DMEA Form 1

DEFENSE MINERALS EXPLORATION ADMINISTRATION
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DMEA Docket No. 4523

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DMEA Form 7
(12-56)

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2/26	Selfridge	130
"	Johnson	110
"	Mittendorf	100
2/27	C	200

225

FEB 27 1957

Mr. C. W. Johnson
Miss Louise Janus
P. O. Box 323
Hopland, California

Re: Docket No. DMEA 4523 - Mercury
Big Injun Mine
Lake County, California

Dear Mr. Johnson and Miss Janus:

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, although noting mercury mineralization on the Big Injun group of claims, indicates to us that the probability of disclosing significant mercury 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. Mittendorf

Administrator

SPHolt:am 2-20-57 - 2-26-57
cc to: Docket
Code 400
Admr. Read. File
Oper. Comm.
FT REG II
Messrs. A. McMahon, USBM
T. Kiilsgaard, USGS

8623

DMEA Form 7
(12-56)

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Date	Surname	Code
2/20	Holt	400
2/20	Martin	400
2/25	Selfridge	130
"	Johnson	110
		100
		200

Mr. C. W. Johnson
Miss Louise Janus
P. O. Box 323
Nopland, California

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Big Injun Mine
Lake County, California

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Careful study of our information, although noting mercury mineralization on the Big Injun group of claims, indicates to us that the probability of disclosing ~~minable~~ mercury ore reserves is not sufficiently promising to justify Government participation. Under these circumstances, we regret to advise you that your application is denied. Such denial, however, is made without prejudice to the property. If at some future date additional work on the property discloses significant geological information which might alter our opinion, we shall be glad to consider a revised application for exploration assistance. The revised application should refer to the present docket and contain all of the necessary supporting data required by Form MF-103.

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,

Administrator

SPHolt:am 2-20-57
cc to: Docket
Code 400
Admr. Read. File
Oper. Comm.
Messrs. R. McMahon, USBM
T. Kiilsgaard, USGS
FT REG II

8623

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

February 20, 1957

MEMORANDUM

To: Administrator, DMEA

From: Iron and Ferro-Alloys Division, DMEA

Subject: Docket No. DMEA 4523 - Mercury
Denial of request for exploration assistance
in the amount of $5,930.00
Louise Janus and C. W. Johnson (Partnership)
Big Injun Mine
Lake County, California

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

(1) The applicant, Louise Janus and C. W. Johnson (Partnership), P. O. Box 323, Hopland, California, requested exploration assistance in the amount of $5,930.00 for rehabilitation, crosscutting and drifting on the Big Injun group of claims.

(2) The applicant controls, by lease with option to purchase from the owner, Louise Fisher Armstrong, Calistoga, California, 1 patented and 5 unpatented lode mining claims, situated in the S. ½, sec. 35, T. 11 N., R. 8 W., M. D. B. & M., Mayacamas Mining District, Lake County, California, and recorded in the County Recorder's Office of Lake County, California, as follows:

Claim Name	Recorded Book	Recorded Page
Big Injun, U. S. Survey 5395		
Big Injun II		
Big Injun III		
Big Injun IV	Vol. 235	254
Big Injun V		
Big Injun VI		

(3) The proposed program is to explore the mercury deposits on the Big Injun group of claims by rehabilitating 75 feet of crosscut adit and drifting and crosscutting in three adits at different levels.

(4) Mercury occurs on the Big Injun group of claims as cinnabar and native quicksilver disseminated through, and in fracture planes in silica-carbonate rock and silicified serpentine breccia. A few small ore bodies have been found along the sheared and brecciated footwall of a northwest-trending elongated body of serpentine lying between greenstone on the footwall and graywacke and shale on the hanging wall.

(5) The Field Team concludes that, a) the inferred reserves are small, b) the property has been well explored by 1,368 feet of underground work on three levels, of which about 550 feet are still accessible, c) the mineralized area as exposed on the surface is small, and the cost of exploring for small inferred ore bodies at depth along the contact would be prohibitive; and, therefore, recommends that the application for Government assistance be denied. The Commodity Division of the Geological Survey concurs in this recommendation. The Commodity Division of the Bureau of Mines, noting the presence of some good (1.83 percent) mercury ore on the property, and the possibility of developing a few more small deposits, recommends that the application should be denied without prejudice.

W S Martin

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

DMEA Form 7
(12-56)

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Date	Surname	Code
2/20	Holt	400
2/20	Martin	400
		130
		110
		100
		220

February 20, 1957

MEMORANDUM

To: Administrator, DMEA

From: Iron and Ferro-Alloys Division, DMEA

Subject: Docket No. DMEA 4523 - Mercury
Denial of request for exploration assistance
in the amount of $5,930.00
Louise Janus and C. W. Johnson (Partnership)
Big Injun Mine
Lake County, California

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8623

(4) Mercury occurs on the Big Injun group of claims as cinnabar and native quicksilver disseminated through, and in fracture planes in silica-carbonate rock and silicified serpentine breccia. A few small ore bodies have been found along the sheared and brecciated footwall of a northwest-trending elongated body of serpentine lying between greenstone on the footwall and graywacke and shale on the hanging wall.

(5) The Field Team concludes that, a) the inferred reserves are small, b) the property has been well explored by 1,368 feet of underground work on three levels, of which about 550 feet are still accessible, c) the mineralized area as exposed on the surface is small, and the cost of exploring for small inferred ore bodies at depth along the contact would be prohibitive; and, therefore, recommends that the application for Government assistance be denied. The Commodity Division of the Geological Survey concurs in this recommendation. The Commodity Division of the Bureau of Mines, noting the presence of some good (1.83 percent) mercury ore on the property, and the possibility of developing a few more small deposits, recommends that the application should be denied without prejudice.

W. S. Martin

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

SPHolt:am
cc to: Docket
Code 400
Admr. Read. File
Oper. Comm.

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

February 11, 1957

Memorandum

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

From: Commodity Specialist, Branch of Base Metals

Subject: Review of Field Examiners Report, Docket No. DMEA 4523, (mercury), Louise Janus and C. W. Johnson, Big Injun Mine, Lake County, California. $5,930.00.

The Field Examiners report recommends denial of the application because:

(1) The inferred reserves are small.
(2) The property has already been well explored by a total of 1,368 feet of underground work on three levels of which 550 feet are still accessible.
(3) The mineralized area as exposed on the surface is small, and the cost of exploring for small inferred ore bodies at depth along the contact would be prohibitive.

