DMA Form 1

DEFENSE MINERALS ADMINISTRATION
Control Slip

CONTROLLED DOCUMENT

DMA Docket No. 3424

DO NOT DETACH THIS SLIP

Action on this document is recorded and controlled in Reports and Records Branch. Any movement of this document between divisions or offices of DMA or movement outside DMA must be reported to the Reports and Records Branch. Actions taken that affect status of the case must also be reported.

This document has been recorded as

Exploration Assistance

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

Cys to USBM, USGS, & Reg.

Routing Slip

To:	600	Date	7/27/54
To:	Oper Com	Date	7-30-54
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CONTROLLED DOCUMENT

Docket Copy
Surname:
Anderson
Newcomb
Thomson
Houk
Hedges
Kiilsgaard
Selfridge
Johnson

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

SEP 10 1954

Mr. Carl W. Heidepriem
Box 146
Custer, South Dakota

Re: Docket No. DMEA-3424 - Beryl-Mica
Granite Reef Fraction
Custer County, South Dakota

Dear Mr. Heidepriem:

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 beryl and mica 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. D. Mittendorf

Administrator

WCAnderson:gad 9/7/54
Copy to: Admr. R. File
Docket
Field Team, Region V
Operating Committee
Mr. Dietrich, 3061
Mr. Kiilsgaard, 5227
Mr. Houk

R.C.J.

IN REPLY REFER TO:

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

September 7, 1954

Memorandum

REVIEW OF FIELD TEAM REPORT ON APPLICATION DMEA-3424 (beryl-mica)

To: L. G. Houk, Defense Minerals Exploration Administration
From: E. L. Newcomb, U. S. Geological Survey
Applicant: Carl W. Heidepriem, Box 146, Custer, South Dakota
Name of property: Granite Reef Fraction
Location of property: Sec. 31, T. 3 S., R. 5 E., Custer County, South Dakota
Date of Field Team Report: August 24, 1954
Authorship of Field Team Report: J. A. Redden, USGS, and E. O. Binyon, USBM.
Field Team's recommendation: Application should be denied.
Comments:

Amount of beryl, amblygonite, and mica is insufficient for profitable mining operation.

Evidence in present workings indicates a significant discovery of beryl, mica (sheet or scrap) and amblygonite is unlikely to be found by proposed work.

ACTION RECOMMENDED: Concurrence with Field Team recommendation that application be denied.

E L Newcomb
E. L. Newcomb

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

September 8, 1954

Memorandum

To: Nonmetallic Minerals Division
Defense Minerals Exploration Administration

From: Donald R. Irving, Acting for Chief, Ceramic and Fertilizer Materials Branch

Subject: DMEA-3424 (mica)

Applicant: C. W. Heidepriem

Name and Location of Property: Granite Reef Pegmatite
Custer County, South Dakota

Date of Field Team Report: August 27, 1954

Date Rec'd. by Ceramic & Fertilizer Mtls. Br.: September 8, 1954

Field Team Recommendation:

1. Denial of application.

Comments:

1. Mica was found to be of scrap quality because of its small size and defects.

2. Field examiners are of the opinion that the possibility of recovery of sheet mica would be small.

3. It appears that this property would be uneconomical to operate for the production of the mica.

Recommendation:

I concur in the field team's recommendation to deny subject application on the basis that the mica is of poor quality.

Donald R. Irving
Donald R. Irving

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

September 3, 1954

Memorandum

To: Administrator

From: Nonmetallic Minerals Division

Subject: A denial of exploration assistance and summary report.

By: Walter C. Anderson

1. Docket No. DMEA-3424 - Beryl-Mica
Property: Granite Reef Fraction
Custer County, South Dakota

Applicant: Carl W. Heidepriem
Box 146, Custer, South Dakota

Application: Form MF-103, date received July 26, 1954
Work proposed: 300 feet of adit.
Amount requested: $7,380.16
No contract: Application denied.

2. Comments:

Geological premise: It is a remote possibility that mineral content of pegmatite will improve sufficiently in quality and amount to warrant an economic mining operation.

