DMA Form 1

DEFENSE MINERALS ADMINISTRATION
Control Slip

CONTROLLED DOCUMENT

DMEA ~~DMA~~ Docket No. 2536

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 was retained by Region II.

To: Code 700, Rm. 4640 Date 5-19-52

To: Opr. Committee Date 6-18-52

To: C.O. Mittendorf Date

To: Mails + Files Date

To: Date

To: Date

To: Date

To: Date

To: Date

To: Date

To: Date

To: Date

To: Date

To: Date

DO NOT DETACH

CONTROLLED DOCUMENT

FILE COPY
700 SURNAME:

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

JUN 17 1952

Mr. K. N. Jackson, Sec'y-Treasurer
Gem Monazite Miner, Inc.
215 Doherty building
Boise, Idaho

Re: Docket No. DMEA-2536 (Monazite)
Gem Monazite Mines, Inc.
Placer Deposits
Valley County, Idaho

Dear Mr. Jackson:

Your application has been studied carefully by personnel of this Agency. From data obtained by previous test drilling by the Special Minerals Investigation Branch of the Bureau of Mines in the Long Valley and Round Valley area, it is quite apparent that the test drilling proposed in your application would have very little chance of encountering placer deposits of monazite that would add materially to the defense program.

Because of the foregoing we regret to advise you that your application has been denied.

If in the future you have any information that might alter our decision we shall be pleased to review your application.

Sincerely yours,

C. O. Mittendorf

Acting Administrator

APPROVED:

Member, Bureau of Mines

Member, Geological Survey

HFKeller/jem
6/12/52
cc to: Adm. Reading File
Docket
Messrs. EJCarlson-1347
JJNorton-G-232
Ellis Keller
Opr. Committee
Field Team, Region II (2)

6/10/52 gla

IN REPLY REFER TO:

G-MD-PLW

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

June 6, 1952

Memorandum

REVIEW OF APPLICATION DMEA-2536 (Monazite).

To: E. Wm. Ellis, Rare and Miscellaneous Metals Division.
From: P. L. Weis, U. S. Geological Survey.
Applicant: Gem Monazite Mines, Inc.
Name of property: None.
Location of property: T. 12 N., R. 4 E.B.M., Valley County, Idaho.
Estimated cost of project: $100,250.00.
Summary of applicant's proposal:
Drill at least one test hole in each 10 acre plot of all leased land (128 holes).
Source of information on applicant's property:
The applicant states that the U. S. Bureau of Mines explored the area in 1950, and has information as to its probable value. The U. S. Geological Survey has no information on the area.
Comments:
If information in the hands of the U. S. Bureau of Mines shows that this property is worthy of further investigation, it is recommended that the application be sent to the field team for study.

Paul L. Weis

Paul L. Weis

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
JUN 9 1952

IN REPLY REFER TO:

G-MD-PLW

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

June 6, 1952

Memorandum

REVIEW OF APPLICATION DMEA-2536 (Monazite).

To: E. Wm. Ellis, Rare and Miscellaneous Metals Division.
From: P. L. Weis, U. S. Geological Survey.
Applicant: Gem Monazite Mines, Inc.
Name of property: None.
Location of property: T. 12 N., R. 4 E.B.M., Valley County, Idaho.
Estimated cost of project: $100,250.00.
Summary of applicant's proposal:
Drill at least one test hole in each 10 acre plot of all leased land (128 holes).
Source of information on applicant's property:
The applicant states that the U. S. Bureau of Mines explored the area in 1950, and has information as to its probable value. The U. S. Geological Survey has no information on the area.
Comments:
If information in the hands of the U. S. Bureau of Mines shows that this property is worthy of further investigation, it is recommended that the application be sent to the field team for study.

Paul L. Weis

PLWeis:hhp
G-6/6/52
cc: Director's Reading file, 4212
DMEA ✓
Branch Reading file, 4212
PLWeis, G-228, GSA Bldg., USGS
extra

DMEA-2536

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

So. 157 Howard Street
Spokane 4, Washington

May 12, 1952

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
MAIL ROOM
MAY 19 1952

Mr. Frank E. Johnson
Chairman, Operating Committee
Defense Minerals Exploration Administration
Department of the Interior
Washington 25, D. C.

Dear Mr. Johnson:

Enclosed are three copies of an application submitted by Gem Monazite Mines, Inc., of Boise, Idaho, in support of an application for exploration assistance on a placer property in Long and Round Valleys, Idaho, Valley County, Idaho. One copy has been retained for our files.

Apparently the Bureau of Mines Special Investigation Unit has done some drilling on the property. Consequently, we will not make any field examination until instructed by you.

Sincerely yours,

A. E. Weissenborn
Executive Officer, DMEA
Field Team, Region II

Enclosures
cc: USBM, Spokane

5/26/52 gla

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

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
MAY 23 1952

May 23, 1952

Memorandum

To: Ernest William Ellis, DMEA Member, Uranium Commodity Committee, Room 4070

From: E. J. Carlson, Special Minerals Investigation Branch

Subject: Gem Monazite Mines, Inc. of Boise, Idaho; DMEA Docket 2536.

The Special Minerals Investigation Branch of the Bureau of Mines has examined and drilled the Long Valley area sufficiently to indicate a minor amount of monazite and other black sand minerals. Under present economic conditions we do not believe the deposit can be considered minable. Considerable sampling was done by our branch in the Round Valley area and only a trace of monazite was found.

Sufficient exploratory work has been conducted by S.M.I.B. to indicate about 0.8 pounds of monazite in the Long Valley area, mentioned in this docket, and less than 0.1 pound in the Round Valley area. Any further drilling must be considered development and not exploratory.

We recommend that the request be refused because under present economical conditions the area could not be considered minable with monazite as the only saleable mineral. Should markets be developed for other black sand minerals, consideration could be given to this request.

E. J. Carlson

E. J. CARLSON

Attachments

DMEA-J536

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

So. 157 Howard Street
Spokane 4, Washington

May 12, 1952

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
MAY 19 1952

Mr. Frank E. Johnson
Chairman, Operating Committee
Defense Minerals Exploration Administration
Department of the Interior
Washington 25, D. C.

Dear Mr. Johnson:

Enclosed are three copies of an application submitted by Gem Monazite Mines, Inc., of Boise, Idaho, in support of an application for exploration assistance on a placer property in Long and Round Valleys, Idaho, Valley County, Idaho. One copy has been retained for our files.

Apparently the Bureau of Mines Special Investigation Unit has done some drilling on the property. Consequently, we will not make any field examination until instructed by you.

Sincerely yours,

A. E. Weissenborn
Executive Officer, DMEA
Field Team, Region II

Enclosures
cc: USBM, Spokane

EXPLORATION

Subject: DMEA-2536
Re: Exploration Loan
May 19, 1952

Mr. K. N. Jackson
Gem Monazite Mines, Inc.
215 McCarty Building
Boise, Idaho

My dear Mr. Jackson:

This will acknowledge receipt of your application dated April 28, 1952 for a loan under the Defense Production Act of 1950.

Your application was assigned Docket Number DMEA-2536 and referred to the Rare and Miscellaneous Metals Division.

Kindly refer to DMEA-2536 in any future correspondence relating to your application.

Sincerely yours,

ROBERT E. ADAMS

Robert E. Adams
Administrative Officer

7862

DMEA-2536

OFFICE OF THE ADMINISTRATOR

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

So. 157 Howard Street
Spokane 4, Washington

May 12, 1952

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
MAY 19 1952

Mr. Frank E. Johnson
Chairman, Operating Committee
Defense Minerals Exploration Administration
Department of the Interior
Washington 25, D. C.

Dear Mr. Johnson:

Enclosed are three copies of an application submitted by Gem Monazite Mines, Inc., of Boise, Idaho, in support of an application for exploration assistance on a placer property in Long and Round Valleys, Idaho, Valley County, Idaho. One copy has been retained for our files.

Apparently the Bureau of Mines Special Investigation Unit has done some drilling on the property. Consequently, we will not make any field examination until instructed by you.

Sincerely yours,

A. E. Weissenborn

A. E. Weissenborn
Executive Officer, DMEA
Field Team, Region II

Enclosures
cc: USBM, Spokane

Gem Monazite Mines, Inc.

OFFICE: 215 McCARTY BLDG. BOISE, IDAHO
OPERATION: CASCADE, IDAHO
PHONE 188

Mr. A. E. Weissenborn, Executive Officer
Field Team, Region II
South 157 Howard Street
Spokane, (8) Washington.

8 May 1952

Dear Mr. Weissenborn:

Complying with our interpretation of the Instructions for applying for an Exploration Assistance Loan, we are pleased to furnish you with the following documents and technical material, 4 copies of each, and request your favored consideration:

4	Form MF-103 and supporting schedules
4	Form MF-100 and supporting schedules
4	U.S.B.M. Hole Report
4	Colorado Assaying Co report
4	Financial Statement as of April 30-1952
4	Section Map showing ground under lease** There were two 40 acre plots left out of the legal in Round Valley, Sections 29-30 and 32, which are being added by supplement and by agreement with owners.
4	Original Lease dated 1024-51
4	Supplements dated 12-13-51
4	Assignment dated 1-21-52
4	Amendment dated 2-25-52

RECEIVED
MAY 12 1952
U. S. G. S.
SPOKANE, WASH.

We have other ground under consideration and for which it appears favorable action will be forthcoming, but we will add that later when we have made more progress with exploring the land presently under lease.

We do not have any Form MF 202. If you will provide, we will have properly completed. We will appreciate you keeping us advised as to the progress of this application as many people are watching our efforts with interest, and we want to keep moving.

Thanking you for your preferred attention, we ar
GEM MONAZITE MINES, INC.

Gem Monazite Mines, Inc.

OFFICE: 215 McCARTY BLDG.
BOISE, IDAHO

OPERATION: CASCADE, IDAHO

PHONE 188

Mr. A. E. Weissenborn, Executive Officer
Field Team, Region II
South 157 Howard Street
Spokane, (6) Washington.

6 May 1950

Dear Mr. Weissenborn:

Complying with our interpretation of the instructions for applying for an Exploration Assistance loan, we are pleased to furnish you with the following documents and technical material, 4 copies of each, and request your favored consideration:

- 4 Form EF-100 and supporting schedules
- 4 Form EF-102 and supporting schedules
- 4 U.S.B.M. Data Report
- 4 Colorado Geology Co report
- 4 Financial statement as of April 30-1950
- 4 Section Map showing ground under lease. There were two 40 acre plots left out of the legal in Round Valley, Sections 29-30 and 32, which are being added by supplement and by agreement with owners.
- 4 Original Lease dated 10-4-51
- 4 Supplements dated 12-19-51
- 4 Assignment dated 1-21-52
- 4 Amendment dated 2-25-52

We have other ground under consideration and for which it appears favorable action will be forthcoming, but we will add that later when we have made more progress with exploring the land presently under lease.

We do not have any Form EF 201. If you will provide, we will have properly completed. We will appreciate you keeping us advised as to the progress of this application as many people are watching our efforts with interest, and we want to keep moving.

Thanking you for your preferred attention, we ar
Gem Monazite Mines, Inc.

R. M. Jackson

RECEIVED
MAY 12 1952
U.S.G.S.
SPOKANE, WASH.

COPY

UNTIED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF MINES

Mt. Weatherm Bluemont, Va.

December 3, 1951

Air Mail

Messrs. Leroy and Frank Dennis

Cascade, Idaho

Gentlemen;

Your letter of November 26th addressed to the U.S. Bureau of Mines, Exploration Department, Washington, D.C., has been forwarded to this office for reply.

The drilling perfomred on your property in the Spring of 1950 was under the supervision of the Boise Office of this Branch of the Bureau. The report on this work has not yet been completed since additional work was performed in the Clear Creek area during the 1951 field season. Howeverm we can give you the following data obtained from the samples taken from the holes drilled on your property:

Hole No.	Minable DepthFt %	Radioassay %Tho2 Equiv.	Calculated %Monazite Equiv.	LBS B.S./ cuyd	LBS Mona zite equiv cuyd
CCD-5	55	0.318	7.36	12.45	0.92
CCD-6	45	0.297	6.87	10.82	0.74
CCD-7	50	0.375	8.68	9.23	0.80
CCD-13	35	0.246	5.69	14.83	0.84
CCD-14	35	0.239	5.53	11.01	0.61
CCD-15	30	0.346	8.01	13.74	1.10
CCD-16	30	0.209	4.84	18.36	0.89

We trsut this information will be sufficient for your present needs.

Very truly yours

Signed M H Kline Chief
Special Minerals Branch

Form MF-103
(April 1951)

U. DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS ADMINISTRATION

Budget Bureau No. 42-R1035.
Approval expires 6-30-51.

APPLICATION FOR AID FOR AN EXPLORATION PROJECT PURSUANT TO MINERAL ORDER 5, UNDER DEFENSE PRODUCTION ACT OF 1950

DO NOT FILL IN THIS BLOCK

Docket No. DMEA-2536

Date received 5-19-52

Participation

Department of the Interior
Defense Minerals Administration
RECEIVED
MAY 13 1952

GEM MONAZITE MINES, INC
215 McCarty Building
Boise, Idaho

Name and address of applicant

Date 28th April 1952

FILL IN THIS BLOCK

Date of application 28th April 1952

Estimated cost $100,250.00

Mineral or metal Monazite

Percentage of Government participation 90%

Location of mine Near Alpha, Idaho

Date of filing MF-100 28th April 1952

DMA Docket Number, if available Not available

INSTRUCTIONS

Read Mineral Order 5, Regulations Governing Government Aid in Defense Projects, before completing this application. Submit four signed copies of the application to Defense Minerals Administration, Department of the Interior, Washington 25, D. C., or to the nearest field executive officer thereof, with your name and address on each sheet of the application and all accompanying papers. If any question is inapplicable, or if you cannot answer it, so state on the form. Where the space provided for answer is insufficient, answer on a separate sheet, annex it to the application form, and refer to it in space for answer. If the application is approved, you will be presented with an exploration project contract on Form MF-200, for your signature.

THE APPLICANT

Schedule attached

*1. Is applicant an individual, partnership, or corporation?
*2. If a partnership, state names and addresses of partners.
*3. If a corporation, state names and addresses of officers, directors, and five largest stockholders.
*4. Describe the mining and general business experience of (*a*) the applicant, and (*b*) the person or persons who will manage the project.
*5. Are you the owner or the lessee of the property?
6. If owner, state what claims, liens, or encumbrances, if any, are against the property.
7. If lessee, attach a copy of the lease and state if it is in good standing.

NOTE.—It will be necessary to procure and attach to the exploration project contract agreements of claimants, lienors, encumbrances and lessors subordinating their interests in the property to the interest of the Government under the contract.

8. Furnish current financial statement, showing assets and liabilities, and a profit and loss statement.
9. How much money is applicant prepared to invest in proposed project? Is it sufficient to pay your part of the cost of the project as detailed in question 23 of this application form, in accordance with the regulations on Government participation (Section 9 of Mineral Order 5)?

*If you have already answered these questions on MF-100, you are not required to answer the questions for this application.

16—64067-1

THE PROPERTY Schedule attached

10. (*a*) Give a description of the real property that will be in any way involved in the exploration project, including any existing mine or operating property.
    (*b*) Give the legal description of the exact parcel, plot, or area upon which the exploration is to be conducted.

    NOTE.—If both areas are the same, so state. The only obligation to repay the Government is from the net earnings from any commercial discovery made in the area specified in (*b*) above in which the exploration is to be conducted, and the expenditure of funds which may be charged as costs of the project must be limited to that area or to work necessary to perform the exploration in that area.

*11. State the present and former names of the property, if any.

*12. State, in detail, the location of the property with reference to towns, railroads, roads, shipping points, including distances and directions and kinds and conditions of roads.

*13. State source and quantity of water available for operations and its sufficiency at all seasons.
State amount of power to be used, rate per hour or other cost, and source.

*14. Describe any existing useable facilities, equipment, buildings, or structure now on the property that will be devoted to the exploration work.

15. State in detail how the ore could be shipped and how and where milled.

*16. History:
    (*a*) Give a statement, as complete as possible, of previous exploration, development, operation, and production of property, with reasons for any past suspensions of operations.
    (*b*) State briefly the known history and production of adjoining and neighboring properties.
    (*c*) Furnish any available (private) reports that may apply to this application, including results of mine examinations, recommended exploration and development, and metallurgical investigations.

*17. Production:
    (*a*) If mine is in production, furnish the following information:

	Tons per day	*Grade or analysis*	*Cost per ton*	*Net value per ton*
(1) Mining				
(2) Milling				
(3) Shipped or sold				

*18. Ore or mineral reserves: (If property is or has been operating.)
    (*a*) Describe the ore or mineral deposits briefly.
    (*b*) Submit available maps and assay data.
    (*c*) Give estimated tonnage and grade of each class of ore reserves.

19. State any conditions or circumstances regarding the property not sufficiently brought out by the foregoing questions.

THE EXPLORATION Schedule attached

20. For what mineral or minerals and for what types of deposits and ores will the exploration be conducted?

21. Describe briefly, but concisely, the proposed work and the estimated time required to complete it.

    NOTE.—The Government will not participate in a project that will require more than 2 years to complete.

22. Furnish statement of the geological basis of the project with particular emphasis on factors leading the operator to expect the finding of commercial ore bodies. This statement should be accompanied by supporting maps such as geological maps, maps of the proposed openings and assay maps, sample lists, and other pertinent data.