The application proposed a small exploration program consisting of 75 feet of crosscut rehabilitation and 140 feet of crosscutting and drifting costing an estimated $5,930. The examiners, evidently, were not sufficiently impressed with the 1.83 percent grab sample of ore mined from the upper adit or the silica carbonate occurrences to suggest an alternative exploration project. It would appear, however, that in view of the existence of some good ore on the property and the possibility of developing a few more small deposits the application should be denied without prejudice to the property.

A. D. McMahon

A. D. McMahon

Copy to: Division of Minerals
Branch of Base Metals (2)
Thor Kiilsgaard, U.S.G.S.
F. D. Lamb
Files

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DMEA
RECEIVED FEB 11 1957

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IN REPLY REFER TO:

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

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DMEA
RECEIVED FEB 8 1957

DATE	INITIALS	CODE
2/8	C	220
2/11	WSM	400

February 7, 1957

Re: DMEA 4523
Louis Janus and C. W. Johnson
Big Injun Mine
Lake Co. Calif.
$5,930 - 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 applicants requested assistance in exploring 2 mercury bearing veins following rehabiliation of old time mine openings. The property is credited with the production of about 250 flasks of mercury in 1916-1917. The mine is developed by 4 adits, the total length of the underground work being about 1368 feet.

Reserves, all inferred, are estimated as:

250 tons @ 30-40 lbs Hg/ton or 100 to 130 flasks of mercury.

The examiners conclude the size of orebodies, as indicated by past production and the geologic environment, do not justify an award of the requested assistance and recommend that the application be denied.

I concur with the recommendation.

N. E. Nelson

N. E. Nelson

DMEA

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

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2-5	C	220
2/5	WSM	400

1605 Evans Avenue
Reno, Nevada

January 30, 1957

Memorandum

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

From: Executive Officer, DMEA Field Team, Region II

Subject: Docket No. DMEA-4523 (Mercury)
Louise Janus and C. W. Johnson (Partnership)
Big Injun Mine
Lake County, California

Enclosed are four copies of a report on subject property by D. B. Tatlock, Geological Survey and J. D. Warne, Bureau of Mines.

Roscoe Smith and I concur in the recommendation that the application for DMEA exploration aid be denied.

S. Ricker

S. Ricker

Encls.

Reviewed by
DMEA OPERATING COMMITTEE
2-4-57
(date)

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RECEIVED FEB 1 1957

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UNITED STATES
DEPARTMENT OF THE INTERIOR
FRED A. SEATON, SECRETARY

DEFENSE MINERALS EXPLORATION ADMINISTRATION

REPORT OF EXAMINATION BY FIELD TEAM
REGION II

APPLICATION REPORT

DMEA-4523 (Mercury)
Louise Janus and C. W. Johnson
Big Injun mine
Lake County, California

by

J. D. Warne
U. S. Bureau of Mines

D. B. Tatlock
U. S. Geological Survey

January 21, 1957

Reviewed by
DMEA OPERATING COMMITTEE
2-4-57
(date)

CONTENTS

	Page
Introduction	1
Conclusions and Recommendations	1
Location, Property, and Ownership	2
History and Production	3
Development	3
General Geology	4
Ore Deposits	4
Sampling	6
Ore Reserves	6

ILLUSTRATIONS

Figure 1 . . . . . Index map

2 . . . . . Geologic map

INTRODUCTION

Mrs. Louise Janus and her brother, Mr. C. W. Johnson, a partnership, Box 323, Hopland, California, applied for Government assistance in a $5,930.00 program under the Defense Minerals Exploration Administration, docket DMEA-4523, to explore for mercury at the Big Injun mine, Lake County, California. The applicant wishes to explore the property for small bodies of high grade ore.

A field examination was made by J. D. Warne, U. S. Bureau of Mines, and D. B. Tatlock, U. S. Geological Survey, on November 8, 1956, accompanied by the applicants. The examiners mapped the surface and the accessible underground workings and took three samples.

Recent work performed by the applicant, including a deep trench and a 30- to 50-foot adit driven westerly from the trench, slumped and caved during a 4-inch rain late in October 1956, and had not been rehabilitated at the time of the examination.

CONCLUSIONS AND RECOMMENDATIONS

Cinnabar and native quicksilver are disseminated through, and occur on fracture planes in, silica-carbonate rock and silicified serpentine breccia in a few very small ore bodies along the foot wall of a northwest-trending serpentine body.

Reserves, all inferred, total about 250 tons averaging 30 to 40 lbs. Hg/ton, or about 100 flasks.

The applicant proposes to further explore the property by 140 feet of crosscutting and drifting and by 75 feet of crosscut rehabilitation.

It is recommended that the application for Government assistance be denied because:

(1) The inferred reserves are small.

(2) The property has already been well explored by a total of 1,368 feet of underground work on three levels of which about 550 feet are still accessible.

(3) The mineralized area as exposed on the surface is small, and the cost of exploring for small inferred ore bodies at depth along the contact would be prohibitive.

LOCATION, PROPERTY, AND OWNERSHIP

The Big Injun mine is in the eastern Mayacmas quicksilver district, sec. 35, T. 11 N., R. 8 W., M.D.B.&M., Lake County, California (fig. 1). It is reached by a paved and gravel road leading 7.8 miles westerly from Middletown, California.

The property consists of the Big Injun patented mining claim, Survey No. 5395 and five unpatented claims named Big Injun Nos. II to VI inclusive.

The mine is owned by Mrs. Alice (Fisher) Armstrong of Calistoga, California, and is leased at the present time to Louise Janus and C. W. Johnson (a partnership), Box 323, Hopland, California.

HISTORY AND PRODUCTION

The deposit is reported to have been discovered in 1873, but no production is recorded before World War I. In 1916-17, 250 flasks of mercury were produced.

The applicants produced six flasks in 1955-56 from a 30-foot adit driven westerly from a deep trench.

DEVELOPMENT

The mine was developed by four adits driven westward which explored the mineralized zone through a vertical zone of about 100 feet (fig. 2). The Lower adit is open for a distance of about 340 feet from the portal, and about 125 feet of the Middle adit is accessible; the other two adits are inaccessible. A large trench has been bulldozed along the footwall.

Surface structures consist of an 8 by 10-foot cook shack and a small wrecked furnace. No mining equipment or tools remain on the property.

GENERAL GEOLOGY

The mine is in an area of high relief underlain by graywacke, shale, and greenstone of the Franciscan series. A northwest-trending elongate body of serpentine about 1,500 feet long and 100 to 200 feet wide intrudes the Franciscan rocks. The serpentine dips steeply southwest; its footwall is greenstone and its hanging wall graywacke and shale; it is locally altered to silica-carbonate rock along its margins. The mine is on the footwall at the southeast end of the serpentine body.

