DMA Form 1

DEFENSE MINERALS ADMINISTRATION
Control Slip

CONTROLLED DOCUMENT

DMA Docket No. 2747

DO NOT DETACH THIS SLIP

Action on this document is recorded and controlled in Reports and Records Branch. Any movement of this document between divisions or offices of DMA or movement outside DMA must be reported to the Reports and Records Branch. Actions taken that affect status of the case must also be reported.

This document has been recorded as

EXPLORATION ASSISTANCE

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
COPIES TO USGS & USBM, REG. II

To:	Code 500	Date	10-27-52
To:	Op Com	Date	12/ 8/52
To:	130	Date	3-17-58
To:	110	Date	3-17-58
To:		Date	
To:		Date	
To:		Date	
To:		Date	
To:		Date	
To:		Date	
To:		Date	
To:		Date	
To:		Date	
To:		Date	

DO NOT DETACH

CONTROLLED DOCUMENT

(Copy sent [illegible])

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

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
DEC 15 1952

Spokane, Washington
December 12, 1952

MEMORANDUM

To: Chairman, Operating Committee, DMEA, Washington, D. C.

From: DMEA Field Team, Region II

Subject: Docket No. DMEA ~~2727~~ 2747 (lead-zinc)
Needle Gun Mine, Granite County, Montana
McLure, Maury, and Shone

With reference to our memorandum to you dated November 21, 1952, mentioning a conference held at the Spokane office in discussion of the subject docket, by representatives of the applicant and of the Field Team, we would like to make additional comments arising from this conference.

Mr. McLure, representing the applicant, stated that the examining team in connection with the subject application had not thoroughly covered all of the evidences of structure and mineralization on the Needle Gun claim and had not gone over to the Granite-Bimetallic mine to observe similarity of surficial features there with those on the Needle Gun. Mr. Quinlan, one of the examining team, replied that he had looked at everything shown to him by Mr. McLure during his two examinations and that old trenches and pits had sloughed to the extent that little if any worthwhile geologic evidence was visible.

Mr. Volin offered the suggestion that the Field Team might entertain an application for a DMEA project, including as an initial step the cleaning out of the old trenches and pits to provide additional information in judging the proposal for the adit. This seemed to appeal to Mr. Shone but was rejected by Mr. McLure on the basis that impending weather conditions probably would interfere with such work before it could be completed. In other words, Mr. McLure would settle only for the adit proposal and wanted immediate approval so that work could be continued during the winter.

As noted in the previous memorandum, Volin stated in conclusion that the Field Team could not recommend a DMEA project on the basis of the information available at this time.

By Field Team, Region II

M. E. Volin, Member
U. S. Bureau of Mines

A. E. Weissenborn, Exec. Officer
U. S. Geological Survey

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

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
DEC 1 8 1952

Spokane, Washington
December 12, 1952

MEMORANDUM

To: Chairman, Operating Committee, DMEA, Washington, D. C.

From: DMEA Field Team, Region II

Subject: Docket No. DMEA ~~2721~~ 2747 (lead-zinc)
Needle Gun Mine, Granite County, Montana
McLure, Maury, and Shone

With reference to our memorandum to you dated November 21, 1952, mentioning a conference held at the Spokane office in discussion of the subject docket, by representatives of the applicant and of the Field Team, we would like to make additional comments arising from this conference.

Mr. McLure, representing the applicant, stated that the examining team in connection with the subject application had not thoroughly covered all of the evidences of structure and mineralization on the Needle Gun claim and had not gone over to the Granite-Bimetallic mine to observe similarity of surficial features there with those on the Needle Gun. Mr. Quinlan, one of the examining team, replied that he had looked at everything shown to him by Mr. McLure during his two examinations and that old trenches and pits had sloughed to the extent that little if any worthwhile geologic evidence was visible.

Mr. Volin offered the suggestion that the Field Team might entertain an application for a DMEA project, including as an initial step the cleaning out of the old trenches and pits to provide additional information in judging the proposal for the adit. This seemed to appeal to Mr. Shone but was rejected by Mr. McLure on the basis that impending weather conditions probably would interfere with such work before it could be completed. In other words, Mr. McLure would settle only for the adit proposal and wanted immediate approval so that work could be continued during the winter.

As noted in the previous memorandum, Volin stated in conclusion that the Field Team could not recommend a DMEA project on the basis of the information available at this time.

By Field Team, Region II

M. R. Volin, Member
U. S. Bureau of Mines

A. E. Weissenborn, Exec. Officer
U. S. Geological Survey

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

Spokane, Washington
December 12, 1952

DEC 15 1952

MEMORANDUM

To: Chairman, Operating Committee, DMEA, Washington, D. C.

From: DMEA Field Team, Region II

Subject: Docket No. DMEA ~~2727~~ 2747 (lead-zinc)
Needle Gun Mine, Granite County, Montana
McLure, Maury, and Shone

With reference to our memorandum to you dated November 21, 1952, mentioning a conference held at the Spokane office in discussion of the subject docket, by representatives of the applicant and of the Field Team, we would like to make additional comments arising from this conference.

Mr. McLure, representing the applicant, stated that the examining team in connection with the subject application had not thoroughly covered all of the evidences of structure and mineralization on the Needle Gun claim and had not gone over to the Granite-Bimetallic mine to observe similarity of surficial features there with those on the Needle Gun. Mr. Quinlan, one of the examining team, replied that he had looked at everything shown to him by Mr. McLure during his two examinations and that old trenches and pits had sloughed to the extent that little if any worthwhile geologic evidence was visible.

Mr. Volin offered the suggestion that the Field Team might entertain an application for a DMEA project, including as an initial step the cleaning out of the old trenches and pits to provide additional information in judging the proposal for the adit. This seemed to appeal to Mr. Shone but was rejected by Mr. McLure on the basis that impending weather conditions probably would interfere with such work before it could be completed. In other words, Mr. McLure would settle only for the adit proposal and wanted immediate approval so that work could be continued during the winter.

As noted in the previous memorandum, Volin stated in conclusion that the Field Team could not recommend a DMEA project on the basis of the information available at this time.

By Field Team, Region II

A. E. Volin, Member
U. S. Bureau of Mines

A. E. Weissenborn, Exec. Officer
U. S. Geological Survey

500

FILE COPY
SURNAME:

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

HFKeller
Ellis

DEC 9 1952

Mr. A. E. Weissenborn
Executive Officer, Region II
DMEA Field Team
South 157 Howard Street
Spokane 4, Washington

Re: Docket No. DMEA-2747 (Lead-Zinc)
Needle Gun Mine
Granite County, Montana

Dear Mr. Weissenborn:

Reference is made to your memorandum of November 21 with which was enclosed the memorandum dated October 30, from Messrs. McNabb and Quinlan covering their report on the re-examination of the Needle Gun Mine.

A study of this report not only confirms the decision we made to deny the application, but also makes it appear that the proposed exploration project would have even less chance of being successful than was thought at the time of the denial.

If future development of the property is favorable, the docket can be reopened at the request of the applicant, upon the presentation of evidence to that effect.

Sincerely yours,

Ernest N. Ellis

ACTING Chairman, Operating Committee

J.H. 12-9-52

APPROVED:

Jo. H. Hedges

Member, Bureau of Mines

A. R. Kinkel, Jr.

Member, Geological Survey

HFKeller/hmj (12-5-52)
Copy to: Adm. Reading File
Op. Committee
Docket File Copy
Mr. Keller (2)
Mr. Kinkle
Mr. Bishop

2747

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

Spokane, Washington
November 21, 1952

[illegible]

To: Chairman, DMA Operating Committee, Washington, D. C.

From: DMA Field Team, Region [illegible]

Subject: Docket No. DMA 2747 (lead-zinc)
Needle Gun Mine, Granite County, Montana
Clure, Maury, and Shone

Attached are 4 copies of a joint report by John B. McCabb, Bureau of Mines, and James J. Quinlan, Geological Survey, describing the results of an examination of the subject property.

An application for exploration assistance made last year was denied, and this examination was made at the request of the owners, who claimed that work done during the past year has demonstrated the property to have ore potentialities not apparent before.

Since writing the report, Messrs. McCabb and Quinlan made another examination of the property on November 5, 1952, to observe and map a structure newly found in the face of the adit. The attached geologic map of the Needle Gun adit gives the geologic data resulting from this latest examination and includes the assays of samples Nos. 2 and 3 taken during the examination.

Today, a conference was held at the Spokane office attended by Messrs. Clure, Shone and McCormick, representing the applicants under the subject docket, and Quinlan and Volin, representing the Field Team. Mr. Clure gave his arguments for the application based on the similarity of the surface outcrop to that of the productive granite-cinnabar vein which lies about 3000 feet north of the Needle Gun in the same body of granodiorite. The Field Team representatives pointed out that the structure exposed in two places in the Needle Gun adit and inferred to be continuous on the basis of surface indications farther to the east is much smaller and relatively insignificant as compared with the granite-cinnabar structure described in U. S. Geological Survey Professional Paper No. 78. Volin stated that the Field Team could not recommend a DMA project on the basis of the information available to date.

Returned by
DMA [illegible]

12-3-52

The applicants stated their determination to continue driving the adit on the vein eastward to an intersection with another vein lying just north of the Needle Gun vein. This intersection is expected at about 100 feet from the present face. Volin stated that the Field Team representatives would follow the progress of the adit and note any new indications having a bearing on the application.

While it is true that the examining team has found nothing to indicate any change in the original appraisal of the Needle Gun application, the Field Team suggests that the reopened docket might be held for further consideration in the case of encouraging developments in the adit.

by Field Team, Region II

T. A. Volin, Acting Exec. Officer
U. S. Bureau of Mines
1201 N. Division St.

Fort A. B. Weissenborn
U. S. Geological Survey
157 S. Howard St.

Enclosure

cc: DMA, Wash. (3)

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS ADMINISTRATION
~~1-WASHINGTON25,D.C.~~
Spokane 2, Washington

October 30, 1952

MEMORANDUM

To: DMEA Field Team, Region II

From: John D. Hewlett, Mining Engineer, U. S. Bureau of Mines, and James J. Quinlan, Geologist, U. S. Geological Survey

Subject: Report of Investigation - Needle Gun Mine, Granite County, Montana. Docket No. DMEA 2747 (lead-zinc)

CONCLUSION

The Needle Gun property, owned by William Schara, L. Henry, Sr. and J. Shone was examined on September 2, 1952 in company with William Schara. The examination was made at the request of the owners through N. H. Volin, Member, DMEA Field Team, Region II to see if work completed during the past year enhanced the outlook for discovering commercial ore.

An exploration loan application presented by the owners in 1951 to explore the Needle Gun property (Docket No. DMA-1958), was denied by the Operating Committee because the exploration project, if successful, would develop essentially a silver mine. The present examination found nothing of interest that would tend to alter the original decision of the Operating Committee.

LOCATION

The Needle Gun claim group, consisting of eight patented and two unpatented quartz lode mining claims, are in Sec. [illegible], T. 7 N., R. 13 W., M.P.M., in the Flint Creek Mining district (unsurveyed), Granite County, Montana. (See accompanying claim map). A graded road 4½ miles long connects the claims to the town of Philipsburg, Montana.

HISTORY

The Needle Gun property is 3,000 feet north of the Granite-Bimetallic vein, a famous producer of silver-zinc-copper ores, with a reported production of [illegible],000,000. The Granite-Bimetallic mine

Reviewed by
DMEA OPERATING COMMITTEE

12-3-52
(date)

was primarily a silver producer and has been virtually inactive since the turn of the century. Concurrently with the development of the Granite-Dimetallic vein the Needle Gun claims were explored by numerous old pits, trenches, adits, and shallow shafts, but none are accessible today.

The present owners began exploration work during the last half of 1951. Work has consisted of driving an adit to the east on the Needle Gun claim for a distance of approximately 400 feet. To date, Mr. Moliere reports exploration costs of $20,000 on the property.

GEOLOGY

The Needle Gun group of claims are within and near the west margin of the Philipsburg granodiorite batholith. The position of pits, trenches, and shallow workings on the Gold Coin, Needle Gun, and Leopard claims suggest that these workings explore a vein striking N. 80° E., dipping steeply south. The indicated strike length of this vein structure may be about 3,000 feet.

It is difficult to evaluate the vein structure because of poor surface exposures, age of the pits, and the inaccessibility of the older workings. Occasional pieces of vein quartz with minor specks of pyrite were noted on several dumps. A few specimens of galena-sphalerite ore were observed on the dump of the caved adit near the east end line of the Needle Gun claim.

The vein exposed in the new adit on the Needle Gun claim apparently is the same vein that has been prospected by the pits, trenches, and shallow workings. This vein is best exposed 150 feet from the adit portal. From the portal to this point the vein is obscured by timber and east of this point the adit was turned to prospect the footwall of the vein. Where exposed, the vein consists of a shear zone 1½ feet wide containing some quartz. Sulfide minerals were not evident in the vein structure. Little or no leaching or wall rock alteration was noted. No other vein structures of comparable size are exposed underground or in the short diamond drill holes drilled near the present face of the adit.

CONCLUSION

Work completed at the Needle Gun property during the past year has revealed nothing that would tend to enhance the outlook of discovering commercial ore. Nor has this work revealed any evidence that would change the original appraisal that if the project was successful, it would develop essentially a silver mine.

The vein exposed in the new adit is narrow, barren of sulfide minerals, and/little, if any, evidence of leaching. If exploration is to continue, it should be confined to drifting along

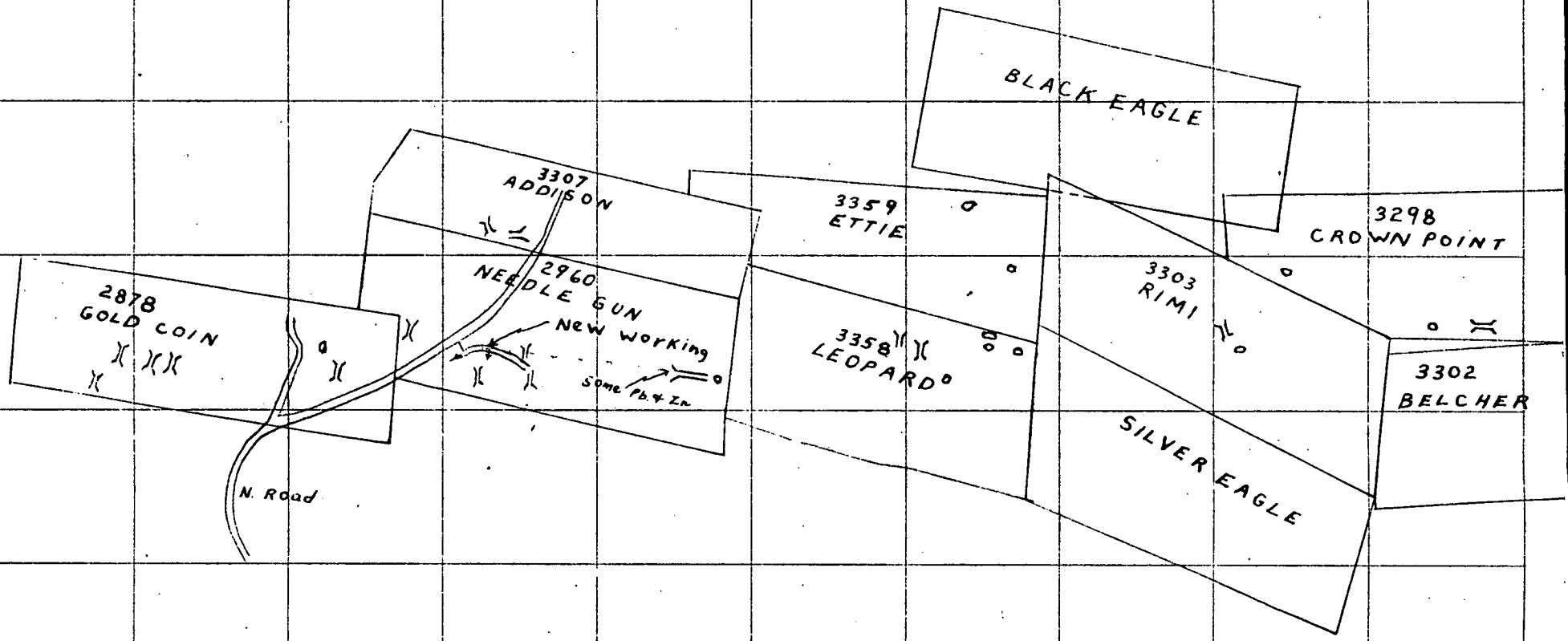
exhibits

the vein, or exploring the vein by diamond drilling. It is conceivable that commercial silver, lead-zinc ore might be discovered by advancing the now working an additional 600 to 700 feet east to a point below the adit having sulfide minerals on the dump. However, any exploration of the property by the Government at this time is not warranted due to the limited information available and the lack of definite surface exposures that might substantiate the presence of commercial ore in the vein.

