Box 67

July 21, 1959

Mr. Dwight A. Carlson
Acting District Ranger
High Sierra Ranger Station
Mono Hot Springs, California

DMEA-3890 (Quartz)
White Quartz Prospect
Fresno County, Calif.

Dear Mr. Carlson:

In reply to your request for a copy of the DMEA report on the Pincushion Peak (White Quartz) prospect I regret that I am not authorized to send you one. DMEA reports are confidential to the Office of Minerals Exploration and may be released only through the Washington D.C. office.

I suggest that you write to the Office of Minerals Exploration, United States Department of the Interior, Interior Building, Washington 25, D. C. and request a copy of the report, refering to the above DMEA docket number and name.

We may discuss the geologic features of the deposit with you and if you would care to call at this office we will be pleased to do so.

Very truly yours,

Roscoe M. Smith
Geologist

cc: OME Washington
Region II Executive Officer
Paul Bateman USGS
File

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O. M. E.
RECEIVED JUL 27 1959

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UNITED STATES DEPARTMENT OF AGRICULTURE
FOREST SERVICE

High Sierra Ranger Station
[illegible]
July 13, 195[illegible]

[illegible] Smith
[illegible]
[illegible] Place
[illegible]

Dear Mr. Smith,

[illegible] a copy of the IVEA report on the Pincushion [illegible]

[illegible] that you might be able to furnish us [illegible] from your office who was up here several weeks [illegible]

[illegible] assistance.

Very truly yours,

A. P. [illegible]
District Ranger

By [illegible] A. [illegible]
Acting


OFFICIAL FILE COPY
O. M. E.
RECEIVED JUL 27 1959

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Docket Copy
Surname:

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION
WASHINGTON 25, D. C. 600

Mr. H. A. Savage
Attorney at Law
815-816 Helm Building
Fresno, California

NOV - 7 1955

Re: Docket No. DMEA-3890
Quartz Crystal
John H. Medley and H. A. Savage
White Quartz Mine (Pincushion)
Fresno County, California

Dear Mr. Savage:

Reference is made to your letter of October 19, 1955, reporting the results of your exploration since the field team examination, as well as the results of check quality testing, and commenting favorably on the Exploration Program.

A careful review of the field team examination and other available data indicated that exploration assistance requested in your application was not warranted, therefore, your application was denied by our letter of September 9, 1955.

This office interpreted your telegram of July 28, 1955, as notice that the property was ready for a field team examination. We regret that such was not the case. However, your report on the results of the work performed by you subsequent to the field examination apparently confirmed our decision. A denied application may always be reopened, if new factual information has been obtained, by requesting reconsideration, submitting the new data, and referring to the original application by docket number. If you make such a request you should include the following information.

Since the quality of small fractional crystals of piezo electric quartz has been partially established by the routine laboratory testing, the factual data should be confined to the quantitative information obtained from the tunnel work and any new work performed by you. Also, furnish a statement on the dimensions of the excavation in quartz in the tunnel and, if available, the total weight and number of plus 100, minus 200 grams clear crystal fragments recovered and the number and total weight of partial crystals in excess of 200 grams recovered from this excavation. A sketch map should be provided showing the relation of the new work to that in existence when

R.C.L.

the field team examination was made. In particular, the dip distance of the tunnel intercept below the former workings should be shown.

The Defense Minerals Exploration Administration appreciates your favorable comments on its program and regrets that the examination was made before the property was properly prepared.

Sincerely yours,

C. O. Mittendorf (for)

Administrator

LGHouk:FEJohnson:gad 11/7/55
Copy to: Admr. R. File
Docket
Operating Committee
Mr. Kiilsgaard, 5222
Mr. Dietrich, 3061
Mr. Houk
Field Team, Region II

IN REPLY REFER TO:

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

RECEIVED
OCT 27 1955

October 27, 1955

Memorandum

To: Nonmetallic Minerals Division, DMEA

From: Thor H. Kiilsgaard, U. S. Geological Survey

Subject: Review of letter from Mr. H. A. Savage dated October 19, 1955, concerning the White Quartz mine, DMEA Docket 3890, Fresno County, California.

Mr. Savage's letter, although not stating specifically, implies that he was not pleased at having DMEA deny his previous application (Docket 3890), and that he has done additional work on his property and now is submitting additional evidence hoping that DMEA will reconsider their previous decision.

I recommend that DMEA reaffirm their previous letter of denial, pointing out that information on hand indicates Mr. Savage's property does not warrant further exploration. Reasons substantiating the denial are:

1. Quartz cores in pegmatites are characteristically spotty and discontinuous. Clear quartz in the pegmatite under discussion is estimated at about one percent of the dike, all in relatively small fragments.

2. The data given by Standard Electronics Division of the Hupp Corp. -- 68 .550-inch square blanks and 24 .440-inch square blanks per pound of quartz -- represents computed data. It cannot be correlated with the data obtained from the U. S. Army Signal Corps on quartz from the same deposit. The Signal Corps data represents blanks -- 25 .55-square inch per pound -- actually cut and produced from a pound of quartz. Mr. Savage's data on blanks per pound must be considered as optimistic and unproven.

3. At no place in the world is there piezoelectric quartz being produced from a resistant vein or dike enclosed in fresh, hard country rock. Quartz will shatter under the slightest impact and the vibration and pressures of blasting will ruin its piezoelectric qualities.

?

As this dike will require mining it is almost certain that most of the quartz will be shattered during the mining operations. This condition is compounded by the fact that the quartz is already fractured and in relatively small pieces. There is no reason to expect this fractured condition to improve with depth.

I can see no reason to consider this property as a possible producer of piezoelectric quartz and recommend that it receive no further attention from DMEA.

Thor H. Kiilsgaard

Thor H. Kiilsgaard

IN REPLY REFER TO:

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

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Thor H. Kiilsgaard

THKiilsgaard:iml
G-10/27/55

cc: Director's reading, 4212
Branch reading, 4212
DMEA (3)
Docket file
W. F. Dietrich, 3061

IN REPLY REFER TO:

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

RECEIVED
OCT 27 1955

October 27, 1955

Memorandum

To: Nonmetallic Minerals Division, DMEA

From: Thor N. Hilliagard, U. S. Geological Survey

Subject: Review of letter from Mr. R. A. Savage dated October 19, 1955, concerning the White Quartz mine, DMEA Docket 3890, Fresno County, California.

Mr. Savage's letter, although not stating specifically, implies that he was not pleased at having DMEA deny his previous application (Docket 3890), and that he has done additional work on his property and now is submitting additional evidence hoping that DMEA will reconsider their previous decision.

I recommend that DMEA reaffirm their previous letter of denial, pointing out that information on hand indicates Mr. Savage's property does not warrant further exploration. Reasons substantiating the denial are:

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2. The data given by Standard Electronics Division of the Hupp Corp. -- 68 .590-inch square blanks and 24 .440-inch square blanks per pound of quartz -- represents computed data. It cannot be correlated with the data obtained from the U. S. Army Signal Corps on quartz from the same deposit. The Signal Corps data represents blanks -- 25 .55-square inch per pound -- actually cut and produced from a pound of quartz. Mr. Savage's data on blanks per pound must be considered as optimistic and unproven.

