FILE COPY
SURNAME:

Wade
Barr

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

June 18, 1951

Memorandum

To: Executive Secretary

From: Chief, Industrial Minerals Branch

Subject: DMA-1521X - Quartz Crystal

It is recommended that subject application be denied for the following reasons:

1. Deposit is known to U. S. Geological Survey and regarded by them as being very unlikely to produce significant amounts of strategic crystal.

2. Applicant has not furnished sound geological basis for expecting to find quartz crystal in appreciable quantities.

James Barr

JAB

James A. Barr, Sr.

Approved:

Tom Lyon

Tom Lyon, Director
Supply Division

RW:dak

cc: Mr. Strobel
Mr. Lyon
Mr. Barr
Files

DMA 15 21

838

FILE COPY
SURNAME:

Barr

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

June 18, 1951

Mr. Howard W. Squires
P. O. Box 373
Virginia City, Nevada

Subject: DMA-1521-X

Dear Mr. Squires:

Your application for aid for an exploration project on quartz crystal deposit located at Crystal Peak, Sierra County, California and docketed as DMA-1521-X, has been reviewed by this office.

Projects approved by the Defense Minerals Administration must, in its judgment, show definite promise of yielding material of acceptable grade, physical character and specifications, in quantities that will significantly improve the mineral supply position for National Defense.

A very careful study of your proposal revealed the following:

1. The Crystal Peak deposit cannot be regarded as a new discovery since it has been visited and studied by the U. S. Geological Survey. Their findings indicate that the likelihood of significant production of strategic quartz from the deposit is very poor, and do not recommend additional exploration work.

2. A sound geological basis for expecting to find a commercial ore body (Question 22, Form MF-103) has not been furnished by applicant.

Under these circumstances, your application for exploration aid to the extent of 90% of $10,000 is denied. Should additional information become available, we would be glad to have you resubmit your proposal for consideration.

Sincerely yours,

Tom Lyon

Tom Lyon, Director
Supply Division

RW:dak

cc: Mr. Strobel
Mr. Lyon
Mr. Barr
Files

DMA 1521

856

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

So. 157 Howard Street
Spokane 4, Washington

July 6, 1951

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
JUL 10 1951
LANDON F. STROBEL
Executive Secretary

Memorandum

To: James A. Barr, Chairman
Nonmetallics Commodity Committee
Through: L. F. Strobel

From: Field Team, Region II

Subject: Bowler Mica Property
Clearwater County, Idaho
DMA Docket No. 1521X

The Bowler Mica property was briefly examined on July 4. A shallow cut about 30 feet wide has poorly opened a small northeasterly-trending pegmatite. The country rock on the west side is gneiss, on the east side mixed gneiss and pegmatite stringers. The pegmatite is about 27 feet wide, but the other dimensions are unknown. The west, or hanging wall, strikes N 45° E and dips about 65° N. There is a 2-3 foot wide microcline-quartz muscovite zone along the hanging wall. The mica books are 1-2 inches in diameter and could not be used for punch. The remainder of the pegmatite is fine-grained and contains inclusions of gneiss.

According to Mr. Bowler, larger mica books were present in the outcrop but none was seen.

If the applicant, by some additional work, could show at least a few larger books of mica, exploration might be warranted. On the basis, however, of the exposed mica, it is recommended that the application be denied.

By Field Team, Region II

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

H. L. Volin, Member
(U. S. Bureau of Mines)

U.S. Bur. Mines
Spokane, Wash.
Albany, Oregon

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

G. E. C.

June 18, 1951

Memorandum

To: Executive Secretary

From: Chief, Industrial Minerals Branch

Subject: DMA-1521X - Quartz Crystal

It is recommended that subject application be denied for the following reasons:

1. Deposit is known to U. S. Geological Survey and regarded by them as being very unlikely to produce significant amounts of strategic crystal.

2. Applicant has not furnished sound geological basis for expecting to find quartz crystal in appreciable quantities.

James A. Barr

James A. Barr, Sr.

Approved:

Tom Lyon

Tom Lyon, Director
Supply Division

6/5/51

Defense Minerals Administration

Review of Application for Exploration Assistance

Docket No. DMA 1521 X

Commodity Quartz Crystal (piezo-electric)

Total Amount $ 10,000.00

Govt. Participation 90%

1. Name and Address of Applicant Howard W. Squires
P.O. Box 373, Virginia City, Nevada

2. Location of Property Crystal Peak Mining District,
Sierra County, California
9 mi. N. of Verdi, Nevada

3. Mineral or metal Quartz Crystal (piezo-electric) Is it listed in Section 9 of MO-5? Yes

If not, application will be rejected.

4. Geologic probability of discovery—based on data in application (question #16, 17, 18, 20 and 22)*

Mines or Survey reports, etc., do you rate chances:

a) Good ____

b) Poor ✓

c) None ____

d) Don't know—needs field examination ____

e) Is there an alternative and favorable project? ____
(If so, attach an explanation)

5. Is the applicant's right to the property clearly stated? Yes
(question 5, 6, 7)*

6. If applicant is a lessee, is a copy of the lease attached? owner

Does the lease have sufficient time to run to cover a future

productive period? ——

*question numbers are those of MF-103

G-MD-RPB

June 15, 1951

Memorandum

To: James A. Barr, Sr., Chairman, Nonmetallics Commodity Committee

From: Robert P. Bryson, Nonmetallics Commodity Committee

Subject: DMA 1521x - Howard A. Squires. ($10,000-exploration)

Reference is made to the subject application for Government participation in an exploration project for quartz crystals (piezo-electric) at Crystal Peak, California (S½ sec. 10, T. 20 N., R. 17 E., M. D. B. + M.) -- near Verdi, Nevada -- to consist mainly of a tunnel or adit, with possible cross-cuts and drifts.

The applicant's reference to this as a "new discovery" may be misleading as the occurrence involved seems to be one that has long been known at Crystal Peak (Note the name!), and has been visited by the Geological Survey.

While the likelihood that a significant production can be obtained from the deposit is poor, a very small production might be obtained at costs greatly in excess of current market prices.

As you probably have observed, exploration and development of quartz crystal deposits commonly and for sound reasons are carried out as open pit, rather than underground operations as proposed by the applicant. The proposal should not be acted upon favorably without careful consideration of this aspect.

Robert P. Bryson

7. Are subordination agreements necessary? No

a) MF-201? ——

b) MF-202 ——

8. From the data presented, does the proposed project appear feasible from the point of view of:

a) Available manpower work to be contracted, with labor +

b) Equipment and supplies equipment furnished by contractor.
(Question 14 plus general knowledge of availability)*

c) Accessibility (question 12)* Yes

d) Water (question 13)* Yes

e) Power (question 13)* Yes - (gasoline power for compressor)

Is a field check needed on any of these points?

9. Does the experience of the applicant appear to be adequate to assure that he can properly conduct the proposed project? (question 4)* Yes (?)

Is a field check needed on this point? No

10. Exhibit A. (questions 21 and 22)*

a) Is the project adequately described? Yes (?)

If not, are there sufficient data given so that you can describe the project? _____ If so, attach a draft.

b) Is there an adequate map or sketch of the proposed work? No

c) Is the proposed work "exploration" under the definition of Section 8, MO-5? Yes

If not, what part of it is?

