600

MAY 3 1 1955

Thompson Materials &
Construction Co., Inc.
917 Dome Street
Avenal, California

Re: Docket No. DMEA-3810 - Rutile
Thompson Materials & Construction
Co., Inc.
Peterson Pit
Fresno and Madera Counties,
California

Gentlemen:

Reference is made to your application for financial assistance for metallurgical testing and adding equipment to your operating gravel plant to recover the strategic fraction of the heavy sands now being wasted.

The Defense Minerals Exploration Administration, functioning under the Defense Production Act of 1950, as amended, is concerned solely with the exploration for indicated or undeveloped sources of strategic or critical minerals. As its title indicates DMEA funds are limited to exploration for the strategic minerals mentioned in Section 7 of DMEA Order-1, Amended.

Your request for participating Government funds for capital expenditures for plant and equipment to recover the heavy black sands does not qualify for exploration assistance under our program. We regret to advise you, under these circumstances, that your application for exploration assistance is denied.

The Small Business Administration business loan program provides Government funds for expansion of manufacturing facilities under certain conditions, and possibly Government funds may be available for your purpose. The address of the nearest Small Business Administration office is Western Pacific Building, Room 412, 1031 South Broadway, Los Angeles 15, California, and Mr. Donald R. Malarman is Regional Director.

Sincerely yours,

C. O. Mittendorf

Administrator

LOHenk:gad 5/20/55
Copy to: Admr. R. File
Docket
Field Team, Reg. II
Operating Committee
Mr. Kiilsgaard, 5222
Mr. Gnervenyak, 3411
Mr. Henk

IN REPLY REFER TO:

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

May 23, 1955

Memorandum

To: L. G. Houk, Chief, Nonmetallic Minerals Division, Defense Minerals Exploration Administration

From: Robert Lawthers, U. S. Geological Survey

Subject: DMEA Docket 3810; Thompson Materials and Construction Co., Review of application.

Applicant desires to recover heavy minerals from sand and gravel deposits that at present are mined from the San Joaquin River by the applicant for the production of concrete aggregate. Large tonnages of crude sand and gravel appear to be present in the area controlled by the applicant. Very little information is given in the application on the heavy mineral content of these sands. One analysis of crude sand shows 3.48 percent TiO_2; another sample of "a sample of the same sand in which we washed out the silica" contains large amounts of iron and titanium, with minor aluminum, silicon, magnesium, and zirconium; mineralogical examination revealed "chiefly" ilmenite, with a "little" magnetite, and some zircon and garnet. There is no indication that rutile occurs in the sample.

I could find nothing in the files on the composition of San Joaquin river deposits. Descriptions of other areas in California, particularly in the Los Angeles area, indicate that ilmenite is more common than rutile in stream deposits.

Under item 5 the applicant states that the exploration money will be used to add "sufficient and proper equipment to concentrate, and separate the desirable minerals." No further work on determining grade and character of the deposit is contemplated.

Conclusions

The presence of rutile has not been demonstrated in this deposit. The following heavy minerals have been identified: ilmenite, magnetite, garnet, epidote, and zircon, although the amount of each is unknown. From the limited information in the files, it is difficult to determine if rutile occurs in this area. Other commercial minerals may occur in the deposit, as analyses furnished by the applicant show niobium (columbium), tantalum, thorium, yttrium, and ytterbium; the minerals in which these occur are unknown.

The applicant has requested financial assistance to separate and concentrate heavy minerals occurring in his sand and gravel plant. It is my understanding that this type of assistance is not given under the DMEA program; therefore, I believe the application should be denied. Should DMEA believe that exploration work on this deposit is warranted, it might advise the applicant to undertake more detailed preliminary work. If such investigations show that rutile and other commercial minerals (such as columbite, tantalite, monazite, etc.) are present in this deposit, and should the applicant wish to explore the extent and grade of this deposit the Government might then be able to consider giving the applicant financial exploration assistance.

