DMA Form 1

DEFENSE MINERALS ADMINISTRATION
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DMA Docket No. 3533

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To:	500	Date	10/19/54
To:	Oper Com	Date	10-27-54
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File Copy
Surname

J.W. Alt.
Swanson
Hedges
Newcomb
Selfridge
R.E. Jackson

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

NOV 15 1954

A. & J. Mining Company
Box 469
Sandpoint, Idaho

Re: Docket No. DMEA-3533 (Lead)
A. & J. Mining Co.
Silver Fox Mine
Bonner County, Idaho

Gentlemen:

Your application for aid for an exploration project and other reports available to us in Washington concerning your application have been reviewed.

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

Careful study of all our information, although noting a small amount of marginal ore on your lease, indicates to us that the probability of disclosing minable ore reserves by your proposed program is not sufficiently promising to justify Government participation. We regret to advise you, under these circumstances, that your application for exploration assistance is denied.

We wish to thank you for your interest in the Defense Minerals Program and for bringing your property to our attention.

Sincerely yours,

O. O. Mittendorf

Administrator

JWAlt/er 11/10/54
Copy to: Docket
Admr R File
Ope. Committee
Base Metals
Region II (2)
Mr. Bishop, USBM
Mr. Kiilsgaard, USGS
Chron.

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

November 10,1954

Memorandum

To: The Administrator

From: Chief, Base Metals Division

Subject: Denial of Application, Docket No. DMEA-3533, A. & J. Mining Co., Silver Fox Mine, Bonner County, Idaho

The cited application was submitted to this Division on October 15, 1954. This application was sent in by the Executive Officer on October 12, 1954.

An examination of the property was made by the Field Team on October 7, 1954 and their report was received by this office on October 29, 1954.

The Field Team recommends that the application be denied and state: "At least two narrow quartz veins containing lead, silver, and copper minerals are present on the applicant's property. The enclosing rock is gray, thin-bedded argillite of the Prichard formation. Quartz veins have formed along tight reverse faults and along bedding planes. Tight faults parallel to and transverse to the bedding have broken up the veins into short segments. Metal content of the higher grade portions of the veins is from 3.0 to 7.0 percent lead, 3.0 to 5.0 ounces silver per ton, and less than 1 percent copper. Maximum width of the veins is less than 2 feet. It is not believed these veins represent a feasible target for exploration."

We concur with the recommendations of the Field Team and the Commodity members of the USGS and USBM that this application be denied.

W. R. Griswold

W. R. Griswold

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

November 10, 1954

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W. R. Griswold

W. R. Griswold

File Copy
Surname
J.M. Alt

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

November 10,1954

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W. R. Griswold

JWAlt/er 11/10/54

Copy to: Docket
Base Metals
Chron.

IN REPLY REFER TO:

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

November 4, 1954

Re: DMEA-3533
A. & J. Mining Co.
(Silver Fox Claims)
Bonner Co., Idaho
$5,144 - Lead

Memorandum

To: W. R. Griswold, Defense Minerals Exploration Administration

From: E. L. Newcomb, U. S. Geological Survey

Subject: Review of field examination report

The applicant proposed to extend the lower adit 60 feet to intersect the vein in the 139 foot inclined shaft, and to drift 100 feet in the vein.

The Field Team has recommended the application be denied.

The vein near the adit face appears to be an extension of the vein exposed in the lower part of the inclined shaft. Regardless of whether this relationship has been correctly interpreted, sufficient work has been completed to establish the character of the deposits on the Silver Fox claims. Mineralization on the property is limited to sparse amounts of galena, chalcopyrite and pyrite, which occurs in narrow quartz veins. Local small pods of ore may be minable, but mineralization is not persistent enough to justify further exploration.

The applicant's proposal is not geologically worthwhile and no alternative project is warranted at the present time. I recommend this application be denied exploration assistance.

E. L. Newcomb

E. L. Newcomb

IN REPLY REFER TO:

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

November 4, 1954

Re: DMEA-3533
A. & J. Mining Co.
(Silver Fox Claims)
Bonner Co., Idaho
$5,144 - Loan

Memorandum

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E. L. Newcomb

ELNewcomb:hlm
G-11/4/54

Copy to: Director's reading, 4212
Branch reading, 4212
DMEA (3)
Docket file
O. M. Bishop, 3617

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

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
NOV 8 - 1954

November 5, 1954

Memorandum

To: W. R. Griswold, Base Metals Branch, DMEA

From: O. M. Bishop, Base Metals Branch, USBM
(reviewed by Walter E. Lewis)

Subject: DMEA-3533 (Lead), A. & J. Mining Co., Sandpoint, Idaho - Application - Field examination report.

We have reviewed the subject application and accompanying field team report.

We concur with the recommendations of the field team report. We recommend that the application be denied because of the apparent lack of continuity of the veins, their low metal content and narrow width.

We note the field team report description of the mine workings is in disagreement with Map 1A, and are of the opinion that the word "fifty", on line 3, page 3, should be changed to the number "250". This small error in no way changes the final recommendations and conclusions of the field team. We also note that the field team made a suggestion (last paragraph, page 4) to the applicant relative to how he should develop his prospect. We would note that such recommendations sometimes bounce unpleasantly and should generally be avoided.

The principal vein in the property is exposed in the face of the upper adit (inclined shaft), in the bulldozer cut northeast of the portal of the upper adit, and 22 feet east of the face in the lower adit. We agree with the examining engineer and geologist, that these three vein exposures can be correlated fairly satisfactorily and that further crosscutting in the lower adit is not justified.

Denial is recommended in the following specific points:

1 - The vein is already exposed in the lower adit.

2 - The vein is narrow and of low metal content.

3 - Geological evidence indicates that the veins are broken into short segments by narrow tight faults.

4 - Exploration for the short faulted segments would be difficult and costly.

5 - The vein carried too low a metal content to pay for the exploration costs.

O. M. Bishop

O. M. Bishop

Copy to: Mr. Kiilsgaard, Room 5227
Minerals Division
Base Metals Branch
O. M. Bishop
Files

C
O
P
Y

UNITED STATES
DEPARTMENT OF THE INTERIOR
Bureau of Mines
Washington 25, D. C.

November 5, 1954

Memorandum

To: W. R. Griswold, Base Metals Branch, DMEA

From: O. M. Bishop, Base Metals Branch, USBM
(reviewed by Walter E. Lewis)

Subject: DMEA-3533 (Lead), A. & J. Mining Co., Sandpoint, Idaho - Application - Field examination report.

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O. M. Bishop

Copy to: Mr. Kiilsgaard, Room 5227
Minerals Division
Base Metals Branch
O. M. Bishop
Files

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION

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

November 2, 1954

Mr. George C. Selfridge, Chairman
Operating Committee, DMEA
Department of the Interior
Washington 25, D. C.

Re: Docket No. DMEA-3533 (Lead)
A. & J. Mining Company
Silver Fox Mine
Bonner County, Idaho

Dear Mr. Selfridge:

We wish to acknowledge your letter of October 28, 1954, pertaining to the above-cited docket, in which you note that the application will be held in abeyance until the Field Team report is received.

You, no doubt, have by this time the examination report prepared by Puffett and Anderson and transmitted to you on October 25. A denial of the application was recommended.

Sincerely yours,

A. E. Weissenborn

A. E. Weissenborn
Executive Officer, DMEA
Field Team, Region II

cc: USBM(2)
Puffett

xxxxxxxxxxxxxxxxxx
So. 157 Howard Street
Spokane 4, Washington

November 2, 1954

Mr. George C. Selfridge, Chairman
Operating Committee, DMEA
Department of the Interior
Washington 25, D. C.

Re: Docket No. DMEA-3533 (Lead)
A. & J. Mining Company
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Bonner County, Idaho

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Sincerely yours,

A. E. Weissenborn
Executive Officer, DMEA
Field Team, Region II

cc: USBM(2)
Puffett

xxxxxxxxxxxxxxxxxx
No. 157 Howard Street
Spokane 4, Washington

OCT 29 1954

October 25, 1954

Mr. George C. Selfridge, Chairman
Operating Committee, DMEA
Department of the Interior
Washington 25, D. C.

Re: Docket No. DMEA-3533 (lead-silver)
A. and J. Mining Company
Silver Fox Group of Claims
Bonner County, Idaho

Dear Mr. Selfridge:

Enclosed is a Field Team report by Willard Puffett, Geological Survey, and Webb Anderson, Bureau of Mines, on the examination of the claims of the Silver Fox group of claims of the A. and J. Mining Company, Bonner County, Idaho.

Denial is recommended because of the apparent lack of continuity of the veins and the narrowness and low metal content.

The Field Team is in agreement with this recommendation.