3. At no place in the world is there piezoelectric quartz being produced from a resistant vein or dike enclosed in fresh, hard country rock. Quartz will shatter under the slightest impact and the vibration and pressures of blasting will ruin its piezoelectric qualities.

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I can see no reason to consider this property as a possible producer of piezoelectric quartz and recommend that it receive no further attention from DMEA.

Thor H. Kiilsgaard

THKiilsgaard:iml
G-10/27/55

cc: Director's reading, 4212
Branch reading, 4212
DMEA (3)
Docket file
W. F. Dietrich, 3061

IN REPLY REFER TO:

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

RECEIVED
OCT 27 1955

October 27, 1955

Memorandum

To: Nonmetallic Minerals Division, DMEA

From: Thor N. Killingsord, U. S. Geological Survey

Subject: Review of letter from Mr. E. A. Savage dated October 19, 1955, concerning the White Quartz mine, DMEA Docket 3890, Fresno County, California.

Mr. Savage's letter, although not stating specifically, implies that he was not pleased at having DMEA deny his previous application (Docket 3890), and that he has done additional work on his property and now is submitting additional evidence hoping that DMEA will reconsider their previous decision.

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3. At no place in the world is these piezoelectric quartz being produced from a resistant vein or dike enclosed in fresh, hard country rock. Quartz will shatter under the slightest impact and the vibration and pressures of blasting will ruin its piezoelectric qualities.

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Thor E. Kilingaard

TEKilingaard:iml
G-10/27/55

cc: Director's reading, 4212
Branch reading, 4212
DMEA (3)
Docket file
W. F. Dietrich, 3061

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

RECEIVED
OCT 26 1955

October 26, 1955

Memorandum

To: Nonmetallic Minerals Division
Defense Minerals Exploration Administration

From: Chief, Branch of Ceramic and Fertilizer Materials

Subject: DMEA-3890 (Quartz Crystal)

Date of letter from H. A. Savage to Administrator, DMEA and others: 10/19/55

Date Rec'd. by Br. of Ceramic & Fertilizer Materials: 10/25/55

Comments:

1. Mr. Savage's statement (p.2, par. 1, letter dated 10/19/55) that he "had not intended or expected to request any DMEA aid ....." is inconsistent with the application Form ME-103 of July 2, 1955, apparently signed jointly by him and the owner, John H. Medley, for an exploration project estimated to cost $14,950.00. The application was given Docket No. DMEA-3890, and after a field team report of August 18, 1955, was denied, principally in view of the small crystal size, lack of crystal faces, and unfavorable geologic evidence.

2. The information supplied in Mr. Savage's letter of October 19, 1955, is welcomed, and it is noted that Mr. Savage and associates have completed some exploration work at their own expense which has demonstrated the continuation of the vein an undisclosed distance down the dip - possibly 16-30 feet, However, extensive fracturing continued to that depth.

3. A report on a sample submitted to the Signal Corps Engineering Laboratories through C. A. Johnson was received by the Bureau of Mines on July 7, 1955. The Signal Corps test indicated a yield of about 25 blanks, 0.550 inch square, per pound, compared with a normal of 63-65 blanks per pound from Grade 1 material. The low yield was attributed to fractures.

4. A copy of a report of August 22, 1955, from Standard Electronics Division of Hupp Corporation to Mr. Savage was enclosed in Mr. Savage's letter of October 19, 1955. This report covered a cutting test on an 8-ounce crystal with visible cracks and flaws along the outside edges, but without electrical or optical twinning. In the copy of the covering letter Standard states that the calculated net yield was 68-0.550 inch square blanks and 24-0.450 inch square blanks per pound, somewhat better than the average yield from Grade 1 material - referred to as Grade A by the reporting company. The copy of Standard's tabulated data, however, indicates that 24-0.550 inch square blanks were obtained from the 8-ounce sample, or 48 instead of 68 per pound. Even the lower yield definitely is of interest in crystals of 200 grams or over in weight.

5. There is no indication that the average crystal size is larger or the crystal facing any better in the new exposure than in the workings examined by the field team.

Recommendations:

1. If Mr. Savage wishes to reopen his application for an exploration project, he should:

a. Provide a sketch map showing the relation of the new work to that in existence when the field team examination was made. In particular, the dip distance of the tunnel intercept below the former workings should be shown;

b. clarify the discrepancy in the Standard Electronics Division's report;

c. comment on presence or absence of crystal faces and apparent average size of crystals in new exposure;

d. submit samples from the new workings for evaluation by the Signal Corps.

2. The new information supplied in Mr. Savage's letter of October 19, 1955, does not alter the basic conclusions of the field team report of August 18, 1955, but favorable answers to the questions raised in recommendation No. 1 may justify re-examination of the property when weather conditions permit.

W. F. Dietrich

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

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BUREAU OF MINES
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Signed

W. F. Dietrich

H. A. SAVAGE
ATTORNEY AT LAW
815-816 HELM BUILDING
FRESNO, CALIFORNIA
TELEPHONE 3-2035

RICHARD L. SHEPARD

RECEIVED
OCT 24 1955

October 19, 1955

C. O. Mittendorf, Administrator,
Department of Controller,
Defense Minerals Exploration Admin.
Washington 25, D.C. 600

Spangler Ricker, Executive Officer,
DMEA Field Team, Region II,
U.S.Bureau of Mines,
1605 Evans Avenue
Reno, Nevada

Mr. C. A. Johnson, Chief,
U.S.Bureau of Mines,
1605 Evans Avenue
Reno, Nevada

DMEA-3890

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

Gentlemen:

You have all helped us on the White Quartz Pincushion Mine in the prospecting work where quartz crystal has been found, and I am making this report to you.

You will be pleased to know that the test of these quartz crystals by Ft. Monmouth has been reaffirmed by the testing of the Standard Piezo Company, now the Electronics Division of Hupp Corporation, whose name was given to me by Boeing Aircraft Company when I was in Seattle, and for the information of your various bureaus I thought you would be interested in receiving a copy of this report of test.

Due to the lateness of the season we have closed down the mine for this year, having put down a shaft some 16 feet and probed down past 20 feet with drills at a point where we should have encountered the formation and quartz crystal vein, if it continued with a dip as indicated on the surface, but without finding the elusive vein. We then run a tunnel from the south side to intersect the vein which dips to the north, and we had just gotten in under the vein and came up through the vein, which still showed bad fracturing, so we had to close down partly because of the weather and partly because of shortage of skilled help.

You so kindly sent Mr. Warren and Mr. Steiger to make an examination this Summer, and it was my suggestion that before any cooperation by DMEA should be requested or asked for that I would put down a shaft to determine whether or not the badly fractured condition continued at depth. I was somewhat surprised upon receiving Mr. Mittendorf's letter under date of September 9, 1955 because I had not intended or expected to request any DMEA aid until, with our own money, we had demonstrated that the quartz crystal vein continued and the quality was useable as quartz crystal, so I am writing this to Mr. Mittendorf to say that his judgment I think was probably very good, but I wanted to keep my own record clear with him because I have always paid off on any DMEA loans with which I have been connected and I feel that in this case I had not asked or expected DMEA to do anything except to wait until we had finished our own independent exploration on our own money.