Robert Lawthers

RLawthers:hlm
G-5/23/55

Copy to: Director's reading, 4212
Branch reading, 4212
DMEA (3)
Docket file
F. J. Cservenyak, 3411 Interior

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

May 19, 1955

Memorandum

To: L. G. Houk, Chief, Nonmetallic Minerals Division, Defense Minerals Exploration Administration

From: Chief, Branch of Light Metals, Division of Minerals

Subject: Docket No. DMEA 3810 - Rutile - Thompson Materials & Construction Company, California

The subject docket has been reviewed by this office. Comments regarding the application are as follows:

1. This is not a request for exploration assistance. The company states that the presence of minerals has been proven and that their request is for assistance in concentration and separation of minerals.

2. According to the assay reports titanium is present in the form of ilmenite and not as rutile. Ilmenite is not included in the list of minerals currently eligible for aid under the DMEA program.

The subject application is returned herewith.

F. J. Cservenyak

Attachment
FJCservenyak:ej
Copy to: W. O. Files
Division of Minerals
Branch of Light Metals

MF-103
(Revised April 1952)

UNITED STATES DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION

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

INTERIOR
Minerals
RECEIVED
MAY 16 1955

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. 3810
Metal or Mineral Rutile
Date Received 5-16-55
Estimated Cost 50,000
Participation (Government %) 75

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: Thompson Materials & Construction Co., Inc. Corporated in the State of California, George L. Thompson, Pres., Lois V. Thompson, Vice Pres., Elsie V. Smith, Sec., Treas.

(*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 See attached leases, plus 6 acres we own in fee described as follows: Lot 2 which lies N&W of Madera Ave., less portion sold to Fresno County for Gravel Pit, Sec. 7; T. 13S; R. 18E.

(*b*) State any mine name by which the property is known. Peterson Pit

(*c*) State your interest in the land, whether owner, lessee, purchaser under contract, or otherwise Owner of 6 acres, Lessee of Approximately 330 acres.

(*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. Copies of Peterson Lease & State Leases.

(*e*) If you own the land, describe any liens or encumbrances on it 6 Acres mortgaged to C. D. Brown

(*f*) If the land consists of unpatented claims, add to the description above, the book and page numbers for each recorded location notice. none

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

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

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

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

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

16—66551-1

5. *The exploration project.*—(*a*) State the mineral or minerals for which you wish to explore (Manganese, chrome, zircon, titanium, Thorium, Columbium, Tantalum, Calcium, Aluminum and of course the gold & silver will be extracted first & added to revenue from other 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. See attached

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

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

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: attached

(*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.). See attached

(*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. See attached

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

(*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. See attached

(*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. See attached

(*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. attached

(*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. See attached

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

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)? See attached

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

☐ 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 May 11, 1955

THOMPSON MATERIALS AND CONSTRUCTION CO., INC.
(Applicant)

By George F. Thompson Pres

Elsy D. Smith, Sec-Treas

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

Supplementing the questions asked on Form MF-1 Revised April 1952, we add the following information with reference to:

4. Physical description.--(a) We have been for a couple of years, and are still mining at the Peterson Pit location, with a floating suction dredge equipped with an 8" Ansco Sand & Gravel Pump, photograph enclosed. Our mining operations are carried on primarily to supply our own requirements, and the general trade with concrete aggregates. The above mentioned floating dredge sweeps the bottom of the river clean as we go after removing all the rock and sand, and the entire thruput is pumped through a floating 8" discharge line to a semi-portable screening, grading and storage plant on shore. Photograph enclosed. Due to the fact that the maximum sized aggregate in the river (approx. 4") is small enough that it will all pass through our pump and discharge line, it is not necessary to leave any boulders laying on the bottom of the river for the fine sand and minerals to hide under. We have noticed due to this condition, that we have produced gold, silver and valuable minerals as a by-product in quantities never before approached by other aggregate producers. We enclose herewith, a copy of an assay made on the general run of river sand handled through our plant and stockpiled, and another copy of an assay made on a panned sample of the same sand in which we washed out the silica. Our pump has a maximum capacity of around 150 tons per hour of 1/4" minus sand, and conservatively will handle an average of 1000 tons per 8 hour day. We operate 5 days per week.

Minerals Administration
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MAY 16 1955

Our interest is bourne out by the copies of the leases included herewith, and owning 6 acres in fee.

