DMA Form 1

DEFENSE MINERALS ADMINISTRATION
Control Slip

CONTROLLED DOCUMENT

DMA Docket No. 3016

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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 Assistance

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.

Copies to USBM, USGS and retained in Reg. III

Routing Slip

To:	Code 400, Rm. 3538	Date	5/5/53
To:	Oper Com	Date	5-18-53
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DOCKET

Martin, Martin

400

APR 19 1954

Mr. Irving Gumbel, Acting Director
Materials Division,
Emergency Procurement Service
General Services Administration
7th and D Streets, S. W.
Washington 25, D. C.

Re: Docket No. DMEA 3016 - Nickel
Lawn, Bressler and Cronin
Wonder Mine
Del Norte County, California

Dear Mr. Gumbel:

Attached is a letter of April 6, 1954, from Mr. A. (Arthur) D. Lawn, of Crescent City, California. Also attached is a copy of our self-explanatory reply of today's date.

It is not unlikely that Mr. Lawn is seeking further exploration aid for his prospect in Del Norte County, California, for which we have already denied the subject application.

At the same time, we are not in a position to reply to questions about a "Guaranteed market for Nickel" and we are, therefore, referring the matter to you for such attention as you see fit.

Sincerely yours,

C. O. Mittendorf
Administrator

Enclosures 2

cc: Docket
FT, Reg. 3
Code 400
Adm. Read. File

WSMartin/ls
4/19/54

R.C.G.

Your letter states that you wrote to us at the suggestion of G. S. A., Emergency Procurement Service in order to obtain information as to whether there is a market for nickel and copper, in the event that you were to produce these commodities. Your letter does not state whether your inquiry was to the Washington or a field office of G.S.A. ~~We assume that it must have been a field office because the Washington office is familiar with the marketing questions which you ask. On the other hand, this agency does not keep abreast of marketing situtations concerning minerals to the same degree as does the Washington office of G.S.A.~~ Therefore, we are writing a letter in your behalf to G.S.A. requesting that agency to ~~answer the question~~ furnish you the information you desire.

If this is anyone

In addition to your inquiry concerning exploration aid, yours

Docket
Martin
Rubin

APR 19 1954

Mr. A. D. Lawn
9th and L Streets
Crescent City, California

Dear Mr. Lawn:

This will acknowledge receipt of your letter of April 6, 1954, asking how to apply for aid for exploration of your 120 acres of property, some of which we note assays 1% nickel and also carries some high grade chrome.

The United States Government grants assistance to individuals, corporations, or other legal entities for the exploration of strategic minerals within the United States, its territories or possessions, on a participating basis, under the rules and regulations set forth in the attached DMEA Order-1, Amended. Certain sections of the order are explained more fully in the "Questions & Answers" booklet included herewith.

In the case of authorized nickel projects, the Government will participate in the approved exploration costs to the extent of 75 percent, the money to be repaid from income on future production. For chrome projects the corresponding figure is 50 percent.

If you wish to participate in the Exploration Program of the Defense Minerals Exploration Administration, you should complete in detail and submit to us four of the enclosed copies of Form MF-103. In the event that your new application covers any of the claims included in your application of April 20, 1953 (our Docket No. DMEA-3016-Nickel), please so state.

In addition to your inquiry concerning exploration aid, your letter states that you wrote to us at the suggestion of General Services Administration, Emergency Procurement Service, in order to obtain information as to whether there is a guaranteed market for nickel and copper in the event you were to produce these commodities. Your letter does not state whether your inquiry was to the Washington office or to a field office of General Services Administration. It is not a function of DMEA to report on marketing situations concerning minerals. If there is any agency familiar with this matter, it might be the Washington office of GSA. Therefore, we are writing a letter in your behalf to the GSA.

Sincerely yours,

C. O. Mittendorf (for)

Administrator

cc: Mails & Files
Code 400
Adm. Read. File
EPS, GSA
FT, Reg. 3
Enclosures

WSMartin/ls 4/13/54

R.C.S.

C O P Y

9th & L Streets
Crescent City, California
April 6, 1954

Defense Minerals Exploration Administration
Washington, D. C.

Gentlemen:

We have just received a letter from the General Services Administration, Emergency Procurement Service in reply to our letter inquiring as to whether there would be a market for Nickel or Copper from the small mines, and if so at what price per. pound.

They suggested we contact your office in the hope of getting the information we desire.

It is our understanding that your office assists owners of mining properties in exploring their mines.

We have 120 acres of property, some of which assays 1% Nickel, also carries some high grade Chrome.

We would like to have the gound drilled for exploration purposes to see if the ore will come up to Commercial Standards, if so what are the possibilities of obtaining an exploration loan.

We are quite anxious to find out if there is a Guaranteed market for Nickel from the Government.

Yours very truly,

/s/ A. D. Lawn

A. D. Lawn

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

1012 Flood Building
870 Market Street
San Francisco 2, Calif.

August 27, 1953

Mr. Robert F. Appel
Attorney at Law
225 H Street
Crescent City, California

Re: Docket DMEA-3016 (Nickel)
Lawn, Dressler & Cronin
Wonder Mine
Del Norte County, California

Dear Mr. Appel:

In reply to your letter, dated August 24, asking for the assays we obtained when examining the Wonder Mine, I am sorry to have to tell you that we are not at liberty to give them to you. I will say, however, that the nickel content of all samples was too low to class the rock as economically minable. The samples were not assayed for cobalt.

It is not the nickel content alone that determines whether a property is worthy of an exploration loan. There are other factors that come into the picture also, such as the geology of the deposit, extent of mineralization, type of ore, and so forth. In the case of the Wonder Mine, denial was based on the conclusion that the probability of disclosing minable ore reserves was not sufficiently promising to justify Government participation.

Sincerely yours,

H. C. MILLER
H. C. Miller
Executive Officer
DMEA Field Team, Region III

Copy to: DMEA, Washington, D. C.
E. H. Bailey, USGS
A. C. Johnson, Reno

FILE COPY
SURNAME:

Denied

Rutledge
Martin
Davis
Lemmon
Hedges
Graboe
Schroeder
Johnson

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

Mr. Tom Cronin
c/o Mr. Harry Bienick
Crescent City, California

JUL 27 1953

Re: Docket No. DMEA 3016 - Nickel
Arthur Dawn, Bernard Dressler,
and Tom Cronin
Wonder mine
Del Norte County, California

Dear Mr. Cronin:

Your application for aid for an exploration project and other data available to us in Washington concerning the above referenced property have been reviewed.

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

Careful study of all our information, although noting the occurrence of nickel mineralization at the Wonder mine, indicates to us that the probability of disclosing minable ore reserves by your proposed program is not sufficiently promising to justify Government participation. We regret to advise you, under these circumstances, that your application is denied.

We wish to thank you for your interest in the Defense Minerals Program and for bringing your property to our attention.

Sincerely yours,

C. O. Mittendorf (for)

Administrator

MDL 7-27-53

FARutledge/jh
7/22/53
cc. to: Docket
Adm. Reading File
Oper.Comm.
Code 400
H. W. Davis, USBM
D. M. Lemmon, USGS
DMEA Field Team, Region III, (2)

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

July 22, 1953

Memorandum

To: Administrator, DMEA

From: Iron and Ferro-Alloys Division, DMEA

Subject: Denial of exploration project in the amount of $48,020.00
Docket No. DMEA 3016 - Nickel
Arthur Lawn, Bernard Dressler, and Tom Cronin
Wonder mine
Del Norte County, California

The denial of the subject application by this Division is based on the following information:

1. The applicant proposed to diamond drill and trench a serpentinized peridotite deposit for nickel at an estimated cost of $48,020.00.

2. Nickel occurs in a peridotite deposit that has been altered extensively to serpentine, presumably as a hydrous nickel mineral. This mineral is fairly abundant at only one place over an area of about 25 square feet, but, even there, probably constitutes less than one percent of the rock.

3. Four samples were taken during the examination, and the results are as follows:

Sample no.	% nickel
1. Fresh "slickentite"	0.25
2. Composite of serpentine on the shaft dump	0.30
3. Composite of dark reddish soil derived from serpentine	0.07
4. Deeply weathered peridotite	0.21

4. The nickel content of the rocks at the Wonder mine is the same as that of most of the serpentine in California and comparable to that at the Burke nickel deposit (DMEA 2671). Where the nickel is thus contained in such small amounts in the ferro-magnesian silicates (as in serpentine), the metal cannot be recovered economically by any known process.

