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

224 New Customhouse
Denver 2, Colorado

October 3, 1951

Memorandum

To: Executive Secretary, Defense Minerals Administration

From: DMA Field Team, Region IV

Subject: DMA Docket 1462X, Francis J. Chesley, Fluorspar and Rare Earths, Crook County, Wyoming

Enclosed herewith are original and two copies of the report on DMA Docket 1462X as listed above.

We concur with the findings of the examining team and recommend that application for a loan be denied.

The brochure is returned herewith.

J. H. East, Jr.

for A. H. Koschmann

Enclosures

1d

cc: DMA

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF MINES

Mining Division
Region Iv

224 NEW CUSTOMHOUSE
DENVER 2, COLORADO

October 2, 1951

Memorandum

To: DMA Field Team, Region IV

From: Chief, Mining Division, Region IV

Subject: DMA Docket 1462X, Francis J. Chesley, Fluorspar and Rare Earths, Crook County, Wyoming

Exploration cannot be recommended on either the fluorspar or rare earth deposits as proposed by the applicant. Exploration on the fluorspar and on rare earth deposits adjacent to the claims of the applicant by the Bureau of Mines has been adequate to evaluate the grade and extent.

It is recommended that the loan request be denied.

Paul T. Allsman

P. T. Allsman

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS ADMINISTRATION
WASHINGTON 25, D. C.
200 New Customhouse
Denver 2, Colorado

September 28, 1951

Memorandum

To: DMA Field Team, Region IV

From: A. H. Koschmann

Subject: DMA Docket 1462X, Fluorite and Rare Earth Deposits, Sundance, Crook County, Wyoming

Attached are 8 copies of the geological report covering DMA Docket 1462X (Fluorite and Rare Earths). Fluorite occurs as replacement lenses in Mississippian limestone, and is exposed in several cuts and shafts. Extensive exploration work by shafts and bulldozer cuts has been done on the subject property without finding deposits of commercial grade. Because of the small size and spotty nature of these deposits, as well as unfavorable economic factors, Mr. Meek recommends that the application for a fluorite exploration loan be denied.

The applicant has also applied for a loan to explore for rare earth deposits on this same property. No rare earth minerals have been recognized, and analyses show that the grade in the most favorable material is well below an estimated economic limit of 5%. Mr. Meek, therefore, recommends that the application for an exploration loan for rare earth deposits also be denied.

I concur with the recommendation of Mr. Meek.

A. H. Koschmann

A. H. Koschmann
Supervising Geologist
Colorado-Wyoming

Attachments (8)

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF MINES
DENVER, COLORADO

Region IV

Building 20
Denver Federal Center
October 1, 1951

Mining Division
Date Rec'd.
OCT 2 1951
BUREAU OF MINES
Denver, Colorado

Memorandum

To: Chief, Mining Division, Region IV

From: W. M. Traver, Jr.

Subject: Docket DMA-1462X, Francis J. Chesley, Fluorspar and Rare Earths, Crook County, ~~Colorado~~ Wyo.

Please find enclosed the original and seven copies of the "Summary, Conclusions, and Recommendations", by Everett and Meek, and the same number of copies of Everett's engineering report on the subject Defense Minerals Administration docket.

The Peterson claims included in this loan request were at first considered as having possibilities for a small participating fluorspar exploration loan. However, correspondence with the applicant, Francis J. Chesley, requesting, first, that he accompany the examiners to the property and, second, that, failing in this first request, he submit an outline of his proposed program, especially with regard to fluorspar, and indicate his ability to participate on a 50 percent basis, was unanswered. The obvious conclusion drawn from his ignoring our correspondence, naturally, was that he was not further interested in a Defense Minerals Administration loan on any basis. Inasmuch as the project was considered marginal, a report recommending denial was prepared.

I am in agreement with the recommendation of the examining team.

The brochure and a review furnished by your office are returned herewith.

W. M. Traver, Jr.

W. M. Traver, Jr.

enclosures

FRANCIS J. CHESLEY
FLUORSPAR AND RARE EARTHS
CROOK COUNTY, WYO.

Summary, Conclusions, and Recommendations

By F. D. Everett
Mining Engineer
Bureau of Mines

and

W. B. Meek
Geologist
U. S. Geological Survey

FRANCIS J. CHESLEY
FLUORSPAR AND RARE EARTHS
CROOK COUNTY, WYO.

SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS

By F. D. Everett and W. B. Meek

Francis J. Chesley applied for a $10,000.00 ninety percent government participating loan for exploration of rare earths and fluorspar on the Peterson claims in the Bear Lodge Mountains, Crook County, Wyo. Proposed work included surface trenching and rehabilitating an old shaft on the rare earth claims and sinking a 60-foot shaft to 100 feet on the fluorspar claims.

The investigation by the Defense Minerals Administration examining team revealed:

(1) Fluorite occurs in spotty, irregular lenses as replacement deposits and in short discontinuous veins in limestone, probably associated with syenite intrusions.

(2) Although some fairly high-grade fluorite was observed, most of the material was low-grade.

(3) The absence of milling facilities, the long truck haul to the railroad, and high freight charges to an eastern market would make fluorite production unprofitable from the Peterson claims.

(4) The applicant made no definite proposal for fluorite exploration, and correspondence in regard to matching funds on a fifty percent participating basis was unanswered.

(5) Rare earth oxides have been found in syenite porphyry and related rocks on the Lucky Day and other claims in the Bear Lodge Mountains. No visible evidence was observed, structurally or otherwise, to account for the mineralization. The presence of rare earth can be

determined either by radioactivity or chemical analyses.

(6) Attempts to identify or isolate the rare earth minerals microscopically have been unsuccessful; beneficiation attempts by other companies actively developing deposits in the area have so far been unsuccessful.

(7) No analyses of rare earth material are known that would necessarily classify Bear Ledge material as ore. It seems advisable to await exploitation success of other companies in the area before attempting to develop the Lucky Day claims.

This loan for exploration of rare earths or fluorspar is not recommended.

FLUORITE AND RARE EARTH DEPOSITS

SUNDANCE, CROOK COUNTY, WYOMING

DMA DOCKET 1462X

Geology

By Ward B. Meek, Geologist
U. S. Geological Survey

Geology

FLUORITE AND RARE EARTH DEPOSITS
SUNDANCE, CROOK COUNTY, WYOMING

INTRODUCTION

Francis J. Chesley and his partners, Frank and C. W. Peterson, have applied for a $10,000.00 exploration grant on fluorite and rare earth deposits located some eight miles north of Sundance, Wyoming. Some $10,000.00 worth of exploration work by shafts and bulldozer cuts has been accomplished. Various other operators have done even more extensive work on properties in the area, but no minerals of present commercial value have been located. The Bureau of Mines drilled some of the fluorite prospects. Their findings are given in Report of Investigations #3877 published in April 1946.

FLUORITE

Fluorite on the Peterson claims is exposed in several cuts and in two shafts which are still open. It occurs as replacement lenses in limestone tentatively identified as the Pahasapa limestone of Mississippian age. Syenite of Tertiary age was found near some of the fluorite deposits; it is a possible source of the mineralizing solutions.

At all observed exposures the lenses of fluorite lie parallel to bedding. Several were observed to pinch out along the strike with a total length of about 50 feet or less. The degree of replacement and the concentration of fluorite vary from slight to extensive. One promising occurrence of fluorite was noted; it is shown at shaft No. 2, Area

No. 1, on Figure No. 3 of Bureau of Mines R. I. #3877. Sampling from this shaft, report in R. I. #3877, shows an average of about 56% CaF_2 for two jack hammer holes of unknown length in the lower 12 feet of the shaft. Muck pile samples were reported to average about 24% CaF_2.

Other prospects in the area, not on the Peterson claims, are perhaps more extensive and promising. It is possible that the future may see some substantial production of fluorite from this general vicinity. At present, however, the small size and spotty nature of these deposits, the distance of required trucking over dirt roads, and the lack of an established market in the district are discouraging.

It is recommended that the application for a fluorite exploration loan be denied.

RARE EARTHS

The rare earth minerals of this district are found in syenite and syenite porphyry of Tertiary age. They occur with no recognized pattern or known or estimated dimensions. No rare earth minerals have been recognized even in microscopic studies. Some values seem to occur with manganese or iron oxides of supergene origin, some with leached white rock. It has been fairly well established that rare earth values are highest in this district wherever radioactivity is high.

Samples previously assayed from this area by the Bureau of Mines and by the Trace Elements Section of the Geological Survey showed rare earths contents well below an estimated economic limit of about 5%. A sample taken in the course of this examination where radioactivity is high on Luckyday claim was analyzed by the Bureau of Mines as follows:

U_3O_8	ThO_2	Ce	Rare earth oxides
0.029%	-0.01%	0.75%	2.2%

These values do not indicate ore.