By Field Team, Region II

A. S. Weissenborn, Executive Officer
U. S. Geological Survey

Wing O. Ignew, Member
U. S. Bureau of Mines

Enclosure

cc: USBM (2)
Puffett

Reviewed by
DMEA OPERATING COMMITTEE
11-1-54
(date)

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED

OCT 29 1954

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION
So. 157 Howard Street
Spokane 4, Washington

October 18, 1954

MEMORANDUM

To: DMEA Field Team, Region II

From: Willard P. Puffett, Geologist, U. S. Geological Survey
Webster S. Anderson, Engineer, U. S. Bureau of Mines

Subject: DMEA application examination (lead-silver), A. and J. Mining Company, Silver Fox Group of Claims, Bonner County, Idaho.

APPLICANT

A. and J. Mining Company, A partnership
E. Vernon Anderson & George H. Johnson
Box 469
Sandpoint, Idaho

SUMMARY & RECOMMENDATION

It is recommended that the application be denied. At least two narrow quartz veins containing lead, silver, and copper minerals are present on the applicant's property. The enclosing rock is gray, thin-bedded argillite of the Prichard formation. Quartz veins have formed along tight reverse faults and along bedding planes. Tight faults parallel to and transverse to the bedding have broken up the veins into short segments. Metal content of the higher grade portions of the veins is from 3.0 to 7.0 percent lead, 3.0 to 5.0 ounces silver per ton, and less than 1 percent copper. Maximum width of the veins is less than 2 feet. It is not believed these veins represent a feasible target for exploration.

EXAMINATION

The A. and J. Mining Company property was examined on Thursday, October 7, 1954, by Webster S. Anderson, engineer, Bureau of Mines, and Willard P. Puffett, geologist, Geological Survey. Mr. George H. Johnson, partner, and Mr. Ted Cherry, foreman, accompanied the DMEA examiners. Mr. E. Vernon Anderson, the other partner, visited the property briefly during the examination.

Reviewed by
DMEA OPERATING COMMITTEE
11-1-54
(date)

The DMEA examiners made a tape and brunton traverse of the accessible workings and cut three samples of the veins. Maps No. 1A, 2, and 3, which accompany this report, show the results of this work.

PROPERTY

The A. and J. Mining Company property comprises the Silver Fox group of claims. The location of these claims is shown on Map No. 1. The Sulphide Lode claim is patented, whereas the Honest John, the Lizzie "S", the Susan "T", and the Millsite claimsare unpatented. The Sulphide Lode claim is recorded in the General Land Office of the United States Survey under Certificate No. 02737, registered in the Coeur d'Alene, Idaho Land Office, and is also recorded as Document No. 26262, Book 26 of Deeds, page 238, in the Office of the Recorder of Bonner County, Idaho. The unpatented claims are recorded on pages 315, 317, 318, and 319, Book 11, in the County Records of Bonner County, Idaho.

The Millsite claim and the northeast portion of the Sulphide Lode claim are in sec. 20, whereas the rest of the claims are in sec. 19, T. 56 N., R. 1 E., B.M., Bonner County, Idaho.

The above claims border the west side of Lake Pend Oreille, just south of Camp Bay, near Mineral Point, some 9.5 miles southeast of Sandpoint, Idaho. Altitudes at the claims range from lake level at 2,050 feet to nearly 2,300 feet. The hillslope is moderately heavy forested with conifers, predominately cedar and pine. The roads leading to the property are in fair condition and can probably be used all months of the year.

PROPERTY RIGHTS

The applicant is leasing the property from Mr. Howard B. Thomason. Period of the lease is 5 years, and the applicant is required to pay 15 percent of the net smelter returns of all ores extracted from the property during the time the lease is in effect. The lease is dated September 28, 1954.

COMPETENCY OF APPLICANT

Mr. E. Vernon Anderson is owner of a Pontiac automobile agency in Sandpoint, Idaho. It is not known if he has had any experience in managing mining operations.

Mr. George H. Johnson has been employed with several construction firms in excavating rock. He recently has been employed by Morrison-Knudsen, contractors, to drive tunnels at the Clark Fork dam. Nothing is known of his experience in metal mining.

DESCRIPTION OF PROPERTY

About 60 feet above the level of the lake an adit has been driven westward for 140 feet. An inclined shaft has been sunk for 139 feet, the portal of which is 120 feet higher than the adit. Fifty feet to the northwest of the inclined shaft another shallow shaft has been sunk for 12 feet.

Near the portal of the adit is an old tool and dry shed and near the lake level to the northeast of the adit are the remains of the foundation of an old mill. No other buildings are on the property.

Equipment at the inclined shaft includes one mine car, a 105 c.f.m. portable compressor, and a single drum hoist. Rail has been laid to near the face of the inclined shaft.

GEOLOGY

The country rock is thin-bedded, gray argillite, probably part of the Prichard formation of the Belt Series of pre-Cambrian age. This is a very fine-grained rock with the beds ranging from 1 to 2 inches in thickness. Thin films of calcareous material occur along some of the fracture surfaces in the underground workings. The bedding strikes in a general northeast direction and dips from 25 to 35 degrees to the southeast.

The adit has crosscut the bedding and exposes a few thin faults which strike from north to northeast and dip steeply to the west. Near the portal there is a 2-foot wide zone of shearing parallel to the bedding. A 4- to 6-inch thick quartz vein occurs about 22 feet east of the face of the adit. Sparse amounts of galena and pyrite occur in this vein. The vein is terminated at both the top and bottom by thin, bedding plane faults. The offset segments of this vein are not exposed elsewhere in the adit.

A 3-inch thick quartz vein is exposed in a bulldozer cut just to the northeast of the portal of the main inclined shaft. This vein strikes N. 35° E. and dips 45° N. No sulfides were seen in it. It could not be traced northeast across the bulldozer cut and is cut off on the southwest by a thin fault zone which strikes N. 52° E. and dips 32° S. The offset segment of the vein was not exposed to the southwest of this fault.

The main inclined shaft sunk at an inclination of -15 degrees has followed what appears to be the top of a vein. The general features of this vein are shown on Map No. 2. It is a little difficult to understand exactly what the actual situation is regarding this vein. The sketch of the face of the incline shows a narrow quartz vein trending nearly parallel to the bedding. In the central part of the face this vein widens to nearly 18 inches and dips steeply to the northwest. There is no apparent structural control for the sharp change in orientation of the vein, and the bedding surrounding it has no apparent distortion.

According to the applicant this vein was first intersected below the thin-mineralized fault which occurs 66 feet from the face of the incline. This fault strikes N. 72° E. and dips 25° N., nearly at right angles to the bedding. Below this fault the vein occurs as a 6- to 18-inch wide quartz band, narrow in the back and wide in the sill. Sparse to moderate amounts of galena, with accompanying pyrrhotite, pyrite, and very sparse amounts of chalcopyrite occur throughout the quartz. The vein is exposed at only a few places in the back of the shaft, but, according to the applicants, it persists in the sill from the northeast dipping fault to the face. A sample taken of this vein where it is exposed in the back assayed 0.01 ounce per ton gold, 4.7 ounces per ton silver, 7.5 percent lead, and 0.4 percent copper across 0.5 feet for a length of 0.8 feet. A sample taken of the upper portion of the vein in the face assayed a trace of gold, 2.4 ounces per ton silver, 3.2 percent lead, and 0.6 percent copper over a width of 1.5 feet.

In the shallow inclined shaft northwest of the main inclined shaft a quartz vein, 12 inches thick, is exposed in what appears to be a reverse fault which strikes N. 35° E. and dips 58° N. This vein is exposed from the top of the shaft to the face, a distance of about 12 feet. Sparse to moderate amounts of galena occur throughout the vein. A sample cut across the vein assayed no gold, 0.9 ounce per ton silver, and 3.6 percent lead.

The dump and small stockpile of ore near the portal of the main inclined shaft were checked with a geiger counter, but no radioactivity was detected. There is no apparent alteration of the argillites bordering the veins.

APPLICANT'S PROPOSAL

The applicant proposes to extend the adit 60 feet to crosscut the vein exposed in the main inclined shaft and to drift 100 feet along the vein.

On Map No. 1A is shown the location of all the quartz veins exposed on the property. It is believed that all of the veins have been broken into short segments by the many narrow faults. In general, however, it appears that the vein exposed near the face of the adit can be correlated fairly satisfactorily with the extension of the vein in the lower part of the main inclined shaft. If this is true, there is no need for further crosscutting on the lower level. The narrowness of the vein exposed in this adit does not justify further work.

