DMA Form 1

DEFENSE MINERALS ADMINISTRATION
Control Slip

CONTROLLED DOCUMENT

DMEA ~~DMX~~ Docket No. 2630

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 PROJECT

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 USBM and USGS. One copy retained by Region III.

To:	Code 400, Rm. 3538	Date	7-28-52
To:	Op Cons	Date	8-4-52
To:	Opr Cons	Date	11-14-52
To:		Date	
To:		Date	
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

IN REPLY REFER TO:

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

November 24, 1952 2630

Memorandum

To: George C. Selfridge

From: T. P. Thayer

Subject: DMEA-2630 Tungsten Little Joe Group
Elko County, Nevada

The Field Team report of October 27, clearly shows that the claims have no reasonable prospects of yielding minable tungsten ore. The highest tungsten content found in any sample was 0.15 percent WO_3, and no geologic hope is indicated for occurrence of better grade material.

I concur, therefore, in the Field Team recommendation that the application be denied.

T. P. Thayer

Administrator, DMEA November 12, 195

Iron and Ferro-Alloy Division, DMEA

Denial of application for exploration assistance in the amount of $60,065.00
Docket No. DMEA 2630 - Tungsten
John W. Mink
Little Joe Group, Island Mining District
Elko County, Nevada

The denial of the subject application by this Division is based on the following information:

1. The applicant proposed no definite plan for exploration. Geologic mapping and engineering studies, trenching, and diamond drilling were proposed but no targets were given.

2. The tungsten mineralization is present in both tactite and in quartz veinlets in hornfels. The tactite and hornfels have been formed where a granodiorite stock has cut shale and limy shale of Paleozoic Age.

   All evidence to date indicate the tungsten ore shoots are small and very low grade.

3. The 12 samples taken by the examining field team averaged 0.065 percent WO_3. Only three samples contained 0.15 percent or more.

   A sample of the material stockpiled by the applicant as "ore" contained 0.02 percent WO_3.

4. The report of a field team examination by R. M. Smith and D. C. Lamb, U. S. Geological Survey, and Glenn G. Gentry, U. S. Bureau of Mines, recommends denial.

5. The executive Officer of the field team recommends denial.

FARutledge'lm
11/12/52

cc: Admn. Reading File
Docket
G. C. Selfridge
F. A. Rutledge

G. C. Selfridge, Chief
Iron and Ferro-Alloy Division

NOV 14 1952

Mr. John W. Mink
960 Ninth Street
Elko, Nevada

Re: Docket No. DMEA 2530 - Tungsten
John W. Mink
Little Joe Group
Island Mining District
Elko County, Nevada

Dear Mr. Mink:

Your request for exploration assistance and other reports concerning the Little Joe Group available to us in Washington have been carefully reviewed.

This information, although noting the occurrence of a small amount of low grade tungsten mineralization on your property, indicates to us that the probability of disclosing mineable ore reserves is not sufficiently promising to justify Government participation. We regret, therefore, to inform you that your application is denied.

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

Sincerely yours,

H. D. Mitchenden

Administrator

FARutledge:lm
11/14/52

cc: Admin. Reading File
Docket
T. W. Goshen, USGS
D. F. Lemmon, USGS
Field Team Reg. III
Operating Committee
G. C. Selfridge
F. A. Rutledge

400

AUG 5 1952

Mr. E. O. Miller
Executive Officer, Region III
1012 Flood Building
870 Market Street
San Francisco 2, California

Re: Docket No. DMEA 2630 - Tungsten
John W. Mink
Little Joe Group, Island Mine District
Elko County, Nevada

Dear Mr. Miller:

On July 22, 1952, your office forwarded to Washington three copies of the subject application and noted that one copy had been retained in order that a field examination might be made when your field engineers are in the Island Mine District. Therefore, we will hold this application in abeyance until your field team report is received.

Sincerely yours,

(signed) FRANK E. JOHNSON

Chairman, Operating Committee
Defense Minerals Exploration Administration

FARutledge:lm
8/4/52

Approved:

J. H. Hedges

Member, Bureau of Mines

D. M. Lemmon

Member, Geological Survey

cc: Admn. Reading File
Docket
F. W. Geehan, USBM
D. M. Lemmon, USGS
Field Team Reg. III
Operating Committee
G. C. Selfridge
F. A. Rutledge

400

FILE COPY
Surname:

Geehan

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

August 1, 1952

Memorandum

To: George C. Selfridge, DMEA

From: Robert W. Geehan, Bureau of Mines

Subject: John W. Mink
Little Joe Group
Island Mine District
Elko County, Nevada

DMEA 2630
Tungsten

Proposal: Geologic mapping and engineering studies, trenching and crosscutting with bulldozer, and diamond drilling. Estimated total cost - $60,065.

General: The same applicant filed for the same amount on the Mohawk Group, Elko County, Nevada, under DMEA 2239. There is no map with this application, and no evidence whatsoever that tungsten has been found on the deposit in question. Based on the information in the docket, no decision can be made in this office. The applicant should be able to present some kind of sketch, and at least some information regarding samples, before the Field Team is requested to examine the deposit. As he proposes geologic mapping and engineering studies in the docket, it can be assumed that he plans to use this information to plan actual work. However, we should require at least enough information to justify a Field Team examination.

Recommendation: The applicant should be requested to supply the following:

1. Sketch map.
2. Sample data.
3. Relative location of Mohawk Group and Little Joe Group.
4. Justification for a project limited to geologic mapping and engineering studies along with some trenching, to be followed by

RWGeehan:lds
Copy to: Ferrous Metals
Mr. Geehan
FILES

the balance of the work if the first step indicates that such work is desirable. Of course, if he has information that would justify the entire project, it should be submitted at this time.

The cost items listed under "e" Equipment to be Purchased are not in line with the information in the docket. The only equipment listed that requires electric power is an Arc-welder and a drill press. The need for a $5,000 transformer to operate this equipment is open to question.

Robert W. Geehan

Attachment

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

480

Office of
Executive Officer
DMEA Field Team
Region III

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

July 22, 1952

Dmea 2630

Memorandum

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

From: Executive Officer, DMEA Field Team, Region III

Subject: Application for exploration loan (Tungsten), John W. Mink, 560 - 9th Street, Elko, Nevada

Attached are the original and two copies of an application for an exploration loan, dated July 17, received in this office on July 18 from Mr. John W. Mink.

Mr. Mink already has an application - Docket DMEA 2239X, (Tungsten), and has now located an additional group of claims in the same district for which he desires exploration assistance. He originally asked that this new group of claims be included with those covered by Docket 2239X, but I suggested to him that it would be more desirable to file a new application, which is what he has done.

We are holding one copy of the new application for our field engineers, who are being instructed to examine the property when in the Island Mine District of Elko County, Nevada.

H. C. MILLER

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

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
JUL 28 1952

Copy to E. H. Bailey, USGS

Form MF-103
(April 1951)

U. S. DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS ADMINISTRATION

Budget Bureau No. 42-R1035.
Approval expires 6-30-51.

APPLICATION FOR AID FOR AN EXPLORATION PROJECT PURSUANT TO MINERAL ORDER 5, UNDER DEFENSE PRODUCTION ACT OF 1950

DO NOT FILL IN THIS BLOCK

Docket No. DMEA 2630

Date received

Participation

United States Department of the Interior
Defense Minerals Administration
1012 Flood Building
870 Market Street
San Francisco 2, California

Mr. John W. Mink
560 - 9th Street
Elko, Nevada

Name and address of applicant

Date July 17, 1952

FILL IN THIS BLOCK

Date of application July 17, 1952

Estimated cost $60,065

Mineral or metal Tungsten

Percentage of Government participation 75%

Location of mine Island Mine District Elko County

Date of filing MF-100

DMA Docket Number, if available

INSTRUCTIONS

Read Mineral Order 5, Regulations Governing Government Aid in Defense Projects, before completing this application. Submit four signed copies of the application to Defense Minerals Administration, Department of the Interior, Washington 25, D. C., or to the nearest field executive officer thereof, with your name and address on each sheet of the application and all accompanying papers. If any question is inapplicable, or if you cannot answer it, so state on the form. Where the space provided for answer is insufficient, answer on a separate sheet, annex it to the application form, and refer to it in space for answer. If the application is approved, you will be presented with an exploration project contract on Form MF-200, for your signature.

THE APPLICANT

*1. Is applicant an individual, partnership, or corporation?
*2. If a partnership, state names and addresses of partners.
*3. If a corporation, state names and addresses of officers, directors, and five largest stockholders.
*4. Describe the mining and general business experience of (*a*) the applicant, and (*b*) the person or persons who will manage the project.
*5. Are you the owner or the lessee of the property?
6. If owner, state what claims, liens, or encumbrances, if any, are against the property.
7. If lessee, attach a copy of the lease and state if it is in good standing.

NOTE.—It will be necessary to procure and attach to the exploration project contract agreements of claimants, lienors, encumbrances and lessors subordinating their interests in the property to the interest of the Government under the contract.

8. Furnish current financial statement, showing assets and liabilities, and a profit and loss statement.
9. How much money is applicant prepared to invest in proposed project? Is it sufficient to pay your part of the cost of the project as detailed in question 23 of this application form, in accordance with the regulations on Government participation (Section 9 of Mineral Order 5)?

*If you have already answered these questions on MF-100, you are not required to answer the questions for this application.

16—64067-1

THE PROPERTY

10. (*a*) Give a description of the real property that will be in any way involved in the exploration project, including any existing mine or operating property.
    (*b*) Give the legal description of the exact parcel, plot, or area upon which the exploration is to be conducted.

    NOTE.—If both areas are the same, so state. The only obligation to repay the Government is from the net earnings from any commercial discovery made in the area specified in (*b*) above in which the exploration is to be conducted, and the expenditure of funds which may be charged as costs of the project must be limited to that area or to work necessary to perform the exploration in that area.

*11. State the present and former names of the property, if any.

*12. State, in detail, the location of the property with reference to towns, railroads, roads, shipping points, including distances and directions and kinds and conditions of roads.

*13. State source and quantity of water available for operations and its sufficiency at all seasons.
State amount of power to be used, rate per hour or other cost, and source.

*14. Describe any existing useable facilities, equipment, buildings, or structure now on the property that will be devoted to the exploration work.

15. State in detail how the ore could be shipped and how and where milled.

*16. History:
    (*a*) Give a statement, as complete as possible, of previous exploration, development, operation, and production of property, with reasons for any past suspensions of operations.
    (*b*) State briefly the known history and production of adjoining and neighboring properties.
    (*c*) Furnish any available (private) reports that may apply to this application, including results of mine examinations, recommended exploration and development, and metallurgical investigations.

*17. Production:
    (*a*) If mine is in production, furnish the following information:

	Tons per day	*Grade or analysis*	*Cost per ton*	*Net value per ton*
(1) Mining				
(2) Milling				
(3) Shipped or sold				

*18. Ore or mineral reserves: (If property is or has been operating.)
    (*a*) Describe the ore or mineral deposits briefly.
    (*b*) Submit available maps and assay data.
    (*c*) Give estimated tonnage and grade of each class of ore reserves.

19. State any conditions or circumstances regarding the property not sufficiently brought out by the foregoing questions.

THE EXPLORATION

20. For what mineral or minerals and for what types of deposits and ores will the exploration be conducted?

21. Describe briefly, but concisely, the proposed work and the estimated time required to complete it.

    NOTE.—The Government will not participate in a project that will require more than 2 years to complete.

22. Furnish statement of the geological basis of the project with particular emphasis on factors leading the operator to expect the finding of commercial ore bodies. This statement should be accompanied by supporting maps such as geological maps, maps of the proposed openings and assay maps, sample lists, and other pertinent data.

THE REQUIREMENTS AND COSTS

23. Tabulate in the form of an itemized statement with a sum for each item the estimated requirements and costs of the project so that the total will give the estimated cost of the project in which the Government will participate, as follows:
    (*a*) Labor, by numbers and classes (miners, muckers, millmen, etc.), with wages of each.
    (*b*) Supervisors, by numbers and positions, with salaries of each.
    (*c*) Cost of necessary repairs to existing facilities, structures, and buildings.
    (*d*) Cost of necessary installation or construction of additional facilities, structures, and buildings.
    (*e*) Cost of items of equipment, not now owned by the applicant which must be purchased for operations at a cost of $50 or more each.
    (*f*) Cost of rental for equipment which the operator proposes to rent.
    (*g*) Rental value of items of equipment which the operator now owns and which will be devoted to the work.
    (*h*) Cost of materials and supplies, including items of equipment costing less than $50 each.
    (*i*) Cost of power, water, utilities, and any other items not provided for above.

24. Furnish a time schedule of the project, stated in terms of months after project is approved, showing progress expected to be accomplished and the money expected to be spent.

CERTIFICATION

The undersigned company, and the official executing this certification on its behalf, hereby certify that the information contained in this form and accompanying papers is correct and complete to the best of their knowledge and belief.

(Name of company)	By J. W. Smith (Signature of authorized official)
July 17 1952 (Date)	Owner & Operator (Title)

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.

*Same as footnote on page 1.

16—64067-1 U. S. GOVERNMENT PRINTING OFFICE

Answers to questions on form MF-103

1. Partnership

2. John W. Mink — General Partner, One Third Interest
   560 Ninth Street
   Elko, Nevada

   Sarah D. Mink — Limited Partner, One third Interest
   560 Ninth Street
   Elko, Nevada

   Clem Culley — Limited Partner, One third Interest
   Mountain City, Nevada

3. Not applicable

4. Applicant will also manage project. The applicants business and mining experience are as follows:

   5 Yrs., U. S. Forest Service. Much of time spent on road and other construction work.
   8 Yrs., freight and mail-line contractor, Northern Elko Co., Nevada
   10 Yrs., ranching and mining experience, including operation of Rosebud Mine, Mohawk Mine, and Bruneau Mine.

5. Owner

6. None

7. Not applicable

8. None: property not in operation

9. $16,000 Yes

10. (a) 18 claims, situated in Sections _, _, _, and _, T45N, R7E, MDB & M, Elko Co., Nevada, with a 50 ft. shaft and 150 ft. of drift on vain that gives 350 ft. of backs on shaft.

    (b) Same as (a) above.

11. Little Joe Group: New location name.

12. Property situated 80 miles north of Elko, Nevada. Sixty-five miles are over paved road, thence over 14 miles of well-graded, gravelled Forest Service road. The last 1 mile, from the Forest Service road to the mine, is over graded, unimproved road.

