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

224 New Customhouse
Denver 2, Colorado

November 26, 1952

Memorandum

To: Administrator, Defense Minerals Exploration Administration
Attention: 210

From: Field Team, Region IV

Subject: Final Report, DMEA Docket 2739 (Tin) Milton I. Leydig, Dakota-Wyoming Placer Claim, Crook County, Wyoming

Enclosed are four copies of the final report on DMEA 2739, two copies of Form 3b and a copy of the letter of denial to the applicant.

W. H. King
W. H. King

A. H. Koschmann
A. H. Koschmann

Enclosures

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

224 New Customhouse
Denver 2, Colorado

November 26, 1952

Mr. Milton I. Leydig
1803 Jerome
Helena, Montana

Re: DMEA Docket 2739

Dear Mr. Leydig:

Reference is made to your application for Government aid on the Dakota-Wyoming Placer.

Projects approved by the Defense Minerals Exploration Administration must, in its judgement, show definite promise of yielding material of acceptable grade, and in quantities that will significantly improve the mineral supply position for the National Defense Program.

A careful study of your property and data available to this agency reveals that the probability of disclosing mineable reserves of strategic tin by your proposed exploration program is not considered sufficiently promising to justify Government participation. Under these circumstances we regret to advise you that your application for exploration aid is denied.

Very truly yours,

W. H. King
W. H. King
Field Team, Region IV

A. H. Koschmann
A. H. Koschmann
Field Team, Region IV

HMC:oc
cc: Administrator
SRWilson
Subject
Chron.
AHKoschmann (2)

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF MINES

224 New Customhouse
Denver 2, Colorado

November 26, 1952

Memorandum

To: Field Team, Region IV

From: Acting Chief, Mining Division, Region IV

Subject: Final Report, DMEA Docket 2739, (Tin) Milton I. Leydig, Dakota-Wyoming Placer, Crook County, Wyoming

Enclosed are nine copies of the engineers memorandum report on the subject docket.

Because the applicant was unable to show any indication that tin occurs on this property the examining engineer recommends that the application be denied.

We concur in this recommendation.

W. H. King
W. H. King

Enclosures

Reviewed by
DMEA OPERATING COMMITTEE

12-5-52
(Date)

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF MINES

Region IV

Building 20, Room 137
Denver Federal Center
Denver 14, Colorado
November 19, 1952

Memorandum

To: Executive Officer, Field Team, Region IV

From: Chief, Colorado Branch, Mining Division, Region IV

Subject: DMEA2739 (Tin), Milton I. Leydig (Dakota-Wyoming placer claim), Creek County, Wyoming

Please find enclosed the original and eight copies of F. D. Everett's memorandum on the subject docket.

We have prepared, in this instance, only a memorandum instead of the regular report for obvious reasons.

The applicant's request admittedly stems from a theory he has evolved over a period of years and he presents no concrete evidence that there is actually any cassiterite contained in the placer. The area he proposes working is presently utilized for grazing purposes and is traversed by a good timber transportation road. Both of these uses would be destroyed by Leydig's proposed project and are probably more valuable than any tin production that might eventuate. The application also fails to substantiate ownership and the examiners were unable to find location markers on the ground.

Under the circumstances, it is difficult to justify a field examination. Everett recommends denial of the loan request and I concur.

The brochure submitted by the Region IV Field Team to A. H. Koschmann, October 23, 1952, with instructions to make a field examination, is returned herewith. Your attention is called to the last paragraph of the last page of the brochure stating a plat of the area and geological map and section of the Tinton district are included. These items were not with the document received from the Survey geologist.

W. M. Traver, Jr.

W. M. Traver, Jr.

enclosures

WMT/eb
cc 8
DMEA 2739, Chron.

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF MINES

Region IV

Bureau of Mines
Building 20, Room 137
Denver Federal Center
Denver 14, Colorado
November 19, 1952

Memorandum

To: Chief, Colorado Branch, Mining Division, Region IV

From: F. D. Everett

Subject: DMEA 2739 (Tin), Milton I. Leydig (Dakota-Wyoming placer claim), Crook County, Wyoming

Milton I. Leydig and two associates applied for a Defense Minerals Exploration Administration loan, docket 2739, for prospecting a tin placer deposit on Sand Creek in eastern Crook County, Wyoming. The cost of the project, which is to churn drill 80 holes, each 10 feet deep, and bulldoze several cuts across the drainage structure of Sand Creek, was estimated at $10,780.00. The project area is in T. 51 N., R. 60 W.; T. 51 N., R. 61 W.; and T. 52 N., R. 61 W.; 6 P. M.

