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

June 14, 1954

Memorandum

To: Administrator

From: Nonmetallic Minerals Division

Subject: Denial - Docket No. DMEA-3336 - Beryl, Mica, Uranium, John B. Grosso, Jr., Jefferson County, Colorado

The Nonmetallic Minerals Division concurs with the recommendation of the Field Team in that geologic probability of making a significant discovery is remote.

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

Colorado Minerals Administration
RECEIVED
JUN 10 1954

June 9, 1954

Memorandum

To: Ernest William Ellis, DMEA Member
Uranium Commodity Committee, Room 4640

From: H. D. Keiser, Bureau of Mines Member
Uranium Commodity Committee

Subject: Report of Examination - DMEA Docket 3336, John B. Grosso, Jr., Jefferson County, Colorado.

I have reviewed the subject report and have discussed it with Joseph O. Hosted, representative of the Atomic Energy Commission.

I concur with the recommendation of the Field Team that the application involved under the subject docket be denied.

The report has been forwarded to the Chief, Minerals Division, Bureau of Mines, in accord with the routing slip attached thereto.

H. D. Keiser

IN REPLY REFER TO:
G-MD-CNM

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

Department of the Interior
Defense Minerals Administration
RECEIVED
JUN 8 1954

June 7, 1954

Memorandum

REVIEW OF FIELD TEAM REPORT ON APPLICATION DMEA-3336 (beryl, uranium, mica)

To: L. G. Houk, Defense Minerals Exploration Administration
From: D. M. Larrabee, U. S. Geological Survey
Applicant: John B. Grosso, Jr., Jefferson County, Colo.
Name of property: None
Location of property: S. 18, T. 3 S., R. 70 W., 6th P.M., Jefferson Co., Colo.
Date of Field Team Report: May 19, 1954.
Authorship of Field Team Report: E. N. Harshmann
Field Team's recommendation: Denial
Comments: 1 - More mining than exploration.
2 - Very slight chance of significant discovery.

ACTION RECOMMENDED:

Follow Field Team's recommendation.

D. M. Larrabee

D. M. Larrabee

IN REPLY REFER TO:

G-MD-CNM

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

Defense Minerals Exp.
JUN 8 1954

June 7, 1954

Memorandum

REVIEW OF FIELD TEAM REPORT ON APPLICATION DMEA-3336 (beryl, uranium, mica)

To: L. G. Houk, Defense Minerals Exploration Administration
From: D. M. Larrabee, U. S. Geological Survey
Applicant: John B. Grosso, Jr., Jefferson County, Colo.
Name of property: None
Location of property: S. 18, T. 3 S., R. 70 W., 6th P.M., Jefferson Co., Colo.
Date of Field Team Report: May 19, 1954.
Authorship of Field Team Report: E. N. Harshmann
Field Team's recommendation: Denial
Comments: 1 - More mining than exploration.
2 - Very slight chance of significant discovery.

ACTION RECOMMENDED:

Follow Field Team's recommendation.

D. M. Larrabee

Copy to: DMEA (3)

IN REPLY REFER TO:

G-MD-CNM

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

Defense Minerals
JUN 8 1954

June 7, 1954

Memorandum

REVIEW OF FIELD TEAM REPORT ON APPLICATION DMEA-3336 (beryl, uranium, mica)

To: L. G. Houk, Defense Minerals Exploration Administration
From: D. M. Larrabee, U. S. Geological Survey
Applicant: John B. Gresse, Jr., Jefferson County, Colo.
Name of property: None
Location of property: S. 18, T. 3 S., R. 70 W., 6th P.M., Jefferson Co., Colo.
Date of Field Team Report: May 19, 1954.
Authorship of Field Team Report: E. N. Harshmann
Field Team's recommendation: Denial
Comments: 1 - More mining than exploration.
2 - Very slight chance of significant discovery.

ACTION RECOMMENDED:

Follow Field Team's recommendation.

D. M. Larrabee

Copy to: DMEA (3)

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

224 New Customhouse
Denver 2, Colorado

May 27, 1954.

Mr. John B. Grosso, Jr.
982 Tennyson Street
Denver, Colorado

Re: DMEA Docket 3336 (Beryl, Mica, Uranium), John B. Grosso, Jr., Jefferson County, Colorado.