Geological Criteria:
1. Zoned pegmatite with maximum thickness of 40 feet.
2. Low mica and beryl content in pegmatite.
3. Scrap grade mica.
4. Highly altered spodumene.

Future possibilities: According to Field Team "Exploration by any method would not result in an economic discovery".

Recommendations: The Nonmetallic Minerals Division concurs in Field Team's recommendation to deny the application. The Geological Survey and the Bureau of Mines concur in this recommendation.

MF-500

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS ADMINISTRATION

REFERENCE SLIP

DATE 8/30

REFERRED TO:

1. 600
2.
3.
4.

FOR:

..... Action	..... Recommendation
..... Approval	..... Record of .....
..... Comment	
..... Conference	..... Referring to .....
..... Consideration	
..... Filing	..... Reply for signature of .....
..... Instructions	
..... Investigation	..... Rewriting
..... Initials	..... Signature
..... Mailing	..... Suggestions
..... Previous correspondence	..... Your information

REMARKS:

Reynolds should letter
concurrence memo to Mat

Check (X) before the items needing attention.

ROBERT E. ADAMS

Initials of sender.

GPO 16—63815-1

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION

~~WASHINGTON, D.C.~~
Region V
2908 Colfax Avenue South
Minneapolis 8, Minnesota

August 27, 1954

Memorandum

To: Operating Committee, Defense Minerals Exploration Administration, Washington, D. C.

From: Executive Officer, Field Team, Region V

Subject: Docket DMEA 3424, Carl W. Heidepriem, Granite Reef Fraction, South Dakota

Reference your memorandum of August 2, 1954.

Here is the original and three copies of the field team report denying the subject application.

A. B. NEEDHAM

Attachments

Reviewed by
DMEA OPERATING COMMITTEE
9-3-54
(date)

UNITED STATES
DEPARTMENT OF THE INTERIOR
DOUGLAS McKAY, SECRETARY

DEFENSE MINERALS EXPLORATION ADMINISTRATION

REPORT OF EXAMINATION BY FIELD TEAM

REGION V

DMEA DOCKET NO. 3424

Granite Reef Pegmatite
Custer County, South Dakota

E. O. Binyon, Mining Engineer
U. S. Bureau of Mines

J. A. Redden, Geologist
U. S. Geological Survey

August 24, 1954

Reviewed by
DMEA OPERATING COMMITTEE
9-3-54
(date)

REPORT OF EXAMINATION ON THE GRANITE REEF PEGMATITE

by

E. O. Binyon, Mining Engineer
U. S. Bureau of Mines

J. A. Redden, Geologist
U. S. Geological Survey

Docket No.: 3424
Applicant: Carl W. Heidepriem, P. O. Box 146 Custer, S. Dak.
Commodity: Mica, beryl, columbite-tantalite, lithium minerals

NAME AND LOCATION OF THE PROPERTY

The property is known as the Granite Reef Fraction and is in sec. 31, T. 3 S., R. 5 E., B.H.M., Custer County, S. Dak., approximately 3 miles southeast of Custer, the county seat and nearest rail point and supply center. From Custer the road to the property, except for the last .3 mile, which is a logging road, is graveled and permits access the year around.

PROPERTY RIGHTS

Carl W. Heidepriem, the applicant, is the locator and owner of the Granite Reef Fraction claim. It is an unpatented lode mining claim held under an amended location, which is recorded in Locations Book No. 18, page 203, at the Register of Deeds office in Custer.

This claim, as the name indicates, is a fraction comprising 3.64 acres. (See map). The applicant states that a lease can be obtained, if necessary, on the patented ground bounding the property.

DESCRIPTION OF THE PROPERTY

Approximately four hours was spent by the field team in mapping and examination of the pegmatite. Fred Heidepriem and Louis Stender were at the property for a short time during the examination.

Other than a small tool shed, there are no buildings or surface facilities on the property.

As shown on the accompanying sketch map, the mine workings consist of three open cuts and two shallow prospect pits. Present operations are confined to the largest open cut at the southwest end of the pegmatite.

