DMA Form 1

DEFENSE MINERALS ADMINISTRATION
Control Slip

CONTROLLED DOCUMENT

DMEA ~~DMA~~ Docket No. 2690

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 Project

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.

Routing Slip - Copies to USBM and USGS. One copy retained by Region II.

To:	Code 700, Rm. 4640	Date	9-8-52
To:	Opr Com	Date	9-12-52
To:	Mr. Mittendorf	Date	
To:	Mails + Files	Date	
To:	Docket (Ellis)	Date	
To:	Opr Com	Date	1-14-53
To:		Date	
To:		Date	
To:		Date	
To:		Date	
To:		Date	
To:		Date	
To:		Date	
To:		Date	

DO NOT DETACH

CONTROLLED DOCUMENT

FILE COPY
SURNAME:

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

JAN 2 7 1953

BL

F L Knouse
E J Carlson
Norton
Ellis
Thayer
Hedges
Schwarz

Mr. Alex Pattimore
Armreiter & Pattimore
5209 Farrar Street
Seattle 8, Washington

Re: Docket No. DMI-2690 (Monazite)
Lakow Flats Placer
Boise County, Idaho

Dear Mr. Pattimore:

This in with reference to your application for Government aid, on the captioned project in the amount of $[illegible].

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 application and data available to this agency, [illegible] examination of the property concerned reveal that the probability of disclosing minable reserves by your proposed exploration program is not considered sufficiently promising to justify Government participation. Under these circumstances, we regret to advise that your application for exploration aid is denied.

J.C. 1/15/53

If additional work on your property reveals information which makes the project feasible, an application may be submitted for consideration.

Sincerely yours,

G. O. Mittendorf (fw)

Administrator

FLKnouse/jem
1/12/53
cc to: Adm. Reading File
Docket
Messrs. EJCarlson-3649
JJNorton-G-232 (SA)
Ellis Knouse
Cpr. Committee
Field Team Region II (2)

1/8/53 gla

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

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
JAN 8 1953

January 8, 1953

Memorandum

To: E. W. Ellis, Chief, Rare & Misc. Metals Div., DMEA

From: E. J. Carlson, Commodity-Industry Analyst

Subject: Lakow Flats, Boise County, Idaho, Docket No. DMEA-2690.

The memorandum report of Lakow Flats by F. C. Armstrong, geologist of the DMEA Field Team, Region II, dated September 29, 1952, has been reviewed.

The examination of this property by Mr. Armstrong appears to have been most practical and thorough. His findings indicate less than one-half pound of monazite per cubic yard of gravels and an almost complete lack of water which would be needed to mine said gravels. This is in complete concurrence with previous investigations made by the Bureau.

It is recommended that the original application be denied, and that any new application on that property or on adjoining properties be considered only if substantial evidence of richer monazite content in the gravels is established by the owner.

E. J. Carlson

E. J. Carlson

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

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
JAN 8 1953

January 8, 1953

Memorandum

To: E. W. Ellis, Chief, Rare & Misc. Metals Div., DMEA

From: E. J. Carlson, Commodity-Industry Analyst

Subject: Lakow Flats, Boise County, Idaho, Docket No. DMEA-2690.

The memorandum report of Lakow Flats by F. C. Armstrong, geologist of the DMEA Field Team, Region II, dated September 29, 1952, has been reviewed.

The examination of this property by Mr. Armstrong appears to have been most practical and thorough. His findings indicate less than one-half pound of monazite per cubic yard of gravels and an almost complete lack of water which would be needed to mine said gravels. This is in complete concurrence with previous investigations made by the Bureau.

It is recommended that the original application be denied, and that any new application on that property or on adjoining properties be considered only if substantial evidence of richer monazite content in the gravels is established by the owner.

E. J. Carlson

MF-500

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS ADMINISTRATION

REFERENCE SLIP

DATE 1/5/53

REFERRED TO:
1. Mr. E. J. Carlson-Rm.3649
2.
3.
4.

FOR:

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

REMARKS:

Check (X) before the items needing attention.

Ernest Wm. Ellis
Initials of sender.

GPO 16—63815-1

11/17/52 gla

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS ADMINISTRATION
~~WASHINGTON 25, D. C.~~
So. 157 Howard Street
Spokane 4, Washington

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
NOV 10

October 29, 1952

Memorandum

To: F. E. Johnson, Chairman, Operating Committee, DMEA

From: DMEA, Field Team, Region II

Subject: Docket No. DMEA-2690, (Monazite,) Arnreiter and Pattimore, Lakow Flats, Boise County, Idaho.

Attached is a memorandum in quadruplicate from F. C. Armstrong considering the subject docket. You will note from page three of Mr. Armstrong's memorandum that the option agreement with Arnreiter and Pattimore has expired and that another option has been entered into with Pattimore alone. A new application would necessarily have to be made by Mr. Pattimore. Mr. Pattimore states that the new application will include more ground than the original one. Armstrong, therefore, concludes that the original application on the above described ground be denied and that a new application be considered on its merits. The Field Team concurs with this recommendation and also points out that a new field examination will probably be necessary if and when Mr. Pattimore submits another application.

By: Field Team, Region II

A. E. Weissenborn, Exec. Officer
(U. S. Geological Survey)

M. E. Volin, Member
(U. S. Bureau of Mines)

Enclosure 1 (in quad.)
cc: USGS (2)
Armstrong

Reviewed by
DMEA OPERATING COMMITTEE

11-14-52
(date)

UNITED STATES
DEPARTMENT OF THE INTERIOR

DEFENSE MINERALS ADMINISTRATION
So. 157 Howard Street
WASHINGTON 25, D. C.
Spokane 4, Washington

September 29, 1952

Memorandum

To: DMEA Field Team, Region II

From: Frank C. Armstrong, Geologist, U. S. Geological Survey

Subject: Field Examination
Docket No. DMEA-2690 (Monazite) Arnreiter and Pattimore,
Lakow Flats, Boise County, Idaho

The above captioned property was visited on September 24, 1952, in company with Richard H. Storch of the Rare and Precious Metals Branch of the U. S. Bureau of Mines, and Mr. "Tuffy" Mink of Idaho City. Mr. Mink is a cousin of Dewey Daily, the owner of the property.

The property is on Bear Run Creek northeast of Idaho City. From the Bear Run Creek turnoff at the north end of the main street of Idaho City it is 2.65 miles along the Bear Run Creek road to the southern end of the property. The property extends northward up the creek bottom for about 1.1 miles. At the time of this examination there was no water flowing in Bear Run Creek. It appears that water flows in the creek only during periods of heavy runoff such as spring.

An attempt was made many years ago to placer this ground for gold. The old timers brought water from another drainage to the south end of the property and washed a few tens of cubic yards of gravel. The property was abandoned, presumably because it did not pay.

At the site of the old workings four panfuls were panned. One was from near surface, two were from different places in the bank, and one was from the present creek bed. These samples represent a thickness of about 20 feet of the valley fill. Storch estimated that all four pans showed less than one pound of heavy mineral content per cubic yard. I estimated that one-quarter or less of the heavies was monazite.

Reviewed by
DMEA OPERATING COMMITTEE

11-14-52
(date)

About 700 yards south of the north boundary of the property, four more panfuls were collected and panned. One was granite sand from surface, two were from the dumps of test pits, and one was from a bar in a dry wash. The first three were from the western part, and the fourth was from the eastern edge of the property. In the last three only the fines were taken so that the pans would be high-grade samples. Storch estimated that all four pans showed less than one pound of heavies per cubic yard and I estimated that one-quarter or less of the heavies was monazite. In all eight pans the monazite was of a small sand size so that there is very little likelihood that a significant amount of large grains of monazite was lost in the panning.

At the north end of the property the creek divides into two branches separated by slightly higher ground. Decomposed bedrock is exposed on the higher ground between the two branches. This indicates that at the north end of the property there are areas in which placer gravels are thin or even missing.

The lack of continuous flow in the creek does not make for good placer ground. Instead of being a site for constant reworking and concentration of the heavies bythe stream, the present valley is a dumping ground for all the material carried by runoff and there is very little concentrating action going on. Of course at some prior geologic time there may have been a perennial stream in the valley that concentrated the heavy minerals, but at present there is no direct evidence that this was ever the case. The samples from the south end of the property suggest that at least for the top 20 feet of valley fill there has been no significant concentration of the heavies.