The project area was examined by F. D. Everett, Bureau of Mines, and E. N. Harshman, U. S. Geological Survey, accompanied by Milton I. Leydig, applicant, on November 11, 1952.

Sand Creek drains northwest from Nigger Hill, a prominent structure resulting from an igneous uplift. Several pegmatite dikes have been found at Tinton, South Dakota, near the crest of Nigger Hill that have been mined for gold, tin, tantalum, and other pegmatite minerals. The pegmatite-bearing area is in the Tinton Mining District.

E. D. Gardner, in Bureau of Mines Information Circular 7069, "Tin Deposits of the Black Hills", estimates that 14,330 tons of ore and 121,000 pounds of tin have been produced from the Tinton area. About 18,698 pounds of tin have been produced from placer operations in the Tinton area in South Dakota and Wyoming from 1884 to 1935.

Milton I. Leydig, applicant, proposes a theory that stream tin can be produced from Sand Creek placer gravel. He believes that about 3,500 feet of igneous rock containing pegmatite dikes were eroded away and much of this material was transported down Sand Creek. He also believes that the most favorable area for tin (cassiterite) deposition is on both sides of Sand Creek below the junction of Grand Canyon because of the wider width of the stream basin.

Sand Creek below the area under consideration is a fair-sized stream flowing 4 or 5 cubic feet of water per second. In the area of the proposed project the creek was dry. Indications are that heavy flows of water occur in the spring months and during periods of flash floods.

Erosion probably did remove 3,500 feet of pegmatite-bearing material above the present surface in the Tinton Mining District but the drainage was not necessarily down Sand Creek, as Sand Creek resulted from a later period of erosion. The amount of pegmatite

rock observed along 2 miles of creek bottom above the area of the proposed project contained an estimated 1 percent pegmatite. This would indicate less than 0.1 percent tin minerals. No test pits or any other form of development work has been performed. No evidence of tin-bearing gravels could be established. Leydig admittedly based his application on a personal theory that commercial quantities of tin could be recovered.

All previous production of tin from placer operations on Sand Creek were 3 to 4 miles above the area located by the applicant.

Lydig was foreman of a tin concentrating mill at Tinton, South Dakota, in 1910. Since 1949 he has visited Sand Creek several times but has never made any qualitative tests for tin on the gravels in the area. In July or August 1952 locations were supposedly made of 160 acres covering the sand and gravel deposits in Sand Creek for 4.4 miles beginning at the south end of Ranch A, which is marked by a stone arch across the old road, and continuing southward to the junction up Grand Canyon road. The width of the placer area varies from 75 to about 800 feet, including the graveled secondary road. The depth of the gravel will average in excess of 10 feet. In the wide portion of the stream basin 3 to 6 feet of black earth covers the gravel. Actual claims have not been staked; no location work has been performed. The area of the proposed work is utilized for cattle grazing. The road is principally utilized by timber hauling trucks for the Homestake Mining Company. Sand Creek is a good recreational area.

Because the applicant could not show any indication that tin occurs in the concerned area, no consideration should be given the proposed project and the application is not recommended for approval.

F. D. Everett
F. D. Everett
Mining Engineer

FDE/cb

cc 8
DMEA 2739
Chron.

Approved
A. H. Koschmann
11/14/52

November 12, 1952

Memorandum

To: Mr. A. H. Koschmann

From: E. N. Harshman, Geologist, U. S. Geological Survey

Subject: DMEA Docket 2739 (Tin), Milton I. Leydig, Dakota-Wyoming Claim, Crook County, Wyoming.

Milton I. Leydig, 1803 Jerome, Helena, Montana, has applied for Government assistance, DMEA Docket 2739, to explore for cassiterite on the Dakota-Wyoming placer claim. He and 2 partners hold 160 acres of placer ground along Sand Creek in T. 51 N., R. 60 W.; T. 51 N., R. 61 W.; and T. 52 N., R. 61 W., Crook County, Wyoming.

The applicant proposes to explore the claim by trenching, test pitting, and churn drilling, at an estimated cost of $10,780.

The property was examined on November 11, 1952, in company with F. D. Everett, U. S. Bureau of Mines, and Milton I. Leydig, the applicant.