John S. McCabb, Mining Engineer
U. S. Bureau of Mines

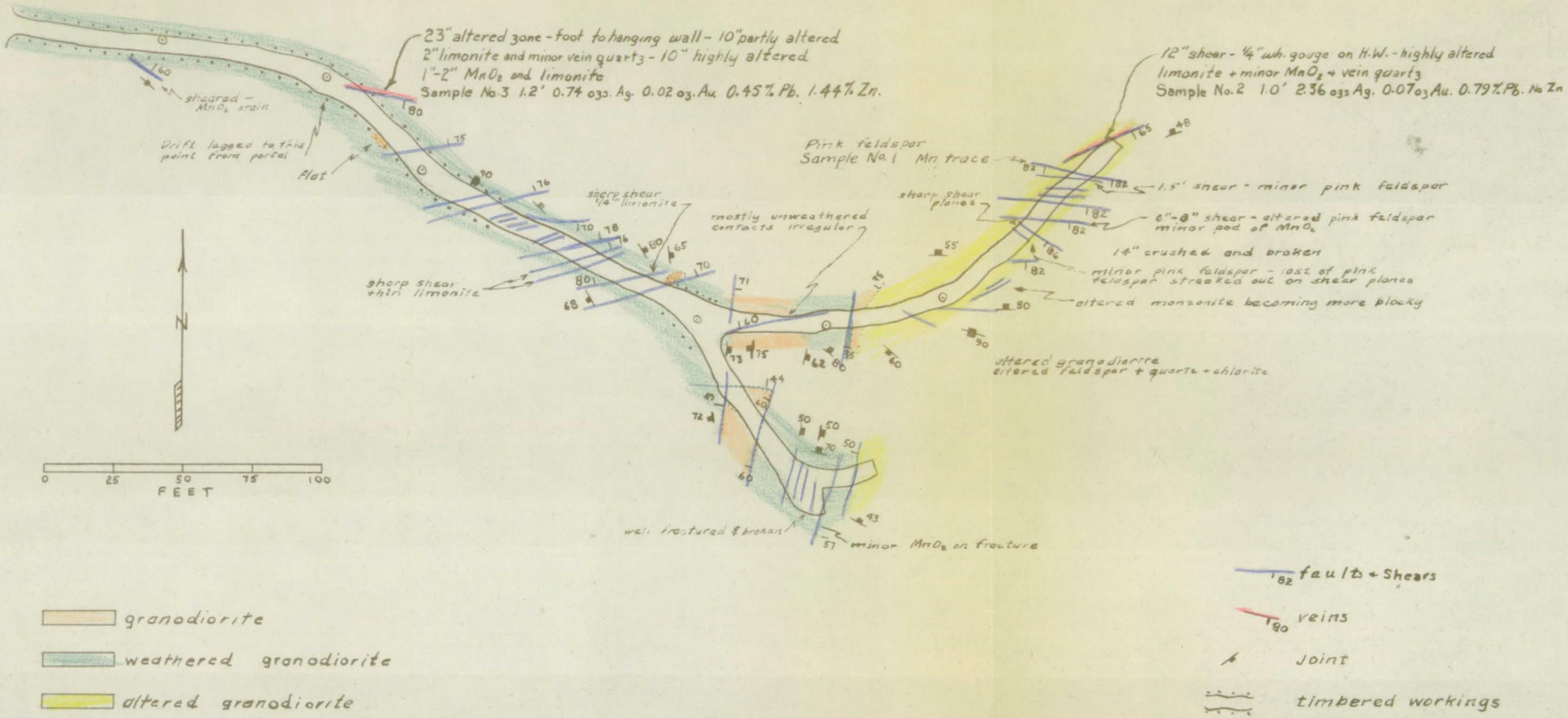
James J. Quinlan, Geologist
U. S. Geological Survey

[illegible] Branch, [illegible]
[illegible]-Branch, [illegible]
[illegible] (2)
[illegible] (2)
Quinlan
McCabb



NEEDLE GUN MINE
TWP 7N RNG. 13W
GRANITE COUNTY
MONTANA
1" = 600 FEET

"ALBANENE" No. 105M K&E CO., N.Y.
REG. U.S. PAT. OFF.



GEOLOGIC MAP NEEDLE GUN ADIT
GRANITE COUNTY, MONTANA

Nov. 1952, J.Q., J. McN

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

Spokane, Washington
November 21, 1952

MEMORANDUM

To: Chairman, DMEA Operating Committee, Washington, D. C.

From: DMEA Field Team, Region II

Subject: Docket No. DMEA 27~~7~~7 (lead-zinc)
Needle Gun Mine, Granite County, Montana
McLure, Maury, and Shone

Attached are 4 copies of a joint report by John S. McNabb, Bureau of Mines, and James J. Quinlan, Geological Survey, describing the results of an examination of the subject property.

An application for exploration assistance made last year was denied, and this examination was made at the request of the owners, who claimed that work done during the past year has demonstrated the property to have ore potentialities not apparent before.

Since writing the report, Messrs. McNabb and Quinlan made another examination of the property on November 5, 1952, to observe and map a structure newly found in the face of the adit. The attached geologic map of the Needle Gun adit gives the geologic data resulting from this latest examination and includes the assays of samples Nos. 2 and 3 taken during the examination.

Today a conference was held at the Spokane office attended by Messrs. McLure, Shone and McDonald, representing the applicants under the subject docket, and Quinlan and Volin, representing the Field Team. Mr. McLure gave his arguments for the application based on the similarity of the surface outcrop to that of the productive Granite-Bimetallic vein which lies about 3000 feet north of the Needle Gun in the same body of granodiorite. The Field Team representatives pointed out that the structure exposed in two places in the Needle Gun adit and inferred to be continuous on the basis of surface indications farther to the east is much smaller and relatively insignificant as compared with the Granite-Bimetallic structure described in U. S. Geological Survey Professional Paper No. 78. Volin stated that the Field Team could not recommend a DMEA project on the basis of the information available to date.

The applicants stated their determination to continue driving the adit on the vein eastward to an intersection with another vein lying just north of the Needle Gun vein. This intersection is expected at about 100 feet from the present face. Volin stated that the Field Team representatives would follow the progress of the adit and note any new indications having a bearing on the application.

While it is true that the examining team has found nothing to indicate any change in the original appraisal of the Needle Gun application, the Field Team suggests that the reopened docket might be held for further consideration in the case of encouraging developments in the adit.

By Field Team, Region II

M. E. Volin, Acting Exec. Officer
U. S. Bureau of Mines
1201 N. Division St.

For: A. E. Weissenborn
U. S. Geological Survey
157 S. Howard St.

Enclosure

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION
~~WASHINGTON 25, D. C.~~
1201 N. Division St.
Spokane 2, Washington

October 30, 1952

MEMORANDUM

To: DMEA Field Team, Region II

From: John S. McNabb, Mining Engineer, U. S. Bureau of Mines, and James J. Quinlan, Geologist, U. S. Geological Survey

Subject: Report of Investigation - Needle Gun Mine, Granite County, Montana, Docket No. DMEA 2747 (lead-zinc)

INTRODUCTION

The Needle Gun property, owned by William McLure, L. Maury, and A. G. Shone was examined on September 8, 1952 in company with William McLure. The examination was made at the request of the owners through M. E. Volin, Member, DMEA Field Team, Region II to see if work completed during the past year enhanced the outlook for discovering commercial ore.

An exploration loan application presented by the owners in 1951 to explore the Needle Gun property (Docket No. DMA-1958), was denied by the Operating Committee because the exploration project, if successful, would develop essentially a silver mine. The present examination found nothing of interest that would tend to alter the original decision of the Operating Committee.

LOCATION

The Needle Gun claim group, consisting of eight patented and two unpatented quartz lode mining claims, are in Sec. 28 and 29, T. 7 N., R. 13 W., M.P.M., in the Flint Creek Mining district (unsurveyed), Granite County, Montana. (See accompanying claim map). A graded road 4½ miles long connects the claims to the town of Philipsburg, Montana.

HISTORY

The Needle Gun property is 3,000 feet north of the Granite-Bimetallic vein, a famous producer of silver-zinc-copper ores, with a reported production of $32,000,000. The Granite-Bimetallic mine

was primarily a silver producer and has been virtually inactive since the turn of the century. Concurrently with the development of the Granite-Bimetallic vein the Needle Gun claims were explored by numerous old pits, trenches, adits, and shallow shafts, but none are accessible today.

The present owners began exploration work during the last half of 1951. Work has consisted of driving an adit to the east on the Needle Gun claim for a distance of approximately 400 feet. To date, Mr. McLure reports exploration costs of $20,000 on the property.

GEOLOGY

The Needle Gun group of claims are within and near the west margin of the Philipsburg granodiorite batholith. The positions of pits, trenches, and shallow workings on the Gold Coin, Needle Gun, and Leopard claims suggest that these workings explore a vein striking S. 80° E., dipping steeply south. The indicated strike length of this vein structure may be about 3,000 feet.

It is difficult to evaluate the vein structure because of poor surface exposures, age of the pits, and the inaccessibility of the older workings. Occasional pieces of vein quartz with minor specks of pyrite were noted on several dumps. A few specimens of galena-sphalerite ore were observed on the dump of the caved adit near the east end line of the Needle Gun claim.

The vein exposed in the new adit on the Needle Gun claim apparently is the same vein that has been prospected by the pits, trenches, and shallow workings. This vein is best exposed 130 feet from the adit portal. From the portal to this point the vein is obscured by timber, and east of this point the adit was turned to prospect the footwall of the vein. Where exposed, the vein consists of a shear zone 1½ feet wide containing some quartz. Sulfide minerals were not evident in the vein structure. Little or no leaching or wall rock alteration was noted. No other vein structures of consequence are exposed underground or in the short diamond drill holes drilled near the present face of the adit.

CONCLUSIONS

Work completed at the Needle Gun property during the past year has revealed nothing that would tend to enhance the outlook of discovering commercial ore. Nor has this work revealed any evidence that would change the original appraisal that if the project was successful, it would develop essentially a silver mine.

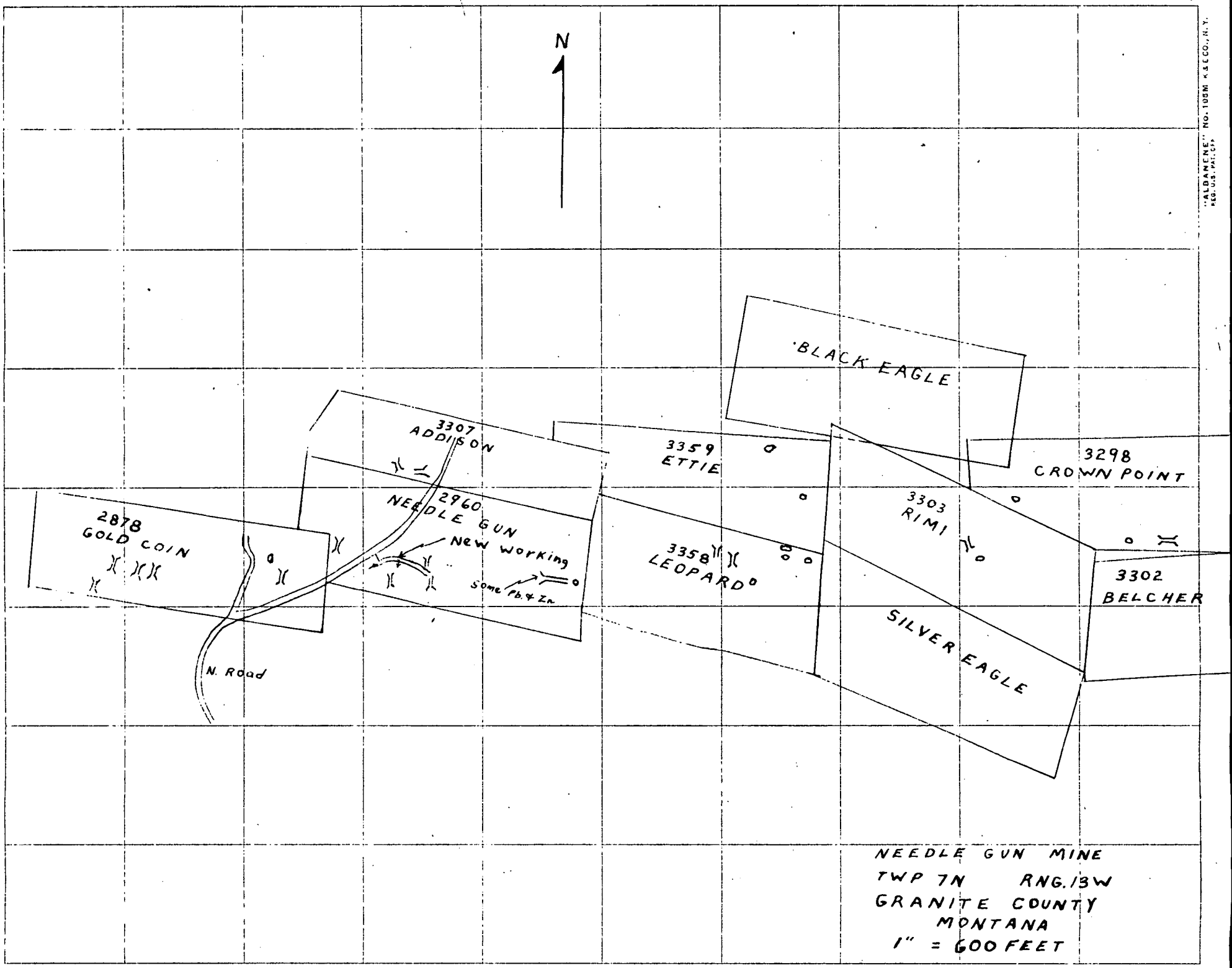
The vein exposed in the new adit is narrow, barren of sulfide minerals, and exhibits little, if any, evidence of leaching. If exploration is to continue, it should be confined to drifting along