The foot-wall contact zone is highly sheared and broken and locally brecciated. A few minor northwest-trending faults that dip gently to steeply west along the foot-wall zone show no appreciable dip-slip. These faults are probably related to a right lateral strike-slip fault along the footwall of the serpentine. No evidence of faulting was seen along the graywacke and shale hanging wall.

ORE DEPOSITS

Cinnabar occurs as finely disseminated grains in silica-carbonate rock and in silicified serpentine breccia; along the footwall native quicksilver and fine crystalline cinnabar occur on fracture surfaces in these same rocks. Native quicksilver makes up as much as 36 percent of the contained

mercury according to Bradley[/]. The mineralized area along the

---

/Bradley, W. W., 1918, Quicksilver resources of California; Calif. Min. Bur. Bull. 78, pp. 56-57 and 288.

---

footwall is from 1 to 30 feet wide and extends about 100 feet along the strike and at least 140 feet in depth.

The only ore seen was on the ore pile. According to the applicant this had been recovered from the recently caved upper adit. Judging from the applicant's description of the ore in the caved adit and from what could be seen in the slumped open cut from which the adit was driven, the ore occurs along a northwest-trending gouge zone in silicified serpentine breccia and in broken silica-carbonate rock adjacent to the greenstone. The gouge zone dips 25 - 40 degrees southwest. The ore zone is about one foot thick. Gangue minerals are calcite, quartz, and iron oxides.

A few discontinuous veinlets of cinnabar up to 1/16 inch thick also occur in steep west-trending cross fractures in silica-carbonate rock along the footwall in the Middle adit.

Along the hanging wall on the surface a few small prospect pits have been cut in oxidized silica-carbonate rock but no cinnabar was found.

SAMPLING

The best showings of cinnabar were in the Upper adit, according to the applicant; but this working is now inaccessible. Three check samples (shown on fig. 2) were taken during the examination, as follows:

Sample No.	Lbs. Hg/ton	Description
1	0.2	2.5 ft. cut across formation showing slight Hg mineralization in Middle adit.
2	36.6	Grab of about 100 lbs. of ore reported to have been mined from Upper adit.
3	0.1	Specimen chip sample from formation at raise from Lower adit.

ORE RESERVES

There are no measured or indicated reserves. Inferred reserves in the caved 30-foot Upper adit, based on the applicant's description and on material in the ore pile, are about 40 tons averaging 30 to 40 lbs. Hg/ton in a west-dipping gouge and breccia zone 40 feet along the strike, 10 feet along the dip, and one foot thick.

It is inferred that a few similar ore bodies ranging in size from 30 to 50 tons each might be found in gouge and breccia zones along the footwall.

APPLICANT'S PROPOSED EXPLORATION

The applicant proposes to further explore the property by

140 feet of underground work. The work consists of (1) drifting 40 feet northwest along the mineralized serpentine-greenstone contact zone from the Lower adit level, (2) rehabilitating about 75 feet of the Middle crosscut adit and advancing an additional 50 feet westerly, and (3) advancing the recently caved Upper adit an additional 50 feet. If a loan were granted, the applicant would rehabilitate the caved Upper adit at his own expense. Some ore would probably be found in the Upper adit, but the high cost of locating other small inferred ore bodies along the footwall would be uneconomical.

DOCKET
SURNAME
McMahon
Martin
Selfridge
Johnson

400

Mr. Spangler Richer
Executive Officer
DMEA Field Team, Region II
1605 Evans Avenue
Reno, Nevada

Re: Docket No. DMEA 4593 - Mercury
Louise Jenne and C. W. Johnson (Partnership)
Big Injun Mine
Lake County, California

Dear Mr. Richer:

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

Copies of memoranda dated November 1, 1956, by N. E. Nelson, Geological Survey, and J. W. Pennington, Bureau of Mines, relating to the project are enclosed.

Sincerely yours,

George C. Selfridge
Chairman, Operating Committee

APPROVED:

Frank D. Lamb
Member, Bureau of Mines

Thor H. Kiilsgaard
Member, Geological Survey

ADMcMahon:foc 11/7/56
cc to: Docket
Code 400
Admr. Read. File
Oper. Comm.
FT. REG. II
Messrs. J. W. Pennington, USBM
T. H. Kiilsgaard, USGS

Enclosures

DOCKET
SURNAME
McMahon
Martin
Lamb
Kiilsgaard
Selfridge

400

9 NOV 1956

Mr. C. W. Johnson
Miss Louise James
P. O. Box 323
Hopland, California

Re: Docket No. DMEA 4523 - Mercury
Big Injun Mine
Lake County, California

Dear Mr. Johnson and Miss James:

The above docketed application for exploration assistance for mercury ore has been reviewed by the Washington office of the Defense Minerals Exploration Administration and referred to Mr. Spangler Ricker, Executive Officer, DMEA Field Team, Region II, 1605 Evans Avenue, Reno, Nevada, for a field examination of the property.

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

Sincerely yours,

Frank E. Johnson

Copy

Administrator

ADMcMahon:foc
11/7/56
cc to: Docket
Code 400
Admr. Read. File
Oper. Comm.
FT. REG. II
Messrs. J. W. Pennington, USBM
T. H. Kiilsgaard, USGS

Docket

IN REPLY REFER TO:

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

RECEIVED NOV 2 1956 D.M.E.A.

November 1, 1956

Re: DMEA 4523
Louise Janus & C. W. Johnson
Big Injun Mine
Lake County, California
$5,930 - Mercury

Memorandum

WSM

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

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

Subject: Review of application.

The applicants request assistance in exploring two mercury-bearing veins by drifting and crosscutting. Rehabilitation of old time openings is necessary.

The veins occur in or near a sandstone-serpentine contact. Old time workings consist of three crosscut adits with drifts and raises from them. The deepest adit, 610 feet long, obtains a depth of 150 feet below the outcrop.

The applicants have spent $10,000, according to the application, on surface work and a 50-foot adit. They recovered 6 flasks of mercury from 4% ore encountered.

Referral of the application to the Field Team for appropriate action is recommended.

N. E. Nelson

N. E. Nelson

Copy retained 400

Docket

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

RECEIVED 1 19 DMEA

November 1, 1956

Memorandum

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

WSM

From: Commodity Specialist, Branch of Base Metals

Subject: Review of application, Docket No. DMEA 4523 (mercury), Louise Janus and C. W. Johnson, Big Injun Mine, Lake County, California. $5,930.00

The applicant proposes to explore for mercury mineralization in favorable areas by 140 feet of drifting and crosscutting and 75 feet of drift rehabilitation at an estimated total cost of $5,930.00.

