224 New Customhouse
Denver 2, Colorado

June 17, 1959

Memorandum

To: Chairman, Operating Committee, OME

From: OME Field Team, Region III

Subject: Docket OME 6019 (Beryl, Mica, et al.) Robert and Della R. Stilen (Lone Eagle claims 1-5) Pennington County, South Dakota

Enclosed are the original and two copies of a Geologic Report dated June 12, 1959, by F. B. Moore, Geologist, Geological Survey, which is rendered as a result of an on-site examination of the subject property. The Bureau of Mines did not participate in the examination.

The application, as submitted, was incomplete and the applicant has failed to provide requested additional information and data. In addition, the proposed work is more the nature of development and preparation for mining rather than exploration.

The examining geologist concludes that there is no particular target for exploration in the low-grade unzoned pegmatite; therefore, recommends that the application be denied, in which we concur.

Original signed by
J. W. TOWNSEND

J. W. Townsend

Original signed by
E. N. HARSHMAN

E. N. Harshman

Enclosures
JWT:jy
cc: Harshman)
OME/DFC) w/copy of Geologic Report
OMR/DFC) dated June 12, 1959
Docket OME 4019)
Chron.

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

OME
DEPARTMENT OF THE INTERIOR
JUL 10 1959
REGION III
DENVER, COLORADO

Docket

JUL 7 1959

Mr. and Mrs. Robert Stilen
Box 63
Keystone, South Dakota

Re: Docket No. OME-6019
(Beryl, Mica, et al.)
Robert and Della R. Stilen
Lone Eagle Claims 1-5
Pennington County, South Dakota

Dear Mr. and Mrs. Stilen:

This will acknowledge Mr. Robert Stilen, Sr.'s letter of June 19, 1959.

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

A careful study of all information available to us concerning your property does not indicate that the geologic probability of making a significant discovery of beryl and mica is sufficiently promising to justify Government participation in the proposed exploration.

We regret to advise you that, under these circumstances, your application for exploration assistance is denied.

Sincerely yours,

Frank E. Johnson

Acting Director

JWAlt:gad 7/1/59
Copy to: Dir. R. File
Operating Committee
Region III
Mr. Kirkemo, USGS
Mr. Eilertson, USBM

June 29, 1959

Re: OME 6019
Robert and Della R. Stilen
Pennington County, South Dakota
Beryl-Mica

Memorandum

To: L. G. Houk, Office of Minerals Exploration

From: H. Kirkemo, U. S. Geological Survey

Subject: Review of Examination Report

I concur with the recommendation of the examining geologist and the Field Team that the subject application be denied.

Absence of a target for exploration and lack of interest by the applicant in doing any work except preparation for mining justify denial of the application without prejudice.

H. Kirkemo

cc: OME (3)
D. E. Eilertsen, Room 3649
Director's reading
Branch reading
Chron. file
Docket file
HKirkemo/mm
G-MD-6-29-59

RECEIVED
DATE

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

EXTRA COPY
O. M. E.
RECEIVED JUN 25 1959

DATE	INITIALS	CODE

OME ~~XXXX~~ Date June 25, 1959
OME ~~XXXX~~ Docket No. 6019
OME Contract No. —
Commodity Beryl
Name of Applicant Robert and Della H. Stilen
Location of Property Pennington Co., S. D.
Estimated Cost of Project Not given

Memorandum

To: Non-Metallics Minerals Division, GS, Room 4451

From: Donald E. Ellertson, Commodity Specialist (Beryllium (Beryllium), Branch of Rare and Precious Metals
Field Team Report

Subject: Review of _____
(Applications, Field Team Report, etc.)

1. Date of subject document: 6/12/59. 2. Date received by reviewer: 6/24/59.

3. Prior reports on this property known to reviewer: Yes ☐ No ☒

4. Prior reports on nearby properties known to reviewer: Yes ☐ No ☒

5. Information available on past production: Yes ☐ No ☒

6. Other pertinent factors known to reviewer: Yes ☐ No ☒

7. Explain items marked 'yes' above:

8. Factors needing special consideration:

a. Location ☐
b. Ownership ☐
c. Evidence of mineralization ☐
d. Geology ☐
e. Proposed exploration method ☐
f. Alternate exploration method ☐
g. Costs ☐
h. _____ ☐

9. Action advised:

a. Obtain information from applicant ☐
b. Refer to Field Team ☐
c. Denial ☒
d. Agree with Field Team ☐
e. Disagree with Field Team ☐
f. Suggest alternate plan ☐
g. Request another examination ☐
h. Approval ☐
i. Consult with Mr. _____ at _____ AEC Office.