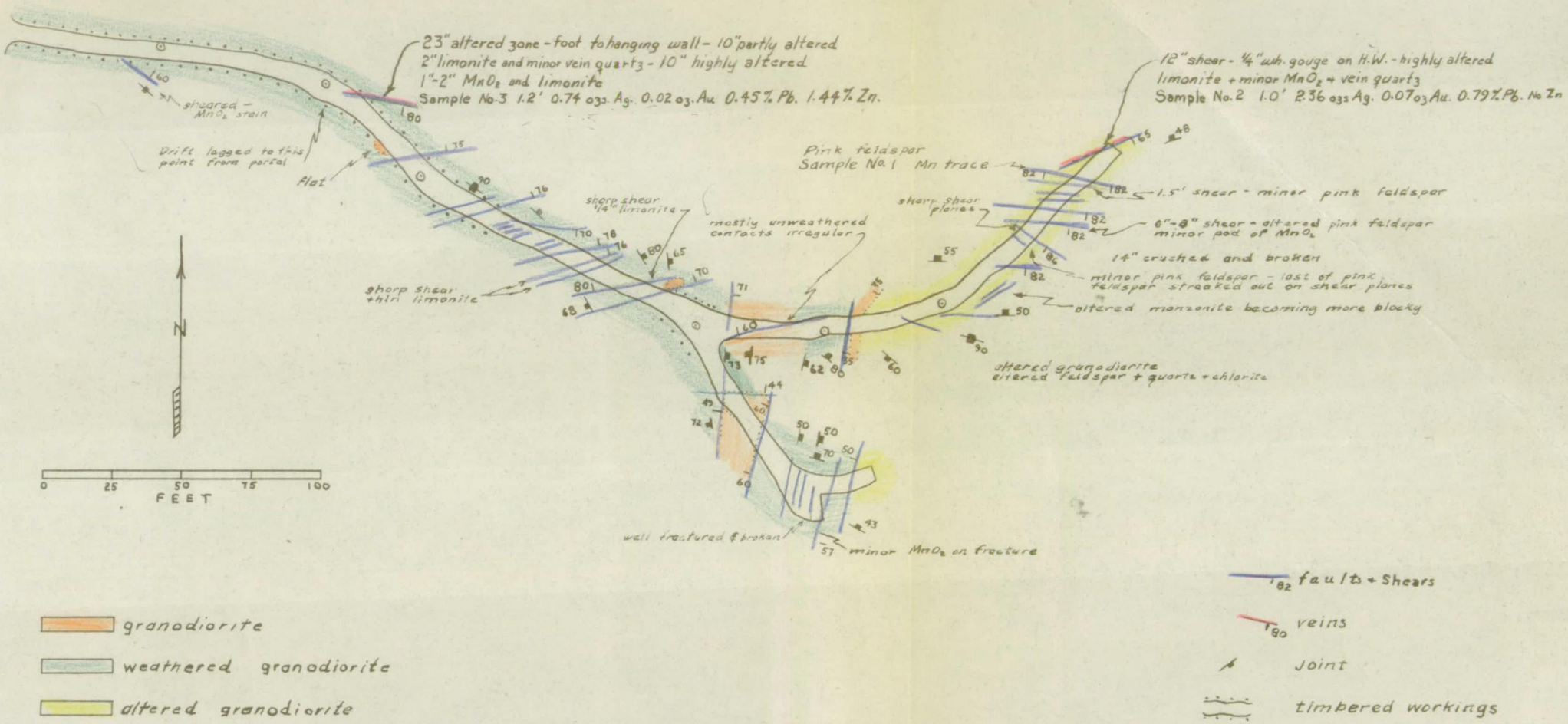
the vein, or exploring the vein by diamond drilling. It is conceivable that commercial silver, lead-zinc ore might be discovered by advancing the new working an additional 600 to 700 feet east to a point below the adit having sulfide minerals on the dump. However, any exploration of the property by the Government at this time is not warranted due to the limited information available and the lack of definite surface exposures that might substantiate the premise of commercial ore in the vein.

John S. McNabb, Mining Engineer
U. S. Bureau of Mines

James J. Quinlan, Geologist
U. S. Geological Survey

CC: 3-Wash. USGS
2-Wash. USBM
2- USGS (SRO)
M/D (Spo)
Quinlan
JSMcNabb


N
BLACK EAGLE
3307
ADDISON
3359
ETTIE
3298
CROWN POINT
2960
NEEDLE GUN
New working
Some Pb. & Zn.
2878
GOLD COIN
3358
LEOPARD
3303
RIMI
3302
BELCHER
SILVER EAGLE
N. Road
NEEDLE GUN MINE
TWP 7N RNG. 13W
GRANITE COUNTY
MONTANA
1" = 600 FEET



GEOLOGIC MAP NEEDLE GUN ADIT
GRANITE COUNTY, MONTANA

Nov. 1952, J.Q., J.McN

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION
~~WASHINGTON 25, D. C.~~
So. 157 Howard Street
Spokane 4, Washington

Aos

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
NOV 21 1952

November 19, 1952

Mr. F. E. Johnson, Chairman
Operating Committee, DMEA
Department of the Interior
Washington 25, D. C.

Re: Docket No. DMEA 2747 (Lead-zinc)
Needle Gun prospect
Granite County, Montana

Dear Mr. Johnson:

In accordance with telephoned instructions from A. E. Weissenborn from Washington D.C., we are enclosing four copies of a geologic map of the Needle Gun adit. This is for your immediate observation. The map is a rough draft and will be redrafted when submitted with an accompanying report.

Messrs. A. G. Shone and W. McLure, applicants, are to meet with Field Team representative in Spokane on November 21, 1952, to discuss the subject application. The field report by McNabb and Quinlan will be forwarded to your office on November 21, immediately following this discussion.

Sincerely

Thor H. Kiilsgaard

Thor H. Kiilsgaard
For: M. E. Volin
Acting Executive Officer, DMEA
Field Team, Region II

Enclosures

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

xxxxxxxxxxxxxxxxxx
So. 157 Howard Street
Spokane 4, Washington

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
NOV 21 1952

November 19, 1952

Mr. F. E. Johnson, Chairman
Operating Committee, DMEA
Department of the Interior
Washington 25, D. C.

Re: Docket No. DMEA 2747 (Lead-zinc)
Needle Gun prospect
Granite County, Montana

Dear Mr. Johnson:

In accordance with telephoned instructions from A. E. Weissenborn from Washington D.C., we are enclosing four copies of a geologic map of the Needle Gun adit. This is for your immediate observation. The map is a rough draft and will be redrafted when submitted with an accompanying report.

Messrs. A. G. Shone and W. McLure, applicants, are to meet with Field Team representative in Spokane on November 21, 1952, to discuss the subject application. The field report by McNabb and Quinlan will be forwarded to your office on November 21, immediately following this discussion.

Sincerely

Thor H. Kiilsgaard
For: M. E. Volin
Acting Executive Officer, DMEA
Field Team, Region II.

Enclosures

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS ADMINISTRATION
WASHINGTON 25, D. C.
xxxxxxxxxxxxxxxxxx
So. 157 Howard Street
Spokane 4, Washington

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
NOV 21 1952

November 19, 1952

Mr. F. E. Johnson, Chairman
Operating Committee, DMEA
Department of the Interior
Washington 25, D. C.

Re: Docket No. DMEA 2747 (Lead-zinc)
Needle Gun prospect
Granite County, Montana

Dear Mr. Johnson:

In accordance with telephoned instructions from A. E. Weissenborn from Washington D.C., we are enclosing four copies of a geologic map of the Needle Gun adit. This is for your immediate observation. The map is a rough draft and will be redrafted when submitted with an accompanying report.

Messrs. A. G. Shone and W. McLure, applicants, are to meet with Field Team representative in Spokane on November 21, 1952, to discuss the subject application. The field report by McNabb and Quinlan will be forwarded to your office on November 21, immediately following this discussion.

Sincerely

Thor H. Kiilsgaard
For: M. E. Volin
Acting Executive Officer, DMEA
Field Team, Region II

Enclosures

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS ADMINISTRATION
WASHINGTON 25, D. C.
xxxxxxxxxxxxxxxxxx
So. 157 Howard Street
Spokane 4, Washington

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
NOV 21 1952

November 19, 1952

Mr. F. E. Johnson, Chairman
Operating Committee, DMEA
Department of the Interior
Washington 25, D. C.

Re: Docket No. DMEA 2747 (Lead-zinc)
Needle Gun prospect
Granite County, Montana

Dear Mr. Johnson:

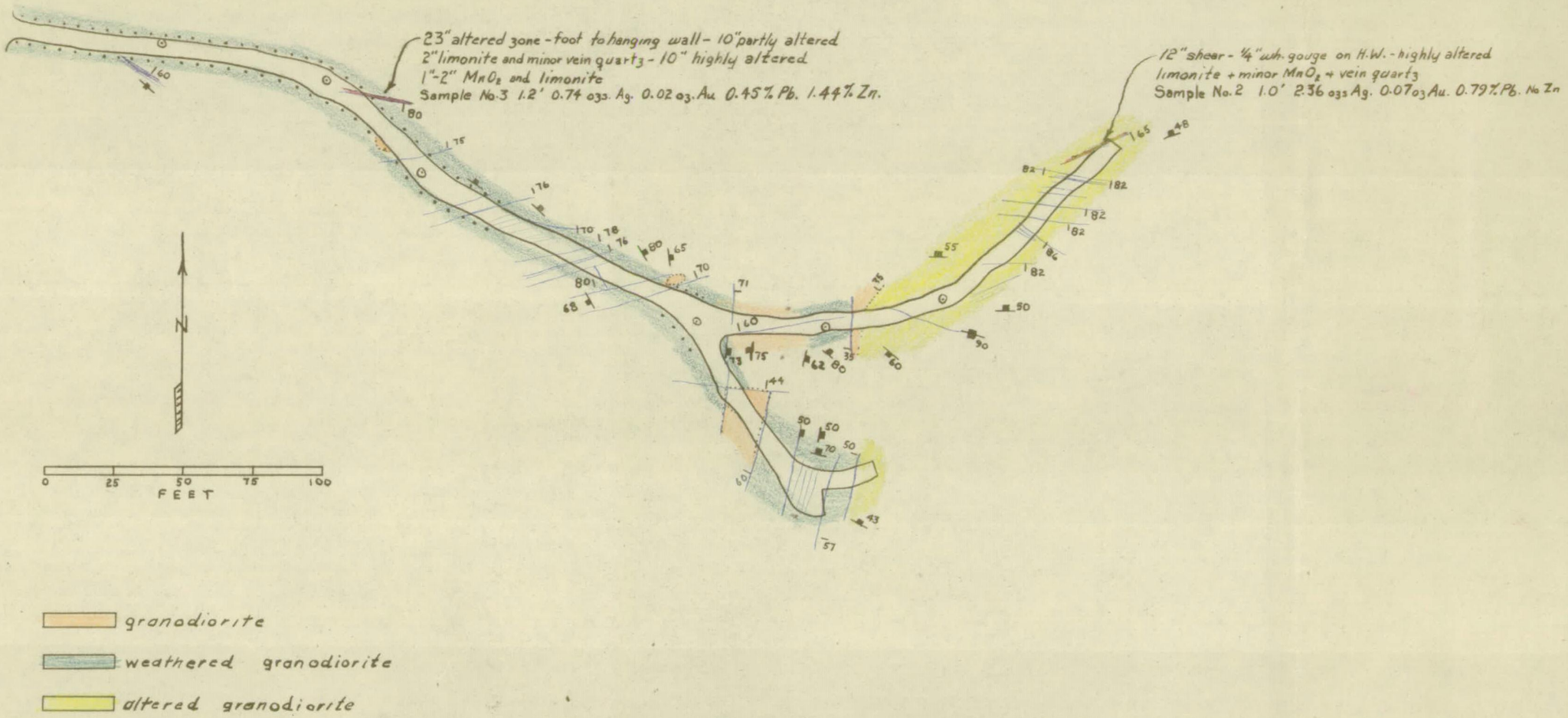
In accordance with telephoned instructions from A. E. Weissenborn from Washington D.C., we are enclosing four copies of a geologic map of the Needle Gun adit. This is for your immediate observation. The map is a rough draft and will be redrafted when submitted with an accompanying report.

Messrs. A. G. Shone and W. McLure, applicants, are to meet with Field Team representative in Spokane on November 21, 1952, to discuss the subject application. The field report by McNabb and Quinlan will be forwarded to your office on November 21, immediately following this discussion.

Sincerely

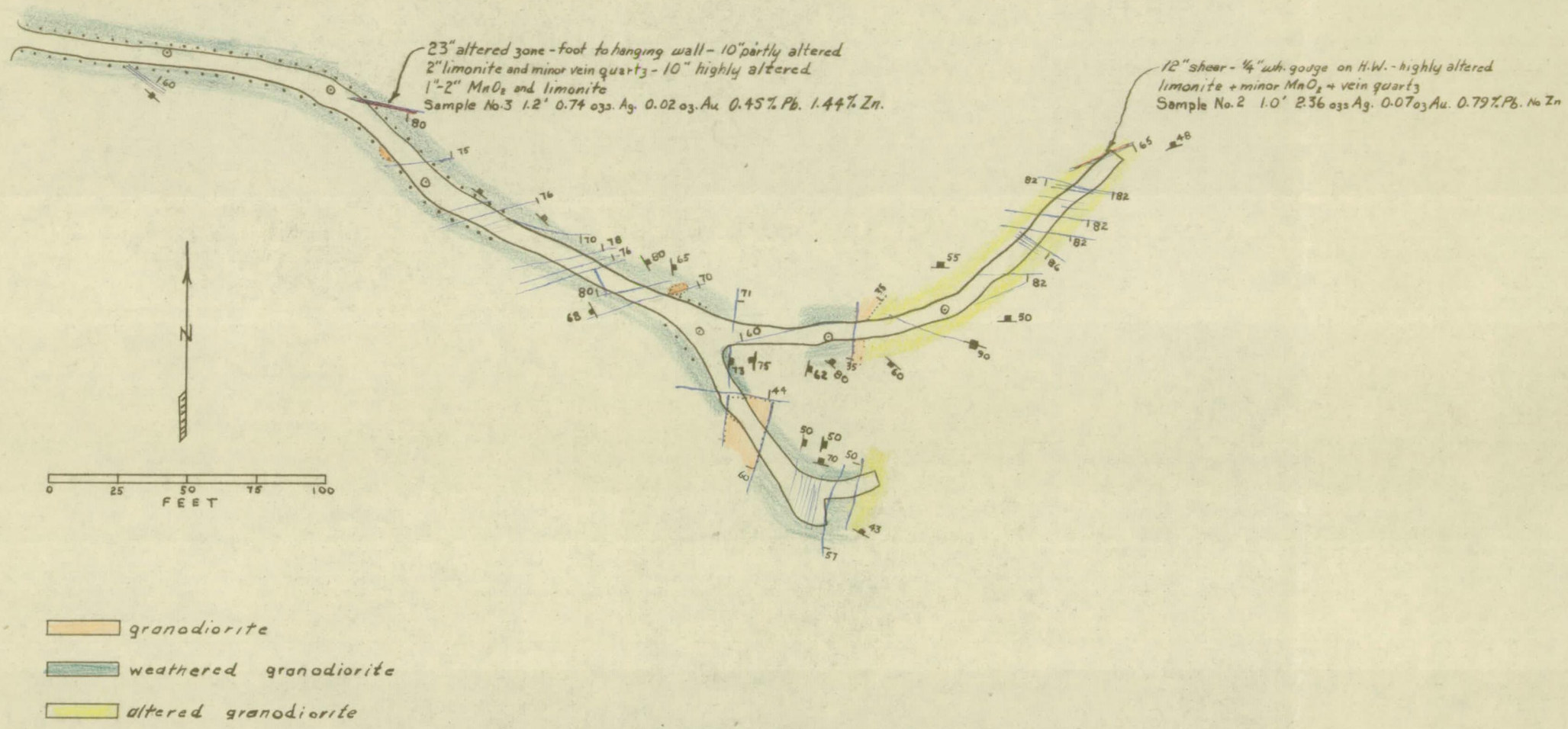
Thor H. Kiilsgaard
For: M. E. Volin
Acting Executive Officer, DMEA
Field Team, Region II