It was suggested to the applicant that he steepen the inclination of the main inclined shaft to get away from the apparent

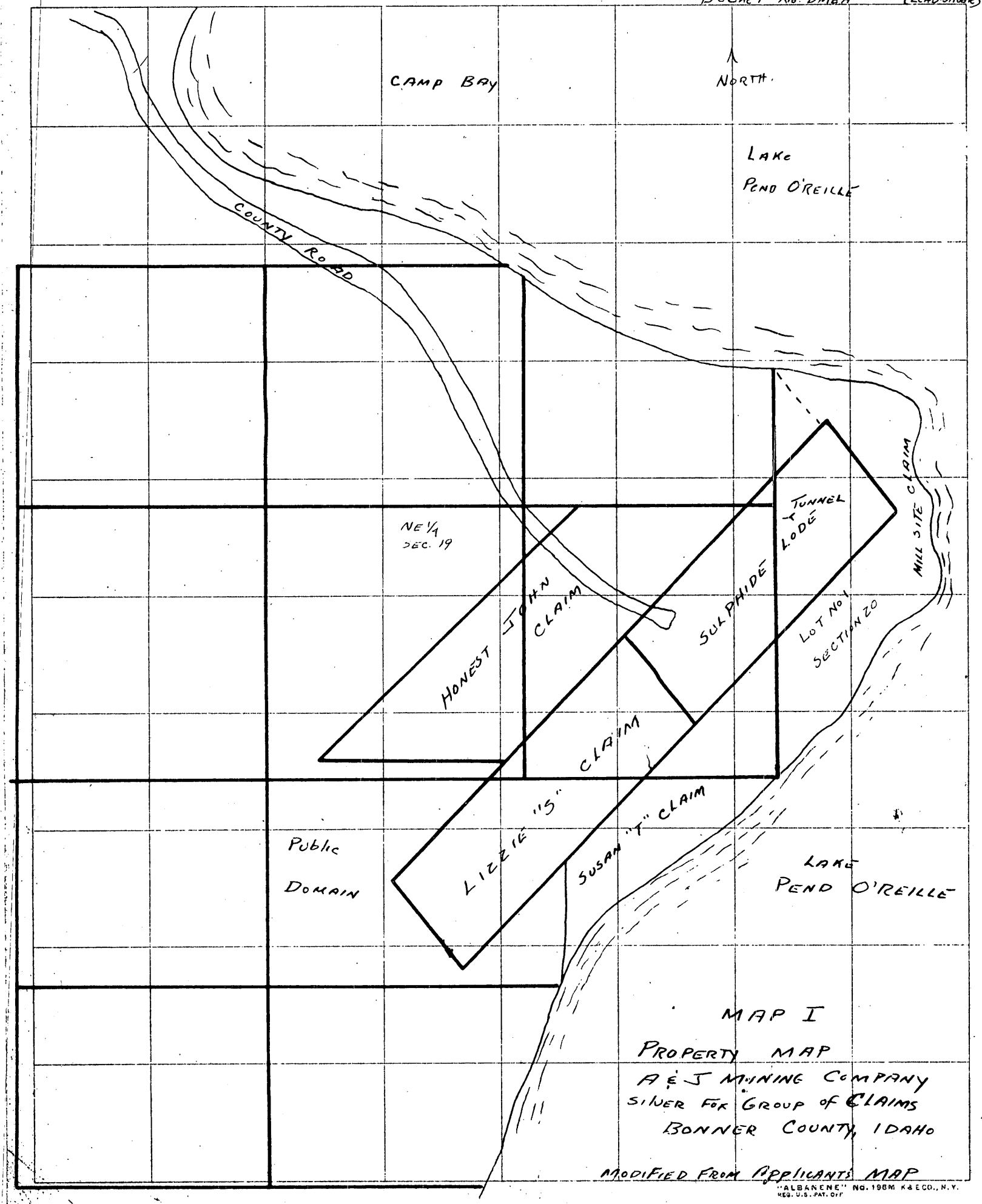
top of the vein and determine the character of the vein with increased depth. The work completed to date shows only the top of the vein, and no evidence has been obtained concerning the width or grade of this down dip.

The vein which appears most promising is near the face of the main inclined shaft, but this vein is too narrow and too low grade to merit further work, unless it can be found that the vein either widens with depth or becomes better mineralized with ore minerals.

Mr. Anderson, one of the partners, stated that the company has an opportunity to purchase a mill at a reasonable price. Presumably, he was thinking seriously of erecting a mill at the property to concentrate the ore he expected to produce. There certainly is not enough evidence of ore exposed to justify the erection of a mill, and at the present time, there is no justification for favorable consideration of this property as a site for a DMEA project.

Enclosures(4)
Distribution:
DMEA(4) ✓
USBM(5)
Docket
USGS(SRO)
Puffett

DOCKET No. DMEA (LEAD-SILVER)



MAP I

PROPERTY MAP

A & J MINING COMPANY

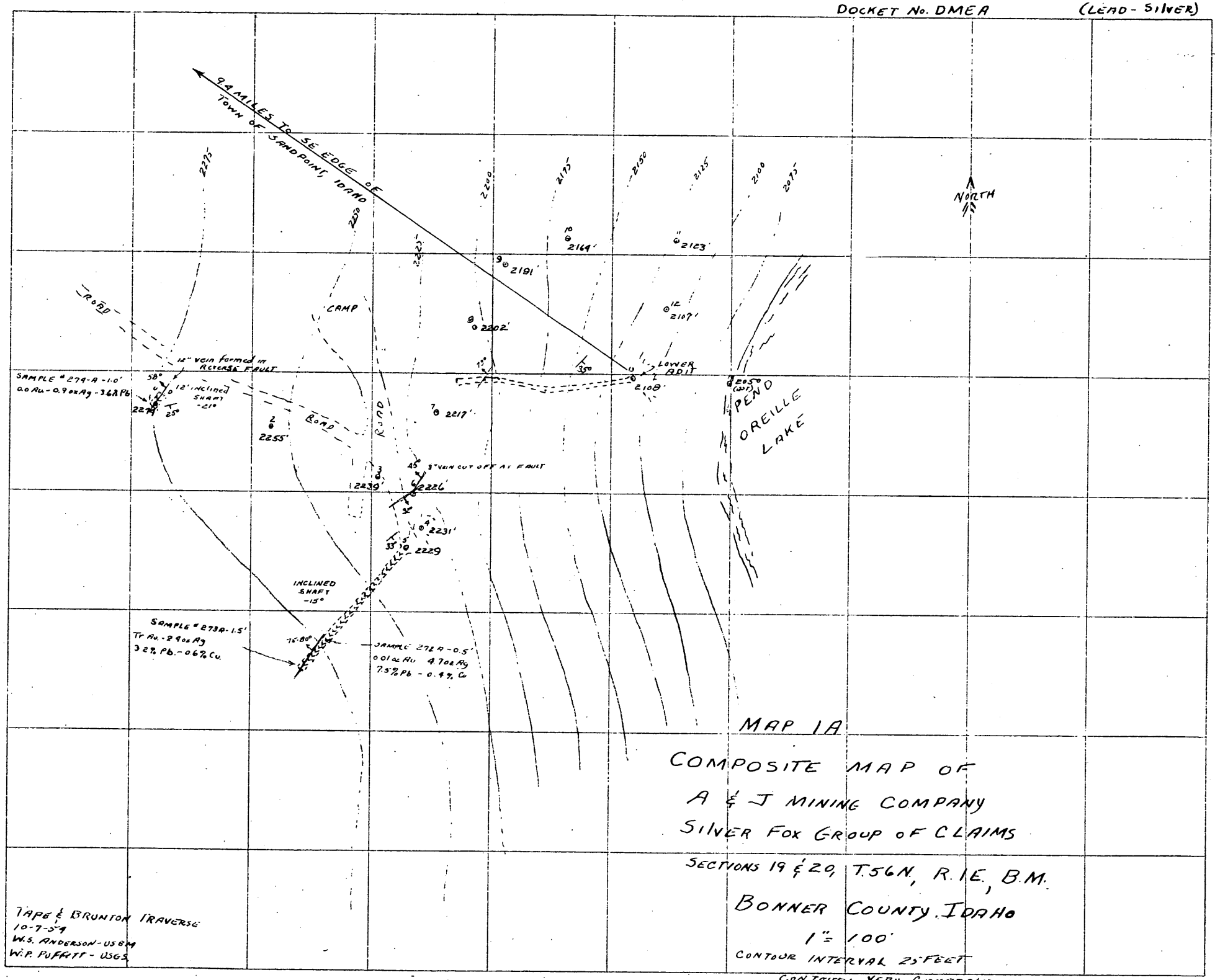
SILVER FOX GROUP OF CLAIMS

BONNER COUNTY, IDAHO

MODIFIED FROM APPLICANTS MAP

"ALBANENE" No. 198M K & E CO., N.Y.
REG. U.S. PAT. OFF.