Dear Mr. Grosso:

Reference is made to your application for Government assistance in the exploration of Section 18, Township 3, Range 70 West, located in Jefferson County, Colorado for Beryl, Mica, and Uranium.

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

A careful study of your property and data available to this agency reveals that the probability of disclosing mineable reserves of Beryl, Mica, or Uranium is not considered sufficiently promising to justify Government participation. Under these circumstances, we regret to advise that your application for exploration aid is denied.

Very truly yours,

W. H. King
W. H. King
Field Team, Region IV

E. N. Hausbrow
for A. H. Koschmann
Field Team, Region IV

RDB:cwm

cc: Docket
Administrator, DMEA
WMTraver
AHKoschmann
CETowle
Chron.

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

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
JUN 4 1954

224 New Customhouse
Denver 2, Colorado

May 26, 1954.

Memorandum

To: Administrator, Defense Minerals Exploration Administration
Attention: Code 200

From: DMEA Field Team, Region IV

Subject: Report of Examination - DMEA Docket 3336 (Beryl, Mica, Uranium), John B. Grosso, Jr., Jefferson County, Colorado.

Enclosed are four copies of the Geological Report of Examination on the subject property. The Bureau of Mines did not participate in the examination.

Also enclosed is a copy of the letter of denial to the applicant and two copies of Form 3b.

W H King
W. H. King

E. N. Hirschman
for A. H. Koschmann

Enclosures

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

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
JUN 4 1954

224 New Customhouse
Denver 2, Colorado

May 26, 1954.

Memorandum

To: Administrator, Defense Minerals Exploration Administration
Attention: Code 200

From: DMEA Field Team, Region IV

Subject: Report of Examination - DMEA Docket 3336 (Beryl, Mica, Uranium), John B. Grosso, Jr., Jefferson County, Colorado.

Enclosed are four copies of the Geological Report of Examination on the subject property. The Bureau of Mines did not participate in the examination.

Also enclosed is a copy of the letter of denial to the applicant and two copies of Form 3b.

W H King
W. H. King

E. N. Haschmann
per A. N. Koschmann

Enclosures

IN REPLY REFER TO:

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY
Defense Minerals Exploration Administration
Denver Federal Center
Denver 2, Colorado

May 19, 1954

Memorandum

To: DMEA Field Team, Region IV

From: A. H. Koschmann

Subject: DMEA Docket 3336, John B. Grosso, Jr., Jefferson County, Colorado

Enclosed are 11 copies of the geological report by E. N. Harshman covering the above docket.

The applicant proposes to explore for beryl, mica, and uranium in two pegmatite dikes by excavating open cuts at an estimated cost of $23,193.00.

Harshman, after a field examination, concludes that exploration of the pegmatite dikes would not lead to the discovery of significant amounts of beryl, uranium, and mica. He, therefore, recommends that the application for an exploration loan be denied.

I concur with his recommendation.

E. N. Harshman
for A. H. Koschmann
Supervising Geologist
Colorado-Wyoming

Enclosures (11)

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
JUN 4 1954

JOHN B. GROSSO, JR.

JEFFERSON COUNTY, COLORADO

DMEA DOCKET 3336

Geologic Report

By E. N. Harshman
U. S. Geological Survey

JOHN B. GROSSO, JR.
JEFFERSON COUNTY, COLORADO

INTRODUCTION

John B. Grosso, Jr., 982 Tennyson Street, Denver, Colorado, has applied for DMEA assistance to explore for beryl, mica, and uranium in two pegmatite dikes located in section 18, T. 3 S., R. 70 W., 6th P.M., Jefferson County, Colorado. The property consists of all of section 18 except one recorded mining claim, and is leased by the applicant from Lyman C. and Audrey E. Ladwig of Arvada, Colorado. It is reached over a poor dirt road that connects with the Crawford Gulch road at a point one mile north of State Highway 58 in Golden Gate Canyon.