The morning of September 26 at Clear Creek 8 miles south of Cascade, I talked with Dewey Daily, the owner of the property, and Gus Pearson, a friend of his. I told them of my findings as set forth above. Daily said that some of the pits at the north end of the property were 22 feet deep. He said that at the south end of the property below the present stream level there is a five-foot thickness of gravel that runs $5.00 per cubic yard. (It seems hard to believe that the old timers would have left such rich ground.) His idea was that perhaps the upper 20 feet of gravel contained enough monazite to pay for the gravel's removal so that they could get at the gold-bearing layer. I told him that any government loan would have to be made on the basisof monazite, not gold, content. I also told him that because of my findings and those of the Bureau of Mines referred to in E. J. Carlson's letter to E. W. Ellis dated September 9, 1952, it would probably be necessary for him or his lessee to prove the presence of significant amounts of monazite before a DMEA loan would be granted. He said that they would do this.

When I pointed out to him that his option agreement with Arnreiter & Pattimore had expired on August 7 last, and that another option would have to be agreed to before a loan could be granted, he said that such an agreement had already been entered into with Pattimore alone.

Since the original application was made by Arnreiter and Pattimore, a new application will have to be made by Pattimore alone. Mr. Pattimore was in the Spokane Regional Office of the Geological Survey September 25 and stated that a new application embracing more ground was going to be submitted.

In view of the facts presented above, I recommend that a loan on the above described ground be denied. If the new application includes a large acreage not immediately adjacent to the above ground, then another examination will probably be necessary.

Frank C. Armstrong
Geologist

cc: DMEA (4)
USBM (2)
USGS (SRO)
Armstrong

12/2/52 gla

IN REPLY REFER TO:

G-MD-CNM

fes

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

November 28, 1952

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
DEC 1 1952

Memorandum

REVIEW OF FIELD TEAM REPORT ON APPLICATION DMEA-2690 (Monazite)

To: E. W. Ellis, Defense Minerals Exploration Administration.
From: P. L. Weis, U. S. Geological Survey
Applicant: Arnreiter and Pattimore.
Name of property: Lakow Flats
Location of property: Boise County, Idaho
Date of field team report: October 29, 1952.
Authorship of field team report: Weissenborn and Volin.
Field team's recommendation: Denial
Comments: Denial requested because option agreement covering the property has expired, and the partnership has been dissolved. One of the original applicants has stated that he will submit a new application.
ACTION SUGGESTED:
Follow field team's recommendation.

Paul L. Weis

Paul L. Weis

IN REPLY REFER TO:

G-MD-CNM

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

November 28, 1952

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
DEC 1 1952

Memorandum

REVIEW OF FIELD TEAM REPORT ON APPLICATION DMEA-2690 (Monazite)

To: E. W. Ellis, Defense Minerals Exploration Administration.
From: P. L. Weis, U. S. Geological Survey
Applicant: Arnreiter and Pattimore.
Name of property: Lakow Flats
Location of property: Boise County, Idaho
Date of field team report: October 29, 1952.
Authorship of field team report: Weissenborn and Volin.
Field team's recommendation: Denial
Comments: Denial requested because option agreement covering the property has expired, and the partnership has been dissolved. One of the original applicants has stated that he will submit a new application.
ACTION SUGGESTED:
Follow field team's recommendation.

Paul L. Weis

PLW:lmc
G-11/28/52
cc: Director's reading file, 4212
Branch reading file, 4212
DMEA
Norton's file, G-230

11/10/52 gla

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION

~~WASHINGTON 25, D.C.~~
So. 157 Howard Street
Spokane 4, Washington

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
NOV 10 1952

October 29, 1952

Memorandum

To: F. E. Johnson, Chairman, Operating Committee, DMEA

From: DMEA, Field Team, Region II

Subject: Docket No. DMEA-2690, (Monazite,) Arnreiter and Pattimore, Lakow Flats, Boise County, Idaho.

Attached is a memorandum in quadruplicate from F. C. Armstrong considering the subject docket. You will note from page three of Mr. Armstrong's memorandum that the option agreement with Arnreiter and Pattimore has expired and that another option has been entered into with Pattimore alone. A new application would necessarily have to be made by Mr. Pattimore. Mr. Pattimore states that the new application will include more ground than the original one. Armstrong, therefore, concludes that the original application on the above described ground be denied and that a new application be considered on its merits. The Field Team concurs with this recommendation and also points out that a new field examination will probably be necessary if and when Mr. Pattimore submits another application.

By: Field Team, Region II

A. E. Weissenborn, Exec. Officer
(U. S. Geological Survey)

M. E. Volin, Member
(U. S. Bureau of Mines)

Enclosure 1 (in quad.)
cc: USBM (2)
Armstrong

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION
WASHINGTON 25, D. C.
So. 157 Howard Street
Spokane 4, Washington

September 29, 1952

Memorandum

To: DMEA Field Team, Region II

From: Frank C. Armstrong, Geologist, U. S. Geological Survey

Subject: Field Examination
Docket No. DMEA-2690 (Monazite) Arnreiter and Pattimore,
Lakow Flats, Boise County, Idaho

The above captioned property was visited on September 24, 1952, in company with Richard H. Storch of the Rare and Precious Metals Branch of the U. S. Bureau of Mines, and Mr. "Tuffy" Mink of Idaho City. Mr. Mink is a cousin of Dewey Daily, the owner of the property.

The property is on Bear Run Creek northeast of Idaho City. From the Bear Run Creek turnoff at the north end of the main street of Idaho City it is 2.65 miles along the Bear Run Creek road to the southern end of the property. The property extends northward up the creek bottom for about 1.1 miles. At the time of this examination there was no water flowing in Bear Run Creek. It appears that water flows in the creek only during periods of heavy runoff such as spring.

An attempt was made many years ago to placer this ground for gold. The old timers brought water from another drainage to the south end of the property and washed a few tens of cubic yards of gravel. The property was abandoned, presumably because it did not pay.

At the site of the old workings four panfuls were panned. One was from near surface, two were from different places in the bank, and one was from the present creek bed. These samples represent a thickness of about 20 feet of the valley fill. Storch estimated that all four pans showed less than one pound of heavy mineral content per cubic yard. I estimated that one-quarter or less of the heavies was monazite.

About 700 yards south of the north boundary of the property, four more panfuls were collected and panned. One was granite sand from surface, two were from the dumps of test pits, and one was from a bar in a dry wash. The first three were from the western part, and the fourth was from the eastern edge of the property. In the last three only the fines were taken so that the pans would be high-grade samples. Storch estimated that all four pans showed less than one pound of heavies per cubic yard and I estimated that one-quarter or less of the heavies was monazite. In all eight pans the monazite was of a small sand size so that there is very little likelihood that a significant amount of large grains of monazite was lost in the panning.

At the north end of the property the creek divides into two branches separated by slightly higher ground. Decomposed bedrock is exposed on the higher ground between the two branches. This indicates that at the north end of the property there are areas in which placer gravels are thin or even missing.

The lack of continuous flow in the creek does not make for good placer ground. Instead of being a site for constant reworking and concentration of the heavies bythe stream, the present valley is a dumping ground for all the material carried by runoff and there is very little concentrating action going on. Of course at some prior geologic time there may have been a perennial stream in the valley that concentrated the heavy minerals, but at present there is no direct evidence that this was ever the case. The samples from the south end of the property suggest that at least for the top 20 feet of valley fill there has been no significant concentration of the heavies.

The morning of September 26 at Clear Creek 8 miles south of Cascade, I talked with Dewey Daily, the owner of the property, and Gus Pearson, a friend of his. I told them of my findings as set forth above. Daily said that some of the pits at the north end of the property were 22 feet deep. He said that at the south end of the property below the present stream level there is a five-foot thickness of gravel that runs $5.00 per cubic yard. (It seems hard to believe that the old timers would have left such rich ground.) His idea was that perhaps the upper 20 feet of gravel contained enough monazite to pay for the gravel's removal so that they could get at the gold-bearing layer. I told him that any government loan would have to be made on the basisof monazite, not gold, content. I also told him that because of my findings and those of the Bureau of Mines referred to in E. J. Carlson's letter to E. W. Ellis dated September 9, 1952, it would probably be necessary for him or his lessee to prove the presence of significant amounts of monazite before a DMEA loan would be granted. He said that they would do this.