The equipment at the property consists of a trailer mounted 160 c.f.m. Chicago-Pneumatic compressor driven by a 6-cylinder Hercules gas engine, a Terratracloader with a 7- cubic foot bucket, an Ingersoll Rand, Model S-55 jackhammer, a 1939 Chevrolet pickup, and approximately 200 feet of 1-inch and 50 feet of 2-inch pipe, with air hoses and small tools.

GEOLOGY AND ORE RESERVES

The pegmatite is a long narrow body having a maximum thickness of about 40 feet. (See sketch map). The average strike of the pegmatite is N. 24° E. Exposed contacts are rare and tend to be irregular, but the average dip of the main pegmatite is about 90°. On the southwest end the dip of the pegmatite flattens to the west, and in the east end of the open cut the dip is flat. Irregular rolls along the contact of the pegmatite plungenearly horizontally northeast-southwest, but it is doubted that this is a true plunge of the pegmatite.

A quartz-plagioclase-muscovite pegmatite wall zone, 1 to 4 feet thick, apparently surrounds the pegmatite. Approximately 15 percent of the zone is muscovite in 1- to 4-inch books. Small beryl crystals 1 to 4 inches in diameter are accessory in the zone.

An intermediate zone consists of quartz-plagioclase-altered spodumene pegmatite. The zone contains 10 to 15 percent altered spodumene. The altered spodumene now consists of a fibrous, white, micaceous mineral which forms poorly developed pseudomorphs after spodumene. The fibers are oriented approximately perpendicular to the surface of the pseudomorphs. Coarser-grained muscovite averaging 0.5 inches in diameter commonly forms radial aggregates around the needle-like mica. Amblygonite also occurs as an accessory mineral in the outer portion of the zone. The amblygonite occurs as rounded aggregates 2 to 10 inches in diameter. The aggregates are commonly altered to a green phosphate (?) mineral in their outer part, but are fresh in the interior. The amblygonite content of the zone probably does not exceed 3 percent.

A massive quartz core forms the innermost unit of the pegmatite. The quartz core crops out prominently above the surrounding zones.

Mineral Deposits

The beryl content of the wall zone is low and probably does not exceed 0.5 percent. Coarser-grained beryl probably exists in the intermediate zone, but none was observed and an estimate of the beryl content would be only a guess.

All of the mica is of scrap quality because of small size, staining, and various mechanical defects. Scrap mica could be mined from the wall zone and from the radial aggregates around the altered spodumene in the intermediate zone. The possibilities for recovery of sheet mica are very few.

Additional amblygonite could be mined as a by-product. The altered spodumene, however, contains a type of alteration which suggests that it was altered at an early stage in the crystallization of the pegmatite. It differs from the common clay alteration of spodumene which often exists in the outer parts of spodumene pegmatites. It is doubtful (but not to be excluded) that fresh spodumene exists in the interior of the pegmatite.

PAST PRODUCTION

The only record of production available is that supplied by the applicant, and according to the statement in the application, 400 pounds of beryl, 3 tons of mica (scrap grade), and 500 pounds of amblygonite were produced from the open cuts and pits shown on the map.

