packard, Cypress group, Gila County, Arizona

Enclosed is the subject application in the amount of $5,879.00. Also enclosed is a copy of a letter from the Chairman of the Operating Committee and relevant memoranda from H. H. Nelson and J. W. Pennington, members of the Branch of Base Metals.

A field examination and suitable report are requested.

W. M. Traver

W. M. Traver

Enclosures

HMC:pw

cc: DMEA-4003
Sec.Op.Comm. (2)
Harshman
Chron

Copy retained 400

400

OCT 19 1955

Messrs. Dan Walker and
Gus Packard
Box 185
Mesa, Arizona

Re: Docket No. DMEA 4003 - Mercury
The Cypress Group
Gila County, Arizona

Gentlemen:

The above docketed application for exploration assistance has been reviewed by the Iron and Ferro-Alloys Division of the Defense Minerals Exploration Administration and referred to Mr. W. M. Trever, Executive Officer, DMEA Field Team, Region III, 224 New Custom House Building, Denver 2, Colorado, for a field examination of the property.

Any assistance you can give the members of the Field Team will be appreciated.

Sincerely yours,

Frank E. Johnson

Acting Administrator

ADMacMahon/foc 10/18/55
cc to: Docket
Code 400
Adm. Read. File
Operating Comm.
FT. REG. III
H. M. Meyer, USBM
Thor H. Killingsstad, USGS

400

OCT 1 9 1955

Mr. W. M. Trever, Executive Officer
DMEA Field Team, Region III
224 New Custom House Building
Denver 2, Colorado

Re: Docket No. DMEA 4003 - Mercury
Don Walker and Gus Packard
The Cypress Group
Gila County, Arizona

Dear Mr. Trever:

The above docketed application for exploration assistance is being referred to your office for a field examination of the property.

Copies of memoranda dated October 7 and October 18, 1955, by H. H. Nelson, Geological Survey, and J. W. Pennington, Bureau of Mines, respectively, relating to the project, are enclosed for your information.

Sincerely yours,

George C. Selfridge

Chairman, Operating Committee

Enclosure

APPROVED:

P. F. Yopes

Member, Bureau of Mines

Thor H. Kiilsgaard

Member, Geological Survey

AIMcMahon/fce 1-18-55
cc to: Docket
Code 400
Adm. Read. File
Operating Comm.
FT. REG. III
H. M. Meyer, USBM
Thor H. Kiilsgaard, USGS

402

RECEIVED

OCT 10 1955

October 10, 1955

Copy retained 400

Memorandum

To: W. S. Martin, Defense Minerals Exploration Administration

From: J. W. Pennington, Branch of Base Metals

Subject: Review of DMEA application, Docket No. 4003 (mercury) Cypress Group Claims, Tonto National Forest, Gila County, Arizona, Dan Walker, Mesa, Arizona

According to the available information, this area appears favorable for mercury mineralization. The applicant states that an estimated 800 tons of 0.75 percent ore is known. At current prices this would amount to about $72,000.

The applicant proposes to explore this area believed to contain an estimated 800 tons as well as other mineralized areas.

The estimated costs of $5,879 seem reasonable for the work proposed.

It is recommended that a Field Team examination be made of the property to check the reported mineralized zones and evaluate the proposed method of exploration.

J. W. Pennington

J. W. Pennington

JWPennington/vr

Copy to: Division of Minerals
Branch of Base Metals
J. W. Pennington
Thor S. Kiilsgaard, U.S.G.S.
F i l e s

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

IN REPLY REFER TO:
400

RECEIVED
OCT 10 1955

October 7, 1955

Re: DMEA 4003
Dan Walker
Cypress Group
Gila Co., Arizona
$5,879.00 - Mercury

Copy retained 400

Memorandum

To: W. S. Martin, Defense Minerals Exploration Administration

From: N. E. Nelson, U. S. Geological Survey

Subject: Review of application

This prospect is in the likely area between the Ord and Rattlesnake mines. Probably the Field Office has good information concerning it.

If the veins are near the widths and grades stated, a work program is warranted.

Referral to the Field Team is recommended.

N. E. Nelson

N. E. Nelson

Copy to: H. M. Meyer, 3623
DMEA (3)

402

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

January 30, 1956

224 New Customhouse
Denver 2, Colorado

RECEIVED
FEB - 6 1956

Memorandum

To: Secretary to the Operating Committee, DMEA

From: Field Team, Region III

Subject: Report of Examination, Docket DMEA 4003 (Mercury), Dan Walker and Gus Pachuré, Cypress group, Gila County, Arizona

Enclosed are the original and three copies of the Report of Examination on the subject docket.

The field examiners concur in the belief that further exploration on this property will not discover any significant amount of new ore. They recommend that the application be denied, and we concur in this recommendation.

DMEA Field Team, Region III

W. M. Traver

E. N. Kerchman

Enclosures

Reviewed by
DMEA OPERATING COMMITTEE

(date)

TRANSMITTED

JAN 30 1956

400

DMEA
Date Rec'd.

JAN 30 1956

BUREAU OF MINES
Denver, Colorado

Box 4097
Tucson 5, Arizona

January 25, 1956

Memorandum

To : W. M. Traver, Executive Officer, DMEA Field Team, Region III

From : Superintendent, Southwest Experiment Station

Subject : Field Examination Report, Docket DMEA-4003, Dan Walker and Gus Packard, Cypress Mercury Group, Sunflower Mining District, Gila County, Ariz.

Enclosed are original and 8 copies of the section on Summary, Conclusions and Recommendations by T. M. Romslo of the Bureau of Mines and J. N. Faick of the Geological Survey, and the section on Engineering by Romslo for the above report. A separate section on Geology will be submitted by the Geological Survey.

The DMEA examiners believe that further exploration work will not discover any significant amount of new ore, so have recommended that Government aid be denied the applicant. I concur with this recommendation.

Brochure is enclosed.

Walter R. Storms

Walter R. Storms

CC W. M. Traver (8)
J. N. Faick
DMEA-4003
DF

WRStorms:frj

TRANSMITTED

JAN 3 0 1956

UNITED STATES
DEPARTMENT OF THE INTERIOR
DOUGLAS McKAY, SECRETARY

DEFENSE MINERALS EXPLORATION ADMINISTRATION

REPORT OF EXAMINATION BY FIELD TEAM
REGION XII

DMEA-4021, Pan Valley and Gun Pocket, Superior Mercury Group

Gila County, Arizona

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

J. H. Feick, Geologist
U.S. Geological Survey

January 1956

Reviewed by
DMEA Contracting Officer

TRANSMITTED
JAN 3 0 1956

SUMMARY, CONCLUSIONS AND RECOMMENDATION

BY T. M. ROWLE[1] AND J. R. FAICK[2]

The Cypress Group of mercury claims in Gila County, Ariz. was examined for the Defense Minerals Exploration Administration in connection with an application for Governmental aid by Man Walker. The property was examined in December 1955 and early in January 1956 under docket DMEA-4003. Aid was requested in an exploratory program that involved 100 linear feet of trenching and 150 feet of drifting, crosscutting, raising and sinking. Total cost of the proposed work was estimated at $5,879.00.

The Cypress Group of claims originally was located in 1925 or 1926. Since then explorations have been mainly confined to the driving of a 105-foot adit and a 25-foot crosscut, and to the excavation of a few shallow pits. Probably the only production from the deposit was in 1949 when a small amount of hand-sorted ore, treated in a home-made retort on the property, yielded 5½ flasks of mercury. The property has been idle, probably since 1949.

The country rock of the Cypress claims is predominantly dark gray slates and phyllites that strike east-northeasterly and dip from 80° north to vertical. A few lamprophyre dikes roughly parallel to the slates and phyllites, are exposed along the gulch in which the Cypress prospect is situated. A weakly

---

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

bleached zone follows the footwall of one of the dikes that closely conforms with the attitude of the schist. In this zone cinnabar occurs mainly in the weakly altered schist as disseminations and as crystals in quartz-sidgrite veinlets. The mineralized zone as exposed by the adit and pits has an indicated strike length of at least 500 feet and a width ranging from a few inches to 11.0 feet. The mercury content of the zone was indicated by 6 samples having a numerical average of about 1 pound per ton.

Governmental aid in further exploration of the deposit is not justified because there is no reason to expect such work would indicate the presence of significant reserves of mercury ore.

TRANSMITTED

JAN 3 0 1956

DMEA-4003, DAN WALKER AND GUS PACKARD, CITRUS MERCURY GROUP
GILA COUNTY, ARIZONA

Engineering Report

By T. M. Ramsle
Mining Engineer
U. S. Bureau of Mines

January 1956

DMEA-4003, DAN WALKER AND GUS PACKARD, CITRUS MERCURY GROUP
GILA COUNTY, ARIZONA

CONTENTS

Engineering report	Page
Introduction	1
Location and accessibility	1
Topography, physical features and climate	2
History and production	3
Extent and ownership of property	3
Reconnaissance of the deposit	3
Ore reserves	4
Conclusions and recommendation	5

ILLUSTRATIONS

Figure No.		Following page
1	Location map	1
2	Claim map	3
3	Geologic map	(See Geologic Report)

INTRODUCTION

The Defense Minerals Exploration Administration received an application from Dan Walker for aid in an exploratory project for mercury on the Cypress Group of claims in Gila County, Ariz. The application was received September 28, 1955. It was docketed as DMEA-4003, reviewed by the Operating Committee, and referred to the Field Team, Region III, for an examination of the property.

The applicant's proposed explorations consisted of 100 lineal feet of trenching and 130 feet of drifting, crosscutting, raising and sinking. Total cost of the explorations was estimated at $5,879.00.

The property was examined for the DMEA by J. H. Faick, geologist, U. S. Geological Survey, on December 13, 1955, and by T. M. Ramsle, mining engineer, U. S. Bureau of Mines on January 13, 1956. Gus Packard, who with Dan Walker owns the property under a partnership, was present during both examinations.