RECOMMENDATIONS

Fluorite: It is recommended that the application for a loan to explore fluorite be denied because of the small size and spotty nature of these deposits and because of their remoteness from any known market.

Rare earths: It is recommended that the application for a loan to explore rare earths be denied because grade of material reported by reliable agencies is too low to be economic.

UNITED STATES
DEPARTMENT OF THE INTERIOR
OSCAR L. CHAPMAN, SECRETARY

DEFENSE MINERALS ADMINISTRATION

REPORT OF EXAMINATION BY FIELD TEAM
REGION IV

DMA-1462X, Francis J. Chesley

Fluorspar and Rare Earths

Crook County, Wyo.

F. D. Everett, Mining Engineer
Bureau of Mines

W. B. Meek, Geologist
U. S. Geological Survey

September 27, 1951

Engineering

FRANCIS J. CHESLEY
FLUORSPAR AND RARE EARTHS
CROOK COUNTY, WYO.

Engineering Report

By F. D. Everett
Mining Engineer
Bureau of Mines

FRANCIS J. CHESLEY
FLUORSPAR AND RARE EARTHS
CROOK COUNTY, WYO.

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FRANCIS J. CHESLEY
FLUORSPAR AND RARE EARTHS
CROOK COUNTY, WYO.

ENGINEERING REPORT

By

F. D. Everett

INTRODUCTION

Fluorspar and rare earth claims commonly called "Peterson's claims" are in the Bear Lodge Mountains, Crook County, Wyo. The rare earth claims are adjacent to the Climax claims which were leased to the Telmor Engineering Company, of Chicago, Ill. The Climax claims together with claims owned by the newly formed Bear Lodge Mining Company were investigated by the Bureau of Mines in the summer of 1950. Peterson's fluorspar claims were investigated by the Bureau of Mines in 1944 and the results are described in Report of Investigations 3877.

The examining team, composed of U. S. Geological Survey men, J. C. Olson, of the Trace Elements Branch, and W. B. Meek, of Minerals Branch, and the Bureau of Mines engineer, investigated the properties on August 9 and 10, 1951. F. J. Chesley, the applicant, was notified by mail of the date designated for the investigation but failed to meet the members of the examining team. The location of the properties was known to the Bureau engineer from previous work in the area, and the investigation was made as planned.

ACKNOWLEDGMENT

Charles Baker, of Sundance, Wyo., gave information regarding the history and production from the properties and this information is gratefully acknowledged.

LOCATION, TOPOGRAPHY, AND PHYSICAL FEATURES

The fluorspar and rare earths claims are in the Bear Lodge Mountains of the Black Hills Region between 8 and 10 miles by dirt road north of Sundance, Crook County, Wyo. The rare earth deposits are in sec. 17, T. 52 N., R. 63 W., 6 P. M., and are from 2 to 3 air line miles west from the fluorspar claims which are in secs. 15, 22, and and 23, T. 52 N., R. 63 W., 6 P. M. The area is in the Black Hills National Forest (fig. 1).

The Black Hills consist of a dome-shaped group of mountains in northeastern Wyoming and western South Dakota rising several hundred feet above the plains. The area is roughly 100 miles long and 50 miles wide.

Precipitation is abundant and the gentle slopes are heavily wooded. Numerous small streams flow during the spring months. Ranching, wheat farming, and lumbering are the main industries.

Sundance is the county seat of Crook County. The nearest railroad shipping facilities are at Upton, on the Chicago, Burlington and Quincy Railroad,,28 miles south of Sundance.

The nearest source for electric power is Sundance which is 5 to 7 air line miles to the south.

HISTORY AND PRODUCTION

Fluorite has been known to occur in the Bear Lodge area since 1915, but was not discovered on the Peterson claims until 1943. The Bureau of Mines investigated and explored the fluorspar occurrences in 1944 by a series of trenches, test pits, and shallow shafts.

