DMEA Form 9
Rev. 6/57

UNITED STATES
DEPARTMENT OF THE INTERIOR
Defense Minerals Exploration Administration

OFFICIAL DOCKET FILE | Idm-E NO. 334 | DMEA NO. 2436

Application
- [ ] Denied
- [ ] Withdrawn

Contract
- [ ] Terminated - Not Certified
- [x] Terminated - Certified
- [ ] Cancelled
- [ ] Royalty Agreement

The records contained in this file are marked (x) and arranged in this order:

Folder No. 1:

Left Side

- [ ] Royalty Audits
- [x] Certification of Discovery
- [x] Closing Letter
- [x] Cost Audits
- [x] Termination Notice or Agreement
- [ ] Recision Notice
- [ ] Assignment of Contract
- [x] Contract Amendments
- [x] Contract with all exhibits and annexes
- [x] Owner's Consent to Lien and Subordination Agreement
- [x] Application and attachments

Right Side

- [x] Project summary (final)
- [x] Work Comoleted analysis (final)
- All other material filed in chronological order including the following reports if checked:
- [ ] Field Team Semi-Annual Report for Certified Project
- [ ] Final Field Team Report (Tab)
- [ ] Operator's Final Report (Tab)
- [ ] Interim Field Team Reports
- [ ] Operator's monthly reports and all attachments
- [x] On-site Exam ~~Report~~ MEMO (Tab)
- [ ] Settlement Sheets
- [ ] Drill Logs

Additional Folders: # 2 - Corres.
" " 3 - Opers Final & Field Team final

Left Side | **Right Side**

Folders No. 4 : Reports

- [x] Analysis of Semi-Annual Inspection Reports
- [ ] Project Summary (Interim) by DMEA Engineers

- [x] Field Team Semi-Annual Report for Certified Project
- [x] Field Team Interim Reports
- [x] Operator's Monthly Reports with transmittal, narrative and maps.

Folders No. 5 : Maps (Use pocket folder or envelope)

Folders No. _____ : Settlement Sheets

Folders No. _____ : Drill Logs

Folders No. _____ : Royalty material

Reported Inactive 12/28/59

17963

MME Form 7
(2/63)

OFFICIAL FILE COPY

Date	Surname	Code
8/10/67		110
		220

AUG 10 1967

Mr. Roger V. Pierce
Consulting Engineer
2302 University Club Tower
Salt Lake City, Utah 84111

Re: MMMA-2436 (Cobalt-Copper)
Northfield Mines, Inc.
Stevenson Property
Lemhi County, Idaho
Contract Idm-R334
(Patented Claims Mineral Survey 2128)

Dear Mr. Pierce:

By the terms of the subject Exploration Project Contract and the certification of discovery or development dated December 21, 1955, all minerals mined or produced from June 2, 1952, to June 2, 1967, were subject to the Government's royalty as set forth in said contract.

As the period during which production was subject to royalty has now expired, the Government according to its present records retains no claim or lien against the property subject to the contract or any production therefrom. We, therefore, are closing our books and records on this contract. Your attention, however, is called to the provisions of the contract which require the Operator to keep and preserve certain records for the periods indicated.

Sincerely yours,

FRANK E. JOHNSON

Frank E. Johnson
Chief, Office of
Minerals Exploration

cc: Director's Reading File
Division File
Economic Geology File
OME Docket
OME Reading File
OME Region I
Branch of Budget and Finance
120M

GLAult/a 8-10-67

23263

OFFICE OF MINERALS EXPLORATION
CONTRACT ADMINISTRATION AND AUDIT DIVISION

REPORT OF ROYALTY REVIEW

I have reviewed the files of the Washington office pertaining to Contract Idm-E354, Docket DMEA-2436 (cobalt-copper), dated June 2, 1952, with

Northfield Mines, Inc.
Room 1841, 230 Park Avenue
New York 17, New York

for the purpose of determining the amount of royalty payable to the U. S. Government on sales of minerals from property referred to as the Stevenson Property located in Lemhi County, Idaho, during the period September 9, 1959, through August 24, 1962.

A certification of discovery or development was issued on December 21, 1955, and, in accordance with Article 9, Amendment No. 7, and Annex II of the contract, royalty is payable on all minerals produced from the land described in Article 2 of the contract for a period of 15 years from the date of the contract or until the total net amount contributed by the Government without interest is fully repaid, whichever occurs first. A Report of Review dated June 14, 1955, indicated accepted costs under the exploration contract amounting to $96,862.62 with the Government's contribution on a 70 percent basis being $67,803.83.

The status of the project, the scope of review, and the reasons therefor are stated on page 2.

This review established no sales subject to the Government's royalty subsequent to the period covered by a prior Report of Royalty Review which also found no sales subject to the Government's royalty through September 8, 1959. Accordingly, as of August 24, 1962, the royalty account of this project was found to be:

Total Royalty Payable	$ -0-
Total Royalty Paid	-0-
Balance of Royalty Due	$ -0-

E. D. Talbert, OME Auditor

September 7, 1962

Idm-8534 Northfield Mines, Inc. DMEA-2436

STATUS OF PROJECT, SCOPE OF REVIEW
AND REASONS THEREFOR

This contract provides that the Operator or its successor in interest shall pay to the Government a percentage royalty on all minerals produced from the land thereunder. The land under the contract consists of 21 unpatented claims and 3 patented claims located in secs. 22, 26, and 27, T. 21 N., R. 18 E., Boise Meridian, Blackbird Mining District. At the time the contract was executed, the Operator was in possession by virtue of a March 14, 1952, assignment by Arnold Hoffman of a lease and option agreement granted on May 10, 1951, by Floyd W. and Merle Stevenson, General Delivery, Richland, Washington. In consideration of the contract the Stevensons executed a Landlord's Subordination Agreement on May 28, 1952, which provides for the assumption of the lessee's royalty obligation in event of termination or surrender of the leasehold interest.

The contract, when executed, included another patented claim (Queen); however, by a Special Agreement Concerning Land dated September 6, 1956, this claim was deleted from this contract and added to the land under contract Idm-8645, DMEA-3143, Calera Mining Company. The royalty obligation under this latter contract was liquidated by payment in full during 1958.

Exploration work under this contract was terminated effective October 1, 1955, by an agreement executed on July 13, 1955. This agreement provides that the Government may certify a discovery or development within six months after the execution date of the Termination Agreement. The certification was not made until December 21, 1955, but the Operator entered no protest. The final report dated March 1957 of the DMEA Field Team, Region I, states that no ore was mined during the exploration period and the property had remained idle, except for necessary assessment work, since termination of the work. A subsequent examination on December 6, 1957, disclosed no production.

By letter dated July 12, 1956, the Operator's attorneys stated that a transfer of the Operator's interests in the land to Idaho Metallurgical Industries, Inc., 88 Metcalfe Street, Ottawa, Canada, was contemplated and, further, that it was their interpretation of the contract that the Operator would not be liable for royalty if the transferee assumed that obligation. A July 25, 1956, reply prepared in the Office of the Solicitor advised that the Government would look to the Operator for royalty in event of non-payment by the transferee. A December 5, 1956, agreement transferring the Operator's interests in the May 10, 1951, lease and option provides for assumption of the royalty obligation by Idaho Metallurgical Industries, Inc.

On June 16, 1958, Quebec Metallurgical Industries Ltd., 2200-25 King Street West, Toronto 1, Canada, the parent company of Idaho Metallurgical Industries, Inc., advised that it had made final payment to the Stevensons on the property. Subsequently, on February 11, 1960, Idaho Metallurgical Industries, Inc., advised that since nothing of any value had been discovered it was suspending further assessment work and fees and allowing the options on all unpatented claims to lapse.

In an August 24, 1962, reply to a MME Form 63 inquiry, Quebec Metallurgical Industries Ltd. stated that (1) there had been no production since January 1, 1958, (2) all unpatented claims had been allowed to lapse, (3) the patented claims had been sold to Idaho Mining Company, 808 Newhouse Building, Salt Lake City, Utah, and (4) the charter of Idaho Metallurgical Industries, Inc., had been allowed to lapse.