Having just returned from Los Vegas Mining Conference where I enjoyed hearing Mr. Mittendorf and had the pleasure of again meeting Mr. Miller, Mr. Johnson and Mr. Ricker, I want to once again say that the conservative, intelligent, constructive and helpful attitude of the Federal Government in so far as prospecting and in opening up new ore bodies is concerned is most commendable, and I appreciate it, and being especially a mining lawyer and engaged in several mining enterprises as a principal, I can say that this has been true throughout the many years of my contact with each of your organizations.

Sincerely yours,

SAVAGE & SHEPARD

By H A Savage
H. A. Savage

HAS:HJ
encl

STANDARD PIEZO COMPANY
Subsidiary of Brown-Allen Chemicals Inc.

Carlisle, Pa., P.O. Box 513

August 22, 1955

RECEIVED
OCT 24 1955

Mr. H. A. Savage
815-816 Helm Building
Fresno, California

Dear Mr. Savage:

We have completed our evaluation of your quartz the results of which you will find on the attached sheet. We are sending to you under separate cover the blanks which were cut from your sample.

As you can see the only major defect which we found was the presence of fractures surrounding the outside edge of the chunk. Our computed yield per pound of quartz for your sample is 68 .550 inch square blanks and 24 .440 inch square blanks giving a total of 92 good usable blanks. This yield factor is approximately the same as we are presently experiencing on Grade A quartz.

We trust you will find this report informative. If we can be of any further service to you please do not hesitate to contact us.

Very truly yours,

STANDARD ELECTRONICS DIVISION
of Hupp Corporation
s/ J.L.Coslow
J. L. Coslow
Assistant to Production
Manager

JLC:rf

Encl.

COPY

8-20-55

Evaluation of Quartz Chunk for Mr. H. A. Savage

| Stage: | Operation: | Yield and Resultant |
|---|---|---|
| Chunk | Weight | 226.8 grams or approximately 8 ounces |
| | Oil Inspection | Visible cracks and flaws along outside edges. No apparent twinning - center of chunk excellent. Estimated usability = 50% |
| Slab | Slab Cutting | Yield of two slabs - one .550" thickness, one .450" thickness. |
| | Weight of Slab | .550" slab = 3 ounces .450" slab = 2 ounces |
| | Inspection | Quartz absolutely free of electrical or optical twinning. |
| Blank | Blank Cutting | Yield of 24 - .550 inch square blanks. Yield of 14 - .450 inch square blanks. Total yield of 40 blanks. |
| | Inspection | Lost 2 .450 inch square blanks for cracks. Total yield = 36 blanks. |

R. D. Shoemaker

Cutting Foreman

72 total

Docket
Surname

Hopkins
Houk
Nelson
Hopkins
Delfredge

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION
WASHINGTON 25, D. C. 600

SEP - 9 1955

Messrs. John H. Medley and
H. A. Savage
815 Helm Building
Fresno, California

Re: Docket No. DMEA-3890
(Quartz Crystal)
John Medley and H. A. Savage
White Quartz Mine
Fresno County, California

Gentlemen:

Your application for aid for an exploration project and other reports available to us in Washington relating to the subject property have been reviewed.

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

Careful study of all our information indicates to us that the probability of disclosing significant reserves of quartz crystal by your proposed program is not sufficiently promising to justify Government participation. We regret to advise you, under these circumstances, that your application for exploration assistance is denied.

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

Sincerely yours,

C. O. Mittendorf

Administrator

JHopkins:pk 9/6/55
Copy to: Admr. R. File
Docket
Operating Committee
~~FAIX~~
Field Team, Region II
Mr. Kiilsgaard, 5222
Mr. Dietrich, 3061
Mr. Houk
Mr. Hopkins

Docket File
Surname:

Hopkins
Houk

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION
WASHINGTON 25, D. C. 600

Messrs. John H. Medley and
H. A. Savage
815 Helm Building
Fresno, California

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

Sincerely yours,

Administrator

JHopkins:pk 9/1/55
Copy to: Admr. R. File
Docket
Operating Committee, Region II
Mr. Kiilsgaard, 5222
Mr. Dietrich, 3061
Mr. Houk
Mr. Hopkins
Field Team, Region II

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION
WASHINGTON 25, D. C. 600

September 1, 1955

Memorandum

To: Administrator

From: Nonmetallic Minerals Division

Subject: A denial of exploration assistance and summary report

By: James Hopkins

1. Docket No. DMEA-3890 Quartz Crystal
Property: White Quartz Claim T55, R26E M D B & M
815 Helm Building
Fresno, California
Application: MF-103 dated July 2, 1955
Work proposed:

| | |
|---|---|
| Bulldozing to expose vein | $ 2,000.00 |
| D. D. holes 2000 feet @ $5.00 | 10,000.00 |
| Camp facilities | 2,000.00 |
| Chain saws to remove timber | 450.00 |
| Incidentals | 400.00 |
| Total estimated cost | $14,950.00 |

No contract: Application denied

2. Comments:
The White Quartz prospect contains a small amount of questionable commercial grade piezoelectric quartz. The results of the examination indicate that this deposit is a small pegmatite dike in granitic rock and will not continue on strike or down dip.
The material from the quartz outcrop had been previously tested by the Component Division of the United States Army Signal Corps, Fort Monmouth, New Jersey.
The program proposed by the applicants was based on the assumption that quartz of suitable grade would be found in large unfractured masses below the zone of surface weathering. The Field Team concludes that this assumption has no basis in geologic fact as revealed by study of other pegmatite dikes. They also conclude that exploration is almost certain to reveal that the deposit is a small quartz-rich core of a dike that does not continue more than a few feet down the dip or along the strike and that the material below the outcrop is of the same general character as that exposed at the surface.

The material sent to Army Signal Corps was cut and processed into 0.55 inch blanks and was stated to be of excellent quality although the yield was only about 25 blanks per pound of material wheras the normal yield of Grade 1 quartz is 60 to 65 blanks per pound.

The Nonmetallic Minerals Division, DMEA concur in the Field Team's recommendation that the application be denied.

The Commodity Divisions of the Geological Survey and Bureau of Mines also concur in the recommendation of denial.

September 1, 1955

Memorandum

To: Administrator

From: Nonmetallic Minerals Division

Subject: A denial of exploration assistance and summary report

By: James Hopkins

1. Docket No. DMEA-3890 Quartz Crystal
   Property: White Quartz Claim T55, R26E M D B & M
   815 Helm Building
   Fresno, California
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| Camp facilities | 2,000.00 |
| Chain saws to remove timber | 450.00 |
| Incidentals | 400.00 |
| Total estimated cost | $14,950.00 |

   No contract: Application denied

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   The material from the quartz outcrop had been previously tested by the Component Division of the United States Army Signal Corps, Fort Monmouth, New Jersey.

   The program proposed by the applicants was based on the assumption that quartz of suitable grade would be found in large unfractured masses below the zone of surface weathering. The Field Team concludes that this assumption has no basis in geologic fact as revealed by study of other pegmatite dikes. They also conclude that exploration is almost certain to reveal that the deposit is a small quartz-rich core of a dike that does not continue more than a few feet down the dip or along the strike and that the material below the outcrop is of the same general character as that exposed at the surface.