5. The examining field team recommended denial.

6. The Field Team recommends denial.

7. The Commodity Divisions of the Geological Survey and the Bureau of Mines concur in the denial.

W S Martin

W. S. Martin, Acting Chief
Iron and Ferro-Alloys Division

FILE COPY
SURNAME:

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

Rutledge
Martin
Davis
Lemmon

July 22, 1953

Memorandum

To: Administrator, DMA

From: Iron and Ferro-Alloys Division, DMA

Subject: Denial of exploration project in the amount of $40,020.00
Docket No. DMA 3016 - Nickel
Arthur Lawn, Bernard Dressler, and Tom Cronin
Wonder mine
Del Norte County, California

The denial of the subject application by this Division is based on the following information:

1. The applicant proposed to diamond drill and trench a serpentinized peridotite deposit for nickel at an estimated cost of $40,020.00.

2. Nickel occurs in a peridotite deposit that has been altered extensively to serpentine, presumably as a garnierite nickel mineral. This mineral is fairly abundant at only one place over an area of about 25 square feet, but, even there, probably constitutes less than one percent of the rock.

3. Four samples were taken during the examination, and the results are as follows:

Sample No.	% Nickel
1. Fresh "slickentite"	0.25
2. Composite of serpentine on the shaft dump	0.30
3. Composite of dark reddish soil derived from serpentine	0.07
4. Deeply weathered peridotite	0.21

4. The nickel content of the rocks at the Wonder mine is the same as that of most of the serpentine in California and comparable to that at the Burke nickel deposit (DMA 2671). Where the nickel is thus contained in such small amounts in the ferro-magnesian silicates (as in serpentine), the metal cannot be recovered economically by any known process.

5. The examining field term recommended denial.

6. The Field Team recommends denial.

7. The Commodity Divisions of the Geological Survey and the Bureau of Mines concur in the denial.

M. L. Martin, Acting Chief
Iron and Ferro-Alloys Division

MLM
7-22-53

FARutledge/jh
7/22/53
cc. to: Docket
Adm. Reading File
Oper. Comm.
Code 400 (2)

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

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
JUL 14 1953

Office of
Executive Officer
DMEA Field Team
Region III

1012 Flood Building
870 Market Street
San Francisco 2, Calif.

July 10, 1953

WSM

Memorandum

To: George C. Selfridge, Chairman, Operating Committee, DMEA, Interior Building, Washington 25, D. C.

From: Executive Officer, DMEA Field Team, Region III

Subject: Docket DMEA-3016 (Nickel)
Arthur Lawn, Bernard Dressler and Tom Cronin
Wonder Mine, Del Norte County, California

Reference is made to the letter dated May 19, 1953, from W. S. Martin, acting Chairman, Operating Committee, requesting a field examination of the Wonder Mine.

Attached are four copies of a report entitled "DMEA-3016 - Wonder Mine, Nickel, Del Norte County, California," by W. P. Irwin and D. B. Tatlock, Geologists, U. S. Geological Survey, dated July 8, 1953.

The field examination and four assays of samples indicate the serpentine masses on the property contain only as much nickel as is normally found in serpentine masses throughout the state. It is recommended that the application be denied.

H. C. Miller
Executive Officer
DMEA Field Team, Region III

Attachments

Copy to: E. H. Bailey, USGS
A. C. Johnson, Reno (With copy of report)

Reviewed by
DMEA OPERATING COMMITTEE
7-20-53
(date)

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF THE INTERIOR, D. ROSAY

RECEIVED
11-23/53

LEGEND MINERALS [illegible] DEPOSITS

REPORT OF EXAMINATION BY FIELD TEAM
NUMBER XII

DMEA 3016 - Wonder Mine, Nickel

Del Norte County, California

W. P. Irwin
U. S. Geological Survey

D. B. Tatlock
U. S. Geological Survey

July 8, 1953

Reviewed by
DMEA OPERATING COMMITTEE

7-20-53
(date)

Introduction

The Wonder mine in Del Norte County, California, was examined on May 31, 1953, by W. N. Irwin, G. W. Walker, and L. M. Tatlock of the Geological Survey, and because the examination was included with a more extensive trip to other localities, Mr. Salem Rice, of the California Division of Mines, accompanied the Survey geologists. The owners of the Wonder mine had applied to DMEA for Government participation in a $48,020.00 exploration program, and the examination was pointed toward determining the feasibility of further exploring the property for nickel. The owners of the property are Arthur Lewn, Bernard Dressler, and Tom Cronin, of Crescent City, California.

Location

The property is in secs. 5 and 6, T. 17 N., R. 3 E., Humboldt B. and M., Del Norte County, California. It is readily accessible by road from Patrick Creek Lodge, which is on U. S. Highway 199 about 26 miles east of Crescent City on the road leading to Grants Pass, Oregon. To reach it from Patrick Creek Lodge, first travel 4 miles northward on a Forest Service road to Old Patrick Creek Station and there cross to the west side of Patrick Creek. On the west side of the creek, turn left and travel southwesterly about 3 miles. The property is along the west side of the road at an altitude of about 2,000 feet between Elevenmile and Twelvemile Creek.

Workings

The principal excavation on the property is a vertical shaft, about 50 feet deep, reported to have been dug during World War I, probably in search of chromite. The shaft was not entered during the examination, as the ladder and timbering is in dangerous condition. Viewed from the collar, the entire shaft appeared to be lagged. In the vicinity of the shaft the overburden has been stripped by bulldozer over an area about 100 feet by 150 feet. The only structure on the property is a small bedframe over the shaft.

Geology

The workings are on a small, gently sloping bench in an otherwise steep and deeply entrenched terrain. The bedrock that underlies the bench is dark reddish brown and deeply weathered in contrast to the nearly fresh bedrock exposed on the steeper slopes. Owing to its anomalous topographic form and the intensely weathered rock, the bench is believed to be an old surface of erosion.

The only rock seen near the workings is peridotite that has been altered extensively to serpentine. A light green mineral, presumably a hydrous nickel mineral, forms a thin coating on a few of the rock surfaces. This mineral is fairly abundant at only one place over an area of about 2[illegible] square feet, but, even there, probably constitutes less than one percent of the rock. The rock on the dump from the shaft is nearly devoid of the light green mineral. Several thin lenses of chrysotile were seen in the peridotite, but these are much too small and widely spaced to be of economic value.

Sampling

Many samples of the altered peridotite have been assayed, according to the applicant, and all have contained nickel. A list of six assay results shown in the application range from 0.[illegible]0 to 1.4 percent nickel.

Four samples were taken during the examination. Sample no. 1 is of fairly fresh "slickentite" serpentine about 50 feet S. 80° E. of the shaft. Sample no. 2 is a composite of chips from numerous blocks of fine-grained serpentinized peridotite on the dump from the shaft. Sample no. 3 is a composite of the dark-reddish soil from five localities in the bulldozer cuts. Sample no. 4 is of the deeply weathered peridotite north of the shaft. The assay results are tabulated below.

Sample no.	% nickel
1 Fresh slickentite	0.25
2 Composite of serpentine on the shaft dump	0.30
3 Composite of dark reddish soil derived from serpentine	0.07
4 Deeply weathered peridotite	0.21

Conclusions

The nickel content of the rocks at the Wonder mine is the same as that of most of the serpentine in California, and the assays are strictly comparable to assays of serpentine from the Burro nickel deposit (MMA-2571). Since the nickel content is not abnormal, the creating of a loan to further explore the deposit would establish a precedent under which every one of the hundreds of serpentine masses in California would warrant similar exploration.

Recommendation

It is recommended that the applicant's request for a MMA loan be denied.

Amen 3016

Docket

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

May 7, 1953

Memorandum

To: Mr. George C. Selfridge, Chairman, Operating Committee, Defense Minerals Exploration Administration

From: Hubert W. Davis, Bureau of Mines

Subject: Docket No. DMEA-3016 - Application of Arthur Lawn et al for loan to explore for nickel in Del Norte County, California.

The applicants have submitted insufficient information on which to base an opinion concerning an exploration loan of $48,020. However, as an appraisal needs to be made of the deposits of silicate and nickeliferous ores in the United States to determine the areas which give the most promise of yielding supplies of nickel in the shortest possible time, the project might have merit aimed at determining the nickel resources of the country. Accordingly, it is recommended that the application be referred to the field team for comments and, if the field team deems necessary, a field examination be made.

Hubert W. Davis

Hubert W. Davis

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
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MAY 7 1953

GCS
Code 400 has extra copies of this
WSM 5/8/53

Copy retained 400

FILE COPY
SURNAME:

Hopkins
Martin
Rutledge
Johnson

UNITED STATES
DEPARTMENT OF THE INTERIOR 400
DEFENSE MINERALS ADMINISTRATION
WASHINGTON 25, D. C.

MAY 1 9 1953

Mr. H. C. Miller, Executive Officer
DMEA Field Team, Region III
1012 Flood Building
870 Market Street
San Francisco 2, California

Re: Docket No. DMEA 3016 - Nickel
Arthur Lawn, Bernard Dressler
and Tom Cronin
Wonder Mine
Del Norte County, California

Dear Mr. Miller:

Reference is made to the subject application for exploration assistance which is being referred to your office for review and possibly a field examination.