This review was made in lieu of an on-site audit of the Operator's accounts and records for the following reasons:

(1) The files indicate that there has been no mineral production from the property under the contract during the period covered by this review; and

(2) The administrative cost to the Government of an on-site royalty audit at this time would be excessive in relation to the amount of possible royalty which might be disclosed.

(1) 7 Ra. [illegible]
(2) 7 E. [illegible]
225

OFFICE OF MINERALS EXPLORATION
CONTRACT ADMINISTRATION AND AUDIT DIVISION

REPORT OF ROYALTY REVIEW

I have reviewed the files of the Office of Minerals Exploration, Washington, D.C., pertaining to Contract No. Idm-E334, Docket No. DMEA-2436 (Cobalt-Copper), dated June 2, 1952, with

Northfield Mines, Inc.
Room 1841, 230 Park Avenue
New York 17, New York

for the purpose of determining the amount of royalty due the U. S. Government on sales of minerals from property referred to as Stevenson Property located in Lemhi County, Idaho, during the period June 2, 1952, through September 8, 1959.

A certification of discovery or development was issued on December 21, 1955, and, in accordance with Amendment No. 7 of the contract royalty is payable on all minerals mined or produced from the land subject to the contract for a period of 15 years from the date of the contract or until the total net amount contributed by the Government without interest is fully repaid, whichever occurs first. A Report of Review in lieu of final cost audit dated June 14, 1955, indicated accepted costs under the exploration contract amounting to $96,862.62 with the Government's contribution, on a 70 percent basis, being $67,803.83.

This review was made in lieu of an on-site audit of the Operator's accounts and records for the following reasons:

(1) The mine has not been operated since completion of the exploration;
(2) Semi-annual reports by representatives of the Field Team, Region I, and other documents in the files do not disclose any production or sales of minerals from this property subject to Government royalty during the exploration period or subsequent thereto; and
(3) The administrative cost to the Government of an on-site royalty audit at this time would be excessive in relation to the amount of possible royalty which might be disclosed.

The review has indicated that there has not been any production since June 2, 1952, from the land subject to the contract and no royalty is due to the Government.

C. E. Fisher

September 15, 1959 — C. E. Fisher, OME Auditor

MME Form 22
April 59

DEPARTMENT OF THE INTERIOR
Office of Minerals Exploration

CHECK SHEET OF EXAMINING ENGINEER

Operator's Name Northfield Mines, Inc.

Address 230 Park Avenue

New York 17, New York

Exploration Contract No. Idm-E334 Docket No. DMEA-2436

		Check One: Yes	Check One: No.
1.	(a) Does the Operator stockpile ore subject to royalty repayment?		X
	(b) If so, is segregation and identification procedure adequate?		
2.	(a) Does Operator commingle production subject to DMEA or OME royalties with exempt production?		X
	(b) If so, do you consider the allocation of the commingled production equitable?		
3.	(a) Does the Operator stockpile mine or mill rejects (low grade ore, tailing, middlings, etc.) that may have potential value within the royalty payment period?		X
	(b) If so, are adequate records maintained on such material to protect the Government's interest?		
4.	Do you consider the assay controls in effect are adequate?	X	
5.	Do you consider that the manner of disposing of production gives the Government its fair royalty returns?	X	
6.	Do your periodic examinations of operations indicate the Operator is properly reporting his production of ores subject to DMEA or OME royalties?	X	
7.	Does the Operator buy from or sell to other Operators?		X
8.	Comment on any item 2 (b) to 6 if answer is No.		

Property inactive.

September 8, 1959
Date

S. W. Zoldok
Mining Engineer
S. W. Zoldok

53362

DEFENSE MINERALS EXPLORATION ADMINISTRATION
CONTRACT ADMINISTRATION AND AUDIT DIVISION

REPORT OF AUDIT

I have reviewed the Monthly Reports of:

Northfield Mines Inc.,
a corporation organized and existing under the laws of Delaware,
Room 1841, 230 Park Avenue, New York 17, New York

pertaining to Exploration Project Contract No. Idm-5314, Docket No. DMEA-3759, including Amendment Nos. 1, 2, 3, 4, 5, 6 and 7, for the months of June 1952 to September 1953, inclusive, covering a project for the exploration of cobalt-copper on property, know as the Stevenson Property, located in Lemhi County, Idaho.

My review included an examination of the Monthly Reports (Forms MP-104) and supporting documents attached thereto, comparison of the costs claimed with contract and pertinent schedules, consultation with Executive Officer in charge of the project, and a determination of the reasonableness and propriety of the costs.

This review was made in lieu of a final audit of the Operator's accounts and records for the following reasons:

(a) the administrative cost to the Government of an audit would be excessive in relation to the amount of possible disallowances thereunder

(b) the accepted costs ($98,761.62) of ~~all~~ work on an actual cost basis were covered by an interim Audit Report and Audit Certificate, dated November 27, 1953, issued by Robert E. Hull, DMEA Auditor;

(c) of the remaining costs incurred, $6,125.00 were under a contract provision for payment by the Government on the basis of agreed estimated costs of work actually performed, and $551.00 was supported by documentary proof of the costs incurred under the contract.

The review disclosed the following facts in regard to the amount paid or to be paid the contractor:

Total cost as billed by Contractor	$105,437.62
Less: Proceeds from property disposition (Schedule attached)	8,575.00
Net Cost as claimed by Contractor	96,862.62
Exceptions	None
Total Accepted Cost	$ 96,862.62

The contract calls for a 70 percent participation of exploration expenses by the United States Government. Therefore, payment ot the contractor, by the Government in the amount of Sixty Seven Thousand Eight Hundred Three and 83/100 Dollars:

** $67,803.83 **

is considered valid and proper, provided that the Regional Executive Officer, the Administrator, or other competent official has accepted or will accept the project as having otherwise met the terms of the contract.

June 14, 1956

George Mavor
George Mavor, Auditor

Schedule of Proceeds from Property Disposition

Northfield Mines Inc.	DMEA-3739	Idm-E334
Items listed as of audit of April 30, 1954	Cost	Salvage Value
Bunk house furnishings	$ 768.25	$ 250.00
Cook house furnishings	1,920.38	500.00
Explosives (1 ton unused)	1,546.67	100.00
Steel	867.89	100.00
Pipe and fittings	1,643.66	800.00
Mine rail	1,894.11	1,200.00
Ventube	488.65	400.00
Diesel Fuel etc.	2,350.94	- 0 -
Gasoline	1,128.58	- 0 -
Tools	862.98	350.00
Eng'r & geological supplies	728.07	150.00
Medical Supplies	113.30	- 0 -
Core boxes	235.20	- 0 -
Mine timber	2,143.87	- 0 -
Operating equipment purchases	1,601.79	1,000.00
New buildings & improvements, etc.	3,724.62	3,725.00
Totals	$21,118.96	$ 8,575.00

DEFENSE MINERALS EXPLORATION ADMINISTRATION
CONTRACT ADMINISTRATION AND AUDIT DIVISION

INTERIM AUDIT CERTIFICATE

2436

I have examined the records and transactions of

NORTHFIELD MINES, INC.
Room 1841, 230 Park Avenue
New York 17, New York
and
Eureka, Nevada

pertaining to Exploration Contract No. Idm-E334, Docket No. DMEA-2436, including Amendments Nos. 1, 2, 3, 4, 5, and 6 (Executive Officer's memorandum November 17, 1953), covering a project of exploration for cobalt-copper located in Lemhi County, Idaho, commonly known as the Stevenson property, for the period of June 2, 1952, to April 30, 1953.

My examination was made in accordance with generally accepted standards applicable in the circumstances.

The audit disclosed the following facts in regard to the amount to be paid the Contractor.

Total cost as billed by contractor			$108,115.36
Exceptions: (See Audit Report for details.)			
Prior to this audit		$5,473.11	
During this audit	$4,143.42		
Less reinstatements	262.79	3,880.63	
Total exceptions			9,353.74
Total accepted cost			$ 98,761.62

The contract calls for a 70 percent participation of exploration expenses by the United States Government. Therefore, payment to the Contractor by the Government in the amount of Sixty-Nine Thousand One Hundred Thirty-Three and 13/100 Dollars

-- $69,133.13 --

is valid and proper.

This certificate is issued on the provision that the Regional Executive Officer, the Administrator, or other competent official has accepted or will accept the project as having otherwise met the terms of the contract.