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The Nonmetallic Minerals Division, DMSA concur in the Field Team's recommendation that the application be denied.

The Commodity Divisions of the Geological Survey and Bureau of Mines also concur in the recommendation of denial.

JHopkins:pl 9/1/55
Copy to: Admr. R. File
Docket
Mr. Houk
Mr. Hopkins

IN REPLY REFER TO:

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

RECEIVED
AUG 30 1955

August 30, 1955

Re: DMEA 3890
Medley and Savage
Quartz Crystal
Fresno Co., Calif.
$14,950 - Quartz

Memorandum

To: L. G. Houk, Defense Minerals Exploration Administration

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

Subject: Review of Field Team report.

The application asked for aid in exploring a zoned pegmatite dike, a small part of the quartz core of which is of piezoelectric quality.

The conclusions of the examiners are well taken. Such exceeding care has to be taken in breaking such material in order to preserve its quality, there may be a question as to its minability. Since the applicant is able and willing to do some prospecting, a possible work program under DMEA could come later.

I concur with the denial recommendation of the Field Team.

N. E. Nelson

N. E. Nelson

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

RECEIVED
AUG 31 1955

August 30, 1955

Memorandum

To: Nonmetallic Minerals Division
Defense Minerals Exploration Administration

From: Chief, Branch of Ceramic and Fertilizer Materials

Subject: DMEA-3890 (Quartz Crystal)

Applicant: J. H. Medley and H. A. Savage

Name and Location of Property: White Quartz Mine, Fresno Co., Calif.

Date of Field Team Report: 8/18/55

Date Rec'd. by Br. of Ceramic & Fertilizer Materials: 8/30/55

Field Team Recommendation: Recommend denial of program.

Comments:

1. The clear piezoelectric-grade quartz lacks any crystal faces and occurs in angular fragments which would make proper orientation for processing difficult.

2. Results by the Squier Laboratories indicate the quartz is of good grade but the yield of blanks is low.

3. National Stockpile Specifications call for 100 gram minimum for faced crystals and 200 gram minimum for unfaced crystals.

4. Geologic evidence does not support an extensive exploration program.

Recommendation: In view of the small size of the crystals and the lack of crystal faces, I concur with the field team's recommendation of denial.

W. F. Dietrich

W. F. Dietrich

DMEA

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

1605 Evans Avenue
Reno, Nevada

August 22, 1955

Memorandum

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

From: Executive Officer, DMEA Field Team, Region II

Subject: Docket No. DMEA-3890 - (Quartz Crystal)
John H. Medley and H. A. Savage
White Quartz Mine
Fresno County, California

Reference is made to your letter of July 25, 1955 regarding a field examination of above subject property.

Attached are four copies of a report by J. D. Warne, Bureau of Mines and H. K. Stager, Geological Survey recommending that exploration aid by the Government be denied.

Roscoe Smith and I concur in the recommendation.

S. Ricker

Attach.

Reviewed by
DMEA OPERATING COMMITTEE
8-26-55
(date)

UNITED STATES
DEPARTMENT OF THE INTERIOR
DOUGLAS McKAY, SECRETARY

DEFENSE MINERALS EXPLORATION ADMINISTRATION

REPORT OF EXAMINATION BY FIELD TEAM
REGION II

# APPLICATION REPORT

DMEA-3890 (Quartz Crystal)
John H. Medley and H. A. Savage
White Quartz prospect, Fresno County, California

by

J. D. Warne
Mining Engineer
U. S. Bureau of Mines

H. K. Stager
Geologist
U. S. Geological Survey

Reviewed by
DMEA OPERATING COMMITTEE
8-26-55
(date)

August 18, 1955

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## ILLUSTRATIONS


Figure 1. Location map, White Quartz claims, Fresno County, California.

2. Geologic sketch map of the White Quartz prospect, Fresno County, California.

## INTRODUCTION

Messrs. John H. Medley and H. A. Savage, 815 Helm Building, Fresno, California, applied for Government assistance in a $14,950 program under the Defense Minerals Exploration Administration, docket number 3890, to explore for piezoelectric quartz crystal at the White Quartz prospect, Fresno County, California. The applicants estimate that quartz crystal suitable for piezoelectric use is present in commercial quantity on the White Quartz claim and wish to explore a pegmatite dike that crops out on the claim.

A field examination was requested by the Operating Committee, and was made by H. K. Stager of the Geological Survey and J. D. Warne of the Bureau of Mines on August 3, 1955, accompanied by the applicants.

Inasmuch as the material from the quartz outcrop on the property had been previously tested by the Component Division of the U. S. Army Signal Corps, Fort Monmouth, New Jersey, only specimen material was collected by the examiners.

A sketch map (fig. 2) was made by the examining geologist to show the geologic relationships of the deposit.

The property was also examined in 1954 by Mr. Frank J. Wiebelt of the Bureau of Mines.

## CONCLUSIONS AND RECOMMENDATIONS

The White Quartz prospect contains a small amount of questionable commercial grade piezoelectric quartz. The results of the examination indicate that this deposit is a small pegmatite dike in granitic rock and will not continue on strike or down dip.

The applicants proposed to explore the deposit by bulldozing and diamond drilling. At the time of the examination the applicants had completed the bulldozing and planned to sink a 20 to 30 foot prospect pit to explore the deposit down the dip of the dike. If the prospect pit exposes quartz of commercial grade they desire DMEA assistance in a program consisting of diamond drilling, shaft sinking, and drifting.

The entire program is based on the assumption that quartz of suitable grade will be found to occur in large unfractured masses below the zone of surface weathering. This assumption has no basis in geologic fact as revealed by study of other pegmatite dikes. Exploration is almost certain to reveal that the deposit is a small quartz-rich core of a dike that does not continue more than a few feet down the dip or along the strike and that the material below the outcrop is of the same general character as that exposed at the surface.

It is recommended that Government assistance under the DMEA program be denied.

## LOCATION, ACCESSIBILITY, LOCAL RESOURCES

The White Quartz claim is in T. 5 S., R. 26 E., M.D.B.&M., in the Sierra National Forest, near the northern boundary of Fresno County, California (fig. 1). It is on the west flank of Pincushion Peak at an altitude of about 8,000 feet.

To reach the claim, which is 113 miles northeast of Fresno, the nearest supply center, go northeast on paved highway California 168 for 99 miles to Vermillion Dam on the South Fork of the San Joaquin River, then west 14 miles on a mine access road. The last 14 miles

is rough dirt road with steep grades and requires a four-wheel-drive vehicle. The drive from Fresno to the property usually requires about 6 hours.

The area is inaccessible because of deep snow cover from November to June.

Working season is about 5 months per year.

Labor - available in Fresno and Sierra foothill towns.

Water - ample supply available on the property.

Power - must be supplied by gasoline or diesel generator.

Timber - ample supply available on the property.

Explosives - available in Fresno.

Mail - post office at Huntington Lake, California a distance of 45 miles.

Telephone - at Huntington Lake.

## HISTORY AND PRODUCTION

The White Quartz claim was located by Mr. John H. Medley, one of the applicants, in 1953. A 14 mile access road was constructed to the property during the summer of 1954. Some bulldozer work was performed on the claim during July of 1955. There has been no production from the property.