No production is reported from the property except for one car load, which,according to Charles Baker, of Sundance, was shipped by Chesley in

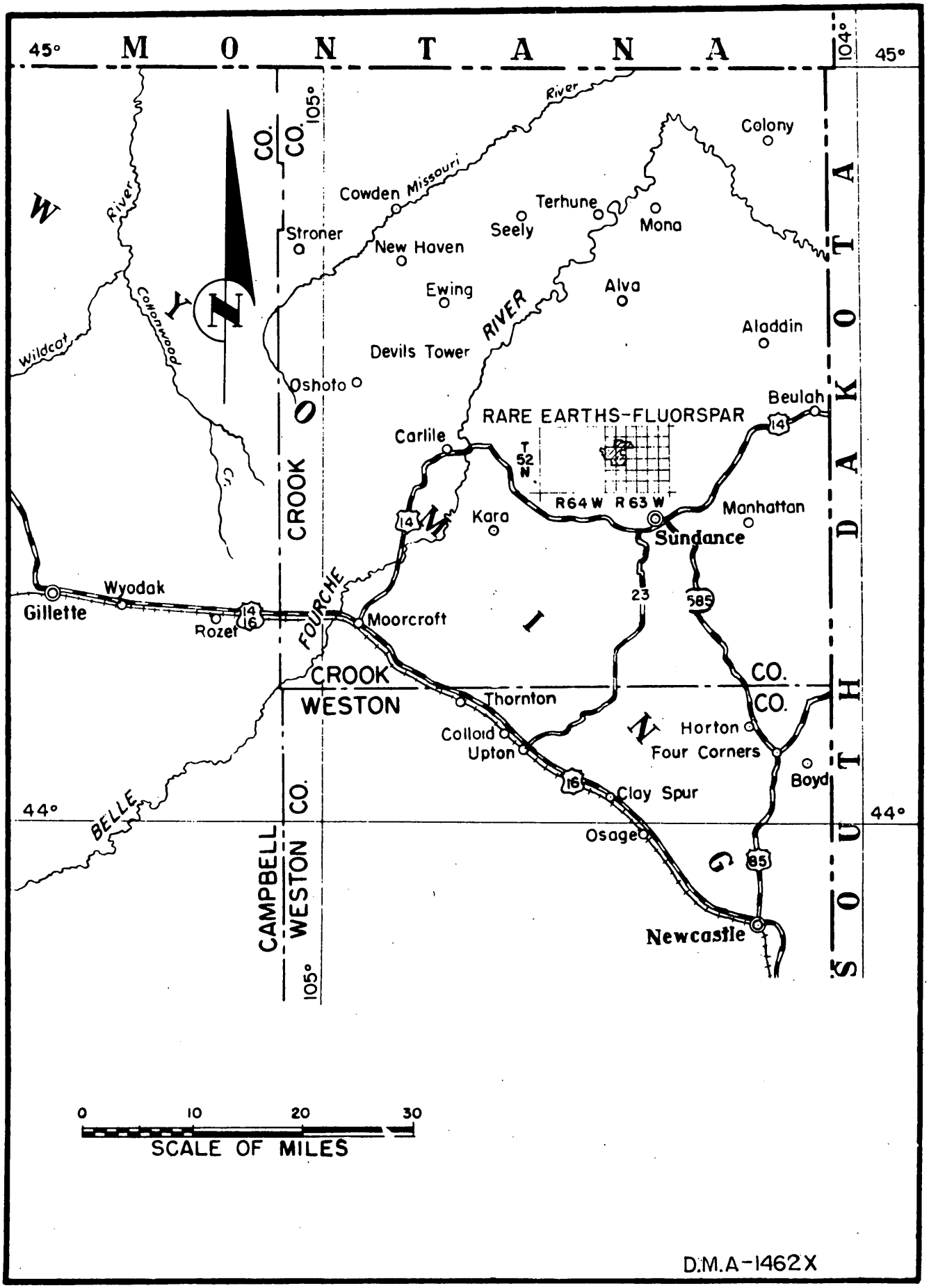

Figure 1.- Location map, Bear Lodge rare earth deposits, Crook County, Wyoming.

1948 or 1949. Details concerning the grade, destination, and tonnage of the shipment are lacking.

Very little work has been done since the investigation by the Bureau of Mines.

The rare earth claims are in an area originally investigated for the showings of copper carbonate minerals by early day prospectors. F. W. Peterson later located the claims. Radioactivity and subsequently rare earths were discovered in the area in 1949 on property which now adjoins Peterson's Lucky Day claims. The Telmor Engineering Corporation, of Chicago, Ill., leased the adjoining Climax group of claims and bulldozed long trenches over areas showing radioactivity. The Bureau of Mines diamond core drilled ten holes varying between 23 and 220 feet in length, analysed samples, and made microscopic tests. More recently the Bear Lodge Mining Company was organized and has done considerable surface trenching work. Both companies and the Bureau of Mines have conducted unsuccessful tests on beneficiation and ultimate utilization of the contained rare earths.