November 27, 1953

Robert M. Hull
Robert M. Hull
Auditor

AUDIT REPORT

I INTRODUCTION

During the month of March 1953, an interim audit covering operations for the period of June 2, 1952, to January 31, 1953, was made at the office of Northfield Mines, Inc., Eureka, Nevada. In May 1953, the Operator brought all books and records to the DMEA office in Spokane, Washington, and the audit was continued through April 30, 1953. This audit pertained to Exploration Project Contract No. Idm-E334, Docket No. DMEA-2436, including Amendments Nos. 1, 2, 3, 4, 5, and 6 (Executive Officer's memorandum November 17, 1953) with the

NORTHFIELD MINES, INC.
Room 1841, 230 Park Avenue
New York 17, New York
and
Eureka, Nevada

covering a project of exploration for cobalt-copper located in Lemhi County, Idaho, commonly known as the Stevenson property.

Mr. A. J. O'Connell, the accountant for the Northfield Mines, Inc., was consulted and his cooperation greatly facilitated the audit.

II GENERAL INFORMATION ON RECORDS

A separate set of books were established for the project which included a cash disbursement book, check register and detailed payroll records. Mr. A. J. O'Connell, the accountant, signs the payroll checks in Eureka, Nevada, and the engineer-in-charge, signed all other checks in Salmon, Idaho. The checks are drawn on the Salmon Branch of the American National Bank of Idaho. The cash disbursement book records all payments and is referenced

with the check number. The checks are prepared in duplicate with the duplicate being retained in the company office to support the payment.

A monthly work sheet consolidating all charges to the project forms the basis for the preparation of the Monthly Form MF-104, Operator's Monthly Report and Voucher.

III SCOPE OF AUDIT AND FINDINGS

The audit was limited to ascertaining the accuracy, propriety, and validity of the costs shown in the "Totals to Date" column of Form MF-104, Operator's Monthly Report and Voucher, for the month of April 1953. Since a preliminary review of the Certifying Officer's records indicated a considerable amount of improper distribution of charges to the "Items of Cost" shown on the Form MF-104, as well as some charges of questionable propriety, a detailed audit and analysis of costs was necessary. The findings, after correction of cost distribution, follow:

(1) Independent Contracts

The audit disclosed that the costs properly chargeable and allowable under this item are:

New road construction and road rehabilitation		
149½ hours bulldozing @ $13/hr.		$ 1,943.50
Trenching - 8,000 feet @ $13/hr.		
425½ hours bulldozing @ $13/hr.	$5,531.50	
Cost of freight on bulldozer	58.00	5,589.50

Diamond Drilling		
1,356 ft. reaming @ $2.50/ft.	$ 3,390.00	
1,674 ft. AX @ $5/ft.	8,370.00	
824 ft. BX @ $5.35/ft.	4,408.40	
187 ft. AX @ $5.50/ft.	1,028.50	
343 ft. NX @ $5.90/ft.	2,023.70	
20 ft. AX casing @ $1.35	27.00	
Laying and moving pipe line - 5½ shifts @ $85/shift	461.00	
2 water tanks @ $47.50 each	95.00	
	$19,803.60	
Reduction in cost claimed by Operator on February MF-104 1952	446.60	19,357.00
Drifting		
151.4 ft. drifting (timbered) @ $18/ft.	2,725.20	
41.6 ft. do. @ $16/ft.	665.60	
Supplies		
100 pieces lagging 12' long @ 36¢ ea.	36.00	
142 mine posts @ 80¢ ea.*	112.60	
71 mine caps @ 65¢ ea.*	43.85	
655 mine wedges @ 4¢ ea.	26.20	
Miscellaneous	2.77	
Freight on tractor	175.00	
	$3,792.22	
Net overclaim	1.70	3,790.52
*See discussion on drifting.		
Snow removal		
December 1952	350.00	
January 1953	350.00	
February 1953	350.00	
March 1953	350.00	
March 1953 (4 hrs. @ $7.50/hr.)	30.00	
April 1953	350.00	
April 1953 (4 hrs. @ $10/hr.)	40.00	
	$1,820.00	
Disallowance of excess of rates	11.20	1,808.80
		$32,489.32

The road construction, rehabilitation and trenching, was done by C. R. Nechanicky of Salmon, Idaho, and the subcontract was approved by the Executive Officer of the DMEA Field Team on August 28, 1952.

The diamond drilling was done by Nichols and Thompson Core Drilling Company of Boise, Idaho, and the subcontract was approved by the Government on September 1, 1952. The original claimed costs for diamond drilling were $19,803.60, which exceeded the allowable maximum by $446.60. The Operator subsequently -- on his February 1952 MF-104 -- reduced his claimed costs to the amount of the allowable maximum $19,357.00, which was allowed by this audit. A slight error in the computation of 5½ shifts @ $85.00 per shift $461.00, for laying and moving pipe line, which should have been extended as $467.50, was ignored because of the Contractor's reduction of claimed costs.

The drifting was done by William E. Corrigan of Salmon, Idaho. The Government approved the subcontract on October 2, 1952. The Operator had figured the 142 mine posts @ 80¢ each as $112.60 rather than the correct amount of $113.60, an underclaim of $1.00; also the 71 mine caps @ 65¢ each as $48.85 instead of $46.15, an overclaim of $2.70. A net disallowance of $1.70 was made by the audit.

Snow removal was authorized as a necessary cost and was provided for by Amendment No. 3. The work was done by William E. Corrigan and the subcontract was approved by the Government on November 1, 1952. The contract provided for a flat fee of $350.00 for 47½ hours of work. In excess of 47½ hours in any one calendar month the rate will be $7.35 per hour. Therefore, a disallowance is made of $11.20, the difference between the authorized rate of $7.35 per hour and the rates of $7.50 and $10.00 per hour paid by the Operator. The audit allows $1,808.80 for snow removal.

The total allowed by the audit under Item (1), Independent Contracts, is $32,489.32.

(2) Labor and Supervision

The charges under this item were checked against the individual time cards to the individual pay sheets for each employee. The individual time cards are approved by the engineer-in-charge and then forwarded to the company's office in Eureka, Nevada, where the amount of earnings is calculated. All pertinent data is then recorded in the permanent payroll distribution book. Payroll computations were checked for the months of June through October 1952, December 1952, and January through April 1953.

The employees are paid semi-monthly and the checks are signed by the accountant, Mr. A. J. O'Connell. The payments were verified by a review of the paid bank checks. The hourly rates paid the employees for labor that was allowed by the audit were not in excess of the maximum specified in the contract.

The audit disclosed that when the allowable maximum for Supervision was reached, the Operator arbitrarily reclassified some of the employees, formerly paid under Supervision, to Labor. The hourly rates used for these employees were such as to give them the same total wage as had previously been claimed under Supervision.

Name	Period	Title	Hours Worked	Rate per hr.	Claimed	Disallowed
W. A. Paroni	Feb. 1953	Miner boss	225	$2.6666	$ 600.00	$ 600.00
do.	Mar. do.	Mucker	250	2.40	600.00	600.00
do.	April do.	Miner	250	2.40	600.00	600.00(a)
M. T. Manz	Feb. 1953	Carpenter	225	2.2222	500.00	500.00
do.	Mar. do.	Miner	250	2.40	600.00	600.00
do.	April do.	do.	250	2.40	600.00	600.00(a)
J. P. Salyer	Jan. 1953	do.	96	2.8646	275.00	275.00
do.	Feb. do.	do.				
	1-15		136	2.75735	375.00	375.00
	16-28		120	3.125	375.00	375.00
do.	Mar. do.	do.				
	1-15		140	2.67857	405.97	405.97
	16-31		144	2.60416	375.00	375.00
do.	April do.	do.				
	1-15		136	2.75735	375.00	375.00(a)
	16-30		136	2.75735	375.00	375.00(a)
					$6,055.97	$6,055.97

(a) Disallowed by audit.

Of the total disallowance of $6,055.97, the Certifying Officer disallowed $4,105.97 and $1,950.00 was disallowed by this audit.

