400

AUG 22 1956

Mr. A. A. Knowles
Box 87
Mountain City, Nevada

Re: Docket No. DMEA-4114, Tungsten
A. A., George G., and
Edward A. Knowles
Garnet Claims
Elko County, Nevada

Dear Mr. Knowles:

Reference is made to your letter of August 15, 1956, notifying the DMEA Field Team, Region II, that a contract for exploration of the subject property had been signed with the Union Carbide Company.

We are accepting this same information as your request for withdrawal of your application to DMEA for exploration assistance, and we are closing our docket in the matter accordingly.

Your interest in the DMEA's exploration program is appreciated.

Sincerely yours,

C. O. Mittendorf

Administrator

cc: Docket
Code 400
Adm. Read. File
T. Kiilsgaard, USGS
R. W. Geehan, USBM
FT, Reg. 2

WSMartin/ls
8/21/56

DRAFT

Mr. Knowles

Re: Docket No. DMEA 4114, Tungsten
etc.

Reference is made to your notif~~ication~~ying ~~to~~ the DMEA Field Team, Region II, ~~on~~ letter of August 15, 1956, that a contract for the exploration of the subject property had been signed with the Union Carbide Company.

We ~~shall, therefore,~~ are ~~consider~~ accepting this same information as your request for withdrawal of your application to DMEA for exploration assistance, and we are closing our docket in the matter accordingly.

~~We thank you for~~ Your interest in the DMEA's exploration program is appreciated.

Sincerely yours,

Administrator

I don't like use of word "ultimately", but we can try that the way it is.

LS Please note necessary change in Memo.

August 17, 1956

MEMORANDUM

To: Chief, Operations Control & Statistics Division

From: Chief, Iron and Ferro-Alloys Division

Subject: Withdrawal of application
Docket No. DMEA-4114, Tungsten
A. A., George, and Edward A. Knowles
Garnet Tungsten Claims
Elko County, Nevada

By letter of March 20, 1956, the Field Team notified the applicant that it did not regard more exploration by means of drifting and crosscutting as justified, but asked whether the applicant would be interested in performing a moderate amount of diamond drilling to further delineate ore bodies Nos. 2 and 3.

No reply was received to the above-cited letter, and on April 3 a follow-up, containing a 30-day ultimatum, was sent to the applicant by the Field Team.

On May 7 the applicant notified the Field Team that an attempt was being made to sell the property, and requested that action be held in abeyance until this matter was resolved.

By letter of August 15, the applicant notified the Field Team that a contract had been signed with Union Carbide Company, giving that company authority to further explore the property. Since the applicant does not now have operating control of the property, it is recommended that we consider the application as having been withdrawn without prejudice.

The docket is sent you herewith to be placed in the inactive files.

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

Attachment
cc: Docket
Code 400
Adm. Read. File

LScott/ls 8/17/56

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

400

1605 Evans Avenue
Reno, Nevada

Aug. 15, 1956

Copy retained 400

Memorandum

To: Operating Committee, DMEA, Interior Bldg.
Washington, D. C.

From: Executive Officer, DMEA Field Team, Reg. II

Subject: Docket No. DMEA-4114 (Tungsten)
A. A., George, and Edward A. Knowles
Garnet Tungsten Claims
Elko County, Nevada

I have received a letter from Mr. A. A. Knowles, dated August 15, 1956, in which he informs us that he has signed a contract with the Union Carbide Company giving that Company until January 1, 1957 to further explore subject property. Work currently consists of trenching and preparation for diamond drilling.

I assume that this docket can be considered closed as far as the DMEA is concerned.

Very truly yours,

S. Ricker
Executive Officer
DMEA Field Team, Reg. II

RECEIVED
AUG 17 1956

400

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

RECEIVED
MAY 11 1956

1605 Evans Avenue
Reno, Nevada

May 9, 1956

Memorandum

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

From: Executive Officer, DMEA Field Team, Region II

Subject: Docket No. DMEA-4114 (Tungsten)
A.A., George, and Edward A. Knowles
Garnet Tungsten Claims
Elko County, Nevada

For your information we are attaching four copies of a letter from A. A. Knowles in reply to my letter of May 3, 1956 relative to above subject docket.

S. Ricker

Attach.

SRicker:gh
cc: R. M. Smith
Finance Off., Reg. II
Geo. Mavor
File

COPY

RECEIVED
MAY 11 1956

May 7, 1956

Dear Mr. Ricker: Re: Docket No. DMEA-4114
Tungsten

We received your letter of inquiry as to why we have not made application for diamond drilling on our Garnet Tungsten claims.

We have a deal on in regard to sale of this property and thought we would have a different answer to send you by this time but haven't yet. These people are not depending on present price holding up. They are in position to keep it for a reserve which as you know is only practical way now. We should know which way we will go any day now and will drop you a line then. Thanks for taking care of this.

Sincerely,

/s/ A. A. Knowles

400

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

RECEIVED
MAY 7 - 1956

1605 Evans Avenue
Reno, Nevada

May 3, 1956

Mr. A. A. Knowles
Box 87
Mountain City, Nevada

Re: Docket No. DMEA-4114 (Tungsten)
A. A., George, and Edward A. Knowles
Garnet Tungsten Claims
Elko County, Nevada

Dear Mr. Knowles:

Reference is made to our letter of March 20, 1956 relative to a suggested DMEA exploration project consisting of diamond drilling on above cited property.

If we do not receive a reply to our letter within 30 days, we will assume that a diamond drilling program does not meet with your approval and will place your application in our inactive files.

Very truly yours,

S. Ricker
Executive Officer
DMEA Field Team, Region II

SRicker:gh
cc: Opr. Com., DMEA, Wash. DC.
Finance Off., Reg. II
Geo. Mavor
R. M. Smith
File

Code 400

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

RECEIVED
MAR 22 1956

1605 Evans Avenue
Reno, Nevada

March 20, 1956

Copy retained 400

Mr. A. A. Knowles
Box 87
Mountain City, Nevada

Re: Docket No. DMEA-4114 (Tungsten)
A. A., George G., and Edward A. Knowles
Garnet Claims
Elko County, Nevada

Dear Mr. Knowles:

The subject of additional DMEA exploration assistance on referenced property has been discussed with our engineers and our Washington office.

It is the consensus that the expense of more exploration by means of drifting and crosscutting is not justified on the Garnet claims, but that a moderate amount of diamond drilling to further delineate the No. 2 and No. 3 ore bodies is warranted.

If a project of this suggested type meets with your approval, please inform us at your earliest convenience so that we can make our recommendation to Washington.