Sand Creek heads in the Tinton mining district where tin bearing pegmatites occur in quartz-mica, graphite, and hornblende schists. Since 1902 about 50 tons of tin have been produced from cassiterite bearing lenses in the pegmatites. Mining operations have been intermittent and generally unprofitable. Some cassiterite has been found in old terrace gravels and recent stream deposits along Sand Creek immediately downstream from the Tinton district.

The Dakota-Wyoming placer claim lies about 6 miles downstream from the Tinton mining district. In this area Sand Creek has eroded a

steep walled canyon in Carboniferous sandstone and limestone. The flat valley floor ranges from 50 to 800 feet in width, and averages less than 200 feet wide. Sand and gravel, of unknown thickness, covers the valley floor and at least 2 old stream terraces are present in the area. A soil mantle, ranging from a few inches to 5 feet in thickness, covers most of the gravel.

The examining team was unable to confirm the presence of cassiterite in the gravel deposits on the Dakota-Wyoming placer claim. The applicant has done no exploration on the property and has not found cassiterite in these gravels. The entire exploration project is based on the applicant's belief that since some of the erosion products of the Tinton area find their way into Sand Creek, these gravels must contain cassiterite.

Since the applicant has made no effort to prospect the Dakota-Wyoming placer claim and has no proof of the presence of cassiterite in these gravels, it is recommended that the application for exploration assistance, DMEA Docket 2739, be denied.

COPY

224 New Customhouse
Denver 2, Colorado

November 26, 1952

Mr. Milton I. Leydig
1803 Jerome
Helena, Montana

Re: DMEA Docket 2739

Dear Mr. Leydig:

Reference is made to your application for Government aid on the Dakota-Wyoming Placer.

Projects approved by the Defense Minerals Exploration Administration must, in its judgement, show definite promise of yielding material of acceptable grade, and in quantities that will significantly improve the mineral supply position for the National Defense Program.

A careful study of your property and data available to this agency reveals that the probability of disclosing mineable reserves of strategic tin by your proposed exploration program is not considered sufficiently promising to justify Government participation. Under these circumstances we regret to advise you that your application for exploration aid is denied.

Very truly yours,

/s/ W. H. King
Field Team, Region IV

/s/ A. H. Koschmann
Field Team, Region IV

HMC:oc
cc: Administrator
SRWilson
Subject
Chron.
AHKoschmann (2)

BY

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

Room 224 New Customhouse
Denver 2, Colorado

November 26, 1952

Memorandum

To: Administrator, Defense Minerals Exploration Administration
Attention: 210

From: Field Team, Region IV

Subject: Final Report, DMEA Docket 2739 (Tin) Milton I. Leydig, Dakota-Wyoming Placer Claim, Crook County, Wyoming

Enclosed are four copies of the final report on DMEA 2739, two copies of Form 3b and a copy of the letter of denial to the applicant.

W. H. King
W. H. King

A. N. Koschmann
A. N. Koschmann

Enclosures

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF MINES

[redacted]
Denver 2, Colorado

November 26, 1952

Memorandum

To: Field Team, Region IV

From: Acting Chief, Mining Division, Region IV

Subject: Final Report, DMEA Docket 2739, (Tin) Milton T. Lagtig, Dakota-Wyoming Placer, Crook County, Wyoming

Enclosed are nine copies of the engineers memorandum report on the subject docket.

Because the applicant was unable to show any indication that tin occurs on this property the examining engineer recommends that the application be denied.

We concur in this recommendation.

W. H. King
W. H. King

Enclosures

Approved by
DMEA OPERATING COMMITTEE

12-5-52
(date)

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF MINES

Region IV

Building 20, Room 137
Denver Federal Center
Denver 14, Colorado
November 19, 1952

Memorandum

To: Executive Officer, Field Team, Region IV

From: Chief, Colorado Branch, Mining Division, Region IV

Subject: DMEA2739 (Tin), Milton I. Laydig (Dakota-Wyoming placer claim), Crook County, Wyoming

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The applicant's request admittedly stems from a theory he has evolved over a period of years and he presents no concrete evidence that there is actually any cassiterite contained in the placer. The area he proposes working is presently utilized for grazing purposes and is traversed by a good timber transportation road. Both of these uses would be destroyed by Laydig's proposed project and are probably more valuable than any tin production that might eventuate. The application also fails to substantiate ownership and the examiners were unable to find location markers on the ground.

Under the circumstances, it is difficult to justify a field examination. Everett recommends denial of the loan request and I concur.