Mr. J. P. Salyer is reported for the first time on the payroll as a miner effective January 21, 1953. Mr. Salyer was a shift boss at the Calera mine and obtained a leave of absence from his Calera job to supervise the adit work on a non-contract basis. While classified by the Operator as a miner, Mr. Salyer's salary of $750.00 a month, plus any earned bonus, is higher than that paid to any other employee on the project.

The U. S. Bureau of Mines engineer who visited the project, stated that Mr. Salyer was actually supervising the work and this fact was further confirmed by the following statement contained in a letter to Mr. A. E. Weissenborn, Executive Officer, DMEA Field Team, Region II, dated January 29,

1953, from Northfield Mines, Inc., and signed by George W. Mitchell:

> "Mr. Salyer has obtained leave of absence from his Calera job to supervise the adit work on a non-contract basis. Walter Paroni is remaining as engineer."

In view of the foregoing information and the rates at which the salaries were figured, a disallowance of the entire sum claimed under labor for Paroni, Salyer and Manz is made. The total allowed by the audit for labor is $20,958.83.

Supervision was paid in accordance with, and not in excess of, the terms specified in Exhibit "A" of the contract. Milo T. Manz was carried as superintendent for the period of June through December 1952 at $600.00 per month for seven months -- a total of $4,200.00. This sum is allowed by the audit.

Technical Services were performed by Jack Brozo, a full-time engineer-geologist, from June 1, 1952, to October 31, 1952.

Costs allowed by audit:

5 months @ $500.00 per month	$2,500.00

This item of cost is an "Allowable Maximum" provided by Amendment No. 4 of the contract.

(3) Operating Materials and Supplies

The costs chargeable to this category were determined by a detailed audit and analysis of the supplier's invoices and cancelled bank checks. The following summarizes the findings:

	Claimed	Disallowed	Reinstated	Accepted Costs
Bunkhouse furnishings	$ 768.25	$	$	$ 768.25
Cookhouse do.	1,020.38			1,020.38
Powder, Caps, Fuse, etc.	1,546.67			1,546.67
Steel	949.52	81.63*		867.89
Pipe and fittings	2,268.20	624.54		1,643.66
Mine rail	1,894.11	88.79*	88.79	1,894.11
Ventube	488.65			488.65
Diesel Fuel, etc.	2,358.04	7.10*		2,350.94
Gasoline	1,128.58			1,128.58
Tools	993.06	130.08		862.98
Engineer & Geological Supplies	733.22	5.15		728.07
Medical Supplies	113.30			113.30
Core boxes	235.20			235.20
Mine timber	2,143.87			2,143.87
	$16,641.05	$937.29	$88.79	$15,792.55

*Disallowance made by Certifying Officer.

The disallowance of $81.63, Steel, consisted of I beams that the Bureau of Mines engineer stated were not necessary for the work and the disallowance is concurred with. The audit made a disallowance of $624.54, Pipe and Fittings, consisting of 500 feet of 4-inch pipe which is not applicable to the operations. The item under Mine Rail of $88.79, covered the purchase of a rail bender. The disallowance made of this item by the Certifying Officer is not concurred with and it is reinstated. The Executive Officer has determined that the item is necessary to the exploration work. Under Diesel Fuel, Etc., the disallowance of $7.10 was made up of unsupported claims for fuel and the disallowance is concurred with. The disallowance by the audit of an item of Tools, $130.08, covered the following:

1	#A K-1 Clamp-on Voltameter	$ 58.77
1	99 by 39 Leather case for above	9.01
1	Type 40, Model 22VAX4M Miniature Instrument	7.45
1	1538B Wattmeter handle	1.07
1	AC Killowatt Meter	51.35
	Freight charges	2.43
		$130.08

The Executive Officer of the DMEA Field Team has stated that, "However, the so-called 'tools' were electrical instruments and attaching parts for electrical equipment beyond the necessary direct cost of the exploratory work then undertaken. These items were bought at the time the work provided for in the original contract was nearly completed and, therefore, would have been used mostly for the contemplated extension of the contract. The items might be classed legitimately as reasonable, necessary, direct cost, but since the extension of the contract is on a unit cost basis and since the unit cost includes the cost of all items of equipment and supplies, the disallowance of $130.08 covering the cost of these items is considered proper." The audit disallows $5.15 under Engineer and Geological Supplies as the items claimed are General Overhead and not direct costs to the project.

(4) Operating Equipment

Rented:

The costs of Operating Equipment -- Rented -- which were claimed only for the actual time the equipment was in use on the project were:

Item	Amount Claimed by Operator	Deletions by Certifying Officer	Deletions by Auditor	Allowed by Audit
Water pump Period covered: June 1952 thru March 1953 - 10 mos. @ $72	$ 792.00		$ 72.00	$ 720.00
Jeep Period covered: June 1952 thru March 1953 - 10 mos. @ $50	550.00		50.00	500.00
Dump truck Period covered: June 1952 thru Dec. 15'52 - 6½ mos. @ $100	750.00		100.00	650.00
Compressor Period covered: Sept. 1952 and Nov. 1952 thru March 1953 - 6 mos. @ $414	3,312.00	414.00	414.00	2,484.00
Mine cars Period covered: Sept. thru Nov. 1952 - Jan. thru March 1953 - 6 mos. @ $52	364.00		52.00	312.00
Mucking machine Period covered: Sept. 20, 1952 thru March 1953 - 6-1/3 mos. @ $325	2,383.33		325.00	2,058.33
Drifter Period covered: Sept. 20 thru Nov. 1952 - 2-1/3 mos. @ $120	280.00			280.00
Jackhammer Period covered: Dec. 1952 thru March 1953 - 4 mos. @ $120	600.00		120.00	480.00
Water tank Period covered: Jan. thru March 1953 - 3 mos. @ $7.65	30.60		7.65	22.95
Blower	25.00		25.00	-0-
Chain saw	55.00	55.00		-0-
	$9,141.93	$469.00	$1,165.65	$7,507.28
Freight	921.28	30.00		891.28
Truck delivery	75.00			75.00
	$10,138.21	$499.00	$1,165.65	$8,473.56
Less adjustment to bring to allowable maximum		71.66		71.66
	$10,138.21	$570.66	$1,165.65	$8,401.90

Deletions made by the Certifying Officer were $570.66, and by this audit, $1,165.65, to bring the figure to the allowable maximum of $8,401.90. The disallowances made by the Certifying Officer are concurred in.

Purchased:

Operating equipment purchased consisted of the following items:

		Claimed	Disallowed	Reinstated	Accepted Cost
1	Pipe die	$ 47.85	$	$	$ 47.85
1	Light plant	527.05			527.05
1	Gas welding outfit	150.53			150.53
1	Chain saw	238.36			238.36
1	Bench grinder	48.00			48.00
1	Ventilating fan	416.00			416.00
	Miners lamps	174.00	174.00	174.00	174.00
		$1,601.79	$174.00	$174.00	$1,601.79

The Certifying Officer's disallowance of the item of Miners Lamps is not concurred with and the item is reinstated. The Executive Officer has deemed the item to be a necessary cost of the project. The audit allows the sum of $1,601.79 for Operating Equipment purchased.

(5) Rehabilitation and Repairs

This item is not applicable to this contract.

(6) New Buildings, Improvements, Etc.

This item of cost covered the erection of the frames, including floor and sides for two tent houses; construction of a 12- by 20-foot compressor house and tool shed, construction of a 16- by 20-foot tar paper-covered frame bunkhouse and one 16- by 20-foot tar paper-covered frame cookhouse, as set forth in Exhibit "A" of the contract.

The audit disclosed that the costs allowable were as follows:

Tent house:		
Wall tents	$139.75	
Freight on tents	3.09	
Stove pipe	20.70	
Pipe fittings (water)	17.92	
Lumber, nails, etc.	563.54	$ 750.00
Materials and supplies for compressor house		579.03
Materials and supplies for cook house		1,100.80
Materials and supplies for bunkhouse		1,294.79
		$3,724.62

Labor for the compressor house, cook house, and bunk house was included under Item 2, Labor and Supervision. The total amount allowed by the audit is $3,724.62.

