DMA Form 1

DEFENSE MINERALS ADMINISTRATION
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DMA Docket No. 3110

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

Copies to USGS, USBM, 1 cy retained in reg.

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To:	Code 400, Rm. 3538	Date	~~7/16/53~~ 7-6-53
To:	Oper Com	Date	7-22-53
To:	Code 400 Rm. 3538	Date	7-23-53
To:	Oper Com	Date	7-22-53
To:	Oper Com	Date	7-24-53
To:	Code 400	Date	7-27-53
To:	Oper Com.	Date	10-30-53
To:	Code 400	Date	11/3/53
To:	Oper Com	Date	11-13-53
To:	400	Date	11-16-53
To:	400	Date	11-19
To:	Code 400	Date	12/1/53
To:	Oper Com	Date	3-3-54
To:		Date	
To:		Date	

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2110

400

MAR 3 1954

Mr. Fred Barnes

Denio, Nevada

Re: Docket No. DMEA 3110 - Tungsten
George D. Mathewson
Defense Tungsten Mine
Humboldt County, Nevada

Dear Mr. Barnes:

Mr. R. C. Miller, DMEA Executive Officer, Region 3 Field Team, San Francisco, California, has informed us that you notified him by letter on February 19, 1954, that you no longer wish to proceed with the subject application for exploration assistance. Accordingly, the application is being withdrawn from our active files.

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

Sincerely yours,

C. O. Mittendorf

Administrator

Copy to: Mr. George D. Mathewson
Denio, Nevada

CC: DOCKET
FT. MEA. 3
COMM. COO
ADM. HEAD. FILE
T. B. TRAYER, USGS
R. W. GREENIAN, USBM

LSeptt 3/2/54

400

COPY

February 19, 1954

DMEA-3110

Mr. H. C. Miller
San Francisco, Calif.

Dear Mr. Miller:

Since my request for the forms MF-203 we have since opened what looks like the main vein. We would rather carry on the work without a loan if possible, therefore I think it best not to go through with our application. Thank you for the attention you have given the matter.

Yours very truly,
Sgd: Fred Barnes, Denio, Nevada

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

400

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
MAR 1 - 1954

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

February 24, 1954

Memorandum

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

From: Executive Officer, DMEA Field Team, Region III

Subject: Docket No. DMEA-3110 - Tungsten
Claim No. 1, Defense Tungsten Mine
Humboldt County, Nevada

Attached is a copy of a letter dated February 19, 1954, from Mr. Fred Barnes, Denio, Nevada, informing us that he does not wish to go through with his application for an exploration loan on the subject property.

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

Attachment

Copy to: Roscoe Smith, DMEA
A. C. Johnson, Reno

402

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

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
FEB 1 3 1954

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

February 12, 1954

Mr. Fred Barnes
Denio
Nevada

Subject: Docket DMEA-3110 - Tungsten Claim No. 1, Defense Tungsten Mine, Humboldt County, Nevada

Dear Mr. Barnes:

With our letter to you, dated December 18, 1953, we sent seven copies of form MF-203, Owner's Consent to Lien, and asked that you have six copies executed and returned to this office.

Up to this writing, our records indicate that you have not submitted the required forms through this office. No contract for exploration work can be entered into with you until the status of the lease in question has been cleared.

Sincerely yours,

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

Copy to: DMEA, Washington, D. C. (2)
Roscoe M. Smith, USGS
A. C. Johnson, Reno

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

Defense Minerals Administration
RECEIVED
DEC 22 1953

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

December 18, 1953

Mr. Fred Barnes
Denio, Nevada

Re: Docket No. DMEA-3111 - Tungsten
Claim No. 1, Defense Tungsten
Mine
Humboldt County, Nevada

Dear Mr. Barnes:

Your letter dated December 11, 1953, replying to my letter of December 2, 1953, to Mr. George Mathewson, is acknowledged.

I note that your lease from Mr. George Mathewson has about one and one-half years more to run; that you filed for the DMEA loan in the name of George Mathewson because he is the owner of the property; and that our Reno office has told you to have forms MF-203 filled out so that the loan might be switched over to Virgil Pratt and you.

I am not sure whether this is the proper way to handle the matter. It may be that you will have to make application in your name and Mr. Pratt's name. I will leave that to the Washington office of the Defense Minerals Exploration Administration to decide.

In any event, we will need Owner's Consent to Lien forms, so I am sending seven copies of form MF-203 herewith. These forms should be executed and six copies returned to this office. The seventh copy is for your files. Upon their receipt, I will forward them to Washington.

Sincerely yours,

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

Enclosure

Copy to: DMEA, Washington, D. C.
E. H. Bailey, USGS
A. C. Johnson, Reno

400 copy

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

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

December 2, 1953

Mr. George Mathewson
Denio, Nevada

Re: Docket No. DMEA-3110 - Tungsten
Claim No. 1, Defense Tungsten
Mine
Humboldt County, Nevada

Dear Mr. Mathewson:

This office has received a wire from Washington requesting further information relative to your application for an exploration loan. The Washington office reports that you apparently have already leased until June 30, 1955, the Defense No. 1 claim to Fred Barnes and Virgil Pratt of Alturas, California. Consequently, you do not have a sufficient interest in the Defense No. 1 claim at this time to enter into an Exploration Project Contract.

If the lease between you and Fred Barnes and Virgil Pratt is terminated and you obtain the right to possession of the property so that you can cause the exploration work to be performed, then a contract may be entered into with you.

Kindly let us know the status of the lease with Fred Barnes and Virgil Pratt and if your lease with them is still in effect or has been terminated.

Sincerely yours,

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

Copy to: DMEA, Washington, D. C.
E. H. Bailey, USGS
A. C. Johnson, Reno

400

[redacted]
[redacted]

F. L. Chapman/Pac
[redacted]

[redacted] Reading File - DMEA
[redacted]

DEC 1 - 1959

[redacted], DMEA Executive Officer, Region 3, San Francisco, California

Receipt November 23 and return of Quitclaim and Patent covering George H. Reservation Patent No. DMEA [redacted]. We require information concerning lease as requested in our letter of November 5. Quitclaim cannot be granted Reservation while patent lease is in effect.

Chief, Operating Committee

cc: Director
[redacted] Region 3 - Confirmation
[redacted]
Admin Reading File
Operating Group
Production Div., Dep. Minerals
[redacted], DMEA
[redacted], DMEA

FLChapman/rcs
11-30-59

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

400

RECEIVED
NOV 25 1953

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

November 23, 1953

WSM

Memorandum

To: W. S. Martin, Acting Chairman, Operating Committee, DMEA, Interior Building, Washington 25, D. C.

From: Executive Officer, DMEA Field Team, Region III

Subject: Docket No. DMEA-3110 (Tungsten)
Defense Tungsten Mine
Humboldt County, Nevada

Reference is made to your teletype dated November 13, 1953, requesting information on the status of the subject application.

Your inquiry was referred to Mr. A. C. Johnson, and I am now in receipt of a memorandum prepared by Glenn G. Gentry, dated November 18, in which he discusses the spelling of the name of the mining claim and evidence of ore in the floor of the drift; also a memorandum by R. M. Smith, dated November 18, in which he discusses Mr. T. P. Thayer's October 20 memorandum.

Four copies of each memorandum are attached.

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

Attachments

Copy to: E. H. Bailey, USGS (With copy of memos)
A. C. Johnson, Reno

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
DEC 27 1953

A. C. Johnson, Chief, Mining Div., Reg. III — November 18, 1953

Glenn G. Gentry, Mining Engineer, Region III

DMEA-3116 (Tungsten) George D. Mathewson, Defense Tungsten Mine, Humboldt County, Nevada

Pursuant to letters from Mr. H. C. Miller, Executive Officer, DMEA Field Team, Region III, dated Nov. 6 and 13, 1953, the following data is submitted:

Spelling of the mining claim as recorded:- In the copy of the lease between the applicant and the lessees, the claim is noted as the Defense No. 1, recorded in book A-2, page 561, of mining records, Humboldt County, Nev. Therefore, while the claim name is spelled Defense in the application, it is believed this spelling was a mistake and the recorded spelling is correct. However, the Field Team did not check the Humboldt County mining records relative to the spelling of the claim name.

Evidence of ore in floor of drift:- Between the portal of the adit and the first raise, the floor of the drift was not sampled as it was not possible for the sampling engineer to remove and replace the track and excavate the accumulated track ballast. The No. 1 stope is east of the adit and the only sample possible to secure near the bottom of the stope was 326-721 which assayed 0.97% WO$_3$. It was not possible to examine the drift below the Glory hole as the area had caved and it was impossible to enter. The lessees of the property reported the downward continuation of the quartz exposure in the bottom of the Glory hole.

Samples were taken of all available exposures in order to present an average analysis for evaluation.

The exploration proposed by the Field Team, was recommended in three stages (each to be undertaken only upon the successful completion of the former stage) in order to eliminate or reduce the degree of speculation.

Glenn G. Gentry
Mining Engineer

222 South West Temple
Salt Lake City 1, Utah

Memorandum November 18, 1953

To: A. G. Johnson, Chief, Mining Division, Region III

From: R. M. Smith, Geologist, U. S. Geological Survey

Subject: DMRA-3119 (Tungsten) Defence Tungsten Mine, Humboldt County, Nevada

In accordance with your request of November 16, I have reviewed the September 29 Field Team report and V. P. Thayer's letter of October 20.

As pointed out by Mr. Thayer, the inferred ore reserves do not constitute a convincing target for exploration. This is the result of two conditions: 1. The samples do not confirm the visual estimates of grade of ore, probably owing to the difficulties inherent in sampling tungsten ores, and should be considered to err on the low side as ore is being mined from the stope where low-grade samples were taken; and 2. only the geologic conditions favorable for ore can be projected into the inferred ore zone - the ore bodies themselves cannot be projected. The Field Team conclude, however, that a small amount of exploratory work is justified although the target cannot be inferred with the usual degree of confidence.

The target of Stages I and II is the exploration of a favorable zone southwest of the Glory hole between the surface and the South Hill Lower adit. This zone is favorable for the deposition of tungsten ore because here the walls of an ore bearing fault are metamorphic rocks containing some calcareous rocks. Small amounts of ore in narrow stringers are exposed on the surface above this favorable zone.

No dimensions can be inferred, but if it is assumed that unexplored parts of the vein contain ore bodies of about the same size and grade as those mined from the same favorable zone, then a few hundred tons of ore containing about 1.0 percent WO_3 may be

"estimated".

No documented evidence is now at hand for the presence of ore in the floor of the adit under stope No. 2. The first one or two rounds of a blast at this site would sample the floor of the adit more effectively and at about the same cost as channel sampling. Unfavorable results at this stage would be adequate reason for terminating the project.

cc: E. M. Bailey

[redacted]

NOV 18 1953

[redacted]

[redacted]

[redacted]

[redacted]

[redacted]

[redacted]

[redacted]

[redacted]

[redacted]

[redacted]

C. O. Mittendorf

[redacted]

FARutledge:foc
11-18-53
cc: Docket
Code 400
Admr. Reading File
FT. REG. 3
R. W. Geehan, USBM
T. P. Thayer, USGS

400

AGENCY: DEFENSE MINERALS EXPLORATION ADMINISTRATION

Originator: F. A. Rutledge

Ext.: 5285 Room: 3538

Approp.: 14X3923.970 - Working Fund - DMEA
Date: November 13, 1953

To: H. C. Miller, DMEA Executive Officer, Region 3, San Francisco, California

Recorlet November 2, George D. Matheson, Docket No. DMEA 3110. Applicant recently inquired about status of application. Would appreciate hearing when we may expect your comments on questions in Thayer's memorandum of October 20.

SIGNED
W. S. Martin
Acting Chairman, Operating Committee

FARutledge/ls
11/12/53

cc: DOCKET
FT. REG. III - CONFIRMATION
OPER. COMMITTEE
CODE 400
AUDITS DIVN., BUR. OF MINES
R. W. GERHAN, USBM
T. P. THAYER, USGS
ADMIN. READING FILE

400

Nov 2 1953

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

Re: Docket No. DMEA 3230 - Tungsten
George D. Mathewson
Defense Tungsten mine
Humboldt County, Nevada

Dear Mr. Miller:

Reference is made to the subject application. Apparently the applicant, George D. Mathewson, has already leased until June 30, 1955, the Defense No. 1 claim to Fred Barnes and Virgil Pratt of Alturas, California. Consequently he does not have a sufficient interest in the Defence No. 1 claim at this time to enter into an Exploration Project Contract.

If the lease between the applicant and Fred Barnes and Virgil Pratt is terminated and George D. Mathewson again obtains the right to possession of the property so that he can cause the exploration work to be performed, then a contract may be entered into with George D. Mathewson.

However, to assist us in determining whether the property has sufficient merit to warrant an exploration contract, it will be appreciated if you will let us have your comments on the questions raised in the attached copies of memoranda by T. P. Thayer, Geological Survey and Robert W. Geehan, Bureau of Mines.

Sincerely yours,

George C. Selfridge

Chairman, Operating Committee

APPROVED:

J. H. Hedges

Member, Bureau of Mines

T. P. Thayer

Member, Geological Survey

FARutledge:foe 10-28-53
cc: Docket
Code 400
FT. Reg. 3
Operating Comm.
Admr. Reading File
R. W. Geehan, USBM
T. P. Thayer, USGS

P.S. In the subject docket, the claim name shown as both Defence No. 1 and Defense No. 1. Please check the spelling the claim as recorded so that the spelling may be kept consistent.

400

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

October 23, 1953

Memorandum

To: Mr. W. S. Martin, DMEA

From: Robert W. Geehan, Assistant Chief, Ferrous Metals and Alloys Branch

Subject: DMEA 3110 - Tungsten
George Mathewson
Claim No. 1 - Defence Tungsten Mine
Humboldt County, Nevada

It is recommended that the modified application, as outlined in the Field Team report dated September 29 and the Field Team memorandum dated October 6, be approved. Special note should be made that this approval by the Field Team is subject to a competent supervisor and a working agreement with the lessees.

Robert W. Geehan

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

400

Defense Minerals Administration
RECEIVED
OCT 20 1953

October 20, 1953

Memorandum

To: W. S. Martin, DMEA

From: T. P. Thayer, USGS

Subject: DMEA-3110, Tungsten
George Mathewson
Claim No. 1, Defense Tungsten Mine
Humboldt County, Nevada

The report of Montis Klepper, referred to by the Field Team, indicates shipments of about 2,500 units of WO_3 from the mine in 1942 to 1943, apparently including workings not covered by the application. Out of a total reported production of $35,000 for the ground covered by the application, it seems very questionable whether more than 500 units valued at $25,000 should be credited.

The Field Team report does not inspire confidence in the deposit as a worthwhile target for exploration. The sample data are far from satisfactory: Out of 31 samples, only 9 are of economic grade; of the 9, 4 were taken lengthwise of veins and report only about one inch width of ore; one is partly washed material; and one is across a width of one foot at the bottom of a shaft which seems to have nothing to do with the exploration proposal. In short, out of the 31 samples, only 3 - BM 717, 721 and 722 - indicate minable ore.

The estimates of the inferred ore are not convincing. Although the vein is explored by the drift below the No. 2 stope, samples do not show a downward extent of the shoot. Was the floor of the drift sampled? The map also shows the drift extending almost the whole distance under the glory hole with only blank assays. On the basis of these unsupported assumptions, an ore shoot is postulated below a one-inch wide stringer 100 feet southwest of the glory hole. The "estimates" of inferred ore, in my opinion, are little better than wishful thinking.

Unless the Field Team can present evidence for the presence of ore in the floor of the drift under stope No. 2, and inclination of the ore shoot in the glory hole that would carry the shoot southwest of the face of the drift, I would recommend denial of the application.

T. P. Thayer

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

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

October 6, 1953

Memorandum

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

From: Executive Officer, DMEA Field Team, Region III

Subject: Docket DMEA-3110 - Tungsten
George Mathewson
Claim No. 1, Defence Tungsten Mine
Humboldt County, Nevada

Reference is made to your letter dated July 23, 1953, with which you referred the subject application to this office for a field examination of the property.

Attached are four copies of a report entitled "DMEA-3110, Defence Tungsten Mine, Humboldt County, Nevada," by Glenn G. Gentry, Mining Engineer, U. S. Bureau of Mines, and Roscoe M. Smith, Geologist, U. S. Geological Survey, dated September 29, 1953.

The applicant originally proposed to explore his tungsten property in Humboldt County, Nevada, by extending the present South Hill lower adit a distance of 400 feet to the south and driving a crosscut tunnel at a lower elevation a distance of 300 feet from an unspecified location.

The examining engineer and geologist are in accord that there is a reasonable chance of discovering new ore bodies and that the property has sufficient merit to justify a moderate exploration program. Following a discussion with the applicant, the proposed plan of exploration was changed and a revised 3-stage program to explore the deposit has been recommended. This program consists of:

Stage I - Extend existing South Hill lower adit in a southwesterly direction for a distance of 175 feet.

Reviewed by
DMEA OPERATING COMMITTEE
10-16-53
(date)

Stage II - From the above 175 foot adit extension, crosscut in an easterly direction a distance of 35 feet. This work to be dependent upon the results of Stage I and subject to approval by the Government.

Stage III - Sink a 50-foot winze from a Government approved location on the best showing of ore in the adit after completion of Stage I and Stage II.

Cost of the recommended program is approximately $9,100.00.

Mr Bailey and I concur with the recommendations that have been made by the examining engineer and geologist and recommend that the proposed application be given favorable consideration.

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

Attachment

Copy to: E. H. Bailey, USGS

UNITED STATES
DEPARTMENT OF THE INTERIOR
DOUGLAS McKAY, SECRETARY

DEFENSE MINERALS EXPLORATION ADMINISTRATION

REPORT OF EXAMINATION BY FIELD TEAM
REGION IX

DMEA-1110, DEFENSE TUNGSTEN MINE

HUMBOLDT COUNTY, NEV.

GLENN G. GENTRY, MINING ENGINEER
U. S. BUREAU OF MINES

ROSCOE M. SMITH, GEOLOGIST
U. S. GEOLOGICAL SURVEY

SEPTEMBER 29, 1953

Reviewed by
DMEA OPERATING COMMITTEE

10-16-53
(date)

EXHIBITS

Figure No.	Description
1	Index map of northwest Nevada.
2	Geologic map of Dufonce No. 1 Claim.
3	South Hill Lower adit
4	Dufonce mineral claims
5	Proposed exploration of Dufonce Tungsten mine and assay map.

Appendix No.	
1	Indenture of lease between George D. Mathewson and Edith C. Mathewson, lessors and Fred Benner and Virgil Frost, lessees.
2	Certificate of authorization, dated Dec. 12, 1952.
3	Letter from G.S.A., dated Dec. 15, 1952.
4	Assay report by Albert A. Blanke, dated Nov. 28, 1952.
5	Assay report by Albert A. Blanke, dated Dec. 29, 1952.
6	Assay report by Albert A. Blanke, dated Feb. 20, 1953.
7	Assay report by Albert A. Blanke, dated March 30, 1953.
8	Analysis of Lot No. 1, Certificate No. 9-2244-1, dated Dec. 1, 1952
9	Analysis of Lot No. 1, Certificate No. 9-2227-1, dated Dec. 30, 1952
10	G.S.A., acceptance and invoice, dated Feb. 24, 1953.
11	G.S.A., acceptance and invoice, dated March 28, 1953.
12	G.S.A., acceptance and invoice, P. O. No. 40913, Dec. 1, 1952.
13	G.S.A., acceptance and invoice, P. O. No. 37-3-P-62646, Dec. 30, 1952.
14	Schedule concentrate shipments to Molybdenum Corp. of America.

REPORT OF EXAMINATION

Docket No.: DMEA-[illegible] (Tungsten)

Name and address of applicant: George D. Mathewson
[illegible], Nevada

Name and location of property: No. 1 Claim of the Dolmite Tungsten Mine,
Humboldt County, Nevada.

SUMMARY

Under date of June [illegible], 1953, Mr. George D. Mathewson of [illegible], Nevada applied for Government assistance in the amount of $[illegible], [illegible].[illegible] with which to continue exploration on the No. 1 claim of the Dolmite Tungsten Mine.

The applicant has proposed to extend the present South Hill lower adit a distance of 400 feet south and drive a crosscut tunnel at a lower elevation a distance of 300 feet from an unspecified location. He also states that an ore bin of 300-ton capacity should be constructed at the mine for storage purposes.

Pursuant to this application, the No. 1 claim of the Dolmite Tungsten mine was examined on August 18, 19, and 20, 1953 by the field team, consisting of an engineer[1] of the Bureau of Mines of Region III and a geologist[2] of the Geological Survey. Based upon the examination and sampling, the field team consider the property has sufficient merit to justify a moderate exploration program in the amount of approximately $9,100.00 and re-

---

1/ [illegible] [illegible].
2/ R. M. Smith.

quiring approximately five months time to complete.

The exploration program was discussed with the applicant and a revised 2-stage program to explore the deposit at less cost was outlined:

Stage I:- Extend existing South Hill lower adit in a southwesterly direction for a distance of 175 feet.

Stage II:- From the above 175 foot adit extension, crosscut in an easterly direction a distance of 35 feet. This work to be dependent upon the results of Stage I and subject to approval by Government.

Stage III:- Sink a 35-foot winze from a Government approved location on the best showing of ore in the adit after completion of Stage I and Stage II.

CONCLUSIONS AND RECOMMENDATIONS

The field team representatives consider that there is a reasonable chance of discovering new ore bodies and that inferred reserves of 1200 tons containing an average of about 1.0 percent WO_3 may be in the block to be explored.

It is recommended that the Government enter into a contract with the applicant to do the work proposed in the revised program. It is also recommended that the contract should be made upon a unit or footage basis, with the applicant furnishing all necessary equipment, supplies, and labor, and that the applicant be required to employ a competent mining engineer whose duties shall consist of supervising the exploratory work, sampling, preparation of adequate maps and monthly reports on forms ECF-204 and ECF-204A.

The field team examined and sampled this property on Aug. 18, 19, and 20, 1980. Several hours were spent on surface examination, using a miner's light on the nights of August 19 and 20. During a part of the examination, the field team were accompanied by Mr. Fred Thomas, one of the lessees of the mine. Mr. George B. Mathewson, owner, was not in good health and was unable to show the field team over the property. Mr. Mathewson, however, remained at his residence about five miles from the mine and was available for discussions and to provide additional information.

NAME AND LOCATION OF PROPERTY

The proposed exploration work is to be done on the No. 1 claim of the Reforma Tungsten Mine situated in the extreme north central part of Humboldt County, Nev. The No. 1 mining claim is located in the NW 1/4 of the NW 1/4 of sec. 13, T. 46 N., R. 30 E. and in the Vicksburgh Mining District. The mine is 11.4 miles nearly due south of Denio, Nev., a small village situated closely adjacent to the Nevada-Oregon east west boundary line.

ACCESSIBILITY

From Denio, Nev., the mine is reached via a unimproved desert road of moderate gradient. During the winter months (from November to May) considerable snow is to be expected and travel during these months may be difficult at times and perhaps impossible for short periods. The greater part of necessary mining supplies will probably be obtained from Winnemucca, Nev., located approximately 180.2 miles southeast of

Denio. A newly constructed, all weather road, connects Denio and Winnemucca. Denio has no telephone or telegraph facilities and receives mail three times each week.

COMPETENCY OF APPLICANT

Mr. George D. Mathewson is approximately 50 years of age and it appears doubtful that he would be physically able to actively supervise the proposed exploration project. He apparently had many years of experience as a miner in the adjacent Ashdown Mine. He believes that he will receive sufficient revenue as royalty from his tungsten mill, now under lease to Fred Symons and Virgil Pratt, with which to pay his 15% part of the costs of the exploration project.

APPLICANT'S PROPERTY RIGHTS

Mr. George D. Mathewson reports that he holds the No. 1 mining claim of the Defense Tungsten Mine, by right of location, and that his location notice is recorded in Book No. A2, page 595, in the Humboldt County Court House, Winnemucca, Nev. He further states that all assessment work has been done for the year 1953 and that no debts or financial obligations have accrued against the mining claim. The field team did not examine the records in the Humboldt County Courthouse at Winnemucca, and therefore have not verified the recording of the No. 1 mining claim.

Under date of June 30, 1953, Mr. George D. Mathewson and Edith C. Mathewson leased the Defense No. 1 mining claim to Fred Symons and Virgil Pratt. The lease, copy of which is attached, expires on June 30, 1954.

The lessees, under the supervision of Mr. Fred Barnes, are actively conducting mining and milling operations with production amounting to from 8 to 10 tons of crude ore per day.

The field team believes that under the terms of the lease that some operational difficulties, between the lessors and lessees, might be expected if development operations and mining operations interfered with each other. Perhaps a mutual agreement between the lessor and the lessees, with the lessees agreeing to the BLM's project, might be in order.

DESCRIPTION OF PROPERTY

Surface and mining facilities:- Mining equipment, owned by the applicant and located near the portal of the adit, consists of:

1 Air compressor, Curtis, No. 17972, 125-cubic foot capacity, direct connected to 4 hp 4 Climax gasoline engine, Model K, No. 5814. This machine is about 25 years old but is reported to be in serviceable condition.

1 Air compressor, Worthington, new, Serial No. [illegible], Model [illegible], size 4-7/8 x 3-7/8 x 3-1/4, capacity 105 cubic feet min., portable, mounted on flat bed. 3 pneumatic tires.

2 Air receivers, 3' x 10', appear to be in good condition.

1 Truck, Dodge, flat stack, 1934 model, 72,194.3 miles registered on the speedometer. Motor No. [illegible]-1565-4-cylinder, 2-ton capacity, 5-speed transmission, dual wheels on rear. Tires in reasonably good condition. Truck has not been operated for the past 6 months and mechanical condition is questionable.

1 Truck, Ford, 1-1/2 cubic yard dump body, 1935 model with 1941 8-cylinder engine Serial No. [illegible], 4-speed transmission, dual rear wheels; speedometer registers 16,[illegible] miles. (Operator estimates truck has traveled about 75,000 miles). Good tires; truck in daily use hauling ore from mine to mill.

1 Shaker, single drum, Gardner-Denver, with 200 feet of 3/8-inch wire cable; good condition.

Equipment in the mine:

Mine track consists of approximately 300 feet of 16-lb. rail, 18-inch gauge (second hand, fair condition).

3 Mine cars, iron body, end dump, 18-inch gauge; body size 2' x 2' x 48"; condition reasonably good.

1 Stoper, hand rotated, Ingersoll-Rand, chucked for 7/8-inch drill rods. Reasonably good condition.

1 Jackhammer, No. 75777, Chicago-Pneumatic Tool Co., chucked for 7/8-inch drill rods; good condition.

The applicant reports that he has additional mining equipment for use, if required.

The mine workings consist of an adit 188 feet in length. One small stope approximately 8 feet wide by 20 feet long is entered at 75 feet from the portal. The back of the stope is approximately 24 feet above the floor of the adit. The mine workings are dry and accessible.