10. Remarks (Use reverse side if more space is needed): I agree with the recommendation made by the geologist who made the examination. Financial assistance for exploration of beryl should be denied to the applicants.

Donald E. Ellertson

Dodge

UNITED STATES
DEPARTMENT OF THE INTERIOR

OFFICE OF MINERALS EXPLORATION

OME
DEPARTMENT OF THE INTERIOR
JUN 16 1959
REGION III
DENVER, COLORADO

REPORT BY EXAMINING TEAM
REGION III

OME 6019

Robert and Della R. Stilen

Lone Eagle Claims 1-5

Pennington County, South Dakota

Beryl-Mica

Geologic Report

by

F. B. Moore, Geologist
Geological Survey

June 12, 1959

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OME 6019

ROBERT AND DELLA R. STILEN
LONE EAGLE CLAIMS 1-5
PENNINGTON COUNTY, SOUTH DAKOTA

INTRODUCTION

The Lone Eagle claims are in sec. 24, T. 2 S., R. 6 E., Pennington County, South Dakota (fig. 1). Application was made March 2, 1959, by Robert and Della Stilen for OME assistance to explore for beryl, mica, tantalum, and fluorspar. The exploration would consist of exposing a pegmatite on Lone Eagle No. 1 claim by stripping with a bulldozer. Following 16 weeks of stripping, the operator hopes to be in position to start mining.

The property, which consists of five claims, was examined June 5, 1959, by F. B. Moore, Geological Survey, accompanied by Mr. Stilen. The exploration area is developed by three pits and a short "dog hole" adit. Several small pits have been dug on claims outside the exploration area, but only one was visited. During the examination, attempts were made to get details on the proposed exploration and to learn the operator's feelings on possible exploration by trenching. The operator is vague on all points and apparently merely wishes to prepare for mining.