Information relative to this occurrence of nickel is lacking in Washington, and it is believed that a project aimed at determining the worth of this deposit as a potential source of nickel in the United States may merit some consideration.

The following memoranda have been prepared and are enclosed for your information:

Memorandum by T. P. Thayer, U. S. Geological Survey May 12, 1953
Memorandum by Hubert W. Davis, U.S. Bureau of Mines May 7, 1953

Sincerely yours,

W. S. Martin

ACTING Chairman, Operating Committee

GHB

Enclosures

APPROVED:

J. H. Hedges

Member, Bureau of Mines GHB

A R. Kinkel, Jr.

Member, Geological Survey (JHG)

JHopkins:foc
5-15-53

mdd
5-19-53

cc: Docket
Code 400
FT, Reg. III
Operating Comm.
Adm. Reading File
H.W. Davis, USBM
T.P. Thayer, USGS

FILE COPY
SURNAME:

UNITED STATES
DEPARTMENT OF THE INTERIOR 400
DEFENSE MINERALS ADMINISTRATION
WASHINGTON 25, D. C.

MAY 1 9 1953

Hopkins
Martin
Rutledge
Kinkel
Hedges
Johnson

Mr. Tom Cronin
% Mr. Harry Bienick
Crescent City, California

Re: Docket No. DMEA -3016 - Nickel
Arthur Lawn, Bernard Dressler
and Tom Cronin
Wonder Mine
Del Norte County, California

Dear Mr. Cronin:

Your application for assistance in exploring a nickel occurrence at your Wonder Mine in Del Norte County, California, has been reviewed by the Iron and Ferro-Alloys Division, DMEA, and has been referred to Mr. H. C. Miller, Executive Officer, DMEA Field Team, Region III, 1012 Flood Building, 870 Market Street, San Francisco 2, California, for further consideration and possibly a field examination.

Should a field examination be made of the property, any assistance that you can render the examining engineers will be appreciated.

Sincerely yours,

C. O. Mittendorf (for)

Administrator MDD 5-19-53

JHopkins:foc
5-15-53

cc: Docket
Code 400
FT. Reg. III
Operating Comm.
Adm. Reading File

cc: H. W. Davis, USBM
T. P. Thayer, USGS

IN REPLY REFER TO:

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

May 12, 1953

Memorandum

To: W. S. Martin

From: T. P. Thayer

Subject: DMEA 3016 - Nickel. Arthur Lawn, Bernard Dressler and Tom Cronin, Crescent City, California.

Applicants propose to spend $48,020 on 3600 feet of diamond drilling, 1,500 feet of surface sampling, and $7500 worth of pitting, tunneling, and bulldozer work, on 6 claims in Secs. 5 and 6, T. 17N., R 3E, Del Norte County, California. The claims are about 7 miles by road north of Patricks Creek, on Highway 199.

The country is rugged, and the area indicated is underlain by serpentine. The Geological Survey has no first-hand information on the nickel deposits in question, and the application will have to be referred to the field for examination.

The field team specifically should find out what the samples represent, whether soil or stringers of garnierite in serpentine. The extent of the mineralized area and vertical range of nickeliferous material should be looked into, as well as possible evidence of any structural zone such as Hanna has explored near Riddle.

The probability of finding material of commercial grade is believed to be slight, but any exploration should be aimed at adequate bulk sampling. Diamond drilling to get EX core would be little better than useless, and other means should be agreed upon. In the absence of any real exploration proposal, the Field Team will have to help the applicant in preparing one.

T. P. Thayer

T. P. Thayer
Geologist

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

402

May 7, 1953

Memorandum

To: Mr. George C. Selfridge, Chairman, Operating Committee, Defense Minerals Exploration Administration

From: Hubert W. Davis, Bureau of Mines

Subject: Docket No. [illegible]-3016 - Application of Arthur Lamm et al for loan to explore for nickel in Del Norte County, California.

The applicants have submitted insufficient information on which to base an opinion concerning an exploration loan of $40,000. However, as an appraisal needs to be made of the deposits of silicate and nickeliferous ores in the United States to determine the areas which give the most promise of yielding supplies of nickel in the shortest possible time, the project might have merit aimed at determining the nickel resources of the country. Accordingly, it is recommended that the application be referred to the field team for comments and, if the field team deems necessary, a field examination be made.

Hubert W. Davis

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
MAY 7 1953

Copy retained 200

MF-103
(Revised April 1952)

UNITED STATES DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION

Form Approved
Budget Bureau No. 42-R1035.2

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
MAY 4 1953

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 - 3016
Metal or Mineral
Date Received 5/4/53
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: Arthur Lawn, Bernard Dressler, and Tom Cronin,
Equal partners. All Residents of Del Norte County, California.
Mailing address: Crescent City, California
Tom Cronin - Cooper & Butte Streets, % Harry Bienick, Crescent City, Calif.
Arthur Lawn - Smith River, California Bernard Dressler, J Street, Crescent City, Cal.

(*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 Six, 20-acre claims, located Sections 5 and 6,
Township 17 North, Range 3 E., County of Del Norte, State of California.

(*b*) State any mine name by which the property is known. All 6 claims known as "Wonder" Mine

(*c*) State your interest in the land, whether owner, lessee, purchaser under contract, or otherwise
Joint owners, equal interest. (Claims not yet patented.)

(*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.

(*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.
See list attached.

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 schedule attached.

(*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.

5. *The exploration project.*—(*a*) State the mineral or minerals for which you wish to explore .....
Schedule attached.

(*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 ..... days and be completed within ..... 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)? **Yes.**

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

☐ Money ☒ Use of equipment owned by you ☐ Other

Explain in detail on acompanying paper.

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 April 20, 1953

Arthur Lawn, Bernard Dressler, and Tom Cronin

By Tom Cronin
(Applicant) Partner

By .....

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

MF-103

Re: Arthur Lawn, Bernard Dressler, and Tom Cronin

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

3. Applicant's property rights

(f) NOTICE

TO WHOM IT MAY CONCERN:

Additional description of the "Wonder Quartz Mining Claims No. 1 - 2 - 3 - 4 - 5 - ", said claims are located in Section 5, Township 17 N., R. 3 E., Del Norte County, State of California. "Wonder Quartz Mining Claim No. 6," is located in Section 6, Township 17 N., R. 3 E., Del Norte County, State of California.

These claims are recorded as follows: (Recorded November 24th, 1951.)

Wonder # 1	Book 18 of Mining Locations, Page 245
Wonder # 2	Book 18 of Mining Locations, Page 246
Wonder # 3	Book 18 of Mining Locations, Page 247
Wonder # 4	Book 18 of Mining Locations, Page 248
Wonder # 5	Book 18 of Mining Locations, Page 249
Wonder # 6	Book 18 of Mining Locations, Page 250

Locators - Tom Cronin, Art Lawn, and Bernard Dressler.

Dated at Crescent City this 13th day of March, 1953.

Signed: Tom Cronin
Locator

Re: Arthur Lawn, Bernard Dressler, and Tom Cronin

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

4. Physical description

(a) There is a 4 foot by 6 foot vertical shaft, 50 feet deep; this shaft was sunk during the First World War by parties unknown.

There are no buildings or improvements on the property. On one of the six claims where most of the prospecting has been done, an area of about 2 acres has been stripped of overburden.

The location and assessment work has been done and recorded on all the claims, recording dated November 24, 1951. Also, $6,400.00 of bulldozing work has been done, consisting of open cuts and trenching.

The property is easily accessible via the old Grants Pass - Crescent City road, which is in fair shape. The claims can be reached by traveling over Highway 199 and turning off on a forest service road which leaves the highway at Patricks Creek Lodge. The claims are approximately 7 miles from this turn-off.

(b) There has been no production to date. To the best of our knowledge, there are several million tons of nickeliferous ore in a body in an altered peridotite, according to Mr. Gray of the Grants Pass Chrome Company, our engineer. The property consists of 6 claims and nickel has been found wherever samples have been taken. The majority of the samples have been taken from Wonder # 1 Claim. The assaying has been done by the Grants Pass Chrome Company. John K. Long, assayer, previously with the Bureau of Mines at Albany, Oregon, who did most of the nickel assaying for the Hanna Company at Riddle, Oregon, was the person in charge of making the above assays. A dump sample from the shaft mentioned above assayed .75% nickel.

A list of assays is attached hereto.

(c) The nickel value is in what we consider an altered peridotite much shattered and heavily stained. The mineral has not been identified. Samples taken at random from all over the surface have consistently shown nickle value.