Is this part a worthwhile exploration project? Not in present form

d) Are the cost estimates detailed? N

Can they be summarized, as on page 2 of Procedural Instruction 5-A, from the available data? _____ If so, attach a draft.

e) Are the cost estimates reasonable? No

f) Should more information be requested from applicant? _____

g) Is a field examination necessary to complete Exhibit A? _____

11. Exhibit B (question 23-d)*

a) Is it applicable? Yes

b) If so, are sufficient data furnished? Yes If so, attach a draft.

c) Is a field check needed? No

12. Exhibit C (question 23-e, f and g)*

a) Is it applicable? Yes

b) Sufficient data? / If so, attach a draft.

c) Are rents and charges reasonable? _____

d) Is a field check needed? No

13. Exhibit D (question 23-a, b)*

a) Are there sufficient data? No

b) Is the schedule adequate for the work proposed? _____

c) Is the schedule excessive for the work proposed? see draft

d) Are the proposed wages and salaries reasonable? _____

e) Is a field check needed? No

14. Exhibit E (question 23-c)*

a) Is it applicable? Yes

b) Sufficient data? No

c) Reasonable? See draft

d) Field check needed? No

15. In your judgment, can the proposed work be done in the proposed time? Yes - provided it starts early in the summer.

(All exploration must be completed within two years)

16. If field examination is not needed, attach your recommendation.

17. If field examination is needed, do you have any special instructions for the field team not indicated by your answers to the foregoing question?

Reviewed by:

Date

97692

6/1/51

Docket No. DMA. 1521X

Sect. 10. Exhibit "A"

Applicant proposes to drift into mountain peak & crosscut at about 100 ft. below surface to test for possible commercial bodies of the quartz crystals which occur on surface

Sect. 11 Exhibit "B."

There are no facilities or buildings on property but the applicant plans on no construction.

Sect. 12. Exhibit "C"

The applicant proposes to do all the work on contract with the contractor furnishing everything - labor, equipment etc. & quotes a flat price of $5000 per ft.

Sect 13 Exhibit "D"

Applicant plans to have all work done on contract with the contractor furnishing all labor, equipment & supplies. He also proposes that his investment or participation in the cost of the project be his services as a supervisor & the rental of equipment (not specified) which is ~~not~~ permissible.

Sect. 14. Exhibit "E"

No facilities or structures are on the property at present.

Sect. 16. Recommend denial in present form. Should consider exploration on small scale by hand quarrying if applicant cares to make reasonable proposal.

Form MF-103
(April 1951)

U. S. DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS ADMINISTRATION

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

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

DO NOT FILL IN THIS BLOCK

Docket No. dma-1621 X

Date received 6/4/51

Participation

DEPARTMENT OF INTERIOR
BUREAU OF MINES
REGION III
RECEIVED
MAY 29 1951
SAN FRANCISCO, CALIFORNIA

HOWARD W. SQUIRES
P.O. Box 373
Virginia City, Nevada

Name and address of applicant

Date May 28, 1951

FILL IN THIS BLOCK

Date of application May 28, 1951 Estimated cost $10,000.00

Mineral or metal Quartz Crystals(piezo-electric). Percentage of Government participation 90%

Location of mine Sec. 10, T. 20 N., R. 17 E., M.D.B. & M.

Crystal Peak Mining District, Sierra County, California.

Date of filing MF-100 May 28, 1951 DMA Docket Number, if available ~~none at present.~~

INSTRUCTIONS

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

THE APPLICANT

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

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

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

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

16—64067-1

THE PROPERTY

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

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

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

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

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

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

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

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

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

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

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

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

THE EXPLORATION

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

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

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

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

THE REQUIREMENTS AND COSTS

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

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

CERTIFICATION

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

Individual
(Name of company)

By Howard W. Squires
(Signature of authorized official)

May 28, 1951
(Date)

Howard W. Squires
(Title)

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

*Same as footnote on page 1.

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

CIVIL ENGINEERING
WATER RIGHT SURVEYS
MINING SURVEYS
GENERAL LAND SURVEYS

HOWARD W. SQUIRES
REGISTERED PROFESSIONAL ENGINEER

BOX 373 -- PHONE 13
VIRGINIA CITY, NEVADA

ROBERT K. MYERS
LICENSED SURVEYOR

May 28, 1951

ADDENDA: Form MF 103

1. Individual.

2. Not applicable.

3. Not Applicable.

4. Graduate of University of Nevada, Class '33. Registered Professional Engineer, State of Nevada. Nineteen years experience in field and mine operation except for three years while serving in Navy during War II, commissioned Lieutenant USNR.

5. Owner.

6. None.

7. Not applicable.

8. None. (new discovery).

9. $1,000.00 in the form of supervision & rental of equipment.

10(a) S. ½ of Sec. 10 T. 20 N., R. 17 E. M.D.B. & M.
(b) Full mining claim, 1500 ft. long by 600 ft. wide., know and recorded in the mining records of Sierra County, California as the "TUNGSTONE mining claim situated in the Crystal Peak Mining District, Sierra County, California. Discovered & located April 17, 1951. The location monument is in the center of the claim from whence the S.W. Cor. Sec. 10 bears S. 70 degrees E. a distance of 2835 ft.

11. Present owner: Howard W. Squires, P.O. Box 373, Virginia City, Nevada
Present name of mine: TUNGSTONE.
Former Name: none known.

12. Located in the Toyabe Nat. Forest.. Nearest town & R.R. point: Verdi, Nevada on S.P. R.R. Distance nine miles Southerly. Forestry road.

13. Babbit creek, flows about 200 gals/min. year round. 1000 ft. Southerly. Gasoline power for compressor. Approx. 10 gals per day at 28¢/gal.

14. No existing usable facilities, except forestry road.

15. Sacked & shipped freight on S.P.R.R. from Verdi or Reno, Nevada. No milling required.

16. (a) None, new discovery.
(b) None.
(c) Quartz crystals, (piezo-electric) occur in limited quantity on the surface outcropping in the massive quartz peak. Recommend a tunnel or adit driven into side of mountain giving approx. 100 ft. of backs to explore possible existance of commercial bodies of piezo-electric quartz. Said tunnel & possible cross-cuts & drifts to include about 200 ft. of underground exploration.

CIVIL ENGINEERING
WATER RIGHT SURVEYS
MINING SURVEYS
GENERAL LAND SURVEYS

HOWARD W. SQUIRES
REGISTERED PROFESSIONAL ENGINEER

BOX 373 -- PHONE 13
VIRGINIA CITY, NEVADA

ROBERT K. MYERS
LICENSED SURVEYOR

May 28, 1951

ADDENDA: Form MF 103

17. Not in production. (new discovery).

18. Not applicable, new discovery.

19. Property lies in the Tyobe Nat. Forest in a Section administered by the Bureau of Land Management under the "Weeks" act of 1915. Owner has been prospecting under prospecting permit from the U.S. Forestry Service, (Special Use Application dated April 9, 1951 issued thru the District Office at Reno, Nevada;)and has located the discovery under the U.S. & Calif. State Mining Laws. It is understood that if commercial mineral is developed; a lease from the Bu. Land Management, U.S. Dept. of Interior will be required.

20. Quartz Crystals (piezo-electric) primary values showing. Possible small vein of tungsten present.

21. Approx. 150 ft. of adit plus some cross-cutting into the quartz peak. Will take about three months. Adverse Winter conditions prevail, allowing only about 8 months availability per year.

22. The claim embraces an entire massive quartz peak which is a geologically recent "blow-out" up thru pre-cambrian granite. A new prospect-no data or maps available.

23. a,b,c,d,e,f,g,h & i: Would contract entire exploration on a footage basis at $ 50 per ft. Approx. 200 ft. of underground tunneling; 200 ft. at $ 50 per ft.---$ 10,000.