SAMPLING

Sample No.	Au Wt.	Concentration Au	Concentration Ag	Description
[illegible]	0.84	Tr.	Tr.	Grab sample from muck car of ore mined from the No. 1 stope.
[illegible]	[illegible]	Tr.	Tr.	Width 1 foot; vein in back of drift 14 feet north of portal of adit; brown quartz and dioxite.
[illegible]	[illegible]	Tr.	Tr.	Width 1.5 feet; narrow vein in back of drift east on west side of drift. Mostly gouge with some quartz.
[illegible]	[illegible]	Tr.	Tr.	Width 2.2 feet; narrow back of drift; 13.7 feet north of Station B; crushed dioxite with some quartz.

Sample No.	A.V.;	Concentration Au	Concentration Ag	Description
[illegible]-706	0.14	0.005	0.20	Width 2.8 feet; across back of drift; 4 feet south of Station 3; oxidized quartz and ground up diorite wall gouge.
[illegible]-707	0.21	0.005	0.15	Width 2.5 feet; west wall of tunnel and 2 feet south of Station 4.
[illegible]-707	<0.01	Tr.	Tr.	Width 3.4 feet; across back of tunnel; 4 feet south of Station 4; mostly quartz.
[illegible]-708	<0.01	Tr.	Tr.	Width 3.0 feet; west wall of tunnel and walled [illegible]-707; mostly quartz.
[illegible]-709	<0.01	Tr.	Tr.	Width 1.5 feet; back of tunnel; 15.4 feet south of Station 4; oxidized, sugary quartz.
[illegible]-710	<0.01	Tr.	Tr.	Width 1.0 feet; across back of tunnel; 4 feet south of [illegible]-709; mostly oxidized quartz.
[illegible]-711	<0.01	Tr.	Tr.	Width 3.0 feet; across back of tunnel; 4 feet south of [illegible]-710; mined diorite and quartz.
[illegible]-712	<0.01	Tr.	Tr.	Width 4.2 feet; across back of tunnel; 20 feet south of Station 4; mined quartz and diorite.
[illegible]-713	0.01	Tr.	Tr.	Width 1.5 feet; floor of tunnel and on east side.
[illegible]-714	<0.01	Tr.	Tr.	Width 3.0 feet; floor of tunnel and on west side; joins [illegible]-713.
[illegible]-715	0.01	Tr.	Tr.	Width 3.5 feet across back of tunnel; 4.4 feet south of floor of tunnel; mostly oxidized quartz.
[illegible]-716	0.35	Tr.	Tr.	Width 3.0 feet; north wall of No. 1 raise; 20 feet above floor of tunnel; mostly quartz.
[illegible]-717	1.20	Tr.	Tr.	Width 6.5 feet; north wall of No. 1 raise; 3.4 feet above No. 716; mostly quartz.
[illegible]-718	0.02	Tr.	Tr.	Width 1.7 feet; north wall of No. 1 raise; 4.7 feet above [illegible]-717; mostly quartz.

Sample No.	Y_2O_3	Gamma/gm Au	Description
[illegible]-719	[illegible]	Tr.	Width 2.4 feet; north wall of No. 1 mine; joint [illegible]-718; mostly white quartz.
[illegible]-720	[illegible]	Tr.	Width 4.0 feet; south face of No. 1 mine; 4 feet above [illegible]-719 and 2.0 feet below back of mine; mostly brown oxidized quartz.
[illegible]-721	0.97	Tr.	Width 2.3 feet; south wall of No. 1 mine and opposite [illegible]-717; mostly high grade quartz.
[illegible]-722	4.13	Tr.	Width 4 feet; west wall of stope; 10 feet south of north wall of No. 1 mine; high grade quartz.
[illegible]-723	0.13	Tr.	Width 4.3 feet; average south face of stope and 11.7 feet south of [illegible]-722; mined quartz and diorite.
[illegible]-724	0.36	Tr.	Width 3.2 feet; average back of stope 5 feet north of [illegible]-723 and 6 feet above [illegible]-721.
[illegible]-725	1.40	Tr.	Length 2.1 feet; horizontal vein along quartz veins about 6-inch wide; auriferous exposure on south wall of Glory hole.
[illegible]-726	0.90	Tr.	Width 1.4 feet; surface exposure 46 feet south of [illegible]-725; vein between sandstone covered with loose rock and soil. Material sampled is horizontal and is partly a layer of much crushed quartz. Iron-stone and diorite.
[illegible]-727	9.40	Tr.	Width 2.0 feet; vertical cut on west wall of vein 12.6 feet south of [illegible]-726; mostly binary schist and shale with some quartz.
[illegible]-728	1.40	Tr.	Width 1.8 feet; vertical cut on west wall of footwall 3 feet south of [illegible]-727. Same type material as [illegible]-727.
[illegible]-729	1.00	Tr.	Width 1.5 feet; vertical cut on west wall of footwall 27 feet south of [illegible]-728; mostly oxidized quartz and binary shale.
[illegible]-730	[illegible]	Tr.	Width 1.0 feet; portal of adit under top of ridge; oxidized quartz on east side of adit.

Sample No.	V_2O_5	Ounces/ton Au	Ag	Description
RM-731	0.14	Tr.	Tr.	Width 1.0 foot; bottom of adit near top of ridge; 32 feet south of RM-730.
RM-732	0.21	Tr.	Tr.	Width 2.6 feet; continuous exposure of oxidized quartz, south 50° east; 23 feet from RM-731.
RM-733	0.01	Tr.	Tr.	Grab and chip sample of oxidized quartz dug out by dozer. Approximately 200 lbs. of quartz S. 30° E., 49 feet from RM-732. The quartz ledge is reported to be under this sample location, but is covered with loose rock and soil.
RM-734	0.12	Tr.	Tr.	Width 4.5 feet; No. 1 stope; 30 feet above RM-732; oxidized quartz.
RM-735	0.28	Tr.	Tr.	Width 1.0 foot; bottom of 16-foot shaft, approximately 400 feet northeast of the portal of adit on No. 1 Claim.

GEOLOGY

On the Reference No. 1 claim metamorphic rocks are in contact with the west edge of a granitic stock 6 miles long and 2.5 miles wide. The rocks are cut by faults which strike northeast and dip steeply northwest. Quartz veins occupy some of the faults and also occur with tactite along the contact of the metamorphic and igneous rocks which strike N. 40° W. and dip steeply north.

The metamorphic rock is principally mica schist containing a few layers of marble and hornfels. The schistosity strikes north or is parallel with the contact or with the faults. In the mine area the granitic rock ranges in composition from a gneissic biotite-hornblende diorite

to granodiorite. Along the contact many dikes of aplite and diorite occur in the schist and also in the granitic stock.

The South Hill fault is nearly vertical and displaces the diorite-schist contact about 400 feet (Fig. 3).

ORE DEPOSITS

The ore bodies that have been mined at the Dolores Tungsten mine are of two kinds: (1) Quartz-tactite bodies along the contact between granite and metamorphic rocks (North Hill workings) and (2), quartz veins along the South Hill fault. The contact deposits have been described by Hoppes[3]. The WPAA application is to explore for deposits along the South Hill fault.

In the South Hill Lower adit a quartz vein pinches and swells along its strike, ranges from a fraction of an inch to about 4 feet in width, and has been traced for several hundred feet along the strike. Two ore shoots which have been mined between the surface and the adit are both about 20 feet long and as much as 12 feet wide but will average only about 5 feet wide. Two stopes are reported to have yielded about 1,400 tons of ore containing an average of 1.6 percent WO_3. Scheelite occurs in masses and in crystals as large as one-fourth of an inch in the quartz vein and in the wall rock adjacent to the vein. The best ore appears to be localized where the quartz vein is wide and where the wall rocks are schistose. In the South Hill Lower adit, the east wall is diorite and the west wall of

3/ Hoppes, M. R., 1941, Dolores Tungsten Mine, Humboldt County, Nev., U. S. Geol. Survey Mineralogical Report.

the vein is metamorphic rock containing a layer of marble; in the North Hill Lower adit, Kleppe: mapped marble along the hanging wall of the ore body; in the South Hill Upper adit, where each wall is diorite, a quartz vein 6 feet wide contains only sparse showings of scheelite.

Bulldozing south of the Cherry hole (fig. 3) has exposed small zones and benches of scheelite along the fault zone over a width of 20 feet.

On Middle Hill (fig. 2) surface trenches and an inclined shaft 15 feet long reveal a layer of marble ore along the contact about 6 inches thick which extends 50 feet along the strike and may average 2 percent WO_3. The face of the Middle Hill adit is about 60 feet northwest of the projected position of the scheelite-bearing contact.

ORE RESERVES

There are no measured ore reserves in the workings of the Defense Tungsten mine. A few tons of indicated ore are above the number 2 stope, which has now been mined nearly to the surface. A few hundred tons of ore is inferred to lie below both the Cherry hole and the No. 2 stope and a few hundred tons may also lie south of the existing face of the South Hill Lower adit along that segment of the vein where the west wall is metamorphic rock.

If an ore shoot of the same size (26 feet by 5 feet) as those mined in the South Hill Lower adit is inferred to extend 75 feet from the surface at samples Bbd-427 and Bbd-428 to the altitude of the proposed exploration, then 600 tons of ore containing about 1.0 percent WO_3 would be in the

block to be explored.

Ore is inferred to extend below the adit level under the Glory hole. If it is inferred to extend 30 feet below the level and to have the same dimensions (20 feet long, 5 feet thick) as the ore shoot which was mined then 600 tons of ore would be contained in the block.

PROPOSED EXPLORATION

The applicant proposes to extend the South Hill Lower adit 400 feet southwest along the vein (fig. 5) and also to drive a crosscut adit 300 feet long from an unspecified point at an altitude 100 feet below the South Hill Lower adit. He also proposes to build a 100-ton ore bin. The field team representatives conclude that exploration on the adit level is warranted and that the best chances for discovery of additional ore bodies lies along that section of the vein where the wall is metamorphic rock. They conclude also that exploration at greater depth of the ore bodies which have been mined is warranted but that a crosscut adit 300 feet long is too costly and that this exploration can best be conducted with a winze after phase 1 is completed. The proposals were discussed with the applicant and a revised program was outlined: Stage I - Extend the South Hill Lower adit 175 feet south along the vein and crosscut 35 feet east at a point about 200 feet from the portal (fig. 5); Stage II - After Stage I is completed, sink a winze 30 feet on the best showing of ore in the adit.

The revised program is estimated to cost $9,100.00 and to require five months to complete. The government's share of the cost would be $4,525.00.

Core drilling was discussed as an alternative exploratory method, but it is considered to be unsuited to this deposit, partly because the vein is vertical and partly because the scheelite is erratically distributed.

PAST OPERATION

The applicant reports production has amounted to 1000 tons of crude ore which produced tungsten concentrates having a value of $35,000.00. These concentrates were reported as sold to the General Services Administration in San Francisco, Calif.

Barnes and Pratt, the lessees, are presently mining and milling from 6 to 10 tons of ore per day from the No. 2 stope. Samples from this stope, taken by the examining engineer, BM-716 to BM-726 inclusive and BM-734, show an average of 0.93% WO_3.

Shipping records submitted by the applicant (copies of which are attached) are as follows:

Date	Purchaser	Units/WO_3	Gross Value
8/13/42	Molybdenum Corp. of America	[illegible].457	$16,102.82 *
12/1/52	G. S. A.	61.9647	2,027.74
12/30/52	G. S. A.	48.2926	4,551.21
2/26/53	G. S. A.	144.1806	10,121.43
3/31/53	G. S. A.	16.[illegible]	4,446.00
		472.1197	$35,648.27

*This production may have been made from the North Hill adit and not from the present applicant's workings.

Other shipping records were not available at the mine and shipments made by the present lessees would be added to the total production. Attached are copies of the analysis of Lot No. 1, dated Dec. 30, 1952, by Abbot A. Hanks, Inc. of San Francisco, Calif. Also attached are copies of letters, dated Dec. 12 and 15, 1952 from the General Services Administration, relative to the issuance of certificate No. 9-287 under which deliveries of tungsten concentrates have been made by the applicant.

MILLING

The lessees are operating a small gravity concentration plant, owned by the applicant and situated approximately five miles south of the mine.

The mill is powered by a gasoline engine, belt connected to line shafts and counter shafts in order to operate the various machines. Water for the mill is piped, by gravity, from a spring about 2.5 miles from the plant. The capacity of the mill is reported to be from 8 to 10 tons of crude ore per 8-hour shift.

The milling equipment consists of the following:

CRUDE ORE BIN ABOUT 50-TON CAPACITY

12" x 18" JAW TYPE CRUSHER

2-FOOT SYMONS CONE CRUSHER

VIBRATING SCREEN 1/4" MESH

BALL MILL 3' x 4'

WEMCO CONCENTRATING TABLE (standard size)

CONCENTRATES TO STORAGE

MIDDLINGS RETURNED TO BALL MILL

TAILINGS TO FINISH TABLE

CONCENTRATES TO STORAGE

TAILINGS TO POND

MANPOWER, SUPPLIES, ETC.

The area adjacent to Denio, Nevada is sparsely populated and in general, miners and mill men would have to be recruited in Winnemucca, Nevada and/or other towns located adjacent to active mining camps.

The usual mining supplies can be obtained from Winnemucca, Nev. Mine timbers are reported to be available at Cedarville, California which is approximately 100 miles west of the mine.

Water for mining purposes will have to be hauled from the mine camp, a distance of five miles. There is no transmitted electric power in the district, therefore, all necessary equipment is operated by diesel Diesel or gasoline engines.

It is estimated that the operator's will probably have to pay miners at least $15.00 per day in order to secure experienced workmen.

APPLICANT'S PROPOSAL

The applicant has proposed to extend the present adit a distance of 400 feet and drive a crosscut tunnel, at a lower elevation, a distance of 300 feet. According to his application, his costs were listed as follows:

700 feet of tunnel @ $15.00/ft.	$10,500.00
Labor for 700 feet of tunnel @ $10.00/ft. . .	7,000.00
Timbers, 2,000 linear feet of 6 x 6	420.00
24,000 feet of 2 x 12 lagging	1,440.00
700 feet of 2" air pipe	850.00
1,500 feet of mine rail @ $20.00/ton	330.00
Powder, steel and fuse	300.00
Gasoline for compressor (320 shifts @ 5 gallons each)	306.25

Gasoline for truck, 5 gallons/day	$ [illegible]
Oil for compressor, truck, etc.	[illegible]
Drill steel, bits, picks, shovels, etc.	[illegible]
Rental of compressor, jackhammers, hoses, mine cars @ [illegible]/day for [illegible] days	[illegible]
Various other rental [illegible]/day	[illegible]
Miscellaneous expense	[illegible]
Supervisors	[illegible]
	[illegible] = [illegible]/m.

The field team have considered that a moderate exploration program is justified, and to be accomplished in three stages:

Stage I:- Extend present adit a distance of 175 feet (175 feet of 5' x 7' drift)

Stage II:- Crosscut a distance of 25 feet at most favorable location in Stage I. Subject to Government approval.

Stage III:- Sink 5' x 7' timbered winze to depth of 50 feet at most favorable location. Subject to Government approval.

The exploration in Stages I, II, and I was discussed with the applicant, who agreed that the modified program would be acceptable to him. The applicant also stated that his revenue from the lessee would be sufficient to pay for his part of the exploration expense.

The geologist of the U.S. Geological Survey has inferred ore reserves of 1,200 tons containing about 1.0 percent WO_3 may be in the block of ground to be explored.

OPERATOR'S PROPERTY RIGHTS

Figure 4 shows the boundary lines of the mining claims No. 1. Government would not be entitled to royalty payments from

tungsten were discovered and/or mined north of the point of beginning of the exploration project.

EXPLORATION PROJECT

Expected starting date: Within 30 days from date of execution of contract.

Time required to complete: Approximately 3 months.

DESCRIPTION OF PROJECT

Stage I:-	Extend present adit a distance of 175 feet. Size of adit 5' x 7' in clear of timbers. Timbered where required. Estimated at approximately 35 sets of drift timbers.	175 feet
Stage II:-	Crosscut a distance of 35 feet from most favorable location in Stage I, provided Stage I is successful. Stage II to be subject to prior approval by Government. Size of crosscut 5' x 7' in clear of timbers. Timbered where required. Estimated at approximately 7 sets of drift timbers.	35 feet
Stage III:-	Sink a winze to a depth of 30 feet from most favorable location in the adit. Stage III to be subject to prior approval by Government. Size of winze: 5' x 7' in the clear of timbers. Winze to be timbered on 4-foot centers, and lagged as required. Estimated at approximately 12 sets of timbers.	30 feet
	Total	240 feet

ALLOWABLE COSTS OF PROJECT

Independent contracts: None

Labor:

2 Miners @ $15.40 ea. (5-day week) 5 months	$3,080.00
Insurance @ 15%	462.00
	$3,542.00 *
	$2.41 per foot
1 Engineer, Supt. @ $340.00/month for 5 months	$1,700.00
Insurance @ 15%	255.00
	$1,955.00 *
	$0.48 per foot

Operating materials and supplies:
To be purchased:

		Per foot
Powder, 40 boxes @ $12.00	$480.00	$0.33
Blasting caps, 1,000	27.50	0.186
Blasting fuse, 5,000 feet	38.00	0.274
Detachable bits, 25 @ $12.50	312.50	1.20
Black iron pipe, 150 ft. of 2-inch @ $0.78	117.00	0.40
Black iron pipe, 100 ft. of 1-inch @ $0.32	64.00	0.16
Valves and fittings	30.00	0.034
Miss. drill steel	25.00	0.072
Gasoline for compressor, 310 gals. @ $0.315	97.65	0.375
Lubricating oils	10.00	0.035
4 miners dish picks	14.00	0.050
4 L. H. round point shovels	14.00	0.054
300 feet of second hand, 14-gauge mine rail with fish plates, bolts and spikes	60.00	0.200
200 lbs. miners carbide @ $7.50 cwt	15.00	0.035
2 miners axes @ $5.00	10.00	0.034
Mine timbers:		
1,200 feet of round timbers @ $0.15 per linear foot	180.00	0.69
200 wedges @ $0.04	20.00	0.077
lagging, 2,000 ft. b.m.	110.00	0.045
Compressor oil, 10 gal. @ $2.50	25.00	0.072
Gasoline for truck, hauling water 50 gal. @ $0.315	15.75	0.041
		$ 30.41

Equipment to be rented from the operator:

1 Air compressor, Worthington, Serial No. [illegible]
Estimated value @ $[illegible] @ 1/60 = $[illegible] x 5 months = $125.00 = $0.481 per foot

2 Mine cars
Estimated value @ $[illegible] each = $[illegible] @ 1/60 = $1.33
$1.33 per mon. x 5 months = $6.65 = $0.026 per foot

1 Rubber drill } with hoses @ $[illegible] @ 1/60 = $8.33 per mo.
1 Jackhammer } $8.33 per month x 5 months = $41.65 = $0.16 per foot

1 Air tugger hoist, with cable and skip
Value: $[illegible] @ 1/60 = $12.50 per month x 5 months = $62.50 = $0.24 per foot

Trunk hauling water: Value, $[illegible] @ 1/60 = $8.33 per month
$8.33 per month x 5 months = $41.65 = $0.16 per foot

TOTAL $31.18

Equipment maintenance and contingencies 3.82

TOTAL $35.00

Initial rehabilitation and repairs: None

New buildings, improvements and installations: None

TOTAL COST OF PROJECT $[illegible]

Government participation @ 75% = $[illegible]

OTHER DATA

The mine is in a somewhat isolated area, and it is suggested that the operator secure two good miners to do the exploration work on a contract basis rather than days pay. If the present lessees continue their work in the mine, an equitable arrangement of working hours will be

necessary as the equipment on hand will not accommodate all of the work at the same time.

The contract, if approved, should only be considered on a unit or footage basis.

U. S. DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

DEFENSE MINERALS EXPLORATION ADMINISTRATION
DOCKET NO. 3110

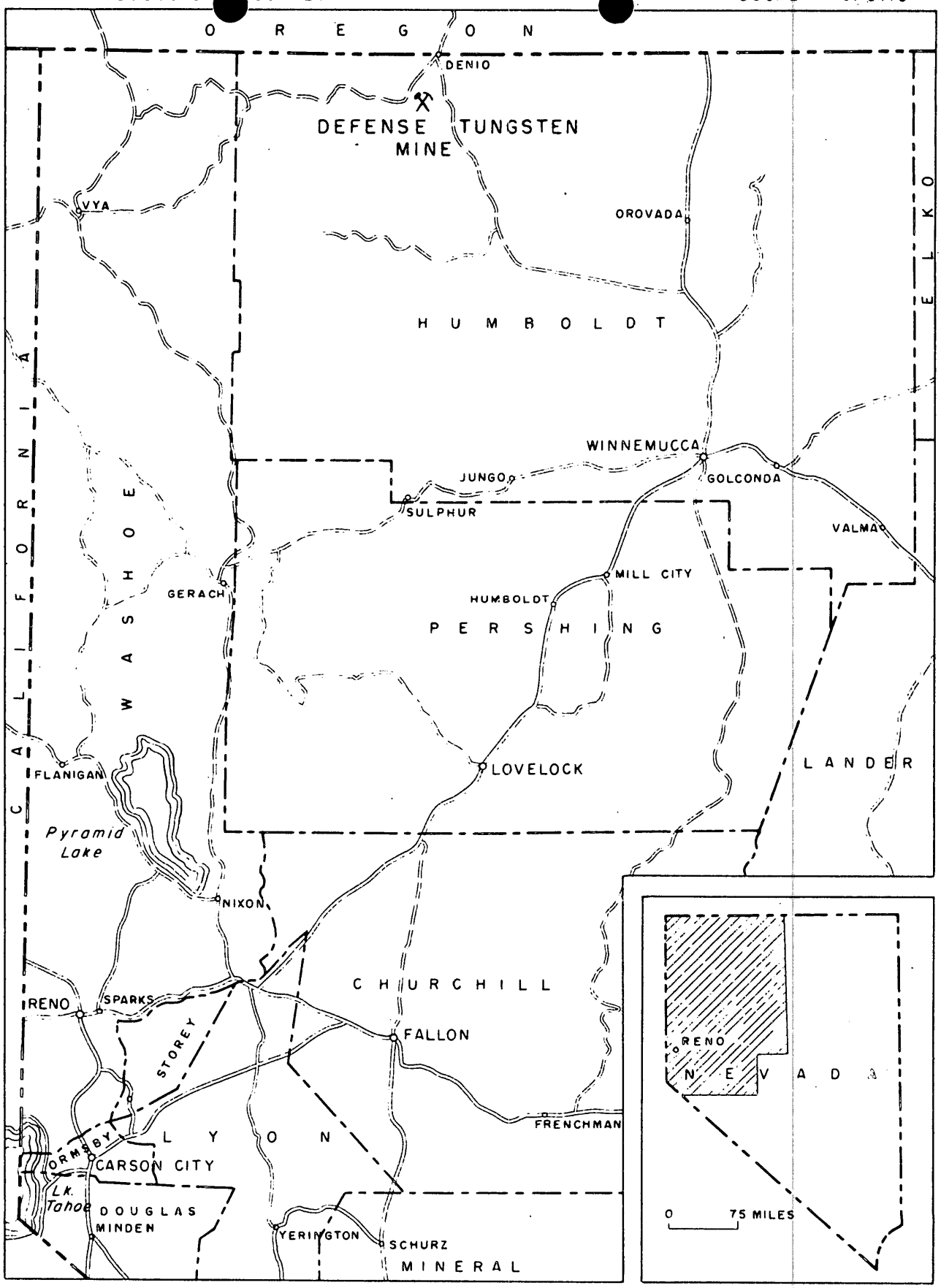


FIG. I INDEX MAP OF NORTH WEST NEVADA

10 0 10 20 MILES

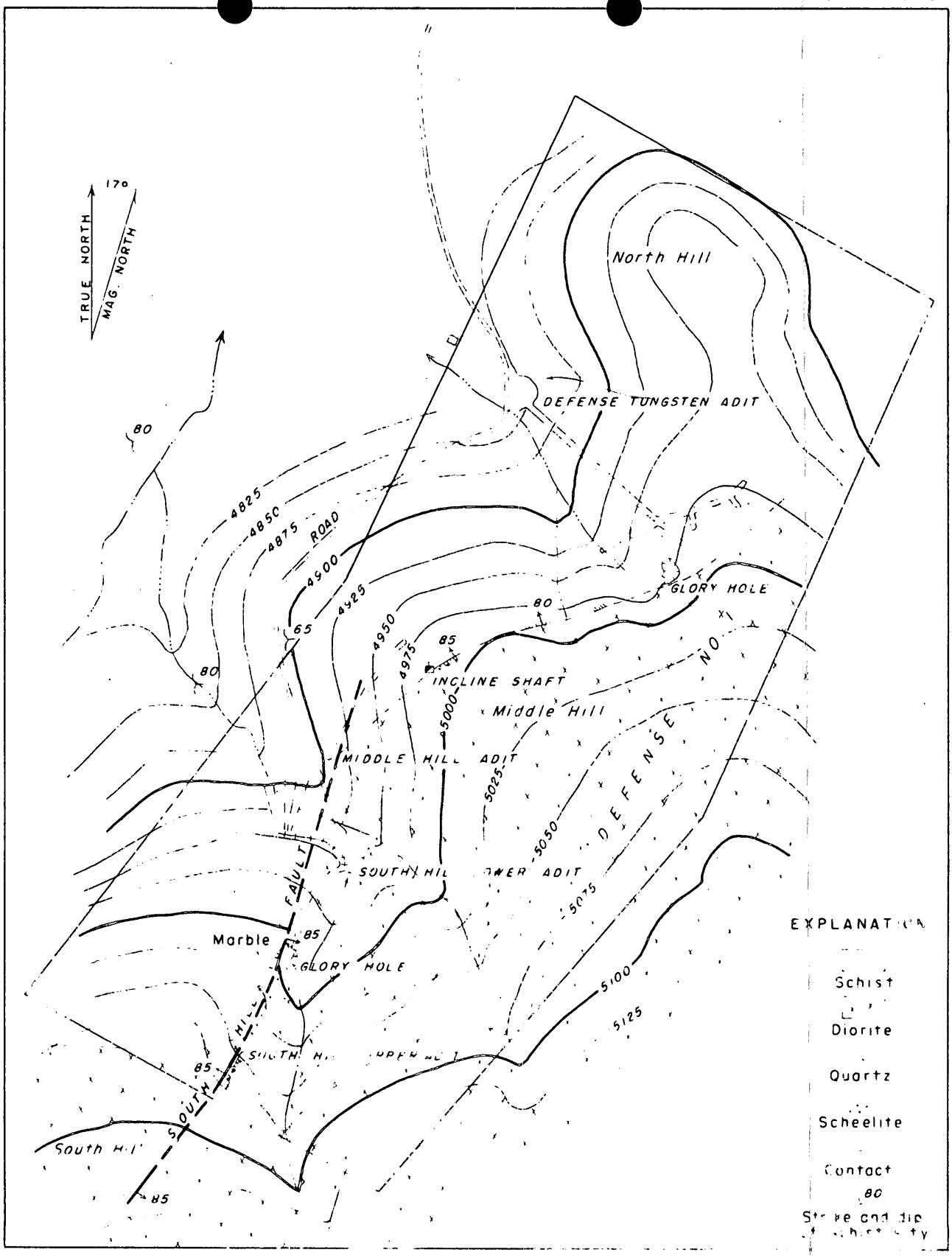
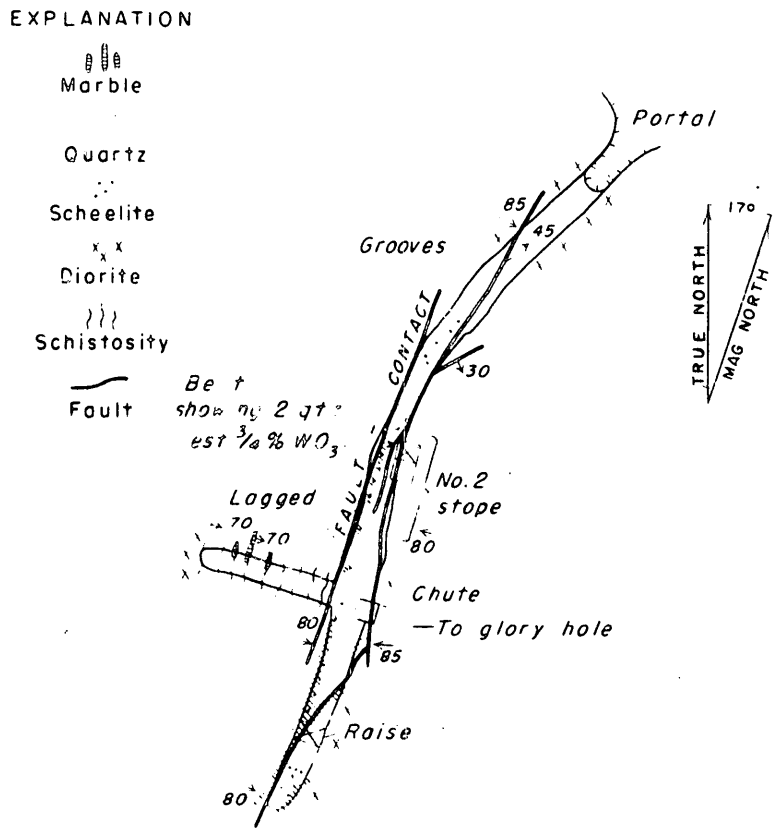