The brochure submitted by the Region IV Field Team to A. H. Koschmann, October 23, 1952, with instructions to make a field examination, is returned herewith. Your attention is called to the last paragraph of the last page of the brochure stating a plat of the area and geological map and section of the Tinton District are included. These items were not with the document received from the Survey geologist.

W. M. Traver, Jr.

W. M. Traver, Jr.

enclosures

WMT/eb
cc: 8
DMEA 2739, Chron.

Region IV

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF MINES

Bureau of Mines
Building 20, Room 137
Denver Federal Center
Denver 14, Colorado
November 19, 1952

Memorandum

To: Chief, Colorado Branch, Mining Division, Region IV

From: F. D. Everett

Subject: DMEA 2739 (Tin), Milton I. Leydig (Dakota-Wyoming placer claim), Crook County, Wyoming

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Sand Creek drains northwest from Nigger Hill, a prominent structure resulting from an igneous uplift. Several pegmatite dikes have been found at Tinton, South Dakota, near the crest of Nigger Hill that have been mined for gold, tin, tantalum, and other pegmatite minerals. The pegmatite-bearing area is in the Tinton Mining District.

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Milton I. Leydig, applicant, proposes a theory that stream tin can be produced from Sand Creek placer gravel. He believes that about 3,500 feet of igneous rock containing pegmatite dikes were eroded away and much of this material was transported down Sand Creek. He also believes that the most favorable area for tin (cassiterite) deposition is on both sides of Sand Creek below the junction of Grand Canyon because of the wider width of the stream basin.

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Erosion probably did remove 3,500 feet of pegmatite-bearing material above the present surface in the Tinton Mining District but the drainage was not necessarily down Sand Creek, as Sand Creek resulted from a later period of erosion. The amount of pegmatite

rock observed along 2 miles of creek bottom above the area of the proposed project contained an estimated 1 percent pegmatite. This would indicate less than 0.1 percent tin minerals. No test pits or any other form of development work has been performed. No evidence of tin-bearing gravels could be established. Leydig admittedly based his application on a personal theory that commercial quantities of tin could be recovered.

All previous production of tin from placer operations on Sand Creek were 3 to 4 miles above the area located by the applicant.

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Because the applicant could not show any indication that tin occurs in the concerned area, no consideration should be given the proposed project and the application is not recommended for approval.

F. D. Everett
F. D. Everett
Mining Engineer

FDE/cb

cc 8
DMEA 2739
~~Chron.~~

Approved
A.H. Koschmann
11/14/52

November 12, 1952

Memorandum

To: Mr. A. H. Koschmann

From: E. N. Harshman, Geologist, U. S. Geological Survey

Subject: DMEA Docket 2739 (Tin), Milton I. Loydig, Dakota-Wyoming Claim, Crook County, Wyoming.

Milton I. Loydig, 1803 Jerome, Helena, Montana, has applied for Government assistance, DMEA Docket 2739, to explore for cassiterite on the Dakota-Wyoming placer claim. He and 2 partners hold 160 acres of placer ground along Sand Creek in T. 51 N., R. 60 W.; T. 51 N., R. 61 W.; and T. 52 N., R. 61 W., Crook County, Wyoming.

The applicant proposes to explore the claim by trenching, test pitting, and churn drilling, at an estimated cost of $10,700.

The property was examined on November 11, 1952, in company with F. D. Everett, U. S. Bureau of Mines, and Milton I. Loydig, the applicant.

Sand Creek heads in the Tinton mining district where tin bearing pegmatites occur in quartz-mica, graphite, and hornblende schists. Since 1902 about 50 tons of tin have been produced from cassiterite bearing lenses in the pegmatites. Mining operations have been intermittent and generally unprofitable. Some cassiterite has been found in old terrace gravels and recent stream deposits along Sand Creek immediately downstream from the Tinton district.

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Since the applicant has made no effort to prospect the Dakota-Wyoming placer claim and has no proof of the presence of cassiterite in these gravels, it is recommended that the application for exploration assistance, OMCA Docket 2739, be denied.

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

224 New Customhouse
Denver 2, Colorado

October 17, 1952

Memorandum

To: Administrator, Defense Minerals Exploration Administration
Attention: 210

From: Executive Officer, Field Team, Region IV

Subject: Docketing for Exploration Assistance

Enclosed herewith in duplicate is DMA Form 3a and Form MF-103 in triplicate and supporting data pertaining to the following applications for Government assistance in exploration work.