Enclosures



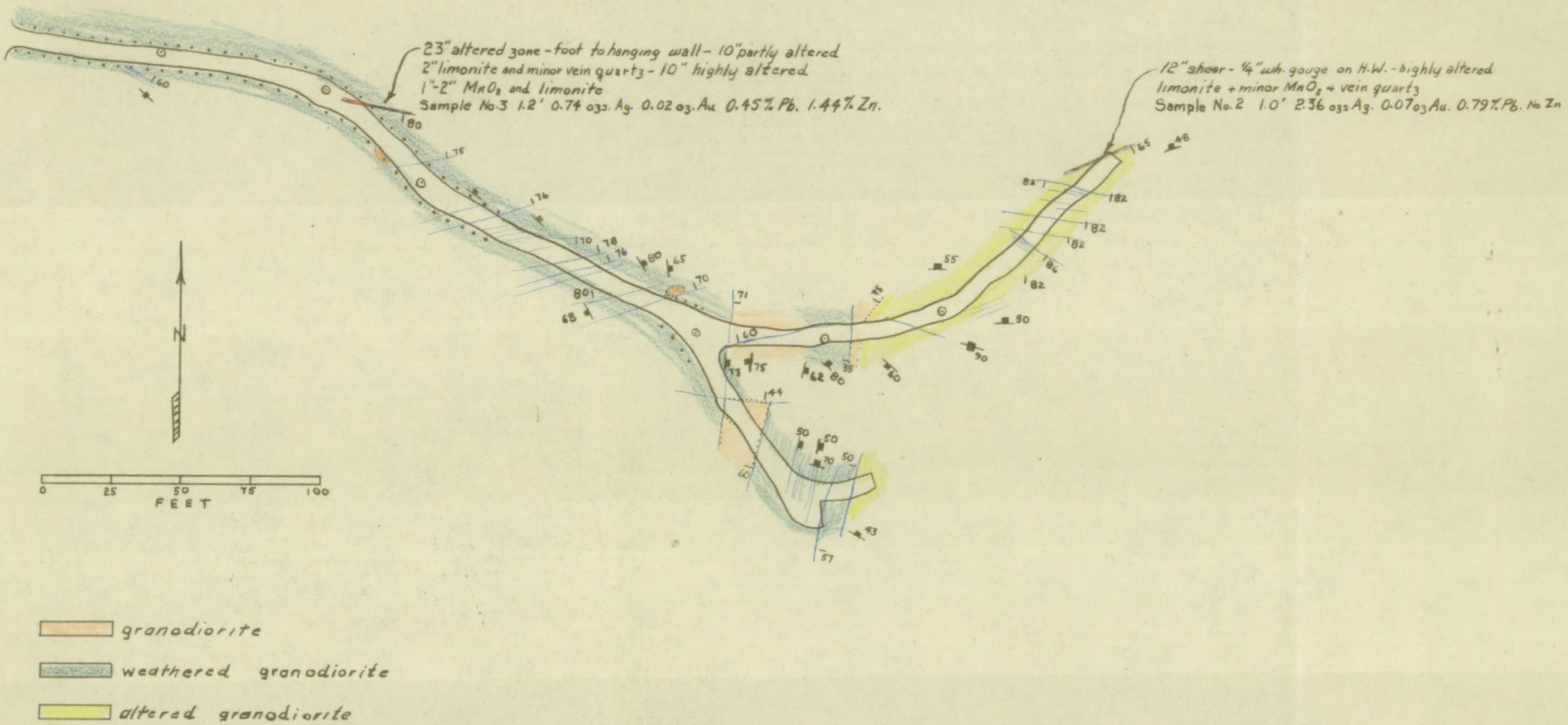
GEOLOGIC MAP NEEDLE GUN ADIT
GRANITE COUNTY, MONTANA

Nov. 1952, J.Q., J. McN



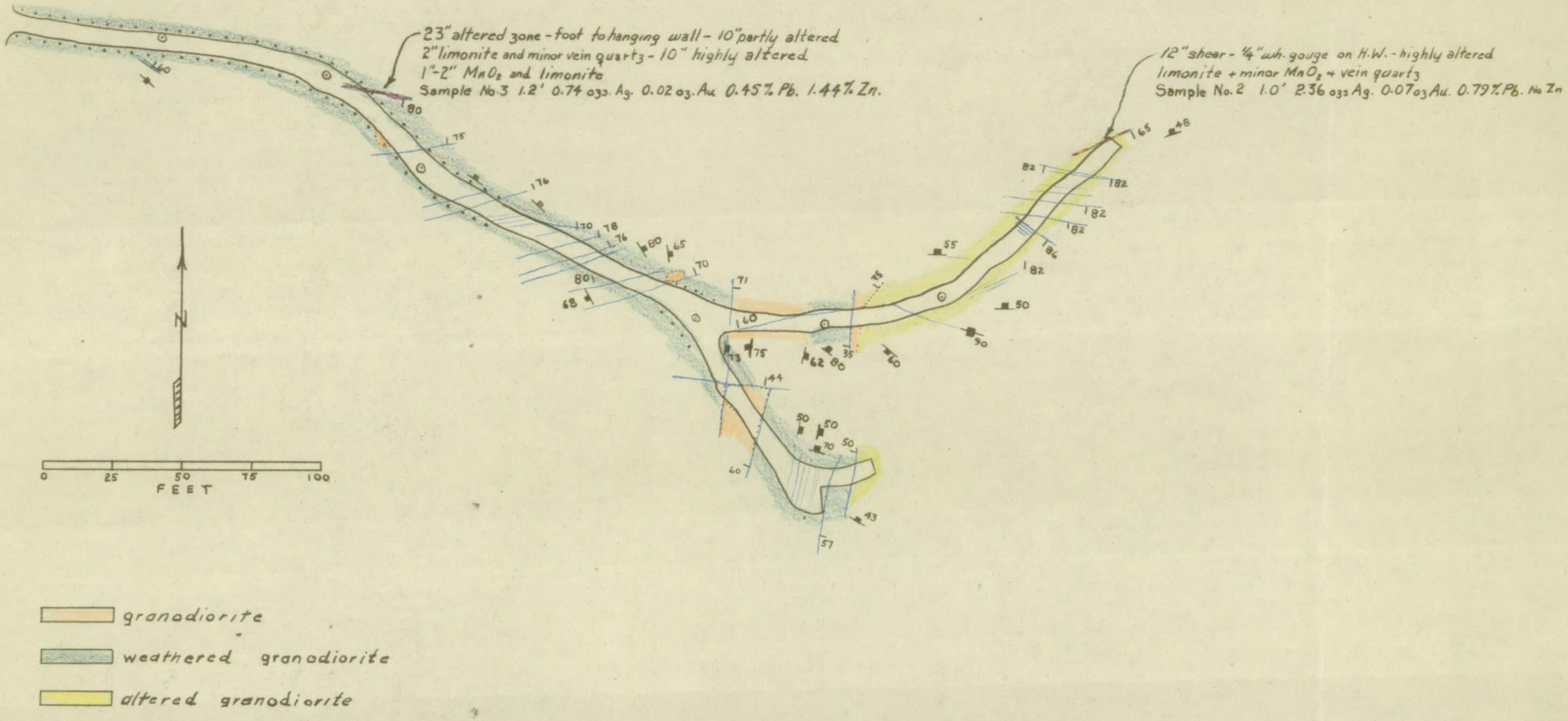
GEOLOGIC MAP NEEDLE GUN ADIT
GRANITE COUNTY, MONTANA

Nov. 1952, J.Q., J. McN



GEOLOGIC MAP NEEDLE GUN ADIT
GRANITE COUNTY, MONTANA

Nov. 1952, J.Q., J. McN



GEOLOGIC MAP NEEDLE GUN ADIT
GRANITE COUNTY, MONTANA

Nov. 1952, J.Q., J. McN

FILE COPY
SURNAME:

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION 500
WASHINGTON 25, D. C.

Orig
MMiller
Lynch
Hedges
Fitzsimon

NOV 10 1952

Mr. Jesse L. Maury
211 Prospect Street
Chevy Chase 15, Maryland

Re: Docket No. DMEA-2747 (Lead-Zinc)
Needlegun Mine
Philipsburg, Montana

Dear Mr. Maury:

Reference is made to your application, Docket No. DMEA-2747, for Government assistance in the exploration of your property.

A study of the information furnished in your application, the reports of the field engineers, who examined your property on August 12 and 13, 1951, accompanied by Wm. R. McIure, and other available data, indicates that the property is not potentially productive of lead and zinc in the amounts that would warrant the expenditure of public funds. We regret to advise you, therefore, that your application is denied.

Your interest in the defense program is appreciated, and we wish to thank you for bringing your property to the attention of the Government.

Sincerely yours,

C. O. Mittendorf (for)

Administrator

11-10-52

FXCorbett/bw
(written 11/4/52)
Copy to:
Docket
Ad. R. File
Op. Comm.
H. F. Keller (2)
F. X. Corbett
Mr. Bishop
Mr. McKnight
Reg. II (2)
Chron.

FILE COPY
SURNAME:

Corbett

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

500

Memorandum

To: Administrator

From: Chief, Base Metals Division

Subject: Denial, Docket No. DMEA-2747, (Previous Number Docket No. DMA-1958) Needlegun Mine, Philipsburg, Montana (Lead-Zinc)

This is the second time this property has been denied an exploration loan.

On September 14, 1951, Mr. U. R. McClure of Philipsburg was informed of the denial of Docket No. DMA-1958 by Mr. Tom Lyon. Considerable correspondence, including letters to and from Senator Murray, resulted from this.

On October 27, 1952, an application was received in this office, which was submitted by Mr. Jesse L. Maury, acting as agent and attorney in fact for the Needlegun Mine.

Apparently no work has been done at the property in the interval between applications that would reveal more significant mineralization.

Quoting from the application, "this prospect depends for its validity upon the general geology of the granite mining area and its geological similarity to the Granite-Bimetallic Mine." In the appendix of the application, USGS Professional Paper #78 has been quoted by lifting sentences and paragraphs out of the text in an attempt to describe the mineralization.

These factors were considered in evaluating the first application and have been reconsidered in regard to the second application.

This office is in agreement with the members of the USBM & USGS that the application should be denied.

(written 11/4/52)
FXCorbett/bw

H. F. Keller, Chief,
Base Metals Division

Copy to:
Docket
Adm R.File
Op. Comm
H.F.Keller(2)
F.X.Corbett
Mr. Bishop
Mr. McKnight
Reg. II (2)
Chron.

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

DMEA
Wesson

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION 500
WASHINGTON 25, D. C.

Memorandum

To: Administrator

From: Chief, Base Metals Division

Subject: Denial, Docket No. DMEA-2747, (Previous Number Docket No. DMA-1958) Needlegun Mine, Philipsburg, Montana (Lead-Zinc)

This is the second time this property has been denied an exploration loan.

On September 14, 1951, Mr. W. R. McClure of Philipsburg was informed of the denial of Docket No. DMA-1958 by Mr. Tom Lyon. Considerable correspondence, including letters to and from Senator Murray, resulted from this.

On October 27, 1952, an application was received in this office, which was submitted by Mr. Jesse L. Maury, acting as agent and attorney in fact for the Needlegun Mine.

Apparently no work has been done at the property in the interval between applications that would reveal more significant mineralization.

Quoting from the application, "this prospect depends for its validity upon the general geology of the granite mining area and its geological similarity to the Granite-Bimetallic Mine." In the appendix of the application, USGS Professional Paper #78 has been quoted by lifting sentences and paragraphs out of the text in an attempt to describe the mineralization.

These factors were considered in evaluating the first application and have been reconsidered in regard to the second application.

This office is in agreement with the members of the USBM & USGS that the application should be denied.

H. F. Keller, Chief,
Base Metals Division

IN REPLY REFER TO:

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

October 31, 1952

Memorandum

Re: DMEA-2747
Needlegum Mine
Phillipsburg, Montana
$30,000
Lead-zinc

To: Mr. H. F. Keller

From: E. T. McKnight

Subject: Recommended denial of project

Request for an exploration loan of $39,650 (DMA-1958) on this property was denied under date of September 14, 1951. A memorandum of the same date from T. P. Billings, Chief of Lead-Zinc Branch, DMA, to the Reports and Records Unit, outlined reasons for the denial. That memorandum indicated that the proposition had some merit as a silver prospect, but not for lead or zinc.

The present application quotes in a biased way - by omitting unfavorable sentences and phrases - information given in U. S. Geological Survey Professional Paper 78 which was available at the time previous consideration was given to this property. Much of the new observation on outcrops presented by applicant confirms the original conclusion that this is not a lead-zinc proposition. The hope for a discovery on the Needlegum property is based upon analogy with the Granite Bimetallic vein. The only new seemingly favorable information of any pertinence is an indirectly quoted statement attributed to the present owner of the Granite-Bimetallic mine to the effect "that the records show that for many years the millheads of this (Granite-Bimetallic) mine contained 7 per cent zinc and 1½ per cent lead." This authority has "also described substantial present reserves on the 600 level (of the Granite Bimetallic mine) which run 14 per cent zinc and 9 per cent lead." There are no details given to substantiate these statements on which doubt can be cast by the recorded history of the Granite-Bimetallic vein, as sent forth in the previous memorandum of September 14, 1951. To justify an exploration loan on the Needlegum under the Defense Production Act of 1950 would require a convincing demonstration that the Granite Bimetallic vein which occurs in granite was actually a lead-zinc vein that could have been worked as such under present day technology. This has not been done. The small yield of lead has been described as a by-product of silver-gold production.

I therefore recommend that this application be again denied.

Edwin T. McKnight
Edwin T. McKnight
Geologist

OK'd by Mr. Bishop

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

October 31, 1952

Memorandum

Re: DMRA-2747
Needlegun Mine
Phillipsburg, Montana
$30,000
Lead-zinc

To: Mr. H. F. Keller

From: E. T. McKnight

Subject: Recommended denial of project

Request for an exploration loan of $39,650 (DMA-1958) on this property was denied under date of September 14, 1951. A memorandum of the same date from T. P. Billings, Chief of Lead-Zinc Branch, DMA, to the Reports and Records Unit, outlined reasons for the denial. That memorandum indicated that the proposition had some merit as a silver prospect, but not for lead or zinc.

The present application quotes in a biased way - by omitting unfavorable sentences and phrases - information given in U. S. Geological Survey Professional Paper 78 which was available at the time previous consideration was given to this property. Much of the new observation on outcrops presented by applicant confirms the original conclusion that this is not a lead-zinc proposition. The hope for a discovery on the Needlegum property is based upon analogy with the Granite Bimetallic vein. The only new seemingly favorable information of any pertinence is an indirectly quoted statement attributed to the present owner of the Granite-Bimetallic mine to the effect "that the records show that for many years the millheads of this (Granite-Bimetallic) mine contained 7 per cent zinc and 1½ per cent lead." This authority has "also described substantial present reserves on the 600 level (of the Granite Bimetallic mine) which run 14 per cent zinc and 9 per cent lead." There are no details given to substantiate these statements on which doubt can be cast by the recorded history of the Granite-Bimetallic vein, as sent forth in the previous memorandum of September 14, 1951. To justify an exploration loan on the Needlegun under the Defense Production Act of 1950 would require a convincing demonstration that the Granite Bimetallic vein which occurs in granite was actually a lead-zinc vein that could have been worked as such under present day technology. This has not been done. The small yield of lead has been described as a by-product of silver-gold production.

I therefore recommend that this application be again denied.

Edwin T. McKnight
Geologist

Dmea-2747

JESSE L. MAURY
MINING ENGINEER
ACCOUNTANT

211 PROSPECT STREET
CHEVY CHASE 15, MARYLAND

TELEPHONE
WISCONSIN 6318

October 27, 1952

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
OCT 27 1952

Defense Minerals Exploration Administration
Department of the Interior
Washington 25, DC

Gentlemen:

As agent for the Needlegun Mine, I submit herewith our application for a loan of $15,000 to be used in a $30,000 exploration for ores of lead and zinc.

One copy of my appointment as agent and attorney in fact accompanies the original of this apllication.

You will note that in the course of my examination of this property, I took certain samples, but did not have them assayed, since they are merely indicative of mineralogy and geology. When you are ready to examine these, I will be glad to bring them in.

I can be reached at the above telephone, or at Appleton 5800.

Respectfully yours,

Jesse L. Maury

MF-103
(Revised April 1952)

UNITED STATES DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION

DEPARTMENT OF THE INTERIOR
RECEIVED
OCT 27 1952

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

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

Not to be filled in by applicant

Docket No. Dmea-2747
Metal or Mineral
Date Received 10-27-52
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: NEEDLEGUN MINE, LOWNDES MAURY, Trustee, Hirbour Building, Butte, Montana.
MAILING ADDRESS: NEEDLEGUN MINE, Care Jesse L. Maury
211 Prospect Street, Chevy Chase 15, Maryland

(*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
Needle Gun Claim, Sur. No. 2960, Sec. 28, T. 7 N., R. 13 W.
Leopard Claim, Sur. No. 3358, Sec. 28, Tp. 7 N., R. 13 W.

