DMA Form 1

DEFENSE MINERALS ADMINISTRATION
Control Slip

CONTROLLED DOCUMENT

DMA Docket No. 1950

DO NOT DETACH THIS SLIP

Action on this document is recorded and controlled in Reports and Records Branch. Any movement of this document between divisions or offices of DMA or movement outside DMA must be reported to the Reports and Records Branch. Actions taken that affect status of the case must also be reported.

This document has been recorded as

An Exploration

Any action taken to change the type of request for assistance must be promptly reported to the Reports and Records Branch. Use DMA Form 2 for submitting these reports.

Routing Slip Code 310

To: Mr. Gauer	Date	8/13/51
To: Rec. "	Date	8/14/51
To: [illegible]	Date	4/29/52
(1) To: Ned Nelson Rm. 4216 GSA	Date	
(2) To: C. H. Johnson Rm. 3617	Date	
(3) To: Operating Com. Rm 4624	Date	4-25-52
(4) To: Mail & File R. 4070	Date	
(5) To: Code 700, R. 4640	Date	
To:	Date	
To:	Date	
To:	Date	
To:	Date	
To:	Date	
To:	Date	
To:	Date	

DO NOT DETACH

ROLLED DOCUMENT

D.C. 98868

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

Mr. McHenry Mosier
Executive Officer
DMEA Field Team, Region VIII
Eastern Experiment Station
College Park, Maryland

Re: Docket No. DMA-1950X (Copper)
Vermont Copper Company, Inc.,
Elizabeth Mine
South Stafford, Vermont

Dear Mr. Mosier:

Vermont Copper Company, operating under an exploration project (DMEA 1526X), comprising diamond drilling in a search for the extension of a mineralized zone now being mined at the Elizabeth mine, has applied for a second exploration project contract with the Government. This new application is a request for funds to sink a new shaft and do crosscutting and drifting to delineate and sample ore zones indicated by the diamond drilling.

In this connection we have prepared six copies of a proposed contract and are enclosing them for your review. If you are in agreement with the contract as drawn up, and it is acceptable to the applicant, then kindly have the six copies signed by an authorized agent of the applicant corporation. Please return the original and three marked copies to this office, delivering the Operator's copy to him and retaining the other copy for your files.

At the time the Operator's signature is obtained, you should terminate the diamond drilling contract (DMEA 1526X), by mutual agreement with the Operator. Of course, any necessary holes to determine the location and depth of the proposed shaft should be completed before the effective termination date.

When the present contract is terminated we will appreciate receiving your final report on the project. A certification of discovery will be made in view of the ore indications in some of the drill holes.

Your attention is called to the southern boundary of the area subject to repayment of royalties on production, a line shown on the map attached to the contract as B-B'. Inasmuch as the location of the line might be difficult to determine underground, we have agreed with the Operator to use the 15,700 north coordinate on the map for this boundary as it will cross the ore zone at approximately the same location as line B-B'.

The Operator's representative has indicated over the telephone agreement as to termination of the present contract, and as to the 15,700 coordinate as a more definite boundary than the line B-B' on the map.

Sincerely yours,

Frank E. Johnson
Chairman, Operating Committee
Defense Minerals Exploration
Administration

APPROVED:

J. H. Hedges
Member, Bureau of Mines

D. M. Lemmon
Member, Geological Survey

Enclosures (6)

110

FILE COPY
SURNAME:

Docket

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

Mr. McHenry Mosier
Executive Officer
DMEA Field Team, Region VIII
Eastern Experiment Station
College Park, Maryland

Re: Docket No. DMA-1950X (Copper)
Vermont Copper Company, Inc.,
Elizabeth Mine
South Stafford, Vermont

Dear Mr. Mosier:

Vermont Copper Company, operating under an exploration project (DMEA 1526X), comprising diamond drilling in a search for the extension of a mineralized zone now being mined at the Elizabeth mine, has applied for a second exploration project contract with the Government. This new application is a request for funds to sink a new shaft and do crosscutting and drifting to delineate and sample ore zones indicated by the diamond drilling.

In this connection we have prepared six copies of a proposed contract and are enclosing them for your review. If you are in agreement with the contract as drawn up, and it is acceptable to the applicant, then kindly have the six copies signed by an authorized agent of the applicant corporation. Please return the original and three marked copies to this office, delivering the Operator's copy to him and retaining the other copy for your files.

At the time the Operator's signature is obtained, you should terminate the diamond drilling contract (DMEA 1526X), by mutual agreement with the Operator. Of course, any necessary holes to determine the location and depth of the proposed shaft should be completed before the effective termination date.

When the present contract is terminated we will appreciate receiving your final report on the project. A certification of discovery will be made in view of the ore indications in some of the drill holes.

Your attention is called to the southern boundary of the area subject to repayment of royalties on production, a line shown on the map attached to the contract as B-B'. Inasmuch as the location of the line might be difficult to determine underground, we have agreed with the Operator to use the 15,700 north coordinate on the map for this boundary as it will cross the ore zone at approximately the same location as line B-B'.

The Operator's representative has indicated over the telephone agreement as to termination of the present contract, and as to the 15,700 coordinate as a more definite boundary than the line B-B' on the map.

Sincerely yours,

(signed) FRANK E. JOHNSON

Chairman, Operating Committee
Defense Minerals Exploration
Administration

APPROVED:

J. H. Hedges
Member, Bureau of Mines

D. M. Lemmon
Member, Geological Survey

Enclosures (6)

FEJOhnson/bih 4/28/52
cc to: Docket
Admr's Reading File
Operating Committee
Field Team, Region VIII
Messrs. D.M.Lemon R-5216 GSA Bldg.
J.H.Hedges R-4604
E.W.Ellis
H.F.Keller
F.E.Johnson

FILE COPY
SURNAME:

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

Mr. McHenry Mosier
Executive Officer
DMEA Field Team, Region VIII
Bureau of Mines
Eastern Experiment Station
College Park, Maryland

Re: Docket No. MA-1950X (Copper)
Vermont Copper Company, Inc.
Elizabeth Mine
South Strafford, Vermont

Dear Mr. Mosier:

We are enclosing six copies of a proposed contract on the above captioned exploration project.

If you are in agreement with the contract as drawn up, and it is acceptable to the applicant, then kindly have the six copies signed by an authorized agent of the applicant corporation. Please return the original and three marked copies to this office, delivering the Operator's copy to him, and retain the other copy for your files.

Sincerely yours,

Chairman, Operating Committee

APPROVED:

For Bureau of Mines

For Geological Survey

HFKeller/gla 4-21-52
cc to: Adm. Reading File
Docket
Operating Committee
Messrs. C.H. Johnson, Rm. 3621
Ned Nelson, Rm. 4216 GSA
Ellis
Keller

110

Edwin Rossington file

Mr. Mellenry Mosier
Executive Officer
DMEA Field Team, Region VIII
Eastern Experiment Station
College Park, Maryland

Re: Docket No. DMA-1950X (Copper)
Vermont Copper Company, Inc.,
Elizabeth Mine
South Strafford, Vermont

Dear Mr. Mosier:

Vermont Copper Company, operating under an exploration project (DMEA 1526X), comprising diamond drilling in a search for the extension of a mineralized zone now being mined at the Elizabeth mine, has applied for a second exploration project contract with the Government. This new application is a request for funds to sink a new shaft and do crosscutting and drifting to delineate and sample ore zones indicated by the diamond drilling.

In this connection we have prepared six copies of a proposed contract and are enclosing them for your review. If you are in agreement with the contract as drawn up, and it is acceptable to the applicant, then kindly have the six copies signed by an authorized agent of the applicant corporation. Please return the original and three marked copies to this office, delivering the Operator's copy to him and retaining the other copy for your files.

At the time the Operator's signature is obtained, you should terminate the diamond drilling contract (DMEA 1526X), by mutual agreement with the Operator. Of course, any necessary holes to determine the location and depth of the proposed shaft should be completed before the effective termination date.

When the present contract is terminated we will appreciate receiving your final report on the project. A certification of discovery will be made in view of the ore indications in some of the drill holes.

Your attention is called to the southern boundary of the area subject to repayment of royalties on production, a line shown on the map attached to the contract as B-B'. Inasmuch as the location of the line might be difficult to determine underground, we have agreed with the Operator to use the 15,700 north coordinate on the map for this boundary as it will cross the ore zone at approximately the same location as line B-B'.

The Operator's representative has indicated over the telephone agreement as to termination of the present contract, and as to the 15,700 coordinate as a more definite boundary than the line B-B' on the map.

Sincerely yours,

(signed) FRANK E. JOHNSON

Chairman, Operating Committee
Defense Minerals Exploration
Administration

APPROVED:

J. H. Hedges

Member, Bureau of Mines

D. M. Lemmon

Member, Geological Survey

Enclosures (6)

FEJohnson/bih 4/28/52
cc to: Docket
Admr's Reading File
Operating Committee
Field Team, Region VIII
Messrs. D.M.Lemon R-5216 GSA Bldg.
J.H.Hedges R-4604
E.W.Ellis
H.F.Keller
F.E.Johnson

Operating Comm.

Mr. McHenry Mosier
Executive Officer
DMEA Field Team, Region VIII
Eastern Experiment Station
College Park, Maryland

Re: Docket No. DMA-1950X (Copper)
Vermont Copper Company, Inc.,
Elizabeth Mine
South Strafford, Vermont

Dear Mr. Mosier:

Vermont Copper Company, operating under an exploration project (DMEA 1526X), comprising diamond drilling in a search for the extension of a mineralized zone now being mined at the Elizabeth mine, has applied for a second exploration project contract with the Government. This new application is a request for funds to sink a new shaft and do crosscutting and drifting to delineate and sample ore zones indicated by the diamond drilling.

In this connection we have prepared six copies of a proposed contract and are enclosing them for your review. If you are in agreement with the contract as drawn up, and it is acceptable to the applicant, then kindly have the six copies signed by an authorized agent of the applicant corporation. Please return the original and three marked copies to this office, delivering the Operator's copy to him and retaining the other copy for your files.

At the time the Operator's signature is obtained, you should terminate the diamond drilling contract (DMEA 1526X), by mutual agreement with the Operator. Of course, any necessary holes to determine the location and depth of the proposed shaft should be completed before the effective termination date.

When the present contract is terminated we will appreciate receiving your final report on the project. A certification of discovery will be made in view of the ore indications in some of the drill holes.

Your attention is called to the southern boundary of the area subject to repayment of royalties on production, a line shown on the map attached to the contract as B-B'. Inasmuch as the location of the line might be difficult to determine underground, we have agreed with the Operator to use the 15,700 north coordinate on the map for this boundary as it will cross the ore zone at approximately the same location as line B-B'.

The Operator's representative has indicated over the telephone agreement as to termination of the present contract, and as to the 15,700 coordinate as a more definite boundary than the line B-B' on the map.

Sincerely yours,

(signed) FRANK E. JOHNSON

Chairman, Operating Committee
Defense Minerals Exploration
Administration

APPROVED:

J. H. Hedges
Member, Bureau of Mines

D. M. Lemmon
Member, Geological Survey

Enclosures (6)

FEJohnson/bih 4/28/52
cc to: Docket
Admr's Reading File
Operating Committee
Field Team, Region VIII
Messrs. D.M.Lemon R-5216 GSA Bldg.
J.H.Hedges R-4604
E.W.Ellis
H.F.Keller
F.E.Johnson

Reviewed by
DMEA OPERATING COMMITTEE
4-28-52
(date) (JB)

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

Mr. Simon
J. A. R. Bloy
R-52160

Mr. McHenry Mosier
Executive Officer
DMEA Field Team, Region VIII
Eastern Experiment Station
College Park, Maryland

Re: Docket No. DMA-1950X (Copper)
Vermont Copper Company, Inc.,
Elizabeth Mine
South Stafford, Vermont

Dear Mr. Mosier:

Vermont Copper Company, operating under an exploration project (DMEA 1526X), comprising diamond drilling in a search for the extension of a mineralized zone now being mined at the Elizabeth mine, has applied for a second exploration project contract with the Government. This new application is a request for funds to sink a new shaft and do crosscutting and drifting to delineate and sample ore zones indicated by the diamond drilling.

In this connection we have prepared six copies of a proposed contract and are enclosing them for your review. If you are in agreement with the contract as drawn up, and it is acceptable to the applicant, then kindly have the six copies signed by an authorized agent of the applicant corporation. Please return the original and three marked copies to this office, delivering the Operator's copy to him and retaining the other copy for your files.

At the time the Operator's signature is obtained, you should terminate the diamond drilling contract (DMEA 1526X), by mutual agreement with the Operator. Of course, any necessary holes to determine the location and depth of the proposed shaft should be completed before the effective termination date.

When the present contract is terminated we will appreciate receiving your final report on the project. A certification of discovery will be made in view of the ore indications in some of the drill holes.

Your attention is called to the southern boundary of the area subject to repayment of royalties on production, a line shown on the map attached to the contract as B-B'. Inasmuch as the location of the line might be difficult to determine underground, we have agreed with the Operator to use the 15,700 north coordinate on the map for this boundary as it will cross the ore zone at approximately the same location as line B-B'.

The Operator's representative has indicated over the telephone agreement as to termination of the present contract, and as to the 15,700 coordinate as a more definite boundary than the line B-B' on the map.

Sincerely yours,

(signed) FRANK E. JOHNSON

Chairman, Operating Committee
Defense Minerals Exploration
Administration

APPROVED:

J. H. Hedges

Member, Bureau of Mines

D. M. Lemmon

Member, Geological Survey

Enclosures (6)

FEJOhnson/bih 4/28/52
cc to: Docket
Admr's Reading File
Operating Committee
Field Team, Region VIII
Messrs. D.M.Lemon R-5216 GSA Bldg.
J.H.Hedges R-4604
E.W.Ellis
H.F.Keller
F.E.Johnson

Mr. Reed
Room 4604

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

Mr. McHenry Mosier
Executive Officer
DMEA Field Team, Region VIII
Eastern Experiment Station
College Park, Maryland

Re: Docket No. DMA-1950X (Copper)
Vermont Copper Company, Inc.,
Elizabeth Mine
South Stafford, Vermont

Dear Mr. Mosier:

Vermont Copper Company, operating under an exploration project (DMEA 1526X), comprising diamond drilling in a search for the extension of a mineralized zone now being mined at the Elizabeth mine, has applied for a second exploration project contract with the Government. This new application is a request for funds to sink a new shaft and do crosscutting and drifting to delineate and sample ore zones indicated by the diamond drilling.

In this connection we have prepared six copies of a proposed contract and are enclosing them for your review. If you are in agreement with the contract as drawn up, and it is acceptable to the applicant, then kindly have the six copies signed by an authorized agent of the applicant corporation. Please return the original and three marked copies to this office, delivering the Operator's copy to him and retaining the other copy for your files.

At the time the Operator's signature is obtained, you should terminate the diamond drilling contract (DMEA 1526X), by mutual agreement with the Operator. Of course, any necessary holes to determine the location and depth of the proposed shaft should be completed before the effective termination date.

When the present contract is terminated we will appreciate receiving your final report on the project. A certification of discovery will be made in view of the ore indications in some of the drill holes.

Your attention is called to the southern boundary of the area subject to repayment of royalties on production, a line shown on the map attached to the contract as B-B'. Inasmuch as the location of the line might be difficult to determine underground, we have agreed with the Operator to use the 15,700 north coordinate on the map for this boundary as it will cross the ore zone at approximately the same location as line B-B'.

The Operator's representative has indicated over the telephone agreement as to termination of the present contract, and as to the 15,700 coordinate as a more definite boundary than the line B-B' on the map.

Sincerely yours,

(signed) FRANK E. JOHNSON

Chairman, Operating Committee
Defense Minerals Exploration
Administration

APPROVED:

J. H. Hedges

Member, Bureau of Mines

D. M. Lemmon

Member, Geological Survey

Enclosures (6)

FEJohnson/bih 4/28/52
cc to: Docket
Admr's Reading File
Operating Committee
Field Team, Region VIII
Messrs. D.M.Lemon R-5216 GSA Bldg.
J.H.Hedges R-4604
E.W.Ellis
H.F.Keller
F.E.Johnson

M. Fecio
Room 4640

Mr. McHenry Mosier
Executive Officer
DMEA Field Team, Region VIII
Eastern Experiment Station
College Park, Maryland

Re: Docket No. DMA-1950X (Copper)
Vermont Copper Company, Inc.,
Elizabeth Mine
South Strafford, Vermont

Dear Mr. Mosier:

Vermont Copper Company, operating under an exploration project (DMEA 1526X), comprising diamond drilling in a search for the extension of a mineralized zone now being mined at the Elizabeth mine, has applied for a second exploration project contract with the Government. This new application is a request for funds to sink a new shaft and do crosscutting and drifting to delineate and sample ore zones indicated by the diamond drilling.

In this connection we have prepared six copies of a proposed contract and are enclosing them for your review. If you are in agreement with the contract as drawn up, and it is acceptable to the applicant, then kindly have the six copies signed by an authorized agent of the applicant corporation. Please return the original and three marked copies to this office, delivering the Operator's copy to him and retaining the other copy for your files.

At the time the Operator's signature is obtained, you should terminate the diamond drilling contract (DMEA 1526X), by mutual agreement with the Operator. Of course, any necessary holes to determine the location and depth of the proposed shaft should be completed before the effective termination date.

When the present contract is terminated we will appreciate receiving your final report on the project. A certification of discovery will be made in view of the ore indications in some of the drill holes.

Your attention is called to the southern boundary of the area subject to repayment of royalties on production, a line shown on the map attached to the contract as B-B'. Inasmuch as the location of the line might be difficult to determine underground, we have agreed with the Operator to use the 15,700 north coordinate on the map for this boundary as it will cross the ore zone at approximately the same location as line B-B'.

The Operator's representative has indicated over the telephone agreement as to termination of the present contract, and as to the 15,700 coordinate as a more definite boundary than the line B-B' on the map.

Sincerely yours,

(signed) FRANK E. JOHNSON

Chairman, Operating Committee
Defense Minerals Exploration
Administration

APPROVED:

J. H. Hedges

Member, Bureau of Mines

D. M. Lemmon

Member, Geological Survey

Enclosures (6)

FEJohnson/bih 4/28/52
cc to: Docket
Admr's Reading File
Operating Committee
Field Team, Region VIII
Messrs. D.M.Lemon R-5216 GSA Bldg.
J.H.Hedges B-4604
E.W.Ellis
H.F.Keller
F.E.Johnson

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

Mr.McHenry Mosier
Executive Officer
DMEA Field Team, Region VIII
Bureau of Mines
Eastern Experiment Station
College Park, Maryland

Re: Docket No. DMA-1950X (Copper)
Vermont Copper Company, Inc.
Elizabeth Mine
South Strafford, Vermont

Dear Mr. Mosier:

We are enclosing six copies of a proposed contract on the above captioned exploration project.

If you are in agreement with the contract as drawn up, and it is acceptable to the applicant, then kindly have the six copies signed by an authorized agent of the applicant corporation. Please return the original and three marked copies to this office, delivering the Operator's copy to him, and retain the other copy for your files.

Sincerely yours,

Chairman, Operating Committee

APPROVED:

For Bureau of Mines

D. M. Lemmon

For Geological Survey

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

Mr. McHenry Mosier
Executive Officer
DMEA Field Team, Region VIII
Bureau of Mines
Eastern Experiment Station
College Park, Maryland

Re: Docket No. DMA-1950X (Copper)
Vermont Copper Company, Inc.
Elizabeth Mine
South Strafford, Vermont

Dear Mr. Mosier:

We are enclosing six copies of a proposed contract on the above captioned exploration project.

If you are in agreement with the contract as drawn up, and it is acceptable to the applicant, then kindly have the six copies signed by an authorized agent of the applicant corporation. Please return the original and three marked copies to this office, delivering the Operator's copy to him, and retain the other copy for your files.

Sincerely yours,

Chairman, Operating Committee

APPROVED:

For Bureau of Mines

For Geological Survey

HFKeller/gla 4-21-52
cc to: Adm. Reading File
Docket
Operating Committee
Messrs. C.H.Johnson, Rm. 3621
Ned Nelson, Rm. 4216 GSA
Ellis
Keller

Mr. Kellen
Room 4640

Mr. McHenry Mosier
Executive Officer
DMEA Field Team, Region VIII
Eastern Experiment Station
College Park, Maryland

Re: Docket No. DMA-1950X (Copper)
Vermont Copper Company, Inc.,
Elizabeth Mine
South Strafford, Vermont

Dear Mr. Mosier:

Vermont Copper Company, operating under an exploration project (DMEA 1526X), comprising diamond drilling in a search for the extension of a mineralized zone now being mined at the Elizabeth mine, has applied for a second exploration project contract with the Government. This new application is a request for funds to sink a new shaft and do crosscutting and drifting to delineate and sample ore zones indicated by the diamond drilling.

In this connection we have prepared six copies of a proposed contract and are enclosing them for your review. If you are in agreement with the contract as drawn up, and it is acceptable to the applicant, then kindly have the six copies signed by an authorized agent of the applicant corporation. Please return the original and three marked copies to this office, delivering the Operator's copy to him and retaining the other copy for your files.

At the time the Operator's signature is obtained, you should terminate the diamond drilling contract (DMEA 1526X), by mutual agreement with the Operator. Of course, any necessary holes to determine the location and depth of the proposed shaft should be completed before the effective termination date.

When the present contract is terminated we will appreciate receiving your final report on the project. A certification of discovery will be made in view of the ore indications in some of the drill holes.

Your attention is called to the southern boundary of the area subject to repayment of royalties on production, a line shown on the map attached to the contract as B-B'. Inasmuch as the location of the line might be difficult to determine underground, we have agreed with the Operator to use the 15,700 north coordinate on the map for this boundary as it will cross the ore zone at approximately the same location as line B-B'.

The Operator's representative has indicated over the telephone agreement as to termination of the present contract, and as to the 15,700 coordinate as a more definite boundary than the line B-B' on the map.

Sincerely yours,

(signed) FRANK E. JOHNSON

Chairman, Operating Committee
Defense Minerals Exploration
Administration

APPROVED:

J. H. Hedges

Member, Bureau of Mines

D. M. Lemmon

Member, Geological Survey

Enclosures (6)

FEJohnson/bth 4/28/52
cc to: Docket
Admr's Reading File
Operating Committee
Field Team, Region VIII
Messrs. D.M.Lemon R-5216 GSA Bldg.
J.H.Hedges R-4604
S.W.Ellis
H.F.Keller
F.E.Johnson

Mr. Nelson
Room 4624

Mr. Mahenry Mosier
Executive Officer
DMEA Field Team, Region VIII
Eastern Experiment Station
College Park, Maryland

Re: Docket No. DMA-1950X (Copper)
Vermont Copper Company, Inc.,
Elizabeth Mine
South Strafford, Vermont

Dear Mr. Mosier:

Vermont Copper Company, operating under an exploration project (DMEA 1526X), comprising diamond drilling in a search for the extension of a mineralized zone now being mined at the Elizabeth mine, has applied for a second exploration project contract with the Government. This new application is a request for funds to sink a new shaft and do crosscutting and drifting to delineate and sample ore zones indicated by the diamond drilling.

In this connection we have prepared six copies of a proposed contract and are enclosing them for your review. If you are in agreement with the contract as drawn up, and it is acceptable to the applicant, then kindly have the six copies signed by an authorized agent of the applicant corporation. Please return the original and three marked copies to this office, delivering the Operator's copy to him and retaining the other copy for your files.

At the time the Operator's signature is obtained, you should terminate the diamond drilling contract (DMEA 1526X), by mutual agreement with the Operator. Of course, any necessary holes to determine the location and depth of the proposed shaft should be completed before the effective termination date.

When the present contract is terminated we will appreciate receiving your final report on the project. A certification of discovery will be made in view of the ore indications in some of the drill holes.

Your attention is called to the southern boundary of the area subject to repayment of royalties on production, a line shown on the map attached to the contract as B-B'. Inasmuch as the location of the line might be difficult to determine underground, we have agreed with the Operator to use the 15,700 north coordinate on the map for this boundary as it will cross the ore zone at approximately the same location as line B-B'.

The Operator's representative has indicated over the telephone agreement as to termination of the present contract, and as to the 15,700 coordinate as a more definite boundary than the line B-B' on the map.

Sincerely yours,

(signed) FRANK E. JOHNSON

Chairman, Operating Committee
Defense Minerals Exploration
Administration

APPROVED:

J. H. Hedges

Member, Bureau of Mines

D. M. Lemmon

Member, Geological Survey

Enclosures (6)

FEJohnson/bih 4/28/52
cc to: Docket
Adair's Reading File
Operating Committee
Field Team, Region VIII
Messrs. D.M.Lemon R-5216 GSA Bldg.
J.H.Hedges R-4604
S.W.Ellis
H.F.Keller
F.E.Johnson

Mr. Mosier

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

Mr. McHenry Mosier
Executive Officer
DMEA Field Team, Region VIII
Eastern Experiment Station
College Park, Maryland

Re: Docket No. DMA-1950X (Copper)
Vermont Copper Company, Inc.,
Elizabeth Mine
South Stafford, Vermont

Dear Mr. Mosier:

Vermont Copper Company, operating under an exploration project (DMEA 1526X), comprising diamond drilling in a search for the extension of a mineralized zone now being mined at the Elizabeth mine, has applied for a second exploration project contract with the Government. This new application is a request for funds to sink a new shaft and do crosscutting and drifting to delineate and sample ore zones indicated by the diamond drilling.

In this connection we have prepared six copies of a proposed contract and are enclosing them for your review. If you are in agreement with the contract as drawn up, and it is acceptable to the applicant, then kindly have the six copies signed by an authorized agent of the applicant corporation. Please return the original and three marked copies to this office, delivering the Operator's copy to him and retaining the other copy for your files.

At the time the Operator's signature is obtained, you should terminate the diamond drilling contract (DMEA 1526X), by mutual agreement with the Operator. Of course, any necessary holes to determine the location and depth of the proposed shaft should be completed before the effective termination date.

When the present contract is terminated we will appreciate receiving your final report on the project. A certification of discovery will be made in view of the ore indications in some of the drill holes.

Your attention is called to the southern boundary of the area subject to repayment of royalties on production, a line shown on the map attached to the contract as B-B'. Inasmuch as the location of the line might be difficult to determine underground, we have agreed with the Operator to use the 15,700 north coordinate on the map for this boundary as it will cross the ore zone at approximately the same location as line B-B'.

The Operator's representative has indicated over the telephone agreement as to termination of the present contract, and as to the 15,700 coordinate as a more definite boundary than the line B-B' on the map.

Sincerely yours,

(signed) FRANK E. JOHNSON

Chairman, Operating Committee
Defense Minerals Exploration
Administration

APPROVED:

J. H. Hedges

Member, Bureau of Mines

D. M. Lemmon

Member, Geological Survey

Enclosures (6)

FEJohnson/bih 4/28/52
cc to: Docket
Admr's Reading File
Operating Committee
Field Team, Region VIII
Messrs. D.M.Lemon R-5216 GSA Bldg.
J.H.Hedges R-4604
E.W.Ellis
H.F.Keller
F.E.Johnson

Signature on contracts only.
Sets attachments complete.
Initialled by Legal and Audit.

MF-200
(June 1951)
(Revised Feb. 1952)

DOCKET NO. DMEA 1950X

COMMODITY Copper

UNITED STATES OF AMERICA
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION

GOVERNMENT'S COPY

EXPLORATION PROJECT CONTRACT [1]

IT IS AGREED this _____ day of _____, 1952, between the United States of America, acting through the Department of the Interior, Defense Minerals Exploration Administration, hereinafter called the "Government," and [2] Vermont Copper Company, Inc.
South Strafford, Vermont

hereinafter called the "Operator," as follows:

ARTICLE 1. *Authority for contract.*—This agreement is entered into under the authority of the Defense Production Act of 1950, as amended, pursuant to DMEA Order 1 entitled "Government Aid in Defense Exploration Projects."

ARTICLE 2. *Operator's property rights.*—With respect to that certain land situated in the State of Vermont, County of Orange, described as follows: [3] That area of land located on Lot #84 in the Third Division of Strafford Township consisting of 2E, 2C, 2B and that portion of 3A and 3B lying North of line B-B' as shown and further delineated on "Plan of Land" map attached hereto.

the Operator represents and undertakes: [4]

(*a*) That the Operator is the owner, in possession and entitled to possession, and that the property is subject only to the following claims, liens, or encumbrances as to each of which the subordination agreement of the holder is attached:

None

(*b*) ~~That the Operator is the owner, in possession and entitled to possession, and the Owner's consent to such is attached~~

The Operator shall devote the land and all existing improvements, facilities, buildings, installations, and appurtenances to the purposes of the exploration project without any allowance for the use, rental value, depreciation, depletion, or other cost of acquiring, owning, or holding possession thereof.

ARTICLE 3. *Exploration project.*—The Operator, within sixty (60) days from the date of this contract shall commence work on a project of exploration for [5] copper

in or upon the described land; and shall bring the project to completion within a period of twelve (12) months from the date of this contract. The work to be performed is more fully described in Exhibit "A" attached hereto, which, with any maps or drawings thereto attached, are made a part of this contract. The Government will contribute to the cost of this work as hereafter provided.

ARTICLE 4. *Performance of the work.*—(*a*) *Operator's responsibility.* The work shall be performed efficiently, expertly, in a workmanlike manner, in accordance with good mining standards and State regulations for health and safety and for workmens' compensation and employers' liability insurance, with suitable and adequate equipment, materials, and labor, to bring the project to completion within the time fixed. To the extent specified in Exhibit "A," attached hereto, the work may be performed by independent contractor or contractors; and work not specified in Exhibit "A" for performance by independent contractor may nevertheless be so performed upon amendment of Exhibit "A," as agreed to by the parties, to state the work to be so performed and the estimated unit costs thereof, as provided hereafter.

(*b*) *Independent contracts.*—Any independent contract for the performance of work shall be on a unit-price basis (such as per foot of drilling, per foot of drifting, per hour of bulldozer operations, per cubic yard of material moved), or on some basis that will indicate the amount due for work performed at any stage of the work to be performed under such independent contract. The Government shall not be nor be considered to be a party to any such independent contract, and the Government's right to terminate the exploration project contract under any of its provisions shall not in any manner be affected by reason of any such independent contract. If the reference in Exhibit "A" to any such independent contract states that the Government's approval thereof is required, the Government may refuse to participate in the cost thereof unless and until it has given its written approval of the independent contract.

(*c*) *Government may inspect.*—The Government shall have the right to enter and observe and inspect the work at all reasonable times, and the Operator shall provide the Government with all available means for doing so. The Government may consult with and advise the Operator on all phases of the work.

ARTICLE 5. *Estimated costs of the project.*—A statement of the estimated cost of the project is set forth in Exhibit "A," attached hereto. Except insofar as any item of requirement or the estimated cost thereof set forth in Exhibit "A" is there or elsewhere designated as an "allowable maximum," such items of requirement and of related cost are estimates only, and may be exceeded to the extent that the Government may from time to time approve for the most economic and beneficial performance of the work within the limitation of the total aggregate estimate of costs. The Government's approval of any such excess over the estimate for an item of requirement or related cost will be signified by its approval and payment of any invoice or voucher for payment which expressly calls attention to such excess. Items expressly designated in Exhibit "A" or elsewhere as "allowable maximum," and the total aggregate estimated cost are limitations, and any excess therein will be for the sole account of the Operator in which the Government will not participate.

ARTICLE 6. *Allowable costs of the project.*—(*a*) The costs of the project in which the Government will participate are limited to the following:

(1) *Independent contracts.*—Payments to independent contractors under independent contracts listed in Exhibit "A." The estimated cost of any work to be performed under an independent contract is or shall be included in the estimate of costs in Exhibit "A" in terms of the estimated numbers of units of work to be performed, the estimated amount to be paid per unit, and the estimated total amount to be paid to the independent contractor, and such estimates shall be allowable maximums above which the Government will not contribute. Regardless of the provisions of any such independent contract, the Government will participate in the payments to the independent contractor only on account of work actually performed and that conforms with the provisions of the exploration project contract, and only to the extent that the Government deems the unit prices for the work under the independent contract to be reasonable and necessary. No such independent contract shall have the effect of increasing the estimated total cost of the exploration project contract nor the maximum amount which the Government will pay as provided in the exploration project contract.

(2) *Labor, supervision, consultants.*—Labor, supervision and technical services (including engineering and geological consultants), a schedule of which is included in the estimate of costs set forth in Exhibit "A." The requirements and related estimated costs for supervision and technical services are allowable maximums.

(3) *Operating materials and supplies.*—Necessary materials and supplies including items of equipment costing less than $50.00 each, and power, water, and fuel, a schedule of which is included in the estimate of costs in Exhibit "A."

(4) *Operating equipment.*—Any operating equipment to be rented or purchased, or which is owned and will be furnished by the Operator, with the estimated rental, purchase price, or the allowable depreciation, as the case may be, a schedule of which is included in Exhibit "A." Any items listed as owned and to be furnished by the Operator, and related initial allowable depreciation, are allowable maximums.

(5) *Rehabilitation and repairs.*—Any necessary initial rehabilitation or repairs of existing buildings, installations, fixtures, and movable operating equipment, now owned by the Operator and to be devoted to the purposes of the exploration contract, a schedule of which is included in the estimate of costs set forth in Exhibit "A." These items are allowable maximums.

(6) *New buildings, improvements, installations.*—Any necessary buildings, fixed improvements, or installations to be purchased, installed, or constructed for the purposes of the exploration work, with the estimated cost of each, a schedule of which is included in the estimate of costs in Exhibit "A." All of these items are allowable maximums.

(7) *Miscellaneous.*—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.

(8) *Contingencies.*—Such other necessary, reasonable direct costs of performing the exploration work, within the limit of the total aggregate estimate of costs, whether or not included in any schedule of costs in Exhibit "A," as may be approved by the Government in the course of the work, as indicated by its approval and payment of invoices and vouchers.

[1] If sufficient space is not provided in any blank, use an extra sheet of paper and refer to it in the blank.
[2] State name, address, and nature of organization if any.
[3] Give legal description or enough to identify the property, particularly excluding any land or interest therein to which the Government's lien is not to attach or the production from which is not to be subject to the Government's percentage royalty.
[4] Strike out the provision not applicable.
[5] Name of mineral or minerals.

(*b*) The Government's payments in all cases will be based on actual, necessary costs (including contract unit prices) incurred not in excess of any "allowable maximum," and not in excess of the fixed percentage of the total aggregate estimated cost. Costs will be considered to be incurred only as they are or become due and payable.

(*c*) 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 this contract, shall be allowed as costs of the project in which the Government will participate.

ARTICLE 7. *Reports, accounts, audits.*—(*a*) *Progress reports.* The Operators shall provide the Government with monthly reports of work performed and costs (including contract unit prices) incurred under the contract, in quintuplicate (five copies), upon forms provided by the Government. These progress reports shall be certified by the Operator, and shall constitute both the Operator's invoice of costs incurred on the project during the period covered by the report and his voucher for repayment by the Government, unless the Government requires the use of a standard voucher form with invoice attached. Progress reports shall include surface and/or underground engineering-geological maps or sketches showing the progress of the exploration, with assay-reports on samples taken concurrently with the advance in mineralized ground.

(*b*) *Final report.*—Upon completion of the exploration work or termination of the contract the Operator shall provide the Government with an adequate geological and engineering report, in quintuplicate (five copies), including an estimate of ore reserves resulting from the exploration work.