Very truly yours,

S. Ricker
Executive Officer
DMEA Field Team, Region II

SRicker:gh
cc: Opr. Com., DMEA, Wash., D.C.
Finance Off., Reg. II
Geo. Mavor
R. M. Smith
File

FEB 13 1956

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

Re: Docket No. DMEA 4114 - Tungsten
A. A., George G., and
Edward A. Knowles
Garnet Claims
Elko County, Nevada

Dear Mr. Ricker:

Reference is made to the above-subject docket, also to the Final Report of the Field Team, dated December 16, 1955, on Docket No. DMEA-2820, Knowles Brothers.

Attached are copies of memoranda, dated January 11 and February 1, 1956, by Ned E. Nelson, Geological Survey, and memoranda dated January 11 and January 25, by R. W. Holliday, Bureau of Mines.

Mr. Nelson's and Mr. Holliday's earlier memoranda, written prior to receipt of the Field Team report, both recommended referral of the subject application to the Field Team, noting that the Field Team Final Report had not yet been received.

Mr. Holliday in his second memorandum used ore reserve figures from the Final Field Team report, quoted an excerpt from the report that "Further exploration will probably discover additional ore . . . . and would be required to more definitely determine the grade," and then repeated his recommendation for referral of the application to the Field Team.

Mr. Nelson, in his memorandum dated February 1, written after receipt of the Field Team Final Report, stated that acceptance of this application would seem to depend on probable demand and probable price (for tungsten). If additions to the reserve were not desired, he concurred that further participation by the Government in exploration costs is not recommended.

The Field Team in its Final Report on Docket No. DMEA-2820 stated: "Further exploration will probably discover additional ore -- and would be required to more definitely determine the grade, but is not essential at this time. Further participation by the Government in exploration costs is not recommended."

We cannot, under Section 2(a) of DMEA Order-1, amended, obligate Government funds to block out ore, but in this case it seems to us that not enough work has been done to give a reasonable delineation of ore bodies Numbers 2 and 3. We believe a few more drill holes at least 200 feet deep (as recommended by Lemmon's memo of March 11, 1953) on 75- or 100-foot centers would be warranted.

We shall appreciate your comments and any information you can give us about the Operator's probable reaction to the foregoing proposal. We note that the application gave incomplete cost and no footage for the adits proposed by the applicant.

Sincerely yours,

George C. Selfridge

Chairman, Operating Committee

Enclosures

APPROVED:

/s/ Robert W. Geehan

Member, Bureau of Mines

Thor H. Kiilsgaard

Member, Geological Survey

cc: Docket
Code 400
Oper. Committee
Adm. Read. File
Thor Kiilsgaard, USGS
Robt. Holliday, USBM
Field Team, Region 2

SPHolt/ls
2/3/56

The Field Team in its Final Report on Docket DMEA-2820 stated: "Further exploration will probably discover additional ore -- and would be required to more definitely determine the grade, but is not essential at this time. Further participation by the Government in exploration costs is not recommended."

We cannot, under Section 2 (a) of DMEA Order-1, amended, obligate Government funds to block out ore, but in this case it seems to us that not enough work has been done to give a reasonable delineation of ore bodies Numbers 2 and 3. We believe a few more drill holes, at least 200 feet deep, (as recommended by Lemmon's memo of March 11, 1953), on 75-or 100-foot centers, would be warranted.

We would appreciate your comments and any information you can give us about the Operator's probable reaction to the foregoing proposal. We note that the application gave ~~no~~ incomplete costs ~~or~~ and no footage for an adits ~~as a possible~~ alternative.

Chairman, Operating Committee

Enclosures

APPROVED:

Member, Bureau of Mines

Member, Geological Survey

SPH ✓
2.8.56

DEFENSE MINERALS ADMINISTRATION

97023

PRODUCTION EXPANSION DIVISION

PROCUREMENT APPLICATIONS

Name of Company and Address _____

Name of Mine and Location _____

Docket No. DMA - _____ Date received by P.E.D. _____

Metals or Minerals involved _____

Length of Contract (preproduction plus production) _____

Amount of Metals or Minerals in tons, units or pounds _____

Floor price or Guaranteed price and whether or not escalated _____

Maximum Government Commitment _____

Comments on Contract: _____

_____

_____

_____

_____

_____

Date sent to Legal Division _____

Date of Recommendation to D.P.A. for Certification _____

Date Certification sent to G.S.A. by D.P.A. _____

Date signed into Contract by G.S.A. _____

Additional Remarks: _____

_____

_____

_____

_____

NOTE: If application is denied, or if it is recommended for change into exploration, etc., please state under additional remarks.

Interior—Duplicating Section, Washington, D. C.

Signed _____

IN REPLY REFER TO:

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

4W

RECEIVED
FEB - 2 1956

February 1, 1956

Re: DMEA-4114
Knowles Brothers
Garnet Tungsten Group
Elko County, Nevada
Tungsten

Memorandum

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

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

Subject: Supplemental review of application.

A review dated January 11, 1956, of the application considered the results of work done under Stage I and part of Stage II work. The receipt of a Final Report makes possible this supplemental review.

The ore reserves of the property as estimated for the Final Report are:

	Tons		
	No. 1 lens	No. 2 and 3 lens	Total
Measured ore	90,000		
Indicated ore	270,000	45,000	315,000
Inferred ore	240,000	135,000	375,000
Total all classes	600,000	180,000	780,000

Estimated grade of all classes of ore is 0.3 to 0.5 percent WO_3. By selective mining, a moderate tonnage of 0.50 to 1.00 percent WO_3 ore could be produced.

The gross WO_3 reserve, assuming average grades, is:

Average grade	Units
0.3%	200,000
0.4%	240,000
0.5%	300,000

No. 1 ore body is known to extend down dip 300 feet and a further extension to a depth of 500 feet is drill indicated. In the

above estimate ore bodies 2 and 3 are assigned dip lengths of only 100 feet. The tonnage estimate I consider conservative. As shown by the 'spread', 0.3% to 0.5% WO_3, the grade estimate is less definite.

A significant addition to the tungsten reserves has been made, and not a little learned concerning the behavior of one ore body in depth. Whether or not the application for assistance in doing depth work on ore bodies 2 and 3 should be accepted would seem to depend on two projections (a) probable demand and (b) probable price. Further work should be expected to make large additions to the reserves.

If such additions are not desired the recommendation of the examiners that the Government should not participate in further exploration work is well taken. I concur with that recommendation.

W. E. Nelson

W. E. Nelson

WENelson:jeh
2/1/56
cc: Director's reading 4212
Branch reading 4212
MMA (3)
Docket file
R. Holliday, 3513

400

Copy retained 400 January 25, 1956

Memorandum

To: Chief, Iron & Ferroalloys Division-DMEA
Through: Chief, Branch of Ferrous Metals & Ferroalloys

From: Commodity Specialist-Tungsten

Subject: Review of Application
Docket No. DMEA-4114
Review of Final Report,
DMEA-2820
Garnet Tungsten Group
Elko County, Nevada
Knowles Bros.