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

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

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

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

(*f*) If the land consists of unpatented claims, add to the description above, the book and page numbers for each recorded location notice.

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

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

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

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

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

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

(*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 1 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.

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.

(*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. (One sixtieth per month.)

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

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

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

(*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)? Yes

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

$13,000	$2,000	
☐ Money	☐ Use of equipment owned by you	☐ Other

Explain in detail on acompanying paper.

CERTIFICATION

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

Dated October 23rd, 1952

The Needlegun Mine
(Applicant)

By Lowndes Maury Trustee

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

Needlegun Mine, Care[illegible]sse L. Maury, 211 Prospect St., [illegible]hevy Chase 15, Maryland

4(a) See accompanying report by Jesse L. Maury and answer to 6(d) below. Our interest in such operations is that of owner.

4(b)(c). See accompanying report by Jesse L. Maury.

4(d). A 3-mile road reaches the present tunnel portal from Philipsburg, Montana, the nearest residence and shipping point.

4(e). Labor, materials, supplies, equipment, water, and (diesel) power are all available in sufficient quantities.

5(b). Drive 750 feet along vein as described in accompanying report by Jesse L. Maury.

5(d). Work will be supervised by William R. McLure. Two years engineering work at Washington and Lee University (Lexington, Va.), and 35 years experience in active management of properties. Thirty years mining and operating mines in Granite County, Montana, and within the District covered by this application.

6 (b)(c)(d)(g)(h).

Equipment now owned by operator	Cost
#315 Worthington portable compressor	$7,000
Gardiner-Denver Loader	2,400
4-wheel drive Willys 1-ton truck	2,160
#48 ——I-R stoper	350
2 8 cubic-foot cars	200
Total	12,110
Suggested use-allowance	200 a month.

	Per Month	10 Months
Labor and superintendent	$2,011	$20,110
Powder	200	2,000
Fuse and caps	65	650
Diesel fuel and oil	60	600
Food for horde	50	500

To Be Purchased

6 mining cars	700
1 horse	175
750 feet of 2" pipe	337
Industrial Accident, Social Security, Unemployment tax, and Incidentals	2,928
Total	28,000
Suggested Use Allowance Above	2,000
Total Cost	30,000

Detail--Labor and Superintendent

	Day	Month
1 Engineer and blacksmith	$15.00	$390
3 Miners	14.50	1221
1 Superintendent		400

NEEDLEGUN PROSPECT

Philipsburg, Montana

Jesse L. Maury September, 1952

GENERAL

This prospect depends for its validity upon the general geology of the granite mining area and its geological similarity to the Granite-Bimetallic mine.

The area and the mine have been described by Emmons and Calkins in U. S. G. S. Professional Paper 78. The area is a granite intrusive with long, narrow east-west veins which in the past were chiefly valuable for their silver content. Of these, the Granite-Bimetallic was by far the largest, production having been some $35,000,000 gross.

MINERALOGY

In the appendix to this report there are listed excerpts from Professional Paper 78 bearing on the mineralogy of the silver veins in granite. These lead to the conclusion that in general the primary and enriched secondary ores of the area contained substantial amounts of lead and zinc sulphides which were disregarded in view of the metallurgy of the period of intensive production and the high silver values of the ores.

My sample 4 at the Josephine Adit (see appendix, List of Observations and Samples) confirms the conclusion that these veins carry substantial amounts of zinc and lead sulphides.

Further, Mr. Perry Yob, present owner of the Granite-Bimetallic informed me on September 27, 1952 that the records show that for many years the millheads of this mine contained 7% zinc and 1½% lead. He also described substantial present reserves on the 600-level w hich run 14% zinc and 9% lead, completely recoverable by flotation

It seems probable that a metal-bearing vein in this area will carry silver, zinc, and lead from fairly near the surface to depth.

OUTCROPS

The enclosing granite has been deeply weathered, and much of the surface is covered by great rounded boulders matted with forest debris. Outcrops are few and far between.

The deep rotting of the granite tends to cause disintegration of vein walls and dissipation of vein matter, so that where outcrops occur, they are poorly defined. My obersvations C and D along some 1000 feet of the most productive length of the Granite-Bimetallic vein indicate that little more than the existence of a vein can be deduced from outcrops in this area.

THE NEEDLEGUN VEIN

When I visited the prospect, an adit had exposed the vein at 120 feet east of its portal, depth probably 35 feet. Oblique, lateral

crosscutting had been carried out to the south to assure the identity of the vein, and the lateral was about to be turned back to intersect the vein at a calculated point some 380 feet east of the portal and depth of 125 feet. Intersection had not yet occurred. (see appendix, sketches, figure 1).

Samples and observations along the course of the vein (see appendix) support the conclusion that a vein probably exists for a length of 3000 feet or more, which has all of the characteristics of other veins in the area, including the Granite-Bimetallic.

Only underground exploration can disclose the size of the vein and the values it contains. 750 feet of drifting from the expected intersection point would give a depth below the surface of approximately 375 feet. The probabilities are that such a depth will expose sulphide ores.

APPENDIX

EXCERPTS FROM U. S. G. S. PROFESSIONAL PAPER #8
Relevant to
MINERALOGY OF SILVER VEINS IN GRANITE

Page 153. Galena is present in the ore of each group of silver deposits and in some of the gold ores----parts of the Granite-Bimetallic lode carried a notable quantity of argentiferous galena.

Page 154. Zinc blende is present in considerable quantity in all the silver-bearing veins near Philipsburg.

Page 163. The silver ores carry zinc and lead, but at present these metals are of no great economic importance.

Page 174. The ore (of silver-bearing veins in granitic rocks) is composed of quartz, rhodocrosite, calcite, pyrite, arsenopyrite, stibnite, tetrahedrite, tennantite, galena, zinc blende, realgar, orpiment, pyrargyrite, proustite, cerargyrite, native silver, and pyromorphite, with iron and manganese oxides and copper and lead carbonates.

Page 204. Character of Ores of Granite-Bimetallic Mine
Primary Ore--The primary ore, which is found in the lower portions of the mine, has a gangue of quartz, rhodocrosite, and calcite, enclosing a large quantity of pyrite, arsenopyrite, stibnite, tetrahedrite, tennantite, galena, and zinc blende.

Enriched Sulphide Ore--Locally zinc blende and chalcopyrite fill cracks--silver contained in pyrargyrite--though proustite present, as are also tetrahedrite and argentite---300 too 800 feet below surface--most of dividends from secondary sulphides.

Enriched Oxidized Ores--Quartz stained with iron and manganese oxides. Cerargyrite, pyromorphite, native silver--galena, zinc blende, pyrite, and chalcopyrite are sometimes present--100 to 400 feet below surface.

Poor Oxidized Ore--(surface to 300 feet)--quartz stained with iron and manganese oxide--small masses of galena--occur here and there as unoxidized remnants.

Page 207. Character of Ores of Hobo Mine.
In lower tunnel--quartz, rhodocrosite, galena, zinc blende, pyrite, arsenopyrite, stibnite, gray copper, realgar, and a little ruby silver. Better grade sulphide 200 to 300 feet below surface.

LIST OF OBSERVATIONS AND SAMPLES

Six samples were taken in the course of the examination. It is not proposed to have these assayed, but merely to hold them for inspection by any interested person. They are merely indicative of geology and mineralogy of the prospect. These samples were supplemented by certain observations which are also described here.

Along Needlegun Vein Course

Sample 1. Vein exposure 120 feet in from portal of Needlegun Adit. Strike S73°E, dip 77°S. Footwall to hangingwall, 0.5' blocky

quartz, 1.0' rotten granite, 0.2' manganese wad. (figure 1).

Observation A. Surface cut about 325 feet east of Needlegun Adit portal. Altered granite and pieces of quartz up to 8 inches with MnO_2 on dump. (figure 1).

Sample 3. Caved tunnel about 300 feet west of Needlegun east end line. Chunks of quartz vein matter up to 18 inches in smallest dimension. Visible galena. (figure 1).

Observation B. Caved shaft near Needlegun east end line. Dump indicates some 50 feet deep. Vein 8 inches wide on east side of shaft strikes S80°E and dips 80°S. Chunks on dump up to 8 inches wide with quartz and MnO_2. (figure 1).

Sample 6. Leopard Shaft. Dump indicates 60 feet deep. Vein matter in decomposed granite about 8 inches wide at 4 feet below surface on east end of shaft. Strong, definite sheer wall 4 feet south of vein matter shows strike S80°E and dip 80°S. Chunks up to 18 inches across banding of porous, iron-stained quartz on dump. (figure 4).

Off Needlegun Vein Course

Sample 2. At end of crosscut southeast in Needlegun adit. About 8 inches of quartz and 1 inch of MnO_2. Not well-defined (figure 1).

Sample 5. Unpatented claim located by Needlegun partnership. Dump indicates 30-foot shaft. Chunks up to 12 inches of quartz with MnO_2. (figure 4).

Sample 4. Dump at caved Josephine adit. Probably about 300 feet lower elevation than Needlegun Adit. Chunks of ore up to 8 inches. Banded quartz and calcite with heavy sphalerite and galena. Dump indicates 200-foot tunnel. (figure 4).

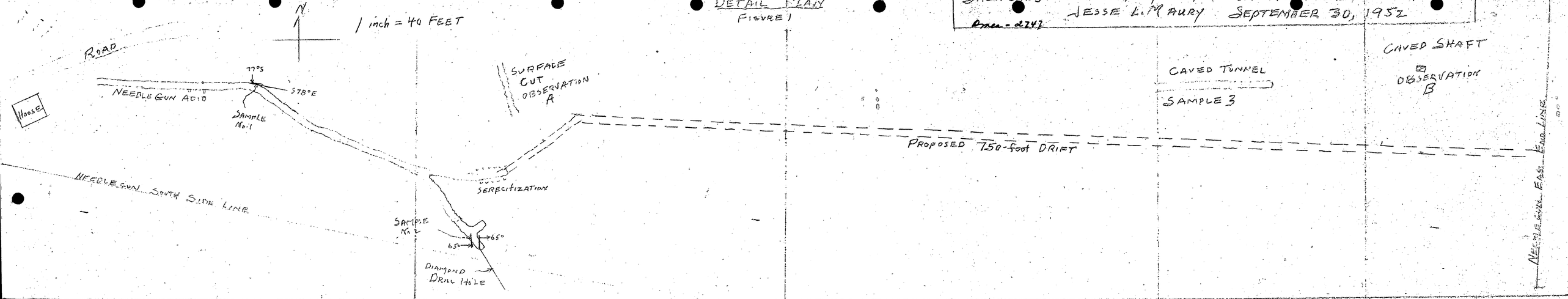
Along Granite-Bimetallic Vein

Observation C. Between the Gore shaft and the Bimetallic shaft, the heart of the productive area and where the high-grade came to within 60 feet of the surface, there is some 400 feet length of natural surface. 4 pits along the vein show nothing but a little decomposed granite and small pieces of quartz. (figure 3)

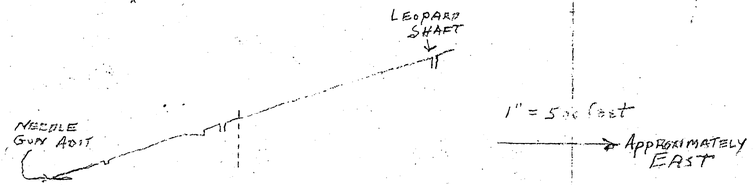
Observation D. 400 feet west of the Bimetallic shaft, a small shaft and long trench show no vein structure and only altered granite. The productive area reached at least 800 feet further west. Time did not permit further surface observations, but McLure says that other showings for 1000 feet west are about the same. (figure 3).

SKETCHES to ACCOMPANY REPORT ON NEEDLEGUN PROSPECT
JESSE L. McAURY SEPTEMBER 30, 1952
Pmcu - 2747

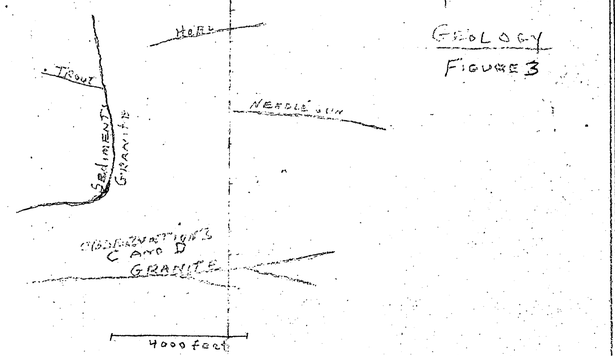
DETAIL PLAN
FIGURE 1



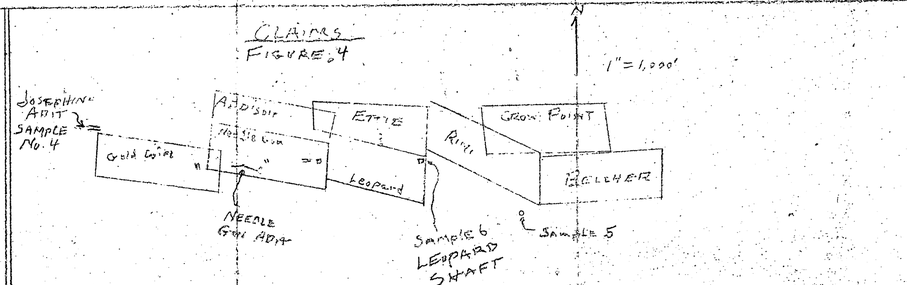
PROFILE
FIGURE 2



GEOLOGY
FIGURE 3



CLAIMS
FIGURE 4



October 27, 1952

Needlegun Mine
c/o Mr. Jesse L. Maury
211 Prospect Street
Chevy Chase, Maryland

Subject: DMEA-2747
Re: Exploration Assistance
Needlegun Mine

My dear Mr. Maury:

The receipt of your application dated October 23, 1952 for exploration assistance under the Defense Production Act of 1950, as amended, is hereby acknowledged.

Your application has been assigned Docket Number DMEA-2747 and referred to the Base Metals Division.

Kindly refer to DMEA-2747 in any future correspondence relating to your application.

Sincerely yours,

R. E. ADAMS

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

25451

Dmea-2747

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
OCT 27 1952

JESSE L. MAURY
MINING ENGINEER
ACCOUNTANT

211 PROSPECT STREET
CHEVY CHASE 15, MARYLAND

TELEPHONE
WISCONSIN 6318

October 27, 1952

Defense Minerals Exploration Administration
Department of the Interior
Washington 25, DC

Gentlemen:

As agent for the Needlegun Mine, I submit herewith our application for a loan of $15,000 to be used in a $30,000 exploration for ores of lead and zinc.

One copy of my appointment as agent and attorney in fact accompanies the original of this application.

You will note that in the course of my examination of this property, I took certain samples, but did not have them assayed, since they are merely indicative of mineralogy and geology. When you are ready to examine these, I will be glad to bring them in.

I can be reached at the above telephone, or at Appleton 5800.

Respectfully yours,

Jesse L. Maury

ME-103
(Revised April 1952)

UNITED STATES DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION

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

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
OCT 27 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 - 2747
Metal or Mineral
Date Received 10-27-52
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: NEEDLEGUN MINE, LOWNDES MAURY, Trustee, Hirbour Building, Butte, Montana

MAILING ADDRESS: NEEDLEGUN MINE, Care Jesse L. Maury
211 Prospect Street, Chevy Chase 15, Maryland

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

Needle Gun Claim, Sur. No. 2960, Sec. 28, T. 7 N., R.13 W.
Leopard Claim, Sur. No. 3358, Sec. 28, Tp. 7 N., R. 13 W.

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

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

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

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

(*f*) If the land consists of unpatented claims, add to the description above, the book and page numbers for each recorded location notice.

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

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

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

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

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

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

(*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 1 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.

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.

(*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. (One-sixtieth per month)

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

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

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

(*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?

☐ $13,000 Money ☐ $2,000 Use of equipment owned by you ☐ Other

Explain in detail on acompanying paper.