Although this is a modest program, evaluation is difficult as insufficient information is given concerning the mineralization and the areas to be explored.

Referral of the application to the Field Team is recommended.

J. W. Pennington

J. W. Pennington

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

Copy retained 400

RECEIVED
Nov 1 1956
D.M.E.A.

Attn: Dana Warren

Gentlemen:

I am enclosing a application for diamond drilling on our chrome property. I talked to several different people on quotations. They quote their estimates cost on conditions on ground, etc. I hesitated to [illegible] to make a special trip up here, without being more certain that I will contract for the work [illegible] accept. I am [illegible] therefore, $[illegible] as a estimate, which I believe will be more average, from their [illegible]

[illegible] Spokane is always available.

[illegible] at our [illegible]

[illegible] of course [illegible]

will do the work [illegible]

[illegible] and that it [illegible]

[illegible] lightning [illegible]

[illegible]

[illegible]

[illegible]

S/ Rusty Janus

DMEA 4525

DMEA 4523

This is a spare copy of a letter filed in Docket DMEA 4525

UNITED STATES
DEPARTMENT OF THE INTERIOR
Defense Minerals Exploration Administration
Washington 25, D. C.

October 29, 1956

Miss Louise Janus
P. O. Box 323
Hopland, California

Subject: DMEA-4523
Re: Exploration Assistance
Big Injun Mine

Dear Miss Janus

Your application for exploration assistance, dated October 20, 1956 submitted to our office at Reno, has been assigned Docket Number DMEA-4523 and referred to the Iron and Ferro-Alloys Division in the Washington office. Kindly identify all future correspondence relating to your application by this Docket Number.

Sincerely yours,

Allen S. Dakan, Chief
Operations Control and
Statistics Division

Copy to:

Region II. Reno, Nevada

Code 400

DMEA

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

RECEIVED
OCT 29 1956

1605 Evans Avenue
Reno, Nevada

October 25, 1956

Memorandum

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

From: Executive Officer, DMEA Field Team, Region II

Subject: Loan Application (Mercury)
Louise Janus and C. W. Johnson (Partnership)
Big Injun Mine
Lake County, California

Attached are three sets of MF-103, Application for Aid forms relative to above subject. The fourth set has been retained in our files.

We have interviewed the applicant and believe it useless to request additional information than that submitted. We however will be glad to make the examination.

B. H. Shahan
for
S. Ricker

Attach.

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

RECEIVED
OCT 29 1956

1605 Evans Avenue
Reno, Nevada

October 25, 1956

Memorandum

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

From: Executive Officer, DMEA Field Team, Region II

Subject: Loan Application (Mercury)
Louise Janus and C. W. Johnson (Partnership)
Big Injun Mine
Lake County, California

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S. Ricker

Attach.

SRicker:gh
cc: R. M. Smith
File

MF-103
(Revised April 1952)

UNITED STATES DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION

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

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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. 4523
Metal or Mineral Mercury
Date Received 10/29/56
Estimated Cost $5930
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: Louise Jamus and C W Johnson (partnership) Box 323, Hopland, Calif.

(*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 "Big Injun" patented mining claims No. 5395 and Big Injun II, III, Iv, V, & VI in Sec 35 T 11 N, R. 8 W, Lake County, Calif within Eastern Mayacmas Quicksilver District

(*b*) State any mine name by which the property is known. Big Injun Mine

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

(*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

(*f*) If the land consists of unpatented claims, add to the description above, the book and page numbers for each recorded location notice. & sketch plan map. Volume 235 of official records page 254 Lake Co Records Parcel No 13-06-20

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 wish to explore 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 6 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?

[x] Money [ ] Use of equipment owned by you [x] 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 20 Oct. 56, 195

C. W. Johnson
(Applicant)

By Louis James

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

Report on Big Injun Mine
J.M. Morrison C.E.

C O P Y

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Description of Property.

The Big Injun Quicksilver Mine property consists of 120 acres of land, situated in Section 35, Township 11 North, Range 8 West, Mount Diablo Meridian and approximately 10 miles northwest of Middletown, Lake County, California, by road, There is one patented piece of 20 acres, on which the workings are located, and five claims of twenty acres immediately adjacent.

The workings consist of the following:

(1) Lower tunnel 610' long with three leads 45' 39' and 29' long respectively and one 45 degrees raise of 16'.
(2) Middle tunnel 329 ' long with two leads, 18' and 61' long and one vertical raise of 13'.
(3) Upper tunnel 166' long with 12' winz.

Ore Showings

A careful investigation has been made, both surface and subsurface to determine the quality and quanity of ore bearing material that may be expected. As a result of this investigation, I submit the following facts: The Ore is found in two zones, both in veins or seams at the contact point of soft sandstone and serpertine. As the veins are somewhat broken and diffucult to follow. Both weins, however, may be traced both on the surface and underground. Their general direction is Northwest and their dip southwest. The richest vein, from the point of quantity is the more easterly one. It varies in width up to forty feet at two hundred feet below the surface croppings. The westerly vein varies upto ten feet in width at one hundred and sixty feet. While most of the ore has been cleaned out of the present workings it was possible to get several representative samples. These samples showed the ore to be mainly characterized by the presence of a large amount of native quicksilver, together with cinnebar of a distincly chrystalline character. An assay of these samples (sixteen in number) taken at vardous points throughout the workings averaged 1.84% quicksliver and an amalgamation test showed 32% of the total assay value to be native quicksilsver.

Big Injun Mine group is in the S. ½ of Sec 35 T 11N R. 8 W MDB&M
There is in automobdle road as far as Castle Springs. The outcrop was discrovered about 1873 by "injun Jeff." It had been worked occasionally in a small way, but was idle for some years preceding it being reopened by the present lessee in 1916 The mine is apparently on a contact of serpentine and sandstone. The formations are considerably broken up at this point. There are two vens or ore zones, the principal development having been done on the eastern one. The strike is NW and dip SW. The width varies up to 30 feet, with ore shoots showing 1' --4' wide. The hanging wall is somewhat heavy to hold, expecially in winter. The ore is characterized by the presence of sonsiderble native mercury with cinnebar, and the gangue mimerals are quartz and dolomite. There are 3 main crosscut adits, the lowest being 610', reaching a depth of 150' below the outcrop. At 350' in on this crosscut there is a warm sulphur spring.