FIG. 2 GEOLOGIC MAP OF DEFENSE NO. 1 CLAIM

DEFENSE TUNGSTEN MINE

HUMBOLDT COUNTY, NEVADA

100 0 100 200 FEET

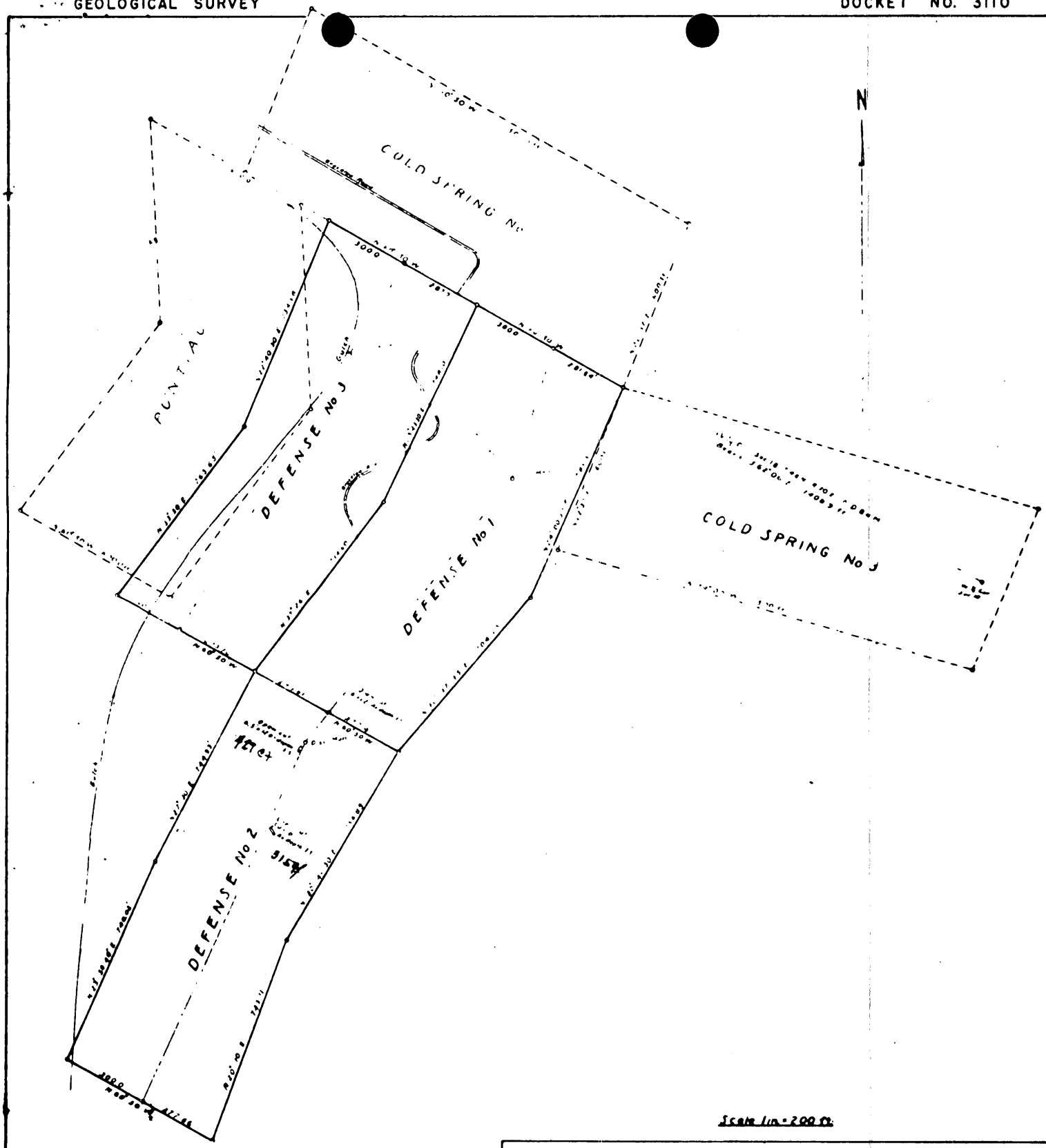


Geology by R M. Smith
Aug. 19, 1953

FIG. 3

SOUTH HILL LOWER ADIT
DEFENSE TUNGSTEN MINE
HUMBOLDT COUNTY, NEVADA

0 10 20 30 40 FEET



DEFENSE MINERAL CLAIMS
VICKSBURG MINING DISTRICT
HUMBOLDT COUNTY, NEVADA

Survey and map by W.A. Wentz, RPE #58 - Winnemucca, Nev.
November 13, 1966

FIG. 4

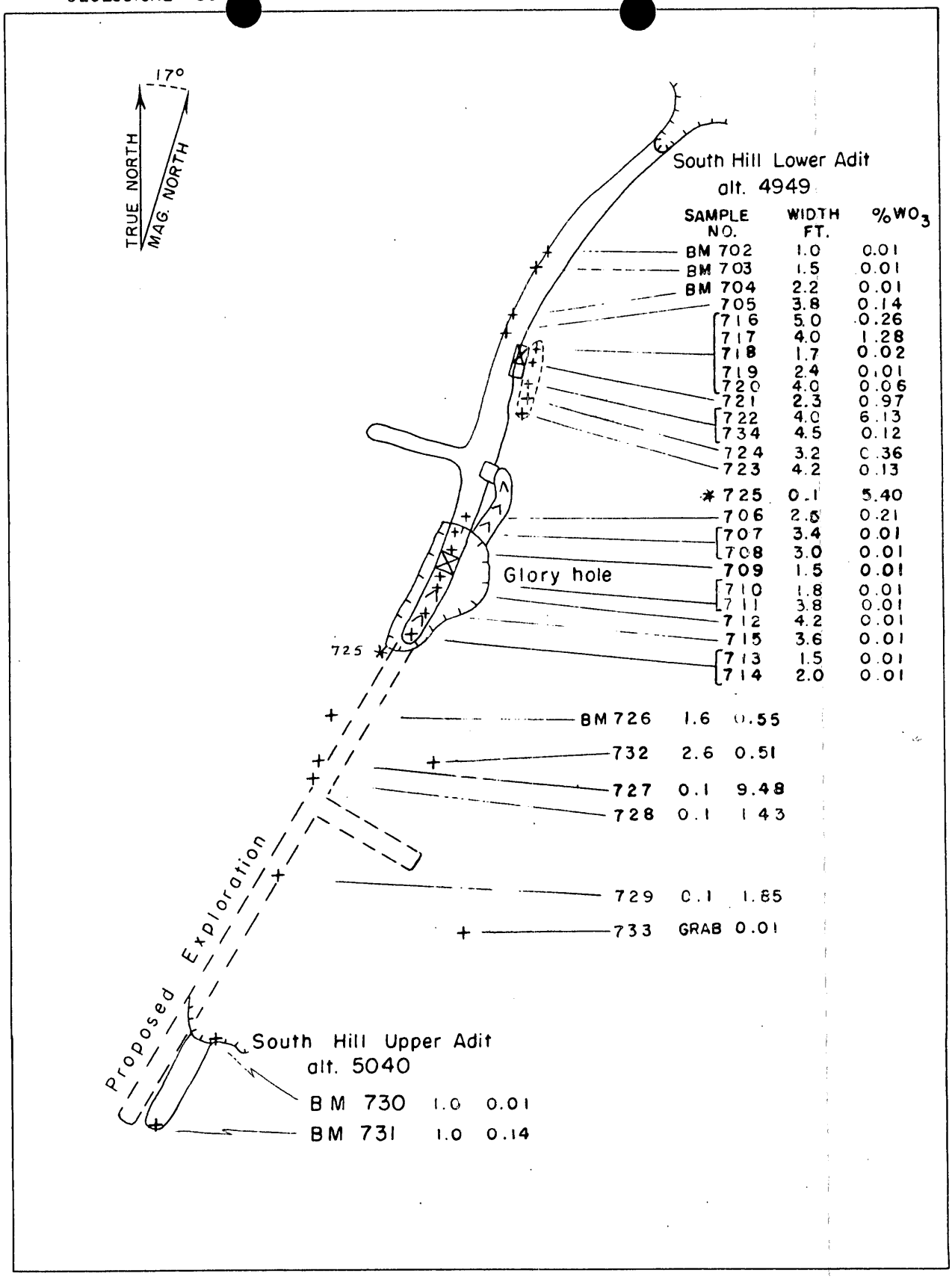


FIG. 5 PROPOSED EXPLORATION
DEFENSE TUNGSTEN MINE
HUMBOLDT COUNTY, NEVADA

0 40 80 FEET
SCALE

JUL 2 7 1953

402

Mr. A. C. Miller, Executive Officer
DMEA Field Team, Region III
1012 Flood Bldg.
870 Market St.
San Francisco 2, California

Re: Docket No. DMEA 3110 - Tungsten
George Mathewson
Claim No. 1, Defence Tungsten Mine
Humboldt County, Nevada

Dear Mr. Miller:

By our letter of July 23, the subject application was referred to your office for a field examination of the property.

Enclosed are two copies of a memorandum by E. W. Geehan, Bur. of Mines, received in DMEA subsequent to our letter of July 23 with which Mr. Geehan concurred, but written and dated prior to our above letter.

Sincerely yours,

George C. Selfridge

Chairman, Operating Committee

Enclosures

APPROVED:

J. H. Hedges

Member, Bureau of Mines

s/ S. M. Larrabee

Member, Geological Survey

WSMartin/jh
7/23/53
cc. to: Docket
Adm. Reading File
Oper. Comm.
Code 400
E. W. Geehan,
D. M. Lemmon
DMEA Field Team, Region III

400

JUL 23 1953

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

Re: Docket No. 3110 - Tungsten
George Mathews
Claim No. 1, Defence Tungsten Mine
Humboldt County, Nevada.

Dear Mr. Miller:

Reference is made to the subject application for exploration assistance which is being referred to your office for a field examination of the property.

In reviewing the application, the following points were noted which should be discussed with the applicant if a project is recommended:

In Item 7, Applicant advises that part of his pro-rata expenses would be covered by use of equipment. In Item 6 (d) the equipment is charged on a rental basis. If it belongs to the operator, only a depreciation charge will be allowable.

A memorandum by L. F. Lemmon, U. S. Geological Survey has been prepared and is enclosed for your information.

Sincerely yours,

George C. Selfridge

Chairman, Operating Committee
E.Chapman/jh
7/21/53
cc. to: Docket
Field Team, Region III
Code 400 (2)
Oper. Comm.
Adm. Reading File
D. M. Lemmon, USGS-R. W. Geehan, USBM

Enclosure

APPROVED:

J. H. Hedges
Member, Bureau of Mines

A. R. Kinkel, Jr.
Member, Geological Survey

JUL 23 1953

400

Mr. George Mathewson
Denio, Nevada

Re: Docket No. 3110 - Tungsten
Claim No. 1, Defence Tungsten Mine
Pine Forest Mountains
Humboldt County, Nevada

Dear Mr. Mathewson:

This will acknowledge receipt of your application for assistance in exploring for tungsten at the above-noted property. The application has been carefully reviewed by the Iron and Ferro-Alloys Division of the Defense Minerals Exploration Administration, and is being referred to Mr. I. C. Miller, Executive Officer, DMEA Field Team, Region III, 1012 Flood Building, 870 Market Street, San Francisco 2, California, for a field examination of the Defence Tungsten Mine.

The Regional Office will contact you with regard to an examination of your property. Any assistance that you can render the members of the Field Team during the examination will be appreciated.

Sincerely yours,

C. O. Mittendorf

Administrator

TL:Chapman;jh
7/21/53
cc. to: Docket
F. T. Region III (2)
Code 400 (2)
Oper. Comm.
Adm. Reading File
D. M. Lemmon USGS
R. W. Geehan USBM

C
O
P
Y

July 17, 1953

Memorandum

To: W. S. Martin

From: Robert W. Geehan
Assistant Chief
Ferrous Metals & Alloys Branch

Subject: George Mathewson, Tungsten, DMEA 3110
Defense Tungsten Mine
Humboldt County, Nevada

The subject application refers to production of tungsten concentrates valued at $35,000 by leasers during 1952 and 1953. Mr. Mathewson did not return a Bureau of Mines form sent to him requesting data on 1952 production, and the Bureau file, which indludes GSA records, does not include any item that can be identified as production from this deposit. I suggest a letter requesting the names of the leasers.

Item 6 regarding costs is not clear, particularly items 6-a and 6-d.

These factors should be cleared up by letter before requesting an examination by the Field Team.

/s/ Robert W. Geehan

Robert W. Geehan

402

IN REPLY REFER TO:

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

JUL 17 1953

MEMORANDUM

July 16, 1953

TO: W. S. Martin, DMEA

FROM: R. M. Lemmon, USGS

SUBJECT: Exploration application DMEA 3110
George Mathewson
Defense Mine
Pine Forest Mountains, Nevada

The applicant proposes to extend a drift 400 feet along a contact between granite and metamorphic rocks, then to drive a 300-foot crosscut adit to the contact at a level 100 feet deeper. No maps are submitted.

The Geological Survey examined the Defense mine in April 1943. At that time the workings consisted of a short adit and open stope within 15 feet of the surface, a 85-foot winze and drift in ore, and a 385-foot adit that reached the ore zone at a vertical depth of 120 feet. On the adit level, drifts extended 100 feet along the contact. It is from this adit level that work is now planned; the application states that 1,400 tons of ore were mined by lessees between October 1, 1952 and May 10, 1953.

The ore is tactite localized at a bend in a contact between granite and metamorphic rocks. The length of ore is 25 feet at the surface and 65 feet within a few feet downward. The exposed length in the adit was 75 feet. The width of ore was 2 to 20 feet and the content of WO_3 was 0.5 to 2.0 percent. Production in 1942-44 was approximately 2,600 units of WO_3 from more than 3,000 tons of ore.

Although the contact is not well-exposed, other ore shoots are probably not present at the surface, for no substantial amounts of float are found. At a point 500 feet southeast of the main ore body, scheelite-bearing tactite one foot wide is found in a trench across the contact. A little scheelite occurs in a quartz vein 1,200 feet south of the adit, but the average grade of the 5-feet vein is only a few tenths of a percent of WO_3.

I suggest that this application be referred to the Field Team for information about recent work done at the mine and for recommendations.

R. M. Lemmon

cc: Martin (3)

Copy retained 400

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.

June 29, 1953

Memorandum

To: Defense Minerals Exploration Administration,
Interior Building, Washington 25, D. C.

dmea 3110

From: Executive Officer, DMEA Field Team, Region III

Subject: Loan Application Forms MF-103 - Tungsten
George Mathewson, Denio, Nevada
Defense Tungsten, Humboldt County, Nevada

Attached are three sets of MF-103 forms received in this office today from George Mathewson. The fourth set has been retained for our files.

H. C. MILLER

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

Attachment

(Rev[redacted] 1952)

UNITE[redacted] STATES DEPARTMENT OF THE I[redacted]ERIOR
DEFE[redacted]E MINERALS EXPLORATION ADMINIST[redacted]TION

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

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

Not to be filled in by applicant

Docket No. DMEA-3110
Metal or Mineral
Date Received 7/3/53
Estimated Cost
Participation (Government %)

INSTRUCTIONS

1. *Name of applicant.*—(*a*) State here your full legal name, in the form in which you will wish to contract, and your mailing address:

George Mathewson
Denio, Nevada

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

(*c*) If a corporation, add to above statement, titles, names and addresses of officers.

(*d*) If a partnership, add to the above statement the names and addresses of all partners.

2. *General.*—Read DMEA Order 1, "Government Aid in Defense Exploration Projects," before completing this application. Submit this application and all accompanying papers in quadruplicate (four copies), with your name and address on each sheet of the application and on all accompanying papers. Where sufficient space is not provided on the form for all required information, state it on an accompanying paper, with a reference in each case to the instruction to which it refers by number. Comply with all applicable instructions; or, if not applicable, so state. File the application with Defense Minerals Exploration Administration, Department of the Interior, Washington 25, D. C., or with the nearest field executive officer thereof.

3. *Applicant's property rights.*—(*a*) State the legal description of the land upon which you wish to explore, including all land which you possess or control that may be benefited by the exploration, and excluding any land or interest in land which is not to be included in the exploration project contract

Number 1 claim of Defence Tungsten Mine.

(*b*) State any mine name by which the property is known. Defence Tungsten

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

Owner

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

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

(*f*) If the land consists of unpatented claims, add to the description above, the book and page numbers for each recorded location notice. Book A2, Page 505, Humboldt County, Nevada

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

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

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

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

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

5. *The exploration project.*—(*a*) [redacted]te the mineral or minerals for which you w[redacted]o explore [redacted]
Sheeli[redacted]

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

(*c*) The work will start within 30 days and be completed within 12 months from the date of an exploration project contract.

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

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

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

(*b*) *Labor, supervision, consultants.*—Include an itemized schedule of numbers, classes and rates of wages, salaries or fees for necessary labor, supervision and engineering and geological consultants.

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

(*d*) *Operating equipment.*—Furnish an itemized list of any operating equipment to be rented, purchased, or which is owned and will be furnished by the Operator, with the estimated rental, purchase price, or suggested use-allowance based on present value, as the case may be.

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

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

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

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

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

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

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

☐ Money ☒ Use of equipment owned by you ☒ Other Services Rendered Camp facilities

Explain in detail on acompanying paper.

CERTIFICATION

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

Dated June 25, 1953

Individual
(Applicant)

By George D. Matheuson
Reno
Nevada

Title 18, U. S. Code (Crimes), Section 1001, makes it a criminal offense to make a willfully false statement or representation to any department or agency of the United States as to any matter within its jurisdiction.

U. S. GOVERNMENT PRINTING OFFICE 16—66551-1

ADDITIONAL INFORMATION FOR FORM MF-103 FILED BY GEORGE D. MATHEWSON.

Item 4. An adit is run on the vein 100 feet. At 75 feet back a raise was run to the surface and 1400 tons of ore was milled from the raise and the surface directly above which produced $35,000.00 worth of tungsten concentrates, which was sold to the G.S.A. at San Francisco, California. Workings are open for inspection.

(b) This work was done by leasers between October 1, 1952, and May 10, 1953.

(c) The vein runs in a northerly and southerly direction for a distance of 1200 feet in a granite and lime contact. The ore is a soft material of limenite and garnet with sheelite stringer running through and is approximately 15 feet wide where the proposed work is to be done.

I believe another 400 feet in the present adit will prove there is a mine there, which would justify the proposed 300 feet of crosscut tunnel at a lower level and furnish an additional 100 feet of backs.

(d) There are good roads to the mine. The ore can be milled at the Ashdown Mill three miles from mine.

Camp facilities can be arranged there also. Concentrates can be hauled to Winnemucca, Nevada (110 miles) to railroad or trucked direct to San Francisco.

(e) Some supplys are available at Denio, Nevada, 10 miles from mine. Timbers would come from Cedarville, California, approximately 100 miles. Water for camp is from springs 2½ miles pipe line and there is also a pumping plant to be used if needed. Power is gasoline and oil engines.

Item 5.
(b) The proposed work would be the present adit continued back another 400 feet and a cross cut tunnel at a lower level of 300 feet to cut the vein which would give another 100 feet of backs.

An ore bin of 100 ton capacity should be built at the mine for storage purposes.

(d) The applicant has been a mine operator at various times for the past 40 years and will supervise the operations.

Item 6. Estimate of costs 700 feet of tunnel at $1500.00 a foot, labor at $10.00 a foot: $7000.00.
Timbers: 2800 lineal feet of 6 x 6 : $420.00.
24,000 feet of 2 x 12 lagging: $1440.00
700 feet 2 in. air pipe: $350.00
1500 feet of mine rail, at $80.00 ton: $320.00.
Powder caps and fuse: $300.00.

(b) All classes of mine labor to be considered in the $10.00 allowed per feet other than the superfisors. His allowance, of $400.00 per month, would be $1600.00 for an estimated 4 months.

re 1.

(c) Power. Gasoline compressor and truck for transportation to and from work and various other uses.

Gasoline for compressor, 120 shifts 5 gals. each:	$306.25
Gasoline for truck, 5 gals. per day:	200.00
Oil for compressor truck and est.	200.00
Drill steel, bits, picks, shovels, etc.	150.00

(d) Compressor, jack hammers, hoses, mine cars, tugger, at a rental of $20.00 per day for estimated use of 120 days: 2400.00

Various other uses at $10.00 per day: 1200.00

(g) Miscellaneous. It is estimated that an allowance for this item for the various things should be at least $2000.00.

Item 7. My prorata of the project would be covered by the use of equipment and services rendered a camp facilities furnished.

COPY

Appendix 1

THIS INDENTURE OF LEASE, made this 30 day of June A. D. 1958, between GEORGE D. MATHEWSON and EDITH C. MATHEWSON, of Denio, Nevada, hereinafter called the LESSORS, and a partnership consisting of FRED BARNES and VIRGIL PRATT, both of Alturas, California, hereinafter called the LESSEES,

W I T N E S S E T H:

That the LESSORS, for an in consideration of the royalties hereinafter reserved and the covenants and agreements hereinafter expressed, and by the LESSEES to be kept and performed, hereby grant, demise, and let to the LESSEES all of the following described property, situate in the Vicksburg Mining District, County of Humboldt, State of Nevada, and more particularly described as follows, to-wit:

> DEFENSE NO. 1, recorded in Book A-2, Page 665, of mining records, Humboldt County, Nevada, or so much thereof as is productive of tungsten ore.

TO HAVE AND TO HOLD, unto the said LESSEES, for the term of two (2) years from date hereof, expiring at noon on the 30th day of June, A. D. 1960, unless sooner forfeited or terminated through the violation of any covenant hereinafter against the LESSEES reserved.

In consideration of such demise, the LESSEES covenant and agree with the LESSORS, as follows, to-wit:

1. To enter upon said mine or premises immediately upon execution of this agreement and work the same in a workman-like fashion, in a manner necessary to good and economical mining, so as to take out the greatest amount of ore possible, with due regard to the development and preservation of the same as a workable mine.

2. To work and mine said premises steadily and continually from the date of this lease to the expiration date thereof.

3. To allow the lessors to enter and come upon the premises of said mine at any and all times.

4. To keep at all times, the drifts, shafts, tunnels and other workings, thoroughly drained and clear of loose rock and rubbish, unless prevented by extraordinary mining casualty.

In further consideration of said demise, the LESSEES covenant and agree to pay to the LESSORS the following royalties, based upon the following schedule:

Ore which yields from zero to $30.00 per ton ——— 20% of net smelter returns as royalty. gross

Ore which yields from $31.00 to $40.00 per ton ——— 25% of net smelter returns as royalty. gross

Ore which yields from $41.00 and up per ton ——— 33 1/3% of net smelter returns as royalty. gross

Computations for the determination of the payment or royalties shall be made in the following manner: The yield in net returns shall be based upon gross ton production which goes through the mill at the mine of the mine. However, percentages and yield

per ton information shall be based upon settlement sheets from the mine or buyers to which said ores or concentrates are shipped. Complete and accurate records shall be kept by said LESSEES, showing gross tonnage which is milled at the mine, so that the yield per gross ton may be compared with the settlement sheets from the mine or smelter to determine the percentage payments due and owing to said LESSORS.

1. Complete and accurate production and milling records shall be kept in order to comply with this agreement of lease and to meet the specifications and requirements of the laws of the State of Nevada.

2. LESSEES agree that upon the receipt of a settlement sheet received from the mill or smelter to which the ores and concentrates were shipped, a copy of said settlement sheet, together with a duplicate of the production record representing the gross production of said ore, shall be furnished to said LESSORS within five (5) days.

3. LESSEES shall pay to LESSORS, in Denio, Nevada, royalty checks, (based on above schedule) within five (5) days after receipt of payment for the shipment of ores and concentrates, from buyers of same. The Lessors retain their interest in all ores until sold.

4. The LESSEES agree to set aside ($1.50) per gross ton's milled for the maintenance and replacement of trucks, mills, and other mining equipment furnished by the LESSORS for the operations of this lease. If in the event the fund isn't used when the lease

is terminated the balance will be divided.

5. All machinery and equipment now located on the premises of Defense No. 1, is and shall remain the property of LESSORS.

6. To post and keep posted all of the said premises prior to the commencement of any work thereon, a notice of non-responsibility of the owner for labor and material liens or claims.

7. To maintain insurance upon all employees and upon themselves, if they actually work on the premises, in accordance with the laws of the State of Nevada.

8. This agreement shall not be recorded.

In further consideration of such demise, and of LESSORS entering into said lease without demanding a minimum royalty, LESSEES gives to LESSORS the option to terminate this lease upon furnishing evidence to said LESSEES that LESSORS have procured a purchaser, ready, willing, and able to buy on LESSORS terms, the above demised property, and upon the further consideration that LESSORS agree, upon the termination of this instrument and sale to third parties, to pay over to said LESSEES ten percent (10%) of the gross sales price received for the tungsten properties located in the mining district known as Defense No. 1. Plus initial investment by LESSEES.

1. LESSEES not to assign or sub-let without the written consent of LESSORS.

It is mutually agreed by and between the parties hereto that upon violation of any covenant or covenants hereby reserved, this lease shall, at the option of LESSORS, expire, and the

LESSORS or their agents may thereupon, ten (10) days after demand for possession in writing, enter upon said premises and dispossess all persons occupying same.

