DMA Form 1

DEFENSE MINERALS ADMINISTRATION
Control Slip

CONTROLLED DOCUMENT

DMA Docket No. DMEA-2821

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Any action taken to change the type of request for assistance must be promptly reported to the Reports and Records Branch. Use DMA Form 2 for submitting these reports.

Routing Slip

CYS TO USBM, USGS AND REGION III

To: Code 700 Rm 4640 Date 12/23/52

To: Oper Com. Date 2-18-53

To: Oper Comm Date 6-5-53

To: Date

To: Date

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FILE COPY
SURNAME:

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

JUN 17 1953

Mr. George David Topliff
241 Jones Street
San Francisco, California

Re: Docket DMEA-2821 (Mercury)
Mericoma and Beeson Claims
Sonoma County, California

Dear Mr. Topliff:

Reference is made to your above-docketed application for exploration assistance in a proposed project estimated to cost $28,475 and to my telegram to you dated May 15, 1953. The telegram denied your application because of the restriction placed on the use of exploration funds, except for certain specified minerals still in short supply. Since your application was pending on April 15, 1953, the effective date of the restrictive order, it was rejected before making a thorough examination of your application and related data, and your request was accordingly denied without prejudice to the merits of your property.

Subsequent to that date - on June 1, 1953 - authority was given to the DMEA to process all applications which were of record prior to May 15, 1953. As a consequence of this recent order, our previous action has been rescinded and your application has been reactivated.

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

A careful study of your application and other data available to this agency, including the report of findings after a field examination of the property was made, indicates to us that the probability of disclosing minable ore reserves by your proposed exploration program is not sufficiently promising to justify Government participation. We regret to advise you, under the circumstances, that your application for exploration assistance is denied.

We wish to thank you for your interest in the defense minerals program and for bringing your property to our attention.

Sincerely yours,

C. O. Mittendorf

Administrator

EWEllis/COMittendorf/jh/fw
6/15/53
cc: Admr Reading File
Operating Committee
Docket
Messrs. H.M.Meyer, Rm. 3206
A.R.Kinkel,Jr., Rm.B-242A GSA Bldg.
Ellis
Field Team, Reg. III (2)

FILE COPY
SURNAME:
Docket
Ellis
Finkel
Hedges
Eldridge

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

Mr. [illegible]
211 Jones Street
San Francisco, California

re: Docket No. [illegible]-2 21 (Percy)
Mariposa [illegible] Lode
Grass Valley, California

Dear Mr. [illegible]:

[illegible] for exploration [illegible] 2, [illegible] and [illegible] 1, 1/1. [illegible] telegram [illegible] of April 15, 1951, and [illegible] was [illegible] first [illegible] eligible [illegible].

[illegible] scribed [illegible] April 15, [illegible] 1, 1951. [illegible] telegram [illegible].

[illegible] exploration [illegible] practice [illegible] other [illegible] for the [illegible] program.

[illegible] to [illegible] your [illegible] government [illegible].

[illegible] advise you that your application for exploration aid is denied.

Sincerely yours,

[illegible]

Ellis/[illegible]
4/4/53
cc. to: Mr. [illegible] Ellis
Operating Committee
Docket
Messrs. F. [illegible] Meyer, Rm. 3206
A. H. Finkel, Jr., Rm. M-2022 [illegible]
Ellis
DMA Field Team, Region III, (2)

Administrator

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

June 1, 1953

SUMMARY OF PROPOSED PROJECT

Docket No. DMEA-2821
Applicant: George David Topliff
241 Jones St., San Francisco, California

Subject: Denial of application

Commodity: Mercury
Location of property: Sonoma County, California Region III
Amount of application: ~~$26,500.00~~ $28,475
Date of application: December 18, 1952

Outline of project: The applicant proposes to explore a prominent fault zone by driving a 200-foot crosscut from the present workings, and then drifting 300 feet along the fault zone; also 200 feet of sinking & raising.

Field Team Report: Dated: March 31, 1953
By: E. H. Pampeyan, Geologist, USGS

Field Team Transmittal letter dated April 6, 1953.

Recommendation: Denial, because of the scanty and erratic nature of the ore-bearing rock.

Commodity Members' Comments:

USBM E. L. Newcomb, dated April 17, 1953

Concurs in denial.

USGS Helena M. Meyer, dated May 19, 1953

Concurs in denial.

NOTE: Since this was a pending mercury application at the time funds were restricted to certain specified metals and minerals (DMEA order 1, Amendment 2, May 15, 1953), the Applicant was notified by telegram on May 15, 1953, that his application was denied. This action was taken before receipt of the USBM commodity member's comments, dated May 19, 1953.

NOTE (continued:

Since the notices of denial, as a result of the restriction of funds effective April 15, 1953, have been rescinded, such action in the instant case has been counteracted by the second paragraph of a letter ~~prepared~~ denying this application on the basis of the Field Team report and recommendations and the concurrence of the Commodity Members.

Ernest Wm. Ellis

Ernest Wm. Ellis, Chief
Rare and Misc. Metals Division

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

May 19, 1953

Memorandum

To: E. W. Ellis

From: Helena M. Meyer

Subject: Field Team report on DMEA-2821, George David Topliff, Mericoma & Beeson Claims (known as B. & M. Mining Co.), Exploration loan $28,475

I have read the Field Team report on the subject property and concur in the recommendation that the application be denied. From the report there is little to suggest that a consequential contribution to the country's reserves of mercury would be made if this property were explored.

Helena M. Meyer

Helena M. Meyer

Enclosure

Copy to: Minerals Division
Base Metals Branch
H. M. Meyer
Files
A. R. Kinkle, Jr. GSA Room 4234

4/20/53 gla

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
APR 10 1953

Office of
Executive Officer
DMEA Field Team
Region III

1012 Flood Building
870 Market Street
San Francisco 2, Calif.

April 6, 1953

Memorandum

To: George C. Selfridge, Chairman, Operating Committee, DMEA, Interior Building, Washington 25, D. C.

From: Executive Officer, DMEA Field Team, Region III

Subject: Docket DMEA-2821 (Mercury)
George David Topliff, Mericoma & Beeson Claims,
Sonoma County, California

Reference is made to your subject letter dated February 19, in which you referred the captioned application to this office for a field examination.

Attached are four copies of a report entitled "DMEA 2821, Mericoma Mine (Quicksilver), Sonoma County, California," by E.H. Pampeyan, Geologist, U. S. Geological Survey, dated March 31, 1953.

Four copies of the applicant's revised cost estimate dated March 13, 1953, also are attached.

The Operator's application proposes to crosscut 200 feet to the northeast from the present workings to intersect the main fault zone, and then to drift 300 feet along this fault — or the best showings encountered. Total cost of the project would be $32,500 with the Government's share amounting to $24,375. It is recommended that the application be denied because of the scanty and erratic nature of the ore-bearing rock.

H. C. MILLER

H. C. Miller
Executive Officer
DMEA Field Team, Region III

Attachments

Copy to: E. H. Bailey, USGS
A. C. Johnson, Reno, Nevada

DMEA OPERATING COMMITTEE
4-17-53
(Date)

UNITED STATES
DEPARTMENT OF THE INTERIOR
SECRETARY OF THE INTERIOR, D. MURAY

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
APR 10 1953

DEFENSE MINERALS EXPLORATION ADMINISTRATION

REPORT OF EXAMINATION BY FIELD TEAM
REGION III

DMEA 2821, Mericosa Mine (Quicksilver)

Sonoma County, California

W. M. Pampeyan, Geologist
U. S. Geological Survey

March 31, 1953

4-17-53

Summary

The Mericoma Mine lies along the southwestern edge of the Mayacmas Quicksilver District, Sonoma County, California. It consists of one level containing 420 feet of workings lying in Franciscan rocks, and exploring a fault contact between greenstone and sandstone. The applicant's consultant proposes to explore a second fault some 200 feet to the northeast of the present workings. Because of the small size and erratic distribution of ore-bearing rocks in this type of deposit, it is recommended that the applicant's request for Government participation in a $32,500 exploration program be denied.

Introduction

The Mericoma Mine is in the NE¼ of the NW¼ of sec. 31, T. 10 N., R. 8 W., MDB&M, on the southwest side of the Mayacmas Mountains, Sonoma County, California. The claim is held by location by the applicant, C. D. Topliff, who located it on October 6, 1952 and filed his location on October 8, 1952. Previous owners are said to have abandoned the claim in 1941.