When I pointed out to him that his option agreement with Arnreiter & Pattimore had expired on August 7 last, and that another option would have to be agreed to before a loan could be granted, he said that such an agreement had already been entered into with Pattimore alone.

Since the original application was made by Arnreiter and Pattimore, a new application will have to be made by Pattimore alone. Mr. Pattimore was in the Spokane Regional Office of the Geological Survey September 25 and stated that a new application embracing more ground was going to be submitted.

In view of the facts presented above, I recommend that a loan on the above described ground be denied. If the new application includes a large acreage not immediately adjacent to the above ground, then another examination will probably be necessary.

Frank C. Armstrong
Geologist

cc: DMEA (4)
USBM (2)
USGS (SRO)
Armstrong

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

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
SEP 29 1952

No. 157 Howard Street
Spokane 4, Washington

September 25, 1952

Memorandum

To: M. B. Volin, Member, DMEA Field Team, Region II

From: A. E. Weissenborn, Exec. Officer, DMEA Field Team, Region II

Subject: Arnreiter & Pattimore Monazite Claims, Docket DMEA-2690 Monazite

Mr. Pattimore called at this office on Thursday, September 25, 1952, to discuss his proposed project with me. He states that there has been a change in the ownership; Mr. Arnreiter is now out of the picture and some additional claims have been added to the property. He therefore requests that we postpone the examination of his property until he submits a revised application. He states, however, that the application should not be considered as withdrawn. I told Mr. Pattimore that samples taken several years ago by the Bureau of Mines on old hydraulic tailings indicated low amounts of monazite and that he might be asked to dig some test pits or trenches to establish the fact that there is actually monazite on the property. He seemed willing to do this if necessary.

A. E. Weissenborn

cc: Frank Armstrong
DMEA (2)

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

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
SEP 29 1952

So. 157 Howard Street
Spokane 4, Washington

September 25, 1952

Memorandum

To: M. E. Volin, Member, DMEA Field Team, Region II

From: A. E. Weissenborn, Exec. Officer, DMEA Field Team, Region II

Subject: Arnreiter & Pattimore Monazite Claims, Docket DMEA-2690

Mr. Pattimore called at this office on Thursday, September 25, 1952, to discuss his proposed project with me. He states that there has been a change in the ownership; Mr. Arnreiter is now out of the picture and some additional claims have been added to the property. He therefore requests that we postpone the examination of his property until he submits a revised application. He states, however, that the application should not be considered as withdrawn. I told Mr. Pattimore that samples taken several years ago by the Bureau of Mines on old hydraulic tailings indicated low amounts of monazite and that he might be asked to dig some test pits or trenches to establish the fact that there is actually monazite on the property. He seemed willing to do this if necessary.

A. E. Weissenborn

cc: Frank Armstrong
DMEA (2)

FILE COPY
SURNAME:

700

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

F.L. Knouse
Ellis
F. Johnson

SEP 15 1952

Mr. Alex Pattimore
Arnreiter & Pattimore
5209 Farrer Street
Seattle 6, Washington

Re: Docket No. [illegible]-2690 (Monazite)
Lakow Flats Placer
Boise County, Idaho

Dear Mr. Pattimore:

The application for assistance in exploring your property in Boise, County, Idaho, under the above captioned docket number, has been reviewed by the Rare and Miscellaneous Metals Division of the Defense Minerals Exploration Administration. Your application has been referred for a field examination to the Executive Officer of Region II at the following address:

Mr. A. H. Weissenborn
Executive Officer, Region II
DMEA Field Team
North 157 Howard Street
Spokane 8, Washington

The Regional Office will contact you at the earliest opportunity in regard to your project.

Sincerely yours,

cc 9/16/52

C. O. Mittendorf (for)

Administrator

FLKnouse/jem
9/12/52
cc to: Adm. Reading File
Docket
Messr. Ellis
Knouse
Field Team, Region II (2)

FILE COPY
SURNAME:

FLKnouse
Ellis
Mitt

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

Mr. A. L. Weisenborn
Executive Officer, Region II
DMEA Field Team
South 157 Howard Street
Spokane 8, Washington

SEP 15 1952

Re: Docket No. [illegible]-26[illegible] (Monazite)
Prospector [illegible] Baltimore
Yakow Flats Placer
Boise County, Idaho

Dear Mr. Weisenborn:

The captioned application is being referred to your office for a field examination. Attached are copies of memoranda from Mr. E. J. Carlson, and Mr. Paul A. Weis that draw attention to various questions to be considered by the field team engineers.

If your office recommends either the program submitted by the applicant or an alternate program approved by the applicant, maps or sketches showing the proposed work in relation to the claim lines with detailed costs of the recommended work as outlined in Form DM-1 3, should accompany the report. These costs should be your recommendation based on prevailing rates for the area. The sketches should include any known geology and available sample data as justification for the project.

The description and cost of equipment required to do the work (classified as units to be purchased or rented) and also the fair market value of units to be furnished by the operator should accompany the report. If the work recommended is to be done on a unit cost basis by either the operator or a contractor it should be so indicated and a breakdown of the unit cost supplied. We will also require from the operator the original and five copies of "Form DM-2 3 Owners Consent to Men" signed by the lessors.

We note in your letter of August 2[illegible], 1952, that your office retained a copy of the application.

Sincerely yours,

(signed) FRANK E. JOHNSON

Chairman, Operating Committee

Enc: Copies
APPROVED: T. H. Hedges

Member, Bureau of Mines
T. P. Thayer
Member, Geological Survey

FLKnouse/jem 9/12/52
cc to: Adm. Reading File
Docket
Messrs. EJCarlson-1347
JJNorton-G-232 GLA
OPR. Com. Field Team. Ellis Knouse

9/16/52

IN REPLY REFER TO:
G-MD-CNM

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

September 10, 1952

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
SEP 11 1952

Memorandum

REVIEW OF APPLICATION DMEA-2690 (Monazite)

To: E. W. Ellis, Defense Minerals Exploration Administration
From: P. L. Weis, U. S. Geological Survey
Applicant: Arnreiter & Pattimore.
Name of property: Lakow Flats Placers, Claims 1, 2, 3, 4, 5, 6, 7, 8, 9.
Location of property: Boise County, Idaho
Estimated cost of project: $4,640.
Summary of applicant's proposal: Drill 50 or 60 test holes in the gravels.
Sources of information on applicant's property: None.
Comments: The applicant has not indicated how sampling and assaying will be carried out. In other respects the applicant appears to have presented a reasonable proposal.
RECOMMENDATION: Refer to the field team.

Paul L. Weis
Paul L. Weis

MF-103
(Revised April 1952)

UNITED STATES DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION

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

RECEIVED
AUG 15 1952

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. DMEA-26490-S
Metal or Mineral
Date Received 9-8-52
Estimated Cost
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: Armreiter & Pattimore, 5209 Farrar St. Seattle (8) Wash.
a partnership
T. V. Armreiter, 2529 12th Ave. West, Seattle (9) Wash.
Alex C. Pattimore, 5209 Farrar St. Seattle (8) Wash.

(*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 Placer claims numbers 1,2,3,4,5,6,7,8,9 (180 acres more or less) located in what is known as LAKOW FLATS PLACERS IN THE GAMBRINUS MINING DISTRICT in Boise County, State of Idaho, as recorded in the office of the County Recorder, said County and State.

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

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

(*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. Copy of Lease enclosed.

(*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. Book and page numbers of location notices not available, however they are duly and legally recorded in the office of County Recorder.

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

(*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. See supplemental data

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

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

See supplemental data

16—66551-1

5. *The exploration project.*—(*a*) State the mineral or minerals for which you will to explore Monazite and other rare earth values

(*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. Test-drill the claims enumerated

(*c*) The work will start within 10 days and be completed within two 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. See supplementals

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.). None

(*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)? Yes

(*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. See 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 August 11th, 195 8

Amrelter & Pattimore

By Alex C. Pattimore

Alex C. Pattimore, Partner

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

(SUPPLEMENT TO FORM MF-103)

Armreiter & Pattimore
5209 Farrar St. Seattle (8) Wash.