OWNERSHIP AND EXTENT

The Bear Lodge property consists of 22 unpatented lode-mining claims owned by E. W. Peterson and F. W. Peterson, of Moorcroft, Wyo., and Francis J. Chesley, of Billings, Mont. The Lucky Day claims, which were probably located for copper or fluorspar, are in the area containing evidence of rare earth minerals.

DESCRIPTION OF THE DEPOSITS

The Bear Lodge uplift was caused by a granitic intrusion probably during the Tertiary period. A series of gradual to steeply dipping sedimentary rocks ranging from Cambrian to Quarternary outcrop away from the edge of the igneous intrusion.

The rare earth claims are in an area of the principal laccolithic uplift which is composed chiefly of syenite porphyry.

The fluorite deposits occur generally in limestone, probably of the Pahasapa formation of Mississippian age.

Fluorite

The fluorite occurs as irregular replacement deposits along favorable beds in limestone, and as discontinuous veins following fissures. The occurrences, although widespread, are spotty.

Three areas, as outlined in the Report of Investigations 3877 by the Bureau of Mines, were examined. Fluorite in areas 2 and 3 was found in several trenches and test pits but in no place appeared concentrated in appreciable quantity. Shaft No. 2 in area 1 contained fluorite in a fissure paralleling the bedding for approximately 60 feet down dip for a width varying from 2 to 5 feet. The average grade of muck pile samples that were taken averaged about 24 percent CaF_2. The exposure for the bottom 20 feet in this shaft is estimated to average at least 40 percent CaF_2. The cuttings from two jackhammer drill holes for the bottom 12 feet of the shaft at the time of the Bureau of Mines' work averaged 56 percent CaF_2 and 27.5 percent SiO_2. This shaft is vertical for 20 feet, then flattens to about 40° at the bottom.

Rare Earths

The rare earths occur in altered syenite porphyry associated with soft earthy material and with black manganese oxide. The rocks are somewhat brecciated.

As determined by diamond drilling and sampling on adjoining claims, the rare earth values are probably greatest near the surface

and are associated with joint and fracture fillings. In some places rare earth occurs with black manganese oxide and reddish iron oxide in irregular cavities in the syenite rock.

The presence of rare earths is indicated by radioactivity as determined by the Geiger counter.

A sample of radioactive material from the Lucky Day claims assayed 0.029 percent uranium oxide, less than 0.01 percent thorium oxide, and 2.2 percent rare earth oxides.

MINABLE ORE RESERVES

Fluorite

The only minable fluorite reserves appeared to be in the No. 2 shaft of area 1. A zone 20 feet on each side of the 50-foot shaft for a 4-foot width would yield about 600 tons of indicated ore averaging about 40 percent CaF_2.

Rare Earths

The rare earth deposits are on Lucky Day claims 1, 2, 4, 8, and 14. Areas on these claims show various degrees of radioactivity and probably contain rare earth values comparable to those on the adjoining Climax claims. Assays of core drill samples on the Climax claims varied up to 10 percent rare earth oxides.

Microscopic tests on samples from the Climax claims failed to isolate any rare earth mineral. These tests indicated the rare earths are contained as salts in clays and as mixtures with iron and other impurities.

The inability to separate or identify any rare earth mineral indicates that beneficiation will be difficult, and may not be possible.

The Bear Lodge Mining Company and the Telmor Engineering Company are investigating methods to beneficiate the Bear Lodge ores but so far have been unsuccessful. These companies are actively exploring their deposits by bulldozer trenching. Until the rare earth ore can be beneficiated to a marketable form, ore reserve calculations are meaningless.

Whereas there is some radioactivity in areas on the Lucky Day claims, there are no calculable ore reserves.

PRESENT STATUS

Exploration and Development

The principal development on the fluorite claims was performed by the Bureau of Mines during World War II. Interesting showings of fluorite occur and a few thousand tons of 40 to 50 percent CaF_2 material could probably be developed.

Equipment and Facilities

The only mining equipment observed on the property was an old car engine rigged up to operate as a hoist. The operators may have other equipment not on the property. Correspondence in regard to equipment, proposed work, and financing was unanswered.

There are no existing milling facilities within several hundred miles.

Metallurgical tests by the Bureau of Mines, as stated in Report of Investigations 3877, indicated the ore will require fine grinding for complete liberation of the fluorite from the gangue. Some of the fluorite grains range to 280-mesh.