13. Sufficient water available year round in Mill Creek, for mining and milling purposes. Power available from Idaho Power Co. line, within three (3) miles.

14. Equipment on property which can be used for exploration work include:

1 Allis Chalmers H. D. 7, w/angle dozer
1 GMC 6 x 6, 2½ ton truck, with semi-trailer
1 210 cfm compressor, w/one jackhammer
1 International 1½ ton truck
1 Chevrolet pickup truck

15. It is impractical to ship this ore to any now-operating plant due to high haulage and shipment costs. This exploration work is being done to block out sufficient ore to warrent construction of milling facilities on the property.

16. (a) This property was explored by a shaft of 50 ft. and 150 ft. of drift on vain that gives 350 ft. of back on shaft. Shaft and Tunnel both showed tungsten. Considerable stripping and cross cutting on surface by bulldozer shows tungsten in place.

(b) The neighboring Montrose and Knowles properties, which adjoin this property on the west, have been explored for tungsten, by cross-cutting and diamond drilling. Considerable tungsten has been reported found, but none has been shipped due to the high shipment costs. The Gribble property, also known as the Star Metal Antimony Mine, which lies southeast of the Mohawk Group, has developed, by shaft and cross-out, and surface trenching, a fair tonnage of good tungsten ore.

17. Not applicable

18. Not applicable

19. Surface examination, by lamping of outcrops, discloses ore over an estimated 100 ft. width, and for a length of 6000 ft. Mineralization is not uniform over the entire width and length, but in several favorable areas a width of about 100 ft. and a length of several hundred feet appear to run from 0.3 to 0.5 percent WO3.

20. Tungsten; contact deposit in tactite

21. Geologic mapping and engineering studies, trenching and cross-cutting with bulldozer, and diamond drilling. Cross-cutting and trenching estimated to require 3 to 4 month, diamond drilling 2 to 3 months, and mapping 1 to 2 months. All three may run concurrently.

22. No geologic maps available. The widespread occurrence of ore in outcrops, and the favorable geologic setting (granitic rock intruding limestones and shales, with the widespread formation of tactite) indicate that it is a favorable area for exploration.

23. Requirements and costs:

(a) Labor (based on 90 working days)

1 Equipment operator, $20/day	$1800
1 Cook, $15/day	1350
2 Miners, $15/day	2700
1 Helper, $12.50/day	1125
	$6975

(b) Supervisors

1 Foreman, $25/day for 90 days (owner's contribution)	$2250
1 Engineer-geologist, $700/month for 6 months	4200
	$6450

(c) Cost of repairs to existing facilities---none

(d) Cost of additional facilities, structures, etc.

1 Cook house-dining room	$2500
1 Bunkhouse	3500
1 Office-shop	2500
	$8500

(e) Equipment to be purchased

1 Transformer (installed by Idaho Power Co.)	$5000
1 J-55 jackhammer	500
1 Arc-welder, 300 Amp	250
1 Drill press, heavy duty, and drills	300
1 Forge and blower	75
1 Anvil and tools	100
1 10 HP Electric motor and starter	175
	$6400

(f) Cost of equipment to be rented---none

(g) Rental value of operators equipment (based on 90 working days)

1 Allis-Chalmers HD 8. w/angle dozer, $12/hr	$8640
1 6 x 6 GMC Truck, $48/day	4320
1 210 cfm compressor, with jackhammer, $10/day	900
	$13860

(h) Cost of materials and supplies

Fuel oil, gasoline, and oil	$ 2500
Powder and caps	600
2000 Flax diamond drilling @ $5.00/ft	10000
Miscellaneous operating supplies & assaying	5000
	$18100

TOTAL	$60065

IN REPLY REFER TO:

Docket

11/25/52

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

November 24, 1952

Memorandum

To: George C. Selfridge

From: T. P. Thayer

Subject: DMEA-2630 Tungsten — Little Joe Group, Elko County, Nevada

The Field Team report of October 27, clearly shows that the claims have no reasonable prospects of yielding minable tungsten ore. The highest tungsten content found in any sample was 0.15 percent WO_3, and no geologic hope is indicated for occurrence of better grade material.

I concur, therefore, in the Field Team recommendation that the application be denied.

T. P. Thayer

T. P. Thayer

already denied
T. Thayer
summarized above.

Copy retained 460

FILE COPY
SURNAME:

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

Rutledge
Selfridge
Mittendorf
Gehan
Hedges
McKnight for Harper
T.C. Johnson

NOV 14 1952

Mr. John W. Mink
560 Ninth Street
Elko, Nevada

Re: Docket No. DMEA 2630 - Tungsten
John W. Mink
Little Joe Group
Island Mining District
Elko County, Nevada

Dear Mr. Mink:

Your request for exploration assistance and other reports concerning the Little Joe Group available to us in Washington have been carefully reviewed.

This information, although noting the occurrence of a small amount of low grade tungsten mineralization on your property, indicates to us that the probability of disclosing mineable ore reserves is not sufficiently promising to justify Government participation. We regret, therefore, to inform you that your application is denied.

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

Sincerely yours,

C. D. Mittendorf (for) J.N. 11-14-52

Administrator

FARutledge'lm
11/14/52

cc: Admn. Reading File
Docket
R. W. Gehan, USBM
D. M. Lemmon, USGS
Field Team Reg. III
Operating Committee
G. C. Selfridge
F. A. Rutledge

STANDARD FORM NO. 64

Office Memorandum • UNITED STATES GOVERNMENT

TO : Administrator, DMEA

DATE: November 12, 1952

FROM : Iron and Ferro-Alloy Division, DMEA

SUBJECT: Denial of application for exploration assistance in the amount of $60,065.00
Docket No. DMEA 2630 - Tungsten
John W. Mink
Little Joe Group, Island Mining District
Elko County, Nevada

The denial of the subject application by this Division is based on the following information:

1. The applicant proposed no definite plan for exploration. Geologic mapping and engineering studies, trenching, and diamond drilling were proposed but no targets were given.

2. The tungsten mineralization is present in both tactite and in quartz veinlets in hornfels. The tactite and hornfels have been formed where a granodiorite stock has cut shale and limy shale of Paleozoic Age.

   All evidence to date indicate the tungsten ore shoots are small and very low grade.

3. The 12 samples taken by the examining field team averaged 0.065 percent WO_3. Only three samples contained 0.15 percent or more.

   A sample of the material stockpiled by the applicant as "ore" contained 0.02 percent WO_3.

4. The report of a field team examination by R. M. Smith and D. C. Laub, U. S. Geological Survey, and Glenn G. Gentry, U. S. Bureau of Mines, recommends denial.

5. The executive Officer of the field team recommends denial.

G. C. Selfridge

G. C. Selfridge, Chief
Iron and Ferro-Alloy Division

FILE COPY 400
SURNAME:

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

Administrator, DMEA

November 12, 1952

Rutledge
Selfridge
Gilbertson
Gukon

Iron and Ferro-Alloy Division, DMEA

Denial of application for exploration assistance in the amount of $60,065.00
Docket No. DMEA 2630 - Tungsten
John W. Mink
Little Joe Group, Island Mining District
Elko County, Nevada

The denial of the subject application by this Division is based on the following information:

1. The applicant proposed no definite plan for exploration. Geologic mapping and engineering studies, trenching, and diamond drilling were proposed but no targets were given.

2. The tungsten mineralization is present in both tactite and in quartz veinlets in hornfels. The tactite and hornfels have been formed where a granodiorite stock has cut shale and limy shale of Paleozoic Age.

   All evidence to date indicate the tungsten ore shoots are small and very low grade.

3. The 12 samples taken by the examining field team averaged 0.065 percent WO_3. Only three samples contained 0.15 percent or more.

   A sample of the material stockpiled by the applicant as "ore" contained 0.02 percent WO_3.

4. The report of a field team examination by R. M. Smith and D. C. Lamb, U. S. Geological Survey, and Glenn G. Gentry, U. S. Bureau of Mines, recommends denial.

5. The executive Officer of the field team recommends denial.

FARutledge'lm
11/12/52

ec: Admn. Reading File
~~Docket~~
G. C. Selfridge
F. A. Rutledge

G. C. Selfridge, Chief
Iron and Ferro-Alloy Division

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

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
NOV 7 1952

Office of
Executive Officer
DMEA Field Team
Region III

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

November 3, 1952

Memorandum

To: Frank E. Johnson, Chairman, Operating Committee, DMEA, Interior Building, Washington 25, D. C.

From: Executive Officer, DMEA Field Team, Region III

Subject: Docket DMEA 2630 (Tungsten), Little Joe Group, Elko County, Nevada, John W. Mink

Reference is made to your letter of August 5, 1952 concerning an examination of the subject group of claims.

Attached are four copies of a report - DMEA-2630 (Tungsten), Little Joe Group, Elko County, Nevada by R. M. Smith and D. C. Laub, geologists, U. S. Geological Survey; and Glenn G. Gentry, Mining Engineer, U. S. Bureau of Mines, dated October 27, 1952.

According to the examining engineer and geologists, the tungsten occurs as scheelite in the quartz veinlets and in irregular bodies in tactite near the aplite dikes. The largest exposure of tungsten mineralization is 26 feet wide in the discovery cut between two aplite dikes. Here the hornfels are cut by many quartz and calcite veinlets less than 1/16 inch wide which occur in all attitudes. Many of the veinlets contain scattered crystals of scheelite--the average grade across the 26 feet is 0.06 percent WO_3. Immediately north of the discovery cut an aplite dike is bordered by a tactite zone about 6 feet wide. Scheelite occurs in the tactite in concentrations up to 0.11 percent WO_3.

It is the conclusions of the engineer and geologists that there is very little chance of making a significant discovery and they have recommended that the application be denied.

The docket is being returned herewith.

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

Attachments
Copy to: E. H. Bailey, USGS (with copy of report)

400

Office of
Executive Officer
DMEA Field Team
Region III

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

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

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
NOV 7 1952

November 3, 1952

Memorandum

To: Frank E. Johnson, Chairman, Operating Committee, DMEA, Interior Building, Washington 25, D. C.

From: Executive Officer, DMEA Field Team, Region III

Subject: Docket DMEA 2630 (Tungsten), Little Joe Group, Elko County, Nevada, John W. Mink

Reference is made to your letter of August 5, 1952 concerning an examination of the subject group of claims.

Attached are four copies of a report - DMEA-2630 (Tungsten), Little Joe Group, Elko County, Nevada by R. M. Smith and D. C. Laub, geologists, U. S. Geological Survey; and Glenn G. Gentry, Mining Engineer, U. S. Bureau of Mines, dated October 27, 1952.

According to the examining engineer and geologists, the tungsten occurs as scheelite in the quartz veinlets and in irregular bodies in tactite near the aplite dikes. The largest exposure of tungsten mineralization is 26 feet wide in the discovery cut between two aplite dikes. Here the hornfels are cut by many quartz and calcite veinlets less than 1/16 inch wide which occur in all attitudes. Many of the veinlets contain scattered crystals of scheelite—the average grade across the 26 feet is 0.06 percent WO_3. Immediately north of the discovery cut an aplite dike is bordered by a tactite zone about 6 feet wide. Scheelite occurs in the tactite in concentrations up to 0.11 percent WO_3.

It is the conclusions of the engineer and geologists that there is very little chance of making a significant discovery and they have recommended that the application be denied.

The docket is being returned herewith.

Reviewed by
DMEA OPERATING COMMITTEE
11-12-52
(date)

H. C. MILLER

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

Attachments
Copy to: E. H. Bailey, USGS (with copy of report)

UNITED STATES
DEPARTMENT OF THE INTERIOR
OSCAR L. CHAPMAN, SECRETARY

DEFENSE MINERALS EXPLORATION ADMINISTRATION

REPORT OF EXAMINATION BY FIELD TEAM
REGION III

DMEA-2630 (tungsten), Little Joe Group

Elko County, Nevada

R. M. Smith and D. C. Laub, geologists
U. S. Geological Survey

Glenn G. Gantry, Mining Engineer
U. S. Bureau of Mines

October 27, 1952

Reviewed by
DMEA OPERATIONS COMMITTEE
11-12-52
(date)

Docket No.: DMEA-2630 (tungsten)

Name and address of applicant: John W. Mink
560 - 9th Street
Elko, Nevada

Name and location of property: Little Joe Group
Elko County, Nevada

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

Under date of July 17, 1952, Mr. John W. Mink applied for a Government loan in the amount of $60,065.00 to be used in exploring the Little Joe group of mining claims.

Pursuant to this application, the Little Joe group of claims were examined on August 29 and 30, 1952 by geologists[1] of the U. S. Geological Survey and an engineer[2] of the U. S. Bureau of Mines of Region III.

In answering question No. 21, Form MF-105, the applicant has proposed a program of geological mapping and engineering studies, trenching and crosscutting with bulldozer, and diamond drilling. The time required is stated to be from 6 to 9 months.

At the Little Joe group of claims a small amount of scheelite is contained in tactite, and in quartz veinlets in hornfels. Some scheelite is found in a quartz vein 1- to 12-inches wide in the Little Joe shaft. The best exposure of scheelite is associated with tactite and hornfels in the discovery cut, but it is not of minable grade.

It is concluded that there is very little chance of making a significant discovery of tungsten and it is recommended, therefore, that the application be denied.

1/ R. M. Smith and D. C. Lamb.
2/ Glenn G. Gentry.

NAME AND LOCATION OF PROPERTY

The applicant's claims are the Little Joe and Silver Shick group of 18 claims which are located 15.4 miles east of Wild Horse, Elko County, Nev. The nearest town in which supplies could be obtained is Mountain City, Nev., approximately 55 miles northwest of the mine. The claims are in the Island Mountain Mining District and have not been surveyed, but are situated in secs. 15, 16, 21, and 22, T. 46 N., R. 68 E., M.D.B.&M. (see fig. 2).

From the all-weather highway, designated as Nevada State Highway No. 45, the roads are unimproved mountain roads, which are sometimes impassable during the winter and spring months due to snow and mud. From the floor of the valley to the mine location, the road is unimproved, with heavy grades. The mine road would not be accessible during the winter and spring months.

The mine is situated at an approximate elevation of 7500 feet in an area where heavy snowfall usually occurs from November to March. During these months it would be impractical to attempt any surface mining.