## PROPERTY AND OWNERSHIP

The property consists of a single unpatented mining claim known as the White Quartz #1 claim, recorded November 13, 1953 in book 3369, page 692 in the Fresno County, California records. This claim is owned by Mr. John H. Medley, who has conveyed 50 percent ownership to

Mr. H. A. Savage. The mailing address of the applicants is 815 Helm Building, Fresno, California.

Mr. Savage, who is an attorney in Fresno, California, has had several years' experience in mining as owner of the Strawberry and Mud Lakes tungsten properties in the Fresno area. His record in connection with previous DMEA loans is excellent; however, the applicants have had very little practical mining or exploration experience.

## DEVELOPMENT

No mine plant buildings or housing facilities are located on the property, but a tent camp has been set up about one mile from the mine. The equipment at the mine consists of only a few hand tools.

Previous exploration operations consisted of bulldozing an area about 200 feet in diameter around and adjacent to a pegmatite dike in the center of the claim.

The operator plans to sink a shallow test pit within the "hanging wall" of the dike to determine the dip and continuity of the deposit.

## GENERAL GEOLOGY

The White Quartz prospect is in an area of high relief in the Sierra Nevada and the surface is almost completely covered with slope wash and alluvium which is over 20 feet thick in the prospect area. The rocks exposed in the vicinity of the prospect are granitic rocks of the Sierra Nevada batholith.

The granitic rock in the prospect area is a light-gray, medium-grained granodiorite. It weathers readily and does not form outcrops. It is covered by flows of volcanic rock east of the prospect area and

boulders of basalt and andesite are common in the slope wash.

A small pegmatite dike that strikes about N. 30° W. and dips 35° to 45° NE. crops out in the center of the White Quartz claim (fig. 2). It is within the quartz-rich center of this pegmatite dike that clear piezoelectric-grade quartz occurs.

## THE DEPOSIT

The White Quartz deposit is a massive, quartz-rich pegmatite dike that contains some clear quartz suitable for piezoelectric use. The dike has been exposed for a strike length of about 40 feet and is about 8 feet thick (fig. 2). The clear quartz is in small highly fractured pods from a few inches to 2 feet in diameter erratically distributed in the massive quartz and comprises about one percent of the dike. Most of the clear quartz is in angular fragments less than one inch in diameter and weighing less than one ounce although some fragments as much as several inches in diameter and weighing as much as six ounces were observed. There are no crystals or crystal faces in the clear material. The only crystals present are small smoky quartz and feldspar crystals. Some of the best material exposed on the outcrop was sampled by the Bureau of Mines and sent to the U. S. Army Signal Corps laboratory at Fort Monmouth, New Jersey. The material was cut and processed into 0.55 inch blanks and was stated to be of excellent quality although the yield was only about 25 blanks per pound of material whereas the normal yield of Grade 1 quartz is 60 to 65 blanks per pound.

There has been no production of piezoelectric quartz from the White Quartz claim and inasmuch as processors of quartz crystal for piezoelectric use require at least one crystal face or material in large unfractured pieces it is not probable that a market could be found for this type of material.

## SAMPLING

Specimen samples of the clear, least fractured, and most transparent type of quartz were taken for possible future appraisal by the Government. Samples of "smoky" or "cloudy" varieties which predominate within this deposit were also taken.

A report covering the examination and evaluation of two quartz samples from this deposit by the Signal Corps Engineering Laboratories, Fort Monmouth, New Jersey, indicated that some of the material could be considered for piezoelectric use.

## RESERVES

There are no measured or indicated reserves of piezoelectric-grade quartz on the White Quartz claim. A reserve of a few tens of pounds of unfractured quartz in fragments weighing from 3 to 7 ounces each is inferred for the deposit. This material may be found by careful mining and sorting of the quartz-rich core of the pegmatite.

## PROPOSED EXPLORATION

The applicants originally proposed a program consisting of bulldozing and diamond drilling to delimit the deposit. Total cost of the program was estimated to be about $14,950. Since submitting the

application the applicants have completed the bulldozing and are planning to sink a 20 to 30 foot prospect pit about 40 feet from the outcrop to explore the deposit down the dip of the dike. If the prospect pit, to be put down at the applicants expense, exposes quartz of commercial grade they desire DMEA assistance in a program consisting of about 1,000 feet of diamond drilling followed by additional underground exploration by 100 feet of shaft and 100 feet of crosscutting or drifting. The amount and estimated cost of the proposed work is as follows:

| | |
|---|---|
| Diamond drilling - 1000 ft. at $7.50/ft. | $7,500 |
| Shaft sinking - 100 ft. at $50.00/ft. | 5,000 |
| Crosscutting or drifting - 100 ft. at $30.00/ft. | 3,000 |
| Miscellaneous - Camp, boarding of men, and transportation | 4,500 |
| Total estimated cost | $20,000 |

The size and character of the deposit does not warrant an exploration program of this type. A little additional trenching and the sinking of a prospect pit will adequately test the material in the deposit. Experience gained by the exploration of other pegmatite dikes has shown that the character of the massive quartz is not greatly affected by surface weathering and that it will be no less fractured at depth.