The applicant proposes to spend $23,193 on two exploration projects as follows:

Project I ($8,348.00): excavate an open cut approximately 100 feet long, 20 feet wide, and a maximum of 75 feet deep to expose a pegmatite dike located on the first ridge south of Van Bibber Creek in the NE 1/4 of section 18 (figure 1):

Project II($14,845.00): excavate an open cut 200 feet long, 75 feet wide and 30 feet deep to expose a pegmatite dike located on a ridge between Halfmile and Cressman Gulches in the SE 1/4 of section 18 (figure 1).

The property was examined on May 13, 1954, in company with the applicant and John Adams of the U. S. Geological Survey.

It is concluded that the exploration requested by the applicant is actually a subsidy for mining, and secondly, that any program of exploration pursued in the area would not lead to the discovery of significant amounts of beryl, uranium, or strategic mica.

It is therefore recommended that the application for exploration assistance, DMEA Docket 3336, be denied.

GEOLOGY

The pegmatite dikes proposed for exploration are in an area underlain by metamorphic rocks of the pre-Cambrian Idaho Springs formation. In the vicinity of Project No. 1 (south of Van Bibber Creek), a sill-like pegmatite dike has been emplaced in schists, gneisses, and phyllites. The lineation of the wall rocks and the pegmatite dike strike N. 68° E. and dip 50 to 55° S. The contacts of the dike and the wall rocks are sharply defined.

The pegmatite is exposed for a strike length of about 100 feet. It is unzoned, 20 to 30 inches wide, and composed of quartz, perthite, and muscovite in crystals 1 to 4 inches in diameter.

The outcrop has been mined, to a limited extent, for scrap mica and books up to 6 inches in diameter have been produced. Beryl, in crystals 1/2 to 2 inches in diameter, is present in the deposit in amounts estimated at not more than 10 pounds per ton (1/2%). A few hundred pounds of beryl crystals from this deposit have been sold at 20 cents per pound delivered in Denver.

Project No. 2 (between Cressman and Halfmile Gulches) in in an area of gneisses and schists striking N. 75° W. and dipping 70° to 80o S. The metamorphic wall rocks have been cut by a series of pegmatite dikes striking about N. 40° W. and apparently dipping steeply northeast.

The dikes are poorly exposed but judging from quartz float in the over burden they appear to be 10 to 30 feet wide and 100 to 200 feet long. At least 2 zones are present in the larger bodies, a core of coarse grained

quartz, and an outer zone of perthite, quartz, and muscovite.

Exploration in this area consists of several very shallow (1 to 2 feet deep) bulldozer cuts. This work has not been systematically planned and has added little or nothing to the knowledge of the deposit.

The presence of beryl in the pegmatite dikes of the area was not confirmed by this examination although the applicant states that a few small beryl crystals were recovered from one of the shallow cuts.

No radioactivity was detected during a scintillator survey of the dikes proposed for exploration in Projects I and II.