3. Applicant's property rights:
   (f) Book and page numbers of location notices can be furnished if required.

4. Physical description:
   (a) Enclosed copy of letter from Mr. Chas. M. Lovenstein sets forth in a general way the physical description of the property. Applicants had no interest in this test-pitting operation. Property is easily accessible, road to and across the several claims which are contiguous.
   (c) Above mentioned letter also describes the geologic features of the property and enclosed copy of sketch the general structure from grassroots to bed-rock.
   (d) Property is adjacent to Idaho City and about 68 miles distance from Boise on a paved highway open the year around.
   (e) Manpower, materials, supplies, equipment readily available. Perennial creek (water) on the land. Electric power available.

5. The exploration project:
   (a) Primarily to determine the Monazite values by test-drilling the property.
   (b) It is proposed to drill fifty or sixty test-holes to bed-rock
   (d) Mr. T. V. Armreiter is an experienced mine operator, both placer and quartz, chiefly placer mining in Oregon, Nevada, Idaho and Montana, he will have general supervision of the drilling operations. Mr. Gus Peterson, of Idaho City, an experienced dredge operator and test-driller will be in charge of drilling assisted by Mr. Dewey Daily, of Idaho City, an experienced placer miner.

6. Estimate of costs:

(b) Labor, supervision, consultants:			
2 drill-operators @ $2.00 per hour	640 hrs.		$1,280.00
2 helpers " 1.50 " "	640 "		960.00
1 supervisor " 500.00 per month	2 months		1,000.00
Engineering, geological consultants			500.00
(c) Operating materials and supplies:			
gasoline, oil, miscellaneous small tools			200.00
(d) Operating equipment:			
Test drill mounted on truck, powered by gasoline motor, and gasoline powered water pump furnished by operators. Estimated rental value 100.00 per mo			200.00
(g) Miscellaneous:			
Maintenance, analytical work, accounting, workmens compensation, employers liability insurance, pay-roll taxes, etc.			500.00

7. Applicants will pay their share of costs of the exploration project in cash as work progresses, less allowance for rental of equipment now owned by them and used in the operation. If test-drilling proves Monazite values in sufficient quantity it is proposed to install a "doodle-bug" and dragline-shovel operation to recover the Monazite and gold values. Employing private capital together with whatever financial assistance which may be obtained from a governmental agency assisting in the development of Monazite deposits.

Total estimated cost of exploration project: $4,640.00

(C O P Y)

Seattle, Wash.
June 20, 1952

T. V. Arnreiter and
Alex C. Pattimore
~~961 Republic Bldg.~~
Seattle, Wash.

Dear Sirs:

Upon your request I will attempt to give you a summary of a test report RE: the Lakow Placers in the Gambrinus mining district, comprising approximately five miles of Bear Run creek.

This test-pitting was conducted by me with the assistance of the owner Mr. Dewey Daily an experienced placer man and sampler, and was done during the month of June, 1941. These pits were dug by hand and material was panned from grass-roots to bed-rock, and in the following I will try to give you a fair average of seven test holes from my field notes.

There is hardly a necessity to describe the result of each and every one of the seven pits, since the various strata differs little in values, and only differed in depth of over-burden, the bed-rock material being quite uniform in values; nature of material and depth.

Generally speaking; the lower, down creek shafts, ran heavier in over-burden, from twelve to twenty feet, of which the top three feet was ordinary soil mixed with graite sand debris, the next six feet was heavy in granite sand containing considerable black sand and ran colors with every pan. In each test hole we encountered a strata of two to three feet of blue clay, and quartz gravel increased with depth. Considerable values of gold and black sand was encountered in the blue clay strata, I might add here that this blue clay material is intermixed with quartz sand and readily dissolves in water by panning.

Below this blue clay lay a strata of five to eight feet of ~~typical pay-gravel, which yielded the uniform values of the glacier~~ type placers of the Idaho City pay streak District, which, according to record, runs into several hundred millions of Dollars.

This strata was tested by careful panning to contain up to five dollars per yard to bed-rock, no boulders larger than ten inches were encountered. Bed-rock consists of disintegrated soft granite, can readily be cleaned six inches below bed-rock surface, which incidentally, yields heavy values.

All of the above material runs heavy with black monazite sand, which at the time was entirely ignored in calculating values, but now, is worth twenty cents per pound at a plant in Boise. It is estimated, by subsequent tests, that approximately two pounds of this sand is contained in one cubic yard. Monazite; thorium; helium; radium; garnets, etc., are contained in the sand and are used in the Atomic industry.

I have been in almost daily contact with this placer ground since the time this test was conducted, as my engress road, to an operation I conducted, led over this ground, and only because my own operation was stopped by government edict after 1942, I ceased any further attempt to operate my property or undertake the operation of this placer.

I hope that this gives you preliminary assurance upon which you may base your contemplated drilling tests. I might mention here that our calculations and professional tests conducted prove an average of seventy-five cents per yard from grass-roots to bedrock taking fully into consideration the barren strata. This whole picture of course changes now with the values placed on Monazite sand which is readily saleable in Boise. All calculations were based on thirty-five dollars per ounce (troy) which price is expected to advance in the near future.

I may say in conclusion; that after closing down my own operation, I hold no interest whatsoever in the Lakow Placer.

Enclosed is a sketch of test pit No. 3 which is indicative of the entire test operation, being in the center of the claims which embodies some five miles of Bear Run Creek.

It might be well for you to check with Mr. Dewey Daily of Idaho City, whom I referred to above, for confirmation of essential facts, as he was present at all times during our testing operations and no doubt kept some records and notes of his own.

Very truly yours

Chas. M. Lovenstein

INDORSEMENT:

The above statements with reference to my participation in pit testing, findings and conclusions, are correct in essential facts to the best of my knowledge and belief.

Dewey Daily

(COPY ORIGINAL ON FILE)

General structure of LAROW FLATS PLACERS as evidenced by pit-testing conducted in 1941 according to available information.

0' to 5'

Ordinary soil mixed with granite sand debris.

6" to 8'

Granite sand containing black sand and some gold values.

3' to 4'

Strata of gravel containing black sand and some gold values.

2' to 3'

Strata of blue clay intermixed with black sand; quartz gravel and some gold values.

5' to 8'

Typical pay-gravel of the Idaho City mining district. Bedrock consists of disintegrated soft granite and can be cleaned 6" below bedrock surface.

(Copy)

MINING LEASE

THIS INDENTURE, made the 7th day of June, 1952, by and between Frank Shelton and Josephine Shelton, his wife, and Dewey Daily, a single man, lessors, parties of the first part, and T.V. Arnreiter and associates, parties of the second part

W I T N E S S E T H

WHEREAS; Parties of the first part are owners of certain placer mining claims situated in the County of Boise, State of Idaho, described as follows:

Placer claims numbers 1,2,3,4,5,6,7,8,9, located in what is known as LAKOW FLATS PLACERS in the GAMBRINUS MINING DISTRICT in Boise County, State of Idaho, as recorded in the office of the County Recorder of said County of Boise, State of Idaho. And are the owners of certain water-rights, hereditaments, and appurtenances situated upon and adjacent to, or used, in connection with the mining of aforesaid placer mining claims.

NOW THEREFORE, in consideration of the royalties hereinafter reserved and the covenants and agreements hereof to be kept and performed, observed and fulfilled by the respective parties, it is covenanted and agreed as follows . VIZ.

(1) Lessees agree to pay to Lessors as royalty Ten per-cent (10%) of all values recovered in lawful money of the United States, or at the option of the Lessors to pay said royalty in Gold. Said royalty payment to be paid as above described until the sum of Thirty five thousand Dollars ($35,000.00) has been paid. And upon payment of said sum /or amount/ Lessors agree to give title to said described mining locations to Lessees free and clear of any and all incumbrance of any nature whatsoever.