LOCATION AND ACCESSIBILITY

The Cypress Group of claims is about 50 airmiles northeast of Phoenix, Ariz., probably in sec. 14 of unsurveyed T. 7 N., R. 9 E., Gila County, Ariz. (figure 1). It is accessible from Phoenix by

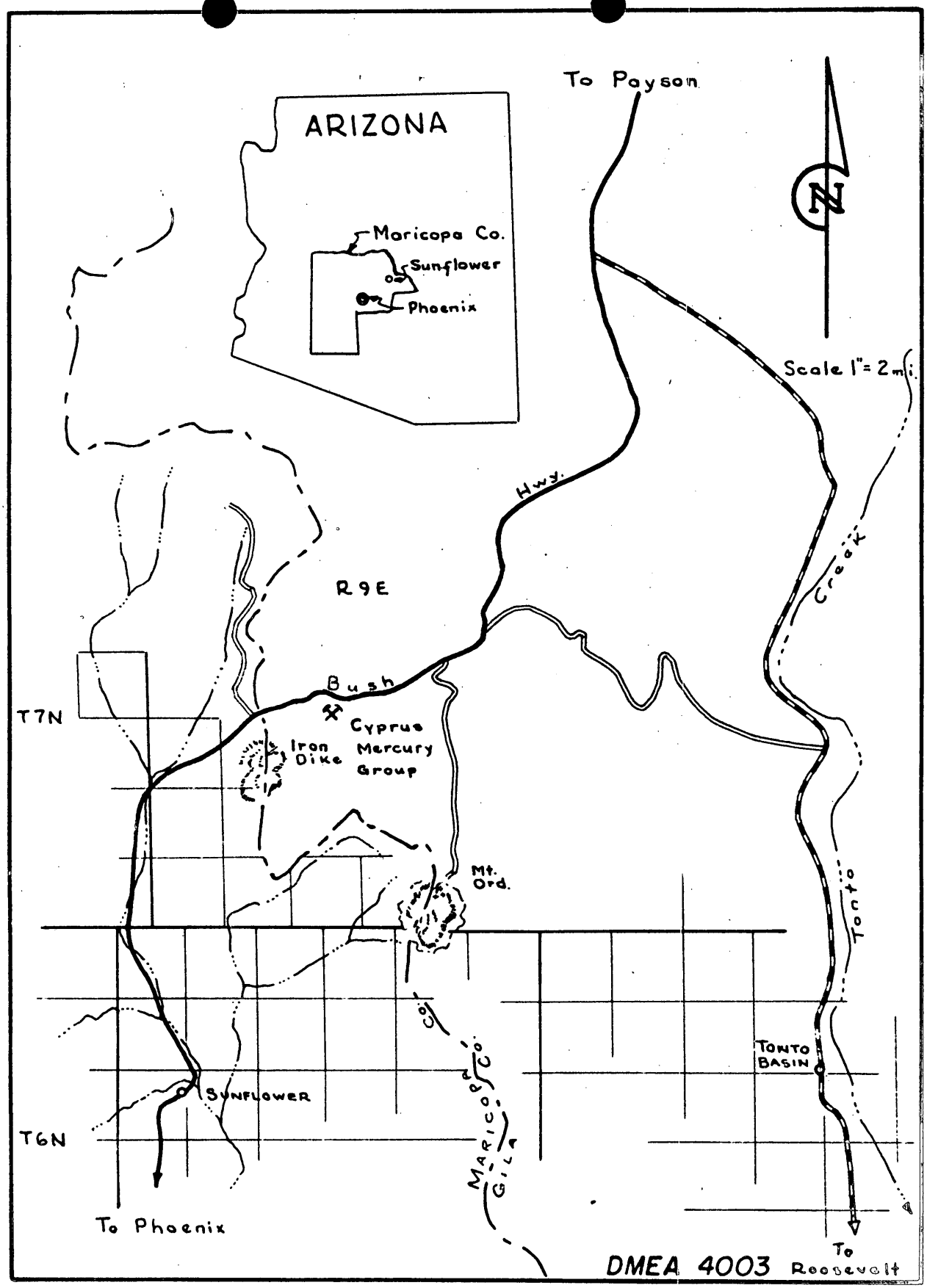

FIG - 1 - LOCATION MAP, DAN WALKER & GUS PACKARD

GILA COUNTY, ARIZONA

driving 24 miles easterly on U. S. Highway 60 to its junction with the Dusk Highway. Proceed 20.5 miles northeasterly on the graded Dusk Highway to a point 1.4 miles beyond the "signed" Maricopa and Gila County boundary line. This stopping place may be recognized as it is the only available nearby off-road parking site on the right side of the Highway. From the parking site to the main mine workings, a short adit, is about 1,500 feet south via a foot trail that follows the bed of an arroyo.

TOPOGRAPHY, PHYSICAL FEATURES, AND CLIMATE

The Cygnus Group of claims is on the western slope of the slightly west of north-trending Mazatzal Mountains. It is bordered on the north by Slate Creek that drains easterly to Tonto Creek. The area comprises northerly trending ridges and intervening deep V-Shaped canyons. The portal of the adit is at an altitude of about 3,600 feet.

Vegetation near the mine is mainly confined to a dense growth of bushes and a few scattered juniper trees.

Summers are pleasant and winters are mild. Annual precipitation of about 15 inches occurs principally as heavy rainfalls during the period from June through September, and as light rain and snowfalls during January and February.

There are no permanent streams in the area. Water for small mining and milling operations is obtainable from springs, mine workings, and Slate Creek. The latter stream flows for an average of probably 9 months yearly.

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HISTORY AND PRODUCTION

The Cypress Group was located first in 1925 or 1926 by Gus Packard and his brothers, A. M. and R. S. Packard. At the same time they located the nearby Rattlesnake mine.

Production from the Cypress Group totals about 5½ flasks of mercury. This was produced by Gus Packard and Irl Conway in 1949 when they retorted a small amount of hand-sorted ore in a home-made 3-tube retort at the portal of the adit. Ore was obtained from a few small open-cuts and the 105-foot adit that had been driven intermittently since the late 1920's.

The property has been inactive since 1949.

EXTENT AND OWNERSHIP OF PROPERTY

The Cypress Group comprises 11 unpatented lode mining claims, namely Cypress Nos. 1 to 11 (figure 2). It is owned by Gus Packard and Dan Walker, Box 185, Mesa, Ariz.

DESCRIPTION OF THE DEPOSIT

The principal mercury-bearing zone of the Cypress claims occurs in a band of weakly altered slate at the footwall of a dike of igneous rock, probably lamprophyre. The dike is somewhat brecciated and contains veinlets of quartz and siderite. It approximately parallels the foliation of the slate that strikes about N. 70° E. and dips from about 80° N. to vertical (figure 3).

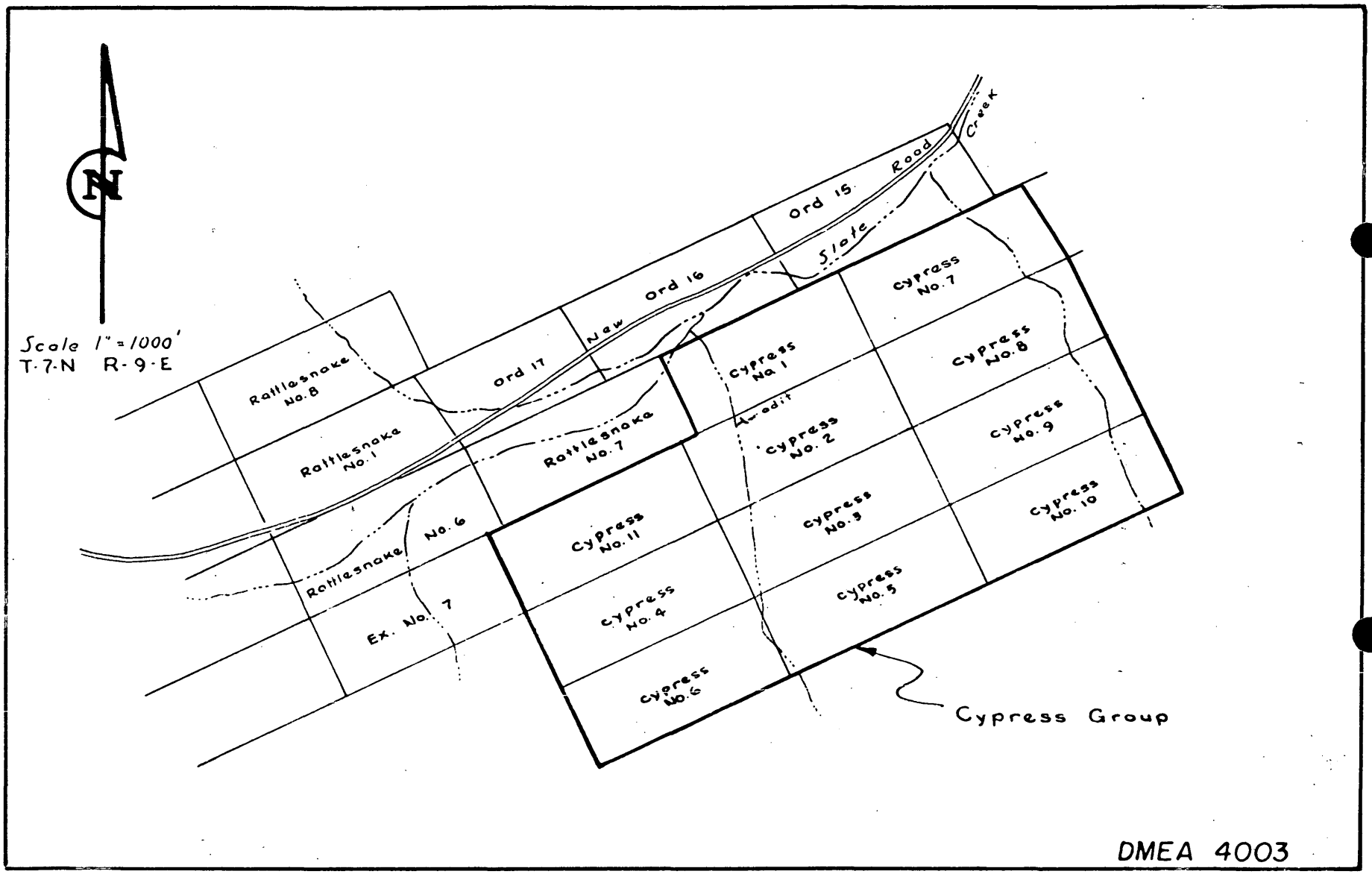

FIG.-2-CLAIM MAP, DAN WALKER & GUS PACKARD

GILA COUNTY, ARIZONA

The zone has been exposed for a strike length of about 250 feet by a 105-foot adit and a few shallow pits. The width of the zones, as shown by the workings, ranges from a few inches at the west to several feet at the east end.

Cinnabar, the ore mineral, occurs principally in the altered slate as disseminations and as minute crystals in irregular quartz-siderite veinlets. At the surface most of the cinnabar is associated with limonite and is not readily detected until the rock is crushed and panned.

The assays of 6 samples across the mineralized zone are shown on figure 3. Mercury content of the samples ranges from nil to 0.11 percent, and averages 0.046 percent, numerically. The sampled widths range from 0.8 feet to 11.0 feet.

ORE RESERVES

The deposit contains no measurable ore reserves.

Grade of both indicated and inferred reserves has been estimated at 1 pound of mercury per ton. A small tonnage of material of this grade has been indicated by the mine workings, and a relatively large tonnage of similar material, possibly 10,000 tons, can be inferred on the basis of geologic conditions.

CONCLUSIONS AND RECOMMENDATION

Mercury mineralization on the Cypress Group of claims appears to be confined to one small zone containing meager amounts of cinnabar. Geological conditions are such that additional exploratory work could not reasonably be expected to indicate significant amounts of presently economic ore.

The application for Governmental aid in exploration for mercury on the Cypress Group of claims should be denied for the above reason.

TRANSMITTED
JAN 30 1956

MINERAL DEPOSITS
DMEA
RECEIVED
JAN 26 1956
U. S.
GEOLOGICAL SURVEY
DENVER, COLORADO

Box 4126 University Station
Tucson, Arizona

FEB - 6 1956

January 24, 1956

DMEA
Date Rec'd.
JAN 27 1956
BUREAU OF MINES
Denver, Colorado

MEMORANDUM

TO: Mr. E. N. Harshman EMH

FROM: John N. Faick

SUBJECT: Geology Examination Report DMEA 4003 - Cypress Mercury Deposit, Gila County, Arizona (Mercury)

Enclosed are the original and 8 copies of my report on the above subject property. Denial of the application is recommended because of the extremely low mercury content in the ore.

The Survey copy of the application is enclosed.