CONCLUSIONS AND RECOMMENDATIONS

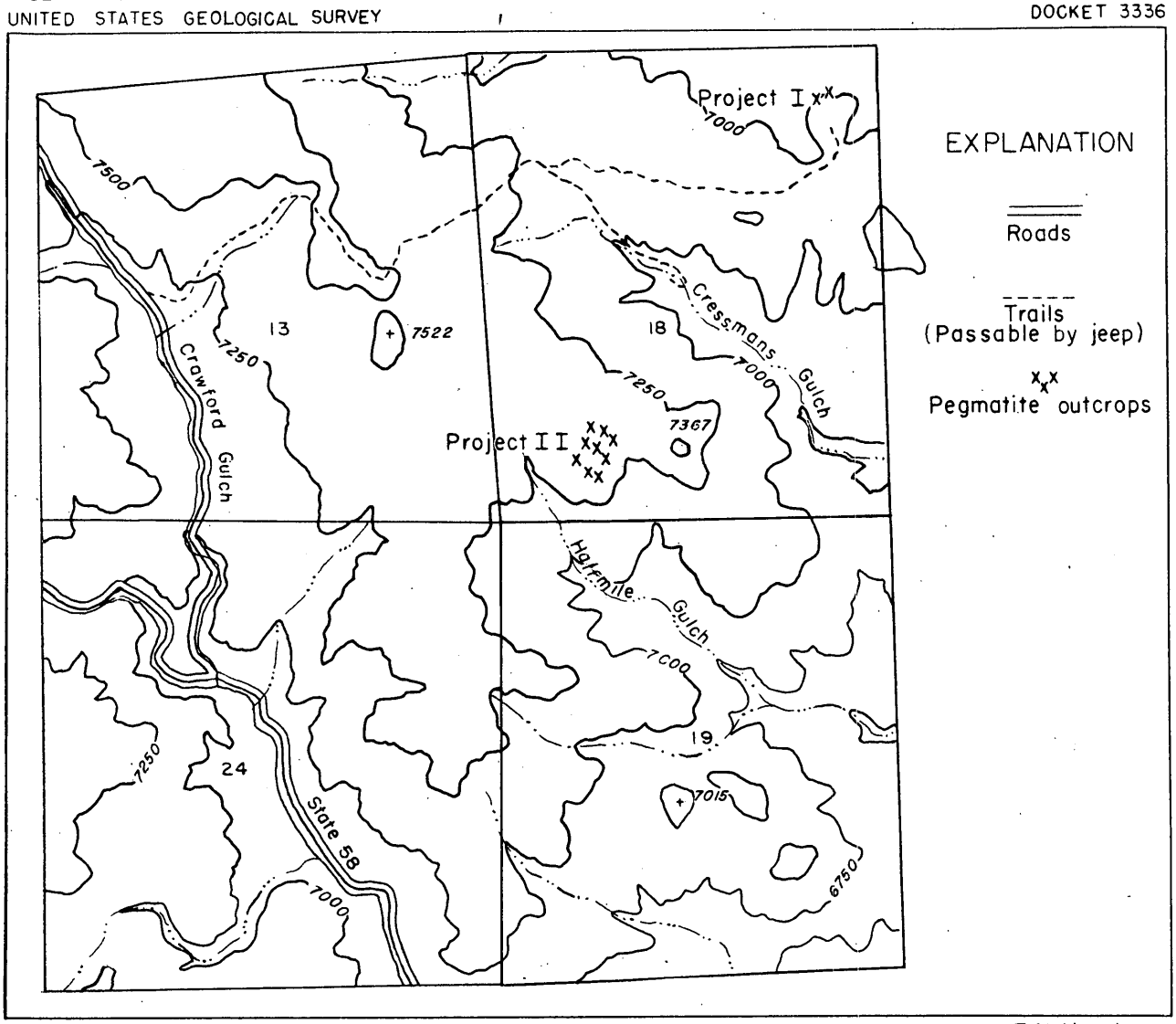
Project No. 1. An uneconomical operation with an insignificant beryl production is indicated by 1) a narrow pegmatite body requiring underground mining methods, 2) a very low grade ore, probably less than 10 pounds of beryl per ton of pegmatite, and 3) difficult hand sorting of 1 to 2-inch (average diameter) beryl crystals. There is no geologic data to indicate that the width of the pegmatite body, the size of the beryl crystals, or the beryl content of the pegmatite dike will increase along the strike of the deposit or at greater depths. Uranium minerals and strategic mica are not present in this pegmatite body.

Project No. 2. The presence of beryl, uranium minerals or strategic mica in the dikes proposed for exploration under this project was not confirmed by this examination and it is improbable that significant amounts of these minerals would be found by additional work in this area.

For the reasons outlined above, it is recommended that the application for exploration assistance, DMEA Docket 3336, be denied.

DEPARTMENT OF THE INTERIOR
UNITED STATES GEOLOGICAL SURVEY

DMEA
DOCKET 3336



From Ralston Buttes Quadrangle, Colorado. Edition of 1948

E.N. Harshman
May 1954

FIGURE I-LOCATION MAP

Scale 1:24000

1000 0 2000 4000 6000 FEET

Contour interval 250 feet

Datum is mean sea level

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

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
MAY 3 - 1954

224 New Customhouse
Denver 2, Colorado

April 30, 1954.