(*c*) Compliance with requirements.—If, in the opinion of the Government, any of the Operator's reports are insufficient or incomplete, the Government may procure the making or completion of such reports and attachments as an expense of the exploration work; and the Government may withhold approval and payment of any vouchers depending upon insufficient or incomplete reports.

(*d*) *Accounts and audits.*—The Operator shall keep suitable records and accounts of operations, which the Government may inspect and audit at any time. The Government may at any time require an audit of the Operator's records and accounts by a certified public accountant, the cost thereof to be treated as a cost of the project. The Operator shall keep and preserve said records and accounts for at least 3 years after the completion of the project or the termination of this contract. Upon the completion of the project or termination of the contract the Operator shall render a final account as provided in Article 12.

ARTICLE 8. *Payments by the Government.*—(*a*) The Government will pay 50 percent of the allowable costs incurred, as they accrue, in an aggregate total amount not in excess of $72,505.00, which is 50 percent of $145,010.00, the agreed, estimated total cost of the project in which the Government will participate; *Provided,* that until the Operator's final report and final accounting have been rendered to the Government, and any final auditing required by the Government has been made, and a final settlement of the contract has been made, the Government may withhold from the last voucher or vouchers such sums as it sees fit not in excess of ten (10) percent of the maximum total which the Government might have been called upon to pay under the terms of the contract.

(*b*) The Government may make any payment or payments direct to independent contractors and to suppliers, for the account of the Operator, rather than to the Operator.

ARTICLE 9. *Repayment by Operator.*—(*a*) If, at any time, the Government considers that a discovery or a development from which production may be made has resulted from the exploration work, the Government, at any time not later than 6 months after the Operator has rendered the required final report and final account, may so certify in writing to the Operator. The certification shall describe broadly or indicate the nature of the discovery or development. In the event of such certification, any minerals mined or produced from the land described in Article 2 within 10 years from the date of this contract, including any mined or produced before the certification, shall be subject to a percentage royalty which the Operator or his successor in interest shall pay to the Government, upon the net smelter returns, the net concentrator returns, or other net amounts realized from the sale or other disposition of any such production, in whatever form disposed of, including ore, concentrates, or metal, until the total amount contributed by the Government, without interest, is fully repaid, or said 10 years have elapsed, whichever occurs first, as follows:

(1) One and one-half (1½) percent of any such net amounts not in excess of eight dollars ($8.00) per ton.

(2) One and one-half (1½) percent of any such net amounts, plus one-half (½) percent of such net amounts for each additional full fifty cents ($0.50) by which such net amounts exceed eight dollars ($8.00) per ton, but not in excess of five (5) percent of such net amounts.

(For instance: The percentage royalty on a net amount of five dollars ($5.00) per ton would be one and one-half (1½) percent; on a net amount of ten dollars ($10.00) per ton, three and one-half (3½) percent.)

(*b*) As here used, "net smelter returns," "net concentrator returns," and "other net amounts realized from the sale or other disposition," mean gross revenue from sales; or if not sold, the market value of the material after it is mined in the form in which and the place where it is held. In the case of integrated operations in which the material is not disposed of as such, these terms mean what is or would be gross income from mining operations for percentage depletion purposes in income-tax determination.

(*c*) To secure the payment of its percentage royalty, the Government shall have and is hereby granted a lien upon the land described in Article 2 and upon any production of minerals therefrom, until the royalty claim is extinguished by lapse of time or is fully paid.

(*d*) This article is not to be construed as imposing any obligation on the Operator or the Operator's successor in interest to engage in any mining or production operations.

ARTICLE 10. *Assignment, transfer, or loss of Operator's interest.*—Without the written consent of the Government, the Operator shall not assign or otherwise transfer or hypothecate this contract or any rights thereunder. The Operator shall not make any voluntary nor permit any involuntary transfer or conveyance of the Operator's rights in the land described in Article 2, without making suitable provision for the preservation of the Government's right to a percentage royalty on production and lien for the payment thereof; *Provided,* that mere failure by the Operator to maintain the Operator's rights in the land, without any consideration running to the Operator other than relief from the cost of maintaining such rights (as by surrender of a leasehold, failure to perform assessment work, or failure to exercise an option), coupled with complete abandonment by the Operator of all interest in or operations on the land for a period of 10 years from the date of this contract, shall not constitute such a transfer or conveyance. Should the Operator make or permit any transfer or conveyance in violation of this provision, the Operator shall be and remain liable for payment to the Government of the same amounts, at the same times, as would have been paid under the terms of the percentage royalty on production. If for any reason the net smelter returns, net concentrator returns, or other net amounts realized from the sale or other disposition of such production are not available as a means of measuring the amount of the Operator's liability, the amount thereof shall be estimated as well as may be, and in the event of dispute as to such estimates, the determination thereof by the Administrator of Defense Minerals Exploration Administration or by his successor shall be final and binding upon the Operator.

ARTICLE 11. *Title to and disposition of property.*—All facilities, buildings, fixtures, equipment, or other items costing more than $50.00 each, paid for or purchased with funds contributed jointly by the Operator and the Government, although title may be taken in the name of the Operator, shall belong to the Operator and the Government jointly, in proportion to their respective contributions, and upon the completion of the work or the termination of the contract shall be disposed of promptly by the Operator for the joint account of the Government and the Operator, either by return to the vendor, by sale to others, or purchase by the Operator at a price at least as high as could otherwise be obtained, as may appear to be for the best interest of the Government, unless the Government, in writing, waives its interest in any such item. If necessary to accomplish such disposition, the Operator shall dismantle, sever from the land, and remove any such item, the cost thereof to be for the joint account of the parties in proportion to their respective interests. If the Operator, within 90 days after the receipt of written notice from the Government, fails, neglects, or refuses to dispose of such property, the Government may itself enter upon the land, take possession of, and remove and dispose of any such property as above provided.

ARTICLE 12. *Termination and completion.*—The Government may, at any time, by written notice to the Operator, terminate this contract: (*a*) If the Operator fails to provide his share of the money necessary to prosecute operations pursuant to the terms of the contract; (*b*) if the Operator, in the opinion of the Government, fails to prosecute operations pursuant to the terms of the contract; or (*c*) if in the opinion of the Government, operations up to the time of the notice have not indicated the probability of making any worth while discovery and in the opinion of the Government further operations are not justified. Upon the completion of the project or any termination of the contract the Operator shall dispose of any remaining materials, supplies, facilities, buildings, fixtures, and equipment in which the Government has an interest, for the joint account of the Operator and the Government in the proportion of their respective interests; shall render to the Government a full and final accounting of his operations under the contract and his expenditures of money; and shall pay to the Government its pro rata share of any money remaining.

ARTICLE 13. *Changes and added provisions.* _____

Executed in sextuplicate the day and year first above written.

THE UNITED STATES OF AMERICA

Vermont Copper Company, Inc.
(Operator)

By _____
Acting Administrator, Defense Minerals Exploration Administration

By _____

I, _____, certify that I am the _____ secretary of the corporation named as Operator herein; that _____, who signed this contract on behalf of the Operator, was then _____ of said corporation; that said contract was duly signed for and in behalf of said corporation by authority of its governing body, and is within the scope of its corporate powers.

_____

[CORPORATE SEAL]

U. S. GOVERNMENT PRINTING OFFICE 16—66328-1

EXPLORATION PROJECT CONTRACT
VERMONT COPPER COMPANY, INC.
THE ELIZABETH MINE
DOCKET NO. DMEA-1950X

EXHIBIT "A"

Description of the Work

Explore for the northern extension of the No. 1 Vein by sinking a two compartment (5' x 5' Compartment) shaft to approximately the 450 ft. level, crosscutting to the vein and drifting some 500 feet along the vein on the same level. The exact depth to which the shaft will be sunk and the elevation of the exploratory level will depend on diamond drilling that is now in progress, but the total depth of the shaft shall not exceed 500 feet.

The work will consist of the following items, to be performed in approximately the chronological order indicated.

1. Install power transmission line and transformers.

2. Level, by bulldozing and hand, the sites selected for the shaft, headframe, and hoist house, compressor house, change house, tool shed, and access roads.

3. Construct headframe and waste bins.

4. Construct hoist house, compressor house, change house, and tool sheds, and install the related equipment.

5. Sink a two compartment shaft, the outside dimensions of which are 12'-0" x 6'-4", to a depth not to exceed 500 feet. Cut the shaft station at the desired elevation of approximately 450' and install pumping equipment and skip pocket.

6. Drive crosscut approximately 115 feet to cut vein structure.

7. Drift 250 feet north and south along the vein structure from the crosscut or a total of 500 feet.

Drifts and crosscut shall have minimum section of 6'x7'-6".

Estimated Costs of the Project

Summary

(1)	Independent Contracts	$10,175.00*	
(2)	Labor, Supervision, Consultants	63,117.24*	
(3)	Operating Material and Supplies	25,465.42*	
(4)	Operating Equipment to be rented	6,096.00*	
(4)	Operating Equipment to be purchased	9,845.00*	
(4)	Operating Equipment to be furnished by Operator	1,745.50*	
(5)	Rehabilitation and Repairs	1,977.40*	
(6)	New Buildings, Improvements, Installations	14,669.15*	
(7)	Miscellaneous: Payroll taxes, Insurance, Workmens Compensation for labor and supervision	9,470.39*	
(8)	Contingencies	2,448.90*	
	Total Estimated Cost		$145,010.00

Details

(1) Independent Contracts (and related Materials and Supplies)

Diamond drilling for grouting	$ 4,250.00	
Supplies for grouting	5,000.00	
Other supplies	925.00	
Total		$ 10,175.00*

NOTE: The allowance for grouting (drilling and supplies) may be used only if, with the approval of the Government, it is found necessary to grout the shaft, and only after the unit costs for the drilling have been determined and inserted in this schedule by amendment of the contract.

* Allowable maximum

(2) Labor, Supervision, Consultants

Labor	Total Wages	
12 - Carpenters	$ 5,313.00	
1 - Bulldozer operator	216.00	
5 - Truck drivers	2,195.56	
2 - Axemen	107.12	
1 - Compressor operator	65.52	
4 - Laborers	1,235.52	
4 - Mechanics	1,424.80	
1 - Rigger	366.60	
4 - Timbermen	219.20	
3 - Hoistmen	3,781.20	
6 - Drillers	3,134.88	
3 - Deckmen	5,520.00	
8 - Shaftmen	14,856.00	
3 - Shaftmen's helpers	5,520.00	
2 - Mucking machine operators	1,501.92	
2 - Skiptenders	1,501.92	
Total		$46,959.24*

Supervision	
1 - Design and layout man	640.00
1 - Engineer	800.00
2 - Engineer's Helpers	1,344.00
1 - Construction Superintendent	1,500.00

* Allowable maximum

	Total Wages	
1 - Shaft foreman	$ 5,267.50	
1 - Shift boss	4,655.00	
1 - Mechanic	657.60	
1 - Electrician	657.60	
1 - Warehouseman	636.30	
Total		$16,158.00*
Total for Labor and Supervision		$63,117.24*

NOTE: The wage scale for labor and the monthly rate for employees shall not exceed the established rates, in effect in the Elizabeth Mine or district.

(3) Operating Material and Supplies

26,110 ft. local timber @ $82.20/M	$ 2,146.24
34,650 ft. Oregon pine @ $135.00/M	4,677.75
Explosives	6,480.30
Bits and steel	3,000.00
1,000 ft. air and water hose	830.00
40 yds. concrete premix @ $16.00/yd.	640.00
Anchor bolts, tie rods, reinforcing steel, etc.	1,118.00
Shaft guide brackets and bolts, washers, log screw, etc.	855.00
Ladders and headers	562.00
Grizzly	250.00

* Allowable maximum

Small tools and Miscellaneous	$ 250.00	
Gasoline and lubricants	350.00	
Diesel oil and lubricants	200.00	
Electric power	1,791.09	
Others	2,315.04	
Total		$25,465.42*

(4) Operating Equipment 1/

To be rented:

1 - Portable compressor 550 cu. ft. @ $32.00/day for 178 days	$ 5,696.00	
1 - Truck @ $20.00/day for 20 days	400.00	
Total for rental		$ 6,096.00*

To be purchased:

1 - Crosshead	$ 300.00	
2 - Sinking buckets	300.00	
1 - Blasting set	500.00	
1 - Bucket dump door	800.00	
1 - Hoist rope	600.00	
1 - Skip	1,200.00	
1 - Oil heater	250.00	
1 - Sheave 72"	550.00	
2 - Dump plates	500.00	

1/The estimates for rental and depreciation, which may be charged only for days the equipment is in use for the benefit of the work, include fuel, supplies, repairs, and maintenance, which will be supplied by the owner of the equipment, and are therefore not included in other estimates of similar items.

* Allowable maximum

1 - Control gate and accessories	$ 400.00	
1 - Cartridge gate and accessories	400.00	
1 - Sinking pump and 4" pipe	2,000.00	
1 - Safety door	150.00	
1 - Pump, tank and pipe (water supply)	1,000.00	
Other supplies and accessories	895.00	
Total for purchase		$ 9,845.00*

To be furnished by Operator:

	Allowable Per day	Depreciation for Project	
1 - Bulldozer D-6, for 17 days valued @ $14,500.00	$8.06	$137.02	
1 - Truck, for 175 days valued @ $7,000.00	3.89	680.75	
3 - Jackhammers, for 104 days valued @ $900.00	0.50	52.00	
2 - Leyners, for 75 days valued @ $1,450.00	0.81	60.75	
1 - Air tugger, for 100 days valued @ $480.00	0.27	27.00	
1 - Mucking machine, for 69 days valued @ $4,950.00	2.75	189.75	
6 - Cars, for 69 days valued @ $3,600.00	2.00	138.00	
1 - Electric locomotive, for 69 days valued @ $12,000.00	6.67	460.23	
Total			$ 1,745.50*

* Allowable maximum

(5) Rehabilitation and Repairs

Repairing, moving and installing 75 h.p. hoist	$ 1,977.40	
Total		$ 1,977.40*

(6) New Buildings, Improvements, Installations

	Supplies	
Electric power transmission lines and installation	$ 5,669.50	
Access roads and surface excavations	510.10	
Hoist house	975.68	
Compressor house	257.00	
Change room, plumbing, etc.	1,180.04	
Tool house	135.50	
Headframe, hoppers, shaft collar, etc.	2,974.06	
2", 3" and 4" pipe and fittings	1,908.00	
Track and supplies	1,059.27	
Total		$14,669.15*

(7) Miscellaneous

Labor: Insurance, workmen's compensation payroll taxes and Miscellaneous	$ 7,046.69	
Supervision: Insurance, workmen's Compensation, payroll taxes and Miscellaneous.	2,423.70	
Total Miscellaneous		$ 9,470.39*

(8) Contingencies

Unforeseen supplies and services	$ 2,448.90*

* Allowable maximum

Estimated Time Schedule

Month	Projects	Estimated Monthly Expenditure
1st	Install power transmission lines, moving hoist, and surface preparation	$ 12,000.00
2nd	Building construction, shaft collar, headframe and hoppers	25,000.00
3rd	Headframe, hopper and sinking shaft	15,000.00
4th	Shaft sinking	18,000.00
5th	Shaft sinking	20,000.00
6th	Shaft sinking	18,000.00
7th	Shaft station and pockets, pump installation and crosscutting	15,000.00
8th	Crosscutting and drifting	12,000.00
9th	Drifting	10,010.00
270 days	TOTAL	$145,010.00

MF-200
(June 1951)
(Revised Feb. 1952)

DOCKET NO. DMEA 1950X

COMMODITY Copper

UNITED STATES OF AMERICA
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION

FIELD TEAM'S COPY

EXPLORATION PROJECT CONTRACT[1]

IT IS AGREED this _____ day of _____, 1952, between the United States of America, acting through the Department of the Interior, Defense Minerals Exploration Administration, hereinafter called the "Government," and[2] Vermont Copper Company, Inc.
South Strafford, Vermont

hereinafter called the "Operator," as follows:

ARTICLE 1. *Authority for contract.*—This agreement is entered into under the authority of the Defense Production Act of 1950, as amended, pursuant to DMEA Order 1 entitled "Government Aid in Defense Exploration Projects."

ARTICLE 2. *Operator's property rights.*—With respect to that certain land situated in the State of Vermont, County of Orange, described as follows:[3] That area of land located on Lot #84 in the Third Division of Strafford Township consisting of 2E, 2C, 2B and that portion of 3A and 3B lying North of line B-B' as shown and further delineated on "Plan of Land" map attached hereto.

the Operator represents and undertakes:[4]

(*a*) That the Operator is the owner, in possession and entitled to possession, and that the property is subject only to the following claims, liens, or encumbrances as to each of which the subordination agreement of the holder is attached: None

(*b*) ~~That the Operator is a lessee, in possession and entitled to possession, and the Owner's Consent to Lien is attached.~~

The Operator shall devote the land and all existing improvements, facilities, buildings, installations, and appurtenances to the purposes of the exploration project without any allowance for the use, rental value, depreciation, depletion, or other cost of acquiring, owning, or holding possession thereof.

ARTICLE 3. *Exploration project.*—The Operator, within sixty (60) days from the date of this contract shall commence work on a project of exploration for[5] copper in or upon the described land; and shall bring the project to completion within a period of twelve (12) months from the date of this contract. The work to be performed is more fully described in Exhibit "A" attached hereto, which, with any maps or drawings thereto attached, are made a part of this contract. The Government will contribute to the cost of this work as hereafter provided.

ARTICLE 4. *Performance of the work.*—(*a*) *Operator's responsibility.* The work shall be performed efficiently, expertly, in a workmanlike manner, in accordance with good mining standards and State regulations for health and safety and for workmens' compensation and employers' liability insurance, with suitable and adequate equipment, materials, and labor, to bring the project to completion within the time fixed. To the extent specified in Exhibit "A," attached hereto, the work may be performed by independent contractor or contractors; and work not specified in Exhibit "A" for performance by independent contractor may nevertheless be so performed upon amendment of Exhibit "A," as agreed to by the parties, to state the work to be so performed and the estimated unit costs thereof, as provided hereafter.

(*b*) *Independent contracts.*—Any independent contract for the performance of work shall be on a unit-price basis (such as per foot of drilling, per foot of drifting, per hour of bulldozer operations, per cubic yard of material moved), or on some basis that will indicate the amount due for work performed at any stage of the work to be performed under such independent contract. The Government shall not be nor be considered to be a party to any such independent contract, and the Government's right to terminate the exploration project contract under any of its provisions shall not in any manner be affected by reason of any such independent contract. If the reference in Exhibit "A" to any such independent contract states that the Government's approval thereof is required, the Government may refuse to participate in the cost thereof unless and until it has given its written approval of the independent contract.

(*c*) *Government may inspect.*—The Government shall have the right to enter and observe and inspect the work at all reasonable times, and the Operator shall provide the Government with all available means for doing so. The Government may consult with and advise the Operator on all phases of the work.

ARTICLE 5. *Estimated costs of the project.*—A statement of the estimated cost of the project is set forth in Exhibit "A," attached hereto. Except insofar as any item of requirement or the estimated cost thereof set forth in Exhibit "A" is there or elsewhere designated as an "allowable maximum," such items of requirement and of related cost are estimates only, and may be exceeded to the extent that the Government may from time to time approve for the most economic and beneficial performance of the work within the limitation of the total aggregate estimate of costs. The Government's approval of any such excess over the estimate for an item of requirement or related cost will be signified by its approval and payment of any invoice or voucher for payment which expressly calls attention to such excess. Items expressly designated in Exhibit "A" or elsewhere as "allowable maximum," and the total aggregate estimated cost are limitations, and any excess therein will be for the sole account of the Operator in which the Government will not participate.

ARTICLE 6. *Allowable costs of the project.*—(*a*) The costs of the project in which the Government will participate are limited to the following:

(1) *Independent contracts.*—Payments to independent contractors under independent contracts listed in Exhibit "A." The estimated cost of any work to be performed under an independent contract is or shall be included in the estimate of costs in Exhibit "A" in terms of the estimated numbers of units of work to be performed, the estimated amount to be paid per unit, and the estimated total amount to be paid to the independent contractor, and such estimates shall be allowable maximums above which the Government will not contribute. Regardless of the provisions of any such independent contract, the Government will participate in the payments to the independent contractor only on account of work actually performed and that conforms with the provisions of the exploration project contract, and only to the extent that the Government deems the unit prices for the work under the independent contract to be reasonable and necessary. No such independent contract shall have the effect of increasing the estimated total cost of the exploration project contract nor the maximum amount which the Government will pay as provided in the exploration project contract.

(2) *Labor, supervision, consultants.*—Labor, supervision and technical services (including engineering and geological consultants), a schedule of which is included in the estimate of costs set forth in Exhibit "A." The requirements and related estimated costs for supervision and technical services are allowable maximums.

(3) *Operating materials and supplies.*—Necessary materials and supplies including items of equipment costing less than $50.00 each, and power, water, and fuel, a schedule of which is included in the estimate of costs in Exhibit "A."

(4) *Operating equipment.*—Any operating equipment to be rented or purchased, or which is owned and will be furnished by the Operator, with the estimated rental, purchase price, or the allowable depreciation, as the case may be, a schedule of which is included in Exhibit "A." Any items listed as owned and to be furnished by the Operator, and related initial allowable depreciation, are allowable maximums.

(5) *Rehabilitation and repairs.*—Any necessary initial rehabilitation or repairs of existing buildings, installations, fixtures, and movable operating equipment, now owned by the Operator and to be devoted to the purposes of the exploration contract, a schedule of which is included in the estimate of costs set forth in Exhibit "A." These items are allowable maximums.

(6) *New buildings, improvements, installations.*—Any necessary buildings, fixed improvements, or installations to be purchased, installed, or constructed for the purposes of the exploration work, with the estimated cost of each, a schedule of which is included in the estimate of costs in Exhibit "A." All of these items are allowable maximums.

(7) *Miscellaneous.*—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.

(8) *Contingencies.*—Such other necessary, reasonable direct costs of performing the exploration work, within the limit of the total aggregate estimate of costs, whether or not included in any schedule of costs in Exhibit "A," [illegible] may be approved by the Government in the course of the work, as indicated by its approval and payment of invoices a[illegible]hers.

[1] If sufficient space is not provided in any blank, use an extra sheet of paper and refer to it in the blank.
[2] State name, address, and nature of organization if any.
[3] Give legal description or enough to identify the property, particularly excluding any land or interest therein to which the Govern[illegible] attach or the production from which is not to be subject to the Government's percentage royalty.
[4] Strike out the provision not applicable.
[5] Name of mineral or minerals.

(*b*) The Government's payments in all cases will be based on actual, necessary costs (including contract unit prices) incurred not in excess of any "allowable maximum," and not in excess of the fixed percentage of the total aggregate estimated cost. Costs will be considered to be incurred only as they are or become due and payable.

(*c*) 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 this contract, shall be allowed as costs of the project in which the Government will participate.

ARTICLE 7. *Reports, accounts, audits.*—(*a*) *Progress reports.* The Operators shall provide the Government with monthly reports of work performed and costs (including contract unit prices) incurred under the contract, in quintuplicate (five copies), upon forms provided by the Government. These progress reports shall be certified by the Operator, and shall constitute both the Operator's invoice of costs incurred on the project during the period covered by the report and his voucher for repayment by the Government, unless the Government requires the use of a standard voucher form with invoice attached. Progress reports shall include surface and/or underground engineering-geological maps or sketches showing the progress of the exploration, with assay-reports on samples taken concurrently with the advance in mineralized ground.

(*b*) *Final report.*—Upon completion of the exploration work or termination of the contract the Operator shall provide the Government with an adequate geological and engineering report, in quintuplicate (five copies), including an estimate of ore reserves resulting from the exploration work.

(*c*) Compliance with requirements.—If, in the opinion of the Government, any of the Operator's reports are insufficient or incomplete, the Government may procure the making or completion of such reports and attachments as an expense of the exploration work; and the Government may withhold approval and payment of any vouchers depending upon insufficient or incomplete reports.

(*d*) *Accounts and audits.*—The Operator shall keep suitable records and accounts of operations, which the Government may inspect and audit at any time. The Government may at any time require an audit of the Operator's records and accounts by a certified public accountant, the cost thereof to be treated as a cost of the project. The Operator shall keep and preserve said records and accounts for at least 3 years after the completion of the project or the termination of this contract. Upon the completion of the project or termination of the contract the Operator shall render a final account as provided in Article 12.

ARTICLE 8. *Payments by the Government.*—(*a*) The Government will pay 50 percent of the allowable costs incurred, as they accrue, in an aggregate total amount not in excess of $72,505.00, which is 50 percent of $145,010.00, the agreed, estimated total cost of the project in which the Government will participate; *Provided,* that until the Operator's final report and final accounting have been rendered to the Government, and any final auditing required by the Government has been made, and a final settlement of the contract has been made, the Government may withhold from the last voucher or vouchers such sums as it sees fit not in excess of ten (10) percent of the maximum total which the Government might have been called upon to pay under the terms of the contract.

(*b*) The Government may make any payment or payments direct to independent contractors and to suppliers, for the account of the Operator, rather than to the Operator.

ARTICLE 9. *Repayment by Operator.*—(*a*) If, at any time, the Government considers that a discovery or a development from which production may be made has resulted from the exploration work, the Government, at any time not later than 6 months after the Operator has rendered the required final report and final account, may so certify in writing to the Operator. The certification shall describe broadly or indicate the nature of the discovery or development. In the event of such certification, any minerals mined or produced from the land described in Article 2 within 10 years from the date of this contract, including any mined or produced before the certification, shall be subject to a percentage royalty which the Operator or his successor in interest shall pay to the Government, upon the net smelter returns, the net concentrator returns, or other net amounts realized from the sale or other disposition of any such production, in whatever form disposed of, including ore, concentrates, or metal, until the total amount contributed by the Government, without interest, is fully repaid, or said 10 years have elapsed, whichever occurs first, as follows:

(1) One and one-half (1½) percent of any such net amounts not in excess of eight dollars ($8.00) per ton.

(2) One and one-half (1½) percent of any such net amounts, plus one-half (½) percent of such net amounts for each additional full fifty cents ($0.50) by which such net amounts exceed eight dollars ($8.00) per ton, but not in excess of five (5) percent of such net amounts.

(For instance: The percentage royalty on a net amount of five dollars ($5.00) per ton would be one and one-half (1½) percent; on a net amount of ten dollars ($10.00) per ton, three and one-half (3½) percent.)

(*b*) As here used, "net smelter returns," "net concentrator returns," and "other net amounts realized from the sale or other disposition," mean gross revenue from sales; or if not sold, the market value of the material after it is mined in the form in which and the place where it is held. In the case of integrated operations in which the material is not disposed of as such, these terms mean what is or would be gross income from mining operations for percentage depletion purposes in income-tax determination.

(*c*) To secure the payment of its percentage royalty, the Government shall have and is hereby granted a lien upon the land described in Article 2 and upon any production of minerals therefrom, until the royalty claim is extinguished by lapse of time or is fully paid.

(*d*) This article is not to be construed as imposing any obligation on the Operator or the Operator's successor in interest to engage in any mining or production operations.

ARTICLE 10. *Assignment, transfer, or loss of Operator's interest.*—Without the written consent of the Government, the Operator shall not assign or otherwise transfer or hypothecate this contract or any rights thereunder. The Operator shall not make any voluntary nor permit any involuntary transfer or conveyance of the Operator's rights in the land described in Article 2, without making suitable provision for the preservation of the Government's right to a percentage royalty on production and lien for the payment thereof; *Provided,* that mere failure by the Operator to maintain the Operator's rights in the land, without any consideration running to the Operator other than relief from the cost of maintaining such rights (as by surrender of a leasehold, failure to perform assessment work, or failure to exercise an option), coupled with complete abandonment by the Operator of all interest in or operations on the land for a period of 10 years from the date of this contract, shall not constitute such a transfer or conveyance. Should the Operator make or permit any transfer or conveyance in violation of this provision, the Operator shall be and remain liable for payment to the Government of the same amounts, at the same times, as would have been paid under the terms of the percentage royalty on production. If for any reason the net smelter returns, net concentrator returns, or other net amounts realized from the sale or other disposition of such production are not available as a means of measuring the amount of the Operator's liability, the amount thereof shall be estimated as well as may be, and in the event of dispute as to such estimates, the determination thereof by the Administrator of Defense Minerals Exploration Administration or by his successor shall be final and binding upon the Operator.

ARTICLE 11. *Title to and disposition of property.*—All facilities, buildings, fixtures, equipment, or other items costing more than $50.00 each, paid for or purchased with funds contributed jointly by the Operator and the Government, although title may be taken in the name of the Operator, shall belong to the Operator and the Government jointly, in proportion to their respective contributions, and upon the completion of the work or the termination of the contract shall be disposed of promptly by the Operator for the joint account of the Government and the Operator, either by return to the vendor, by sale to others, or purchase by the Operator at a price at least as high as could otherwise be obtained, as may appear to be for the best interest of the Government, unless the Government, in writing, waives its interest in any such item. If necessary to accomplish such disposition, the Operator shall dismantle, sever from the land, and remove any such item, the cost thereof to be for the joint account of the parties in proportion to their respective interests. If the Operator, within 90 days after the receipt of written notice from the Government, fails, neglects, or refuses to dispose of such property, the Government may itself enter upon the land, take possession of, and remove and dispose of any such property as above provided.

ARTICLE 12. *Termination and completion.*—The Government may, at any time, by written notice to the Operator, terminate this contract: (*a*) If the Operator fails to provide his share of the money necessary to prosecute operations pursuant to the terms of the contract; (*b*) if the Operator, in the opinion of the Government, fails to prosecute operations pursuant to the terms of the contract; or (*c*) if in the opinion of the Government, operations up to the time of the notice have not indicated the probability of making any worth while discovery and in the opinion of the Government further operations are not justified. Upon the completion of the project or any termination of the contract the Operator shall dispose of any remaining materials, supplies, facilities, buildings, fixtures, and equipment in which the Government has an interest, for the joint account of the Operator and the Government in the proportion of their respective interests; shall render to the Government a full and final accounting of his operations under the contract and his expenditures of money; and shall pay to the Government its pro rata share of any money remaining.

ARTICLE 13. *Changes and added provisions.* _____

_____

_____

_____

Executed in sextuplicate the day and year first above written.

THE UNITED STATES OF AMERICA

Vermont Copper Company, Inc.
(Operator)

By _____
Acting Administrator, Defense Minerals Exploration Administration

By _____

I, _____, certify that I am the _____ secretary of the corporation named as Operator herein; that _____, who signed this contract on behalf of the Operator, was then _____ of said corporation; that said contract was duly signed for and in behalf of said corporation by authority of its governing body, and is within the scope of its corporate powers.

_____

[CORPORATE SEAL]

GOVERNMENT PRINTING OFFICE 16—66328-1

EXPLORATION PROJECT CONTRACT
VERMONT COPPER COMPANY, INC.
THE ELIZABETH MINE
DOCKET NO. DMEA-1950X

EXHIBIT "A"

Description of the Work

Explore for the northern extension of the No. 1 Vein by sinking a two compartment (5' x 5' Compartment) shaft to approximately the 450 ft. level, crosscutting to the vein and drifting some 500 feet along the vein on the same level. The exact depth to which the shaft will be sunk and the elevation of the exploratory level will depend on diamond drilling that is now in progress, but the total depth of the shaft shall not exceed 500 feet.

The work will consist of the following items, to be performed in approximately the chronological order indicated.

1. Install power transmission line and transformers.

2. Level, by bulldozing and hand, the sites selected for the shaft, headframe, and hoist house, compressor house, change house, tool shed, and access roads.

3. Construct headframe and waste bins.

4. Construct hoist house, compressor house, change house, and tool sheds, and install the related equipment.

5. Sink a two compartment shaft, the outside dimensions of which are 12'-0" x 6'-4", to a depth not to exceed 500 feet. Cut the shaft station at the desired elevation of approximately 450' and install pumping equipment and skip pocket.

6. Drive crosscut approximately 115 feet to cut vein structure.

7. Drift 250 feet north and south along the vein structure from the crosscut or a total of 500 feet.

Drifts and crosscut shall have minimum section of 6'x7'-6".

Estimated Costs of the Project

Summary

(1)	Independent Contracts	$10,175.00*	
(2)	Labor, Supervision, Consultants	63,117.24*	
(3)	Operating Material and Supplies	25,465.42*	
(4)	Operating Equipment to be rented	6,096.00*	
(4)	Operating Equipment to be purchased	9,845.00*	
(4)	Operating Equipment to be furnished by Operator	1,745.50*	
(5)	Rehabilitation and Repairs	1,977.40*	
(6)	New Buildings, Improvements, Installations	14,669.15*	
(7)	Miscellaneous: Payroll taxes, Insurance, Workmens Compensation for labor and supervision	9,480.39*	
(8)	Contingencies	2,448.90*	
	Total Estimated Cost		$145,010.00

Details

(1)	Independent Contracts (and related Materials and Supplies)		
	Diamond drilling for grouting	$ 4,250.00	
	Supplies for grouting	5,000.00	
	Other supplies	925.00	
	Total		10,175.00*

NOTE: The allowance for grouting (drilling and supplies) may be used only if, with the approval of the Government, it is found necessary to grout the shaft, and only after the unit costs for the drilling have been determined and inserted in this schedule by amendment of the contract.

* Allowable maximum

(2) Labor, Supervision, Consultants

Labor	Total Wages	
12 - Carpenters	* 5,313.00	
1 - Bulldozer operator	216.00	
5 - Truck drivers	2,195.56	
2 - Axemen	107.12	
1 - Compressor operator	65.52	
4 - Laborers	1,235.52	
4 - Technics	1,424.80	
1 - Rigger	356.60	
4 - Timbermen	219.20	
3 - Hoistmen	3,701.20	
6 - Drillers	3,134.88	
3 - Deckmen	5,520.00	
8 - Shaftmen	14,056.00	
3 - Shaftmen's helpers	5,520.00	
2 - Mucking machine operators	1,501.92	
2 - Skiptenders	1,501.92	
Total		46,959.24*

Supervision

1 - Design and layout man	640.00
1 - Engineer	800.00
2 - Engineer's helpers	1,344.00
1 - Construction Superintendent	1,500.00

* Allowable maximum

	Total Wages	
1 - Shaft foreman	$ 5,267.50	
1 - Shift boss	4,655.00	
1 - Mechanic	657.60	
1 - Electrician	657.60	
1 - Warehousemen	636.30	
Total		$16,158.00*
Total for Labor and Supervision		$63,117.24*

NOTE: The wage scale for labor and the monthly rate for employees shall not exceed the established rates, in effect in the Elizabeth Mine or district.

(3) Operating Material and Supplies

26,110 ft. local timber @ $82.20/M	$ 2,146.24
34,650 ft. Oregon pine @ $135.00/M	4,677.75
Explosives	6,480.30
Bits and steel	3,000.00
1,000 ft. air and water hose	830.00
40 yds. concrete premix @ $16.00/yd.	640.00
Anchor bolts, tie rods, reinforcing steel, etc.	1,118.00
Shaft guide brackets and bolts, washers, log screw, etc.	855.00
Ladders and headers	562.00
Grizzly	250.00

* Allowable maximum

Small tools and Miscellaneous	$ 250.00	
Gasoline and lubricants	350.00	
Diesel oil and lubricants	200.00	
Electric power	1,791.09	
Others	2,315.04	
Total		$25,465.42*

(4) Operating Equipment 1/

To be rented:

1 - Portable compressor 550 cu. ft. $32.00/day for 178 days	$ 5,696.00	
1 - Truck 20.00/day for 20 days	400.00	
Total for rental		$ 6,096.00*

To be purchased:

1 - Crosshead	$ 300.00	
2 - Sinking buckets	300.00	
1 - Blasting set	500.00	
1 - Bucket dump door	800.00	
1 - Hoist rope	600.00	
1 - Skip	1,200.00	
1 - Oil heater	250.00	
1 - Sheave 72"	550.00	
2 - Dump plates	500.00	

1/The estimates for rental and depreciation, which may be charged only for days the equipment is in use for the benefit of the work, include fuel, supplies, repairs, and maintenance, which will be supplied by the owner of the equipment, and are therefore not included in other estimates of similar items.