Subject application for assistance (DMEA4114) is in effect a request for extension of the recently completed contract (Docket - 2820). Final report of DMEA 2820 lists reserves of measured, indicated and inferred ore totaling 780,000 tons-estimated at 0.3 to 0.5 percent WO_3.

The field team report states that "Further exploration will probably discover additional ore..... and would be required to more definitely determine the grade."

It is recommended that the application (DMEA-4114) be referred to the field team to determine the best method of exploration.

R. W. Holliday

RWHolliday/tra

Copy to: Mr. Geehan
Mr. Holliday
Docket No. DMEA 4114 Files
F I L E S

40C

IN REPLY REFER TO:

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

RECEIVED
JAN 16 1956

January 11, 1956

Re: DMEA 4114
Knowles Bros.
Garnet Tungsten Group
Elko County, Nevada
Tungsten

Memorandum

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

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

Subject: Review of application.

The referenced property has been the subject of considerable work by the owners and under a DMEA contract, Idm-E556 (2820), transmitted June 25, 1953, and later amended. The contract provided for a 2-stage work program.

The first stage work, completed about May 1954, consisted of 64 hours of bulldozing and 770 feet of diamond drilling. The examiners concluded the work had closely determined the northwestern limits of the tactite body and indicated the location of the highest grade part of the No. 1 ore body, the lowest in altitude of 3 ore bodies.

A Final Field Team report was submitted under date of May 7, 1954. All work done to that time had indicated approximately 255,000 tons of scheelite ore, with an average grade of 0.31% WO_3, of which 50,000 tons show an average of 0.50%. The Field Team recommended that a certificate of discovery be issued which was done October 27, 1954. The operator of the Stage I period, The Sunshine Mining Co., decided to abandon the project, but assigned the contract to one of the owners. $5,440.00, the amount approved for Stage I work, was expended. Stage II work, 400 feet of drifting, estimated to cost $16,320.00, was started May 26, 1955. The drifting is 150 feet below the No. 1 adit, the work in which, along with diamond drilling, had indicated the 255,000 tons of 0.31% WO_3 material.

The latest Interim Report at hand, H. W. Jones - September 12, 1955, gives information concerning 295 feet of work in the lower adit. The results appear to be less favorable than obtained above as the examiner says, "Low grade (0.2% est.) scheelite mineralization was noted in streaks throughout the tactite but was not of sufficient grade to be considered mill ore."

400

Copy retained 00

January 11, 1956

Memorandum

To: Chief, Iron & Ferroalloys Division-DMEA
Through: Chief, Branch of Ferrous Metals & Ferroalloys

From: Commodity Specialist-Tungsten

Subject: Application for assistance in exploration
Docket No. DMEA-4114-Tungsten
25 Claims (Garnet Extensions)
Elko County, Nevada
Knowles Bros., Box 87, Mtn. City, Nevada
Amount no determined

Previous work under Docket No. DMEA 2820 has just been completed but the final Field Team report has not yet been received by this office.

It is recommended that this application be referred to the Field Team for review and if necessary examination.

R. W. Holliday

RWHolliday/tre

Copy to: Mr. Geehan
Mr. Holliday
Docket No. 4114 file
F I L E S

400

DOCKET
Surname:
Martin
Johnson

AUG 22 1956

Mr. A. A. Knowles
Box 87
Mountain City, Nevada

Re: Docket No. DMEA-4114, Tungsten
A. A., George G., and
Edward A. Knowles
Garnet Claims
Elko County, Nevada

Dear Mr. Knowles:

Reference is made to your letter of August 15, 1956, notifying the DMEA Field Team, Region II, that a contract for exploration of the subject property had been signed with the Union Carbide Company.

We are accepting this same information as your request for withdrawal of your application to DMEA for exploration assistance, and we are closing our docket in the matter accordingly.

Your interest in the DMEA's exploration program is appreciated.

Sincerely yours,

C. O. Mittendorf

Administrator

cc: Docket
Code 400
Adm. Read. File
T. Kiilsgaard, USGS
R. W. Geehan, USBM
FT, Reg. 2

WSMartin/ls
8/21/56

DOCKET
Surname:
Martin

August 17, 1956

MEMORANDUM

To: Chief, Operations Control & Statistics Division

From: Chief, Iron and Ferro-Alloys Division

Subject: Withdrawal of application
Docket No. DMEA-4114, Tungsten
A. A., George, and Edward A. Knowles
Garnet Tungsten Claims
Elko County, Nevada

By letter of March 20, 1956, the Field Team notified the applicant that it did not regard more exploration by means of drifting and crosscutting as justified, but asked whether the applicant would be interested in performing a moderate amount of diamond drilling to further delineate ore bodies Nos. 2 and 3.

No reply was received to the above-cited letter, and on April 3 a follow-up, containing a 30-day ultimatum, was sent to the applicant by the Field Team.

On May 7 the applicant notified the Field Team that an attempt was being made to sell the property, and requested that action be held in abeyance until this matter was resolved.

By letter of August 15, the applicant notified the Field Team that a contract had been signed with Union Carbide Company, giving that company authority to further explore the property. Since the applicant does not now have operating control of the property, it is recommended that we consider the application as having been withdrawn without prejudice.

The docket is sent you herewith to be placed in the inactive files.

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

Attachment
cc: Docket
Code 400
Adm. Read. File

LScott/ls 8/17/56

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

August 17, 1956

MEMORANDUM

To: Chief, Operations Control & Statistics Division

From: Chief, Iron and Ferro-Alloys Division

Subject: Withdrawal of application
Docket No. DMEA-4114, Tungsten
A. A., George, and Edward A. Knowles
Garnet Tungsten Claims
Elko County, Nevada

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

Attachment

DMEA Docket

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

Aug. 15, 1956

Copy retained 100

Memorandum

W 34

To: Operating Committee, DMEA, Interior Bldg.
Washington, D. C.

From: Executive Officer, DMEA Field Team, Reg. II

Subject: Docket No. DMEA-4114 (Tungsten)
A. A., George, and Edward A. Knowles
Garnet Tungsten Claims
Elko County, Nevada

I have received a letter from Mr. A. A. Knowles, dated August 15, 1956, in which he informs us that he has signed a contract with the Union Carbide Company giving that Company until January 1, 1957 to further explore subject property. Work currently consists of trenching and preparation for diamond drilling.

I assume that this docket can be considered closed as far as the DMEA is concerned.

Very truly yours,

S. Ricker
Executive Officer
DMEA Field Team, Reg. II

RECEIVED
AUG 17 1956

6/20/56

Re: DMEA 4114 (also 2820) - Tungsten
Knowles Bros.