DOCKET No. DMEA (LEAD - SILVER)



MAP 1A

COMPOSITE MAP OF
A & J MINING COMPANY
SILVER FOX GROUP OF CLAIMS

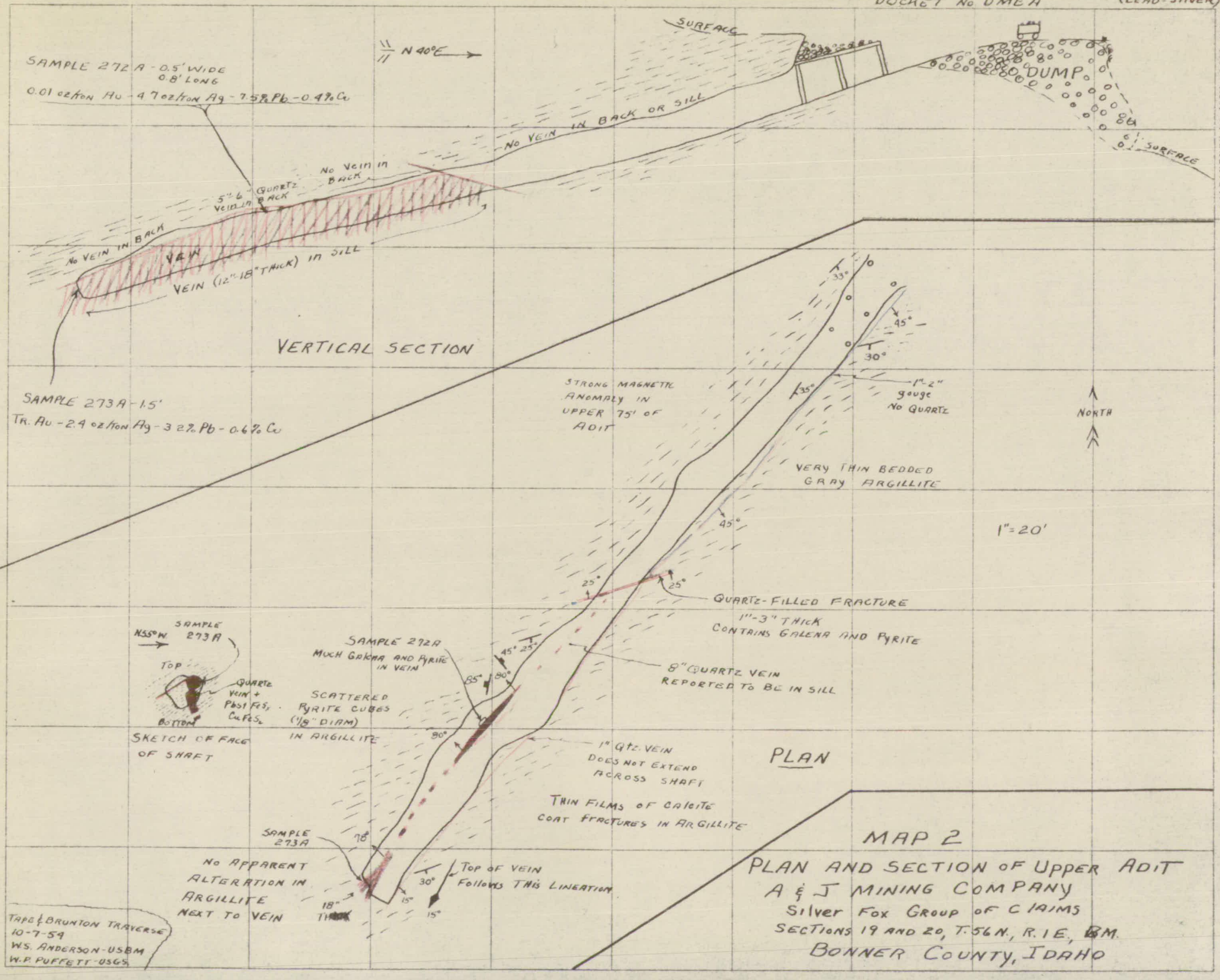
SECTIONS 19 & 20, T.56N., R.1E., B.M.
BONNER COUNTY, IDAHO
1" = 100'
CONTOUR INTERVAL 25 FEET

TAPE & BRUNTON TRAVERSE
10-7-59
W.S. ANDERSON - USBM
W.P. PUFFETT - USGS

CONTOURS VERY GENERALIZED

"ALBANENE" NO. 185M K&E CO., N.Y. REG. U.S. PAT. OFF.

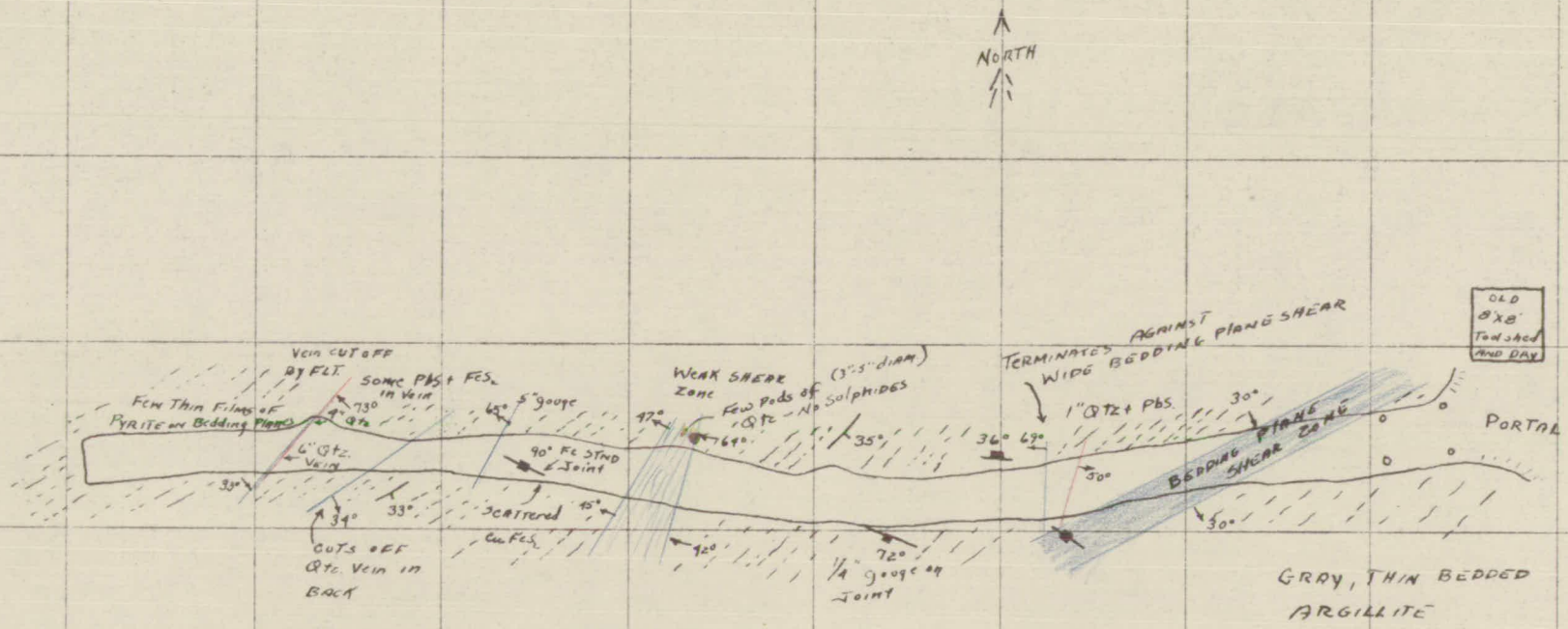
DOCKET No. DMEA (LEAD-SILVER)



MAP 2

PLAN AND SECTION OF UPPER ADIT
A & J MINING COMPANY
Silver Fox Group of Claims
Sections 19 and 20, T. 56 N., R. 1 E., BM.
Bonner County, Idaho

DOCKET No. DMEA (LEAD-SILVER)



MAP 3

PLAN MAP OF LOWER ADIT
A & J MINING COMPANY
SILVER FOX GROUP OF CLAIMS

SECTIONS 19 & 20, T.56N., R.1E., B.M.
BONNER COUNTY, IDAHO

1" = 20'

TAPE & BRUNTON TRAVERSE
10-7-59
W.S. ANDERSON, USBM
W.P. PUFFETT, USGS.

"ALDANENE" NO. 195M KALCO, N.Y. REG. U.S. PAT. OFF.

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION

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

Department of the Interior
Defense Minerals Administration
RECEIVED
OCT 29 1954

October 25, 1954

Mr. George C. Selfridge, Chairman
Operating Committee, DMEA
Department of the Interior
Washington 25, D. C.

Re: Docket No. DMEA-3533 (lead-silver)
A. and J. Mining Company
Silver Fox Group of Claims
Bonner County, Idaho

Dear Mr. Selfridge:

Enclosed is a Field Team report by Willard Puffett, Geological Survey, and Webb Anderson, Bureau of Mines, on the examination of the claims of the Silver Fox group of claims of the A. and J. Mining Company, Bonner County, Idaho.

Denial is recommended because of the apparent lack of continuity of the veins and the narrowness and low metal content.