APPLICANT'S PROPOSAL

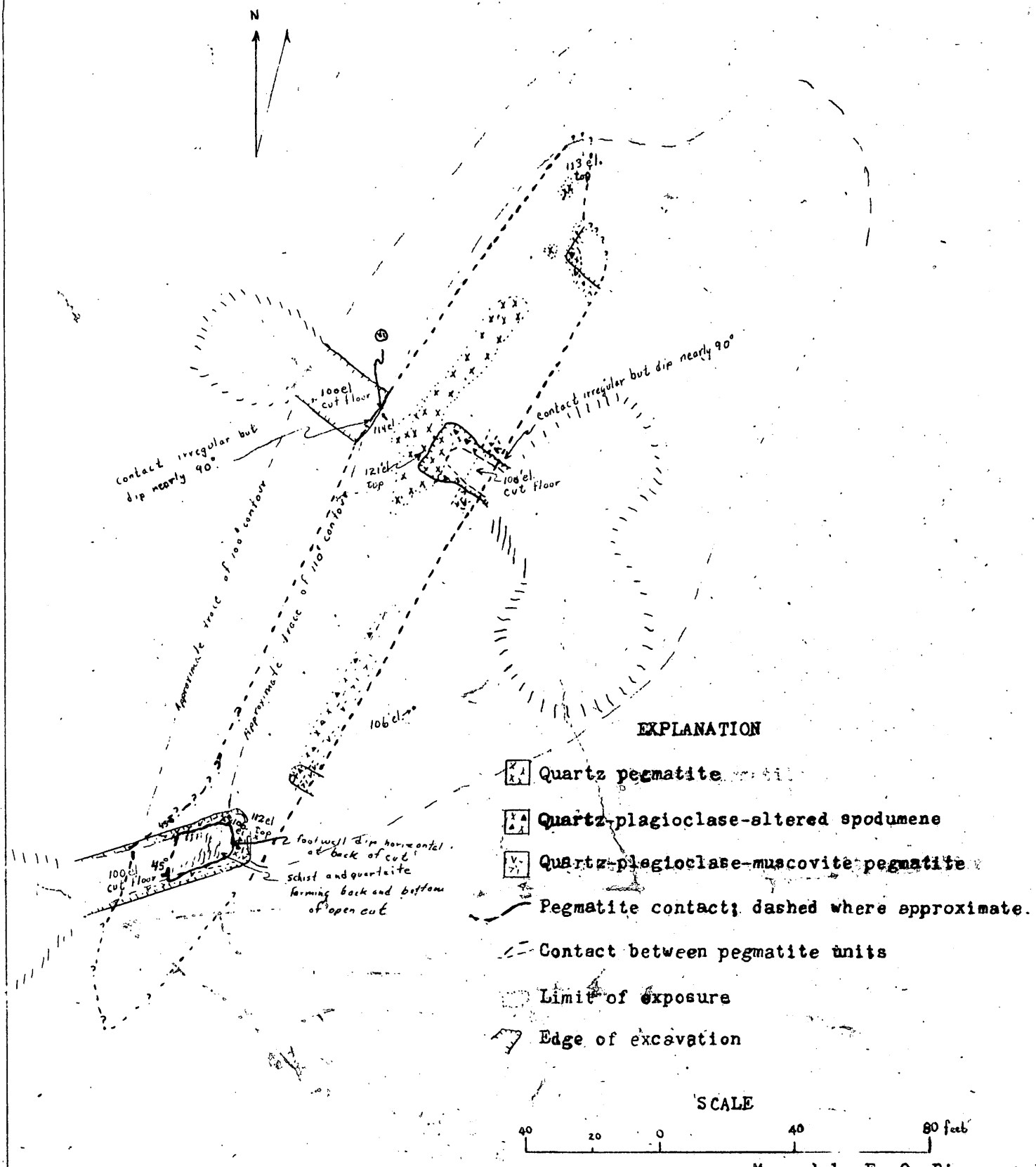
The applicant proposes to explore the deposit by adit. The adit is to be started at the north end of the pegmatite and is to be driven along the strike for a distance of 300 feet and at a depth of approximately 100 feet below the outcrop. The proposed work is not economically feasible and, owing to the low grade of the deposit as described under "Geology," exploration by any method would not result in an economic discovery.