The mine is 8.4 miles northeast of Healdsburg and is reached by traveling 2.7 miles north on U.S. Highway 101 from the center of town, then turning right for 3.7 miles to Jimtown, then traveling northeast from Jimtown for 1.4 miles. At this point a sharp right turn through a gate is made onto private property, and after 0.2 miles another right turn is made through a second gate and this road is followed for 0.4 miles to the portal of the tunnel.

The Mericoma property was visited on March 10, 1953 by A. H. Pampeyan and D. B. Tatlock, of the U.S. Geological Survey, in the company of the applicant, C. D. Topliff. A map of the underground workings was made and three samples were taken for assays.

This property was explored prior to 1903 and has been operated sporadically since that time. No production records are known to exist.

Development

The workings in the Mericoma Mine consist chiefly of some 420 feet of crosscuts and drifts on one level. Two small stopes extend up the dip of the ore-bearing structure to a height of 28 feet above the floor of the level. One inaccessible raise goes up 20 feet, possibly to a third stope.

Two caved adits were observed approximately 100 feet above the portal of the Mericoma tunnel. Because of the slumped and eroded condition of their dumps, it is difficult to estimate the extent of the workings. However, it seems likely that they might have reached the Mascama fault.

One D retort, a two-pipe Nossi-type retort, and condensing equipment, all in unusable condition, are on the property. About 500 feet of track is in place in the mine and on the dump. Two ore cars and one timber car, which could be used, also belong to the applicant. A small amount of timber, track spikes, and fish plates are scattered over the property.

Geology and Ore Deposits

The mine is on the southwest side of the Mayacmas Mountains and about four miles southwest of the Mayacmas Quicksilver District. The rocks are predominately Franciscan sediments and greenstones with irregular intruded masses of serpentine; these rocks are cut by a series of northwest trending faults.

The portal of the Mericoma Mine is some 350 feet southwest of the Mascama fault described by Geeley /.

/ Geeley, W. K., Geology of the Healdsburg quadrangle, Calif. State Division Mines Bull. 161, 1951.

Surface exposures are poor. Red, thin-bedded chert is exposed along the road leading to the mine, and sandstone, or graywacke, appears on the northeast side of the steep Mascama fault scarp. Some serpentine and silica-carbonate rock (altered serpentine) float was observed but none was found in place on the surface. The adit penetrates Franciscan greenstone, which contains some minor, irregular pods of serpentine. The drift at the end of the adit follows the greenstone-sandstone contact which is a fault. This fault dips steeply to the northeast, and along it a three- to five-foot thickness of breccia has been altered and mineralized. This sheared and altered zone includes fragments of sandstone, greenstone, serpentine, silica-carbonate rock, and chert, and also a layer of clayey material similar to the "alta" of other Coast Range quicksilver deposits. The faulted greenstone-sandstone contact is the structure that controlled the localization of ore.

The ore mineral, which is cinnabar, was exposed in one pod of fractured silica-carbonate rock in the stope at the southeast end of the drift. This pod, measuring 1½ feet by 5 feet has films of finely crystalline cinnabar as much as two millimeters thick coating the fracture surfaces. The one or possibly two other stopes on the fault show that other small ore-bearing pods might have been mined out in the past. The cinnabar was deposited under the impermeable layer of fault gouge or "alta" and above the greenstone footwall, but appears to have deposited somewhat preferentially on altered serpentine or silica-carbonate rocks.

Chip sample was taken across the thickness of the under-ground showing of cinnabar, one grab sample was taken from a pile of high-grade near the portal, and one grab sample was taken from the burnt ore dump near the retorts. No other mineralized areas were exposed at the time of this visit. Results of the Bureau of Mines assays are listed below:

Sample		Pounds Mercury per Ton
M-1	1½' chip sample across thickness of silica-carbonate pod in stope.....	35.2
M-2	Grab sample from high-grade pile	8.6
M-3	Grab sample from burnt ore dump	0.5

The largest accessible stope, roughly triangular in shape, is shown on the map. About 320 tons of rock have been removed from this stope in the past. Assuming that the ore-bearing rock was of uniform thickness and of a grade comparable to the assay, 45 to 55 flasks of mercury could have been produced. However, the irregular appearance of the silica-carbonate pod would suggest that a smaller number of flasks was produced.

No reserves could be estimated as only one small pod of ore-bearing rock was observed. The downward extension of the fault zone might contain other pods of ore. However, it is impossible to predict their presence, or absence, on such meager showings. One small outcrop of questionable silica-carbonate rock was observed on the surface along the Mascama fault. This would suggest that only a limited number of scattered pods might exist in the area under consideration for exploration.

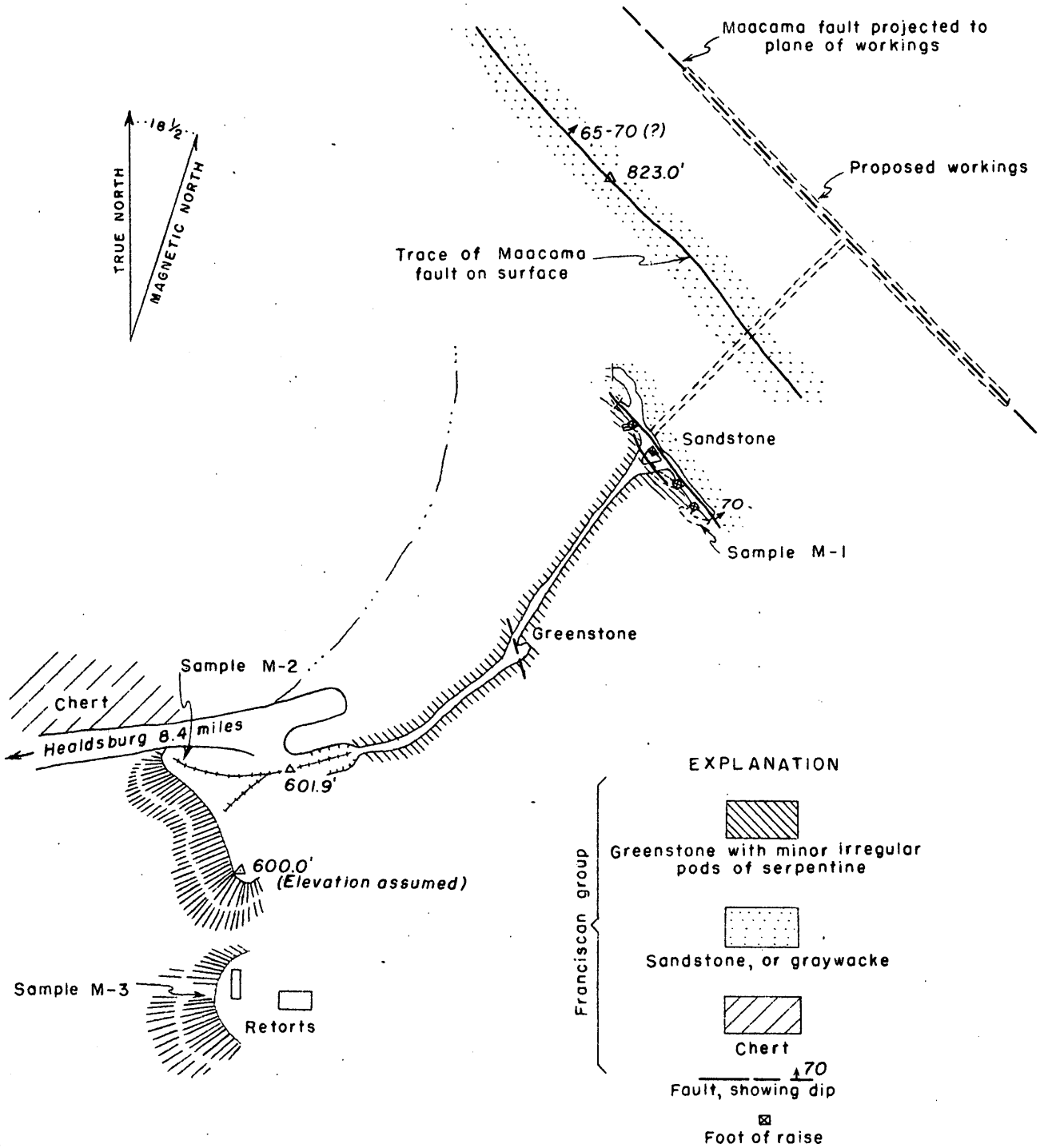
Proposed Exploration

C. N. Schuette, consulting engineer for Mr. Topliff, submitted a proposal requesting Government aid in a $32,500 exploration program. The consultant proposes to extend the present crosscut 200 feet northeast from the present drift with the expectation of cutting the main (Mamsam) fault, then 300 feet of drifting on the best exposures in this crosscut or in the fault zone. An additional 200 feet of sinking and raising would be done on the showings of ore to determine their vertical range. The project would be completed in nine months. Mr. Topliff, however, apparently was not quite familiar with this plan suggested by Schuette. He would rather begin exploration by sinking on a showing of ore -- now hidden by muck -- at the southeast end of the present drift.