John N. Faick

John N. Faick

JNF:ms

Enclosures

cc: Harshman (8)
Storms

Reviewed by
DMEA OPERATING COMMITTEE

(date)

TRANSMITTED
JAN 30 1956

DMEA
Date Rec'd.
JAN 27 1956
BUREAU OF MINES
Denver, Colorado

U. S. DEPARTMENT OF THE INTERIOR
DOUGLAS McKAY, SECRETARY

DEFENSE MINERALS EXPLORATION ADMINISTRATION

REGION III

GEOLOGY

EXAMINATION REPORT

DMEA 4003

CYPRESS MERCURY DEPOSIT

GILA COUNTY, ARIZONA

(Mercury)

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

January 24, 1956

Reviewed by
DMEA OPERATING COMMITTEE

(date)

U. S. DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION
FIELD TEAM III

EXAMINATION REPORT

DMEA 4003

CYPRESS MERCURY DEPOSIT
GILA COUNTY, ARIZONA
(Mercury)

CONTENTS

	Page
INTRODUCTION	1
GEOLOGY	2
PRODUCTION, GRADE AND RESERVES	4
CONCLUSIONS AND RECOMMENDATIONS	5

ILLUSTRATIONS

Fig. 1 Location Map	(See Engineering Report)
Fig. 2 Claim Map	(" " ")
Fig. 3 Geologic Sketch Map	Following page 1

INTRODUCTION

On behalf of Defense Minerals Exploration Administration the writer examined the mercury prospects on the Cypress group of claims December 12, 1955. The Cypress application was submitted to DMEA by Dan Walker who, in partnership with his stepfather Gus Packard, controls the group of claims. The Cypress group consists of 11 unpatented claims located (fig. 1) on the south side of Slate Creek in Gila County, Arizona. The property lies adjacent to and southwest of the unpatented claims of the Rattlesnake Mine, and is bordered on the north and east by the Ord group of patented claims, which constitute the Ord mine.

The Cypress group (fig. 2) was originally located in about 1925 or 1926 by Gus Packard and his brothers A. M. Packard and Robert S. Packard, at about the same time when these three brothers located the nearby Rattlesnake mine. The Cypress group has been held by the Packard brothers since that time.

The property is readily accessible from the Bush Highway, and the principal prospects on the property lie about a quarter of a mile south of the highway. These prospects (see fig. 3) consist of an adit and several open cuts which lie near the bottom of the second gulch west of the Ord Number 1 tunnel on the Ord claims. The gulch drains northward into Slate Creek. The prospects are accessible from the highway by an impassable access road which follows along the gulch, and this road could easily be placed into service.

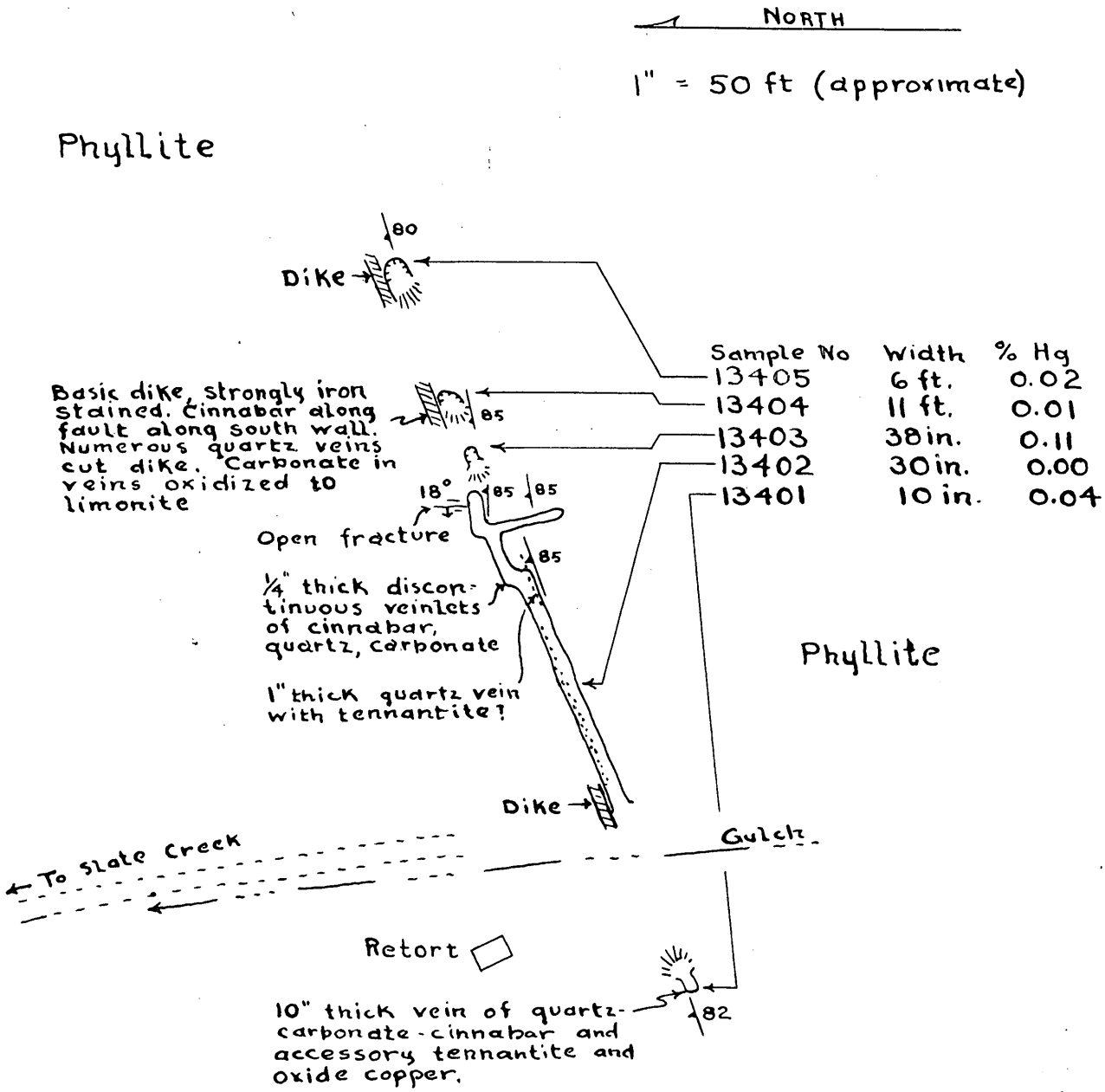

FIG. 3

GEOLOGIC SKETCH MAP

CYPRESS MERCURY DEPOSIT

GILA COUNTY, ARIZONA

DMEA 4003

J. N. Faick

Dec. 1955

GEOLOGY

The Cypress group of claims is underlain by metamorphic sedimentary rock belonging to the Alder series of older Precambrian. The prevailing rock type is dark gray, brown, or maroon slate and phyllite, and associated with these rock types are beds of quartzite, grits, and coarse sandstone. In places the slate has been altered to phyllite and schist and bleached by hydrothermal solutions. On the Cypress claims in the vicinity of the prospects there are at least 2 and probably several dike-like bodies of basic igneous rocks that lie approximately parallel to the regional monoclinal dip of the rocks. The bedding, banding and foliation of the country rock strikes about north 70° east, and the dip ranges from vertical to about 80° north. In its broader aspect the geology of the Cypress prospect is very similar to the geology of both the Ord and Rattlesnake mines. The Cypress prospect has exposed a mercury-bearing zone for a strike distance of approximately 250 feet, and undoubtedly the zone must have a considerably greater strike length, but the eastern end of it is concealed by brush and rock debris.

The principal development of this mercury-bearing zone consists of an adit about 105 feet long and a crosscut about 25 feet long. The adit was driven eastward along the mineralized zone from the bottom of the gulch in which the prospect is situated. About 60 feet west of the portal of the adit on the west side of the gulch in which the prospect is located the mineralized zone is exposed in a small pit. The ore zone is exposed in 3 other places which lie on a steep slope into which the adit was driven (see fig. 3).

The mineralized zone exposed in the adit and in the cut indicates that the ore zone ranges from a few inches wide at the west end to several feet wide at the east end and attains a maximum width of about 11 feet in the prospect pit where Sample 13404 was taken. At the portal of the adit and at the two most easterly prospect pits there is exposed a basic dike, probably lamprophyre, that apparently forms the north wall of the main mineralized zone. This dike is somewhat brecciated and contains irregular veinlets of quartz, ferriginous carbonate (siderite) and minor amounts of cinnabar. The main ore zone lies south of the dike and consists principally of very minor amounts of cinnabar disseminated in phyllite. The outcrop of the dike and the ore zone is stained with limonite which apparently was formed as a result of oxidation of the siderite. The mineralogical features are nearly identical to those found at the nearby Rattlesnake and Ord mines. Only a relatively small amount of cinnabar is visible in the Cypress ore zone but it is readily detected by crushing and panning of the rock. Most of the cinnabar seems to occur in the limonite, suggesting that it may have been closely associated with the siderite and may have been concentrated as a result of weathering.

The slate or phyllite along the Cypress ore zone is slightly bleached and altered but apparently the alteration is not of the same high degree of intensity as found with the ore bodies at the Ord and Rattlesnake mines. Likewise, the attitude of the foliation is remarkably uniform and does not indicate structural deformation of great intensity. This is in contrast to the structural setting of the ore deposits of the nearby properties, especially at the Ord mine, where the ore bodies obviously are localized in areas of intense deformation.

PRODUCTION, GRADE AND ORE RESERVES

About 1949 Gus Packard and Irl Conway retorted in a small 3-tube retort near the portal of the adit a small amount of hand-sorted ore obtained from the various exploration workings. From selected high-grade ore about 5½ flasks of mercury were produced and sold for $1,350. It is stated by Packard that the work stopped because of interference by the construction of the new highway which was being built at that time.

The writer collected 6 samples of ore. The locations and analyses of 5 of these are shown on fig. 3. The sixth sample was taken from another cut about 300 or 400 feet northeasterly from the adit, on the south side of Slate Creek, and about 200 feet above it, and does not show on the geologic sketch map. The numerical average of these 6 samples is 0.045 percent mercury, and the highest grade sample obtained by the writer contained only 0.11% mercury. Obviously all of the ore seen by the writer is of extremely low grade. No attempt was made to calculate an accurate ore reserve but it appears geologically possible that this deposit might contain many thousand tons of ore that might average about one pound of mercury per ton of ore. This estimate is based on the assumption that the deposit has a much greater strike length than is indicated in the presently developed exploration cuts, and that the ore, if present, must be confined to the zone above the adit level. It is possible that the adit was driven at or near the bottom of the main mercury-bearing zone. This seems to be supported by the fact that tennantite (?) was found in the prospect 60 feet west of the portal of the adit. This mineral has been found in the Ord mine and is reported in the Rattlesnake mine, but insofar as is known is not abundant in the richer or more productive orebodies, and apparently makes its appearance near the bottom of the ore shoots.

CONCLUSIONS AND RECOMMENDATION

From field examinations of the geology and the samples and assay results given above, and by comparison of the Cypress mineralized zone with the productive orebodies of both the Ord and Rattlesnake mines, it is concluded that the Cypress prospect does not contain significant quantities of ore of minable grade. As indicated above, the deposits may contain a substantial tonnage of ore containing possibly about one pound of mercury per ton. The deposit seemingly lacks the intensity of alteration of the rock and the intensity of structural development that have been associated with the minable orebodies at nearby properties. As intense structural deformation and alteration are lacking and as the samples indicate that the ore is very low grade, there is no geological basis on which government participation in exploration could be justified; therefore it is recommended that this application be denied.