Table concentration of the sample gave a low recovery with a concentrate assaying in excess of 80 percent CaF_2. By grinding to

minus 100-mesh and treating by flotation, a recovery of 75 to 90 percent was made in a product assaying plus 85 percent CaF_2. Additional flotation tests indicate that, with slightly lower recovery, a concentrate assaying in excess of 90 percent CaF_2 can be made.

PROJECT PROPOSALS, WITH COSTS

The loan application requested funds for rehabilitating old shafts, diamond drilling, and bulldozer trenching on the Lucky Day rare earth claims and for trenching, shaft sinking, and drifting on the Fluoride claims. No definite proposals were made. The application stated $1,200.00 were available on a matching fund basis, but no cost estimates for work at either the rare earth or fluorite claims were submitted.

Equipment

The applicant, so far as is known, has no serviceable mining equipment.

Transportation

Good access roads exist to both types of deposits.

Ore or concentrates would have to be trucked 36 to 38 miles to Upton for loading on railroad cars for shipment.

The operator probably does not have any adequate hauling equipment; local hauling services are available at Sundance on a contract basis.

Manpower

Skilled labor is scarce in the area. A limited number of unskilled surface laborers can be obtained at Sundance.

Power

The nearest source for power is Sundance. Four to six miles of transmission lines would have to be constructed to make power available at the mining claims and utilization of deisel power would probably be advisable in the event operations are undertaken.

Water

Adequate water can be collected from small surface flows or from springs for mining. Water for milling facilities would have to be developed.

Others

Hardware and incidental supplies can be obtained at Sundance. Mining supplies can be obtained from Deadwood, S. Dak., about 46 miles east of Sundance.

CONCLUSIONS

The following conclusions are presented:

(1) There are some interesting occurrences of fluorite on the Peterson claims. A possibility exists that these deposits with production from others nearby may in the future, if developed on a regional basis, contribute sufficient fluorite to warrant a district treatment plant.

(2) The fluorite on the Peterson claims is erratic in occurrence and low-grade.

(3) The absence of milling facilities, long truck haul to the railroad, and high freight charges to eastern markets affect adversely development of fluorite in the area at present.

(4) The applicant made no definite proposal for a fluorite project and correspondence in regards to matching funds and plans for operation with project costs was unanswered.

(5) Evidence of rare earths was indicated by the Geiger counter and in a sample as occurring in altered syenite porphyry on the Lucky Day claims.

(6) It is not considered necessary in testing for rare earth minerals to rehabilitate old inaccessible mine workings as waste dump material appears similar and reacts the same as the minerals found in surface exposures.

(7) The rare earth ores are low-grade, and, because of the inability to microscopically isolate any of them, beneficiation, if possible, will be difficult and costly. It seems advisable to await results attained by companies in the area actively engaged in investigating beneficiation methods for the ultimate utilization of the Bear Lodge rare earths before suggesting an exploration program.

RECOMMENDATIONS

The request for a loan of $10,000.00 for exploration of either fluorite or rare earth deposits on the "Peterson claims" is not recommended.

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

OFFICE RECEIVED OCT 2 5 1951

OCT 2 5 1951

Mr. Francis Chesley
2423 4th
Billings, Montana

Re: LMA-1648
Rare Earths

Dear Mr. Chesley:

Your application dated May 31, 1951, LMA docket 1648x for an exploration project in the sum of $10,000.00, has been carefully reviewed by the Supply Division, this review including a field examination on August 9 & 10, 1951.

Because of the present lack of evidence to indicate the probability of making a significant discovery and your failure to answer correspondence directed to you regarding consideration of a fluorspar project, we regret to advise that it has been decided to deny your application at this time.

Should future work on your property bring to light evidence of a more encouraging nature we would be glad to receive your advices.

Yours very truly,

SIGNED

Director
Supply Division

JFS

Kierdon/mh 10-19-51
cc: Adm. Asst. File
Lynn
Minor and Rare Metals
Mr. Barr
Klein, Bur. of Mines
Morton, USGS
LMA docket file
Field team III

Site visit

Sent to

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

FIELD DIRECTOR'S OFFICE REGION IV
OCT 31 1951
DENVER, COLORADO

OCT 23 1951

Memorandum

To: Administrative Management Division

Through: Director, Supply Division

From: Minor and Rare Metals Branch

Subject: [illegible] Docket 1468x
Rare Earths, Crook County, Wyoming

Under date of May 11, 1951, [illegible] Docket 1468x, Mr. Francis J. Chesley, 2812 4th, Billings, Montana, submitted the subject application, for an loan in the amount of $13,000.