The Field Team is in agreement with this recommendation.

By Field Team, Region II

A. E. Weissenborn per J.B.V.
A. E. Weissenborn, Executive Officer
U. S. Geological Survey

Wing G. Agnew, Member
U. S. Bureau of Mines

Enclosure

cc: USBM (2)
Puffett

Q mea

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION
So. 157 Howard Street
Spokane 4, Washington

OCT 29 1954

October 18, 1954

MEMORANDUM

To: DMEA Field Team, Region II

From: Willard P. Puffett, Geologist, U. S. Geological Survey
Webster S. Anderson, Engineer, U. S. Bureau of Mines

Subject: DMEA application examination (lead-silver), A. and J. Mining Company, Silver Fox Group of Claims, Bonner County, Idaho.

APPLICANT

A. and J. Mining Company, A partnership
E. Vernon Anderson & George H. Johnson
Box 469
Sandpoint, Idaho

SUMMARY & RECOMMENDATION

It is recommended that the application be denied. At least two narrow quartz veins containing lead, silver, and copper minerals are present on the applicant's property. The enclosing rock is gray, thin-bedded argillite of the Prichard formation. Quartz veins have formed along tight reverse faults and along bedding planes. Tight faults parallel to and transverse to the bedding have broken up the veins into short segments. Metal content of the higher grade portions of the veins is from 3.0 to 7.0 percent lead, 3.0 to 5.0 ounces silver per ton, and less than 1 percent copper. Maximum width of the veins is less than 2 feet. It is not believed these veins represent a feasible target for exploration.

EXAMINATION

The A. and J. Mining Company property was examined on Thursday, October 7, 1954, by Webster S. Anderson, engineer, Bureau of Mines, and Willard P. Puffett, geologist, Geological Survey. Mr. George H. Johnson, partner, and Mr. Ted Cherry, foreman, accompanied the DMEA examiners. Mr. E. Vernon Anderson, the other partner, visited the property briefly during the examination.

The DMEA examiners made a tape and brunton traverse of the accessible workings and cut three samples of the veins. Maps No. 1A, 2, and 3, which accompany this report, show the results of this work.

PROPERTY

The A. and J. Mining Company property comprises the Silver Fox group of claims. The location of these claims is shown on Map No. 1. The Sulphide Lode claim is patented, whereas the Honest John, the Lizzie "S", the Susan "T", and the Millsite claimsare unpatented. The Sulphide Lode claim is recorded in the General Land Office of the United States Survey under Certificate No. 02737, registered in the Coeur d'Alene, Idaho Land Office, and is also recorded as Document No. 26262, Book 26 of Deeds, page 238, in the Office of the Recorder of Bonner County, Idaho. The unpatented claims are recorded on pages 315, 317, 318, and 319, Book 11, in the County Records of Bonner County, Idaho.

The Millsite claim and the northeast portion of the Sulphide Lode claim are in sec. 20, whereas the rest of the claims are in sec. 19, T. 56 N., R. 1 E., B.M., Bonner County, Idaho.

The above claims border the west side of Lake Pend Oreille, just south of Camp Bay, near Mineral Point, some 9.5 miles southeast of Sandpoint, Idaho. Altitudes at the claims range from lake level at 2,050 feet to nearly 2,300 feet. The hillslope is moderately heavy forested with conifers, predominately cedar and pine. The roads leading to the property are in fair condition and can probably be used all months of the year.

PROPERTY RIGHTS

The applicant is leasing the property from Mr. Howard B. Thomason. Period of the lease is 5 years, and the applicant is required to pay 15 percent of the net smelter returns of all ores extracted from the property during the time the lease is in effect. The lease is dated September 28, 1954.

COMPETENCY OF APPLICANT

Mr. E. Vernon Anderson is owner of a Pontiac automobile agency in Sandpoint, Idaho. It is not known if he has had any experience in managing mining operations.

Mr. George H. Johnson has been employed with several construction firms in excavating rock. He recently has been employed by Morrison-Knudsen, contractors, to drive tunnels at the Clark Fork dam. Nothing is known of his experience in metal mining.

DESCRIPTION OF PROPERTY

About 60 feet above the level of the lake an adit has been driven westward for 140 feet. An inclined shaft has been sunk for 139 feet, the portal of which is 120 feet higher than the adit. Fifty feet to the northwest of the inclined shaft another shallow shaft has been sunk for 12 feet.

Near the portal of the adit is an old tool and dry shed and near the lake level to the northeast of the adit are the remains of the foundation of an old mill. No other buildings are on the property.

Equipment at the inclined shaft includes one mine car, a 105 c.f.m. portable compressor, and a single drum hoist. Rail has been laid to near the face of the inclined shaft.

GEOLOGY

The country rock is thin-bedded, gray argillite, probably part of the Prichard formation of the Belt Series of pre-Cambrian age. This is a very fine-grained rock with the beds ranging from 1 to 2 inches in thickness. Thin films of calcareous material occur along some of the fracture surfaces in the underground workings. The bedding strikes in a general northeast direction and dips from 25 to 35 degrees to the southeast.

The adit has crosscut the bedding and exposes a few thin faults which strike from north to northeast and dip steeply to the west. Near the portal there is a 2-foot wide zone of shearing parallel to the bedding. A 4- to 6-inch thick quartz vein occurs about 22 feet east of the face of the adit. Sparse amounts of galena and pyrite occur in this vein. The vein is terminated at both the top and bottom by thin, bedding plane faults. The offset segments of this vein are not exposed elsewhere in the adit.

A 3-inch thick quartz vein is exposed in a bulldozer cut just to the northeast of the portal of the main inclined shaft. This vein strikes N. 35° E. and dips 45° N. No sulfides were seen in it. It could not be traced northeast across the bulldozer cut and is cut off on the southwest by a thin fault zone which strikes N. 52° E. and dips 32° S. The offset segment of the vein was not exposed to the southwest of this fault.

The main inclined shaft sunk at an inclination of -15 degrees has followed what appears to be the top of a vein. The general features of this vein are shown on Map No. 2. It is a little difficult to understand exactly what the actual situation is regarding this vein. The sketch of the face of the incline shows a narrow quartz vein trending nearly parallel to the bedding. In the central part of the face this vein widens to nearly 18 inches and dips steeply to the northwest. There is no apparent structural control for the sharp change in orientation of the vein, and the bedding surrounding it has no apparent distortion.

According to the applicant this vein was first intersected below the thin-mineralized fault which occurs 66 feet from the face of the incline. This fault strikes N. 72° E. and dips 25° N., nearly at right angles to the bedding. Below this fault the vein occurs as a 6- to 18-inch wide quartz band, narrow in the back and wide in the sill. Sparse to moderate amounts of galena, with accompanying pyrrhotite, pyrite, and very sparse amounts of chalcopyrite occur throughout the quartz. The vein is exposed at only a few places in the back of the shaft, but, according to the applicants, it persists in the sill from the northeast dipping fault to the face. A sample taken of this vein where it is exposed in the back assayed 0.01 ounce per ton gold, 4.7 ounces per ton silver, 7.5 percent lead, and 0.4 percent copper across 0.5 feet for a length of 0.8 feet. A sample taken of the upper portion of the vein in the face assayed a trace of gold, 2.4 ounces per ton silver, 3.2 percent lead, and 0.6 percent copper over a width of 1.5 feet.

In the shallow inclined shaft northwest of the main inclined shaft a quartz vein, 12 inches thick, is exposed in what appears to be a reverse fault which strikes N. 35° E. and dips 58° N. This vein is exposed from the top of the shaft to the face, a distance of about 12 feet. Sparse to moderate amounts of galena occur throughout the vein. A sample cut across the vein assayed no gold, 0.9 ounce per ton silver, and 3.6 percent lead.

The dump and small stockpile of ore near the portal of the main inclined shaft were checked with a geiger counter, but no radioactivity was detected. There is no apparent alteration of the argillites bordering the veins.

APPLICANT'S PROPOSAL

The applicant proposes to extend the adit 60 feet to crosscut the vein exposed in the main inclined shaft and to drift 100 feet along the vein.

On Map No. 1A is shown the location of all the quartz veins exposed on the property. It is believed that all of the veins have been broken into short segments by the many narrow faults. In general, however, it appears that the vein exposed near the face of the adit can be correlated fairly satisfactorily with the extension of the vein in the lower part of the main inclined shaft. If this is true, there is no need for further crosscutting on the lower level. The narrowness of the vein exposed in this adit does not justify further work.