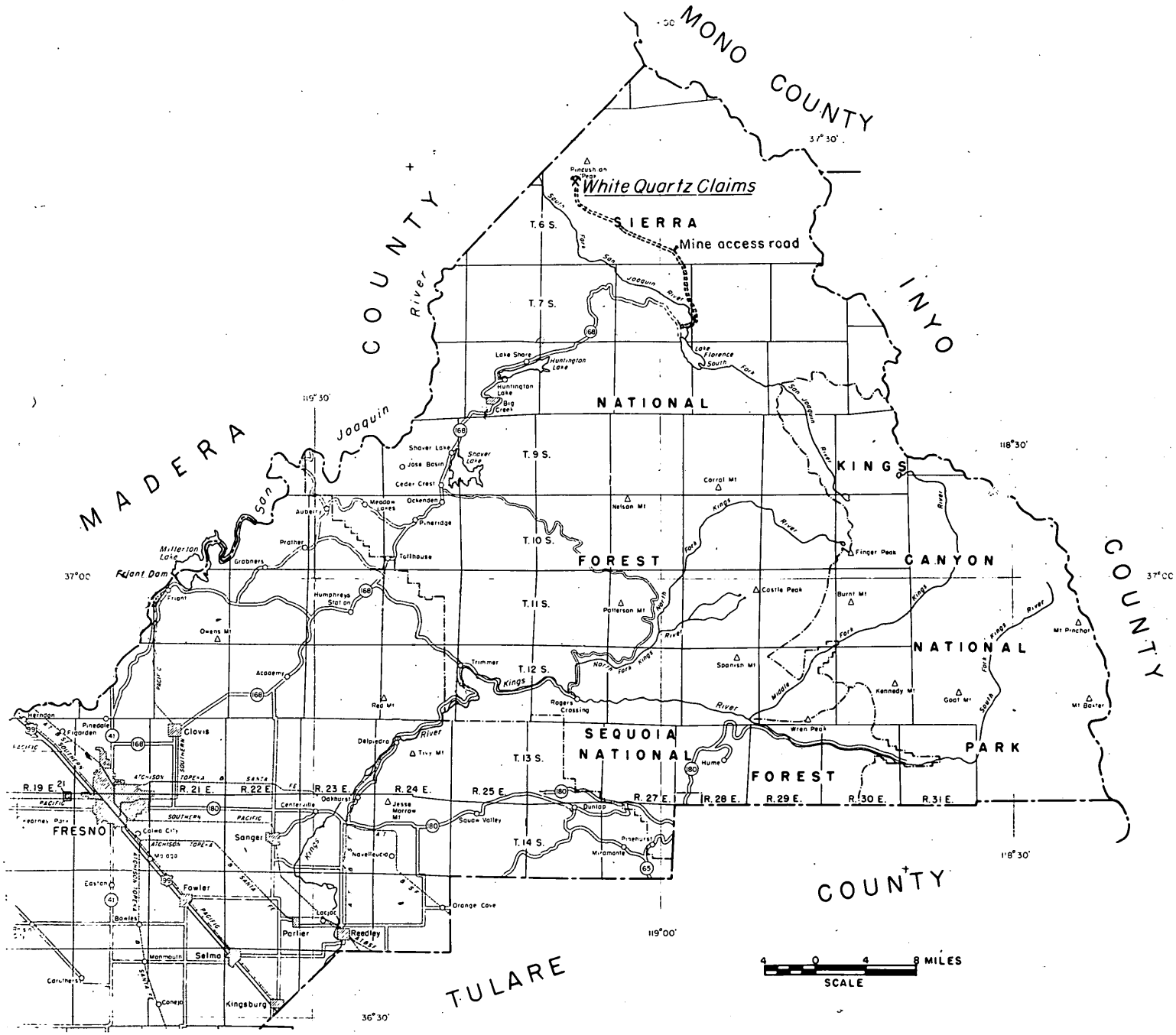
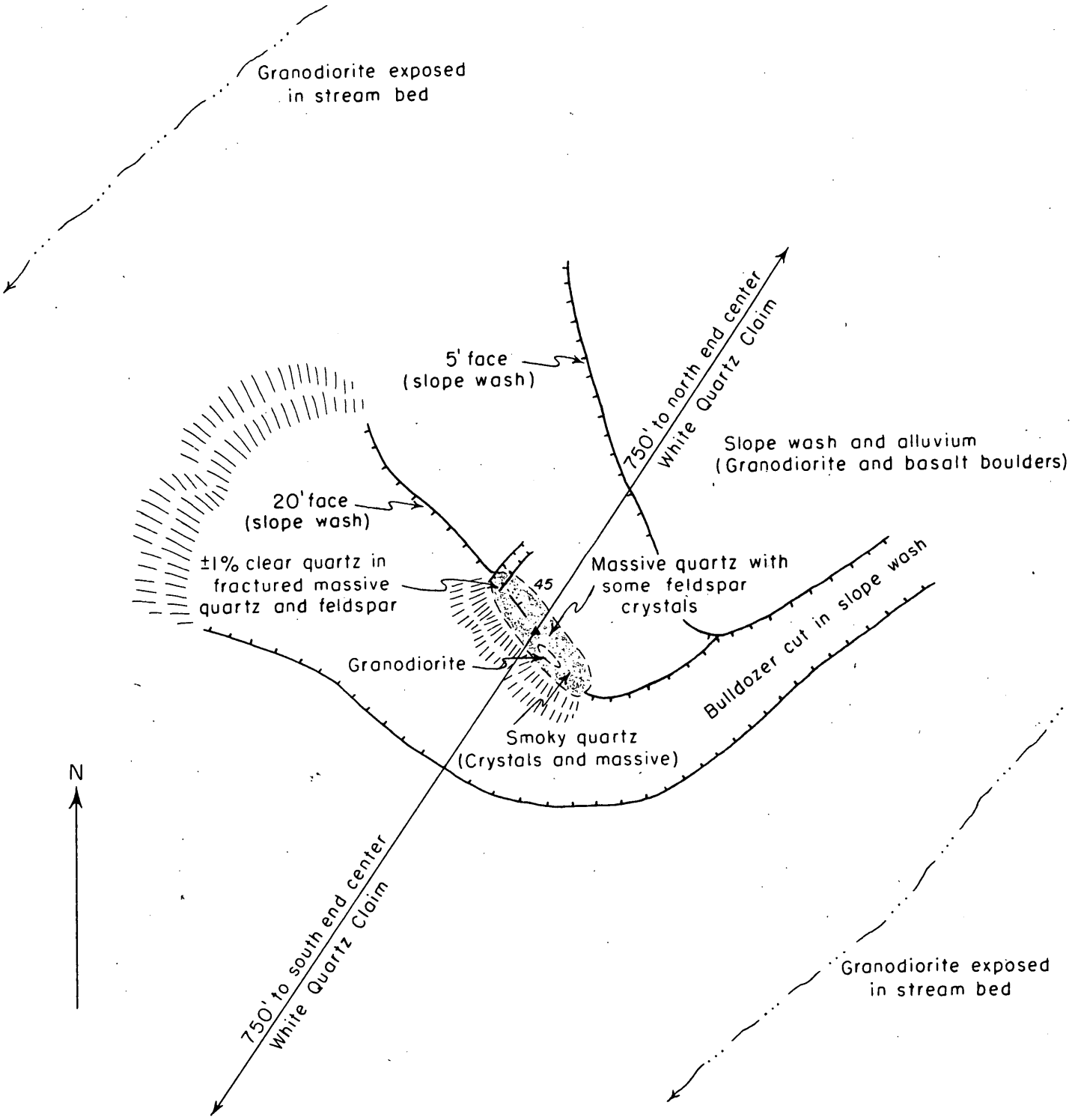



FIGURE 1.- LOCATION MAP, WHITE QUARTZ CLAIMS, ~~MODESTO~~ FRESNO COUNTY, CALIFORNIA




GEOLOGIC SKETCH MAP OF THE WHITE QUARTZ PROSPECT
FRESNO COUNTY, CALIFORNIA

40 0 40 80 Feet

Figure 2

Telfax WESTERN UNION Telfax

FL329 LOB FRESNO CALIF 28 1057AMP=

DEFENSE MINERALS EXPLORATION ADMINISTRATION=

DEPT OF INTERIOR WASHDC= Sheet 1 of 2

SUBJECT DMEA EXPLORATION ASSISTANCE WHITE QUARTZ

MINE AM SURE THE BUREAU OF MINES AT RENO NEVADA AND MR

MILLER IN SAN FRANCISCO ARE INTERESTED IN THE QUARTZ

CRYSTAL DISCOVERY SUBJECT OF ABOVE APPLICATION. HIGH

ELEVATION APPROXIMATELY 8500 FEET ONLY ABOUT THREE

MONTHS MORE TIME FOR CORE DRILLING. CAN YOU PLEASE

MAKE EARLY REFERENCE TO BUREAU OF MINES SAN FRANCISCO

THE COMPANY WILL APPRECIATE SUGGESTIONS FROM ITS PATRONS CONCERNING THE SERVICE

1270 (1-51)

WESTERN UNION

DIVISION FOR EXAMINATION AND CHECKING. I URGE YOU GIVE THIS YOUR IMMEDIATE ATTENTION. I

THE QUARTZ MINE BY H A SAVAGE.