THE REQUIREMENTS AND COSTS Schedule attached

23. Tabulate in the form of an itemized statement with a sum for each item the estimated requirements and costs of the project so that the total will give the estimated cost of the project in which the Government will participate, as follows:
    (*a*) Labor, by numbers and classes (miners, muckers, millmen, etc.), with wages of each.
    (*b*) Supervisors, by numbers and positions, with salaries of each.
    (*c*) Cost of necessary repairs to existing facilities, structures, and buildings.
    (*d*) Cost of necessary installation or construction of additional facilities, structures, and buildings.
    (*e*) Cost of items of equipment, not now owned by the applicant which must be purchased for operations at a cost of $50 or more each.
    (*f*) Cost of rental for equipment which the operator proposes to rent.
    (*g*) Rental value of items of equipment which the operator now owns and which will be devoted to the work.
    (*h*) Cost of materials and supplies, including items of equipment costing less than $50 each.
    (*i*) Cost of power, water, utilities, and any other items not provided for above.

24. Furnish a time schedule of the project, stated in terms of months after project is approved, showing progress expected to be accomplished and the money expected to be spent.

CERTIFICATION

The undersigned company, and the official executing this certification on its behalf, hereby certify that the information contained in this form and accompanying papers is correct and complete to the best of their knowledge and belief.

Gem Monazite Mines Inc
(Name of company)

By R M Jackson
(Signature of authorized official)

28th April 1952
(Date)

Sec'y-Treas.
(Title)

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.

*Same as footnote on page 1.

16—64067-1 U. S. GOVERNMENT PRINTING OFFICE

GEM MONAZITE MINES, INC

215 McCARTY BUILDING

BOISE, IDAHO

Schedule attached to
Form MF-103

THE APPLICANT

1. Corporation

2. Not applicable

3. Earle A. Pack Pres Director General Manager
John H Reusser Vice Pres. Director Sales supervisor
John Bastida Vice Pres. Director Contractor
John Barriatua Vice Pres. Director Contractor
K N Jackson Sec'y-Treas. Director Investments
Dennis Brothers Land owners and stockholders
Harry Heath Dredge Man

4. Earle Pack and Harry Heath, many years mining and dredge.
Bastida and Barriatua, contractors and business men
K N Jackson investments, finance 22 years

5. Lessee

6. Not applicable

7. Attached and in good standing

8. Attached

9. $10,000 if needed.

THE PROPERTY

10(a) Exact legal of property involved in (b). No existing.
(b) SE¼NE¼ Sec 5; NE¼SE¼ Sec. 5; SW¼NW¼ Sec.4; NW¼SW¼ Sec.4
S½NE¼ Sec.9; N½SE¼ Sec. 9; SE¼SE¼ Sec. 9; W½NW¼ Sec.10;
E½SW¼ Sec. 10 W½ SE¼ Sec. 10; all in T12N R4E B.M. and

~~11,12~~, N½SE¼ Sec. 30; SE¼SE¼ Sec. 30; SW¼ Sec.29; SE¼NW¼ 32.

11, 12, 13, 14 all answered in Form MF-100

15. Shipped by rail to be refined in Boise unless other facility is provided.

16. a Report #5 Idaho State Bureau of Mines give this. USBM has made some exploration.

b. 1½ years activity, actual results kept secret. See USBM
c. USBM report and assay report attached.

17. No production

18. (a) Monazite Sands and allied minerals
(b) attached
(c) Not known

19. None. Reason for exploration request.

GEM MONAZITE MINES, INC

215 McCARTY BUILDING

BOISE, IDAHO

Schedule attached to Form MF-103

THE EXPLORATION

20. Monazite dredge operation

21. Drill at least one test hole in each 10 acre plot of all leased land. I years time contemplated.

22. Report #5 State of Idaho, and information procured from various sources, while sparse, still believed valuable.

THE REQUIREMENTS AND COST

23.	(A)	Miners 2 x $300mo	$7200.00
	(B)	Supervisors 2 x $500 mo	12000.00
	(c)	None	
	(d)	Headquarters and seperation plant buidling	$2500.00
	(e)	Not known now.	
	(f)	Contractor-drilling $500 hole for 128 holes	$64000.00
	(g)	none	
	(h)	not known	
	(i)	Power, water other items	$14550.00
		Total	$100,250.00

24. 12 holes per month for first10 months, blanace as needed or indicated. Sampling to be doen on ground with help government authority and our own men.

Form MF-100
(May 1951)

U. S. DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS ADMINISTRATION

Form approved.
Budget Bureau No. 42-R1026.

GENERAL TECHNICAL DATA
FOR USE UNDER THE
DEFENSE PRODUCTION ACT OF 1950

NOT TO BE FILLED IN BY APPLICANT

Docket No. DMEA-2536

Date received 5-19-52

GEM MONAZITE MINES, INC
215 McCARTY BUILDING
BOISE, IDAHO

Name and address of applicant

Date 28 April 1952

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
MAY 19 1952

INSTRUCTIONS

This form is to be filed with Defense Minerals Administration, Department of the Interior, Washington 25, D. C. It should be accompanied by appropriate application form when a specific type of Government assistance is requested, in the form of (1) loan, (2) purchase contract, (3) Government guarantee of a private loan, (4) priorities or allocation of mining equipment, and maintenance, repair and operating supplies, and (5) other forms of Government assistance that might arise under the Act. Submit four (4) signed copies of the form and accompanying papers. Name and address should be stamped or typed on each sheet of this form and all accompanying papers. *When a question is inapplicable it should be so stated on the form.* Additional sheets may be attached in answering any questions or in supplying additional information. (IF YOU CANNOT ANSWER A QUESTION, SO STATE.) If a question is answered elsewhere indicate where answered. It is not necessary to answer it again.

GENERAL TECHNICAL DATA

Supply the following information on separate sheets, arranged, numbered, and lettered as indicated:

1. Materials produced:
   (*a*) What are the chief mine, mill, or smelter products?
   (*b*) What are the byproducts, if any?

   Schedule attached covering #1 thru #7 inclusive

2. Name(s) and type(s) of mine(s), mill(s), smelter(s), refinery(ies), pit(s), quarry (ies), drilling operation(s). Include old names of property, if any. Show extent of workings, including the following:
   (*a*) Linear feet of shafts.
   (*b*) Linear feet of drifts and crosscuts.
   (*c*) Linear feet of tunnels or adits.
   (*d*) Linear feet of other mine openings (explain briefly).

   Indicate whether mine is flooded or not. Describe any pumping problems. Give size or productive capacity.
3. For each operation listed above supply the following:
   (*a*) Distance and direction from nearest town and shipping point.
   (*b*) Mining district.
   (*c*) Township, Section, Range.
   (*d*) County, State.
4. (*a*) State whether or not property is now in operation, and if in operation, by whom operated.
   (*b*) Are you operating this property as:
   - ☐ Owner.
   - ☐ Lessee.
   - ☐ Contractor.
5. Number of years in production _____

   If not in production or operation, estimated date when production will begin _____
6. Experience of operators:
   Describe the mining and general business experience of (*a*) the applicant, and (*b*) the person or persons who manage the project.
7. History:
   (*a*) Give a statement, as complete as possible, of previous exploration, development, operation, and production of property, with reasons for suspension of operation.
   (*b*) State briefly the known history and production of adjoining and neighboring properties.
   (*c*) Furnish any available (private) reports that may apply to this application, including results of mine examinations, recommended exploration and development, and metallurgical investigations.

8. Names and addresses of Officers, Directors, or Partners, and in addition thereto, the five largest stockholders if applicant is a corporation.

Name and Address	Official Title (If officer is also director indicate by "D")	Total of Annual Salary, Commissions, Bonuses, Etc., Received From Applicant and Affiliates During Last Fiscal Year	Estimated Net Worth Outside of Interest in Applicant	Number of Shares Held in Applicant Corporation		Life Insurance Carried for Benefit of Applicant	
				Common	Preferred	Amount Applied for	Net Cash Surrender Value After Loans
All Boise Idaho	(b)	(c)	(d)	(e)	(f)	(g)	(h)
Earle A. Pack 3011 Teton street	Pres. 'D'	Comms	10M	1600000	none	$5000.	---
John H. Reusser Route #9 Alamosa	V.Pres.'D'	Comms	5M	800M	none	5000.	---
John Bastida Cruzen Addition	V.Pres.'D'	none	50M	500M	none	5000.	---
John Barriatua 1829 Vista	V.Pres'D'	Comms	30M	500M	none	5000.	---
K N Jackson 819½ North 24th	Secy-Treas	none	10M	500M	none	5000.	---
Dennis Brothers Alpha Idaho	Stockholders	none	25M	75M	none	to come	---
Harry Heath 825 East State	Dredge man Stockholder	none	5M	100M	none	tp come	---
	Total		x x x x x	4075M		x x x x x	x x x x x

If more lines are needed continue on separate sheet.

9. Capital Stock Issues:

For Corporate Applicants

Item	Authorized (a)	Outstanding (b)	Par Value (c)	Number of Shares Outstanding (d)	Dividend Rate Last Paid* (e)
Common stock	$1,000,000	$420,000	$1,000,000	---	none
Preferred stock none	$	$	$		

*Indicate period covered.

10. Production: none

Item	Kind of Product (a)	1948 Total (b)	1949 Total (c)	1950 Total (d)	Present Average Monthly (e)
1. Quantity of product mined or quarried (Short, long, metric tons; barrels; pounds; etc.)	none	--	--	--	--
2. Quantity of product processed (specify unit of measure and type of process)	none	--	--	--	--
3. Quantity and grade of product sold or shipped (specify units of measure)	none	--	--	--	--

11. Do you contemplate a change in the present average monthly rate of production? If so, state estimated maximum monthly production and basis of change. Installation dredge 150,000 yards per month min.

12. Ore or Mineral Reserves:

(a) Describe the ore or mineral deposit briefly. Accompany the application by any available report on the geology and ore reserves. Monazi[illegible] Sands USBM has made te[illegible]

GEM MONAZITE MINES, INC
215 McCarty Building
Boise Idaho.

Schedule attached to
FORM MF-100

1. Materials produced:
   (a) Monazite
   (b) Garnet, Zircon, Ilmenite

2. Owners, Dennis Brothers. 616 acres in Long Valley. All but 160 dredge land. 320 Acres in Round Valley, all dredge land. Adjoining land under negotiation. USBM has made tests on some of this land.
   (a) shafts none)
   (b) crosscuts none)
   (c) tunnels none)
   (d) other openings none) Not applicable
   Dredge operation

3. (a) 8 miles south of Cascade Idaho
   (b) Cascade Idaho Alpha Idaho
   (c) Sections 3-4-5-9-10, 29-30-32, Twp 12 North Range 4E B.M.
   (d) Valley County Idaho

4. (a) Not now in operation
   (b) Lessee Gem Monazite Mines, Inc.
   Contractor to be hired

5. Not in production. Production will be started when exploration indicates proper location, and value.

6.

Earle A. Pack	Many years mining	
Harry Heath	Many years as dredge operator	
John Bastida	Self employed contractor	10 years
John Barriatus	Self Employed contractor	20 years
John Reusser	Self employed land developer	20 years
K N Jackson	Investments and mortgages-accountant	20 years

7. (a) General area explored and written up by State Bureau of Mines. U S B M has explored in 1950. Results indicate justification of further work.
   (b) 3 different outfits have been working adjacent property for 1½ years, and according to all available information are planning on further expansion.
   (c) U S Bureau of Mines has only information known to us.

END OF PAGE ONE Form MF-100

(*b*) If deposit is other than placer:

(1) Submit assay plans and/or sections showing location and size of proved (measured) and probable (indicated) ore or mineral reserve.

(2) State the tonnage (indicate type of ton) and grade of each class of ore reserve, as above, and show how computed. Tabulated total ore reserve as follows:

TOTAL ORE OR MINERAL RESERVES

Ore or Mineral Reserve	Estimated Tons (a)	Metal or Mineral Content Per Ton (Grade) (b)	Gross Value Per Ton (c)	Recoverable Unit Value Per Ton (d)	Estimated Cost of Production Per Ton (e)
Measured (proved)					
	To be determined				
Indicated (probable)					

(*c*) If placer: to be

(1) Give estimated total yardage and average marketable mineral content of each deposit.

(2) Submit map showing location of placer deposit and surrounding area, with all test holes or pits. Submit logs of each hole and test pit with depth and average value of each.

(3) Describe gravel, stating whether fine, medium or coarse; loose, tight, cemented, or frozen, and whether it contains stumps or boulders more than 1 foot in diameter; if so, how large, and in what proportion.
Medium tight nothing over 1 foot.

(4) Describe bedrock, giving type (granite, sandstone, shale, etc.) and state whether it is hard or soft, smooth, uneven or rough no bedrock known

(5) Describe overburden, stating whether loose, tight, or cemented; fine or coarse textured; furnish estimate of average thickness and total amount. Loose fine texture 2 feet average amount unknown

(6) Tabulate the reserves using the form outlined above for ore or mineral reserves.
Purpose of exploration application

13. Access Roads:

Give road distances to shipping, supply and residence points, stating kind and condition of roads.
State Highway 15 Good

14. Water Supply:

State source and quantity of water available for operations and whether sufficient for all seasons of year.
Clear Creek Skunk Creek year around supply adequate

15. Power:

State amount of power used, rate per hour, and source thereof. Idaho Power 1750 HP

16. Labor: none

State number and classes (miners, muckers, millmen, etc.) of men employed during a recent representative payroll period.

17. Equipment and Facilities: none

Describe present equipment on the property, including buildings. (State condition.) List major pieces of equipment now owned or controlled and in serviceable condition available for this operation.

18. Are there any particular conditions or circumstances affecting your operations that are not described above? If so, explain.
no

CERTIFICATION

The undersigned company, and the official executing this certification on its behalf, hereby certify that the information contained in this form and accompanying papers is correct and complete to the best of their knowledge and belief.

GEM MONAZITE MINES, INC.
(Name of company)

By K N Jackson
(Signature of authorized official)

28th April 1952
(Date)

Secretary-Treasurer
(Title)

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—63792-1

ASSIGNMENT OF LEASE.

KNOW ALL MEN BY THESE PRESENTS: That the undersigned, Earle A. Pack, John Bastida, John Barriatua, John H. Reusser, and K. N. Jackson, for valuable consideration, receipt of which is hereby acknowledged, do hereby set over, transfer, assign and sell unto Gem Monazite Mines, Inc., all our right, title and interest in and to the following described property situate in Valley County, Idaho, to-wit:

> The SE¼NE¼ and the NE¼SE¼ of Section 5, and the SW¼NW¼ and the NW¼SW¼ of Section 4, all in Township 12 North, Range 4 East of the Boise Meridian, containing 160 acres, more or less; and, also
>
> The S½NE¼, the N½SE¼. the SE¼SE¼, and the East 10 acres of the NE¼NE¼, all in Section 9; the W½NW¼ and the E½SW¼, and the W½SE¼, all in Section 10; the N½SE¼ and the SE¼SE¼ of Section 30; the SW¼ of Section 29; and the SE¼NW¼ os Section 32; all in Township 12 North, Range 4 East of the Boise Meridian, consisting of approximately 840 acres;

as evidenced by that certain indenture of lease dated October 24, 1951, made and entered into between LeRoy Dennis and Lois Dennis, husband and wife, and Frank Dennis, a widower, all of Cascade, Idaho, Lessors therein, and Earle A. Pack, of Boise, Idaho, Lessee therein, and the amendment to said lease dated December 13, 1951, entered into between the same parties.

TO HAVE AND TO HOLD unto said Gem Monazite Mines, Inc., its successors and assigns, subject, nevertheless, to all the terms and conditions thereof.

IN WITNESS WHEREOF, the undersigned have hereunto set their hands, this 21st. day of January, 1952.

S/ Earle A. Pack

Approved 3/8/52

S/ John H. Reusser

S/ LeRoy Dennis

S/ John C. Bastida

S/ Frank Dennis

S/ John Barriatua

S/ Lois Dennis

S/ K. N. Jackson

STATE OF IDAHO)
: ss.
County of Ada)

On this 21st. day of January, 1952, before me, the undersigned, a Notary Public for Idaho, personally appeared EARLE A. PACK, JOHN BASTIDA, JOHN BARRIATUA, JOHN H. REUSSER, and K. N. JACKSON, known to me to be the persons whose names are subscribed to the within and foregoing instrument, and acknowledged to me that they executed the same.

IN WITNESS WHEREOF, I have hereunto set my hand and affixed my official seal, the day and year in this certificate first above written.

S/ Herbert H. Eberle
Notary Public for Idaho
Residing at Boise, Idaho

Seal

L E A S E.

THIS INDENTURE OF LEASE, Made and entered into this 24 day of October, 1951, by and between LEROY DENNIS and LOIS DENNIS, husband and wife, and FRANK DENNIS, a widower, all of Cascade, Valley County, Idaho, hereinafter called "Lessors," and EARLE A. PACK, of Boise, Ada County, Idaho, hereinafter called "Lessee";

W I T N E S S E T H:

WHEREAS, the Lessors are the owners and in possession of certain real property situate in Valley County, Idaho, more particularly described as follows, to-wit:

> The SE¼NE¼ and the NE¼SE¼ of Section 5, and the SW¼NW¼ and the NW¼SW¼ of Section 4, all in Township 12 North, Range 4 East of the Boise Meridian, containing 160 acres, more or less.
>
> Together with all water and water rights thereunto belonging or in anywise appertaining; and

WHEREAS, the Lessors desire to lease the above described real property to Lessee for mining purposes, and Lessee desires to lease the same upon the terms and conditions hereinafter set forth;

NOW, THEREFORE, In consideration of the covenants and conditions hereinafter set forth, Lessors do hereby lease unto the Lessee the above described real property, together with all water and water rights used in connection therewith or appurtenant thereto, for the term of ten (10) years, commencing December 1, 1951, and ending December 1, 1961, with the option to renew the lease for an additional term of ten (10) years, as hereinafter provided.