24. At 1 shift per day at 5 days per week at 6 ft. per round would take about 3 months including moving in of contractor's equipment & supplies.

Form MF-103
(April 1951)

U. S. DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS ADMINISTRATION

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

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

DO NOT FILL IN THIS BLOCK

Docket No. DMA-1521X

Date received 6/4/51

Participation

DEPARTMENT OF INTERIOR
BUREAU OF MINES
REGION III
RECEIVED
MAY 29 1951
SAN FRANCISCO, CALIFORNIA

HOWARD W. SQUIRES
P.O. Box 373
Virginia City, Nevada

Name and address of applicant

Date May 28, 1951

FILL IN THIS BLOCK

Date of application May 28, 1951 Estimated cost $10,000.00

Mineral or metal Quartz Crystals(piezo-electric). Percentage of Government participation 90%

Location of mine Sec. 10, T. 20 N., R. 17 E., M.D.B. & M.

Crystal Peak Mining District, Sierra County, California.

Date of filing MF-100 May 28, 1951 DMA Docket Number, if available none at present.

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

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

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16—64067-1

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

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

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

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

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

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

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

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

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    (*a*) Describe the ore or mineral deposits briefly.
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20. For what mineral or minerals and for what types of deposits and ores will the exploration be conducted?

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

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THE REQUIREMENTS AND COSTS

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    (*a*) Labor, by numbers and classes (miners, muckers, millmen, etc.), with wages of each.
    (*b*) Supervisors, by numbers and positions, with salaries of each.
    (*c*) Cost of necessary repairs to existing facilities, structures, and buildings.
    (*d*) Cost of necessary installation or construction of additional facilities, structures, and buildings.
    (*e*) Cost of items of equipment, not now owned by the applicant which must be purchased for operations at a cost of $50 or more each.
    (*f*) Cost of rental for equipment which the operator proposes to rent.
    (*g*) Rental value of items of equipment which the operator now owns and which will be devoted to the work.
    (*h*) Cost of materials and supplies, including items of equipment costing less than $50 each.
    (*i*) Cost of power, water, utilities, and any other items not provided for above.

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

CERTIFICATION

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

Individual
(Name of company)

May 28, 1951
(Date)

By Howard W. Squires
(Signature of authorized official)

Howard W. Squires
(Title)

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

*Same as footnote on page 1.

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

CIVIL ENGINEERING
WATER RIGHT SURVEYS
MINING SURVEYS
GENERAL LAND SURVEYS

HOWARD W. SQUIRES
REGISTERED PROFESSIONAL ENGINEER

BOX 373 -- PHONE 13
VIRGINIA CITY, NEVADA

[redacted]
LICENSED SURVEYOR

May 28, 1951

BLM: Form IP 103

1. Individual.

2. Not applicable.

3. Not Applicable.

4. Graduate of University of Nevada, Class '33. Registered Professional Engineer, State of Nevada. Nineteen years experience in field and mine operation except for three years while serving in Navy during War II, commissioned Lieutenant USNR.

5. Owner.

6. None.

7. Not applicable.

8. None, (new discovery).

9. $1,000.00 in the form of supervision & rental of equipment.

10(a) S. ½ of Sec. 10 T. 20 N., R. 17 E. M.D.B. & M.
(b) Full mining claim, 1500 ft. long by 600 ft. wide., know and recorded in the mining records of Sierra County, California as the "TUNGSTON" mining claim situated in the Crystal Peak Mining District, Sierra County, California. Discovered & located April 17, 1951. The location monument is in the center of the claim from whence the S.W. Cor. Sec. 10 bears S. 70 degrees E. a distance of 2865 ft.

11. Present owner: Howard W. Squires, P.O. Box 373, Virginia City, Nevada
Present name of mine: TUNGSTON.
Former Name: none known.

12. Located in the Toyabe Nat. Forest.. Nearest town & R.R. point: Verdi, Nevada on S.P. R.R. Distance nine miles Southerly. Forestry road.

13. Rabbit creek, flows about 300 gals/min. year round. 1000 ft. Southerly. Gasoline power for compressor. Approx. 10 gals per day at 28¢/gal.

14. No existing usable facilities, except forestry road.

15. Packed & shipped freight on S.P.R.R. from Verdi or Reno, Nevada. No milling required.

16. (a) None, new discovery.
(b) None.
(c) Quartz crystals, (piezo-electric) occur in limited quantity on the surface outcropping in the massive quartz peak. Recommend a tunnel or adit driven into side of mountain giving approx. 100 ft. of backs to explore possible existance of commercial boiles of piezo-electric quartz. Said tunnel & possible cross-cuts & drifts to include about 300 ft. of underground exploration.

CIVIL ENGINEERING
WATER RIGHT SURVEYS
MINING SURVEYS
GENERAL LAND SURVEYS

HOWARD W. SQUIRES
REGISTERED PROFESSIONAL ENGINEER

BOX 373 -- PHONE 13
VIRGINIA CITY, NEVADA

[redacted]
LICENSED SURVEYOR

May 23, 1951

[redacted]: Form MP 103

17. Not in production. (new discovery).

18. Not applicable, new discovery.

19. Property lies in the Tyebo Nat. Forest in a Section administered by the Bureau of Land Management under the "Rocks" act of 1915. Owner has been prospecting under prospecting permit from the U.S. Forestry Service. (Special Use Application dated April 9, 1951 issued thru the District Office at Reno, Nevada; land has located the discovery under the U.S. & Calif. State Mining Laws. It is understood that if commercial mineral is developed; a lease from the Bu. Land Management, U.S. Dept. of Interior will be required.

20. Quartz Crystals (piezo-electric) primary values showing. Possible small vein of tungsten present.

21. Approx. 250 ft. of adit plus some cross-cutting into the quartz peak. Will take about three months. Adverse Winter conditions prevail, allowing only about 6 months availability per year.

22. The claim embraces an entire massive quartz peak which is a geologically recent "blow-out" up thru pre-cambrian granite. A new prospect-up data or maps available.

23. a,b,c,d,e,f,g,h & i: Would contract entire exploration on a footage basis at $ 50 per ft. Approx. 500 ft. of underground tunneling: 200 ft. at $ 50 per ft.---$ 10,000.

24. At 1 shift per day at 6 days per week at 4 ft. per round would take about 3 months including moving in of contractor's equipment & supplies.

Refer to	Noted	Date
Answered		

DEPARTMENT OF INT.
BUREAU OF MINES
REGION II
RECEIVED
MAY 2 9 1951
SAN FRANCISCO, CALIFORNIA

Form MF-100
(March 1951)

U. S. DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS ADMINISTRATION

Form approved.
Budget Bureau No. 42-R1026.

GENERAL TECHNICAL DATA
FOR USE UNDER THE
DEFENSE PRODUCTION ACT OF 1950

NOT TO BE FILLED IN BY APPLICANT

Docket No. Dma-1521 X

Date received 6/4/51

DEPARTMENT OF INTERIOR
BUREAU OF MINES
REGION III
RECEIVED
MAY 29 1951
SAN FRANCISCO, CALIFORNIA

HOWARD W. SQUIRES
P.O. Box 373
Virginia City, Nevada.