You will find a full description of the Big Unjun on page 57 in Quicksilver Resources of Calif Bulletin 78. Also on page 288 more description can be found. On page 26 you will find colored plate of Cinnebar; the lower one of the three is the color and quality of the kind which produced in the Big Injun. This came from the upper tunnel directly under the surface of ground and as you know the richest ore, as a rule, is never found so near the surface. Anyone going below both tunnels where this rich ore was found and proving same, would surely have a mine. The number of feet would not be any great distance.

4. Physical description:

(a) applicant has expended approxemately $10,000 to explore surface expolures with bulldozer, and construct 3 miles of road to property and drove about 50 feet of adit to explore favorable formations.
(b) Produced about 6 flasks of mercury. No proven ore reserves. Applicant mined ore averaging 4.0% Hg content.
(c) Mineralization in silica carbonate rock formation.
(d) Access from Middletown 6 miles NW from Middletown, follow dirt road 3 miles southerly to the mine.
(e) Manpower, supplies and equipment are available from Middletown. Electric power available within a distance of one mile.

5. (b) The applicant wishes to further explore the property by driving underground drifts and crosscuts aggregating about 210 feet, as follows:

1. 40 ft. of crosscutting to intercept the foot wall. Also a 6" vein reported to be ahead of the present point.
2. Rehabilitate about 75 feet and advance intermediate adit 50 feet.
3. Drive an upper adit 50 feet to explore a favorable ore formation, reported to widen into a 8 foot vein.

(b) See attached sketch.
(d) One of the partners C W Johnson has had about 2 years gold placer mining experience. Will hire competent supervisors with mining experience.

6. Estimate of Costs:

Operator plans to perform all work by independent contract at the following extimated unit costs:

Drifting or crosscutting	@ $30.00 ft.	
Timbering as required in drifts or crosscuts	@ 7.00 ft.	
Summary		
1. 40' of crosscutting	@ $30.00	$1200.00
40' of timbering	@ 7.00	280.00
2. Rehabilitate 75 ' of intermediate adit @ 10.00 ft.		750.00
50 ' of adit	@ 30.00	1500.00
50 ' of timbering	@ 7.00	350.00
3. 50 ' of upper adit	@ 30.00	1500.00
50 ' of timbering	@ 7.00	350.00
Total extimated cost of work		$5930.00

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LEASE AND OPTION

THIS LEASE AND OPTION, executed this 15th day of April, 1955, between ALICE FISHER ARMSTRONG, of Calistoga, California, First Party and Lessor, and LOUISE JANUS and C. W. JOHNSON, Second Parties and Lessees,

W I T N E S S E T H :

That First Party, as owner and lessor of the "Big Injin" patented mining claim, Survey No. 5395, and "Big Injin II", "Big Injin III", "Big Injin IV", "Big Injin V" and "Big Injin VI" unpatented mining claims, situated in the Mayacmas Mining District, Township II North, Range 8 West M.D.B.& M., Lake County, State of California, and the record of which claims is duly entered in the County Recorder's Office of said Lake County, to which reference hereby is made, hereby leases to, and said Second Parties as lessees lease from First Party and Lessor, the said foregoing mining claims and appurtenances, on the following terms and conditions:

1. Lessees shall have ninety (90) days free option period from date hereof within which to sample and test the ore deposits in the above described mining property, at lessees' sole cost and expense, and in the event said lessees thereafter desire to continue with the operation of said property, said lessees shall notify and deliver to first party and lessor a notice in writing to that effect, at her address, within ten (10) days prior to the expiration of said ninety (90) days first hereinabove mentioned.

2. After the expiration of said ninety (90) days and acceptance of this lease and option by second parties and lessees, said lessees shall commence development work and as soon thereafter as is practicable continuously operate the said property, with not less than five (5) full working days each and every week, unless prevented by causes beyond the control of second parties and lessees or by acts of God;

but said lease shall not exceed six (6) years from date, unless sooner terminated by purchase or a breach of this lease.

3. Said second parties and lessees at all times shall conduct the operations of said lessees on said above-described property at the lessees' own expense, as independent contractors and not as agents for said first party and lessor, in any and all operations on and in said property so conducted by said lessees. Said second parties and lessees likewise shall conform to and comply with all federal, state, county and local laws and ordinances now in force or hereafter to be enacted, relative to conducting mining operations; said lessees also shall carry all necessary compensation, accident or other insurance, as may be required by law from time to time; said lessees shall also pay all taxes levied or assessed against said property during the time said lessees shall operate the same and prior to purchase thereof hereunder; said lessees shall commit no waste on or in said property and shall conduct all operations in a minerlike manner, and shall save harmless said first party and lessor in any and all things made, done or suffered by said second parties and lessees in connection with the operation of said property by said lessees.

4. First party and lessor may post notices of non-liability and keep the same posted, and said second parties and lessees agree to keep the said notices posted and to see that the same are not destroyed or removed from said property during the term of this lease.

5. Said second parties, after said ninety (90) days time and acceptance of this lease and the commencement of operations by said lessees, shall have the sole and exclusive right to mine and operate said property and remove the ores and minerals therefrom. Said lessees shall pay to first party and lessor ten per cent (10%) of the gross production of all quicksilver, minerals, metals and values extracted by said second parties and lessees from said premises, and settlement shall be made between the 1st and 10th days of each month,

covering the previous month's operation and extraction of values. At said time, and with statements of the settlements so made, said lessees shall furnish to first party and lessor a duplicate copy and complete statement of all sales of quicksilver or other minerals or products produced from said property and sold during said previous month. Commencing ninety (90) days hereafter, and during the term of this lease, the lessees shall pay to lessor One Hundred ($100.00) Dollars per month as rental for the use of said property. The said sums so paid as rental hereunder shall be deducted from royalties accruing to lessor from time to time hereunder, provided, however, that said deduction shall not in any event reduce the net income to lessor hereunder to less than One Hundred ($100.00) Dollars per month at any time during the term hereof or during any extension of this said lease and option.

6. Lessees shall keep proper books of account covering the production and sale of all quicksilver or other values extracted by said lessees hereunder, and on a monthly basis, which said records shall be open to the inspection of said first party and lessor, or her duly authorized agent, at all times during reasonable business hours. Said first party and lessor also, at her own risk, shall have the right to enter upon or in said property herein leased and optioned, at all reasonable times for the purposes of sampling or testing ores, or other examination, but without interfering in any way with said operations so conducted by second parties and lessees.