That as rental for said lands the Lessee agrees to pay to the Lessors an amount equal to $1,000.00 per acre for each acre mined by the Lessee, or 10% of the gross returns from the sale of all metals, ores, timber, sands or any other materials of

value removed, excavated or processed from the lands, whichever sum is the greater. That said rental shall be paid as follows: The sum of $10,000.00 on or before thirty (30) days from date hereof, which sum shall be credited as rentals and advance royalties. The royalties shall be computed at the end of each month during the term of this lease, or any extensions or renewals thereof, and paid to the Lessors by the 10th of the following month. Lessee agrees that he will diligently commence and prosecure mining and ore dredging operations on the above described lands and will be in production and removing ores and metals from the lands not later than eighteen (18) months from date hereof, and will have located upon the premises a dredge capable of removing and processing ore and metals from the lands, with a capacity of not less than five thousand (5,000) cubic yards per day. Lessee shall operate said dredge continuously during the mining season, and said dredge shall be in operation at all times, except when prevented from operation by reason of inclement weather conditions, strikes, breakdowns, or any other conditions over which Lessee has no control.

It is understood and agreed that the above described premises are leased and to be used by Lessee for mining purposes only, and Lessors shall have the right to the continued use of the rest of the land not being mined for such use as Lessors see fit, other than mining operations. The Lessee shall have the right to remove and sell timber from the lands, which must necessarily be removed in connection with the mining operations. The Lessee shall be required at all times to keep the area of mining operation fenced against cattle and to provide adequate cattle guards to keep cattle out of the mining area.

In connection with the mining operations to be conducted by Lessee it is agreed that should any ores or valuable metals or materials be processed, which cannot be profitably sold or which are not sold by the Lessee, then all such materials shall be stockpiled upon the premises, and if not sold prior to the termination of the lease shall revert to and become the property of the Lessors.

In connection with the mining operations to be conducted by Lessee, Lessee shall systematically mine the entire area in designated plots, each plot to be completely mined before the dredge or other equipment is moved to a new plot. It is contemplated that the area to be mined shall be agreed upon between the parties, and the first mining operations shall commence in close proximity to the borderline of the above described premises and worked in either square or rectangular areas. The first area to be mined shall be of approximately ten (10) acres. As any area is completely mined a new area will be designated immediately adjacent to the mined area, and this plan continued throughout the entire mining operations of the above described premises.

In connection with the ten-acre plot to be mined first by the Lessee, it is the intent of the parties that the $10,000.00 down payment is payment of the minimum rental. In other areas to be designated and mined, it is agreed that the area shall be fixed in acres, and prior to any mining operations thereon Lessee shall pay to the Lessors an amount equal to $1,000.00 per acre for the plot to be mined. This procedure shall be continued throughout the life of the lease and mining operations to be conducted. All mining operations conducted upon the above

described premises ahll be carried on in such a manner as to derive the most profitable returns, which shall necessarily include mining to a depth which is profitable and feasible.

Lessee contemplates establishing a campsite on the above described premises. It will be required that any campsite so established by Lessee shall be mined as any other property, and Lessee shall be required to move his campsite for the purpose of mining the same when the campsite comes within an area designated for mining purposes.

In connection with the mining operations to be conducted by Lessee, Lessee agrees to conform to all the laws of the United States of America and the State of Idaho and will keep the property posted according to law, notifying all persons that the property is being operated under lease. Lessee shall maintain at all times adequate liability insurance, which will keep and hold the Lessors free and harmless from any liability from third persons by reason of the mining operations to be conducted by Lessee. The Lessee shall maintain and keep in full force and effect Workmen's Compensation Insurance as required by the laws of the State of Idaho. Lessee shall not permit any materialman's or workman's liens to be filed against the property and shall promptly discharge and pay all obligations incurred by him in connection with the mining operation. All taxes and assessments levied and assessed against any personal property which is placed upon the above described premises shall be the obligation of the Lessee and shall be promptly paid when due. Upon the termination of this lease, either by its own terms or by forfeiture, Lessee shall have the right to remove from the premises all equipment and buildings place thereon by him and to remove the same within sixty (60) days following

such termination, provided that all royalties due and owing to Lessors have been fully paid.

That as the above referred to plots of ground are mined the right to possession of the mined plot shall immediately revert to the Lessors, and they may thereupon go into possession and use the same in any manner they desire. It is further understood that Lessors contemplate placing a dwelling upon the above described premises within the next two (2) or three (3) years, and should such dwelling be placed upon an area which has not previously been mined, such area, constituting not more than five (5) acres in total, is hereby reserved from the terms of this lease, and Lessee shall not have the right to go upon or mine the same without the consent of the Lessors.

The Lessee shall not assign, transfer or sublet any part or portion of the above described premises without the written consent of either Leroy Dennis or Frank Dennis; provided, however, Lessors understand that it is contemplated that this lease is to be transferred to a corporation to be formed, of which Lessee will be a major stockholder, and Lessors do hereby consent to the transfer to such corporation.

In consideration of the rentals to be paid by Lessee to Lessors, as hereinbefore provided, Lessors hereby extend to Lessee an option to renew this lease for an additional period of ten (10) years, commencing December 1, 1961, and terminating December 1, 1971, and to renew this lease upon the same terms and conditions as set forth herein. Lessee may exercise this option to renew by giving written notice of his intention to renew the same at least sixty (60) days prior to December 1, 1961.

Further in consideration of the rentals to be paid by

Lessee to Lessors, Lessors hereby extend to Lessee the option to lease certain other lands now owned by Lessors, situate in Valley County, State of Idaho, more particularly described as follows:

> The S½NE¼, the N½SE¼, the SE¼SE¼, and the East 10 acres of the NE¼NE¼, all in Section 9; the W½NW¼, the E½SW¼, and the W½SE¼, all in Section 10; the N½SE¼, the SE¼SE¼ of Section 30; the SW¼ of Section 29; and the SE¼NW¼ of Section 32, all in Township 12 North, Range 4, East of the Boise Meridian, consisting of approximately 840 acres.

This option to lease the last above described real property may be exercised by Lessee at any time during the term of this lease or any extensions or renewals thereof. The terms and conditions of such lease covering the last above described real property shall be agreed upon between the parties, and Lessee shall have at all times the first right to lease said premises at such rental and upon such terms as Lessors may receive from any other person on a bona fide offer to lease.

The Lessors shall have the right at all reasonable times to examine the books, records and accounts of the Lessee and shall have the right to make a complete audit of the same. Such audit shall be at the expense of the Lessors. Lessors shall also have the right to visit and inspect the operation or any part thereof.

It is understood that Lessee shall not be entitled to possession of the first above described premises until the initial payment of $10,000.00 has been made, and should Lessee fail to comply with any other terms and conditions, and this lease be terminated, then said $10,000.00 shall be forfeited to Lessors and be deemed liquidated damages for breach of contract.

Should Lessee fail to make the payment of $10,000.00 due within thirty (30) days from date hereof, or to pay the royalties

as herein agreed to be paid, or fail to comply with any other terms and conditions of this agreement, then Lessors may terminate this lease upon fifteen (15) days written notice to the Lessee. If the matters are not corrected within the fifteen (15) day period, this lease shall thereupon be terminated, and Lessee shall have no further right, title or interest in and to the above described property.

This agreement shall be binding upon the heirs, executors, administrators and assigns of the parties hereto.

IN WITNESS WHEREOF, the parties hereto have hereunto set their hands and seals, the day and year first above written.

/S/ Leroy Dennis

/S/ Frank Dennis

/S/ Mrs. Lois Dennis
Lessors.

/S/ Earle A. Pack
Lessee.

STATE OF IDAHO (
: ss.
County of Valley (

On this 24 day of October, 1951, before me, the undersigned, a Notary Public for Idaho, personally appeared LEROY DENNIS and LOIS DENNIS, husband and wife, FRANK DENNIS, a widower, and EARLE A. PACK, known to me to be the persons whose names are subscribed to the within and foregoing instrument, and acknowledged to me that they executed the same.

IN WITNESS WHEREOF, I have hereunto set my hand and affixed my official seal, the day and year in this certificate first above written.

/S/ Forest E. Rebb
Notary Public for Idaho
Residing at
Recorder, Valley Co. Idaho

SEAL

AMENDMENT TO LEASE

THIS AGREEMENT OF AMENDMENT, Made and entered into this 25th day of February, 1952 by and between Leroy Dennis and Frank Dennis, as first parties, and Gem Monazite Mines, Inc., as second party;

WITNESSETH:

WHEREAS, the parties hereto, by reason of the assignment to Gem Monazite Mines, Inc., by Earle A. Pack, John H. Reusser, John Barriatus, John Bastida and K. N. Jackson, owners of a lease which was originally executed by the first parties herein and Earle A. Pack; the original lease for which was executed on October 24,1951,and which covered real property situate in Valley County, Idaho; and

Whereas said indenture of lease provides for the payment of $10,000.00 rental on or before November 24th 1951, and further that this lease was further amended under date of 13th of December,1951 to extend the time of payment to 13th March, 1952;

NOW THEREFORE, in consideration of the sum of Two Thousand ($2000.00) Dollars in cash receipt for which is hereby acknowledged, and the further payment of the sum of Five Thousand($5000.00)Dollars to be paid by the issuance to the first parties of 50,000 shares of the fully paid, non-assessable common capital stock of Gem Monazite Mines, Inc., and the further payment of $1000.00 on the 1st day of April 1952; $1000.00 on the first day of May 1952, and the payment of $1000.00 on the first day of June, the provision in the original lease which required the payment of $10,000.00 shall have been fully performed and no further payment shall be made except as provided in the lease with respect to royalties from production.

IT IS FURTHER AGREED, that in consideration of the first parties co-operative and friendly attitude toward the second partly,the Directors of the second party agree to cause to be issued from their own personal holdings (as contributed surplus for the company) shares totaling a value of $2500.00.

The lease of October 24, 1951 is in all particulars in full force and effect and binding upon the parties hereto.

IN WITNESS WHEREOF, the parties have hereunto set their hands the day and year first above written.

S/ Leroy Dennis

S/ Frank Dennis
First Parties

GEM MONAZITE MINES, INC.

S/ Earle A. Pack
President

S/ K. N. Jackson
Secretary

STATE OF IDAHO)
County of Ada) ss

On this 27th day of February 1952, personally appeared before me Earle A. Pack, the President and K.N.Jackson, the Secretary of GEM MONAZITE MINES, INC., and stated that they were authorized to execute the foregoing document for the uses and purpose therein mentioned. Witness my hand and official seal this 27th day of February 1952.

Seal

S/ Herbert H. Eberle
Notary Public for Idaho
Residing in Boise.

STATE OF IDAHO)
County of Valley)

On this 1st day of March 1952 before me, a Notary Public in and for the State of Idaho, personally appeared Leroy Dennis and Frank Dennis, known to me to be the individuals whose names are subscribed to the foregoing instrument and who acknowledged to me that they signed the same as their free and voluntary act and deed.

IN WITNESS WHEREOF, I have hereunto set my hand and official seal the day and year above written.

Seal

S/ Corabelle Gedney
Notary Public in and for the State of Idaho residing in Boise

AMENDMENT TO LEASE.

THIS AGREEMENT OF AMENDMENT, Made and entered into this 13th day of December, 1951, by and between LEROY DENNIS and FRANK DENNIS, as first parties, and EARLE A. PACK, as second party;

WITNESSETH:

WHEREAS, the parties hereto did on October 24, 1951, enter into a certain indenture of lease with reference to real property situate in Valley County, Idaho; and

WHEREAS, said indenture of lease provides for the payment of $10,000.00 rentals on or before November 24, 1951, and the parties hereto desire to extend the time for payment of said rentals; and

WHEREAS, no provision was made in said lease with reference to the restoration of the land following the mining operations;

NOW, THEREFORE, In consideration of the sum of One Dollar, each paid to the other, IT IS HEREBY AGREED, as follows:

That the provision for the payment of $10,000.00 rent on or before November 24, 1951, as provided in that said lease dated October 24, 1951, hereinbefore referred to, is hereby amended, and the Lessee in said lease, to-wit; Earle A. Pack, is hereby given until March 13, 1952, within which to pay said rental of $10,000.00, as provided on page 2 of said lease.

IT IS FURTHER AGREED, That in connection with any mining operations carried on by Lessee, or his assigns, that said Lessee, or his assigns, will upon completion of the mining operations cause all diggings to be filled in and top-soil placed back on top of the diggings and insofar as possible the lands restored to their natural condition.

Except as amended by this agreement said lease of October 24, 1951, to which this is attached, hereinbefore referred to, is in all other particulars in full force and effect and binding upon the parties hereto.

IN WITNESS WHEREOF, the parties hereto have hereunto set their hands, the day and year first above written.

S/ Frank Dennis

S/ Leroy Dennis
First Parties

S/ Earle A.Pack

STATE OF IDAHO)
: ss.
County of Ada)

On this 18 day of December, 1951, before me, the undersigned, a Notary Public for Idaho, personally appeared LEROY DENNIS, FRANK DENNIS and EARLE A. PACK, known to me to be the persons whose names are subscribed to the within and foregoing instrument, and acknowledged to me that they executed the same.

IN WITNESS WHEREOF, I have hereunto set my hand and affixed my official seal, the day and year in this certificate first above written.

S/ Dale Clemons
Notary Public for Idaho
Residing at Boise, Idaho

Seal

A. H. HOLLAND, PRES.-TREAS. EDMUND E. PHILLIPS, VICE-PRES.—GEN. MGR. M. E. HOLLAND, SECRETARY

OUR MOTTO:—WHAT THERE IS IN IT, NO MORE, NO LESS.

THE COLORADO ASSAYING COMPANY

(Incorporated)

COMPLETE ANALYSIS ON ANY ORE $15.00
THIS ANALYSIS WILL DETECT AND REPORT EVERY ELEMENT OR METAL THAT MAY BE PRESENT IN THE ORE, TOGETHER WITH THE PERCENTAGE AND VALUE OF EACH. IT IS THE MOST SATISFACTORY ANALYSIS TO APPLY ON ALL UNKNOWN ORES, WHOSE GENERAL APPEARANCE INDICATES PROBABLE VALUES

ASSAYERS AND CHEMISTS

2013 WELTON STREET

QUALITATIVE ANALYSIS $5.00
THIS ANALYSIS WILL DETECT AND REPORT THE ABSENCE OR PRESENCE OF THE FOLLOWING 23 METALS: LEAD, SILVER, MERCURY, GOLD, BISMUTH, ARSENIC, ANTIMONY, COPPER, CADMIUM, TIN, ALUMINUM, MANGANESE, COBALT, ZINC, CHROMIUM, STRONTIUM, IRON, NICKEL, BARIUM, CALCIUM, MAGNESIUM, TUNGSTEN AND MOLYBDENUM.

DENVER 1, COLO., Oct. 15, 1951.

Report on Spectrographic Analysis submitted by Mr. Earl A. Pack, Boise, Idaho.

"Monazite" Sand

ELEMENTS PRESENT	APPROXIMATE PERCENTAGES
Silicon	10.-20.
Iron	major
Titanium	major
Cerium	2.-10.
Aluminum	1.-5.
Calcium	1.-3.
Magnesium	1.-3.
Manganese	1.-3.
Phosphorus	1.-3.
Zirconium	.5-.2
Thorium	.1-1.
Sodium	.1-.5
Yttrium	.1-1.
Lanthanum	.1-1.
Erbium	.01-.1
Potassium	.01
Barium	.01
Strontium	.001
Lead	.001
Chromium	trace
Vanadium	trace
Uranium	trace

Gold .02 ounces per ton at $35.00 per ounce - 70¢ per ton
Silver trace

REMARKS: The black mineral in this sample is chiefly Ilmenite (iron and titanium oxides). The red-brown crystals are Garnet (complex iron aluminum calcium silicate). The yellow grains are Monazite (phosphate of cerium and other rare earths with thorium). The white grains are Quartz (silica), while the heavy clear grains are Zircon (zirconium silicate). The few pink grains are probably Ruby (aluminum oxide).
The Monazite will be marketable, if concentrated further.
Garnet and Ruby will make mild abrasives, also Zircon. A high grade Zircon concentrate is worth much more than abrasives. Ilmenite concentrates should run 60% Titanium Dioxide content to be readily marketable.

Respectfully submitted,

THE COLORADO ASSAYING COMPANY
Edmund Phillips

COPY

UNTIED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF MINES

Mt. Weatherm Bluemont, Va.

December 3, 1951

Air Mail

Messrs. Leroy and Frank Dennis

Cascade, Idaho

Gentlemen;

Your letter of November 26th addressed to the U.S. Bureau of Mines, Exploration Department, Washington, D.C., has been forwarded to this office for reply.

The drilling perfomred on your property in the Spring of 1950 was under the supervision of the Boise Office of this Branch of the Bureau. The report on this work has not yet been completed since additional work was performed in the Clear Creek area during the 1951 field season. Howeverm we can give you the following data obtained from the samples taken from the holes drilled on your property:

Hole No.	Minable Depth Ft	Radioassay %Tho2 Equiv.	Calculated %Monazite Equiv.	LBS B.S./ cuyd	LBS Monazite equiv cuyd
CCD-5	55	0.318	7.36	12.45	0.92
CCD-6	45	0.297	6.87	10.82	0.74
CCD-7	50	0.375	8.68	9.23	0.80
CCD-13	35	0.246	5.69	14.83	0.84
CCD-14	35	0.239	5.53	11.01	0.61
CCD-15	30	0.346	8.01	13.74	1.10
CCD-16	30	0.209	4.84	18.36	0.89

We trsut this information will be sufficient for your present needs.