The engineer's proposal would be the best way for exploring the property. The main fault, when projected from the surface, would lie almost 200 feet to the northeast of the present drift -- assuming that it dips 65-70° NE. However, outcrops along the main fault were not conclusive so far as predicting ore-bodies 230 to 250 feet below the surface is concerned. The lone exposure of ore underground leads one to believe that there may be more of these small, irregular pods of silica-carbonate rock scattered throughout this, or any other fault zone nearby. The cost of the proposed underground exploration program would be greater than the value of quicksilver produced from these small and scattered pods.

Recommendations

It is recommended that the applicant's request for a RFC loan to explore the main fault zone of the Mariposa Mine property by 500 feet of crosscutting and drifting be denied because of the scanty showings and erratic nature of the ore-bearing rock.



Mapped by E. H. Pampeyan and D. B. Tatlock, March 1953

MERICOMA MINE, SONOMA COUNTY, CALIFORNIA

100 0 100 200 FEET

DOCKET DMRA-2821
- Mercury -
George David Topliff
241 Jones Street, San Francisco, Calif.

Revised Gross Estimate
March 13, 1952

6 (a) **Independent Contracts**

Bulldozer-repairing road 1½ days (12 hrs. @ $12 hr.) 1/		$ 144.00

1/ See 4 (f)

(b) **Labor, supervision, consultants**

1 supervisor @ $450 mo. 9 mos.	$4,050	
1 consulting geologist @ $50 mo. including expenses 9 mos.	450	
2 miners 300 days each @ $15 (no overtime)	6,000	
2 workers 300 days each @ $15 (" ")	5,200	
1 extra laborer 50 days @ $12.50	625	
Accounting $25 mo. 9 mos.	225	
Total Labor		$ 16,550.00

(c) **Operating materials and supplies**

Power, fuse and caps	1,000	
Carbide	50	
Gasoline for power	500	
Timber for drifts, crosscuts, etc. 31 M	3,100	
Total supplies		4,650.00

(d) **Operating equipment(to be purchased)**

1 - 210 C.F. gasoline-driven compressor	1,800	
100 - ft 2" black pipe	360	
1800 - ft 12 lb. rail	810	
Fish plates, bolts, spikes	100	
100 ft 10" - 22 ga. G. I. vent pipe	870	
1 - 5HP gasoline-driven engine and blower	410	
Trunk ties 500 lin. ft. 4" x 6"	100	
2 - Jackhammers with mounts, columns, and tanks	1,300	
Drill steel & bits	400	
Air & water hose for jackhammers	125	
1 Blacksmith forge and tools	300	
Picks, shovels, saws, hammers, etc.	100	
Total equipment		6,385.00

[illegible] furnished

[illegible]l 3/4 ton Pick-up valued at 925

2 - mine cars @ $250	$ 500	
1 - lumber car	200	
800 - ft new ½" steel cable with clamps	100	
Small tools, picks, shovels, etc.	150	
1000 - ft 12 lb. rail in place	350	
Fish plates, bolts, etc.	75	
Pins	100	
Total	2,400	

Depreciation $2400 / 60 = $40 / mo x 9 mos. — 360.00

6 (f) Mine buildings

1 - galvanized iron shed 16' x 32 to house compressor, truck and supplies; one end to be used for change room. 2/		
Bulldozer (contract see 6(a)) 4 hrs. @ $12	48	
Material	400	
Labor	600	
Total building cost		1,048.00

2/Might get a prefabricated building. Shed material cost will be more and labor cost less.

6 (g) Miscellaneous

Assays 25 @ $3	75	
Office and engineering supplies	50	
Workmen's Compensation and Employees Liability Insurance and Payroll taxes 18% of payroll	2,415	
Total Miscellaneous		2,540.00

6 (h) Contingencies — 845.00

Total cost — $22,800.00

4/20/53 gla

IN REPLY REFER TO:

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

April 17, 1953

Memorandum

Re: DMEA-2821
Mericoma Mine
Mayacmas District
Sonoma County, California
$32,500
Mercury

To: Mr. E. Wm. Ellis

From: E. L. Newcomb

Subject: Concurrence with the field team denial

The applicant proposes to explore a prominent fault zone by driving a 200-foot crosscut from the present workings, and then drifting 300 feet along the fault zone.

The field team recommends that the application be denied.

Mercury mineralization on the Mericoma is localized in small pods of silica-carbonate rock along a greenstone-sandstone fault contact. Proposed exploration involves a second fault zone located northeast of the present workings. The size of the old stopes indicates that past production was very small and limited to 2 or 3 pods of silica-carbonate rock above the present adit level. The nature of the ore deposits and the very meager showings of ore-bearing material on the property do not indicate that a significant amount of mercury will be discovered by the proposed exploration project.

I concur with the field team and recommend the application be denied.

E. L. Newcomb
E. L. Newcomb
Geologist

[illegible] 5-1[illegible]-53

[illegible]

[illegible]

[illegible], Interior, [illegible]

MAY 1 5 1953

Night Letter

[illegible]
[illegible] JUN [illegible]
[illegible], CALIFORNIA

[illegible] A-2621

[illegible]. [illegible] 15,

1953 [illegible]

[illegible]

[illegible]

[illegible]

C. O. Mittendorf

[illegible]

[illegible]knouse/gla
5-15-53
cc to: [illegible] Reading File
Docket
Messrs. [illegible] Meyer, Rm. 3623
[illegible] Kinkel, Jr. Rm. B-242A [illegible] Bldg.
Ellis
Knouse
[illegible] Field Team, Region III (2)
Confirmation to Applicant

FILE COPY
SURNAME:

FLKnouse/gla 5-15-53

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

DMA3923.970 Screening

MAY 15 1953

Night Letter

GEORGE DAVID TOLIFF
241 JONES STREET
SAN FRANCISCO, CALIFORNIA

RE YOUR EXPLORATION APPLICATION DOCKET NUMBER DMA-2821 DATED MAY. THIS IS TO ADVISE YOU THAT EFFECTIVE APRIL 15, 1953 EXPLORATION FUNDS RESTRICTED TO ASSISTANCE ONLY FOR EXPLORATION FOR RARE EARTH ORE. MERCURY NO LONGER INCLUDED. CONSEQUENTLY WE DO NOT HAVE AUTHORITY OR FUNDS TO EXECUTE CONTRACT FOR EXPLORATION PROJECT AT YOUR PROPERTY AND YOUR APPLICATION THEREFORE IS DENIED. THIS IS WITHOUT PREJUDICE TO THE MERITS OF YOUR PROPOSED PROJECT. IN VIEW OF THE NECESSITY OF THIS POLICY A DEFERRED DETERMINATION ON YOUR INTEREST IN THE EXPLORATION PROGRAM WITH CONFIRMATION WHICH WOULD BE AVAILABLE UNDER CONSIDERATION.

G. O. Mittendorf

G. O. MITTENDORF, ADMINISTRATOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION

J.H.
5-15-53

FLKnouse/gla
5-15-53
cc to: Adm.Reading File
Docket
Messrs. H.M.Meyer, Rm. 3623
A.E.Kinkel, Jr. Rm. B-242A GSA Bldg.
Ellis
Knouse
DMEA Field Team, Region III (2)
Confirmation to Applicant

SENDER IS AWAITING A SPEEDY

answer

PLEASE GIVE IT TO THE MESSENGER OR TELEPHONE

WESTERN UNION

2477 D (6-48)

WESTERN UNION

W. P. MARSHALL, PRESIDENT

FX-1201

SYMBOLS
DL=Day Letter
NL=Night Letter
LT=Int'l Letter Telegram
VLT=Int'l Victory Ltr.

The time shown in the date line on telegrams and day letters is STANDARD TIME at point of origin. Time of receipt is STANDARD TIME at point of destination

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O•GTA051 NL PD=GT SAN FRANCISCO CALIF 14= 1953 MAY 14 PM 4 48

C O MITTENDORF=

D M E A INTERIOR BLDV WASH=

PLEASE ADVISE BY WIRE DESPOSITION APPLICATION DOCKET D M E A 2821 (MERCUR) FIELD REPORT FILLED MAY 6=

GEORGE D TOPLIFF=••

THE COMPANY WILL APPRECIATE SUGGESTIONS FROM ITS PATRONS CONCERNING ITS SERVICE

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
MAY 15 1953

4/10/53 gla

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

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
APR 10 1953

Office of
Executive Officer
DMEA Field Team
Region III

1012 Flood Building
870 Market Street
San Francisco 2, Calif.

April 6, 1953

Memorandum

To: George C. Selfridge, Chairman, Operating Committee, DMEA, Interior Building, Washington 25, D. C.