DOCKET
SURNAME
McMahon
Martin
Leihon
Kilsgaard
Selfridge
Robinson

400

FEB 27 1956

Messrs. Don Walker and Gus Packard
Box 185
Mesa, Arizona

Re: Docket No. DMEA 4003 - Mercury
The Cypress Group
Gila County, Arizona

Gentlemen:

Your application for aid for an exploration project and other data available to us in Washington concerning the above-referenced property have been reviewed.

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

Careful study of our information indicates that although mercury mineralization occurs on the property the probability of disclosing significant ore reserves is not sufficiently promising to justify Government participation. Under these circumstances, we regret to advise you that your application is denied.

We wish to thank you for your interest in the Defense Minerals Exploration Administration program and for bringing this property to our attention.

Sincerely yours,

C. O. Mittendorf

Administrator

ADMcMahon/foc
2-21-56
cc to: Docket
Code 400
Adm. Read. File
Operating Comm.
FT. REG. III
H. M. Meyer, USBM
T. H. Kiilsgaard, USGS

R.C.L.

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

February 21, 1956

MEMORANDUM

To: Administrator, DMEA

From: Iron and Ferro-Alloys Division, DMEA

Subject: Denial of request for exploration assistance in the amount of $5,879.00
Docket No. DMEA 4003 - Mercury
Dan Walker and Gus Packard
The Cypress Group
Gila County, Arizona

Denial of the subject application is recommended by this Division based on the following information:

(1) The applicants, Dan Walker and Gus Packard, Box 185, Mesa, Arizona, requested exploration assistance in the amount of $5,879.00 for 100 lineal feet of trenching and 150 feet of drifting, crosscutting, raising and sinking.

(2) The applicants are the owners of eleven (11) unpatented lode mining claims, namely Cypress Nos. 1 through 11, located in the NW. $\frac{1}{4}$ of unsurveyed T. 7 N., R. 9 E., Gila County, Arizona.

(3) The proposed program is to further explore a mineralized mercury-bearing zone previously indicated by an adit about 105 feet long, a 25 foot crosscut and a small surface pit.

(4) A field examination revealed that the main mineralized zone is somewhat brecciated, contains irregular veinlets of quartz, siderite and minor amounts of cinnabar; only a small amount of cinnabar is visible as most of it occurs in limonite where the zone is exposed. Alteration of the Cypress ore zone is not of the same high intensity of nearby producing ore bodies; the foliation is uniform with no indication of the strong structural deformation in which ore bodies are localized at adjacent properties. Assays of six samples taken by the Examiners showed a numercial average of only 0.045% mercury, the highest being 0.11% Hg.

(5) The examiners conclude and recommend that the application for Government assistance be denied because the deposit lacks the intensity of alteration and structural development associated with minable ore bodies at nearby properties and, as the samples indicate that the ore is very low grade, there is no geological basis on which Government participation can be justified. The Field Team and the Commodity Divisions of the Geological Survey and the Bureau of Mines concur in this recommendation.

W S Martin

W. S. Martin, Chief
Iron and Ferro-Alloys Division

DOCKET
SURNAME
McMahon
Martin

February 21, 1956

MEMORANDUM

To: Administrator, DMEA

From: Iron and Ferro-Alloys Division, DMEA

Subject: Denial of request for exploration assistance in the amount of $5,879.00
Docket No. DMEA 4003 - Mercury
Dan Walker and Gus Packard
The Cypress Group
Gila County, Arizona

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(3) The proposed program is to further explore a mineralized mercury-bearing zone previously indicated by an adit about 105 feet long, a 25 foot crosscut and a small surface pit.

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(5) The examiners conclude and recommend that the application for Government assistance be denied because the deposit lacks the intensity of alteration and structural development associated with minable ore bodies at nearby properties and as the samples indicate that the ore is very low grade there is no geological basis on which Government participation can be justified. The Field Team and the Commodity Divisions of the Geological Survey and the Bureau of Mines concur in this recommendation.

W. S. Martin, Chief
Iron and Ferro-Alloys Division

ADMcMahon/fcc
2-21-56
cc to: Docket
Code 400
Adm. Read. File
Operating Comm.

Docket

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

RECEIVED
FEB 15 1956

February 13, 1956

Memorandum

WSM

To: W. S. Martin, Defense Minerals Exploration Administration

From: J. W. Pennington, Branch of Base Metals

Subject: Review of Field Team Examination Report, Docket No. DMEA 4003 (mercury), Don Walker and Gus Packard, Cypress Group, Gila County, Arizona, $5,879.00

The applicant proposed to explore this property by 100 feet of trenching and 150 feet of drifting, crosscutting, raising and sinking at an estimated cost of $5,879.00.

Examination of the property by T. M. Romslo, Bureau of Mines, and J. N. Faick, Geological Survey, revealed that the mercury content of the mineralized zone was much lower than the applicant had stated and averaged only about 1.0 pound of mercury per ton of material.

In addition, the examiners concluded that the exploration would not discover significant quantities of minable-grade ore.

I agree with the Field Team's recommendation that the application for assistance to explore the property be denied.

J. W. Pennington

Copy to: Division of Minerals
Branch of Base Metals (2)
Thor Kiilsgaard, U.S.G.S.
R. W. Geehan
F i l e s

Copy retained 400

Docket

IN REPLY REFER TO:

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

RECEIVED
FEB 10 1956

February 9, 1956

Re: DMEA 4003
Dan Walker and Gus Packard
Cypress Mercury Group
Gila County, Arizona
$5,879.00 - Mercury

Copy retained 400

Memorandum

W309

To: W. S. Martin, Defense Minerals Exploration Administration

From: N. E. Nelson, U. S. Geological Survey

Subject: Review of Field Team report.

The applicant requested Government participation in a work program designed to explore a mercury-bearing fault zone by trenching, drifting, sinking and raising at an estimated cost of $5,879.00. The work proposed consists of 100 feet of trenching, 10 feet of raising, 30 feet of crosscutting, 40 feet of shaft and 70 feet of drift.

The examiners found that considerable work had been done on a fault zone along a dike. Open cuts and 125 feet of underground work had opened the low-grade mercury-bearing rock. Sampling showed up to 38 inches of 0.11 percent mercury material, but the average width and grade is much lower.

The examiners conclude that the prospect does not contain significant quantities of ore of minable grade and recommend that the application be denied. I concur with the recommendation.

N. E. Nelson

N. E. Nelson

Docket

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

RECEIVED
FEB - 6 1956

January 30, 1956

224 New Customhouse
Denver 2, Colorado

WBM

Memorandum

To: Secretary to the Operating Committee, DMEA

From: Field Team, Region III

Subject: Report of Examination, Docket DMEA 4003 (Mercury), Dan Walker and Gus Packard, Cypress group, Gila County, Arizona

Enclosed are the original and three copies of the Report of Examination on the subject docket.

The field examiners concur in the belief that further exploration on this property will not discover any significant amount of new ore. They recommend that the application be denied, and we concur in this recommendation.

DMEA Field Team, Region III

W. M. Traver

W. M. Traver

E. N. Harshman

E. N. Harshman

Enclosures

Reviewed by
DMEA OPERATING COMMITTEE
2-10-56
(date)

TRANSMITTED

JAN 30 1956

DMEA Detached

JAN 30 1956

BUREAU OF MINES
Denver, Colorado

Box 4097
Tucson 5, Arizona

January 25, 1956

Memorandum

To : W. M. Trever, Executive Officer, DMEA Field Team, Region III

From : Superintendent, Southwest Experiment Station

Subject : Field Examination Report, Docket DMEA-4003, Dan Walker and Gus Packard, Cypress Mercury Group, Sunflower Mining District, Gila County, Ariz.

Enclosed are original and 8 copies of the section on Summary, Conclusions and Recommendations by T. M. Rosale of the Bureau of Mines and J. N. Faick of the Geological Survey, and the section on Engineering by Rosale for the above report. A separate section on Geology will be submitted by the Geological Survey.

The DMEA examiners believe that further exploration work will not discover any significant amount of new ore, so have recommended that Government aid be denied the applicant. I concur with this recommendation.

Brochure is enclosed.

Walter R. Storms

Walter R. Storms

CC W. M. Trever (8)
J. N. Faick
DMEA-4003
DF

WRStorms:frj

Reviewed by
DMEA OPERATING COMMITTEE

2-10-56
(date)

TRANSMITTED
JAN 30 1956

UNITED STATES
DEPARTMENT OF THE INTERIOR
DOUGLAS McKAY, SECRETARY

RECEIVED
FEB - 6 1956

DEFENSE MINERALS EXPLORATION ADMINISTRATION

REPORT OF EXAMINATION BY FIELD TEAM
REGION III

DMEA-4003, Dan Walker and Gus Packard, Cypress Mercury Group

Gila County, Arizona

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

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

January 1956

Reviewed by
DMEA OPERATING COMMITTEE
2-10-56
(date)

TRANSMITTED
JAN 30 1956
RECEIVED
FEB - 6 1956

SUMMARY, CONCLUSIONS AND RECOMMENDATION

BY T. M. ROMSLO[1] AND J. N. FAICK[2]

The Cypress Group of mercury claims in Gila County, Ariz. was examined for the Defense Minerals Exploration Administration in connection with an application for Governmental aid by Dan Walker. The property was examined in December 1955 and early in January 1956 under docket DMEA-4003. Aid was requested in an exploratory program that involved 100 lineal feet of trenching and 150 feet of drifting, crosscutting, raising and sinking. Total cost of the proposed work was estimated at $5,879.00.

The Cypress Group of claims originally was located in 1925 or 1926. Since then explorations have been mainly confined to the driving of a 105-foot adit and a 25-foot crosscut, and to the excavation of a few shallow pits. Probably the only production from the deposit was in 1949 when a small amount of hand-sorted ore, treated in a home-made retort on the property, yielded $5\frac{1}{2}$ flasks of mercury. The property has been idle, probably since 1949.

The country rock of the Cypress claims is predominantly dark gray slates and phyllites that strike east-northeasterly and dip from 80° north to vertical. A few lamprophyre dikes roughly parallel to the slates and phyllites, are exposed along the gulch in which the Cypress prospect is situated. A weakly

---

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

bleached zone follows the footwall of one of the dikes that closely conforms with the attitude of the schist. In this zone cinnabar occurs mainly in the weakly altered schist as disseminations and as crystals in quartz-siderite veinlets. The mineralized zone as exposed by the adit and pits has an indicated strike length of at least 250 feet and a width ranging from a few inches to 11.0 feet. The mercury content of the zone was indicated by 6 samples having a numerical average of about 1 pound per ton.

Governmental aid in further exploration of the deposit is not justified because there is no reason to expect such work would indicate the presence of significant reserves of mercury ore.