Memorandum

To: Administrator, Defense Minerals Exploration Administration
Attention: Code 200

From: Executive Officer, DMEA Field Team, Region IV

Subject: Docketing for Exploration Assistance

Enclosed herewith in duplicate is DMEA Form 3a and MF-103 and supporting data pertaining to the following applications for Government assistance in exploration work:

Reymert Extension Silver Mines (Copper and Lead)
P. O. Box 521
Superior, Arizona

John B. Grosso, Jr. (Beryl, Mica and Uranium)
982 South Tennyson Street
Denver, Colorado

W. H. King

Enclosures

MF-103
(Revised April 1952)

UNITED STATES DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION

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

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
MAY 3 - 1954

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. 3336
Metal or Mineral Beryl-Mica-Uranium
Date Received
Estimated Cost $23,193
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: Paul D. Crosso Jr. 982 So. Tennyson St. Denver Colo.

(*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

All of Section 18 Township 5 Range 70 West except mining claim now of record Jefferson County Colo.

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

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

(*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

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

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

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

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

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

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

5. *The exploration project.*—(*a*) State the mineral or minerals for which you wish to explore Beryl, spars, mica unriomin

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

(*c*) The work will start within 1 days and be completed within 6 months from the date of an exploration project contract.

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

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

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

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

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

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

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

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

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

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

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

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

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

☐ Money ☐ Use of equipment owned by you ☐ Other

Explain in detail on acompanying paper.

CERTIFICATION

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

Dated 4-22-, 195 4

John B Grosso Jr.
(Applicant)

By

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

ESTIMATION OF COST

All Total 8348.00

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
MAY 3 - 1954

6 A. None

B. 2 men , 30 dollars a day 150 days 4500.00

C. Gasoline and oil 1250.00

4 roll of fuse 8.00

2 box of caps 10.00

D. Bulldozer rent 480.00

Rent loader 1000.00

Rent air compressor , hose and drills 1000.00

Have my own truck for hauling of Gasoline , oil and supplys, repairs of 100.00

E. None

F. Tools Shed 25.00

G. None

H. None

7 A. None

B. Use own truck, and tools , money and labor.

Total 8348.00

Project no/

1. A. John B. Grosso Jr. 982 So. Tennyson St. Denver, Colo.

B. Partner Ship Denver, Colo

C.

D. Lester Embree 335 Josephine St.

2.

3. All of section 18, Township 3, Range 70 west, except minning claim now of record in Jefferson County, Colo.

B. None

C. Lesse

D. Copy of Leese

E. None

F. None

4. A. No mining now in operation , have removed one truck load of mica, and some Beryl.

B. Lots of Mica and Beryl.

C. Lots of Mica showing , have found Spar and traces of Beryl.

D. Easily acceessable road enters to mine. Shipping distance is,

Beryl 8 miles
Mica 120 miles
Spar 20 Miles
Supplys 8 Miles
Residence 20 Miles

E. My partner and my self . Materials and supplys must be purchased. Equipment must be rented, and water is on property.

5. A. Beryl, Spar and Mica .

B. There is a pigmatite of Spar , Beryl and Mica now showing, lying on a hill approxamitly on a 40 degree angle, there is an open cut 6 feet wide and 50 feet long and 3 feet deep. I will start an open pit at the bottom of the open cut 20 feet wide, and start up the hill on that level. I will explore 100 feet up the hill in a open pit. By the time I reach the 100 feet I will have an open pit 20 feet wide, 100 feet long and App. 75 feet deep.

C. 1 day , 6 mos.

D. Have had 8 mos. experience in open pit minning , Partner has had 20 Yrs. experience in handling of equipment and minning.

Project no 1

1 A. John B. Gr[illegible]o Jr. 982 So. Tennyson [illegible] Denver,Colo

B. Partnership Denver,Colo

C.

D. Lester Embree 335 Josephine St. Denver,Colo

2.

3. A. All of section 18, Township 3, Range 70 West, Except minning claim now of record in Jefferson County.

B. None

C. Lesse

D. Copy of Lease

E. None

F. None

4. A. No minning in operation.

B. None

C. Have found lots of round white quarts and after removing overburden have found Spar, traces of Beryl and some Mica.

D. Easily accesable road, enters to mine. the distances are,

~~Beryl~~

Beryl	8 Miles
Mica	120 Miles
Spar	20 Miles
Supplys	8 Miles
Residence	20 Miles

E. My partner and myself and [illegible]. Materials and supplys must be perhhased. Equipment must be rented and water is on property.