From: Executive Officer, DMEA Field Team, Region III

Subject: Docket DMEA-2821 (Mercury)
George David Topliff, Mericoma & Beason Claims,
Sonoma County, California

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H. C. Miller
Executive Officer
DMEA Field Team, Region III

Attachments

Copy to: E. H. Bailey, USGS
A. C. Johnson, Reno, Nevada

UNITED STATES
DEPARTMENT OF THE INTERIOR
SECRETARY OF THE INTERIOR, D. MCKAY

DEFENSE MINERALS EXPLORATION ADMINISTRATION

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
APR 10 1953

REPORT OF EXAMINATION BY FIELD TEAM
REGION III

DMEA 2821, Mericoma Mine (Quicksilver)

Sonoma County, California

E. H. Pampeyan, Geologist
U. S. Geological Survey

March 31, 1953

Summary

The Mericoma Mine lies along the southwestern edge of the Mayacmas Quicksilver District, Sonoma County, California. It consists of one level containing 420 feet of workings lying in Franciscan rocks, and exploring a fault contact between greenstone and sandstone. The applicant's consultant proposes to explore a second fault some 200 feet to the northeast of the present workings. Because of the small size and erratic distribution of ore-bearing rocks in this type of deposit, it is recommended that the applicant's request for Government participation in a $32,500 exploration program be denied.

Introduction

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The mine is 8.4 miles northeast of Healdsburg and is reached by traveling 2.7 miles north on U.S. Highway 101 from the center of town, then turning right for 3.7 miles to Jimtown, then traveling northeast from Jimtown for 1.4 miles. At this point a sharp right turn through a gate is made onto private property, and after 0.2 miles another right turn is made through a second gate and this road is followed for 0.4 miles to the portal of the tunnel.

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Two caved adits were observed approximately 100 feet above the portal of the Mericoma tunnel. Because of the slumped and eroded condition of their dumps, it is difficult to estimate the extent of the workings. However, it seems likely that they might have reached the Maacama fault.

One D retort, a two-pipe Rossi-type retort, and condensing equipment, all in unusable condition, are on the property. About 500 feet of track is in place in the mine and on the dump. Two ore cars and one timber car, which could be used, also belong to the applicant. A small amount of timber, track spikes, and fish plates are scattered over the property.

Geology and Ore Deposits

The mine is on the southwest side of the Mayacmas Mountains and about four miles southwest of the Mayacmas Quicksilver District. The rocks are predominately Franciscan sediments and greenstones with irregular intruded masses of serpentine; these rocks are cut by a series of northwest trending faults.

The portal of the Mericoma Mine is some 350 feet southwest of the Maacama fault described by Gealey _/.

_/ Gealey, W. K., Geology of the Healdsburg quadrangle, Calif. State Division Mines Bull. 161, 1951.

Surface exposures are poor. Red, thin-bedded chert is exposed along the road leading to the mine, and sandstone, or graywacke, appears on the northeast side of the steep Maacama fault scarp. Some serpentine and silica-carbonate rock (altered serpentine) float was observed but none was found in place on the surface. The adit penetrates Franciscan greenstone, which contains some minor, irregular pods of serpentine. The drift at the end of the adit follows the greenstone-sandstone contact which is a fault. This fault dips steeply to the northeast, and along it a three- to five-foot thickness of breccia has been altered and mineralized. This sheared and altered zone includes fragments of sandstone, greenstone, serpentine, silica-carbonate rock, and chert, and also a layer of clayey material similar to the "alta" of other Coast Range quicksilver deposits. The faulted greenstone-sandstone contact is the structure that controlled the localization of ore.

The ore mineral, which is cinnabar, was exposed in one pod of fractured silica-carbonate rock in the stope at the southeast end of the drift. This pod, measuring $1\frac{1}{2}$ feet by 5 feet has films of finely crystalline cinnabar as much as two millimeters thick coating the fracture surfaces. The one or possibly two other stopes on the fault show that other small ore-bearing pods might have been mined out in the past. The cinnabar was deposited under the impermeable layer of fault gouge or "alta" and above the greenstone footwall, but appears to have deposited somewhat preferentially on altered serpentine or silica-carbonate rocks.

A chip sample was taken across the thickness of the under-ground showing of cinnabar, one grab sample was taken from a pile of high-grade near the portal, and one grab sample was taken from the burnt ore dump near the retorts. No other mineralized areas were exposed at the time of this visit. Results of the Bureau of Mines assays are listed below:

Sample		Pounds Mercury per Ton
M-1	$1\frac{1}{2}$' chip sample across thickness of silica-carbonate pod in stope.....	35.2
M-2	Grab sample from high-grade pile	8.6
M-3	Grab sample from burnt ore dump	0.5

The largest accessible stope, roughly triangular in shape, is shown on the map. About 320 tons of rock have been removed from this stope in the past. Assuming that the ore-bearing rock was of uniform thickness and of a grade comparable to the assay, 45 to 55 flasks of mercury could have been produced. However, the irregular appearance of the silica-carbonate pod would suggest that a smaller number of flasks was produced.

No reserves could be estimated as only one small pod of ore-bearing rock was observed. The downward extension of the fault zone might contain other pods of ore. However, it is impossible to predict their presence, or absence, on such meager showings. One small outcrop of questionable silica-carbonate rock was observed on the surface along the Maacama fault. This would suggest that only a limited number of scattered pods might exist in the area under consideration for exploration.