* Allowable maximum

1 - Control gate and accessories	$ 400.00	
1 - Cartridge gate and accessories	400.00	
1 - Sinking pump and 4" pipe	2,000.00	
1 - Safety door	150.00	
1 - Pump, tank and pipe (water supply)	1,000.00	
Other supplies and accessories	895.00	
Total for purchase		$ 9,845.00*

To be furnished by Operator:

	Allowable Per day	Depreciation for Project	
1 - Bulldozer D-6, for 17 days valued @ $14,500.00	$8.06	$137.02	
1 - Truck, for 175 days valued @ $7,000.00	3.89	680.75	
3 - Jackhammers, for 104 days valued @ $900.00	0.50	52.00	
2 - Leyners, for 75 days valued @ $1,450.00	0.81	60.75	
1 - Air tugger, for 100 days valued @ $480.00	0.27	27.00	
1 - Mucking machine, for 69 days valued @ $4,950.00	2.75	189.75	
6 - Cars, for 69 days valued @ $3,600.00	2.00	138.00	
1 - Electric locomotive, for 69 days valued @ $12,000.00	6.67	460.23	
Total			1,745.50*

* Allowable maximum

(5) Rehabilitation and Repairs

Repairing, moving and installing 75 h.p. hoist	$ 1,977.40	
Total		$ 1,977.40*

(6) New Buildings, Improvements, Installations

	Supplies	
Electric power transmission lines and installation	$ 5,669.50	
Access roads and surface excavations	510.10	
Hoist house	975.68	
Compressor house	257.00	
Change room, plumbing, etc.	1,180.04	
Tool house	135.50	
Headframe, housers, shaft collar, etc.	2,974.06	
2", 3" and 4" pipe and fittings	1,908.00	
Track and supplies	1,059.27	
Total		$14,669.15*

(7) Miscellaneous

Labor: Insurance, workmen's compensation payroll taxes and miscellaneous	$ 7,046.69	
Supervision: Insurance, workmen's compensation, payroll taxes and miscellaneous.	2,423.70	
Total Miscellaneous		$ 9,470.39*

(8) Contingencies

Unforeseen supplies and services	$ 2,448.90*

* Allowable maximum

Estimated Time Schedule

Month	Projects	Estimated Monthly Expenditure
1st	Install power transmission lines, moving hoist, and surface preparation	$ 12,000.00
2nd	Building construction, shaft collar, headframe and hoppers	25,000.00
3rd	Headframe, hopper and sinking shaft	15,000.00
4th	Shaft sinking	18,000.00
5th	Shaft sinking	20,000.00
6th	Shaft sinking	18,000.00
7th	Shaft station and pockets, pump installation and crosscutting	15,000.00
8th	Crosscutting and drifting	12,000.00
9th	Drifting	10,010.00
270 days	TOTAL	$145,010.00

MF-200
(June 1951)
(Revised Feb. 1952)

DOCKET NO. DMEA 1950X

COMMODITY Copper

UNITED STATES OF AMERICA
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION

DIVISION COPY

EXPLORATION PROJECT CONTRACT [1]

IT IS AGREED this _____ day of _____, 1952, between the United States of America, acting through the Department of the Interior, Defense Minerals Exploration Administration, hereinafter called the "Government," and [2] Vermont Copper Company, Inc.
South Strafford, Vermont

hereinafter called the "Operator," as follows:

ARTICLE 1. *Authority for contract.*—This agreement is entered into under the authority of the Defense Production Act of 1950, as amended, pursuant to DMEA Order 1 entitled "Government Aid in Defense Exploration Projects."

ARTICLE 2. *Operator's property rights.*—With respect to that certain land situated in the State of Vermont, County of Orange, described as follows: [3] That area of land located on Lot #34 in the Third Division of Strafford Township consisting 2E, 2C, 2B and that portion of 3A and 3B lying North of line B-B' as shown and further delineated on "Plan of Land" map attached hereto.

the Operator represents and undertakes: [4]

(*a*) That the Operator is the owner, in possession and entitled to possession, and that the property is subject only to the following claims, liens, or encumbrances as to each of which the subordination agreement of the holder is attached:

None

(*b*) ~~That the Operator is the owner, in possession and entitled to possession, and that the property is subject only to the following claims, liens, or encumbrances as to each of which the subordination agreement of the holder is attached:~~

The Operator shall devote the land and all existing improvements, facilities, buildings, installations, and appurtenances to the purposes of the exploration project without any allowance for the use, rental value, depreciation, depletion, or other cost of acquiring, owning, or holding possession thereof.

ARTICLE 3. *Exploration project.*—The Operator, within sixty (60) days from the date of this contract shall commence work on a project of exploration for [5] copper in or upon the described land; and shall bring the project to completion within a period of twelve (12) months from the date of this contract. The work to be performed is more fully described in Exhibit "A" attached hereto, which, with any maps or drawings thereto attached, are made a part of this contract. The Government will contribute to the cost of this work as hereafter provided.

ARTICLE 4. *Performance of the work.*—(*a*) *Operator's responsibility.* The work shall be performed efficiently, expertly, in a workmanlike manner, in accordance with good mining standards and State regulations for health and safety and for workmens' compensation and employers' liability insurance, with suitable and adequate equipment, materials, and labor, to bring the project to completion within the time fixed. To the extent specified in Exhibit "A," attached hereto, the work may be performed by independent contractor or contractors; and work not specified in Exhibit "A" for performance by independent contractor may nevertheless be so performed upon amendment of Exhibit "A," as agreed to by the parties, to state the work to be so performed and the estimated unit costs thereof, as provided hereafter.

(*b*) *Independent contracts.*—Any independent contract for the performance of work shall be on a unit-price basis (such as per foot of drilling, per foot of drifting, per hour of bulldozer operations, per cubic yard of material moved), or on some basis that will indicate the amount due for work performed at any stage of the work to be performed under such independent contract. The Government shall not be nor be considered to be a party to any such independent contract, and the Government's right to terminate the exploration project contract under any of its provisions shall not in any manner be affected by reason of any such independent contract. If the reference in Exhibit "A" to any such independent contract states that the Government's approval thereof is required, the Government may refuse to participate in the cost thereof unless and until it has given its written approval of the independent contract.

(*c*) *Government may inspect.*—The Government shall have the right to enter and observe and inspect the work at all reasonable times, and the Operator shall provide the Government with all available means for doing so. The Government may consult with and advise the Operator on all phases of the work.

ARTICLE 5. *Estimated costs of the project.*—A statement of the estimated cost of the project is set forth in Exhibit "A," attached hereto. Except insofar as any item of requirement or the estimated cost thereof set forth in Exhibit "A" is there or elsewhere designated as an "allowable maximum," such items of requirement and of related cost are estimates only, and may be exceeded to the extent that the Government may from time to time approve for the most economic and beneficial performance of the work within the limitation of the total aggregate estimate of costs. The Government's approval of any such excess over the estimate for an item of requirement or related cost will be signified by its approval and payment of any invoice or voucher for payment which expressly calls attention to such excess. Items expressly designated in Exhibit "A" or elsewhere as "allowable maximum," and the total aggregate estimated cost are limitations, and any excess therein will be for the sole account of the Operator in which the Government will not participate.

ARTICLE 6. *Allowable costs of the project.*—(*a*) The costs of the project in which the Government will participate are limited to the following:

(1) *Independent contracts.*—Payments to independent contractors under independent contracts listed in Exhibit "A." The estimated cost of any work to be performed under an independent contract is or shall be included in the estimate of costs in Exhibit "A" in terms of the estimated numbers of units of work to be performed, the estimated amount to be paid per unit, and the estimated total amount to be paid to the independent contractor, and such estimates shall be allowable maximums above which the Government will not contribute. Regardless of the provisions of any such independent contract, the Government will participate in the payments to the independent contractor only on account of work actually performed and that conforms with the provisions of the exploration project contract, and only to the extent that the Government deems the unit prices for the work under the independent contract to be reasonable and necessary. No such independent contract shall have the effect of increasing the estimated total cost of the exploration project contract nor the maximum amount which the Government will pay as provided in the exploration project contract.

(2) *Labor, supervision, consultants.*—Labor, supervision and technical services (including engineering and geological consultants), a schedule of which is included in the estimate of costs set forth in Exhibit "A." The requirements and related estimated costs for supervision and technical services are allowable maximums.

(3) *Operating materials and supplies.*—Necessary materials and supplies including items of equipment costing less than $50.00 each, and power, water, and fuel, a schedule of which is included in the estimate of costs in Exhibit "A."

(4) *Operating equipment.*—Any operating equipment to be rented or purchased, or which is owned and will be furnished by the Operator, with the estimated rental, purchase price, or the allowable depreciation, as the case may be, a schedule of which is included in Exhibit "A." Any items listed as owned and to be furnished by the Operator, and related initial allowable depreciation, are allowable maximums.

(5) *Rehabilitation and repairs.*—Any necessary initial rehabilitation or repairs of existing buildings, installations, fixtures, and movable operating equipment, now owned by the Operator and to be devoted to the purposes of the exploration contract, a schedule of which is included in the estimate of costs set forth in Exhibit "A." These items are allowable maximums.

(6) *New buildings, improvements, installations.*—Any necessary buildings, fixed improvements, or installations to be purchased, installed, or constructed for the purposes of the exploration work, with the estimated cost of each, a schedule of which is included in the estimate of costs in Exhibit "A." All of these items are allowable maximums.

(7) *Miscellaneous.*—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.

(8) *Contingencies.*—Such other necessary, reasonable direct costs of performing the exploration work, within the limit of the total aggregate estimate of costs, whether or not included in any schedule of costs in Exhibit "A," as may be approved by the Government in the course of the work, as indicated by its approval and payment of invoices and vouchers.

[1] If sufficient space is not provided in any blank, use an extra sheet of paper and refer to it in the blank.
[2] State name, address, and nature of organization if any.
[3] Give legal description or enough to identify the property, particularly excluding any land or interest therein to which the Government's lien is not to attach or the production from which is not to be subject to the Government's percentage royalty.
[4] Strike out the provision not applicable.
[5] Name of mineral or minerals.

(*b*) The Government's payments in all cases will be based on actual, necessary costs (including contract unit prices) incurred not in excess of any "allowable maximum," and not in excess of the fixed percentage of the total aggregate estimated cost. Costs will be considered to be incurred only as they are or become due and payable.

(*c*) 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 this contract, shall be allowed as costs of the project in which the Government will participate.

ARTICLE 7. *Reports, accounts, audits.*—(*a*) *Progress reports.* The Operators shall provide the Government with monthly reports of work performed and costs (including contract unit prices) incurred under the contract, in quintuplicate (five copies), upon forms provided by the Government. These progress reports shall be certified by the Operator, and shall constitute both the Operator's invoice of costs incurred on the project during the period covered by the report and his voucher for repayment by the Government, unless the Government requires the use of a standard voucher form with invoice attached. Progress reports shall include surface and/or underground engineering-geological maps or sketches showing the progress of the exploration, with assay-reports on samples taken concurrently with the advance in mineralized ground.

(*b*) *Final report.*—Upon completion of the exploration work or termination of the contract the Operator shall provide the Government with an adequate geological and engineering report, in quintuplicate (five copies), including an estimate of ore reserves resulting from the exploration work.

(*c*) Compliance with requirements.—If, in the opinion of the Government, any of the Operator's reports are insufficient or incomplete, the Government may procure the making or completion of such reports and attachments as an expense of the exploration work; and the Government may withhold approval and payment of any vouchers depending upon insufficient or incomplete reports.

(*d*) *Accounts and audits.*—The Operator shall keep suitable records and accounts of operations, which the Government may inspect and audit at any time. The Government may at any time require an audit of the Operator's records and accounts by a certified public accountant, the cost thereof to be treated as a cost of the project. The Operator shall keep and preserve said records and accounts for at least 3 years after the completion of the project or the termination of this contract. Upon the completion of the project or termination of the contract the Operator shall render a final account as provided in Article 12.

ARTICLE 8. *Payments by the Government.*—(*a*) The Government will pay ....0.......... percent of the allowable costs incurred, as they accrue, in an aggregate total amount not in excess of $72,505.00........., which is ......50...... percent of $..145,010.00................., the agreed, estimated total cost of the project in which the Government will participate; *Provided,* that until the Operator's final report and final accounting have been rendered to the Government, and any final auditing required by the Government has been made, and a final settlement of the contract has been made, the Government may withhold from the last voucher or vouchers such sums as it sees fit not in excess of ten (10) percent of the maximum total which the Government might have been called upon to pay under the terms of the contract.

(*b*) The Government may make any payment or payments direct to independent contractors and to suppliers, for the account of the Operator, rather than to the Operator.

ARTICLE 9. *Repayment by Operator.*—(*a*) If, at any time, the Government considers that a discovery or a development from which production may be made has resulted from the exploration work, the Government, at any time not later than 6 months after the Operator has rendered the required final report and final account, may so certify in writing to the Operator. The certification shall describe broadly or indicate the nature of the discovery or development. In the event of such certification, any minerals mined or produced from the land described in Article 2 within 10 years from the date of this contract, including any mined or produced before the certification, shall be subject to a percentage royalty which the Operator or his successor in interest shall pay to the Government, upon the net smelter returns, the net concentrator returns, or other net amounts realized from the sale or other disposition of any such production, in whatever form disposed of, including ore, concentrates, or metal, until the total amount contributed by the Government, without interest, is fully repaid, or said 10 years have elapsed, whichever occurs first, as follows:

(1) One and one-half (1½) percent of any such net amounts not in excess of eight dollars ($8.00) per ton.

(2) One and one-half (1½) percent of any such net amounts, plus one-half (½) percent of such net amounts for each additional full fifty cents ($0.50) by which such net amounts exceed eight dollars ($8.00) per ton, but not in excess of five (5) percent of such net amounts.

(For instance: The percentage royalty on a net amount of five dollars ($5.00) per ton would be one and one-half (1½) percent; on a net amount of ten dollars ($10.00) per ton, three and one-half (3½) percent.)

(*b*) As here used, "net smelter returns," "net concentrator returns," and "other net amounts realized from the sale or other disposition," mean gross revenue from sales; or if not sold, the market value of the material after it is mined in the form in which and the place where it is held. In the case of integrated operations in which the material is not disposed of as such, these terms mean what is or would be gross income from mining operations for percentage depletion purposes in income-tax determination.

(*c*) To secure the payment of its percentage royalty, the Government shall have and is hereby granted a lien upon the land described in Article 2 and upon any production of minerals therefrom, until the royalty claim is extinguished by lapse of time or is fully paid.

(*d*) This article is not to be construed as imposing any obligation on the Operator or the Operator's successor in interest to engage in any mining or production operations.

ARTICLE 10. *Assignment, transfer, or loss of Operator's interest.*—Without the written consent of the Government, the Operator shall not assign or otherwise transfer or hypothecate this contract or any rights thereunder. The Operator shall not make any voluntary nor permit any involuntary transfer or conveyance of the Operator's rights in the land described in Article 2, without making suitable provision for the preservation of the Government's right to a percentage royalty on production and lien for the payment thereof; *Provided,* that mere failure by the Operator to maintain the Operator's rights in the land, without any consideration running to the Operator other than relief from the cost of maintaining such rights (as by surrender of a leasehold, failure to perform assessment work, or failure to exercise an option), coupled with complete abandonment by the Operator of all interest in or operations on the land for a period of 10 years from the date of this contract, shall not constitute such a transfer or conveyance. Should the Operator make or permit any transfer or conveyance in violation of this provision, the Operator shall be and remain liable for payment to the Government of the same amounts, at the same times, as would have been paid under the terms of the percentage royalty on production. If for any reason the net smelter returns, net concentrator returns, or other net amounts realized from the sale or other disposition of such production are not available as a means of measuring the amount of the Operator's liability, the amount thereof shall be estimated as well as may be, and in the event of dispute as to such estimates, the determination thereof by the Administrator of Defense Minerals Exploration Administration or by his successor shall be final and binding upon the Operator.

ARTICLE 11. *Title to and disposition of property.*—All facilities, buildings, fixtures, equipment, or other items costing more than $50.00 each, paid for or purchased with funds contributed jointly by the Operator and the Government, although title may be taken in the name of the Operator, shall belong to the Operator and the Government jointly, in proportion to their respective contributions, and upon the completion of the work or the termination of the contract shall be disposed of promptly by the Operator for the joint account of the Government and the Operator, either by return to the vendor, by sale to others, or purchase by the Operator at a price at least as high as could otherwise be obtained, as may appear to be for the best interest of the Government, unless the Government, in writing, waives its interest in any such item. If necessary to accomplish such disposition, the Operator shall dismantle, sever from the land, and remove any such item, the cost thereof to be for the joint account of the parties in proportion to their respective interests. If the Operator, within 90 days after the receipt of written notice from the Government, fails, neglects, or refuses to dispose of such property, the Government may itself enter upon the land, take possession of, and remove and dispose of any such property as above provided.

ARTICLE 12. *Termination and completion.*—The Government may, at any time, by written notice to the Operator, terminate this contract: (*a*) If the Operator fails to provide his share of the money necessary to prosecute operations pursuant to the terms of the contract; (*b*) if the Operator, in the opinion of the Government, fails to prosecute operations pursuant to the terms of the contract; or (*c*) if in the opinion of the Government, operations up to the time of the notice have not indicated the probability of making any worth while discovery and in the opinion of the Government further operations are not justified. Upon the completion of the project or any termination of the contract the Operator shall dispose of any remaining materials, supplies, facilities, buildings, fixtures, and equipment in which the Government has an interest, for the joint account of the Operator and the Government in the proportion of their respective interests; shall render to the Government a full and final accounting of his operations under the contract and his expenditures of money; and shall pay to the Government its pro rata share of any money remaining.

ARTICLE 13. *Changes and added provisions.* ....

....

....

....

Executed in sextuplicate the day and year first above written.

THE UNITED STATES OF AMERICA

Vermont Copper Company, Inc.
(Operator)

By Acting Administrator, Defense Minerals Exploration Administration

Hoffman (?) Talbert

By ....

I, , certify that I am the secretary of the corporation named as Operator herein; that , who signed this contract on behalf of the Operator, was then of said corporation; that said contract was duly signed for and in behalf of said corporation by authority of its governing body, and is within the scope of its corporate powers.

....

[CORPORATE SEAL]

U. S. GOVERNMENT PRINTING OFFICE 16—66328-1

EXPLORATION PROJECT CONTRACT
VERMONT COPPER COMPANY, INC.
THE [illegible]
[illegible]-1950X

EXHIBIT "A"

Description of the Work

Explore for the northern extension of the No. 1 Vein by sinking a two compartment (5' x 5' compartment) shaft to approximately the 450 ft. level, crosscutting to the vein and drifting some 500 feet along the vein on the same level. The exact depth to which the shaft will be sunk and the elevation of the exploratory level will depend on diamond drilling that is now in progress, but the total depth of the shaft shall not exceed 500 feet.

The work will consist of the following items, to be performed in approximately the chronological order indicated.

1. Install power transmission line and transformers.

2. Level, by bulldozing and hand, the sites selected for the shaft, headframe, and hoist house, compressor house, change house, tool shed, and access roads.

3. Construct headframe and waste bins.

4. Construct hoist house, compressor house, change house, and tool shed, and install the related equipment.

5. Sink a two compartment shaft, the outside dimensions of which are 12'-0" x 6'-4", to a depth not to exceed 500 feet. Cut the shaft station at the desired elevation of approximately 450' and install pumping equipment and skip pocket.

6. Drive crosscut approximately 115 feet to cut vein structure.

7. Drift 250 feet north and south along the vein structure from the crosscut or a total of 500 feet.

Drifts and crosscut shall have minimum section of 6'x7'-6".

Estimated Costs of the Project

Summary

(1)	Independent Contracts	$10,175.00*	
(2)	Labor, supervision, consultants	63,117.24*	
(3)	Operating material and supplies	5,465.42*	
(4)	Operating equipment to be rented	6,096.00*	
(4)	Operating equipment to be purchased	3,[illegible]	
(4)	Operating equipment to be furnished by operator	1,7[illegible]	
(5)	Rehabilitation and Repairs	1,977.40*	
(6)	New buildings, improvements, installations	14,669.15	
(7)	Miscellaneous: payroll taxes, insurance, workmen's compensation for labor and supervision	9,470.39*	
(8)	Contingencies	[illegible]	
	Total Estimated Cost		$165,[illegible]

Details

(1) Independent Contracts and related materials and supplies

Diamond drilling for grouting	$ 4,250.00
Supplies for grouting	5,000.[illegible]
Other supplies	925.00
Total	$ 10,175.[illegible]

Note: The allowance for grouting (drilling and supplies) may be used only if, with the approval of the Government, it is found necessary to grout the shaft, and only after the unit costs for the drilling have been determined and inserted in this schedule by amendment of the contract.

* Allowable maximum

(2) Labor, Supervision, Consultants

Labor	Total wages	
12 - Carpenters	$ 5,313.00	
1 - Bulldozer operator	216.00	
5 - Truck drivers	2,195.56	
2 - Axemen	107.12	
1 - Compressor operator	65.52	
4 - Laborers	1,235.52	
4 - Mechanics	1,424.80	
1 - Rigger	366.60	
4 - Airbermen	219.20	
3 - Hoistmen	3,701.20	
6 - Drillers	3,134.[illegible]	
3 - Muckers	5,520.00	
6 - Shaftmen	14,856.00	
3 - Shaftmen's helpers	5,520.00	
2 - Muking machine operators	1,501.92	
2 - Skiptenders	1,501.92	
Total		46,959.24*

Supervision	
1 - Design and layout man	640.00
1 - Engineer	800.00
2 - Engineer's helpers	1,344.00
1 - Construction superintendent	1,500.00

* Allowable maximum

	Total wages	
1 - Shaft foreman	$ 5,267.50	
1 - Shift boss	4,655.00	
1 - Mechanic	657.00	
1 - Electrician	657.00	
1 - Warehousemen	636.30	
Total		$10,168.00*
Total for labor and supervision		$63,117.24*

Ref: Due to a scale for labor and the monthly rate for employees shall not exceed the established rates, in effect in the Alaska Pine or district.

(3) Operating material and supplies

56,110 ft. local timber @$2.20/M	$ 2,142.24
34,450 ft. Oregon pine @$38.00/M	4,677.75
Explosives	[illegible]
Bits and steel	3,000.00
3,000 ft. air and water hose	[illegible]
40 yds. concrete drain @$16.00/yd.	640.00
Anchor bolts, tie rods, reinforcing steel, etc.	1,116.00
Shaft guide brackets and bolts, washers, lag screws, etc.	555.00
Ladders and headers	542.00
Grizzly	450.00

* Allowable maximum

Small tools and Miscellaneous	250.00	
Gasoline and lubricants	350.00	
Diesel oil and lubricants	200.00	
Electric power	1,791.09	
Others	2,315.04	
Total		*25,465.42*

(4) Operating equipment 1/

To be rented:

1 - Portable compressor 55 cu. ft. $32.00 /day for 175 days	5,600.00	
1 - Truck (1.00 ton) for 20 days	400.00	
Total for rental		$ 6,000.00

To be purchased:

1 - Crowbar	300.00
2 - Drinking buckets	300.00
1 - Drafting set	500.00
1 - Budget demo door	[illegible]
1 - Boiler rope	500.00
1 - Skip	1,000.00
1 - Oil heater	150.00
1 - Sleeve 7"	550.00
2 - Jump plates	500.00

1/The estimates for rental and depreciation, which may be charged only for days the equipment is in use for the benefit of the work, include fuel, supplies, repairs, and maintenance, which will be supplied by the owner of the equipment, and are therefore not included in other estimates of similar items.

* Allowable maximum

1 - Control gate and accessories	$ 400.00	
1 - Cartridge gate and accessories	400.00	
1 - Sinking pump and 4" pipe	2,000.00	
1 - Safety door	150.00	
1 - Pump, tank and pipe (water supply)	1,000.00	
Other supplies and accessories	895.00	
Total for purchase		9,445.00*

To be furnished by operator:

	Allowable per day	Depreciation for Project
1 - Bulldozer D-6, for 17 days valued $11,500.00	28.00	$137.02
1 - Truck, for 175 days valued $7,000.00	3.[illegible]	6[illegible]0.75
3 - Scrapers, for 104 days valued $900.00	0.50	5[illegible].00
2 - Tampers, for 75 days valued $1,500.00	0.[illegible]1	60.75
1 - Air tamper, for 100 days value[illegible] $340.00	0.[illegible]	[illegible]7.00
1 - Mucking machine, for 69 days valued $4,950.00	2.75	189.75
6 - Cars, for 69 days valued $3,600.00	2.00	13[illegible]
1 - Electric locomotive, for 69 days valued $12,[illegible]	6.67	460.23
Total		1,[illegible]5.50*

* Allowable maximum

(5) **Rehabilitation and Repairs**

Repairing, moving and installing 75 h.p. hoist	$ 1,977.40	
Total		$ 1,977.40*

(6) **New Buildings, Improvements, Installations**

	Supplies	
Electric power transmission lines and installation	$ 5,[illegible]9.50	
Access roads and surface excavations	516.10	
Hoist house	975.6[illegible]	
Compressor house	267.00	
Change room, plumbing, etc.	1,1[illegible].04	
Coal house	135.50	
Headframe, headgear, shaft collar, etc.	[illegible],0[illegible].06	
2", 3" and 4" pipe and fittings	1,9[illegible].00	
Track and supplies	1,[illegible]59.27	
Total		$[illegible].15*

(7) **Miscellaneous**

Labor: insurance, workmen's compensation payroll taxes and miscellaneous	$ 7,046.69	
Supervision: insurance, workmen's compensation, payroll taxes and miscellaneous.	2,423.70	
Total Miscellaneous		$ 9,470.39*

(8) **Contingencies**

Unforeseen supplies and services	$ 2,[illegible].90*

* Allowable maximum

Estimated Time Schedule

Month	Projects	Estimated Monthly Expenditure
1st	Install power transmission lines, moving hoist, and surface preparation	$ 12,000.00
2nd	Building construction, shaft collar, headframe and hoppers	25,000.00
3rd	Headframe, hopper and sinking shaft	15,000.00
4th	Shaft sinking	18,000.00
5th	Shaft sinking	20,000.00
6th	Shaft sinking	18,000.00
7th	Shaft station and pockets, pump installation and crosscutting	15,000.00
8th	Crosscutting and drifting	12,000.00
9th	Drifting	10,010.00
270 days	TOTAL	$145,010.00

MF-200
(June 1951)
(Revised Feb. 1952)

DOCKET NO. DMEA 1950X

COMMODITY Copper

UNITED STATES OF AMERICA
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION

DOCKET COPY

EXPLORATION PROJECT CONTRACT [1]

IT IS AGREED this _____ day of _____, 1952, between the United States of America, acting through the Department of the Interior, Defense Minerals Exploration Administration, hereinafter called the "Government," and [2]

Vermont Copper Company, Inc.
South Strafford, Vermont

hereinafter called the "Operator," as follows:

ARTICLE 1. *Authority for contract.*—This agreement is entered into under the authority of the Defense Production Act of 1950, as amended, pursuant to DMEA Order 1 entitled "Government Aid in Defense Exploration Projects."

ARTICLE 2. *Operator's property rights.*—With respect to that certain land situated in the State of Vermont, County of Orange, described as follows: [3] That area of land located on Lot #84 in the Third Division of Strafford Township consisting 2E, 2C, 2B and that portion of 3A and 3B lying North of line B-B' as shown and further delineated on "Plan of Land" map attached hereto.

the Operator represents and undertakes: [4]

(*a*) That the Operator is the owner, in possession and entitled to possession, and that the property is subject only to the following claims, liens, or encumbrances as to each of which the subordination agreement of the holder is attached:

None

(*b*) [redacted]

The Operator shall devote the land and all existing improvements, facilities, buildings, installations, and appurtenances to the purposes of the exploration project without any allowance for the use, rental value, depreciation, depletion, or other cost of acquiring, owning, or holding possession thereof.

ARTICLE 3. *Exploration project.*—The Operator, within sixty (60) days from the date of this contract shall commence work on a project of exploration for [5] copper

in or upon the described land; and shall bring the project to completion within a period of twelve (12) months from the date of this contract. The work to be performed is more fully described in Exhibit "A" attached hereto, which, with any maps or drawings thereto attached, are made a part of this contract. The Government will contribute to the cost of this work as hereafter provided.

ARTICLE 4. *Performance of the work.*—(*a*) *Operator's responsibility.* The work shall be performed efficiently, expertly, in a workmanlike manner, in accordance with good mining standards and State regulations for health and safety and for workmens' compensation and employers' liability insurance, with suitable and adequate equipment, materials, and labor, to bring the project to completion within the time fixed. To the extent specified in Exhibit "A," attached hereto, the work may be performed by independent contractor or contractors; and work not specified in Exhibit "A" for performance by independent contractor may nevertheless be so performed upon amendment of Exhibit "A," as agreed to by the parties, to state the work to be so performed and the estimated unit costs thereof, as provided hereafter.

(*b*) *Independent contracts.*—Any independent contract for the performance of work shall be on a unit-price basis (such as per foot of drilling, per foot of drifting, per hour of bulldozer operations, per cubic yard of material moved), or on some basis that will indicate the amount due for work performed at any stage of the work to be performed under such independent contract. The Government shall not be nor be considered to be a party to any such independent contract, and the Government's right to terminate the exploration project contract under any of its provisions shall not in any manner be affected by reason of any such independent contract. If the reference in Exhibit "A" to any such independent contract states that the Government's approval thereof is required, the Government may refuse to participate in the cost thereof unless and until it has given its written approval of the independent contract.

(*c*) *Government may inspect.*—The Government shall have the right to enter and observe and inspect the work at all reasonable times, and the Operator shall provide the Government with all available means for doing so. The Government may consult with and advise the Operator on all phases of the work.

ARTICLE 5. *Estimated costs of the project.*—A statement of the estimated cost of the project is set forth in Exhibit "A," attached hereto. Except insofar as any item of requirement or the estimated cost thereof set forth in Exhibit "A" is there or elsewhere designated as an "allowable maximum," such items of requirement and of related cost are estimates only, and may be exceeded to the extent that the Government may from time to time approve for the most economic and beneficial performance of the work within the limitation of the total aggregate estimate of costs. The Government's approval of any such excess over the estimate for an item of requirement or related cost will be signified by its approval and payment of any invoice or voucher for payment which expressly calls attention to such excess. Items expressly designated in Exhibit "A" or elsewhere as "allowable maximum," and the total aggregate estimated cost are limitations, and any excess therein will be for the sole account of the Operator in which the Government will not participate.

ARTICLE 6. *Allowable costs of the project.*—(*a*) The costs of the project in which the Government will participate are limited to the following:

(1) *Independent contracts.*—Payments to independent contractors under independent contracts listed in Exhibit "A." The estimated cost of any work to be performed under an independent contract is or shall be included in the estimate of costs in Exhibit "A" in terms of the estimated numbers of units of work to be performed, the estimated amount to be paid per unit, and the estimated total amount to be paid to the independent contractor, and such estimates shall be allowable maximums above which the Government will not contribute. Regardless of the provisions of any such independent contract, the Government will participate in the payments to the independent contractor only on account of work actually performed and that conforms with the provisions of the exploration project contract, and only to the extent that the Government deems the unit prices for the work under the independent contract to be reasonable and necessary. No such independent contract shall have the effect of increasing the estimated total cost of the exploration project contract nor the maximum amount which the Government will pay as provided in the exploration project contract.

(2) *Labor, supervision, consultants.*—Labor, supervision and technical services (including engineering and geological consultants), a schedule of which is included in the estimate of costs set forth in Exhibit "A." The requirements and related estimated costs for supervision and technical services are allowable maximums.

(3) *Operating materials and supplies.*—Necessary materials and supplies including items of equipment costing less than $50.00 each, and power, water, and fuel, a schedule of which is included in the estimate of costs in Exhibit "A."

(4) *Operating equipment.*—Any operating equipment to be rented or purchased, or which is owned and will be furnished by the Operator, with the estimated rental, purchase price, or the allowable depreciation, as the case may be, a schedule of which is included in Exhibit "A." Any items listed as owned and to be furnished by the Operator, and related initial allowable depreciation, are allowable maximums.

(5) *Rehabilitation and repairs.*—Any necessary initial rehabilitation or repairs of existing buildings, installations, fixtures, and movable operating equipment, now owned by the Operator and to be devoted to the purposes of the exploration contract, a schedule of which is included in the estimate of costs set forth in Exhibit "A." These items are allowable maximums.

(6) *New buildings, improvements, installations.*—Any necessary buildings, fixed improvements, or installations to be purchased, installed, or constructed for the purposes of the exploration work, with the estimated cost of each, a schedule of which is included in the estimate of costs in Exhibit "A." All of these items are allowable maximums.

(7) *Miscellaneous.*—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.

(8) *Contingencies.*—Such other necessary, reasonable direct costs of performing the exploration work, within the limit of the total aggregate estimate of costs, whether or not included in any schedule of costs in Exhibit "A," as may be approved by the Government in the course of the work, as indicated by its approval and payment of invoices and vouchers.

[1] If sufficient space is not provided in any blank, use an extra sheet of paper and refer to it in the blank.
[2] State name, address, and nature of organization if any.
[3] Give legal description or enough to identify the property, particularly excluding any land or interest therein to which the Government's lien is not to attach or the production from which is not to be subject to the Government's percentage royalty.
[4] Strike out the provision not applicable.
[5] Name of mineral or minerals.

(*b*) The Government's payments in all cases will be based on actual, necessary costs (including contract unit prices) incurred not in excess of any "allowable maximum," and not in excess of the fixed percentage of the total aggregate estimated cost. Costs will be considered to be incurred only as they are or become due and payable.

(*c*) 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 this contract, shall be allowed as costs of the project in which the Government will participate.

ARTICLE 7. *Reports, accounts, audits.*—(*a*) *Progress reports.* The Operators shall provide the Government with monthly reports of work performed and costs (including contract unit prices) incurred under the contract, in quintuplicate (five copies), upon forms provided by the Government. These progress reports shall be certified by the Operator, and shall constitute both the Operator's invoice of costs incurred on the project during the period covered by the report and his voucher for repayment by the Government, unless the Government requires the use of a standard voucher form with invoice attached. Progress reports shall include surface and/or underground engineering-geological maps or sketches showing the progress of the exploration, with assay-reports on samples taken concurrently with the advance in mineralized ground.

(*b*) *Final report.*—Upon completion of the exploration work or termination of the contract the Operator shall provide the Government with an adequate geological and engineering report, in quintuplicate (five copies), including an estimate of ore reserves resulting from the exploration work.

(*c*) Compliance with requirements.—If, in the opinion of the Government, any of the Operator's reports are insufficient or incomplete, the Government may procure the making or completion of such reports and attachments as an expense of the exploration work; and the Government may withhold approval and payment of any vouchers depending upon insufficient or incomplete reports.