7. Upon termination of this lease and option, other than by the purchase of said property by second parties and lessees, during said six-year period, or extension thereof, said first party and lessor may re-take possession thereof, with or without process of law, and second parties and lessees agree peaceably to surrender possession of said property. In the event of the termination of this lease other than by the purchase of said property by second parties and lessees, said lessees shall have sixty (60) days after termination

within which to remove any structure, or equipment placed by said lessees on or in said property. However, said second parties shall not remove any timbers or structure placed on or in said mine, which will cause injury or damage thereto, or any buildings now on said premises, or which may be placed thereon by lessor; but said second parties and lessees shall leave said premises in good condition, reasonable wear, tear and action of the elements excepted. It is further understood and agreed in the event of such termination as above mentioned of this lease and option, that said second parties and lessees shall not be obligated to make further payments hereunder, except as may then be due in the premises; and said first party and lessor shall retain any and all payments theretofore made and then due and payable, as a rental for the use of said property and as liquidated damages, but not as a penalty.

8. Second parties and lessees shall have the right and privilege at any time, on thirty (30) days' prior written notice, to discontinue operations and surrender and terminate said lease and option, subject to the payment of the current royalties.

THE OPTION

In consideration of the keeping and carrying out of the covenants and conditions of the lease hereinbefore set forth, and the sum of One Dollar ($1.00) paid by second parties to first party, the receipt of which is hereby acknowledged, said first party and lessor hereby grants to, and said second parties and lessees secure and accept from her, an option to purchase the foregoing and above described mining property, on or before six (6) years from date hereof, or during any extension of time mutually agreed on, for the sum of Seventy-five Thousand ($75,000.00) Dollars: provided, however, that said option to purchase shall not be exercised within two years from the date hereof, unless and until said total royalty payments, hereinabove provided for, shall exceed the sum of Fifty Thousand

($50,000.00) Dollars. Against said sum shall be applied all royalties paid by second parties and lessees to first party and lessor, but said second parties and lessees shall have the right and privilege of paying the full Seventy-five Thousand ($75,000.00) Dollars at any time during the said six-year period, or extension thereof. Upon full payment of said purchase price by second parties to said first party and lessor, she agrees and hereby covenants to execute and deliver a proper deed conveying said property hereinbefore described, together with all the appurtenances, free and clear of any encumbrances, and conveying a good, marketable title. Within twelve (12) months after commencement of operations by second parties and lessees after lessees' notification of intention to operate, and on lessees' demand, said first party and lessor place in any bank selected by second party and lessees the above mentioned, conveying said property free and clear of all encumbrances. And conveying a good, marketable title, and proper escrow instructions to said bank so selected for the delivery of said deed upon the payment of any unpaid balance of the purchase price then due, or which thereafter may become due hereunder from said second parties and lessees to said first party and lessor.

In the event of the termination of the foregoing lease and the withdrawal from said property and operations by second parties and lessees under the conditions specified in Paragraphs 7 and 8 of the foregoing lease, this option likewise shall terminate, as hereinbefore provided, and the moneys theretofore paid by second parties and lessees to first party and lessor shall be retained by said first party as rental for the use of said property and as liquidated damages, but not as a penalty, and said second parties and lessees shall be absolved from any liability to make further payments thereon, except any moneys which may then be due for royalties. Said second parties, however, shall have the right during said sixty (60) days

after termination of said lease and this option, to remove all machinery and equipment as specified in Paragraph 7 of said foregoing lease.

The lessees shall not assign this lease or any interest therein, except as herein provided, and shall not sublease or underlet the said premises, or any part thereof, or any right or privilege appurtenant thereto, without the written consent of the lessor first had and obtained, and a consent to one assignment or subletting shall not be construed as a consent to any subsequent assignment or subletting. Unless such written consent thereto has been so had and obtained, any assignment or transfer, or attempted assignment or transfer of this lease or of any interest therein or underletting, either by voluntary or involuntary act of the lessees or by operation of law or otherwise, shall, at the option of the lessor, terminate this lease; and any such purported assignment, transfer or underletting, without such consent shall be null and void.

The benefits hereunder shall inure to, and the terms and conditions hereof shall be binding upon, the respective parties hereto, their heirs, executors, administrators, successors in interest or assigns.

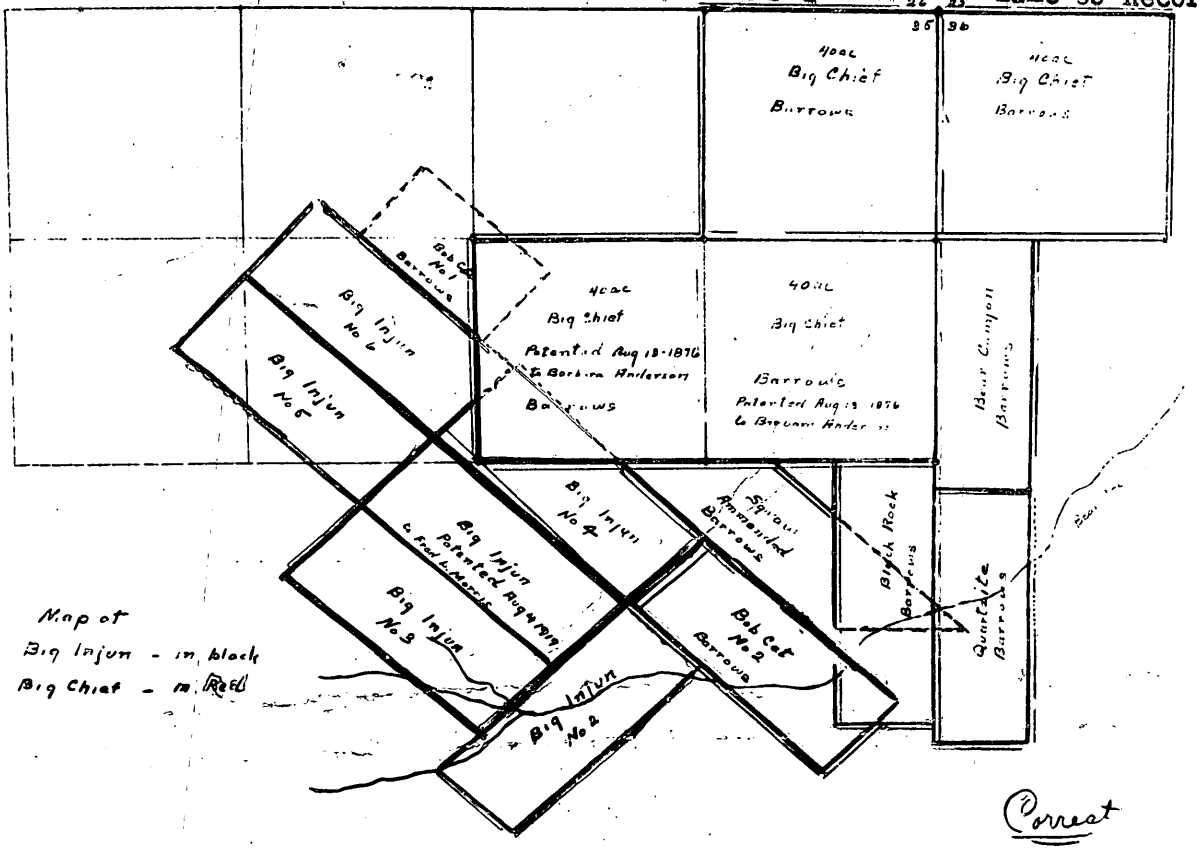
Executed in duplicate the day and year first hereinabove written.