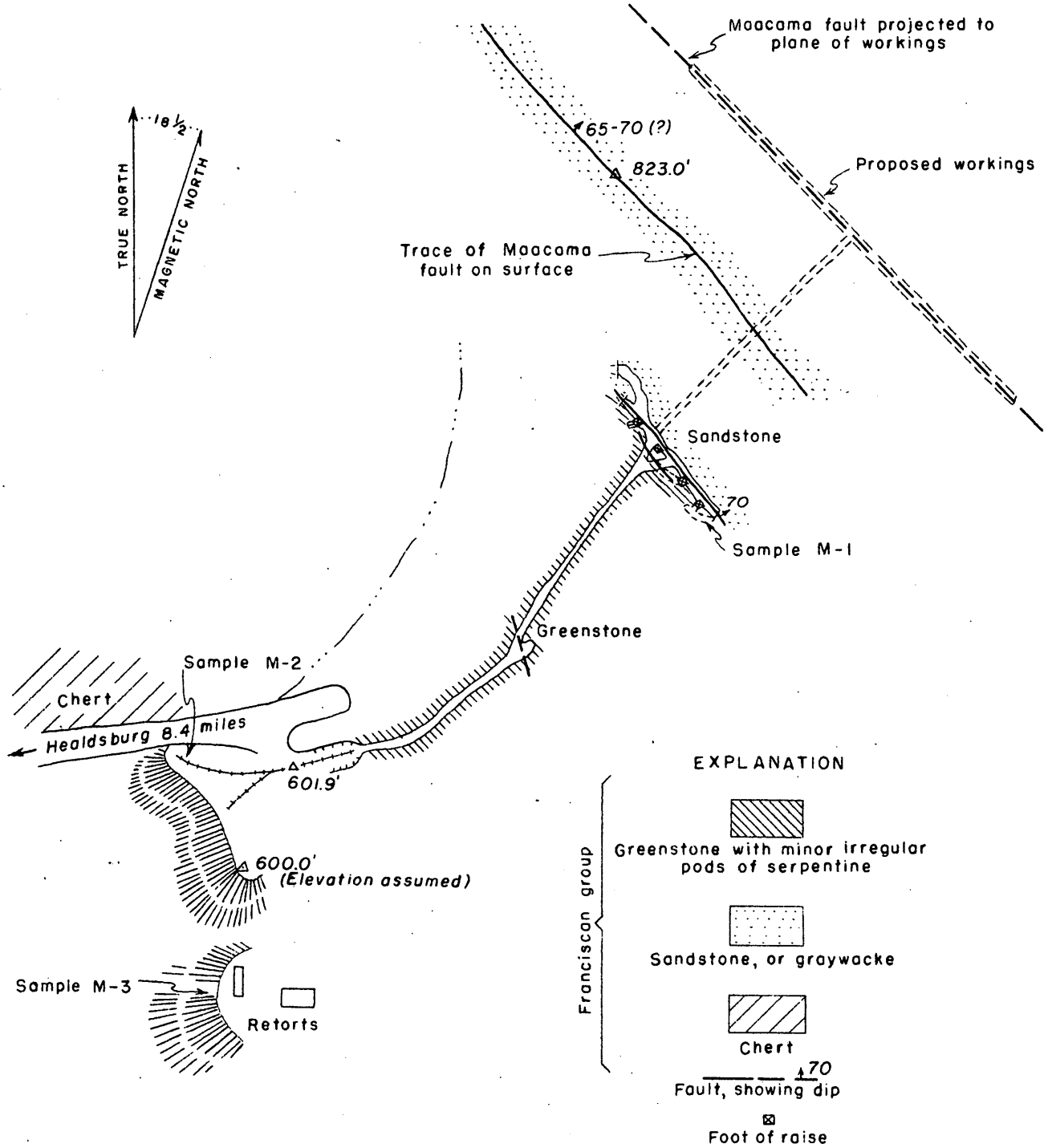
Proposed Exploration

C. N. Schuette, consulting engineer for Mr. Topliff, submitted a proposal requesting Government aid in a $32,500 exploration program. The consultant proposes to extend the present crosscut 200 feet northeast from the present drift with the expectation of cutting the main (Maacama) fault, then 300 feet of drifting on the best exposures in this crosscut or in the fault zone. An additional 200 feet of sinking and raising would be done on the showings of ore to determine their vertical range. The project would be completed in nine months. Mr. Topliff, however, apparently was not quite familiar with this plan suggested by Schuette. He would rather begin exploration by sinking on a showing of ore -- now hidden by muck -- at the southeast end of the present drift.

The engineer's proposal would be the best way for exploring the property. The main fault, when projected from the surface, would lie almost 200 feet to the northeast of the present drift -- assuming that it dips 65-70° NE. However, outcrops along the main fault were not conclusive so far as predicting ore-bodies 230 to 250 feet below the surface is concerned. The lone exposure of ore underground leads one to believe that there may be more of these small, irregular pods of silica-carbonate rock scattered throughout this, or any other fault zone nearby. The cost of the proposed underground exploration program would be greater than the value of quicksilver produced from these small and scattered pods.

Recommendations

It is recommended that the applicant's request for a DMEA loan to explore the main fault zone of the Mericoma Mine property by 500 feet of crosscutting and drifting be denied because of the scanty showings and erratic nature of the ore-bearing rock.



Mapped by E. H. Pampeyan and D. B. Tatlock, March 1953

MERICOMA MINE, SONOMA COUNTY, CALIFORNIA

100 0 100 200 FEET

DOCKET DMEA-2821
- Mercury -
George David Topliff
241 Jones Street, San Francisco, Calif.

Revised Cost Estimate
March 13, 1953

6 (a) Independent Contracts

Bulldozer-repairing road 1½ days (12 hrs. @ $12 hr.) 1/		$ 144.00

1/ See 6 (f)

(b) Labor, supervision, consultants

1 supervisor @ $450 mo. 9 mos.	$4,050	
1 consulting geologist @ $50 mo. including expenses 9 mos.	450	
2 miners 200 days each @ $15 (no overtime)	6,000	
2 muckers 200 days each @ $13 (" ")	5,200	
1 extra laborer 50 days @ $12.50	625	
Accounting $25 mo. 9 mos.	225	
Total Labor		$ 16,550.00

(c) Operating materials and supplies

Power, fuse and caps	1,000	
Carbide	50	
Gasoline for power	500	
Timber for drifts, crosscuts, etc. 31 M	3,100	
Total supplies		4,650.00

(d) Operating equipment (to be purchased)

1 - 210 C.F. gasoline-driven compressor	1,800	
100 - ft 2" black pipe	350	
1500 - ft 12 lb. rail	510	
Fish plates, bolts, spikes	100	
100 ft 10" - 22 ga. G. I. vent pipe	870	
1 - 5HP gasoline-driven engine and blower	410	
Track ties 650 lin. ft. 4" x 6"	100	
2 - Jackhammers with mounts, columns, and tanks	1,300	
Drill steel & bits	400	
Air & water hose for jackhammers	125	
1 Blacksmith forge and tools	300	
Picks, shovels, saws, hammers, etc.	100	
Total equipment		6,365.00

Equipment to be furnished

1 - 1949 International 3/4 ton Pick-up valued at	925

2 - mine cars @ $250	$ 500	
1 - Timber car	200	
600 - ft new ¾" steel cable with clamps	100	
Small tools, picks, shovels, etc.	150	
1000 - ft 12 lb. rail in place	350	
Fish plates, bolts, etc.	75	
Ties	100	
Total	2,400	

Depreciation $\frac{\$2400}{60}$ = $40 / mo x 9 mos. 360.00

6 (f) New buildings

1 - galvanized iron shed 16' x 32 to house compressor, truck and supplies; one end to be used for change room. 2/		
Bulldozer (contract see 6(a) 4 hrs. @ $12	48	
Material	400	
Labor	600	
Total building cost		1,048.00

2/Might get a prefabricated building. Then material cost will be more and labor cost less.

6 (g) Miscellaneous

Assays 25 @ $3	75	
Office and engineering supplies	50	
Workmen's Compensation and Employees Liability Insurance and Payroll taxes 15% of payroll	2,415	
Total Miscellaneous		2,540.00

6 (h) Contingencies 843.00

Total cost $32,500.00

FILE COPY
SURNAME:
700

F.L. Knouse
Ellis

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

FEB 26 1953

Mr. George David Topliff
241 Jones Street
San Francisco, California

Re: Docket No. DMA-2821 (Mercury)
Mericoma & Benson Claims
Sonoma County, California

Dear Mr. Topliff:

This will acknowledge receipt of your letter dated February 20, 1953, concerning the status and action taken on the captioned application.

Under the date of February 19, 1953, we wrote you advising that the application had been referred for a field examination to the Executive Officer of Region III at the following address:

Mr. H. C. Miller
Executive Officer, Region III
DMA Field Team
1012 Flood Building
870 Market Street
San Francisco 2, California

No doubt you have received that notification by this time.

Sincerely yours,

S.H.
2/26/53

SIGNED

Ernest Wm. Ellis, Chief
Rare and Misc. Metals Division

FLKnouse/jem
2/26/53
cc to: Adm. Reading File
Docket
Messrs. Ellis
Knouse
Field Team, Region III (2)

Padre Hotel

Downtown — *100 Rooms*

Fireproof - Soundproof — *All Private Baths*

PROSPECT 5-7411

241 JONES STREET
SAN FRANCISCO 2, CALIFORNIA

February 20/53

Rare & Miscellaneous--

Department of Interior--

Washington D. C.

Gentleman,

INTE. DEPT.
SECRETARY'S
MAIL CENTER
FEB 24 1953
RECEIVED

Will you please inform us what ACTION if any has been taken on OUR APPLICATION # D. M. E. A. 282I. - George David Topliff, Applicant

Thanking you in advance for the above request

We beg to remain,

B & M Minning Co

24I Jones Street

San Francisco Calif

Dic G. T./J. M.

The Cosmopolitan City of the West.

q 2/25/53

Mr. M:

This apparently came down from Mr. Day's office.

Is it something you wanted to see, or shall we send it on to Division?

~~fw~~

No — Ellis

FILE COPY
SURNAME:
TOC

FLKnouse
Ellis
Lemmon
Selfridge

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

FEB 19 1953

Mr. M. C. Miller
Executive Officer, Region III
DMEA Field Team
1012 Flood Building
870 Market Street
San Francisco 2, California

Re: Docket No. [illegible]-2821 (Mercury)
George David Topliff
Mericoma & Seeson Claims
Sonoma County, California

Dear Mr. Miller:

F.C. 2/19/53

The captioned application is referred to your office for a field examination.

Copies of memoranda from Mr. Irwin J. Lyons, dated December 30, 1952, and Miss Helena M. Meyer, dated February 10, 1953, outlining questions to be covered in the reports of the examining engineers, are enclosed.

If your office recommends either the proposed program submitted by the applicant, or an alternate one approved by the Applicant, kindly furnish us with the detailed information required to draft a contract. This information should include any property controlled by the applicant that will benefit from a recommended exploration program, also the required copies signed by the property owner's of Form MF-203 "Owner's Consent to Lien" covering any property to be included in the contract that is not owned by the applicant.

Under the date of December 23, 1952, a copy of the application and related data were transmitted to your office.