(2) Lessees agree to enter upon the mining claims /or premises/ above described and to work the same mine fashion and in manner necessary to good and economical mining; to allow Lessors /and or/ their agents to enter upon said property for the purpose of inspection; to give notice to Lessors of Lessees' intention to have a clean-up not less than twenty-four hours before cleaning up the

Gold or concentrates resulting from Lessees operation of said placer mining claims; to permit Lessors /or their agents/ to be present at each and every clean-up.

(3) It is further agreed that Lessees shall commence test operations within sixty days from date of execution of this lease agreement.

(4) It is agreed that Lessees shall have no right whatsoever to the timber; stone or grazing rights on said placer mining claims excepting the right to use such timber as may be necessary, or convenient to carrying on and conducting mining operations.

(5) Lessees shall make available to Lessors all of their engineering data concerning said mining claims; results of test drilling and all prospective data. Lessees agree to seasonably and promptly pay all labor and materials bills incurred in their mining operations, and to keep said placer claims free and clear from any and all kinds of liens on account thereof.

(6) Lessees shall perform upon said placer mining claims all assessment work if there be any required under the mining laws of the United States; the State of Idaho or the rules of the mining district, and will either file proof thereof, or furnish proof thereof to Lessors timely of said work having been performed.

(7) That upon termination of this Lease Lessees may remove from said premises all of the personal property purchased by, or brought on to said premises by said Lessees.

(8) Lessees may, at any time, upon written notice to Lessors terminate this Lease by forfeiting to Lessors all payments herein or on account hereof made, and Lessees' liabilities shall not exceed the amount of royalty actually owing to Lessors at the time of termination.

(9) In the event Lessee fails to perform any of the covenants, or agreements, herein contained on their part to be performed, Lessors shall have the option of terminating this Lease by giving written notice to Lessees of the non-payment of royalty, or default complained of, and if said non-payment, or default,

complained of is not paid or remedied within thirty days after said written notice then Lessors may terminate this Lease and it shall become null and void.

(10) Upon termination of this Lease Lessees agree to deliver up possession of the aforesaid placer mining claims and said Lessors may enter upon said premises and dispossess all persons occupying the same with or without force and with or without process of law.

(11) All words and phrases herein contained shall be construed as having the meaning of those in general use and practice in the Mining Industry.

(12) This Lease shall be binding upon, and inure to the benefit of the heirs; executors; administrators and assigns of the parties hereto.

IN WITNESS WHEREOF, the parties hereto have executed these presents the day and year first above written.

PARTIES OF THE FIRST PART:

DEWEY DAILY

FRANK SHELTON

JOSEPHINE SHELTON

PARTIES OF THE SECOND PART:

T.V. ARNREITER

ALEX C. PATTIMORE

NOTARY ACKNOWLEDGEMENT

(S E A L)

(C O P Y)

Original Lease duly recorded in the office of the County Recorder of Boise County, State of Idaho, as Instrument No. 58845 in Book 4 of Leases at Page 58, on the 3rd day of July 1952.

9/11/52 gla

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

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
SEP 10 1952

September 9, 1952

Memorandum

To: Ernest Wm. Ellis, Chief, Rare & Misc. Metals Division

From: E. J. Carlson, Rare and Precious Metals Branch

Subject: Lakow Flats Placers, Boise County, Idaho DMEA Docket No. 2690

This branch is quite surprised to read in the attached letter from Mr. Charles M. Lovenstein of the existance of black monazite sand, of helium, and of radium in the placer material of this deposit near Idaho City. The previous investigations of Special Minerals Investigation Branch in that area did not disclose these relatively rare minerals or elements.

During the summer of 1949 the S.M.I. Branch conducted a churn-drill, shafting, and trenching investigation of the Boise Basin area which included the Gambrinus Mining District. Four large samples were taken of virgin gravels from the old hydraulic banks adjacent to the applicants claims on Bear Run Creek. These samples ran 0.24, 0.93, 0.24, and 0.30 pounds of monazite per cubic yard. Another sample from the bed of hydraulic tailings that covers the surrounding area indicated 0.16 pounds of monazite per cubic yard. Gold values ran from 2¢ to 15¢ per cubic yard of the virgin material tested.

It is possible that richer values may be found in the stream gravels of Bear Run Creek because of the concentration of heavy minerals from the higher, older channels which have been mined by hydraulic methods. It is more probable that, if high values in gold were contained in the stream, they would have been mined by the early miners 70 to 80 years ago.

It is recommended that the applicant cut a deep trench by bulldozer at his own expense across the gravels of his claims and that the DMEA field team sample said trench to determine whether monazite exists in sufficient abundance to warrant further exploration. The Rare and Precious Metals Branch has information available that the adjoining gravels contain from 0.24 to 0.93 pounds of monazite per cubic yard. The applicant should submit some evidence of the possible monazite tenor on his claims before a loan could be granted.

E. J. Carlson

E. J. Carlson
Commodity-Industry Analyst
Rare and Precious Metals Branch

MF-103
(Revised April 1952)

UNITED STATES DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION

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

RECEIVED
AUG 15 1952
SPOKANE, WASH.

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

SEP 8

Not to be filled in by applicant

Docket No. DMEA-2690
Metal or Mineral
Date Received 9-8-52
Estimated Cost
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: Arnreiter & Pattimore, 5209 Farrar St. Seattle (8) Wash.
a partnership
T. V. Arnreiter, 2529 12th Ave. West, Seattle (9) Wash.
Alex C. Pattimore, 5209 Farrar St. Seattle (8) Wash.

(*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 Placer claims numbers 1,2,3,4,5,6,7,8,9 (180 acres more or less) located in what is known as LAKOW FLATS PLACERS IN THE GAMBRINUS MINING DISTRICT in Boise County, State of Idaho, as recorded in the office of the County Recorder, said County and State.

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

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

(*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. Copy of Lease enclosed.

(*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. Book and page numbers of location notices not available, however they are duly and legally recorded in the office of County Recorder.

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

(*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. See supplemental data

(*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.

See supplemental data.

5. *The exploration project.*—(a) State the mineral or minerals for which you [illegible] to explore Monazite and other rare earth values

(*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. Test-drill the claims enumerated

(*c*) The work will start within 10 days and be completed within two 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. See supplementals

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.). None

(*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? Yes

☑ Money ☑ Use of equipment owned by you ☐ Other

Explain in detail on acompanying paper. See 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 August 11th, 1952

Arnreiter & Pattimore
(Applicant)

By Alex C. Pattimore
Alex C. Pattimore, Partner

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

(SUPPLEMENT TO FORM MF-103)

Armreiter & Pattimore
5409 Farrar St. Seattle (6) Wash.

3. Applicant's property rights:
(f) Book and page numbers of location notices can be furnished if required.

4. Physical description:
(a) Enclosed copy of letter from Mr. Chas. H. Lovenstein sets forth in a general way the physical description of the property. Applicants had no interest in this test-pitting operation. Property is easily accessible, road to and across the several claims which are contiguous.
(c) Above mentioned letter also describes the geologic features of the property and enclosed copy of sketch the general structure from grassroots to bed-rock.
(d) Property is adjacent to Idaho City and about 33 miles distance from Boise on a paved highway open the year around.
(e) Manpower, materials, supplies, equipment readily available. Perennial creek (water) on the land. Electric power available.

5. The exploration project:
(a) Primarily to determine the Monazite values by test-drilling the property.
(b) It is proposed to drill fifty or sixty test-holes to bed-rock
(d) Mr. T. V. Armreiter is an experienced mine operator, both placer and quartz, chiefly placer mining in Oregon, Nevada, Idaho and Montana, he will have general supervision of the drilling operations. Mr. Gus Peterson, of Idaho City, an experienced dredge operator and test-driller will be in charge of drilling assisted by Mr. Dewey Daily, of Idaho City, an experienced placer miner.

6. Estimate of costs:

(b) Labor, supervision, consultants:			
2 drill-operators @	$2.00 per hour	640 hrs.	$1,280.00
2 helpers	1.50 "	" 640 "	960.00
1 supervisor	500.00 per month	2 months	1,000.00
Engineering, geological consultants			500.00
(c) Operating materials and supplies:			
gasoline, oil, miscellaneous small tools			200.00
(d) Operating equipment:			
Test drill mounted on truck, powered by gasoline motor, and gasoline powered water pump furnished by operators. Estimated rental value 100.00 per mo			200.00
(g) Miscellaneous:			
Maintenance, analytical work, accounting, workmens compensation, employers liability insurance, pay-roll taxes, etc.			500.00

7. Applicants will pay their share of costs of the exploration project in cash as work progresses, less allowance for rental of equipment now owned by them and used in the operation. If test-drilling proves Monazite values in sufficient quantity it is proposed to install a "dodge-bug" and dragline-shovel operation to recover the Monazite and gold values. Employing private capital together with whatever financial assistance which may be obtained from a governmental agency assisting in the development of Monazite deposits.