8/10 f-up

On this case we think some added exploration could be done, but Knowles Bros. did not answer FT's ltr of inquiry of March 20, until after a May 3 follow-up containing a 30-day ultimatum had been sent. Operators by May 7 letter said they were trying to sell the property and should know "any day now," and would inform FT.

More than a month has elapsed, so a follow-up to learn the status would appear in order.

(Hold this up till we get Idaho 1s Mtd 3347 straightened out)

All action probably held up awaiting legislation on tungsten bill. Hold for a few weeks. WSM RLC

Please return
letter and docket
to Martin
Room 3538

DMEA
Docket

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

RECEIVED
MAY 11 1956

1605 Evans Avenue
Reno, Nevada

May 9, 1956

WSM

Memorandum

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

From: Executive Officer, DMEA Field Team, Region II

Subject: Docket No. DMEA-4114 (Tungsten)
A.A., George, and Edward A. Knowles
Garnet Tungsten Claims
Elko County, Nevada

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S. Ricker

Attach.

Copy retained 400

BUREAU OF MINES
WASHINGTON, D. C.
MAY 11 9 1 AM '56

COPY

RECEIVED
MAY 11 1956

May 7, 1956

Dear Mr. Ricker:

Re: Docket No. DMEA-4114
Tungsten

We received your letter of inquiry as to why we have not made application for diamond drilling on our Garnet Tungsten claims.

We have a deal on in regard to sale of this property and thought we would have a different answer to send you by this time but haven't yet. These people are not depending on present price holding up. They are in position to keep it for a reserve which as you know is only practical way now. We should know which way we will go any day now and will drop you a line then. Thanks for taking care of this.

Sincerely,

/s/ A. A. Knowles

COPY

RECEIVED
MAY 11 1956

May 7, 1956

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Sincerely,

/s/ A. A. Knowles

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

RECEIVED
MAY 7 - 1956

1605 Evans Avenue
Reno, Nevada

May 3, 1956

Mr. A. A. Knowles
Box 87
Mountain City, Nevada

Re: Docket No. DMEA-4114 (Tungsten)
A. A., George, and Edward A. Knowles
Garnet Tungsten Claims
Elko County, Nevada

Dear Mr. Knowles:

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If we do not receive a reply to our letter within 30 days, we will assume that a diamond drilling program does not meet with your approval and will place your application in our inactive files.

Very truly yours,

S. Ricker
Executive Officer
DMEA Field Team, Region II

SRicker:gh
cc: Opr. Com., DMEA, Wash. DC.
Finance Off., Reg. II
Geo. Mavor
R. M. Smith
File

BUREAU OF MINES
WASHINGTON, D. C.

MAY 7 10 43 AM '56

WASHINGTON, D. C.
DEPARTMENT OF INTERIOR
BUREAU OF MINES
DIVISION OF INFORMATION

MAY 1 - 1955
RECEIVED

Docket

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

RECEIVED
MAR 22 1956

1605 Evans Avenue
Reno, Nevada

Copy retained 400

March 20, 1956

Mr. A. A. Knowles
Box 87
Mountain City, Nevada

WSM

Re: Docket No. DMEA-4114 (Tungsten)
A. A., George G., and Edward A. Knowles
Garnet Claims
Elko County, Nevada

Dear Mr. Knowles:

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Very truly yours,

S. Ricker
Executive Officer
DMEA Field Team, Region II

SRicker:gh
cc: Opr. Com., DMEA, Wash., D.C.
Finance Off., Reg. II
Geo. Mavor
R. M. Smith
File

DOCKET
Surname:
Martin
Hoff
Selfridge
Fitzsimmons
McKeever

FEB 13 1956

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

Re: Docket No. DMEA 4114 - Tungsten
A. A., George G., and
Edward A. Knowles
Garnet Claims
Elko County, Nevada

Dear Mr. Ricker:

Reference is made to the above-subject docket, also to the Final Report of the Field Team, dated December 16, 1955, on Docket No. DMEA-2820, Knowles Brothers.

Attached are copies of memoranda, dated January 11 and February 1, 1956, by Ned E. Nelson, Geological Survey, and memoranda dated January 11 and January 25, by R. W. Holliday, Bureau of Mines.

Mr. Nelson's and Mr. Holliday's earlier memoranda, written prior to receipt of the Field Team report, both recommended referral of the subject application to the Field Team, noting that the Field Team Final Report had not yet been received.

Mr. Holliday in his second memorandum used ore reserve figures from the Final Field Team report, quoted an excerpt from the report that "Further exploration will probably discover additional ore . . . . and would be required to more definitely determine the grade," and then repeated his recommendation for referral of the application to the Field Team.

Mr. Nelson, in his memorandum dated February 1, written after receipt of the Field Team Final Report, stated that acceptance of this application would seem to depend on probable demand and probable price (for tungsten). If additions to the reserve were not desired, he concurred that further participation by the Government in exploration costs is not recommended.

Rch.

The Field Team in its Final Report on Docket No. DMEA-2820 stated: "Further exploration will probably discover additional ore -- and would be required to more definitely determine the grade, but is not essential at this time. Further participation by the Government in exploration costs is not recommended."

We cannot, under Section 2(a) of DMEA Order-1, amended, obligate Government funds to block out ore, but in this case it seems to us that not enough work has been done to give a reasonable delineation of ore bodies Numbers 2 and 3. We believe a few more drill holes at least 200 feet deep (as recommended by Lemmon's memo of March 11, 1953) on 75- or 100-foot centers would be warranted.

We shall appreciate your comments and any information you can give us about the Operator's probable reaction to the foregoing proposal. We note that the application gave incomplete cost and no footage for the adits proposed by the applicant.

Sincerely yours,

George C. Selfridge

Chairman, Operating Committee

Enclosures

APPROVED:

/s/ Robert W. Geehan

Member, Bureau of Mines

Thor H. Kiilsgaard

Member, Geological Survey

cc: Docket
Code 400
Oper. Committee
Adm. Read. File
Thor Kiilsgaard, USGS
Robt. Holliday, USBM
Field Team, Region 2

SPHolt/ls
2/3/56

The Final report of the operator (received November 7) says the work was completed on the last day of September 1955, and " . . . if the tunnel were through the middle of the ore body it (tunnel) would be good on both sides. This ore body according to previous diamond drilling should be 35 to 40 feet thick here. The tunnel needs crosscuts to the left to determine the size of the ore body."