APPLICANT

The applicant has a very limited experience and knowledge of mining operations and he does not appear to be a good judge of the scheelite mineral, either in quantity or quality. Therefore, any extensive exploration program should be supervised by a mining engineer or geologist experienced in such type of work.

RIGHT OF LOCATION

The applicant holds 18 full mining claims by right of location and which are unsurveyed. These claims are recorded in the Elko County, Nevada, County Recorders Office, Elko County Courthouse, Elko, Nevada, as follows:

Claim	Book No.	Page No.	Date recorded	
Little Joe	30	131	July 10, 1952	
" " No. 1	30	132	" " "	
" " No. 2	30	133	" " "	These 10 claims
" " No. 3	30	134	" " "	were originally
" " No. 4	30	135	" " "	located in 1948.
" " No. 5	30	136	" " "	
" " No. 6	30	137	" " "	
" " No. 7	30	138	" " "	
" " No. 8	30	139	" " "	
" " No. 9	30	140	" " "	
" " No. 10	30	141	" " "	
Silver Shick No. 1	30	85	June 30, 1952	
" " No. 2	30	86	" " "	
" " No. 3	30	87	" " "	These 8 claims
" " No. 4	30	88	" " "	were originally
" " No. 5	30	89	" " "	located in 1947.
" " No. 6	30	90	" " "	
" " No. 7	30	84	" " "	
" " No. 8	30	91	" " "	

These mining claims are relocations of abandoned claims upon which considerable prospecting for gold was done many years ago. One location notice, dated July 2, 1930, was found near a discovery cut on the Silver Shick claim. This claim was located by Norman L. McKinnon and was designated as National No. 1. This man held the claim for many years and after his death it was relocated by J. W. Mink on July 1, 1952.

The applicant reports that there are no mortgages, liens or financial obligations against any of his claims itemized in the application.

IMPROVEMENTS AND FACILITIES

There are no surface improvements or facilities.

The mine workings consist of one vertical shaft sunk to a depth of 40 feet and one adit 105 feet in length. This work was done many years ago by prospectors in search of gold.

In the shaft, a small amount of scheelite was observed in a narrow quartz vein averaging about 10 inches in width. Short drifts have been driven along this vein, both east and west off the shaft at 20 feet below the collar. The quartz vein in these drifts narrows rapidly which indicates any expected tonnage would be in a very small amount. The shaft is tightly cribbed with timbers, making it impossible to secure samples of the walls. The applicant reports one small shipment of tungsten bearing quartz was made from this shaft, having a reported assay content of about 3.0% WO_3. This shipment was evidently sorted ore. An examination of the quartz rejects on the dump, by mineralight, showed only a very little scheelite in small and scattered crystals.

The portal of the 105-foot adit was found to have caved. However, after considerable shoveling, the Field Team were able to crawl through the caved section and examine the limited underground workings. A small amount of scheelite was observed in only one place, namely, in a short crosscut to the south off the main level (fig. 3 - BM-332). No production of tungsten ore has been made from the adit.

The property has been partly explored by the applicant by means of three bulldozer trenches (fig. 3).

The lower trench at the south side is approximately 380 feet in length and has not removed all of the overburden. The discovery trench, at the center, is approximately 300 feet in length by 8 feet average depth. This trench has removed the overburden and exposed scheelite-bearing rock for a length of 26 feet which has averaged 0.06% WO_3 from samples BM-334 to BM-358, inclusive. The upper trench, at the north side, is approximately 220 feet in length and has not removed all of the overburden.

No scheelite mineral was observed by mineralight in the upper and lower trenches, and only a few occurrences were found between the lower and discovery trenches during the night examination.

Between the upper and discovery trenches, scheelite was observed in a small surface area about 15 feet square. The best part of this area is represented by sample BM-340, which assayed 0.11% WO_3.

GEOLOGY

The sedimentary rocks in the area are shale and limy shale of Paleozoic age that have been cut by a granodiorite stock. Near their contact with the granodiorite the sedimentary rocks have been metamorphosed to hornfels and, locally, tactite, and are cut by aplite dikes and by veinlets of quartz or calcite. Scheelite is associated with the tactite and with the quartz veinlets. The sedimentary rocks in the mine area strike N. 80° E. and dip 85° south or are overturned.

In this area the intrusive rock is alaskite which appears to be a border facies of the granodiorite. The aplite dikes range from 1 to 6 feet in thickness, strike south from the alaskite and have been exposed as much as 50 feet from the contact. They commonly dip west.

The quartz and calcite veinlets cut the hornfels in all attitudes but the more persistent strike is N. 70° W. and dip steeply.

ORE DEPOSITS

The tungsten occurs as scheelite in the quartz veinlets and in irregular bodies in tactite near the aplite dikes.

The largest exposure of tungsten ore is 26 feet wide in the discovery cut (fig. 2) between two aplite dikes. Here the hornfels are cut by many quartz and calcite veinlets less than 1/16 inch wide which occur in all attitudes. Many of the veinlets contain scattered crystals of scheelite--the average grade across the 26 feet is 0.06 percent WO_3. Immediately north of the discovery cut at the site of sample BM-340 (fig. 3), an aplite dike is bordered by a tactite zone about 6 feet wide. Scheelite occurs in the tactite in concentrations up to 0.11 percent WO_3.

In the Little Joe vertical shaft, a quartz vein contains local concentrations of scheelite estimated to be as high as 2.0 percent WO_3. The vein strikes N. 70° W. and dips steeply. It ranges from 1 to 12 inches in width and is exposed to a depth of 40 feet.

In the 105-foot adit a single exposure of scheelite at the site of sample BM-352 appears to have no lateral or vertical persistence.

SAMPLING

Sample No.	%,WO_3	Oz Au/T	Oz Ag/T	Description
BM-329	0.05	Trace	0.40	Width 2.9 feet. Little Joe shaft. West drift off shaft on 20-foot level. Across back of drift at 14 feet west of shaft.
BM-330	0.04	0.02	7.50	Width 2.6 feet. Little Joe shaft. East side of shaft on 20-foot level.
BM-331	0.17	0.01	4.25	Width 1.2 feet. Little Joe shaft. East side of shaft at bottom of shaft.

Note: Samples were secured from the only available openings.

BM-332	0.05	Trace	1.05	Width 2.0 feet. Adit in gulch on Little Joe claim. South crosscut at junction of small raise. This is the only occurrence of scheelite observed in this adit.
BM-333	+0.01	Trace	0.50	Width 4.0 feet. Surface material 8.9 feet. West of portal of Little Joe adit. Surface exposure of soft, talcy material in the overburden, showing small amount of quartz in narrow stringers.
BM-334	0.15	Trace	Trace	Length of sample cut 6.0 feet. North bank of discovery cut.
BM-335	0.01	Trace	Trace	Width of sample cut 6.0 feet. North bank of discovery cut and adjoining BM-334.
BM-336	0.15	Trace	Trace	Width of sample 6.0 feet. North bank of discovery cut, starting at west end of BM-335 and 12 inches below BM-335.
BM-337	+0.01	Trace	Trace	Length of sample 6.0 feet. North bank of discovery cut. Starting at West end of BM-336.
BM-338	+0.01	Trace	Trace	Width of sample 40 inches. North bank of discovery cut. Starting at west end of BM-337.

Note: Samples BM-334 to 338, inclusive, were about 200 lb. samples, caught on canvas sheet. Large pieces broken to uniform, small size. Entire sample rolled, thoroughly mixed and quartered.

BM-339	0.02	Trace	Trace	Shovel sample of stockpiled material which the applicant had produced from the discovery cut.
BM-340	0.11	Trace	Trace	Width 58 inches. Surface exposure of tactite; 20 feet north of the discovery cut.

ORE RESERVES

As none of the scheelite-bearing material is of ore grade, no ore reserves can be estimated.

APPLICANT'S PROPOSAL

The applicant's proposal of trenching and crosscutting with a bulldozer and diamond drilling, was vague and indefinite. Due to the amount of overburden and barren and limited exposures, the applicant had no definite knowledge as to the location of bulldozer cuts or the location of diamond drill holes, and desired to have any exploration program to be specified by the Field Team.

From the sampling conducted by the Field Team and an examination by mineralight, the examining geologists and engineer have concluded that the only area in which further prospecting might be of value is an area approximately 26 feet in width by 50 feet in length, situated north of the discovery cut. It is considered that two bulldozer trenches (one in a north-south direction and one in an east-west direction) to a depth below the overburden, would evaluate this part of the property which has indicated a small and sparsely mineralized area. This work could be done by the applicant, with his Allis-Chalmers H.D. 7, caterpillar tractor, with angle dozer, in ten working days at an estimated cost of not to exceed $1,000.00. The purpose of the bulldozer cuts would be to afford more detailed geological information and new exposures for sampling and inspection by mineralight.

If these trenches should indicate that a substantial tonnage of tungsten ore could be inferred, then it would be necessary for the

Field Team to determine the further type of exploration and the extent and cost of same.

The exploration is considered highly speculative and the applicant has very limited funds with which to finance his share of any project. He expects to provide his share of the moneys by his own work and the rentals from any of his equipment used on the project.

It is considered probable that a few experienced miners could be obtained at Mountain City, Nev., however, it might be necessary to recruit such labor from Elko, Nev. A small amount of mining materials and supplies could also be obtained at Mountain City, though it would no doubt be less expensive to purchase materials, supplies and equipment in Elko, Nev.

Sufficient water for mining purposes is available from a small stream located approximately 500 feet northwest of the bulldozer cuts and at a lower elevation. The water would have to be hauled or pumped to the mine.

There is no transmitted electric power in the immediate area and it would be necessary to use machinery powered by Diesel or gasoline engines.