It was suggested to the applicant that he steepen the inclination of the main inclined shaft to get away from the apparent

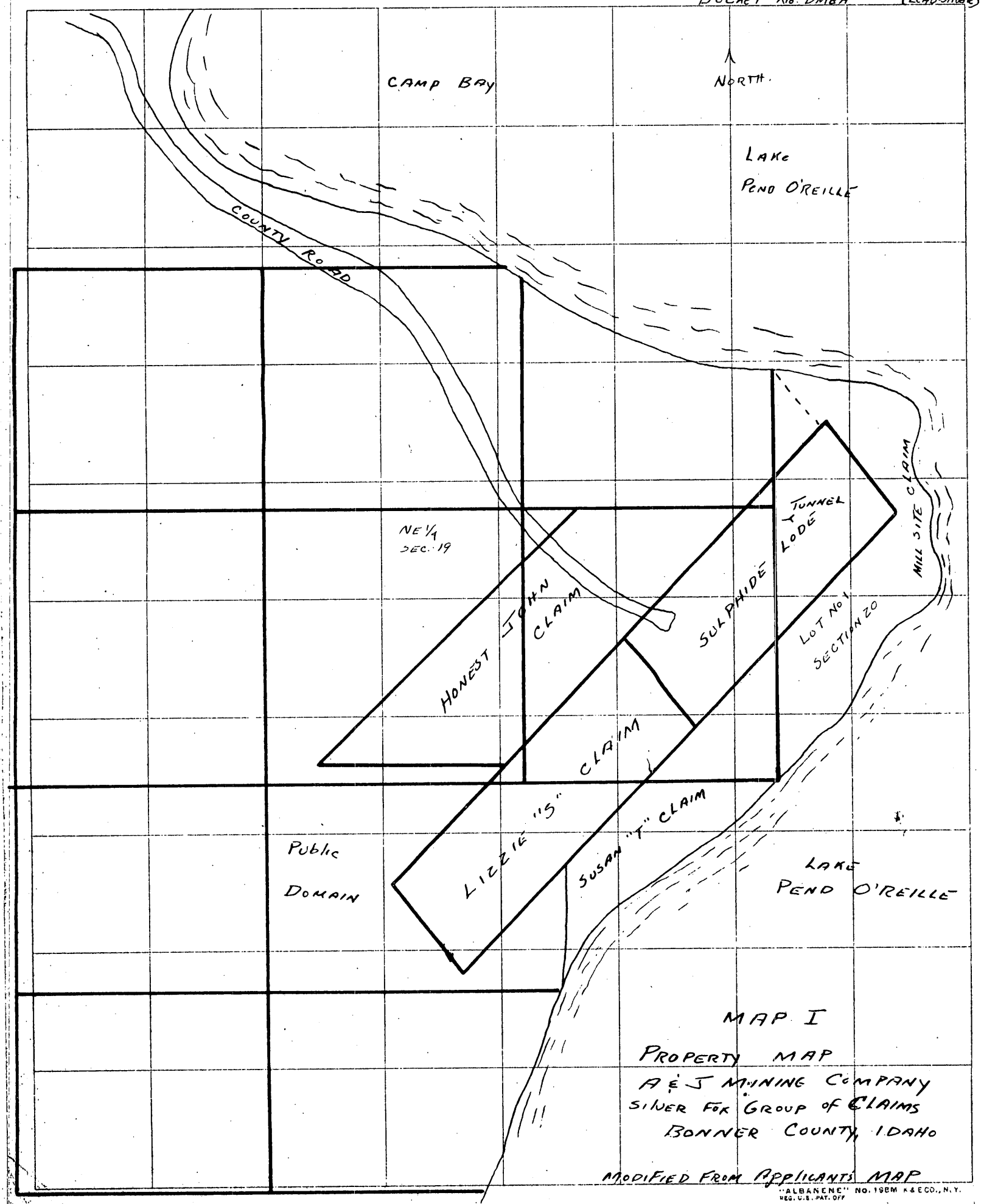
top of the vein and determine the character of the vein with increased depth. The work completed to date shows only the top of the vein, and no evidence has been obtained concerning the width or grade of this down dip.

The vein which appears most promising is near the face of the main inclined shaft, but this vein is too narrow and too low grade to merit further work, unless it can be found that the vein either widens with depth or becomes better mineralized with ore minerals.

Mr. Anderson, one of the partners, stated that the company has an opportunity to purchase a mill at a reasonable price. Presumably, he was thinking seriously of erecting a mill at the property to concentrate the ore he expected to produce. There certainly is not enough evidence of ore exposed to justify the erection of a mill, and at the present time, there is no justification for favorable consideration of this property as a site for a DMEA project.

Enclosures(4)
Distribution:
DMEA(4)
USBM(5)
Docket
USGS(SRO)
Puffett

DOCKET No. DMEA (LEAD-SILVER)



MAP I

PROPERTY MAP
A & J MINING COMPANY
SILVER FOX GROUP OF CLAIMS
BONNER COUNTY, IDAHO

MODIFIED FROM APPLICANTS MAP

"ALBANENE" No. 198M K&E CO., N.Y.
REG. U.S. PAT. OFF

"ALBANENE" No. 198M K&E CO., N.Y.
REG. U.S. PAT. OFF

File Copy
Surname
J.W. Alt.
Irwin
Selfridge
Johnson
Whitehead

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

OCT 28 1954

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

Re: Docket No. DMEA-3533 (Lead)
A. & J. Mining Company
Silver Fox Mine
Bonner County, Idaho

Dear Mr. Weissenborn:

This will acknowledge receipt of your letter of October 12, 1954, in which you state that a field examination has been made and that the examiner's report of the cited property will be forwarded as soon as possible.

We will hold this application in abeyance until the Field Team report is received.

Sincerely yours,

George C. Selfridge
Chairman, Operating Committee (JB)

JWAlt/er 10/26/54

APPROVED:

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

Thor H. Kiilsgaard
Member, Geological Survey (JB)

Copy to: Docket
Admr R File
Op. Committee
Base Metals
Mr. Bishop, USBM
Mr. Kiilsgaard, USGS
Chron.

R.C.S.

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

October 19, 1954

Memorandum

To: Executive Officer, DMEA Field Team, Region II

From: Chief, Operation's Control and Statistics Division

Subject: Assignment of Docket Number

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

DMEA - 3533 A. & J. Mining Co.

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

October 19, 1954

A. & J. Mining Co.
Box 469
Sandpoint, Idaho

Subject: DMEA-3533
Exploration Assistance
Re: Silver Fox Mine

Gentlemen:

The receipt of your application dated September 8, 1954 for exploration assistance under the Defense Production Act of 1950, as amended, is hereby acknowledged.

Your application has been assigned Docket Number DMEA-3533 and referred to the Base Metals Division.

Kindly refer to DMEA-3533 in any future correspondence relating to your application.

Sincerely yours,

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION

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

October 12, 1954

Mr. George C. Selfridge, Chairman
Operating Committee, DMEA
Department of the Interior
Washington 25, D. C.

Re: DMEA application (lead-silver)
A. & J. Mining Co.
Silver Fox Mine
Bonner County, Idaho

Dear Mr. Selfridge:

Enclosed are the original and two copies of an application received from A. & J. Mining Co., a partnership composed of E. Vernon Anderson and George H. Johnson, to explore a lead-silver property in Bonner County, Idaho. One copy of the application is being retained at this office.

Made a part of the application is a lease from Howard B. Thomason to the applicants. This lease will expire September 28, 1959. Also attached is an Owner's Consent to Lien.

A field examination has been made of this property and the examiners' report will be forwarded as soon as possible.

Sincerely yours,

A. E. Weissenborn

A. E. Weissenborn
Executive Officer, DMEA
Field Team, Region II

Enclosures

cc: USBM (2)
Puffett

xxxxxxxxxxxxxxxxx
So. 157 Howard Street
Spokane 4, Washington

October 12, 1954

Mr. George C. Selfridge, Chairman
Operating Committee, DMEA
Department of the Interior
Washington 25, D. C.

Re: DMEA application (lead-silver)
A. & J. Mining Co.
Silver Fox Mine
Bonner County, Idaho

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Sincerely yours,

A. E. Weissenborn
Executive Officer, DMEA
Field Team, Region II

Enclosures

cc: USBM (2)
Puffett

MF-103
(Revised April 1952)

UNITED STATES DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION

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

RECEIVED
OCT 5 1954
U. S. G. S.
SPOKANE, WASH.

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-353~~1~~3
Metal or Mineral Lead ~~[illegible]~~
Date Received
Estimated Cost $5,144
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: A. & J Mining Co., Box 469, Sandpoint, Idaho
Partnership - Idaho - E. Vernon Anderson and
George H. Johnson - Box 469, Sandpoint, Idaho - Partnership

(*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 Claims located in sections nineteen & twenty - TWP Fifty Six North of Range One East in Bonner County, Idaho

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

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

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

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

(*f*) If the land consists of unpatented claims, add to the description above, the book and page numbers for each recorded location notice. See enclosure under 3f.

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.

16—66551-1

See accompanying papers headed 4. (a), etc.