Name and address of applicant

Date May 28, 1951

INSTRUCTIONS

This form is to be filed with Defense Minerals Administration, Department of the Interior, Washington 25, D. C. It should be accompanied by appropriate application form when a specific type of Government assistance is requested, in the form of (1) loan, (2) purchase contract, (3) Government guarantee of a private loan, (4) ~~Necessity Certificate pursuant to the provisions of Sec. 124 A (Amortization Deduction) of Internal Revenue Code, 1950, (5) priorities or allocation of mining equipment, and maintenance,~~ repair and operating supplies, and (6) other forms of Government assistance that might arise under the Act. Submit four (4) signed copies of the form and accompanying papers. Name and address should be stamped or typed on each sheet of this form and all accompanying papers. *When a question is inapplicable it should be so stated on the form.* Additional sheets may be attached in answering any questions or in supplying additional information. (IF YOU CANNOT ANSWER A QUESTION, SO STATE.) If a question is answered elsewhere indicate where answered. It is not necessary to answer it again.

X
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GENERAL TECHNICAL DATA

Supply the following information on separate sheets, arranged, numbered, and lettered as indicated:

1. Materials produced:
   (*a*) What are the chief mine, mill, or smelter products?
   (*b*) What are the byproducts, if any?
2. Name(s) and type(s) of mine(s), mill(s), smelter(s), refinery(ies), pit(s), quarry (ies), drilling operation(s). Include old names of property, if any. Show extent of workings, including the following:
   (*a*) Linear feet of shafts.
   (*b*) Linear feet of drifts and crosscuts.
   (*c*) Linear feet of tunnels or adits.
   (*d*) Linear feet of other mine openings (explain briefly).

   Indicate whether mine is flooded or not. Describe any pumping problems. Give size or productive capacity.
3. For each operation listed above supply the following:
   (*a*) Distance and direction from nearest town and shipping point.
   (*b*) Mining district.
   (*c*) Township, Section, Range.
   (*d*) County, State.
4. (*a*) State whether or not property is now in operation, and if in operation, by whom operated.
   (*b*) Are you operating this property as:
   - ☐ Owner.
   - ☐ Lessee.
   - ☐ Contractor.
5. Number of years in production _____

   If not in production or operation, estimated date when production will begin _____
6. Experience of operators:
   Describe the mining and general business experience of (*a*) the applicant, and (*b*) the person or persons who manage the project.
7. History:
   (*a*) Give a statement, as complete as possible, of previous exploration, development, operation, and production of property, with reasons for suspension of operation.
   (*b*) State briefly the known history and production of adjoining and neighboring properties.
   (*c*) Furnish any available (private) reports that may apply to this application, including results of mine examinations, recommended exploration and development, and metallurgical investigations.

8. Names and addresses of Officers, Directors, or Partners, and in addition thereto, the five largest stockholders if applicant is a corporation.

Name and Address (a)	Official Title (If officer is also director indicate by "D") (b)	Total of Annual Salary, Commissions, Bonuses, Etc., Received From Applicant and Affiliates During Last Fiscal Year (c)	Estimated Net Worth Outside of Interest in Applicant (d)	Number of Shares Held in Applicant Corporation		Life Insurance Carried for Benefit of Applicant	
				Common (e)	Preferred (f)	Amount (g)	Net Cash Surrender Value After Loans (h)
	Total		x x x x x			x x x x x	x x x x x

If more lines are needed continue on separate sheet.

9. Capital Stock Issues:

For Corporate Applicants

Item	Authorized (a)	Outstanding (b)	Par Value (c)	Number of Shares Outstanding (d)	Dividend Rate Last Paid* (e)
Common stock	$	$	$		
Preferred stock	$	$	$		

*Indicate period covered.

10. Production:

Item	Kind of Product (a)	1948 Total (b)	1949 Total (c)	1950 Total (d)	Present Average Monthly (e)
1. Quantity of product mined or quarried (Short, long, metric tons; barrels; pounds; etc.)					
2. Quantity of product processed (specify unit of measure and type of process)					
3. Quantity and grade of product sold or shipped (specify units of measure)					

11. Do you contemplate a change in the present average monthly rate of production? If so, state estimated maximum monthly production and basis of change.

12. Ore or Mineral Reserves:

(a) Describe the ore or mineral deposit briefly. Accompany the application by any available report on the geology and ore reserves.

(*b*) If deposit is other than placer:

(1) Submit assay plans and/or sections showing location and size of proved (measured) and probable (indicated) ore or mineral reserve.

(2) State the tonnage (indicate type of ton) and grade of each class of ore reserve, as above, and show how computed. Tabulated total ore reserve as follows:

TOTAL ORE OR MINERAL RESERVES

Ore or Mineral Reserve	Estimated Tons (a)	Metal or Mineral Content Per Ton (Grade) (b)	Gross Value Per Ton (c)	Recoverable Unit Value Per Ton (d)	Estimated Cost of Production Per Ton (e)
Measured (proved)					
Indicated (probable)					

(*c*) If placer:

(1) Give estimated total yardage and average marketable mineral content of each deposit.

(2) Submit map showing location of placer deposit and surrounding area, with all test holes or pits. Submit logs of each hole and test pit with depth and average value of each.

(3) Describe gravel, stating whether fine, medium or coarse; loose, tight, cemented, or frozen, and whether it contains stumps or boulders more than 1 foot in diameter; if so, how large, and in what proportion.

(4) Describe bedrock, giving type (granite, sandstone, shale, etc.) and state whether it is hard or soft, smooth, uneven or rough.

(5) Describe overburden, stating whether loose, tight, or cemented; fine or coarse textured; furnish estimate of average thickness and total amount.

(6) Tabulate the reserves using the form outlined above for ore or mineral reserves.

13. Access Roads:

Give road distances to shipping, supply and residence points, stating kind and condition of roads.

14. Water Supply:

State source and quantity of water available for operations and whether sufficient for all seasons of year.

15. Power:

State amount of power used, rate per hour, and source thereof.

16. Labor:

State number and classes (miners, muckers, millmen, etc.) of men employed during a recent representative payroll period.

17. Equipment and Facilities:

Describe present equipment on the property, including buildings. (State condition.) List major pieces of equipment now owned or controlled and in serviceable condition available for this operation.

18. Are there any particular conditions or circumstances affecting your operations that are not described above? If so, explain.

CERTIFICATION

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

Individual
(Name of company)

By Howard W. Squires
(Signature of authorized official)

Howard W. Squires

May 28, 1951
(Date)

(Title)

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

U. S. GOVERNMENT PRINTING OFFICE 16—63792-1

CIVIL ENGINEERING
WATER RIGHT SURVEYS
MINING SURVEYS
GENERAL LAND SURVEYS

HOWARD W. SQUIRES
REGISTERED PROFESSIONAL ENGINEER

BOX 373 -- PHONE 13
VIRGINIA CITY, NEVADA

~~ROBERT K. MYERS~~
LICENSED SURVEYOR

May 28, 1951

ADDENDA: Form: MF 100

1.(a)New discovery of piezo-electric quartz crystals. No production as yet.
(b)Development & prospecting indicated.

2. (a,b,c, & d) Virgin.

3. (a) Approx. nine miles Southerly over improved dirt Forestry Service Road to Verdi, Nevada, S.P.R.R. & U.S. Highway 40.
(b) Crystal Peak, Sierra County, California.
(c) Sec. 10, T. 20 N., R. 17 E., M.D.B. & M.
(d) Sierra County, California.

4. (a) Not in operation, new discovery.
(b) Owner.

5. (a) None, new discovery. Operation date dependent upon results of prospecting and development.

6. (a) Graduate of the University of Nevada, class '33. Eighteen years experience in field and operation of mines & mining except for three years while serving as Lt., USNR. during War II.
(b) Same as (a) above.

7. (a) New discovery, none.
(b) " " "
(c) " " " . This claim embraces an entire quartz crystal peak which has geologically recently pushed up thru pre-cambrian granites for an elevation of several hundred feet. Piezo-electric quartz crystals are found in limited quantities on the surface. A tunnel or adit workings of several hundred feet are recommended to be run to penetrate this massive quartz to develop possible commercial bre-bodies of said quartz.