Very truly yours

Signed M H Kline Chief
Special Minerals Branch

Gem Monazite Mines, Inc.

OFFICE: 215 McCARTY BLDG. BOISE, IDAHO
OPERATION: CASCADE, IDAHO
PHONE 188

Statement of Condition
at
April 30th-1952

ASSETS:			
First Security Bank		12,719.73	
Subscriptions Receivable		11,015.00	
Dennis Lease-Approx 1000 Acres		1,000,000.00	
Organization Expense		11,123.60	
TOTAL ASSETS			1,034,858.33
LIABILITIES:			
Commissions Payable Contingent upon payment of Deferred Subscriptions		3,013.60	
Dennis Brothers-Final Payment on lease deposit-due 6-1-52		1,000.00	
TOTAL LIABILITIES			4,013.60
CAPITAL:			
Capital Stock Subscribed		1,000,000.00	
Donated Surplus		600,000.00	
		1,600,000.00	
Treasury Stock	560,700.00		
* Expense to date	8,455.27	569,155.27	1,030,844.73
TOTAL LIABILITIES AND CAPITAL			1,034,858.33

Expenses to date:

Commissions	6160.00
Office Supplies	63.00
Sales expense	134.18
Documentary Stamps	1425.00
Dredge Procurement expense	210.29
Life Insurance Premiums on Officers(5 x 5M)	462.80
	8455.27

-103
1951)

U. S. DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS ADMINISTRATION

Budget Bureau No. 42-R1035.
Approval expires 6-30-51.

APPLICATION FOR AID FOR AN EXPLORATION PROJECT PURSUANT TO MINERAL ORDER 5, UNDER DEFENSE PRODUCTION ACT OF 1950

DO NOT FILL IN THIS BLOCK

Docket No. DMEA-2536

Date received 5-19-52

Participation

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
MAY 19 1952

GEM MONAZITE MINES, INC
215 McCarty Building
Boise, Idaho

Name and address of applicant

Date 28th April 1952

FILL IN THIS BLOCK

Date of application 28th April 1952

Estimated cost $100,250.00

Mineral or metal Monazite

Percentage of Government participation 90%

Location of mine Near Alpha, Idaho

Date of filing MF-100 28th April 1952

DMA Docket Number, if available Not available

INSTRUCTIONS

Read Mineral Order 5, Regulations Governing Government Aid in Defense Projects, before completing this application. Submit four signed copies of the application to Defense Minerals Administration, Department of the Interior, Washington 25, D. C., or to the nearest field executive officer thereof, with your name and address on each sheet of the application and all accompanying papers. If any question is inapplicable, or if you cannot answer it, so state on the form. Where the space provided for answer is insufficient, answer on a separate sheet, annex it to the application form, and refer to it in space for answer. If the application is approved, you will be presented with an exploration project contract on Form MF-200, for your signature.

THE APPLICANT

Schedule attached

*1. Is applicant an individual, partnership, or corporation?
*2. If a partnership, state names and addresses of partners.
*3. If a corporation, state names and addresses of officers, directors, and five largest stockholders.
*4. Describe the mining and general business experience of (*a*) the applicant, and (*b*) the person or persons who will manage the project.
*5. Are you the owner or the lessee of the property?
6. If owner, state what claims, liens, or encumbrances, if any, are against the property.
7. If lessee, attach a copy of the lease and state if it is in good standing.

NOTE.—It will be necessary to procure and attach to the exploration project contract agreements of claimants, lienors, encumbrances and lessors subordinating their interests in the property to the interest of the Government under the contract.

8. Furnish current financial statement, showing assets and liabilities, and a profit and loss statement.
9. How much money is applicant prepared to invest in proposed project? Is it sufficient to pay your part of the cost of the project as detailed in question 23 of this application form, in accordance with the regulations on Government participation (Section 9 of Mineral Order 5)?

*If you have already answered these questions on MF-100, you are not required to answer the questions for this application.

16—64067-1

THE PROPERTY Schedule attached

10. (*a*) Give a description of the real property that will be in any way involved in the exploration project, including any ex[illegible] mine or operating property.

(*b*) Give the legal description of the exact parcel, plot, or area upon which the exploration is to be conducted.

NOTE.—If both areas are the same, so state. The only obligation to repay the Government is from the net earnings from any commercial discovery made in the area specified in (*b*) above in which the exploration is to be conducted, and the expenditure of funds which may be charged as costs of the project must be limited to that area or to work necessary to perform the exploration in that area.

*11. State the present and former names of the property, if any.

*12. State, in detail, the location of the property with reference to towns, railroads, roads, shipping points, including distances and directions and kinds and conditions of roads.

*13. State source and quantity of water available for operations and its sufficiency at all seasons. State amount of power to be used, rate per hour or other cost, and source.

*14. Describe any existing useable facilities, equipment, buildings, or structure now on the property that will be devoted to the exploration work.

15. State in detail how the ore could be shipped and how and where milled.

*16. History:

(*a*) Give a statement, as complete as possible, of previous exploration, development, operation, and production of property, with reasons for any past suspensions of operations.

(*b*) State briefly the known history and production of adjoining and neighboring properties.

(*c*) Furnish any available (private) reports that may apply to this application, including results of mine examinations, recommended exploration and development, and metallurgical investigations.

*17. Production:

(*a*) If mine is in production, furnish the following information:

	Tons per day	*Grade or analysis*	*Cost per ton*	*Net value per ton*
(1) Mining				
(2) Milling				
(3) Shipped or sold				

*18. Ore or mineral reserves: (If property is or has been operating.)

(*a*) Describe the ore or mineral deposits briefly.

(*b*) Submit available maps and assay data.

(*c*) Give estimated tonnage and grade of each class of ore reserves.

19. State any conditions or circumstances regarding the property not sufficiently brought out by the foregoing questions.

THE EXPLORATION Schedule attached

20. For what mineral or minerals and for what types of deposits and ores will the exploration be conducted?

21. Describe briefly, but concisely, the proposed work and the estimated time required to complete it.

NOTE.—The Government will not participate in a project that will require more than 2 years to complete.

22. Furnish statement of the geological basis of the project with particular emphasis on factors leading the operator to expect the finding of commercial ore bodies. This statement should be accompanied by supporting maps such as geological maps, maps of the proposed openings and assay maps, sample lists, and other pertinent data.

THE REQUIREMENTS AND COSTS Schedule attached

23. Tabulate in the form of an itemized statement with a sum for each item the estimated requirements and costs of the project so that the total will give the estimated cost of the project in which the Government will participate, as follows:

(*a*) Labor, by numbers and classes (miners, muckers, millmen, etc.), with wages of each.

(*b*) Supervisors, by numbers and positions, with salaries of each.

(*c*) Cost of necessary repairs to existing facilities, structures, and buildings.

(*d*) Cost of necessary installation or construction of additional facilities, structures, and buildings.

(*e*) Cost of items of equipment, not now owned by the applicant which must be purchased for operations at a cost of $50 or more each.

(*f*) Cost of rental for equipment which the operator proposes to rent.

(*g*) Rental value of items of equipment which the operator now owns and which will be devoted to the work.

(*h*) Cost of materials and supplies, including items of equipment costing less than $50 each.

(*i*) Cost of power, water, utilities, and any other items not provided for above.

24. Furnish a time schedule of the project, stated in terms of months after project is approved, showing progress expected to be accomplished and the money expected to be spent.

CERTIFICATION

The undersigned company, and the official executing this certification on its behalf, hereby certify that the information contained in this form and accompanying papers is correct and complete to the best of their knowledge and belief.

Gen Monazite Mines Inc
(Name of company)

By R M Jackson
(Signature of authorized official)

28th April 1952
(Date)

Sec'y-Treas.
(Title)

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.

*Same as footnote on page 1.

16—64067-1 U. S. GOVERNMENT PRINTING OFFICE

GEM MONAZITE MINES, INC

215 McCARTY BUILDING

BOISE, IDAHO

Schedule attached to
Form MF-103

THE APPLICANT

1. Corporation

2. Not applicable

3. Earle A. Pack Pres 'Director General Manager
John H Reusser Vice Pres. Director Sales supervisor
John Bastida Vice Pres. Director Contractor
John Barriatua Vice Pres. Director Contractor
K N Jackson Sec'y-Treas. Director Investments
Dennis Brothers Land owners and stockholders
Harry Heath Dredge Man

4. Earle Pack and Harry Heath, many years mining and dredge.
Bastida and Barriatua, contractors and business men
K N Jackson investments, finance 22 years

5. Lessee

6. Not applicable

7. Attached and in good standing

8. Attached

9. $10,000 if needed.

THE PROPERTY

10(a) Exact legal of property involved in (b). No existing.
(b) SE¼NE¼ Sec 5; NE¼SE¼ Sec. 5; SW¼NW¼ Sec.4; NW¼SW¼ Sec.4
S½NE¼ Sec.9; N½SE¼ Sec. 9; SE¼SE¼ Sec. 9; W½NW¼ Sec.10;
N½SW¼ Sec. 10 W½ SE¼ Sec. 10; all in T12N R4E B.M. and

~~T12N~~, N½SE¼ Sec. 30; SE¼SE¼ Sec. 30; SW¼ Sec.29; SE¼NW¼ 32.

11, 12, 13, 14 all answered in Form MF-100

15. Shipped by rail to be refined in Boise unless other facilit is provided.

16. aReport #5 Idaho State Bureau of Mines give this. USBM has made some exploration.

b. 1½ years activity, actual results kept secret. See USBM
c. USBM report and assay report attached.

17. No production

18. (a) Monazite Sands and allied minerals
(b) attached
(c) Not known

19. None. Reason for exploration request.

GEM MONAZITE MINES, INC

215 McCARTY BUILDING

BOISE, IDAHO

Schedule attached to Form MF-103

THE EXPLORATION

20. Monazite dredge operation

21. Drill at least one test hole in each 10 acre plot of all leased land. I years time contemplated.

22. Report #5 State of Idaho, and information procured from various sources, while sparse, still believed valuable.

THE REQUIREMENTS AND COST

23.	(A)	Miners 2 x $300mo	$7200.00
	(B)	Supervisors 2 x $500 mo	12000.00
	(c)	None	
	(d)	Headquarters and seperation plant buidling	$2500.00
	(e)	Not known kmw.	
	(f)	Contractor-drilling $500 hole for 128 holes	$64000.00
	(g)	none	
	(h)	not known	
	(i)	Power, water other items	$14550.00
		Total	$100,250.00

24. 12 holes per month for first10 months, blanace as needed or indicated. Sampling to be doen on ground with help government authority and our own men.

Form MF-100
(May 1951)

U. S. DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS ADMINISTRATION

Form approved.
Budget Bureau No. 42-R1026.

GENERAL TECHNICAL DATA
FOR USE UNDER THE
DEFENSE PRODUCTION ACT OF 1950

NOT TO BE FILLED IN BY APPLICANT

Docket No. DMEA-2536

Date received 5-19-52

GEM MONAZITE MINES, INC
215 McCARTY BUILDING
BOISE, IDAHO

Name and address of applicant

Date 26 April 1952

MAY 19 1952
RECEIVED
Department of the Interior
Defense Minerals Administration

INSTRUCTIONS

This form is to be filed with Defense Minerals Administration, Department of the Interior, Washington 25, D. C. It should be accompanied by appropriate application form when a specific type of Government assistance is requested, in the form of (1) loan, (2) purchase contract, (3) Government guarantee of a private loan, (4) priorities or allocation of mining equipment, and maintenance, repair and operating supplies, and (5) other forms of Government assistance that might arise under the Act. Submit four (4) signed copies of the form and accompanying papers. Name and address should be stamped or typed on each sheet of this form and all accompanying papers. *When a question is inapplicable it should be so stated on the form.* Additional sheets may be attached in answering any questions or in supplying additional information. (IF YOU CANNOT ANSWER A QUESTION, SO STATE.) If a question is answered elsewhere indicate where answered. It is not necessary to answer it again.

GENERAL TECHNICAL DATA

Supply the following information on separate sheets, arranged, numbered, and lettered as indicated:

1. Materials produced:
   (*a*) What are the chief mine, mill, or smelter products?
   (*b*) What are the byproducts, if any?

   Schedule attached covering #2 thru #7 inclusive

2. Name(s) and type(s) of mine(s), mill(s), smelter(s), refinery(ies), pit(s), quarry (ies), drilling operation(s). Include old names of property, if any. Show extent of workings, including the following:
   (*a*) Linear feet of shafts.
   (*b*) Linear feet of drifts and crosscuts.
   (*c*) Linear feet of tunnels or adits.
   (*d*) Linear feet of other mine openings (explain briefly).

   Indicate whether mine is flooded or not. Describe any pumping problems. Give size or productive capacity.
3. For each operation listed above supply the following:
   (*a*) Distance and direction from nearest town and shipping point.
   (*b*) Mining district.
   (*c*) Township, Section, Range.
   (*d*) County, State.
4. (*a*) State whether or not property is now in operation, and if in operation, by whom operated.
   (*b*) Are you operating this property as:
   - ☐ Owner.
   - ☐ Lessee.
   - ☐ Contractor.
5. Number of years in production _____

   If not in production or operation, estimated date when production will begin _____
6. Experience of operators:

   Describe the mining and general business experience of (*a*) the applicant, and (*b*) the person or persons who manage the project.
7. History:
   (*a*) Give a statement, as complete as possible, of previous exploration, development, operation, and production of property, with reasons for suspension of operation.
   (*b*) State briefly the known history and production of adjoining and neighboring properties.
   (*c*) Furnish any available (private) reports that may apply to this application, including results of mine examinations, recommended exploration and development, and metallurgical investigations.

8. Names and addresses of Officers, Directors, or Partners, and in addition thereto, the five largest stockholders if applicant is a corporation.

Name and Address	Official Title (If officer is also director indicate by "D") (b)	Total of Annual Salary, Commissions, Bonuses, Etc., Received From Applicant and Affiliates During Last Fiscal Year (c)	Estimated Net Worth Outside of Interest in Applicant (d)	Number of Shares Held in Applicant Corporation: Common (e)	Number of Shares Held in Applicant Corporation: Preferred (f)	Life Insurance Carried for Benefit of Applicant: Amount Applied for (g)	Life Insurance Carried for Benefit of Applicant: Net Cash Surrender Value After Loans (h)
All Boise Idaho							
Earle A. Pack 3011 Teton street	Pres. 'D'	Comms	10M	1600000	none	$5000.	---
John H. Heusser Route #9 Alamosa	V.Pres.'D'	Comms	5M	800M	none	5000.	---
John Bastida Crozen Addition	V.Pres.'D'	none	50M	500M	none	5000.	---
John Barriatua 1329 Viste	V.Pres'D'	Comms	30M	500M	none	5000.	---
K N Jackson 819½ North 24th	Secy-Treas	none	10M	500M	none	5000.	---
Dennis Brothers Alpha Idaho	Stockholders	none	25M	75M	none	to come	---
Harry Heath 825 East State	Dredge man Stockholder	none	5M	100M	none	to come	---
	Total		x x x x x	4075M		x x x x x	x x x x x

If more lines are needed continue on separate sheet.

9. Capital Stock Issues:

For Corporate Applicants

Item	Authorized (a)	Outstanding (b)	Par Value (c)	Number of Shares Outstanding (d)	Dividend Rate Last Paid* (e)
Common stock	$1,000,000	$620,000	$1,000,000	---	none
Preferred stock none	$	$	$		

*Indicate period covered.

10. Production: none

Item	Kind of Product (a)	1948 Total (b)	1949 Total (c)	1950 Total (d)	Present Average Monthly (e)
1. Quantity of product mined or quarried (Short, long, metric tons; barrels; pounds; etc.)	none	---	---	---	---
2. Quantity of product processed (specify unit of measure and type of process)	none	---	---	---	---
3. Quantity and grade of product sold or shipped (specify units of measure)	none	---	---	---	---

11. Do you contemplate a change in the present average monthly rate of production? If so, state estimated maximum monthly production and basis of change. Installation dredge 150,000 yards per month min.

12. Ore or Mineral Reserves:

(a) Describe the ore or mineral deposit briefly. Accompany the application by any available report on the geology and ore reserves. Monazite Sands USM has made tests

GEM MONAZITE MINES, INC
215 McCarty Building
Boise Idaho.

Schedule attached to
FORM MF-100

1. Materials produced:
   (a) Monazite
   (b) Garnet, Zircon, Ilmenite

2. Owners, Dennis Brothers. 616 acres in Long Valley. All but 160 dredge land. 320 Acres in Round Valley, all dredge land. Adjoining land under negotiation. USBM has made tests on some of this land.
   (a) shafts none)
   (b) crosscuts none)
   (c) tunnels none)
   (d) other openings none) Not applicable
   Dredge operation

3. (a) 8 miles south of Cascade Idaho
   (b) Cascade Idaho Alpha Idaho
   (c) Sections 3-4-5-9-10, 29-30-32, Twp 12 North Range 4E B.M.
   (d) Valley County Idaho

4. (a) Not now in operation
   (b) Lessee Gem Monazite Mines, Inc.
   Contractor to be hired

5. Not in production. Production will be started when exploration indicates proper location, and value.

6.