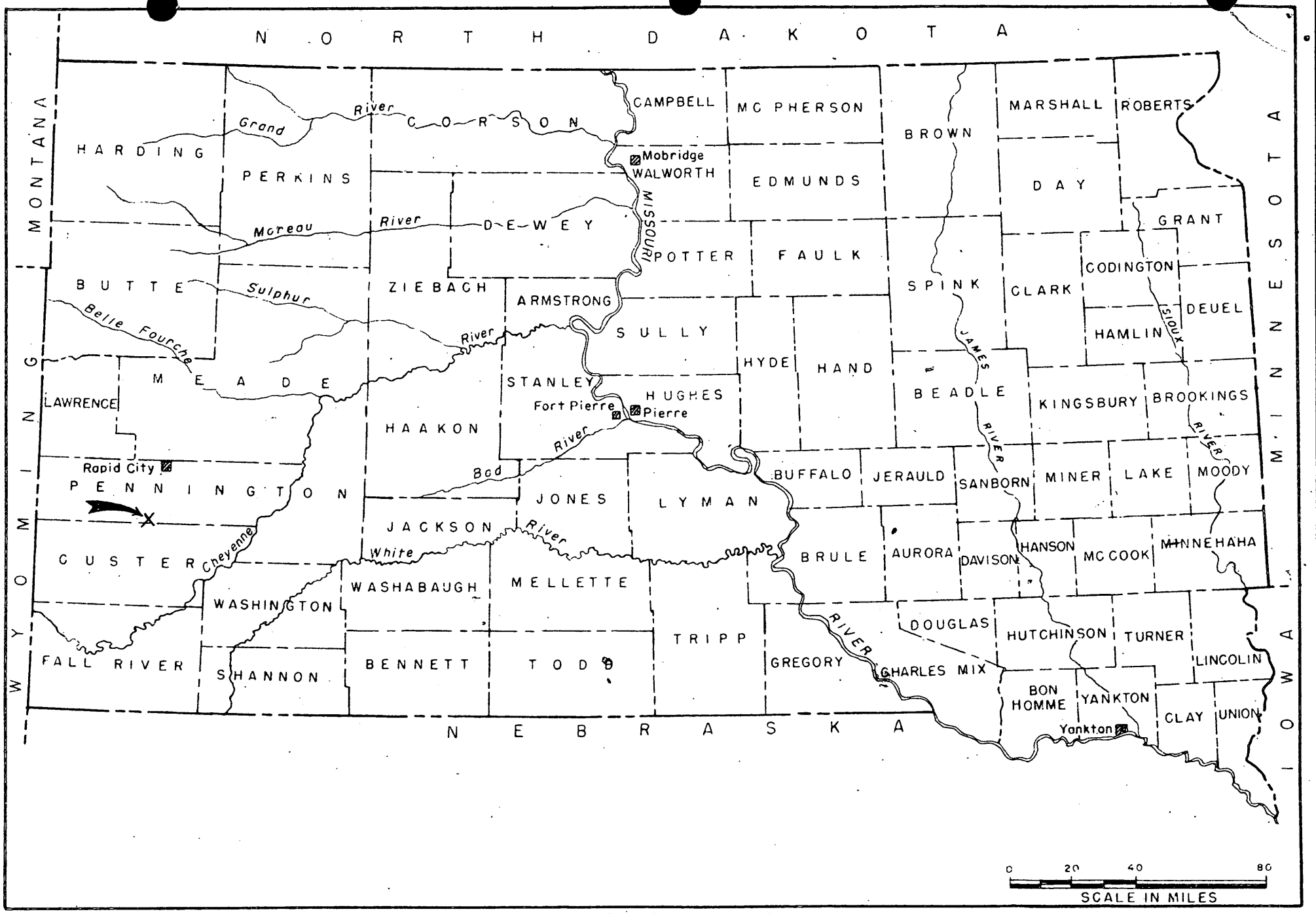

FIGURE 1. LOCATION MAP, LONE EAGLE CLAIMS, PENNINGTON COUNTY, SOUTH DAKOTA

GEOLOGY

The claims are at the northeast edge of the Harney Peak Precambrian granite stock in an area underlain chiefly by schist. The Lone Eagle No. 1 exploration area, being on a north slope, is covered by 2 to 10 feet of overburden. A pegmatite estimated to be about 100 feet wide is exposed by three prospect pits (fig. 2). The strike of the pegmatite is believed to be northeast. For purposes of identification, the pits are numbered from 1 to 4.

Pit No. 1 consists of two parts separated by a quartz rib 5 to 6 feet thick. Perthite, quartz, plagioclase, and muscovite are the chief minerals. No beryl or other accessory minerals were seen. The rocks have been shattered and part of the feldspar has been altered to kaolinite. Small--generally less than 4 inches--books of fairly hard, flat muscovite are disseminated through the rock. Because of shattering and alteration the size of the feldspar masses could not be determined. Depth of the pit is about 10 feet.

Pit No. 2 is also about 10 feet deep but smaller. The mineralogy is the same as pit No. 1.

Pit No. 3 is at the contact of the pegmatite with granite but probably not with the main granite mass. Here the mineralogy differs slightly: this pit contains considerable tourmaline but less mica than pit No. 1 and 2. The principal mineral is relatively unaltered perthite.

Pit No. 4 is a 10- to 12-foot "dog hole" driven in schist.