Sincerely yours,

George C. Selfridge (JHB)
Chairman, Operating Committee

Enclosures
APPROVED:

J. H. Hedges (JHB)
Member, Bureau of Mines

S. M. Lemmon (JHB)
Member, Geological Survey

FLKnouse/jem
2/15/53
cc to: Adm. Reading File
Docket
Messrs.: HMMeyer-3623
ARKinkel-4234 GSA
Ellis Knouse
Opr. Com. Field Team, Reg. III

FILE COPY
709 SURNAME:

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

F L Knouse
Ellis
Lemmon
Hedges
Selfridge

FEB 19 1953

Mr. George David Ropliff
241 Jones Street
San Francisco, California

Re: Docket No. [illegible]-2821 (Mercury)
Mericoma & Beeson Claims
Sonoma County, California

F.L. 2/19/53

Dear Mr. Ropliff:

The application for assistance in exploring your property in Sonoma County, California, under the above captioned docket number, has been reviewed by the Rare and Miscellaneous Metals Division of the Defense Minerals Exploration Administration. Your application has been referred for a field examination to the Executive Officer of Region III at the following address:

Mr. [illegible] Miller
Executive Officer, Region III
DMEA Field Team
1012 Flood Building
870 Market Street
San Francisco 2, California

The Regional Office will contact you at the earliest opportunity in regard to your project.

Sincerely yours,

C. O. Mittendorf (fw)

Administrator

FLKnouse/jem
2/15/53
cc to: Adm. Reading File
Docket
Messrs. Ellis
Knouse
Field Team, Region III (2)

2/11/53 gla

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

February 10, 1953

Memorandum

To: E. William Ellis

From: Helena M. Meyer

Subject: DMEA - 2821, George David Topliff, Mericoma & Beeson Claims (known as B & M Mining Co.), Exploration Loan $28,475

I have read the subject proposal and believe that it should be referred to the Field Team of Region III for review. It may be that sufficient data are available in the regional offices of the Bureau of Mines and the Geological Survey so that recommendations may be made without examination of the property.

Alfred L. Ransome and John L. Kellogg, in their report on Quicksilver Resources of California, California Journal of Mines and Geology, 1939, list the "Maricoma" as one of a number of properties that had little or no production. Bureau of Mines records show no production for this property. Despite the pains taken to obtain complete statistics on production, it would, of course, be possible for a small output to be missed.

C. N. Schuette, who is the consulting engineer for the applicant, has had wide experience in judging mercury properties. His report, however, shows that his first-hand knowledge of the property in question was based on a brief visit and reports of the California State Division of Mines.

The drawings furnished are inadequate to show the geology of the area and the location of the proposed work.

A field-team report appears necessary because the proposal to crosscut depends on certain geologic assumptions that are not adequately justified by applicant.

From Schuette's report it would appear that work should be staged as follows:

1. Drive the crosscut, and map and sample the old workings systematically.
2. Then reexamine the situation to see what if any further exploration is justified.
3. The proposal should specify systematic sampling of all mineralized ground exposed by new work.

Helena M. Meyer

Helena M. Meyer

Attachments

Copy to: Minerals Division
Base Metals Branch
H. M. Meyer
Files
A. R. Kinkle, Jr. Room 4234

12/30/52 fa

IN REPLY REFER TO:

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

December 30, 1952
Re: Docket DMEA-2821
George David Topliff
Mericoma mine, Sonoma County, California
Total cost: $28,475.00
Quicksilver

Memorandum

To: Mr. E. Wm. Ellis

From: Erwin J. Lyons, USGS

Subject: Recommendation for field referral

Applicant has requested exploration assistance to investigate the Mericoma mine in Sonoma County, California. It is proposed to extend the present crosscut an additional 200 feet northeast and do 300 feet of drifting, sink two 50-foot winzes and drive two 50-foot raises on the best ore exposures found. Total estimated cost of the project is $28,475.00.

The applicant has retained C. N. Schuelte as consulting engineer. In a report accompanying the application Schuelte states that a strong fault exposed on the surface northeast of the mine portal was not reached by the present crosscut. It is this fault, as well as any other faults which may be present, that the exploration will investigate. No maps showing the geology or the relationship of the fault to the present workings were submitted, however.

W. K. Gealey in Bulletin 161 of the California Division of Mines states that attempts were made to operate the mine during both world wars. The only other information given is that the ore is cinnabar in silica-carbonate rock and shattered Franciscan sandstone.

The present reviewer believes that there is sufficient favorable evidence to warrant a field examination and recommends that the property be examined to investigate the geology and the proposed method of exploration.

Erwin J. Lyons

Erwin J. Lyons
Geologist

December 23, 1952

Mr. George David Topliff
241 Jones Street
San Francisco, California

Subject: DMEA-2821
Re: Exploration Assistance
B & M Mining Company

My dear Mr. Topliff:

The receipt of your application dated December 16, 1952 for exploration assistance under the Defense Production Act of 1950, as amended, is hereby acknowledged.

Your application has been assigned Docket Number DMEA-2821 and referred to the Rare and Miscellaneous Metals Division.

Kindly refer to DMEA-2821 in any future correspondence relating to your application.

Sincerely yours,

ROBERT E. ADAMS

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

25451

DEPARTMENT OF THE INTERIOR
DEC 22 1952

241 Jones St.,
San Francisco, Calif

Defense Minerals Exploration
Administration
Dept. of Interior
Washington 25, D. C.

Gentlemen:

In sending in Forms MF-103 in regard to Exploration loan, mailed Dec. 18th, 1952, via Registered Mail number 61340, through oversight same were not signed.

Hope this will not hold up action; possibly signatures can be affixed after your decision.

Thanking you for your trouble, I remain

Yours very truly,

George David Topliff

George David Topliff

MF-103
(Revised April 1952)

UNITED STATES DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
Budget Bureau No. 42-R1035.2.
RECEIVED
DEC 22 1952

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-2721
Metal or Mineral
Date Received 12/22/52
Estimated Cost
Participation (Government %)

INSTRUCTIONS

1. *Name of applicant.*—(*a*) State here your full legal name, in the form in which you will wish to contract, and your mailing address: George David Topliff
241 Jones St.,
San Francisco, California

(*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 Mericoma Claim (# 63)
Range 10N 8W. Sec.30-31. Beeson Claim (#58), known as B&M Mining Co.
Unpatented claims recorded Book 2, page 235, Santa Rosa Recorder's Office.

(*b*) State any mine name by which the property is known. B & Mining Co.

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

(*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. see above

4. *Physical description.*—(*a*) Describe in detail any mining or exploration operations which have been or now are being conducted upon the land, including existing mine workings and production facilities. State your interest, if any, in such operations. Also describe accessibility of mine workings for examination purposes. See pg 4,5 and 6

(*b*) State past and current production, and ore reserves, if any, giving quantities and grades. See pg 6

(*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. page 6

(*d*) State the facts with respect to the accessibility of the project: Access roads, distances to shipping, supply and residence points. pages 1 & 3

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

16—66551-1

Small operation. No trouble with supplies or man power.

5. *The exploration project.*—(*a*) State the mineral or minerals for which you will to explore Mercury (Quicksilver)

(*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. page 6 & 7

(*c*) The work will start within 15 days and be completed within 10 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. See attached page

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.). None

(*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. page 7

(*c*) *Operating materials and supplies.*—Furnish an itemized list, including items of equipment costing less than $50 each, and power, water and fuel. See page 7

(*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. See attached page

(*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 at present

(*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. See Att.Pg

(*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. See page 7

(*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?

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

Explain in detail on acompanying paper. See attached page

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 December 18 1952, 195__

(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

Attached sheet

Sec. 5.

D. I have worked on lead-zink prospects in Northern Idaho for about ten years. Consulting Engineer, C. H. Schutte, author of Bulletins, 106966 U. S. Bureau of Mines. Bull. 222 Bureau of Mines, 1925, 173pp, Tech. Pub. 335, Am. Inst. Min. & Met. Engrs, N. Y. 1930 88 pp, Quicksilver Bull. 335, Bureau of Mines, 1931 168 pp and Tech. Paper 96, Bureau of Mines, 1919, 25 pp, Bull. 222, Bureau of Mines, 1925, 173 pp.

Sec. 6. List of assets I own and value of same at mine:

D.	1/2 Ton. International Truck *A	$ 545.00
	1940 Desoto Sedan *B	175.00
	1000 ft. 18# rail	350.00
	Fish plates, bolts & spikes for same	75.00
	625 ft. lin. of Ties 4 x 6	100.00
	2 Mine cars @ $250. ea.	500.00
	1 Timber car	200.00
	Small tools- picks, shovels, hammers, etc.	75.00
	Total ---	$2,020.00

*A May trade for later model truck.