(7) Miscellaneous

The findings of the audit as to the costs acceptable and allowable under this item are summarized as follows:

	Costs Claimed	Disallowed	Accepted Costs
Analytical	$1,481.18	$	$1,481.18
Accounting fees	1,039.81		1,039.81
Travel for engineer	1,000.00		1,000.00
Telephone	350.00		350.00
Automotive repairs	803.58	31.80	771.78
Repair parts - machine	818.30		818.30
Payroll taxes	1,558.18	354.23	1,203.95
Liability insurance	1,514.57	305.44	1,209.13
Boarding house loss	552.05	8.59	543.46
Cabin rent	350.00		350.00
Freight on drill	325.00		325.00
	$9,792.67	$700.06	$9,092.61

Analytical work covers sampling and analysis. The acceptable cost for this item was found to be:

222 assays, cobalt & copper @ $6	$1,332.00
8 do. do. @ $15	120.00
6 do. tungsten @ $3	18.00
Preparation of samples	11.18
	$1,481.18

The assay work was done by the Union Assay Office, Inc., Salt Lake City, Utah.

Accounting fees in the amount of $1,039.81 have been claimed for the period of June 2, 1952, through December 31, 1952. The Operator claimed $139.81 for the month of June 1952. This sum consisted of accounting fees,

$99.50; accounting supplies of $40.31; and for the remainder of the period, a flat fee of $150.00 a month. The total allowed by the audit is $1,039.81.

Travel was disclosed by the audit to consist of the following:

			Allowed
June 1952	Travel of J. K. Brozo		$ 150.00
Aug. do.	Do.	Do.	90.20
Sept. do.	Do.	Do.	304.90
Oct. do.	Do.	Do.	90.20
Nov. do.	Do.	Do.	90.20
Dec. do.	Do.	Do.	150.00
Feb. 1953	Do.	Do.	124.50
			$1,000.00

The travel covered various trips of the engineer from Eureka, Nevada, to Salmon, Idaho, and return to Eureka. The audit allows $1,000.00 for travel. Exhibit "A", Page 6, Item (7) Miscellaneous, has the allowable maximum for travel at $150.00 per month with the total of $1,050.00; also telephone and telegraph at $50.00 per month, with the total of $350.00. The Executive Officer, DMEA Field Team, Region II, by memorandum of November 17, 1953, advised that when Amendment No. 6 was prepared it had been the intention of the Field Team to have removed the monthly maximum from "Traveling for the Engineer" and "Telephone and Telegraph." Therefore, only the total amount of these two items were to be considered as a maximum allowable.

Telephone. This item covered telephone calls essential to the exploration project and was supported by invoices containing the necessary information required. The audit allows the sum of $350.00 for this item.

Automotive Repairs covered the necessary parts and repairs to the jeep and the dump truck. The audit revealed that the Operator had not revised his figures to reflect the distribution corrections made by the Certifying Officer in the amount of $80.00 and disallowance of $19.30. The disallowance for this item consisted of the purchase of one heater and thermostat

to be installed on the dump truck, $19.30. The Certifying Officer's disallowance is concurred in. An item of $12.50 for repairs to a house trailer which was not applicable to the contract was disallowed by the audit. The audit allows the sum of $771.78.

Repair parts - machines consisted of necessary parts and repairs to the diamond drilling equipment, the mucking machine, and the jacklegs. The audit allows the sum of $813.30 for this item.

Payroll taxes applicable to this project cover the Federal Old Age Benefit, Federal Unemployment and Idaho Unemployment taxes at the following rates, which were verified by reference to the company's records:

Federal Old Age Benefit	1.5 percent
Federal Unemployment	0.3 do.
Idaho Unemployment	2.7 do.

Workmen's Compensation rates were:

Engineer	$1.00 per $100.00 of base wage	
Mechanics	1.30 Do.	Do.
Cooks	1.95 Do.	Do.
Surface labor	2.75 Do.	Do.
Miners	7.50 Do.	Do.

On the salary of the engineer, classified under Technical Services, the following tax rates were applicable:

Federal Old Age Benefit	1.5 percent
Federal Unemployment	0.3 do.
Nevada Unemployment	0.1 do.
Nevada Industrial Insurance	5.0 do.

The Operator has not adjusted his records to reflect the disallowances of $266.48 made by the Certifying Officer on Payroll Taxes and of $159.18 on Liability Insurance. The disallowance is concurred with. Additional disallowances of $87.75 for payroll taxes and $146.26 for liability

insurance are made by this audit due to the disallowances made under Item 2, Labor and Supervision.

The allowable amount for payroll taxes is $1,203.95, and liability insurance is $1,209.13.

The item of "Cabin Rental" has been included by the Operator with "Boarding House Loss." By the terms of Amendment No. 1, Cabin Rental was provided for 8 months at $50.00 per month. The audit disclosed that the Operator had claimed rental for 7 months, and the sum of $350.00 is allowed. The boarding house loss was claimed in the amount of $552.05. A disallowance of $8.59, covering magazines and club soda, is being made as these items are not considered as coming under this category. The total allowable by the audit for cabin rental and boarding house loss is $893.46.

The item of "Freight on Drill" is allowable by the audit in the amount of $325.00, which was the cost of moving the drill on to the property.

IV CONCLUSIONS AND RECOMMENDATIONS

This audit disclosed that all costs charged to this project with the exception of the disallowances itemized under Items (1) Independent Contracts, (2) Labor and Supervision, (3) Operating Materials and Supplies, (4) Operating Equipment, and (7) Miscellaneous of the preceding section of this report, are reasonable and proper under the terms of the contract.

The audit disclosed the status of the allowable maximums to be:

	Accepted costs	Allowable maximum	Balance
New road construction & road rehabilitation	$ 1,943.50	$ 2,223.00	$ 279.50
Trenching	5,589.50	5,655.00	65.50
Diamond drilling	19,357.00	19,357.00	-0-
Equipment -- Rented	8,401.90	8,401.90	-0-
Equipment -- Purchased	1,601.79	1,840.00	238.21
Two tent houses	750.00	750.00	-0-
Material & supplies for bunkhouse	1,294.79	2,500.00	1,205.21
do. do. cookhouse	1,100.80	2,750.00	1,649.20
do. do. compressor house and tool shed	579.03	1,500.00	920.97
Total for New Buildings, Improvements, etc.	3,724.62	7,500.00	3,775.38
Accounting fees	1,039.81	1,050.00	10.19
Travelling for engineer	1,000.00	1,050.00	50.00
Telephone and telegraph	350.00	350.00	-0-
Miscellaneous costs	9,092.61	12,660.93	3,568.32
	55,523.35	67,587.33	
Total estimated cost	98,761.62	102,900.00	4,138.38
Government participation -- 70 percent	69,133.13	72,030.00	2,896.87

The rates for wages were discussed under Item (2) of Section III of this report.

The adjustments between "Items of Cost" as shown on the April 1953 Form MF-104, the disallowances, and the accepted costs, are summarized as follows:

	Totals April 1953 MF-104	Corrected Distribution	Disallowed by Audit	Reinstated by Audit	Allowed by Audit
(1) **Independent Contracts**					
Drilling	$19,357.00	$19,357.00	$	$	$19,357.00
Bulldozing	7,533.00	7,533.00			7,533.00
Drifting	3,645.46	3,792.22	1.70		3,790.52
Snow removal	1,966.77	1,820.00	11.20		1,808.80
(2) **Labor and Supervision**					
Labor	27,014.80	27,014.80	*4,105.97) 1,950.00)		20,958.83
Supervision	4,200.00	4,200.00			4,200.00
Technical Services	2,500.00	2,500.00			2,500.00
(3) **Operating Material & Supplies**					
Bunkhouse Furnishings	768.25	768.25			768.25
Cookhouse do.	1,020.38	1,020.38			1,020.38
Powder, Caps, Fuse, Etc.	1,546.67	1,546.67			1,546.67
Steel	949.52	949.52	*81.63		867.89
Pipe and Fittings	2,268.20	2,268.20	624.54		1,643.66
Mine Rail	1,894.11	1,894.11	*88.79	88.79	1,894.11
Ventube	438.66	438.66			438.66
Diesel Fuel, Etc.	2,438.04	2,358.04	*7.10		2,350.94
Gasoline	1,128.58	1,128.58			1,128.58
Tools	993.06	993.06	130.08		862.98
Engineer & Geological Supplies	733.22	733.22	5.15		728.07
Medical Supplies	113.30	113.30			113.30
Core Boxes	235.20	235.20			235.20
Mine Timber	2,143.87	2,143.87			2,143.87
(4) **Operating Equipment**					
Rented	10,138.21	10,138.21	*570.66) 1,165.65)		8,401.90
Purchased	1,601.79	1,601.79	*174.00	174.00	1,601.79
(6) **New Buildings & Improvements, Etc.**	3,724.62	3,724.62			3,724.62
(7) **Miscellaneous**					
Analytical	1,481.18	1,481.18			1,481.18
Accounting Fees	1,039.81	1,039.81			1,039.81
Travel for Engineer	1,000.00	1,000.00			1,000.00
Telephone	350.00	350.00			350.00
Automotive Repair	723.58	803.58	12.50) *19.30)		771.78
Repair Parts-Machine	818.30	818.30			818.30
Payroll Taxes	3,072.75	1,558.18	87.75) *266.48)		1,203.95
Liability Insurance		1,514.57	146.26) *159.18)		1,209.13
Boarding House Loss	902.05	552.05	8.59		543.46
Cabin Rental		350.00			350.00
Freight on Drill	325.00	325.00			325.00
	$108,115.36	$108,115.36	$9,616.53	$262.79	$98,761.62