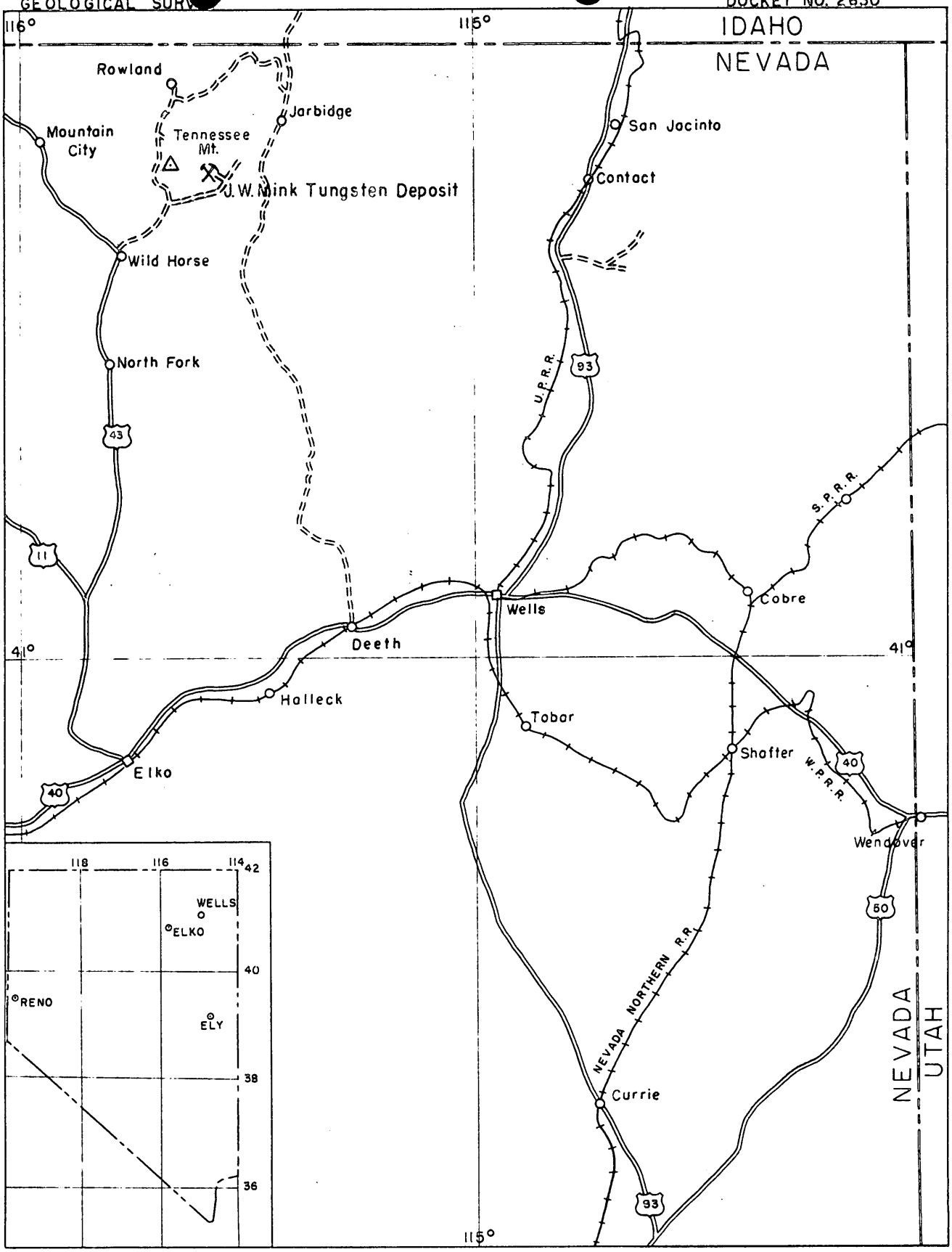


FIG. 1 INDEX MAP OF NEVADA

0 10 20 30 40 Miles

Scale 1:1,000,000

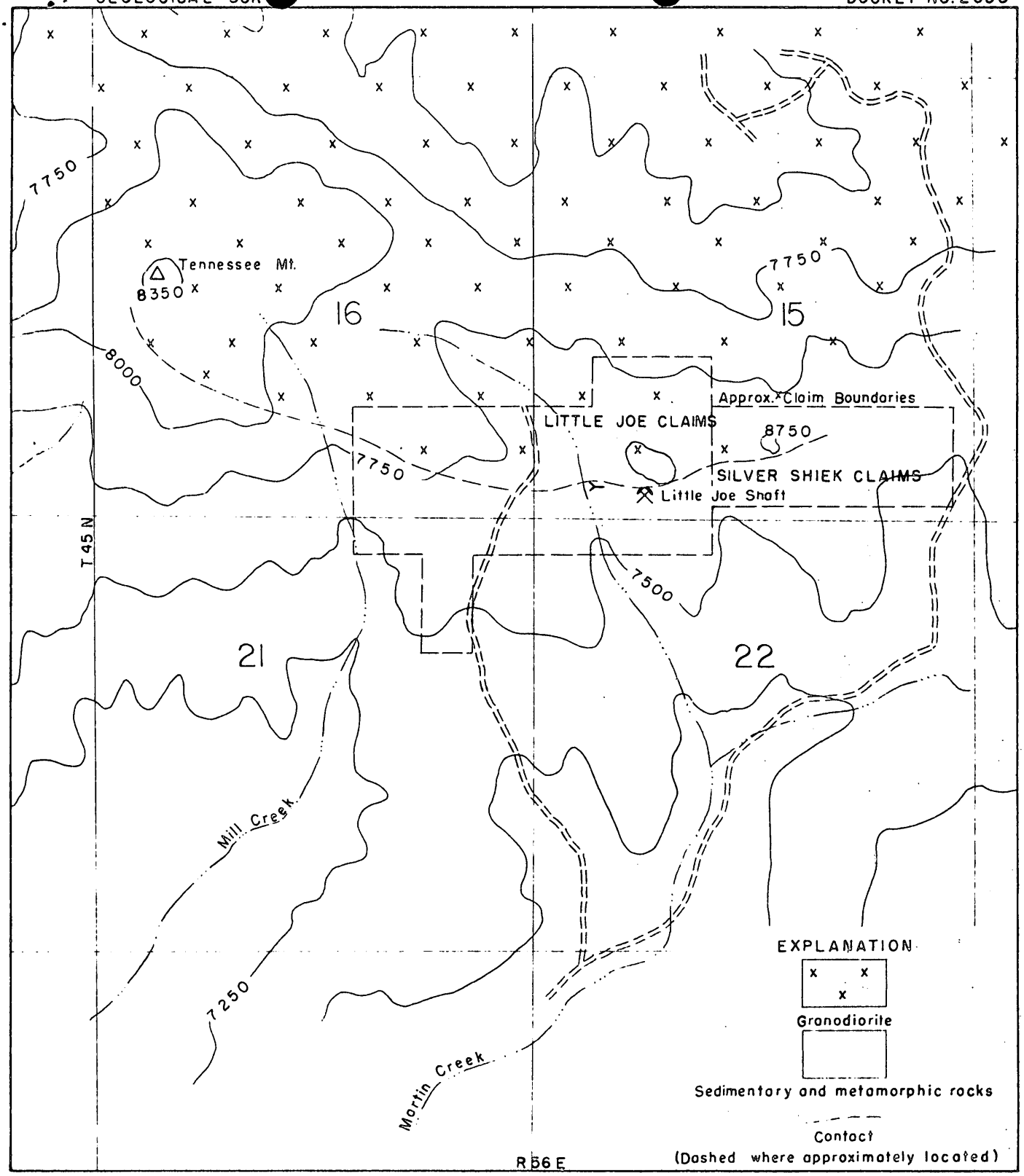


FIG. 2

GEOLOGIC SKETCH OF J.W. MINK TUNGSTEN DEPOSIT

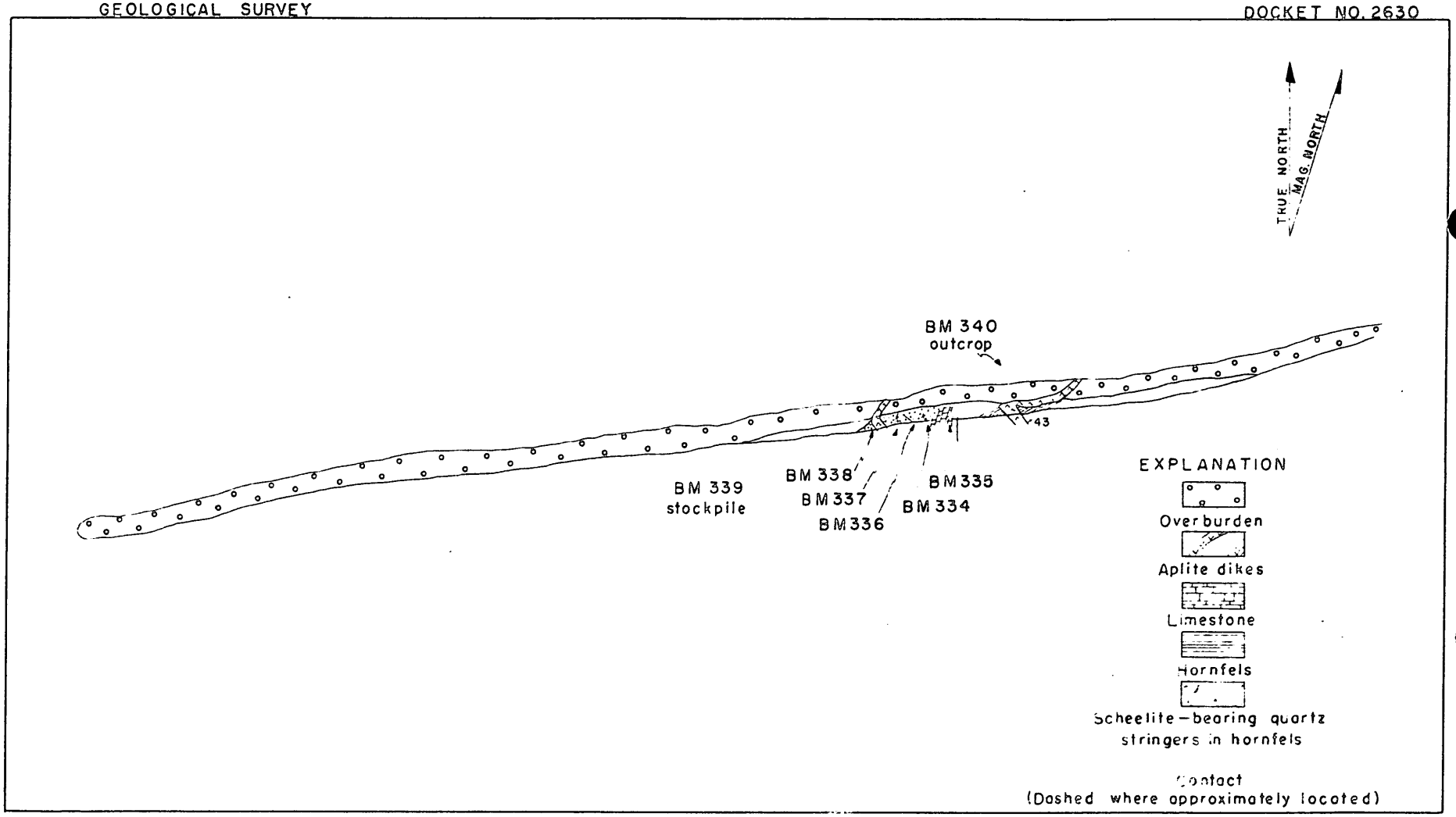
ELKO COUNTY, NEVADA

0 .5 1 MILE
Scale

Contour interval 250'

U. S. DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

DEFENSE MINERALS EXPLORATION ADMINISTRATION
DOCKET NO. 2630



GEOLOGY BY D. C. LAUB & R. M. SMITH
AUG 30, 1962

FIG. 4

LONGITUDINAL SECTION ALONG LINE A-A'
J.W. MINK TUNGSTEN PROSPECT
ELKO COUNTY, NEVADA

0 40 80 FEET
Scale

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
NOV 7 1952
GCL
11/13/52

UNITED STATES
DEPARTMENT OF THE INTERIOR
OSCAR L. CHAPMAN, SECRETARY

DEFENSE MINERALS EXPLORATION ADMINISTRATION

REPORT OF EXAMINATION BY FIELD TEAM
REGION III

DMEA-2630 (tungsten), Little Joe Group

Elko County, Nevada

R. M. Smith and D. C. Laub, geologists
U. S. Geological Survey

Glenn G. Gentry, Mining Engineer
U. S. Bureau of Mines

October 27, 1952

Reviewed by
DMEA OPERATING COMMITTEE
11-12-52
(date)

Docket No.: DMEA-2630 (tungsten)

Name and address of applicant: John W. Mink
560 - 9th Street
Elko, Nevada

Name and location of property: Little Joe Group
Elko County, Nevada

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

Under date of July 17, 1952, Mr. John W. Mink applied for a Government loan in the amount of $60,065.00 to be used in exploring the Little Joe group of mining claims.

Pursuant to this application, the Little Joe group of claims were examined on August 29 and 30, 1952 by geologists[1/] of the U. S. Geological Survey and an engineer[2/] of the U. S. Bureau of Mines of Region III.

In answering question No. 21, Form MF-103, the applicant has proposed a program of geological mapping and engineering studies, trenching and crosscutting with bulldozer, and diamond drilling. The time required is stated to be from 6 to 9 months.

At the Little Joe group of claims a small amount of scheelite is contained in tactite, and in quartz veinlets in hornfels. Some scheelite is found in a quartz vein 1- to 12-inches wide in the Little Joe shaft. The best exposure of scheelite is associated with tactite and hornfels in the discovery cut, but it is not of minable grade.

It is concluded that there is very little chance of making a significant discovery of tungsten and it is recommended, therefore, that the application be denied.

1/ R. M. Smith and D. C. Laub.
2/ Glenn G. Gentry.

NAME AND LOCATION OF PROPERTY

The applicant's claims are the Little Joe and Silver Shiek group of 18 claims which are located 15.4 miles east of Wild Horse, Elko County, Nev. The nearest town in which supplies could be obtained is Mountain City, Nev., approximately 35 miles northwest of the mine. The claims are in the Island Mountain Mining District and have not been surveyed, but are situated in secs. 15, 16, 21, and 22, T. 45 N., R. 56 E., M.D.B.&M. (see fig. 2).

From the all-weather highway, designated as Nevada State Highway No. 43, the roads are unimproved mountain roads, which are sometimes impassable during the winter and spring months due to snow and mud. From the floor of the valley to the mine location, the road is unimproved, with heavy grades. The mine road would not be accessible during the winter and spring months.

The mine is situated at an approximate elevation of 7500 feet in an area where heavy snowfall usually occurs from November to March. During these months it would be impractical to attempt any surface mining.

APPLICANT

The applicant has a very limited experience and knowledge of mining operations and he does not appear to be a good judge of the scheelite mineral, either in quantity or quality. Therefore, any extensive exploration program should be supervised by a mining engineer or geologist experienced in such type of work.

RIGHT OF LOCATION

The applicant holds 18 full mining claims by right of location and which are unsurveyed. These claims are recorded in the Elko County, Nevada, County Recorders Office, Elko County Courthouse, Elko, Nevada, as follows:

Claim	Book No.	Page No.	Date recorded	
Little Joe	30	131	July 10, 1952	
" " No. 1	30	132	" " "	
" " No. 2	30	133	" " "	These 10 claims
" " No. 3	30	134	" " "	were originally
" " No. 4	30	135	" " "	located in 1948.
" " No. 5	30	136	" " "	
" " No. 6	30	137	" " "	
" " No. 7	30	138	" " "	
" " No. 8	30	139	" " "	
" " No. 9	30	140	" " "	
" " No. 10	30	141	" " "	
Silver Shiek No. 1	30	85	June 30, 1952	
" " No. 2	30	86	" " "	
" " No. 3	30	87	" " "	These 8 claims
" " No. 4	30	88	" " "	were originally
" " No. 5	30	89	" " "	located in 1947.
" " No. 6	30	90	" " "	
" " No. 7	30	84	" " "	
" " No. 8	30	91	" " "	

These mining claims are relocations of abandoned claims upon which considerable prospecting for gold was done many years ago. One location notice, dated July 2, 1930, was found near a discovery cut on the Silver Shiek claim. This claim was located by Norman L. McKinnon and was designated as National No. 1. This man held the claim for many years and after his death it was relocated by J. W. Mink on July 1, 1952.

The applicant reports that there are no mortgages, liens or financial obligations against any of his claims itemized in the application.

IMPROVEMENTS AND FACILITIES

There are no surface improvements or facilities.

The mine workings consist of one vertical shaft sunk to a depth of 40 feet and one adit 105 feet in length. This work was done many years ago by prospectors in search of gold.

In the shaft, a small amount of scheelite was observed in a narrow quartz vein averaging about 10 inches in width. Short drifts have been driven along this vein, both east and west off the shaft at 20 feet below the collar. The quartz vein in these drifts narrows rapidly which indicates any expected tonnage would be in a very small amount. The shaft is tightly cribbed with timbers, making it impossible to secure samples of the walls. The applicant reports one small shipment of tungsten bearing quartz was made from this shaft, having a reported assay content of about 3.0% WO_3. This shipment was evidently sorted ore. An examination of the quartz rejects on the dump, by minoralight, showed only a very little scheelite in small and scattered crystals.

The portal of the 105-foot adit was found to have caved. However, after considerable shoveling, the Field Team were able to crawl through the caved section and examine the limited underground workings. A small amount of scheelite was observed in only one place, namely, in a short crosscut to the south off the main level (fig. 3 - BM-332). No production of tungsten ore has been made from the adit.

The property has been partly explored by the applicant by means of three bulldozer trenches (fig. 3).

The lower trench at the south side is approximately 380 feet in length and has not removed all of the overburden. The discovery trench, at the center, is approximately 300 feet in length by 8 feet average depth. This trench has removed the overburden and exposed scheelite-bearing rock for a length of 26 feet which has averaged 0.06% WO_3 from samples BM-334 to BM-338, inclusive. The upper trench, at the north side, is approximately 220 feet in length and has not removed all of the overburden.

No scheelite mineral was observed by mineralight in the upper and lower trenches, and only a few occurrences were found between the lower and discovery trenches during the night examination.

Between the upper and discovery trenches, scheelite was observed in a small surface area about 15 feet square. The best part of this area is represented by sample BM-340, which assayed 0.11% WO_3.

GEOLOGY

The sedimentary rocks in the area are shale and limy shale of Paleozoic age that have been cut by a granodiorite stock. Near their contact with the granodiorite the sedimentary rocks have been metamorphosed to hornfels and, locally, tactite, and are cut by aplite dikes and by veinlets of quartz or calcite. Scheelite is associated with the tactite and with the quartz veinlets. The sedimentary rocks in the mine area strike N. 80° E. and dip 85° south or are overturned.

In this area the intrusive rock is alaskite which appears to be a border facies of the granodiorite. The aplite dikes range from 1 to 6 feet in thickness, strike south from the alaskite and have been exposed as much as 50 feet from the contact. They commonly dip west.