8. Not applicable in this case.
9.,10,11, 12: All not applicable in this case as it is a new virgin discovery.

13. Approx. nine miles improved dirt U.S. Forestry road to Verdi, Nevada on S.P. R.R. Ranger station & camp , 2000 ft. Southerly from the mine.

14. Babbitt Creek, flows on average of 200 gals/ min. year round--sufficient.

15. Gasoline power for compressor. Approx. 10 gals per day at 28c?/gal.

16. Not applicable in this case; new discovery.

17. Sufficient mining contracting equipment available in district to accomplish proposed exploration program on contract basis.

18. Property situated in Toyabe Nat. Forest in Section under administration of Dept. of Int., Bu. Land Management. If commercial ore is developed, a lease from Bu. Land Management will be required by the owner.

Form MP-100
(March 1951)

U. S. DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS ADMINISTRATION

Form approved.
Budget Bureau No. 42-R1026.

GENERAL TECHNICAL DATA
FOR USE UNDER THE
DEFENSE PRODUCTION ACT OF 1950

NOT TO BE FILLED IN BY APPLICANT

Docket No. dma-1521 X

Date received 6/4/51

HOWARD W. SQUIRES
P.O. Box 373
Virginia City, Nevada

Name and address of applicant

Date May 28, 1951

INSTRUCTIONS

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X
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Individual
(Name of company)

By Howard W. Squires
Howard W. Squires
(Signature of authorized official)

May 28, 1951
(Date)

(Title)

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U. S. GOVERNMENT PRINTING OFFICE 16—63792-1

CIVIL ENGINEERING
WATER RIGHT SURVEYS
MINING SURVEYS
GENERAL LAND SURVEYS

HOWARD W. SQUIRES
REGISTERED PROFESSIONAL ENGINEER

BOX 373 -- PHONE 13
VIRGINIA CITY, NEVADA

LICENSED SURVEYOR

May 28, 1951

ADDENDA: Form: MF 100

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(b) Development & prospecting indicated.

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Form MF-100
(March 1951)

U. S. DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS ADMINISTRATION

Form approved.
Budget Bureau No. 42-R1026.

GENERAL TECHNICAL DATA FOR USE UNDER THE DEFENSE PRODUCTION ACT OF 1950

NOT TO BE FILLED IN BY APPLICANT

Docket No. dma-1521X

Date received 9/4/51

HOWARD W. SQUIRES
P.O. Box 373
Virginia City, Nevada

DEPARTMENT OF INTERIOR
BUREAU OF MINES
REGION III
RECEIVED
MAY 29 1951
SAN FRANCISCO, CALIF.

Name and address of applicant

Date May 28, 1951

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For Corporate Applicants

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(*b*) If deposit is other than placer:

(1) Submit assay plans and/or sections showing location and size of proved (measured) and probable (indicated) ore or mineral reserve.

(2) State the tonnage (indicate type of ton) and grade of each class of ore reserve, as above, and show how computed. Tabulated total ore reserve as follows:

TOTAL ORE OR MINERAL RESERVES

Ore or Mineral Reserve	Estimated Tons (a)	Metal or Mineral Content Per Ton (Grade) (b)	Gross Value Per Ton (c)	Recoverable Unit Value Per Ton (d)	Estimated Cost of Production Per Ton (e)
Measured (proved)					
Indicated (probable)					

(*c*) If placer:

(1) Give estimated total yardage and average marketable mineral content of each deposit.

(2) Submit map showing location of placer deposit and surrounding area, with all test holes or pits. Submit logs of each hole and test pit with depth and average value of each.

(3) Describe gravel, stating whether fine, medium or coarse; loose, tight, cemented, or frozen, and whether it contains stumps or boulders more than 1 foot in diameter; if so, how large, and in what proportion.

(4) Describe bedrock, giving type (granite, sandstone, shale, etc.) and state whether it is hard or soft, smooth, uneven or rough.

(5) Describe overburden, stating whether loose, tight, or cemented; fine or coarse textured; furnish estimate of average thickness and total amount.

(6) Tabulate the reserves using the form outlined above for ore or mineral reserves.

13. Access Roads:

Give road distances to shipping, supply and residence points, stating kind and condition of roads.

14. Water Supply:

State source and quantity of water available for operations and whether sufficient for all seasons of year.

15. Power:

State amount of power used, rate per hour, and source thereof.

16. Labor:

State number and classes (miners, muckers, millmen, etc.) of men employed during a recent representative payroll period.

17. Equipment and Facilities:

Describe present equipment on the property, including buildings. (State condition.) List major pieces of equipment now owned or controlled and in serviceable condition available for this operation.

18. Are there any particular conditions or circumstances affecting your operations that are not described above? If so, explain.

CERTIFICATION

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

Individual
(Name of company)

By Howard W. Squires
(Signature of authorized official)

May 28, 1951
(Date)

(Title)

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

U. S. GOVERNMENT PRINTING OFFICE 16—63792-1

CIVIL ENGINEERING
WATER RIGHT SURVEYS
MINING SURVEYS
GENERAL LAND SURVEYS

HOWARD W. SQUIRES
REGISTERED PROFESSIONAL ENGINEER

BOX 373 -- PHONE 13
VIRGINIA CITY, NEVADA

ROBERT K. MYERS
LICENSED SURVEYOR

May 20, 1951

ADDENDA: Form: M 100

1. (a) New discovery of piezo-electric quartz crystals. No production as yet.
(b) Development & prospecting indicated.

2. (a,b,c, & d) Virgin.

3. (a) Approx. nine miles Southerly over improved dirt Forestry Service Road to Verdi, Nevada, S.P.R.R. & U.S. Highway 40.
(b) Crystal Peak, Sierra County, California.
(c) Sec. 10, T. 20 N., R. 17 E., M.D.B. & M.
(d) Sierra County, California.

4. (a) Not in operation, new discovery.
(b) Owner.

5. (a) None, new discovery. Operation date dependent upon results of prospecting and development.

6. (a) Graduate of the University of Nevada, class '38. Eighteen years experience in field and operation of mines & mining except for three years while serving as Lt., USNR. during War II.
(b) Same as (a) above.

7. (a) New discovery, none.
(b) " " "
(c) " " " . This claim embraces an entire quartz crystal peak which has geologically recently pushed up thru pre-cambrian granites for an elevation of several hundred feet. Piezo-electric quartz crystals are found in limited quantities on the surface. A tunnel or adit workings of several hundred feet are recommended to be run to penetrate this massive quartz to develop possible commercial ore-bodies of said quartz.

8. Not applicable in this case.
9., 10, 11, 12: All not applicable in this case as it is a new virgin discovery.

13. Approx. nine miles improved dirt U.S. Forestry road to Verdi, Nevada on S.P. R.R. Ranger station & camp, 2000 ft. Southerly from the mine.

14. Rabbit Creek, flows on average of 200 gals/ min. year round--sufficient.

15. Gasoline power for compressor. Approx. 10 gals per day at 28¢/gal.

16. Not applicable in this case; new discovery.

17. Sufficient mining contracting equipment available in district to accomplish proposed exploration program on contract basis.

18. Property situated in Toyabe Nat. Forest in Section under administration of Dept. of Int., Bu. Land Management. If commercial ore is developed, a lease from Bu. Land Management will be required by the owner.