Each and every agreement and covenant herein shall extend to the heirs, executors, administrators, and assigns of all parties hereto.

IN WITNESS WHEREOF, the parties hereto have, on the day and year in this agreement first above written, subscribed their hands, upon five (5) pages of this agreement.

/s/ Geo. D. Mathewson
GEORGE D. MATHEWSON

/s/ Edith C. Mathewson
EDITH C. MATHEWSON

LESSORS

/s/ Fred Barnes
FRED BARNES

/s/ Virgil Pratt
VIRGIL PRATT

LESSEES

Witnessed by

/s/ Vivian Pratt
/s/ Frank King

GENERAL SERVICES ADMINISTRATION

REGION 9 - ARIZONA, CALIFORNIA, NEVADA
and TERRITORY OF HAWAII

CERTIFICATE OF AUTHORIZATION
Domestic Tungsten Program

Number [illegible] Date December 22, 1952

Nevada Sonora Mines
Tor, Berlo, Nevada

Your notice dated December 5, 1952, indicating your willingness to participate in the Domestic Tungsten Program and your undertaking to prospect for or produce tungsten, has been received. You are hereby authorized to deliver to the Government, in accordance with the terms of the Program, tungsten concentrates meeting the specifications contained therein. Reasonable notice should be given to the Government with respect to the availability of any tungsten concentrates for inspection

GENERAL SERVICES ADMINISTRATION

Region 9
Emergency Procurement Service
49[illegible] Fourth Street
San Francisco 3, California

December 15, 1952

Nevada Sonora Mineros
Denio, Nevada

Attention: Mr. Arthur H. Perl

Gentlemen:

In accordance with your request of December 5, we are enclosing Certificate No. 9-2227, domestic tungsten program, issued to Nevada Sonora Mineros, Denio, Nevada. All future deliveries to the Government should be made under this certificate.

If you desire to have payments for tungsten concentrates made directly to the First National Bank of Nevada, Winnemucca, Nevada, it is necessary that we be furnished a Notice of Assignment (original and three copies) and an Instrument of Assignment (original and one copy), in accordance with the Assignment of Claims Act of 1940. Your bank should be able to assist you in this matter.

Very truly yours,

R. L. Reno, Jr.
Deputy Regional Director

Enclosure.

FORM A-8

REPORT OF ASSAY

ABBOT A. HANKS, INC.

ASSAYERS, CHEMISTS, ENGINEERS
624 SACRAMENTO STREET
SAN FRANCISCO.

November 28, 1952

DEPOSITED BY R. E. Reno, Jr.,
Chief, Inspection Division
Federal Supply Service
General Services Administration
~~630 Sansome St., S. F. 11, Calif.~~

SAMPLE OF TUNGSTEN CONCENTRATES

Labty. No.	Mark	GOLD, per ton of 2,000 lbs. Troy Ounces	GOLD, per ton of 2,000 lbs. Value @ $35.00 oz.	SILVER, per ton of 2,000 lbs. Troy Ounces	SILVER, per ton of 2,000 lbs. Value @ $	Percentages	
49955	Sample 1, Lot 1 Specifications P-57 Date sampled:- 11-18-52 Program: DMPA Supplier: Arthur B. Ferl & R. K. Abbott Certificate No. 9-2161-1					Tungstic Oxide	68.30 %
						Tin	Trace
						Copper	0.02
						Arsenic	Trace
						Antimony	Trace
						Bismuth	Trace
						Molybdenum	0.31
						Phosphorus	0.10
						Sulphur	0.05
						Manganese	0.02
						Lead	0.02
						Zinc	0.01

bob

ABBOT A. HANKS, INC.

FORM A-8

REPORT OF ASSAY

ABBOT A. HANKS, INC.

ASSAYERS, CHEMISTS, ENGINEERS
624 SACRAMENTO STREET
SAN FRANCISCO

December 30, 1952

DEPOSITED BY R. E. Reno, Jr.,
Chief, Inspection Division
Federal Supply Service
General Services Administration
49 Fourth Street, S. F. 3, California

SAMPLE OF TUNGSTEN CONCENTRATES

Labty. No.	Mark	GOLD, per ton of 2,000 lbs.		SILVER, per ton of 2,000 lbs.		Percentages	
		Troy Ounces	Value @ $35.00 oz.	Troy Ounces	Value @		
					$		
50854	Sample 1, Lot 1 Date Sampled:- 12-19-52 Quantity: 2055 lbs. net wet weight Specifications:- P-57R Program: DMPA Supplier: Nevada Sonora Mineros Certificate No.- 9-2227-1					Tungstic Oxide	66.55 %
						Tin	Trace
						Copper	0.01
						Arsenic	None Found
						Antimony	Trace
						Bismuth	Trace
						Molybdenum	0.18
						Phosphorus	0.08
						Sulphur	0.02
						Manganese	0.12
						Lead	0.07
						Zinc	0.02

ABBOT A. HANKS, INC.

SIZE CLASSIFICATION - TYPE A

bob

FORM X-8

REPORT OF ASSAY

ABBOT A. HANKS, INC.

ASSAYERS. CHEMISTS. ENGINEERS.
624 SACRAMENTO STREET
SAN FRANCISCO.

February 20, 1953

DEPOSITED BY R. E. Reno, Jr.,
Chief, Inspection Division
Federal Supply Service
General Services Administration
49 Fourth St., S. F. 3, Calif.

SAMPLE OF TUNGSTEN CONCENTRATES

Labty. No.	Mark	GOLD, per ton of 2,000 lbs. Troy Ounces	GOLD, per ton of 2,000 lbs. Value @ $35.00 oz.	SILVER, per ton of 2,000 lbs. Troy Ounces	SILVER, per ton of 2,000 lbs. Value @	Percentages	
52416	Sample 1, Lot 3 Date Sampled:- 2-11-53 Quantity: 4526 Net Wt. Weight Specifications:- P-57-R Program: D.M.P.A. Supplier: Nevada Sonora Mineros Certificate No.- 9-2227-3				$ 5.00 4.00 3.00 5.00 5.00 5.00 5.00 4.00 4.00 3.00 3.00	Tungstic Oxide Tin Copper Arsenic Antimony Bismuth Molybdenum Phosphorus Sulphur Manganese Lead Zinc	72.20 % None Found Trace None Found None Found Trace 0.34 0.09 0.04 0.15 0.01 0.01

SIZE CLASSIFICATION: TYPE A

ABBOT A. HANKS, INC.

bob

FORM A-8

REPORT OF ASSAY

ABBOT A. HANKS, INC.

ASSAYERS, CHEMISTS, ENGINEERS
624 SACRAMENTO STREET
SAN FRANCISCO.

March 30, 1953

DEPOSITED BY R. E. Reno, Jr.,
Chief, Inspection Division
Federal Supply Service
General Services Administration
49 Fourth St., S. F. 3, California

SAMPLE OF TUNGSTEN CONCENTRATES

Labty. No.	Mark	GOLD, per ton of 2,000 lbs. Troy Ounces	GOLD, per ton of 2,000 lbs. Value @ $35.00 oz.	SILVER, per ton of 2,000 lbs. Troy Ounces	SILVER, per ton of 2,000 lbs. Value @ $	Percentages	
53538	Sample 1, Lot 4 Date Sampled:- 3-25-53 Quantity: 2100 Net Wet Weight Specifications:- P-57-R Program: DMPA Supplier: Nevada Sonora Mineros Certificate No.- 9-2227-4					Tungstic Oxide	72.81 %
						Tin	Trace
						Copper	0.02
						Arsenic	None Found
						Antimony	None Found
						Bismuth	Trace
						Molybdenum	0.33
						Phosphorus	0.14
						Sulphur	0.02
						Manganese	0.10
						Lead	0.03
						Zinc	0.02
						Iron	2.07

SIZE CLASSIFICATION: TYPE A

ABBOT A. HANKS, INC.

bob

CONTRACTOR: Arthur B. Ferl and R. K. Abbott
CONTRACT NO:
CERTIFICATE NO: 9-2161-1
LOCATION OF MATERIAL: Butler Rd.Whse., So.Sf,Calif.
DATE: 12/1/52

ADDRESS: P.O. Box 292, Redding, Calif.
LOT NO.: 1

SOLD TO: GENERAL SERVICES ADMINISTRATION
630 Sansome Street
San Francisco 11, California

One lot tungsten (Type Natural D Scheelite) per weight certificate and assay report attached.

WEIGHT

Gross Weight		2424.	lbs.
Tare Weight		24.	lbs.
Net Weight		2400.	lbs.
Moisture	0.065 %	1.56	lbs.
Net dry pounds		2398.44	or 1.1992 S.D.T.

ANALYSIS

Tungsten Trioxide	WO_3	68.30	%
Tin	Sn	trace	%
Copper	Cu	0.02	%
Arsenic	As	trace	%
Antimony	Sb	trace	%
Bismuth	Bi	trace	%
Molybdenum	Mo	0.31	%
Phosphorus	P	0.10	%
Sulphur	S	0.05	%
Manganese	Mn	0.02	%
Lead	Pb	0.02	%
Zinc	Zn	0.01	%

Net dry pounds 2398.44 containing 68.30 % WO_3
equals 1638.1344 lbs. WO_3 or 81.9067 S.T.U. WO_3

BASIC PRICE: (60% WO_3) . . . . . $63.00 S.T.U.

PENALTIES:

	% WO_3	below 60%		20 cents for each			%	$
	% Sn	above		25 " " "			%	
	% Cu	"		25 " " "			%	
	% As	"		25 " " "			%	
	% Sb	"		25 " " "			%	
	% Bi	"		25 " " "			%	
	% Mo	"		25 " " "			%	
0.05	% P	"	0.05	25 " " "		0.01	%	1.25
	% S	"		25 " " "			%	
	% Mn	"		25 " " "			%	
	% Pb	"		25 " " "			%	
	% Zn	"		25 " " "			%	

Total Penalties 1.25
Net price per short ton unit $ 61.75

81.9067 61.75

CONTRACTOR: Nevada Sonora Mineros ADDRESS: Denio, Nevada
CONTRACT NO: [redacted] LOT NO : [redacted]
CERTIFICATE NO: 9-2227-1
LOCATION OF MATERIAL: GSA Whse., Butler Rd., So. San Francisco
DATE: December 30, 1952

SOLD TO: GENERAL SERVICES ADMINISTRATION
630 Sansome Street
San Francisco 11, California

One lot tungsten (Type D Natural Scheelite) per weight certificate and assay report attached.

WEIGHT

Gross Weight	2076.	lbs.	
Tare Weight	21.	lbs.	
Net Weight	2055.	lbs.	
Moisture 0.128 %	2.6304	lbs.	
Net dry pounds	2052.3696	or 1.0262	S.D.T.

ANALYSIS

Tungsten Trioxide	(WO_3)	66.55	%
Tin	Sn	Trace	%
Copper	Cu	0.01	%
Arsenic	As	None	%
Antimony	Sb	Trace	%
Bismuth	Bi	Trace	%
Molybdenum . . .	Mo	0.18	%
Phosphorus . . .	P	0.08	%
Sulphur	S	0.02	%
Manganese	Mn	0.12	%
Lead	Pb	0.07	%
Zinc	Zn	0.02	%

Net dry pounds 2052.3696 containing 66.55 % WO_3
equals 1365.8520 lbs. WO_3 or 68.2926 S.T.U. WO_3

BASIC PRICE: (60% WO_3) . . . . . $63.00 S.T.U.

PENALTIES:

	% WO_3	below	60%	20	cents	for each		%	$
	% Sn	above		25	"	" "		%	
	% Cu	"		25	"	" "		%	
	% As	"		25	"	" "		%	
	% Sb	"		25	"	" "		%	
	% Bi	"		25	"	" "		%	
	% Mo	"		25	"	" "		%	
0.03	% P	"	0.05	25	"	" "	0.01	%	0.75
	% S	"		25	"	" "		%	
	% Mn	"		25	"	" "		%	
	% Pb	"		25	"	" "		%	
	% Zn	"		25	"	" "		%	

Total Penalties . . . . . $ 0.75
Net price per short ton unit $ 62.25

68.2926 S.T.U.'s X 62.25

GENERAL SERVICES ADMINISTRATION
DOMESTIC TUNGSTEN PURCHASE PROGRAM
ACCEPTANCE AND INVOICE

Date 2/24/53

Certificate of Authorization Number 9-2227-3

TO Nevada Sonora Mineros
Denio, Nevada

Subject to the terms and conditions of the Tungsten Regulation establishing the Government's Purchase Program for Domestic Tungsten Concentrates in lots of one ton or more, the Government accepts 4526 pounds (wet basis) of Tungsten Concentrates (Type D natural scheelite containing 163.2808 short ton units of tungsten trioxide, delivered f. o. b. common carrier's conveyance at Toulon, Nevada, consigned to Butler Rd.Whse.,So.SF,Calif. on B/L No. CS-30035. Such material has a moisture content of 0.066% and analyses in a dry basis as follows:

	Percent		Percent
Tungsten Trioxide (WO3)	72.20	Molybdenum (Mo)	0.34
Tin (Sn)	none	Phosphorous (P)	0.09*
Copper (Cu)	trace	Sulphur (S)	0.04
Arsenic (As)	none	Manganese (Mn)	0.15
Antimony (Sb)	none	Lead (Pb)	0.01
Bismuth (Bi)	trace	Zinc (Zn)	0.01

EVALUATION AND SETTLEMENT DATA

	Dollars
Base Price (Penalties indicated by asterisk (*)) — Per S. T. U.	63.00
Penalties: 0.04% P above 0.05%, 25 cents for each 0.01% — Dollars 1.00	
Total Penalties	1.00
Adjusted Base Price — Per S. T. U.	62.00

Gross Wt. 4571 Tare Wt. 45 Net Wt. 4526

Net Wet Lbs.		Moisture Content		Net Dry Lbs.		Percent WO3		Lbs. WO3		S. T. U. WO3		Adjusted Base Price		Payment
4526	−	2.9872	=	4523.0128	×	72.20	=	3265.6152	or	163.2808	×	62.00	=	10,123.41

ACCEPTANCE

Received and Accepted by General Services Administration at San Francisco, California

By (Type name)	Signature	Title
R. B. Reno, Jr.		Deputy Regional Director, SPS

For Use of Producer Only

INVOICE

To	Region Number	
General Services Administration	9	San Francisco, California

For		Dollars
Tungsten Concentrates delivered as indicated above	Total Amount Due	10,123.41

I certify that the above bill is correct and just and that payment therefor has not been received. The producer warrants that said material was mined in the continental United States.

Producer (Type name)	Date 2/24/53
By (Signature)	Title

GPO 86-361415

Form R9-281 (12/5/52)

GENERAL SERVICES ADMINISTRATION
DOMESTIC TUNGSTEN PURCHASE PROGRAM
ACCEPTANCE AND INVOICE

Date 3/31/53

Certificate of Authorization Number 9-2227-4

TO Nevada Scheelite Mineros
Zenio, Nevada

Subject to the terms and conditions of the Tungsten Regulation establishing the Government's Purchase Program for Domestic Tungsten Concentrates in lots of one ton or more, the Government accepts 2100 pounds (wet basis) of Tungsten Concentrates (Type natural scheelite) containing 76.3932 short ton units of tungsten trioxide, delivered f. o. b. common carrier's conveyance at delivered to consigned to Butler Bldg.,So.SF,Calif. on B/L by vendor. Such material has a moisture content of 0.075% and analyses in a dry basis as follows:

	Percent		Percent
Tungsten Trioxnide (WO3)	72.81	Molybdenum (Mo)	0.33
Tin (Sn)	trace	Phosphorous (P)	0.14 *
Copper (Cu)	0.02	Sulphur (S)	0.02
Arsenic (As)	none	Manganese (Mn)	0.10
Antimony (Sb)	none	Lead (Pb)	0.03
Bismuth (Bi)	trace	Zinc (Zn)	0.02

EVALUATION AND SETTLEMENT DATA

	Dollars
Base Price (Penalties indicated by asterisk (*)) — Per S. T. U.	63.00
Penalties: 0.09% P above 0.05%, 25 cents for each 0.01% — Dollars 2.25	
Total Penalties	2.25
Adjusted Base Price — Per S. T. U.	60.75

Gross Wt. 2121 Tare Wt. 21 Net Wt. 2100

Net Wet Lbs.		Moisture Content		Net Dry Lbs.		Percent WO3		Lbs. WO3		S. T. U. WO3		Adjusted Base Price		Payment
2100	−	1.5750	=	2098.4250	×	72.81	=	1527.8632	or	76.3932	×	60.75	=	4,640.89

ACCEPTANCE

Received and Accepted by General Services Administration at San Francisco, California

By (Type name) R. E. Reno, Jr. | Signature | Title Deputy Regional Director,IPS

For Use of Producer Only

INVOICE

To General Services Administration | Region Number 9 | San Francisco, California

For Tungsten Concentrates delivered as indicated above | Total Amount Due | Dollars 4,640.89

I certify that the above bill is correct and just and that payment therefor has not been received. The producer warrants that said material was mined in the continental United States.

Producer (Type name) | Date 3/31/53

By (Signature) | Title

ORDER NO. No 60813

DATE OF ORDER 12/1/52

AGENCY GENERAL SERVICES ADMINISTRATION

MAILING ADDRESS Office of the Comptroller
49 Fourth Street
San Francisco 3, Calif.

SELLER (Payee) (Print) Arthur B. Ferl and R. K. Abbott

ADDRESS (Print) P. O. Box 292, Redding, California

FURNISH TO Emergency Procurement Service, G.S.A.

ADDRESS Butler Rd. whse., So. San Francisco, Cal.

QUANTITY	ITEM AND UNIT	UNIT PRICE	AMOUNT
81.9067	S.T.U. WO3	61.75	5057.74
Tungsten concentrates (Type D ~~natural scheelite) purchased in~~ accord. with cond. and spec. given under the DTP as set forth ~~in the Fed.Reg. 5/11/51.~~ Sec. 303, Pub.Law 774, 81st Cong.			
Certificate No. 9-2161-1			

PURPOSE (Project, etc.) 53 X 4401 DMPA

TOTAL 5057.74

ORDERED BY (Signature) for R. E. Isaac, Jr.

DISCOUNT

The above items were received in good order except as noted below:

RECEIVED BY ARTHUR B. FERL & R. K. ABBOTT

TITLE Arthur B. Ferl

DATE

* INSTRUCTIONS TO SELLER

After insisting upon satisfactory identification of the Government Ordering Officer presenting this form, complete the portions indicated by an asterisk (*) on the Seller's Invoice. If purchase is for immediate "over-the-counter" complete delivery, return the certified Seller's Invoice to the Ordering Officer to expedite payment. If purchase is for any other type of delivery, forward certified Seller's Invoice to the agency at mailing address shown near top of form. Retain this copy for your record.

2. SELLER'S COPY OF INVOICE

Form prescribed by Administrator of General Services
C. S. A. General Regulation No. 6
Approved by Comptroller General, U. S.

U. S. GOVERNMENT PRINTING OFFICE 10—63332-1b

ORIGINAL

GSA FORM 300
February 1951
(Formerly No. 52 and 52-1)
Form Approved--Budget Bureau No. 48-R101
METHOD OF PURCHASE
Indicate Method by Number
1. Federal Supply Schedule
2. Federal Supply Service stock
3. Surplus Property Transfer
4. Advertising (R. S. §3709)
5. War Powers Negotiation
6. Other Exemptions from R. S. §3709
7. Miscellaneous
(SEE FSS CIRCULAR LETTER B-69)

6.

GENERAL SERVICES ADMINISTRATION
FEDERAL SUPPLY SERVICE
49 Fourth Street
San Francisco 3, California

PURCHASE ORDER

This number must appear on all PACKAGES and PAPERS relating to this order.

ORDER NO. SF-2-D- 61648

DATE December 30, 1952

~~REQUISITION NO.~~ DATE
Certificate No. 9-2227-1

APPROPRIATION SYMBOL AND TITLE
53 X 4401 DMPA

REQUISITIONING OFFICE
SanFrancisco Supply Center

TO (SELLER)
Nevada Sonora Mineros
Denio, Nevada

CONSIGNEE AND DESTINATION (SHIP TO)
Emergency Procurement Service, G.S.A.
c/o U.S.Federal Supply ~~Center~~ Officer
Butler Road Warehouse
South San Francisco, California

INVITATION NO.

CONTRACT NO.

TIME FOR DELIVERY 12/23/52
EXPIRING

F. O. B. POINT
SHIPPING POINT Toulon, Nevada

GOV'T. B/L NO. GS-30020

DISCOUNT TERMS

ITEM NO.	ARTICLES OR SERVICES	QUANTITY	UNIT	UNIT PRICE	AMOUNT
1	Tungsten concentrates (Type D Natural Scheelite) purchased in accordance with conditions and specifications given under the Domestic Tungsten Program as set forth in the Federal Register 5/11/51. (lot 1)	68.29	26 STU W03	62.25	4,251.21
	Payment will be made on basis of Government assay. Transportation cost to the Government warehouse paid by GSL.				
6.	Sec. 303, Public Law 774, 81st Congress.				

INVOICES MUST BE EXECUTED AND CERTIFIED IN ACCORDANCE WITH INSTRUCTIONS ON REVERSE SIDE HEREOF AND FORWARDED TO:
Invoice must be executed and certified on attached Standard Form 44 and forwarded to Office of Regional Comptroller, 49 Fourth Street, San Francisco 3, California

TOTAL 4,251.21

SIGNATURE: R.E. Reno Jr.
NAME: R.E. Reno, Jr.
TITLE: Deputy Regional Director
PURCHASING AGENT
UNIT NO.

U. S. GOVERNMENT PRINTING OFFICE: 1951-843460

MOLYBDENUM CORPORATION OF AMERICA

PITTSBURGH, PA.

YOUR INVOICE DATE	YOUR INVOICE AMOUNT	DEDUCTIONS MEMO.	DEDUCTIONS AMOUNT	NET AMOUNT	YOUR INVOICE DATE	YOUR INVOICE AMOUNT	DEDUCTIONS MEMO.	DEDUCTIONS AMOUNT	NET AMOUNT
6/13/42	$4,307.34								

Amount to cover funds to be credited to the account of George D. Mathewson, Denio, Oregon, covering the purchase of 74 bags of Scheelite Conc. containing. 200.437 units @ $21.65 $ 4,339.46

Less: Sampling, Assaying & Drayage 32.12

$ 4,307.34

MOLYBDENUM CORPORATION OF AMERICA

PITTSBURGH, PA.

YOUR INVOICE DATE	YOUR INVOICE AMOUNT	DEDUCTIONS MEMO.	DEDUCTIONS AMOUNT	NET AMOUNT	YOUR INVOICE DATE	YOUR INVOICE AMOUNT	DEDUCTIONS MEMO.	DEDUCTIONS AMOUNT	NET AMOUNT
7/27/42	$3771.26								

Amount to cover funds to be credited to the account of Geo. D. Mathewson, Denio, Oregon, covering the purchase of 54 bags Scheelite Concentrates containing 167.609 units at $22.65 per unit -- $3,796.34

Less: Sampling, assaying, etc. -- 25.08

$3,771.26

DETACH BEFORE BANKING.

MOLYBDENUM CORPORATION OF AMERICA

PITTSBURGH, PA.

YOUR INVOICE DATE	YOUR INVOICE AMOUNT	DEDUCTIONS MEMO.	DEDUCTIONS AMOUNT	NET AMOUNT	YOUR INVOICE DATE	YOUR INVOICE AMOUNT	DEDUCTIONS MEMO.	DEDUCTIONS AMOUNT	NET AMOUNT
6/25/42	$2,814.94								

Amount of funds to be credited to the account of Geo. D. Mathewson, Denio, Oregon, covering 47 bags Scheelite Concentrates containing 4,712 lbs. at 55.80% - or 131.465 units at $21.65 per unit -- $2,846.22

Less: Sampling, assaying, etc. 31.28

$2,814.94

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

Docket

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
FEB 1 8 1954

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

February 12, 1954

WSM

Mr. Fred Barnes
Denio
Nevada

Subject: Docket DMEA-3110 - Tungsten Claim No. 1, Defense Tungsten Mine, Humboldt County, Nevada

Dear Mr. Barnes:

With our letter to you, dated December 18, 1953, we sent seven copies of form MF-203, Owner's Consent to Lien, and asked that you have six copies executed and returned to this office.

Up to this writing, our records indicate that you have not submitted the required forms through this office. No contract for exploration work can be entered into with you until the status of the lease in question has been cleared.

Sincerely yours,

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

Copy to: DMEA, Washington, D. C. (2)
Roscoe M. Smith, USGS
A. C. Johnson, Reno

DOCKET
Surname:
Martin

MAR 3 1954

Mr. Fred Barnes

Denio, Nevada

Re: Docket No. DMEA 3110 - Tungsten
George D. Matheson
Defense Tungsten mine
Humboldt County, Nevada

Dear Mr. Barnes:

Mr. M. C. Miller, DMEA Executive Officer, Region 3 Field Team, San Francisco, California, has informed us that you notified him by letter on February 19, 1954, that you no longer wish to proceed with the subject application for exploration assistance. Accordingly, the application is being withdrawn from our active files.

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

Sincerely yours,

C. O. Mittendorf (for)

Administrator

Copy to: Mr. George D. Matheson
Denio, Nevada

CC: DOCKET
FT. REG. 3
CODE 400
ADM. READ.FILE
T. P. THAYER, USGS
R. W. GEEHAN, USBM

LScott 3/2/54

DETACH

Docket

Department of the Interior
Defense Minerals Administration
RECEIVED
MAR 1 - 1954

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

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

February 24, 1954

WSM

Memorandum

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

From: Executive Officer, DMEA Field Team, Region III

Subject: Docket No. DMEA-3110 - Tungsten
Claim No. 1, Defense Tungsten Mine
Humboldt County, Nevada

Attached is a copy of a letter dated February 19, 1954, from Mr. Fred Barnes, Denio, Nevada, informing us that he does not wish to go through with his application for an exploration loan on the subject property.

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

Attachment

Copy to: Roscoe Smith, USGS
A. C. Johnson, Reno

February 18 1954

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
MAR 1 - 1954

Refer to	Noted	Date
	18144	2/24
Answered		

DMEA-3110

Mr. H.C. Miller
San Francisco
Calif.

Dear Mr. Miller

Since my request for the forms MF-103 we have since opened what looks like the main vein. We would rather carry on the work without a loan if possible; therefore I think it best not to go through with our application. Thank you for the attention you have given the matter

Yours very truly
Fred Barnes
Reno Nev

Note:

Present lease allows insufficient time to warrant contract with Baum & Pratt.

Should have new lease or present lease extended.

The property should also include adjoining

Defense No. 2 claim

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

Department of the Interior
Defense Minerals Administration
RECEIVED
DEC 22 1953

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

December 18, 1953

Mr. Fred Barnes
Denio, Nevada

Re: Docket No. DMEA-3110 - Tungsten
Claim No. 1, Defense Tungsten
Mine
Humboldt County, Nevada

WSM

Dear Mr. Barnes:

Your letter dated December 11, 1953, replying to my letter of December 2, 1953, to Mr. George Mathewson, is acknowledged.

I note that your lease from Mr. George Mathewson has about one and one-half years more to run; that you filed for the DMEA loan in the name of George Mathewson because he is the owner of the property; and that our Reno office has told you to have forms MF-203 filled out so that the loan might be switched over to Virgil Pratt and you.