Re: Arthur Lawn, Bernard Dressler, and Tom Cronin

4. Physical description
(Cont'd)

(d) This project is located 7 miles off Highway 199, on the old Crescent City - Grants Pass road, and can easily be reached in a Pickup the year around.

It is located 33 miles from Crescent City, California, 26 miles on Highway 199 and 7 miles on the above-named County road. You turn off the Highway at a point known as Patrick's Creek Lodge, Del Norte County, California

The project is 67 miles west of Grants Pass, Oregon, on Highway 199.

(e) There is no shortage of manpower. Materials, supplies, and equipment are readily available.

There is plenty of water for all purposes the year around.

The California-Oregon Power Company's main line going to Crescent City passes directly over the 2 acres which have been cleared.

This is a steep, hilly country, and good dump sites are numerous.

5. The exploration project

(a) Nickel.

(b) We propose to fully explore this property by diamond drilling. The drill holes will be 100 feet deep and spaced on the surface at 100 foot intervals. There will also be many surface samples. We figure approximately 3,600 feet of daimond drilling and about the same for surface sample cutting.

We propose to build a cook shack, bunk house, and tool shed.

(c) The work will start within 10 days and be completed within 6 months from the date of an exploration project contact.

(d) Arthur Lawn owns the Pelican Bay Construction Company in Crescent City, California, and has been in business there for eight years. Bulldozing, shovel work, road building, drilling, powder work, excavations, pile driving, and bridge building are in his scope of everyday work.

Re: Arthur Lawn, Bernard Dressler, and Tom Cronin

5. The exploration project
(Cont'd)

(d) Tom Cronin, a prospector and miner the past twenty-five years, has lived in this area for that period of time.

Bernard Dressler is a truck driver.

6. Estimate of costs

(a) None.

(b), (c), (d), (e), (f), (g), and (h)

Diamond drill. A drill capable of drilling E. X. or A. X. holes to a depth of 200 feet. A pressure pump with motor. Drill rods and casing. 12 bits needed for exchange and accessories		$ 5,000.00
1 Compressor 105 cu. ft. capacity new	$ 4,000.00	
2 - 50 ft. lengths 3/4" hose	75.00	
1 wet head sinker rock drill	345.00	
Steel, bits, etc.	200.00	
Air pipe	200.00	
Water pipe, pump, motor and tank	1,200.00	
		6,020.00
~~Contract~~ drilling: Price on A. X. holes $5.00 per foot; Price on E. X. holes 4.50 per foot; to 200 feet deep and footage over 1,000 feet. Drilling in serpentine an additional $1.00 per foot; Diamond drilling: 3,600 ft. at $5.00 per foot		18,000.00
Surface sample cutting: 1,500 ft. at $2.00 per foot		3,000.00
Camp buildings		2,500.00
Fuel		1,500.00
Clearing overburden by bulldozer and sinking pits and tunnels		7,500.00
Assaying: 500 samples from trenches, cores, and sludges, $3.00 ea.		1,500.00
Freight, miscellaneous, and unforeseen		3,000.00
		$48,020.00

MF-103

Re: Arthur Lawn, Bernard Dressler, and Tom Cronin

7. Are you prepared to furnish your share of the cost of the proposed project in accordance with the regulations to Government participation?

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

Use of equipment owned by us:

Caterpillar D-7 Tractor
Serial No. 377580
Equipped with caterpillar hydraulic contol and angle blade and hyster.

D-7N towing winch.

MF-103

Re: Arthur Lawn, Bernard Dressler, and Tom Cronin

4. Physical description

(c) COPY

GRANTS PASS CHROME COMPANY

Phone 6222
P. O. Box 2
Grants Pass, Oregon

Registered
Assayers and Chemists

Laboratories
261 Highway 199 South

March 11th, 1953

Mr. Tom Cronin:

Following is the list of nickel assays which you asked for:

Oct. 11, 1952	#667	1.0 % Ni
	9	1.0
	90	0.70
29	750	0.98
Jan. 2, 1953	891	0.75
7	902	0.91
13	930	0.96

s/ John Long

MF-103
(Revised April 1952)

UNITED STATES DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION

DEPARTMENT OF THE INTERIOR
Minerals Administration
RECEIVED
MAY 4 1953

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-3014
Metal or Mineral
Date Received 5/4/53
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: Arthur Lawn, Bernard Dressler, and Tom Cronin, Equal partners. All Residents of Del Norte County, California. Mailing address: Crescent City, California
Tom Cronin - Cooper & Butte Streets, % Harry Bienick, Crescent City, Calif.
Arthur Lawn - Smith River, California Bernard Dressler, J Street, Crescent City, Cal.

(*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 Six, 20-acre claims, located Sections 5 and 6, Township 17 North, Range 3 E., County of Del Norte, State of California.

(*b*) State any mine name by which the property is known. All 6 claims known as "Wonder" Mine

(*c*) State your interest in the land, whether owner, lessee, purchaser under contract, or otherwise Joint owners, equal interest. (Claims not yet patented.)

(*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.

(*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. See list attached.

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 schedule attached.

(*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.

5. *The exploration project.*—(a) State the mineral or minerals for which you plan to explore .....
Schedule attached.

(*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 ..... days and be completed within ..... 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)? Yes.

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

☐ Money ☒ Use of equipment owned by you ☐ Other

Explain in detail on acompanying paper.

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 April 20, 1953

Arthur Lawn, Bernard Dressler, and Tom Cronin

By Tom Cronin (Applicant) Partner

By .....

.....

.....

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

Re: Arthur Lawn, Bernard Dressler, and Tom Cronin

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

3. Applicant's property rights

(f) NOTICE

TO WHOM IT MAY CONCERN:

Additional description of the "Wonder Quartz Mining Claims No. 1 - 2 - 3 - 4 - 5 - ", said claims are located in Section 5, Township 17 N., R. 3 E., Del Norte County, State of California. "Wonder Quartz Mining Claim No. 6," is located in Section 6, Township 17 N., R. 3 E., Del Norte County, State of California.

These claims are recorded as follows: (Recorded November 24th, 1951.)

Wonder # 1	Book 18 of Mining Locations, Page 245
Wonder # 2	Book 18 of Mining Locations, Page 246
Wonder # 3	Book 18 of Mining Locations, Page 247
Wonder # 4	Book 18 of Mining Locations, Page 248
Wonder # 5	Book 18 of Mining Locations, Page 249
Wonder # 6	Book 18 of Mining Locations, Page 250

Locators - Tom Cronin, Art Lawn, and Bernard Dressler.

Dated at Crescent City this 13th day of March, 1953.

Signed: Tom Cronin
Locator

Re: Arthur Lawn, Bernard Dressler, and Tom Cronin

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

4. Physical description

(a) There is a 4 foot by 6 foot vertical shaft, 50 feet deep; this shaft was sunk during the First World War by parties unknown.

There are no buildings or improvements on the property. On one of the six claims where most of the prospecting has been done, an area of about 2 acres has been stripped of overburden.

The location and assessment work has been done and recorded on all the claims, recording dated November 24, 1951. Also, $6,400.00 of bulldozing work has been done, consisting of open cuts and trenching.

The property is easily accessible via the old Grants Pass - Crescent City road, which is in fair shape. The' claims can be reached by traveling over Highway 199 and turning off on a forest service road which leaves the highway at Patricks Creek Lodge. The claims are approxmately 7 miles from this turn-off.

(b) There has been no production to date. To the best of our knowledge, there are several million tons of nickeliferous ore in a body in an altered peridotite, according to Mr. Gray of the Grants Pass Chrome Company, our engineer. The property consists of 6 claims and nickel has been found wherever samples have been taken. The majority of the samples have been taken from Wonder # 1 Claim. The assaying has been done by the Grants Pass Chrome Company. John K. Long, assayer, previously with the Bureau of Mines at Albany, Oregon, who did most of the nickel assaying for the Hanna Company at Riddle, Oregon, was the person in charge of making the above assays. A dump sample from the shaft mentioned above assayed .75% nickel.

A list of assays is attached hereto.

(c) The nickel value is in what we consider an altered peridotite much shattered and heavily stained. The mineral has not been identified. Samples taken at random from all over the surface have consistently shown nickle value.

Re: Arthur Lawn, Bernard Dressler, and Tom Cronin

4. Physical description
(Cont'd)

(d) This project is located 7 miles off Highway 199, on the old Crescent City - Grants Pass road, and can easily be reached in a Pickup the year around.

It is located 33 miles from Crescent City, California, 26 miles on Highway 199 and 7 miles on the above-named County road. You turn off the Highway at a point known as Patrick's Creek Lodge, Del Norte County, California

The project is 67 miles west of Grants Pass, Oregon, on Highway 199.

(e) There is no shortage of manpower. Materials, supplies, and equipment are readily available.

There is plenty of water for all purposes the year around.

The California-Oregon Power Company's main line going to Crescent City passes directly over the 2 acres which have been cleared.