(*d*) *Accounts and audits.*—The Operator shall keep suitable records and accounts of operations, which the Government may inspect and audit at any time. The Government may at any time require an audit of the Operator's records and accounts by a certified public accountant, the cost thereof to be treated as a cost of the project. The Operator shall keep and preserve said records and accounts for at least 3 years after the completion of the project or the termination of this contract. Upon the completion of the project or termination of the contract the Operator shall render a final account as provided in Article 12.

ARTICLE 8. *Payments by the Government.*—(*a*) The Government will pay 0 percent of the allowable costs incurred, as they accrue, in an aggregate total amount not in excess of $72,505.00, which is 50 percent of $145,010.00, the agreed, estimated total cost of the project in which the Government will participate; *Provided,* that until the Operator's final report and final accounting have been rendered to the Government, and any final auditing required by the Government has been made, and a final settlement of the contract has been made, the Government may withhold from the last voucher or vouchers such sums as it sees fit not in excess of ten (10) percent of the maximum total which the Government might have been called upon to pay under the terms of the contract.

(*b*) The Government may make any payment or payments direct to independent contractors and to suppliers, for the account of the Operator, rather than to the Operator.

ARTICLE 9. *Repayment by Operator.*—(*a*) If, at any time, the Government considers that a discovery or a development from which production may be made has resulted from the exploration work, the Government, at any time not later than 6 months after the Operator has rendered the required final report and final account, may so certify in writing to the Operator. The certification shall describe broadly or indicate the nature of the discovery or development. In the event of such certification, any minerals mined or produced from the land described in Article 2 within 10 years from the date of this contract, including any mined or produced before the certification, shall be subject to a percentage royalty which the Operator or his successor in interest shall pay to the Government, upon the net smelter returns, the net concentrator returns, or other net amounts realized from the sale or other disposition of any such production, in whatever form disposed of, including ore, concentrates, or metal, until the total amount contributed by the Government, without interest, is fully repaid, or said 10 years have elapsed, whichever occurs first, as follows:

(1) One and one-half (1½) percent of any such net amounts not in excess of eight dollars ($8.00) per ton.

(2) One and one-half (1½) percent of any such net amounts, plus one-half (½) percent of such net amounts for each additional full fifty cents ($0.50) by which such net amounts exceed eight dollars ($8.00) per ton, but not in excess of five (5) percent of such net amounts.

(For instance: The percentage royalty on a net amount of five dollars ($5.00) per ton would be one and one-half (1½) percent; on a net amount of ten dollars ($10.00) per ton, three and one-half (3½) percent.)

(*b*) As here used, "net smelter returns," "net concentrator returns," and "other net amounts realized from the sale or other disposition," mean gross revenue from sales; or if not sold, the market value of the material after it is mined in the form in which and the place where it is held. In the case of integrated operations in which the material is not disposed of as such, these terms mean what is or would be gross income from mining operations for percentage depletion purposes in income-tax determination.

(*c*) To secure the payment of its percentage royalty, the Government shall have and is hereby granted a lien upon the land described in Article 2 and upon any production of minerals therefrom, until the royalty claim is extinguished by lapse of time or is fully paid.

(*d*) This article is not to be construed as imposing any obligation on the Operator or the Operator's successor in interest to engage in any mining or production operations.

ARTICLE 10. *Assignment, transfer, or loss of Operator's interest.*—Without the written consent of the Government, the Operator shall not assign or otherwise transfer or hypothecate this contract or any rights thereunder. The Operator shall not make any voluntary nor permit any involuntary transfer or conveyance of the Operator's rights in the land described in Article 2, without making suitable provision for the preservation of the Government's right to a percentage royalty on production and lien for the payment thereof; *Provided,* that mere failure by the Operator to maintain the Operator's rights in the land, without any consideration running to the Operator other than relief from the cost of maintaining such rights (as by surrender of a leasehold, failure to perform assessment work, or failure to exercise an option), coupled with complete abandonment by the Operator of all interest in or operations on the land for a period of 10 years from the date of this contract, shall not constitute such a transfer or conveyance. Should the Operator make or permit any transfer or conveyance in violation of this provision, the Operator shall be and remain liable for payment to the Government of the same amounts, at the same times, as would have been paid under the terms of the percentage royalty on production. If for any reason the net smelter returns, net concentrator returns, or other net amounts realized from the sale or other disposition of such production are not available as a means of measuring the amount of the Operator's liability, the amount thereof shall be estimated as well as may be, and in the event of dispute as to such estimates, the determination thereof by the Administrator of Defense Minerals Exploration Administration or by his successor shall be final and binding upon the Operator.

ARTICLE 11. *Title to and disposition of property.*—All facilities, buildings, fixtures, equipment, or other items costing more than $50.00 each, paid for or purchased with funds contributed jointly by the Operator and the Government, although title may be taken in the name of the Operator, shall belong to the Operator and the Government jointly, in proportion to their respective contributions, and upon the completion of the work or the termination of the contract shall be disposed of promptly by the Operator for the joint account of the Government and the Operator, either by return to the vendor, by sale to others, or purchase by the Operator at a price at least as high as could otherwise be obtained, as may appear to be for the best interest of the Government, unless the Government, in writing, waives its interest in any such item. If necessary to accomplish such disposition, the Operator shall dismantle, sever from the land, and remove any such item, the cost thereof to be for the joint account of the parties in proportion to their respective interests. If the Operator, within 90 days after the receipt of written notice from the Government, fails, neglects, or refuses to dispose of such property, the Government may itself enter upon the land, take possession of, and remove and dispose of any such property as above provided.

ARTICLE 12. *Termination and completion.*—The Government may, at any time, by written notice to the Operator, terminate this contract: (*a*) If the Operator fails to provide his share of the money necessary to prosecute operations pursuant to the terms of the contract; (*b*) if the Operator, in the opinion of the Government, fails to prosecute operations pursuant to the terms of the contract; or (*c*) if in the opinion of the Government, operations up to the time of the notice have not indicated the probability of making any worth while discovery and in the opinion of the Government further operations are not justified. Upon the completion of the project or any termination of the contract the Operator shall dispose of any remaining materials, supplies, facilities, buildings, fixtures, and equipment in which the Government has an interest, for the joint account of the Operator and the Government in the proportion of their respective interests; shall render to the Government a full and final accounting of his operations under the contract and his expenditures of money; and shall pay to the Government its pro rata share of any money remaining.

ARTICLE 13. *Changes and added provisions.* ____________

____

____

____

Executed in sextuplicate the day and year first above written.

THE UNITED STATES OF AMERICA

Vermont Copper Company, Inc.
(Operator)

By Acting Administrator, Defense Minerals Exploration Administration

By ____________

I, , certify that I am the secretary of the corporation named as Operator herein; that , who signed this contract on behalf of the Operator, was then of said corporation; that said contract was duly signed for and in behalf of said corporation by authority of its governing body, and is within the scope of its corporate powers.

____

[CORPORATE SEAL]

EXPLORATION PROJECT CONTRACT
VERMONT COPPER COMPANY, INC.
THE ELIZABETH MINE
DOCKET NO. PRA-1950F

EXHIBIT "A"

Description of the Work

Explore for the northern extension of the No. 1 Vein by sinking a two compartment (5' x 5' Compartment) shaft to approximately the 450 ft. level, crosscutting to the vein and drifting some 500 feet along the vein on the same level. The exact depth to which the shaft will be sunk and the elevation of the exploratory level will depend on diamond drilling that is now in progress, but the total depth of the shaft shall not exceed 500 feet.

The work will consist of the following items, to be performed in approximately the chronological order indicated.

1. Install power transmission line and transformers.

2. Level, by bulldozing and hand, the sites selected for the shaft, headframe, and hoist house, compressor house, change house, tool shed, and access roads.

3. Construct headframe and waste bins.

4. Construct hoist house, compressor house, change house, and tool shed, and install the related equipment.

5. Sink a two compartment shaft, the outside dimensions of which are 12'-0" x 6'-4", to a depth not to exceed 500 feet. Cut the shaft station at the desired elevation of approximately 450' and install pumping equipment and skip pocket.

6. Drive crosscut approximately 115 feet to cut vein structure.

7. Drift 250 feet north and south along the vein structure from the crosscut or a total of 500 feet.

Drifts and crosscut shall have minimum section of 6'x7'-6".

Estimated Costs of the Project

Summary

(1)	Independent Contracts	$10,175.00*	
(2)	Labor, Supervision, Consultants	63,117.24*	
(3)	Operating Material and Supplies	25,465.42*	
(4)	Operating Equipment to be rented	6,096.00*	
(4)	Operating Equipment to be purchased	9,[illegible]45.00*	
(4)	Operating Equipment to be furnished by Operator	1,74[illegible].50*	
(5)	Rehabilitation and Repairs	1,977.40*	
(6)	New Buildings, Improvements, Installations	14,669.13*	
(7)	Miscellaneous: Payroll taxes, insurance, Workmen's Compensation for labor and supervision	9,470.39*	
(8)	Contingencies	[illegible],44[illegible].90*	
	Total Estimated Cost		$145,[illegible]4[illegible].00

Details

(1)	Independent Contracts (and related materials and supplies)		
	Diamond drilling for grouting	$ 4,250.00	
	Supplies for grouting	5,000.00	
	Other supplies	925.00	
	Total		10,175.00*

Note: The allowance for grouting (drilling and supplies) may be used only if, with the approval of the Government, it is found necessary to grout the shaft, and only after the unit costs for the drilling have been determined and inserted in this schedule by amendment of the contract.

* Allowable maximum

(2) Labor, Supervision, Consultants

Labor	Total Wages	
12 - Carpenters	5,313.00	
1 - Bulldozer operator	226.00	
5 - Truck drivers	2,195.56	
2 - Oilers	1,[illegible].12	
1 - Compressor operator	[illegible]	
1 - Welders	1,2[illegible]	
4 - Mechanics	1,[illegible].00	
1 - Plumber	2[illegible].00	
2 - Riggers	[illegible]	
3 - Roofers	3,[illegible].20	
6 - Painters	5,1[illegible]	
3 - Cooks	5,[illegible].00	
[illegible] - Laborers	14,[illegible].00	
3 - Apprentice helpers	[illegible],500.00	
2 - Heavy equipment operators	[illegible]	
2 - Welders	1,[illegible].72	
Total		46,959.04*

Supervision

1 - Design and layout man	620.00
1 - Welder	[illegible]
2 - Engineer's helpers	1,2[illegible]
1 - Construction superintendent	1,500.00

* Allowable maximum

	Total Wages	
1 - Shaft foreman	$ 5,267.50	
1 - Shift boss	4,655.00	
1 - Mechanic	657.60	
1 - Electrician	657.60	
1 - Warehouseman	636.30	
Total		$16,158.00*
Total for Labor and Supervision		$63,117.24*

NOTE: The wage scale for labor and the monthly rate for employees shall not exceed the established rates, in effect in the Elizabeth Mine or district.

(3) Operating Material and Supplies

26,110 ft. local timber @ $2.20/M	$ 2,1[illegible].24
34,650 ft. Oregon pine @ $135.00/M	4,677.75
Explosives	[illegible]
Bits and steel	3,000.00
1,000 ft. air and water hose	630.[illegible]
40 yds. concrete crib mix @ $16.00/yd.	640.00
Anchor bolts, tie rods, reinforcing steel, etc.	1,1[illegible]
Cage guide brackets and bolts, washers, lag screw, etc.	255.00
Ladders and headers	542.00
Grizzly	200.00

* Allowable maximum

Small tools and Miscellaneous	$ 250.00	
Gasoline and Lubricants	350.00	
Diesel oil and lubricants	200.00	
Electric power	1,791.09	
Others	2,315.04	
Total		$25,465.42*

(4) Operating Equipment 1/

To be rented:

1 - Portable compressor 550 cu. ft. $32.00/day for 175 days	$ 5,696.00	
1 - Truck [illegible].00/day for 20 days	400.00	
Total for rental		$ 6,096.00*

To be purchased:

1 - Crosshead	300.00
2 - Sinking buckets	300.00
1 - Hoisting set	500.00
1 - Bucket dump door	[illegible]
1 - Hoist rope	600.00
1 - Skip	1,200.00
1 - Oil heater	250.00
1 - Sheave 72"	550.00
2 - Sump pipes	500.00

1/The estimates for rental and depreciation, which may be charged only for days the equipment is in use for the benefit of the work, include fuel, supplies, repairs, and maintenance, which will be supplied by the owner of the equipment, and are therefore not included in other estimates of similar items.

* Allowable maximum

1 - Control gate and accessories	$ 400.00	
1 - Cartridge gate and accessories	400.00	
1 - Sinking pump and 4" pipe	2,000.00	
1 - Safety door	150.00	
1 - Pump, tank and pipe (water supply)	1,000.00	
Other supplies and accessories	895.00	
Total for purchase		9,945.00*

To be furnished by Operator:

	Allowable per day	Depreciation for project	
1 - Caterpillar D-6, for 17 days valued [illegible]	8.05	137.02	
1 - Truck, for 175 days valued [illegible]	3.89	680.75	
3 - Jackhammers, for 104 days valued [illegible]	0.50	52.00	
2 - Tampers, for 75 days valued [illegible]	0.81	60.75	
1 - Air tugger, for 100 days valued [illegible]	0.27	27.00	
1 - Shoking machine, for 69 days valued [illegible]	2.75	189.75	
6 - Cars, for 69 days valued [illegible]	2.00	138.00	
1 - Electric locomotive, for 69 days valued [illegible]	6.67	460.23	
Total			1,745.50*

* Allowable maximum

(5) **Rehabilitation and Repairs**

Repairing, moving and installing 75 h.p. hoist	$ 1,977.40	
Total		$ 1,977.40*

(6) **New Buildings, Improvements, Installations**

	Supplies	
Electric power transmission lines and installation	$ 5,[illegible]9.50	
Access roads and surface excavations	51[illegible].10	
Hoist house	975.66	
Compressor house	257.00	
Change room, plumbing, etc.	1,1[illegible].04	
Tool house	135.50	
Headframe, headers, shaft collar, etc.	,974.05	
2", 3" and 4" pipe and fittings	1,9[illegible].[illegible]	
Track and supplies	1,[illegible]59.77	
Total		14,567.15*

(7) **Miscellaneous**

Labor: Insurance, workmen's compensation payroll taxes and miscellaneous	* 7,046.69	
Supervision: Insurance, workmen's compensation, payroll taxes and miscellaneous.	2,423.70	
Total Miscellaneous		9,470.39*

(8) **Contingencies**

Unforeseen supplies and services	* 2,446.90*

* Allowable maximum

Estimated Time Schedule

Month	Projects	Estimated Monthly Expenditure
1st	Install power transmission lines, moving hoist, and surface preparation	$ 12,000.00
2nd	Building construction, shaft collar, headframe and hoppers	25,000.00
3rd	Headframe, hopper and sinking shaft	15,000.00
4th	Shaft sinking	18,000.00
5th	Shaft sinking	20,000.00
6th	Shaft sinking	18,000.00
7th	Shaft station and pockets, pump installation and crosscutting	15,000.00
8th	Crosscutting and drifting	12,000.00
9th	Drifting	10,010.00
270 days	TOTAL	$145,010.00

MF-200
(June 1951)
(Revised Feb. 1952)

DOCKET NO. DMEA 1950X

COMMODITY Copper

UNITED STATES OF AMERICA
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION

FINANCE OFFICE'S COPY

EXPLORATION PROJECT CONTRACT [1]

IT IS AGREED this _____ day of _____, 1952, between the United States of America, acting through the Department of the Interior, Defense Minerals Exploration Administration, hereinafter called the "Government," and [2] Vermont Copper Company, Inc.
South Strafford, Vermont

hereinafter called the "Operator," as follows:

ARTICLE 1. *Authority for contract.*—This agreement is entered into under the authority of the Defense Production Act of 1950, as amended, pursuant to DMEA Order 1 entitled "Government Aid in Defense Exploration Projects."

ARTICLE 2. *Operator's property rights.*—With respect to that certain land situated in the State of Vermont, County of Orange, described as follows: [3] That area of land located on Lot #84 in the Third Division of Strafford Township consisting of 2F, 2C, 2B and that portion of 3A and 3B lying North of line B-B' as shown and further delineated on "Plan of Land" map attached hereto.

the Operator represents and undertakes: [4]

(*a*) That the Operator is the owner, in possession and entitled to possession, and that the property is subject only to the following claims, liens, or encumbrances as to each of which the subordination agreement of the holder is attached:

None

(*b*) ~~That the Operator is a lessee, in possession and entitled to possession, and the Owner's Consent to Lien is attached.~~

The Operator shall devote the land and all existing improvements, facilities, buildings, installations, and appurtenances to the purposes of the exploration project without any allowance for the use, rental value, depreciation, depletion, or other cost of acquiring, owning, or holding possession thereof.

ARTICLE 3. *Exploration project.*—The Operator, within sixty (60) days from the date of this contract shall commence work on a project of exploration for [5] copper

in or upon the described land; and shall bring the project to completion within a period of twelve (12) months from the date of this contract. The work to be performed is more fully described in Exhibit "A" attached hereto, which, with any maps or drawings thereto attached, are made a part of this contract. The Government will contribute to the cost of this work as hereafter provided.

ARTICLE 4. *Performance of the work.*—(*a*) *Operator's responsibility.* The work shall be performed efficiently, expertly, in a workmanlike manner, in accordance with good mining standards and State regulations for health and safety and for workmens' compensation and employers' liability insurance, with suitable and adequate equipment, materials, and labor, to bring the project to completion within the time fixed. To the extent specified in Exhibit "A," attached hereto, the work may be performed by independent contractor or contractors; and work not specified in Exhibit "A" for performance by independent contractor may nevertheless be so performed upon amendment of Exhibit "A," as agreed to by the parties, to state the work to be so performed and the estimated unit costs thereof, as provided hereafter.

(*b*) *Independent contracts.*—Any independent contract for the performance of work shall be on a unit-price basis (such as per foot of drilling, per foot of drifting, per hour of bulldozer operations, per cubic yard of material moved), or on some basis that will indicate the amount due for work performed at any stage of the work to be performed under such independent contract. The Government shall not be nor be considered to be a party to any such independent contract, and the Government's right to terminate the exploration project contract under any of its provisions shall not in any manner be affected by reason of any such independent contract. If the reference in Exhibit "A" to any such independent contract states that the Government's approval thereof is required, the Government may refuse to participate in the cost thereof unless and until it has given its written approval of the independent contract.

(*c*) *Government may inspect.*—The Government shall have the right to enter and observe and inspect the work at all reasonable times, and the Operator shall provide the Government with all available means for doing so. The Government may consult with and advise the Operator on all phases of the work.

ARTICLE 5. *Estimated costs of the project.*—A statement of the estimated cost of the project is set forth in Exhibit "A," attached hereto. Except insofar as any item of requirement or the estimated cost thereof set forth in Exhibit "A" is there or elsewhere designated as an "allowable maximum," such items of requirement and of related cost are estimates only, and may be exceeded to the extent that the Government may from time to time approve for the most economic and beneficial performance of the work within the limitation of the total aggregate estimate of costs. The Government's approval of any such excess over the estimate for an item of requirement or related cost will be signified by its approval and payment of any invoice or voucher for payment which expressly calls attention to such excess. Items expressly designated in Exhibit "A" or elsewhere as "allowable maximum," and the total aggregate estimated cost are limitations, and any excess therein will be for the sole account of the Operator in which the Government will not participate.

ARTICLE 6. *Allowable costs of the project.*—(*a*) The costs of the project in which the Government will participate are limited to the following:

(1) *Independent contracts.*—Payments to independent contractors under independent contracts listed in Exhibit "A." The estimated cost of any work to be performed under an independent contract is or shall be included in the estimate of costs in Exhibit "A" in terms of the estimated numbers of units of work to be performed, the estimated amount to be paid per unit, and the estimated total amount to be paid to the independent contractor, and such estimates shall be allowable maximums above which the Government will not contribute. Regardless of the provisions of any such independent contract, the Government will participate in the payments to the independent contractor only on account of work actually performed and that conforms with the provisions of the exploration project contract, and only to the extent that the Government deems the unit prices for the work under the independent contract to be reasonable and necessary. No such independent contract shall have the effect of increasing the estimated total cost of the exploration project contract nor the maximum amount which the Government will pay as provided in the exploration project contract.

(2) *Labor, supervision, consultants.*—Labor, supervision and technical services (including engineering and geological consultants), a schedule of which is included in the estimate of costs set forth in Exhibit "A." The requirements and related estimated costs for supervision and technical services are allowable maximums.

(3) *Operating materials and supplies.*—Necessary materials and supplies including items of equipment costing less than $50.00 each, and power, water, and fuel, a schedule of which is included in the estimate of costs in Exhibit "A."

(4) *Operating equipment.*—Any operating equipment to be rented or purchased, or which is owned and will be furnished by the Operator, with the estimated rental, purchase price, or the allowable depreciation, as the case may be, a schedule of which is included in Exhibit "A." Any items listed as owned and to be furnished by the Operator, and related initial allowable depreciation, are allowable maximums.

(5) *Rehabilitation and repairs.*—Any necessary initial rehabilitation or repairs of existing buildings, installations, fixtures, and movable operating equipment, now owned by the Operator and to be devoted to the purposes of the exploration contract, a schedule of which is included in the estimate of costs set forth in Exhibit "A." These items are allowable maximums.

(6) *New buildings, improvements, installations.*—Any necessary buildings, fixed improvements, or installations to be purchased, installed, or constructed for the purposes of the exploration work, with the estimated cost of each, a schedule of which is included in the estimate of costs in Exhibit "A." All of these items are allowable maximums.

(7) *Miscellaneous.*—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.

(8) *Contingencies.*—Such other necessary, reasonable direct costs of performing the exploration work, within the limit of the total aggregate estimate of costs, whether or not included in any schedule of costs in Exhibit "A," as may be approved by the Government in the course of the work, as indicated by its approval and payment of invoices and vouchers.

[1] If sufficient space is not provided in any blank, use an extra sheet of paper and refer to it in the blank.
[2] State name, address, and nature of organization if any.
[3] Give legal description or enough to identify the property, particularly excluding any land or interest therein to which the Government's lien is not to attach or the production from which is not to be subject to the Government's percentage royalty.
[4] Strike out the provision not applicable.
[5] Name of mineral or minerals.

(*b*) The Government's payments in all cases will be based on actual, necessary costs (including contract unit prices) incurred not in excess of any "allowable maximum," and not in excess of the fixed percentage of the total aggregate estimated cost. Costs will be considered to be incurred only as they are or become due and payable.

(*c*) 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 this contract, shall be allowed as costs of the project in which the Government will participate.

ARTICLE 7. *Reports, accounts, audits.*—(*a*) *Progress reports.* The Operators shall provide the Government with monthly reports of work performed and costs (including contract unit prices) incurred under the contract, in quintuplicate (five copies), upon forms provided by the Government. These progress reports shall be certified by the Operator, and shall constitute both the Operator's invoice of costs incurred on the project during the period covered by the report and his voucher for repayment by the Government, unless the Government requires the use of a standard voucher form with invoice attached. Progress reports shall include surface and/or underground engineering-geological maps or sketches showing the progress of the exploration, with assay-reports on samples taken concurrently with the advance in mineralized ground.

(*b*) *Final report.*—Upon completion of the exploration work or termination of the contract the Operator shall provide the Government with an adequate geological and engineering report, in quintuplicate (five copies), including an estimate of ore reserves resulting from the exploration work.

(*c*) Compliance with requirements.—If, in the opinion of the Government, any of the Operator's reports are insufficient or incomplete, the Government may procure the making or completion of such reports and attachments as an expense of the exploration work; and the Government may withhold approval and payment of any vouchers depending upon insufficient or incomplete reports.

(*d*) *Accounts and audits.*—The Operator shall keep suitable records and accounts of operations, which the Government may inspect and audit at any time. The Government may at any time require an audit of the Operator's records and accounts by a certified public accountant, the cost thereof to be treated as a cost of the project. The Operator shall keep and preserve said records and accounts for at least 3 years after the completion of the project or the termination of this contract. Upon the completion of the project or termination of the contract the Operator shall render a final account as provided in Article 12.

ARTICLE 8. *Payments by the Government.*—(*a*) The Government will pay 50 percent of the allowable costs incurred, as they accrue, in an aggregate total amount not in excess of $72,505.00, which is 50 percent of $145,010.00, the agreed, estimated total cost of the project in which the Government will participate; *Provided,* that until the Operator's final report and final accounting have been rendered to the Government, and any final auditing required by the Government has been made, and a final settlement of the contract has been made, the Government may withhold from the last voucher or vouchers such sums as it sees fit not in excess of ten (10) percent of the maximum total which the Government might have been called upon to pay under the terms of the contract.

(*b*) The Government may make any payment or payments direct to independent contractors and to suppliers, for the account of the Operator, rather than to the Operator.

ARTICLE 9. *Repayment by Operator.*—(*a*) If, at any time, the Government considers that a discovery or a development from which production may be made has resulted from the exploration work, the Government, at any time not later than 6 months after the Operator has rendered the required final report and final account, may so certify in writing to the Operator. The certification shall describe broadly or indicate the nature of the discovery or development. In the event of such certification, any minerals mined or produced from the land described in Article 2 within 10 years from the date of this contract, including any mined or produced before the certification, shall be subject to a percentage royalty which the Operator or his successor in interest shall pay to the Government, upon the net smelter returns, the net concentrator returns, or other net amounts realized from the sale or other disposition of any such production, in whatever form disposed of, including ore, concentrates, or metal, until the total amount contributed by the Government, without interest, is fully repaid, or said 10 years have elapsed, whichever occurs first, as follows:

(1) One and one-half (1½) percent of any such net amounts not in excess of eight dollars ($8.00) per ton.

(2) One and one-half (1½) percent of any such net amounts, plus one-half (½) percent of such net amounts for each additional full fifty cents ($0.50) by which such net amounts exceed eight dollars ($8.00) per ton, but not in excess of five (5) percent of such net amounts.

(For instance: The percentage royalty on a net amount of five dollars ($5.00) per ton would be one and one-half (1½) percent; on a net amount of ten dollars ($10.00) per ton, three and one-half (3½) percent.)

(*b*) As here used, "net smelter returns," "net concentrator returns," and "other net amounts realized from the sale or other disposition," mean gross revenue from sales; or if not sold, the market value of the material after it is mined in the form in which and the place where it is held. In the case of integrated operations in which the material is not disposed of as such, these terms mean what is or would be gross income from mining operations for percentage depletion purposes in income-tax determination.

(*c*) To secure the payment of its percentage royalty, the Government shall have and is hereby granted a lien upon the land described in Article 2 and upon any production of minerals therefrom, until the royalty claim is extinguished by lapse of time or is fully paid.

(*d*) This article is not to be construed as imposing any obligation on the Operator or the Operator's successor in interest to engage in any mining or production operations.

ARTICLE 10. *Assignment, transfer, or loss of Operator's interest.*—Without the written consent of the Government, the Operator shall not assign or otherwise transfer or hypothecate this contract or any rights thereunder. The Operator shall not make any voluntary nor permit any involuntary transfer or conveyance of the Operator's rights in the land described in Article 2, without making suitable provision for the preservation of the Government's right to a percentage royalty on production and lien for the payment thereof; *Provided,* that mere failure by the Operator to maintain the Operator's rights in the land, without any consideration running to the Operator other than relief from the cost of maintaining such rights (as by surrender of a leasehold, failure to perform assessment work, or failure to exercise an option), coupled with complete abandonment by the Operator of all interest in or operations on the land for a period of 10 years from the date of this contract, shall not constitute such a transfer or conveyance. Should the Operator make or permit any transfer or conveyance in violation of this provision, the Operator shall be and remain liable for payment to the Government of the same amounts, at the same times, as would have been paid under the terms of the percentage royalty on production. If for any reason the net smelter returns, net concentrator returns, or other net amounts realized from the sale or other disposition of such production are not available as a means of measuring the amount of the Operator's liability, the amount thereof shall be estimated as well as may be, and in the event of dispute as to such estimates, the determination thereof by the Administrator of Defense Minerals Exploration Administration or by his successor shall be final and binding upon the Operator.

ARTICLE 11. *Title to and disposition of property.*—All facilities, buildings, fixtures, equipment, or other items costing more than $50.00 each, paid for or purchased with funds contributed jointly by the Operator and the Government, although title may be taken in the name of the Operator, shall belong to the Operator and the Government jointly, in proportion to their respective contributions, and upon the completion of the work or the termination of the contract shall be disposed of promptly by the Operator for the joint account of the Government and the Operator, either by return to the vendor, by sale to others, or purchase by the Operator at a price at least as high as could otherwise be obtained, as may appear to be for the best interest of the Government, unless the Government, in writing, waives its interest in any such item. If necessary to accomplish such disposition, the Operator shall dismantle, sever from the land, and remove any such item, the cost thereof to be for the joint account of the parties in proportion to their respective interests. If the Operator, within 90 days after the receipt of written notice from the Government, fails, neglects, or refuses to dispose of such property, the Government may itself enter upon the land, take possession of, and remove and dispose of any such property as above provided.

ARTICLE 12. *Termination and completion.*—The Government may, at any time, by written notice to the Operator, terminate this contract: (*a*) If the Operator fails to provide his share of the money necessary to prosecute operations pursuant to the terms of the contract; (*b*) if the Operator, in the opinion of the Government, fails to prosecute operations pursuant to the terms of the contract; or (*c*) if in the opinion of the Government, operations up to the time of the notice have not indicated the probability of making any worth while discovery and in the opinion of the Government further operations are not justified. Upon the completion of the project or any termination of the contract the Operator shall dispose of any remaining materials, supplies, facilities, buildings, fixtures, and equipment in which the Government has an interest, for the joint account of the Operator and the Government in the proportion of their respective interests; shall render to the Government a full and final accounting of his operations under the contract and his expenditures of money; and shall pay to the Government its pro rata share of any money remaining.

ARTICLE 13. *Changes and added provisions.* _____

_____

_____

_____

Executed in sextuplicate the day and year first above written.

THE UNITED STATES OF AMERICA

Vermont Copper Company, Inc.
(Operator)

By Acting Administrator, Defense Minerals Exploration Administration

By _____

I, _____, certify that I am the _____ secretary of the corporation named as Operator herein; that _____, who signed this contract on behalf of the Operator, was then _____ of said corporation; that said contract was duly signed for and in behalf of said corporation by authority of its governing body, and is within the scope of its corporate powers.

_____

[CORPORATE SEAL]

U. S. GOVERNMENT PRINTING OFFICE 16—66328-1

EXPLORATION PROJECT CONTRACT
VERMONT COPPER COMPANY, INC.
THE ELIZABETH MINE
DOCKET NO. MMA-1950X

EXHIBIT "A"

Description of the Work

Explore for the northern extension of the No. 1 Vein by sinking a two compartment (5' x 5' Compartment) shaft to approximately the 450 ft. level, crosscutting to the vein and drifting some 500 feet along the vein on the same level. The exact depth to which the shaft will be sunk and the elevation of the exploratory level will depend on diamond drilling that is now in progress, but the total depth of the shaft shall not exceed 500 feet.

The work will consist of the following items, to be performed in approximately the chronological order indicated.

1. Install power transmission line and transformers.

2. Level, by bulldozing and hand, the sites selected for the shaft, headframe, and hoist house, compressor house, change house, tool shed, and access roads.

3. Construct headframe and waste bins.

4. Construct hoist house, compressor house, change house, and tool sheds, and install the related equipment.

5. Sink a two compartment shaft, the outside dimensions of which are 12'-0" x 6'-4", to a depth not to exceed 500 feet. Cut the shaft station at the desired elevation of approximately 450' and install pumping equipment and skip pocket.

6. Drive crosscut approximately 115 feet to cut vein structure.

7. Drift 250 feet north and south along the vein structure from the crosscut or a total of 500 feet.

Drifts and crosscut shall have minimum section of 6'x7'-6".

Estimated Costs of the Project

Summary

(1)	Independent Contracts	$10,175.00*
(2)	Labor, Supervision, Consultants	63,117.24*
(3)	Operating Material and Supplies	25,465.42*
(4)	Operating Equipment to be rented	6,096.00*
(4)	Operating Equipment to be purchased	9,045.00*
(4)	Operating Equipment to be furnished by Operator	1,745.50*
(5)	Rehabilitation and Repairs	1,977.40*
(6)	New Buildings, Improvements, Installations	14,669.15
(7)	Miscellaneous: Payroll taxes, Insurance, Workmen's Compensation for labor and supervision	9,470.39*
(8)	Contingencies	2,440.90*
	Total Estimated Cost	$145,010.00

Details

(1) Independent Contracts (and related Materials and Supplies)

Diamond drilling for grouting	$ 4,250.00
Supplies for grouting	5,000.00
Other supplies	925.00
Total	$ 10,175.00*

NOTE: The allowance for grouting (drilling and supplies) may be used only if, with the approval of the Government, it is found necessary to grout the shaft, and only after the unit costs for the drilling have been determined and inserted in this schedule by amendment of the contract.

* Allowable maximum

(2) **Labor, Supervision, Consultants**

Labor	Total Wages	
12 - Carpenters	$ 5,313.00	
1 - Bulldozer operator	216.00	
5 - Truck drivers	2,195.56	
2 - Axemen	107.12	
1 - Compressor operator	65.52	
4 - Laborers	1,235.52	
4 - Mechanics	1,424.80	
1 - Rigger	356.00	
4 - Linemen	219.20	
3 - Hoist men	3,7[illegible]1.20	
6 - Drillers	3,134.[illegible]	
3 - Blasters	[illegible],5[illegible].00	
9 - Shafmen	14,[illegible]56.00	
3 - Shaftmen's helpers	5,520.00	
2 - Mucking machine operators	1,501.92	
2 - Skip tenders	1,501.92	
Total		46,959.24*

Supervision

1 - Design and layout man	640.00
1 - Engineer	800.00
2 - Engineer's helpers	1,344.[illegible]
1 - Construction Superintendent	1,500.00

* Allowable maximum

	Total Wages	
1 - Shaft foreman	$ 5,267.50	
1 - Shift boss	4,655.00	
1 - Mechanic	657.60	
1 - Electrician	657.60	
1 - Warehousemen	836.30	
Total		$16,158.00*
Total for Labor and Supervision		63,117.24*

NOTE: The wage scale for labor and the monthly rate for employees shall not exceed the established rates, in effect in the Elizabeth Mine or District.

(3) Operating Material and Supplies

26,110 ft. local timber @ $72.20/	$ 2,1[illegible].24
34,650 ft. Oregon pine @ $135.00/	4,677.75
Explosives	6,[illegible].30
Bits and steel	3,000.00
1,000 ft. air and water hose	430.00
40 yds. concrete premix @ 16.00/yd.	640.00
Anchor bolts, tie rods, reinforcing steel, etc.	1,116.00
Shaft guide brackets and bolts, washers, lock screw, etc.	455.00
Ladders and headers	562.00
Grizzly	250.00

* Allowable maximum

Small tools and Miscellaneous	$ 250.00	
Gasoline and lubricants	350.00	
Diesel oil and lubricants	200.00	
Electric power	1,791.19	
Others	2,315.04	
Total		$25,465.42*

(4) Operating Equipment 1/

To be rented:

1 - Portable compressor 550 cu. ft. $32.00/day for 178 days	$ 5,696.00	
1 - Truck $20.00/day for 20 days	400.00	
Total for rental		$ 6,096.00*

To be purchased:

1 - Cross head	300.00
2 - Sinking buckets	300.00
1 - Blasting set	500.00
1 - Bucket dump door	800.00
1 - Hoist rope	600.00
1 - Skip	1,800.00
1 - Oil heater	250.00
1 - Sheave 72"	550.00
2 - Dump plates	500.00

1/The estimates for rental and depreciation, which may be charged only for days the equipment is in use for the benefit of the work, include fuel, supplies, repairs, and maintenance, which will be supplied by the owner of the equipment, and are therefore not included in other estimates of similar items.