As to accessibility for examination purposes, the river bed is from 6 ft. to 25 ft. below water level, but we have thousands of tons of sand stored on land that came out of the river bed.

(b) As you can see by the leases, we have two 20 year leases with 10 year renewal options on 5 miles of the river bottom from the State of California. The river will vary in width from 200 ft. to 700 or 800 ft. The sand and gravel will vary in depth from 6 ft. along the edge to 25 ft. in the center. In addition to the two State leases, we have a 28 acre lease of which a copy is enclosed, and own 6 acres in fee. In this acreage that we control, we have millions of tons of unworked river bed. In addition to the acreage controlled by us, there are hundreds of acres along the shore and low lands adjoining us that can be leased. We have found places where the river channel flowed thousands of years ago that is now not within the banks of the present river.

(c) The San Joaquin River originates in the highly mineralized Sierra Nevada Mountains to the East of us. The minerals contained in our leases has been washed down from these mountains, and is now laying in the bottom of the river in the form of a placer deposit.

(d) Our plant now set up at our (Peterson Pit), is located 9 miles South of Madera, California, and 9 miles North of Kerman, California, and approximately 23 miles Northwest of Fresno. There is a good road leading to our plant. We are 1/2 mile off of a main highway, and 9 miles from a railroad shipping point.

(e) Any quantity of man power, materials, supplies, equipment, water and power, is readily available. We have 3 phase 440 volt power connected into our plant.

2-- Supplementing questions, Form MF-103 - Continued:

5. The exploration project.--(a) In answering paragraph #5, we wish to point out that the usual risk or hazard normally prevalent in exploration work is in our case pretty negligable, as we have proven the minerals are there, but we do recognize the risk and/or hazard envolved in the task of concentrating, and seperating these known elements into commercially marketable products. This phase of the work to us is still exploratory, and it is in this connection that we are asking for financial aid.

(b) The proposed work will consist of adding sufficient and proper equipment to concentrate, and seperate the desirable minerals.

(c) Reasonable starting and completion dates can be arrived at for the plant additions.

(d) The dredge operation, sand and gravel production will continue to be operated by the present personal. If a mining engineer, or a trained laboratory technician is necessary to operate or supervise the extraction and/or seperation of the minerals, this will be done.

6. Estimate of costs: It is estimated at this time, that approximately $50,000.00 will be required to buy the equipment needed, and bear the cost of installation.

(a) We have the men and construction equipment available to install the additions.

(b) Engineering and consultant fees included in above estimate.

(c) All equipment included in above estimate, operating supplies, water and fuel negligable. Power required estimated at 150 H.P. connected load, costing approx. $300.00 per month.

(d) All of our present equipment will be used in the operation at no cost to the concentrating and extraction plant. Present equipment includes:

8" Ansco Sand & Gravel Dredge Pump
150 H.P. Variable Speed Electric Motor Drive
Adequate switching, power line and control equipment
20 H.P. 400 G.P.M. Jet and Aggitating Pump.
1½ H.P. Priming Pump
1000 Ft. of 8" Discharge Lines with Floats and Flexible Discharge Hoses.
4 - 65 ton Circular Steel Storage Bins
1 - 3' x 10' Symons Double Deck Shaker Screen
1 - 18" x 10' Eagle Twin Screw Coarse Aggregate Washer
1 - 50 ton Platform Truck Scales
1 - Office and Scale House
1 - 2 H.P. Electric Driven Air Compressor & Storage Tank
1 - Model HM Hough 1½ Cu.Yd., 4 Wheel Drive Pneumatic Tired Loader
1 - 3/8 Cu.Yd. Bay City Pneumatic Tired Loading out Crane with Clam Bucket.

(e) All of the above equipment will be devoted to the exploration extraction project without cost.

3-- Supplementing questions, Form MF-103 - Continued

(f) Included in the above estimate.

(g) Included in the above estimate

(h) Not to exceed 10%

7. (a) Yes

(b) Use of company owned equipment as marked on application. This equipment is evaluated at $50,009.06.