CERTIFICATION

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

Dated October 23, 1952

The Needlegun Mine
(Applicant)

By (Signed) Lowndes Maury, Trustee

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

Needlegun Mine, Care J[illegible]e L. Maury, 211 Prospect St., [illegible]vy Chase 15, Maryland

4(a) See accompanying report by Jesse L. Maury and answer to 6(d) below. Our interest in such operations is that of owner.

4(b)(c). See accompanying report by Jesse L. Maury.

4(d). A 3-mile road reaches the present tunnel portal from Philipsburg, Montana, the nearest residence and shipping point.

4(e). Labor, materials, supplies, equipment, water, and (diesel) power are all available in sufficient quantities.

5(b). Drive 750 feet along vein as described in accompanying report by Jesse L. Maury.

5(d). Work will be supervised by William M. McLure. Two years engineering work at Washington and Lee University (Lexington, Va.), and 3[illegible] years experience in active management of properties. Thirty years mining and operating mines in Granite County, Montana, and within the District covered by this application.

6 (b)(c)(d)(g)(h).

Equipment now owned by operator	Cost
6215 Worthington portable compressor	7,000
Gardiner-Denver Loader	2,400
4-wheel drive Willys 1-ton truck	2,1[illegible]0
240 ——— I-R stoper	350
2 [illegible] 8 cubic-foot cars	200
Total	12,110
Suggested use-allowance	200 a month.

	Per Month	10 Months
Labor and superintendent	2,011	20,110
Powder	200	2,000
Fuse and caps	65	650
Diesel fuel and oil	60	600
Feed for horse	50	500

To Be Purchased

6 mining cars	700
1 horse	175
750 feet of 2" pipe	337
Industrial Accident, Social Security, Unemployment tax, and Incidentals	2,928
Total	28,000
Suggested Use Allowance Above	2,000
Total Cost	30,000

Detail--Labor and Superintendent

	Day	Month
1 Engineer and blacksmith	$15.00	$390
3 Miners	14.50	1221
1 Superintendent		400

NEEDLEGUN PROSPECT

Philipsburg, Montana

Jesse L. Maury September, 1952

GENERAL

This prospect depends for its validity upon the general geology of the granite mining area and its geological similarity to the Granite-Bimetallic mine.

The area and the mine have been described by Emmons and Calkins in U. S. G. S. Professional Paper 78. The area is a granite intrusive with long, narrow east-west veins which in the past were chiefly valuable for their silver content. Of these, the Granite-Bimetallic was by far the largest, production having been some $35,000,000 gross.

MINERALOGY

In the appendix to this report there are listed excerpts from Professional Paper 78 bearing on the mineralogy of the silver veins in granite. These lead to the conclusion that in general the primary and enriched secondary ores of the area contained substantial amounts of lead and zinc sulphides which were disregarded in view of the metallurgy of the period of intensive production and the high silver values of the ores.

My sample 4 at the Josephine Adit (see appendix, List of Observations and Samples) confirms the conclusion that these veins carry substantial amounts of zinc and lead sulphides.

Further, Mr. Perry Yob, present owner of the Granite-Bimetallic informed me on September 27, 1952 that the records show that for many years the millheads of this mine contained 7% zinc and 1½% lead. He also described substantial present reserves on the 600-level w hich run 14% zinc and 9% lead, completely recoverable by flotation

It seems probable that a metal-bearing vein in this area will carry silver, zinc, and lead from fairly near the surface to depth.

OUTCROPS

The enclosing granite has been deeply weathered, and much of the surface is covered by great rounded boulders matted with forest debris. Outcrops are few and far between.

The deep rotting of the granite tends to cause disintegration of vein walls and dissipation of vein matter, so that where outcrops occur, they are poorly defined. My obersvations C and D along some 1000 feet of the most productive length of the Granite-Bimetallic vein indicate that little more than the existence of a vein can be deduced from outcrops in this area.

THE NEEDLEGUN VEIN

When I visited the prospect, an adit had exposed the vein at 120 feet east of its portal, depth probably 35 feet. Oblique, lateral

crosscutting had been carried out to the south to assure the identity of the vein, and the lateral was about to be turned back to intersect the vein at a calculated point some 380 feet east of the portal and depth of 125 feet. Intersection had not yet occurred. (see appendix, sketches, figure 1).

Samples and observations along the course of the vein (see appendix) support the conclusion that a vein probably exists for a length of 3000 feet or more, which has all of the characteristics of other veins in the area, including the Granite-Bimetallic.

Only underground exploration can disclose the size of the vein and the values it contains. 750 feet of drifting from the expected intersection point would give a depth below the surface of approximately 375 feet. The probabilities are that such a depth will expose sulphide ores.

APPENDIX

EXCERPTS FROM U. S. G. S. PROFESSIONAL PAPER 38
Relevant to
MINERALOGY OF SILVER VEINS IN GRANITE

Page 153. Galena is present in the ore of each group of silver deposits and in some of the gold ores----parts of the Granite-Bimetallic lode carried a notable quantity of argentiferous galena.

Page 154. Zinc blende is present in considerable quantity in all the silver-bearing veins near Philipsburg.

Page 163. The silver ores carry zinc and lead, but at present these metals are of no great economic importance.

Page 174. The ore (of silver-bearing veins in granitic rocks) is composed of quartz, rhodocrosite, calcite, pyrite, arsenopyrite, stibnite, tetrahedrite, tennantite, galena, zinc blende, realgar, orpiment, pyrargyrite, proustite, cerargyrite, native silver, and pyromorphite, with iron and manganese oxides and copper and lead carbonates.

Page 204. Character of Ores of Granite-Bimetallic Mine
Primary Ore--The primary ore, which is found in the lower portions of the mine, has a gangue of quartz, rhodocrosite, and calcite, enclosing a large quantity of pyrite, arsenopyrite, stibnite, tatrahedrite, tennantite, galena, and zinc blende.

Enriched Sulphide Ore--Locally zinc blende and chalcopyrite fill cracks--silver contained in pyrargyrite--though proustite present, as are also tetrahedrite and argentite---300 too 800 feet below surface--most of dividends from secondary sulphides.

Enriched Oxidized Ores--Quartz stained with iron and manganese oxides. Cerargyrite, pyromorphite, native silver--galena, zinc blende, pyrite, and chalcopyrite are sometimes present--100 to 400 feet Below surface.

Poor Oxidized Ore--(surface to 300 feet)--Quartz stained with iron and manganese oxide--small masses of galena--occur here and there as unoxidized remnants.

Page 207. Character of Ores of Hobo Mine.
In lower tunnel--quartz, rhodocrosite, galena, zinc blende, pyrite, arsenopyrite, stibnite, gray copper, realgar, and a little ruby silver. Better grade sulphide 200 to 300 feet below surface.

LIST OF OBSERVATIONS AND SAMPLES

Six samples were taken in the course of the examination. It is not proposed to have these assayed, but merely to hold them for inspection by any interested person. They are merely indicative of geology and mineralogy of the prospect. These samples were supplemented by certain observations which are also described here.

Along Needlegun Vein Course

Sample 1. Vein exposure 120 feet in from portal of Needlegun Adit. Strike S78°E, dip 77°S. Footwall to hangingwall, 0.5' blocky

quartz, 1.0' rotten granite, 0.2' manganese wad. (figure 1).

Observation A. Surface cut about 325 feet east of Needlegun Adit portal. Altered granite and pieces of quartz up to 8 inches with MnO_2 on dump. (figure 1).

Sample 3. Caved tunnel about 300 feet west of Needlegun east end line. Chunks of quartz vein matter up to 18 inches in smallest dimension. Visible galena. (figure 1).

Observation B. Caved shaft near Needlegun east end line. Dump indicates some 50 feet deep. Vein 8 inches wide on east side of shaft strikes S80°E and dips 80°S. Chunks on dump up to 8 inches wide with quartz and MnO_2. (figure 1).

Sample 6. Leopard Shaft. Dump indicates 60 feet deep. Vein matter in decomposed granite about 8 inches wide at 4 feet below surface on east end of shaft. Strong, definite sheer wall 4 feet south of vein matter shows strike S80°E and dip 80°S. Chunks up to 18 inches across banding of porous, iron-stained quartz on dump. (figure 4).

Off Needlegun Vein Course

Sample 2. At end of crosscut southeast in Needlegun adit. About 8 inches of quartz and 1 inch of MnO_2. Not well-defined (figure 1).

Sample 5. Unpatented claim located by Needlegun partnership. Dump indicates 30-foot shaft. Chunks up to 12 inches of quartz with MnO_2. (figure 4).

Sample 4. Dump at caved Josephine adit. Probably about 300 feet lower elevation than Needlegun Adit. Chunks of ore up to 8 inches. Banded quartz and calcite with heavy sphalerite and galena. Dump indicates 200-foot tunnel. (figure 4).

Along Granite-Bimetallic Vein

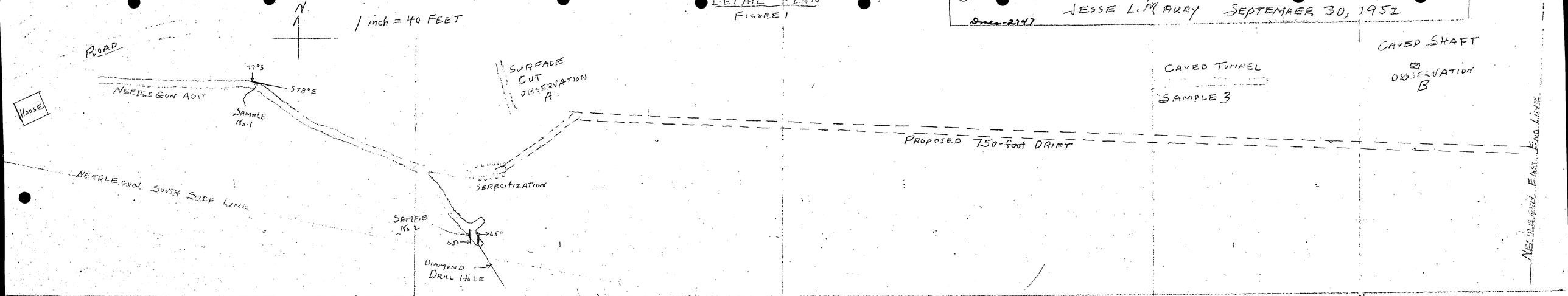
Observation C. Between the Gore shaft and the Bimetallic shaft, the heart of the productive area and where the high-grade came to within 60 feet of the surface, there is some 400 feet length of natural surface. 4 pits along the vein show nothing but a little decomposed granite and small pieces of quartz. (figure 3)

Observation D. 400 feet west of the Bimetallic shaft, a small shaft and long trench show no vein structure and only altered granite. The productive area reached at least 800 feet further west. Time did not permit further surface observations, but McLure says that other showings for 1000 feet west are about the same. (figure 3).

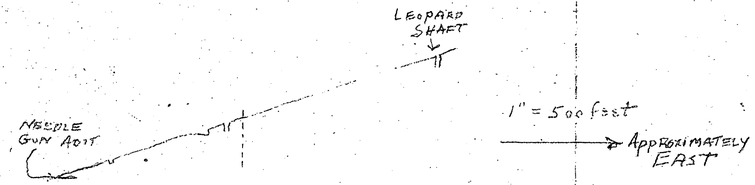
SKETCHES to ACCOMPANY REPORT ON NEEDLEGUN PROSPECT
JESSE L. MAURY SEPTEMBER 30, 1952

~~Dnes-2147~~

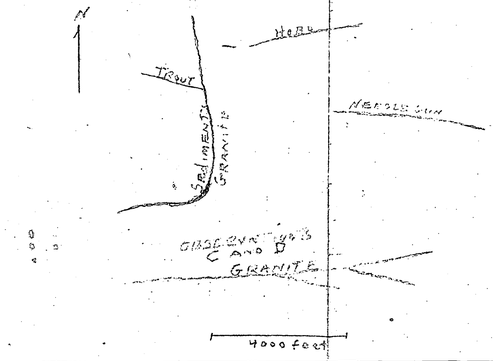
DETAIL PLAN
FIGURE 1



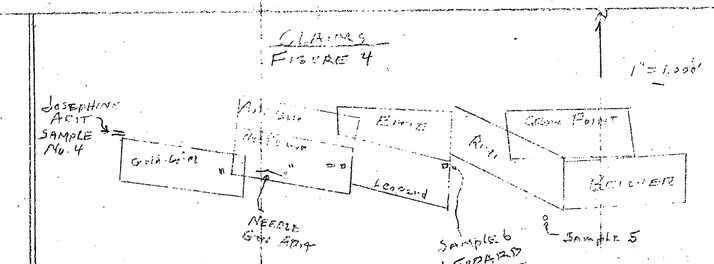
PROFILE
FIGURE 2



GEOLOGY
FIGURE 3



CLAIMS
FIGURE 4



Dmea - 2747

JESSE L. MAURY
MINING ENGINEER
ACCOUNTANT

211 PROSPECT STREET
CHEVY CHASE 15, MARYLAND

TELEPHONE
WISCONSIN 6318

October 27, 1952

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
OCT 27 1952

Defense Minerals Exploration Administration
Department of the Interior
Washington 25, DC

Gentlemen:

As agent for the Needlegun Mine, I submit herewith our application for a loan of $15,000 to be used in a $30,000 exploration for ores of lead and zinc.

One copy of my appointment as agent and attorney in fact accompanies the original of this apllication.

You will note that in the course of my examination of this property, I took certain samples, but did not have them assayed, since they are merely indicative of mineralogy and geology. When you are ready to examine these, I will be glad to bring them in.

I can be reached at the above telephone, or at Appleton 5800.

Respectfully yours,

Jesse L. Maury

Jesse L. Maury

MF-103
(Revised April 1952)

UNITED STATES DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION

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

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
OCT 27 1952

2747

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-2747
Metal or Mineral
Date Received 10-27-52
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: NEEDLEGUN MINE, LOWNDES MAURY, Trustee, Hirbour Building, Butte, Montana.

MAILING ADDRESS:---NEEDLEGUN MINE, Care Jesse L. Maury
211 Prospect Street, Chevy Chase 15, Maryland

(*b*) If other than an individual, add to your name above whether a corporation, partnership, etc., and the name of the State 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
Needle Gun Claim, Sur. No. 2960, Sec. 28, T. 7 N., R. 13 W.
Leopard Claim, Sur. No. 3358, Sec. 28, Tp. 7 N., R. 13 W.

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

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

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

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

(*f*) If the land consists of unpatented claims, add to the description above, the book and page numbers for each recorded location notice.

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

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

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

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

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

5. *The exploration project.*—(a) State the mineral or minerals for which you [illegible] to explore zinc and lead.

(*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 1 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.

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.

(*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. (One sixtieth per month.)

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

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

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

(*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)? Yes

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

☐ Money $13,000 ☐ Use of equipment owned by you $2,000 ☐ 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 October 23rd, 1952

The Needlegun Mine
(Applicant)

By Lowndes Maury Foster

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

Needlegun Mine, Care [redacted]se L. Maury, 211 Prospect St., [redacted]evy Chase 15, Maryland

4(a) See accompanying report by Jesse L. Maury and answer to 6(d) below. Our interest in such operations is that of owner.

4(b)(c). See accompanying report by Jesse L. Maury.

4(d). A 3-mile road reaches the present tunnel portal from Philipsburg, Montana, the nearest residence and shipping point.

4(e). Labor, materials, supplies, equipment, water, amd (diesel) power are all available in sufficient quantities.

5(b). Drive 750 feet along vein as described in accompanying report by Jesse L. Maury.

5(d). Work will be supervised by William R. McLure. Two years engineering work at Washington and Lee University (Lexington, Va.), and 35 years experience in active manggement of properties. Thirty years mining and operating mines in Granite County, Montana, and within the District covered by this application.

6 (b)(c)(d)(g)(h).

Equipment now owned by operator	Cost
#315 Worthington portable compressor	$7,000
Gardiner-Denver Loader	2,400
4-wheel drive Willys 1-ton truck	2,160
#48 -----I-R stoper	350
2 8 cubic-foot cars	200
Total	12,110
Suggested use-allowance	200 a month.