* Allowable maximum

1 - Control gate and accessories	$ 400.00	
1 - Cartridge gate and accessories	400.00	
1 - Sinking pump and 4" pipe	2,000.00	
1 - Safety door	150.00	
1 - Pump, tank and pipe (water supply)	1,000.00	
Other supplies and accessories	895.00	
Total for purchase		$ 9,845.00*

To be furnished by Operator:

	Allowable Depreciation Per day	Allowable Depreciation for Project	
1 - Bulldozer D-6, for 17 days valued $ 12,500.00	16.06	137.02	
1 - Truck, for 175 days valued $ 7,000.00	3.59	630.75	
3 - Jackhammers, for 104 days valued $ 900.00	0.50	52.00	
2 - Tampers, for 75 days valued $ 1,250.00	0.81	60.75	
1 - Air tugger, for 100 days value $ 450.00	0.27	27.00	
1 - Bucking machine, for 69 days valued $ 4,950.00	2.75	189.75	
6 - Cars, for 69 days valued $ 3,600.00	2.00	138.00	
1 - Electric locomotive, for 69 days valued $ 10,000.00	6.67	460.23	
Total			1,745.50*

* Allowable maximum

(5) **Rehabilitation and Repairs**

Repairing, moving and installing 75 h.p. hoist	$ 1,977.40	
Total		$ 1,977.40*

(6) **New Buildings, Improvements, Installations**

	Supplies	
Electric power transmission lines and installation	$ 5,[illegible]9.50	
Access roads and surface excavations	510.10	
Point house	975.60	
Compressor house	257.00	
Change room, plumbing, etc.	1,1[illegible].04	
Tool house	135.50	
Headframe, hoisters, shaft collar, etc.	[illegible],9[illegible].05	
2", 3" and 4" pipe and fittings	1,9[illegible]	
Track and supplies	1,[illegible]59.27	
Total		$[illegible],669.15*

(7) **Miscellaneous**

Labor: Insurance, workmen's compensation payroll taxes and miscellaneous	$ 7,046.69	
Supervision: Insurance, workmen's compensation, payroll taxes and miscellaneous.	2,423.70	
Total Miscellaneous		$ 9,4[illegible].39*

(8) **Contingencies**

Unforeseen supplies and services	$ 2,446.90*

* Allowable maximum

Estimated Time Schedule

Month	Projects	Estimated Monthly Expenditure
1st	Install power transmission lines, moving hoist, and surface preparation	$ 12,000.00
2nd	Building construction, shaft collar, headframe and hoppers	25,000.00
3rd	Headframe, hopper and sinking shaft	15,000.00
4th	Shaft sinking	18,000.00
5th	Shaft sinking	20,000.00
6th	Shaft sinking	18,000.00
7th	Shaft station and pockets, pump installation and crosscutting	15,000.00
8th	Crosscutting and drifting	12,000.00
9th	Drifting	10,010.00
270 days	TOTAL	$145,010.00

MF-200
(June 1951)
(Revised Feb. 1952)

DOCKET NO. DMEA 1950X

COMMODITY Copper

UNITED STATES OF AMERICA
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION

OPERATOR'S COPY

EXPLORATION PROJECT CONTRACT[1]

IT IS AGREED this _____ day of _____, 1952, between the United States of America, acting through the Department of the Interior, Defense Minerals Exploration Administration, hereinafter called the "Government," and[2] Vermont Copper Company, Inc.
South Strafford, Vermont

hereinafter called the "Operator," as follows:

ARTICLE 1. *Authority for contract.*—This agreement is entered into under the authority of the Defense Production Act of 1950, as amended, pursuant to DMEA Order 1 entitled "Government Aid in Defense Exploration Projects."

ARTICLE 2. *Operator's property rights.*—With respect to that certain land situated in the State of Vermont, County of Orange, described as follows:[3] That area of land located on Lot #84 in the Third Division of Strafford Township consisting of 2E, 2C, 2B and that portion of 3A and 3B lying North of line B-B' as shown and further delineated on "Plan of Land" map attached hereto.

the Operator represents and undertakes:[4]

(*a*) That the Operator is the owner, in possession and entitled to possession, and that the property is subject only to the following claims, liens, or encumbrances as to each of which the subordination agreement of the holder is attached:

None

(*b*) ~~That the Operator is a lessee, in possession and entitled to possession, and the Owner's Consent to Lien is attached.~~

The Operator shall devote the land and all existing improvements, facilities, buildings, installations, and appurtenances to the purposes of the exploration project without any allowance for the use, rental value, depreciation, depletion, or other cost of acquiring, owning, or holding possession thereof.

ARTICLE 3. *Exploration project.*—The Operator, within sixty (60) days from the date of this contract shall commence work on a project of exploration for[5] copper

in or upon the described land; and shall bring the project to completion within a period of twelve (12) months from the date of this contract. The work to be performed is more fully described in Exhibit "A" attached hereto, which, with any maps or drawings thereto attached, are made a part of this contract. The Government will contribute to the cost of this work as hereafter provided.

ARTICLE 4. *Performance of the work.*—(*a*) *Operator's responsibility.* The work shall be performed efficiently, expertly, in a workmanlike manner, in accordance with good mining standards and State regulations for health and safety and for workmens' compensation and employers' liability insurance, with suitable and adequate equipment, materials, and labor, to bring the project to completion within the time fixed. To the extent specified in Exhibit "A," attached hereto, the work may be performed by independent contractor or contractors; and work not specified in Exhibit "A" for performance by independent contractor may nevertheless be so performed upon amendment of Exhibit "A," as agreed to by the parties, to state the work to be so performed and the estimated unit costs thereof, as provided hereafter.

(*b*) *Independent contracts.*—Any independent contract for the performance of work shall be on a unit-price basis (such as per foot of drilling, per foot of drifting, per hour of bulldozer operations, per cubic yard of material moved), or on some basis that will indicate the amount due for work performed at any stage of the work to be performed under such independent contract. The Government shall not be nor be considered to be a party to any such independent contract, and the Government's right to terminate the exploration project contract under any of its provisions shall not in any manner be affected by reason of any such independent contract. If the reference in Exhibit "A" to any such independent contract states that the Government's approval thereof is required, the Government may refuse to participate in the cost thereof unless and until it has given its written approval of the independent contract.

(*c*) *Government may inspect.*—The Government shall have the right to enter and observe and inspect the work at all reasonable times, and the Operator shall provide the Government with all available means for doing so. The Government may consult with and advise the Operator on all phases of the work.

ARTICLE 5. *Estimated costs of the project.*—A statement of the estimated cost of the project is set forth in Exhibit "A," attached hereto. Except insofar as any item of requirement or the estimated cost thereof set forth in Exhibit "A" is there or elsewhere designated as an "allowable maximum," such items of requirement and of related cost are estimates only, and may be exceeded to the extent that the Government may from time to time approve for the most economic and beneficial performance of the work within the limitation of the total aggregate estimate of costs. The Government's approval of any such excess over the estimate for an item of requirement or related cost will be signified by its approval and payment of any invoice or voucher for payment which expressly calls attention to such excess. Items expressly designated in Exhibit "A" or elsewhere as "allowable maximum," and the total aggregate estimated cost are limitations, and any excess therein will be for the sole account of the Operator in which the Government will not participate.

ARTICLE 6. *Allowable costs of the project.*—(*a*) The costs of the project in which the Government will participate are limited to the following:

(1) *Independent contracts.*—Payments to independent contractors under independent contracts listed in Exhibit "A." The estimated cost of any work to be performed under an independent contract is or shall be included in the estimate of costs in Exhibit "A" in terms of the estimated numbers of units of work to be performed, the estimated amount to be paid per unit, and the estimated total amount to be paid to the independent contractor, and such estimates shall be allowable maximums above which the Government will not contribute. Regardless of the provisions of any such independent contract, the Government will participate in the payments to the independent contractor only on account of work actually performed and that conforms with the provisions of the exploration project contract, and only to the extent that the Government deems the unit prices for the work under the independent contract to be reasonable and necessary. No such independent contract shall have the effect of increasing the estimated total cost of the exploration project contract nor the maximum amount which the Government will pay as provided in the exploration project contract.

(2) *Labor, supervision, consultants.*—Labor, supervision and technical services (including engineering and geological consultants), a schedule of which is included in the estimate of costs set forth in Exhibit "A." The requirements and related estimated costs for supervision and technical services are allowable maximums.

(3) *Operating materials and supplies.*—Necessary materials and supplies including items of equipment costing less than $50.00 each, and power, water, and fuel, a schedule of which is included in the estimate of costs in Exhibit "A."

(4) *Operating equipment.*—Any operating equipment to be rented or purchased, or which is owned and will be furnished by the Operator, with the estimated rental, purchase price, or the allowable depreciation, as the case may be, a schedule of which is included in Exhibit "A." Any items listed as owned and to be furnished by the Operator, and related initial allowable depreciation, are allowable maximums.

(5) *Rehabilitation and repairs.*—Any necessary initial rehabilitation or repairs of existing buildings, installations, fixtures, and movable operating equipment, now owned by the Operator and to be devoted to the purposes of the exploration contract, a schedule of which is included in the estimate of costs set forth in Exhibit "A." These items are allowable maximums.

(6) *New buildings, improvements, installations.*—Any necessary buildings, fixed improvements, or installations to be purchased, installed, or constructed for the purposes of the exploration work, with the estimated cost of each, a schedule of which is included in the estimate of costs in Exhibit "A." All of these items are allowable maximums.

(7) *Miscellaneous.*—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.

(8) *Contingencies.*—Such other necessary, reasonable direct costs of performing the exploration work, within the limit of the total aggregate estimate of costs, whether or not included in any schedule of costs in Exhibit "A," as may be approved by the Government in the course of the work, as indicated by its approval and payment of invoices and vouchers.

[1] If sufficient space is not provided in any blank, use an extra sheet of paper and refer to it in the blank.
[2] State name, address, and nature of organization if any.
[3] Give legal description or enough to identify the property, particularly excluding any land or interest therein to which the Government's lien is not to attach or the production from which is not to be subject to the Government's percentage royalty.
[4] Strike out the provision not applicable.
[5] Name of mineral or minerals.

(*b*) The Government's payments in all cases will be based on actual, necessary costs (including contract unit prices) incurred not in excess of any "allowable maximum," and not in excess of the fixed percentage of the total aggregate estimated cost. Costs will be considered to be incurred only as they are or become due and payable.

(*c*) 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 this contract, shall be allowed as costs of the project in which the Government will participate.

ARTICLE 7. *Reports, accounts, audits.*—(*a*) *Progress reports.* The Operators shall provide the Government with monthly reports of work performed and costs (including contract unit prices) incurred under the contract, in quintuplicate (five copies), upon forms provided by the Government. These progress reports shall be certified by the Operator, and shall constitute both the Operator's invoice of costs incurred on the project during the period covered by the report and his voucher for repayment by the Government, unless the Government requires the use of a standard voucher form with invoice attached. Progress reports shall include surface and/or underground engineering-geological maps or sketches showing the progress of the exploration, with assay-reports on samples taken concurrently with the advance in mineralized ground.

(*b*) *Final report.*—Upon completion of the exploration work or termination of the contract the Operator shall provide the Government with an adequate geological and engineering report, in quintuplicate (five copies), including an estimate of ore reserves resulting from the exploration work.

(*c*) Compliance with requirements.—If, in the opinion of the Government, any of the Operator's reports are insufficient or incomplete, the Government may procure the making or completion of such reports and attachments as an expense of the exploration work; and the Government may withhold approval and payment of any vouchers depending upon insufficient or incomplete reports.

(*d*) *Accounts and audits.*—The Operator shall keep suitable records and accounts of operations, which the Government may inspect and audit at any time. The Government may at any time require an audit of the Operator's records and accounts by a certified public accountant, the cost thereof to be treated as a cost of the project. The Operator shall keep and preserve said records and accounts for at least 3 years after the completion of the project or the termination of this contract. Upon the completion of the project or termination of the contract the Operator shall render a final account as provided in Article 12.

ARTICLE 8. *Payments by the Government.*—(*a*) The Government will pay 50 percent of the allowable costs incurred, as they accrue, in an aggregate total amount not in excess of $72,505.00, which is 50 percent of $145,010.00, the agreed, estimated total cost of the project in which the Government will participate; *Provided,* that until the Operator's final report and final accounting have been rendered to the Government, and any final auditing required by the Government has been made, and a final settlement of the contract has been made, the Government may withhold from the last voucher or vouchers such sums as it sees fit not in excess of ten (10) percent of the maximum total which the Government might have been called upon to pay under the terms of the contract.

(*b*) The Government may make any payment or payments direct to independent contractors and to suppliers, for the account of the Operator, rather than to the Operator.

ARTICLE 9. *Repayment by Operator.*—(*a*) If, at any time, the Government considers that a discovery or a development from which production may be made has resulted from the exploration work, the Government, at any time not later than 6 months after the Operator has rendered the required final report and final account, may so certify in writing to the Operator. The certification shall describe broadly or indicate the nature of the discovery or development. In the event of such certification, any minerals mined or produced from the land described in Article 2 within 10 years from the date of this contract, including any mined or produced before the certification, shall be subject to a percentage royalty which the Operator or his successor in interest shall pay to the Government, upon the net smelter returns, the net concentrator returns, or other net amounts realized from the sale or other disposition of any such production, in whatever form disposed of, including ore, concentrates, or metal, until the total amount contributed by the Government, without interest, is fully repaid, or said 10 years have elapsed, whichever occurs first, as follows:

(1) One and one-half (1½) percent of any such net amounts not in excess of eight dollars ($8.00) per ton.

(2) One and one-half (1½) percent of any such net amounts, plus one-half (½) percent of such net amounts for each additional full fifty cents ($0.50) by which such net amounts exceed eight dollars ($8.00) per ton, but not in excess of five (5) percent of such net amounts.

(For instance: The percentage royalty on a net amount of five dollars ($5.00) per ton would be one and one-half (1½) percent; on a net amount of ten dollars ($10.00) per ton, three and one-half (3½) percent.)

(*b*) As here used, "net smelter returns," "net concentrator returns," and "other net amounts realized from the sale or other disposition," mean gross revenue from sales; or if not sold, the market value of the material after it is mined in the form in which and the place where it is held. In the case of integrated operations in which the material is not disposed of as such, these terms mean what is or would be gross income from mining operations for percentage depletion purposes in income-tax determination.

(*c*) To secure the payment of its percentage royalty, the Government shall have and is hereby granted a lien upon the land described in Article 2 and upon any production of minerals therefrom, until the royalty claim is extinguished by lapse of time or is fully paid.

(*d*) This article is not to be construed as imposing any obligation on the Operator or the Operator's successor in interest to engage in any mining or production operations.

ARTICLE 10. *Assignment, transfer, or loss of Operator's interest.*—Without the written consent of the Government, the Operator shall not assign or otherwise transfer or hypothecate this contract or any rights thereunder. The Operator shall not make any voluntary nor permit any involuntary transfer or conveyance of the Operator's rights in the land described in Article 2, without making suitable provision for the preservation of the Government's right to a percentage royalty on production and lien for the payment thereof; *Provided,* that mere failure by the Operator to maintain the Operator's rights in the land, without any consideration running to the Operator other than relief from the cost of maintaining such rights (as by surrender of a leasehold, failure to perform assessment work, or failure to exercise an option), coupled with complete abandonment by the Operator of all interest in or operations on the land for a period of 10 years from the date of this contract, shall not constitute such a transfer or conveyance. Should the Operator make or permit any transfer or conveyance in violation of this provision, the Operator shall be and remain liable for payment to the Government of the same amounts, at the same times, as would have been paid under the terms of the percentage royalty on production. If for any reason the net smelter returns, net concentrator returns, or other net amounts realized from the sale or other disposition of such production are not available as a means of measuring the amount of the Operator's liability, the amount thereof shall be estimated as well as may be, and in the event of dispute as to such estimates, the determination thereof by the Administrator of Defense Minerals Exploration Administration or by his successor shall be final and binding upon the Operator.

ARTICLE 11. *Title to and disposition of property.*—All facilities, buildings, fixtures, equipment, or other items costing more than $50.00 each, paid for or purchased with funds contributed jointly by the Operator and the Government, although title may be taken in the name of the Operator, shall belong to the Operator and the Government jointly, in proportion to their respective contributions, and upon the completion of the work or the termination of the contract shall be disposed of promptly by the Operator for the joint account of the Government and the Operator, either by return to the vendor, by sale to others, or purchase by the Operator at a price at least as high as could otherwise be obtained, as may appear to be for the best interest of the Government, unless the Government, in writing, waives its interest in any such item. If necessary to accomplish such disposition, the Operator shall dismantle, sever from the land, and remove any such item, the cost thereof to be for the joint account of the parties in proportion to their respective interests. If the Operator, within 90 days after the receipt of written notice from the Government, fails, neglects, or refuses to dispose of such property, the Government may itself enter upon the land, take possession of, and remove and dispose of any such property as above provided.

ARTICLE 12. *Termination and completion.*—The Government may, at any time, by written notice to the Operator, terminate this contract: (*a*) If the Operator fails to provide his share of the money necessary to prosecute operations pursuant to the terms of the contract; (*b*) if the Operator, in the opinion of the Government, fails to prosecute operations pursuant to the terms of the contract; or (*c*) if in the opinion of the Government, operations up to the time of the notice have not indicated the probability of making any worth while discovery and in the opinion of the Government further operations are not justified. Upon the completion of the project or any termination of the contract the Operator shall dispose of any remaining materials, supplies, facilities, buildings, fixtures, and equipment in which the Government has an interest, for the joint account of the Operator and the Government in the proportion of their respective interests; shall render to the Government a full and final accounting of his operations under the contract and his expenditures of money; and shall pay to the Government its pro rata share of any money remaining.

ARTICLE 13. *Changes and added provisions.* _____

_____

_____

_____

Executed in sextuplicate the day and year first above written.

THE UNITED STATES OF AMERICA

Vermont Copper Company, Inc.
(Operator)

By _____
Acting Administrator, Defense Minerals Exploration Administration

By _____

I, _____, certify that I am the _____ secretary of the corporation named as Operator herein; that _____, who signed this contract on behalf of the Operator, was then _____ of said corporation; that said contract was duly signed for and in behalf of said corporation by authority of its governing body, and is within the scope of its corporate powers.

_____

[CORPORATE SEAL]

U. S. GOVERNMENT PRINTING OFFICE 16—66328-1

EXPLORATION PROJECT CONTRACT
VERMONT COPPER COMPANY, INC.
THE ELIZABETH MINE
DOCKET NO. DMEA-1950X

EXHIBIT "A"

Description of the Work

Explore for the northern extension of the No. 1 Vein by sinking a two compartment (5' x 5' Compartment) shaft to approximately the 450 ft. level, crosscutting to the vein and drifting some 500 feet along the vein on the same level. The exact depth to which the shaft will be sunk and the elevation of the exploratory level will depend on diamond drilling that is now in progress, but the total depth of the shaft shall not exceed 500 feet.

The work will consist of the following items, to be performed in approximately the chronological order indicated.

1. Install power transmission line and transformers.

2. Level, by bulldozing and hand, the sites selected for the shaft, headframe, and hoist house, compressor house, change house, tool shed, and access roads.

3. Construct headframe and waste bins.

4. Construct hoist house, compressor house, change house, and tool sheds, and install the related equipment.

5. Sink a two compartment shaft, the outside dimensions of which are 12'-0" x 6'-4", to a depth not to exceed 500 feet. Cut the shaft station at the desired elevation of approximately 450' and install pumping equipment and skip pocket.

6. Drive crosscut approximately 115 feet to cut vein structure.

7. Drift 250 feet north and south along the vein structure from the crosscut or a total of 500 feet.

Drifts and crosscut shall have minimum section of 6'x7'-6".

Estimated Costs of the Project

Summary

(1)	Independent Contracts	$10,175.00*	
(2)	Labor, Supervision, Consultants	63,117.24*	
(3)	Operating Material and Supplies	25,465.42*	
(4)	Operating Equipment to be rented	6,096.00*	
(4)	Operating Equipment to be purchased	9,845.00*	
(4)	Operating Equipment to be furnished by Operator	1,745.50*	
(5)	Rehabilitation and Repairs	1,977.40*	
(6)	New Buildings, Improvements, Installations	14,669.15*	
(7)	Miscellaneous: Payroll taxes, Insurance, Workmens Compensation for labor and supervision	9,470.39*	
(8)	Contingencies	2,448.90*	
	Total Estimated Cost		$145,010.00

Details

(1) Independent Contracts (and related Materials and Supplies)

Diamond drilling for grouting	$ 4,250.00	
Supplies for grouting	5,000.00	
Other supplies	925.00	
Total		$ 10,175.00*

NOTE: The allowance for grouting (drilling and supplies) may be used only if, with the approval of the Government, it is found necessary to grout the shaft, and only after the unit costs for the drilling have been determined and inserted in this schedule by amendment of the contract.

* Allowable maximum

(2) Labor, Supervision, Consultants

Labor	Total wages	
12 - Carpenters	$ 5,313.00	
1 - Bulldozer operator	216.00	
5 - Truck drivers	2,195.56	
2 - Axemen	107.12	
1 - Compressor operator	65.52	
4 - Laborers	1,235.52	
4 - Mechanics	1,424.80	
1 - Rigger	366.60	
4 - Timbermen	219.20	
3 - Hoistmen	3,781.20	
6 - Drillers	3,134.88	
3 - Deckmen	5,520.00	
8 - Shaftmen	14,856.00	
3 - Shaftmen's helpers	5,520.00	
2 - Mucking machine operators	1,501.92	
2 - Skiptenders	1,501.92	
Total		46,959.24*
Supervision		
1 - Design and layout man	640.00	
1 - Engineer	800.00	
2 - Engineer's helpers	1,344.00	
1 - Construction Superintendent	1,500.00	

* Allowable maximum

	Total Wages	
1 - Shaft foreman	$ 5,267.50	
1 - Shift boss	4,655.00	
1 - Mechanic	657.60	
1 - Electrician	657.60	
1 - Warehouseman	636.30	
Total		$16,158.00*
Total for Labor and Supervision		$63,117.24*

NOTE: The wage scale for labor and the monthly rate for employees shall not exceed the established rates, in effect in the Elizabeth Mine or district.

(3) Operating Material and Supplies

26,110 ft. local timber @ $82.20/M	$ 2,146.24
34,650 ft. Oregon pine @ $135.00/M	4,677.75
Explosives	6,480.30
Bits and steel	3,000.00
1,000 ft. air and water hose	830.00
40 yds. concrete premix @ $16.00/yd.	640.00
Anchor bolts, tie rods, reinforcing steel, etc.	1,118.00
Shaft guide brackets and bolts, washers, log screw, etc.	855.00
Ladders and headers	562.00
Grizzly	250.00

* Allowable maximum

Small tools and Miscellaneous	$ 250.00	
Gasoline and lubricants	350.00	
Diesel oil and lubricants	200.00	
Electric power	1,791.09	
Others	2,315.04	
Total		$25,465.42*

(4) Operating Equipment 1/

To be rented:

1 - Portable compressor 550 cu. ft. @ $32.00/day for 178 days	$ 5,696.00	
1 - Truck @ $20.00/day for 20 days	400.00	
Total for rental		$ 6,096.00*

To be purchased:

1 - Crosshead	$ 300.00
2 - Sinking buckets	300.00
1 - Blasting set	500.00
1 - Bucket dump door	800.00
1 - Hoist rope	600.00
1 - Skip	1,200.00
1 - Oil heater	250.00
1 - Sheave 72"	550.00
2 - Dump plates	500.00

1/The estimates for rental and depreciation, which may be charged only for days the equipment is in use for the benefit of the work, include fuel, supplies, repairs, and maintenance, which will be supplied by the owner of the equipment, and are therefore not included in other estimates of similar items.

* Allowable maximum

1 - Control gate and accessories	$ 400.00	
1 - Cartridge gate and accessories	400.00	
1 - Sinking pump and 4" pipe	2,000.00	
1 - Safety door	150.00	
1 - Pump, tank and pipe (water supply)	1,000.00	
Other supplies and accessories	895.00	
Total for purchase		$ 9,845.00*

To be furnished by Operator:

	Allowable Per day	Depreciation for Project	
1 - Bulldozer D-6, for 17 days valued @ $14,500.00	$8.06	$137.02	
1 - Truck, for 175 days valued @ $7,000.00	3.89	680.75	
3 - Jackhammers, for 104 days valued @ $900.00	0.50	52.00	
2 - Leyners, for 75 days valued @ $1,450.00	0.81	60.75	
1 - Air tugger, for 100 days valued @ $480.00	0.27	27.00	
1 - Mucking machine, for 69 days valued @ $4,950.00	2.75	189.75	
6 - Cars, for 69 days valued @ $3,600.00	2.00	138.00	
1 - Electric locomotive, for 69 days valued @ $12,000.00	6.67	460.23	
Total			$ 1,745.50*

* Allowable maximum

(5) Rehabilitation and Repairs

Repairing, moving and installing 75 h.p. hoist	$ 1,977.40	
Total		$ 1,977.40*

(6) New Buildings, Improvements, Installations

	Supplies	
Electric power transmission lines and installation	$ 5,669.50	
Access roads and surface excavations	510.10	
Hoist house	975.68	
Compressor house	257.00	
Change room, plumbing, etc.	1,180.04	
Tool house	135.50	
Headframe, hoppers, shaft collar, etc.	2,974.06	
2", 3" and 4" pipe and fittings	1,908.00	
Track and supplies	1,059.27	
Total		$14,669.15*

(7) Miscellaneous

Labor: Insurance, workmen's compensation payroll taxes and Miscellaneous	$ 7,046.69	
Supervision: Insurance, workmen's Compensation, payroll taxes and Miscellaneous.	2,423.70	
Total Miscellaneous		$ 9,470.39*

(8) Contingencies

Unforeseen supplies and services	$ 2,448.90*

* Allowable maximum

Estimated Time Schedule

Month	Projects	Estimated Monthly Expenditure
1st	Install power transmission lines, moving hoist, and surface preparation	$ 12,000.00
2nd	Building construction, shaft collar, headframe and hoppers	25,000.00
3rd	Headframe, hopper and sinking shaft	15,000.00
4th	Shaft sinking	18,000.00
5th	Shaft sinking	20,000.00
6th	Shaft sinking	18,000.00
7th	Shaft station and pockets, pump installation and crosscutting	15,000.00
8th	Crosscutting and drifting	12,000.00
9th	Drifting	10,010.00
270 days	TOTAL	$145,010.00

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

February 27, 1953

Memorandum

To: Robert E. Adams, Chief,
Operating Control & Statistics Division

From: Ernest Wm. Ellis, Chief
Rare and Misc. Metals Division

Subject: Docket No. DMA-1950
Vermont Copper Company
Orange County, Vermont

Subject application, requesting an exploration loan in the amount of $303,565.64, was filed August 6, 1951, and revised on March 19, 1952. The estimated cost of the revised application was $158,905.00.

A proposed contract was drawn in the amount of $145,010.00. The work proposed under this contract, in the opinion of some of the reviewing engineers, entailed largely work which might be considered as development. The Applicant's representative was apprised of this fact and in the opinion of the undersigned is in more or less agreement that the proposed work could be considered both development and exploration. Accordingly, it has been decided to continue the diamond drilling contract Idm-E94 (Docket DMA-1526X) and to not continue with the proposed contract as drawn on the subject application.

Therefore, this docket is returned to Mails and Files and considered closed.

Ernest Wm. Ellis

Ernest Wm.Ellis

700

FILE COPY
SURNAME:

Ellis

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

February 27, 1953

Memorandum

To: Robert E. Adams, Chief,
Operating Control & Statistics Division

From: Ernest Wm. Ellis, Chief
Rare and Misc. Metals Division

Subject: Docket No. DMA-1950
Vermont Copper Company
Orange County, Vermont

Subject application, requesting an exploration loan in the amount of $303,565.64, was filed August 6, 1951, and revised on March 19, 1952. The estimated cost of the revised application was $158,905.00.

A proposed contract was drawn in the amount of $145,010.00. The work proposed under this contract, in the opinion of some of the reviewing engineers, entailed largely work which might be considered as development. The Applicant's representative was apprised of this fact and in the opinion of the undersigned is in more or less agreement that the proposed work could be considered both development and exploration. Accordingly, it has been decided to continue the diamond drilling contract Idm-E94 (Docket DMA-1526X) and to not continue with the proposed contract as drawn on the subject application.

Therefore, this docket is returned to Mails and Files and considered closed.

SIGNED

Ernest Wm.Ellis

EWEllis/gla
cc to: Adm.Reading File
Docket

5/28/52 gla

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

May 27, 1952

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

Subject: Docket No. DMA-1950 (Copper)
Vermont Copper Co., Inc.
South Strafford, Vermont

Dear Mr. Johnson:

To be attached to my letter regarding Docket DMA-1950 under date of May 21, 1952, are the enclosed two photostat copies of the longitudinal section through the Elizabeth mine and its northern extension which is being diamond drilled under Contract DMA-94, Docket 1526X.

This section should clarify the letter by showing graphically the relationship of ore in diamond drill holes, the proposed shaft and the Elizabeth mine workings.

Yours very truly,

McHenry Mosier

McHenry Mosier, Executive Officer
Bureau-Survey Field Team
Defense Minerals Exploration
Administration, Region VIII

Enclosures 2

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
MAY 29 1952

5/26/52

Discuss with Keller.

Hold for maps results of Drill Hole & Report of Millan on north the property.

UNITED STATES 13771
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION

REFERENCE SLIP

DATE 5-22-52

REFERRED TO: Code 700

DMEA-2950

1. ~~Mr. Ellis~~
2. ~~Mr. Keller~~
3. ~~F. Johnson~~
4.

FOR:

- Action
- Approval
- Comment
- Conference
- Consideration
- Filing
- Instructions
- Investigation
- Initials
- Mailing
- Previous correspondence
- Recommendation
- Record of
- Referring to
- Ready for signature of
- Rewriting
- Signature
- Suggestions
- Your informtion

REMARKS: This came to us directly from Mail Room. Mrs. Ouelt

Check (X) before the items needing attention.

notes 5/26 Com

R. E. ADAMS

Initial of sender

INT.-DUP. SEC., WASH., D.C.

F.E.J.

Photostats of Longitudinal Section through the Elizabeth Mine, extended to include Proposed New Shaft and Diamond Drill Hole intersections will follow as soon as they can be obtained.

5/22/52 gla

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

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
MAY 22 1952

May 21, 1952

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

Subj: Docket No. DMA-1950 (Copper)
Vermont Copper Co., Inc.
South Strafford, Vermont

Related Dev. Approved?

Dear Mr. Johnson:

Referring to your letter of May 15, 1952 requesting comments and recommendations on the above named docket:

It is the considered opinion of the mining engineers and the geologists of the Field Team that this application is preponderantly for development and not for exploration.

Holes diamond drilled by the Company itself before Contract DMA-94 went into effect, showed the following: DDH 426 on section 15,700 intercepted 14.8 feet carrying 3.63 percent copper. This was supplemented by a short underground drill-hole which closely checked the width and content of hole 426. Both these holes intercepted the ore zone slightly above the 975 level. DDH 445 on section 16,200 intercepted 24.6 feet containing 3.34 percent copper at an altitude of 630 feet. Drill hole 476 on section 16,700 intercepted 8.2 feet carrying 4.44 percent copper at an altitude of 555 feet.

Under Docket 1526X, Contract 94, diamond-drill hole 516 on section 17,200 intercepted 5 feet carrying 2.05 percent copper at an altitude of 590 feet. On section 16,450 drill hole 574 intercepted 9.2 feet of copper mineralization assaying 0.90 percent copper at an altitude of 640 feet. Drill hole 578 intercepted 25.2 feet averaging 3.32 percent copper at an altitude of 580 feet.

In view of the results of recent diamond drilling, the present heading on the 975 level should be classified as development northward for 500 to 1,000 feet from the present face. The remaining drifting northward to section 16,700 would contribute little to exploration because of the proximity of the good copper mineralization in diamond drill holes 445, 578 and 476. Part of this remaining drifting is included in the proposed work in Docket No. DMA-1950. Consequently, the proposed shaft whose primary purpose was to serve as a base for drifting operations would thus have to be classed as development.

Considering exploration alone, without any accrued benefits toward possible later development, the cheapest method of delineating any

probable extension of the known ore zone in the area south of section 17,200 is by the continuation of the current diamond drilling.

With this in view, Mr. John Cowley was this day contacted on long distance telephone. It was suggested that an additional hole on section 16,700 would provide valuable information by intersecting the ore zone about 50 feet below the mineralization cut in hole 476. He has agreed to drill this proposed hole.

Any decision by the Field Team as to the validity of a "discovery or development" at this project is deferred until a later date.

Yours very truly,

McHenry Mosier

McHenry Mosier, Executive Officer
Bureau-Survey Field Team
Defense Minerals Exploration
Administration, Region VIII

N. E. Nelson

Ned E. Nelson
Geologist, U.S.G.S.

Copies sent to the following:

Mr. C. H. Johnson, B. M. Rm. 3621
Mr. Ned Nelson, Rm. 4216, GSA
Mr. Ellis (2)
Field Team, Reg. VIII (2)

5/22/52 gla

Exact copy including [illegible]pographical errors

SUMMARY OF NEGOTIATIONS WITH DMA AND ITS SUCCESSOR DMEA
IN CONNECTION WITH PROPOSED EXPLORATION FOR COPPER ORES
AT VERMONT COPPER COMPANY, SOUTH STRAFFORD, VERMONT

C O P Y

The Vermont Copper Company Inc. operates a copper mine at South Strafford, Vermont which has been in continuous production since 1943 when it was reopened by a group of Vermont citizens as a contribution to the war effort to supply critically needed copper.

Since that time, it has produced some 45,000,000 pounds of copper and has furnished employment to 150-200 men from the South Strafford area.

Early in 1951 it became obvious that if the mine was to continue to produce, a very substantial exploration program would be required to find the ore necessary for the annual mill capacity of 240,000 tons.

Developed ore reserves available for mining on April 1, 1951 amounted to 220,000 tons but the possibilities of additional ore discoveries appeared excellent.

Vermont Copper Company outlined an exploration program covering approximately 17,000 feet of diamond drilling for the year and about 12,000 feet of underground drifts, raises and crosscuts, which by the way has been completed.

However, it was recognized that in the area north of our present mine, there were indications that by sinking a new shaft nearly one mile north of our present shaft and following such work with underground drifts, crosscuts and raises, enough ore might be discovered to assure mill requirements for an extended period.

In view of the extensive exploration commitments already planned by the Company at its own expense and the provisions for government assistance provided by the Defense Minerals legislation passed by Congress, it appeared reasonable to believe that Vermont Copper Company should make an application to DMA for such help in the proposed shaft project.

The President of the Company went to Washington in April 1951 to outline its program to DMA and to try and learn the requirements and procedures under which an application should be submitted.

The original proposal discussed with DMA people contemplated a shaft sinking project to explore the favorable area north of our present mine. Vermont Copper was at that time diamond drilling in the area and had cut ore in one hole some 500 feet ahead of the most northerly workings of the Elizabeth mine. This program was in force

as discussions with DMA continued and Vermont spent some $13,000 during 1951 up to the time of the government participation.

As discussions for the proposed shaft continued, DMA suggested that Vermont apply for a diamond drilling project at once which could be granted without delay and to follow with a shaft project if and when indications from diamond drilling would show sufficient encouragement to justify shaft sinking and deep exploration work.