This is a steep, hilly country, and good dump sites are numerous.

5. The exploration project

(a) Nickel.

(b) We propose to fully explore this property by diamond drilling. The drill holes will be 100 feet deep and spaced on the surface at 100 foot intervals. There will also be many surface samples. We figure approximately 3,600 feet of daimond drilling and about the same for surface sample cutting.

We propose to build a cook shack, bunk house, and tool shed.

(c) The work will start within 10 days and be completed within 6 months from the date of an exploration project contact.

(d) Arthur Lawn owns the Pelican Bay Construction Company in Crescent City, California, and has been in business there for eight years. Bulldozing, shovel work, road building, drilling, powder work, excavations, pile driving, and bridge building are in his scope of everyday work.

Re: Arthur Lawn, Bernard Dressler, and Tom Cronin

5. The exploration project
(Cont'd)

(d) Tom Cronin, a prospector and miner the past twenty-five years, has lived in this area for that period of time.

Bernard Dressler is a truck driver.

6. Estimate of costs

(a) None.

(b), (c), (d), (e), (f), (g), and (h)

Diamond drill. A drill capable of drilling E. X. or A. X. holes to a depth of 200 feet. A pressure pump with motor. Drill rods and casing. 12 bits needed for exchange and accessories		$ 5,000.00
1 Compressor 105 cu. ft. capacity new	$ 4,000.00	
2 - 50 ft. lengths 3/4" hose	75.00	
1 wet head sinker rock drill	345.00	
Steel, bits, etc.	200.00	
Air pipe	200.00	
Water pipe, pump, motor and tank	1,200.00	
		6,020.00
~~Contract~~ drilling: Price on A. X. holes $5.00 per foot; Price on E. X. holes 4.50 per foot; to 200 feet deep and footage over 1,000 feet. Drilling in serpentine an additional $1.00 per foot		18,000.00
Diamond drilling: 3,600 ft. at $5.00 per foot		
Surface sample cutting: 1,500 ft. at $2.00 per foot		3,000.00
Camp buildings		2,500.00
Fuel		1,500.00
Clearing overburden by bulldozer and sinking pits and tunnels		7,500.00
Assaying: 500 samples from trenches, cores, and sludges, $3.00 ea.		1,500.00
Freight, miscellaneous, and unforeseen		3,000.00
		$48,020.00

Re: Arthur Lawn, Bernard Dressler, and Tom Cronin

7. Are you prepared to furnish your share of the cost of the proposed project in accordance with the regulations to Government participation?

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

Use of equipment owned by us:

Caterpillar D-7 Tractor
Serial No. 377580
Equipped with caterpillar hydraulic contol and angle blade and hyster.

D-7N towing winch.

MF-103

Re: Arthur Lawn, Bernard Dressler, and Tom Cronin

4. Physical description

(c) COPY

GRANTS PASS CHROME COMPANY
Registered
Assayers and Chemists

Phone 6222
P. O. Box 2
Grants Pass, Oregon

Laboratories
261 Highway 199 South

March 11th, 1953

Mr. Tom Cronin:

Following is the list of nickel assays which you asked for:

Oct. 11, 1952	#687	1.0 % Ni
	9	1.0
	90	0.70
29	750	0.98
Jan. 2, 1953	891	0.75
7	902	0.91
13	930	0.96

s/ John Long

400

Office of
Executive Officer
DMEA Field Team
Region III

1012 Flood Building
870 Market Street
San Francisco 2, Calif.

April 28, 1953

Memorandum

To: Defense Minerals Exploration Administration, Interior Building, Washington 25, D. C.

From: Executive Officer, DMEA Field Team, Region III

Subject: Application forms MF-103 (Nickel), submitted by Arthur Lawn, Bernard Dressler, and Tom Cronin, Crescent City, California

Attached are three of the four copies of an application for an exploration loan for a nickel deposit situated in Del Norte County, thirty-three miles from Crescent City, California. The application reached this office on April 27.

The applicants are requesting a loan amounting to $48,020.00.

H. C. MILLER

H. C. Miller
Executive Officer
DMEA Field Team, Region III

Attachment

Copy to: E. H. Bailey, USGS

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

May 8, 1953

MEMORANDUM

To: Docket No. DMEA-3016 - Nickel

From: Iron and Ferro-Alloys Division

Subject: DMEA-3016 - Exploration Assistance - Wonder Mine
Del Norte County, California
Arthur Lawn, etc.
Crescent City, Calif.

Under Article 4 - Physical Description of the subject application, it is noted that the applicants make the following statement; "To the best of our knowledge, there are several million tons of nickeliferous ore in a body in an altered periodotite, also, that nickel has been found where samples have been taken." There is attached to the application a certificate of analysis of six samples by the Grants Pass Chrome Company that show nickel values ranging from 0.70% to 1.00%. Apparently these samples were taken from points on the Wonder No. 1 claim. It is also stated that a sample taken from the dump of the shaft that had been sunk to a depth of 50 feet showed an analysis - .75% nickel.

The geographical location of this property indicates that it apparently lies within the large and extensive serpentine belt that extends along the Coast Ranges of California into the State of Oregon. It is at Nickel Mountain in this mountain range in Oregon that the Hanna Company with government aid from DMPA is developing a deposit of nickel ore containing proven reserves of 8,400,000 tons having a nickel content of 1.5%. Preparations are presently being made to mine this ore body and to recover nickel in an electric smelting plant utilizing the D'Ugine Process in the form of a ferro-nickel alloy.

This project is approximately 100 miles south of Nickel Mountain and apparently nickel occurs in the mineral garnierite in each instance. At Nickel Mountain it has been found that the nickel is so wrapped up in the mineral molecule that it resists all attempts at concentration and can be recovered as a saleable product only in the form of ferro-nickel alloy.

It was learned through contact with officials of DMPA that it is true that the serpentine belt in the Coast Range of Northern California frequently will show an appreciable nickel content upon analysis and in some isolated instances values comparable to those reported in the cited application are common. However, it may be questionable that a large body of commercial nickelferous ore will be found in the vicinity of the applicants' property.

Attached are some random notes on the Ugine Process that will be employed by the Hanna Nickel Smelting Company at Nickel Mountain Oregon.

Attachment

W S Martin

W. S. Martin, Acting Chief
Iron and Ferro-Alloys Division

D'UGINE PROCESS

"Dried ore crushed to approximately minus half-inch size is fed into rotary kilns and is heated to a temperature of about 600° C at which it loses most of its water of hydration. Heated ore is conveyed by skip to feed hoppers located above the electric furnaces and from these it is charged into the furnaces as desired.

In the Ugine Process the electric furnaces are employed solely for the purpose of melting the ore and not for the production of the ferro-nickel inside the furnaces, as is the case in the Albany Process. In the Ugine Process all the reactions resulting in the production of ferro-nickel take place outside of the melting furnace under closely controlled conditions.

At regular intervals of time, say 1 hour, a predetermined amount of molten ore is poured out of the furnace into a special reaction vessel. A predetermined amount of the reducing agent is added to the vessel and after the reaction is completed two products are made:

1. A slag which is poured into a slag car and taken to a dump, and

2. Ferro-nickel which, according to the experiments conducted to date, contains 35 to 37% nickel, the balance being iron.

This ferro-nickel is transferred to a small refining furnace in which basic flux is employed to remove phosphorus in a conventional manner. The dephosphorized metal is then poured into a ladle which contains a small amount of specially prepared desulphurizing flux. This comprises about 4% of the weight of the ferro-nickel and consists of approximately equal amounts of bauxite and lime.

After the first pouring the contents of the ladle are poured again into another ladle to insure better mixing and the final desulphurized ferro-nickel is then poured from the ladle into a casting machine. Based on the work done so far, the Ugine Company expects to obtain an over-all plant recovery of not less than 80% of nickel contained in the ore. The Hanna Company prepared its cost estimates based on an over-all 85% plant recovery."

The Ugine Process was developed in France to treat New Caledonia ores. The following are compared average analyses of Oregon and New Caledonia ores:

COMPARED AVERAGE ANALYSES OF OREGON & NEW CALEDONIA

	Caledonia	Oregon
NiO	4.80%	2.14%
SiO_2	40.90	46.00
Al_2O_3	5.40	2.42
Fe_2O_3	12.65	13.48
CaO	0.35	Tr
MgO	23.70	30.80
Heat Loss	11.00	5.70

FERRO-NICKEL PRODUCT

Ni	48 to 53%
C	Max less than .05%
Si	Less than .1%

Discarded slags - .12 to .20% NiO

FILE COPY
SURNAME:

400

Hopkins
Martin

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

May 8, 1953

MEMORANDUM

To: Docket No. DMEA-3016 - Nickel

From: Iron and Ferro-Alloys Division

Subject: DMEA-3016 - Exploration Assistance - Wonder Mine
Del Norte County, California
Arthur Lawn, etc.
Crescent City, Calif.