The quartz and calcite veinlets cut the hornfels in all attitudes but the more persistent strike is N. 70° W. and dip steeply.

ORE DEPOSITS

The tungsten occurs as scheelite in the quartz veinlets and in irregular bodies in tactite near the aplite dikes.

The largest exposure of tungsten ore is 26 feet wide in the discovery cut (fig. 2) between two aplite dikes. Here the hornfels are cut by many quartz and calcite veinlets less than 1/16 inch wide which occur in all attitudes. Many of the veinlets contain scattered crystals of scheelite--the average grade across the 26 feet is 0.06 percent WO_3. Immediately north of the discovery cut at the site of sample BM-340 (fig. 3), an aplite dike is bordered by a tactite zone about 6 feet wide. Scheelite occurs in the tactite in concentrations up to 0.11 percent WO_3.

In the Little Joe vertical shaft, a quartz vein contains local concentrations of scheelite estimated to be as high as 2.0 percent WO_3. The vein strikes N. 70° W. and dips steeply. It ranges from 1 to 12 inches in width and is exposed to a depth of 40 feet.

In the 105-foot adit a single exposure of scheelite at the site of sample BM-332 appears to have no lateral or vertical persistence.

SAMPLING

Sample No.	%, WO_3	Oz Au/T	Oz Ag/T	Description
BM-329	0.05	Trace	0.40	Width 2.9 feet. Little Joe shaft. West drift off shaft on 20-foot level. Across back of drift at 14 feet west of shaft.
BM-330	0.04	0.02	7.30	Width 2.6 feet. Little Joe shaft. East side of shaft on 20-foot level.
BM-331	0.17	0.01	4.25	Width 1.2 feet. Little Joe shaft. East side of shaft at bottom of shaft.

Note: Samples were secured from the only available openings.

BM-332	0.05	Trace	1.05	Width 2.0 feet. Adit in gulch on Little Joe claim. South crosscut at junction of small raise. This is the only occurrence of scheelite observed in this adit.
BM-333	*0.01	Trace	0.50	Width 4.0 feet. Surface material 8.9 feet. West of portal of Little Joe adit. Surface exposure of soft, talcy material in the overburden, showing small amount of quartz in narrow stringers.
BM-334	0.15	Trace	Trace	Length of sample cut 6.0 feet. North bank of discovery cut.
BM-335	0.01	Trace	Trace	Width of sample cut 6.0 feet. North bank of discovery cut and adjoining BM-334.
BM-336	0.15	Trace	Trace	Width of sample 6.0 feet. North bank of discovery cut, starting at west end of BM-335 and 12 inches below BM-335.
BM-337	*0.01	Trace	Trace	Length of sample 6.0 feet. North bank of discovery cut. Starting at West end of BM-336.
BM-338	*0.01	Trace	Trace	Width of sample 40 inches. North bank of discovery cut. Starting at west end of BM-337.

Note: Samples BM-334 to 338, inclusive, were about 200 lb. samples, caught on canvas sheet. Large pieces broken to uniform, small size. Entire sample rolled, thoroughly mixed and quartered.

BM-339	0.02	Trace	Trace	Shovel sample of stockpiled material which the applicant had produced from the discovery cut.
BM-340	0.11	Trace	Trace	Width 38 inches. Surface exposure of tactite; 20 feet north of the discovery cut.

ORE RESERVES

As none of the scheelite-bearing material is of ore grade, no ore reserves can be estimated.

APPLICANT'S PROPOSAL

The applicant's proposal of trenching and crosscutting with a bulldozer and diamond drilling, was vague and indefinite. Due to the amount of overburden and barren and limited exposures, the applicant had no definite knowledge as to the location of bulldozer cuts or the location of diamond drill holes, and desired to have any exploration program to be specified by the Field Team.

From the sampling conducted by the Field Team and an examination by mineralight, the examining geologists and engineer have concluded that the only area in which further prospecting might be of value is an area approximately 26 feet in width by 50 feet in length, situated north of the discovery cut. It is considered that two bulldozer trenches (one in a north-south direction and one in an east-west direction) to a depth below the overburden, would evaluate this part of the property which has indicated a small and sparsely mineralized area. This work could be done by the applicant, with his Allis-Chalmers H.D. 7, caterpillar tractor, with angle dozer, in ten working days at an estimated cost of not to exceed $1,000.00. The purpose of the bulldozer cuts would be to afford more detailed geological information and new exposures for sampling and inspection by mineralight.

If these trenches should indicate that a substantial tonnage of tungsten ore could be inferred, then it would be necessary for the

Field Team to determine the further type of exploration and the extent and cost of same.

The exploration is considered highly speculative and the applicant has very limited funds with which to finance his share of any project. He expects to provide his share of the moneys by his own work and the rentals from any of his equipment used on the project.

It is considered probable that a few experienced miners could be obtained at Mountain City, Nev., however, it might be necessary to recruit such labor from Elko, Nev. A small amount of mining materials and supplies could also be obtained at Mountain City, though it would no doubt be less expensive to purchase materials, supplies and equipment in Elko, Nev.

Sufficient water for mining purposes is available from a small stream located approximately 500 feet northwest of the bulldozer cuts and at a lower elevation. The water would have to be hauled or pumped to the mine.

There is no transmitted electric power in the immediate area and it would be necessary to use machinery powered by Diesel or gasoline engines.