I am not sure whether this is the proper way to handle the matter. It may be that you will have to make application in your name and Mr. Pratt's name. I will leave that to the Washington office of the Defense Minerals Exploration Administration to decide.

In any event, we will need Owner's Consent to Lien forms, so I am sending seven copies of form MF-203 herewith. These forms should be executed and six copies returned to this office. The seventh copy is for your files. Upon their receipt, I will forward them to Washington.

Sincerely yours,

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

Enclosure

Copy to: DMEA, Washington, D. C.
E. H. Bailey, USGS
A. C. Johnson, Reno

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

Mail Docket Cy

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

WSM

December 2, 1953

Mr. George Mathewson
Denio, Nevada

Re: Docket No. DMEA-3110 - Tungsten
Claim No. 1, Defense Tungsten Mine
Humboldt County, Nevada

Dear Mr. Mathewson:

This office has received a wire from Washington requesting further information relative to your application for an exploration loan. The Washington office reports that you apparently have already leased until June 30, 1955, the Defense No. 1 claim to Fred Barnes and Virgil Pratt of Alturas, California. Consequently, you do not have a sufficient interest in the Defense No. 1 claim at this time to enter into an Exploration Project Contract.

If the lease between you and Fred Barnes and Virgil Pratt is terminated and you obtain the right to possession of the property so that you can cause the exploration work to be performed, then a contract may be entered into with you.

Kindly let us know the status of the lease with Fred Barnes and Virgil Pratt and if your lease with them is still in effect or has been terminated.

Sincerely yours,

H. C. Miller

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

Copy to: DMEA, Washington, D. C.
E. H. Bailey, USGS
A. C. Johnson, Reno

[redacted]

[redacted]

[redacted]

DEC 1 - 1953

[redacted]

Receipt December [redacted] and copies of Gentry and Smith concerning George [redacted] Hathaway Scope No. [redacted] file, in regards information concerning loans as requested in our letter of December [redacted]. Contract cannot be granted Hathaway while present loan is in default.

[redacted]

cc: [redacted]
[redacted] Region 3 - Confirmation
Code [redacted]
Adpr. Pending File
Contracting Court
Auditor Div., Dir. Mines
[redacted]
[redacted]

[redacted]
[redacted]

R.C.G. 12-1-53

Docket 98

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

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
NOV 27 1953

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

November 23, 1953

WSM

Memorandum

To: W. S. Martin, Acting Chairman, Operating Committee, DMEA, Interior Building, Washington 25, D. C.

From: Executive Officer, DMEA Field Team, Region III

Subject: Docket No. DMEA-3110 (Tungsten)
Defense Tungsten Mine
Humboldt County, Nevada

Reference is made to your teletype dated November 13, 1953, requesting information on the status of the subject application.

Your inquiry was referred to Mr. A. C. Johnson, and I am now in receipt of a memorandum prepared by Glenn G. Gentry, dated November 18, in which he discusses the spelling of the name of the mining claim and evidence of ore in the floor of the drift; also a memorandum by R. L. Smith, dated November 18, in which he discusses Mr. T. P. Thayer's October 20 memorandum.

Four copies of each memorandum are attached.

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

Attachments

Copy to: E. H. Bailey, USGS (With copy of memos)
A. C. Johnson, Reno

What does Thayer think of this?

WBP
11/27/53

Mr. Chapman.

It pass

TPT.

RECEIVED

A. C. Johnson, Chief, Mining Div., Reg. III — November 18, 1953

Glenn G. Gentry, Mining Engineer, Region III

DMEA-3110 (Tungsten) George D. Mathewson, Defence Tungsten Mine, Humboldt County, Nevada

Pursuant to letters from Mr. M. C. Miller, Executive Officer, DMEA Field Team, Region III, dated Nov. 6 and 13, 1953, the following data is submitted:

Spelling of the mining claim as recorded:- In the copy of the lease between the applicant and the lessees, the claim is noted as the Defence No. 1, recorded in book A-2, page 105, of mining records, Humboldt County, Nev. Therefore, while the claim name is spelled Defence in the application, it is believed this spelling was a mistake and the recorded spelling is correct. However, the Field Team did not check the Humboldt County mining records relative to the spelling of the claim name.

Evidence of ore in floor of drift:- Between the portal of the adit and the first raise, the floor of the drift was not sampled as it was not possible for the examining engineer to remove and replace the track and excavate the accumulated track ballast. The No. 1 stope is east of the adit and the only sample possible to secure near the bottom of the stope was DM-721 which assayed 0.77% WO_3. It was not possible to examine the drift below the Glory hole as the area had caved and it was impossible to enter. The lessees of the property reported the downward continuation of the quartz exposure in the bottom of the Glory hole.

Samples were taken of all available exposures in order to present an average analysis for evaluation.

The exploration proposed by the Field Team, was recommended in three stages (each to be undertaken only upon the successful completion of the former stage) in order to eliminate or reduce the degree of speculation.

Glenn G. Gentry

Glenn G. Gentry
Mining Engineer

122 South West Temple
Salt Lake City 1, Utah

Memorandum

November 18, 1953

To: A. C. Johnson, Chief, Mining Division, Region III

From: R. M. Smith, Geologist, U. S. Geological Survey

Subject: DMEA-3110 (Tungsten) Defense Tungsten Mine, Humboldt County, Nevada

In accordance with your request of November 16, I have reviewed the September 29 Field Team report and T. P. Thayer's letter of October 30.

As pointed out by Mr. Thayer, the inferred ore reserves do not constitute a convincing target for exploration. This is the result of two conditions: 1. The samples do not confirm the visual estimates of grade of ore, probably owing to the difficulties inherent in sampling tungsten ores, and should be considered to err on the low side as ore is being mined from the stope where low-grade samples were taken; and 2. only the geologic conditions favorable for ore can be projected into the inferred ore zone - the ore bodies themselves cannot be projected. The Field Team concludes, however, that a small amount of exploratory work is justified although the target cannot be inferred with the usual degree of confidence.

The target of Stages I and II is the exploration of a favorable zone southwest of the Glory hole between the surface and the South Hill Lower adit. This zone is favorable for the deposition of tungsten ore because here the walls of an ore bearing fault are metamorphic rocks containing some calcareous rocks. Small amounts of ore in narrow stringers are exposed on the surface above this favorable zone.

No dimensions can be inferred, but if it is assumed that unexplored parts of the vein contain ore bodies of about the same size and grade as those mined from the same favorable zone, then a few hundred tons of ore containing about 1.0 percent WO_3 may be

"estimated".

No documented evidence is now at hand for the presence of ore in the floor of the adit under stope No. 2. The first one or two rounds of a winze at this site would sample the floor of the adit more effectively and at about the same cost as channel sampling. Unfavorable results at this stage would be adequate reason for terminating the project.

yes, but would the Field Team do so,

cc: E. H. Bailey

FILE COPY
SURNAME:

MD
400

Rutledge
Martin

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

NOV 18 1953

Mr. George Mathewson
Denio, Nevada

Re: Docket No. 3110 - Tungsten
Claim No. 1, Defense Tungsten mine
Pine Forest Mountains
Humboldt County, Nevada

Dear Mr. Mathewson:

This will acknowledge receipt of your letter of November 6, 1953, with regard to the status of the above-docketed application for exploration assistance.

On November 2, 1953, we referred your application back to the Field Team for additional information. Upon receipt of the necessary data, we will resume processing of your application.

Please be assured that you will be promptly advised of any decision by the Defense Minerals Exploration Administration.

Sincerely yours,

C. O. Mittendorf (fw)

Administrator

FARutledge:foc
11-18-53
cc: Docket
Code 400
FT. Reg. 3
Admr. Reading File
R. W. Geehan, USBM
T. P. Thayer, USGS

R.C.B.
11-18-53

FILE COPY
SURNAME:

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

Originator: F. A. Rutledge

Ext.: 5285 Room: 3538

Rutledge
Martin
Lafrigliere
Hedges
Wallendorf

Appro.: 14X3923.970 - Working Fund - DMEA
Date: November 13, 1953

To: H. G. Miller, DMEA Executive Officer, Region 3, San Francisco, California

Recourlet November 2, George D. Matheusem, Docket No. DMEA 3110. Applicant recently inquired about status of application. Would appreciate hearing when we may expect your comments on questions in Thayer's memorandum of October 20.

SIGNED
W. S. Martin
Acting Chairman, Operating Committee

FARutledge/ls
11/12/53

cc: DOCKET
FT. REG. III - CONFIRMATION
OPER. COMMITTEE
CODE 400
AUDITS DIVN., BUR. OF MINES
R. W. GEEHAN, USBM
T. P. THAYER, USGS
ADMIN. READING FILE

R.C.B.
11-13-53

INT. DEPT.
SECRETARY'S
MAIL CENTER
NOV 9 1953
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VICKSBURG CONSOLIDATED MINES
HUMBOLDT CO., NEVADA

Defense Minerals Administration
RECEIVED
NOV 9 1953

Denio Nevada
Nov. 6 - 53

U.S. Dept. of the Interior
D.M.E.A.

3110

WSM

Dear Sirs:

Please advise me in Regards to the Exploration assistance subject D.M.E.A - 3110 - Turnpike. I am anxious to know if I am going to get this loan or not.

would appreciate hearing from you at your earliest convenience.

Respectfully yours
George D. Matthewson
Denio. Nevada
Humboldt County

FILE COPY
SURNAME:

400

Rutledge
Martin
Chafin
Geehan
Selfridge
Hedges
Mathewson

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

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

NOV 2 1953

Re: Docket No. DMEA 3110 - Tungsten
George D. Mathewson
Defense Tungsten mine
Humboldt County, Nevada

Dear Mr. Miller:

Reference is made to the subject application. Apparently the applicant, George D. Mathewson, has already leased until June 30, 1955, the Defense No. 1 claim to Fred Barnes and Virgil Pratt of Alturas, California. Consequently he does not have a suffucient interest in the Defense No. 1 claim at this time to enter into an Exploration Project Contract.

If the lease between the applicant and Fred Barnes and Virgil Pratt is terminated and George D. Mathewson again obtains the right to possession of the property so that he can cause the exploration work to be performed, then a contract may be entered into with George D. Mathewson.

However, to assist us in determining whether the property has sufficient merit to warrant an exploration contract, it will be appreciated if you will let us have your comments on the questions raised in the attached copies of memoranda by T. P. Thayer, Geological Survey and Robert W. Geehan, Bureau of Mines.

Sincerely yours,

George C. Selfridge

Chairman, Operating Committee (2/B)

APPROVED:

J. H. Hedges

Member, Bureau of Mines (2/B)

T. P. Thayer

Member, Geological Survey (2/B)

FARutledge:foc 10-28-53
cc: Docket
Code 400
FT. Reg. 3
Operating Comm.
Admr. Reading File
R. W. Geehan, USBM
T. P. Thayer, USGS

P.S. In the subject docket, the claim name is shown as both Defence No. 1 and Defense No. 1. Please check the spelling of the claim as recorded so that the spelling may be kept consistent.

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

October 23, 1953

Memorandum

To: Mr. W. S. Martin, DMEA

From: Robert W. Geehan, Assistant Chief, Ferrous Metals and Alloys Branch

Subject: DMEA 3110 - Tungsten
George Mathewson
Claim No. 1 - Defence Tungsten Mine
Humboldt County, Nevada

It is recommended that the modified application, as outlined in the Field Team report dated September 29 and the Field Team memorandum dated October 6, be approved. Special note should be made that this approval by the Field Team is subject to a competent supervisor and a working agreement with the lessees.

Robert W. Geehan

Robert W. Geehan

IN REPLY REFER TO:

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

October 20, 1953

Memorandum

To: W. S. Martin, DMEA

From: T. P. Thayer, USGS

Subject: DMEA-3110, Tungsten
George Mathewson
Claim No. 1, Defence Tungsten Mine
Humboldt County, Nevada

The report of Montis Klepper, referred to by the Field Team, indicates shipments of about 2,500 units of WO_3 from the mine in 1942 to 1943, apparently including workings not covered by the application. Out of a total reported production of $35,000 for the ground covered by the application, it seems very questionable whether more than 500 units valued at $25,000 should be credited.

The Field Team report does not inspire confidence in the deposit as a worthwhile target for exploration. The sample data are far from satisfactory: Out of 31 samples, only 9 are of economic grade; of the 9, 4 were taken lengthwise of veins and report only about one inch width of ore; one is partly washed material; and one is across a width of one foot at the bottom of a shaft which seems to have nothing to do with the exploration proposal. In short, out of the 31 samples, only 3 - BM 717, 721 and 722 - indicate minable ore.

The estimates of the inferred ore are not convincing. Although the vein is explored by the drift below the No. 2 stope, samples do not show a downward extent of the shoot. Was the floor of the drift sampled? The map also shows the drift extending almost the whole distance under the glory hole with only blank assays. On the basis of these unsupported assumptions, an ore shoot is postulated below a one-inch wide stringer 100 feet southwest of the glory hole. The "estimates" of inferred ore, in my opinion, are little better than wishful thinking.

Unless the Field Team can present evidence for the presence of ore in the floor of the drift under stope No. 2, and inclination of the ore shoot in the glory hole that would carry the shoot southwest of the face of the drift, I would recommend denial of the application.

T. P. Thayer

T. P. Thayer

Market

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

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

October 6, 1953

WSM

Memorandum

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

From: Executive Officer, DMEA Field Team, Region III

Subject: Docket DMEA-3110 - Tungsten
George Mathewson
Claim No. 1, Defence Tungsten Mine
Humboldt County, Nevada

Reference is made to your letter dated July 23, 1953, with which you referred the subject application to this office for a field examination of the property.

Attached are four copies of a report entitled "DMEA-3110, Defence Tungsten Mine, Humboldt County, Nevada," by Glenn G. Gentry, Mining Engineer, U. S. Bureau of Mines, and Roscoe M. Smith, Geologist, U. S. Geological Survey, dated September 29, 1953.

The applicant originally proposed to explore his tungsten property in Humboldt County, Nevada, by extending the present South Hill lower adit a distance of 400 feet to the south and driving a crosscut tunnel at a lower elevation a distance of 300 feet from an unspecified location.

The examining engineer and geologist are in accord that there is a reasonable chance of discovering new ore bodies and that the property has sufficient merit to justify a moderate exploration program. Following a discussion with the applicant, the proposed plan of exploration was changed and a revised 3-stage program to explore the deposit has been recommended. This program consists of:

Stage I - Extend existing South Hill lower adit in a southwesterly direction for a distance of 175 feet.

Cleared OC
10-16-53
L.A.R.

Stage II - From the above 175 foot adit extension, crosscut in an easterly direction a distance of 35 feet. This work to be dependent upon the results of Stage I and subject to approval by the Government.

Stage III - Sink a 50-foot winze from a Government approved location on the best showing of ore in the adit after completion of Stage I and Stage II.

Cost of the recommended program is approximately $9,100.00.

Mr Bailey and I concur with the recommendations that have been made by the examining engineer and geologist and recommend that the proposed application be given favorable consideration.

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

Attachment

Copy to: E. H. Bailey, USGS

George Mitchell has heard out claims

see docket #3106
Oct 6 letter

UNITED STATES
DEPARTMENT OF THE INTERIOR
DOUGLAS McKAY, SECRETARY

DEFENSE MINERALS EXPLORATION ADMINISTRATION

REPORT OF EXAMINATION BY FIELD TEAM
REGION III

10/29/53

DMEA-3110, DEFENCE TUNGSTEN MINE

HUMBOLDT COUNTY, NEV.

GLENN G. GENTRY, MINING ENGINEER
U. S. BUREAU OF MINES

ROSCOE M. SMITH, GEOLOGIST
U. S. GEOLOGICAL SURVEY

SEPTEMBER 29, 1953

EXHIBITS

Figure No.	Description
1	Index map of northwest Nevada.
2	Geologic map of Defence No. 1 Claim.
3	South Hill Lower adit
4	Defence mineral claims
5	Proposed exploration of Defence Tungsten mine and assay map.

Appendix No.	
1	Indenture of lease between George D. Mathewson and Edith C. Mathewson, lessors and Fred Barnes and Virgil Pratt, lessees.
2	Certificate of authorization, dated Dec. 12, 1952.
3	Letter from G.S.A., dated Dec. 15, 1952.
4	Assay report by Abbot A. Hanks, dated Nov. 28, 1952.
5	Assay report by Abbot A. Hanks, dated Dec. 30, 1952.
6	Assay report by Abbot A. Hanks, dated Feb. 20, 1953.
7	Assay report by Abbot A. Hanks, dated March 30, 1953.
8	Analysis of Lot No. 1, Certificate No. 9-2161-1, dated Dec. 1, 1952
9	Analysis of Lot No. 1, Certificate No. 9-2227-1, dated Dec. 30, 1952
10	G.S.A., acceptance and invoice, dated Feb. 24, 1953.
11	G.S.A., acceptance and invoice, dated March 31, 1953.
12	G.S.A., acceptance and invoice, P. O. No. 60813, Dec. 1, 1952.
13	G.S.A., acceptance and invoice, P. O. No. SF-2-D-61648, Dec. 30, 1952.
14	Scheelite concentrate shipments to Molybdenum Corp. of America.

REPORT OF EXAMINATION

Docket No.: DMEA-3110 (Tungsten)

Name and address of applicant: George D. Mathewson
Denio, Nevada

Name and location of property: No. 1 Claim of the Defence Tungsten Mine, Humboldt County, Nevada.

SUMMARY

Under date of June 25, 1953, Mr. George D. Mathewson of Denio, Nevada applied for Government assistance in the amount of $28,386.25 with which to continue exploration on the No. 1 claim of the Defence Tungsten Mine.

The applicant has proposed to extend the present South Hill lower adit a distance of 400 feet south and drive a crosscut tunnel at a lower elevation a distance of 300 feet from an unspecified location. He also states that an ore bin of 100-ton capacity should be constructed at the mine for storage purposes.

Pursuant to this application, the No. 1 claim of the Defence Tungsten mine was examined on August 18, 19, and 20, 1953 by the field team, consisting of an engineer[1/] of the Bureau of Mines of Region III and a geologist[2/] of the Geological Survey. Based upon the examination and sampling, the field team consider the property has sufficient merit to justify a moderate exploration program in the amount of approximately $9,100.00 and re-

1/ Glenn G. Gentry.
2/ R. M. Smith.

quiring approximately five months time to complete.

The exploration program was discussed with the applicant and a revised 3-stage program to explore the deposit at less cost was outlined:

Stage I:- Extend existing South Hill lower adit in a southwesterly direction for a distance of 175 feet.

Stage II:- From the above 175 foot adit extension, crosscut in an easterly direction a distance of 35 feet. This work to be dependent upon the results of Stage I and subject to approval by Government.

Stage III:- Sink a 50-foot winze from a Government approved location on the best showing of ore in the adit after completion of Stage I and Stage II.

CONCLUSIONS AND RECOMMENDATIONS

The field team representatives conclude that there is a reasonable chance of discovering new ore bodies and that inferred reserves of 1200 tons containing an average of about 1.0 percent WO_3 may be in the block to be explored.

It is recommended that the Government enter into a contract with the applicant to do the work proposed in the revised program. It is also recommended that the contract should be made upon a unit or footage basis, with the applicant furnishing all necessary equipment, supplies, and labor, and that the applicant be required to employ a competent mining engineer whose duties shall consist of supervising the exploratory work, sampling, preparation of adequate maps and monthly reports on forms MF-104 and MF-104A.

The field team examined and sampled this property on Aug. 18, 19, and 20, 1953. Several hours were spent on surface examination, using a mineralight on the nights of August 19 and 20. During a part of the examination, the field team were accompanied by Mr. Fred Barnes, one of the lessees of the mine. Mr. George D. Mathewson, owner, was not in good health and was unable to show the field team over the property. Mr. Mathewson, however, remained at his residence about five miles from the mine and was available for discussions and to provide additional information.

NAME AND LOCATION OF PROPERTY

The proposed exploration work is to be done on the No. 1 claim of the Defence Tungsten Mine situated in the extreme north central part of Humboldt County, Nev. The No. 1 mining claim is located in the NW 1/4 of the NW 1/4 of sec. 13, T. 46 N., R. 30 E. and in the Vicksburgh Mining District. The mine is 11.4 miles nearly due south of Denio, Nev., a small village situated closely adjacent to the Nevada-Oregon east west boundary line.

ACCESSIBILITY

From Denio, Nev., the mine is reached via an unimproved desert road of moderate gradient. During the winter months (from November to May) considerable snow is to be expected and travel during these months may be difficult at times and perhaps impossible for short periods. The greater part of necessary mining supplies will probably be obtained from Winnemucca, Nev., located approximately 100.2 miles southeast of

Denio. A newly constructed, all weather road, connects Denio and Winnemucca. Denio has no telephone or telegraph facilities and receives mail three times each week.

COMPETENCY OF APPLICANT

Mr. George D. Mathewson is approximately 80 years of age and it appears doubtful that he would be physically able to actively supervise the proposed exploration project. He apparently had many years of experience as a miner in the adjacent Ashdown Mine. He believes that he will receive sufficient revenue as royalty from his tungsten mill, now under lease to Fred Barnes and Virgil Pratt, with which to pay for his 25% part of the costs of the exploration project.

APPLICANT'S PROPERTY RIGHTS

Mr. George D. Mathewson reports that he holds the No. 1 mining claim of the Defence Tungsten Mine, by right of location, and that his location notice is recorded in Book No. A2, page 505, in the Humboldt County Court House, Winnemucca, Nev. He further states that all assessment work has been done for the year 1953 and that no debts or financial obligations have accrued against the mining claim. The field team did not examine the records in the Humboldt County Courthouse at Winnemucca, and therefore have not verified the recording of the No. 1 mining claim.

Under date of June 30, 1953, Mr. George D. Mathewson and Edith C. Mathewson leased the Defence No. 1 mining claim to Fred Barnes and Virgil Pratt. The lease, copy of which is attached, expires on June 30, 1955.

The lessees, under the supervision of Mr. Fred Barnes, are actively conducting mining and milling operations with production amounting to from 8 to 10 tons of crude ore per day.

The field team believe that under the terms of the lease that some operational difficulties, between the lessors and lessees, might be expected if development operations and mining operations interfered with each other. Perhaps a mutual agreement between the lessor and the lessees, with the lessees agreeing to the DMEA project, might be in order.

DESCRIPTION OF PROPERTY

Surface and surface facilities:- Mining equipment, owned by the applicant and located near the portal of the adit, consists of:

1 Air compressor, Curtis, No. 37092, 125-cubic foot capacity, direct connected to 6 by 6 Climax gasoline engine, Model K, No. 8019. This machine is about 23 years old but is reported to be in serviceable condition.

1 Air compressor, Worthington, new, Serial No. 225B, Model 00400, size 4-7/8 x 2-7/8 x 2-3/4, capacity 100 cubic foot min., portable, mounted on flat bed, 2 pneumatic tires.

2 Air receivers, 3' x 10', appear to be in good condition.

1 Truck, Dodge, flat rack, 1934 model, 72,396.3 miles registered on the speedometer, Motor No. AT7-1545-6-cylinder, 2-ton capacity, 5-speed transmission, dual wheels on rear. Tires in reasonably good condition. Truck has not been operated for the past 6 months and mechanical condition is questionable.

1 Truck, Ford, 1-1/2 cubic yard dump body, 1935 model with 1941 8-cylinder engine Serial No. 3B-3251, 4-speed transmission, dual rear wheels; speedometer registers 16,245 miles. (Operator estimates truck has traveled about 75,000 miles). Good tires; truck in daily use hauling ore from mine to mill.

1 Slusher, single drum, Gardner-Denver, with 200 feet of 3/8-inch wire cable; good condition.

Equipment in the mine:

Mine track consists of approximately 300 feet of 16-lb. rail, 18-inch gauge (second hand, fair condition).

2 Mine cars, iron body, end dump, 18-inch gauge; body size 2' x 2' x 40"; condition reasonably good.

1 Stoper, hand rotated, Ingersoll-Rand, chucked for 7/8-inch drill rods. Reasonably good condition.

1 Jackhammer, No. 75777, Chicago-Pneumatic Tool Co., chucked for 7/8-inch drill rods; good condition.

The applicant reports that he has additional mining equipment for use, if required.

The mine workings consist of an adit 151 feet in length. One small stope approximately 8 feet wide by 20 feet long is entered at 75 feet from the portal. The back of the stope is approximately 26 feet above the floor of the adit. The mine workings are dry and accessible.

SAMPLING

Sample No.	%, WO_3	Ounces/ton		Description
		Au	Ag	
BM-701	0.84	Tr.	Tr.	Grab sample from muck car of ore mined from the No. 1 stope.
BM-702	*0.01	Tr.	Tr.	Width 1 foot; vein in back of drift 34 feet south of portal of adit; brown quartz and diorite.
BM-703	*0.01	Tr.	Tr.	Width 1.5 feet; across vein in back of drift and on west side of drift. Mostly gouge with some quartz.
BM-704	*0.01	Tr.	Tr.	Width 2.2 feet; across back of drift; 13.7 feet north of Station 2; crushed diorite with some quartz.

Sample No.	%, WO_3	Ounces/ton Au	Ounces/ton Ag	Description
BM-705	0.14	0.005	0.20	Width 3.8 feet; across back of drift; 4 feet north of Station 2; oxidized quartz and ground up diorite mud gouge.
BM-706	0.21	0.005	0.15	Width 2.5 feet; west wall of tunnel and 2 feet north of Station 4.
BM-707	*0.01	Tr.	Tr.	Width 3.4 feet; across back of tunnel; 4 feet south of Station 4; mostly quartz.
BM-708	*0.01	Tr.	Tr.	Width 3.0 feet; west wall of tunnel and under BM-707; mostly quartz.
BM-709	*0.01	Tr.	Tr.	Width 1.5 feet; back of tunnel; 10.4 feet south of Station 4; oxidized, sugar quartz.
BM-710	*0.01	Tr.	Tr.	Width 1.8 feet; across back of tunnel; 4 feet south of BM-709; mostly oxidized quartz.
BM-711	*0.01	Tr.	Tr.	Width 3.8 feet; across back of tunnel; 4 feet south of BM-710; mixed diorite and quartz.
BM-712	*0.01	Tr.	Tr.	Width 4.2 feet; across back of tunnel; 18 feet south of Station 4; mixed quartz and diorite.
BM-713	0.01	Tr.	Tr.	Width 1.5 feet; face of tunnel and on east side.
BM-714	*0.01	Tr.	Tr.	Width 2.0 feet; face of tunnel and on west side; joins BM-713.
BM-715	0.01	Tr.	Tr.	Width 3.6 feet; across back of tunnel; 4.6 feet north of face of tunnel; mostly oxidized quartz.
BM-716	0.26	Tr.	Tr.	Width 5.0 feet; north wall of No. 1 raise; 10 feet above floor of tunnel; mostly quartz.
BM-717	1.28	Tr.	Tr.	Width 4.0 feet; north wall of No. 1 raise; 5.4 feet above No. 716; mostly quartz.
BM-718	0.02	Tr.	Tr.	Width 1.7 feet; north wall of No. 1 raise; 4.7 feet above BM-717; mostly quartz.