Form MF-103
(April 1951)

U. S. DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS ADMINISTRATION

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

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

DO NOT FILL IN THIS BLOCK

Docket No. dma-1521 X

Date received 6/4/51

Participation

DEPARTMENT OF INTERIOR
BUREAU OF MINES
REGION III
RECEIVED
MAY 29 1951
SAN FRANCISCO, CALIFORNIA

Name and address of applicant

EDWARD W. [illegible]
P.O. Box 373
Virginia City, Nevada

Date May 28, 1951

FILL IN THIS BLOCK

Date of application May 28, 1951

Estimated cost $10,000.00

Mineral or metal Quartz Crystals(piezo-electric).

Percentage of Government participation 90%

Location of mine Sec. 10, T. 20 N., R. 17 E., M.D.B. & M.

Crystal Peak Mining District, Sierra County, California.

Date of filing MF-100 May 28, 1951

DMA Docket Number, if available none at present.

INSTRUCTIONS

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

THE APPLICANT

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

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

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

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

16—64067-1

THE PROPERTY

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

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

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

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

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

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

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

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

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

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

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

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

THE EXPLORATION

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

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

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

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

THE REQUIREMENTS AND COSTS

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

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

CERTIFICATION

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

Individual
(Name of company)

By Howard W. Squires
(Signature of authorized official)

May 28, 1951
(Date)

Howard W. Squires
(Title)

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

*Same as footnote on page 1.

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

CIVIL ENGINEERING
WATER RIGHT SURVEYS
MINING SURVEYS
GENERAL LAND SURVEYS

HOWARD W. SQUIRES
REGISTERED PROFESSIONAL ENGINEER

BOX 373 -- PHONE 13
VIRGINIA CITY, NEVADA

ROBERT K. MYERS
LICENSED
SURVEYOR

May 18, 1951

[illegible] Form N 103

1. Individual.

2. Not applicable.

3. Not applicable.

4. Graduate of University of Nevada, Class '30. Registered Professional Engineer, State of Nevada. Sixteen years experience in field and mine operation except for three years while serving in Navy during War II, commissioned Lieutenant U.S.N.

5. Owner.

6. None.

7. Not applicable.

8. None. (new discovery).

9. $1,000.00 in the form of supervision & rental of equipment.

10(a) N. ½ of Sec. 10 T. 39 N., R. 17 E. M.D.B. & M.
(b) Full mining claim, 1500 ft. long by 600 ft. wide., known and recorded in the mining records of Sierra County, California as the "[illegible]" mining claim situated in the Crystal Peak Mining District, Sierra County, California. Discovered & located April 17, 1951. The location monument is in the center of the claim from thence the S.W. Cor. Sec. 10 bears S. 70 degrees E. a distance of 2000 ft.

11. Present owner: Howard W. Squires, P.O. Box 373, Virginia City, Nevada
Present name of mine: "[illegible]".
Former Owner: none known.

12. Located in the Toiyabe Nat. Forest. Nearest town & R.R. point: Verdi, Nevada on S.P. R.R. Distance nine miles Southerly. Forestry road.

13. Rabbit creek, flows about 200 gals/min. year round. 1000 ft. Southerly. Gasoline power for compressor. Approx. 10 gals per day at 23¢/gal.

14. No existing usable facilities, except forestry road.

15. Packed & shipped freight on S.P.R.R. from Verdi or Reno, Nevada. No milling required.

16. (a) None, new discovery.
(b) None.
(c) Quartz crystals, (piezo-electric) occur in limited quantity on the surface outcropping in the massive quartz peak. Recommend a tunnel or adit driven into side of mountain giving approx. 200 ft. of backs to explore possible existance of commercial bodies of piezo-electric quartz. Call tunnel & possible cross-cuts & drifts to include about 500 ft. of underground exploration.

CIVIL ENGINEERING
WATER RIGHT SURVEYS
MINING SURVEYS
GENERAL LAND SURVEYS

HOWARD W. SQUIRES
REGISTERED PROFESSIONAL ENGINEER

BOX 373 -- PHONE 13
VIRGINIA CITY, NEVADA

[redacted]
LICENSED
SURVEYOR

May 8, 1951

[redacted] Form M 103

17. Not in production. (new discovery).

18. Not applicable, new discovery.

19. Property lies in the Tahoe Nat. Forest in a Section administered by the Bureau of Land Management under the "Nesbit" act of 1915. Owner has been prospecting under prospecting permit from the U.S. Forestry Service. (Special Use application dated April 6, 1951 issued thru the District Office at Reno, Nevada; but has located the discovery under the U.S. & Calif. State Mining Laws. It is understood that if commercial mineral is developed; a lease from the Bu. Land Management, U.S. Dept. of Interior will be required.

20. Quartz Crystals (piezo-electric) primary values showing. Possible small vein of tungsten present.

21. Approx. 150 ft. of adit plus some cross-cutting into the quartz peak. Will take about three months. Severe winter conditions prevail, allowing only about 8 months availability per year.

22. The claim embraces an entire massive quartz peak which is a geologically recent "blow-out" up thru pre-cambrian granite. A new prospect-no data or maps available.

23. a,b,c,d,e,f,g,h & i: Would contract entire exploration on a footage basis at $ 20 per ft. Approx. 200 ft. of underground tunneling; 200 ft. at $ 50 per ft.---$ 10,000.

24. At 1 shift per day 20 days per week at 6 ft. per round would take about 8 months including moving in of contractor's equipment & supplies.

Form MF-100
(March 1951)

U. S. DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS ADMINISTRATION

Form approved.
Budget Bureau No. 42-R1026.

GENERAL TECHNICAL DATA FOR USE UNDER THE DEFENSE PRODUCTION ACT OF 1950

NOT TO BE FILLED IN BY APPLICANT

Docket No. DMA-1521X

Date received 6/4/51

HOWARD W. SQUIRES
P.O. Box 373
Virginia City, Nevada.

Name and address of applicant

DEPARTMENT OF INTERIOR
BUREAU OF MINES
REGION III
RECEIVED
MAY 29 1951
SAN FRANCISCO, CALIFORNIA

Date May 28, 1951

INSTRUCTIONS

This form is to be filed with Defense Minerals Administration, Department of the Interior, Washington 25, D. C. It should be accompanied by appropriate application form when a specific type of Government assistance is requested, in the form of (1) loan, (2) purchase contract, (3) Government guarantee of a private loan, (4) ~~Certificate pursuant to the provisions of Sec. 124-A (Amortization Deduction) of Internal Revenue Code, 1950, (5)~~ priorities or allocation of mining equipment, and maintenance, repair and operating supplies, and (~~6~~ 5) other forms of Government assistance that might arise under the Act. Submit four (4) signed copies of the form and accompanying papers. Name and address should be stamped or typed on each sheet of this form and all accompanying papers. *When a question is inapplicable it should be so stated on the form.* Additional sheets may be attached in answering any questions or in supplying additional information. (IF YOU CANNOT ANSWER A QUESTION, SO STATE.) If a question is answered elsewhere indicate where answered. It is not necessary to answer it again.