TRANSMITTED

JAN 30 1956

DMEA-4003, DAN WALKER AND GUS PACKARD, CYPRESS MERCURY GROUP
GILA COUNTY, ARIZONA

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FEB - 6 1956

Engineering Report

By T. M. Romslo
Mining Engineer
U. S. Bureau of Mines

January 1956

Reviewed by
DMEA OPERATING COMMITTEE

2-10-56
(date)

RECEIVED
FEB - 6 1956

DMEA-4003, DAN WALKER AND GUS PACKARD, CYPRESS MERCURY GROUP
GILA COUNTY, ARIZONA

CONTENTS

Engineering report — Page

Introduction ---------- 1
Location and accessibility ---------- 1
Topography, physical features and climate ---------- 2
History and production ---------- 3
Extent and ownership of property ---------- 3
Description of the deposit ---------- 3
Ore reserves ---------- 4
Conclusions and recommendation ---------- 5

ILLUSTRATIONS

Figure No. — Following page

1 Location map ---------- 1
2 Claim map ---------- 3
3 Geologic map ----------(See Geologic Report)

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FEB - 6 1956

INTRODUCTION

The Defense Minerals Exploration Administration received an application from Dan Walker for aid in an exploratory project for mercury on the Cypress Group of claims in Gila County, Ariz. The application was received September 28, 1955. It was docketed as DMEA-4003, reviewed by the Operating Committee, and referred to the Field Team, Region III, for an examination of the property.

The applicant's proposed explorations consisted of 100 lineal feet of trenching and 150 feet of drifting, crosscutting, raising and sinking. Total cost of the explorations was estimated at $5,879.00.

The property was examined for the DMEA by J. N. Faick, geologist, U. S. Geological Survey, on December 12, 1955, and by T. M. Romslo, mining engineer, U. S. Bureau of Mines on January 13, 1956. Gus Packard, who with Dan Walker owns the property under a partnership, was present during both examinations.

LOCATION AND ACCESSIBILITY

The Cypress Group of claims is about 50 airmiles northeast of Phoenix, Ariz., probably in sec. 16 of unsurveyed T. 7 N., R. 9 E., Gila County, Ariz. (figure 1). It is accessible from Phoenix by

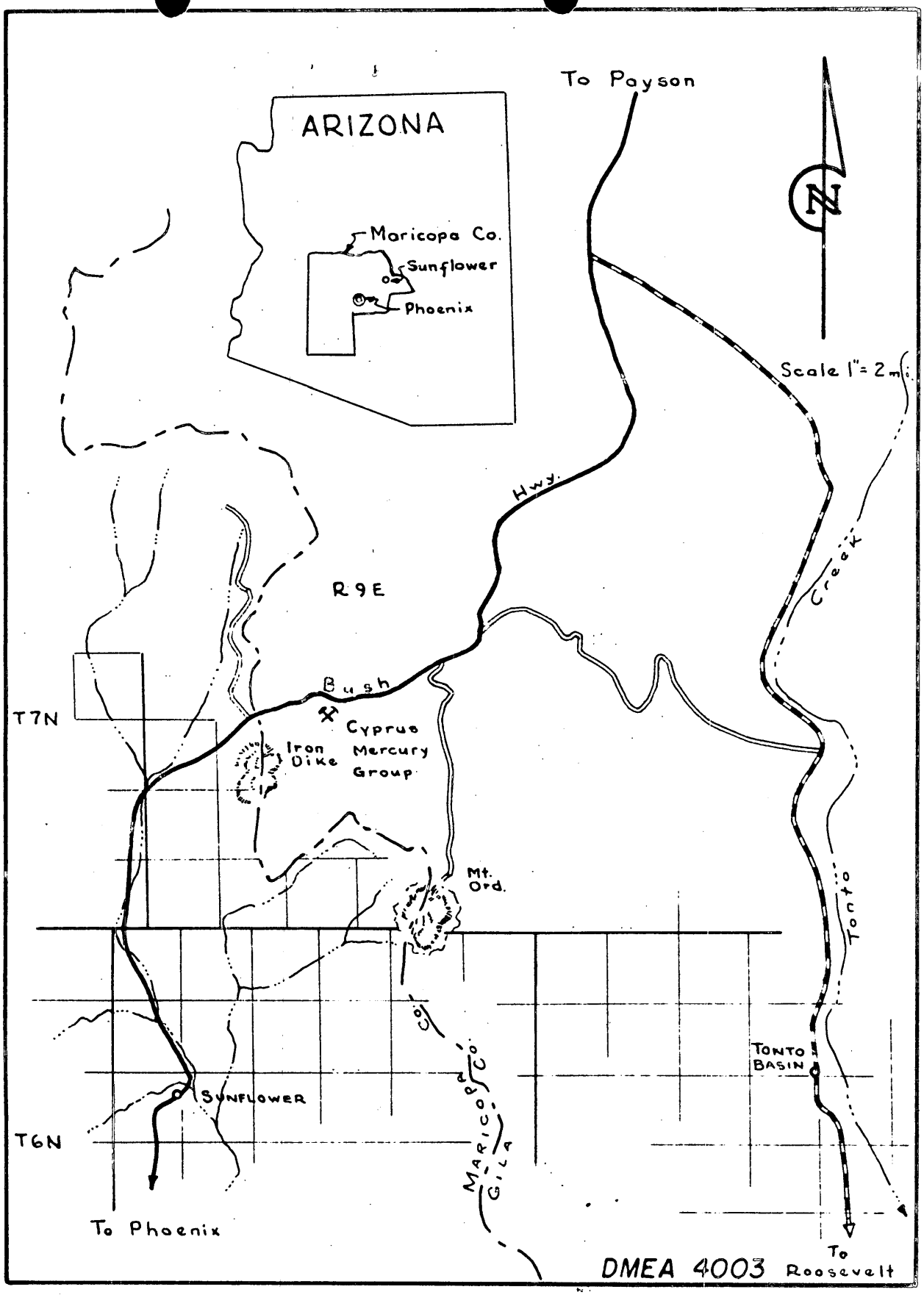

FIG - 1 - LOCATION MAP, DAN WALKER & GUS PACKARD

GILA COUNTY, ARIZONA

driving 24 miles easterly on U. S. Highway 60 to its junction with the Bush Highway. Proceed 50.5 miles northeasterly on the graded Bush Highway to a point 1.4 miles beyond the "signed" Maricopa and Gila County boundary line. This stopping place may be recognized as it is the only available nearby off-road parking site on the right side of the Highway. From the parking site to the main mine workings, a short adit, is about 1,500 feet south via a foot trail that follows the bed of an arroyo.

TOPOGRAPHY, PHYSICAL FEATURES, AND CLIMATE

The Cypress Group of claims is on the western slope of the slightly west of north-trending Mazatzal Mountains. It is bordered on the north by Slate Creek that drains easterly to Tonto Creek. The area comprises northerly trending ridges and intervening deep V-Shaped canyons. The portal of the adit is at an altitude of about 3,600 feet.

Vegetation near the mine is mainly confined to a dense growth of bushes and a few scattered juniper trees.

Summers are pleasant and winters are mild. Annual precipitation of about 15 inches occurs principally as heavy rainfalls during the period from June through September, and as light rain and snowfalls during January and February.

There are no permanent streams in the area. Water for small mining and milling operations is obtainable from springs, mine workings, and Slate Creek. The latter stream flows for an average of probably 9 months yearly.

HISTORY AND PRODUCTION

The Cypress Group was located first in 1925 or 1926 by Gus Packard and his brothers, A. M. and R. S. Packard. At the same time they located the nearby Rattlesnake mine.

Production from the Cypress Group totals about $5\frac{1}{2}$ flasks of mercury. This was produced by Gus Packard and Irl Conway in 1949 when they retorted a small amount of hand-sorted ore in a home-made 3-tube retort at the portal of the adit. Ore was obtained from a few small open-cuts and the 105-foot adit that had been driven intermittently since the late 1920's.

The property has been inactive since 1949.

EXTENT AND OWNERSHIP OF PROPERTY

The Cypress Group comprises 11 unpatented lode mining claims, namely Cypress Nos. 1 to 11 (figure 2). It is owned by Gus Packard and Dan Walker, Box 185, Mesa, Ariz.

DESCRIPTION OF THE DEPOSIT

The principal mercury-bearing zone of the Cypress claims occurs in a band of weakly altered slate at the footwall of a dike of igneous rock, probably lamprophyre. The dike is somewhat brecciated and contains veinlets of quartz and siderite. It approximately parallels the foliation of the slate that strikes about N. 70° E. and dips from about 80° N. to vertical (figure 3).

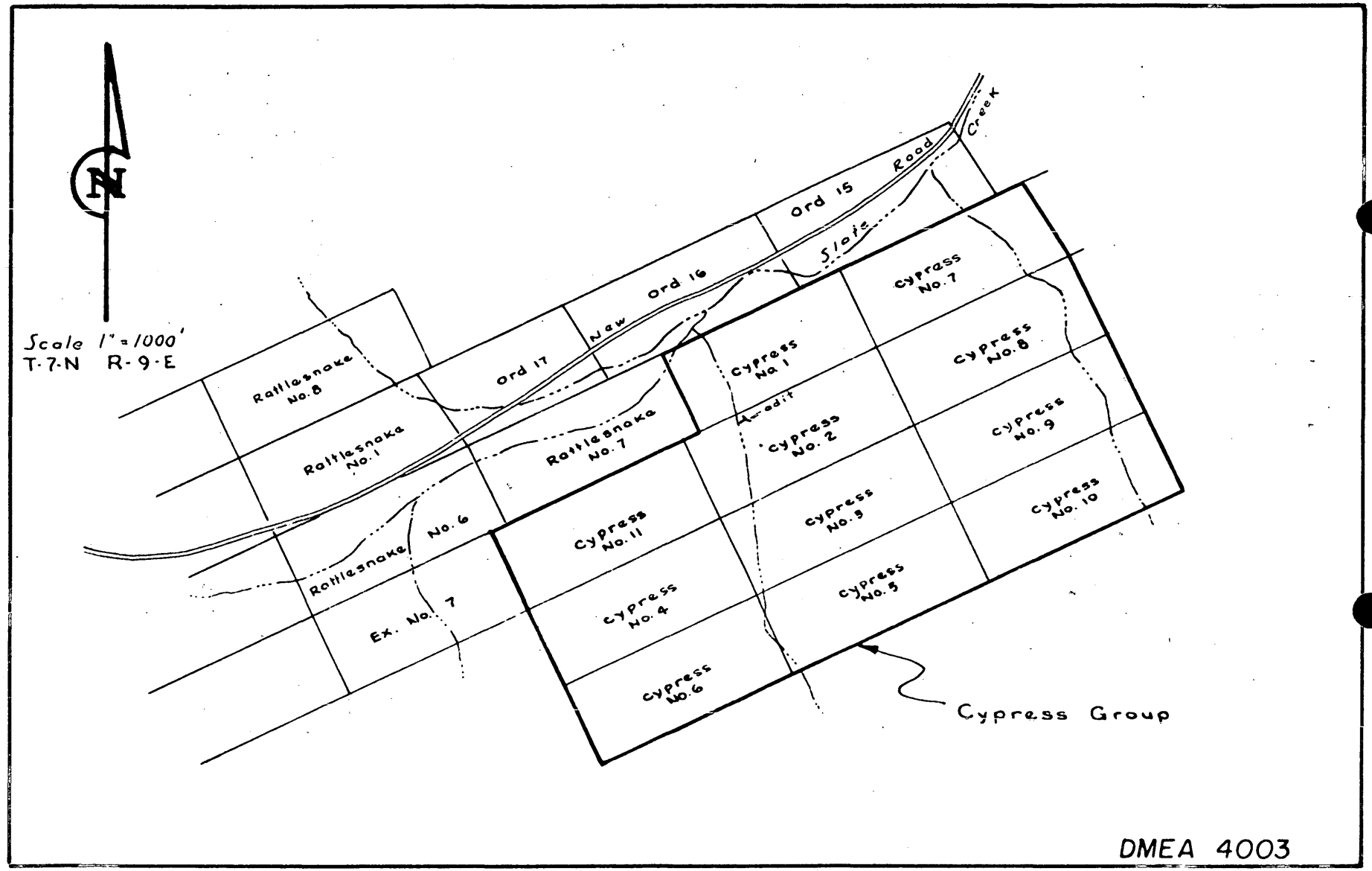

FIG.-2-CLAIM MAP, DAN WALKER & GUS PACKARD

GILA COUNTY, ARIZONA

The zone has been exposed for a strike length of about 250 feet by a 105-foot adit and a few shallow pits. The width of the zones, as shown by the workings, ranges from a few inches at the west to several feet at the east end.