Earle A. Pack	Many years mining
Harry Heath	Many years as dredge operator
John Bastida	Self employed contractor 10 years
John Barriatua	Self Employed contractor 20 years
John Reusser	Self employed land developer 20 years
K N Jackson	Investments and mortgages-accountant 20 years

7. (a) General area explored and written up by State Bureau of Mines. U S B M has explored in 1950. Results indicate justification of further work.
   (b) 3 different outfits have been working adjacent property for 1½ years, and according to all available information are planning on further expansion.
   (c) U S Bureau of Mines has only information known to us.

END OF PAGE ONE Form MF-100

(*b*) If deposit is other than placer:

(1) Submit assay plans and/or sections showing location and size of proved (measured) and probable (indicated) ore or mineral reserve.

(2) State the tonnage (indicate type of ton) and grade of each class of ore reserve, as above, and show how computed. Tabulated total ore reserve as follows:

TOTAL ORE OR MINERAL RESERVES

Ore or Mineral Reserve	Estimated Tons (a)	Metal or Mineral Content Per Ton (Grade) (b)	Gross Value Per Ton (c)	Recoverable Unit Value Per Ton (d)	Estimated Cost of Production Per Ton (e)
Measured (proved)	To be determined				
Indicated (probable)					

(*c*) If placer:

(1) Give estimated total yardage and average marketable mineral content of each deposit.

(2) Submit map showing location of placer deposit and surrounding area, with all test holes or pits. Submit logs of each hole and test pit with depth and average value of each.

(3) Describe gravel, stating whether fine, medium or coarse; loose, tight, cemented, or frozen, and whether it contains stumps or boulders more than 1 foot in diameter; if so, how large, and in what proportion.
Medium tight nothing over 1 foot.

(4) Describe bedrock, giving type (granite, sandstone, shale, etc.) and state whether it is hard or soft, smooth, uneven or rough. no bedrock known

(5) Describe overburden, stating whether loose, tight, or cemented; fine or coarse textured; furnish estimate of average thickness and total amount. Loose fine texture 2 feet average amount unknown

(6) Tabulate the reserves using the form outlined above for ore or mineral reserves.
Purpose of exploration application

13. Access Roads:

Give road distances to shipping, supply and residence points, stating kind and condition of roads.
State Highway 15 Good

14. Water Supply:

State source and quantity of water available for operations and whether sufficient for all seasons of year.
Clear Creek Skunk Creek year around supply adequate

15. Power:

State amount of power used, rate per hour, and source thereof Idaho Power 1750 HP

16. Labor: none

State number and classes (miners, muckers, millmen, etc.) of men employed during a recent representative payroll period.

17. Equipment and Facilities: none

Describe present equipment on the property, including buildings. (State condition.) List major pieces of equipment now owned or controlled and in serviceable condition available for this operation.

18. Are there any particular conditions or circumstances affecting your operations that are not described above? If so, explain.
no

CERTIFICATION

The undersigned company, and the official executing this certification on its behalf, hereby certify that the information contained in this form and accompanying papers is correct and complete to the best of their knowledge and belief.

GEM MONAZITE MINES, INC.
(Name of company)

By K N Jackson
(Signature of authorized official)

28th April 1952
(Date)

Secretary-Treasurer
(Title)

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—63792-1

ASSIGNMENT OF LEASE.

KNOW ALL MEN BY THESE PRESENTS: That the undersigned, Earle A. Pack, John Bastida, John Barriatua, John H. Reusser, and K. N. Jackson, for valuable consideration, receipt of which is hereby acknowledged, do hereby set over, transfer, assign and sell unto Gem Monazite Mines, Inc., all our right, title and interest in and to the following described property situate in Valley County, Idaho, to-wit:

> The SE¼NE¼ and the NE¼SE¼ of Section 5, and the SW¼NW¼ and the NW¼SW¼ of Section 4, all in Township 12 North, Range 4 East of the Boise Meridian, containing 160 acres, more or less; and, also
>
> The S½NE¼, the N½SE¼. the SE¼SE¼, and the East 10 acres of the NE¼NE¼, all in Section 9; the W½NW¼ and the E½SW¼, and the W½SE¼, all in Section 10; the N½SE¼ and the SE¼SE¼ of Section 30; the SW¼ of Section 29; and the SE¼NW¼ os Section 32; all in Township 12 North, Range 4 East of the Boise Meridian, consisting of approximately 840 acres;

as evidenced by that certain indenture of lease dated October 24, 1951, made and entered into between LeRoy Dennis and Lois Dennis, husband and wife, and Frank Dennis, a widower, all of Cascade, Idaho, Lessors therein, and Earle A. Pack, of Boise, Idaho, Lessee therein, and the amendment to said lease dated December 13, 1951, entered into between the same parties.

TO HAVE AND TO HOLD unto said Gem Monazite Mines, Inc., its successors and assigns, subject, nevertheless, to all the terms and conditions thereof.

IN WITNESS WHEREOF, the undersigned have hereunto set their hands, this 21st. day of January, 1952.

S/ Earle A. Pack

Approved 3/8/52

S/ John H. Reusser

S/ LeRoy Dennis

S/ John C. Bastida

S/ Frank Dennis

S/ John Barriatua

S/ Lois Dennis

S/ K. N. Jackson

STATE OF IDAHO)
: ss.
County of Ada)

On this 21st. day of January, 1952, before me, the undersigned, a Notary Public for Idaho, personally appeared EARLE A. PACK, JOHN BASTIDA, JOHN BARRIATUA, JOHN H. REUSSER, and K. N. JACKSON, known to me to be the persons whose names are subscribed to the within and foregoing instrument, and acknowledged to me that they executed the same.

IN WITNESS WHEREOF, I have hereunto set my hand and affixed my official seal, the day and year in this certificate first above written.

S/ Herbert H. Eberle
Notary Public for Idaho
Residing at Boise, Idaho

Seal

L E A S E.

THIS INDENTURE OF LEASE, Made and entered into this 24 day of October, 1951, by and between LEROY DENNIS and LOIS DENNIS, husband and wife, and FRANK DENNIS, a widower, all of Cascade, Valley County, Idaho, hereinafter called "Lessors," and EARLE A. PACK, of Boise, Ada County, Idaho, hereinafter called "Lessee";

W I T N E S S E T H:

WHEREAS, the Lessors are the owners and in possession of certain real property situate in Valley County, Idaho, more particularly described as follows, to-wit:

> The SE¼NE¼ and the NE¼SE¼ of Section 5, and the SW¼NW¼ and the NW¼SW¼ of Section 4, all in Township 12 North, Range 4 East of the Boise Meridian, containing 160 acres, more or less.
>
> Together with all water and water rights thereunto belonging or in anywise appertaining; and

WHEREAS, the Lessors desire to lease the above described real property to Lessee for mining purposes, and Lessee desires to lease the same upon the terms and conditions hereinafter set forth;

NOW, THEREFORE, In consideration of the covenants and conditions hereinafter set forth, Lessors do hereby lease unto the Lessee the above described real property, together with all water and water rights used in connection therewith or appurtenant thereto, for the term of ten (10) years, commencing December 1, 1951, and ending December 1, 1961, with the option to renew the lease for an additional term of ten (10) years, as hereinafter provided.

That as rental for said lands the Lessee agrees to pay to the Lessors an amount equal to $1,000.00 per acre for each acre mined by the Lessee, or 10% of the gross returns from the sale of all metals, ores, timber, sands or any other materials of

value removed, excavated or processed from the lands, whichever sum is the greater. That said rental shall be paid as follows: The sum of $10,000.00 on or before thirty (30) days from date hereof, which sum shall be credited as rentals and advance royalties. The royalties shall be computed at the end of each month during the term of this lease, or any extensions or renewals thereof, and paid to the Lessors by the 10th of the following month. Lessee agrees that he will diligently commence and prosecure mining and ore dredging operations on the above described lands and will be in production and removing ores and metals from the lands not later than eighteen (18) months from date hereof, and will have located upon the premises a dredge capable of removing and processing ore and metals from the lands, with a capacity of not less than five thousand (5,000) cubic yards per day. Lessee shall operate said dredge continuously during the mining season, and said dredge shall be in operation at all times, except when prevented from operation by reason of inclement weather conditions, strikes, breakdowns, or any other conditions over which Lessee has no control.

It is understood and agreed that the above described premises are leased and to be used by Lessee for mining purposes only, and Lessors shall have the right to the continued use of the rest of the land not being mined for such use as Lessors see fit, other than mining operations. The Lessee shall have the right to remove and sell timber from the lands, which must necessarily be removed in connection with the mining operations. The Lessee shall be required at all times to keep the area of mining operation fenced against cattle and to provide adequate cattle guards to keep cattle out of the mining area.

In connection with the mining operations to be conducted by Lessee it is agreed that should any ores or valuable metals or materials be processed, which cannot be profitably sold or which are not sold by the Lessee, then all such materials shall be stockpiled upon the premises, and if not sold prior to the termination of the lease shall revert to and become the property of the Lessors.

In connection with the mining operations to be conducted by Lessee, Lessee shall systematically mine the entire area in designated plots, each plot to be completely mined before the dredge or other equipment is moved to a new plot. It is contemplated that the area to be mined shall be agreed upon between the parties, and the first mining operations shall commence in close proximity to the borderline of the above described premises and worked in either square or rectangular areas. The first area to be mined shall be of approximately ten (10) acres. As any area is completely mined a new area will be designated immediately adjacent to the mined area, and this plan continued throughout the entire mining operations of the above described premises.

In connection with the ten-acre plot to be mined first by the Lessee, it is the intent of the parties that the $10,000.00 down payment is payment of the minimum rental. In other areas to be designated and mined, it is agreed that the area shall be fixed in acres, and prior to any mining operations thereon Lessee shall pay to the Lessors an amount equal to $1,000.00 per acre for the plot to be mined. This procedure shall be continued throughout the life of the lease and mining operations to be conducted. All mining operations conducted upon the above

described premises ahll be carried on in such a manner as to derive the most profitable returns, which shall necessarily include mining to a depth which is profitable and feasible.

Lessee contemplates establishing a campsite on the above described premises. It will be required that any campsite so established by Lessee shall be mined as any other property, and Lessee shall be required to move his campsite for the purpose of mining the same when the campsite comes within an area designated for mining purposes.

In connection with the mining operations to be conducted by Lessee, Lessee agrees to conform to all the laws of the United States of America and the State of Idaho and will keep the property posted according to law, notifying all persons that the property is being operated under lease. Lessee shall maintain at all times adequate liability insurance, which will keep and hold the Lessors free and harmless from any liability from third persons by reason of the mining operations to be conducted by Lessee. The Lessee shall maintain and keep in full force and effect Workmen's Compensation Insurance as required by the laws of the State of Idaho. Lessee shall not permit any materialman's or workman's liens to be filed against the property and shall promptly discharge and pay all obligations incurred by him in connection with the mining operation. All taxes and assessments levied and assessed against any personal property which is placed upon the above described premises shall be the obligation of the Lessee and shall be promptly paid when due. Upon the termination of this lease, either by its own terms or by forfeiture, Lessee shall have the right to remove from the premises all equipment and buildings place thereon by him and to remove the same within sixty (60) days following

such termination, provided that all royalties due and owing to Lessors have been fully paid.

That as the above referred to plots of ground are mined the right to possession of the mined plot shall immediately revert to the Lessors, and they may thereupon go into possession and use the same in any manner they desire. It is further understood that Lessors contemplate placing a dwelling upon the above described premises within the next two (2) or three (3) years, and should such dwelling be placed upon an area which has not previously been mined, such area, constituting not more than five (5) acres in total, is hereby reserved from the terms of this lease, and Lessee shall not have the right to go upon or mine the same without the consent of the Lessors.

The Lessee shall not assign, transfer or sublet any part or portion of the above described premises without the written consent of either Leroy Dennis or Frank Dennis; provided, however, Lessors understand that it is contemplated that this lease is to be transferred to a corporation to be formed, of which Lessee will be a major stockholder, and Lessors do hereby consent to the transfer to such corporation.

In consideration of the rentals to be paid by Lessee to Lessors, as hereinbefore provided, Lessors hereby extend to Lessee an option to renew this lease for an additional period of ten (10) years, commencing December 1, 1961, and terminating December 1, 1971, and to renew this lease upon the same terms and conditions as set forth herein. Lessee may exercise this option to renew by giving written notice of his intention to renew the same at least sixty (60) days prior to December 1, 1961.

Further in consideration of the rentals to be paid by

Lessee to Lessors, Lessors hereby extend to Lessee the option to lease certain other lands now owned by Lessors, situate in Valley County, State of Idaho, more particularly described as follows:

> The S½NE¼, the N½SE¼, the SE¼SE¼, and the East 10 acres of the NE¼NE¼, all in Section 9; the W½NW¼, the E½SW¼, and the W½SE¼, all in Section 10; the N½SE¼, the SE¼SE¼ of Section 30; the SW¼ of Section 29; and the SE¼NW¼ of Section 32, all in Township 12 North, Range 4, East of the Boise Meridian, consisting of approximately 840 acres.

This option to lease the last above described real property may be exercised by Lessee at any time during the term of this lease or any extensions or renewals thereof. The terms and conditions of such lease covering the last above described real property shall be agreed upon between the parties, and Lessee shall have at all times the first right to lease said premises at such rental and upon such terms as Lessors may receive from any other person on a bona fide offer to lease.

The Lessors shall have the right at all reasonable times to examine the books, records and accounts of the Lessee and shall have the right to make a complete audit of the same. Such audit shall be at the expense of the Lessors. Lessors shall also have the right to visit and inspect the operation or any part thereof.

It is understood that Lessee shall not be entitled to possession of the first above described premises until the initial payment of $10,000.00 has been made, and should Lessee fail to comply with any other terms and conditions, and this lease be terminated, then said $10,000.00 shall be forfeited to Lessors and be deemed liquidated damages for breach of contract.

Should Lessee fail to make the payment of $10,000.00 due within thirty (30) days from date hereof, or to pay the royalties

as herein agreed to be paid, or fail to comply with any other terms and conditions of this agreement, then Lessors may terminate this lease upon fifteen (15) days written notice to the Lessee. If the matters are not corrected within the fifteen (15) day period, this lease shall thereupon be terminated, and Lessee shall have no further right, title or interest in and to the above described property.

This agreement shall be binding upon the heirs, executors, administrators and assigns of the parties hereto.

IN WITNESS WHEREOF, the parties hereto have hereunto set their hands and seals, the day and year first above written.

/S/ Leroy Dennis

/S/ Frank Dennis

/S/ Mrs. Lois Dennis
Lessors.

/S/ Earle A. Pack
Lessee.

STATE OF IDAHO (
: ss.
County of Valley (

On this 24 day of October, 1951, before me, the undersigned, a Notary Public for Idaho, personally appeared LEROY DENNIS and LOIS DENNIS, husband and wife, FRANK DENNIS, a widower, and EARLE A. PACK, known to me to be the persons whose names are subscribed to the within and foregoing instrument, and acknowledged to me that they executed the same.

IN WITNESS WHEREOF, I have hereunto set my hand and affixed my official seal, the day and year in this certificate first above written.

/S/ Forest E. Robb
Notary Public for Idaho
Residing at
Recorder, Valley Co. Idaho

SEAL

AMENDMENT TO LEASE

THIS AGREEMENT OF AMENDMENT, Made and entered into this 25th day of February, 1952 by and between Leroy Dennis and Frank Dennis, as first parties, and Gem Monazite Mines, Inc., as second party;

WITNESSETH:

WHEREAS, the parties hereto, by reason of the assignment to Gem Monazite Mines, Inc., by Earle A. Pack, John H. Reusser, John Barriatua, John Bastida and K. N. Jackson, owners of a lease which was originally executed by the first parties herein and Earle A. Pack; the original lease for which was executed on October 24,1951,and which covered real property situate in Valley County, Idaho; and

Whereas said indenture of lease provides for the payment of $10,000.00 rental on or before November 24th 1951, and further that this lease was further amended under date of 13th of December,1951 to extend the time of payment to 13th March, 1952;

NOW THEREFORE, in consideration of the sum of Two Thousand ($2000.00) Dollars in cash receipt for which is hereby acknowledged, and the further payment of the sum of Five Thousand($5000.00)Dollars to be paid by the issuance to the first parties of 50,000 shares of the fully paid, non-assessable common capital stock of Gem Monazite Mines, Inc., and the further payment of $1000.00 on the 1st day of April 1952; $1000.00 on the first day of May 1952, and the payment of $1000.00 on the first day of June, the provision in the original lease which required the payment of $10,000.00 shall have been fully performed and no further payment shall be made except as provided in the lease with respect to royalties from production.

IT IS FURTHER AGREED, that in consideration of the first parties co-operative and friendly attitude toward the second partly,the Directors of the second party agree to cause to be issued from their own personal holdings (as contributed surplus for the company) shares totaling a value of $2500.00.

The lease of October 24, 1951 is in all particulars in full force and effect and binding upon the parties hereto.

IN WITNESS WHEREOF, the parties have hereunto set their hands the day and year first above written.

S/ Leroy Dennis

S/ Frank Dennis
First Parties

GEM MONAZITE MINES, INC.

S/ Earle A. Pack
President

S/ K. N. Jackson
Secretary

STATE OF IDAHO)
County of Ada) ss

On this 27th day of February 1952, personally appeared before me Earle A. Pack, the President and K.N.Jackson, the Secretary of GEM MONAZITE MINES, INC., and stated that they were authorized to execute the foregoing document for the uses and purpose therein mentioned. Witness my hand and official seal this 27th day of February 1952.

Seal

S/ Herbert H. Eberle
Notary Public for Idaho
Residing in Boise.

STATE OF IDAHO)
County of Valley)

On this 1st day of March 1952 before me, a Notary Public in and for the State of Idaho, personally appeared Leroy Dennis and Frank Dennis, known to me to be the individuals whose names are subscribed to the foregoing instrument and who acknowledged to me that they signed the same as their free and voluntary act and deed.