CONCLUSIONS AND RECOMMENDATIONS

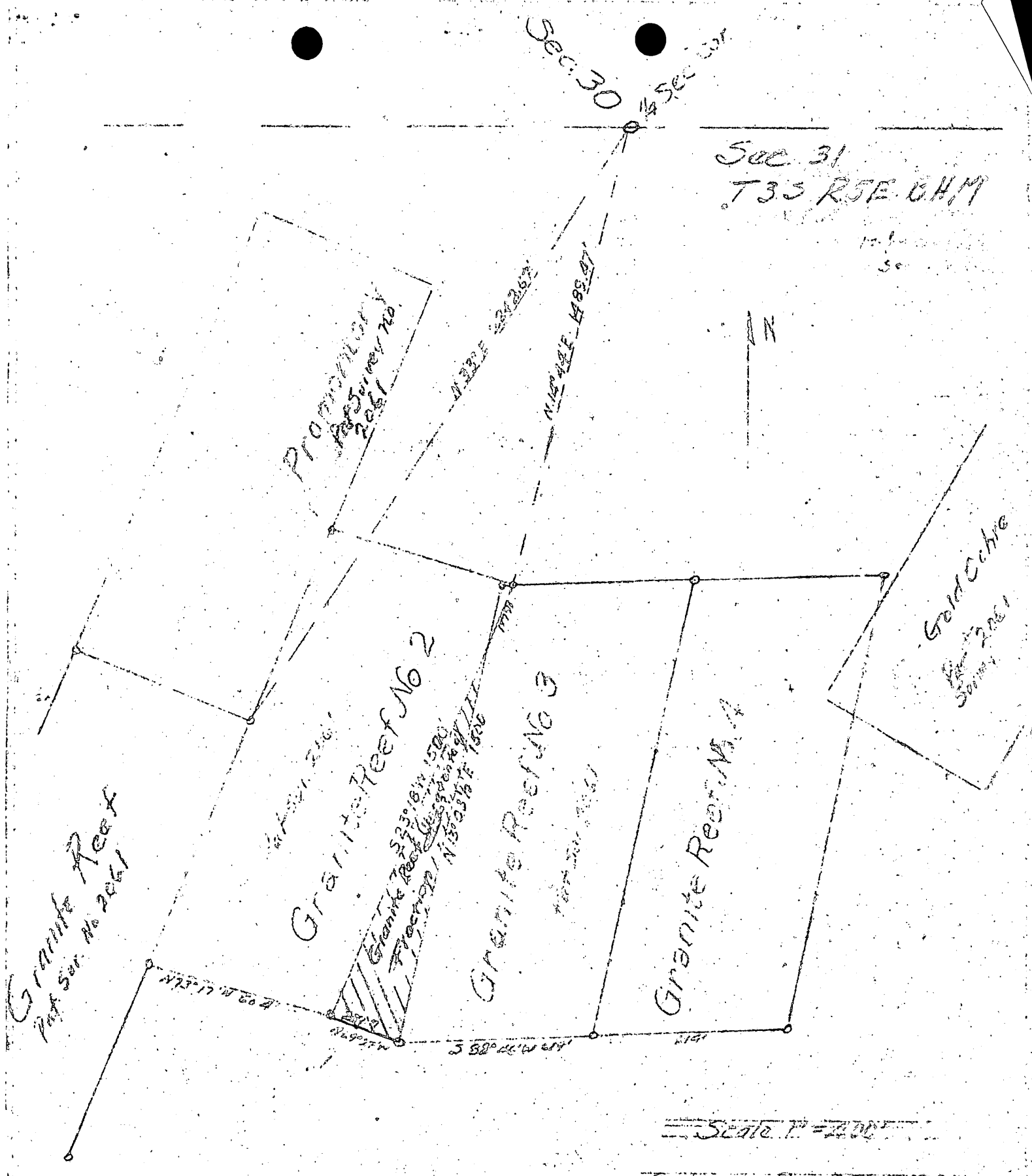
The pegmatite is well zoned and contains some beryl, mica (scrap grade), amblygonite and spodumene. However, the percentage of beryl and amblygonite is too low for profitable mining; also, there is little, if any, sheet mica and the spodumene is so highly altered as to be unsalable.

As it is very unlikely that fresh or unaltered spodumene will be found in minable quantities in the deposit at depth, and since a successful mining operation would depend on the recovery of spodumene, it is concluded that the pegmatite does not warrant exploration as proposed. Also, it is unlikely any exploration would result in a discovery of sufficient amounts of either one or all of the economic minerals--beryl, mica (sheet or scrap), and amblygonite--to permit a profitable mining operation. As stated, the spodumene noted in the workings is highly altered and has no value.

Although some beryl production would result from a mining operation, the amount would not be of economic importance and it is recommended that the application be denied.