Sample No.	%, WO_3	Ounces/ton Au	Ounces/ton Ag	Description
BM-719	*0.01	Tr.	Tr.	Width 2.4 feet; north wall of No. 1 raise; joins BM-718; mostly white quartz.
BM-720	0.06	Tr.	Tr.	Width 4.0 feet; north face of No. 1 raise; 4 feet above BM-719 and 2.0 feet below back of raise; mostly brown oxidized quartz.
BM-721	0.97	Tr.	Tr.	Width 2.3 feet; south wall of No. 1 raise and opposite BM-717; mostly high grade quartz.
BM-722	6.13	Tr.	Tr.	Width 4 feet; west wall of stope; 10 feet south of north wall of No. 1 raise; high grade quartz.
BM-723	0.13	Tr.	Tr.	Width 4.2 feet; across south face of stope and 13.7 feet south of BM-722; mixed quartz and diorite.
BM-724	0.36	Tr.	Tr.	Width 3.2 feet; across back of stope 5 feet north of BM-723 and 6 feet above BM-723.
BM-725	5.40	Tr.	Tr.	Length 2.5 feet; horizontal cut along quartz seam about 1-inch wide; surface exposure at south end of Glory hole.
BM-726	0.55	Tr.	Tr.	Width 1.6 feet; surface exposure 46 feet south of BM-725; vein between samples covered with loose rock and soil. Material sampled is brecciated and is partly a layer of wash containing quartz, limestone and diorite.
BM-727	9.48	Tr.	Tr.	Width 2.0 feet; vertical cut on west wall of vein; 12.6 feet south of BM-726; mostly limey schist and slate with some quartz.
BM-728	1.43	Tr.	Tr.	Width 1.0 feet; vertical cut on west wall of fault; 5 feet south of BM-727. Same type material as BM-727.
BM-729	1.85	Tr.	Tr.	Width 1.3 feet; vertical cut on west wall of fault; 29 feet south of BM-728; mostly oxidized quartz and limey shale.
BM-730	*0.01	Tr.	Tr.	Width 1.0 feet; portal of adit near top of ridge; oxidized quartz on east side of adit.

Sample No.	%, WO_3	Ounces/ton Au	Ounces/ton Ag	Description
BM-731	0.14	Tr.	Tr.	Width 1.0 feet ; breast of adit near top of ridge; 31 feet south of BM-730.
BM-732	0.51	Tr.	Tr.	Width 2.6 feet; surface exposure of oxidized quartz, south 58° east; 21 feet from BM-726.
BM-733	0.01	Tr.	Tr.	Grab and chip sample of oxidized quartz dug out by dozer. Approximately 200 lbs. of quartz S. 10° E., 49 feet from BM-732. The quartz ledge is reported to be under this sample location, but is covered with loose rock and soil.
BM-734	0.12	Tr.	Tr.	Width 4.5 feet; No. 1 stope; 10 feet above BM-722; oxidized quartz.
BM-735	2.20	Tr.	Tr.	Width 1.0 feet; bottom of 16-foot shaft, approximately 600 feet northeast of the portal of adit on No. 1 Claim.

GEOLOGY

On the Defence No. 1 claim metamorphic rocks are in contact with the west edge of a granitic stock 8 miles long and 2.5 miles wide. The rocks are cut by faults which strike northeast and dip steeply northwest. Quartz veins occupy some of the faults and also occur with tactite along the contact of the metamorphic and igneous rocks which strike N. 60° W. and dip steeply north.

The metamorphic rock is principally mica schist containing a few layers of marble and hornfels. The schistosity strikes north or is parallel with the contact or with the faults. In the mine area the granitic rock ranges in composition from a gneissic biotite-hornblende diorite

to granodiorite. Along the contact many dikes of aplite and diorite occur in the schist and also in the granitic stock.

The South Hill fault is nearly vertical and displaces the diorite-schist contact about 400 feet (fig. 2).

ORE DEPOSITS

The ore bodies that have been mined at the Defence Tungsten mine are of two kinds: (1) Quartz-tactite bodies along the contact between granite and metamorphic rocks (North Hill workings) and (2), quartz veins along the South Hill fault. The contact deposits have been described by Klepper[3/]. The DMEA application is to explore for deposits along the South Hill fault.

In the South Hill Lower adit a quartz vein pinches and swells along its strike, ranges from a fraction of an inch to about 6 feet in width, and has been traced for several hundred feet along the stike. Two ore shoots which have been mined between the surface and the adit are both about 20 feet long and as much as 12 feet wide but will average only about 5 feet wide. Two stopes are reported to have yielded about 1,400 tons of ore containing an average of 1.0 percent WO_3. Scheelite occurs in seams and in crystals as large as one-fourth of an inch in the quartz vein and in the wall rock adjacent to the vein. The best ore appears to be localized where the quartz vein is wide and where the wall rocks are calcareous. In the South Hill Lower adit, the east wall is diorite and the west wall of

3/ Klepper, M. R., 1943, Defense Tungsten Mine, Humboldt County, Nev., U. S. Geol. Survey Memorandum Report.

the vein is metamorphic rock containing a layer of marble; in the North Hill Lower adit, Klepper mapped marble along the hanging wall of the ore body; in the South Hill Upper adit, where each wall is diorite, a quartz vein 6 feet wide contains only sparse showings of scheelite.

Bulldozing south of the Glory hole (fig. 3) has exposed small seams and bunches of scheelite along the fault zone over a width of 30 feet.

On Middle Hill (fig. 2) surface trenches and an inclined shaft 15 feet long reveal a layer of tactite ore along the contact about 6 inches thick which extends 50 feet along the strike and may average 2 percent WO_3. The face of the Middle Hill adit is about 60 feet northwest of the projected position of the scheelite-bearing contact.

ORE RESERVES

There are no measured ore reserves in the workings of the Defence Tungsten mine. A few tons of indicated ore are above the number 2 stope, which has now been mined nearly to the surface. A few hundred tons of ore is inferred to lie below both the Glory hole and the No. 2 stope and a few hundred tons may also lie south of the existing face of the South Hill Lower adit along that segment of the vein where the west wall is metamorphic rock.

If an ore shoot of the same size (20 feet by 5 feet) as those mined in the South Hill Lower adit is inferred to extend 75 feet from the surface at samples BM-627 and BM-628 to the altitude of the proposed exploration, then 600 tons of ore containing about 1.0 percent WO_3 would be in the

block to be explored.

Ore is inferred to extend below the adit level under the Glory hole. If it is inferred to extend 50 feet below the level and to have the same dimensions (20 feet long, 5 feet thick) as the ore shoot which was mined then 600 tons of ore would be contained in the block.

PROPOSED EXPLORATION

The applicant proposes to extend the South Hill Lower adit 400 feet southwest along the vein (fig. 5) and also to drive a crosscut adit 300 feet long from an unspecified point at an altitude 100 feet below the South Hill Lower adit. He also proposes to build a 100-ton ore bin. The field team representatives conclude that exploration on the adit level is warranted and that the best chances for discovery of additional ore bodies lies along that section of the vein where the wall is metamorphic rock. They conclude also that exploration at greater depth of the ore bodies which have been mined is warranted but that a crosscut adit 300 feet long is too costly and that this exploration can best be conducted with a winze after phase 1 is completed. The proposals were discussed with the applicant and a revised program was outlined: Stage I - Extend the South Hill Lower adit 175 feet south along the vein and crosscut 35 feet east at a point about 200 feet from the portal (fig. 5); Stage II - After Stage I is completed, sink a winze 50 feet on the best showing of ore in the adit.

The revised program is estimated to cost $9,100.00 and to require five months to complete. The government's share of the cost would be $6,825.00.

Core drilling was discussed as an alternative exploratory method, but it is considered to be unsuited to this deposit, partly because the vein is vertical and partly because the scheelite is erratically distributed.

PAST OPERATION

The applicant reports production has amounted to 1400 tons of crude ore which produced tungsten concentrates having a value of $35,000.00. These concentrates were reported as sold to the General Services Administration in San Francisco, Calif.

Barnes and Pratt, the lessees, are presently mining and milling from 8 to 10 tons of ore per day from the No. 2 stope. Samples from this stope, taken by the examining engineer, BM-716 to BM-724 inclusive and BM-734, show an average of 0.93% WO_3.

Shipping records submitted by the applicant (copies of which are attached) are as follows:

Date	Purchaser	Units/WO_3	Gross Value
8/13/42	Molybdenum Corp. of America	200.437	$10,982.02 *
12/1/52	G.S.A.	81.9067	5,057.74
12/30/52	G.S.A.	68.2926	4,251.21
2/24/53	G.S.A.	163.2808	10,123.41
3/31/53	G.S.A.	76.3932	4,640.89
		692.2107	$35,055.27

*This production may have been made from the North Hill adit and not from the present applicant's workings.

Other shipping records were not available at the mine and shipments made by the present lessees would be added to the total production. Attached are copies of the analysis of Lot No. 1, dated Dec. 30, 1952, by Abbot A. Hanks, Inc. of San Francisco, Calif. Also attached are copies of letters, dated Dec. 12 and 15, 1952 from the General Services Administration, relative to the issuance of certificate No. 9-227 under which deliveries of tungsten concentrates have been made by the applicant.

MILLING

The lessees are operating a small gravity concentration plant, owned by the applicant and situated approximately five miles south of the mine.

The mill is powered by a gasoline engine, belt connected to line shafts and counter shafts in order to operate the various machines. Water for the mill is piped, by gravity, from a spring about 2.5 miles from the plant. The capacity of the mill is reported to be from 8 to 10 tons of crude ore per 8-hour shift.

The milling equipment consists of the following:

CRUDE ORE BIN ABOUT 50-TON CAPACITY

12" x 18" JAW TYPE CRUSHER

2-FOOT SYMONS CONE CRUSHER

VIBRATING SCREEN 1/4" MESH

BALL MILL 3' x 4'

WEMCO CONCENTRATING TABLE (standard size)

CONCENTRATES TO STORAGE

MIDDLINGS RETURNED TO BALL MILL

TAILINGS TO FINISH TABLE

CONCENTRATES TO STORAGE

TAILINGS TO POND

MANPOWER, SUPPLIES, ETC.

The area adjacent to Denio, Nevada is sparsely populated and in general, miners and mill men would have to be recruited in Winnemucca, Nevada and/or other towns located adjacent to active mining camps.

The usual mining supplies can be obtained from Winnemucca, Nev. Mine timbers are reported to be available at Cedarville, California which is approximately 100 miles west of the mine.

Water for mining purposes will have to be hauled from the mine camp, a distance of five miles. There is no transmitted electric power in the district, therefore, all necessary equipment is operated by either Diesel or gasoline engines.

It is estimated that the operator's will probably have to pay miners at least $15.40 per day in order to secure experienced workmen.

APPLICANT'S PROPOSAL

The applicant has proposed to extend the present adit a distance of 400 feet and drive a crosscut tunnel, at a lower elevation, a distance of 300 feet. According to his application, his costs were listed as follows:

700 feet of tunnel @ $15.00/ft.	$10,500.00
Labor for 700 feet of tunnel @ $10.00/ft. . .	7,000.00
Timbers, 2,800 linear feet of 6 x 6	420.00
24,000 feet of 2 x 12 lagging	1,440.00
700 feet of 2" air pipe	350.00
1,500 feet of mine rail @ $80.00/ton	320.00
Powder, caps and fuse	300.00
Gasoline for compressor (120 shifts @ 5 gallons each)	306.25

Gasoline for truck, 5 gallons/day	$ 200.00
Oil for compressor, truck, etc.	200.00
Drill steel, bits, picks, shovels, etc.	150.00
Rental of compressor, jackhammers, hoses, mine cars @ $20.00/day for 120 days	2,400.00
Various other uses@ $10.00/day	1,200.00
Miscellaneous expense	2,000.00
Supervisors	1,600.00
	$28,386.25 = $40.55/ft.

The field team have considered that a moderate exploration program is justified, and to be accomplished in three stages:

Stage I:- Extend present adit a distance of 175 feet (175 feet of 5' x 7' drift)

Stage II:- Crosscut a distance of 35 feet at most favorable location in Stage I. Subject to Government approval.

Stage III:- Sink 5' x 7' timbered winze to depth of 50 feet at most favorable location. Subject to Government approval.

The exploration in Stages 1, 2, and 3 was discussed with the applicant, who agreed that the modified program would be acceptable to him. The applicant also stated that his revenue from the lessees would be sufficient to pay for his part of the exploration expense.

The geologist of the U.S. Geological Survey has inferred ore reserves of 1,200 tons containing about 1.0 percent WO_3 may be in the block of ground to be explored.

OPERATOR'S PROPERTY RIGHTS

Figure 4 shows the boundary lines of the mining claim No. 1. Government would not be entitled to Royalty payments from

tungsten ores discovered and/or mined north of the point of beginning of the exploration project.

EXPLORATION PROJECT

Expected starting date: Within 30 days from date of execution of contract.

Time required to complete: Approximately 5 months.

DESCRIPTION OF PROJECT

Stage I:-	Extend present adit a distance of 175 feet. Size of adit 5' x 7' in clear of timbers. Timbered where required. Estimated at approximately 35 sets of drift timbers.	175 feet
Stage II-	Crosscut a distance of 35 feet from most favorable location in Stage I, provided Stage I is successful. Stage II to be subject to prior approval by Government. Size of crosscut: 5' x 7' in clear of timbers. Timbered where required. Estimated at approximately 7 sets of drift timbers.	35 feet
Stage III:-	Sink a winze to a depth of 50 feet from most favorable location in the adit. Stage III to be subject to prior approval by Government. Size of winze: 5' x 7' in the clear of timbers. Winze to be timbered on 4-foot centers, and lagged as required. Estimated at approximately 12 sets of timbers.	50 feet
	Total	260 feet

ALLOWABLE COSTS OF PROJECT

Independent contracts: None

Labor:

2 Miners @ $15.40 ea. (5-day week) 5 months	$3,080.00
Insurance @ 15%	462.00
	$3,542.00 =
	$13.62 per foot
1 Engineer, Supt. @ $500.00/month for 5 months	$2,500.00
Insurance @ 15%	375.00
	$2,875.00 =
	$9.62 per foot

Operating materials and supplies:

To be purchased:

		Per foot
Powder, 40 boxes @ $12.00	$480.00	$1.85
Blasting caps, 1,000	27.50	0.106
Blasting fuse, 5,000 feet	71.22	0.274
Detachable bits, 25 @ $12.50	312.50	1.20
Black iron pipe, 150 ft. of 2-inch @ $0.78	117.00	0.45
Black iron pipe, 150 ft. of 1-inch @ $0.31	46.50	0.18
Valves and fittings	10.00	0.034
Misc. drill steel	25.00	0.092
Gasoline for compressor, 310 gals. @ $0.315	97.65	0.375
Lubricating oils	10.00	0.038
4 miners drift picks	14.00	0.054
4 L.H. round point shovels	14.00	0.054
350 feet of second hand, 16-pound mine rail with fish plates, bolts and spikes	80.00	0.308
200 lbs. miners carbide @ $7.50 cwt	15.00	0.055
2 miners axes @ $5.00	10.00	0.034
Mine timbers:		
1,200 feet of round timbers @ $0.15 per linear foot	180.00	0.69
500 wedges @ $0.04	20.00	0.077
lagging, 2,000 ft. b.m.	110.00	0.846
Compressor oil, 10 gal. @ $2.50	25.00	0.092
Gasoline for truck, hauling water 50 gal. @ $0.315	15.75	0.061
		$ 30.11

Equipment to be rented from the operator:

1 Air compressor, Worthington, Serial No. 225B
Estimated value @ $1,500.00 @ 1/60 = $25.00 x 5 months = $125.00 = $0.481 per foot

2 Mine cars
Estimated value @ $40.00 each = $80.00 @ 1/60 = $1.33
$1.33 per mo. x 5 months = $6.65 = $0.026 per foot

1 Drifter drill) with hoses @ $500.00 @ 1/60 = $8.33 per mo.
1 Jackhammer) $8.33 per month x 5 months = $41.65 = $0.16 per foot

1 Air tugger hoist, with cable and skip
Value: $750.00 @ 1/60 = $12.50 per month x 5 months = $62.50 = $0.24 per foot

Truck hauling water: Value, $500.00 @ 1/60 = $8.33 per month
$8.33 per month x 5 months = $41.65 = $0.16 per foot

	TOTAL $31.18
Equipment maintenance and contingencies	3.82
	TOTAL $35.00

Initial rehabilitation and repairs:	None
New buildings, improvements and installations:	None
TOTAL COST OF PROJECT	$9,100.00

Government participation @ 75% = $6,825.00

OTHER DATA

The mine is in a somewhat isolated area, and it is suggested that the operator secure two good miners to do the exploration work on a contract basis rather than days pay. If the present leasers continue their work in the mine, an equitable arrangement of working hours will be

necessary as the equipment on hand will not accommodate all of the work at the same time.

The contract, if approved, should only be considered on a unit or footage basis.

Appendix 1

THIS INDENTURE OF LEASE, made this 30 day of June A. D. 1953, between GEORGE D. MATHEWSON and EDITH C. MATHEWSON, of Denio, Nevada, hereinafter called the LESSORS, and a partnership consisting of FRED BARNES and VIRGIL PRATT, both of Alturas, California, hereinafter called the LESSEES,

W I T N E S S E T H:

That the LESSORS, for an in consideration of the royalties hereinafter reserved and the covenants and agreements hereinafter expressed, and by the LESSEES to be kept and performed, hereby grant, demise, and let to the LESSEES all of the following described property, situate in the Vicksburg Mining District, County of Humboldt, State of Nevada, and more particularly described as follows, to-wit:

> DEFENSE NO. 1, recorded in Book A-2, Page 505, of mining records, Humboldt County, Nevada, or so much thereof as is productive of tungsten ore.

TO HAVE AND TO HOLD, unto the said LESSEES, for the term of two (2) years from date hereof, expiring at noon on the 30th day of June, A. D. 1955, unless sooner forfeited or terminated through the violation of any covenant hereinafter against the LESSEES reserved.

In consideration of such demise, the LESSEES covenant and agree with the LESSORS, as follows, to-wit:

1. To enter upon said mine or premises immediately upon execution of this agreement and work the same in a workman-like fashion, in a manner necessary to good and economical mining, so as to take out the greatest amount of ore possible, with due regard to the development and preservation of the same as a workable mine.

2. To work and mine said premises steadily and continually from the date of this lease to the expiration date thereof.

3. To allow the lessors to enter and come upon the premises of said mine at any and all times.

4. To keep at all times, the drifts, shafts, tunnels and other workings, thoroughly drained and clear of loose rock and rubbish, unless prevented by extraordinary mining casualty.

In further consideration of said demise, the LESSEES covenant and agree to pay to the LESSORS the following royalties, based upon the following schedule:

Ore which yields from zero to $30.00 per ton ----- 20% of ~~net~~ gross smelter returns as royalty.

Ore which yields from $31.00 to $60.00 per ton ----- 25% of ~~net~~ gross smelter returns as royalty.

Ore which yields from $61.00 and up per ton ----- 33 1/3% of ~~net~~ gross smelter returns as royalty.

Computations for the determination of the payment or royalties shall be made in the following manner: The yield in net returns shall be based upon gross ton production which goes through the mill at the situs of the mine. However, percentages and yield

per ton information shall be based upon settlement sheets from the mine or buyers to which said ores or concentrates are shipped. Complete and accurate records shall be kept by said LESSEES, showing gross tonnage which is milled at the situs, so that the yield per gross ton may be compared with the settlement sheets from the mine or smelter to determine the percentage payments due and owing to said LESSORS.

1. Complete and accurate production and milling records shall be kept in order to comply with this agreement of lease and to meet the specifications and requirements of the laws of the State of Nevada.

2. LESSEES agree that upon the receipt of a settlement sheet received from the mill or smelter to which the ores and concentrates were shipped, a copy of said settlement sheet, together with a duplicate of the production record representing the gross production of said ore, shall be furnished to said LESSORS within five (5) days.

3. LESSEES shall pay to LESSORS, in Denio, Nevada, royalty checks, (based on above schedule) within five (5) days after receipt of payment for the shipment of ores and concentrates, from buyers of same. The Lessors retain their interest in all ores until sold.

4. The LESSEES agree to set aside ($1.50) per gross ton's milled for the maintenance and replacement of trucks, mills, and other mining equipment furnished by the LESSORS for the operations of this lease. If in the event the fund is'nt used when the lease

is terminated the balance will be divided.

5. All machinery and equipment now located on the premises of Defense No. 1, is and shall remain the property of LESSORS.

6. To post and keep posted all of the said premises prior to the commencement of any work thereon, a notice of non-responsibility of the owner for labor and material liens or claims.

7. To maintain insurance upon all employees and upon themselves, if they actually work on the premises, in accordance with the laws of the State of Nevada.

8. This agreement shall not be recorded.

In further consideration of such demise, and of LESSORS entering into said lease without demanding a minimum royalty, LESSEES gives to LESSORS the option to terminate this lease upon furnishing evidence to said LESSEES that LESSORS have procured a purchaser, ready, willing, and able to buy on LESSORS terms, the above demised property, and upon the further consideration that LESSORS agree, upon the termination of this instrument and sale to third parties, to pay over to said LESSEES ten percent (10%) of the gross sales price received for the tungsten properties located in the mining district known as Defense No. 1. Plus initial investment by LESSEES.

1. LESSEES not to assign or sub-let without the written consent of LESSORS.

It is mutually agreed by and between the parties hereto that upon violation of any covenant or covenants hereby reserved, this lease shall, at the option of LESSORS, expire, and the

LESSORS or their agents may thereupon, ten (10) days after demand for possession in writing, enter upon said premises and dispossess all persons occupying same.

Each and every agreement and covenant herein shall extend to the heirs, executors, administrators, and assigns of all parties hereto.

IN WITNESS WHEREOF, the parties hereto have, on the day and year in this agreement first above written, subscribed their hands, upon five (5) pages of this agreement.

/s/ Geo. D. Mathewson
GEORGE D. MATHEWSON

/s/ Edith C. Mathewson
EDITH C. MATHEWSON

LESSORS

/s/ Fred Barnes
FRED BARNES

/s/ Virgil Pratt
VIRGIL PRATT

LESSEES

Witnessed by

/s/ Vivian Pratt
/s/ Frank King

Appendix 2

GENERAL SERVICES ADMINISTRATION

REGION 9 - ARIZONA, CALIFORNIA, NEVADA
and TERRITORY OF HAWAII

CERTIFICATE OF AUTHORIZATION
Domestic Tungsten Program

Number [illegible] Date [illegible]

Nevada Sonora Mines
To: Denio, Nevada

Your notice dated December 5, 1952, indicating your willingness to participate in the Domestic Tungsten Program and your undertaking to prospect for or produce tungsten, has been received. You are hereby authorized to deliver to the Government, in accordance with the terms of the Program, tungsten concentrates meeting the specifications contained therein. Reasonable notice should be given to the Government with respect to the availability of any tungsten concentrates for inspection

Appendix 3

GENERAL SERVICES ADMINISTRATION

Region 9
Emergency Procurement Service
49 Fourth Street
San Francisco 3, California

December 15, 1952

Nevada Honora Mineros
Denio, Nevada

Attention: Mr. Arthur T. Ford

Gentlemen:

In accordance with your request of December 5, we are enclosing Certificate No. 9-2227, domestic tungsten program, issued to Nevada Honora Mineros, Denio, Nevada. All future deliveries to the Government should be made under this certificate.

If you desire to have payments for tungsten concentrates made directly to the First National Bank of Nevada, Winnemucca, Nevada, it is necessary that we be furnished a Notice of Assignment (original and three copies) and an Instrument of Assignment (original and one copy), in accordance with the Assignment of Claims Act of 1940. Your bank should be able to assist you in this matter.

Very truly yours,

R. C. Reno, Jr.
Deputy Regional Director

Enclosure.

FORM A-B

REPORT OF ASSAY

ABBOT A. HANKS, INC.

ASSAYERS, CHEMISTS, ENGINEERS
624 SACRAMENTO STREET
SAN FRANCISCO.

November 28, 1952

DEPOSITED BY R. E. Reno, Jr.,
Chief, Inspection Division
Federal Supply Service
General Services Administration
~~630 Sansome St., S. F. 11, Calif.~~

SAMPLE OF TUNGSTEN CONCENTRATES

Labty. No.	Mark	GOLD, per ton of 2,000 lbs.		SILVER, per ton of 2,000 lbs.		Percentages	
		Troy Ounces	Value @ $35.00 oz.	Troy Ounces	Value @ $		
49955	Sample 1, Lot 1 Specifications P-57 Date sampled:- 11-18-52 Program: DMPA Supplier: Arthur B. Ferl & R. K. Abbott Certificate No. 9-2161-1					Tungstic Oxide	68.30 %
						Tin	Trace
						Copper	0.02
						Arsenic	Trace
						Antimony	Trace
						Bismuth	Trace
						Molybdenum	0.31
						Phosphorus	0.10
						Sulphur	0.05
						Manganese	0.02
						Lead	0.02
						Zinc	0.01

bob

ABBOT A. HANKS, INC.

Appendix 4

FORM A-8

REPORT OF ASSAY

ABBOT A. HANKS, INC.

ASSAYERS, CHEMISTS, ENGINEERS
624 SACRAMENTO STREET
SAN FRANCISCO

December 30, 1952

DEPOSITED BY R. E. Reno, Jr.,
Chief, Inspection Division
Federal Supply Service
General Services Administration
49 Fourth Street, S. F. 3, California

SAMPLE OF TUNGSTEN CONCENTRATES

Labty. No.	Mark	GOLD, per ton of 2,000 lbs.		SILVER, per ton of 2,000 lbs.		Percentages	
		Troy Ounces	Value @ $35.00 oz.	Troy Ounces	Value @		
50354	Sample 1, Lot 1 Date Sampled:- 12-19-52 Quantity: 2055 lbs. net wet weight Specifications:- R-57R Program: DMPA Supplier: Nevada Sonora Mineros Certificate No.- 9-2227-1				$	Tungstic Oxide Tin Copper Arsenic Antimony Bismuth Molybdenum Phosphorus Sulphur Manganese Lead Zinc	66.55 % Trace 0.01 None Found Trace Trace 0.18 0.08 0.02 0.12 0.07 0.02

ABBOT A. HANKS, INC.

bob

SIZE CLASSIFICATION - TYPE A

Appendix 5

FORM A-8

REPORT OF ASSAY

ABBOT A. HANKS, INC.

ASSAYERS, CHEMISTS, ENGINEERS
624 SACRAMENTO STREET
SAN FRANCISCO.

February 20, 1953

DEPOSITED BY R. E. Reno, Jr.,
Chief, Inspection Division
Federal Supply Service
General Services Administration
49 Fourth St., S. F. 3, Calif.

SAMPLE OF TUNGSTEN CONCENTRATES

Labty. No.	Mark	GOLD, per ton of 2,000 lbs. Troy Ounces	GOLD Value @ $35.00 oz.	SILVER, per ton of 2,000 lbs. Troy Ounces	SILVER Value @ $	Percentages	
52416	Sample 1, Lot 3 Date Sampled:- 2-11-53 Quantity: 4526 Net Wt. Weight Specifications:- P-57-R Program: D.M.P.A. Supplier: Nevada Sonora Mineros Certificate No.- 9-2227-3					Tungstic Oxide	72.20 %
						Tin	None Found
						Copper	Trace
						Arsenic	None Found
						Antimony	None Found
						Bismuth	Trace
						Molybdenum	0.34
						Phosphorus	0.09
						Sulphur	0.04
						Manganese	0.15
						Lead	0.01
						Zinc	0.01

SIZE CLASSIFICATION: TYPE A

ABBOT A. HANKS, INC.

bob

Appendix 6

FORM A-8

REPORT OF ASSAY

ABBOT A. HANKS, INC.