IN WITNESS WHEREOF, I have hereunto set my hand and official seal the day and year above written.

Seal

S/ Corabelle Gedney
Notary Public in and for the State of Idaho residing in Boise

AMENDMENT TO LEASE.

THIS AGREEMENT OF AMENDMENT, Made and entered into this 13th day of December, 1951, by and between LEROY DENNIS and FRANK DENNIS, as first parties, and EARLE A. PACK, as second party;

WITNESSETH:

WHEREAS, the parties hereto did on October 24, 1951, enter into a certain indenture of lease with reference to real property situate in Valley County, Idaho; and

WHEREAS, said indenture of lease provides for the payment of $10,000.00 rentals on or before November 24, 1951, and the parties hereto desire to extend the time for payment of said rentals; and

WHEREAS, no provision was made in said lease with reference to the restoration of the land following the mining operations;

NOW, THEREFORE, In consideration of the sum of One Dollar, each paid to the other, IT IS HEREBY AGREED, as follows:

That the provision for the payment of $10,000.00 rent on or before November 24, 1951, as provided in that said lease dated October 24, 1951, hereinbefore referred to, is hereby amended, and the Lessee in said lease, to-wit; Earle A. Pack, is hereby given until March 13, 1952, within which to pay said rental of $10,000.00, as provided on page 2 of said lease.

IT IS FURTHER AGREED, That in connection with any mining operations carried on by Lessee, or his assigns, that said Lessee, or his assigns, will upon completion of the mining operations cause all diggings to be filled in and top-soil placed back on top of the diggings and insofar as possible the lands restored to their natural condition.

Except as amended by this agreement said lease of October 24, 1951, to which this is attached, hereinbefore referred to, is in all other particulars in full force and effect and binding upon the parties hereto.

IN WITNESS WHEREOF, the parties hereto have hereunto set their hands, the day and year first above written.

S/ Frank Dennis

S/ Leroy Dennis
First Parties

S/ Earle A.Pack

STATE OF IDAHO)
: ss.
County of Ada)

On this 13 day of December, 1951, before me, the undersigned, a Notary Public for Idaho, personally appeared LEROY DENNIS, FRANK DENNIS and EARLE A. PACK, known to me to be the persons whose names are subscribed to the within and foregoing instrument, and acknowledged to me that they executed the same.

IN WITNESS WHEREOF, I have hereunto set my hand and affixed my official seal, the day and year in this certificate first above written.

S/ Dale Clemons
Notary Public for Idaho
Residing at Boise, Idaho

Seal

A. H. HOLLAND, PRES.-TREAS. EDMUND E. PHILLIPS, VICE-PRES.—GEN[illegible]R. M. E. HOLLAND, SECRETARY

OUR MOTTO:—WHAT THERE IS IN IT, NO MORE, NO LESS.

THE COLORADO ASSAYING COMPANY

(Incorporated)

ASSAYERS AND CHEMISTS

2013 WELTON STREET

COMPLETE ANALYSIS ON ANY ORE $15.00
THIS ANALYSIS WILL DETECT AND REPORT EVERY ELEMENT OR METAL THAT MAY BE PRESENT IN THE ORE, TOGETHER WITH THE PERCENTAGE AND VALUE OF EACH. IT IS THE MOST SATISFACTORY ANALYSIS TO APPLY ON ALL UNKNOWN ORES, WHOSE GENERAL APPEARANCE INDICATES PROBABLE VALUES

QUALITATIVE ANALYSIS $5.00
THIS ANALYSIS WILL DETECT AND REPORT THE ABSENCE OR PRESENCE OF THE FOLLOWING 23 METALS: LEAD, SILVER, MERCURY, GOLD, BISMUTH, ARSENIC, ANTIMONY, COPPER, CADMIUM, TIN, ALUMINUM, MANGANESE, COBALT, ZINC, CHROMIUM, STRONTIUM, IRON, NICKEL, BARIUM, CALCIUM, MAGNESIUM, TUNGSTEN AND MOLYBDENUM.

DENVER 1, COLO., Oct. 15, 1951.

Report on Spectrographic Analysis submitted by Mr. Earl A. Pack, Boise, Idaho.

* *

"Monazite" Sand

ELEMENTS PRESENT	APPROXIMATE PERCENTAGES
Silicon	10.-20.
Iron	major
Titanium	major
Cerium	2.-10.
Aluminum	1.-5.
Calcium	1.-3.
Magnesium	1.-3.
Manganese	1.-3.
Phosphorus	1.-3.
Zirconium	.5-.2
Thorium	.1-1.
Sodium	.1-.5
Yttrium	.1-1.
Lanthanum	.1-1.
Erbium	.01-.1
Potassium	.01
Barium	.01
Strontium	.001
Lead	.001
Chromium	trace
Vanadium	trace
Uranium	trace

Gold .02 ounces per ton at $35.00 per ounce -
70¢ per ton
Silver trace

* *

REMARKS: The black mineral in this sample is chiefly Ilmenite (iron and titanium oxides).
The red-brown crystals are Garnet (complex iron aluminum calcium silicate).
The yellow grains are Monazite (phosphate of cerium and other rare earths with thorium).
The white grains are Quartz (silica), while the heavy clear grains are Zircon (zirconium silicate). The few pink grains are probably Ruby (aluminum oxide).
The Monazite will be marketable, if concentrated further.
Garnet and Ruby will make mild abrasives, also Zircon. A high grade Zircon concentrate is worth much more than abrasives. Ilmenite concentrates should run 60% Titanium Dioxide content to be readily marketable.

Respectfully submitted,

THE COLORADO ASSAYING COMPANY
Edmund Phillips

COPY

UNTIED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF MINES

Mt. Weatherm Bluemont, Va.

December 3, 1951

Air Mail

Messrs. Leroy and Frank Dennis

Cascade, Idaho

Gentlemen:

Your letter of November 26th addressed to the U.S. Bureau of Mines, Exploration Department, Washington, D.C., has been forwarded to this office for ersply.

The drilling perfomred on your property in the Spring of 1950 was under the supervision of the Boise Office of this Branch of the Bureau. The report on this work has not yet been completed since additional work was performed in the Clear Creek area during the 1951 field season. Howeverm we can give you the following data obtained from the samples taken from the holes drilled on your property:

Hole No.	Minable DepthFt	Radioassay %Tho2 Equiv.	Calculated %Monazite Equiv.	LBS B.S./ cuyd	LBS Monazite equiv cuyd
CCD-5	55	0.318	7.36	12.45	0.92
CCD-6	45	0.297	6.87	10.82	0.74
CCD-7	50	0.375	8.68	9.23	0.80
CCD-13	35	0.246	5.69	14.83	0.84
CCD-14	35	0.239	5.53	11.01	0.61
CCD-15	30	0.346	8.01	13.74	1.10
CCD-16	30	0.209	4.84	18.36	0.89

We trsut this information will be sufficient for your present needs.

Very truly yours

Signed M H Kline Chief
Special Minerals Branch

Gem Monazite Mines, Inc.

OFFICE: 215 McCARTY BLDG., BOISE, IDAHO
OPERATION: CASCADE, IDAHO
PHONE 188

Statement of Condition
at
April 30th-1952

ASSETS:

First Security Bank	12,719.73	
Subscriptions Receivable	11,015.00	
Bennie Bones-Approx 1000 Acres	1,000,000.00	
Organization Expense	11,129.00	
TOTAL ASSETS		1,034,858.73

LIABILITIES:

Commissions Payable Contingent upon payment of Deferred Subscriptions	9,013.60	
Bennie Brothers-Final Payment on lease deposit-due 6-1-52	1,000.00	
TOTAL LIABILITIES		4,013.60

CAPITAL:

Capital Stock Subscribed		1,000,000.00	
Donated Surplus		600,000.00	
		1,600,000.00	
Treasury Stock	569,700.00		
* Expense to date	6,455.27	563,155.27	1,030,844.73
TOTAL LIABILITIES AND CAPITAL			1,034,858.33

Expenses to date:

Commissions	6160.00
Office Supplies	63.00
Sales expense	154.18
Documentary Stamps	1625.00
Broker Procurement expense	310.29
Life Insurance Premium on Officers(5 x 52)	142.80
	6455.27

Ku

MF-103
(April 1951)

U. S. DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS ADMINISTRATION

Budget Bureau No. 42-R1035.
Approval expires 6-30-51.

APPLICATION FOR AID FOR AN EXPLORATION PROJECT PURSUANT TO MINERAL ORDER 5, UNDER DEFENSE PRODUCTION ACT OF 1950

DO NOT FILL IN THIS BLOCK

Docket No. DMEA-2536

Date received 5-19-52

Participation

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
MAY 19 1952

GEM MONAZITE MINES, INC
215 McCarty Building
Boise, Idaho

Name and address of applicant

Date 28th April 1952

FILL IN THIS BLOCK

Date of application 28th April 1952

Estimated cost $100,250.00

Mineral or metal Monazite

Percentage of Government participation 90%

Location of mine Near Alpha, Idaho

Date of filing MF-100 28th April 1952

DMA Docket Number, if available Not available

INSTRUCTIONS

Read Mineral Order 5, Regulations Governing Government Aid in Defense Projects, before completing this application. Submit four signed copies of the application to Defense Minerals Administration, Department of the Interior, Washington 25, D. C., or to the nearest field executive officer thereof, with your name and address on each sheet of the application and all accompanying papers. If any question is inapplicable, or if you cannot answer it, so state on the form. Where the space provided for answer is insufficient, answer on a separate sheet, annex it to the application form, and refer to it in space for answer. If the application is approved, you will be presented with an exploration project contract on Form MF-200, for your signature.

THE APPLICANT

Schedule attached

*1. Is applicant an individual, partnership, or corporation?
*2. If a partnership, state names and addresses of partners.
*3. If a corporation, state names and addresses of officers, directors, and five largest stockholders.
*4. Describe the mining and general business experience of (*a*) the applicant, and (*b*) the person or persons who will manage the project.
*5. Are you the owner or the lessee of the property?
6. If owner, state what claims, liens, or encumbrances, if any, are against the property.
7. If lessee, attach a copy of the lease and state if it is in good standing.

NOTE.—It will be necessary to procure and attach to the exploration project contract agreements of claimants, lienors, encumbrances and lessors subordinating their interests in the property to the interest of the Government under the contract.

8. Furnish current financial statement, showing assets and liabilities, and a profit and loss statement.
9. How much money is applicant prepared to invest in proposed project? Is it sufficient to pay your part of the cost of the project as detailed in question 23 of this application form, in accordance with the regulations on Government participation (Section 9 of Mineral Order 5)?

*If you have already answered these questions on MF-100, you are not required to answer the questions for this application.

16—64067-1

THE PROPERTY Schedule attached

10. (*a*) Give a description of the real property that will be in any way involved in the exploration project, including any existing mine or operating property.
    (*b*) Give the legal description of the exact parcel, plot, or area upon which the exploration is to be conducted.

    NOTE.—If both areas are the same, so state. The only obligation to repay the Government is from the net earnings from any commercial discovery made in the area specified in (*b*) above in which the exploration is to be conducted, and the expenditure of funds which may be charged as costs of the project must be limited to that area or to work necessary to perform the exploration in that area.

*11. State the present and former names of the property, if any.

*12. State, in detail, the location of the property with reference to towns, railroads, roads, shipping points, including distances and directions and kinds and conditions of roads.

*13. State source and quantity of water available for operations and its sufficiency at all seasons.
State amount of power to be used, rate per hour or other cost, and source.

*14. Describe any existing useable facilities, equipment, buildings, or structure now on the property that will be devoted to the exploration work.

15. State in detail how the ore could be shipped and how and where milled.

*16. History:
    (*a*) Give a statement, as complete as possible, of previous exploration, development, operation, and production of property, with reasons for any past suspensions of operations.
    (*b*) State briefly the known history and production of adjoining and neighboring properties.
    (*c*) Furnish any available (private) reports that may apply to this application, including results of mine examinations, recommended exploration and development, and metallurgical investigations.

*17. Production:
    (*a*) If mine is in production, furnish the following information:

	Tons per day	*Grade or analysis*	*Cost per ton*	*Net value per ton*
(1) Mining				
(2) Milling				
(3) Shipped or sold				

*18. Ore or mineral reserves: (If property is or has been operating.)
    (*a*) Describe the ore or mineral deposits briefly.
    (*b*) Submit available maps and assay data.
    (*c*) Give estimated tonnage and grade of each class of ore reserves.

19. State any conditions or circumstances regarding the property not sufficiently brought out by the foregoing questions.

THE EXPLORATION Schedule attached

20. For what mineral or minerals and for what types of deposits and ores will the exploration be conducted?

21. Describe briefly, but concisely, the proposed work and the estimated time required to complete it.

    NOTE.—The Government will not participate in a project that will require more than 2 years to complete.

22. Furnish statement of the geological basis of the project with particular emphasis on factors leading the operator to expect the finding of commercial ore bodies. This statement should be accompanied by supporting maps such as geological maps, maps of the proposed openings and assay maps, sample lists, and other pertinent data.

THE REQUIREMENTS AND COSTS Schedule attached

23. Tabulate in the form of an itemized statement with a sum for each item the estimated requirements and costs of the project so that the total will give the estimated cost of the project in which the Government will participate, as follows:
    (*a*) Labor, by numbers and classes (miners, muckers, millmen, etc.), with wages of each.
    (*b*) Supervisors, by numbers and positions, with salaries of each.
    (*c*) Cost of necessary repairs to existing facilities, structures, and buildings.
    (*d*) Cost of necessary installation or construction of additional facilities, structures, and buildings.
    (*e*) Cost of items of equipment, not now owned by the applicant which must be purchased for operations at a cost of $50 or more each.
    (*f*) Cost of rental for equipment which the operator proposes to rent.
    (*g*) Rental value of items of equipment which the operator now owns and which will be devoted to the work.
    (*h*) Cost of materials and supplies, including items of equipment costing less than $50 each.
    (*i*) Cost of power, water, utilities, and any other items not provided for above.

24. Furnish a time schedule of the project, stated in terms of months after project is approved, showing progress expected to be accomplished and the money expected to be spent.

CERTIFICATION

The undersigned company, and the official executing this certification on its behalf, hereby certify that the information contained in this form and accompanying papers is correct and complete to the best of their knowledge and belief.

Gem Monazite Mines Inc (Name of company) — By A. W. Jackson (Signature of authorized official)

28th April 1952 (Date) — Sec'y-Treas. (Title)

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.

*Same as footnote on page 1.

16—64067-1 U. S. GOVERNMENT PRINTING OFFICE

GEM MONAZITE MINES, INC

215 McCARTY BUILDING

BOISE, IDAHO

Schedule attached to
Form MF-103

THE APPLICANT

1. Corporation

2. Not applicable

3. Earle A. Pack Pres Director General Manager
John H Reusser Vice Pres. Director Sales supervisor
John Bastida Vice Pres. Director Contractor
John Barriatua Vice Pres. Director Contractor
K N Jackson Sec'y-Treas. Director Investments
Dennis Brothers Land owners and stockholders
Harry Heath Dredge Man

4. Earle Pack and Harry Heath, many years mining and dredge.
Bastida and Barriatua, contractors and business men
K N Jackson investments, finance 22 years

5. Lessee

6. Not applicable

7. Attached and in good standing

8. Attached

9. $10,000 if needed.

THE PROPERTY

10(a) Exact legal of property involved in (b). No existing.
(b) SE¼NE¼ Sec 5; NE¼SE¼ Sec. 5; SW¼NW¼ Sec.4; NW¼SW¼ Sec.4
S½NE¼ Sec.9; N½SE¼ Sec. 9; SE¼SE¼ Sec. 9; W½NW¼ Sec.10;
E½SW¼ Sec. 10 W½ SE¼ Sec. 10; all in T12N R4E B.M. and

~~11,12~~, N½SE¼ Sec. 30; SE¼SE¼ Sec. 30; SW¼ Sec.29; SE¼NW¼ 32.

11, 12, 13, 14 all answered in Form MF-100

15. Shipped by rail to be refined in Boise unless other facility is provided.

16. a Report #5 Idaho State Bureau of Mines give this. USBM has made some exploration.

b. 1½ years activity, actual results kept secret. See USBM
c. USBM report and assay report attached.

17. No production

18. (a) Monazite Sands and allied minerals
(b) attached
(c) Not known

19. None. Reason for exploration request.

GEM MONAZITE MINES, INC

215 McCARTY BUILDING

BOISE, IDAHO

Schedule attached to Form MF-103

THE EXPLORATION

20. Monazite dredge operation

21. Drill at least one test hole in each 10 acre plot of all leased land. I years time contemplated.

22. Report #5 State of Idaho, and information procured from various sources, while sparse, still believed valuable.

THE REQUIREMENTS AND COST

23.	(A)	Miners 2 x $300mo	$7200.00
	(B)	Supervisors 2 x $500 mo	12000.00
	(c)	None	
	(d)	Headquarters and seperation plant buidling	$2500.00
	(e)	Not known now.	
	(f)	Contractor-drilling $500 hole for 128 holes	$64000.00
	(g)	none	
	(h)	not known	
	(i)	Power, water other items	$14550.00
		Total	$100,250.00

24. 12 holes per month for first 10 months, blanace as needed or indicated. Sampling to be doen on ground with help government authority and our own men.

Form MF-100
(May 1951)

U. S. DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS ADMINISTRATION

Form approved.
Budget Bureau No. 42-R1026.