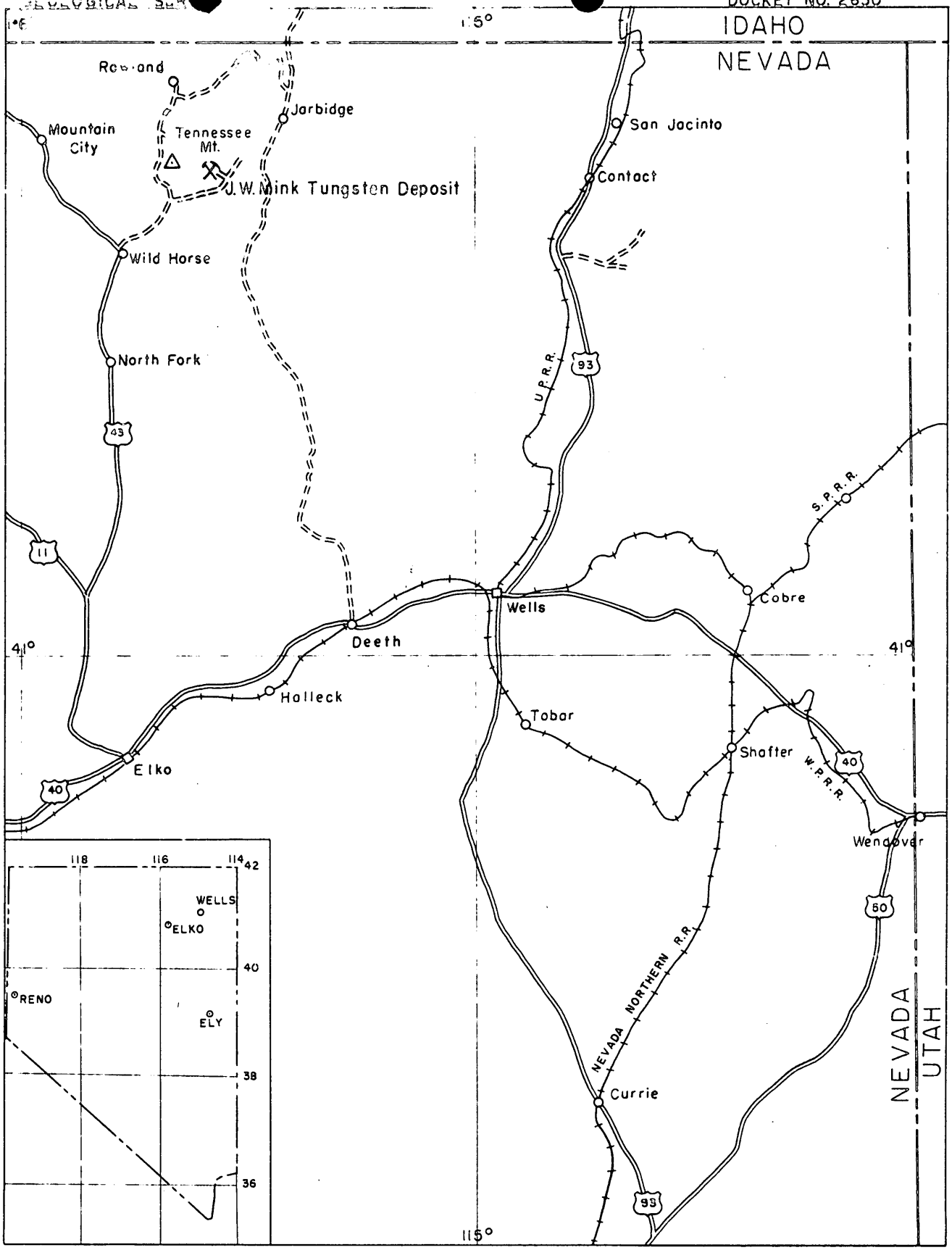


FIG. 1 INDEX MAP OF NEVADA

0 10 20 30 40 Miles

Scale 1:1,000,000

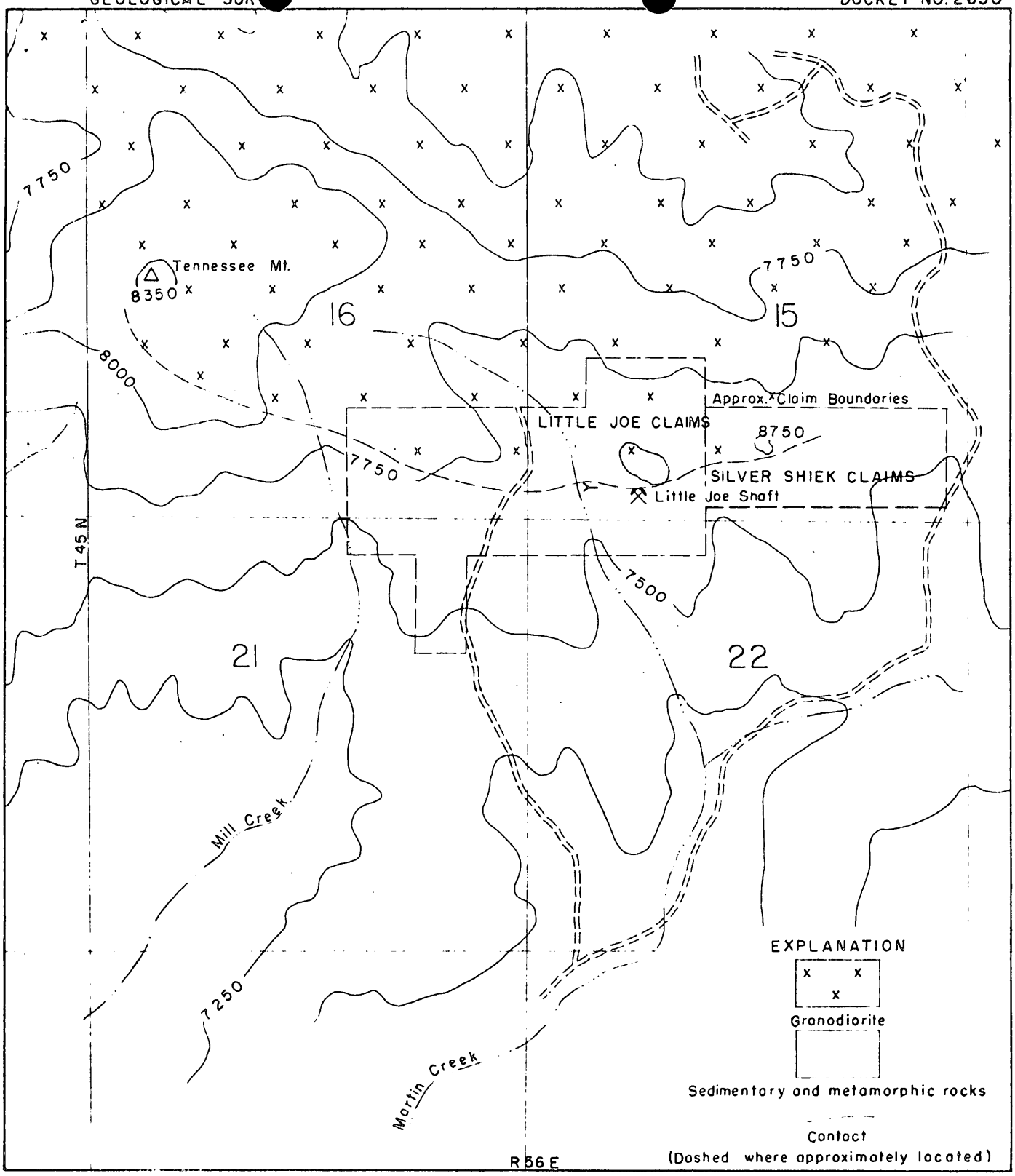


FIG. 2

GEOLOGIC SKETCH OF J.W. MINK TUNGSTEN DEPOSIT

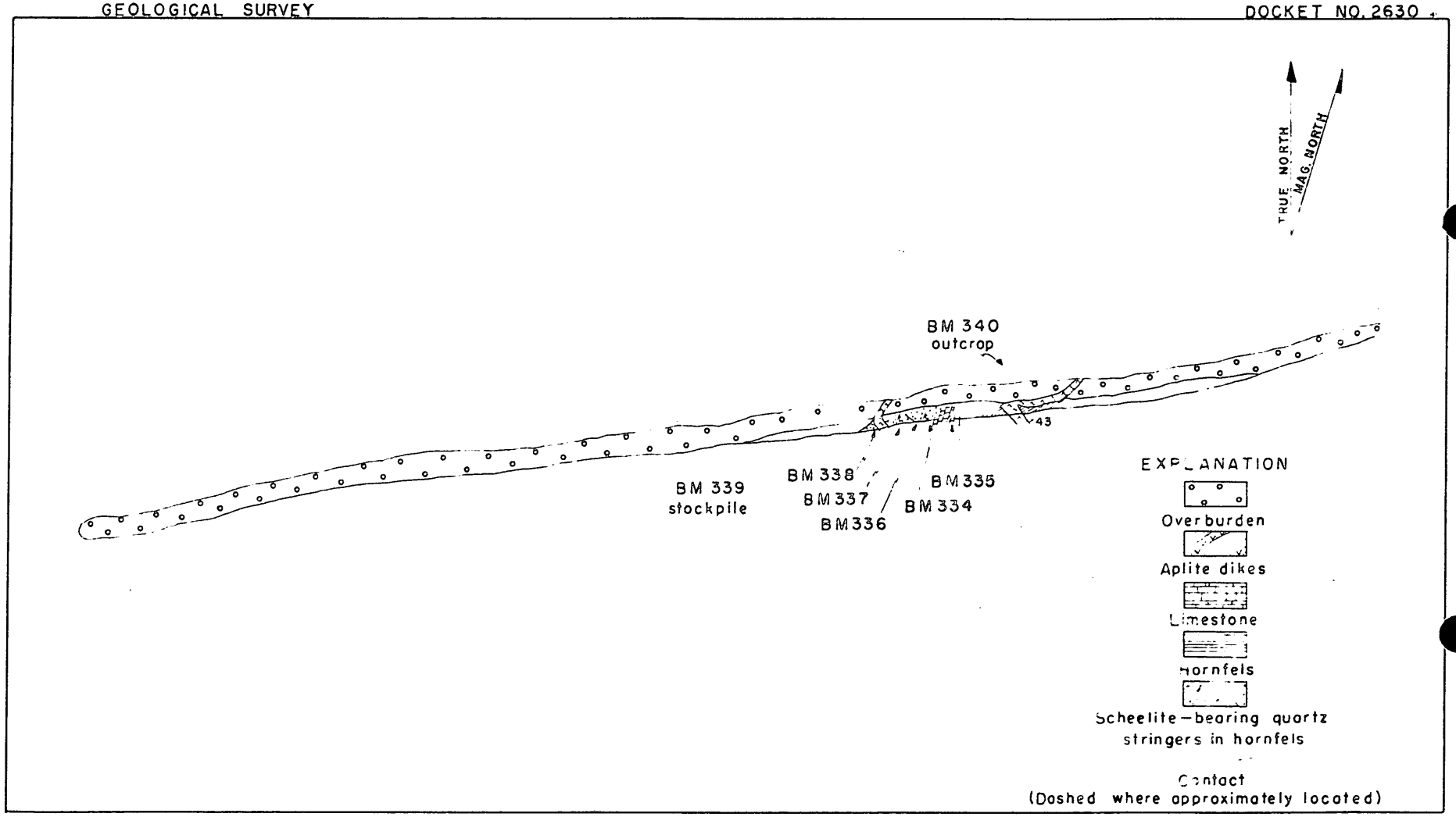
ELKO COUNTY, NEVADA

0 .5 1 MILE
Scale

Contour interval 250'

U. S. DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

DEFENSE MINERALS EXPLORATION ADMINISTRATION
DOCKET NO. 2630



GEOLOGY BY C C LAJB & R M SMITH
AUG 30, 1962

FIG. 4

LONGITUDINAL SECTION ALONG LINE A-A'
J.W. MINK TUNGSTEN PROSPECT
ELKO COUNTY, NEVADA

0 40 80 FEET
Scale

FILE COPY
SURNAME:

Rutledge
Selfridge

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

AUG 5 1952

Mr. N. G. Miller
Executive Officer, Region III
1012 Flood Building
870 Market Street
San Francisco 2, California

Re: Docket No. DMEA 2630 - Tungsten
John W. Mink
Little Joe Group, Island Mine District
Elko County, Nevada

Dear Mr. Miller:

On July 22, 1952, your office forwarded to Washington three copies of the subject application and noted that one copy had been retained in order that a field examination might be made when your field engineers are in the Island Mine District. Therefore, we will hold this application in abeyance until your field team report is received.

FARutledge:lm
8/4/52

Sincerely yours,

S.N. 8-5-52

(signed) FRANK E. JOHNSON GLS

Chairman, Operating Committee
Defense Minerals Exploration Administration

Approved:

J. H. Hedges GLS

Member, Bureau of Mines

D. M. Lemmon (GLS)

Member, Geological Survey

cc: Admn. Reading File
Docket
R. W. Geehan, USBM
D. M. Lemmon, USGS
Field Team Reg. III
Operating Committee
G. C. Selfridge
F. A. Rutledge

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

8/4/52

August 1, 1952

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
AUG 1 1952

Memorandum

To: George C. Selfridge, DMEA

From: Robert W. Geehan, Bureau of Mines

Subject: John W. Mink
Little Joe Group
Island Mine District
Elko County, Nevada

DMEA 2630
Tungsten

Proposal: Geologic mapping and engineering studies, trenching and crosscutting with bulldozer, and diamond drilling. Estimated total cost - $60,065.

General: The same applicant filed for the same amount on the Mohawk Group, Elko County, Nevada, under DMEA 2239. There is no map with this application, and no evidence whatsoever that tungsten has been found on the deposit in question. Based on the information in the docket, no decision can be made in this office. The applicant should be able to present some kind of sketch, and at least some information regarding samples, before the Field Team is requested to examine the deposit. As he proposes geologic mapping and engineering studies in the docket, it can be assumed that he plans to use this information to plan actual work. However, we should require at least enough information to justify a Field Team examination.

Recommendation: The applicant should be requested to supply the following:

1. Sketch map.
2. Sample data.
3. Relative location of Mohawk Group and Little Joe Group.
4. Justification for a project limited to geologic mapping and engineering studies along with some trenching, to be followed by

Copy retained 400

the balance of the work if the first step indicates that such work is desirable. Of course, if he has information that would justify the entire project, it should be submitted at this time.

The cost items listed under "e" Equipment to be Purchased are not in line with the information in the docket. The only equipment listed that requires electric power is an Arc-welder and a drill press. The need for a $5,000 transformer to operate this equipment is open to question.

Robert W. Geehan

Robert W. Geehan

Attachment

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

August 1, 1952

Memorandum

To: George C. Selfridge, DMEA

From: Robert W. Geehan, Bureau of Mines

Subject: John W. Mink — DMEA 2630
Little Joe Group — Tungsten
Island Mine District
Elko County, Nevada

Proposal: Geologic mapping and engineering studies, trenching and crosscutting with bulldozer, and diamond drilling. Estimated total cost - $60,065.

General: The same applicant filed for the same amount on the Mohawk Group, Elko County, Nevada, under DMEA 2239. There is no map with this application, and no evidence whatsoever that tungsten has been found on the deposit in question. Based on the information in the docket, no decision can be made in this office. The applicant should be able to present some kind of sketch, and at least some information regarding samples, before the Field Team is requested to examine the deposit. As he proposes geologic mapping and engineering studies in the docket, it can be assumed that he plans to use this information to plan actual work. However, we should require at least enough information to justify a Field Team examination.

Recommendation: The applicant should be requested to supply the following:

1. Sketch map.
2. Sample data.
3. Relative location of Mohawk Group and Little Joe Group.
4. Justification for a project limited to geologic mapping and engineering studies along with some trenching, to be followed by

the balance of the work if the first step indicates that such work is desirable. Of course, if he has information that would justify the entire project, it should be submitted at this time.

The cost items listed under "e" Equipment to be Purchased are not in line with the information in the docket. The only equipment listed that requires electric power is an Arc-welder and a drill press. The need for a $5,000 transformer to operate this equipment is open to question.

Robert W. Geehan

Attachment

EXPLORATION

Subject: DMEA-2630
Re: Exploration Loan
Little Joe Group
July 28, 1952

Mr. John W. Mink
560 - 9th Street
Elko, Nevada

My dear Mr. Mink:

This will acknowledge receipt of your application dated July 17, 1952, for a loan under the Defense Production Act of 1950.

Your application was assigned Docket Number DMEA-2630 and referred to the Iron and Ferro-Alloys Division.

Kindly refer to DMEA-2630 in any future correspondence relating to your application.

Sincerely yours,

ROBERT E. ADAMS

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

7862

July 28, 1952

Memorandum

To: Executive Officer, DMEA Field Team, Region III

From; Chief, Operation's Control and Statistics Division

Subject: Assignment of Docket Number

There is listed below the assigned Docket Number to an application recently submitted from Region III.

DMEA-2630 - John W. Mink

ROBERT E. ADAMS

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

~~Copy retained 400~~

DMEA-2630

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

Office of
Executive Officer
DMEA Field Team
Region III

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

July 22, 1952

Memorandum

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

From: Executive Officer, DMEA Field Team, Region III

Subject: Application for exploration loan (Tungsten), John W. Mink, 560 - 9th Street, Elko, Nevada

Attached are the original and two copies of an application for an exploration loan, dated July 17, received in this office on July 18 from Mr. John W. Mink.

Mr. Mink already has an application - Docket DMEA 2239X, (Tungsten), and has now located an additional group of claims in the same district for which he desires exploration assistance. He originally asked that this new group of claims be included with those covered by Docket 2239X, but I suggested to him that it would be more desirable to file a new application, which is what he has done.

We are holding one copy of the new application for our field engineers, who are being instructed to examine the property when in the Island Mine District of Elko County, Nevada.

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

Copy to E. H. Bailey, USGS

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
JUL 28 1952

Copy retained 400

Form MF-103
(April 1951)

U. S. DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS ADMINISTRATION

Budget Bureau No. 42-R1035.
Approval expires 6-30-51.

APPLICATION FOR AID FOR AN EXPLORATION PROJECT PURSUANT TO MINERAL ORDER 5, UNDER DEFENSE PRODUCTION ACT OF 1950

DO NOT FILL IN THIS BLOCK

Docket No. DMEA-2630

Date received 7-28-52

Participation

United States Department of the Interior
Defense Minerals Administration
1012 Flood Building
870 Market Street
San Francisco 2, California

Mr. John W. Mink
560 - 9th Street
Elko, Nevada

Name and address of applicant

Date July 17, 1952

FILL IN THIS BLOCK

Date of application July 17, 1952

Estimated cost 860,065

Mineral or metal Tungsten

Percentage of Government participation 75%

Location of mine Island Mine District Elko County

Date of filing MF-100

DMA Docket Number, if available

INSTRUCTIONS

Read Mineral Order 5, Regulations Governing Government Aid in Defense Projects, before completing this application. Submit four signed copies of the application to Defense Minerals Administration, Department of the Interior, Washington 25, D. C., or to the nearest field executive officer thereof, with your name and address on each sheet of the application and all accompanying papers. If any question is inapplicable, or if you cannot answer it, so state on the form. Where the space provided for answer is insufficient, answer on a separate sheet, annex it to the application form, and refer to it in space for answer. If the application is approved, you will be presented with an exploration project contract on Form MF-200, for your signature.

THE APPLICANT

*1. Is applicant an individual, partnership, or corporation?
*2. If a partnership, state names and addresses of partners.
*3. If a corporation, state names and addresses of officers, directors, and five largest stockholders.
*4. Describe the mining and general business experience of (*a*) the applicant, and (*b*) the person or persons who will manage the project.
*5. Are you the owner or the lessee of the property?
6. If owner, state what claims, liens, or encumbrances, if any, are against the property.
7. If lessee, attach a copy of the lease and state if it is in good standing.

NOTE.—It will be necessary to procure and attach to the exploration project contract agreements of claimants, lienors, encumbrances and lessors subordinating their interests in the property to the interest of the Government under the contract.

8. Furnish current financial statement, showing assets and liabilities, and a profit and loss statement.
9. How much money is applicant prepared to invest in proposed project? Is it sufficient to pay your part of the cost of the project as detailed in question 23 of this application form, in accordance with the regulations on Government participation (Section 9 of Mineral Order 5)?

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
JUL 28 1952

*If you have already answered these questions on MF-100, you are not required to answer the questions for this application.

16—64067-1

THE PROPERTY

10. (*a*) Give a description of the [illegible] property that will be in any way involved in [illegible] exploration project, including any existing mine or operating property.

(*b*) Give the legal description of the exact parcel, plot, or area upon which the exploration is to be conducted.

NOTE.—If both areas are the same, so state. The only obligation to repay the Government is from the net earnings from any commercial discovery made in the area specified in (*b*) above in which the exploration is to be conducted, and the expenditure of funds which may be charged as costs of the project must be limited to that area or to work necessary to perform the exploration in that area.

*11. State the present and former names of the property, if any.

*12. State, in detail, the location of the property with reference to towns, railroads, roads, shipping points, including distances and directions and kinds and conditions of roads.

*13. State source and quantity of water available for operations and its sufficiency at all seasons. State amount of power to be used, rate per hour or other cost, and source.

*14. Describe any existing useable facilities, equipment, buildings, or structure now on the property that will be devoted to the exploration work.

15. State in detail how the ore could be shipped and how and where milled.

*16. History:

(*a*) Give a statement, as complete as possible, of previous exploration, development, operation, and production of property, with reasons for any past suspensions of operations.

(*b*) State briefly the known history and production of adjoining and neighboring properties.

(*c*) Furnish any available (private) reports that may apply to this application, including results of mine examinations, recommended exploration and development, and metallurgical investigations.

*17. Production:

(*a*) If mine is in production, furnish the following information:

	Tons per day	*Grade or analysis*	*Cost per ton*	*Net value per ton*
(1) Mining				
(2) Milling				
(3) Shipped or sold				

*18. Ore or mineral reserves: (If property is or has been operating.)

(*a*) Describe the ore or mineral deposits briefly.

(*b*) Submit available maps and assay data.

(*c*) Give estimated tonnage and grade of each class of ore reserves.

19. State any conditions or circumstances regarding the property not sufficiently brought out by the foregoing questions.

THE EXPLORATION

20. For what mineral or minerals and for what types of deposits and ores will the exploration be conducted?

21. Describe briefly, but concisely, the proposed work and the estimated time required to complete it.

NOTE.—The Government will not participate in a project that will require more than 2 years to complete.

22. Furnish statement of the geological basis of the project with particular emphasis on factors leading the operator to expect the finding of commercial ore bodies. This statement should be accompanied by supporting maps such as geological maps, maps of the proposed openings and assay maps, sample lists, and other pertinent data.

THE REQUIREMENTS AND COSTS

23. Tabulate in the form of an itemized statement with a sum for each item the estimated requirements and costs of the project so that the total will give the estimated cost of the project in which the Government will participate, as follows:

(*a*) Labor, by numbers and classes (miners, muckers, millmen, etc.), with wages of each.

(*b*) Supervisors, by numbers and positions, with salaries of each.

(*c*) Cost of necessary repairs to existing facilities, structures, and buildings.

(*d*) Cost of necessary installation or construction of additional facilities, structures, and buildings.