Total estimated cost of exploration project: $4,640.00

(C O P Y)

Seattle, Wash.
June 20, 1952

T. V. Armreiter and
Alex C. Pattimore
~~961 Republic Bldg.~~
Seattle, Wash.

Dear Sirs:

Upon your request I will attempt to give you a summary of a test report RE: the Lakow Placers in the Gambrinus mining district, comprising approximately five miles of Bear Run creek.

This test-pitting was conducted by me with the assistance of the owner Mr. Dewey Daily an experienced placer man and sampler, and was done during the month of June, 1941. These pits were dug by hand and material was panned from grass-roots to bed-rock, and in the following I will try to give you a fair average of seven test holes from my field notes.

There is hardly a necessity to describe the result of each and every one of the seven pits, since the various strata differs little in values, and only differed in depth of over-burden, the bed-rock material being quite uniform in values; nature of material and depth.

Generally speaking; the lower, down creek shafts, ran heavier in over-burden, from twelve to twenty feet, of which the top three feet was ordinary soil mixed with graite sand debris, the next six feet was heavy in granite sand containing considerable black sand and ran colors with every pan. In each test hole we encountered a strata of two to three feet of blue clay, and quartz gravel increased with depth. Considerable values of gold and black sand was encountered in the blue clay strata, I might add here that this blue clay material is intermixed with quartz sand and readily dissolves in water by panning.

Below this blue clay lay a strata of five to eight feet of typical pay-gravel, which yielded the uniform values of the glacier type placers of the Idaho City pay streak District, which, according to record, runs into several hundred millions of Dollars.

This strata was tested by careful panning to contain up to five dollars per yard to bed-rock, no boulders larger than ten inches were encountered. Bed-rock consists of disintegrated soft granite, can readily be cleaned six inches below bed-rock surface, which incidentally, yields heavy values.

All of the above material runs heavy with black monazite sand, which at the time was entirely ignored in calculating values, but now, is worth twenty cents per pound at a plant in Boise. It is estimated, by subsequent tests, that approximately two pounds of this sand is contained in one cubic yard. Monazite; thorium; helium; radium; garnets, etc., are contained in the sand and are used in the Atomic industry.

I have been in almost daily contact with this placer ground since the time this test was conducted, as my engress road, to an operation I conducted, led over this ground, and only because my own operation was stopped by government edict after 1942, I ceased any further attempt to operate my property or undertake the operation of this placer.

I hope that this gives you preliminary assurance upon which you may base your contemplated drilling tests. I might mention here that our calculations and professional tests conducted prove an average of seventy-five cents per yard from grass-roots to bedrock taking fully into consideration the barren strata. This whole picture of course changes now with the values placed on Monazite sand which is readily saleable in Boise. All calculations were based on thirty-five dollars per ounce (troy) which price is expected to advance in the near future.

I may say in conclusion; that after closing down my own operation, I hold no interest whatsoever in the Lakow Placer.

Enclosed is a sketch of test pit No. 3 which is indicative of the entire test operation, being in the center of the claims which embodies some five miles of Bear Run Creek.

It might be well for you to check with Mr. Dewey Daily of Idaho City, whom I referred to above, for confirmation of essential facts, as he was present at all times during our testing operations and no doubt kept some records and notes of his own.

Very truly yours

Chas. M. Lovenstein

INDORSEMENT:

The above statements with reference to my participation in pit testing, findings and conclusions, are correct in essential facts to the best of my knowledge and belief.

Dewey Daily

(COPY ORIGINAL ON FILE)

General structure of LAKE FLATS PLACERS as evidenced by pit-testing conducted in 1941 according to available information.

0' to 5'

Ordinary soil mixed with granite sand debris.

6' to 8'

Granite sand containing black sand and some gold values.

3' to 4'

Strata of gravel containing black sand and some gold values.

2' to 3'

Strata of blue clay intermixed with black sand; quartz gravel and some gold values.

5' to 8'

Typical pay-gravel of the Idaho City mining district. Bedrock consists of disintegrated soft granite and can be cleaned 6" below bedrock surface.

(Copy)

MINING LEASE

THIS INDENTURE, made the 7th day of June, 1952, by and between Frank Shelton and Josephine Shelton, his wife, and Dewey Daily, a single man, lessors, parties of the first part, and T.V. Arnreiter and associates, parties of the second part

W I T N E S S E T H

WHEREAS; Parties of the first part are owners of certain placer mining claims situated in the County of Boise, State of Idaho, described as follows:

Placer claims numbers 1,2,3,4,5,6,7,8,9, located in what is known as LAKOW FLATS PLACERS in the GAMBRINUS MINING DISTRICT in Boise County, State of Idaho, as recorded in the office of the County Recorder of said County of Boise, State of Idaho. And are the owners of certain water-rights, hereditaments, and appurtenances situated upon and adjacent to, or used, in connection with the mining of aforesaid placer mining claims.

NOW THEREFORE, in consideration of the royalties hereinafter reserved and the covenants and agreements hereof to be kept and performed, observed and fulfilled by the respective parties, it is covenanted and agreed as follows . VIZ.

(1) Lessees agree to pay to Lessors as royalty Ten per-cent (10%) of all values recovered in lawful money of the United States, or at the option of the Lessors to pay said royalty in Gold. Said royalty payment to be paid as above described until the sum of Thirty five thousand Dollars ($35,000.00) has been paid. And upon payment of said sum /or amount/ Lessors agree to give title to said described mining locations to Lessees free and clear of any and all incumbrance of any nature whatsoever.

(2) Lessees agree to enter upon the mining claims /or premises/ above described and to work the same mine fashion and in manner necessary to good and economical mining; to allow Lessors /and or/ their agents to enter upon said property for the purpose of inspection; to give notice to Lessors of Lessees' intention to have a clean-up not less than twenty-four hours before cleaning up the

Gold or concentrates resulting from Lessees operation of said placer mining claims; to permit Lessors /or their agents/ to be present at each and every clean-up.

(3) It is further agreed that Lessees shall commence test operations within sixty days from date of execution of this lease agreement.

(4) It is agreed that Lessees shall have no right whatsoever to the timber; stone or grazing rights on said placer mining claims excepting the right to use such timber as may be necessary, or convenient to carrying on and conducting mining operations.

(5) Lessees shall make available to Lessors all of their engineering data concerning said mining claims; results of test drilling and all prospective data. Lessees agree to seasonably and promptly pay all labor and materials bills incurred in their mining operations, and to keep said placer claims free and clear from any and all kinds of liens on account thereof.

(6) Lessees shall perform upon said placer mining claims all assessment work if there be any required under the mining laws of the United States; the State of Idaho or the rules of the mining district, and will either file proof thereof, or furnish proof thereof to Lessors timely of said work having been performed.

(7) That upon termination of this Lease Lessees may remove from said premises all of the personal property purchased by, or brought on to said premises by said Lessees.

(8) Lessees may, at any time, upon written notice to Lessors terminate this Lease by forfeiting to Lessors all payments herein or on account hereof made, and Lessees' liabilities shall not exceed the amount of royalty actually owing to Lessors at the time of termination.

(9) In the event Lessee fails to perform any of the covenants, or agreements, herein contained on their part to be performed, Lessors shall have the option of terminating this Lease by giving written notice to Lessees of the non-payment of royalty, or default complained of, and if said non-payment, or default,

complained of is not paid or remedied within thirty days after said written notice then Lessors may terminate this Lease and it shall become null and void.

(10) Upon termination of this Lease Lessees agree to deliver up possession of the aforesaid placer mining claims and said Lessors may enter upon said premises and dispossess all persons occupying the same with or without force and with or without process of law.