	Per Month	10 Months
Labor and superintendent	$2,011	$20,110
Powder	200	2,000
Fuse and caps	65	650
Diesel fuel and oil	60	600
Food for horde	50	500

To Be Purchased

6 mining cars	700
1 horse	175
750 feet of 2" pipe	337
Industrial Accident, Social Security, Unemployment tax, and Incidentals	2,928
Total	28, 000
Suggested Use Allowance Above	2, 000
Total Cost	30, 000

Detail--Labor and Superintendent

	Day	Month
1 Engineer and blacksmith	$15.00	$390
3 Miners	14.50	1221
1 Superintendent		400

NEEDLEGUN PROSPECT

Philipsburg, Montana

Jesse L. Maury September, 1952

GENERAL

This prospect depends for its validity upon the general geology of the granite mining area and its geological similarity to the Granite-Bimetallic mine.

The area and the mine have been described by Emmons and Calkins in U. S. G. S. Professional Paper 78. The area is a granite intrusive with long, narrow east-west veins which in the past were chiefly valuable for their silver content. Of these, the Granite-Bimetallic was by far the largest, production having been some $35,000,000 gross.

MINERALOGY

In the appendix to this report there are listed excerpts from Professional Paper 78 bearing on the mineralogy of the silver veins in granite. These lead to the conclusion that in general the primary and enriched secondary ores of the area contained substantial amounts of lead and zinc sulphides which were disregarded in view of the metallurgy of the period of intensive production and the high silver values of the ores.

My sample 4 at the Josephine Adit (see appendix, List of Observations and Samples) confirms the conclusion that these veins carry substantial amounts of zinc and lead sulphides.

Further, Mr. Perry Yob, present owner of the Granite-Bimetallic informed me on September 27, 1952 that the records show that for many years the millheads of this mine contained 7% zinc and 1½% lead. He also described substantial present reserves on the 600-level which run 14% zinc and 9% lead, completely recoverable by flotation

It seems probable that a metal-bearing vein in this area will carry silver, zinc, and lead from fairly near the surface to depth.

OUTCROPS

The enclosing granite has been deeply weathered, and much of the surface is covered by great rounded boulders matted with forest debris. Outcrops are few and far between.

The deep rotting of the granite tends to cause disintegration of vein walls and dissipation of vein matter, so that where outcrops occur, they are poorly defined. My obersvations C and D along some 1000 feet of the most productive length of the Granite-Bimetallic vein indicate that little more than the existence of a vein can be deduced from outcrops in this area.

THE NEEDLEGUN VEIN

When I visited the prospect, an adit had exposed the vein at 120 feet east of its portal, depth probably 35 feet. Oblique, lateral

crosscutting had been carried out to the south to assure the identity of the vein, and the lateral was about to be turned back to intersect the vein at a calculated point some 380 feet east of the portal and depth of 125 feet. Intersection had not yet occurred. (see appendix, sketches, figure 1).

Samples and observations along the course of the vein (see appendix) support the conclusion that a vein probably exists for a length of 3000 feet or more, which has all of the characteristics of other veins in the area, including the Granite-Bimetallic.

Only underground exploration can disclose the size of the vein and the values it contains. 750 feet of drifting from the expected intersection point would give a depth below the surface of approximately 375 feet. The probabilities are that such a depth will expose sulphide ores.

APPENDIX

EXCERPTS FROM U. S. G. S. PROFESSIONAL PAPER #8
Relevant to
MINERALOGY OF SILVER VEINS IN GRANITE

Page 153. Galena is present in the ore of each group of silver deposits and in some of the gold ores----parts of the Granite-Bimetallic lode carried a notable quantity of argentiferous galena.

Page 154. Zinc blende is present in considerable quantity in all the silver-bearing veins near Philipsburg.

Page 163. The silver ores carry zinc and lead, but at present these metals are of no great economic importance.

Page 174. The ore (of silver-bearing veins in granitic rocks) is composed of quartz, rhodocrosite, calcite, pyrite, arsenopyrite, stibnite, tetrahedrite, tennantite, galena, zinc blende, realgar, orpiment, pyrargyrite, proustite, cerargyrite, native silver, and pyromorphite, with iron and manganese oxides and copper and lead carbonates.

Page 204. Character of Ores of Granite-Bimetallic Mine
Primary Ore--The primary ore, which is found in the lower portions of the mine, has a gangue of quartz, rhodocrosite, and calcite, enclosing a large quantity of pyrite, arsenopyrite, stibnite, tetrahedrite, tennantite, galena, and zinc blende.

Enriched Sulphide Ore--Locally zinc blende and chalcopyrite fill cracks--silver contained in pyrargyrite--though proustite present, as are also tetrahedrite and argentite---300 too 800 feet below surface--most of dividends from secondary sulphides.

Enriched Oxidized Ores--Quartz stained with iron and manganese oxides. Cerargyrite, pyromorphite, native silver--galena, zinc blende, pyrite, and chalcopyrite are sometimes present--100 to 400 feet below surface.

Poor Oxidized Ore--(surface to 300 feet)--Quartz stained with iron and manganese oxide--small masses of galena--occur here and there as unoxidized remnants.

Page 207. Character of Ores of Hobo Mine.
In lower tunnel--quartz, rhodocrosite, galena, zinc blende, pyrite, arsenopyrite, stibnite, gray copper, realgar, and a little ruby silver. Better grade sulphide 200 to 300 feet below surface.

LIST OF OBSERVATIONS AND SAMPLES

Six samples were taken in the course of the examination. It is not proposed to have these assayed, but merely to hold them for inspection by any interested person. They are merely indicative of geology and mineralogy of the prospect. These samples were supplemented by certain observations which are also described here.

Along Needlegun Vein Course

Sample 1. Vein exposure 120 feet in from portal of Needlegun Adit. Strike S78°E, dip 77°S. Footwall to hangingwall, ~~###~~ 0.5' blocky

quartz, 1.0' rotten granite, 0.2' manganese wad. (figure 1).

Observation A. Surface cut about 325 feet east of Needlegun Adit portal. Altered granite and pieces of quartz up to 8 inches with MnO_2 on dump. (figure 1).

Sample 3. Caved tunnel about 300 feet west of Needlegun east end line. Chunks of quartz vein matter up to 18 inches in smallest dimension. Visible galena. (figure 1).

Observation B. Caved shaft near Needlegun east end line. Dump indicates some 50 feet deep. Vein 8 inches wide on east side of shaft strikes S80°E and dips 80°S. Chunks on dump up to 8 inches wide with quartz and MnO_2. (figure 1).

Sample 6. Leopard Shaft. Dump indicates 60 feet deep. Vein matter in decomposed granite about 8 inches wide at 4 feet below surface on east end of shaft. Strong, definite sheer wall 4 feet south of vein matter shows strike S80°E and dip 80°S. Chunks up to 18 inches across banding of porous, iron-stained quartz on dump. (figure 4).

Off Needlegun Vein Course

Sample 2. At end of crosscut southeast in Needlegun adit. About 8 inches of quartz and 1 inch of MnO_2. Not well-defined (figure 1).

Sample 5. Unpatented claim located by Needlegun partnership. Dump indicates 30-foot shaft. Chunks up to 12 inches of quartz with MnO_2. (figure 4).

Sample 4. Dump at caved Josephine adit. Probably about 300 feet lower elevation than Needlegun Adit. Chunks of ore up to 8 inches. Banded quartz and calcite with heavy sphalerite and galena. Dump indicates 200-foot tunnel. (figure 4).

Along Granite-Bimetallic Vein

Observation C. Between the Gore shaft and the Bimetallic shaft, the heart of the productive area and where the high-grade came to within 60 feet of the surface, there is some 400 feet length of natural surface. 4 pits along the vein show nothing but a little decomposed granite and small pieces of quartz. (figure 3)

Observation D. 400 feet west of the Bimetallic shaft, a small shaft and long trench show no vein structure and only altered granite. The productive area reached at least 800 feet further west. Time did not permit further surface observations, but McLure says that other showings for 1000 feet west are about the same. (figure 3).

Mr. Jesse L. Maury,
211 Prospect Street,
Chevy Chase 15, Md.

You are hereby appointed agent and attorney-in-fact for the "NEEDLEGUN MINE" to do all things in connection with an application for aid in an exploration project pursuant to D. M. E. A. Order 1, under the Defense Production Act of 1950, as amended, before Defense Minerals Exploration, or before any other department of the Government of the United States.

Dated at Butte, Montana, this 23rd day of October, 1952.

The Needlegun Mine
by Lowndes Maury Trustee

STATE OF MONTANA,)
: ss.
COUNTY OF SILVER BOW,)

On this 23rd day of October, 1952, before me, L. B. ESSELSTYN, a Notary Public in and for the State of Montana, residing at Butte, personally appeared LOWNDES MAURY, known to me to be the person whose name is subscribed to the foregoing instrument, and he acknowledged to me that he executed the same.

IN WITNESS WHEREOF, I have hereunto set my hand and seal of office this 23rd day of October, 1952.

L. B. Esselstyn
Notary Public for the State of Montana, residing at Butte. My commission expires September 27, 1954.

(NOTARIAL SEAL)

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

OFFICIAL BUSINESS
[redacted]
2908 Colfax Avenue South
Minneapolis 8, Minnesota

(PMGC)

MINNEAPOLIS MINN. OCT 17 8 PM

MINNEAPOLIS MINN. OCT 17 8 PM

~~Operating Committee~~

~~Defense Minerals Exploration Administration~~

~~Interior Building~~

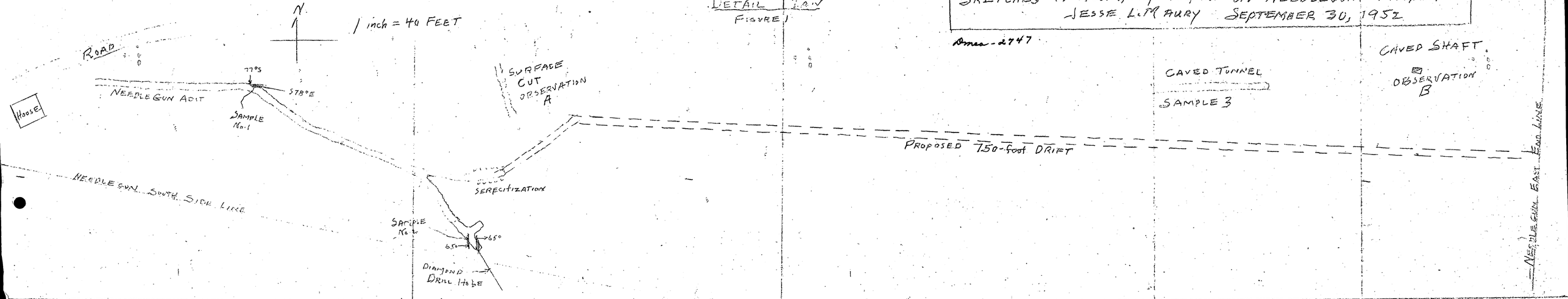
~~WASHINGTON 25, D. C.~~

FIRST CLASS MAIL

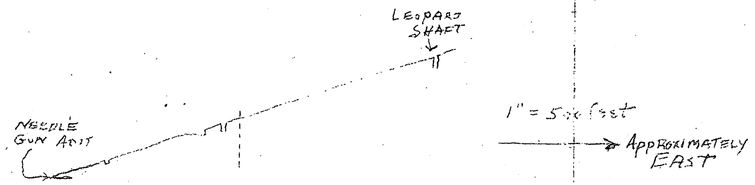
SKETCHES to ACCOMPANY REPORT ON NEEDLEGUN PROSPECT
JESSE L. McAURY SEPTEMBER 30, 1952

Omea-2747

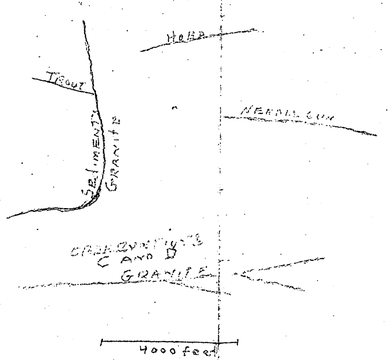
DETAIL PLAN
FIGURE 1



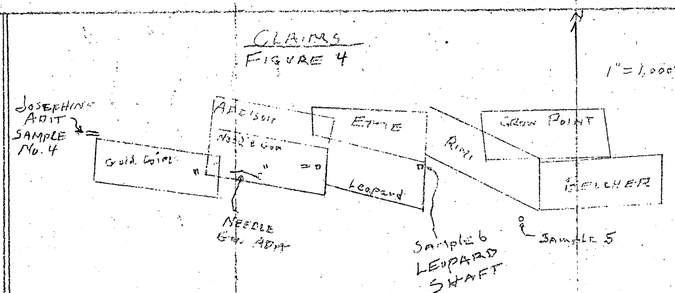
PROFILE
FIGURE 2



GEOLOGY
FIGURE 3



CLAIMS
FIGURE 4



UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION

~~WASHINGTON 25, D.C.~~
So. 157 Howard Street
Spokane 4, Washington

Docket

March 25, 1953

MEMORANDUM

To: DMEA Field Team, Region II

From: Howard B. Nickelson, Geologist, U. S. Geological Survey

Subject: Supplemental Examination Report, Needlegun Mine, Granite County, Montana, Docket No. DMEA-2747.

The application for exploration assistance for development of this mine was previously denied, but the Field Team, Region II, stated in a memorandum dated November 21, 1952, that the docket might be held for further consideration in case of encouraging developments in the work being done since the last examination in November 1952.

The Needlegun mine was re-examined by Howard B. Nickelson and Raymond Robinson, Geologists, U. S. Geological Survey, on February 19, 1953. The U.S.G.S. representatives were accompanied by Mr. W. R. McLure, mine operator.

The vein encountered in the face on November 5, 1952, has been followed in an easterly direction for 210 feet. The east-west vein consists of the following, measured from where the adit intersected the vein (see attached map).

Distance from Vein Intersection by the Drift	Description of Vein
0'	12" shear, ¼" white gouge on H.W., highly altered limonite and minor MnO_2, vein quartz. Sample #2. 1', 2.36 oz. Ag; 0.07 Oz. Au; 0.79% Pb; No Zn.
7'	2" of gouge, 6" altered granite stained by limonite.
22'	4" gouge. 1½' altered granite stained by limonite and MnO_2. 3" gouge & breccia stained by limonite and MnO_2; 6" of stained quartz.

Distance from Vein Intersection by the Drift	Description of Vein
38'	2" gouge; 6" of altered granite stained with limonite.
58' to 98'	Vein goes thru a set of faults from the northeast and the vein widens up to 1½' for a distance of 5' east of each fault then narrows and consists of minor quartz and gouge stained with MnO_2 and limonite. The almost vertical shear zones south of vein contain $MnCO_3$ blebs up to 6" across, but the zone is not Mn ore.
116'	1" to 2" of gouge and 4" of altered stained granite.
128'	3" of stained quartz and 2" of gouge.
193'	4" quartz vein stained with MnO_2 and limonite.
Face 210	2" stained quartz in 2½' of altered granite.

The above description shows the quartz mineralization on the vein to be very narrow (2" to 4") and not continuous along the vein. Some portions of the vein should be called a fault with the gouge stained by manganese dioxide and limonite. The quartz will probably assay a few ounces in silver, but lead and zinc assays would be very low. The rhodochrosite on the green structures consists of blebs less than 6" across sparsely scattered through the altered granite in the fault zone. The mineralization is obviously so sparse that the vein is not worth extensive sampling; however, two samples were taken, as shown on the attached map. They assayed as follows:

Sample #3 - 1.2', 0.74 oz. Ag, 0.02 oz. Au, 0.045% Pb, 1.44% Zn.
Sample #2 - 1.0', 2.36 oz. Ag, 0.07 oz. Au, 0.79% Pb, 0.00% Zn.

The weak vein structure with irregular quartz mineralization on the vein certainly does not warrant any change in the original appraisal of the Needlegun application. Mr. McLure failed to show us any evidence which would indicate favorable appraisal of the property.