*B Will trade for a jeep

F. Buying material and erection of shelters for truck and compressor, about $1200.00.

Additional to cost on pg. 7, making total of $28,475.00. ?

26,000.00

Report on Proposed Exploration Work

at the

Mericoma Mine in Sonoma County, California

by

C. N. Schuette.

C. N. SCHUETTE
CONSULTING MINING ENGINEER
TELEPHONE SEBASTOPOL 6690
6390 BARNETT VALLEY ROAD W.
SEBASTOPOL, CALIFORNIA

December 13 1952.

Mr. George Topliff,
241 Jones Street,
San Francisco, California.

Dear Sir,

Herewith I submit to you my report on an exploration program for the Mericoma Mine that can be completed in 9 months with a crew of three men. On a two shift basis the time required would be cut in half.

This report is based on observations made during a visit to the property on December 3rd 1952 and on information gathered from various sources and on data published by the California State Division of Mines. Cost estimates are based on recent quotations for machinery and supplies and on current wage rates. Two sketch maps illustrate the report.

In the work thus far done in the mine, the probable ore zone has barely been reached by the crosscut tunnel and very little work has been done along the strike to explore it.

I propose an exploration program to start with a 200 foot crosscut of the mineralized fault zone. This to be followed by drifting for 300 feet on the best ore disclosures and finally some 200 feet of sinking and raising to prove up the vertical extent of any orebodies found by drifting.

Such an amount of work should give a good picture of the cinnabar mineralization of the fault zone and might well disclose enough ore to warrant subsequent mining operations.

The cost of such an exploration program will be $26,500.

C. N. Schuette.

Report on Proposed Exploration Work at the Mericoma Mine in Sonoma County, California.

by C. N. Schuette.

Introduction

This report outlines an exploration program for the Mericoma Mine near Healdsburg, Sonoma County, California. The Mericoma Mine produces quicksilver. Quicksilver is a strategic metal and the development of domestic sources of supply is encouraged by our government under DMA by providing 75% of the costs of exploration projects for this strategic metal.

Location of the Mine

The Mericoma Lode Claim lies in Section 31, R. 8 W., T. 10 N., M.D.B.M. The location of the claim on the ground is shown on page 2 of this report. It is about 6 miles north east from the town of Healdsburg. Its location is shown on Plate 1 of Bulletin 161 of the California State Division of Mines. The claim is held by location by George Topliff who located it on October 6 1952 and filed his location on October 8 1952. Previous owners are said to have abandoned the claim in 1941.

Description of the Area

About four miles north east of Healdsburg, the Russian River flows south east thru Alexander Valley. This valley is bounded on the north east by steep hills rising abruptly from the valley floor. These hills are covered with brush and scrub timber.

The Mericoma Mine lies on the first steep hill rising from the valley floor, south east of Saysal Creek. The road to the mine goes from Healdsburg thru Jimtown. A little ways north east of Jimtown a crossroad runs south east. This is followed for 3/4 of a mile and then a road running north east is taken and followed to a ranch at the foot of the hills. From here a steep road leads up to the main tunnel of the mine.

Below the mouth of the main tunnel are the remains of a 2-pipe Rossi retort and a D retort. The setting of the retorts and the elaborate condenser arrangements lead me to believe that the operators were not too experienced in such operations, and this was born out when panning of the burned rock showed that the treated rock still contained a few lbs per ton of quicksilver. At one side of the tunnel a few tons of ore that was probably too low grade to be treated, were piled up and panned about 5 lbs/ton.

Further up on the hill was another tunnel and at another location there seems to have been a third one tho slides made this uncertain. The ridge above the mine is all Franciscan sandstone. About half way down from the ridge to the main tunnel a sharp escarpment marks a strong fault in the sandstone. The original discovery of cinnabar in place was probably made along this escarpment after following pannings on the hillside. Slides obscure the base of the escarpment and I could not find any silica-carbonate rock or cinnabar in place in the limited time I had to see this area.

The road leading to the mine cuts thru chert beds and the portal of the tunnel seems to be in chert also. Then the

tunnel penetrates old greenstones and then the Franciscan sandstone. A rough sketch of the tunnel is shown on page 5. It was made by pacing the distances and taking bearings by compass. At the end of the crosscut part of the tunnel a drift has been run on a fault running north west and dipping north east at 70°. This drift is roughly 100 feet long and from it three raises were run up to aid in stoping out ore to a height of some 25 to 35 feet. The vein was about 4 feet wide, shows cinnabar in silica carbonate rock and has a fairly heavy fault gouge on the hanging wall side.

Geology

The geology of the Healdsburg Quadrangle has been mapped by W. K. Gealey. He shows that the range of hills north east of Alexander Valley in which the mine lies, is cut by many northwest trending faults in rocks of the Franciscan group of Jurassic Age. This is the geologic formation in which most of the quicksilver mines of California are found. On the basis of the known geology of the area, it is a very favorable area in which to prospect for quicksilver occurrences as it shows numerous croppings of silica-carbonate rock. This rock is so generally associated with quicksilver orebodies in the Franciscan Formation that it is colloquially known as "quicksilver rock". He shows the Mericoma Mine to lie in the Maacama Fault Zone.

General Observations

300 feet of crosscut tunnel was driven to reach the ore zone and then only 100 feet of drifting was done to explore it.

I doubt very much that the fault on which the ore was found is the main fault marked by the escarpment on the surface.

I think that the last operators in 1940-41 during the high price of the war years stoped out the ore that had been developed years before (I remember getting some ore specimens from this mine some 20 years ago) but did no development work of their own. They appear to have taken the mine for granted and to have spent their money on building retorts that didn't work very well.

There undoubtedly was some production from this mine as the size of the burned-rock dump below the retorts shows that a fair tonnage of ore was put thru them. The reject pile of 5 lb ore shows that a fair grade of ore must have been treated as many retort operators treated ore as low as 5 lbs per ton when the price was high. I was not able to obtain production figures on this mine.

Conclusion

The general geology is favorable. Ore has been found by a very modest development effort in the past. On the basis of this showing I would say that further exploration is warranted.

I would suggest : Additional exploration ahead, by crosscutting to see if more fault fissures and possibly larger ones can be found. This to be followed by drifting on the most favorable leads and then raising or sinking on the best ore exposures found in the drifting.

To make the program definite so that it can be debated and so a cost estimate can be made, I suggest the following:

1. Crosscut NE from the present drift for 200 feet, with the expectation of cutting the main fault fissure.

2. Drift for 300 feet on the best exposures of ore shown in either the present or the extended crosscut.

3. Sink or Raise on the best ore exposures in the drifts. Two 50 foot winzes and two 50 foot raises would serve to show if the ore as found will persist in height and depth.

Cost Estimate

Equipment needed:		
A pickup truck	$1,800	
A 210 cu. ft. gas driven compressor	1,800	
1000 ft. 2" black iron pipe	350	
2000 ft. 12# rail	720	
Fish plates, bolts & spikes for same	150	
1000 ft. 10" - 22 ga. g.i. vent. pipe	870	
5 HP gas engine & blower for ventilation	410	
2 mine cars	500	
1 timber car	200	
Ties (1250 lin. ft. 4 x 6)	200	
2 Jackhammers with mounts, columns & tank	1,300	
Air and water hose for same	125	
Steel and bits	400	
Blacksmith forge & tools	300	
Picks, shovels, saws, hammers, axes, etc	200	
		$ 9,325
Supplies:		
Powder, fuse and caps	1,000	
Carbide	50	
Gasoline for power	500	
Timber for drifts & crosscuts (16 M)	1,600	
Timber for winzes & raises (15 M)	1,500	4,650
		4,650
Labor:		8,000
Supervision & Miscellaneous (9 months)		4,500
Total		$ 26,475

Since some 700 feet of work are contemplated, this figures out to some $38 per foot on the average tho of course the sinking and raising will cost more per foot than tunneling.

Time required to complete the project on a 6 day week basis with 2 men per shift and a third man as working foreman would be some 9 months. Assumed wage scale $1.70/hour. Assumed advance is 3 feet per shift.

FORM A-8

REPORT OF ASSAY

ABBOT A. HANKS, INC.