(11) All words and phrases herein contained shall be construed as having the meaning of those in general use and practice in the Mining Industry.

(12) This Lease shall be binding upon, and inure to the benefit of the heirs; executors; administrators and assigns of the parties hereto.

IN WITNESS WHEREOF, the parties hereto have executed these presents the day and year first above written.

PARTIES OF THE FIRST PART:

DEWEY DAILY

FRANK SHELTON

JOSEPHINE SHELTON

PARTIES OF THE SECOND PART:

T.V. ARNREITER

ALEX C. PATTIMORE

NOTARY ACKNOWLEDGEMENT

(S E A L)

(C O P Y)

Original Lease duly recorded in the office of the County Recorder of Boise County, State of Idaho, as Instrument No. 58845 in Book 4 of Leases at Page 58, on the 3rd day of July 1952.

September 8, 1952

Memorandum

To: Executive Officer, DMEA Field Team, Region II

From: Chief, Operation's Control and Statistics Division

Subject: Assignment of Docket Number

There are listed below the assigned docket numbers to three applications recently received from Region II.

DMEA-2690 - Arnreiter & Pattimore

DMEA-2691 - A. A. McDonald, J. C. Ettien, and P. D. Hanifan

DMEA-2692 - Skeman and Carter

ROBERT E. ADAMS

Robert E. Adams
Chief, Operation's Control
and Statistics Division

Mr. Alex Pattimore
Arnreiter & Pattimore
5209 Farrar Street
Seattle 8, Washington

Subject: DMEA-2690
Re: Exploration Assistance
Lakow Flats Placers
September 8, 1952

My dear Mr. Pattimore:

The receipt of your application dated August 11, 1952, for exploration assistance under the Defense Production Act of 1950, as amended, is hereby acknowledged.

Your application has been assigned Docket Number DMEA-2690 and referred to the Rare and Miscellaneous Metals Division.

Kindly refer to DMEA-2690 in any future correspondence relating to your application.

Sincerely yours,

ROBERT E. ADAMS

Robert E. Adams
Chief, Operation's Control
and Statistics Division

25451

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

So. 157 Howard Street
Spokane 4, Washington

August 29, 1952

Mr. Frank E. Johnson, Chairman
Operating Committee, DMEA
Washington 25, D. C.

Re: Application - Monazite
Arnreiter & Pattimore, Partners
Lakow Flats Placers
Boise Co., Idaho

Dear Mr. Johnson:

Enclosed are three copies of an application from the above-referenced partners, together with copies of a lease. One copy has been retained to facilitate a field examination. Since there is a field party in that area at the present time, it may be that an examination can be scheduled ahead of referral. Since the applicants reside in Seattle, Washington, arrangements would have to be made with them prior to the examination.

Very truly yours,

Thor H. Kiilsgaard
emr

Thor H. Kiilsgaard
For: A. E. Weissenborn
Executive Officer, DMEA
Field Team, Region II

Enclosures
As above

cc: USBM (2)

P. S. In a letter to the applicants dated August 20, 1952, Owner's Consent to Lien and the names and numbers of the claims affected by the proposed exploration and the book and page number of the county recording has been requested.

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

So. 157 Howard Street
Spokane 4, Washington

August 29, 1952

Mr. Frank E. Johnson, Chairman
Operating Committee, DMEA
Washington 25, D. C.

Re: Application - Monazite
Arnreiter & Pattimore, Partners
Lakow Flats Placers
Boise Co., Idaho

Dear Mr. Johnson:

Enclosed are three copies of an application from the above-referenced partners, together with copies of a lease. One copy has been retained to facilitate a field examination. Since there is a field party in that area at the present time, it may be that an examination can be scheduled ahead of referral. Since the applicants reside in Seattle, Washington, arrangements would have to be made with them prior to the examination.

Very truly yours,

Thor H. Kiilsgaard
For: A. E. Weissenborn
Executive Officer, DMEA
Field Team, Region II

Enclosures
As above

cc: USBM (2)

P. S. In a letter to the applicants dated August 20, 1952, Owner's Consent to Lien and the names and numbers of the claims affected by the proposed exploration and the book and page number of the county recording has been requested.

MF-103
(Revised April 1952)

UNITED STATES DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION

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

RECEIVED
AUG 15 1952
U.S. C.S. WASH

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. DMEA-2690
Metal or Mineral
Date Received 9-8-52
Estimated Cost
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: Arnreiter & Pattimore, 5209 Farrar St. Seattle (8) Wash.
a partnership
T. V. Arnreiter, 2529 12th Ave. West, Seattle (9) Wash.
Alex C. Pattimore, 5209 Farrar St. Seattle (8) Wash.

(*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 Placer claims numbers 1,2,3,4,5,6,7,8,9 (180 acres more or less) located in what is known as LAKOW FLATS PLACERS IN THE GAMBRINUS MINING DISTRICT in Boise County, State of Idaho, as recorded in the office of the County Recorder, said County and State.

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

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

(*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. Copy of Lease enclosed.

(*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. Book and page numbers of location notices not available, however they are duly and legally recorded in the office of County Recorder.

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

(*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. See supplemental data

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

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

5. *The exploration project.*—(*a*) [redacted]te the mineral or minerals for which you w[redacted]o explore Monazite and other rare earth values

(*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. Test-drill the claims enumerated

(*c*) The work will start within 10 days and be completed within two 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. See supplementals

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.). None

(*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)? Yes

(*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. See 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 August 11th, 195 2

Arnreiter & Pattimore C
(Applicant)

By Alex C. Pattimore
Alex C. Pattimore, Partner

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

(SUPPLEMENT TO FORM MF-103)

Arnreiter & Pattimore
5209 Farrar St. Seattle (8) Wash.

3. Applicant's property rights:
   (f) Book and page numbers of location notices can be furnished if required.

4. Physical description:
   (a) Enclosed copy of letter from Mr. Chas. M. Lovenstein sets forth in a general way the physical description of the property. Applicants had no interest in this test-pitting operation. Property is easily accessible, road to and across the several claims which are contiguous.
   (c) Above mentioned letter also describes the geologic features of the property and enclosed copy of sketch the general structure from grassroots to bed-rock.
   (d) Property is adjacent to Idaho City and about 38 miles distance from Boise on a paved highway open the year around.
   (e) Manpower, materials, supplies, equipment readily available. Perennial creek (water) on the land. Electric power available.

5. The exploration project:
   (a) Primarily to determine the Monazite values by test-drilling the property.
   (b) It is proposed to drill fifty or sixty test-holes to bed-rock
   (d) Mr. T. V. Arnreiter is an experienced mine operator, both placer and quartz, chiefly placer mining in Oregon, Nevada, Idaho and Montana, he will have general supervision of the drilling operations. Mr. Gus Pearson, of Idaho City, an experienced dredge operator and test-driller will be in charge of drilling assisted by Mr. Dewey Daily, of Idaho City, an experienced placer miner.

6. Estimate of costs:

(b) Labor, supervision, consultants:			
2 drill-operators	@ $2.00 per hour	640 hrs.	$1,280.00
2 helpers	@ 1.50 " "	640 "	960.00
1 supervisor	@ 500.00 per month	2 months	1,000.00
Engineering, geological consultants			500.00
(c) Operating materials and supplies:			
gasoline, oil, miscellaneous small tools			200.00
(d) Operating equipment:			
Test drill mounted on truck, powered by gasoline motor, and gasoline powered water pump furnished by operators. Estimated rental value 100.00per mo			200.00
(g) Miscellaneous:			
Maintenance, analytical work, accounting, workmens compensation, employers liability insurance, pay-roll taxes, etc.			500.00

7. Applicants will pay their share of costs of the exploration project in cash as work progresses, less allowance for rental of equipment now owned by them and used in the operation. If test-drilling proves Monazite values in sufficient quantity it is proposed to install a "doodle-bug" and dragline-shovel operation to recover the Monazite and gold values. Employing private capital together with whatever financial assistance which may be obtained from a governmental agency assisting in the development of Monazite deposits.

Total estimated cost of exploration project: $4,640.00

(C O P Y)

Seattle, Wash.
June 20, 1952

T. V. Arnreiter and
Alex C. Pattimore
~~961 Republic Bldg.~~
Seattle, Wash.

Dear Sirs:

Upon your request I will attempt to give you a summary of a test report RE: the Lakow Placers in the Gambrinus mining district, comprising approximately five miles of Bear Run creek.