SKETCH MAP, GRANITE REEF FRACTION PEGMATITE, CUSTER COUNTY, SOUTH DAKOTA


Sec. 30
1/4 Sec. Cor.
Sec. 31
T35 R5E BHM
N
Proprietary Pat. Survey No. 2061
N 32°E 1342.62'
N 14°44'E 489.47'
Granite Reef No 2
Granite Reef No 3
Granite Reef No 4
Gold Cache
Granite Reef
Pat. Sur. No. 2061
Granite Reef Fraction
N 77°17'W 60.2'
N 49°37'W
S 38°46'W 614'
Scale 1" = 200'
Granite Reef Fraction
Deadwood, S. Dak.
Sec. 31, T35, R5E BHM
Traced from Pat. Sur. Plat

RECEIVED
AUG 16 1954

Custer, South Dakota
August 9, 1954

United States Department Of The Interior
Defense Minerals Exploration Administration
Washington 25, D. C.

Re: Docket No. DMEA 3424
Beryl - Mica
Granite Reef Fraction
Custer County, South Dakota

Gentlemen:

Your letter of the 2nd instant received and note that my application has been turned over to Mr. Needham, Executive Officer of the DMEA Field Team, Minneapolis.

It was my understanding that beryl and mica came under the 90% Government participation, however, if 75% is the new rate of Government participation for these minerals, I am prepared to proceed at that rate of participation.

I will be willing and able to render the Field Team any possible assistance in making their examination of my property.

Yours truly,

Carl W. Heidepriem

Carl W. Heidepriem

Docket Copy

Houk
Selfridge
[illegible]

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

AUG 3 - 1954

Mr. A. B. Needham
Executive Officer, DMEA
Field Team, Region V
2908 Colfax Ave., South
Minneapolis 8, Minnesota

Subject: Docket No. DMEA-3424 - Beryl-Mica
Carl W. Heidepriem
Granite Reef Fraction
Custer County, South Dakota

Dear Mr. Needham:

Please review the subject application and arrange for a field examination if you deem it necessary.

On July 29, 1954, this office received a telephone call from Representative E. Y. Berry of South Dakota inquiring into the status and progress of the application.

Copies of memoranda from the Geological Survey, dated July 28, 1954, and from the Bureau of Mines, dated July 30, 1954, are enclosed for your information.

Sincerely yours,

George C. Selfridge

Chairman, Operating Committee (JHB)

Approved:

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

D. M. Larrabee (JHB)
Member, Geological Survey

Enclosures 4

Copy to: Admr. R. File
Docket
Operating Committee
Mr. Dietrich, 3061
Mr. Larrabee, 5216
Mr. Houk

R.C.B.

Docket Copy
Surname:
Favrbes
Lefordge
Hedges
Jefferson

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

AUG 3 - 1954

Mr. Carl W. Heidepriem
Box 146
Custer, South Dakota

Re: Docket No. DMEA-3424 - Beryl-Mica
Granite Reef Fraction
Custer County, South Dakota

Dear Mr. Heidepriem:

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. A. B. Needham, Executive Officer, DMEA Field Team, Region V, 2908 Colfax Avenue, South, Minneapolis 8, Minnesota, for further consideration and possibly a field examination.

Please advise this office in writing if you desire to have your application processed under the new Government participation rate which is 75 percent of the approved cost.

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

Sincerely yours,

C. O. Mittendorf (fw)

Administrator

WCAnderson:gad 7/30/54
Copy to: Hon. E. Y. Berry
House of Representatives
Washington 25, D. C.

Admr. R. File
Docket
Operating Committee
Field Team, Region V
Mr. Dietrich, 3061
Mr. Larrabee, 5216
Mr. Houk

R.C.B.

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

July 30, 1954

Memorandum

To: Nonmetallic Minerals Division
Defense Minerals Exploration Administration

From: Chief, Ceramic and Fertilizer Materials Branch

Subject: DMEA-3424 (mica)

Applicant: Carl W. Heidepriem

Name and Location of Property: Granite Reef Fraction
near Custer, South Dakota

Date Application Rec'd. by Ceramic & Fertilizer Mtls. Br.: 7/27/54

Comments:

No information is available on this mine.