The current application, 4114, asks assistance in exploring the ore bodies higher on the mountain, the No. 2 and No. 3. No. 3 is between No. 1 and No. 2. Three holes were drilled in each of the upper ore bodies. Holes 11, 12, and 13 in the No. 3 zone are credited with having cut scheelite-bearing tactite as are holes 14, 15 and 16 in the No. 2 zone, but no assays are given. Neither ore body has the outcrop area of No. 1 and No. 3 lacked an ore exposure when examined in 1952. Two ore grade samples were taken at the No. 2 outcrop as:--

Sample No.	Width	% WO_3
B. M. 424	32 feet	0.45
B. M. 425	10 "	0.37
At No. 3		
B. M. 426	16 "	0.19
B. M. 427	10.6 "	0.01
For comparison		
At No. 1		
B. M. 428	7.0	0.13
B. M. 429	7.8	0.42
B. M. 430	15.0	0.21
B. M. 431	10.0	0.05
B. M. 432	14.0	0.53
B. M. 433	6.0	0.42

Judged by the surface samples, ore body No. 2 compares well with No. 1. No. 3 is less promising and neither promises to be better than No. 1, unless the incomplete drilling data suggest more than is apparent.

The ore estimate of Gentry and Smith (May 7, 1954) for ore body No. 1, 255,000 tons at 0.31% WO_3, includes ore below the upper tunnel but for how far below we are not told. Though not shown at the lower level, ore grade material should be available to raises from that level, and the writers of the May 7, 1954, report concluded, " . . . that production is economically feasible by

selectively mining the higher grade of ore presently exposed underground (upper tunnel) and on the surface. Considerable ore could be mined cheaply by means of a power shovel from prominent surface exposures."

It would seem then to be a question whether No. 1 ore body should be more thoroughly explored, developed and perhaps put into production or No. 2 and No. 3 should be partially explored and developed. As was the case at the finish of the Stage 1 work, "the ultimate objectives of the DMEA exploration program have not been attained. . . ." Final Report, May 13, 1954.

The Final Report covering Stage 2 work should be helpful and should be awaited.

Referral to the Field Team is tentatively recommended.

N. E. Nelson

N. E. Nelson

NENelson:iml
G-1/11/56

cc: Director's reading, 4212
Branch reading, 4212
DMEA (3)
Docket file
R. Holliday, 3513

The Field Team in its Final Report on Docket DMEA-2820 stated: "Further exploration will probably discover additional ore -- and would be required to more definitely determine the grade, but is not essential at this time. Further participation by the Government in exploration costs is not recommended."

We cannot, under Section 2(a) of DMEA Order-1, amended, obligate Government funds to block out ore, but in this case it seems to us that not enough work has been done to give a reasonable delineation of ~~the~~ ore bodies numbers 2 and 3. ~~nor enough sampling to determine the grade with any accuracy.~~ We believe a few more holes on 75 or 100 foot centers would be warranted. drill at least 200 feet deep (as recommended by Lemmon's memo of ---)

~~We think that you will probably agree with us that~~ these questions should be resolved, and We would appreciate your ~~opinion as to whether it can be done by a review by the Field Team examiners of~~ information already available or whether another field examination would be required.

Comments and any information you can give us about the Operator's probable reaction to the foregoing proposal. We note that the application gave no costs or footage for an adit as a possible alternative.

Sincerely yours,

Chairman, Operating Committee

Enclosures

APPROVED:

Robert W. Geehan
Member, Bureau of Mines

Thor H. Kiilsgaard
Member, Geological Survey

Consider actual cost rather than unit cost

Drilling 8.00 vs. 5.50

Two rock types "rate of advance"

Reuter
2-9-56

Docket

IN REPLY REFER TO:

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

RECEIVED
FEB - 3 1956

February 1, 1956

Re: DMEA-4114
Knowles Brothers
Garnet Tungsten Group
Elko County, Nevada
Tungsten

Memorandum

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

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

Subject: Supplemental review of application.

A review dated January 11, 1956, of the application considered the results of work done under Stage I and part of Stage II work. The receipt of a Final Report makes possible this supplemental review.

The ore reserves of the property as estimated for the Final Report are:

	Tons		
	No. 1 lens	No. 2 and 3 lens	Total
Measured ore	90,000		
Indicated ore	270,000	45,000	315,000
Inferred ore	240,000	135,000	375,000
Total all classes	600,000	180,000	780,000

Estimated grade of all classes of ore is 0.3 to 0.5 percent WO_3. By selective mining, a moderate tonnage of 0.50 to 1.00 percent WO_3 ore could be produced.

The gross WO_3 reserve, assuming average grades, is:

Average grade	Units
0.3%	200,000
0.4%	240,000
0.5%	300,000

No. 1 ore body is known to extend down dip 300 feet and a further extension to a depth of 500 feet is drill indicated. In the

above estimate ore bodies 2 and 3 are assigned dip lengths of only 100 feet. The tonnage estimate I consider conservative. As shown by the 'spread', 0.3% to 0.5% WO_3, the grade estimate is less definite.

A significant addition to the tungsten reserves has been made, and not a little learned concerning the behavior of one ore body in depth. Whether or not the application for assistance in doing depth work on ore bodies 2 and 3 should be accepted would seem to depend on two projections (a) probable demand and (b) probable price. Further work should be expected to make large additions to the reserves.

If such additions are not desired the recommendation of the examiners that the Government should not participate in further exploration work is well taken. I concur with that recommendation.

N. E. Nelson

N. E. Nelson

Docket

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

January 25, 1956

Copy retained 200

Memorandum

WSay

To: Chief, Iron & Ferroalloys Division-DMEA
Through: Chief, Branch of Ferrous Metals & Ferroalloys

From: Commodity Specialist-Tungsten

Subject: Review of Application
Docket No. DMEA-4114
Review of Final Report,
DMEA-2820
Garnet Tungsten Group
Elko County, Nevada
Knowles Bros.

Subject application for assistance (DMEA4114) is in effect a request for extension of the recently completed contract (Docket - 2820). Final report of DMEA 2820 lists reserves of measured, indicated and inferred ore totaling 780,000 tons-estimated at 0.3 to 0.5 percent WO_3.

The field team report states that "Further exploration will probably discover additional ore..... and would be required to more definitely determine the grade."

It is recommended that the application (DMEA-4114) be referred to the field team to determine the best method of exploration.

R W Holliday

R. W. Holliday

Always remembering that the program has to be the applicant's - The FT should not be expected to take that responsibility off his shoulders
1/27/56

Copy to: Mr. Geehan
Mr. Holliday
Docket No. DMEA 4114 Files
F I L E S

Docket

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

January 11, 1956

Copy retained 00 WSay

Memorandum

To: Chief, Iron & Ferroalloys Division-DMEA
Through: Chief, Branch of Ferrous Metals & Ferroalloys

From: Commodity Specialist-Tungsten

Subject: Application for assistance in exploration
Docket No. DMEA-4114-Tungsten
25 Claims (Garnet Extensions)
Elko County, Nevada
Knowles Bros., Box 87, Mtn. City, Nevada
Amount not determined

Previous work under Docket No. DMEA 2820 has just been completed but the final Field Team report has not yet been received by this office.