*Starred items in column "Disallowed by Audit" indicate items disallowed by the Certifying Officer.

The audit has been thoroughly discussed with the Executive Officer of the DMEA Field Team, Region II.

November 27, 1953

Robert M. Hull

Robert M. Hull
Auditor

DOCKET
Surname:
Holt
Martin
Meyer
Davis
Nelson
Fisher
Lawyer
Ashwit
Kiilsgaard
Geehan
Selfridge
Johnson

"Appd. Sol. Off.

CERTIFICATION BY THE UNITED STATES OF AMERICA OF A DISCOVERY OR DEVELOPMENT UNDER AN EXPLORATION PROJECT CONTRACT

To: Northfield Mines, Inc.
Room 1841, 230 Park Avenue
New York 17, New York

Pursuant to the provisions of Exploration Project Contract No. Idm-E334, dated June 2, 1952, as amended (Docket No. DMEA 2436), hereinafter called the "Contract," between you and the United States of America, hereinafter called the "Government"; to establish and fix the Government's percentage royalty on production and its lien thereon and on the land described in the contract, the Government considers and therefore certifies that a discovery or development from which production may be made has resulted from the exploration work.

The nature of said discovery or development is described broadly or indicated as follows:

Cobalt and copper occur in wide, persistent mineralized shear zones traceable on the surface over extensive lengths. These shear zones ~~have been~~ proved by diamond drilling to continue to depth.

Surface trenching, drifting, crosscutting, and diamond drilling have indicated a substantial quantity of the cobalt-and-copper-bearing material.

THE UNITED STATES OF AMERICA

Dated: DEC 9 1955

By C. M. Stendor
Administrator, Defense Minerals Exploration Administration

cc: Docket
Code 400-Mr. Martin
Code 800-Mr. Chambers
Code 110-Mr. Johnson
Operating Committee
Adm. Reading File
R. W. Geehan, USBM
H. W. Davis, USBM
Thor Kiilsgaard, USGS

cc: Finance Officer
Helena Meyer, USBM
~~Arnold~~ Hoffman
Mr. & Mrs. F. W. Stevenson
FT, Reg. I-Spokane
G.S.A., EPS

PSHolt/ls 12/19/55

Docket Co

TERMINATION AGREEMENT

The United States of America, acting through the Department of the Interior, Defense Minerals Exploration Administration, hereinafter called the "Government," and Northfield Mines, Inc., hereinafter called the "Operator," are parties to that certain Exploration Project Contract No. Idm-E334 (Docket No. DMEA-2436), dated June 2, 1952, as amended, hereinafter called the "Contract." As a result of the work completed under the Contract, a discovery or development was made, and the Operator no longer desires to receive financial assistance from the Government in connection with said Contract. Instead, the Operator desires to divert its exploration activities to another area, and the Government is agreeable that the work under the Contract be terminated.

NOW THEREFORE, it is agreed as follows:

1. Effective October 1, 1953, the Contract and all obligations of the parties thereunder, except as otherwise herein expressly provided, shall be and are hereby terminated.

2. (a) The Government shall contribute to allowable costs incurred prior to said effective date.

(b) The report submitted by the Operator covering the work completed through September 1, 1953, is accepted by the Government in lieu of the final report required by the Contract.

3. The Government's equity in all property purchased and installations made under the Contract is agreed upon as having a total value of $6,002.50, and the Government may deduct this amount from any money due the Operator.

4. All rights of the Government provided for in the Contract with respect to a certification of discovery or development and a percentage royalty and lien for its payment

are preserved, provided that in lieu of the period previously fixed in the Contract within which the Government may certify a discovery or development, the Government may make such a certification within six-months after the date this agreement is executed.

5. The Operator hereby releases and agrees to save the Government harmless from all claims and demands under or arising out of said Contract, except as otherwise herein provided.

IN WITNESS WHEREOF, these parties have executed this agreement as of this 13th day of July, 1955.

THE UNITED STATES OF AMERICA

By O Muthendorf
Administrator, Defense Mineral Exploration Administration

Martin
Hoffman
Asst. Sol. Off.
Rutledge
Talbert
Martin
Selfridge
Zeftman

NORTHFIELD MINES, INC.

By Paul W. Beckhausen

Docket Copy

EXPLORATION PROJECT CONTRACT
NORTHFIELD MINES, INC.
DOCKET NO. DMEA-2436

AMENDMENT NO. 7

It is agreed this 6th day of August, 1953, between the United States of America acting through the Department of the Interior, Defense Minerals Exploration Administration, and Northfield Mines, Inc., each acting in consideration of the agreement of the other to the terms hereinafter set forth, that Exploration Project Contract No. Idm-E334, Docket No. DMEA-2436, dated June 2, 1952, as amended, between the parties hereto, be further modified and amended as of said date as follows:

1. In the contract form, in the first paragraph after the words "as follows," the following is inserted: "and as set forth in Annexes I, II, and III attached hereto and made a part hereof." Annexes II and III are attached hereto.

2. In Article 3, the words "ten (10) months" are deleted and in their place are substituted the words "thirty (30) months."

3. In Article 8, the figures $72,030 and $102,900 are deleted and are replaced by the figures $163,205 and $233,150, respectively.

4. In Article 13, the following is inserted:

The words "10 years," wherever they occur in the above contract form and Annex II, are hereby changed to "15 years"; to the extent that the costs of the additional work are set forth as "agreed unit costs," they are in lieu of the actual costs that would otherwise be allowable costs of the project under the provisions of Article 6(a) of the contract form.

5. All the work referred to in Exhibit "A" having been completed or being in the process of completion, and the parties desiring to explore further for cobalt and copper, additional work shall be performed as indicated in Exhibit "B" and on the map entitled "Northfield Mines, Inc.," both being attached hereto and made a part hereof.

EXHIBIT "B"

Description of Additional Work

MERLE NO. 5 ZONE

The work on Merle No. 5 Zone on the 7000 adit level shall consist of crosscutting from the end of 701 drift as indicated on the accompanying map, through the Merle No. 5 Zone and then drifting north along the mineralized zone from a point to be agreed upon by the Operator and the Field Team. The total of the crosscutting and drifting shall be approximately 400 feet. Short diamond drill holes shall be used to test the width of and otherwise explore the mineralized zone. Such drilling shall amount to approximately 400 feet and location of holes shall be selected by the Operator with the approval of the Field Team.

MERLE NO. 3 ZONE

This work shall consist of crosscutting westerly to the Merle No. 3 Zone from the 702 drift on the 7000 adit level at a point as indicated on the accompanying map. Said crosscut shall be a maximum of 1,200 feet in length, and work herein shall be stopped whenever it passes through the Merle No. 3 Zone. Drifts to the north and south shall be extended along the mineralized zone for a distance of approximately 550 feet, followed by approximately 300 feet of crosscutting at locations, only one of which is shown on the accompanying map, to be selected by the Operator with the approval of the Field Team. Approximately 600 feet of diamond drilling shall be done at locations to be selected by the Operator with the approval of the Field Team to test the full width of the mineralized zone and otherwise explore the area.