GENERAL TECHNICAL DATA

Supply the following information on separate sheets, arranged, numbered, and lettered as indicated:

1. Materials produced:
   (*a*) What are the chief mine, mill, or smelter products?
   (*b*) What are the byproducts, if any?
2. Name(s) and type(s) of mine(s), mill(s), smelter(s), refinery(ies), pit(s), quarry (ies), drilling operation(s). Include old names of property, if any. Show extent of workings, including the following:
   (*a*) Linear feet of shafts.
   (*b*) Linear feet of drifts and crosscuts.
   (*c*) Linear feet of tunnels or adits.
   (*d*) Linear feet of other mine openings (explain briefly).
   Indicate whether mine is flooded or not. Describe any pumping problems. Give size or productive capacity.
3. For each operation listed above supply the following:
   (*a*) Distance and direction from nearest town and shipping point.
   (*b*) Mining district.
   (*c*) Township, Section, Range.
   (*d*) County, State.
4. (*a*) State whether or not property is now in operation, and if in operation, by whom operated.
   (*b*) Are you operating this property as:
   ☐ Owner.
   ☐ Lessee.
   ☐ Contractor.
5. Number of years in production ____________
   If not in production or operation, estimated date when production will begin ____________
6. Experience of operators:
   Describe the mining and general business experience of (*a*) the applicant, and (*b*) the person or persons who manage the project.
7. History:
   (*a*) Give a statement, as complete as possible, of previous exploration, development, operation, and production of property, with reasons for suspension of operation.
   (*b*) State briefly the known history and production of adjoining and neighboring properties.
   (*c*) Furnish any available (private) reports that may apply to this application, including results of mine examinations, recommended exploration and development, and metallurgical investigations.

16—63792-1

CIVIL ENGINEERING
WATER RIGHT SURVEYS
MINING SURVEYS
GENERAL LAND SURVEYS

HOWARD W. SQUIRES
REGISTERED PROFESSIONAL ENGINEER

BOX 373 -- PHONE 13
VIRGINIA CITY, NEVADA

ROBERT [illegible]
REGISTERED PROFESSIONAL ENGINEER
SURVEYOR

May 21, 1951

[illegible] Form No 100

1. (a) New discovery of piezo-electric quartz crystals. No production as yet.
(b) Development & prospecting indicated.

2. (a,b,c, & d) Virgin.

3. (a) Approx. nine miles southerly over improved dirt Forestry Service Road to Verdi, Nevada, S.P.R.R. & U.S. Highway 40.
(b) Crystal Peak, Sierra County, California.
(c) Sec. 19, T. 5 N., R. 17 E., M.D.B. & M.
(d) Sierra County, California.

4. (a) Not in question, new discovery.
(b) Owner.

5. (a) None, new discovery. Operation date dependent upon results of prospecting and development.

6. (a) Graduate of the University of Nevada, class '38. Eighteen years experience in field and operation of mines & mining except for three years while serving as Lt., U.S.N. during War II.
(b) Same as (a) above.

7. (a) New discovery, none.
(b) " " "
(c) " " " . This claim embraces an entire quartz crystal peak which has geologically recently pushed up thru pre-cambrian granites for an elevation of several hundred feet. Piezo-electric quartz crystals are found in limited quantities on the surface. A tunnel or adit coverage of several hundred feet are recommended to be run to penetrate this massive quartz to develop possible commercial bre-bation of said quartz.

8. Not applicable in this case.
9.,10.,11., 12. All not applicable in this case as it is a new virgin discovery.

13. Approx. nine miles improved dirt U.S. Forestry road to Verdi, Nevada on S.P. R.R. Larger station & camp, 3000 ft. southerly from the mine.

14. Dabbits Creek, flows an average of 300 gals/ min. year round--sufficient.

15. Gasoline power for compressor. Approx. 10 gals per day at 18¢/gal.

16. Not applicable in this case; new discovery.

17. Sufficient mining contracting equipment available in district to accomplish proposed exploration program on contract basis.

18. Property situated in Tahoe Nat. Forest in Section under administration of Dept. of Int., Bu. Land Management. If commercial ore is developed, a lease from Bu. Land Management will be required by the owner.

Form MF-103
(April 1951)

U. S. DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS ADMINISTRATION

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

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

DO NOT FILL IN THIS BLOCK

Docket No. dma-1521 X

Date received 6/4/51

Participation

HOWARD W. SQUIRES
P.O. Box 373
Virginia City, Nevada

Name and address of applicant

Date May 28, 1951

FILL IN THIS BLOCK

Date of application May 28, 1951 Estimated cost $10,000.00

Mineral or metal Quartz Crystals(piezo-electric). Percentage of Government participation 90%

Location of mine Sec. 10, T. 20 N., R. 17 E., M.D.B. & M.
Crystal Peak Mining District, Sierra County, California.

Date of filing MF-100 May 28, 1951 DMA Docket Number, if available none at present.

INSTRUCTIONS

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

THE APPLICANT

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

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

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

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

16—64067-1

THE PROPERTY

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

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

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

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

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

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

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

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

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

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

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

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

THE EXPLORATION

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

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

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

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

THE REQUIREMENTS AND COSTS

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

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

CERTIFICATION

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

Individual
(Name of company)

By Howard W. Squires
(Signature of authorized official)

May 28, 1951
(Date)

(Title)

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

*Same as footnote on page 1.

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

Dma-1521X

1521X

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF MINES
Region III

1415 Appraisers Bldg.
630 Sansome Street
San Francisco 11, Calif.

May 31, 1951

Memorandum

To: Defense Minerals Administration, Washington, D. C.

From: Executive Officer, DMA Field Team, Region III

Subject: Application for Aid for an Exploration Project

The attached application was received in this office on May 29, , 1951.

Applicant: Howard W. Squires
P. O. Box 373
Virginia City, Nevada

Date of Application: May 28, 1951

Estimated Cost: $10,000.00

Mineral or Metal: Quartz Crystals (piezo-electric)

Percentage of Government Participation: 90%

Location of Mine: Sec. 10, T. 20 N., R. 17 E., M.D.B. & M. Crystal Peak Mining District, Sierra County, California.

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

P.S. Set MF-100 also attached.

CIVIL ENGINEERING
WATER RIGHT SURVEYS
MINING SURVEYS
GENERAL LAND SURVEYS

HOWARD W. SQUIRES
REGISTERED PROFESSIONAL ENGINEER

BOX 373 -- PHONE 13
VIRGINIA CITY, NEVADA

~~ROBERT W. MYERS~~
LICENSED SURVEYOR

May 28, 1951

ADDENDA: Form MF 103

1. Individual.

2. Not applicaple.

3. Not Applicaple.

4. Graduate of University of Nevada, Class '33. Registered Professional Engineer, State of Nevada. Nineteen years experience in field and mine operation except for three years while serving in Navy during War II, commissioned Lieutenant USNR.

5. Owner.

6. None.

7. Not applicaple.

8. None, (new discovery).

9. $1,000.00 in the form of supervision & rental of equipment.

10(a) S. ½ of Sec. 10 T. 20 N., R. 17 E. M.D.B. & M.
(b) Full mining claim, 1500 ft. long by 600 ft. wide., know and recorded in the mining records of Sierra County, California as the "TUNGSTONE mining claim situated in the Crystal Peak Mining District, Sierra County, California. Discovered & located April 17, 1951. The location monument is in the center of the claim from whence the S.W. Cor. Sec. 10 bears S. 70 degrees E. a distance of 2885 ft.

11. Present owner: Howard W. Squires, P.O. Box 373, Virginia City, Nevada
Present name of mine: TUNGSTONE.
Former Name: none known.

12. Located in the Toyabe Nat. Forest.. Nearest town & R.R. point: Verdi, Nevada on S.P. R.R. Distance nine miles Southerly. Forestry road.

13. Babbit creek, flows about 200 gals/min. year round. 1000 ft. Southerly. Gasoline power for compressor. Approx. 10 gals per day at 28¢/gal.