Under the circumstances, Vermont could hardly object to such reasoning and did apply for assistance for diamond drilling which was granted.

Up to April 1st of this year some 5500 feet of drilling from three stations 500 feet apart had been completed. Indications of ore had been obtained over a length of 1500 feet. However, by August of 1951 it was apparent that exploration by diamond drilling alone would not warrant a determination that an ore discovery had been made because of the impossibility of determining the physical extent of the ore possibilities. It appeared then, as now, that further exploration by means of a shaft and drifts would be necessary.

At this point DMA suggested to Vermont that it draw up a shaft project to cover the necessary underground exploration and submit it to the DMA as a supplement to the diamond drill project. The shaft to be deep enough to reach what appeared to be the bottom of the ore shoot and the project to include sufficient drifting along the vein if found to explore the possibilities for development.

Such a project was written up and submitted to DMA, as a supplement, to the DMA 1526X project on August 6, 1951. The estimated cost of the project was $303,565.64 and included an exploration shaft approximately 500 feet in depth together with 225 feet of crosscutting and 1500 feet of drifting along the ore zone.

After weeks of reviewing and several personal visits to Washington to clarify various phases of the project, DMEA finally advised that the project appeared to be over the imaginary line between development, which DMEA funds do not provide for, and exploration which is its function. As a consequence, Vermont revised the scope of its shaft program downwad as of March 15, 1952, curtailing a necessary power installation to provide only the bare necessities in power, decreasing the size of the shaft from three 5' x 5' compartments to two 5' x 5' compartments, and limiting the crosscutting to 115 feet and the drifting along the ore zone to 500 feet, the total cost of which was decreased from $303,565.64 to $158,905.00 of which the government's share is cut from $151,782.82 to $79,452.50.

In subsequent discussions via telephone DMEA suggested that Vermont agree to provide a repayment to the government in the event the project was approved on a basis of its royalty scale applying to the present production from its Elizabeth mine, or in other words to include in the exploration are the presently developed and producing areas of the Elizabeth mine.

In view of the legislation under which DMEA is operating and which Congress set up as a program to aid in exploration of critical and strategic minerals, the financial aid to be repaid from ores found in such exploration Vermont was unwilling to agree to extending such royalty payments to ore already developed and being mined in its regular operations.

In order to meet DMEA half way however, Vermont did agree to extend the prospective area covered from which all ores will be subject to royalty payments to the south approximately 700 feet to the northerly limit of the present operations. This extra area will cover prospective ore which was indicated by diamond drilling at Vermont's expense prior to the government participation in the present contract.

The present status of the application appears in doubt. DMEA is still reluctant to make any decision on the project, apparently unable to determine whether it is to be considered as exploration or development and whether its decision in the Vermont Copper Company case would be considered a precedent in numerous other projects.

Our position in the matter is that, while indications of copper bearing material have been found by diamond drilling, no ore has been discovered.. Ore by commonly accepted definition is material that can be mined at a profit. The only possible way to determine an ore discovery in the type of deposits covered in the Vermont area is to do underground exploration by means of shaft sinking and drifting to obtain the necessary information as to quantity and grade by mineral bearing material.

It is quite true that drilling can determine ore in sheet deposits such as those in the tri-state area where years of experience has made it possible to correlate such information with little chance of error but the same procedure is worthless in vein type deposits such as in our mine.

It has been suggested that Vermont extend its present mine to the north areas by drifting on its lower level. Such a suggestion is impractical from a safety standpoint inasmuch as we are almost a mile from the source of fresh air, the heading will have to be advanced under the Pompanoosic River with its attendant risk of a water inflow with the men a mile from the present shaft and is impractical from an operating standpoint in view of the fact that the major share of our

present production is being obtained from the drift on the lower level and no further increase in material handling can be made at this time.

J. F. Cowley

cc: Mr. C. H. Johnson, B.M. Rm. 3621
Mr. Ned Nelson, Rm. 4216, GSA
Mr. Ellis
Field Team, Reg. VIII (2)

FILE COPY
700 SURNAME:

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

MKelley
Ellis
Lemmon

MAY 15 1952

Mr. Henry Monier, Executive Officer
The Field Team, Region VIII
Bureau of Mines
Eastern Experiment Station
College Park, Maryland

Re: Docket No. DM-1950 (Copper)
Vermont Copper Company, Inc.
South Strafford, Vermont

Dear Mr. Monier:

Because of changes in procedure of filing and distributing copies of applications for aid in exploration projects, we neglected to send you both the original and revised applications pertaining to the subject docket. For your files we are enclosing one copy of both applications.

Although we realize that a large proportion of the proposed project in the revised application could be classified as development rather than exploration, we believe that the project has sufficient merit to warrant consideration by this agency.

Enclosed you will also find a copy of the proposed contract that has been drawn up, but not executed. We would appreciate your recommendations and comments on the proposed contract as well as your evaluation of the entire project.

Sincerely yours,

5/15

(signed) FRANK E. JOHNSON

(NB)

Chairman, Operating Committee
Defense Minerals Exploration
Administration

Enclosures
HFKeller/jem
5/13/52
cc to: Adm. Reading File
Docket
Messrs. CHJohnson, Rm.3621
Ned Nelson, Rm.4216 GS
Ellis Keller
Operating Committee
Field Team, Region VIII

J. H. Hedges (NB)
For Bureau of Mines

D. M. Lemmon (NB)
For Geological Survey

Dictated over phone Mr. Mosier's secretary:

Field Inspection Report dated May 8, 1952:

Subject: DMA-1526 - Vermont Copper Co.

Exploratory work under this project is being continued on cross-section 16,450 on drill hole no. 587, which is the third drill hole from this drill site (see map with application).

Apparently this drill hole is in a faulted area. Several zones of bracciated material has been intersected which may indicate that the drill is following the fault plane parallelling the dip. The present depth of the hole is 412 feet on a 64-degree incline. The loss of drill water necessitated cementing twice, using a total of 60 bags of cement. The material being drilled is a sericite schist containing garnet. The abrasiveness of the material and pressure of the material exerted on the drill rods were sufficient to wear the rods which were twisted off in the drill hole. The drill hole was flushed clean and cased to 96 feet, which seemed to have relieved the pressure on the rods. Then fishing for the broken rods was started. The fishing tools passed the depth of the broken rods, so drilling was resumed. At the time of this visit the drill bit was at a depth of about 200 feet, cutting through cemented material, and the hole was being flushed. It is possible that the drill was deflected, or it may be that sufficient material was flushed out of the faulted zone to allow the rods to settle off the original dip to permit the fishing tool to pass. In case of the latter, the broken rods may be encountered at a greater depth and it is possible that the hole may be lost, but not due to negligence of the driller.

The project is well supervised by the Mine Superintendent and a Geologist who logs the core, splits and samples the core, and plots the drill sections, also samples the sludge.

An application for Government participation in an exploratory shaft has been filed. Conforming with certain limitations of the loan, a tentative location for the shaft has been made. This location is on the hanging wall side of the vein, near the present drill site. Before approval of the shaft location, a detailed study of the drill section should be made, devoting special attention to the faulted zones shown in the present section, but not encountered in previous section. Also the floor water deserves consideration.

Changing the present contract to the "short form", on a unit basis, is accepted favorably pending the decision on the exploratory shaft application. If the shaft application is approved, the present contract may be cancelled, or a request may be made to suspend drilling under the present contract until the shaft is completed. Then apply the remainder of the present contract to underground drilling.

The company has leased a promising area about four miles north of the present operations, and application for Government participation in exploratory drilling on the new lease is being considered. Wages to the Vermont Copper Company have been increased 2 cents per hour, and an application to the Wage Stabilization Board has been made to increase wages an additional 3 cents, which will be above the present ceiling.

W. T. MILLAR

HFKeller/jem
5/6/52

As there is in effect an Exploration Project Contract No. Idm-E94 dated the 1st day of August, 1951, to explore some of the properties of the Vermont Copper Company by diamond drilling, a total of 14,400 feet, at an estimated cost of $51,382.00 and whereas it has been decided that the same area could be much more thoroughly explored by other means, it has been mutually agreed that Contract No. Idm-E94 shall be terminated with the signing of this contract.

The termination of Contract No. Idm-E94 does not eliminate the obligation of the operator to repay from net returns or proceeds the Government's claim or lien upon the mineral deposit which was the subject of the exploration project. Within six months after the termination of this new contract the Government shall certify to the operator that a discovery or development has been made. This certification shall describe and delimit the discovery made as a result of exploration projects of this contract and Contract No. Idm-E94 . If such a certificate of discovery is issued the operator shall be obligated to repay the Government's lien on the property as a result of its participation in both contracts.

Redraft this to amend the old contract and add it to the new contract on a new form.

RECEIVED
MAY - 6 1952
GENERAL COUNSEL
DEFENSE MINERALS
ADMINISTRATION

Mr. Henry Kosler
Executive Officer
DMEA Field Team, Region VIII
Bureau of Mines
Eastern Experiment Station
College Park, Maryland

Re: Docket No. DMA-1950X (Copper)
Vermont Copper Company, Inc.
Elizabeth Mine
Strafford, Vermont

Dear Mr. Kosler:

We are enclosing six copies of a proposed contract on the above captioned exploration project.

If you are in agreement with the contract as drawn up, and it is acceptable to the applicant, then kindly have the six copies signed by an authorized agent of the applicant corporation. Please return the original and two marked copies to this office, delivering the operator's copy to him, and retain the other copy for your files.

Sincerely yours,

Chairman, Operating Committee

APPROVED:

For Bureau of Mines

For Geological Survey

HPKeller/gla 4-21-52
cc to: Adm. Reading File
Docket
Operating Committee
Messrs. C.H. Johnson, Rm. 3621
Ned Nelson, Rm. 4216 GSA
Ellis
Keller

140

FILE COPY
SURNAME:

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

April 17, 1952

Memorandum

To: Ernest Wm. Ellis

From: Chief Counsel

Subject: Vermont Copper Company, Inc. exploration project — Docket No. DMEA-1950X

The attached seven copies of the subject contract are in satisfactory legal form for execution subject to the attachment of the necessary maps to the contract. Your file in the case is returned.

J. L. Hofflund
J. L. Hofflund
Chief Counsel

Attachments

JLHofflund/bjl

Copy to: Mails & Files
J. L. Hofflund
Chron.

FILE COPY
SURNAME:

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

Mr. E. W. Ellis
Chief, Rare and Misc. Metals Division

March 10, 1952

C. O. Mittendorf
Acting Administrator

Vermont Copper Co. - DMA-1950

Jack Cowley phoned me late Friday afternoon to inform me that he would be in Washington Wednesday morning to discuss the Vermont Copper exploration project. He stated that he had completed a revision of the project whereby it would now cost about $155,000, and he felt that his revised project would eliminate the objections which were raised in the former submissions.

The purpose of this memo. is to apprise you of ~~this and~~ his visit to discuss the case.

N.S
R+R

COMittendorf/fw

cc: Admr. Reading File
Docket file

4/18/52 gla

140

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

April 17, 1952

Memorandum

To: Ernest Wm. Ellis

From: Chief Counsel

Subject: Vermont Copper Company, Inc. exploration project — Docket No. DMEA-1950X

The attached seven copies of the subject contract are in satisfactory legal form for execution subject to the attachment of the necessary maps to the contract. Your file in the case is returned.

J. L. Hofflund
Chief Counsel

Attachments

4/2/52 rgla

IN REPLY REFER TO:

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

March 31, 1952

Memorandum

To: Mr. E. Wm. Ellis

From: Ned E. Nelson

Subject: DMA-1950X revised, Vermont Copper Company, Orange County, Vermont.

Comment

Drilling at Vermont Copper, while generally favorable has not been entirely so. The "fans" at intervals of 500 feet have shown ore, but it had been up and down more than expected and it is fairly apparent that underground work is necessary to block it out.

Also the new ore is far from the new shaft so another opening is practically necessary for extraction and service reasons.

Just where to draw the line is a question. The operation promises to pay out if too many new projects are not found necessary.

Ned E. Nelson
P.

Ned E. Nelson
Geologist

3/28/52 gla

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

March 27, 1952

Memorandum

To: E. W. Ellis, DMEA

From: C. H. Johnson, Bureau of Mines

Subject: DMA-1950X Revised, Vermont Copper County, Orange County, Vermont

Approval or disapproval of this application depends to some extent on the definition of exploration. If DMEA resolves this question in favor of the applicant, I think it is otherwise a good project and will be glad to concur in its approval.

The cost has been greatly reduced in the revised application from approximately $300,000 to $145,000, but it still contains a large element of work that is chiefly for purposes of production and on the whole it seems to me to be as much or more a production project as an exploration loan.

The amount of actual exploration that will be accomplished under the revised project has been greatly reduced as only 500 feet of vein will be explored compared with 1500 in the original project. Nevertheless, the program still contains a definite and worthwhile exploratory feature. The vein has been drilled only at 500-foot intervals and in such a distance along the strike there may be very great changes in thickness, dip and grade of ore. Compared with many other projects, I feel that the chances for substantial royalty returns to the Government are comparatively good in this case, particularly since the ground to which the lien will apply includes several thousand feet of known mineralized vein.

The docket is being sent on to Mr. Nelson.

C. H. Johnson
C. H. Johnson

Copy to - Mr. Nelson, USGS (with docket)
Minerals Division
Base Metals Branch
C. H. Johnson
Files

3/10/52 - gla

STANDARD FORM NO. 64

Office Memorandum • UNITED STATES GOVERNMENT

TO : Mr. E. W. Ellis
Chief, Rare and Misc. Metals Division

DATE: March 10, 1952

FROM : C. O. Mittendorf
Acting Administrator

COM

SUBJECT: Vermont Copper Co. - DMA-1950

Jack Cowley phoned me late Friday afternoon to inform me that he would be in Washington Wednesday morning to discuss the Vermont Copper exploration project. He stated that he had completed a revision of the project whereby it would now cost about $155,000, and he felt that his revised project would eliminate the objections which were raised in the former submissions.

The purpose of this memo. is to apprise you of his visit ~~this and~~ to discuss the case.

to CB for attention

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS ADMINISTRATION
~~WASHINGTON 25, D.C.~~
College Park, Md.

gpc 8/27/'51

August 22, 1951

Mr. John F. Cowley, President
Vermont Copper Company, Inc.
South Strafford, Vermont

Dear Mr. Cowley:

In reference to your letter of August 10, regarding Docket No. DMA 1526X:

I wish to thank you for the advice concerning your start on diamond-drilling under the DMA contract. Our Mr. W. T. Millar expects to call on you at the Elizabeth Mine on Thursday morning, September 6. He will be prepared to discuss the contract as well as the preparation of your Progress Report due for transmittal prior to October 15.

Please be assured that Mr. Millar and I will be glad to render all possible assistance in connection with these Progress Reports.

Yours very truly,

McHenry Mosier

McHenry Mosier
Executive Officer
Bureau-Survey Field Team
Defense Minerals Administration
Region VIII

Ben Note the date in case I may be away gpc

September 12, 1951

Mr. McHenry Mosier, Executive Officer
Bureau - Survey Field Team
Defense Minerals Administration Region VIII
College Park, Maryland

Re: Vermont Copper Company
DMA 1526 X

Dear Mr. Mosier:

This will acknowledge your letter dated September 10, 1951 together with 50 blank forms of Operator's Monthly Progress Reports for DMA exploration projects MF 104, a blank contract for drilling operations, specifications for Core Drilling, and blank Schedule of Unit Prices for Core Drilling.

We commenced work on the captioned project on August 20th and as agreed with Mr. Millar, will submit our first progress report prior to October 15, 1951 covering the work to September 30, 1951.

We greatly appreciate the cordial cooperation you have given us.

Very truly yours,

John F. Cowley

JFC:mz

John F. Cowley
President

August 13, 1951

Mr. John F. Cowley
President
Vermont Copper Company, Inc.
South Strafford, Vermont

Subject: Exploration Loan
Re: DMA-1950.

My dear Mr. Cowley:

This will acknowledge receipt of your application dated August 6, 1951 for a loan under the Defense Production Act of 1950.

Your application was assigned Docket Number DMA- 1950 and referred to the Copper Branch

Kindly refer to DMA- 1950 in any future correspondence relating to your application.

Sincerely yours,

Robert E. Adams

Robert E. Adams, Chief
Reports and Records Unit

VERMONT COPPER COMPANY, INC.
SOUTH STRAFFORD
VERMONT

310

dma - 1950

August 6, 1951

Defense Minerals Administration
Department of the Interior
Washington 25, D. C.

Gentlemen:

In connection with our recent correspondence concerning our application DMA-1526X for an exploration loan under the Defense Production Act of 1950 including letter dated July 10, 1951 addressed to Mr. George Adams Ellis from Mr. James Boyd, Administrator, letter dated July 25, 1951 addressed to Mr. Boyd from Mr. Ellis and telephone conversations between the writer and Mr. C. O. Mittendorf, we are submitting herewith a supplement to DMA 1526X to cover the necessary shaft sinking and exploration drifting as recommended.

Form MF 100 General Technical Data For Use Under the Defense Production Act of 1950 was submitted on May 23, 1951 and assigned Docket Number DMA 1526X.

The original MF 103 covering diamond drilling only was submitted May 29, 1951.

The supplement to MF 103 herein submitted covers the shaft and drift project only and does not answer questions already answered in our MF 100 or the previous MF 103.

Very truly yours,

John F. Cowley

John F. Cowley
President

JFC:mz

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
AUG 6 1951

August 6, 1951

~~DMA 1526X~~
DMA-1950

Defense Minerals Administration
Department of the Interior
Washington 25, D. C.

Gentlemen:

In connection with our recent correspondence concerning our application DMA-1526X for an exploration loan under the Defense Production Act of 1950 including letter dated July 10, 1951 addressed to Mr. George Adams Ellis from Mr. James Boyd, Administrator, letter dated July 25, 1951 addressed to Mr. Boyd from Mr. Ellis and telephone conversations between the writer and Mr. G. O. Mittandorf, we are submitting herewith a supplement to DMA 1526X to cover the necessary shaft sinking and exploration drifting as recommended.

Form MF 100 General Technical Data For Use Under the Defense Production Act of 1950 was submitted on May 23, 1951 and assigned Docket Number DMA 1526X.

The original MF 103 covering diamond drilling only was submitted May 29, 1951.

The supplement to MF 103 herein submitted covers the shaft and drift project only and does not answer questions already answered in our MF 100 or the previous MF 103.

Very truly yours,

John F. Cowley

John F. Cowley
President

JFC:mz

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
AUG 6 1951

COPY

Form MF-103
(April 1951)

U. S. DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS ADMINISTRATION

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

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

DO NOT FILL IN THIS BLOCK

Docket No. dma 1950-REVISED

Date received 3-19-52

Participation

VERMONT COPPER COMPANY, INC.
SOUTH STRAFFORD, VERMONT

Name and address of applicant

Date March 17, 1952

FILL IN THIS BLOCK

Date of application Supplement - March 17, 1952

Estimated cost 158,905.00

Mineral or metal Copper Ore

Percentage of Government participation 50%

Location of mine Orange County, Vermont

Date of filing MF-100 May 23, 1951

DMA Docket Number, if available DMA ~~1526 X~~ 1950

INSTRUCTIONS

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

Department of the Interior
Defense Minerals Administration
RECEIVED
MAR 1 3 1952

THE APPLICANT

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

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

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

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

THE PROPERTY

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

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

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

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

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

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

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

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

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

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

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

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

THE EXPLORATION

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

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

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

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

THE REQUIREMENTS AND COSTS

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

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

CERTIFICATION

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

VERMONT COPPER COMPANY, INC.
(Name of company)

By John F. Cowley
(Signature of authorized official)

March 17, 1952
(Date)

President
(Title)

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

*Same as footnote on page 1.

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

VERMONT COPPER COMPANY, INC.
SOUTH STRAFFORD, VERMONT

ATTACHMENT TO
U. S. DEPT. OF THE INTERIOR
DEFENSE MINERALS ADMINISTRATION
FORM MF-103

It is understood that this application for aid for an Exploration Project pursuant to Mineral Order 5, under Defense Production Act of 1950 is a supplement to DMA 1526 X.

1. Answered on MF 100

2. Answered on MF 100

3. Answered on MF 100

4. Answered on MF 100

5. Answered on MF 100

6. Answered on MF 103

7. Answered on MF 103

8. Answered on MF 103

9. Applicant is prepared to invest $79,452.50 representing its full share of this supplementary to project DMA 1526 X.

10. (a) Answered on MF 103

(b) Answered on MF 103

11. Answered on MF 100

12. Answered on MF 100

13. Answered on MF 100

14. Answered on MF 103 - In addition see 23 G.

15. Answered on MF 103

16. Answered on MF 100

17. Answered on MF 100

18. Answered on MF 100

19. None

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

No. of Men	Class	No. of Straight Time Shifts	Hourly Rate	No. of Overtime Shifts	Rate	Straight Time Pay	Overtime Pay	Total
12	Carpenters	300	1.75	53	2.625	4,200.00	1,113.00	5,313.00
1	Bulldozer Operator	15	1.50	2	2.25	180.00	36.00	216.00
5	Truck Drivers	166	1.31	29	1.965	1,739.68	455.88	2,195.56
2	Axemen	10	1.03	2	1.545	82.40	24.72	107.12
1	Compressor Operator	5	1.26	1	1.89	50.40	15.12	65.52
4	Laborers	110	1.08	22	1.62	950.40	285.12	1,235.52
4	Mechanics	100	1.37	20	2.055	1,096.00	328.80	1,424.80
1	Rigger	25	1.41	5	2.115	282.00	84.60	366.60
4	Timbermen	20	1.37	0	2.055	219.20		219.20
3	Hoistmen	264	1.37	54	2.055	2,893.44	887.76	3,781.20
6	Drillers	242	1.26	46	1.89	2,439.36	695.52	3,134.88
3	Deckmen	264	2.00	54	3.00	4,224.00	1,296.00	5,520.00
8	Shaftmen	687	2.00	161	3.00	10,992.00	3,864.00	14,856.00
3	Shaftmen's Helpers	264	2.00	54	3.00	4,224.00	1,296.00	5,520.00
~~2~~	Diamond Drill Operators			~~43~~	2.055		706.92	~~706.92~~
2	Mucking Machine Operators	116	1.26	22	1.89	1,169.28	332.64	1,501.92
2	Skiptenders	116	1.26	22	1.89	1,169.28	332.64	1,501.92
63		2,704		~~590~~ 547		35,911.44	11,754.72	47,666.16

SUMMARY

Total Number of Men	63		
Total Man Shifts	3,295		
Total Man Hours	26,360		
Straight Time Wages		~~$35,911.44~~	
Overtime Wages		~~11,754.72~~	
Total Wages		~~47,666.16~~	
15% Contingencies		~~7,149.92~~	
		~~$54,816.08~~	

47666.16
706.92
46959.24
+15% 7043.89
54,003.13

Insurance Workmen's Comp. Vacat. + Cont.

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

No. of Men	Supervision	No. of Shifts	Rate per Shift	Total
1	Design & Layout Man	40	16.00	640.00
1	Engineer	50	16.00	800.00
2	Engineer's Helpers	100	13.44	1,344.00
1	Construction Superintendent	60	25.00	1,500.00
1	Shaft Foreman	245	21.50	5,267.50
1	Shift Boss	245	19.00	4,655.00
1	Mechanic (Maintenance)	60	10.96	657.60
1	Electrician	60	10.96	657.60
1	Warehouse Man	60	10.60	636.30
				$16,158.00
	Plus 15% Contingencies			2,423.70
				$18,581.70

23. (c) None.

3/19/52 gla

VERMONT COPPER COMPANY, INC.
SOUTH STRAFFORD
VERMONT

March 15, 1952

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
MAR 18 1952

Mr. C. O. Mittendorf, Director
Defense Minerals Exploration Administration
Department of the Interior
Washington 25, D. C.

Dear Mr. Mittendorf:

Re: Vermont Copper Co., Inc.
Docket ~~DMA 1526 X~~ DMA-1950 X

Following extended discussions with engineers of your department in connection with the proposed exploration shaft required to explore the ground covered by the captioned contract, we have reviewed our project in accordance with suggestions made by your people.

The amended project, as outlined, reduces the expenditures originally estimated at $303,565.64 to a sum of $158,905.00. Such reduction has been made possible by cutting the size of the shaft from three to two compartments, reducing the electric power requirements to the bare necessities, eliminating the purchase of some equipment and by other economies.

The major ore reserves in our present operation are, as you know, concentrated in one haulage level and it appears that our production of copper for the defense effort will be seriously curtailed if the proposed exploration is not successfully completed within the next 12 months, so that subsequent development of this new area may furnish additional ore.

I expect to be in Washington within the next week and will be available for discussions in this matter.

Very truly yours,

VERMONT COPPER CO., INC.

John F. Cowley

John F. Cowley
President

JFC:mz
Encl.

THE EXPLORATION

20. Answered on MF 103.

21. In addition to diamond drill program listed in original MF 103, it is proposed to sink an exploratory shaft approximately 450 feet in depth, at a point 4,000 feet north of the present operating shaft, and to drive 115 feet of crosscuts and 500 feet of drifts to explore the vein indicated by diamond drill cores in that area. A sketch of the area showing the location of the above described work is attached hereto. It is estimated that 249 days will be required to complete the project.

22. Answered on MF 103.

23. In addition to itemized statement covering expenditures for the diamond drill program in MF 103 Docket No. DMA 1526 X, the following is an itemized statement for the exploration work as covered in 21 above.

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

Item	Labor	Materials	15% Contingencies	Total
Buildings	1,246.00	2,548.22	569.14	$4,363.36
Headframe & Bins	4,731.16	5,289.66	1,503.12	11,523.94
				$15,887.30

Total is included in (a) and (h).

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

Item	No. Required	Cost
Cross Head	1	300.00
Sinking Bucket	2	300.00
Blasting Set	1	500.00
Bucket Dump Door	1	800.00
Hoist Rope		600.00
Skip	1	1,200.00
Oil Heater	1	250.00
Sheave - 72"	1	550.00
Diversion Gate	1	1,000.00
Skip Dump Plates	2	500.00
Control Gate & Acces.	1	400.00
Cartridge Gate & Acces.	1	400.00
Sinking Pump & 4" Pipe		2,000.00
Safety Door		150.00
Pump, tank & Pipe - Water Supply		1,000.00
		$ 9,950.00
	15% Contingencies	1,492.50
		$11,442.50

Note: Equipment herein does not include materials for power installation, etc.

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

Item	No. Required	Days	Cost Per Day	Total
Portable Compressors	1	178	32.00	$5,696.00
Trucks	4	5	20.00	400.00
				$6,096.00
	15% Contingencies			914.40
	Total Cost			$7,010.40

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

Item	No. Required	Days	Cost Per Days Each	Total
Bulldozer D-6	1	17	53.12	903.04
Truck	1	175	20.00	3,500.00
Jackhammers 2	3	104	6.00	624.00
Leyners 2	2	75	4.00	300.00
Air Tugger 1	1	100	1.00	100.00
Mucking Machine 6	1	69	(2 shifts) 18.00	1,242.00
6 Cars 7	6	69	" " 12.00	828.00
Electric Locomotive #10	1	69	(" ") 9.00	621.00
				& $ 8,118.04
	15% Contingencies			1,217.71
	Total Cost			$ 9,335.75

23. (h) Cost of material and supplies, including items of equipment costing less than $50.00 each.

Item	Amount Required	Cost	Total	
Local Timber	46,739 Bd.Ft.	.822 M	$3,841.76	
Oregon Timber	44,050 Bd.Ft.	1.35 M	5,947.20	
Explosives			6,486.34	*
Bits & Steel			4,692.50	*
2" Pipe	705 Ft.		262.50	
3" Pipe	450 Ft.		292.50	
4" Pipe	1,230 Ft.		1,353.00	1908.0
Air Hose	600 Ft.		590.00	
Water Hose	400 Ft.		240.00	
Concrete Pre-Mix	72 Yds	16.00	1,152.00	
Roofing	17 Rolls	5.00	85.00	
Gyp Lap	2,884 Ft.	.06	195.36	
Windows	14	16.00	224.00	
Doors	2	30.00	60.00	
Nails & Hardware			57.50	
Axes & Picks	2 each		11.10	
Shovels	52	3.50	182.00	
Anchor Bolts for Hoist	12	3.00	36.00	
Reinforcing Steel			45.00	
Steel Rods, Bolts & Plate			550.00	
Anchor Bolts for Headframe	80	1.25	100.00	
Tie rods & Bolts			423.00	
Ladders	450'	1.25	112.50	
Header	1		50.00	
Grouting Supplies			5,000.00	Eliminate
Diamond Drill & Supplies			4,250.00	
Track & Supplies			1,059.36	
Pipe Hangers			67.50	
Guide Brackets & Bolts			666.00	
Bolts			11.52	
C.I. Washers			92.90	
Lag Screws	48	.12	5.76	
Turnbuckles	12	1.00	12.00	
Change House Plumbing & Lockers			575.00	
Grizzley Material			250.00	
			$38,979.30	
	15% Contingencies		5,846.90	
		Total Cost	$44,826.20	

* Calculated on a per foot basis, not broken down to units.

23. (i) Cost of the power moving hoist, etc., not provided for above.

To obtain the power for this exploration it will be necessary for Vermont Copper Co. to increase the size of its copper wire from its main transformer station to the river pump station, a distance of 2700 feet from No. 4 wire to No. 2 wire which the Company proposes to do at its own expense.

To deliver power to the proposed shaft site from the river pump station, a distance of 2,400 feet, will require the 7,200 feet of No. 4 wire shown below.

For hoisting duty during the exploration program, we have available a 75 H.P. single drum hoist which must be completely overhauled and an auxiliary brake installed.

This hoist is presently located underground at our No. 2 Winze. No rental for this hoist has been charged.

The above estimate of the cost of power, installation and moving hoist has not been included in 23 a, b, d, e, f, g, h, because it is contemplated that these two operations may be contracted separately.

23. (i) 1 - Power & Miscellaneous

Item	Estimated Power Cost
Sinking	$1,200.00
Station & Pocket	100.00
Drifts & Cross-cuts	492.00
	$1,792.00
15% Contingencies	268.80
Total Cost	$2,060.80

VERMONT COPPER COMPANY, INC.
SOUTH STRAFFORD, VERMONT

ATTACHMENT TO
U. S. DEPT. OF THE INTERIOR
DEFENSE MINERALS ADMINISTRATION
FORM MF-103

24. Time schedule and expenditures starting date depends on delivery of material but is expected to be not later than May 1, 1952.

Month			
1	Supervision	774.25	
	Surface Preparation	2,694.70	
	Power Installation	8,534.17	12,003.12
2	Supervision	1,548.48	
	Building Construction	4,363.36	
	Moving Hoist	2,297.38	
	Shaft Collar	1,428.44	
	Headframe & Bins	8,000.00	
	Shaft Equipment Purchase	7,705.00	25,342.66
3	Supervision	2,322.71	
	Headframe & Bins	3,523.94	
	Shaft Sinking	10,366.06	16,212.71
4	Supervision & Power	2,322.71	
	Shaft Sinking	19,251.24	21,573.95
5	Supervision & Power	2,322.71	
	Shaft Sinking	19,251.24	21,573.95
6	Supervision & Power	2,322.71	
	Shaft Sinking	17,770.38	20,093.09
7	Supervision & Power	2,322.71	
	Shaft Station & Pocket	5,433.75	
	Cross-Cutting	8,609.75	16,366.21
8	Supervision & Power	2,322.71	
	Crosscut & Drift	11,192.68	13,515.39
9	Supervision & Power	2,322.71	
	Drift	9,901.21	12,223.92
	Total		$158,905.00

n MF-103
pril 1951)

U. S. DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS ADMINISTRATION

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

Dma - 1950
8/6/51

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

DO NOT FILL IN THIS BLOCK

Docket No. [redacted]

Date received [redacted]

Participation

VERMONT COPPER COMPANY, INC.
SOUTH STRAFFORD, VERMONT

Name and address of applicant

Date August 6, 1951

FILL IN THIS BLOCK

Date of application Supplement - August 1, 1951

Estimated cost $303,565.64

Mineral or metal Copper Ore

Percentage of Government participation 50%

Location of mine Orange County, Vermont

Date of filing MF-100 May 23, 1951

DMA Docket Number, if available DMA 1526 X

INSTRUCTIONS

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

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
AUG 6 1951

THE APPLICANT

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

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

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

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

16—64067-1

THE PROPERTY

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

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

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

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

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

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

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

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

*16. History:

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

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

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

*17. Production:

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

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

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

(*a*) Describe the ore or mineral deposits br efly.

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

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

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

THE EXPLORATION

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

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

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

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

TI E REQUIREMENTS AND COSTS

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

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

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

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

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

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

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

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

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

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

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

CERTIFICATION

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

VERMONT COPPER COMPANY, INC.
(Name of company)

By John J Cowley
(Signature of authorized official)

August 6, 1951
(Date)

President
(Title)

Title 18, U. S. Code (Crimes), Section 1001, makes 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 jurisdicti

*Same as footnote on page 1.

VERMONT COPPER COMPANY, INC.
SOUTH STRAFFORD, VERMONT

ATTACHMENT TO
U. S. DEPT. OF THE INTERIOR
DEFENSE MINERALS ADMINISTRATION
FORM MF-103

It is understood that this application for aid for an Exploration Project pursuant to Mineral Order 5, under Defense Production Act of 1950 is a supplement to DMA 1526 X.

1. Answered on MF 100

2. Answered on MF 100

3. Answered on MF 100

4. Answered on MF 100

5. Answered on MF 100

6. Answered on MF 103

7. Answered on MF 103

8. Answered on MF 103

9. Applicant is prepared to invest $151,782.82 representing its full share of this supplementary to project DMA 1526 X.

10. (a) Answered on MF 103

(b) Answered on MF 103

11. Answered on MF 100

12. Answered on MF 100

13. Answered on MF 100

14. Answered on MF 103 - In addition see 23 G.

15. Answered on MF 103

16. Answered on MF 100

17. Answered on MF 100

18. Answered on MF 100

19. None

THE EXPLORATION

20. Answered on MF 103

21. In addition to diamond drill program listed in original MF 103, it is proposed to sink an exploratory shaft approximately 450 feet in depth, at a point 4,000 feet north of the present operating shaft, and to drive 225 feet of crosscuts and 1,500 feet of drifts to explore the vein indicated by diamond drill cores in that area. A sketch of the area showing the location of the above described work is attached hereto. It is estimated that 371 days will be required to complete the project.

22. Answered on MF 103

23. In addition to itemized statement covering expenditures for the diamond drill program in MF 103 Docket No. DMA 1526X, the following is an itemized statement for the exploration work as covered in 21 above.