FURTHER WORK

In order to explore any other mineralized zones encountered that appear to justify such exploration, approximately 300 feet of drifting and crosscutting, and 200 feet of diamond drilling, are allowed at locations, inclinations, and in the direction to be determined by the Operator with the approval of the Field Team.

All work as far as possible shall be carried on concurrently. All drilling shall be of EX size and timbering (whether normal or heavy) and spiling may be done where necessary but only to the extent below indicated.

Five diamond drill stations may be drilled out in Merle No. 5 Zone, twelve in Merle No. 3 Zone, and four for any further work to be done.

If necessary not in excess of 250 hours of snow removal operations may be allowed and not in excess of 600 cobalt and copper assays may be made.

The mine shall at all times be maintained in a suitable and safe condition so that the project may be duly carried forward.

Estimated Costs of the Project

Agreed Unit Costs

MERLE NO. 5 ZONE

400 feet of drifting and crosscutting @ $32.50/ft.	$13,000.00	
350 feet of normal timbering @ $5.00/ft.	1,750.00	
150 feet of heavy timbering @ $5.00/ft. 1/	750.00	
100 feet of spiling @ $20.00/ft. 1/	2,000.00	
400 feet of diamond drilling @ $5.00/ft.	2,000.00	
5 diamond drill stations @ $25.00/ea. 2/	125.00	$19,625.00

MERLE NO. 3 ZONE

2050 feet of drifting and crosscutting @ $32.50/ft.	66,625.00	
1750 feet of normal timbering @ $5.00/ft.	8,750.00	
400 feet of heavy timbering @ $5.00/ft. 1/	2,000.00	

1/ This charge is in addition to the charge per foot for normal timbering.

2/ The unit here is the completed station.

200 feet of spiling @ $20.00/ft.3/	$4,000.00	
600 feet of diamond drilling @ $5.00/ft.	3,000.00	
12 diamond drill stations @ $25.00/ea. 4/	300.00	$84,675.00

FURTHER WORK

300 feet of drifting and crosscutting @ $32.50/ft.	9,750.00	
250 feet of normal timbering @ $5.00/ft.	1,250.00	
100 feet of heavy timbering @ $5.00/ft. 3/	500.00	
50 feet of spiling @ $20.00/ft. 3/-	1,000.00	
200 feet of diamond drilling @ $5.00/ft.	1,000.00	
4 diamond drill stations @ $25.00/ea.4/	100.00	13,600.00
Total Agreed Unit Costs		$117,900.00

The Government will contribute to the costs of the above diamond drill stations and to the costs per foot of the above drifting, crosscutting, normal timbering, heavy timbering, spiling and diamond drilling on the basis of the above unit costs as they accrue for the units of work actually performed, in lieu of the actual costs. These unit costs include all costs incidental to the completion of the work. Work to the costs of which the Government will contribute on the basis of agreed unit costs may be performed by independent contractors without reference to the provisions relating to independent contracts in Articles 4(a) and (b), and 6(a)(1) of the contract form.

Actual Costs
(*Indicates allowable maximum)

Mine Maintenance	$ 5,000.00*	
Assays - 600 @ $6.00*/ea.	3,600.00*	
Snow removal - 250 hrs. @ $15.00/hr.*	3,750.00*	$ 12,350.00*

3/ See footnote 1.
4/ See footnote 2.

S U M M A R Y

Actual Cost of Work in Exhibit "A"	$102,900.00*5/	
Actual Cost Additional Work in Exhibit "B"	12,350.00*	
Agreed Unit Costs Additional Work	117,900.00	
Total Estimated Cost of Project		$233,150.00*
Government Participation @ 70%		$163,205.00*

Executed in sextuplicate the day and year first above written.

THE UNITED STATES OF AMERICA

By C. W. Mittendorf
Administrator, Defense
Minerals Exploration
Administration

NORTHFIELD MINES, INC.

By [illegible]

Oscar Hoffman
Chamberlin

5/ Subject to audit.

EXPLORATION PROJECT CONTRACT
NORTHFIELD MINES, INC.
DOCKET NO. DMEA-2436
AMENDMENT NO. 7

ANNEX II

The following provisions are in lieu of all of paragraph (a) of Article 9 which precedes the colon:

If at any time the Government considers that a discovery or development from which production may be made has resulted from the exploration work, the Government, at any time not later than six months after the Operator has rendered the final report and final account required by the exploration project contract, may so certify in writing to the Operator. Such certification shall describe broadly or indicate the nature of the discovery or development. The Operator, or his successor in interest, shall pay to the Government a royalty on all minerals mined or produced from the land which is the subject of the exploration project contract, as follows: (1) Regardless of any certification of discovery or development, from the date of the contract until the lapse of the time within which the Government may make such certification of discovery or development, or until the total net amount contributed by the Government, without interest, is fully repaid, whichever occurs first, unless the Government waives its right to a royalty; or (2) if the Government makes a certification of discovery or development, for a period of ten years (or other period fixed by the contract) from the date of the contract, or until the total net amount contributed by the Government, without interest, is fully repaid, whichever occurs first. Said royalty shall be a percentage of 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, as follows:

EXPLORATION PROJECT CONTRACT
NORTHFIELD MINES, INC.
DOCKET NO. DMEA-2436

ANNEX III

Materials and Supplies. For the purpose of determining the Government's interest in materials or supplies remaining upon any termination of the work, they shall be considered in groups or categories (such as pipe, or explosives, or rails, or drill steel), and if the original cost of the remaining unexpended portion of any such group or category exceeded $50, the Government shall have an interest therein as provided in Article 11 of the contract form.

Equities in Equipment. Unless expressly permitted by provisions in Exhibit "A", the operator shall not procure equipment or any other item under a rental-purchase agreement, an installment-purchase agreement, any agreement which creates or builds up an equity or interest in the thing procured which can be converted to legal title only by further payment or some other consideration, or any agreement other than for straight rental or cash purchase and delivery.

Preservation of Property. Until the final disposal of any equipment or other property in which the Government has an interest or equity, the operator shall preserve and protect same for the mutual best interests of the parties, any reasonable and necessary cost thereof to be treated as an allowable cost of the exploration work to which the Government will contribute.

DOCKET COPY

Hotlund
Aug. 13, 52

NORTHFIELD MINES, INC.
Exploration Project Contract Idm-E334
Docket No. DMEA 2436 (cobalt-copper)

AMENDMENT NO. 6

It is agreed this 9th day of June 1953 between the United States of America, acting through the Department of the Interior, Defense Minerals Exploration Administration, and Northfield Mines, Inc., each acting in consideration of the agreement of the other to the terms hereinafter set forth, that the Exploration Project Contract Idm-E334 of June 2, 1952, between the parties hereto be modified and amended as set forth herein. The effective date of this amendment shall be June 2, 1952.

Changes and modifications

1. In Exhibit "A" of the contract, page 3, under (1) Independent Contracts remove the asterisk after $27,550.00. The total estimated cost for Independent Contracts shall not be an "allowable maximum."

2. In Exhibit "A" of the contract, page 3, under (2) Labor, Supervision and Consultants remove the asterisks after the following amounts:

Total labor	$21,685.83
Bonus for miners and muckers	1,960.00
Cook	2,722.72

These amounts shall not be "allowable maximums."

3. In Exhibit "A" of the contract, page 4, under (3) Operating Materials and Supplies remove the asterisk following the total $13,083.62. This amount shall not be an allowable maximum.

This amendment shall not be construed to increase the total amount of the contract or the amount of the Government's contribution.

Executed in sextuplicate the day and year first above written.

NORTHFIELD MINES, INC.

By [signature]

THE UNITED STATES OF AMERICA

By A. E. Weissenborn
A. E. Weissenborn, Exec. Officer
DMEA Field Team, Region II

NORTHFIELD MINES, INC.
Exploration Project Contract Idm-E334
Docket No. DMEA 2436 (cobalt-copper)

Justification of Amendment No. 6

This amendment is necessary in order that the Operator may be reimbursed for drifting done by an independent contractor which was not provided for in the original contract. The cost of the work was incurred in good faith, with the prior knowledge and consent of the Field Team. Amendment No. 3 of the contract was prepared to provide for the subcontract and was believed to be within the authority of the Executive Officer. Some time after Amendment No. 3 was executed the Field Team was informed by representatives of the Contract and Audit Division, DMEA, that a further amendment to revise certain items specified as "allowable maximums" was required before payment could be made under Amendment No. 3.