1270 (1-51)

JHopkins X-2974
Rm. 4451

Docket Copy
Surname:

Interior
Defense Minerals Exploration
Administration

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

14X4401(01) Revolving Fund,
Defense Production Act, Interior
(Allocated Working Fund to the Office of
the Sey.)

COLLECT

Mr. H. A. Savage
815 Helm Building
Fresno, California

JUL 29 1955

Reurtel Docket No. DMEA 3890 application referred to Region II, Reno, Nevada July 25. Letter mailed to you same date advising this action.

C. O. Mittenderf

C. O. Mittenderf, Administrator
Defense Minerals Exploration Administration

JHopkins:gad 7/29/55
Copy to: Admr. R. File
Docket
Field Team, Region II
Mr. Kiilsgaard, 5222
Mr. Dietrich, 3061
Mr. Houk
Mr. Hopkins

R.E.S.

Docket Copy
Surname:

Hopkins
J. Houck
Hoffman
Geehan
Kilsgaard
Martin
Johnson

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION
600
WASHINGTON 25, D. C.

JUL 2 5 1955

Messrs. John H. Medley and
H. A. Savage
815 Helm Building
Fresno, California

Re: Docket No. DMEA-3890
(Quartz Crystal)
John Medley and H. A. Savage
White Quartz Mine
Fresno County, California

Gentlemen:

Your application for assistance in exploring the subject property has been reviewed by the Nonmetallic Minerals Division of the Defense Minerals Exploration Administration and has been referred to Mr. Spangler Ricker, Executive Officer, DMEA Field Team, Region II, U. S. Bureau of Mines, Rare and Precious Metals Experiment Station, 1605 Evans Avenue, Reno, Nevada, for further consideration and possibly a field examination.

The Regional Office will contact you at an early date if an examination is to be made. Any assistance you may give the members of the Field Team during the examination will be appreciated.

It is noted in your application that you list Mr. John H. Medley, Owner, and Mr. H. A. Savage, Operator. It is not clear to us whether this is a partnership applying for exploration assistance or whether the contract is to be with Mr. H. A. Savage. In case the contract is to be with Mr. Savage, we will require six copies of the enclosed Consent to Lien forms executed by Mr. John H. Medley with a copy of a lease or other instrument as evidence that Mr. Savage has sufficient interest in the land for the purpose of an exploration project.

Sincerely yours,

C. O. Mittendorf (for)

Administrator

Enclosures 6
JHopkins:gad 7/22/55
Copy to: Admr. R. File
Docket
Field Team, Region II
Operating Committee
Mr. Kiilsgaard, 5222
Mr. Dietrich, 3061
Mr. Hopkins
Mr. Houk

R.G.J.

Docket Copy
Surname:

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION
600
WASHINGTON 25, D. C.

JUL 2 5 1955

Mr. Spangler Ricker
Executive Officer, DMEA
Field Team, Region II
U. S. Bureau of Mines
Rare and Precious Metals
Experiment Station
1605 Evans Avenue
Reno, Nevada

Subject: Docket No. DMEA-3890
(Quartz Crystal)
John H. Medley and H. A. Savage
White Quartz Mine
Fresno County, California

Dear Mr. Ricker:

The captioned application is referred to Region II Field Team for either a field examination and report on the proposed project or your recommendations based on information available to your office.

Enclosed are copies of memoranda from Mr. W. F. Dietrich, dated July 12, 1955, and Mr. N. E. Nelson, dated July 15, 1955, members of the Quartz Crystal Commodity Committee. If the Field Team recommends an exploration program approved by the applicant, please furnish us the necessary information to draft a contract. In this connection please furnish nine copies of a map showing the proposed work, quartz crystal vein exposures, and the boundaries of the mining claim.

You will note in our letter to the applicant that we have requested clarification of the question as to who will be the Operator.

Sincerely yours,

W. S. Martin
Chairman, Operating Committee (JHB)

Approved:

/s/ Robert W. Geehan (JHB) ACTING
Member, Bureau of Mines

Thor H. Kiilsgaard (JHB)
Member, Geological Survey

Enclosures 4

JHopkins:gad 7/22/55
Copy to: Admr. R. File
Docket
Operating Committee
Mr. Kiilsgaard, 5222
Mr. Dietrich, 3061
Mr. Hopkins
Mr. Houk

IN REPLY REFER TO:

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

RECEIVED
JUL 1 3 1955

July 15, 1955

Re: DMEA 3890
John H. Medley
White Quartz Mine
Fresno Co., Calif.
$14,950 - Quartz

Memorandum

To: L. G. Houk, Defense Minerals Exploration Administration

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

Subject: Review of Application.

We have no information on this prospect.

The property has been visited by Mr. Weibelt, sent by the U. S. Bureau of Mines office at Reno.

I recommend referral to the Field Team. Perhaps information at hand will enable it to make a report and recommendation.

N. E. Nelson

N. E. Nelson

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

RECEIVED
JUL 13 1955

July 12, 1955

Memorandum

To: Nonmetallic Minerals Division
Defense Minerals Exploration Administration

From: Chief, Branch of Ceramic and Fertilizer Materials

Subject: DMEA - 3890 (quartz crystal)

Applicant: J. H. Medley, H. A. Savage

Name and Location of Property: White Quartz Mine
Fresno County, California

Date Application Rec'd by Br. of Ceramic and Fert. Mtls: July 7, 1955

Comments:

1. Consideration should be given to an alternate method of exploration following the first stage of bulldozing, because core drilling is unlikely to result in positive evidence of the presence or absence of electronic-grade quartz crystal in commercial quantities.

2. Although it would be desirable for the applicant to furnish more complete information, it appears that a visit by an examiner would furnish more useful data.

Recommendation:

It is recommended that the field team visit this mine when in that vicinity to ascertain if an exploration project is justified. If so, the field team and applicant should agree on a definite plan of exploration on a unit-cost basis.

W. F. Dietrich

W. F. Dietrich

John H. Medley
815 Helm Building
Fresno, California

July 7, 1955
Subject: DMEA-3890
Re: Exploration Assistance
White Quartz Mine

Dear Mr. Medley:

The receipt of your application dated July 2, 1955 for exploration assistance under the Defense Production Act of 1950, as amended, is hereby acknowledged.

Your application has been assigned Docket Number DMEA-3890 and referred to the Nonmetallic Minerals 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

MF-103
(Revised April 1952)

# UNITED STATES DEPARTMENT OF THE INTERIOR
## DEFENSE MINERALS EXPLORATION ADMINISTRATION

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

RECEIVED
JUL - 7 1955

# 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. 3890
Metal or Mineral Quartz
Date Received 7-7-55
Estimated Cost $14,950.00
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: JOHN H. MEDLEY, Owner, H. A. SAVAGE, Operator,
815 Helm Building,
Fresno, California

(*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 Legal Owner, John H. Medley, with conveyance of 50% interest in mining claims to H.A.Savage in escrow, providing exploration shows favorable for commercial production of quartz crystal.

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

(*c*) State your interest in the land, whether owner, lessee, purchaser under contract, or otherwise John H. Medley, owner, H.A.Savage half owner if exploration shows commercial values.

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

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

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

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. See attached sheet

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

(*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. See attached sheet

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

(*e*) State the availability of manpower, materials, supplies, equipment, water, and power. Plenty of manpower available;also material supplies and equipment. Water for mining, none for power.