Two miners, one hoeman and compressor man, were employed on the day of the inspection. Mr. McLure supervises the mining operations. The mine has been operating all winter.

Distribution:
BMMA(Orig.A3) Michelsen
USBM(2) USGS(SEO)
Docket

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS ADMINISTRATION
~~WASHINGTON 25, D. C.~~
1201 N. Division St.
Spokane 2, Washington

October 30, 1952

MEMORANDUM

To: DMEA Field Team, Region II

From: John S. McNabb, Mining Engineer, U. S. Bureau of Mines, and James J. Quinlan, Geologist, U. S. Geological Survey

Subject: Report of Investigation - Needle Gun Mine, Granite County, Montana. Docket No. DMEA 2747 (lead-zinc)

INTRODUCTION

The Needle Gun property, owned by William McLure, L. Maury, and A. G. Shone was examined on September 8, 1952 in company with William McLure. The examination was made at the request of the owners through M. E. Volin, Member, DMEA Field Team, Region II to see if work completed during the past year enhanced the outlook for discovering commercial ore.

An exploration loan application presented by the owners in 1951 to explore the Needle Gun property (Docket No. DMA-1958), was denied by the Operating Committee because the exploration project, if successful, would develop essentially a silver mine. The present examination found nothing of interest that would tend to alter the original decision of the Operating Committee.

LOCATION

The Needle Gun claim group, consisting of eight patented and two unpatented quartz lode mining claims, are in Sec. 28 and 29, T. 7 N., R. 13 W., M.P.M., in the Flint Creek Mining district (unsurveyed), Granite County, Montana. (See accompanying claim map). A graded road 4½ miles long connects the claims to the town of Philipsburg, Montana.

HISTORY

The Needle Gun property is 3,000 feet north of the Granite-Bimetallic vein, a famous producer of silver-zinc-copper ores, with a reported production of $32,000,000. The Granite-Bimetallic mine

(Orig. sent to [illegible] 10/31/52 [illegible] by USBM)
See [illegible] file

was primarily a silver producer and has been virtually inactive since the turn of the century. Concurrently with the development of the Granite-Bimetallic vein the Needle Gun claims were explored by numerous old pits, trenches, adits, and shallow shafts, but none are accessible today.

The present owners began exploration work during the last half of 1951. Work has consisted of driving an adit to the east on the Needle Gun claim for a distance of approximately 400 feet. To date, Mr. Malaga reports exploration costs of $20,000 on the property.

GEOLOGY

The Needle Gun group of claims are within and near the west margin of the Philipsburg granodiorite batholith. The position of pits, trenches, and shallow workings on the Gold Coin, Needle Gun, and Leopard claims suggest that these workings explore a vein striking S. 80° E., dipping steeply south. The indicated strike length of this vein structure may be about 3,000 feet.

It is difficult to evaluate the vein structure because of poor surface exposures, age of the pits, and the inaccessibility of the older workings. Occasional pieces of vein quartz with minor specks of pyrite were noted on several dumps. A few specimens of galena-sphalerite ore were observed on the dump of the caved adit near the east end line of the Needle Gun claim.

The vein exposed in the new adit on the Needle Gun claim apparently is the same vein that has been prospected by the pits, trenches, and shallow workings. This vein is best exposed 150 feet from the adit portal. From the portal to this point the vein is obscured by timber and east of this point the adit was turned to prospect the footwall of the vein. Where exposed, the vein consists of a shear zone 1½ feet wide containing some quartz. Sulfide minerals were not evident in the vein structure. Little or no leaching or wall rock alteration was noted. No other vein structures of consequence are exposed underground or in the short diamond drill holes drilled near the present face of the adit.

CONCLUSIONS

Work completed at the Needle Gun property during the past year has revealed nothing that would tend to enhance the outlook of discovering commercial ore. Nor has this work revealed any evidence that would change the original appraisal that if the project was successful, it would develop essentially a silver mine.

The vein exposed in the new adit is narrow, barren of sulfide minerals, and exhibits little, if any, evidence of leaching. If exploration is to continue, it should be confined to drifting along

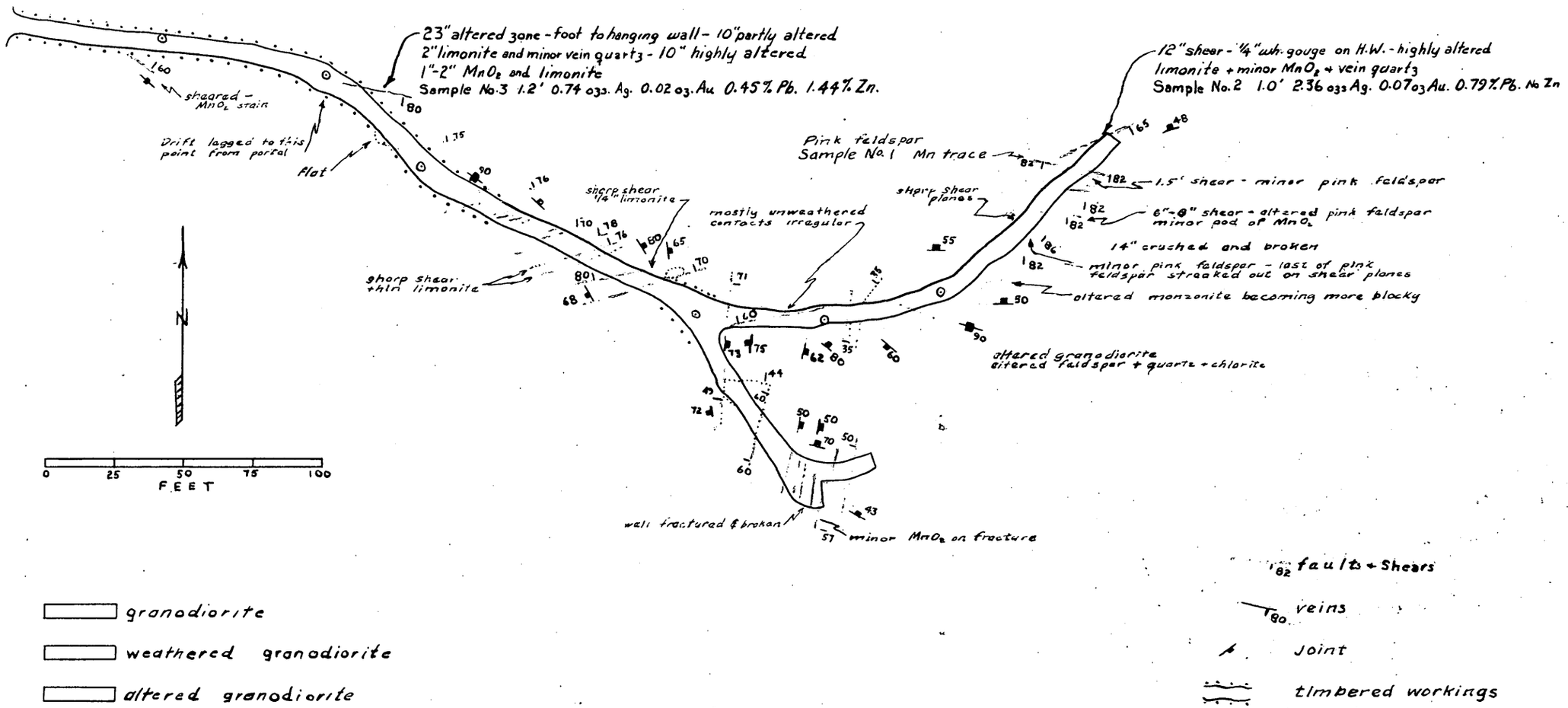
the vein, or exploring the vein by diamond drilling. It is conceivable that commercial silver, lead-zinc ore might be discovered by advancing the new working an additional 600 to 700 feet east to a point below the adit having sulfide minerals on the dump. However, any exploration of the property by the Government at this time is not warranted due to the limited information available and the lack of definite surface exposures that might substantiate the premise of commercial ore in the vein.

John S. McNabb, Mining Engineer
U. S. Bureau of Mines

James J. Quinlan, Geologist
U. S. Geological Survey

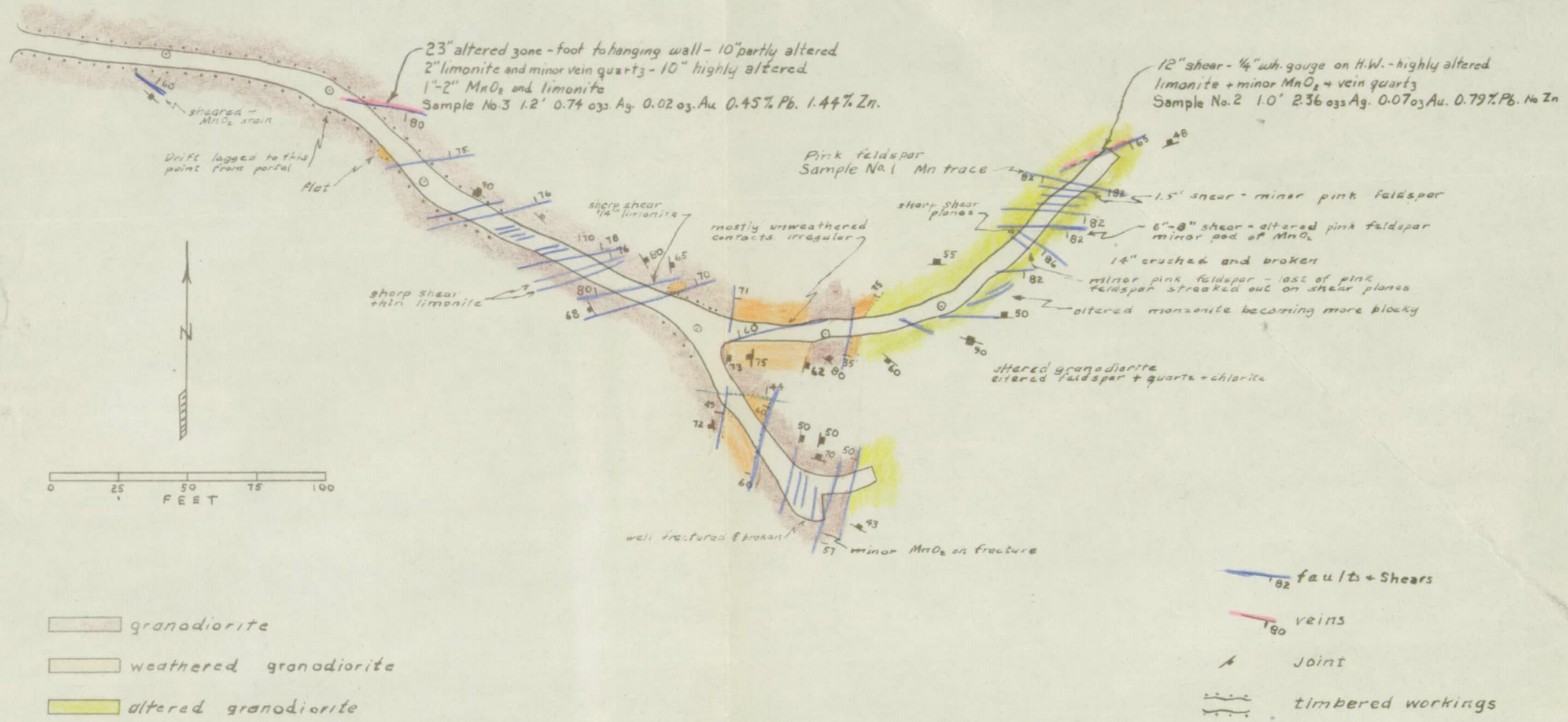
CC: 3-Wash. USGS
2-Wash. USBM
2- USGS (SRO)
M/D (Spo)
Quinlan
JSMcNabb

RECEIVED
NOV 1952



GEOLOGIC MAP NEEDLE GUN ADIT
GRANITE COUNTY, MONTANA

Nov. 1952, J.Q., J. McN

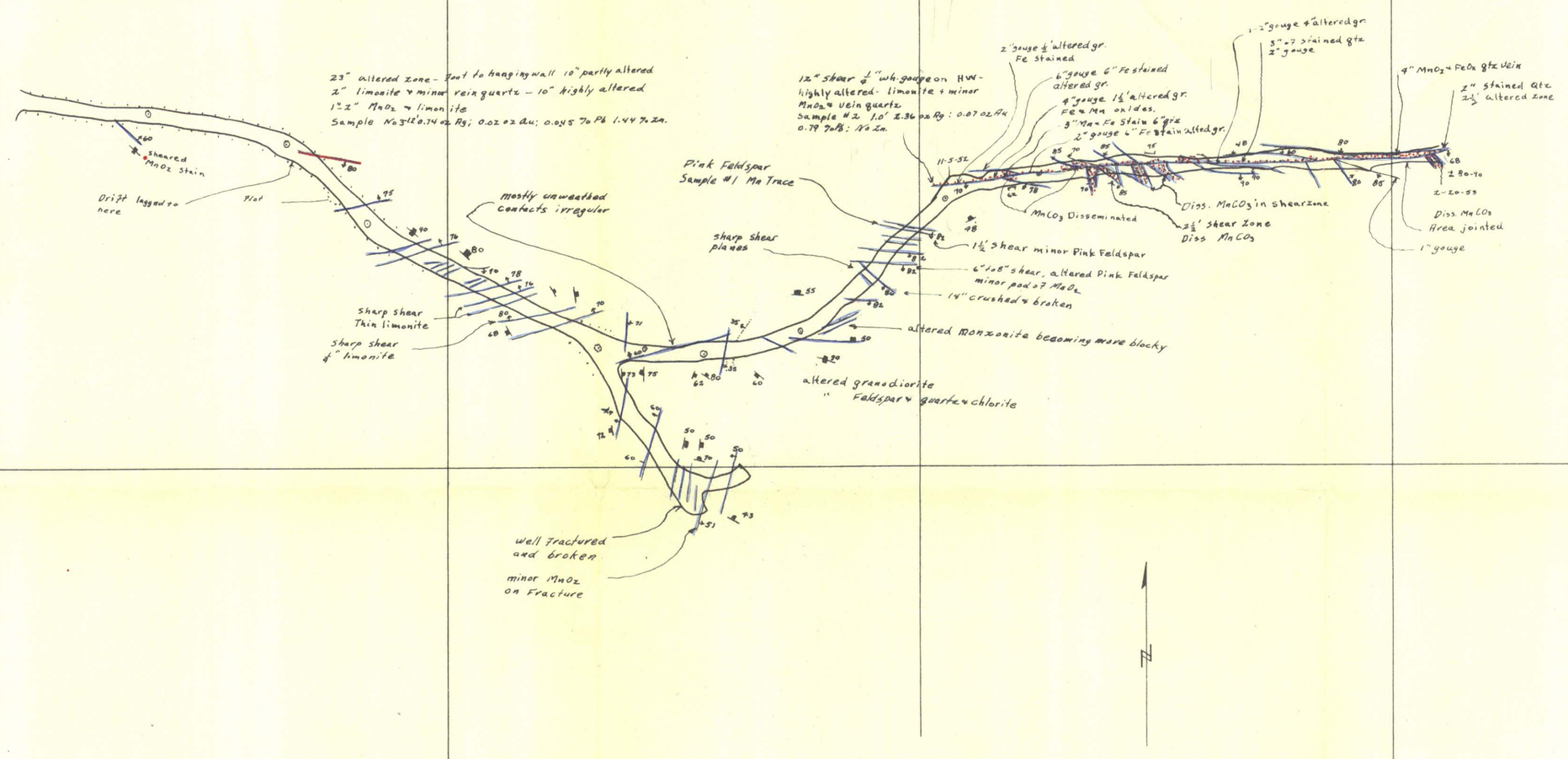


GEOLOGIC MAP NEEDLE GUN ADIT
GRANITE COUNTY, MONTANA

Nov. 1952, J.Q., J. McN

Dept. of Interior
U.S. Geological Survey

DMEA 2747 (1958)



Needle Gun Adit

Granite County, Montana

0 40 80 120 160 Feet.

Nov. 1952 J.Q. & J.M.; R.H.B.N. Feb 1953