Under Article 4 - Physical Description of the subject application, it is noted that the applicants make the following statement; "To the best of our knowledge, there are several million tons of nickeliferous ore in a body in an altered periodotite, also, that nickel has been found where samples have been taken." There is attached to the application a certificate of analysis of six samples by the Grants Pass Chrome Company that show nickel values ranging from 0.70% to 1.00%. Apparently these samples were taken from points on the Wonder No. 1 claim. It is also stated that a sample taken from the dump of the shaft that had been sunk to a depth of 50 feet showed an analysis - .75% nickel.

The geographical location of this property indicates that it apparently lies within the large and extensive serpentine belt that extends along the Coast Ranges of California into the State of Oregon. It is at Nickel Mountain in this mountain range in Oregon that the Hanna Company with government aid from DMPA is developing a deposit of nickel ore containing proven reserves of 8,400,000 tons having a nickel content of 1.5%. Preparations are presently being made to mine this ore body and to recover nickel in an electric smelting plant utilizing the D'Ugine Process in the form of a ferro-nickel alloy.

This project is approximately 100 miles south of Nickel Mountain and apparently nickel occurs in the mineral garnierite in each instance. At Nickel Mountain it has been found that the nickel is so wrapped up in the mineral molecule that it resists all attempts at concentration and can be recovered as a saleable product only in the form of ferro-nickel alloy.

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SURNAME:

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

It was learned through contact with officials of DMPA that it is true that the serpentine belt in the Coast Range of Northern California frequently will show an appreciable nickel content upon analysis and in some isolated instances values comparable to those reported in the cited application are common. However, it may be questionable that a large body of commercial nickelferous ore will be found in the vicinity of the applicants' property.

Attached are some random notes on the Ugine Process that will be employed by the Hanna Nickel Smelting Company at Nickel Mountain Oregon.

SIGNED: W. S. MARTIN

W. S. Martin, Acting Chief
Iron and Ferro-Alloys Division

Attachment

JHopkins:foc

cc: Docket
Code 400

FILE COPY
SURNAME:

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

"Dried ore crushed to approximately minus half-inch size is fed into rotary kilns and is heated to a temperature of about 600° C at which it loses most of its water of hydration. Heated ore is conveyed by skip to feed hoppers located above the electric furnaces and from these it is charged into the furnaces as desired.

In the Ugine Process the electric furnaces are employed solely for the purpose of melting the ore and not for the production of the ferro-nickel inside the furnaces, as is the case in the Albany Process. In the Ugine Process all the reactions resulting in the production of ferro-nickel take place outside of the melting furnace under closely controlled conditions.

At regular intervals of time, say 1 hour, a predetermined amount of molten ore is poured out of the furnace into a special reaction vessel. A predetermined amount of the reducing agent is added to the vessel and after the reaction is completed two products are made:

1. A slag which is poured into a slag car and taken to a dump, and

2. Ferro-nickel which, according to the experiments conducted to date, contains 35 to 37% nickel, the balance being iron.

This ferro-nickel is transferred to a small refining furnace in which basic flux is employed to remove phosphorus in a conventional manner. The dephosphorised metal is then poured into a ladle which contains a small amount of specially prepared desulphurizing flux. This comprises about 4% of the weight of the ferro-nickel and consists of approximately equal amounts of bauxite and lime.

After the first pouring the contents of the ladle are poured again into another ladle to insure better mixing and the final desulphurized ferro-nickel is then poured from the ladle into a casting machine. Based on the work done so far, the Ugine Company expects to obtain an over-all plant recovery of not less than 80% of nickel contained in the ore. The Hanna Company prepared its cost estimates based on an over-all 85% plant recovery."

The Ugine Process was developed in France to treat New Caledonia ores. The following are compared average analyses of Oregon and New Caledonia ores:

COMPARED AVERAGE ANALYSES OF OREGON & NEW CALEDONIA

	Caledonia	Oregon
NiO	4.80%	2.14%
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Fe_2O_3	12.65	13.48
CaO	0.35	Tr
MgO	23.70	30.80
Heat Loss	11.00	5.70

FERRO-NICKEL PRODUCT

Ni	48 to 53%
S	Max less than .05%
Si	Less than .1%

Discarded slags - .12 to .20% NiO

May 5, 1953

Mr. Tom Cronin
Crescent City, California

Subject: DMEA-3016
Re: Exploration Assistance
Wonder Mine

My dear Mr. Cronin:

The receipt of your application dated April 20, 1953 for exploration assistance under the Defense Production Act of 1950, as amended, is hereby acknowledged.

Your application has been assigned Docket Number DMEA-3016 and referred to the Iron and Ferro-Alloy Division.

Kindly refer to DMEA-3016 in any future correspondence relating to your application.

Sincerely yours,

ROBERT E. ADAMS

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

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

May 5, 1953

Memorandum

To: Executive Officer, DMEA Field Team, Region III

From: Chief, Operation's Control and Statistics Division

Subject: Assignment of Docket Number

There is listed below the assigned docket number to an application recently received from Region III.

DMEA - 3016 - Lawn, Arthur; Dressler, Bernard; etc.

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

38226

MF-103
(Revised April 1952)

UNITED STATES DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION

Department of the Interior
Defense Minerals Administration
RECEIVED
MAY 4 1953

Form Approved.
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-3016
Metal or Mineral
Date Received 5/4/53
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: Arthur Lawn, Bernard Dressler, and Tom Cronin, Equal partners. All Residents of Del Norte County, California. Mailing address: Crescent City, California
Tom Cronin - Cooper & Butte Streets, % Harry Bienick, Crescent City, Calif.
Arthur Lawn - Smith River, California Bernard Dressler, J Street, Crescent City, Cal.

(*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 Six, 20-acre claims, located Sections 5 and 6, Township 17 North, Range 3 E., County of Del Norte, State of California.

(*b*) State any mine name by which the property is known. All 6 claims known as "Wonder" Mine

(*c*) State your interest in the land, whether owner, lessee, purchaser under contract, or otherwise Joint owners, equal interest. (Claims not yet patented.)

(*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.

(*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.
See list attached.

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 schedule attached.

(*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.

5. *The exploration project.*—(*a*) State the mineral or minerals for which you wish to explore Schedule attached.

(*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 ..... days and be completed within ..... 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)? Yes.

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

☐ Money ☒ Use of equipment owned by you ☐ Other

Explain in detail on acompanying paper.

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 April 20, 1953

Arthur Lawn, Bernard Dressler, and Tom Cronin

By Tom Cronin
(Applicant) Partner

By .....

.....

.....

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

NOTICE

TO WHOM IT MAY CONCERN:

Additional Description of The "Wonder Quartz Mining Claims No. 1- 2- 3- 4- 5-," said Claims are located in Section 5 Township 17 N. R. 3 E, Del Norte County, State of California. "Wonder Quartz Mining Claim No. 6," is located in Section 6 Township 17 N. R. 3 E. Del Norte County, State of California.

These claims are recorded as follows: Recorded November 24th, 1951

Wonder # 1	Book 18	of Mining Locations	Page 245
Wonder # 2	Book 18	of Mining Locations	Page 246
Wonder # 3	Book 18	of Mining Locations	Page 247
Wonder # 4	Book 18	of Mining Locations	Page 248
Wonder # 5	Book 18	of Mining Locations	Page 249
Wonder # 6	Book 18	of Mining Locations	Page 250

Locators- Tom Cronin, Art Lawn, and Bernard Dressler:

Dated at Crescent City this 13th day of March, 1953.

Signed Tom Cronin
Locator.

Mining Locations

2110

Pick up

NOTATIONS TO BE MADE

RECORDED AT THE REQUEST OF
Tom Cronin
on the 13 day of March
19 53 at 11:02 o'clock A M.
and recorded in Vol. 18
of Mining Location Pages 371
in the Records of the County Recorder, of
Del Norte County, State of California.

Margaret Lamb
County Recorder

Deputy

2 00

Re: Arthur Lawn, Bernard Dressler, and Tom Cronin

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

4. Physical description

(a) There is a 4 foot by 6 foot vertical shaft, 50 feet deep; this shaft was sunk during the First World War by parties unknown.

There are no buildings or improvements on the property. On one of the six claims where most of the prospecting has been done, an area of about 2 acres has been stripped of overburden.

The location and assessment work has been done and recorded on all the claims, recording dated November 24, 1951. Also, $6,400.00 of bulldozing work has been done, consisting of open cuts and trenching.

The property is easily accessible via the old Grants Pass - Crescent City road, which is in fair shape. The' claims can be reached by traveling over Highway 199 and turning off on a forest service road which leaves the highway at Patricks Creek Lodge. The claims are approximately 7 miles from this turn-off.