Cinnabar, the ore mineral, occurs principally in the altered slate as disseminations and as minute crystals in irregular quartz-siderite veinlets. At the surface most of the cinnabar is associated with limonite and is not readily detected until the rock is crushed and panned.

The assays of 6 samples across the mineralized zone are shown on figure 3. Mercury content of the samples ranges from nil to 0.11 percent, and averages 0.045 percent, numerically. The sampled widths range from 0.8 feet to 11.0 feet.

ORE RESERVES

The deposit contains no measurable ore reserves.

Grade of both indicated and inferred reserves has been estimated at 1 pound of mercury per ton. A small tonnage of material of this grade has been indicated by the mine workings, and a relatively large tonnage of similar material, possibly 10,000 tons, can be inferred on the basis of geologic conditions.

CONCLUSIONS AND RECOMMENDATION

Mercury mineralization on the Cypress Group of claims appears to be confined to one small zone containing meager amounts of cinnabar. Geological conditions are such that additional exploratory work could not reasonably be expected to indicate significant amounts of presently economic ore.

The application for Governmental aid in exploration for mercury on the Cypress Group of claims should be denied for the above reason.

TRANSMITTED

JAN 30 1956

MINERAL RESOURCES DIVISION

JAN 26 1956

RECEIVED

FEB 3 1956

U. S. GEOLOGICAL SURVEY DENVER, COLORADO

Box 4126 University Station
Tucson, Arizona

January 24, 1956

DMEA
Date Rec'd.
JAN 27 1956
BUREAU OF MINES
Denver, Colorado

MEMORANDUM

TO: Mr. E. N. Harshman EMH

FROM: John N. Faick

SUBJECT: Geology Examination Report DMEA 4003 - Cypress Mercury Deposit, Gila County, Arizona (Mercury)

Enclosed are the original and 8 copies of my report on the above subject property. Denial of the application is recommended because of the extremely low mercury content in the ore.

The Survey copy of the application is enclosed.

John N. Faick

John N. Faick

JNF:ms

Enclosures

cc: Harshman (8)
Storms

Reviewed by
DMEA OPERATING COMMITTEE
2-10-56
(date)

TRANSMITTED
JAN 30 1956

DMEA
Date Rec'd.
JAN 27 1956
BUREAU OF MINES
Denver, Colorado

U. S. DEPARTMENT OF THE INTERIOR
DOUGLAS McKAY, SECRETARY

DEFENSE MINERALS EXPLORATION ADMINISTRATION

REGION III

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FEB - 6 1956

GEOLOGY

EXAMINATION REPORT

DMEA 4003

CYPRESS MERCURY DEPOSIT

GILA COUNTY, ARIZONA

(Mercury)

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

January 24, 1956

Reviewed by
DMEA OPERATING COMMITTEE
2-10-56
(date)

U. S. DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION
FIELD TEAM III

EXAMINATION REPORT

DMEA 4003

CYPRESS MERCURY DEPOSIT
GILA COUNTY, ARIZONA
(Mercury)

CONTENTS

	Page
INTRODUCTION	1
GEOLOGY	2
PRODUCTION, GRADE AND RESERVES	4
CONCLUSIONS AND RECOMMENDATIONS	5

ILLUSTRATIONS

Fig. 1 Location Map	(See Engineering Report)
Fig. 2 Claim Map	(" " ")
Fig. 3 Geologic Sketch Map	Following page 1

RECEIVED
FEB - 6 1956

INTRODUCTION

On behalf of Defense Minerals Exploration Administration the writer examined the mercury prospects on the Cypress group of claims December 12, 1955. The Cypress application was submitted to DMEA by Dan Walker who, in partnership with his stepfather Gus Packard, controls the group of claims. The Cypress group consists of 11 unpatented claims located (fig. 1) on the south side of Slate Creek in Gila County, Arizona. The property lies adjacent to and southwest of the unpatented claims of the Rattlesnake Mine, and is bordered on the north and east by the Ord group of patented claims, which constitute the Ord mine.

The Cypress group (fig. 2) was originally located in about 1925 or 1926 by Gus Packard and his brothers A. M. Packard and Robert S. Packard, at about the same time when these three brothers located the nearby Rattlesnake mine. The Cypress group has been held by the Packard brothers since that time.

The property is readily accessible from the Bush Highway, and the principal prospects on the property lie about a quarter of a mile south of the highway. These prospects (see fig. 3) consist of an adit and several open cuts which lie near the bottom of the second gulch west of the Ord Number 1 tunnel on the Ord claims. The gulch drains northward into Slate Creek. The prospects are accessible from the highway by an impassable access road which follows along the gulch, and this road could easily be placed into service.

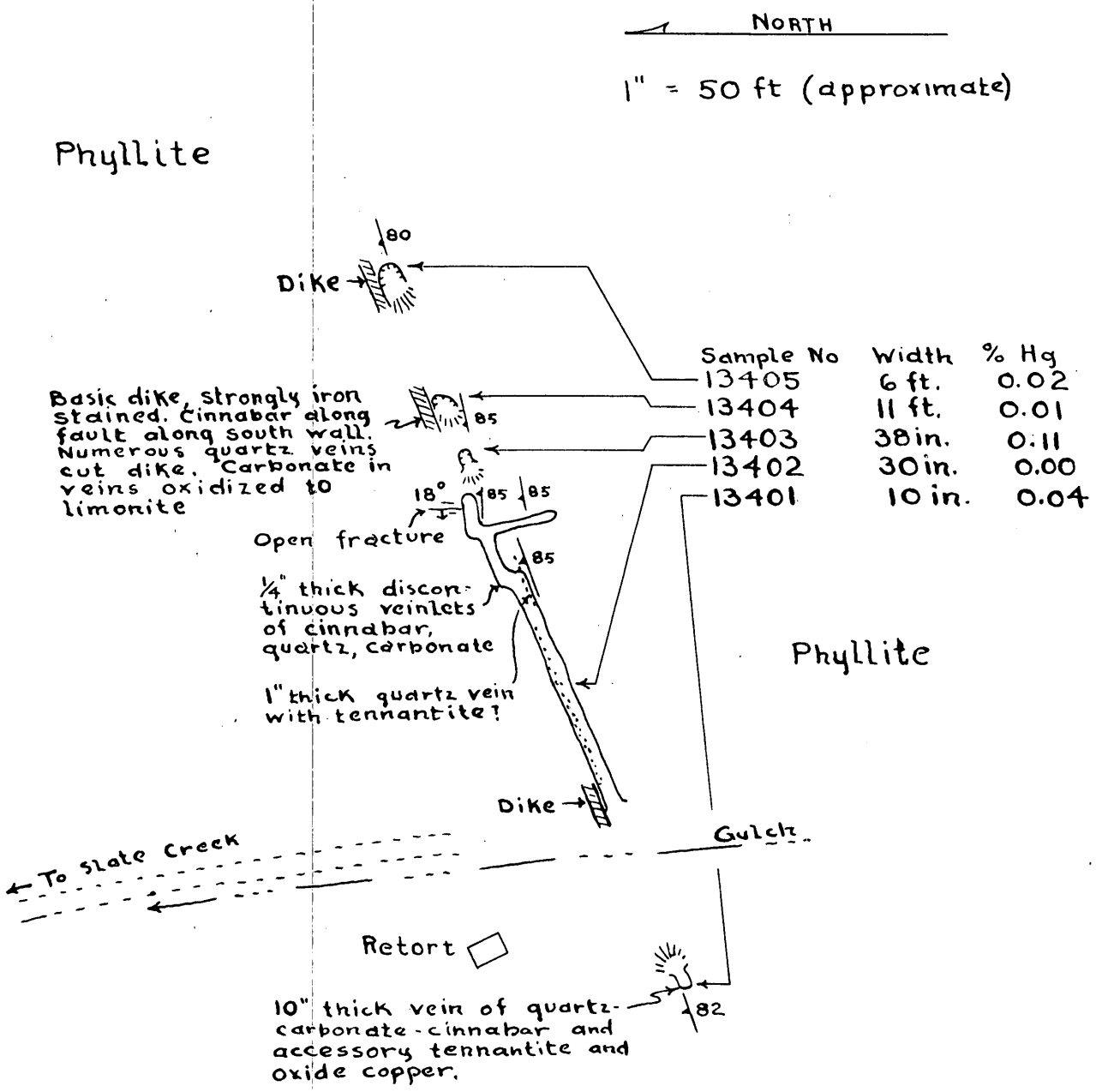


FIG. 3

GEOLOGIC SKETCH MAP

CYPRESS MERCURY DEPOSIT

GILA COUNTY, ARIZONA

DMEA 4003

J. N. Faick

Dec. 1955

GEOLOGY

The Cypress group of claims is underlain by metamorphic sedimentary rock belonging to the Alder series of older Precambrian. The prevailing rock type is dark gray, brown, or maroon slate and phyllite, and associated with these rock types are beds of quartzite, grits, and coarse sandstone. In places the slate has been altered to phyllite and schist and bleached by hydrothermal solutions. On the Cypress claims in the vicinity of the prospects there are at least 2 and probably several dike-like bodies of basic igneous rocks that lie approximately parallel to the regional monoclinal dip of the rocks. The bedding, banding and foliation of the country rock strikes about north 70° east, and the dip ranges from vertical to about 80° north. In its broader aspect the geology of the Cypress prospect is very similar to the geology of both the Ord and Rattlesnake mines. The Cypress prospect has exposed a mercury-bearing zone for a strike distance of approximately 250 feet, and undoubtedly the zone must have a considerably greater strike length, but the eastern end of it is concealed by brush and rock debris.

The principal development of this mercury-bearing zone consists of an adit about 105 feet long and a crosscut about 25 feet long. The adit was driven eastward along the mineralized zone from the bottom of the gulch in which the prospect is situated. About 60 feet west of the portal of the adit on the west side of the gulch in which the prospect is located the mineralized zone is exposed in a small pit. The ore zone is exposed in 3 other places which lie on a steep slope into which the adit was driven (see fig. 3).

The mineralized zone exposed in the adit and in the cut indicates that the ore zone ranges from a few inches wide at the west end to several feet wide at the east end and attains a maximum width of about 11 feet in the prospect pit where Sample 13404 was taken. At the portal of the adit and at the two most easterly prospect pits there is exposed a basic dike, probably lamprophyre, that apparently forms the north wall of the main mineralized zone. This dike is somewhat brecciated and contains irregular veinlets of quartz, ferriginous carbonate (siderite) and minor amounts of cinnabar. The main ore zone lies south of the dike and consists principally of very minor amounts of cinnabar disseminated in phyllite. The outcrop of the dike and the ore zone is stained with limonite which apparently was formed as a result of oxidation of the siderite. The mineralogical features are nearly identical to those found at the nearby Rattlesnake and Ord mines. Only a relatively small amount of cinnabar is visible in the Cypress ore zone but it is readily detected by crushing and panning of the rock. Most of the cinnabar seems to occur in the limonite, suggesting that it may have been closely associated with the siderite and may have been concentrated as a result of weathering.