14. No existing usable facilities, except forestry road.

15. Sacked & shipped freight on S.P.R.R. from Verdi or Reno, Nevada. No milling required.

16. (a) None, new discovery.
(b) None.
(c) Quartz crystals, (piezo-electric) occur in limited quantity on the surface outcropping in the massive quartz peak. Recommend a tunnel or adit driven into side of mountain giving approx. 100 ft. of backs to explore possible existance of commercial bodies of piezo-electric quartz. Said tunnel & possible cross-cuts & drifts to include about 200 ft. of underground exploration.

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BOX 373 -- PHONE 13
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[redacted]
LICENSED SURVEYOR

May 28, 1951

ADDENDA: Form MF 103

17. Not in production. (new discovery).

18. Not applicable, new discovery.

19. Property lies in the Tyobe Nat. Forest in a Section administered by the Bureau of Land Management under the "Weeks" act of 1915. Owner has been prospecting under prospecting permit from the U.S. Forestry Service, (Special Use Application dated April 9, 1951 issued thru the District Office at Reno, Nevada;)and has located the discovery under the U.S. & Calif. State Mining Laws. It is understood that if commercial mineral is developed; a lease from the Bu. Land Management, U.S. Dept. of Interior will be required.

20. Quartz Crystals (piezo-electric) primary values showing. Possible small vein of tungsten present.

21. Approx. 150 ft. of adit plus some cross-cutting into the quartz peak. Will take about three months. Adverse Winter conditions prevail, allowing only about 8 months availability per year.

22. The claim embraces an entire massive quartz peak which is a geologically recent "blow-out" up thru pre-cambrian granits. A new prospect-no data or maps available.

23. a,b,c,d,e,f,g,h & i: Would contract entire exploration on a footage basis at $ 50 per ft. Approx. 200 ft. of underground tunneling: 200 ft. at $ 50 ~~per ft.---~~$ 10,000.

24. At 1 shift per day at 5 days per week at 4 ft. per round would take about 3 months including moving in of contractor's equipment & supplies.

High!

6/5/51

Defense Minerals Administration

Review of Application for Exploration Assistance

Docket No. DMA. 1521 X

Commodity Quartz Crystal (piezo-electric)

Total Amount $ 10,000.00

Govt. Participation 90%

1. Name and Address of Applicant Howard W. Squires
P.O. Box 373, Virginia City, Nevada

2. Location of Property Crystal Peak Mining District
Sierra County, California
9 mi. N. of Verdi, Nevada

3. Mineral or metal Quartz Crystal (piezo-electric) Is it listed in Section 9 of MO-5? Yes

If not, application will be rejected.

4. Geologic probability of discovery—based on data in application (question #16, 17, 18, 20 and 22)*

Mines or Survey reports, etc., do you rate chances:

a) Good

b) Poor ✓

c) None

d) Don't know—needs field examination

e) Is there an alternative and favorable project?
(If so, attach an explanation)

5. Is the applicant's right to the property clearly stated? Yes
(question 5, 6, 7)*

6. If applicant is a lessee, is a copy of the lease attached? Owner

Does the lease have sufficient time to run to cover a future

productive period? —

*question numbers are those of MF-103

IN REPLY REFER TO:

G-MD-RPB

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

June 15, 1951

Memorandum

To: James A. Barr, Sr., Chairman, Nonmetallics Commodity Committee

From: Robert P. Bryson, Nonmetallics Commodity Committee

Subject: DMA 1521x - Howard A. Squires. ($10,000-exploration)

Reference is made to the subject application for Government participation in an exploration project for quartz crystals (piezo-electric) at Crystal Peak, California (S½ sec. 10, T. 20 N., R. 17 E., M. D. B. + M.) — near Verdi, Nevada — to consist mainly of a tunnel or adit, with possible cross-cuts and drifts.

The applicant's reference to this as a "new discovery" may be misleading as the occurrence involved seems to be one that has long been known at Crystal Peak (Note the name!), and has been visited by the Geological Survey.

While the likelihood that a significant production can be obtained from the deposit is poor, a very small production might be obtained at costs greatly in excess of current market prices.

As you probably have observed, exploration and development of quartz crystal deposits commonly and for sound reasons are carried out as open pit, rather than underground operations as proposed by the applicant. The proposal should not be acted upon favorably without careful consideration of this aspect.

Robert P. Bryson

Robert P. Bryson

7. Are subordination agreements necessary? No

a) MF-201? —

b) MF-202 —

8. From the data presented, does the proposed project appear feasible from the point of view of:

a) Available manpower work to be contracted, with labor

b) Equipment and supplies equipment furnished by contractor
(Question 14 plus general knowledge of availability)*

c) Accessibility (question 12)* Yes

d) Water (question 13)* Yes

e) Power (question 13)* Yes - (gasoline power for compressor)

Is a field check needed on any of these points?

9. Does the experience of the applicant appear to be adequate to assure that he can properly conduct the proposed project? (question 4)* Yes (?)

Is a field check needed on this point? No

10. Exhibit A. (questions 21 and 22)*

a) Is the project adequately described? Yes (?)

If not, are there sufficient data given so that you can describe the project? If so, attach a draft.

b) Is there an adequate map or sketch of the proposed work? No

c) Is the proposed work "exploration" under the definition of Section 8, MO-5? Yes

If not, what part of it is?

Is this part a worthwhile exploration project? Not in present form

d) Are the cost estimates detailed? No

Can they be summarized, as on page 2 of Procedural Instruction 5-A, from the available data? No If so, attach a draft.

e) Are the cost estimates reasonable? No

f) Should more information be requested from applicant?

g) Is a field examination necessary to complete Exhibit A? No.

11. Exhibit B (question 23-d)*

a) Is it applicable? Yes

b) If so, are sufficient data furnished? Yes If so, attach a draft.

c) Is a field check needed? No

12. Exhibit C (question 23-e, f and g)*

a) Is it applicable? Yes

b) Sufficient data? No If so, attach a draft.

c) Are rents and charges reasonable? Contract price high.

d) Is a field check needed? No

13. Exhibit D (question 23-a, b)*

a) Are there sufficient data? No

b) Is the schedule adequate for the work proposed?

c) Is the schedule excessive for the work proposed? see draft

d) Are the proposed wages and salaries reasonable?

e) Is a field check needed? No

14. Exhibit E (question 23-c)*

a) Is it applicable? Yes

b) Sufficient data? No

c) Reasonable? See draft

d) Field check needed? No

15. In your judgment, can the proposed work be done in the proposed time? Yes - provided it starts early in the summer.

(All exploration must be completed within two years)

16. If field examination is not needed, attach your recommendation.

17. If field examination is needed, do you have any special instructions for the field team not indicated by your answers to the foregoing question?

Reviewed by:

Date

97692

6/11/51

Docket No. DMA. 1521X

Sect. 10. Exhibit "A"

Applicant proposes to drift into mountain peak & crosscut at about 100 ft. below surface to test for possible commercial bodies of the quartz crystals which occur on surface

Sect. 11 Exhibit "B."

There are no facilities or buildings on property but the applicant plans on no construction.

Sect. 12 Exhibit "C"

The applicant proposes to do all the work on contract with the contractor furnishing everything - labor, equipment etc. & quotes a flat price of $50.00 per ft.

Sect 13. Exhibit "D"

Applicant plans to have all work done on contract with the contractor furnishing all labor, equipment & supplies. He also proposes that his investment or participation in the costs of the project be his services as a supervisor & the rental of equipment (not specified) which is not permissible.

Sect. 14. Exhibit "E."

No facilities or structures are on the property at present.

Sect. 16. Recommend denial in present form. Should consider exploration on small scale by hand quarrying if applicant comes to make reasonable proposal.

MP