(b) There has been no production to date. To the best of our knowledge, there are several million tons of nickeliferous ore in a body in an altered peridotite, according to Mr. Gray of the Grants Pass Chrome Company, our engineer. The property consists of 6 claims and nickel has been found wherever samples have been taken. The majority of the samples have been taken from Wonder # 1 Claim. The assaying has been done by the Grants Pass Chrome Company. John K. Long, assayer, previously with the Bureau of Mines at Albany, Oregon, who did most of the nickel assaying for the Hanna Company at Riddle, Oregon, was the person in charge of making the above assays. A dump sample from the shaft mentioned above assayed .75% nickel.

A list of assays is attached hereto.

(c) The nickel value is in what we consider an altered peridotite much shattered and heavily stained. The mineral has not been identified. Samples taken at random from all over the surface have consistently shown nickle value.

Re: Arthur Lawn, Bernard Dressler, and Tom Cronin

4. Physical description
(Cont'd)

(d) This project is located 7 miles off Highway 199, on the old Crescent City - Grants Pass road, and can easily be reached in a Pickup the year around.

It is located 33 miles from Crescent City, California, 26 miles on Highway 199 and 7 miles on the above-named County road. You turn off the Highway at a point known as Patrick's Creek Lodge, Del Norte County, California

The project is 67 miles west of Grants Pass, Oregon, on Highway 199.

(e) There is no shortage of manpower. Materials, supplies, and equipment are readily available.

There is plenty of water for all purposes the year around.

The California-Oregon Power Company's main line going to Crescent City passes directly over the 2 acres which have been cleared.

This is a steep, hilly country, and good dump sites are numerous.

5. The exploration project

(a) Nickel.

(b) We propose to fully explore this property by diamond drilling. The drill holes will be 100 feet deep and spaced on the surface at 100 foot intervals. There will also be many surface samples. We figure approximately 3,600 feet of daimond drilling and about the same for surface sample cutting.

We propose to build a cook shack, bunk house, and tool shed.

(c) The work will start within 10 days and be completed within 6 months from the date of an exploration project contact.

(d) Arthur Lawn owns the Pelican Bay Construction Company in Crescent City, California, and has been in business there for eight years. Bulldozing, shovel work, road building, drilling, powder work, excavations, pile driving, and bridge building are in his scope of everyday work.

Re: Arthur Lawn, Bernard Dressler, and Tom Cronin

5. The exploration project
(Cont'd)

(d) Tom Cronin, a prospector and miner the past twenty-five years, has lived in this area for that period of time.

Bernard Dressler is a truck driver.

6. Estimate of costs

(a) None.

(b), (c), (d), (e), (f), (g), and (h)

Diamond drill. A drill capable of drilling E. X. or A. X. holes to a depth of 200 feet. A pressure pump with motor. Drill rods and casing. 12 bits needed for exchange and accessories		$ 5,000.00
1 Compressor 105 cu. ft. capacity new	$ 4,000.00	
2 - 50 ft. lengths 3/4" hose	75.00	
1 wet head sinker rock drill	345.00	
Steel, bits, etc.	200.00	
Air pipe	200.00	
Water pipe, pump, motor and tank	1,200.00	
		6,020.00
~~Contract~~ drilling: Price on A. X. holes $5.00 per foot; Price on E. X. holes 4.50 per foot; to 200 feet deep and footage over 1,000 feet. Drilling in serpentine an additional $1.00 per foot		18,000.00
Diamond drilling: 3,600 ft. at $5.00 per foot		
Surface sample cutting: 1,500 ft. at $2.00 per foot		3,000.00
Camp buildings		2,500.00
Fuel		1,500.00
Clearing overburden by bulldozer and sinking pits and tunnels		7,500.00
Assaying: 500 samples from trenches, cores, and sludges, $3.00 ea.		1,500.00
Freight, miscellaneous, and unforeseen		3,000.00
		$ 48,020.00

Re: Arthur Lawn, Bernard Dressler, and Tom Cronin

7. Are you prepared to furnish your share of the cost of the proposed project in accordance with the regulations to Government participation?

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

Use of equipment owned by us:

Caterpillar D-7 Tractor
Serial No. 377580
Equipped with caterpillar hydraulic control and angle blade and hyster.

D-7N towing winch.

PHONE 6222
P. O. BOX 2
GRANTS PASS, OREGON

GRANTS PASS CHROME COMPANY

Registered

ASSAYERS AND CHEMISTS

LABORATORIES
261 HIGHWAY 99 SOUTH

March IIth I953.

Mr Tom Cronin:
Following is the list of nickel assays which you asked for.

Oct 11, 1952	#687	1.0% Ni
	9	1.0
	90	0.70
29	750	0.98
Jan 2, 1953	891	0.75
7	902	0.91
13	930	0.96

John Long

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

Office of
Executive Officer
DMEA Field Team
Region III

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
MAY 4 1953

1012 Flood Building
870 Market Street
San Francisco 2, Calif.

April 28, 1953

Memorandum

To: Defense Minerals Exploration Administration, Interior Building, Washington 25, D. C.

From: Executive Officer, DMEA Field Team, Region III

Subject: Application forms MF-103 (Nickel), submitted by Arthur Lawn, Bernard Dressler, and Tom Cronin, Crescent City, California

Attached are three of the four copies of an application for an exploration loan for a nickel deposit situated in Del Norte County, thirty-three miles from Crescent City, California. The application reached this office on April 27.

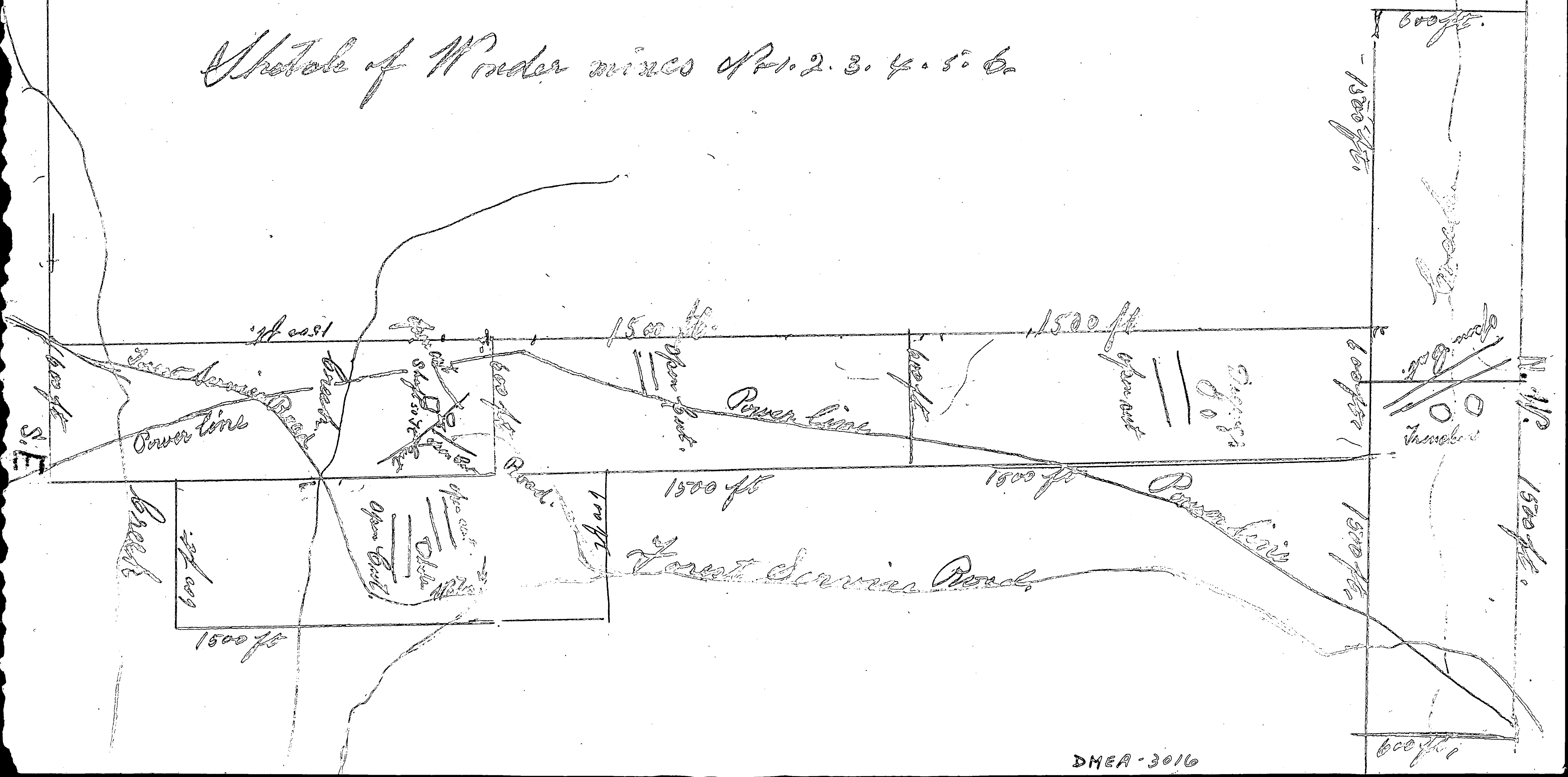
The applicants are requesting a loan amounting to $48,020.00.