The slate or phyllite along the Cypress ore zone is slightly bleached and altered but apparently the alteration is not of the same high degree of intensity as found with the ore bodies at the Ord and Rattlesnake mines. Likewise, the attitude of the foliation is remarkably uniform and does not indicate structural deformation of great intensity. This is in contrast to the structural setting of the ore deposits of the nearby properties, especially at the Ord mine, where the ore bodies obviously are localized in areas of intense deformation.

PRODUCTION, GRADE AND ORE RESERVES

About 1949 Gus Packard and Irl Conway retorted in a small 3-tube retort near the portal of the adit a small amount of hand-sorted ore obtained from the various exploration workings. From selected high-grade ore about 5½ flasks of mercury were produced and sold for $1,350. It is stated by Packard that the work stopped because of interference by the construction of the new highway which was being built at that time.

The writer collected 6 samples of ore. The locations and analyses of 5 of these are shown on fig. 3. The sixth sample was taken from another cut about 300 or 400 feet northeasterly from the adit, on the south side of Slate Creek, and about 200 feet above it, and does not show on the geologic sketch map. The numerical average of these 6 samples is 0.045 percent mercury, and the highest grade sample obtained by the writer contained only 0.11% mercury. Obviously all of the ore seen by the writer is of extremely low grade. No attempt was made to calculate an accurate ore reserve but it appears geologically possible that this deposit might contain many thousand tons of ore that might average about one pound of mercury per ton of ore. This estimate is based on the assumption that the deposit has a much greater strike length than is indicated in the presently developed exploration cuts, and that the ore, if present, must be confined to the zone above the adit level. It is possible that the adit was driven at or near the bottom of the main mercury-bearing zone. This seems to be supported by the fact that tennantite (?) was found in the prospect 60 feet west of the portal of the adit. This mineral has been found in the Ord mine and is reported in the Rattlesnake mine, but insofar as is known is not abundant in the richer or more productive orebodies, and apparently makes its appearance near the bottom of the ore shoots.

CONCLUSIONS AND RECOMMENDATION

From field examinations of the geology and the samples and assay results given above, and by comparison of the Cypress mineralized zone with the productive orebodies of both the Ord and Rattlesnake mines, it is concluded that the Cypress prospect does not contain significant quantities of ore of minable grade. As indicated above, the deposits may contain a substantial tonnage of ore containing possibly about one pound of mercury per ton. The deposit seemingly lacks the intensity of alteration of the rock and the intensity of structural development that have been associated with the minable orebodies at nearby properties. As intense structural deformation and alteration are lacking and as the samples indicate that the ore is very low grade, there is no geological basis on which government participation in exploration could be justified; therefore it is recommended that this application be denied.

Arizona Mining and Development Co. Inc.

1. Mining Lease And Option for Rattlesnake Claims Nos. 1 through 10.

2. However, application (attachment under Exhibit 3A - Applicants Property Rights) states "The claims possessed by the applicant, which will be benefited by exploration are known as the Rattlesnake Extension claims Nos. 1 through 7 as recorded in Docket Nr. 24, pages 508 through 514 in the office of the County Recorder of Gila County, State of Arizona, and the Cypress Claims Nos. 1 through 11 as recorded in Docket 24, pages 487 through 497 in the office of County recorder of Gila County, State of Arizona."

3. Are not these last the same claims covered in the application by Dan Walker and Gus Packard? Recordings indicate not.

4. Check F.T. report when submitted.

Docket

RECEIVED
OCT 31 1955

October 27, 1955

Book

Copy retained 400

Memorandum

To: W. R. Storms

W&M

From: Superintendent, Denver Experiment Station, Reg. III

Subject: Docket DMRA-4003 (Mercury), Dan Walker and Gus Packard, Cypress group, Gila County, Arizona

The subject application in the amount of $5,879.00 is enclosed. The brochure consists of:

1. Form MF-103 and supplementary information sheets
2. Location map
3. Memo from J. W. Pennington to W. S. Martin (photocopy)
4. Photocopy of memo from E. N. Nelson to W. S. Martin
5. Photocopy of letter of transmittal from Chairman, Operating Committee to Executive Officer
6. Copy of memo of transmittal from Executive Officer to this office

A field examination and suitable report are required. The completed report should be forwarded directly to the Executive Officer with a copy of the memorandum of transmittal to this office.

W. H. KING
W. H. King

Enclosures

Copy to: E. N. Harshman
J. N. Faick
W. M. Traver (3)
Sec. Op. Com. (2)

Docket

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

RECEIVED
OCT 26 1955

Room New Customhouse
Denver 2, Colorado

October 21, 1955

Memorandum

Copy retained 400

WSay

To: W. E. King (w/enclosure)
J. N. Raick

From: Executive Officer, DMEA Field Team, Region III

Subject: Docket DMEA-4003 (Mercury), Dan Walker and Gus Packard, Cypress group, Gila County, Arizona

Enclosed is the subject application in the amount of $5,679.00. Also enclosed is a copy of a letter from the Chairman of the Operating Committee and relevant memoranda from H. K. Nelson and J. W. Pennington, members of the Branch of Base Metals.

A field examination and suitable report are requested.

W. M. Traver

W. M. Traver

Enclosures

HMC:pw

cc: DMEA-4003
Sec.Op.Comm. (2)
Harshman
Chron

DOCKET
400 SURNAME
McMahon
Martin
Selfridge
Johnson

OCT 1 9 1955

Mr. W. M. Traver, Executive Officer
DMEA Field Team, Region III
224 New Custom House Building
Denver 2, Colorado

Re: Docket No. DMEA 400) - Mercury
Dan Walker and Gus Packard
The Cypress Group
Gila County, Arizona

Dear Mr. Traver:

The above docketed application for exploration assistance is being referred to your office for a field examination of the property.

Copies of memoranda dated October 7 and October 10, 1955, by N. B. Nelson, Geological Survey, and J. W. Pennington, Bureau of Mines, respectively, relating to the project, are enclosed for your information.

Sincerely yours,

George C. Selfridge
Chairman, Operating Committee (GCS)

Enclosure

ADMacMahon/foc 1-18-55
cc to: Docket
Code 400
Adm. Read. File
Operating Comm.
FT. REG. III
H. M. Meyer, USBM
Thor H. Kiilsgaard, USGS

APPROVED:

P. F. Yopes (GCS)
Member, Bureau of Mines

Thor H. Kiilsgaard (GCS)
Member, Geological Survey

R.C.L.

DOCKET
SURNAME
400 McMahon
Martin
Yogo
Kiilsgaard
Selfridge
Johnson

OCT 19 1955

Messrs. Dan Walker and
Gus Packard
Box 185
Mesa, Arizona

Re: Docket No. DMEA 4003 - Mercury
The Cypress Group
Gila County, Arizona

Gentlemen:

The above docketed application for exploration assistance has been reviewed by the Iron and Ferro-Alloys Division of the Defense Minerals Exploration Administration and referred to Mr. W. M. Traver, Executive Officer, DMEA Field Team, Region III, 22h New Custom House Building, Denver 2, Colorado, for a field examination of the property.

Any assistance you can give the members of the Field Team will be appreciated.

Sincerely yours,

Frank E. Johnson

Acting Administrator

ADMacMahon/fec 10/18/55
cc to: Docket
Code 400
Adm. Read. File
Operating Comm.
FT. REG. III
H. M. Meyer, USBM
Thor H. Kiilsgaard, USGS

R.C.H.

Docket

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

RECEIVED
OCT 10 1955

October 10, 1955

Copy retained 400

WSM

Memorandum

To: W. S. Martin, Defense Minerals Exploration Administration

From: J. W. Pennington, Branch of Base Metals

Subject: Review of DMEA application, Docket No. 4003 (mercury) Cypress Group Claims, Tonto National Forest, Gila County, Arizona, Dan Walker, Mesa, Arizona

According to the available information, this area appears favorable for mercury mineralization. The applicant states that an estimated 800 tons of 0.75 percent ore is known. At current prices this would amount to about $72,000.

The applicant proposes to explore this area believed to contain an estimated 800 tons as well as other mineralized areas.

The estimated costs of $5,879 seem reasonable for the work proposed.

It is recommended that a Field Team examination be made of the property to check the reported mineralized zones and evaluate the proposed method of exploration.

J W Pennington
J. W. Pennington

Copy to: Division of Minerals
Branch of Base Metals
J. W. Pennington
Thor S. Kiilsgaard, U.S.G.S.
F i l e s

Docket

IN REPLY REFER TO:

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

RECEIVED
OCT 10 1955

October 7, 1955

Re: DMEA 4003
Dan Walker
Cypress Group
Gila Co., Arizona
$5,879.00 - Mercury

Copy retained 400

WSM

Memorandum

To: W. S. Martin, Defense Minerals Exploration Administration

From: N. E. Nelson, U. S. Geological Survey

Subject: Review of application

This prospect is in the likely area between the Ord and Rattlesnake mines. Probably the Field Office has good information concerning it.

If the veins are near the widths and grades stated, a work program is warranted.

Referral to the Field Team is recommended.

N. E. Nelson

N. E. Nelson

October 6, 1955

Subject: DMEA-4003
Re: Exploration Assistance
The Cypress Group

Mr. Dan Walker and
Mr. Gus Packard
Box 185
Mesa, Ariaona

Gentlemen:

The receipt of your application dated September 24, 1955 for exploration assistance under the Defense Production Act of 1950, as amended, is hereby acknowledged.

Your application has been assigned Docket Number DMEA 4003 and referred to the Iron & Ferro Alloys Division.

Kindly identify all future correspondence relating to your application by this docket number.

Sincerely yours,

Robert E. Adams, Chief
Operations Control and
Statistics Division

60932

October 6, 1955

Memorandum

To: Executive Officer, DMEA Field Team, Region III.

From: Chief, Operation's Control and Statistics Division

Subject: Assignment of Docket Number

There is listed below the assigned docket number to an application recently received from Region III.

DMEA - 4003 Dan Walker and Gus Packard

Robert E. Adams
Chief, Operation's Control
and Statistics Division

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

RECEIVED
OCT 4 - 1955

224 New Customhouse
Denver 2, Colorado

September 28, 1955

Memorandum

To: Secretary to the Operating Committee, DMEA

From: Executive Officer, DMEA Field Team, Region III

Subject: Application for DMEA aid (Mercury), Dan Walker and Gus Packard, 12 unpatented claims in Tonto National Forest, Gila County, Arizona

Enclosed are three copies of the subject application in the amount of $5,879.00. One copy is retained in our files.

W. M. Traver

W. M. Traver

Enclosures

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

224 New Customhouse
Denver 2, Colorado

September 28, 1955

Memorandum

To: Secretary to the Operating Committee, DMEA

From: Executive Officer, DMEA Field Team, Region III

Subject: Application for DMEA aid (Mercury), Dan Walker and Gus Packard, 12 unpatented claims in Tonto National Forest, Gila County, Arizona

Enclosed are three copies of the subject application in the amount of $5,879.00. One copy is retained in our files.

W. M. Traver

Enclosures

JDC
~~WMT~~/vj

cc: Harshman
Docket DMEA ( )
Chron.

DMEA
Date Rec'd.