Milton I. Leydig
1803 Jerome
Helena, Montana dmea 2739

Jerold C. Bosley
603 W. Birch Ave. dmea 2738
Flagstaff, Arizona

Floyd Hamrick & Charles A. Linscott
1307 Colorado Ave.
Grand Junction, Colorado dmea 2737

John F. Shaw

John F. Shaw for
W. H. King

Enclosures

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
OCT 20 1952

MF-103
(Revised April 1952)

UNITED STATES DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION

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

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

Not to be filled in by applicant

Docket No. DMEA 2739
Metal or Mineral
Date Received 10-20-52
Estimated Cost
Participation (Government %)

INSTRUCTIONS

1. *Name of applicant.*—(*a*) State here your full legal name, in the form in which you will wish to contract, and your mailing address: Milton I. Leydig Partnership
1803 Jerome, Helena, Montana
Dr. W. J. Doyle, Superior, Montana Partner
R. F. Wellcome, Port Angeles, Washington Partner

(*b*) If other than an individual, add to your name above whether a corporation, partnership, etc., and the name of the State in which incorporated or otherwise organized.

(*c*) If a corporation, add to above statement, titles, names and addresses of officers.

(*d*) If a partnership, add to the above statement the names and addresses of all partners.

2. *General.*—Read DMEA Order 1, "Government Aid in Defense Exploration Projects," before completing this application. Submit this application and all accompanying papers in quadruplicate (four copies), with your name and address on each sheet of the application and on all accompanying papers. Where sufficient space is not provided on the form for all required information, state it on an accompanying paper, with a reference in each case to the instruction to which it refers by number. Comply with all applicable instructions; or, if not applicable, so state. File the application with Defense Minerals Exploration Administration, Department of the Interior, Washington 25, D. C., or with the nearest field executive officer thereof.

3. *Applicant's property rights.*—(*a*) State the legal description of the land upon which you wish to explore, including all land which you possess or control that may be benefited by the exploration, and excluding any land or interest in land which is not to be included in the exploration project contract 160 acres adjacent to Sand Creek, Wyoming
T. 51 North, R. 60 West
T. 51 North, R. 61 West
T. 52 North, R 61 West

(*b*) State any mine name by which the property is known. Dakota-Wyoming placer claim

(*c*) State your interest in the land, whether owner, lessee, purchaser under contract, or otherwise Owner,
M. I. Leydig 60%

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

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

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

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

(*b*) State past and current production, and ore reserves, if any, giving quantities and grades.

(*c*) Describe the geologic features of the property, including mineralization, type of deposit (vein, bedded, etc.), and your reasons for wishing to explore. Illustrate with maps or sketches. Send with your application (but not necessarily as a part of it) any geologic or engineering report, assay maps, or other technologic information you may have, indicating on each whether you require its return to you.

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

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

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
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OCT 20 1952

16—66551-1

5. *The exploration project.*—(a) State the mineral or minerals for which you will explore tin (cassiterite), tantalum and other rare minerals

(*b*) Describe fully the proposed work, including a map or sketch of the property showing a plan (and cross sections if needed) of any present mine workings, and the location of the proposed exploration work as related to such features as contacts, veins, ore-bearing beds, etc.

(*c*) The work will start within 15 days and be completed within 18 months from the date of an exploration project contract.

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

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

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

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

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

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

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

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

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

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

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

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

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

☒ Money ☐ Use of equipment owned by you ☐ Other

Explain in detail on acompanying paper.

CERTIFICATION

The undersigned, whether as an individual, corporate officer, partner, or otherwise, both in his own behalf and acting for the applicant, certifies that the information set forth in this form and accompanying papers is correct and complete, to the best of his knowledge and belief.

Dated Oct 10, 1951

Milton I. Leydig
(Applicant)

By Milton I. Leydig

Title 18, U. S. Code (Crimes), Section 1001, makes it a criminal offense to make a willfully false statement or representation to any department or agency of the United States as to any matter within its jurisdiction.

U. S. GOVERNMENT PRINTING OFFICE 16—66551-1

4.

Physical Description

(a) In early times placer mining was carried on by prospectors for gold. No interest in former work. Within the past ten years I have examined the placer several times.

(b) In early times there was a comparatively small production.