It is recommended that this application be referred to the Field Team for review and if necessary examination.

R W Holliday
R. W. Holliday

Copy to: Mr. Geehan
Mr. Holliday
Docket No. 4114 file
F I L E S

Docket

IN REPLY REFER TO:

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

RECEIVED
JAN 16 1956

January 11, 1956

Re: DMEA 4114
Knowles Bros.
Garnet Tungsten Group
Elko County, Nevada
Tungsten

Copy retained 400

Memorandum

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

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

Subject: Review of application.

The referenced property has been the subject of considerable work by the owners and under a DMEA contract, Idm-E556 (2820), transmitted June 25, 1953, and later amended. The contract provided for a 2-stage work program.

The first stage work, completed about May 1954, consisted of 64 hours of bulldozing and 770 feet of diamond drilling. The examiners concluded the work had closely determined the northwestern limits of the tactite body and indicated the location of the highest grade part of the No. 1 ore body, the lowest in altitude of 3 ore bodies. also Dec 16, 1955

A Final Field Team report was submitted under date of May 7, 1954. All work done to that time had indicated approximately 255,000 tons of scheelite ore, with an average grade of 0.31% WO_3, of which 50,000 tons show an average of 0.50%. The Field Team recommended that a certificate of discovery be issued which was done October 27, 1954. The operator of the Stage I period, The Sunshine Mining Co., decided to abandon the project, but assigned the contract to one of the owners. $5,440.00, the amount approved for Stage I work, was expended. Stage II work, 400 feet of drifting, estimated to cost $16,320.00, was started May 26, 1955. The drifting is 150 feet below the No. 1 adit, the work in which, along with diamond drilling, had indicated the 255,000 tons of 0.31% WO_3 material.

The latest Interim Report at hand, H. W. Jones - September 12, 1955, gives information concerning 295 feet of work in the lower adit. The results appear to be less favorable than obtained above as the examiner says, "Low grade (0.2% est.) scheelite mineralization was noted in streaks throughout the tactite but was not of sufficient grade to be considered mill ore."

Copy retained 400

The Final report of the operator (received November 7) says the work was completed on the last day of September 1955, and " . . . if the tunnel were through the middle of the ore body it (tunnel) would be good on both sides. This ore body according to previous diamond drilling should be 35 to 40 feet thick here. The tunnel needs crosscuts to the left to determine the size of the ore body."

The current application, 4114, asks assistance in exploring the ore bodies higher on the mountain, the No. 2 and No. 3. No. 3 is between No. 1 and No. 2. Three holes were drilled in each of the upper ore bodies. Holes 11, 12, and 13 in the No. 3 zone are credited with having cut scheelite-bearing tactite as are holes 14, 15 and 16 in the No. 2 zone, but no assays are given. Neither ore body has the outcrop area of No. 1 and No. 3 lacked an ore exposure when examined in 1952. Two ore grade samples were taken at the No. 2 outcrop as:--

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For comparison At No. 1		
B. M. 428	7.0	0.13
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B. M. 430	15.0	0.21
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B. M. 432	14.0	0.53
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Judged by the surface samples, ore body No. 2 compares well with No. 1. No. 3 is less promising and neither promises to be better than No. 1, unless the incomplete drilling data suggest more than is apparent.

The ore estimate of Gentry and Smith (May 7, 1954) for ore body No. 1, 255,000 tons at 0.31% WO_3, includes ore below the upper tunnel but for how far below we are not told. Though not shown at the lower level, ore grade material should be available to raises from that level, and the writers of the May 7, 1954, report concluded, " . . . that production is economically feasible by

selectively mining the higher grade of ore presently exposed underground (upper tunnel) and on the surface. Considerable ore could be mined cheaply by means of a power shovel from prominent surface exposures."

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The Final Report covering Stage 2 work should be helpful and should be awaited.

Referral to the Field Team is tentatively recommended.

N. E. Nelson

N. E. Nelson

January 9, 1956
Subject: DMEA-4114
Re: Exploration Assistance
Garnet Claims

Mr. A. A. Knowles
Box 87
Mountain City, Nevada

My dear Mr. Knowles:

The receipt of your application dated December 27, 1955, for exploration assistance under the Defense Production Act of 1950, as amended, is hereby acknowledged.

Your application has been assigned Docket Number DMEA-4114 and referred to the Iron & Ferro-Alloys Division.

Kindly identify all future correspondence relating to your application by this docket number.

Sincerely yours,

Robert E. Adams, Chief
Operations Control and
Statistics Division

60932

January 9, 1956

Memorandum

To: Executive Officer, DMEA Field Team, Region II

From: Chief, Operation's Control and Statistics Division

Subject: Assignment of Docket Number

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

DMEA - 4114 A. A., George G. & Edward A. Knowles

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

R 30 Ea

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

1605 Evans Avenue
Reno, Nevada

January 3, 1956

Memorandum

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

From: Executive Officer, DMEA Field Team, Region II

Subject: Loan Application - Tungsten
Knowles Bros.
Garnet Claims
Elko County, Nevada

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

S. Ricker

Attach.

RECEIVED
JAN 3 1956

BUREAU OF MINES
WASHINGTON, D. C.

JAN 6 10 22 AM '56

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

1605 Evans Avenue
Reno, Nevada

January 3, 1956

Memorandum

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

From: Executive Officer, DMEA Field Team, Region II

Subject: Loan Application - Tungsten
Knowles Bros.
Garnet Claims
Elko County, Nevada

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

S. Ricker

Attach

SRicker:gh
File

RECEIVED
JAN 6 1956

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-4114
Metal or Mineral Tungsten
Date Received ~~12/30/55~~ 1-6-56
Estimated Cost $ no amount
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: Knowles Bros. - Box 87 Mtn. City, NEVADA
Partnership A.A. Knowles Box 87 Mtn. City, NEVADA.
George B. Knowles - 649 FIRST ST. Elko, NEVADA.
EDWARD A. KNOWLES. 649. FIRST, St. Elko, 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 BARNET CLAIMS No. 1 to 8 - BARNET EXTENSION CLAIMS, 1 to 3. ALSO BARNET-EXTENSION 9 to 20 and Barium claims 1 and 2 a total of 25

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

(*c*) State your interest in the land, whether owner, lessee, purchaser under contract, or otherwise BARNET-tungsten-CLAIMS. - ONE HALF 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 one - By GOVERNMENT. DMEA - 2820 CONTRACT No. IDM E556

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

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

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

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

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

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

16—66551-1

RECEIVED
JAN 6 1956

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

(*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 ..... days and be completed within ..... months from the date of an exploration project contract.