Alice Fisher Armstrong
Alice Fisher Armstrong, Lessor

Louie Jones

C J Johnson
Lessees

Volume 235 of official records, page 254 Lake Co Records



Correct

I own 6 claims in "Big Injun" Mine. No. 1 - is the only patented claim. and the only one worked for production.

Parcel No. Lake 60 Record
13-06-20

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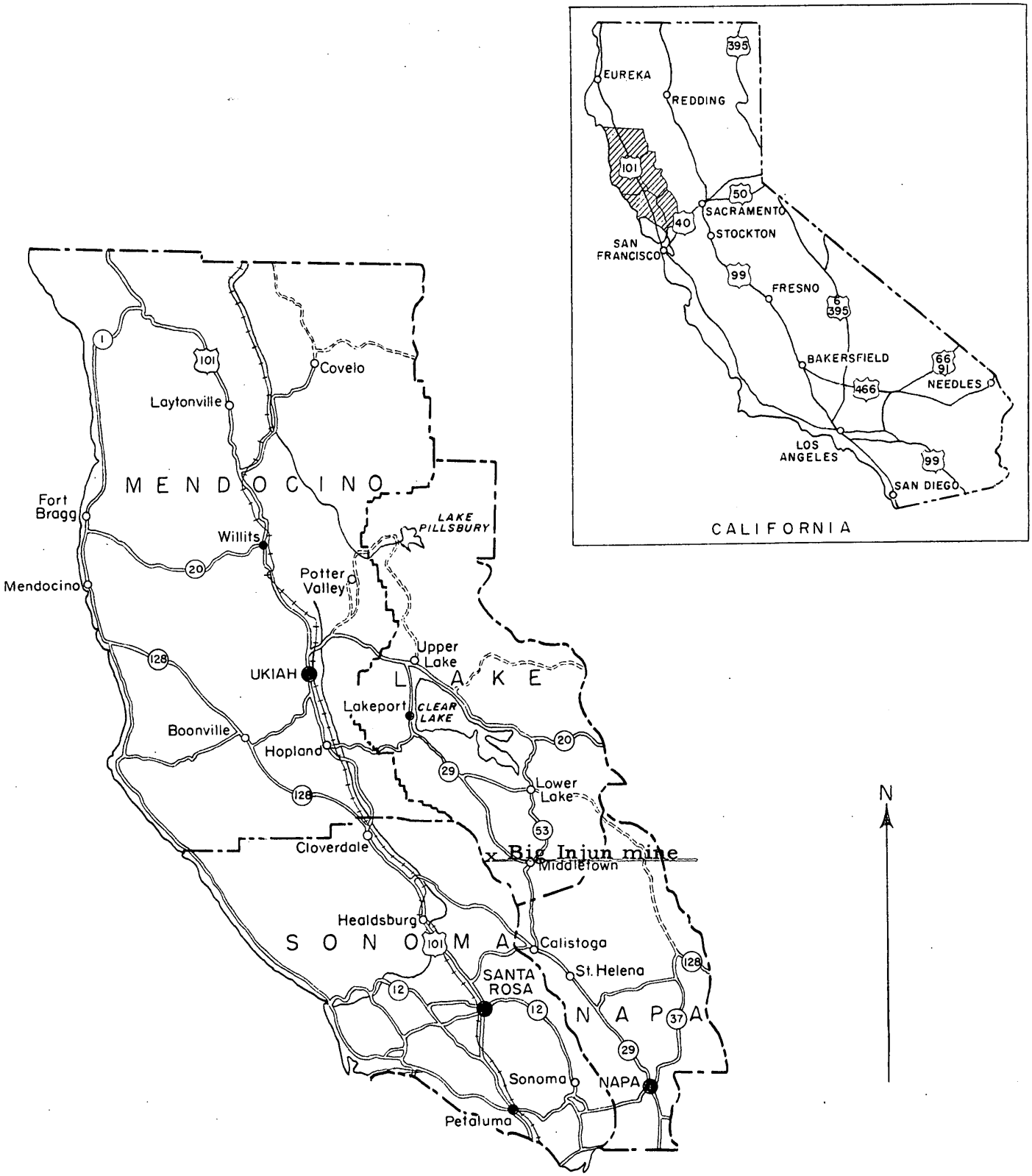
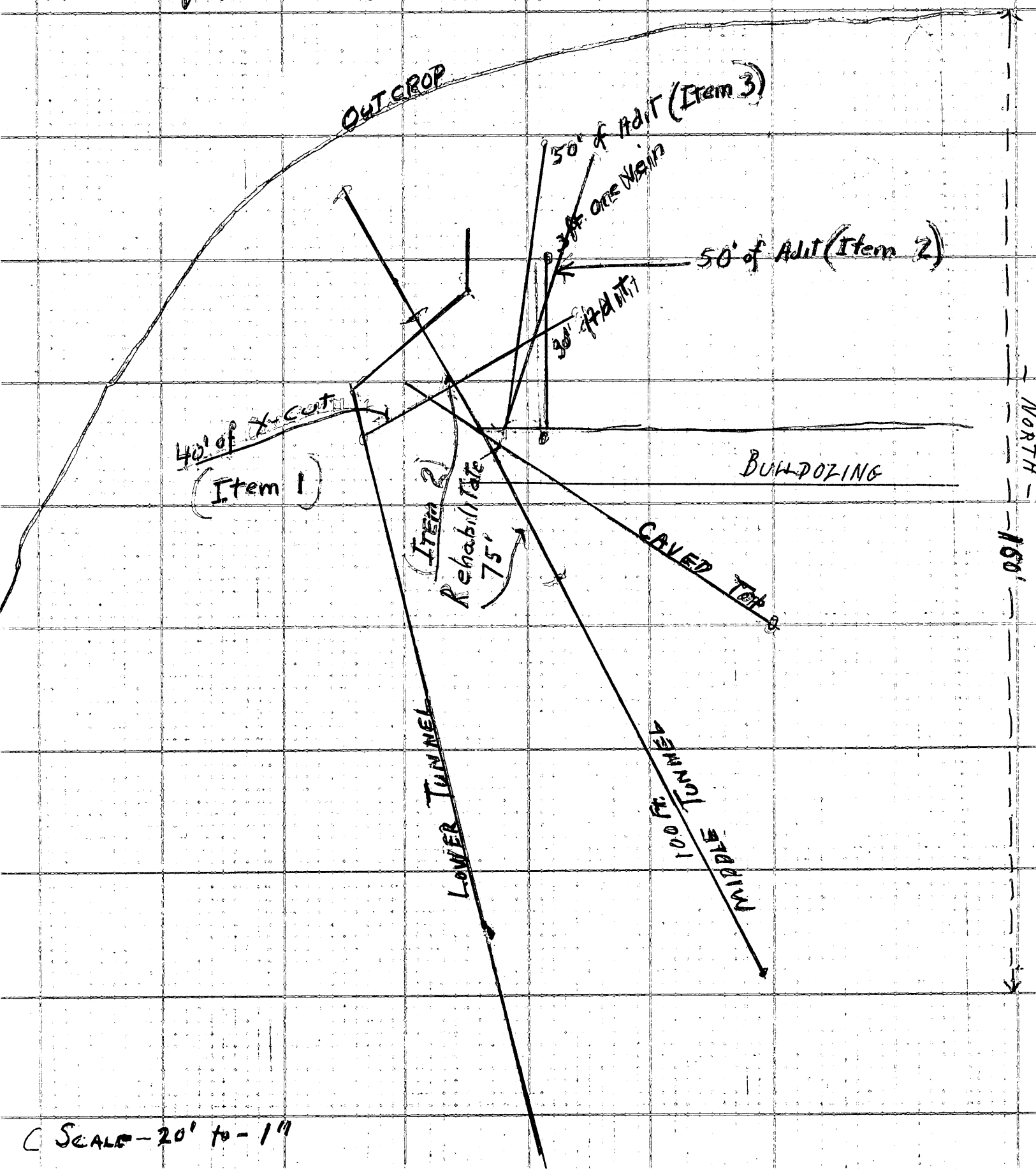