(c) Sand Creek drains the mineral hill and Tinton districts which produced---105,039--pounds between the following years. 1903 and 1927

The Mineral Hill district has large dikes of pegmatite in which the cassiterite occurs. The erosion has been extensive and carried much of the minerals to the placers in Sand Creek. Gold, tin and tantalum have been worked in the past. The following is an abstract from Geological Survey Bulletin 922-T

ABSTRACT

By Ward C. Smith and Lincoln R. Page

The Tinton district, which is in the northern part of the Black Hills, Lawrence County, South Dakota, produced 105,039 pounds of tin between 1903 and 1927.

The oldest rocks in the district are pre-Cambrian quartz-mica, graphite, and hornblende schists, and pegmatite dikes injected parallel to the foliation of the schists or nearly so. The pre-Cambrian rocks are unconformably overlain by the sedimentary rocks of the Cambrian Deadwood formation. All these are cut by Tertiary intrusive rocks, divisible into three groups, which are in order of age(1) mozonite and syenite porphyries intruding the pre-Cambrian achists as steeply dipping dikes and invading the Deadwood formation as flat-lying sills and laccoliths: (2) pseudoleucite- and nepheline-bearing dikes; and (3) lamprohyre dikes.

The deposits of potential tin ore are cassiterite-rich lenses in certain of the pegmatite dikes. The cassiterite appears to have formed contemporaneously with the oldest and most abundant variety of pegmatite, which is of magamatic origin.

Physical Description(Continued)

My reasons for wishing to explore is my past knowledge of this placer. This placer should be explored by drilling or trenching in a systematic manner. This will require careful sampling of the pulp from the drill holes and concentrating to determine values

The placer is situated on a gentle water grade and it is ten miles from the state highway. The road from the highway to the mine is a good gravelled road and easily accessible by auto or truck.

The R. R. point is Newcastle, Wyoming a distance of 75 miles.

It is a lumber and agriculture district with normal manpower available. Equipment such as power shovels and drilling equipment can be contracted. Water ample.

5. Exploration Project

(a) Stream tin(cassiterite) gold, tantalum.

(b) I would propose to bulldoze the overburden and wash the bedrock material or pay zone, and save the minerals by jigging and tabling in a washing plant.

(d) I, Milton I. Leydig will supervise the work. I am a Mining Engineer with thirty years experience with successful operating companies, recovering metals by cyanidization, gravity concentration and flotation.

6. Estimate of costs.

(a) The contract drilling price is approximately $3.50 per foot. The power shovel for excavation about $10 per hour. This would require about 25 days to sample systematically.

(b) All work possible done by contract except the operation of the washing plant. Washing plant operators rate $12.50 per day. Supervision $500 per month

(c) Operating materials furnished by contractor except washing plant.

(d) Operating equipment to be rented--shovel, bulldozer, drilling equipment and portable washing plant.

(e) None

Milton I. Leydig

4. Physical Description

The Dakota-Wyoming Placer mine is twelve miles south of Beulah, Crook County, Wyoming located on Sand Creek, Wyoming. Sand Creek drains the Mineral Hill Tinton District. This is just over the boundary line in So. Dakota.

The elevation at Mineral Hill is 6,000 feet and at the placer it is about 3,600 feet. Sand Creek is about twenty miles in length. The upper three and one-half miles grade is very steep and the bed-rock is exposed in many places. At the lower part of Sand Creek the grade is a gentle slope (water grade).

The erosion materials from the mountains are deposited in the creek bottom on this claim. The Dakota-Wyoming Placer covers a length of four miles with an average width of 400 feet. There are no large boulders to interfere with digging and washing.

Hand placer mining has been carried on in early days searching for gold. Values have been found as far as twelve miles below this placer.

It is quite important that this exploration work be done early this fall to avoid cold weather.

I am enclosing a plat of the area and a geological map and section of the Tinton District.

Dakota-Wyoming Placer--Milton I. Leydig

6. Estimate of cost

Contract-bulldozing 12 days @ $100	$1200.00
(Contract) churn drilling 80 holes , 10ft. deep 800 ft. @ $3.50 per ft.	2800.00
Day's work labor estimate 60 days time concentrating and testing drills	850.00
Supplies, gas, oil, misc.	550.00
Truck rental	600.00
Labor 2 men @$13.00, 60 days	1560.00
Supervision, 2 months	1000.000
Miscellaneous	450.00
Bunk house rental and repair	650.00
Sample washing plant	550.00
Assaying and accounting	350.00
Compensation Insurance	220.00
	$10,780.00

(f) Intend to rent bunkhouse for employees available near placer. $650.00

(g) Note estimate of cost above.

(h) Stated above.

7. (a) Yes.

(b) We propose to furnish our part in money.