16—66551-1

5. *The exploration project.*—(*a*) State the mineral or minerals for which you will to explore Quartz Crystal

(*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. See attached sheet

(*c*) The work will start within 5 days and be completed within 3 months from the date of an exploration project contract. See attached sheet.

(*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. See attached sheet

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.). See attached sheet

(*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. see attached sheet

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

(*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. See attached sheet

(*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. See attached sheet

7. (*a*) Are you prepared to furnish your share of the cost of the proposed project in accordance with the regulations on Government participation (Sec. 7, DMEA No. 1)? Yes, Cash on hand and available for exploration $8,000.00

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

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

Explain in detail on acompanying paper.

## CERTIFICATION

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

Dated JULY 2, 1955

W A Savage

(Applicant)

By John H. Merkey

**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

H. A. SAVAGE
ATTORNEY AT LAW
815-816 HELM BUILDING
FRESNO, CALIFORNIA
TELEPHONE 3-2035

RICHARD L. SHEPARD

RECEIVED
JUL - 7 1955

July 5 1955

Defense Minerals Exploration Administration
United States Department of the Interior
Washington 25, D. C.

Dear Sirs:

Enclosed herewith is the application of John H. Medley, owner, and H. A. Savage, Operator, for aid in an exploration project pursuant to DMEA Order 1, under the Defense Production Act of 1950, as amended.

We will appreciate your expediting this application as quickly as possible in view of the shortness of the summer operating season at the mine.

Sincerely

Richard L. Shepard

Richard L. Shepard

RLS:s

Encls.

3.

(f) The land consists of one un/patented mining claim described as follows:

White Quarts Mine. Silica - the location and extent of which said mine being more particularly described in that notice of claim filed for record on Nov.13, 1953 in Book 3369 at Page 692 of Official Records of the County of Fresno, State of California, in document #61706 Located in the Northeast corner of Fresno County on Pincushion Peak, about 20 air miles from Mono Hot Springs, in Kaiser quadrangle of the U.S.Geological Survey.

RECEIVED JUL 27 1955

4. (a) The quartz crystal vein has been opened with bulldozer and hand crosscut to a depth of about 6 feet and to a length of about 100 feet. The mine is accessable by approximately 20 miles of access road through the Sierra National Forest, already constructed, and one can drive directly to the mine.

(b) No commercial production has been made from the mine but samples have been sent to the U. S. Bureau of Mines at Reno, and by them to Fort Monmouth where tests of quality of the quartz crystal from said mine was made and found to be No.1 grade as per attached copy of letter from Ft. Monmouth to the U.S.Bureau of Mines.

(c) The deposit lies between two bodies of granite, is approximately 20 feet wide and is believed to have great depth and length but is covered now except where bulldozer has cleaned off with about 6 feet of loose sand and gravel. There are no geological reports.

5. (b) The proposed work will consist of bulldozing probably 200 or 300 feet additional along the course of the vein to clear away loose surface decomposed granite and sand, and then to core drill at the present exposure and at 100 feet on each side of the present exposure with holes cross cutting the master quartz vein at depths of 25 feet and 50 feet and 75 feet at locations approved by U.S.Bureau of Mines.

(c) Start within 5 days and completed within three months etc..if approval is secured in time for the core drilling to be done this season. Elevation is approximately 8,000 feet and season is only about 5 or 6 months. Speedy approval is therefore urgently requested. U.S.Bureau of Mines, of its own volition has sent its engineer Frank J. Weibelt, of Reno, Nevada, who has already made inspection of this mine, and it is believed that approval of the U.S.Bureau of Mines can be had forthwith.

(d) Core drilling and exploration will be under the direction and supervision and control of H.A.Savage, who owns the Mud Lakes Tungsten Mine, formerly Garnet Dike Mine and now being operated as Cal-Tex Tungsten Mine, with a capacity of 250 tons per day,exploration contract having been signed by one Col. Pierce and approved by H.A.Savage as owner, $11,000.00 of government money expended and fully paid back and H.A.Savage is on the gold star list with H.C. Miller, Chief of the Bureau of Mines in San Francisco.

6. (a) Bulldozing (ton be hired by commercial contractor @ $12.50 per day using D-6 caterpillar, or $15.00 per day using D-8 Caterpillar,whichever is available. $2,000.00 per yd 3 per hour

Core drilling at 3 points and with 3 holes at each point on the quartz crystal vein, total core drilling 2000 feet of core drill at an estimated contract cost of $5.00 per foot; (Location far removed from valley) 10,000.00

| | |
|---|---|
| Expenditure in living quarters & camp facilities, only temporary, approximately | 2,000.00 |
| Investment in chain saws to remove heavy timber from vein | 450.00 |
| Incicental expenses such as butane stove,cooking utensils,etc | 400.00 |
| Total | $14,950.00 |

(b) Rate of wages will be standard union scale wages for all core drillers and all miners used and for all bulldozer operators.

(c) We have already on hand the necessary transportation equipment, jeeps etc. Nothing for power or water except fuel for core drilling estimated at $150.00, and fuel for bulldozing estimated at $400.00.

(d) The above figures include cost of hiring work done, which will be done by contract.

(h) Contingencies are estimated at an overall of $1,000.00. No items are charged for overhead, management, interest or taxes.

In view of the knowledge of the deposit by the U.S.Bureau of Mines through its Reno headquarters, By their Mr. Johnson, and through its engineer Mr. Frank J. Weibelt, and the fact that this is apparently the only major deposit of No.1 grade quartz crystal in the Western United States, we courteously request prompt consideration of this application, and for this reason we have not gone into minute detail.

Applicant will advance 25% and DMEA should advance 75%, to be repaid in accordance with the rules and regulations of DMEA, should core drilling prove commercial mineralization.

HEADQUARTERS
SIGNAL CORPS ENGINEERING LABORATORIES
Fort Monmouth, New Jersey

RECEIVED
JUL - 7 1955

Address Reply to:
Director, Components Division

Refer to:
SIGEL-SFC-4
Project No.559A

U.S.Bureau of Mines
Mining Division
1505 Evans Avenue
Reno, Nevada

Attention Mr. C. A. Johnson

Dear Sir:

Reference is made to your letter of September 7, 1954 in which you requested that two quartz samples sent to you by Mr. E. A. Savage, Fresno, California, be examined and evaluated at these Laboratories.

Initial examination disclosed that fractures were the only visible internal defects in both of the crystals. The crystal containing the least affected volume was processed into crystal blanks, and, while the yeild was low, apparently contained excellent material. Five blanks, .550 inch square, were obtained from the crystal, giving a computed yield of approximately 25 blanks per pound. The normal yield in our crystal shop is 63-65,blanks per pound. The primary reason for the low yield from the processed crystal was the presence of fractures. Otherwise, the yield might have been as high as that normally obtained from Grade 1 material.

If it were not for the presence of fractures the quartz might be considered very good material for piezoelectric use., In the condition in which the crystals were received, the crystals could be considered.

If we can be of additional service to you in the future, please do not hesitate to contact us.

Very truly yours,
s/ W. L. DOXEY
Chief,Frequency Control Branch
Component Division

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