GENERAL TECHNICAL DATA
FOR USE UNDER THE
DEFENSE PRODUCTION ACT OF 1950

NOT TO BE FILLED IN BY APPLICANT

Docket No. DMEA-2536

Date received 5-19-52

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
MAY 19 1952

GEM MONAZITE MINES, INC
215 McCARTY BUILDING
BOISE, IDAHO

Name and address of applicant

Date 28 April 1952

INSTRUCTIONS

This form is to be filed with Defense Minerals Administration, Department of the Interior, Washington 25, D. C. It should be accompanied by appropriate application form when a specific type of Government assistance is requested, in the form of (1) loan, (2) purchase contract, (3) Government guarantee of a private loan, (4) priorities or allocation of mining equipment, and maintenance, repair and operating supplies, and (5) other forms of Government assistance that might arise under the Act. Submit four (4) signed copies of the form and accompanying papers. Name and address should be stamped or typed on each sheet of this form and all accompanying papers. *When a question is inapplicable it should be so stated on the form.* Additional sheets may be attached in answering any questions or in supplying additional information. (IF YOU CANNOT ANSWER A QUESTION, SO STATE.) If a question is answered elsewhere indicate where answered. It is not necessary to answer it again.

GENERAL TECHNICAL DATA

Supply the following information on separate sheets, arranged, numbered, and lettered as indicated:

1. Materials produced:
   (*a*) What are the chief mine, mill, or smelter products?
   (*b*) What are the byproducts, if any?

   Schedule attached covering #1 thru #7 inclusive

2. Name(s) and type(s) of mine(s), mill(s), smelter(s), refinery(ies), pit(s), quarry(ies), drilling operation(s). Include old names of property, if any. Show extent of workings, including the following:
   (*a*) Linear feet of shafts.
   (*b*) Linear feet of drifts and crosscuts.
   (*c*) Linear feet of tunnels or adits.
   (*d*) Linear feet of other mine openings (explain briefly).

   Indicate whether mine is flooded or not. Describe any pumping problems. Give size or productive capacity.
3. For each operation listed above supply the following:
   (*a*) Distance and direction from nearest town and shipping point.
   (*b*) Mining district.
   (*c*) Township, Section, Range.
   (*d*) County, State.
4. (*a*) State whether or not property is now in operation, and if in operation, by whom operated.
   (*b*) Are you operating this property as:
   ☐ Owner.
   ☐ Lessee.
   ☐ Contractor.
5. Number of years in production _____

   If not in production or operation, estimated date when production will begin _____
6. Experience of operators:
   Describe the mining and general business experience of (*a*) the applicant, and (*b*) the person or persons who manage the project.
7. History:
   (*a*) Give a statement, as complete as possible, of previous exploration, development, operation, and production of property, with reasons for suspension of operation.
   (*b*) State briefly the known history and production of adjoining and neighboring properties.
   (*c*) Furnish any available (private) reports that may apply to this application, including results of mine examinations, recommended exploration and development, and metallurgical investigations.

8. Names and addresses of Officers, Directors, or Partners, and in addition thereto, the five largest stockholders if applicant is a corporation.

Name and Address	Official Title (If officer is also director indicate by "D")	Total of Annual Salary, Commissions, Bonuses, Etc., Received From Applicant and Affiliates During Last Fiscal Year	Estimated Net Worth Outside of Interest in Applicant	Number of Shares Held in Applicant Corporation		Life Insurance Carried for Benefit of Applicant	
				Common	Preferred	Amount Applied for	Net Cash Surrender Value After Loans
All Boise Idaho	(b)	(c)	(d)	(e)	(f)	(g)	(h)
Earle A. Pack 3011 Teton street	Pres. 'D'	Comms	10M	1600000	none	$5000.	---
John H. Reusser Route #9 Alamosa	V.Pres.'D'	Comms	5M	800M	none	5000.	---
John Bastida Cruzen Addition	V.Pres.'D'	none	50M	500M	none	5000.	---
John Barriatua 1829 Vista	V.Pres'D'	Comms	30M	500M	none	5000.	---
K N Jackson 819½ North 24th	Secy-Treas	none	10M	500M	none	5000.	---
Dennis Brothers Alpha Idaho	Stockholders	none	25M	75M	none	to come	---
Harry Heath 825 East State	Dredge man Stockholder	none	5M	100M	none	tp come	---
	Total		x x x x x	4075M		x x x x x	x x x x x

If more lines are needed continue on separate sheet.

9. Capital Stock Issues:

For Corporate Applicants

Item	Authorized (a)	Outstanding (b)	Par Value (c)	Number of Shares Outstanding (d)	Dividend Rate Last Paid* (e)
Common stock	$1,000,000	$420,000	$1,000,000	---	none
Preferred stock none	$	$	$		

*Indicate period covered.

10. Production: none

Item	Kind of Product (a)	1948 Total (b)	1949 Total (c)	1950 Total (d)	Present Average Monthly (e)
1. Quantity of product mined or quarried (Short, long, metric tons; barrels; pounds; etc.)	none	--	--	--	--
2. Quantity of product processed (specify unit of measure and type of process)	none	--	--	--	---
3. Quantity and grade of product sold or shipped (specify units of measure)	none	--	--	--	--

11. Do you contemplate a change in the present average monthly rate of production? If so, state estimated maximum monthly production and basis of change. Installation dredge 150,000 yards per month min.

12. Ore or Mineral Reserves:

(a) Describe the ore or mineral deposit briefly. Accompany the application by any available report on the geology and ore reserves. Mona[illegible]e Sands USBM has made [illegible]ts

GEM MONAZITE MINES, INC
215 McCarty Building
Boise Idaho.

Schedule attached to
FORM MF-100

1. Materials produced:
   (a) Monazite
   (b) Garnet, Zircon, Ilmenite

2. Owners, Dennis Brothers. 616 acres in Long Valley. All but 160 dredge land. 320 Acres in Round Valley, all dredge land. Adjoining land under negotiation. USBM has made tests on some of this land.
   (a) shafts none)
   (b) crosscuts none)
   (c) tunnels none)
   (d) other openings none) Not applicable
   Dredge operation

3. (a) 8 miles south of Cascade Idaho
   (b) Cascade Idaho Alpha Idaho
   (c) Sections 3-4-5-9-10, 29-30-32, Twp 12 North Range 4E B.M.
   (d) Valley County Idaho

4. (a) Not now in operation
   (b) Lessee Gem Monazite Mines, Inc.
   Contractor to be hired

5. Not in production. Production will be started when exploration indicates proper location, and value.

6.

Earle A. Pack	Many years mining	
Harry Heath	Many years as dredge operator	
John Bastida	Self employed contractor	10 years
John Barriatua	Self Employed contractor	20 years
John Reusser	Self employed land developer	20 years
K N Jackson	Investments and mortgages-accountant	20 years

7. (a) General area explored and written up by State Bureau of Mines. U S B M has explored in 1950. Results indicate justification of further work.
   (b) 3 different outfits have been working adjacent property for 1½ years, and according to all available information are planning on further expansion.
   (c) U S Bureau of Mines has only information known to us.

END OF PAGE ONE Form MF-100

(*b*). If deposit is other than placer:

(1) Submit assay plans and/or sections showing location and size of proved (measured) and probable (indicated) ore or mineral reserve.

(2) State the tonnage (indicate type of ton) and grade of each class of ore reserve, as above, and show how computed. Tabulated total ore reserve as follows:

TOTAL ORE OR MINERAL RESERVES

Ore or Mineral Reserve	Estimated Tons (a)	Metal or Mineral Content Per Ton (Grade) (b)	Gross Value Per Ton (c)	Recoverable Unit Value Per Ton (d)	Estimated Cost of Production Per Ton (e)
Measured (proved)					
	To be determined				
Indicated (probable)					

(*c*) If placer:

(1) Give estimated total yardage and average marketable mineral content of each deposit. to be determined

(2) Submit map showing location of placer deposit and surrounding area, with all test holes or pits. Submit logs of each hole and test pit with depth and average value of each. Sec. 4 - 5 T 12N R4E

(3) Describe gravel, stating whether fine, medium or coarse; loose, tight, cemented, or frozen, and whether it contains stumps or boulders more than 1 foot in diameter; if so, how large, and in what proportion. See USBM for logs

(4) Describe bedrock, giving type (granite, sandstone, shale, etc.) and state whether it is hard or soft, smooth, uneven or rough. Medium tight nothing over 1 foot. no bedrock known

(5) Describe overburden, stating whether loose, tight, or cemented; fine or coarse textured; furnish estimate of average thickness and total amount. Loose fine texture 2 feet average amount unknown

(6) Tabulate the reserves using the form outlined above for ore or mineral reserves.

Purpose of exploration application

13. Access Roads:

Give road distances to shipping, supply and residence points, stating kind and condition of roads.

State Highway 15 Good

14. Water Supply:

State source and quantity of water available for operations and whether sufficient for all seasons of year.

Clear Creek Skunk Creek year around supply adequate

15. Power:

State amount of power used, rate per hour, and source thereof. Idaho Power 1750 HP

16. Labor: none

State number and classes (miners, muckers, millmen, etc.) of men employed during a recent representative payroll period.

17. Equipment and Facilities: none

Describe present equipment on the property, including buildings. (State condition.) List major pieces of equipment now owned or controlled and in serviceable condition available for this operation.

18. Are there any particular conditions or circumstances affecting your operations that are not described above? If so, explain.

no

CERTIFICATION

The undersigned company, and the official executing this certification on its behalf, hereby certify that the information contained in this form and accompanying papers is correct and complete to the best of their knowledge and belief.

GEM MONAZITE MINES, INC.
(Name of company)

By K N Jackson
(Signature of authorized official)

28th April 1952
(Date)

Secretary-Treasurer
(Title)

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—63792-1

ASSIGNMENT OF LEASE.

KNOW ALL MEN BY THESE PRESENTS: That the undersigned, Earle A. Pack, John Bastida, John Barriatua, John H. Reusser, and K. N. Jackson, for valuable consideration, receipt of which is hereby acknowledged, do hereby set over, transfer, assign and sell unto Gem Monazite Mines, Inc., all our right, title and interest in and to the following described property situate in Valley County, Idaho, to-wit:

> The SE¼NE¼ and the NE¼SE¼ of Section 5, and the SW¼NW¼ and the NW¼SW¼ of Section 4, all in Township 12 North, Range 4 East of the Boise Meridian, containing 160 acres, more or less; and, also
>
> The S½NE¼, the N½SE¼. the SE¼SE¼, and the East 10 acres of the NE¼NE¼, all in Section 9; the W½NW¼ and the E½SW¼, and the W½SE¼, all in Section 10; the W½SE¼ and the SE¼SE¼ of Section 30; the SW¼ of Section 29; and the SE¼NW¼ os Section 32; all in Township 12 North, Range 4 East of the Boise Meridian, consisting of approximately 840 acres;

as evidenced by that certain indenture of lease dated October 24, 1951, made and entered into between LeRoy Dennis and Lois Dennis, husband and wife, and Frank Dennis, a widower, all of Cascade, Idaho, Lessors therein, and Earle A. Pack, of Boise, Idaho, Lessee therein, and the amendment to said lease dated December 13, 1951, entered into between the same parties.

TO HAVE AND TO HOLD unto said Gem Monazite Mines, Inc., its successors and assigns, subject, nevertheless, to all the terms and conditions thereof.

IN WITNESS WHEREOF, the undersigned have hereunto set their hands, this 21st. day of January, 1952.

S/ Earle A. Pack

Approved 3/8/52

S/ John H. Reusser

S/ LeRoy Dennis

S/ John C. Bastida

S/ Frank Dennis

S/ John Barriatua

S/ Lois Dennis

S/ K. N. Jackson

STATE OF IDAHO)
: ss.
County of Ada)

On this 21st. day of January, 1952, before me, the undersigned, a Notary Public for Idaho, personally appeared EARLE A. PACK, JOHN BASTIDA, JOHN BARRIATUA, JOHN H. REUSSER, and K. W. JACKSON, known to me to be the persons whose names are subscribed to the within and foregoing instrument, and acknowledged to me that they executed the same.

IN WITNESS WHEREOF, I have hereunto set my hand and affixed my official seal, the day and year in this certificate first above written.

S/ Herbert H. Eberle
Notary Public for Idaho
Residing at Boise, Idaho

Seal

L E A S E.

THIS INDENTURE OF LEASE, Made and entered into this 24 day of October, 1951, by and between LEROY DENNIS and LOIS DENNIS, husband and wife, and FRANK DENNIS, a widower, all of Cascade, Valley County, Idaho, hereinafter called "Lessors," and EARLE A. PACK, of Boise, Ada County, Idaho, hereinafter called "Lessee";

W I T N E S S E T H:

WHEREAS, the Lessors are the owners and in possession of certain real property situate in Valley County, Idaho, more particularly described as follows, to-wit:

> The SE¼NE¼ and the NE¼SE¼ of Section 5, and the SW¼NW¼ and the NW¼SW¼ of Section 4, all in Township 12 North, Range 4 East of the Boise Meridian, containing 160 acres, more or less.
>
> Together with all water and water rights thereunto belonging or in anywise appertaining; and

WHEREAS, the Lessors desire to lease the above described real property to Lessee for mining purposes, and Lessee desires to lease the same upon the terms and conditions hereinafter set forth;

NOW, THEREFORE, In consideration of the covenants and conditions hereinafter set forth, Lessors do hereby lease unto the Lessee the above described real property, together with all water and water rights used in connection therewith or appurtenant thereto, for the term of ten (10) years, commencing December 1, 1951, and ending December 1, 1961, with the option to renew the lease for an additional term of ten (10) years, as hereinafter provided.

That as rental for said lands the Lessee agrees to pay to the Lessors an amount equal to $1,000.00 per acre for each acre mined by the Lessee, or 10% of the gross returns from the sale of all metals, ores, timber, sands or any other materials of

value removed, excavated or processed from the lands, whichever sum is the greater. That said rental shall be paid as follows: The sum of $10,000.00 on or before thirty (30) days from date hereof, which sum shall be credited as rentals and advance royalties. The royalties shall be computed at the end of each month during the term of this lease, or any extensions or renewals thereof, and paid to the Lessors by the 10th of the following month. Lessee agrees that he will diligently commence and prosecure mining and ore dredging operations on the above described lands and will be in production and removing ores and metals from the lands not later than eighteen (18) months from date hereof, and will have located upon the premises a dredge capable of removing and processing ore and metals from the lands, with a capacity of not less than five thousand (5,000) cubic yards per day. Lessee shall operate said dredge continuously during the mining season, and said dredge shall be in operation at all times, except when prevented from operation by reason of inclement weather conditions, strikes, breakdowns, or any other conditions over which Lessee has no control.

It is understood and agreed that the above described premises are leased and to be used by Lessee for mining purposes only, and Lessors shall have the right to the continued use of the rest of the land not being mined for such use as Lessors see fit, other than mining operations. The Lessee shall have the right to remove and sell timber from the lands, which must necessarily be removed in connection with the mining operations. The Lessee shall be required at all times to keep the area of mining operation fenced against cattle and to provide adequate cattle guards to keep cattle out of the mining area.

In connection with the mining operations to be conducted by Lessee it is agreed that should any ores or valuable metals or materials be processed, which cannot be profitably sold or which are not sold by the Lessee, then all such materials shall be stockpiled upon the premises, and if not sold prior to the termination of the lease shall revert to and become the property of the Lessors.

In connection with the mining operations to be conducted by Lessee, Lessee shall systematically mine the entire area in designated plots, each plot to be completely mined before the dredge or other equipment is moved to a new plot. It is contemplated that the area to be mined shall be agreed upon between the parties, and the first mining operations shall commence in close proximity to the borderline of the above described premises and worked in either square or rectangular areas. The first area to be mined shall be of approximately ten (10) acres. As any area is completely mined a new area will be designated immediately adjacent to the mined area, and this plan continued throughout the entire mining operations of the above described premises.

In connection with the ten-acre plot to be mined first by the Lessee, it is the intent of the parties that the $10,000.00 down payment is payment of the minimum rental. In other areas to be designated and mined, it is agreed that the area shall be fixed in acres, and prior to any mining operations thereon Lessee shall pay to the Lessors an amount equal to $1,000.00 per acre for the plot to be mined. This procedure shall be continued throughout the life of the lease and mining operations to be conducted. All mining operations conducted upon the above

described premises ahll be carried on in such a manner as to derive the most profitable returns, which shall necessarily include mining to a depth which is profitable and feasible.

Lessee contemplates establishing a campsite on the above described premises. It will be required that any campsite so established by Lessee shall be mined as any other property, and Lessee shall be required to move his campsite for the purpose of mining the same when the campsite comes within an area designated for mining purposes.

In connection with the mining operations to be conducted by Lessee, Lessee agrees to conform to all the laws of the United States of America and the State of Idaho and will keep the property posted according to law, notifying all persons that the property is being operated under lease. Lessee shall maintain at all times adequate liability insurance, which will keep and hold the Lessors free and harmless from any liability from third persons by reason of the mining operations to be conducted by Lessee. The Lessee shall maintain and keep in full force and effect Workmen's Compensation Insurance as required by the laws of the State of Idaho. Lessee shall not permit any materialman's or workman's liens to be filed against the property and shall promptly discharge and pay all obligations incurred by him in connection with the mining operation. All taxes and assessments levied and assessed against any personal property which is placed upon the above described premises shall be the obligation of the Lessee and shall be promptly paid when due. Upon the termination of this lease, either by its own terms or by forfeiture, Lessee shall have the right to remove from the premises all equipment and buildings place thereon by him and to remove the same within sixty (60) days following

such termination, provided that all royalties due and owing to Lessors have been fully paid.