ASSAYERS, CHEMISTS, ENGINEERS
624 SACRAMENTO STREET
SAN FRANCISCO.

March 30, 1953

DEPOSITED BY R. E. Reno, Jr.,
Chief, Inspection Division
Federal Supply Service
General Services Administration
49 Fourth St., S. F. 3, California

SAMPLE OF TUNGSTEN CONCENTRATES

Labty. No.	Mark	GOLD, per ton of 2,000 lbs. Troy Ounces	GOLD, per ton of 2,000 lbs. Value @ $35.00 oz.	SILVER, per ton of 2,000 lbs. Troy Ounces	SILVER, per ton of 2,000 lbs. Value @ $	Percentages	
53538	Sample 1, Lot 4 Date Sampled:- 3-25-53 Quantity: 2100 Net Wet Weight Specifications:- P-57-R Program: DMPA Supplier: Nevada Sonora Mineros Certificate No.- 9-2227-4					Tungstic Oxide	72.81 %
						Tin	Trace
						Copper	0.02
						Arsenic	None Found
						Antimony	None Found
						Bismuth	Trace
						Molybdenum	0.33
						Phosphorus	0.14
						Sulphur	0.02
						Manganese	0.10
						Lead	0.03
						Zinc	0.02
						Iron	2.97

SIZE CLASSIFICATION: TYPE A

ABBOT A. HANKS, INC.

bob

Appendix 7

Appendix 8

CONTRACTOR: Arthur [redacted] Ferl and R. K. Abbott
ADDRESS: P.[redacted]Box 292, Redding, Calif.
CONTRACT NO:
LOT NO : 1
CERTIFICATE NO: 9-2161-1
LOCATION OF MATERIAL: Butler Rd.Whse.,So.SF,Calif.
DATE: 12/1/52

SOLD TO: GENERAL SERVICES ADMINISTRATION
630 Sansome Street
San Francisco 11, California

One lot tungsten (Type D Natural Scheelite) per weight certificate and assay report attached.

WEIGHT

Gross Weight		2424.	lbs.
Tare Weight		24.	lbs.
Net Weight		2400.	lbs.
Moisture	0.065 %	1.56	lbs.
Net dry pounds		2398.44	or 1.1992 S.D.T.

ANALYSIS

Tungsten Trioxide	(WO_3)	68.30	%
Tin	Sn	trace	%
Copper	Cu	0.02	%
Arsenic	As	trace	%
Antimony	Sb	trace	%
Bismuth	Bi	trace	%
Molybdenum	Mo	0.31	%
Phosphorus	P	0.10	%
Sulphur	S	0.05	%
Manganese	Mn	0.02	%
Lead	Pb	0.02	%
Zinc	Zn	0.01	%

Net dry pounds 2398.44 containing 68.30 % WO_3
equals 1638.1344 lbs. WO_3 or 31.9067 S.T.U. WO_3

BASIC PRICE: (60% WO_3) . . . . . $63.00 S.T.U.

PENALTIES:

	% WO_3	below 60%		20 cents	for each		%	$	
	% Sn	above		25 "	"	"	%		
	% Cu	"		25 "	"	"	%		
	% As	"		25 "	"	"	%		
	% Sb	"		25 "	"	"	%		
	% Bi	"		25 "	"	"	%		
	% Mo	"		25 "	"	"	%		
0.05	% P	"	0.05	25 "	"	"	0.01	%	1.25
	% S	"		25 "	"	"	%		
	% Mn	"		25 "	"	"	%		
	% Pb	"		25 "	"	"	%		
	% Zn	"		25 "	"	"	%		

Total Penalties . . . . . $ 1.25
Net price per short ton unit $ 61.75

31.9067 61.75

Appendix 9

CONTRACTOR: Nevada Sonora Mineros ADDRESS: Denio, Nevada
CONTRACT NO: [redacted] LOT NO : [redacted]
CERTIFICATE NO: 9-2227-1
LOCATION OF MATERIAL: GSA Whse., Butler Rd., So. San Francisco
DATE: December 30, 1952

SOLD TO: GENERAL SERVICES ADMINISTRATION
630 Sansome Street
San Francisco 11, California

One lot tungsten (Type D Natural Scheelite) per weight certificate and assay report attached.

WEIGHT

Gross Weight		2076.	lbs.
Tare Weight		21.	lbs.
Net Weight		2055.	lbs.
Moisture	0.128 %	2.6304	lbs.
Net dry pounds	2052.3696	or 1.0262	S.D.T.

ANALYSIS

Tungsten Trioxide	(WO_3)	66.55	%
Tin	Sn	Trace	%
Copper	Cu	0.01	%
Arsenic	As	None	%
Antimony	Sb	Trace	%
Bismuth	Bi	Trace	%
Molybdenum	Mo	0.18	%
Phosphorus	P	0.08	%
Sulphur	S	0.02	%
Manganese	Mn	0.12	%
Lead	Pb	0.07	%
Zinc	Zn	0.02	%

Net dry pounds 2052.3696 containing 66.55 % WO_3
equals 1365.8520 lbs. WO_3 or 68.2926 S.T.U. WO_3

BASIC PRICE: (60% WO_3) . . . . . $63.00 S.T.U.

PENALTIES:

	% WO_3	below 60%		20 cents for each			%	$	
	% Sn	above		25 " " "			%		
	% Cu	"		25 " " "			%		
	% As	"		25 " " "			%		
	% Sb	"		25 " " "			%		
	% Bi	"		25 " " "			%		
	% Mo	"		25 " " "			%		
0.03	% P	"	0.05	25 " " "		0.01	%		0.75
	% S	"		25 " " "			%		
	% Mn	"		25 " " "			%		
	% Pb	"		25 " " "			%		
	% Zn	"		25 " " "			%		

Total Penalties . . . . . $ 0.75
Net price per short ton unit $ 62.25

68.2926 S.T.U.'s X 62.25

Appendix 10

GENERAL SERVICES ADMINISTRATION
DOMESTIC TUNGSTEN PURCHASE PROGRAM
ACCEPTANCE AND INVOICE

Date 2/24/53

Certificate of Authorization Number 9-2227-3

TO Nevada Sonora Mineros
Denio, Nevada

Subject to the terms and conditions of the Tungsten Regulation establishing the Government's Purchase Program for Domestic Tungsten Concentrates in lots of one ton or more, the Government accepts 4526 pounds (wet basis) of Tungsten Concentrates (Type D natural scheelite containing 163.2808 short ton units of tungsten trioxide, delivered f. o. b. common carrier's conveyance at Toulon, Nevada, consigned to Butler Rd.Whse.,So.SF,Calif. on B/L No. CS-30035 Such material has a moisture content of 0.066% and analyses in a dry basis as follows:

	Percent		Percent
Tungsten Trioxnide (WO3)	72.20	Molybdenum (Mo)	0.34
Tin (Sn)	none	Phosphorous (P)	0.09*
Copper (Cu)	trace	Sulphur (S)	0.04
Arsenic (As)	none	Manganese (Mn)	0.15
Antimony (Sb)	none	Lead (Pb)	0.01
Bismuth (Bi)	trace	Zinc (Zn)	0.01

EVALUATION AND SETTLEMENT DATA

	Dollars
Base Price (Penalties indicated by asterisk (*)) — Per S. T. U.	63.00
Penalties	
0.04% P above 0.05%, 25 cents for each 0.01%	1.00
Total Penalties	1.00
Adjusted Base Price — Per S. T. U.	62.00

Gross Wt. 4571 Tare Wt. 45 Net Wt. 4526

Net Wet Lbs.		Moisture Content		Net Dry Lbs.		Percent WO3		Lbs. WO3		S. T. U. WO3		Adjusted Base Price		Payment
4526	−	2.9872	=	4523.0128	×	72.20	=	3265.6152	or	163.2808	×	62.00	=	10,123.41

ACCEPTANCE

Received and Accepted by General Services Administration at San Francisco, California

By (Type name)	Signature	Title
R. E. Reno, Jr.		Deputy Regional Director, RPS

For Use of Producer Only

INVOICE

To	Region Number	
General Services Administration	9	San Francisco, California

For		Dollars
Tungsten Concentrates delivered as indicated above	Total Amount Due	10,123.41

I certify that the above bill is correct and just and that payment therefor has not been received. The producer warrants that said material was mined in the continental United States.

Producer (Type name)	Date 2/24/53
By (Signature)	Title

GPO 86-361415

Form R9-281 (12/5/53)

appendix II

GENERAL SERVICES ADMINISTRATION
DOMESTIC TUNGSTEN PURCHASE PROGRAM
ACCEPTANCE AND INVOICE

Date 3/31/53

Certificate of Authorization Number 9-2227-4

TO Nevada Sonora Mineros
Reno, Nevada

Subject to the terms and conditions of the Tungsten Regulation establishing the Government's Purchase Program for Domestic Tungsten Concentrates in lots of one ton or more, the Government accepts 2100 pounds (wet basis) of Tungsten Concentrates (Type natural scheelite) containing 76.3932 short ton units of tungsten trioxide, delivered f. o. b. common carrier's conveyance at delivered to, consigned to Butler Rd.Whse., So.SF, Calif. on by vendor. Such material has a moisture content of 0.075% and analyses in a dry basis as follows:

	Percent		Percent
Tungsten Trioxnide (WO3)	72.81	Molybdenum (Mo)	0.33
Tin (Sn)	trace	Phosphorous (P)	0.11 *
Copper (Cu)	0.02	Sulphur (S)	0.02
Arsenic (As)	none	Manganese (Mn)	0.10
Antimony (Sb)	none	Lead (Pb)	0.03
Bismuth (Bi)	trace	Zinc (Zn)	0.02

EVALUATION AND SETTLEMENT DATA

	Dollars
Base Price (Penalties indicated by asterisk (*)) — Per S. T. U.	63.00
Penalties: 0.09% P above 0.05%, 25 cents for each 0.01%	2.25
Total Penalties	2.25
Adjusted Base Price — Per S. T. U.	60.75

Gross Wt. 2121 Tare Wt. 21 Net Wt. 2100

Net Wet Lbs.		Moisture Content		Net Dry Lbs.		Percent WO3		Lbs. WO3		S. T. U. WO3		Adjusted Base Price		Payment
2100	−	1.5750	=	2098.4250	×	72.81	=	1527.8632	or	76.3932	×	60.75	=	4,640.89

ACCEPTANCE

Received and Accepted by General Services Administration at San Francisco, California

By (Type name) R. E. Reno, Jr. | Signature | Title Deputy Regional Director, GPS

For Use of Producer Only

INVOICE

To General Services Administration | Region Number 9 | San Francisco, California

For Tungsten Concentrates delivered as indicated above | Total Amount Due | Dollars 4,640.89

I certify that the above bill is correct and just and that payment therefor has not been received. The producer warrants that said material was mined in the continental United States.

Producer (Type name) | Date 3/31/53

By (Signature) | Title

GPO 86-361415

Form R9-281 (12/5/52)

Appendix 12

STANDARD FORM 44
DECEMBER 1950

U. S. GOVERNMENT

PURCHASE ORDER—INVOICE—VOUCHER

D. O. VOUCHER NO.

BUREAU VOUCHER NO.

ORDER NO. No. 60813

DATE OF ORDER 12/1/52

AGENCY GENERAL SERVICES ADMINISTRATION

MAILING ADDRESS Office of the Comptroller
49 Fourth Street
San Francisco 3, Calif.

SELLER (Payee) (Print) Arthur B. Ferl and R. K. Abbott

ADDRESS (Print) P. O. Box 292, Redding, California

FURNISH TO Emergency Procurement Service, G.S.A.

ADDRESS Butler Rd. Whse., So. San Francisco, Cal.

QUANTITY	ITEM AND UNIT	UNIT PRICE	AMOUNT
81.9367	S.T.U. W03	61.75	5057.74
Tungsten concentrates (Type D ~~natural scheelite) purchased in~~ accord. with cond. and spec. given under the DTP as set forth ~~in the Fed.Reg. 5/11/54.~~ Sec. 303, Pub.Law 774, 81st Cong.			
Certificate No. 9-2161-1			

PURPOSE (Project, etc.) 53 X 4401 DMPA

TOTAL 5057.74

ORDERED BY (Signature) W. E. Burger

DISCOUNT % DAYS

The above items were received in good order except as noted below:

RECEIVED BY ARTHUR B. FERL & R. K. ABBOTT

TITLE Arthur B. Ferl

DATE

* INSTRUCTIONS TO SELLER

After insisting upon satisfactory identification of the Government Ordering Officer presenting this form, complete the portions indicated by an asterisk (*) on the Seller's Invoice. If purchase is for immediate "over-the-counter" complete delivery, return the certified Seller's Invoice to the Ordering Officer to expedite payment. If purchase is for any other type of delivery, forward certified Seller's Invoice to the agency at mailing address shown near top of form. Retain this copy for your record.

2. SELLER'S COPY OF INVOICE

Form prescribed by Administrator of General Services
C. S. A. General Regulation No. 6
Approved by Comptroller General, U. S.

U. S. GOVERNMENT PRINTING OFFICE 10—63882-1b

Appendix 13

ORIGINAL

GSA FORM 300
February 1951
(Formerly No. 52 and 52-1)
Form Approved--Budget Bureau No. 40-R101

METHOD OF PURCHASE
Indicate Method by Number
1. Federal Supply Schedule
2. Federal Supply Service stock
3. Surplus Property Transfer
4. Advertising (R. S. §3709)
5. War Powers Negotiation
6. Other Exemptions from R. S. §3709
7. Miscellaneous
(SEE FSS CIRCULAR LETTER B-69)

6.

GENERAL SERVICES ADMINISTRATION
FEDERAL SUPPLY SERVICE
49 Fourth Street
San Francisco 3, California

PURCHASE ORDER

This number must appear on all PACKAGES and PAPERS relating to this order.

ORDER NO. SF-2-D- 61646

DATE December 30, 1952

~~REQUISITION NO.~~ DATE
Certificate No. 9-2227-1

APPROPRIATION SYMBOL AND TITLE
53 X 4401 DMPA

REQUISITIONING OFFICE
SanFrancisco Supply Center

TO (SELLER)
Nevada Sonora Mineros
Denio, Nevada

CONSIGNEE AND DESTINATION (SHIP TO)
Emergency Procurement Service, G.S.A.
c/o U.S.Federal Supply ~~Center~~ Officer
Butler Road Warehouse
South San Francisco, California

INVITATION NO.

CONTRACT NO.

TIME FOR DELIVERY 12/23/52
EXPIRING

F. O. B. POINT
SHIPPING POINT Toulon, Nevada

GOV'T. B/L NO. GS-30020

DISCOUNT TERMS

ITEM NO.	ARTICLES OR SERVICES	QUANTITY	UNIT	UNIT PRICE	AMOUNT
1	Tungsten concentrates (Type D Natural Scheelite) purchased in accordance with conditions and specifications given under the Domestic Tungsten Program as set forth in the Federal Register 5/11/51. (lot 1)	68.292	STU W03	62.25	4,251.21
	Payment will be made on basis of Government assay. Transportation cost to the Government warehouse paid by GBL.				
	Sec. 303, Public Law 774, 81st Congress.				

INVOICES MUST BE EXECUTED AND CERTIFIED IN ACCORDANCE WITH INSTRUCTIONS ON REVERSE SIDE HEREOF AND FORWARDED TO:
Invoice must be executed and certified on attached Standard Form 44 and forwarded to Office of Regional Comptroller, 49 Fourth Street, San Francisco 3, California

TOTAL 4,251.21

SIGNATURE: R.E.Rene Jr.
NAME: R.E.Rene, Jr.
TITLE: Deputy Regional Director
PURCHASING AGENT
UNIT NO.:

U. S. GOVERNMENT PRINTING OFFICE: 1951-943469

appendix 14

MOLYBDENUM CORPORATION OF AMERICA

PITTSBURGH, PA.

YOUR INVOICE DATE	YOUR INVOICE AMOUNT	DEDUCTIONS MEMO.	DEDUCTIONS AMOUNT	NET AMOUNT	YOUR INVOICE DATE	YOUR INVOICE AMOUNT	DEDUCTIONS MEMO.	DEDUCTIONS AMOUNT	NET AMOUNT
8/13/42	$4,307.34								

Amount to cover funds to be credited to the account of George D. Mathewson, Denio, Oregon, covering the purchase of 74 bags of Scheelite Conc. containing 200.437 units @ $21.65 $ 4,339.46

Less: Sampling, Assaying & Drayage 32.12

$ 4,307.34

MOLYBDENUM CORPORATION OF AMERICA

PITTSBURGH, PA.

YOUR INVOICE DATE	YOUR INVOICE AMOUNT	DEDUCTIONS MEMO.	DEDUCTIONS AMOUNT	NET AMOUNT	YOUR INVOICE DATE	YOUR INVOICE AMOUNT	DEDUCTIONS MEMO.	DEDUCTIONS AMOUNT	NET AMOUNT
7/27/42	$3771.26								

Amount to cover funds to be credited to the account of Geo. D. Mathewson, Denio, Oregon, covering the purchase of 54 bags Scheelite Concentrates containing 167.609 units at $22.65 per unit -- $3,796.[illegible]

Less: Sampling, assaying, etc. -- 25.[illegible]

$3,771.[illegible]

DETACH BEFORE BANKING.

MOLYBDENUM CORPORATION OF AMERICA

PITTSBURGH, PA.

YOUR INVOICE DATE	YOUR INVOICE AMOUNT	DEDUCTIONS MEMO.	DEDUCTIONS AMOUNT	NET AMOUNT	YOUR INVOICE DATE	YOUR INVOICE AMOUNT	DEDUCTIONS MEMO.	DEDUCTIONS AMOUNT	NET AMOUNT
6/25/42	$2,814.94								

Amount of funds to be credited to the account of Geo. D. Mathewson, Denio, Oregon, covering 47 bags Scheelite Concentrates containing 4,712 lbs. at 55.80% - or 131.465 units at $21.65 per unit -- $2,846.[illegible]

Less: Sampling, assaying, etc. 31.[illegible]

$2,[illegible]

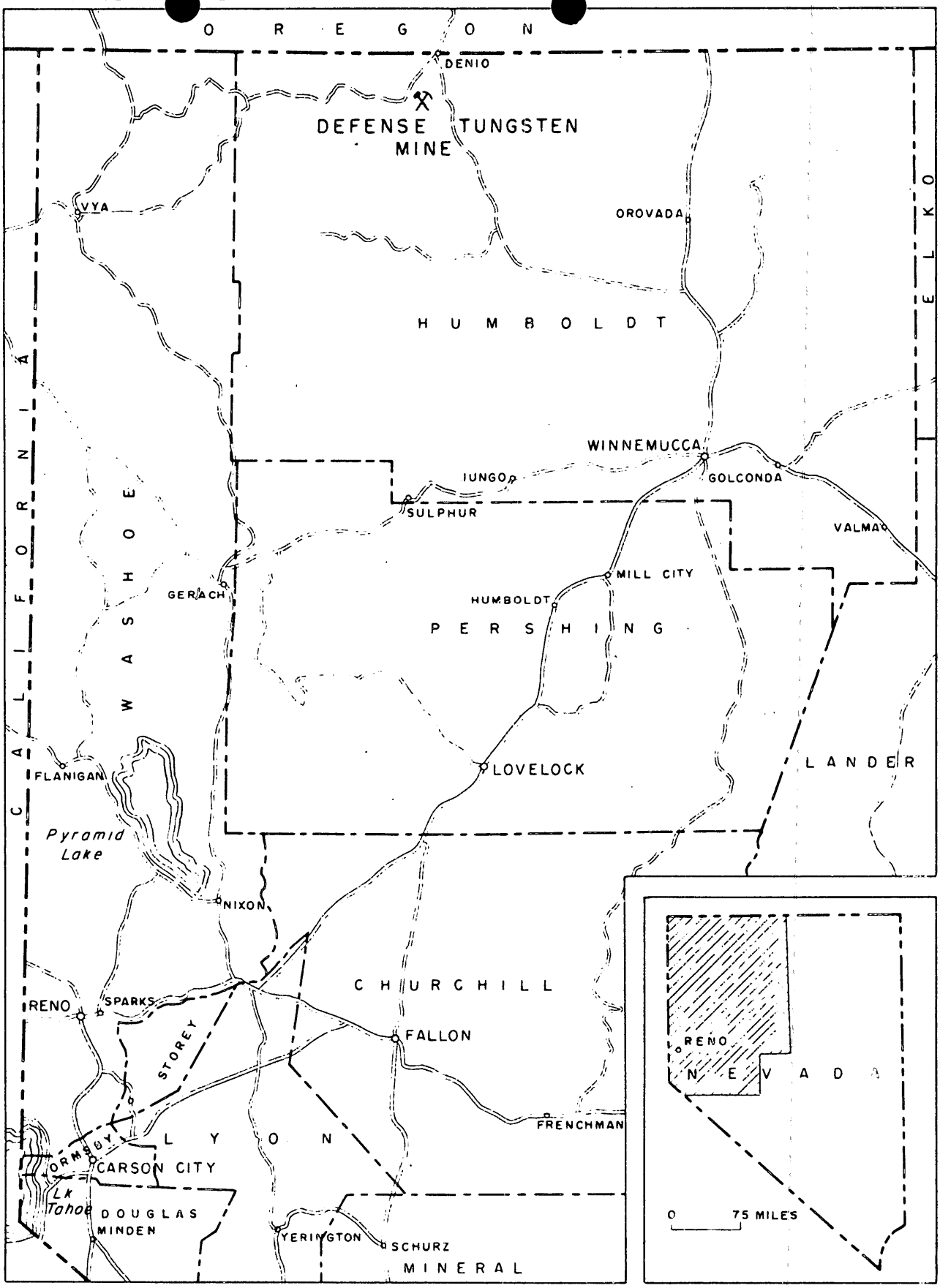


FIG. 1 INDEX MAP OF NORTH WEST NEVADA

10 0 10 20 MILES

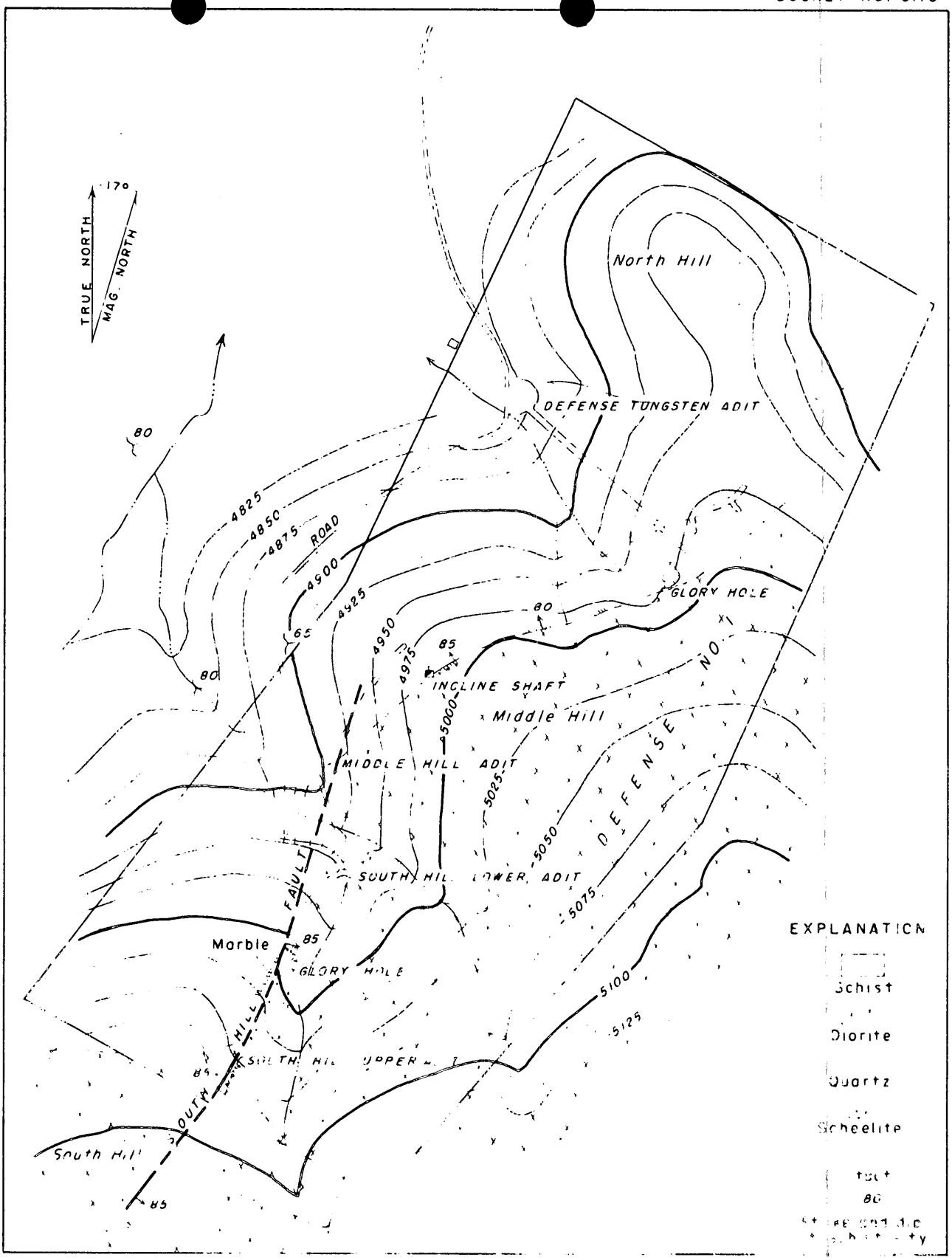
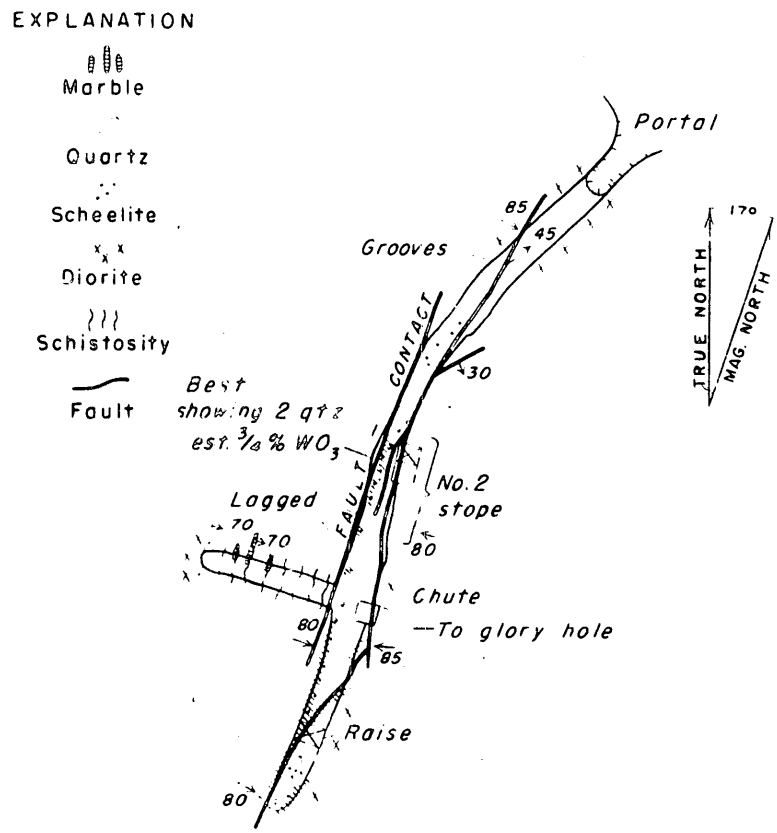