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

No. Of Men	Class	No. of Straight Time Shifts	Hourly Rate	No. of Overtime Shifts	Rate	Straight Time Pay	Overtime Pay	Total
13	Carpenters	463	1.32	85	1.98	4,889.28	1,346.40	6,235.68
1	Bulldozer Operator	15	1.36	2	2.04	163.20	32.64	195.84
5	Truck Drivers	272	1.26	51	1.89	2,741.76	771.12	3,512.88
2	Axemen	10	1.03	2	1.545	82.40	24.72	107.12
1	Compressor Operator	5	1.21	1	1.815	48.40	14.52	62.92
6	Laborers	214	1.03	38	1.545	1,763.36	469.68	2,233.04
4	Mechanics	118	1.32	22	1.98	1,246.08	348.48	1,594.56
1	Rigger	34	1.75	6	2.625	476.00	126.00	602.00
4	Timbermen	20	1.32		1.98	211.20		211.20
3	Hoistmen	756	1.27	153	1.905	7,680.96	2,331.72	10,012.68
6	Drillers	646	1.21	130	1.815	6,253.28	1,887.60	8,140.88
3	Deckmen	279	1.21	57	1.815	2,700.72	827.64	3,528.36
12	Shaftmen	1,116	1.50	228	2.25	13,392.00	4,104.00	17,496.00
3	Shaftmen's Helpers	279	1.21	57	1.815	2,700.72	827.64	3,528.36
2	D. Drill Operators		1.32	152	1.98		2,407.68	2,407.68
2	Muck. Mach. Oper.	318	1.21	64	1.815	3,078.24	929.28	4,007.52
2	Trackmen	318	1.21	64	1.815	3,078.24	929.28	4,007.52
2	Pipefitters	159	1.21	32	1.815	1,539.12	464.64	2,003.76
3	Skiptenders	477	1.21	96	1.815	4,617.36	1,393.92	6,011.28
75		5,499		1,240		56,662.32	19,236.96	75,899.28

Summary

Total Number of Men	75
Total Man Shifts	6,739
Total Man Hours	47,173
Straight Time Wages	$56,662.32
Overtime Wages	19,236.96
Total Wages	75,899.28
15% Contingencies	11,384.89
Total	$87,284.17

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

No. of Men	Supervision	No. of Shifts	Rate Shift	Total
1	Design & Layout Man	60	16.00	960.00
1	Engineer	74	16.00	1,184.00
2	Engineer's Helpers	148	13.44	1,989.12
1	Construction Superintendent	60	25.00	1,500.00
1	Shaft Foreman	355	16.00	5,680.00
1	Shift Boss	355	14.00	4,970.00
1	Mechanics Maintenance	355	10.56	3,748.80
1	Electricians Maintenance	355	10.56	3,748.80
1	Warehouse Man	175	10.48	~~785.60~~ 1834.00
10				
				$24,566.~~87~~ 32 25 814.72
	Plus 15% Contingencies			3,685.03
				$28,251.~~90~~ 35 29,299.75

23. (c) None.

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

Item	Labor	Materials	Contingencies	Total
Hoist & Compressor Building	3,433.12	2,085.30	827.76	$6,346.18
Headframe & Bins	5,347.28	5,633.76	1,686.99	12,668.03
				$19,014.21 *

Total is included in (a) and (h).

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

Item	No. Required	Cost
Cross Head	1	300.00
Sinking Bucket	2	300.00
Blasting Set	1	500.00
Bucket Dump Door	1	800.00
Hoist Rope		1,600.00
Skip Cages	2	4,000.00
Sump Pump	1	2,000.00
Mucking Machine	1	5,000.00
Battery Locomotive	1	12,000.00
Cars @ $535.00	6	3,210.00
Oil Heater	1	300.00
Sheaves - 6 foot	2	1,100.00
Diversion Gate		1,000.00
Skip Dump	2	500.00
Control Gate & Asses	1	800.00
Cartridge	1	800.00
Grizzlies	2	250.00
		$34,460.00
15% Contingencies		5,169100
		$39,629.00

Note: Equipment herein does not include power line, substation, etc.

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

Item	No. Required	Days	Cost Per Day	Total
Portable Compressor	2	306	$32.00	$9,792.00
Trucks	4	5	72.00	360.00
				$10,152.00
	15% Contingencies			1,522.80
	Total Cost			$11,674.80

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

Item	No. Required	Days	Cost Per Day Each	Total
Bull Dozer	1	17	53.12	$ 903.04
Truck - Dump	1	303	18.00	5,454.00
Jackhammers	4	103	2.00	824.00
Leyners	2	203	2.00	812.00
Air Tugger	1	100	1.00	100.00
				$8,093.04
	15% Contingencies			1,213.95
	Total Cost			$9,306.99

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

Item	Amount Required	Cost	Total
Timber (Local)	55,670 Bd. Ft.	.08	$ 4,509.60 - 4453.60
Timber (Oregon Pine)	57,810 Bd. Ft.	.16	9,249.60
Explosives			13,191.55 *
Bits & Steel			13,992.20 *
2" Water Pipe	2,475 Ft.	.73	1,806.75
3" Air Pipe	2,175 Ft.	.80	1,740.00
Air Hose	600 Ft.	.95	570.00
Water Hose	400 Ft.	.60	240.00
Concrete Pre-Mix	86 Yd.	15.00	1,290.00
Siding	30 Sq.Ft.	3.50	105.00
Roofing	36 Sq.Ft.	2.50	90.00
Gip-Lap	2,600 Sq.Ft.	55.50 M Sq.Ft.	144.30
Windows	12	8.00	96.00
Doors	2	20.00	40.00
Nails	10 Kegs	14.00	140.00
Axes	2	2.00	4.00
Shovels	2	2.00	4.00
Picks	2	2.00	4.00
Anchor bolt for Hoist	12	3.00	36.00
Reinforced Steel	360#	.15	54.00
Ladders	450 ft.	1.25 15' ? 0.27	112.50 - ?
Header	1	50.00	50.00
Diamond Drill Supplies	3,800 Ft.	2,50	9,500.00 ?
Track & Supplies	34,500 #	8.50 CWT	2,932.50
Grouting & Supplies			5,000.00
Steel Rods & H	16,770 #	..10	1,677.00
Anchor Bolts Headframe	80	1.25	100.00
Pipe Hangers	90	.75	67.50
Guide Bolts 7/8" x 10½"	540	.20	108.00
Guide Bolts 7/8" x 5"	360	.15	54.00
Bolts Loading Pocket - 3/4" x 2"-6"	72	.16	11.52
C.I. Washers 3/4"	1,170	.08	93.60
Lag Screws	48	.12	5.76
Turnbuckles 1"	12	1.00	12.00
			$67,031.38
	15% Contingencies		10,054.70
	Total Cost		$77,086.08

* Calculated on a per foot basis, not broken down to units.

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

To obtain the necessary power for this exploration project it is necessary to extend the high tension line, supplying the Elizabeth Mine, a distance of approximately 3½ miles and install a separate transformer set up. Our present Transformers which consist of 3 - 500 KVA units, are carrying peak loads in excess of 1,500 KW.

The following estimate of the cost of the new power installation is based upon present prices of equipment and our experience records as to labor. It is expected however, that the complete installation will be done by contract, consequently the labor, supplies, and rental equipment have been kept separate from the remainder of cost estimates.

For hoisting duty during the exploration program, we have available a Nordberg Hoist, Serial #3034, double drum, post brakes, 250 H.P. motor complete with switch gear, which was used in our #1 Shaft, now abandoned. We include herein an estimate of the cost of moving and installing said hoist from its present location underground, to the new shaft site. No rental charge for its operation is included.

23. (i) 1- Power & Miscellaneous

Item	Estimated Power Cost
Sinking	$1,200.00
Station & Pocket Cutting	100.00
Drifting & Crosscutting	1,380.00
	$2,680.00
15% for Contingencies	402.00
Total Cost	$3,082.00

VERMONT COPPER COMPANY, INC.
SOUTH STRAFFORD, VERMONT

ATTACHMENT TO
U. S. DEPT. OF THE INTERIOR
DEFENSE MINERALS ADMINISTRATION
FORM MF-103

24. Time schedule and expenditures. Starting date depends upon delivery of transformers for power supply.

Month	Item		Cost
1	Supervision	$ 2,018.00	
	Surface Preparation	3,485.30	36,909.57
	Power Installation	31,406.27	39,617.08
2	Supervision	2,018.00	
	Building Construction	2,860.89	
	Secondary Power	10,298.75	
	Moving Hoist	5,572.68	
	Shaft Collar	1,389.68	
	Headframe & Bins	9,000.00	
	Shaft Equipment & Purchase	7,700.00	38,840.00
3	Supervision & Power	2,274.00	
	Headframe & Bins	3,933.63	
	Shaft Sinking	11,747.00	17,954.63
4	Supervision & Power	2,274.00	
	Shaft Sinking	21,816.60	24,090.60
5	Supervision & Power	2,274.00	
	Shaft Sinking	21,816.60	24,090.60
6	Supervision & Power	2,274.00	
	Shaft Sinking	20,136.84	
	Equipment Purchase - Locomotive, Mucker, Cars	23,000.00	45,410.84
7	Supervision & Power	2,274.00	
	Shaft Station & Pocket	6,212.67	
	Crosscutting	3,703.68	12,190.35
8	Supervision & Power	2,274.00	
	Crosscutting & Drifts	12,036.96	14,310.96
9	Supervision & Power	2,274.00	
	Crosscutting & Drifts	12,036.96	14,310.96
10	Supervision & Power	2,274.00	
	Drifts	12,036.96	14,310.96
11	Supervision & Power	2,274.00	
	Drifts	12,036.96	14,310.96
12	Supervision & Power	2,274.00	
	Drifts	12,036.96	14,310.96
13	Supervision & Power	2,274.00	
	Drifts	12,036.96	14,310.96

24. (Continued)

Month	Item		Cost
14	Supervision & Power	2,274.00	
	Drifts	12,036.96	14,310.96
15	Drifts	771.60	771.60
	Total		300 434.91 $303,142.42
	To Balance		423.22
	Grand Total		$303,565.64 300,857.13
	Calculated Total		304,584.50 304 [illegible]

23. (1) 4 - Move Nordberg Hoist from Elizabeth Mine to No. 4 Shaft Site

L A B O R

No. of Men	Class	Hourly Rate	No. Man Shifts	Rate Per Shift	Rate Per Overtime Shift	Total
	Hoist - 2 Drum - 70 3/4" x 24"					
	Rope 900'1"					
	Maximum Pull - 15,250 #					
6	Mechanics	1.32	180 150/50	10.56	15.84	2,059.20
3	Electricians	1.50	72 60/12	12.00	18.00	936.00
1	Mine Motorman	1.25	6 5/1	10.00	15.00	65.00
1	Truck Driver	1.26	15 12/3	10.08	15.12	161.28
1	Rigger	2.00	30 25/5	16.00	24.00	520.00
1	Crane Operator	2.50	6 5/1	20.00	30.00	130.00
5	Laborers	1.03	120. 100/20	8.24	12.36	1,071.20
						4,942.68

EQUIPMENT RENTAL

Item	Hourly Rate	No. of Hours	No. of Shifts	Per Shift	Total
Truck	2.25	120	15	18.00	270.00
Crane	7.50	48	6	60.00	360.00
					$630.00

SUMMARY

Labor	4,942.68
Rentals	630.00
	$5,572.68

Cut in half

LABOR

	No. of Men	Class	Hourly Rate	No. Man Shifts	Rate a Per Shift	Total
A		Foundations				
	2	Laborers	1.03	4	8.24	32.96
B		Transformers				
	3	Laborers	1.03	3	8.24	24.72
	1	Truck Driver	1.26	1	10.08	10.08
	2	Electricians	1.50	4	12.00	48.00
	2	Laborers	1.03	4	8.24	32.96
C		Oil Circuit Breaker				
	2	Electricians	1.50	4	12.00	48.00
	2	Laborers	1.03	4	8.24	32.96
	1	Truck Driver	1.26	1	10.08	10.08
D		Secondary Feeder				
	2	Electricians	1.50	24	12.00	288.00
	4	Laborers	1.03	48	8.24	395.52
	1	Truck Driver	1.26	2	10.08	20.16
						$943.44

MATERIALS & EQUIPMENT

Item	No. Required	Cost	Total
Concrete	2 Cu. Yds.	15.00	30.00
Form Lumber	125 feet	.08	10.00
100 KVA 2300/480 v.	3	800.00	2400.00
600 AMP - F-122 3 POCB	1	500.00	500.00
350,000 CM Wire	1,000 ft.	5,000.00	5,000.00
			$7,940.00

EQUIPMENT RENTAL

Item	Hourly Rate	No. of Hours	No. of Shifts	Per Shift	Total
Truck	2.25	8	~~7~~ 1	18.00	18.00
Truck	2.25	8	1	18.00	18.00
Truck	2.25	16	2	18.00	36.00
					$72.00

SUMMARY

Labor	943.44
Materials	7,940.00
Rentals	72.00
	8,955.44
15% Contingencies	1,343.31
	$10,298.75

(1) 2 - Power Installation Cost

L A B O R

	No. of Men	Class	Hourly Rate	No. Man Shifts	Rate Per Shift	Total
		PRIMARY POWER				
A		Clearing Right-of-Way				
	1	Bulldozer Operator	1.36	6	10.88	65.28
	8	Laborers	1.03	136	8.24	1,120.64
B		Grading				
	1	Bulldozer Operator	1.36	4	10.88	43.52
	2	Laborers	1.03	8	8.24	65.92
C		Fencing				
	5	Laborers	1.03	15	8.24	123.60
D		Foundatings & Structures for Substation & Dead Ends				
	4	Carpenters	1.32	40	10.56	422.40
	2	Laborers	1.03	22	8.24	181.28
E		Substation & Dead End Structures				
	1	Truck Trailer Driver	1.50	3	12.00	36.00
	2	Truck Drivers	1.26	6	10.08	60.48
	12	Laborers	1.03	60	8.24	494.40
	3	Electricians (Linemen)	1.65	54	13.20	712.80
	2	Steel Erectors	1.50	14	12.00	168.00
	1	Bulldozer Operator	1.36	6	10.88	65.28
	1	Line Truck Driver	1.50	6	12.00	72.00
	2	Electicians (Substation)	1.50	36	12.00	432.00
	4	Laborers	1.03	72	8.24	593.28
	1	Electrical Supervisor	3.13	40	25.00	1,000.00
						$5,656.88

MATERIALS & EQUIPMENT TO PURCHASE

Item	No. Required	Cost	Total
Page Wire Fence			375.00
Form Lumber	600 Ft.	.08	48.00
Concrete	16 Cu.Yd.	15.00	240.00
333 KVA Transformers 4400/2300	3	2,738.33	8,215.00
2300 V Unit - Type OCB	1	3,607.00	3,607.00
4400 KV Air Brakes	1	800.00	800.00
4400 KV Fused Disconnects	3	100.00	300.00
4400 KV Ltg Arresters	3	200.00	600.00
4400 KV Bus Support	3	33.33	100.00
7.5 KV Air Brakes	1-Grouped		550.00
7.5 KV Bus Support	1-Grouped		158.00
7.5 KV Fuse Disconn.	3	100.00	300.00
Arrester Brackets	1		75.00
Bus Tubing 3/4"x13'	3	13.33	40.00
Misc. Connectors & Wire			150.00
Steel (Specifications for Structure			1,100.00
2/A Copper Weld	18,000'		1,750.00
Poles & Arms	25 Poles	55.00	1,375.00
Insulators & Pins			600.00
			$20,383.00

EQUIPMENT RENTAL

Item	Hourly Rate	No. of Hours	No. of Shifts	Per Shift	Total
Bulldozer	6.64	48	6	53.12	318.72
Bulldozer	6.64	32	4	53.12	212.48
Transformer Trailer	7.50	24	3	~~22.50~~ 60.00	180.00
Bulldozer	6.64	48	6	53.12	318.72
Line Truck	5.00	48	6	40.00	240.00
					$1,269.92

SUMMARY

Labor	$ 5,656.88
Material	20,383.00
Rentals	1,269.92
	$27,309.80
15% Contingencies	4,096.47
Total	$31,406.27

~~DMA 1526X~~

August 6, 1951

Defense Minerals Administration
Department of the Interior
Washington 25, D. C.

Gentlemen:

In connection with our recent correspondence concerning our application DMA-1526X for an exploration loan under the Defense Production Act of 1950 including letter dated July 10, 1951 addressed to Mr. George Adams Ellis from Mr. James Boyd, Administrator, letter dated July 25, 1951 addressed to Mr. Boyd from Mr. Ellis and telephone conversations between the writer and Mr. C. O. Mittenderf, we are submitting herewith a supplement to DMA 1526X to cover the necessary shaft sinking and exploration drifting as recommended.

Form MF 100 General Technical Data For Use Under the Defense Production Act of 1950 was submitted on May 23, 1951 and assigned Docket Number DMA 1526X.

The original MF 103 covering diamond drilling only was submitted May 29, 1951.

The supplement to MF 103 herein submitted covers the shaft and drift project only and does not answer questions already answered in our MF 100 or the previous MF 103.

Very truly yours,

John F. Cowley

John F. Cowley
President

JFC:mm

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
AUG 6 1951

COPY

Form MF-103
(April 1951)

U[redacted] DEPARTMENT OF THE INTER[redacted]R
DEFENSE MINERALS ADMINISTRATION

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

dma - 1950

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

DO NOT FILL IN THIS BLOCK

Docket No. ~~DMA 1526X~~

Date received 8-6-51

Participation

VERMONT COPPER COMPANY, INC.
SOUTH STRAFFORD, VERMONT

Name and address of applicant

Date August 6, 1951

FILL IN THIS BLOCK

Date of application Supplement - August 1, 1951

Estimated cost $303,565.64

Mineral or metal Copper Ore

Percentage of Government participation 50%

Location of mine Orange County, Vermont

Date of filing MF-100 May 23, 1951

DMA Docket Number, if available DMA 1526X

INSTRUCTIONS

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

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
AUG 6 1951

THE APPLICANT

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

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

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

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

16—64067-1

THE PROPERTY

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

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

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

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

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

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

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

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

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

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

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

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

THE EXPLORATION

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

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

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

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

THE REQUIREMENTS AND COSTS

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

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

CERTIFICATION

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

VERMONT COPPER COMPANY, INC.
(Name of company)

By John F. Dowley
(Signature of authorized official)

August 6, 1951
(Date)

President
(Title)

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

*Same as footnote on page 1.

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

VERMONT COPPER COMPANY, INC.
SOUTH STRAFFORD, VERMONT

ATTACHMENT TO
U. S. DEPT. OF THE INTERIOR
DEFENSE MINERALS ADMINISTRATION
FORM MF-103

It is understood that this application for aid for an Exploration Project pursuant to Mineral Order 5, under Defense Production Act of 1950 is a supplement to DMA 1526 X.

1. Answered on MF 100

2. Answered on MF 100

3. Answered on MF 100

4. Answered on MF 100

5. Answered on MF 100

6. Answered on MF 103

7. Answered on MF 103

8. Answered on MF 103

9. Applicant is prepared to invest $ 151,782.82 representing its full share of this supplementary to project DMA 1526 X.

10. (a) Answered on MF 103

(b) Answered on MF 103

11. Answered on MF 100

12. Answered on MF 100

13. Answered on MF 100

14. Answered on MF 103 - In addition see 23 G.

15. Answered on MF 103

16. Answered on MF 100

17. Answered on MF 100

18. Answered on MF 100

19. None

THE EXPLORATION

20. Answered on MF 103

21. In addition to diamond drill program listed in original MF 103, it is proposed to sink an exploratory shaft approximately 450 feet in depth, at a point 4,000 feet north of the present operating shaft, and to drive 225 feet of crosscuts and 1,500 feet of drifts to explore the vein indicated by diamond drill cores in that area. A sketch of the area showing the location of the above described work is attached hereto. It is estimated that 371 days will be required to complete the project.

22. Answered on MF 103

23. In addition to itemized statement covering expenditures for the diamond drill program in MF 103 Docket No. DMA 1526X, the following is an itemized statement for the exploration work as covered in 21 above.

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

No. Of Men	Class	No. of Straight Time Shifts	Hourly Rate	No. of Overtime Shifts	Rate	Straight Time Pay	Overtime Pay	Total
13	Carpenters	463	1.32	85	1.98	4,889.28	1,346.40	6,235.68
1	Bulldozer Operator	15	1.36	2	2.04	163.20	32.64	195.84
5	Truck Drivers	272	1.26	51	1.89	2,741.76	771.12	3,512.88
2	Axeman	10	1.03	2	1.545	82.40	24.72	107.12
1	Compressor Operator	5	1.21	1	1.815	48.40	14.52	62.92
6	Laborers	214	1.03	38	1.545	1,763.36	469.68	2,233.04
4	Mechanics	118	1.32	22	1.98	1,246.08	348.48	1,594.56
1	Rigger	34	1.75	6	2.625	476.00	126.00	602.00
4	Timberman	20	1.32		1.98	211.20		211.20
3	Heistman	756	1.27	153	1.905	7,680.96	2,331.72	10,012.68
6	Drillers	646	1.21	130	1.815	6,253.28	1,887.60	8,140.88
3	Deckman	279	1.21	57	1.815	2,700.72	827.64	3,528.36
12	Shaftman	1,116	1.50	228	2.25	13,392.00	4,104.00	17,496.00
3	Shaftman's Helpers	279	1.21	57	1.815	2,700.72	827.64	3,528.36
2	D. Drill Operators		1.32	152	1.98		2,407.68	2,407.68
2	Muck. Mach. Oper.	318	1.21	64	1.815	3,078.24	929.28	4,007.52
2	Trackman	318	1.21	64	1.815	3,078.24	929.28	4,007.52
2	Pipefitters	159	1.21	32	1.815	1,539.12	464.64	2,003.76
3	Shiptenders	477	1.21	96	1.815	4,617.36	1,393.92	6,011.28
75		5,499		1,240		56,662.32	19,236.96	75,899.28

Summary

Total Number of Men	75
Total Man Shifts	6,739
Total Man Hours	47,173
Straight Time Wages	$56,662.32
Overtime Wages	19,236.96
Total Wages	75,899.28
15% Contingencies	11,384.89
Total	$87,284.17

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

No. of Men	Supervision	No. of Shifts	Rate Shift	Total
1	Design & Layout Man	60	16.00	960.00
1	Engineer	74	16.00	1,184.00
2	Engineer's Helpers	148	13.44	1,989.12
1	Construction Superintendent	60	25.00	1,500.00
1	Shaft Foreman	355	16.00	5,680.00
1	Shift Boss	355	14.00	4,970.00
1	Mechanics Maintenance	355	10.56	3,748.80
1	Electricians Maintenance	355	10.56	3,748.80
1	Warehouse Man	175	10.48	785.60
				$24,566.87
	Plus 15% Contingencies			3,685.03
				$28,251.90

23. (c) None.

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

Item	Labor	Materials	Contingencies	Total
Hoist & Compressor Building	3,433.12	2,085.30	827.76	$6,346.18
Headframe & Bins	5,347.28	5,633.76	1,686.99	12,668.03
				$19,014.21 *

Total is included in (a) and (b).

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

Item	No. Required	Cost
Crane Head	1	300.00
Sinking Bucket	2	300.00
Blasting Set	1	500.00
Bucket Dump Door	1	800.00
Hoist Rope		1,600.00
Skip Cages	2	4,000.00
Sump Pump	1	2,500.00
Mucking Machine	1	5,000.00
Battery Locomotive	1	12,000.00
Cars @ $535.00	6	3,210.00
Oil Heater	1	300.00
Sheaves - 6 foot	2	1,100.00
Diversion Gate		1,000.00
Skip Dump	2	500.00
Control Gate & Fence	1	800.00
Cartridge	1	800.00
Crinolines	2	250.00
		$34,460.00
15% Contingencies		5,169.00
		$39,629.00

Note: Equipment herein does not include power line, substation, etc.

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

Item	No. Required	Days	Cost Per Day	Total
Portable Compressor	2	306	$32.00	$9,792.00
Trucks	4	5	72.00	360.00
				$10,152.00
	15% Contingencies			1,522.80
	Total Cost			$11,674.80

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

Item	No. Required	Days	Cost Per Day Each	Total
Bull Dozer	1	17	53.12	$ 903.04
Truck - Dump	1	303	18.00	5,454.00
Jackhammers	4	103	2.00	824.00
Laymers	2	203	2.00	812.00
Air Tugger	1	100	1.00	100.00
				$8,093.04
	15% Contingencies			1,213.95
	Total Cost			$9,306.99

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

Item	Amount Required	Cost	Total
Timber (Local)	55,670 Bd. Ft.	.08	$ 4,509.60
Timber (Oregon Pine)	57,810 Bd. Ft.	.16	9,249.60
Explosives			13,191.55 *
Bits & Steel			13,992.20 *
2" Water Pipe	2,475 Ft.	.73	1,806.75
3" Air Pipe	2,175 Ft.	.80	1,740.00
Air Hose	600 Ft.	.95	570.00
Water Hose	400 Ft.	.60	240.00
Concrete Pre-Mix	86 Yd.	15.00	1,290.00
Siding	30 Sq.Ft.	3.50	105.00
Roofing	36 Sq.Ft.	2.50	90.00
Gip-Lap	2,600 Sq.Ft.	55.50 M Sq.Ft.	144.30
Windows	12	8.00	96.00
Doors	2	20.00	40.00
Nails	10 Kegs	14.00	140.00
Axes	2	2.00	4.00
Shovels	2	2.00	4.00
Picks	2	2.00	4.00
Anchor bolt for Hoist	12	3.00	36.00
Reinforced Steel	360#	.15	54.00
Ladders	450 ft.	1.25	112.50
Header	1	50.00	50.00
Diamond Drill Supplies	3,800 Ft.	2.50	9,500.00
Track & Supplies	34,500 #	8.50 CWT	2,932.50
Grouting & Supplies			5,000.00
Steel Rods & M.	16,770 #	.10	1,677.00
Anchor Bolts Headframe	80	1.25	100.00
Pipe Hangers	90	.75	67.50
Guide Bolts 7/8" x 10½"	540	.20	108.00
Guide Bolts 7/8" x 5"	360	.15	54.00
Bolts Loading Pocket - 3/4" x 2"-6"	72	.16	11.52
C.I. Washers 3/4"	1,170	.08	93.60
Lag Screws	48	.12	5.76
Turnbuckles 1"	12	1.00	12.00
			$67,031.38
15% Contingencies			10,054.70
Total Cost			$77,086.08

* Calculated on a per foot basis, not broken down to units.

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

To obtain the necessary power for this exploration project it is necessary to extend the high tension line, supplying the Elizabeth Mine, a distance of approximately 3½ miles and install a separate transformer set up. Our present Transformers which consist of 3 - 500 KVA units, are carrying peak loads in excess of 1,500 KW.

The following estimate of the cost of the new power installation is based upon present prices of equipment and our experience records as to labor. It is expected however, that the complete installation will be done by contract, consequently the labor, supplies, and rental equipment have been kept separate from the remainder of cost estimates.

For hoisting duty during the exploration program, we have available a Nordberg Hoist, Serial #3034, double drum, post brakes, 250 H.P. motor complete with switch gear, which was used in our #1 Shaft, now abandoned. We include herein an estimate of the cost of moving and installing said hoist from its present location underground, to the new shaft site. No rental charge for its operation is included.

23. (i) 1- Power & Miscellaneous

Item	Estimated Power Cost
Sinking	$1,200.00
Station & Pocket Cutting	100.00
Drifting & Crosscutting	1,380.00
	$2,680.00
15% for Contingencies	402.00
Total Cost	$3,082.00

LABOR

	No. of Men	Class	Hourly Rate	No. Man Shifts	Rate Per Shift	Total
A		Foundations				
	2	Laborers	1.03	4	8.24	32.96
B		Transformers				
	3	Laborers	1.03	3	8.24	24.72
	1	Truck Driver	1.26	1	10.08	10.08
	2	Electricians	1.50	4	12.00	48.00
	2	Laborers	1.03	4	8.24	32.96
C		Oil Circuit Breaker				
	2	Electricians	1.50	4	12.00	48.00
	2	Laborers	1.03	4	8.24	32.96
	1	Truck Driver	1.26	1	10.08	10.08
D		Secondary Feeder				
	2	Electricians	1.50	24	12.00	288.00
	4	Laborers	1.03	48	8.24	395.52
	1	Truck Driver	1.26	2	10.08	20.16
						$943.44

MATERIALS & EQUIPMENT

Item	No. Required	Cost	Total
Concrete	2 Cu. Yds.	15.00	30.00
Form Lumber	125 feet	.08	10.00
100 KVA 2300/480 v.	3	800.00	2400.00
600 AMP - F-122 3 POLE	1	500.00	500.00
350,000 CM Wire	1,000 Ft.	5,000.00	5,000.00
			$7,940.00

EQUIPMENT RENTAL

Item	Hourly Rate	No. of Hours	No. of Shifts	Per Shift	Total
Truck	2.25	8	7 1	18.00	18.00
Truck	2.25	8	1	18.00	18.00
Truck	2.25	16	2	18.00	36.00
					$72.00

SUMMARY

Labor	943.44
Materials	7,940.00
Rentals	72.00
	8,955.44
15% Contingencies	1,343.31
	$10,298.75

23.61) 2 - Power Installation Cost

L A B O R

No. of Men	Class	Hourly Rate	No. Man Shifts	Rate Per Shift	Total
	PRIMARY POWER				
A	Clearing Right-of-Way				
1	Bulldozer Operator	1.36	6	10.88	65.28
8	Laborers	1.03	136	8.24	1,120.64
B	Grading				
1	Bulldozer Operator	1.36	4	10.88	43.52
2	Laborers	1.03	8	8.24	65.92
C	Fencing				
5	Laborers	1.03	15	8.24	123.60
D	Foundations & Structures for Substation & Lead Ends				
4	Carpenters	1.32	40	10.56	422.40
2	Laborers	1.03	22	8.24	181.28
E	Substation & Lead End Structures				
1	Truck Trailer Driver	1.50	3	12.00	36.00
2	Truck Drivers	1.26	6	10.08	60.48
12	Laborers	1.03	60	8.24	494.40
3	Electricians (Linemen)	1.65	54	13.20	712.80
2	Steel Erectors	1.50	14	12.00	168.00
1	Bulldozer Operator	1.36	6	10.88	65.28
1	Line Truck Driver	1.50	6	12.00	72.00
2	Electicians (Substation)	1.50	36	12.00	432.00
4	Laborers	1.03	72	8.24	593.28
1	Electrical Supervisor	3.13	40	25.00	1,000.00
					$5,656.88

MATERIALS & EQUIPMENT TO PURCHASE

Item	No. Required	Cost	Total
Page Wire Fence			375.00
Form Lumber	600 Ft.	.08	48.00
Concrete	16 Cu.Yd.	15.00	240.00
333 KVA Transformers 4400/2300	3	2,738.33	8,215.00
2300 V Unit - Type OCB	1	3,607.00	3,607.00
4400 KV Air Brakes	1	800.00	800.00
4400 KV Fused Disconnects	3	100.00	300.00
4400 KV Ltg Arresters	3	200.00	600.00
4400 KV Bus Support	3	33.33	100.00
7.5 KV Air Brakes	1-Grouped		550.00
7.5 KV Bus Support	1-Grouped		158.00
7.5 KV Fuse Disconn.	3	100.00	300.00
Arrester Brackets	1		75.00
Bus Tubing 3/4"x13'	3	13.33	40.00
Misc. Connectors & Wire			150.00
Steel (Specifications for Structure			1,100.00
2/4 Copper Weld	18,000'		1,750.00
Poles & Arms	25 Poles	55.00	1,375.00
Insulators & Pins			600.00
			$20,383.00

EQUIPMENT RENTAL

Item	Hourly Rate	No. of Hours	No. of Shifts	Per Shift	Total
Bulldozer	6.64	48	6	53.12	318.72
Bulldozer	6.64	32	4	53.12	212.48
Transformer Trailer	7.50	24	3	22.50	180.00
Bulldozer	6.64	48	6	53.12	318.72
Line Truck	5.00	48	6	40.00	240.00
					$1,269.92

SUMMARY

Labor	$ 5,656.88
Material	20,383.00
Rentals	1,269.92
	$27,309.80
15% Contingencies	4,096.47
Total	$31,406.27

23. (1) 4 - Move Nordberg Hoist from Elizabeth Mine to No. 4 Shaft Site

L A B O R

No. of Men	Class	Hourly Rate	No. Man Shifts	Rate Per Shift	Rate Per Overtime Shift	Total
	Hoist - 2 Drum - 70 3/4" x 24"					
	Rope 900'1"					
	Maximum Pull - 15,250 #					
6	Mechanics	1.32	180	10.56	15.84	2,059.20
3	Electricians	1.50	72	12.00	18.00	936.00
1	Mine Motorman	1.25	6	10.00	15.00	65.00
1	Truck Driver	1.26	15	10.08	15.12	161.28
1	Rigger	2.00	30	16.00	24.00	520.00
1	Crane Operator	2.50	6	20.00	30.00	130.00
5	Laborers	1.03	120.	8.24	12.36	1,071.20
						4,942.68

EQUIPMENT RENTAL

Item	Hourly Rate	No. of Hours	No. of Shifts	Per Shift	Total
Truck	2.25	120	15	18.00	270.00
Crane	7.50	48	6	60.00	360.00
					$630.00

SUMMARY

Labor	4,942.68
Rentals	630.00
	$5,572.68

VERMONT COPPER COMPANY, INC.
SOUTH STRAFFORD, VERMONT

ATTACHMENT TO
U. S. DEPT. OF THE INTERIOR
DEFENSE MINERALS ADMINISTRATION
FORM MF-103

24. Time schedule and expenditures. Starting date depends upon delivery of transformers for power supply.

Month	Item		Cost
1	Supervision	$ 2,018.00	
	Surface Preparation	3,485.30	
	Power Installation	31,406.27	39,617.08
2	Supervision	2,018.00	
	Building Construction	2,860.89	
	Secondary Power	10,298.75	
	Moving Hoist	5,572.68	
	Shaft Collar	1,389.68	
	Headframe & Bins	9,000.00	
	Shaft Equipment & Purchase	7,700.00	38,840.00
3	Supervision & Power	2,274.00	
	Headframe & Bins	3,933.63	
	Shaft Sinking	11,747.00	17,954.63
4	Supervision & Power	2,274.00	
	Shaft Sinking	21,816.60	24,090.60
5	Supervision & Power	2,274.00	
	Shaft Sinking	21,816.60	24,090.60
6	Supervision & Power	2,274.00	
	Shaft Sinking	20,136.84	
	Equipment Purchase - Locomotive, Hucker, Cars	23,000.00	45,410.84
7	Supervision & Power	2,274.00	
	Shaft Station & Pocket	6,212.67	
	Crosscutting	3,703.68	12,190.35
8	Supervision & Power	2,274.00	
	Crosscutting & Drifts	12,036.96	14,310.96
9	Supervision & Power	2,274.00	
	Crosscutting & Drifts	12,036.96	14,310.96
10	Supervision & Power	2,274.00	
	Drifts	12,036.96	14,310.96
11	Supervision & Power	2,274.00	
	Drifts	12,036.96	14,310.96
12	Supervision & Power	2,274.00	
	Drifts	12,036.96	14,310.96
13	Supervision & Power	2,274.00	
	Drifts	12,036.96	14,310.96

24. (Continued)

Month	Item		Cost
14	Supervision & Power	2,274.00	
	Drifts	12,036.96	14,310.96
15	Drifts	771.60	771.60
	Total		$303,142.42
	To Balance		423.22
	Grand Total		$303,565.64

August 6, 1951

Defense Minerals Administration
Department of the Interior
Washington 25, D. C.

Gentlemen:

In connection with our recent correspondence concerning our application DMA-1526X for an exploration loan under the Defense Production Act of 1950 including letter dated July 10, 1951 addressed to Mr. George Adams Ellis from Mr. James Boyd, Administrator, letter dated July 25, 1951 addressed to Mr. Boyd from Mr. Ellis and telephone conversations between the writer and Mr. C. O. Mittendorf, we are submitting herewith a supplement to DMA 1526X to cover the necessary shaft sinking and exploration drifting as recommended.

Form MF 100 General Technical Data For Use Under the Defense Production Act of 1950 was submitted on May 23, 1951 and assigned Docket Number DMA 1526X.