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

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

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

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

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

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

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

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

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

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

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

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

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

☐ Money ☒ Use of equipment owned by you ☐ Other

Explain in detail on acompanying paper.

CERTIFICATION

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

Dated 12/27/, 1955

KNOWLES BROS.
(Applicant)

By A. A. KNOWLES - PARTNER

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

Paragraph -3-F

F. All 25 Garnet Tungsten claims are recorded in court house Elko, Nevada in book 8, page 425. PlL

4. Paragraph-

There has been no production to date on this property only exploration by bull dozer, tunnel and diamond drill. The diamond drilling was mostly done at our expense until our funds were about depleted, the rest was under D.M.E.A. contract by a former leesor, Culp, Summers and Wilson, who sub leased to Sunshine Mining Co. of Kellog, Idaho.

Last year my Bros. and I drove 400 ft. of tunnel which makes approximately 700 ft. total of exploration tunnel to date. The first tunnel is about an average of 50 to 75 feet below outcrop, the 400 ft. is on the same ore chute 150 ft. below first tunnel and exposed a large tonage of ore of from .4 to .6 ore. According to diamond drill holes and exploration tunnels to date on this one ore chute there should be now about 200,000 tons of .5 tungsten ore in sight.

Accessibility--road in summer time to or near any part of these claims.

I have 1/3 interest in Knowles Bros. Partnership. We are 3 brothers, have always worked together since kids on ranch in Montana.

B- There has been no production in past or at present other than ore in dump from D.M.E.A. prejects.

C- Geologic features-

The Scheelite tungsten is formed on the contact of a very large deposit of lime on one side (the West) and granite on the east side and above the lime. This contact extends for approximately 2 miles on our claims (Garnet-Tungsten) with outcroppings showing at irrigular distances apart. The first one we explored last summer under D.M.E.A. proved to be a chute and not just a deposit of shallow depth, as in 1949 in our diamond drilling we put down a diamond drill hole 125 ft. below this last tunnel, (400 ft.) and it passed through 45 ft. of ore which averaged .3 to .6 W.O3 proving this chute goes deep. And the D.M.E.A. tunnel proves it is continuous.

We see no reason why deposits farther up the Mtn. (approximately 1500 ft. and 2000 ft.) should not prove large chutes same as one just explored.

D. from mine to forest road ½ miles good natural material (lime shale) forest road to oiled highway, 1½ miles. This road is partly graveled, part natural that gets slippery in wet weather, oiled road to Elko 60 miles very good highway.

Most mining supplies available at Elko our shipping point. Plenty room for residence ½ mile below first chute explored, with water and road.

E.- 66000 V. power line 1½ miles crossing Mtns. below center of this group of claims.
We have complete equipment for exploration now, entirely in clear.

5-A-. Scheelite Tungsten
B.- The propose work is to drive a tunnel under two outcroppings, one tunnel under each, these outcroppings are next in line up the mountain above the one just explored this past summer, 1955. We believe the proposed exploration work should be delayed until the D.M.E.A. engineers and we the owners get together in a meeting and all decide what is best in regard to exactly where and how deep each tunnel will contact the two ore bodies, if the ore bodies extend to depth, we think they will, we think they will be ore chutes same as first one.

C.- Starting of work-
Any time, preferable spring or summer, subject to agreement with D.M.E.A. we have everything including transportation.

D.- Have had many years of experience in mining, we will supervise our own work with help of D.M.E.A. engineers to guide us.

6 A- None
The cost according tunnel just completed per ft. of tunnel driven, $40.00 per ft. Bull dozing for collar of tunnel undertain. Possibly 2 days work, perhaps only one, at $75.00 per day, D.7. cat, 1 hr. day.

B.- We handle our own work, this work is mechanized to where we can do practically all ourselves.

C.- Operating materials and supplies-
Motor fuel, drill steel and bits and powder are the main costs on a tunnel job of this type. The drilling in this hardest of tactite that we have ever seen is slow and breakage of steel and bits is very expensive, in spite of all w can do.

D.- We own all equipment, have never rented it out, do not know what it would rent for. 4 rock drills, mucking machine, trammer, 285 cu. ft. Gardner two stage compressor, electric mine lamps with battery charger, Bull dozer, 1 heavy 4 wheel drive truck, 2 ton 4 wheel drive, two pickups timber saw, tungsten carbide bit sharpener, rail bender and other tooks for track laying.

E.- We would have to establish tent for summer and a building if work in winter for sleeping quarters near the proposed exploration work, if this work is done in summer the cost on this item could be scrateched off.

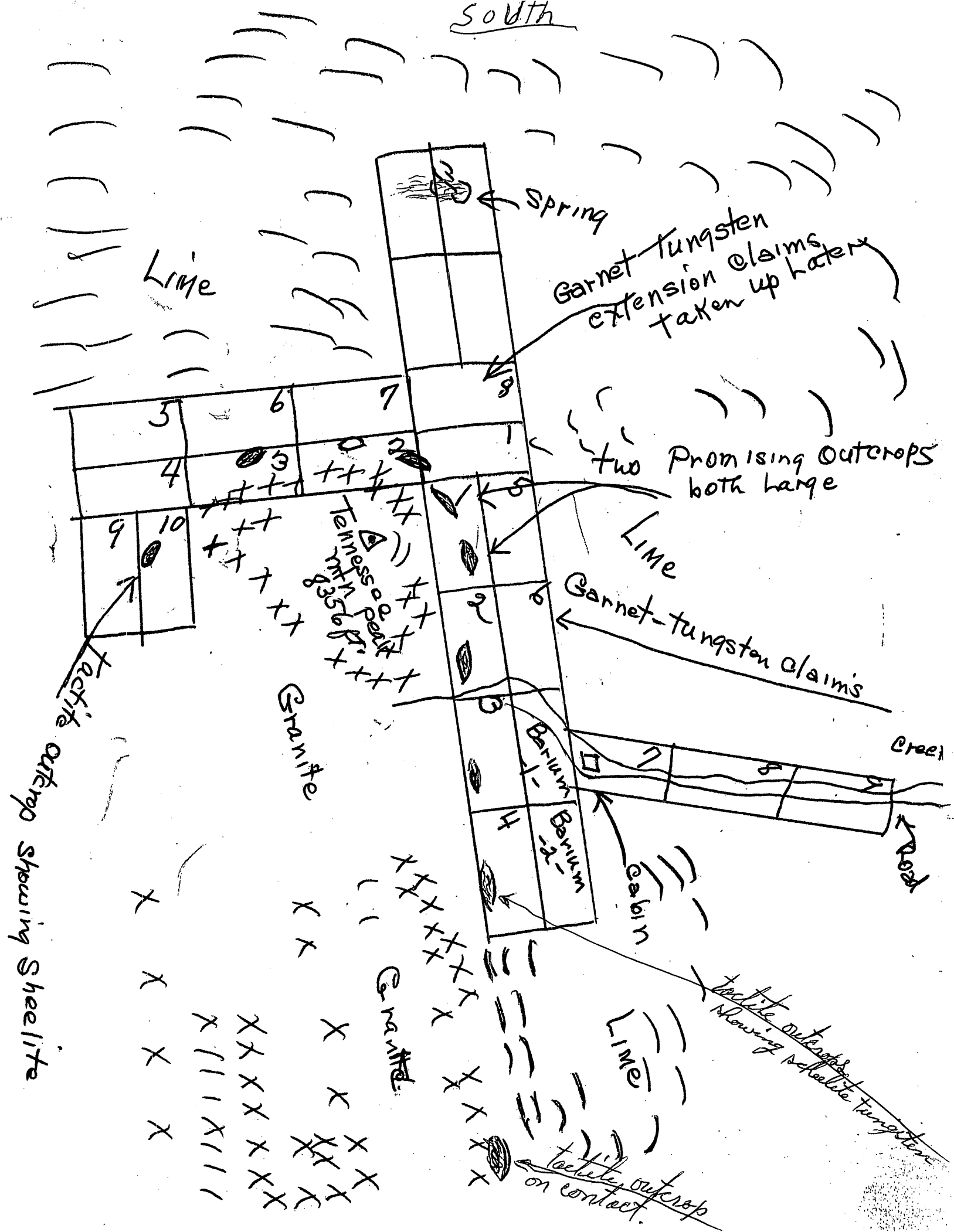
F.- This item taken care of in above item.
Cost too uncertain until after meeting with D.M.E.A. engineers and time set for job to start.