(*e*) Cost of items of equipment, not now owned by the applicant which must be purchased for operations at a cost of $50 or more each.

(*f*) Cost of rental for equipment which the operator proposes to rent.

(*g*) Rental value of items of equipment which the operator now owns and which will be devoted to the work.

(*h*) Cost of materials and supplies, including items of equipment costing less than $50 each.

(*i*) Cost of power, water, utilities, and any other items not provided for above.

24. Furnish a time schedule of the project, stated in terms of months after project is approved, showing progress expected to be accomplished and the money expected to be spent.

CERTIFICATION

The undersigned company, and the official executing this certification on its behalf, hereby certify that the information contained in this form and accompanying papers is correct and complete to the best of their knowledge and belief.

(Name of company)	By Jno Mink (Signature of authorized official)
July 17, 1952 (Date)	Owner + Operator (Title)

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.

*Same as footnote on page 1.

16—64067-1 U. S. GOVERNMENT PRINTING OFFICE

Answers to questions on form MF-103

1. Partnership

2. John W. Mink — General Partner, One Third Interest
   560 Ninth Street
   Elko, Nevada

   Sarah D. Mink — Limited Partner, One third Interest
   560 Ninth Street
   Elko, Nevada

   Clem Culley — Limited Partner, One third Interest
   Mountain City, Nevada

3. Not applicable

4. Applicant will also manage project. The applicants business and mining experience are as follows:

   5 Yrs., U. S. Forest Service. Much of time spent on road and other construction work.
   8 Yrs., freight and mail-line contractor, Northern Elko Co., Nevada
   10 Yrs., ranching and mining experience, including operation of Rosebud Mine, Mohawk Mine, and Bruneau Mine.

5. Owner

6. None

7. Not applicable

8. None: property not in operation

9. $16,000 Yes

10. (a) 18 claims, situated in Sections _, _, _, and _, T45N, R7E, MDB & M, Elko Co., Nevada, with a 50 ft. shaft and 150 ft. of drift on vein that gives 350 ft. of backs on shaft.

    (b) Same as (a) above.

11. Little Joe Group: New location name.

12. Property situated 80 miles north of Elko, Nevada. Sixty-five miles are over paved road, thence over 14 miles of well-graded, gravelled Forest Service road. The last 1 mile, from the Forest Service road to the mine, is over graded, unimproved road.

13. Sufficient water available year round in Mill Creek, for mining and milling purposes. Power available from Idaho Power Co. line, within three (3) miles.

14. Equipment on property which can be used for exploration work include:

1 Allis Chalmers H. D. 7, w/angle dozer
1 GMC 6 x 6, 2½ ton truck, with semi-trailer
1 210 cfm compressor, w/one jackhammer
1 International 1½ ton truck
1 Chevrolet pickup truck

15. It is impractical to ship this ore to any now-operating plant due to high haulage and shipment costs. This exploration work is being done to block out sufficient ore to warrent construction of milling facilities on the property.

16. (a) This property was explored by a shaft of 50 ft. and 150 ft. of drift on vain that gives 350 ft. of back on shaft. Shaft and Tunnel both showed tungsten. Considerable stripping and cross cutting on surface by bulldozer shows tungsten in place.

(b) The neighboring Montrose and Knowles properties, which adjoin this property on the west, have been explored for tungsten, by cross-cutting and diamond drilling. Considerable tungsten has been reported found, but none has been shipped due to the high shipment costs. The Gribble property, also known as the Star Metal Antimony Mine, which lies southeast of the Mohawk Group, has developed, by shaft and cross-cut, and surface trenching, a fair tonnage of good tungsten ore.

17. Not applicable

18. Not applicable

19. Surface examination, by lamping of outcrops, discloses ore over an estimated 100 ft. width, and for a length of 6000 ft. Mineralization is not uniform over the entire width and length, but in several favorable areas a width of about 100 ft. and a length of several hundred feet appear to run from 0.3 to 0.5 percent WO_3.

20. Tungsten; contact deposit in tactite

21. Geologic mapping and engineering studies, trenching and cross-cutting with bulldozer, and diamond drilling. Cross-cutting and trenching estimated to require 3 to 4 month, diamond drilling 2 to 3 months, and mapping 1 to 2 months. All three may run concurrently.

22. No geologic maps available. The widespread occurrence of ore in outcrops, and the favorable geologic setting (granitic rock intruding limestones and shales, with the widespread formation of tactite) indicate that it is a favorable area for exploration.

23. Requirements and costs:

(a) Labor (based on 90 working days)

1 Equipment operator, $20/day	$1800
1 Cook, $15/day	1350
2 Miners, $15/day	2700
1 Helper, $12.50/day	1125
	$6975

(b) Supervisors

1 Foreman, $25/day for 90 days (owner's contribution)	$2250
1 Engineer-geologist, $700/month for 6 months	4200
	$6450

(c) Cost of repairs to existing facilities---none

(d) Cost of additional facilities, structures, etc.

1 Cook house-dining room	$2500
1 Bunkhouse	3500
1 Office-shop	2500
	$8500

(e) Equipment to be purchased

1 Transformer (installed by Idaho Power Co.)	$5000
1 J-55 jackhammer	500
1 Arc-welder, 300 Amp	250
1 Drill press, heavy duty, and drills	300
1 Forge and blower	75
1 Anvil and tools	100
1 10 HP Electric motor and starter	175
	$6400

(f) Cost of equipment to be rented---none

(g) Rental value of operators equipment (based on 90 working days)

1 Allis-Chalmers HD 8. w/angle dozer, $12/hr	$8640
1 6 x 6 GMC Truck, $48/day	4320
1 210 cfm compressor, with jackhammer, $10/day	900
	$13640

(h) Cost of materials and supplies

Fuel oil, gasoline, and oil	$ 2500
Powder and caps	600
2000 Flax diamond drilling @ $5.00/ft	10000
Miscellaneous operating supplies & assaying	5000
	$18100

TOTAL	$60065

Form MF-103
(April 1951)

U. S. DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS ADMINISTRATION

Budget Bureau No. 42-R1035.
Approval expires 6-30-51.

APPLICATION FOR AID FOR AN EXPLORATION PROJECT PURSUANT TO MINERAL ORDER 5, UNDER DEFENSE PRODUCTION ACT OF 1950

DO NOT FILL IN THIS BLOCK

Docket No. DMEA-2630

Date received 7-28-52

Participation

United States Department of the Interior
Defense Minerals Administration
1012 Flood Building
870 Market Street
San Francisco 2, California

Mr. John W. Mink
560 - 9th Street
Elko, Nevada

Name and address of applicant

Date July 17, 1952

FILL IN THIS BLOCK

Date of application July 17, 1952

Estimated cost $60,065

Mineral or metal Tungsten

Percentage of Government participation 75%

Location of mine Island Mine District Elko County

Date of filing MF-100

DMA Docket Number, if available

INSTRUCTIONS

Read Mineral Order 5, Regulations Governing Government Aid in Defense Projects, before completing this application. Submit four signed copies of the application to Defense Minerals Administration, Department of the Interior, Washington 25, D. C., or to the nearest field executive officer thereof, with your name and address on each sheet of the application and all accompanying papers. If any question is inapplicable, or if you cannot answer it, so state on the form. Where the space provided for answer is insufficient, answer on a separate sheet, annex it to the application form, and refer to it in space for answer. If the application is approved, you will be presented with an exploration project contract on Form MF-200, for your signature.

THE APPLICANT

*1. Is applicant an individual, partnership, or corporation?
*2. If a partnership, state names and addresses of partners.
*3. If a corporation, state names and addresses of officers, directors, and five largest stockholders.
*4. Describe the mining and general business experience of (*a*) the applicant, and (*b*) the person or persons who will manage the project.
*5. Are you the owner or the lessee of the property?
6. If owner, state what claims, liens, or encumbrances, if any, are against the property.
7. If lessee, attach a copy of the lease and state if it is in good standing.

NOTE.—It will be necessary to procure and attach to the exploration project contract agreements of claimants, lienors, encumbrances and lessors subordinating their interests in the property to the interest of the Government under the contract.

8. Furnish current financial statement, showing assets and liabilities, and a profit and loss statement.
9. How much money is applicant prepared to invest in proposed project? Is it sufficient to pay your part of the cost of the project as detailed in question 23 of this application form, in accordance with the regulations on Government participation (Section 9 of Mineral Order 5)?

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
JUL 28 1952

*If you have already answered these questions on MF-100, you are not required to answer the questions for this application.

THE PROPERTY

10. (*a*) Give a description of the real property that will be in any way involved in the exploration project, including any existing mine or operating property.
    (*b*) Give the legal description of the exact parcel, plot, or area upon which the exploration is to be conducted.

    NOTE.—If both areas are the same, so state. The only obligation to repay the Government is from the net earnings from any commercial discovery made in the area specified in (*b*) above in which the exploration is to be conducted, and the expenditure of funds which may be charged as costs of the project must be limited to that area or to work necessary to perform the exploration in that area.

*11. State the present and former names of the property, if any.

*12. State, in detail, the location of the property with reference to towns, railroads, roads, shipping points, including distances and directions and kinds and conditions of roads.

*13. State source and quantity of water available for operations and its sufficiency at all seasons.
State amount of power to be used, rate per hour or other cost, and source.

*14. Describe any existing useable facilities, equipment, buildings, or structure now on the property that will be devoted to the exploration work.

15. State in detail how the ore could be shipped and how and where milled.

*16. History:
    (*a*) Give a statement, as complete as possible, of previous exploration, development, operation, and production of property, with reasons for any past suspensions of operations.
    (*b*) State briefly the known history and production of adjoining and neighboring properties.
    (*c*) Furnish any available (private) reports that may apply to this application, including results of mine examinations, recommended exploration and development, and metallurgical investigations.

*17. Production:
    (*a*) If mine is in production, furnish the following information:

	Tons per day	*Grade or analysis*	*Cost per ton*	*Net value per ton*
(1) Mining				
(2) Milling				
(3) Shipped or sold				

*18. Ore or mineral reserves: (If property is or has been operating.)
    (*a*) Describe the ore or mineral deposits briefly.
    (*b*) Submit available maps and assay data.
    (*c*) Give estimated tonnage and grade of each class of ore reserves.

19. State any conditions or circumstances regarding the property not sufficiently brought out by the foregoing questions.

THE EXPLORATION

20. For what mineral or minerals and for what types of deposits and ores will the exploration be conducted?

21. Describe briefly, but concisely, the proposed work and the estimated time required to complete it.

    NOTE.—The Government will not participate in a project that will require more than 2 years to complete.

22. Furnish statement of the geological basis of the project with particular emphasis on factors leading the operator to expect the finding of commercial ore bodies. This statement should be accompanied by supporting maps such as geological maps, maps of the proposed openings and assay maps, sample lists, and other pertinent data.

THE REQUIREMENTS AND COSTS

23. Tabulate in the form of an itemized statement with a sum for each item the estimated requirements and costs of the project so that the total will give the estimated cost of the project in which the Government will participate, as follows:
    (*a*) Labor, by numbers and classes (miners, muckers, millmen, etc.), with wages of each.
    (*b*) Supervisors, by numbers and positions, with salaries of each.
    (*c*) Cost of necessary repairs to existing facilities, structures, and buildings.
    (*d*) Cost of necessary installation or construction of additional facilities, structures, and buildings.
    (*e*) Cost of items of equipment, not now owned by the applicant which must be purchased for operations at a cost of $50 or more each.
    (*f*) Cost of rental for equipment which the operator proposes to rent.
    (*g*) Rental value of items of equipment which the operator now owns and which will be devoted to the work.
    (*h*) Cost of materials and supplies, including items of equipment costing less than $50 each.
    (*i*) Cost of power, water, utilities, and any other items not provided for above.

24. Furnish a time schedule of the project, stated in terms of months after project is approved, showing progress expected to be accomplished and the money expected to be spent.

CERTIFICATION

The undersigned company, and the official executing this certification on its behalf, hereby certify that the information contained in this form and accompanying papers is correct and complete to the best of their knowledge and belief.

(Name of company)	By [illegible] (Signature of authorized official)
July 17-52 (Date)	Owner + Operator (Title)

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.

*Same as footnote on page 1.

16—64067-1 U. S. GOVERNMENT PRINTING OFFICE

Answers to questions on form MF-103

1. Partnership

2. John W. Mink — General Partner, One Third Interest
   560 Ninth Street
   Elko, Nevada

   Sarah D. Mink — Limited Partner, One third Interest
   560 Ninth Street
   Elko, Nevada

   Clem Culley — Limited Partner, One third Interest
   Mountain City, Nevada

3. Not applicable

4. Applicant will also manage project. The applicants business and mining experience are as follows:

   5 Yrs., U. S. Forest Service. Much of time spent on road and other construction work.
   8 Yrs., freight and mail-line contractor, Northern Elko Co., Nevada
   10 Yrs., ranching and mining experience, including operation of Rosebud Mine, Mohawk Mine, and Bruneau Mine.

5. Owner

6. None

7. Not applicable

8. None: property not in operation

9. $16,000 Yes

10. (a) 18 claims, situated in Sections _, _, _, and _, T45N, R7E, MDB & M, Elko Co., Nevada, with a 50 ft. shaft and 150 ft. of drift on vain that gives 350 ft. of backs on shaft.

    (b) Same as (a) above.

11. Little Joe Group: New location name.

12. Property situated 80 miles north of Elko, Nevada. Sixty-five miles are over paved road, thence over 14 miles of well-graded, gravelled Forest Service road. The last 1 mile, from the Forest Service road to the mine, is over graded, unimproved road.

13. Sufficient water available year round in Mill Creek, for mining and milling purposes. Power available from Idaho Power Co. line, within three (3) miles.

14. Equipment on property which can be used for exploration work include:

1 Allis Chalmers H. D. 7, w/angle dozer
1 GMC 6 x 6, 2½ ton truck, with semi-trailer
1 210 cfm compressor, w/one jackhammer
1 International 1½ ton truck
1 Chevrolet pickup truck

15. It is impractical to ship this ore to any now-operating plant due to high haulage and shipment costs. This exploration work is being done to block out sufficient ore to warrent construction of milling facilities on the property.

16. (a) This property was explored by a shaft of 50 ft. and 150 ft. of drift on vain that gives 350 ft. of back on shaft. Shaft and Tunnel both showed tungsten. Considerable stripping and cross cutting on surface by bulldozer shows tungsten in place.