Figure 1. INDEX MAP OF LAKE, MENDOCINO, NAPA, AND SONOMA COUNTIES, CALIFORNIA

0 20 40 60 Miles

EXHIBIT 5 b

NOTE – All old tunnels are to the left of the contact of the silica Carbonate & serpentine where we find the ore to be



SCALE – 20' to – 1"

UNITED STATES DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

DMEA 4523
(MERCURY)

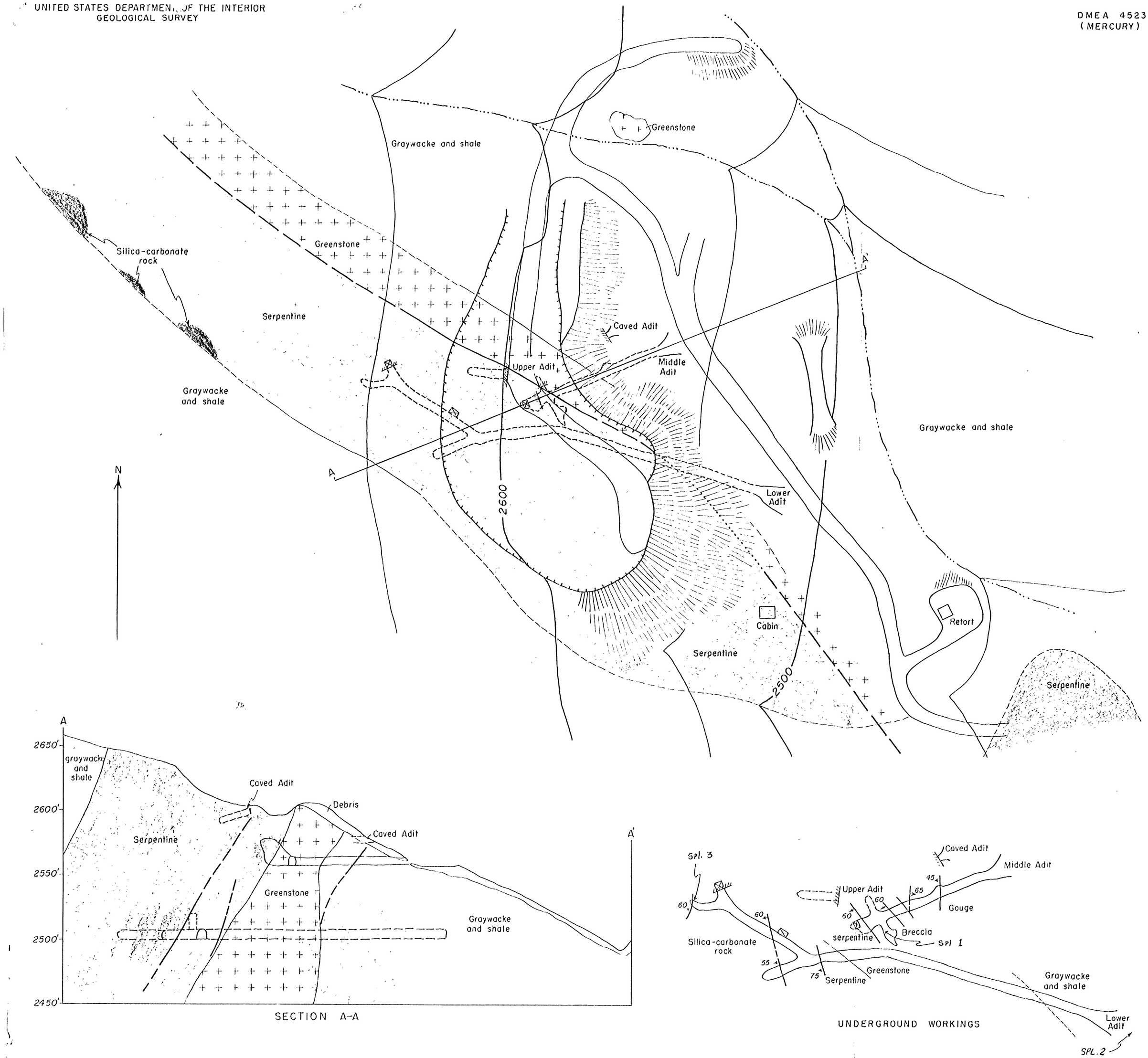


Figure 2. BIG INJUN MINE, LAKE COUNTY, CALIFORNIA