FIG. 2 GEOLOGIC MAP OF DEFENSE NO. 1 CLAIM
DEFENSE TUNGSTEN
HUMBOLDT COUNTY
100 0

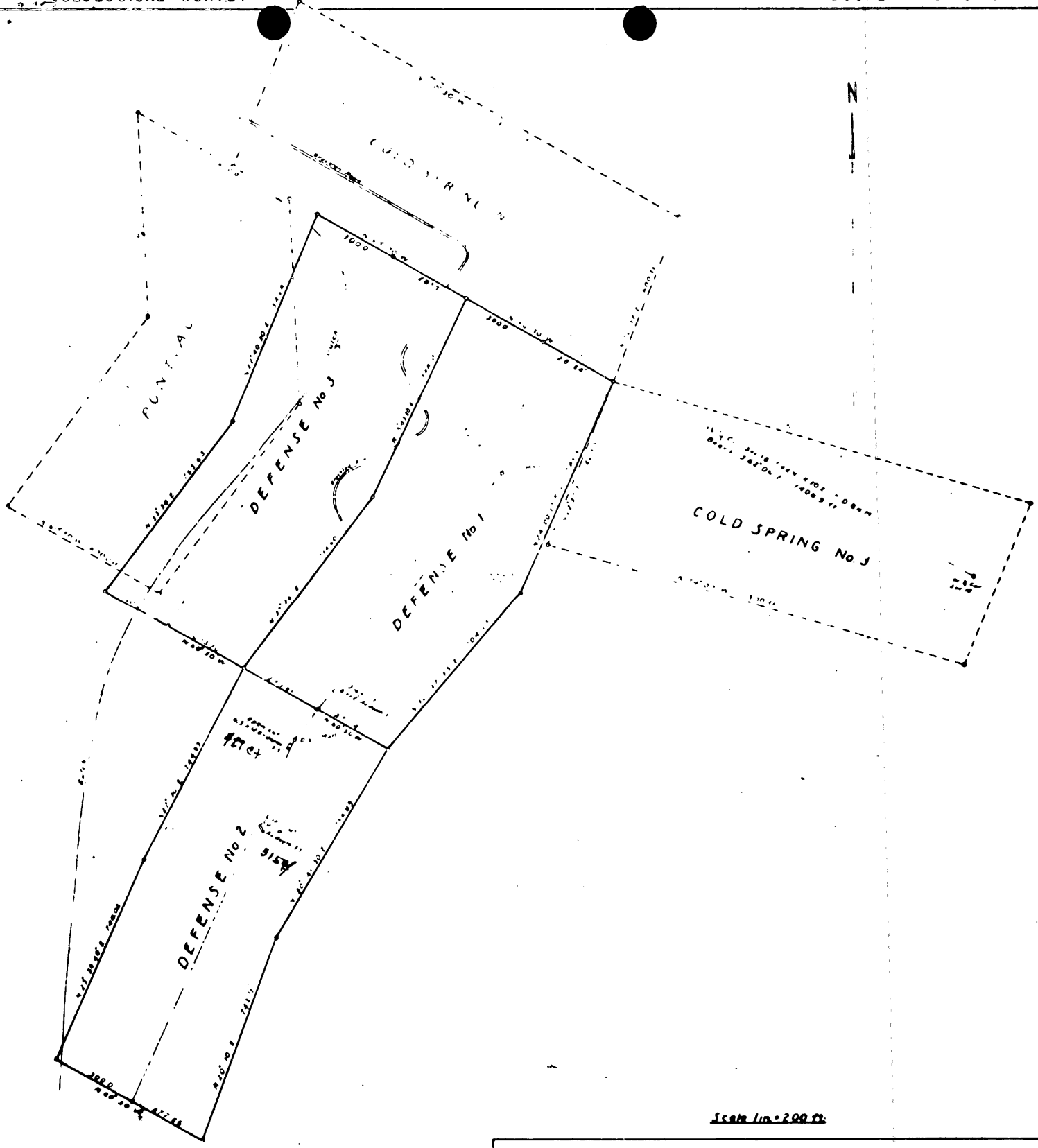


Geology by R. M. Smith
Aug. 19, 1953

F.G. 3

SOUTH HILL LOWER ADIT
DEFENSE TUNGSTEN MINE
HUMBOLDT COUNTY, NEVADA

0 10 20 30 40 FEET



DEFENSE MINERAL CLAIMS
VICKSBURG MINING DISTRICT
HUMBOLDT COUNTY, NEVADA

Survey and map by W. A. Wentz, RPE '58 - Winnemucca, Nev.
November 13, 1960

FIG. 4

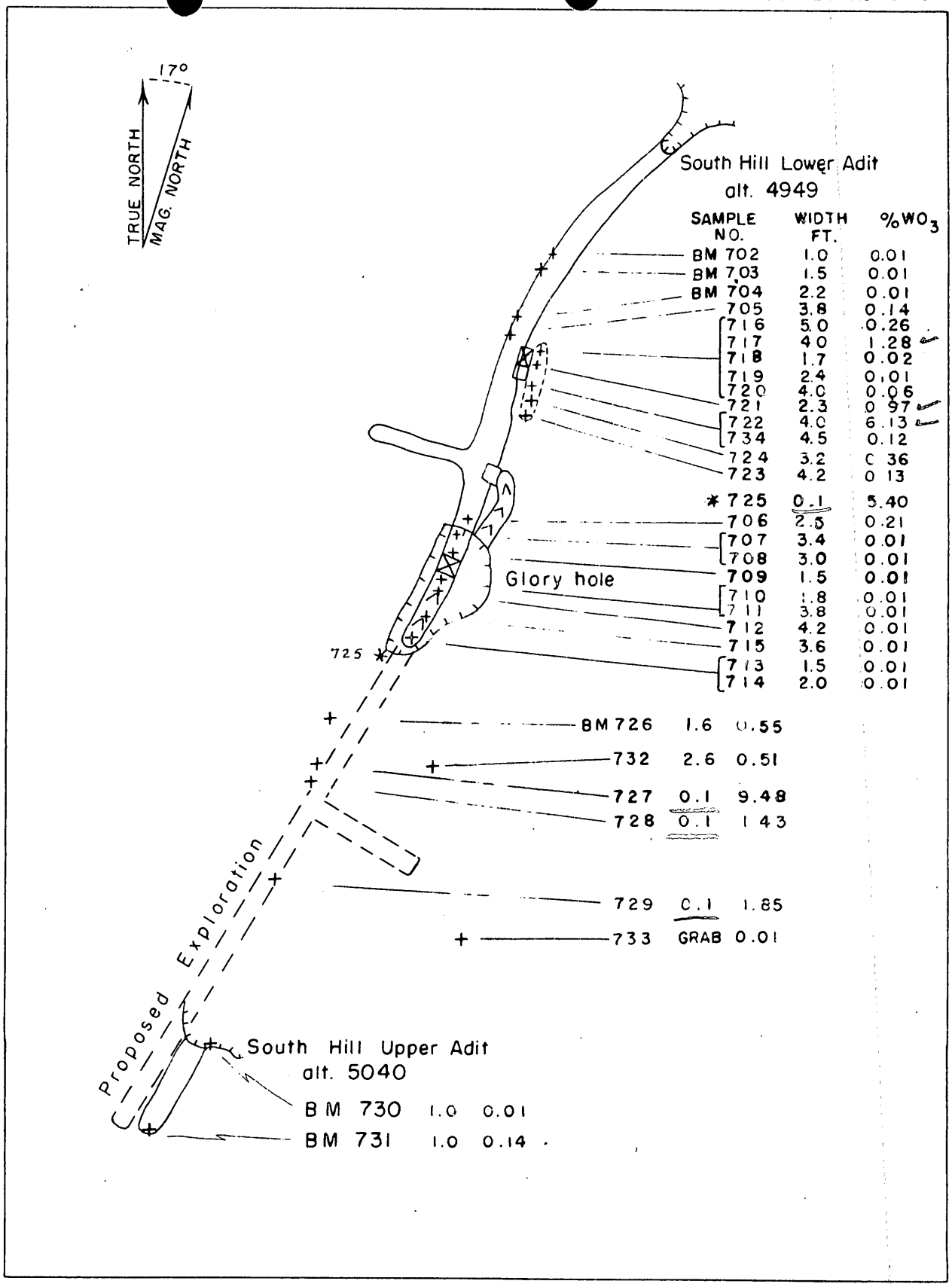


FIG. 5 PROPOSED EXPLORATION
DEFENSE TUNGSTEN MINE
HUMBOLDT COUNTY, NEVADA

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

Department of the Interior
Defense Minerals Administration
RECEIVED
JUL 20 1953

July 17, 1953

Memorandum

To: W. L. Martin
DMEA

From: Robert M. Geehan
Assistant Chief
Ferrous Metals & Alloys Branch

Subject: George Mathewson, Tungsten, DMEA 3110
Defense Tungsten Mine
Humboldt County, Nevada

The subject application refers to production of tungsten concentrates valued at $35,000 by lessees during 1952 and 1953. Mr. Mathewson did not return a Bureau of Mines form sent to him requesting data on 1952 production, and the Bureau file, which includes GSA records, does not include any item that can be identified as production from this deposit. I suggest a letter requesting the names of the lessees.

Item 6 regarding costs is not clear, particularly items 6-a and 6-d.

These factors should be cleared up by letter before requesting an examination by the Field Team.

Robert M. Geehan

RMGeehan:be

Copy to: Mr. Geehan
DMEA (3) ✓
Ferrous Metals
Files

FILE COPY
SURNAME:

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

Martin
Geehan
Selfridge
Hedges
Lamarsday

Mr. H. C. Miller, Executive Officer
DMEA Field Team, Region III
1012 Flood Bldg.
870 Market St.
San Francisco 2, California

Re: Docket No. DMEA 3110 - Tungsten
George Mathewson
Claim No. 1, Defence Tungsten Mine
Humboldt County, Nevada

Dear Mr. Miller:

By our letter of July 23, the subject application was referred to your office for a field examination of the property.

Enclosed are two copies of a memorandum by R. W. Geehan, Bureau of Mines, received in DMEA subsequent to our letter of July 23 with which Mr. Geehan concurred, but written and dated prior to our above letter.

Sincerely yours,

George C. Selfridge
Chairman, Operating Committee (SHB)

Enclosures

WSMartin/jh
7/23/53
MDA 7.27.53

APPROVED:

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

s/D. M. Larrabee
Member, Geological Survey (SHB)

cc. to: Docket
Adm. Reading File
Oper. Comm.
Code 400
R. W. Geehan,
D. M. Lemmon
DMEA Field Team, Region III

FILE COPY
Surname:

RLC
Martin
Gehan
Selfridge
Kingman

UNITED STATES
DEPARTMENT OF THE INTERIOR
OFFICE OF THE SECRETARY
WASHINGTON 25, D. C.

JUL 23 1953

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

Re: Docket No. 3110 - Tungsten
George Mathewson
Claim No. 1, Defence Tungsten Mine
Humboldt County, Nevada.

Dear Mr. Miller:

Reference is made to the subject application for exploration assistance which is being referred to your office for a field examination of the property.

In reviewing the application, the following points were noted which should be discussed with the applicant if a project is recommended:

In Item 7, Applicant advises that part of his pro-rata expenses would be covered by use of equipment. In Item 6 (d) the equipment is charged on a rental basis. If it belongs to the Operator, only a depreciation charge will be allowable.

A memorandum by D. M. Lemmon, U. S. Geological Survey has been prepared and is enclosed for your information.

Sincerely yours,

George C. Selfridge

Chairman, Operating Committee (216)
TLChapman/jh
7/21/53
cc. to: Docket
Field Team, Region III
Code 400 (2)
Oper. Comm.
Adm. Reading File
D. M. Lemmon, USGS-R. W. Geehan, USBM

Enclosure

APPROVED:

A. H. Kinney (213)
Member, Geological Survey

A. H. Hedges
Member, Bureau of Mines (215)

R.C.G.
7-23-53

FILE COPY
Surname:

UNITED STATES
DEPARTMENT OF THE INTERIOR
OFFICE OF THE SECRETARY
WASHINGTON 25, D. C.

RLC
Martin
Burns
Parker
Hedges
Stillinger
Johnson

JUL 23 1953

Mr. George Mathewson
Denio, Nevada

Re: Docket No. 3110 - Tungsten
Claim No. 1, Defense Tungsten Mine
Pine Forest Mountains
Humboldt County, Nevada

Dear Mr. Mathewson:

This will acknowledge receipt of your application for assistance in exploring for tungsten at the above-noted property. The application has been carefully reviewed by the Iron and Ferro-Alloys Division of the Defense Minerals Exploration Administration, and is being referred to Mr. H. G. Wilber, Executive Officer, DMEA Field Team, Region III, 1011 Flood Building, 870 Market Street, San Francisco 2, California, for a field examination of the Defense Tungsten Mine.

The Regional Office will contact you with regard to an examination of your property. Any assistance that you can render the members of the Field Team during the examination will be appreciated.

Sincerely yours,

C. O. Mittendorf (for)

Administrator

TLChapman:jh
7/21/53
cc. to: Docket
F. T. Region III (2)
Code 400 (2)
Oper. Comm.
Adm. Reading File
D. M. Lemmon USGS
R. W. Geehan USBM

R.C.G.
7-23-53

Docket

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
JUL 20 1953

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

July 17, 1953

Memorandum

To: W. S. Martin
DMEA

From: Robert W. Geehan
Assistant Chief
Ferrous Metals & Alloys Branch

Subject: George Mathewson, Tungsten, DMEA 3110
Defense Tungsten Mine
Humboldt County, Nevada

The subject application refers to production of tungsten concentrates valued at $35,000 by leasers during 1952 and 1953. Mr. Mathewson did not return a Bureau of Mines form sent to him requesting data on 1952 production, and the Bureau file, which includes GSA records, does not include any item that can be identified as production from this deposit. I suggest a letter requesting the names of the leasers.

Item 6 regarding costs is not clear, particularly items 6-a and 6-d.

These factors should be cleared up by letter before requesting an examination by the Field Team.

Robert W. Geehan
Robert W. Geehan

Received 7/22 in Code 400

Copy retained 400

Docket

IN REPLY REFER TO:

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

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
JUL 17 1953

MEMORANDUM

July 16, 1953

TO: W. S. Martin, DMEA

WSM

FROM: D. M. Lemmon, USGS

SUBJECT: Exploration application
George Mathewson
Defense Mine
Pine Forest Mountains, Nevada

DMEA 3110

The applicant proposes to extend a drift 400 feet along a contact between granite and metamorphic rocks, then to drive a 300-foot crosscut adit to the contact at a level 100 feet deeper. No maps are submitted.

The Geological Survey examined the Defense mine in April 1943. At that time the workings consisted of a short adit and open stope within 15 feet of the surface, a 25-foot winze and drift in ore, and a 285-foot adit that reached the ore zone at a vertical depth of 120 feet. On the adit level, drifts extended 100 feet along the contact. It is from this adit level that work is now planned; the application states that 1,400 tons of ore were mined by lessees between October 1, 1952 and May 10, 1953.

The ore is tactite localized at a bend in a contact between granite and metamorphic rocks. The length of ore is 25 feet at the surface and 85 feet within a few feet downward. The exposed length in the adit was 75 feet. The width of ore was 2 to 20 feet and the content of WO_3 was 0.5 to 2.0 percent. Production in 1942-44 was approximately 2,600 units of WO_3 from more than 3,000 tons of ore. Less than .87

Although the contact is not well-exposed, other ore shoots are probably not present at the surface, for no substantial amounts of float are found. At a point 500 feet southwest of the main ore body, scheelite-bearing tactite one foot wide is found in a trench across the contact. A little scheelite occurs in a quartz vein 1,200 feet south of the adit, but the average grade of the 5-foot vein is only a few tenths of a percent of WO_3.

I suggest that this application be referred to the Field Team for information about recent works done at the mine and for recommendations.

D. M. Lemmon

D. M. Lemmon

cc: Martin (3)

Copy retained 400

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

July 6, 1953

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 received from Region III

DMEA -3110 - George Mathewson.

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

38226

July 6, 1953

Mr. George Mathewson
Denio,
Nevada

Subject: DMEA-3110
Re: Exploration Assistance

My dear Mr. Mathewson:

The receipt of your application dated June 25, 1953, for exploration assistance under the Defense Production Act of 1950, as amended, is hereby acknowledged.

Your application has been assigned Docket Number DMEA-3110 and referred to the Iron and Ferro-Alloys Division.

Kindly refer to DMEA-3110 in any future correspondence relating to your application.

Sincerely yours,

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

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

Office of
Executive Officer
DMEA Field Team
Region III

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

June 29, 1953

Memorandum

To: Defense Minerals Exploration Administration,
Interior Building, Washington 25, D. C.

From: Executive Officer, DMEA Field Team, Region III

Subject: Loan Application Forms MF-103 - Tungsten
George Mathewson, Denio, Nevada
Defense Tungsten, Humboldt County, Nevada

Attached are three sets of MF-103 forms received in this office today from George Mathewson. The fourth set has been retained for our files.

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

Attachment

MF-103
(Revised April 1952)

UNITED STATES DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION

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

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

Not to be filled in by applicant

Docket No. DMEA-3110
Metal or Mineral
Date Received 7/3/53
Estimated Cost
Participation (Government %)

INSTRUCTIONS

1. *Name of applicant.*—(*a*) State here your full legal name, in the form in which you will wish to contract, and your mailing address:

George Mathewson
Denio, Nevada

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

(*c*) If a corporation, add to above statement, titles, names and addresses of officers.

(*d*) If a partnership, add to the above statement the names and addresses of all partners.

2. *General.*—Read DMEA Order 1, "Government Aid in Defense Exploration Projects," before completing this application. Submit this application and all accompanying papers in quadruplicate (four copies), with your name and address on each sheet of the application and on all accompanying papers. Where sufficient space is not provided on the form for all required information, state it on an accompanying paper, with a reference in each case to the instruction to which it refers by number. Comply with all applicable instructions; or, if not applicable, so state. File the application with Defense Minerals Exploration Administration, Department of the Interior, Washington 25, D. C., or with the nearest field executive officer thereof.

3. *Applicant's property rights.*—(*a*) State the legal description of the land upon which you wish to explore, including all land which you possess or control that may be benefited by the exploration, and excluding any land or interest in land which is not to be included in the exploration project contract

Number 1 claim of Defence Tungsten Mine.

(*b*) State any mine name by which the property is known. Defence Tungsten

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

Owner

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

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

(*f*) If the land consists of unpatented claims, add to the description above, the book and page numbers for each recorded location notice. Book A2, Page 505, Humboldt County, Nevada

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

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

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

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

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

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

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

(*c*) The work will start within 30 days and be completed within 12 months from the date of an exploration project contract.

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

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

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

(*b*) *Labor, supervision, consultants.*—Include an itemized schedule of numbers, classes and rates of wages, salaries or fees for necessary labor, supervision and engineering and geological consultants.

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

(*d*) *Operating equipment.*—Furnish an itemized list of any operating equipment to be rented, purchased, or which is owned and will be furnished by the Operator, with the estimated rental, purchase price, or suggested use-allowance based on present value, as the case may be.

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

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

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

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

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

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

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

☐ Money ☒ Use of equipment owned by you ☒ Other services Rendered & Camp facilities

Explain in detail on acompanying paper.

CERTIFICATION

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

Dated June 25, 1953

Individual
(Applicant)

By George D. Mathewson

Denio

Nevada

Title 18, U. S. Code (Crimes), Section 1001, makes it a criminal offense to make a willfully false statement or representation to any department or agency of the United States as to any matter within its jurisdiction.

U. S. GOVERNMENT PRINTING OFFICE 16—66551-1

ADDITIONAL INFORMATION FOR FORM MF-103 FILED BY GEORGE D. MATHEWSON.

Item 4. An adit is run on the vein 100 feet. At 75 feet back a raise was run to the surface and 1400 tons of ore was milled from the raise and the surface directly above which produced $35,000.00 worth of tungsten concentrates, which was sold to the G.S.A. at San Francisco, California. Workings are open for inspection.

(b) This work was done by leasers between October 1, 1952, and May 10, 1953.

(c) The vein runs in a northerly and southerly direction for a distance of 1200 feet in a granite and lime contact. The ore is a soft material of limenite and garnet with sheelite stringer running through and is approximately 15 feet wide where the proposed work is to be done.

I believe another 400 feet in the present adit will prove there is a mine there, which would justify the proposed 300 feet of crosscut tunnel at a lower level and furnish an additional 100 feet of backs.

(d) There are good roads to the mine. The ore can be milled at the Ashdown Mill three miles from mine.

Camp facilities can be arranged there also. Concentrates can be hauled to Winnemucca, Nevada (110 miles) to railroad or trucked direct to San Francisco.

(e) Some supplys are available at Denio, Nevada, 10 miles from mine. Timbers would come from Cedarville, California, approximately 100 miles. Water for camp is from springs 2½ miles pipe line and there is also a pumping plant to be used if needed. Power is gasoline and oil engines.

Item 5.
(b) The proposed work would be the present adit continued back another 400 feet and a cross cut tunnel at a lower level of 300 feet to cut the vein which would give another 100 feet of backs.

An ore bin of 100 ton capacity should be built at the mine for storage purposes.

(d) The applicant has been a mine operator at various times for the past 40 years and will supervise the operations.

Item 6. Estimate of costs 700 feet of tunnel at $1500.00 a foot, labor at $10.00 a foot: $7000.00.
Timbers: 2800 lineal feet of 6 x 6 : $420.00.
24,000 feet of 2 z 12 lagging: $1440.00
700 feet 2 in. air pipe: $350.00
1500 feet of mine rail, at $80.00 ton: $320.00.
Powder caps and fuse: $300.00.

(b) All classes of mine labor to be considered in the $10.00 allowed per foot other than the superfisors. His allowance, of $400.00 per month, would be $1600.00 for an estimated 4 months.

(c) Power. Gasoline compressor and truck for transportation to and from work and various other uses.

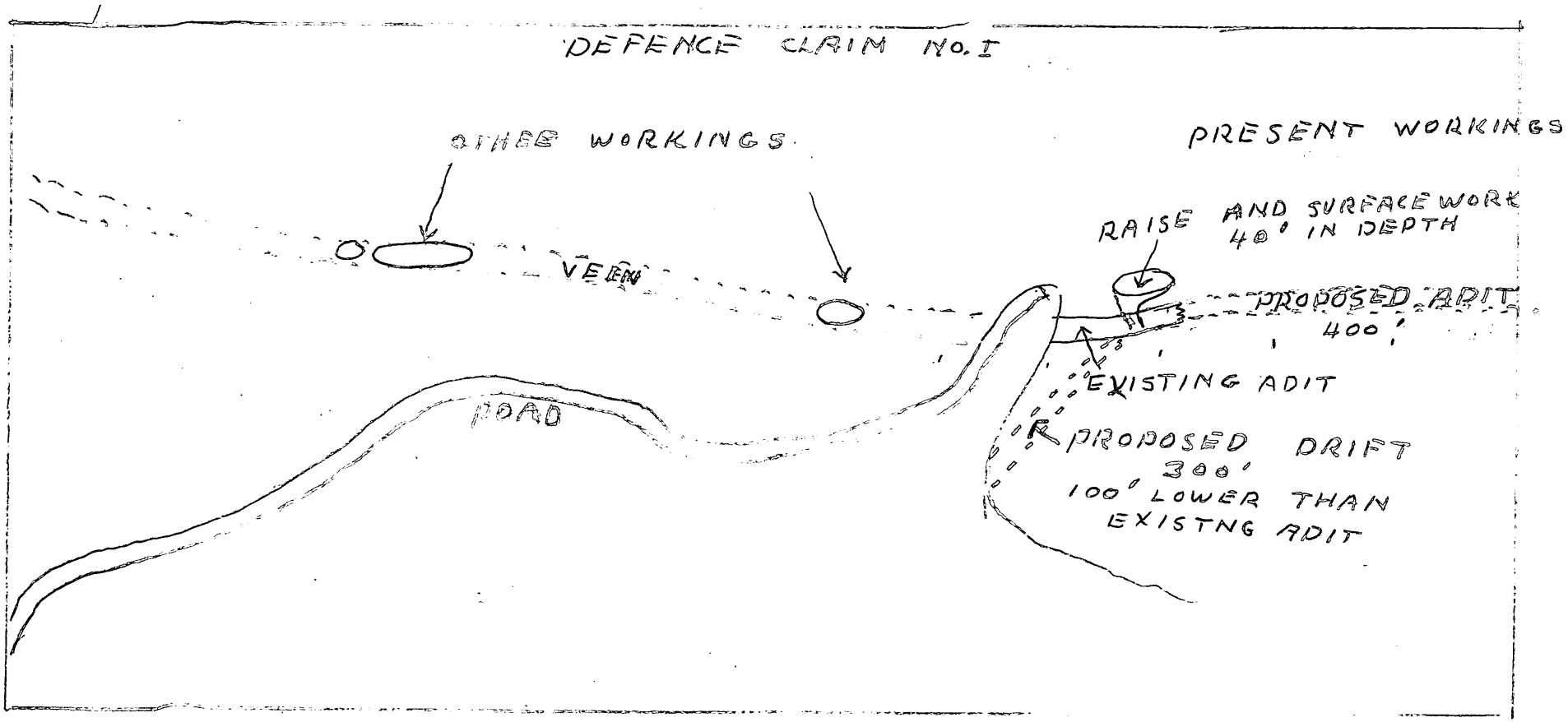
Gasoline for compressor, 120 shifts 5 gals. each:	$306.25
Gasoline for truck, 5 gals. per day:	200.00
Oil for compressor truck and ect.	200.00
Drill steel, bits, picks, shovels, etc.	150.00

(d) Compressor, jack hammers, hoses, mine cars, tugger, at a rental of $20.00 per day for estimated use of 120 days: 2400.00

Various other uses at $10.00 per day: 1200.00

(g) Miscellaneous. It is estimated that an allowance for this item for the various things should be at least $2000.00.

Item 7. My prorata of the project would be covered by the use of equipment and services rendered a camp facilities furnished.


DEFENCE CLAIM NO. I
OTHER WORKINGS
PRESENT WORKINGS
RAISE AND SURFACE WORK 40' IN DEPTH
VEIN
PROPOSED ADIT 400'
EXISTING ADIT
ROAD
PROPOSED DRIFT 300' 100' LOWER THAN EXISTNG ADIT

DMEA-3110

VICKSBURG CONSOLIDATED MINES
HUMBOLDT CO., NEVADA

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Operating Committee
Defense Minerals Exploration Administration
Department of the Interior
Washington 25, D. C.