A. H. HOLLAND, PRES.
EDMUND E. PHILLIPS, VICE-PRES.—GEN.

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

M. E. HOLLAND, TREASURER
M. E. PHILLIPS, SECRETARY

THE COLORADO ASSAYING COMPANY

(Incorporated)

COMPLETE ANALYSIS ON ANY ORE $25.00 UP
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., Jan. 19, 1955.

Report on Complete Analysis submitted by Thompson Materials & Construction Co., Avenal, Calif.

ELEMENTS PRESENT	PERCENTAGES
Silica	61.12
Iron Oxide	13.73
Aluminum Oxide	11.08
Calcium Oxide	3.47
Magnesium Oxide	1.34
Manganese Dioxide	0.39
Chromium Oxide	0.01
Titanium Dioxide	3.48
Zirconium Dioxide	0.62
Sodium and Potassium Oxides	4.50
Columbium and Tantalum Oxides	0.02
Thorium Dioxide	0.05
Barium Sulphate	0.03
Vanadium Pentoxide	0.02
	99.86

Gold .05 oz. per ton -at $35.00 per oz. - $1.75 per ton
Silver trace
Beryllium, Copper, Fluorine, Gallium, Nickel traces
Phosphorus , Tin, Rare Earths traces
Platinum and Platinum Group Metals none.

REMARKS: This sample consists chiefly of white to pale pink Feldspars (sodium potassium calcium aluminum silicate), hard clear Quartz (silica), dark flaky Biotite Mica (potassium magnesium iron aluminum silicate), heavy black Magnetite (magnetic iron oxide) and slightly magnetic Ilmenite (iron and titanium oxides).
The gray-green pebbles are Andesites (complex silicates of aluminum, iron, calcium, magnesium, sodium, potassium, etc.).
The heavy water clear grains are Zircon (zirconium silicate).
The heavy pink to yellow brown grains are Garnets (calcium iron aluminum silicates), while the green grains are part Epidote (calcium iron aluminum silicates). Very small amounts of other minerals are present.
The Gold and Zircon contents appear to have the greatest commercial possibilities in this sample.

Respectfully submitted,

THE COLORADO ASSAYING CO.

Edmund Phillips

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

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

M. E. HOLLAND, TREASURER
M. E. PHILLIPS, SECRETARY

THE COLORADO ASSAYING COMPANY

(Incorporated)

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DENVER 1, COLO., Jan. 19, 1955.

Report on Spectrographic Analysis submitted by Thompson Materials & Construction Co.,Avenal, Cal
* *

"Radioactive Sample"

ELEMENTS PRESENT	APPROXIMATE PERCENTAGES
Iron	major
Titanium	major
Silicon	5.-10.
Aluminum	2.-5.
Magnesium	1.
Zirconium	2.-5.
Barium	.01
Beryllium	.001
Calcium	.2-1.
Columbium	.2-1.
Cobalt	.01-.1
Chromium	.01-.1
Copper	.01-.05
Gallium	.001-.01
Lead	.05-.3
Manganese	.1
Nickel	.01-.1
Potassium	.01-.1
Sodium	.01-.1
Mercury	.01-.1
Tin	.01-.1
Vanadium	.1-.2
Tungsten	.01-.03
Zinc	.01-.1
Tantalum	.2-.5
Thorium	1.-2.
Yttrium	.1
Ytterbium	.01

Rutile

Pure 19.33 Gold 111.14 oz. per ton- $3889.90 per ton   Platinum trace
Silver 22.50 oz. per ton -$20.25 per ton   Uranium none detected
Other Rare Earths none detected

REMARKS:This sample consists chiefly of heavy black Ilmenite (iron and titanium oxides) with a little black Magnetite (magnetic iron oxide). The heavy water clear crystals are Zircon (zirconium silicate). Pink, brown, and yellow Garnets (complex calcium iron aluminum silicate) are present. The minerals containing the columbium, tantalum, and thorium, we were unable to accurately identify. This material is most valuable for its gold and silver contents. The zirconium, thorium, columbium and tantalum contents are also of commercial interest.

Respectfully submitted,
THE COLORADO ASSAYING COMPANY

Edmund Phillips

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