Attached hereto find letter of even date addressed to applicant advising that the application must be denied, basing this action on the field team's recommendation, the reviewers for [illegible] and [illegible] concurring in same.

Complete docket is attached comprised of the following:

(a) One copy of field team report.
(b) One copy of [illegible].
(c) Two copies of [illegible] attached to field referral
(d) One copy of memorandum from Mr. Van Alstine.

Weston Bourret

Weston Bourret, Chief
Minor and Rare Metals

Enclosure

Approved: SIGNED

Director, Supply Division

WOM

E Gordon/mh 10-12-51
cc: [illegible] Read File
Lyon
Minor and Rare Metals
Field Team IV
Albin, Bur. of Mines
Morton, U.S.G.
[illegible] Docket File

225, New Customhouse
Denver 2, Colorado

October 3, 1951

Memorandum

To: Executive Secretary, Defense Minerals Administration

From: DMA Field Team, Region IV

Subject: DMA Project 1462X, Francis J. Chesley, Thermopolis and Bare Barite, Grant County, Wyoming

Enclosed herewith are original and two copies of the report on DMA Project 1462X as listed above.

We concur with the findings of the examining team and recommend that application for a loan be denied.

The brochure is returned herewith.

J. H. Earl, Jr.

for A. H. Beckman

Enclosures

Ad

cc: DMA

Subj.

Mining Division
Region IV

October 2, 1951

Memorandum

To: BMR Field Team, Region IV

From: Chief, Mining Division, Region IV

Subject: BMR Docket 14[illegible], Francis J. Chesley, Fluorspar and Rare Earths, Crook County, Wyoming

Exploration cannot be recommended on either the fluorspar or rare earth deposits as proposed by the applicant. Exploration on the fluorspar and on rare earth deposits adjacent to the claims of the applicant by the Bureau of Mines has been adequate to evaluate the grade and extent.

It is recommended that the loan request be denied.

F. T. Allmann

FTA:bd

cc: BMR

WMT/dd

Building 20
Denver Federal Center

August 31, 1951

Mining Division
Date Rec'd.
SEP 4 1951
BUREAU OF MINES
Denver, Colorado

Mr. Francis J. Chesley
2423 Ash
Billings, Montana

Re: DMA-1462X, Bear spring, fluorspar, and lead, Crook County, Wyoming

Dear Mr. Chesley:

We notified you by air mail on August 6, 1951, of our intended examination of the property included under the above-captioned docket. The examination by a Defense Minerals Administration field team was made August 9 and 10 without your being present to show them over the property or explain your proposed program.

On August 14 we wrote you asking a number of questions concerning your plans regarding the project. As of today, we have received no reply.

We are required to submit our report covering the examination within a reasonable time after the field work is completed and, unless we hear from you in answer to our questions in this recent letter before September 7, 1951, we will assume you are no longer interested in exploration for fluorspar and will prepare our report accordingly.

Very truly yours,

W. M. Traver, Jr., Chief
Colorado Branch, Mining Division

cc SRWilson
AHKoschmann
PTAllsman
DMA 1462X
DMA Chron.

FWO

6-303
(March 1947)

cc: P. T. Allsman
S. R. Wilson
W. M. Traver, Jr.

UNITED STATES DEPARTMENT OF THE INTERIOR
BUREAU OF MINES
Salt Lake City, Utah

No.

Report to Mr. F. D. Everett

Chemical Laboratory Report

Date received Aug. 24, 1951

Date reported Aug. 31, 1951

Serial No.	DESCRIPTION	Lot No.	U_3O_8	ThO_2	Rare Earth Oxides		Ce				Mining Division Date Rec'd.
	DMA-1426X, Luckday claims, owned by F. W. Peterson and F. J. Chesley Bear Lodge Mountains, Sundance, Wyoming										SEP 4 1951 BUREAU OF MINES Denver, Colorado
97852		E-7	0.029	<0.01	2.2		0.75				

U. S. GOVERNMENT PRINTING OFFICE 16—33553-3

Signed H. C. Peterson
M. R. H.

WMT/dd

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF MINES
DENVER, COLORADO

Region IV

Building 2-A
Denver Federal Center
Denver 14, Colorado

August 6, 1951

Mining Division
Data Section
AUG 1951
BUREAU OF MINES
Denver, Colorado

Mr. Francis J. Chesley
2423 Ash
Billings, Montana

REFERENCE: DMA-1462X, Rare earths, fluorspar, and lead, Crook County, Wyoming

Dear Mr. Chesley:

This is to notify you that representatives of the Defense Minerals Administration, geologists and engineers, expect to make an investigation of the above-captioned property about Thursday, August 9, 1951.