(b) The neighboring Montrose and Knowles properties, which adjoin this property on the west, have been explored for tungsten, by cross-cutting and diamond drilling. Considerable tungsten has been reported found, but none has been shipped due to the high shipment costs. The Gribble property, also known as the Star Metal Antimony Mine, which lies southeast of the Mohawk Group, has developed, by shaft and cross-cut, and surface trenching, a fair tonnage of good tungsten ore.

17. Not applicable

18. Not applicable

19. Surface examination, by lamping of outcrops, discloses ore over an estimated 100 ft. width, and for a length of 6000 ft. Mineralization is not uniform over the entire width and length, but in several favorable areas a width of about 100 ft. and a length of several hundred feet appear to run from 0.3 to 0.5 percent WO3.

20. Tungsten; contact deposit in tactite

21. Geologic mapping and engineering studies, trenching and cross-cutting with bulldozer, and diamond drilling. Cross-cutting and trenching estimated to require 3 to 4 month, diamond drilling 2 to 3 months, and mapping 1 to 2 months. All three may run concurrently.

22. No geologic maps available. The widespread occurrence of ore in outcrops, and the favorable geologic setting (granitic rock intruding limestones and shales, with the widespread formation of tactite) indicate that it is a favorable area for exploration.

23. Requirements and costs:

(a) Labor (based on 90 working days)

1 Equipment operator, $20/day	$1800
1 Cook, $15/day	1350
2 Miners, $15/day	2700
1 Helper, $12.50/day	1125
	$6975

(b) Supervisors

1 Foreman, $25/day for 90 days (owner's contribution)	$2250
1 Engineer-geologist, $700/month for 6 months	4200
	$6450

(c) Cost of repairs to existing facilities---none

(d) Cost of additional facilities, structures, etc.

1 Cook house-dining room	$2500
1 Bunkhouse	3500
1 Office-shop	2500
	$8500

(e) Equipment to be purchased

1 Transformer (installed by Idaho Power Co.)	$5000
1 J-55 jackhammer	500
1 Arc-welder, 300 Amp	250
1 Drill press, heavy duty, and drills	300
1 Forge and blower	75
1 Anvil and tools	100
1 10 HP Electric motor and starter	175
	$6400

(f) Cost of equipment to be rented---none

(g) Rental value of operators equipment (based on 90 working days)

1 Allis-Chalmers HD 8. w/angle dozer, $12/hr	$8640
1 6 x 6 GMC Truck, $48/day	4320
1 210 cfm compressor, with jackhammer, $10/day	900
	$13640

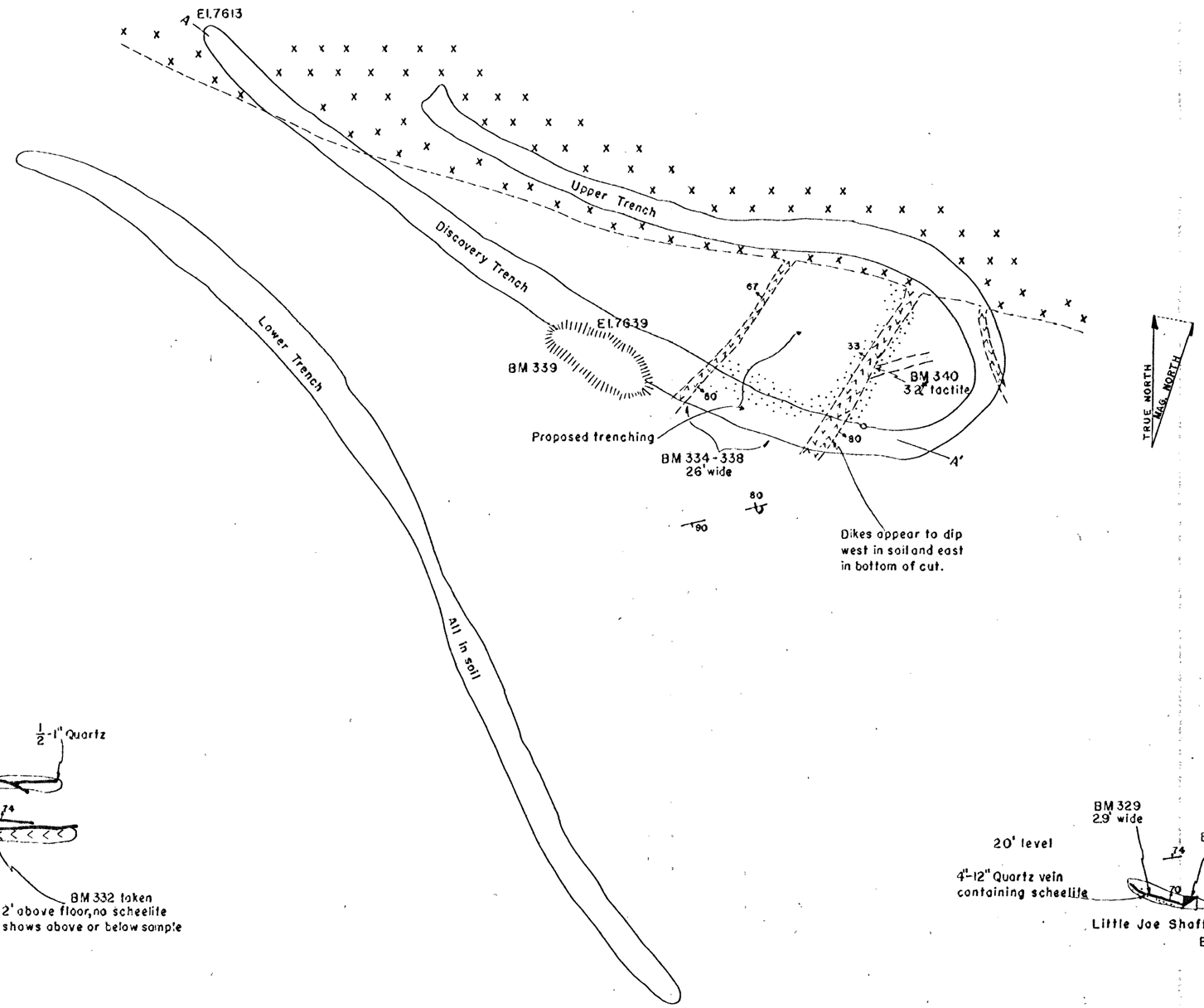
(h) Cost of materials and supplies

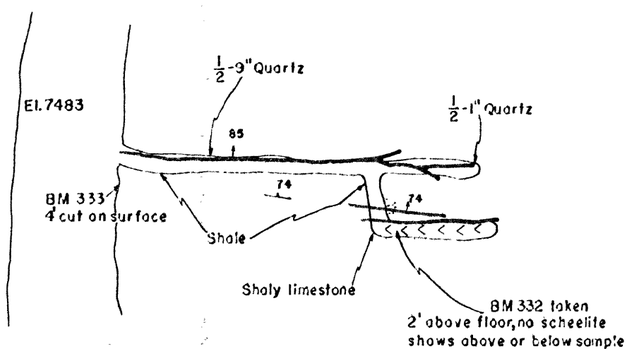
Fuel oil, gasoline, and oil	$ 2500
Powder and caps	600
2000 Flax diamond drilling @ $5.00/ft	10000
Miscellaneous operating supplies & assaying	5000
	$18100

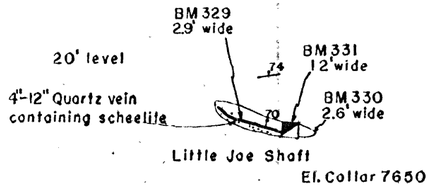
TOTAL	$60065

Box X
323 4806
467 6629

Sample No.	Width feet	Percent WO_3
BM 329	2.9	0.05
BM 330	2.6	0.04
BM 331	1.2	0.17
BM 332	2.0	0.05
BM 333	4.0	< 0.01
BM 334	6.0	0.15
BM 335	6.0	0.01
BM 336	6.0	0.15
BM 337	6.0	< 0.01
BM 338	3.3	< 0.01
BM 339	Stockpile	0.02
BM 340	3.2	0.11







EXPLANATION

Alaskite

Aplite

Hornfels

Scheelite-bearing tactite

Contact
(Dashed where approximately located)

Fault, showing dip
(Dashed where approximately located)

Strike and dip of beds

Strike and dip of overturned beds

Dump

Shaft at surface

Inclined workings
(Chevrons point down)

GEOLOGY BY D. C. LAUB & R. M. SMITH

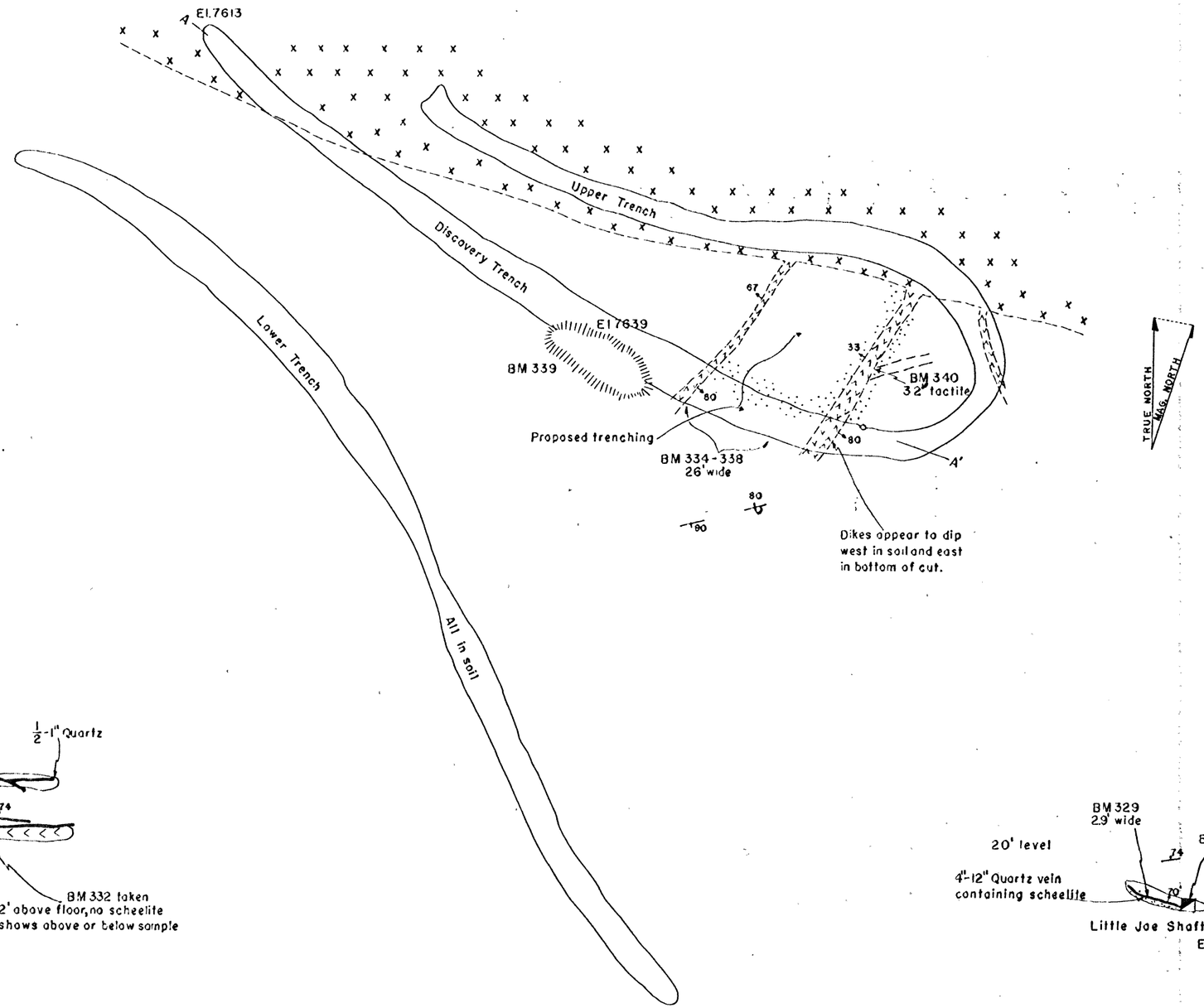
FIG. 3

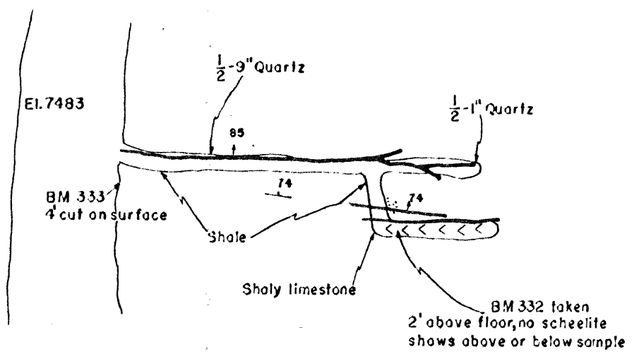
GEOLOGIC SKETCH MAP OF THE J.W. MINK TUNGSTEN PROSPECT

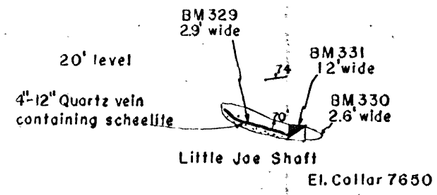
ELKO COUNTY, NEVADA

0 40 80 FEET
Scale

Sample No.	Width feet	Percent WO_3
BM 329	2.9	0.05
BM 330	2.6	0.04
BM 331	1.2	0.17
BM 332	2.0	0.05
BM 333	40	< 0.01
BM 334	6.0	0.15
BM 335	6.0	0.01
BM 336	6.0	0.15
BM 337	6.0	< 0.01
BM 338	3.3	< 0.01
BM 339	stockpile	0.02
BM 340	3.2	0.11







EXPLANATION

Alaskite

Aplite

Hornfels

Scheelite-bearing tactite

Contact
(Dashed where approximately located)

Fault, showing dip
(Dashed where approximately located)

Strike and dip of beds

Strike and dip of overturned beds

Dump

Shaft at surface

Inclined workings
(Chevrons point down)

GEOLOGY BY D. C. LAUB & R. M. SMITH

FIG. 3

GEOLOGIC SKETCH MAP OF THE J.W. MINK TUNGSTEN PROSPECT

ELKO COUNTY, NEVADA

0 40 80 FEET
Scale