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

IN REPLY REFER TO:

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

July 28, 1954

Memorandum

REVIEW OF APPLICATION DMEA-3424 (mica)

To: L. G. Houk, Defense Minerals Exploration Administration
From: E. L. Newcomb, U. S. Geological Survey
Applicant's name and address: Carl Heidepriem, Box 146, Custer, South Dakota
Name of property: Granite Reef Fraction
Location of property: (Sec. 31, T. 3 S., R. 5 E.) 1.5 mi. SE of Custer
Summary of applicant's proposal: 300' adit in pegmatite dike
Total cost -- $7,388.18
Sources of information on applicant's property:
U.S.G.S. Prof. Paper 247 (general geologic information)
We have no specific information on this property. However, the applicant states that U.S.G.S. personnel (L. Page and J. Redden) have visited the property.
Comments: Though the application contains insufficient information to appraise the proposed work, the property is known to be in an area containing significant mica deposits.
RECOMMENDATION: The application should be referred to the Field Team for their review and comments.

E. L. Newcomb
E. L. Newcomb

July 27, 1954

Mr. Carl W. Heideprian
P. O. Box 146
Custer, South Dakota

Subject: DMEA-3424
Re: Exploration Assistance
Granite Reef Fraction

Dear Sir:

The receipt of your application dated July 23, 1954 for exploration assistance under the Defense Production Act of 1950, as amended, is hereby acknowledged.

Your application has been assigned Docket Number DMEA-3424 and referred to the Non-Metallic Minerals Division.

Kindly refer to in any future correspondence relating to your application.

Sincerely yours,

MF-103
(Revised April 1952)

UNITED STATES DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION

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

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

Not to be filled in by applicant

Docket No. 3424
Metal or Mineral Mica, et al
Date Received
Estimated Cost $7,380
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: Carl W. Heideprien
Box 146
Custer, South Dakota

(*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 Mineral Location of about 3.64 acres. This Fraction lies between two patented mineral locations, and is situated in Section 31, T. 3 S., R. 5 E.. This fractional claim embraces practically all of the dike claimed and any portion conflicting with the patents can be leased.

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

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

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

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

(*f*) If the land consists of unpatented claims, add to the description above, the book and page numbers for each recorded location notice. Book 18 of Locations, Page 203

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 Mica, Beryl, Columbium - Tantalum and Lithia Ores

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

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

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

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

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

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

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

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

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

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

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

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

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

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

☐ Money ☒ Use of equipment owned by you ☒ Other (Labor)

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 23rd, 1954

Carl W. Heidepriem
(Applicant)
Carl W. Heidepriem

By

Self

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

SUPPLEMENTAL SHEETS

No. 1

4. (a) Open cut 10' wide, 30' long with 20' face. Open cut 10' wide, 20' long with 15' face.

(b) Beryl 400 pounds, scrap mica 3 tons, amblygonite 500 pounds.

(c) Pegmatite dike extending above ground on west side to a highth of approximately 75' and running full length of claim. Reason for wanting to explore is on account of showings of beryl, mica, and amblygonite. Property has been examined by geologists Lincoln Page and Jack Redden and is indicated as a rare mineral dike on a Geological Survey map.

(d) Property is located 1½mmiles from Custer in a south easterly direction, and is easily accessable from Custer, a shipping point on the Burlington Railroad.

(e) Manpower, materials, supplies, equipmwnt, water and power available in Custer,

5. (b) I propose to tunnel through length of dike for a distance of about 300', exploring the dike at a depth of approximately 100'. Map of dike included with this application.

(c) Work to be started within ten days of completion of negoiations for loan, and work to be completed within six months of start of operations.

(d) I have worked in many of the pegmatite mines of the areanboth as an employee and as a contractor.

6. (a) (See cost sheet.

7. (a) Yes.

(b) I propose to furnish my shareeof the costs by my labor and the rent on my equipment. I have a 160 Cu. Ft. Air Compressor, an Ingersol Drifter, Drill Steel, 2" air pipe, air hose, water tank, "Cat" Loader, and all hand tools and auxillary equipmant,

SUPPLEMENTAL SHEET

No. 2

Costs

Blasting Powder	$ 1,500.00
Fuse	225.00
Caps	50.90
Fuel (Gasoline)	750.00
Oil	100.00
Bits	449.76
Sharpening Bits	202.50
Insurance	250.00
Wages	3,300.00
Water Hauling	200.00
Timber and Miscelaneous Expense	252.00
Steel Breakage	100.00
Total Cost of Project	$7,380.16

24.46 | ft.