5. A . Beryl, Spar and Mica.

B. At the top of a ridge there is lots of round pure white ~~xxxx~~ Quarts. I have uncovered several spots and found that the pygmatite runs at the top of the ridge app. 200 hundred feet long and 75 feet wide.
I will start at the lower end of the pygmatite at the depth of 30 feet, and start an open pit mine app.75 feet wide and explore 100 feet long.

5 C. one day on completion of loam and aprox. 18 mos.

D. Have had 8 mos. experience in open pit mining, partner has had 20 yrs. experience in handling of equipment and mining.

Project no 2

ESTIMATION OF COSTS

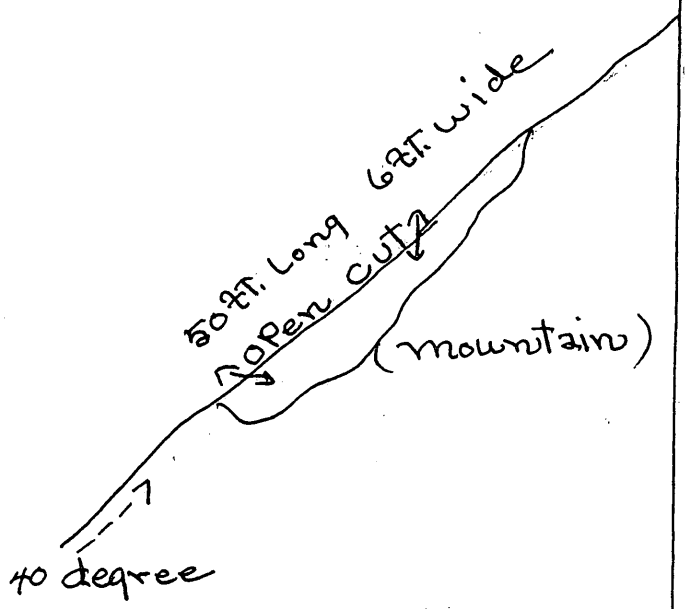
6. A. None TOTAL COSTS*--- 14,845.00

B. 2 men 15.00 a day each for 300 days	9000.00
C. Gasoline and oil	2440.00
Powder	240.00
Caps (6 Boxes)	30.00
Fuse	10.00
D. Rent Bulldozer with loader	1000.00
Purchase 1 air compressor , gun , hose and drill	1800.00
E. None	
F. Tool shed	25.00
G. Repairs and upkeep of equipment	300.00
7 Yes	
8. Labor , truck and money.	
Total	14,845.00