That as the above referred to plots of ground are mined the right to possession of the mined plot shall immediately revert to the Lessors, and they may thereupon go into possession and use the same in any manner they desire. It is further understood that Lessors contemplate placing a dwelling upon the above described premises within the next two (2) or three (3) years, and should such dwelling be placed upon an area which has not previously been mined, such area, constituting not more than five (5) acres in total, is hereby reserved from the terms of this lease, and Lessee shall not have the right to go upon or mine the same without the consent of the Lessors.

The Lessee shall not assign, transfer or sublet any part or portion of the above described premises without the written consent of either Leroy Dennis or Frank Dennis; provided, however, Lessors understand that it is contemplated that this lease is to be transferred to a corporation to be formed, of which Lessee will be a major stockholder, and Lessors do hereby consent to the transfer to such corporation.

In consideration of the rentals to be paid by Lessee to Lessors, as hereinbefore provided, Lessors hereby extend to Lessee an option to renew this lease for an additional period of ten (10) years, commencing December 1, 1961, and terminating December 1, 1971, and to renew this lease upon the same terms and conditions as set forth herein. Lessee may exercise this option to renew by giving written notice of his intention to renew the same at least sixty (60) days prior to December 1, 1961.

Further in consideration of the rentals to be paid by

Lessee to Lessors, Lessors hereby extend to Lessee the option to lease certain other lands now owned by Lessors, situate in Valley County, State of Idaho, more particularly described as follows:

> The S½NE¼, the N½SE¼, the SE¼SE¼, and the East 10 acres of the NE¼NE¼, all in Section 9; the W½NW¼, the N½SW¼, and the W½SE¼, all in Section 10; the N½SE¼, the SE¼SE¼ of Section 30; the SW¼ of Section 29; and the SE¼NW¼ of Section 32, all in Township 12 North, Range 4, East of the Boise Meridian, consisting of approximately 840 acres.

This option to lease the last above described real property may be exercised by Lessee at any time during the term of this lease or any extensions or renewals thereof. The terms and conditions of such lease covering the last above described real property shall be agreed upon between the parties, and Lessee shall have at all times the first right to lease said premises at such rental and upon such terms as Lessors may receive from any other person on a bona fide offer to lease.

The Lessors shall have the right at all reasonable times to examine the books, records and accounts of the Lessee and shall have the right to make a complete audit of the same. Such audit shall be at the expense of the Lessors. Lessors shall also have the right to visit and inspect the operation or any part thereof.

It is understood that Lessee shall not be entitled to possession of the first above described premises until the initial payment of $10,000.00 has been made, and should Lessee fail to comply with any other terms and conditions, and this lease be terminated, then said $10,000.00 shall be forfeited to Lessors and be deemed liquidated damages for breach of contract.

Should Lessee fail to make the payment of $10,000.00 due within thirty (30) days from date hereof, or to pay the royalties

as herein agreed to be paid, or fail to comply with any other terms and conditions of this agreement, then Lessors may terminate this lease upon fifteen (15) days written notice to the Lessee. If the matters are not corrected within the fifteen (15) day period, this lease shall thereupon be terminated, and Lessee shall have no further right, title or interest in and to the above described property.

This agreement shall be binding upon the heirs, executors, administrators and assigns of the parties hereto.

IN WITNESS WHEREOF, the parties hereto have hereunto set their hands and seals, the day and year first above written.

/S/ Leroy Dennis

/S/ Frank Dennis

/S/ Mrs. Lois Dennis
Lessors.

/S/ Earle A. Pack
Lessee.

STATE OF IDAHO (
: ss.
County of Valley (

On this 24 day of October, 1951, before me, the undersigned, a Notary Public for Idaho, personally appeared LEROY DENNIS and LOIS DENNIS, husband and wife, FRANK DENNIS, a widower, and EARLE A. PACK, known to me to be the persons whose names are subscribed to the within and foregoing instrument, and acknowledged to me that they executed the same.

IN WITNESS WHEREOF, I have hereunto set my hand and affixed my official seal, the day and year in this certificate first above written.

/S/ Forest E. Robb
Notary Public for Idaho
Residing at
Recorder, Valley Co. Idaho

SEAL

AMENDMENT TO LEASE

THIS AGREEMENT OF AMENDMENT, Made and entered into this 25th day of February, 1952 by and between Leroy Dennis and Frank Dennis, as first parties, and Gem Monazite Mines, Inc., as second party;

WITNESSETH:

WHEREAS, the parties hereto, by reason of the assignment to Gem Monazite Mines, Inc., by Earle A. Pack, John H. Reusser, John Barriatua, John Bastida and K. N. Jackson, owners of a lease which was originally executed by the first parties herein and Earle A. Pack; the original lease for which was executed on October 24,1951,and which covered real property situate in Valley County, Idaho; and

Whereas said indenture of lease provides for the payment of $10,000.00 rental on or before November 24th 1951, and further that this lease was further amended under date of 13th of December,1951 to extend the time of payment to 13th March, 1952;

NOW THEREFORE, in consideration of the sum of Two Thousand ($2000.00) Dollars in cash receipt for which is hereby acknowledged, and the further payment of the sum of Five Thousand($5000.00)Dollars to be paid by the issuance to the first parties of 50,000 shares of the fully paid, non-assessable common capital stock of Gem Monazite Mines, Inc., and the further payment of $1000.00 on the 1st day of April 1952; $1000.00 on the first day of May 1952, and the payment of $1000.00 on the first day of June, the provision in the original lease which required the payment of $10,000.00 shall have been fully performed and no further payment shall be made except as provided in the lease with respect to royalties from production.

IT IS FURTHER AGREED, that in consideration of the first parties co-operative and friendly attitude toward the second partly,the Directors of the second party agree to cause to be issued from their own personal holdings (as contributed surplus for the company) shares totaling a value of $2500.00.

The lease of October 24, 1951 is in all particulars in full force and effect and binding upon the parties hereto.

IN WITNESS WHEREOF, the parties have hereunto set their hands the day and year first above written.

S/ Leroy Dennis

S/ Frank Dennis
First Parties

GEM MONAZITE MINES, INC.

S/ Earle A. Pack
President

S/ K. N. Jackson
Secretary

STATE OF IDAHO)
County of Ada) ss

On this 27th day of February 1952, personally appeared before me Earle A. Pack, the President and K.N.Jackson, the Secretary of GEM MONAZITE MINES, INC., and stated that they were authorized to execute the foregoing document for the uses and purpose therein mentioned. Witness my hand and official seal this 27th day of February 1952.

Seal

S/ Herbert H. Eberle
Notary Public for Idaho
Residing in Boise.

STATE OF IDAHO)
County of Valley)

On this 1st day of March 1952 before me, a Notary Public in and for the State of Idaho, personally appeared Leroy Dennis and Frank Dennis, known to me to be the individuals whose names are subscribed to the foregoing instrument and who acknowledged to me that they signed the same as their free and voluntary act and deed.

IN WITNESS WHEREOF, I have hereunto set my hand and official seal the day and year above written.

Seal

S/ Corabelle Gedney
Notary Public in and for the State of Idaho residing in Boise

AMENDMENT TO LEASE.

THIS AGREEMENT OF AMENDMENT, Made and entered into this 13th day of December, 1951, by and between LEROY DENNIS and FRANK DENNIS, as first parties, and EARLE A. PACK, as second party;

WITNESSETH:

WHEREAS, the parties hereto did on October 24, 1951, enter into a certain indenture of lease with reference to real property situate in Valley County, Idaho; and

WHEREAS, said indenture of lease provides for the payment of $10,000.00 rentals on or before November 24, 1951, and the parties hereto desire to extend the time for payment of said rentals; and

WHEREAS, no provision was made in said lease with reference to the restoration of the land following the mining operations;

NOW, THEREFORE, In consideration of the sum of One Dollar, each paid to the other, IT IS HEREBY AGREED, as follows:

That the provision for the payment of $10,000.00 rent on or before November 24, 1951, as provided in that said lease dated October 24, 1951, hereinbefore referred to, is hereby amended, and the Lessee in said lease, to-wit; Earle A. Pack, is hereby given until March 13, 1952, within which to pay said rental of $10,000.00, as provided on page 2 of said lease.

IT IS FURTHER AGREED, That in connection with any mining operations carried on by Lessee, or his assigns, that said Lessee, or his assigns, will upon completion of the mining operations cause all diggings to be filled in and top-soil placed back on top of the diggings and insofar as possible the lands restored to their natural condition.

Except as amended by this agreement said lease of October 24, 1951, to which this is attached, hereinbefore referred to, is in all other particulars in full force and effect and binding upon the parties hereto.

IN WITNESS WHEREOF, the parties hereto have hereunto set their hands, the day and year first above written.

S/ Frank Dennis

S/ Leroy Dennis
First Parties

S/ Earle A.Pack

STATE OF IDAHO)
: ss.
County of Ada)

On this 13 day of December, 1951, before me, the undersigned, a Notary Public for Idaho, personally appeared LEROY DENNIS, FRANK DENNIS and EARLE A. PACK, known to me to be the persons whose names are subscribed to the within and foregoing instrument, and acknowledged to me that they executed the same.

IN WITNESS WHEREOF, I have hereunto set my hand and affixed my official seal, the day and year in this certificate first above written.

S/ Dale Clemons
Notary Public for Idaho
Residing at Boise, Idaho

Seal

A. H. HOLLAND, PRES.-TREAS. EDMUND E. PHILLIPS, VICE-PRES.—GEN. M[illegible] M. E. HOLLAND, SECRETARY

OUR MOTTO:—WHAT THERE IS IN IT, NO MOR[illegible]O LESS.

THE COLORADO ASSAYING COMPANY

(Incorporated)

ASSAYERS AND CHEMISTS

2013 WELTON STREET

COMPLETE ANALYSIS ON ANY ORE $15.00
THIS ANALYSIS WILL DETECT AND REPORT EVERY ELEMENT OR METAL THAT MAY BE PRESENT IN THE ORE, TOGETHER WITH THE PERCENTAGE AND VALUE OF EACH. IT IS THE MOST SATISFACTORY ANALYSIS TO APPLY ON ALL UNKNOWN ORES, WHOSE GENERAL APPEARANCE INDICATES PROBABLE VALUES

QUALITATIVE ANALYSIS $5.00
THIS ANALYSIS WILL DETECT AND REPORT THE ABSENCE OR PRESENCE OF THE FOLLOWING 23 METALS: LEAD, SILVER, MERCURY, GOLD, BISMUTH, ARSENIC, ANTIMONY, COPPER, CADMIUM, TIN, ALUMINUM, MANGANESE, COBALT, ZINC, CHROMIUM, STRONTIUM, IRON, NICKEL, BARIUM, CALCIUM, MAGNESIUM, TUNGSTEN AND MOLYBDENUM.

DENVER 1, COLO., Oct. 15, 1951.

Report on Spectrographic Analysis submitted by Mr. Earl A. Pack, Boise, Idaho.

* *

"Monazite" Sand

ELEMENTS PRESENT	APPROXIMATE PERCENTAGES
Silicon	10.-20.
Iron	major
Titanium	major
Cerium	2.-10.
Aluminum	1.-5.
Calcium	1.-3.
Magnesium	1.-3.
Manganese	1.-3.
Phosphorus	1.-3.
Zirconium	.5-.2
Thorium	.1-1.
Sodium	.1-.5
Yttrium	.1-1.
Lanthanum	.1-1.
Erbium	.01-.1
Potassium	.01
Barium	.01
Strontium	.001
Lead	.001
Chromium	trace
Vanadium	trace
Uranium	trace

Gold .02 ounces per ton at $35.00 per ounce -
70¢ per ton
Silver trace

* *

REMARKS: The black mineral in this sample is chiefly Ilmenite (iron and titanium oxides). The red-brown crystals are Garnet (complex iron aluminum calcium silicate). The yellow grains are Monazite (phosphate of cerium and other rare earths with thorium). The white grains are Quartz (silica), while the heavy clear grains are Zircon (zirconium silicate). The few pink grains are probably Ruby (aluminum oxide).
The Monazite will be marketable, if concentrated further.
Garnet and Ruby will make mild abrasives, also Zircon. A high grade Zircon concentrate is worth much more than abrasives. Ilmenite concentrates should run 60% Titanium Dioxide content to be readily marketable.

Respectfully submitted,

THE COLORADO ASSAYING COMPANY
Edmund Phillips

Gem Monazite Mines, Inc.

OFFICE: 215 McCARTY BLDG. BOISE, IDAHO
OPERATION: CASCADE, IDAHO
PHONE 188

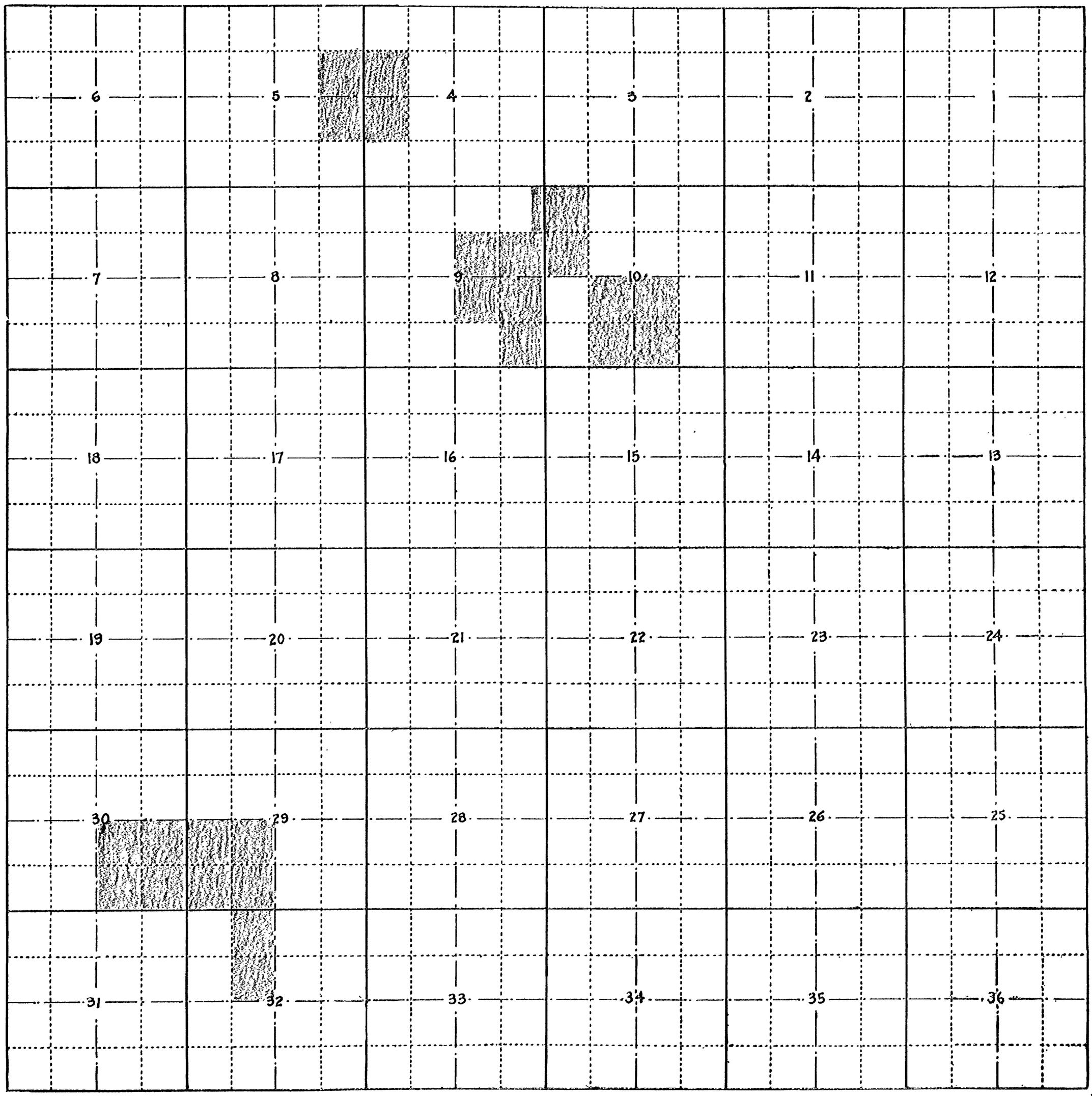
Statement of Condition
at
April 30th-1952

ASSETS:			
First Security Bank		12,719.73	
Subscriptions Receivable		11,015.00	
Dennis Lease-Approx 1000 Acres		1,000,000.00	
Organization Expense		11,123.60	
TOTAL ASSETS			1,034,858.33
LIABILITIES:			
Commissions Payable Contingent upon payment of Deferred Subscriptions		3,013.60	
Dennis Brothers-Final Payment on lease deposit-due 6-1-52		1,000.00	
TOTAL LIABILITIES			4,013.60
CAPITAL:			
Capital Stock Subscribed		1,000,000.00	
Donated Surplus		600,000.00	
		1,600,000.00	
Treasury Stock	560,700.00		
* Expense to date	8,455.27	569,155.27	1,030,844.73
TOTAL LIABILITIES AND CAPITAL			1,034,858.33

Expenses to date:

Commissions	6160.00
Office Supplies	63.00
Sales expense	134.18
Documentary Stamps	1425.00
Dredge Procurement expense	210.29
Life Insurance Premiums on Officers(5 x 5M)	462.80
	8455.27

Jno. Butterdorf
Inv 1640

TOWNSHIP 12 N RANGE 4 E. B.M. cbcd

Printed and for sale by The Statesman Shop, Boise, Idaho