5. *The exploration project.*—(*a*) State the mineral or minerals for which you wish to explore lead and silver
See accompanying papers enclosed.

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

(*c*) The work will start within 30 days and be completed within 6 months from the date of an exploration project contract.

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

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

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

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

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

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

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

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

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

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

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

Explain in detail on acompanying paper.

CERTIFICATION

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

Dated 9-8-54, 1954

A. & J. Mining Company
(Applicant)

By E. Vernon Anderson

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

********MINING LEASE********

This lease made and entered into as of the date hereof by and between Howard B. Thomason as hereinafter called the party of the first part and George H. Johnson and E. Vernon Anderson, operating in the name of A. & J. Mining Co. as hereinafter called the party of the second part.

WHEREAS, the said party of the first part owns and controls the following mining claims to wit:

1. The Sulphide Lode Mining Claim a patented mining claim described as follows:
General Land office of the United States Survey and certificate No. 08737, Registered in the Coeur d' Alene, Idaho Land Office. Also recorded as document No. 26262, Book 26 of deeds, page 238, in the office of the recorder of Bonner County and to wit:
Beginning at corner No. 1 a cross and 1-2117 marked on base of cliff, with a mound of stone, from which the meander corner between Sections 19 and 20 in Twp. 56 N. of Range 1 East of the Boise Meridian, bears North 55 45' west 403 feet distant. Thence, first course, south 51 43' west 1206.4 feet to corner No. 2, a fir post five feet long, five inches square, marked 2-2117, with mound of earth; Thence, second course, south 6 35' east 300 feet to a point from which discovery bears north 48 07' east 694.8 feet distant; 560 feet to corner No. 3, a slate stone 28 x 3 x 6 inches marked with a cross on top at exact corner point and 3--2117 with mound of stone; thence third course, north 53 49' east 1192.5 feet to corner no. 4 a slate stone 30 x 6 x 4 inches marked 4-2117 with a mound of stone; thence, fourth course North 6 35' west 567 feet to corner no. 1 the place of beginning; survey No. 2117 extending 1287.8 feet in length along the Sulphide vein or lode; the premises herein granted containing 13.042 acres, more or less.

2. The Honest John; The Lizzie S., The Susan T., The Millsite claims, all unpatented mining claims described as follows:

Those claims are set forth in the County records of Bonner County, Idaho., Quartz Mining Book as follows:

Honest John	- 99491;	Page 315	-Book 11.
Susan T.	- 99492;	Page 317	-Book 11.
Millsite Lode	- 99493;	Page 318	-Book 11.
Lizzie S.	- 99494,	Page 319	-Book 11.

The said Howard B. Thomason hereby agrees to lease to the said second party the above mentioned mining claims for a period of five years upon the following conditions and provisions to wit;

The said party of the second part shall pay to the said first party as a royalty for this lease fifteen per cent of the net smelter returns of all ores extracted therefrom during the term of this lease. All materials, labor, supplies and other expenses in connection with the conducting the mining operations thereon and extraction of the ores and also the hauling of the ores to the smelter shall be paid by and become the expenses of the said second party without cost to the said first party.

The said second party shall not have the right without the consent of the first party to sell his lease, assign his lease, or sub-let his lease.

The said second party reserves the right to terminate this lease at anytime he so desires and vacate the said property. In such case the said second party shall have the right to remove therefrom all equipment, building materials and supplies used in his operation provided that all of the same shall be removed within ninety days from notice (written) of the termination of this lease. If this is not done the said property shall become the property of the said first party.

This lease may be renewed upon the same terms and conditions for a period of ten years at the option of the said second party.

The said second party shall enter upon the property within a reasonable length of time and commence his mining operations which he will continuously maintain during the period of this lease in a business-like manner according to mining practices.

This lease is made and executed in duplicate.

Dated at Sandpoint, Idaho this 23 day of Sept., 1954.

Howard B. Thomson
Party of the first part

Subscribed to before me this
28 day of September 1954

W. E. Brewsell
NOTARY PUBLIC for the State of Idaho
Residing at Sandpoint, Idaho
My commission expires March 1, 1958

E. Vernon Anderson
Parties of the second part

George N. Johnson
Parties of the second part

3 f. 1. The Sulphide Lode Mining Claim a Patented Mining claim described as follows:

General Land Office of the United States Survey and certificate No. 02737, Registered in the Coeur d' Alene, Idaho Land Office. Also recorded as Document No. 26262, Book 26 of deeds, page 238, in the office of the recorder of Bonner County and to wit:

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2. The Honest John, The Lizzie S., The Susan T., The Millsite claims, all unpatented mining claims described as follows:

These claims are set forth in the County records of Bonner County, Idaho., Quartz Mining Book.

Honest John--#99491, Page 315- Book 11.
Susan T.- - - #99492, Page 317- Book 11.
Millsite Lode-#99493, Page 318-Book 11.
Lizzie "S" -#99494, Page 319 -Book 11.

4. (a) The upper tunnel has been driven to a depth of 155 ft. Track has been laid the full length. The mine is in operation in this tunnel. The lower tunnel has been driven to a depth of 133 ft. Track has been laid the full length. No ore has been encountered in this tunnel. We believe that a large body of ore lies approximately 60 ft. straight ahead. The reason for this application is to complete this cross-cut. We have the necessary equipment, including compressor, drifter, winch, ore car, and necessary hand tools.

There are good roads right to both mine shafts. Electricity is available from 300 ft. away. This would be furnished by the Northern Lights, Inc.

A. & J. Mining Co. are the complete lessees of claims covered by this application.

The mine is 18 miles from Sandpoint, Idaho, and is an easy 30 minute drive from Sandpoint, and is accessible the year around.

(b) There has been no past production in either the upper or lower tunnels. Current production from the upper tunnel is approximately two tons per day. Ore reserves are unknown.

(c) Mineralization - Lead & silver. Gang matter is quartz. Type of deposit is vein. We have been told by geologists and mining engineers that a large body of ore lies approximately 60 ft. ahead of present tunnel heading.

(d) Roads built directly to mine entrances. Distance to Smelter at Kellogg, Idaho is 75 miles. Distance to supplies and residence is 18 miles.

(e) Manpower, materials, supplies and equipmentare rédily available. Water is within 100 ft. of the mine. Power is available at 300 ft.

5. (b) We propose to drive the lower cross cut 60 ft. or more to ore body. Find map of claims enclosed.

(d) Applicant has had no previous experience in operating a mine but has had 25 years of business experience. Foreman in charge has had 30 years experience in prospecting and mining.

6. (a) None

(b) Unit cost estimate - Labor - Supervision
Breaking & mucking average 4 ft. advance per shift
7'x 5' cross section
2 miners at $16.00 - - - - - - - - - - - $32.00

CONTINUED

1 surface laborer at $15.00- - - - - -	$15.00	
1 supervisor at $24.00- - - - - - - -	$24.00	
		$71.00
Plus 10% for FICA & other insurance		7.10
Total cost per 4 feet of advance- - - - - - - - - - - - - -		78.10

(c) Unit cost estimate - Operating materials & supplies, per 4 ft. advance.

Powder #40- - - - - - - - - - - - - - - -	$8.00	
Caps 14 at .0285 - - - - - - - - - - - -	.40	
Fuses 100' at .015-- - - - - - - - - - -	1.50	
Bits- - - - - - - - - - - - - - - - - -	3.00	
Steel- - - - - - - - - - - - - - - - - -	1.00	
Rail - - - - $140.00 per ton - - - - - -	3.73	
Fish plates, bolts, etc.- - - - - - - -	.25	
Ties- - - - - - - - - - - - - - - - - -	.42	
Power - gas & oil- - - - - - - - - - - -	4.00	
Pipe- - - - - - - - - - - - - - - - - -	1.20	
Repairs- - - - - - - - - - - - - - - - -	2.90	
Total cost operating materials and supplies	26.40	26.40
(d) Compressor- Rental per shift	7.46	
Drifter, hoses, sinker leg, water tank, -Rental per shift	3.41	
Use of pickup for man hauling men and material	3.00	
	13.87	13.87
Total Cost per unit of 4 ft. advance- - - - -		118.37
(Divided by four - Unit cost per ft.- - - - -		29.59
(e) Rebuilding tool house at lower mine entrance- - - - - -		200.00
(f) None		
(g) Bookkeeper salary - part time - per month		35.00
(h) None		

COST OF PROJECT

Sixty ft. cross cut @ 29.59 ft. -- - - - - - - - -	1775.40
One Hundred ft. drift @ 29.59 ft.- - - - - - - - -	2959.00
Tool house repair and remodling- - - - - - - - - -	200.00
Bookkeeper - 6 months @ $35.00- - - - - - - - - 6	210.00
Total cost of project- - - - - - - - - - - - - -	$5144.40

MF-203
(Revised July 1, 1954)

OWNER'S CONSENT TO LIEN

WHEREAS, the undersigned, as owner, co-owner, lessor, or seller has an interest in certain property in the State of Idaho, County of Bonner, described as follows:1/

See attached sheet for descriptions.

which is the subject of a proposed exploration project contract, hereinafter called the "contract", between the United States of America, hereinafter called the "Government", and

2/ A. & J. Mining Co., Box 469, Sandpoint, Idaho -Partnership - Idaho -
E. Vernon Anderson and George H. Johnson - Box 469, Sandpoint, Idaho

hereinafter called the "Operator"; and

WHEREAS, under the provisions of said contract the Government is entitled to a percentage royalty on production and to other rights and equities which do or may conflict with or be adverse to the rights of the undersigned:

NOW THEREFORE, the undersigned, in consideration of said contract and as an inducement to the Government to enter into same, undertakes and agrees as follows:

1. The Government's equity in and right to dismantle, sever, take possession of, and remove and dispose of facilities, buildings, fixtures, equipment, or other items as provided in the contract or any amendment thereof shall prevail over and be prior and superior to any conflicting or adverse rights of the undersigned, and the Government is authorized to enter upon the land for such purposes.