This test-pitting was conducted by me with the assistance of the owner Mr. Dewey Daily an experienced placer man and sampler, and was done during the month of June, 1941. These pits were dug by hand and material was panned from grass-roots to bed-rock, and in the following I will try to give you a fair average of seven test holes from my field notes.

There is hardly a necessity to describe the result of each and every one of the seven pits, since the various strata differs little in values, and only differed in depth of over-burden, the bed-rock material being quite uniform in values; nature of material and depth.

Generally speaking; the lower, down creek shafts, ran heavier in over-burden, from twelve to twenty feet, of which the top three feet was ordinary soil mixed with graite sand debris, the next six feet was heavy in granite sand containing considerable black sand and ran colors with every pan. In each test hole we encountered a strata of two to three feet of blue clay, and quartz gravel increased with depth. Considerable values of gold and black sand was encountered in the blue clay strata, I might add here that this blue clay material is intermixed with quartz sand and readily dissolves in water by panning.

Below this blue clay lay a strata of five to eight feet of typical pay-gravel, which yielded the uniform values of the glacier type placers of the Idaho City pay streak District, which, according to record, runs into several hundred millions of Dollars.

This strata was tested by careful panning to contain up to five dollars per yard to bed-rock, no boulders larger than ten inches were encountered. Bed-rock consists of disintegrated soft granite, can readily be cleaned six inches below bed-rock surface, which incidentally, yields heavy values.

All of the above material runs heavy with black monazite sand, which at the time was entirely ignored in calculating values, but now, is worth twenty cents per pound at a plant in Boise. It is estimated, by subsequent tests, that approximately two pounds of this sand is contained in one cubic yard. Monazite; thorium; helium; radium; garnets, etc., are contained in the sand and are used in the Atomic industry.

I have been in almost daily contact with this placer ground since the time this test was conducted, as my engress road, to an operation I conducted, led over this ground, and only because my own operation was stopped by government edict after 1942, I ceased any further attempt to operate my property or undertake the operation of this placer.

I hope that this gives you preliminary assurance upon which you may base your contemplated drilling tests. I might mention here that our calculations and professional tests conducted prove an average of seventy-five cents per yard from grass-roots to bedrock taking fully into consideration the barren strata. This whole picture of course changes now with the values placed on Monazite sand which is readily saleable in Boise. All calculations were based on thirty-five dollars per ounce (troy) which price is expected to advance in the near future.

I may say in conclusion; that after closing down my own operation, I hold no interest whatsoever in the Lakow Placer.

Enclosed is a sketch of test pit No. 3 which is indicative of the entire test operation, being in the center of the claims which embodies some five miles of Bear Run Creek.

It might be well for you to check with Mr. Dewey Daily of Idaho City, whom I referred to above, for confirmation of essential facts, as he was present at all times during our testing operations and no doubt kept some records and notes of his own.

Very truly yours

Chas. M. Lovenstein

INDORSEMENT:

The above statements with reference to my participation in pit testing, findings and conclusions, are correct in essential facts to the best of my knowledge and belief.

Dewey Daily

(COPY ORIGINAL ON FILE)

(Copy)

MINING LEASE

THIS INDENTURE, made the 7th day of June, 1952, by and between Frank Shelton and Josephine Shelton, his wife, and Dewey Daily, a single man, lessors, parties of the first part, and T.V. Arnreiter and associates, parties of the second part

W I T N E S S E T H

WHEREAS; Parties of the first part are owners of certain placer mining claims situated in the County of Boise, State of Idaho, described as follows:

Placer claims numbers 1,2,3,4,5,6,7,8,9, located in what is known as LAKOW FLATS PLACERS in the GAMBRINUS MINING DISTRICT in Boise County, State of Idaho, as recorded in the office of the County Recorder of said County of Boise, State of Idaho. And are the owners of certain water-rights, hereditaments, and appurtenances situated upon and adjacent to, or used, in connection with the mining of aforesaid placer mining claims.

NOW THEREFORE, in consideration of the royalties hereinafter reserved and the covenants and agreements hereof to be kept and performed, observed and fulfilled by the respective parties, it is covenanted and agreed as follows . VIZ.

(1) Lessees agree to pay to Lessors as royalty Ten per-cent (10%) of all values recovered in lawful money of the United States, or at the option of the Lessors to pay said royalty in Gold. Said royalty payment to be paid as above described until the sum of Thirty five thousand Dollars ($35,000.00) has been paid. And upon payment of said sum /or amount/ Lessors agree to give title to said described mining locations to Lessees free and clear of any and all incumbrance of any nature whatsoever.

(2) Lessees agree to enter upon the mining claims /or premises/ above described and to work the same mine fashion and in manner necessary to good and economical mining; to allow Lessors /and or/ their agents to enter upon said property for the purpose of inspection; to give notice to Lessors of Lessees' intention to have a clean-up not less than twenty-four hours before cleaning up the

Gold or concentrates resulting from Lessees operation of said placer mining claims; to permit Lessors /or their agents/ to be present at each and every clean-ip.

(3) It is further agreed that Lessees shall commence test operations within sixty days from date of execution of this lease agreement.

(4) It is agreed that Lessees shall have no right whatsoever to the timber; stone or grazing rights on said placer mining claims excepting the right to use such timber as may be necessary, or convenient to carrying on and conducting mining operations.

(5) Lessees shall make available to Lessors all of their engineering data concerning said mining claims; results of test drilling and all prospective data. Lessees agree to seasonably and promptly pay all labor and materials bills incurred in their mining operations, and to keep said placer claims free and clear from any and all kinds of liens on account thereof.

(6) Lessees shall perform upon said placer mining claims all assessment work if there be any required under the mining laws of the United States; the State of Idaho or the rules of the mining district, and will either file proof thereof, or furnish proof thereof to Lessors timely of said work having been performed.

(7) That upon termination of this Lease Lessees may remove from said premises all of the personal property purchased by, or brought on to said premises by said Lessees.

(8) Lessees may, at any time, upon written notice to Lessors terminate this Lease by forfeiting to Lessors all payments herein or on account hereof made, and Lessees' liabilities shall not exceed the amount of royalty actually owing to Lessors at the time of termination.

(9) In the event Lessee fails to perform any of the covenants, or agreements, herein contained on their part to be performed, Lessors shall have the option of terminating this Lease by giving written notice to Lessees of the non-payment of royalty, or default complained of, and if said non-payment, or default,

complained of is not paid or remedied within thirty days after said written notice then Lessors may terminate this Lease and it shall become null and void.

(10) Upon termination of this Lease Lessees agree to deliver up possession of the aforesaid placer mining claims and said Lessors may enter upon said premises and dispossess all persons occupying the same with or without force and with or without process of law.

(11) All words and phrases herein contained shall be construed as having the meaning of those in general use and practice in the Mining Industry.

(12) This Lease shall be binding upon, and inure to the benefit of the heirs; executors; administrators and assigns of the parties hereto.

IN WITNESS WHEREOF, the parties hereto have executed these presents the day and year first above written.

PARTIES OF THE FIRST PART:	PARTIES OF THE SECOND PART:
DEWEY DAILY	T.V. ARNREITER
FRANK SHELTON	ALEX C. PATTIMORE
JOSEPHINE SHELTON	

NOTARY ACKNOWLEDGEMENT

(S E A L)

(C O P Y)

Original Lease duly recorded in the office of the County Recorder of Boise County, State of Idaho, as Instrument No. 58845 in Book 4 of Leases at Page 58, on the 3rd day of July 1952.

General structure of LAKOW FLATS PLACERS as evidenced by pit-testing conducted in 1941 according to available information.

3' to 5'

Ordinary soil mixed with granite sand debris.

6' to 8'

Granite sand containing black sand and some gold values.

3' to 4'

Strata of gravel containing black sand and some gold values.

2' to 3'

Strata of blue clay intermixed with black sand; quartz gravel and some gold values.

5' to 8'

Typical pay-gravel of the Idaho City mining district. Bedrock consists of disintegrated soft granite and can be cleaned 6" below bedrock surface.