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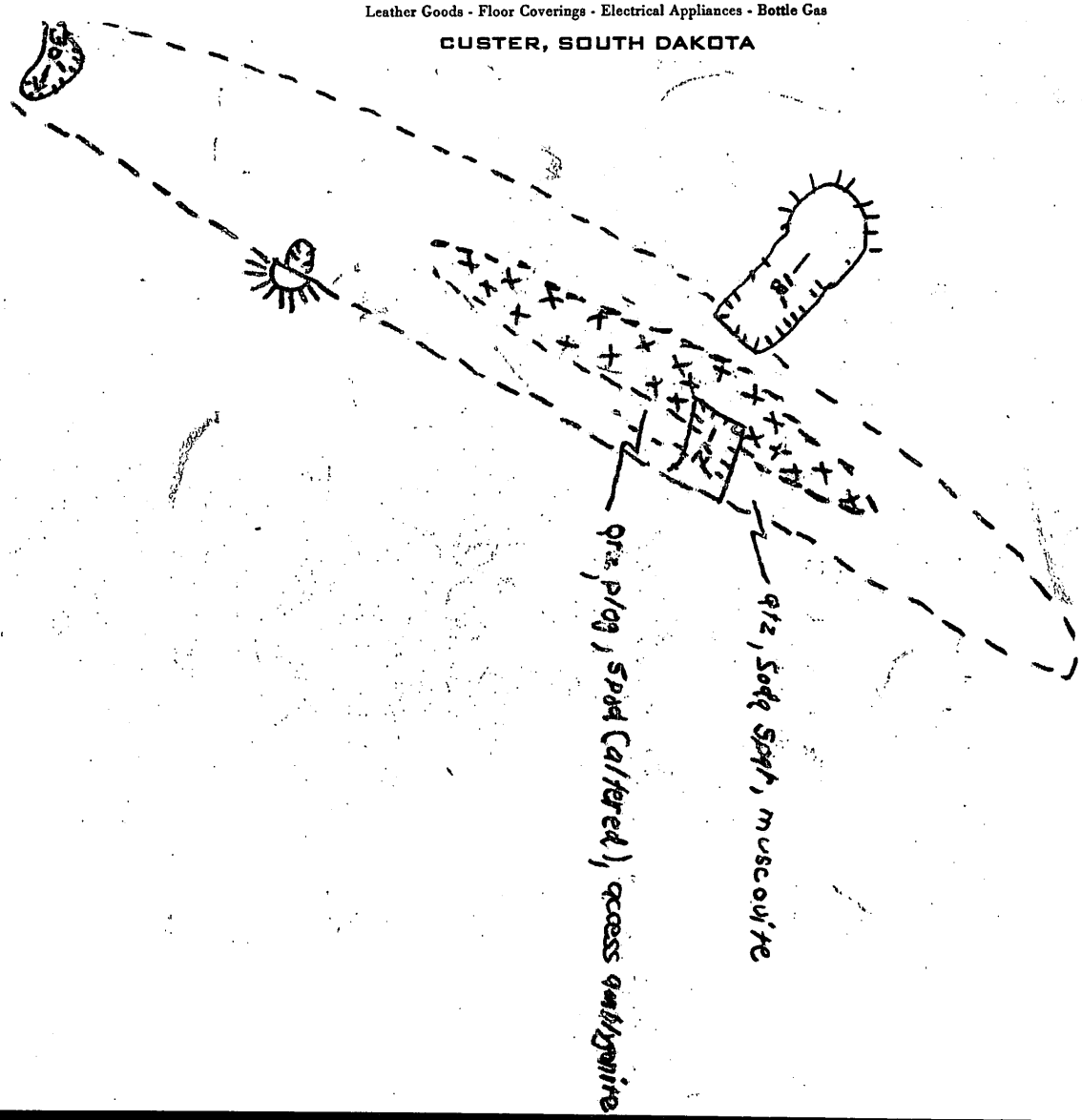
Ambulance Service



1" = 40'

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Mr. George C. Selfridge, Chairman
Operating Committee
Defense Minerals Exploration Administration
Department of the Interior
Washington 25, D. C.