2. To secure the payment to the Government of the percentage royalty on production3/ provided for under the terms of said exploration project contract or any amendment thereof there is hereby granted to the Government a lien upon the land above referred to and upon any production of minerals therefrom until said royalty is fully paid or ten years have elapsed from the date of the contract, whichever occurs first.

1/ Either (a) insert the legal description of the land, or (b) strike out the words "as follows" and insert "in a lease [or contract, deed, or other document] dated _____, and recorded in book _____ page _____ official records of said county." If (b) is used, the book and page of recordation cannot be dispensed with. If the space provided is insufficient, use an Annex, and refer to the Annex in the space.

2/ Insert the name of the Operator as it will appear in the exploration project contract.

3/ Mining or production from the land is not required, and in the absence of production there is no obligation to repay the Government.

(OVER)

3. The undersigned shall commit no act nor assert any claim that may contravene or conflict with the lien, claim, or rights of the Government under the provisions of said contract. This agreement shall be binding upon the heirs, executors, administrators, successors, and assigns of the undersigned.

4. Changes and added provisions None.

Dated this 8 day of September, 1954.

Howard B. Thomson [Seal]

[Seal]

[Seal]

W. A. Brunsell

NOTARY PUBLIC for the State of Idaho
residing at Sandpoint, Idaho
My commission expires March 1, 1958

MF-203
(Revised July 1, 1954)

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See attached sheet for description.

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2/ A. S. J. Mining Co., Box 169, Sandpoint, Idaho - Partners - Idaho -
E. Vernon Anderson and George H. Johnson - Box 169, Sandpoint, Idaho

hereinafter called the "Operator"; and

WHEREAS, under the provisions of said contract the Government is entitled to a percentage royalty on production and to other rights and equities which do or may conflict with or be adverse to the rights of the undersigned:

NOW THEREFORE, the undersigned, in consideration of said contract and as an inducement to the Government to enter into same, undertakes and agrees as follows:

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4. Changes and added provisions _____

_____

_____

_____

Dated this _____ day of _____, 195_____

Howard B. Cameron [Seal]

_____ [Seal]

_____ [Seal]

W. E. Brunsell

NOTARY PUBLIC for the State of Idaho
residing at Sandpoint, Idaho
My commission expires March 1, 1958

MF-203
(Revised July 1, 1954)

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B. Vernon Anderson and George H. Johnson - Box 469, Sandpoint, Idaho

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4. Changes and added provisions None.

Dated this 6 day of October, 1954.

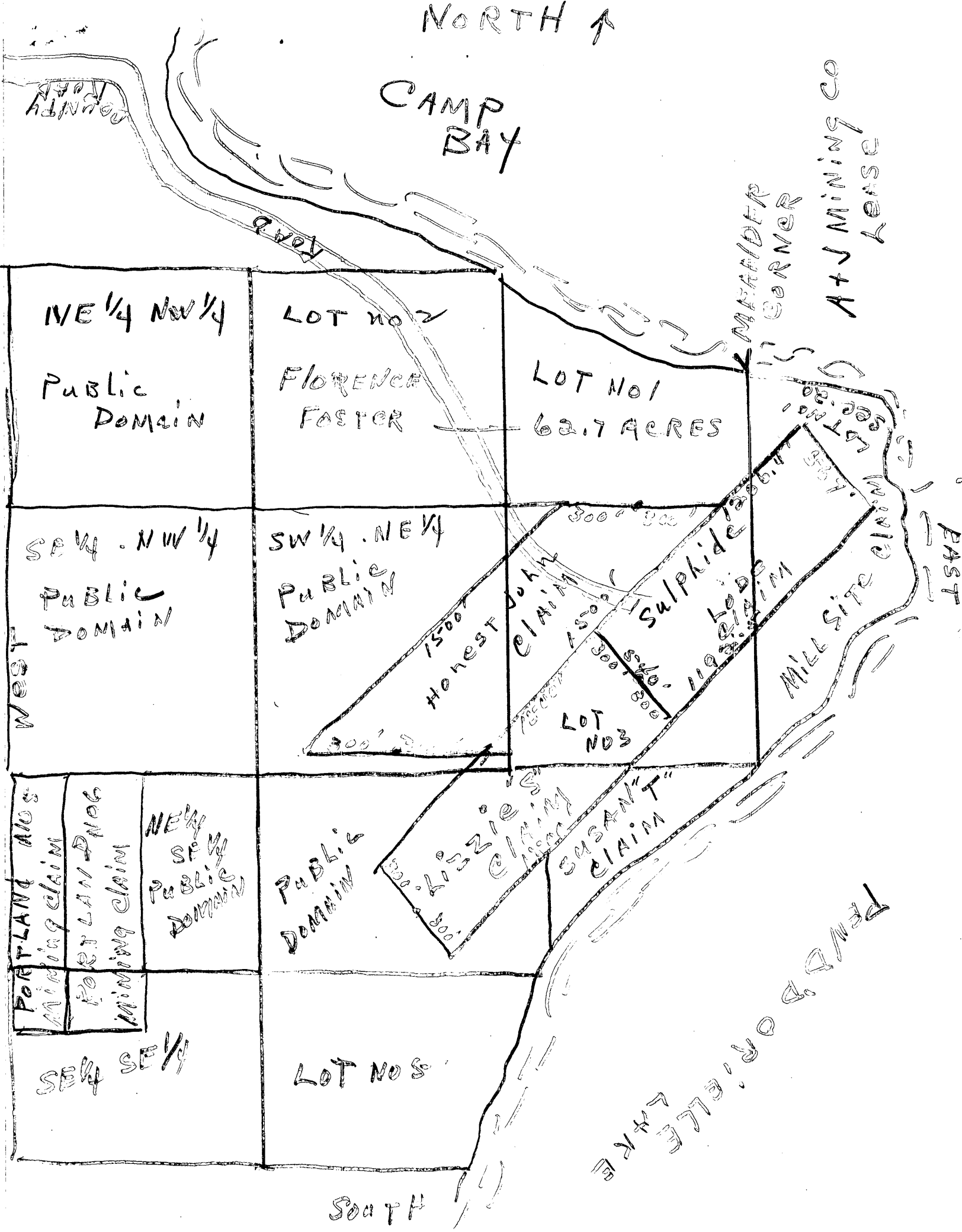
Hawan B. Thomson [Seal]

[Seal]

[Seal]

W. E. Brunsell

NOTARY PUBLIC for the State of Idaho
residing at Sandpoint, Idaho
My commission expires March 1, 1958


NORTH
CAMP BAY
COUNTY ROAD
ROAD
NE 1/4 NW 1/4
PUBLIC DOMAIN
LOT NO 2
FLORENCE FOSTER
LOT NO 1
62.7 ACRES
MEANDER CORNER
A+J MINING CO LEASE
SE 1/4 . NW 1/4
PUBLIC DOMAIN
SW 1/4 . NE 1/4
PUBLIC DOMAIN
1500' HONEST JOHN CLAIM
1500'
SULPHIDE LODE CLAIM
300'
LOT NO 3
MILL SITE CLAIM
WEST
EAST
PORTLAND NO 5 MINING CLAIM
PORTLAND NO 6 MINING CLAIM
NE 1/4 SE 1/4 PUBLIC DOMAIN
PUBLIC DOMAIN
LIZZIE CLAIM
SUSAN "T" CLAIM
SE 1/4 SE 1/4
LOT NO 5
PEND OREILLE LAKE
SOUTH

DEFENSE MINERALS
EXPLORATION ADMINISTRATION
~~WASHINGTON 25, D.C.~~
Knoxville 2, Tennessee
OFFICIAL BUSINESS

Mr. George C. Selfridge, Chairman
Operating Committee, DMEA
Dept. of the Interior
Washington 25, D. C.