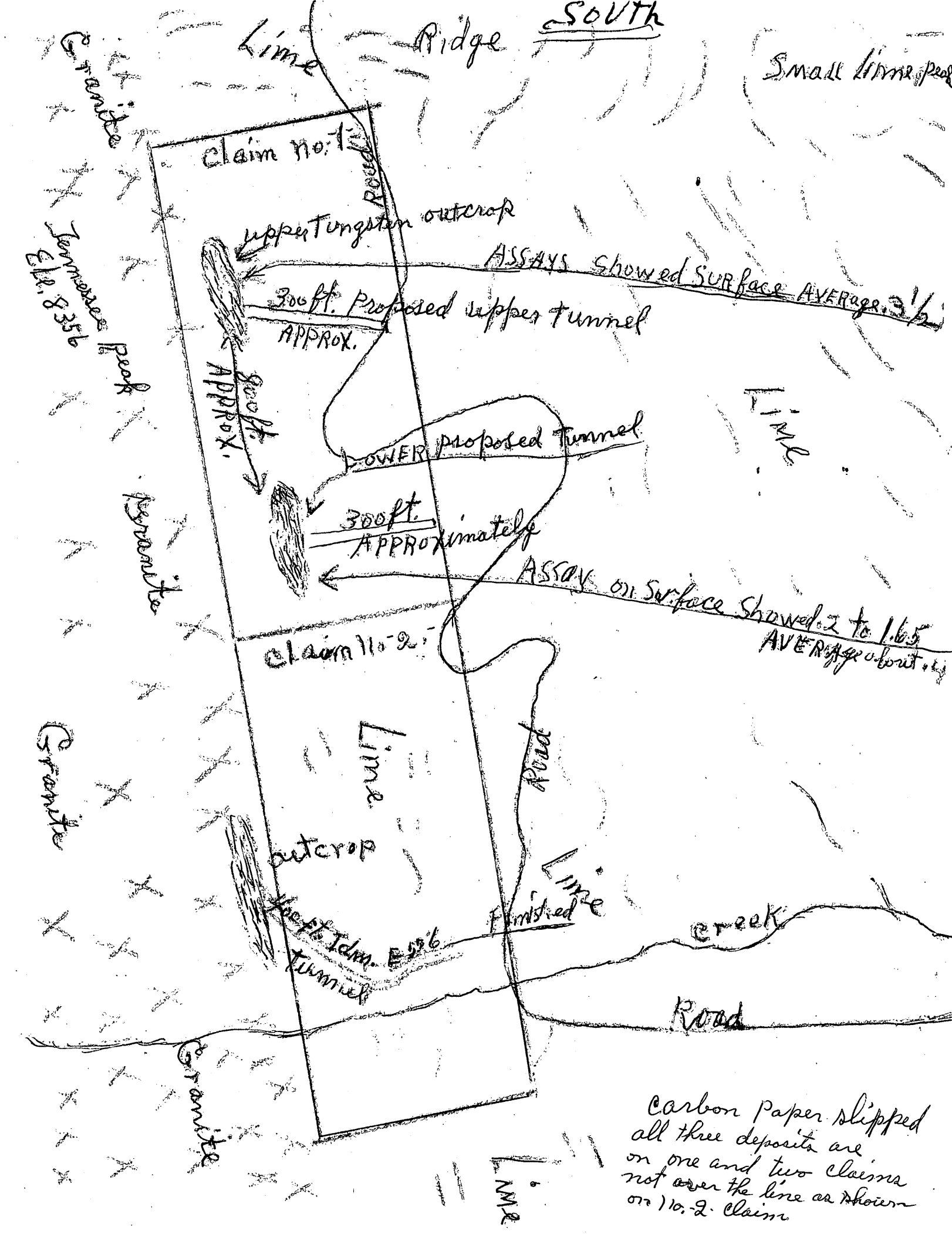
G.- Due to the fact that we bros. do all our own work, repair, maintenance, operate and everything, we eliminate practically all of item -G-.

H.- We figure on reserving at least 40% over and above cost of a job of this kind for emergency.

7.-A-. In regard to this question-yes.

B.- By doing all work, furnishing all equipment, standing all our expense and completing this work in such a way that everyone implicated in satisfied. We believe we are in a position to do this. Our job just finished should qualify us. (Contract No. Idm.-E556)


South
Spring
Lime
Garnet Tungsten extension claims taken up later
two Promising Outcrops both Large
Lime
Garnet-tungsten claims
Tennessee Mtn 8356 ft. peak
Granite
Barium -1-
Barium -2-
Cabin
Creek
Road
Granite
Lime
tactite outcrops showing scheelite tungsten
tactite outcrop on contact.
tactite outcrop showing Scheelite



carbon paper slipped
all three deposits are
on one and two claims
not over the line as shown
on No. 2 claim