ASSAYERS, CHEMISTS, ENGINEERS
624 SACRAMENTO STREET

SAN FRANCISCO. October 24, 1952

DEPOSITED BY George Toplift
241 Jones Street
San Francisco, California

SAMPLE OF ORE

Labty. No.	Mark	GOLD, per ton of 2,000 lbs. Troy Ounces	GOLD, per ton of 2,000 lbs. Value @ $35.00 oz.	SILVER, per ton of 2,000 lbs. Troy Ounces	SILVER, per ton of 2,000 lbs. Value @ $	Percentages
						MERCURY
48967	High Grade					7.36 %
68	Low Grade					0.66 %

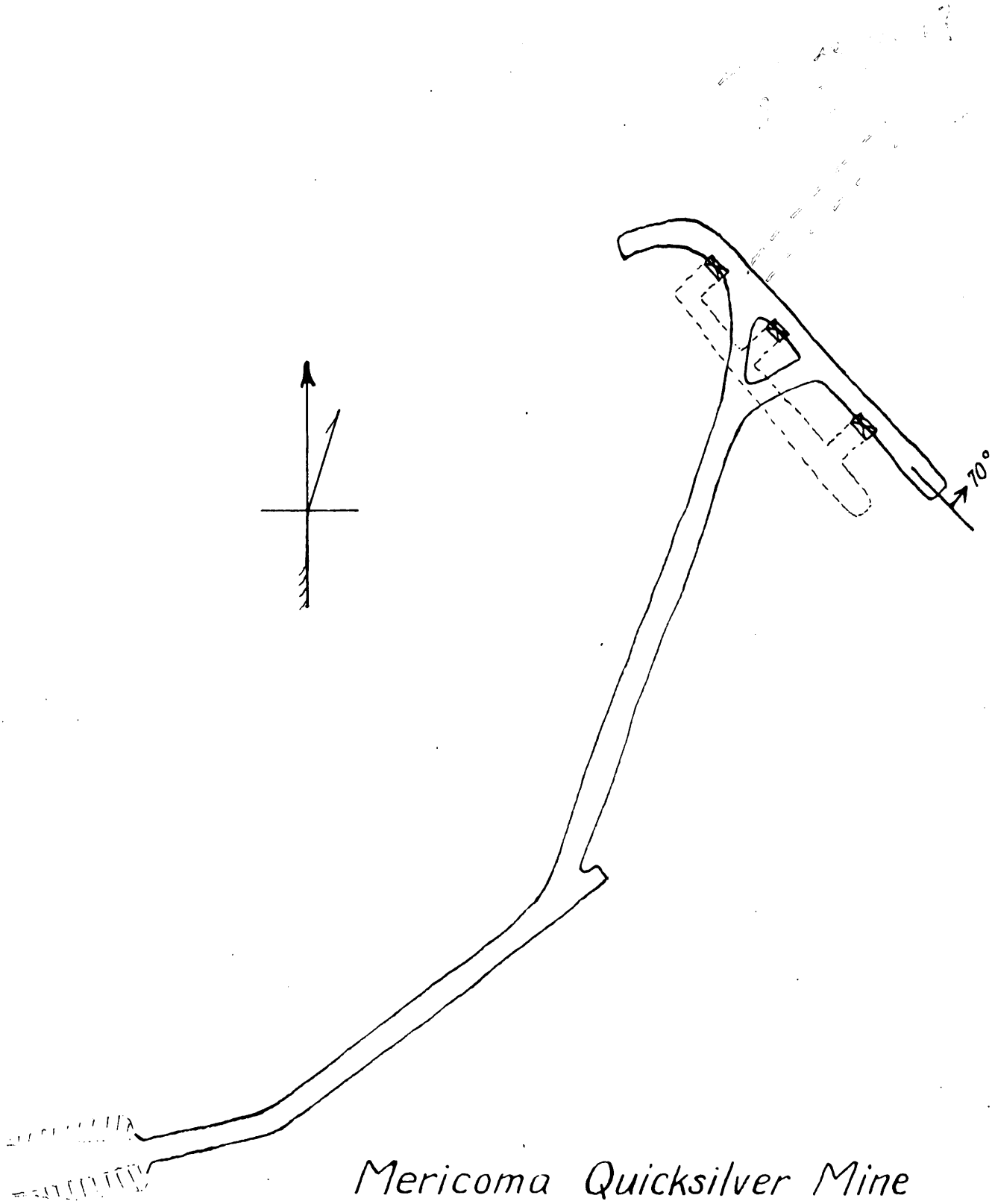
bob

Assay of small amount of ore now in tunnel
Taking the high and low content
G.D.T.

ABBOT A. HANKS, INC.

Martin P. Quast

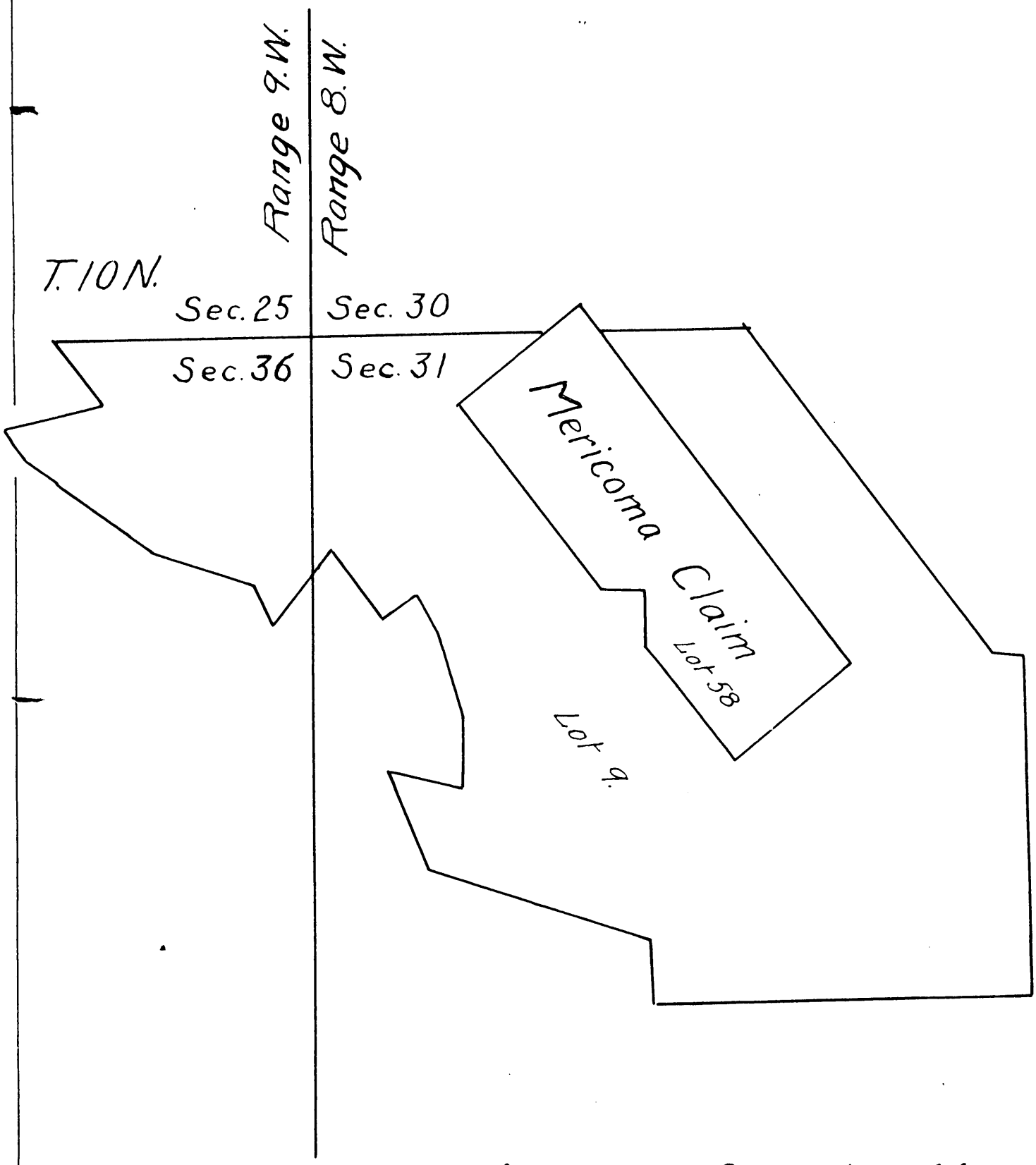
nmca-2721



Mericoma Quicksilver Mine
Sonoma Co., California
Scale 0 50 Feet

C. N. Schuette. Dec. 1952.

SMCU-2821



Mericoma Quicksilver Mine
Sonoma Co., California
Scale 0 600 Feet
C. N. Schuette. Dec. 1952.

Mr. L. Zoplitz
41 Jones St.
San Francisco, Calif.

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VIA AIR MAIL

The Defense Minerals Exploration
Administration Dept. of the Interior,
Washington 25 D.C.

61340

VIA AIR MAIL

RETURN RECEIPT REQUESTED

2 maps enclosed - 2/23/52