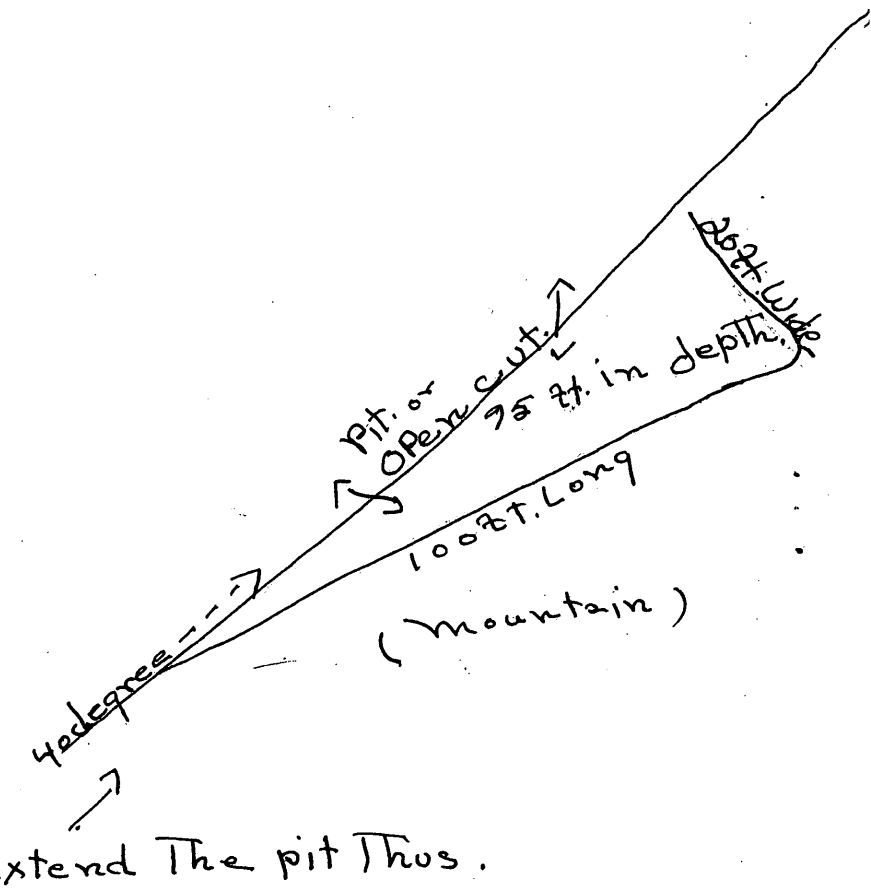
Project no 2

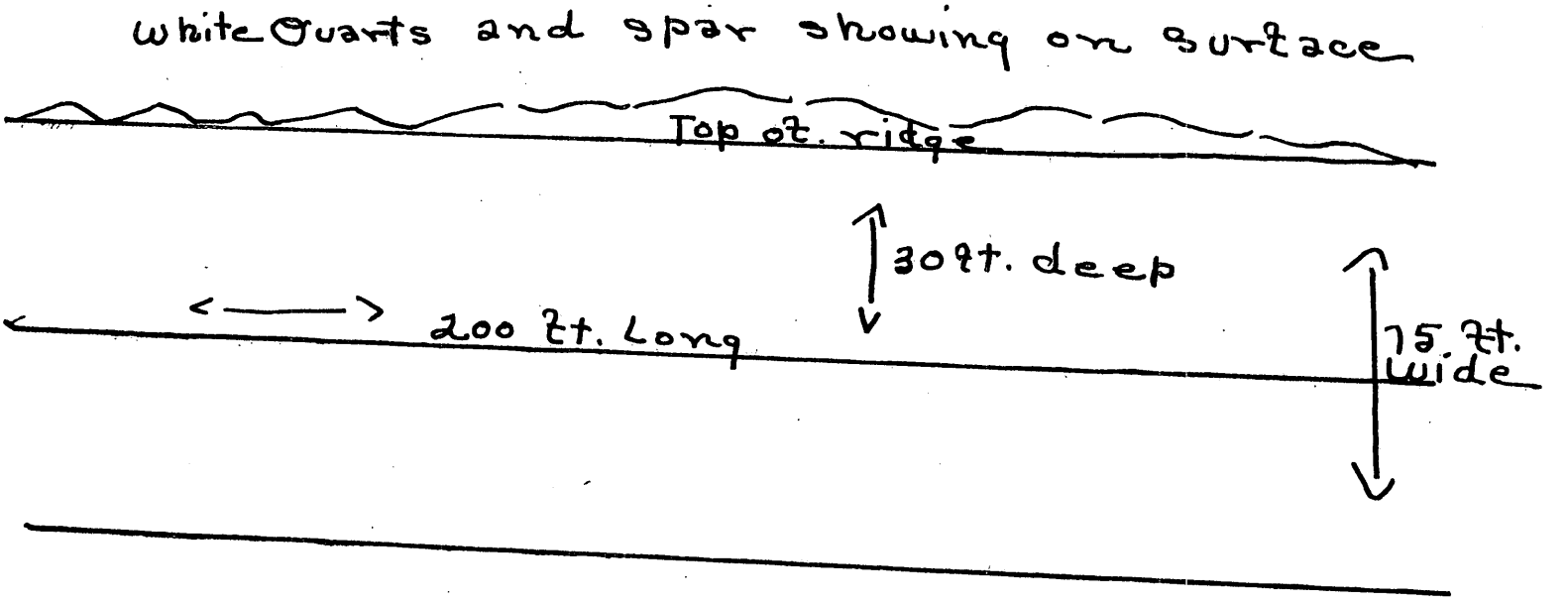
as situated now

Projection 1



Proposed Project



Extend The pit Thus.

Proposed Project #2