They plan to meet at Rounds Motor Court, in Sundance, Wednesday evening prior to the date of the examination, and, if it is convenient, it would be well for you to arrange to meet them also and accompany them to show them the property and explain your proposed exploration program.

Very truly yours,

FWO

W. M. Traver, Jr., Chief
Colorado Branch, Mining Division

VIA AIR MAIL

cc SRWilson
AHKoschmann
PTAllsman
DMA-1462X
DMA Chron.

FDE/dd

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF MINES
DENVER, COLORADO

Region IV

Mining Division
Date Rec'd.
AUG 15 1951
BUREAU OF MINES
Denver, Colorado

Building 20
Denver Federal Center
August 14, 1951

AIR MAIL

Mr. Francis J. Chesley
2423 Ash
Billings, Montana

My dear Mr. Chesley:

In regard to your Defense Minerals Administration application, docket 1462X, our field team which examined your properties on August 9, 1951, needs additional information, especially as to exploration of your fluorspar property. Answers are needed to the following questions before your loan request can be considered.

1. Are you interested in a fifty percent participating loan for your fluorspar properties, and, if so, what amount are you able to provide as your part of the project and what is the total amount requested?

2. Specifically, what work do you wish to do, in what areas, and from what shafts, pits, or trenches (use U. S. Bureau of Mines R. I. 3877 for reference)?

3. What, if any, equipment do you have that can be used? What equipment will be needed? How many men will be required? What wages will be paid (laborers, miners, supervisor)?

4. Will any road or roads have to be constructed, and, if so, what are the estimated costs?

5. What new facilities are required, such as buildings, and what are the estimated costs?

6. Will the product be sorted or milled? If milled, where? and where will the product be marketed?

7. How long will it take to complete your proposed project?

8. What is your production plan after the completion of the project (how many tons will be mined, what mining method will be used, and what milling methods do you propose for treatment of the product)?

9. How will the operation be financed? What are the estimated operating costs? What profit is expected?

Your immediate reply to these questions is requested in order for us to prepare our report.

Very truly yours,

W. M. Traver, Jr., Chief
Colorado Branch, Mining Division

cc PTAllsman
DMA-1462X
DMA Chron.

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

224 New Customhouse
Denver, Colorado

June 28, 1951

Memorandum

To: P. T. Allsman (with brochure)

A. H. Koschmann

From: DMA Field Team, Region IV

Subject: DMA Docket 1462X, Francis J. Chesley (Rare earths, Fluorspar, Lead), Crook County, Wyoming

Attached is the brochure on the above docket and the "Review" made in the Washington office covering this application. The Bureau of Mines core drilled adjacent property and available information may be adequate to make the necessary report and recommendation. If not, please make the necessary field investigation and report.

P. T. Allsman, Alternate

A. H. Koschmann

Attachments

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Mining Division
Region IV

July 3, 1951

Memorandum

To: W. M. Traver, Jr.

From: Chief, Mining Division

Subject: DMA Docket 1462X, Francis J. Chesley (Rare earths, Fluorspar, Lead), Crook County, Wyoming

Enclosed is the brochure on the above docket. Although the rare earth deposits are in Wyoming, I believe Everett should prepare the report since he did the work.

I don't believe further field examination is warranted until we can get Washington to decide whether the ore already found has any economic value. I suggest making a brief report including the questions we need to have Washington answer before we can decide whether further exploration is warranted.

P. T. Allsman

Enclosure

PTA:ld

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Mining Division
Region IV

July 3, 1951

Memorandum

To: S. R. Wilson

From: Chief, Mining Division

Subject: DMA Docket 1462X, Francis J. Chesley (Rare Earths, Fluorspar, Lead), Crook County, Wyoming

A brochure on the above docket has been submitted from Washington, D. C., regarding an application for assistance in exploration on the Bear Lodge fluorspar on which we did some exploration and on rare earth deposits adjacent to the area drilled by the Bureau of Mines in Crook County, Wyoming.

The Geological Survey has an expert on rare earth deposits who is expected here soon and since Everett did the work for the Bureau, I expect to have Traver assign him to make the report. I will notify you when they expect to make the examination so you can meet them if we decide further examination is required.

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