The original MF 103 covering diamond drilling only was submitted May 29, 1951.

The supplement to MF 103 herein submitted covers the shaft and drift project only and does not answer questions already answered in our MF 100 or the previous MF 103.

Very truly yours,

John F. Cowley

John F. Cowley
President

JFC:mm

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
AUG 6 1951

COPY

Form MF-103
(April 1951)

U. S. DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS ADMINISTRATION

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

Dma-1950

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

DO NOT FILL IN THIS BLOCK

Docket No. ~~DMA 1526 X~~

Date received 8-6-51

Participation

VERMONT COPPER COMPANY, INC.
SOUTH STRAFFORD, VERMONT

Name and address of applicant

Date August 6, 1951

FILL IN THIS BLOCK

Date of application Supplement - August 1, 1951

Estimated cost $303,565.64

Mineral or metal Copper Ore

Percentage of Government participation 50%

Location of mine Orange County, Vermont

Date of filing MF-100 May 23, 1951

DMA Docket Number, if available DMA 1526 X

INSTRUCTIONS

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

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
AUG 6 1951

THE APPLICANT

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

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

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

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

16—64067-1

THE PROPERTY

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

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

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

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

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

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

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

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

*16. History:

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

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

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

*17. Production:

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

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

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

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

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

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

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

THE EXPLORATION

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

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

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

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

THE REQUIREMENTS AND COSTS

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

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

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

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

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

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

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

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

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

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

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

CERTIFICATION

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

VERMONT COPPER COMPANY, INC.
(Name of company)

By John J Cowley
(Signature of authorized official)

August 6, 1951
(Date)

President
(Title)

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

*Same as footnote on page 1.

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

VERMONT COPPER COMPANY, INC.
SOUTH STRAFFORD, VERMONT

ATTACHMENT TO
U. S. DEPT. OF THE INTERIOR
DEFENSE MINERALS ADMINISTRATION
FORM MF-103

It is understood that this application for aid for an Exploration Project pursuant to Mineral Order 5, under Defense Production Act of 1950 is a supplement to DMA 1526 X.

1. Answered on MF 100

2. Answered on MF 100

3. Answered on MF 100

4. Answered on MF 100

5. Answered on MF 100

6. Answered on MF 103

7. Answered on MF 103

8. Answered on MF 103

9. Applicant is prepared to invest $ 151,782.82 representing its full share of this supplementary to project DMA 1526 X.

10. (a) Answered on MF 103

(b) Answered on MF 103

11. Answered on MF 100

12. Answered on MF 100

13. Answered on MF 100

14. Answered on MF 103 - In addition see 23 G.

15. Answered on MF 103

16. Answered on MF 100

17. Answered on MF 100

18. Answered on MF 100

19. None

THE EXPLORATION

20. Answered on MF 103

21. In addition to diamond drill program listed in original MF 103, it is proposed to sink an exploratory shaft approximately 450 feet in depth, at a point 4,000 feet north of the present operating shaft, and to drive 225 feet of crosscuts and 1,500 feet of drifts to explore the vein indicated by diamond drill cores in that area. A sketch of the area showing the location of the above described work is attached hereto. It is estimated that 371 days will be required to complete the project.

22. Answered on MF 103

23. In addition to itemized statement covering expenditures for the diamond drill program in MF 103 Docket No. DMA 1526X, the following is an itemized statement for the exploration work as covered in 21 above.

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

No. Of Men	Class	No. of Straight Time Shifts	Hourly Rate	No. of Overtime Shifts	Rate	Straight Time Pay	Overtime Pay	Total
13	Carpenters	463	1.32	85	1.98	4,889.28	1,346.40	6,235.68
1	Bulldozer Operator	15	1.36	2	2.04	163.20	32.64	195.84
5	Truck Drivers	272	1.26	51	1.89	2,741.76	771.12	3,512.88
2	Axmen	10	1.03	2	1.545	82.40	24.72	107.12
1	Compressor Operator	5	1.21	1	1.815	48.40	14.52	62.92
6	Laborers	214	1.03	38	1.545	1,763.36	469.68	2,233.04
4	Mechanics	118	1.32	22	1.98	1,246.08	348.48	1,594.56
1	Rigger	34	1.75	6	2.625	476.00	126.00	602.00
4	Timberman	20	1.32		1.98	211.20		211.20
3	Hoistmen	756	1.27	153	1.905	7,680.96	2,331.72	10,012.68
6	Drillers	646	1.21	130	1.815	6,253.28	1,887.60	8,140.88
3	Deckmen	279	1.21	57	1.815	2,700.72	827.64	3,528.36
12	Shaftmen	1,116	1.50	228	2.25	13,392.00	4,104.00	17,496.00
3	Shaftmen's Helpers	279	1.21	57	1.815	2,700.72	827.64	3,528.36
2	D. Drill Operators		1.32	152	1.98		2,407.68	2,407.68
2	Mank. Mach. Oper.	318	1.21	64	1.815	3,078.24	929.28	4,007.52
2	Trackman	318	1.21	64	1.815	3,078.24	929.28	4,007.52
2	Pipefitters	159	1.21	32	1.815	1,539.12	464.64	2,003.76
3	Skiptenders	477	1.21	96	1.815	4,617.36	1,393.92	6,011.28
75		5,499		1,240		56,662.32	19,236.96	75,899.28

Summary

Total Number of Men	75
Total Man Shifts	6,739
Total Man Hours	47,173
Straight Time Wages	$56,662.32
Overtime Wages	19,236.96
Total Wages	75,899.28
15% Contingencies	11,384.89
Total	$87,284.17

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

No. of Men	Supervision	No. of Shifts	Rate Shift	Total
1	Design & Layout Man	60	16.00	960.00
1	Engineer	74	16.00	1,184.00
2	Engineer's Helpers	148	13.44	1,989.12
1	Construction Superintendent	60	25.00	1,500.00
1	Shaft Foreman	355	16.00	5,680.00
1	Shift Boss	355	14.00	4,970.00
1	Mechanics Maintenance	355	10.56	3,748.80
1	Electricians Maintenance	355	10.56	3,748.80
1	Warehouse Man	175	10.48	785.60
				$24,566.87
	Plus 15% Contingencies			3,685.03
				$28,251.90

23. (c) None.

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

Item	Labor	Materials	Contingencies	Total
Hoist & Compressor Building	3,433.12	2,085.30	827.76	$6,346.18
Headframe & Bins	5,347.28	5,633.76	1,686.99	12,668.03
				$19,014.21

Total is included in (a) and (h).

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

Item	No. Required	Cost
Cross Head	1	300.00
Sinking Bucket	2	300.00
Blasting Set	1	500.00
Bucket Dump Door	1	800.00
Hoist Rope		1,600.00
Skip Cages	2	4,000.00
Sump Pump	1	2,000.00
Mucking Machine	1	5,000.00
Battery Locomotive	1	12,000.00
Cars @ $535.00	6	3,210.00
Oil Heater	1	300.00
Sheaves - 6 foot	2	1,100.00
Diversion Gate		1,000.00
Skip Dump	2	500.00
Control Gate & Assess	1	800.00
Cartridge	1	800.00
Grizzlies	2	250.00
		$34,460.00
15% Contingencies		5,169.00
		$39,629.00

Note: Equipment herein does not include power line, substation, etc.

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

Item	No. Required	Days	Cost Per Day	Total
Portable Compressor	2	306	$32.00	$9,792.00
Trucks	4	5	72.00	360.00
				$10,152.00
15% Contingencies				1,522.80
Total Cost				$11,674.80

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

Item	No. Required	Days	Cost Per Day Each	Total
Bull Dozer	1	17	53.12	$ 903.04
Truck - Dump	1	303	18.00	5,454.00
Jackhammers	4	103	2.00	824.00
Leyners	2	203	2.00	812.00
Air Tugger	1	100	1.00	100.00
				$8,093.04
15% Contingencies				1,213.95
Total Cost				$9,306.99

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

Item	Amount Required	Cost	Total
Timber (Local)	55,670 Bd. Ft.	.08	$ 4,509.60
Timber (Oregon Pine)	57,810 Bd. Ft.	.16	9,249.60
Explosives			13,191.55 *
Bits & Steel			13,992.20 *
2" Water Pipe	2,475 Ft.	.73	1,806.75
3" Air Pipe	2,175 Ft.	.80	1,740.00
Air Hose	600 Ft.	.95	570.00
Water Hose	400 Ft.	.60	240.00
Concrete Pre-Mix	86 Yd.	15.00	1,290.00
Siding	30 Sq.Ft.	3.50	105.00
Roofing	36 Sq.Ft.	2.50	90.00
Gip-Lap	2,600 Sq.Ft.	55.50 M Sq.Ft.	144.30
Windows	12	8.00	96.00
Doors	2	20.00	40.00
Nails	10 Kegs	14.00	140.00
Axes	2	2.00	4.00
Shovels	2	2.00	4.00
Picks	2	2.00	4.00
Anchor bolt for Hoist	12	3.00	36.00
Reinforced Steel	360#	.15	54.00
Ladders	450 ft.	1.25	112.50
Header	1	50.00	50.00
Diamond Drill Supplies	3,800 Ft.	2.50	9,500.00
Track & Supplies	34,500 #	8.50 CWT	2,932.50
Grouting & Supplies			5,000.00
Steel Rods & H.	16,770 #	.10	1,677.00
Anchor Bolts Headframe	80	1.25	100.00
Pipe Hangers	90	.75	67.50
Guide Bolts 7/8" x 10½"	540	.20	108.00
Guide Bolts 7/8" x 5"	360	.15	54.00
Bolts Leading Pocket - 3/4" x 2"-6"	72	.16	11.52
C.I. Washers 3/4"	1,170	.08	93.60
Lag Screws	48	.12	5.76
Turnbuckles 1"	12	1.00	12.00
			$67,031.38
15% Contingencies			10,054.70
Total Cost			$77,086.08

* Calculated on a per foot basis, not broken down to units.

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

To obtain the necessary power for this exploration project it is necessary to extend the high tension line, supplying the Elisabeth Mine, a distance of approximately 3½ miles and install a separate transformer set up. Our present Transformers which consist of 3 - 500 KVA units, are carrying peak loads in excess of 1,500 KW.

The following estimate of the cost of the new power installation is based upon present prices of equipment and our experience records as to labor. It is expected however, that the complete installation will be done by contract, consequently the labor, supplies, and rental equipment have been kept separate from the remainder of cost estimates.

For hoisting duty during the exploration program, we have available a Nordberg Hoist, Serial #3034, double drum, post brakes, 250 H.P. motor complete with switch gear, which was used in our #1 Shaft, now abandoned. We include herein an estimate of the cost of moving and installing said hoist from its present location underground, to the new shaft site. No rental charge for its operation is included.

23. (i) 1- Power & Miscellaneous

Item	Estimated Power Cost
Sinking	$1,200.00
Station & Pocket Cutting	100.00
Drifting & Crosscutting	1,380.00
	$2,680.00
15% for Contingencies	402.00
Total Cost	$3,082.00

23. (f) 2 - Power Installation Cost 200.00

L A B O R

	No. of Men	Class	Hourly Rate	No. Man Shifts	Rate Per Shift	Total
		PRIMARY POWER				
A		Clearing Right-of-Way				
	1	Bulldozer Operator	1.36	6	10.88	65.28
	8	Laborers	1.03	136	8.24	1,120.64
B		Grading				
	1	Bulldozer Operator	1.36	4	10.88	43.52
	2	Laborers	1.03	8	8.24	65.92
C		Fencing				
	5	Laborers	1.03	15	8.24	123.60
D		Foundatings & Structures for Substation & Dead Ends				
	4	Carpenters	1.32	40	10.56	422.40
	2	Laborers	1.03	22	8.24	181.28
E		Substation & Dead End Structures				
	1	Truck Trailer Driver	1.50	3	12.00	36.00
	2	Truck Drivers	1.26	6	10.08	60.48
	12	Laborers	1.03	60	8.24	494.40
	3	Electricians (Linemen)	1.65	54	13.20	712.80
	2	Steel Erectors	1.50	14	12.00	168.00
	1	Bulldozer Operator	1.36	6	10.88	65.28
	1	Line Truck Driver	1.50	6	12.00	72.00
	2	Electicians (Substation)	1.50	36	12.00	432.00
	4	Laborers	1.03	72	8.24	593.28
	1	Electrical Supervisor	3.13	40	25.00	1,000.00
						$5,656.88

MATERIALS & EQUIPMENT TO PURCHASE

Item	No. Required	Cost	Total
Page Wire Fence			375.00
Form Lumber	600 Ft.	.08	48.00
Concrete	16 Cu.Yd.	15.00	240.00
333 KVA Transformers 4400/2300	3	2,738.33	8,215.00
2300 V Unit - Type OCB	1	3,607.00	3,607.00
4400 KV Air Brakes	1	800.00	800.00
4400 KV Fused Disconnects	3	100.00	300.00
4400 KV Ltg Arresters	3	200.00	600.00
4400 KV Bus Support	3	33.33	100.00
7.5 KV Air Brakes	1-Grouped		550.00
7.5 KV Bus Support	1-Grouped		158.00
7.5 KV Fuse Disconn.	3	100.00	300.00
Arrester Brackets	1		75.00
Bus Tubing 3/4"x13'	3	13.33	40.00
Misc. Connectors & Wire			150.00
Steel (Specifications for Structure			1,100.00
2/A Copper Weld	18,000'		1,750.00
Poles & Arms	25 Poles	55.00	1,375.00
Insulators & Pins			600.00
			$20,383.00

EQUIPMENT RENTAL

Item	Hourly Rate	No. of Hours	No. of Shifts	Per Shift	Total
Bulldozer	6.64	48	6	53.12	318.72
Bulldozer	6.64	32	4	53.12	212.48
Transformer Trailer	7.50	24	3	22.50	180.00
Bulldozer	6.64	48	6	53.12	318.72
Line Truck	5.00	48	6	40.00	240.00
					$1,269.92

SUMMARY

Labor	$ 5,656.88
Material	20,383.00
Rentals	1,269.92
	$27,309.80
15% Contingencies	4,096.47
Total	$31,406.27

23. (1) 3 - Power Cost

LABOR

	No. of Men	Class	Hourly Rate	No. Man Shifts	Rate Per Shift	Total
A		Foundations				
	2	Laborers	1.03	4	8.24	32.96
B		Transformers				
	3	Laborers	1.03	3	8.24	24.72
	1	Truck Driver	1.26	1	10.08	10.08
	2	Electricians	1.50	4	12.00	48.00
	2	Laborers	1.03	4	8.24	32.96
C		Oil Circuit Breaker				
	2	Electricians	1.50	4	12.00	48.00
	2	Laborers	1.03	4	8.24	32.96
	1	Truck Driver	1.26	1	10.08	10.08
D		Secondary Feeder				
	2	Electricians	1.50	24	12.00	288.00
	4	Laborers	1.03	48	8.24	395.52
	1	Truck Driver	1.26	2	10.08	20.16
						$943.44

MATERIALS & EQUIPMENT

Item	No. Required	Cost	Total
Concrete	2 Cu. Yds.	15.00	30.00
Form Lumber	125 feet	.08	10.00
100 KVA 2300/480 v.	3	800.00	2400.00
600 AMP - F-122 3 POCB	1	500.00	500.00
350,000 CM Wire	1,000 ft.	5,000.00	5,000.00
			$7,940.00

EQUIPMENT RENTAL

Item	Hourly Rate	No. of Hours	No. of Shifts	Per Shift	Total
Truck	2.25	8	7 1	18.00	18.00
Truck	2.25	8	1	18.00	18.00
Truck	2.25	16	2	18.00	36.00
					$72.00

SUMMARY

Labor	943.44
Materials	7,940.00
Rentals	72.00
	8,955.44
15% Contingencies	1,343.31
	$10,298.75

23. (i) 4 - Move Nordberg Hoist from Elizabeth Mine to No. 4 Shaft Site

L A B O R

No. of Men	Class	Hourly Rate	No. Man Shifts	Rate Per Shift	Rate Per Overtime Shift	Total
	Hoist - 2 Drum - 70 3/4" x 24"					
	Rope 900'1"					
	Maximum Pull - 15,250 #					
6	Mechanics	1.32	180	10.56	15.84	2,059.20
3	Electricians	1.50	72	12.00	18.00	936.00
1	Mine Motorman	1.25	6	10.00	15.00	65.00
1	Truck Driver	1.26	15	10.08	15.12	161.28
1	Rigger	2.00	30	16.00	24.00	520.00
1	Crane Operator	2.50	6	20.00	30.00	130.00
5	Laborers	1.03	120.	8.24	12.36	1,071.20
						4,942.68

EQUIPMENT RENTAL

Item	Hourly Rate	No. of Hours	No. of Shifts	Per Shift	Total
Truck	2.25	120	15	18.00	270.00
Crane	7.50	48	6	60.00	360.00
					$630.00

SUMMARY

Labor	4,942.68
Rentals	630.00
	$5,572.68

VERMONT COPPER COMPANY, INC.
SOUTH STRAFFORD, VERMONT

ATTACHMENT TO
U. S. DEPT. OF THE INTERIOR
DEFENSE MINERALS ADMINISTRATION
FORM MP-103

24. Time schedule and expenditures. Starting date depends upon delivery of transformers for power supply.

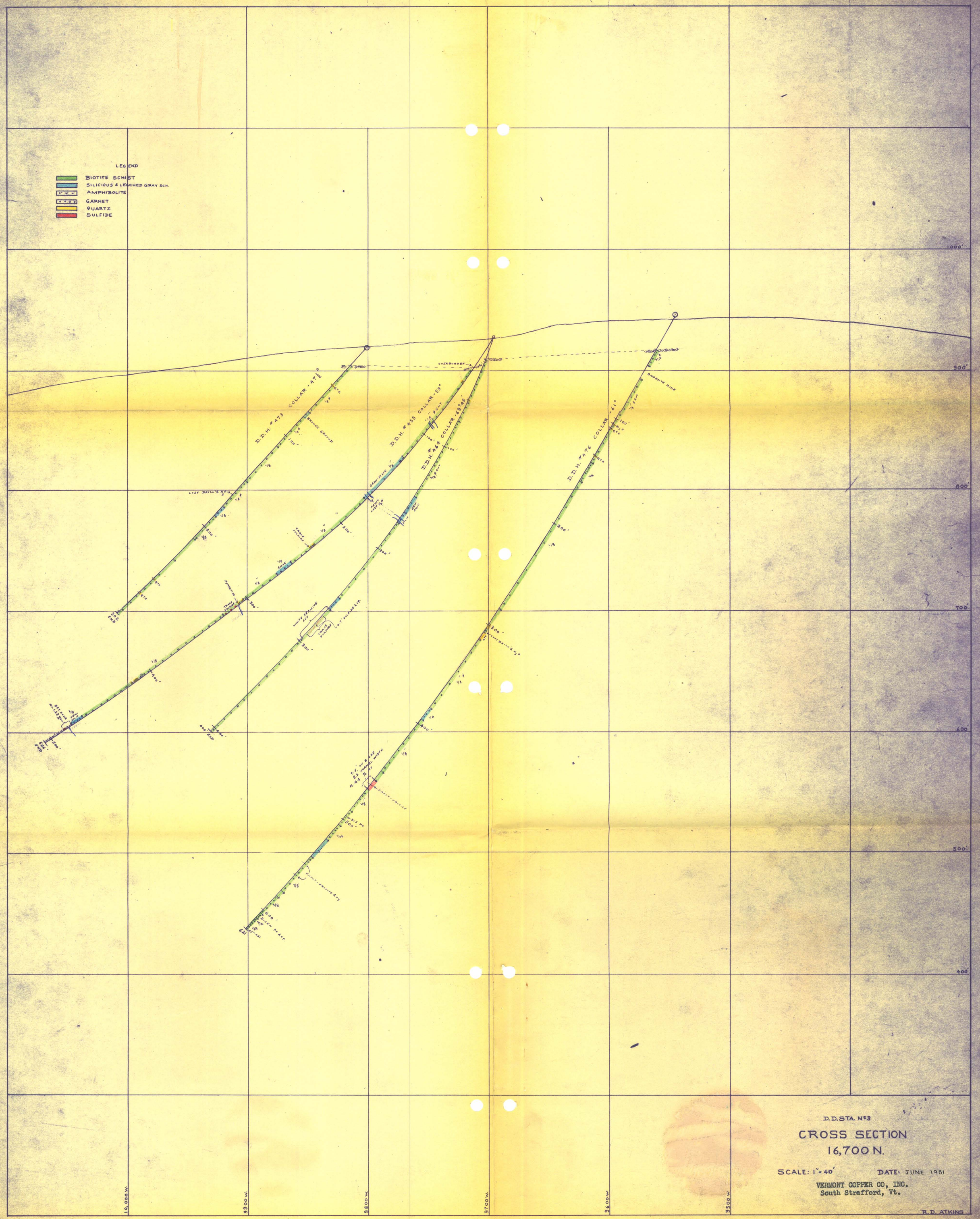
Month	Item		Cost
1	Supervision	$ 2,018.00	
	Surface Preparation	3,485.30	
	Power Installation	31,406.27	39,617.08
2	Supervision	2,018.00	
	Building Construction	2,860.89	
	Secondary Power	10,298.75	
	Moving Hoist	5,572.68	
	Shaft Collar	1,389.68	
	Headframe & Bins	9,000.00	
	Shaft Equipment & Purchase	7,700.00	38,840.00
3	Supervision & Power	2,274.00	
	Headframe & Bins	3,933.63	
	Shaft Sinking	11,747.00	17,954.63
4	Supervision & Power	2,274.00	
	Shaft Sinking	21,816.60	24,090.60
5	Supervision & Power	2,274.00	
	Shaft Sinking	21,816.60	24,090.60
6	Supervision & Power	2,274.00	
	Shaft Sinking	20,136.84	
	Equipment Purchase - Locomotive, Mucker, Cars	23,000.00	45,410.84
7	Supervision & Power	2,274.00	
	Shaft Station & Pocket	6,212.67	
	Crosscutting	3,703.68	12,190.35
8	Supervision & Power	2,274.00	
	Crosscutting & Drifts	12,036.96	14,310.96
9	Supervision & Power	2,274.00	
	Crosscutting & Drifts	12,036.96	14,310.96
10	Supervision & Power	2,274.00	
	Drifts	12,036.96	14,310.96
11	Supervision & Power	2,274.00	
	Drifts	12,036.96	14,310.96
12	Supervision & Power	2,274.00	
	Drifts	12,036.96	14,310.96
13	Supervision & Power	2,274.00	
	Drifts	12,036.96	14,310.96

24. (Continued)

Month	Item		Cost
14	Supervision & Power	2,274.00	
	Drifts	12,036.96	14,310.96
15	Drifts	771.60	771.60
	Total		$303,142.42
	To Balance		423.22
	Grand Total		$303,565.64

24. (Continued)

Month	Item		Cost
14	Supervision & Power	2,274.00	
	Drifts	12,036.96	14,310.96
15	Drifts	771.60	771.60
	Total		$303,142.42
	To Balance		423.22
	Grand Total		$303,565.64



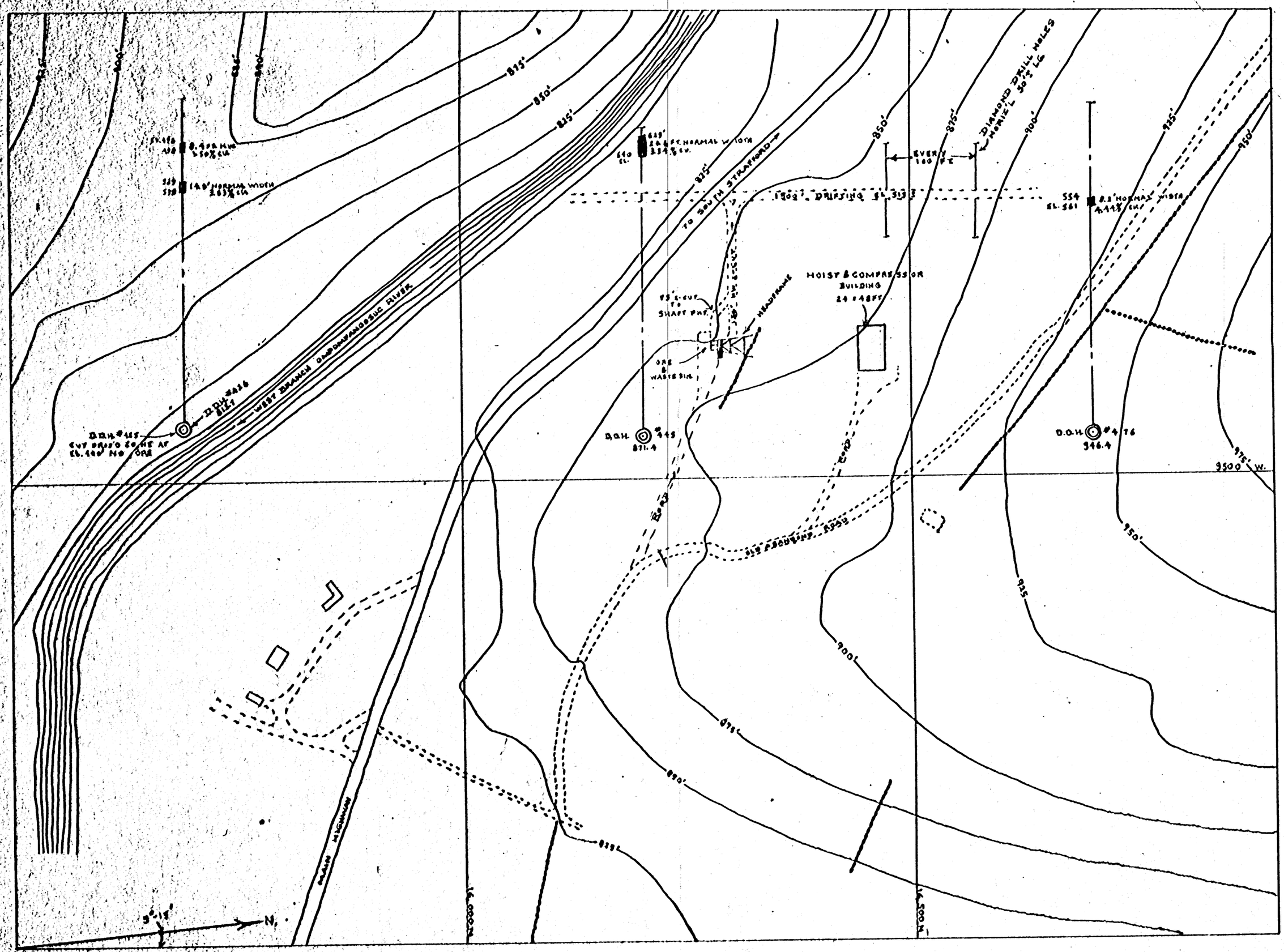
D.D. STA. Nº 3

CROSS SECTION
16,700 N.

SCALE: 1" = 40' DATE: JUNE 1951

VERMONT COPPER CO, INC.
South Strafford, Vt.

R.D. ATKINS



PLAN SHOWING

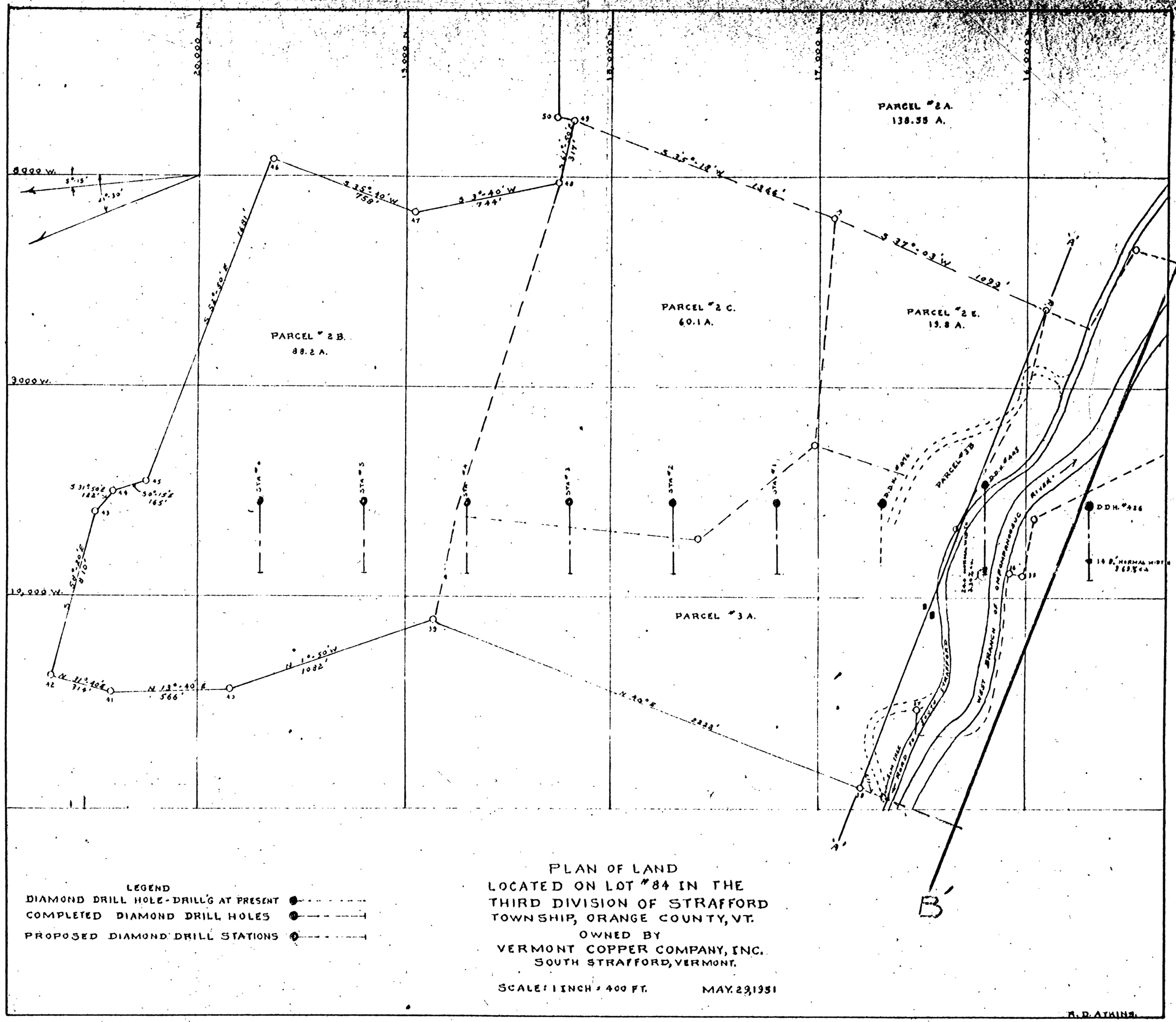
PROPOSED SHAFT & UNDERGROUND LAYOUT

SCALE: 1" = 100' AUG. 3, 1951

— SURFACE CONSTRUCTION

-·- UNDERGROUND EXPLORATION

VERMONT COPPER COMPANY, INC.
SOUTH STRAFFORD, VERMONT



LEGEND

DIAMOND DRILL HOLE - DRILL'G AT PRESENT

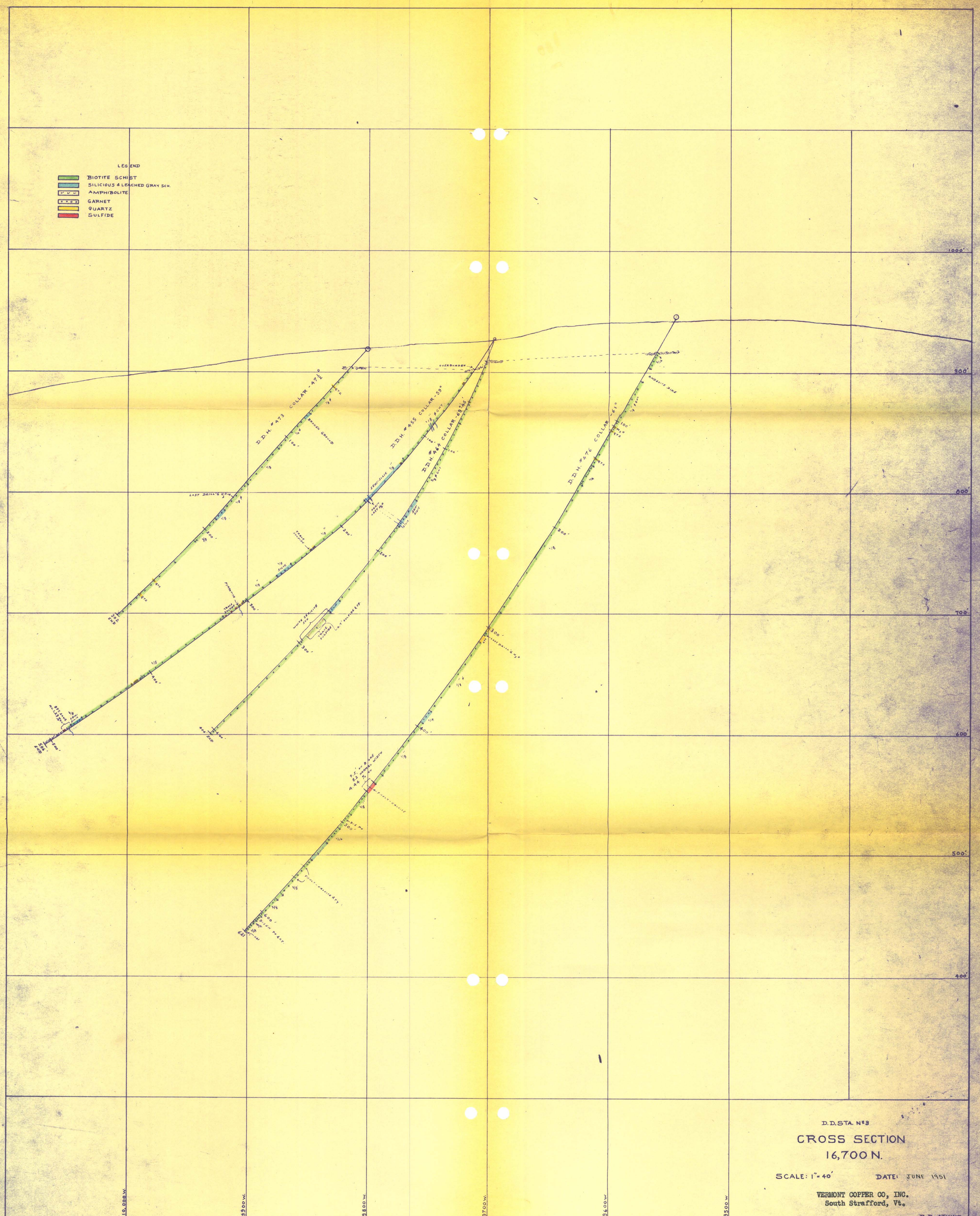
COMPLETED DIAMOND DRILL HOLES

PROPOSED DIAMOND DRILL STATIONS

PLAN OF LAND
LOCATED ON LOT #84 IN THE
THIRD DIVISION OF STRAFFORD
TOWNSHIP, ORANGE COUNTY, VT.
OWNED BY
VERMONT COPPER COMPANY, INC.
SOUTH STRAFFORD, VERMONT.

SCALE: 1 INCH = 400 FT. MAY. 23, 1951

R. D. ATKINS.



D.D. STA. Nº 3

CROSS SECTION
16,700 N.

SCALE: 1" = 40' DATE: JUNE 1951

VERMONT COPPER CO, INC.
South Strafford, Vt.

R.D. ATKINS