H. C. Miller
Executive Officer
DMEA Field Team, Region III

Attachment

Copy to: E. H. Bailey, USGS

Sketch of Wonder mines No. 1. 2. 3. 4. 5. 6.



DMEA-3016

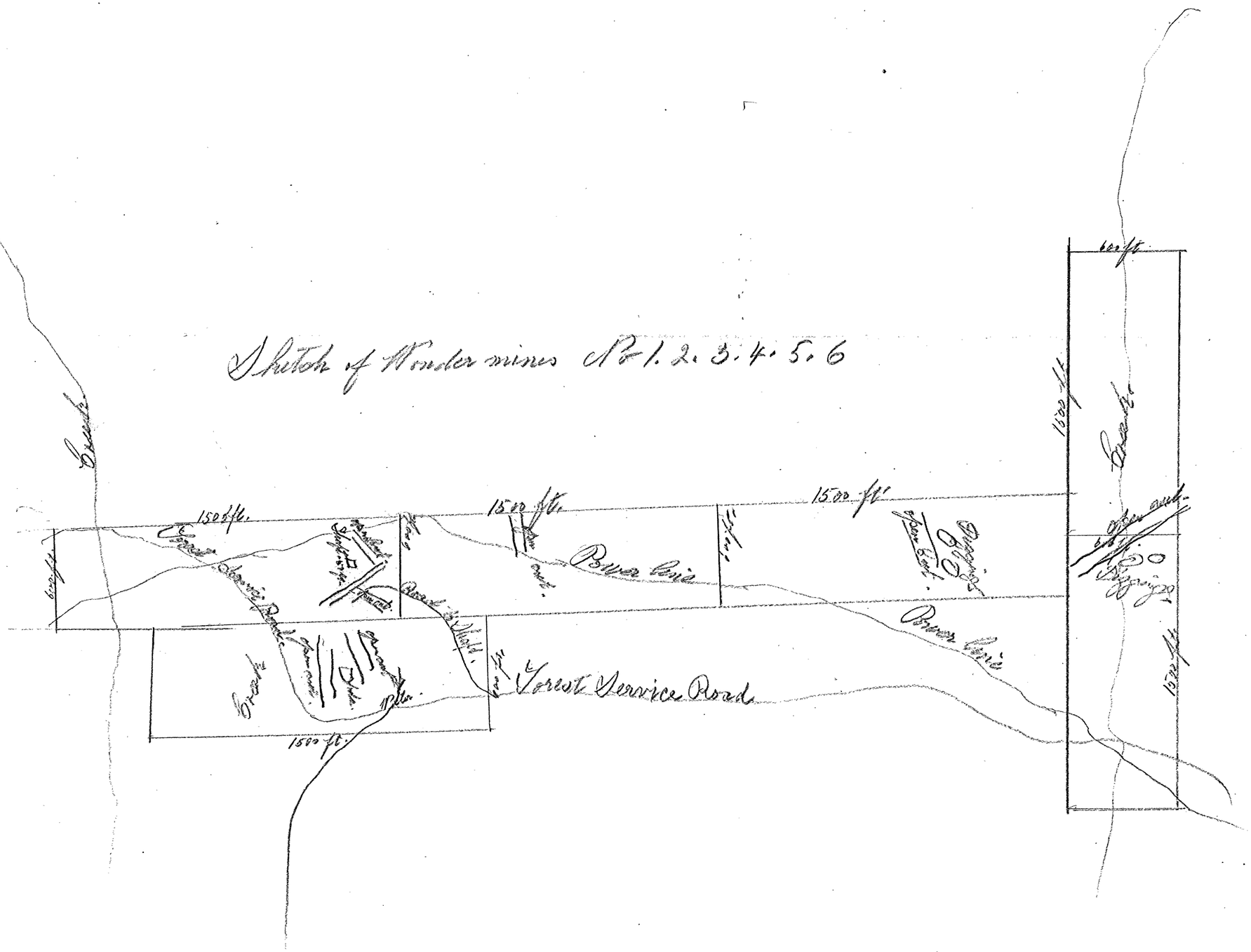
LOUISVILLE
MAY 1
2 PM
1953
COLO.

First Class

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

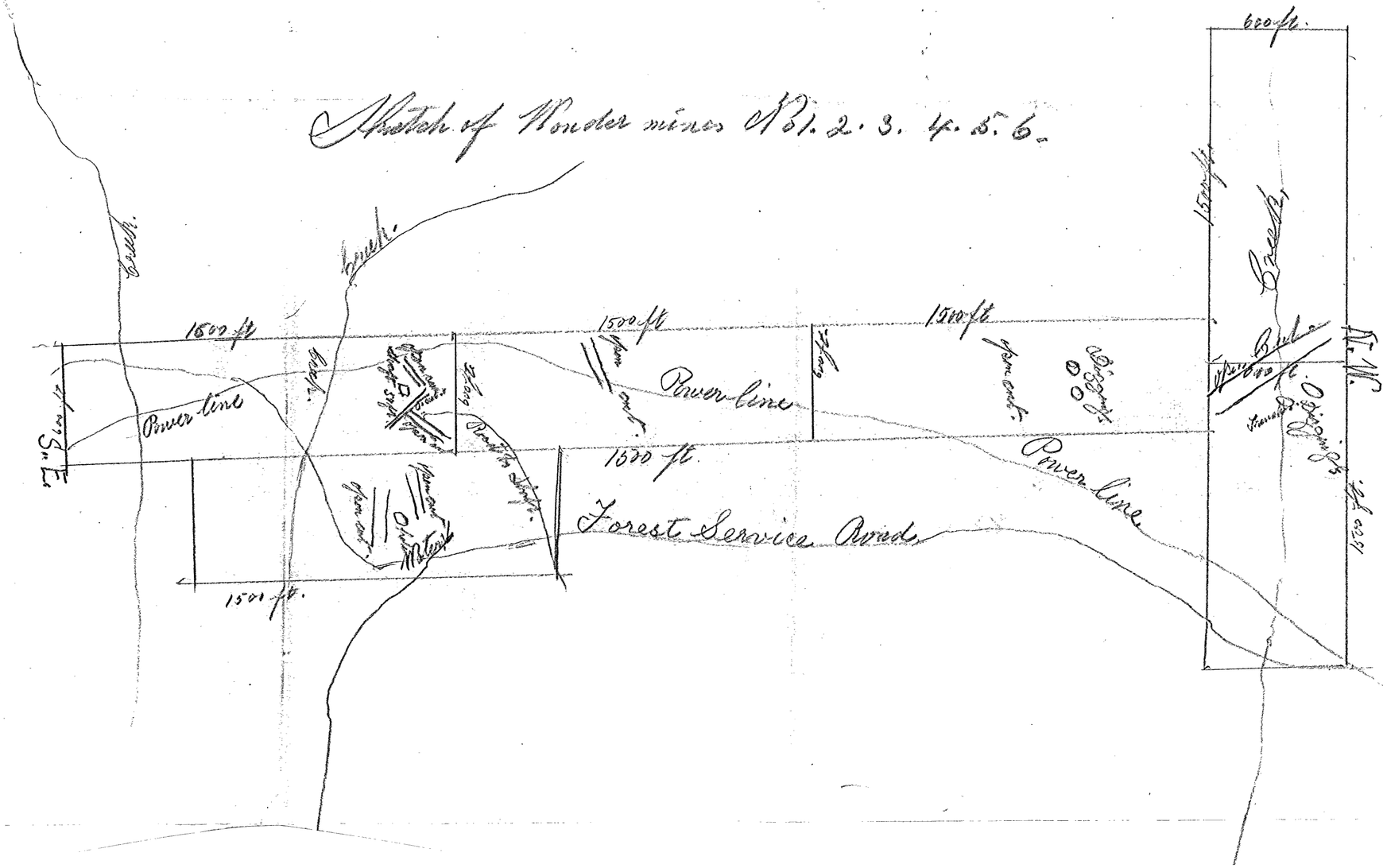
DMEA- 3016

Sketch of Wonder mines No 1. 2. 3. 4. 5. 6



DMEA-3016

Sketch of Wonder mines No. 1. 2. 3. 4. 5. 6.



DMEA-3016