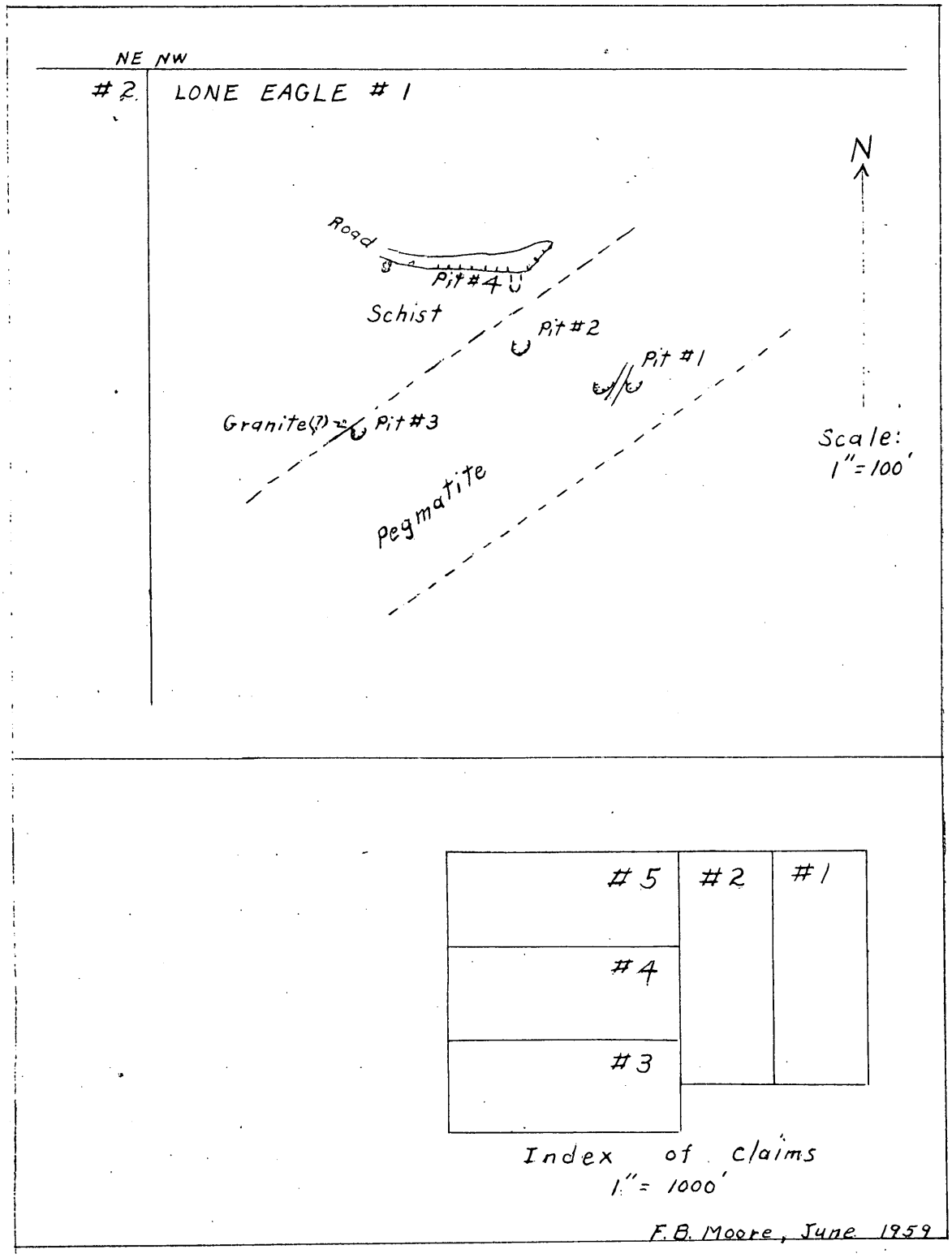

FIGURE 2. SKETCH MAP OF THE PROPOSED EXPLORATION AREA, LONE EAGLE CLAIMS, PENNINGTON COUNTY, SOUTH DAKOTA

The east contact of the pegmatite was located by float. An attempt to follow the pegmatite to the southwest was largely unsuccessful. Considerable quartz float was seen along the estimated trend but it could be related to other pegmatites as well as to this one. A large mass of granite occurs about 2,000 feet to the southwest. Few if any outcrops exist for the first 1,000 feet southwest.

The operator reported that some beryl had been found in pits 1 or 2. A few crystals at the operator's house were 1 inch or less in diameter. He estimated production from the property as 3 tons scrap mica sold, 2½ tons scrap mica stockpiled at home, 25 tons of feldspar (presumably sold), and 175 pounds of beryl. The applicant's belief that the existing pits are 40 feet too high for ore-grade material has no particular basis for support.

CONCLUSIONS AND RECOMMENDATIONS

Besides the fact that the program as outlined by the applicant is development work rather than exploration, the beryl content in the pits is very low. The mica content is estimated at 2 to 3 percent but the books are generally small and mostly of scrap quality. The pegmatite is not zoned.

Because no particular exploration target exists other than to look at some more of a low grade unzoned pegmatite, it is recommended that the application be denied.