MF-103
(Revised April 1952)

UNITED STATES DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION

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

SEP 26 1955

BUREAU OF MINES
Denver, Colorado

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

RECEIVED
OCT 4 - 1955

Not to be filled in by applicant

Docket No. DMEA 4003
Metal or Mineral Mercury
Date Received 10-4-55
Estimated Cost 5,849.00
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: DAN WALKER - Box 185 Mesa Arizona
Partnership - Arizona

Gus Packard (Stepfather) Sunflower, Arizona

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

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

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

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

3. *Applicant's property rights.*—(*a*) State the legal description of the land upon which you wish to explore, including all land which you possess or control that may be benefited by the exploration, and excluding any land or interest in land which is not to be included in the exploration project contract Twelve Claims, NE 1/4 T7N, R9E
Gila County - Tonto National Forest
Docket 3 - Pg 389-390, Docket 19, Pg 417 - Docket 21, Pg 110 - Docket 22, Pgs 364-371

(*b*) State any mine name by which the property is known. The Cypress Group

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

(*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.

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

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

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

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

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

5. *The exploration project.*—(*a*) State the mineral or minerals for which you plan to explore Mercury Ore – Cinnabar and Meta Cinnabar

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

☐ Money ☑ Use of equipment owned by you ☑ Other

Explain in detail on acompanying paper.

CERTIFICATION

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

Dated September 24, 1955

Dan Walker
(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

Dan Walker
Box 185
Mesa, Arizona

RECEIVED
NOV 4 1963

4. Physical description -(a)

A 70' drift and access road Completed presumably by Original Locator. The property Contains a Three Tube Retort and Small utility building Constructed by present Owners. All Location and assessment work is Completed for The present Fiscal year.

Accessibility of Mine is very good, being only 1/4 mile off main highway.

(b) Three flasks Retorted by present owners. Estimated 800 tons of .75% ore extending from Tunnel overhead To Surface of hillside. Five inch vein of ore Located Across from Tunnel and Widening To about 14" at present depth. No assay on This small vein but estimated at 1% from Pannings. Location hole on claim adjacent To Tunnel Claim is a Kind of Schist Conglomerate and yields very rich pannings. Vein 2' wide at present and on 45° angle.

(C) The property is a schist formation and the ore veins are primarily schist although Containing Various Sized and rich stringers of Cinnabar in quartz and also What Looks To be Neto cinnabar. Some Copper and possibly Antimony is With The Cinnabar but Not in quantity.

This property is Located in The heart of The only important mercurized area of Arizona and is adjacent on both ends To Large producers of Mercury, Past and present. The Rattlesnake Group on The West and now being operated by Arizona Mining and Developement Co and on The East by The former Ord Mercury Mines but now owned by Vance Thornburg of Uranium Enterprises

A large dike (Malone Dike) just South and parallel To our property should figure in The possibility of an ore body.

Sketches on following papers

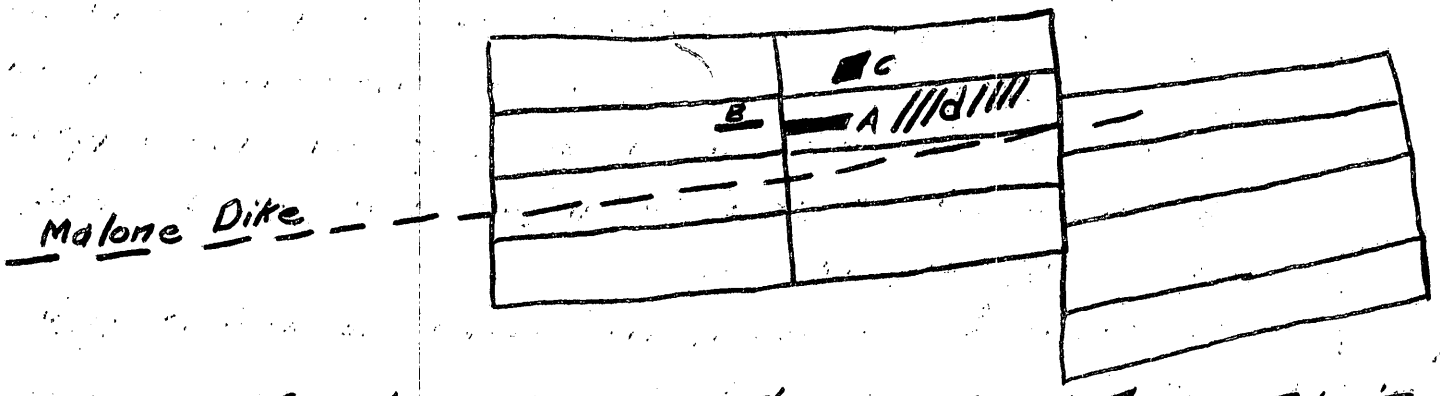
Dan Walker
Box 185
Mesa, Arizona

4. (c) Continued

Sketch of property

→ Ord Mines 1½ mile

← Rattlesnake Group 1 mile



A = 70' Tunnel. By tracing the vein from the portal it looks as though the original workers veered to right of vein. Would like to crosscut to left at or near face of drift.

B = Small vein I developed from small surface stringer. Would like to run drift here and then sink winze.

C = schist conglomerate. Hole about eight feet deep.
d = Surface vein extending up hillside above Tunnel.

The surface indications of this property and present developement and history of adjacent areas are, I beleive, very good reasons to explore.

So far we have been handicapped by lack of time and money to do even the necessary sampling. I sincerely beleive, that with adequate financial and some technical aid we could successfully develope valuable lenses of mercury ore.

At one point, on hillside above Tunnel, the vein is nearly eight feet wide and assays .78%. This vein extends on up the hillside for approximately 200'. Would like to cross trench this vein at 50' intervals.

Dan Walker.
Box 185
Mesa, Arizona

4. (d) Accessability of property is very good. Located 1/4 mile To right of Bee Line Highway which runs from Phoenix To Payson Arizona. Shipping and Supply points Would be Mesa and Phoenix, 67 and 83 Miles respectively over good road. Residence could be established at Mine or at Sunflower, Twelve miles West. Groceries, Gas and oil can also be obtained at Sunflower.

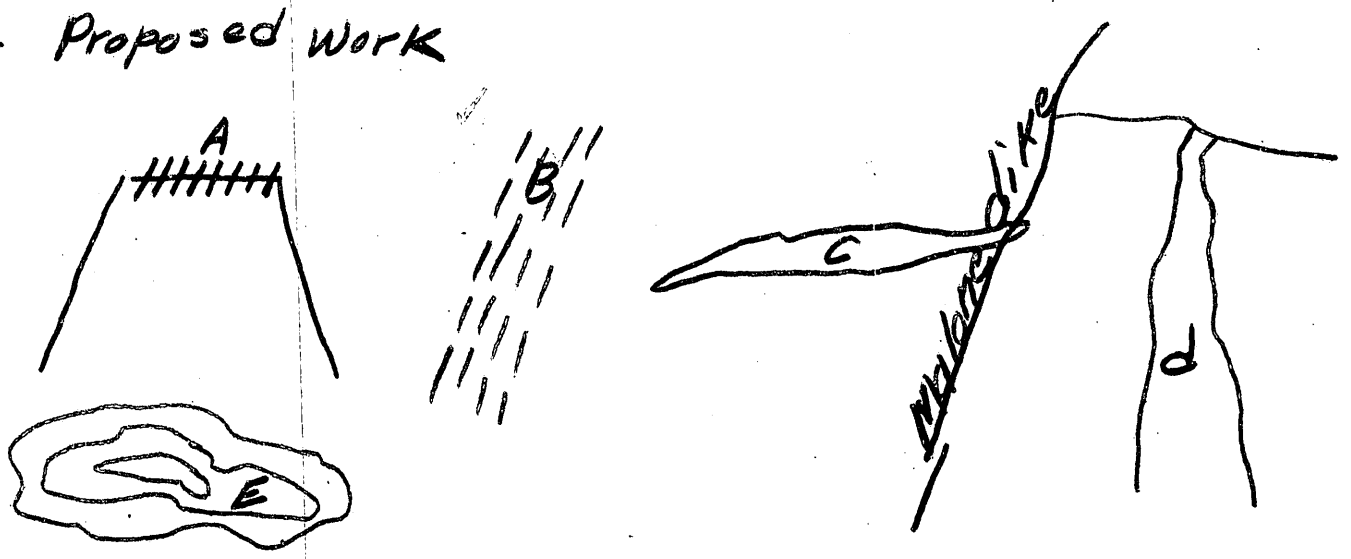
(E) The required manpower would be available at Sunflower. My Stepfather and brother will be available and both are experienced Miners. Gus Packard (Stepfather and Partner) has had Considerable experience with Mercury ore.

Mine materials and equipt. Will have to Come from Phoenix. Water can be obtained near the mine during the Winter but will have To be hauled otherwise. No electricity available.

RECEIVED
[illegible]

Dan Walker
Box 185
Mesa. Arizona

5. b. Proposed Work



A.= Schist Vein and rich Stringers. Sampling and 10' raise here.

B. = Schist vein on hillside above Tunnel.
100' of cross Trenching and sampling.

C. = Crack in hanging wall near face of Tunnel. Dust from Crack yields rich pannings.
30' of Cross cut on 45° angle here plus sampling.

d = Small vein of quartz-Cinnabar plus mercurized schist.
50' of drift and 20' of winze plus sampling.

E. = Schist Conglomerate but rich.
20' shaft and 20' drift plus sampling.

Sinking, drifting, raising and Trench = 250 feet.

Don Walker
Box 185
Mesa, Arizona

5. (d) I have had approximately five years experience in mining and have performed nearly all work essential to mining operations. The supervision will be performed either by myself or my stepfather who has had considerable experience with mercury ore.

6. Estimate of Costs.

a. none

b. Supervisor at $500.00 per month for 3 mos. = $1500.00
miner " 100.00 week " " " = 1200.00
mucker " 90.00 " " " " " = 1080.00
Consulting Engineer at 150.00 per day = 150.00
Total = 3930.00

c. Gasoline and motor oil for compressor for 3 mos = 120.00
" " " " " pickup " = 30.00
Powder and caps for 3 months = 300.00
Total = $450.00

d. Compressor, jackhammer, hoses, etc for 3 mos. = ~~1140.00~~ 540.00
Two days with bulldozer for 2 days at 100.00 per. = 200.00
Total = ~~1340.00~~ 740.00

e. none

f. none

G. assaying at $3 per sample for 3 mos. = 150.00
accounting at 25.00 per mo. " " " = 75.00
Total = 225.00

H. Contingencies at 10% for 3 months = ~~600.00~~ 534.00

Grand Total = ~~$6545.00~~ $5879.00

Above estimates are subject to modification but should reach same average.

Dan Walker
Box 185
Mesa, Arizona

7. a. Yes.

b. Will deduct one quarter of Supervision and employee salaries. Pickup and jeep will be utilized for hauling, hoisting and etc. All necessary hand tools will be furnished such as wrenches, hammers, saws, hand forges and etc.
Timber for operations can be cut on mine property and will cut same as part of work assumed by Supervisor.

Operators will perform as much work as possible that is normally outside work and will make necessary deductions from salaries and wages until our one quarter obligation can be met.

In the event of inspection by your representatives, please notify (Two weeks in advance if possible) Gus Packard
Sunflower, Ariz. or Dan Walker
Box 185
Mesa, Ariz

Will then meet you when and where you designate. Assuming Sunflower as the logical place.