Further justification for this amendment may be found in letters from the Field Team, Region II, to the Operating Committee, dated February 2, 1953 and May 22, 1953.

The Executive Officer was authorized and requested to prepare this amendment by teletypes dated June 1, 1953, from George C. Selfridge, Chairman, Operating Committee, and June 9, 1953, from Frank E. Johnson, Deputy Administrator.

T. E. Howard

DOCKET COPY

(Amendment to Change Starting and/or Completion Dates)

AMENDMENT NO. 5

It is agreed this 10th day of March 1953, between the United States of America, acting through the Department of the Interior, Defense Minerals Administration and Northfield Mines, Inc., (Docket No. DMEA-2436, cobalt-copper)

each acting in consideration of the agreement to the other to the terms hereinafter set forth, that the Exploration Project Contract Idm-E334 dated June 2, 1952 between the parties hereto be modified and amended to change the starting date from --- (No. of days) to within --- (No. of days) of the date of the contract and the completion period from 10 (No. of months) to 14 (No. of months) from the date of the contract. The effective date of this amendment shall be April 2, 1953.

This amendment is made by authority granted the Executive Officer, DMEA Field Team, Region II, in Order No. 2684 by the Acting Secretary of the Interior.

This amendment shall not be construed to increase the estimated total cost of the project, the amount of the Government's contribution, or any item of allowable cost which is expressly designated "Allowable Maximum".

Executed in sextuplicate the day and year first above written.

NORTHFIELD MINES, INC.
(Operator)

By [signature]

THE UNITED STATES OF AMERICA

By [signature]
A. E. Weissenborn
Executive Officer
DMEA Field Team, Region II

Northfield Mines, Inc.
Exploration Project Contract Idm-X334

Justification for Amendment No. 5

Because of difficult ground conditions, it has taken longer to complete the project than was anticipated.

Docket Copy

EXPLORATION PROJECT CONTRACT
NORTHFIELD MINES, INC.
DOCKET NO. DMEA-2436

AMENDMENT NO. 4

It is agreed this 19th day of November, 1952, between the United States of America, acting through the Department of the Interior, Defense Minerals Exploration Administration, and Northfield Mines, Inc., each acting in consideration of the agreement of the other to the terms hereinafter set forth, that effective June 2, 1952, the Exploration Project Contract Idm-E334, dated June 2, 1952, between the parties hereto, as amended, be further modified and amended as follows:

In Exhibit "A" under (2) Labor, Supervision and Consultants delete:

1 - Engineer part time @ $186.00* per month, 7 months*	$1,295.00*

and substitute:

1 - Engineer-geologist @ $500.00* per month, 5 months* (June - October inclusive)	$2,500.00*

This amendment shall not be construed to increase the estimated total cost of the project, the aggregate total amount which the Government may be obligated to pay, or the percentage of costs which the Government may be obligated to pay under the provisions of Article 8 of the contract form, and the additional funds required for this engineer-geologist shall be taken from the amount set up for boarding house loss.

THE UNITED STATES OF AMERICA

By C. A. Mittenden
Administrator, Defense
Minerals Exploration
Administration

Dr. Fan Falbert

NORTHFIELD MINES, INC.

By Mountbell

DOCKET COPY

AMENDMENT NO. 3

It is agreed this 7th day of November 195 2, between the United States of America, acting through the Department of the Interior, Defense Minerals Administration, and [illegible] Mines, Inc., Room 1721, 230 Park Ave., New York 17, N. Y. (Contract No. [illegible] 2836, colors-copper)

each acting in consideration of the agreement of the other to the terms hereinafter set forth, that the Exploration Project Contract Idm-E 396 of June 2 195 2 between the parties hereto be modified and amended as described in Exhibit "F" attached hereto, which, with any maps or drawings attached thereto, is made a part of this agreement. The effective date of this amendment shall be July 10 195 2.

This amendment is made by authority granted the Executive Officer, DMEA Field Team, Region II, in Order No. 2684 by the Acting Secretary of the Interior.

This amendment shall not be construed to increase the estimated total cost of the project, the amount of the Government's contribution, or any item of allowable cost which is expressly designated "Allowable Maximum."

Executed in sextuplicate the day and year first above written.

[illegible] Mines, Inc.
(Operator)

By Joan Mitchell

THE UNITED STATES OF AMERICA

By A. E. Weissenborn
A. E. Weissenborn, Exec. Officer
DMEA Field Team, Region II

NORTHFIELD MINES, INC.
Exploration Project Contract Idm-E334
Docket No. DMEA 2436 (cobalt-copper)

Amendment No. 3

EXHIBIT "F"

In Exhibit "A" of the contract under "Estimate of Costs, - (1) Independent Contracts," add the following items:

"Driving of the adits specified in Phase 8 in the above Description of the Work may be done by independent contractors with the prior approval of the Field Team."

"Snow removal is considered a necessary cost of drifting and may be included in the same subcontract."

NORTHFIELD MINES, INC.
Exploration Project Contract Idm-E334
Docket No. DMEA 2436 (cobalt-copper)

Justification of Amendment No. 3

This amendment provides for subcontracting the drifting specified in the contract and is considered to be of benefit to both the Operator and the Government as the work should be conducted more economically by a subcontractor than would be possible otherwise. Snow removal from the road leading to the mine, thereby insuring access to the mine by employees, is considered part of the cost of drifting.

Thomas E. Howard

DOCKET COPY

AMENDMENT NO. 2

It is agreed this 15th day of September 195 2, between the United States of America, acting through the Department of the Interior, Defense Minerals Administration, and Northfield Mines, Inc. (Docket No. DMEA 2436, cobalt-copper)

each acting in consideration of the agreement of the other to the terms hereinafter set forth, that the Exploration Project Contract Idm-E 334 of June 2 195 2 between the parties hereto be modified and amended as described in Exhibit "F" attached hereto, which, with any maps or drawings attached thereto, is made a part of this agreement. The effective date of this amendment shall be September 15 195 2.

~~This amendment is made by authority granted the Executive Officer, DMEA Field Team, Region II, in Order No. 2684 by the Acting Secretary of the Interior.~~

This amendment shall not be construed to increase the estimated total cost of the project, the amount of the Government's contribution, or any item of allowable cost which is expressly designated "Allowable Maximum."

Executed in sextuplicate the day and year first above written.

Northfield Mines Inc.
(Operator)

By [signature]

THE UNITED STATES OF AMERICA

By [signature]
~~Acting Executive Officer~~
~~DMEA Field Team, Region II~~
Administrator, Defense Minerals
Exploration Administration

NORTHFIELD MINES, INC.
Exploration Project Contract Idm-8334
Docket No. 2436 (Cobalt-copper)

Amendment No. 2

EXHIBIT "S"

Changes and modifications

1. In Exhibit "A" of the contract, page 1, under (1) Independent Contracts, make the following changes:

(a) Change the first item to read:

"2500 feet of new road construction @ $13.00 per hour for bulldozing, 100 hours $1,300.00"*

(b) Change the second item to read:

"8000 feet of trench @ $13.00 per hour, 435 hours 5,655.00"*

(c) Change the third item to read:

"Road rehabilitation @ $13.00 per hour, 71 hours 923.00"*

2. In Exhibit "A" of the contract, page 2, under (1) Independent Contracts, change the item of diamond drilling to read:

Approximately
"2980 feet of diamond drilling at $6.49 per foot. The costs of all equipment, supplies, labor, and all other costs necessary for drilling the holes are included in the per foot cost $19,357.00"*

27 23

Alexander
OEKaa
Hoffland

Justification for Amendment No. 2

Northfield Mines, Inc.

Exploration Project Contract No. Idm-E334

The bulldozing done so far has exposed much more mineralized rock on the Marle No. 3 claim than had been expected. As 1,445 feet of drilling was done on the Marle No. 5 zone, this leaves only 555 feet to use on the Marle No. 3. As this is not nearly enough footage to test the wide and complicated zone exposed on the Marle No. 3 claim, it is recommended that the allowable maximum be increased to 3,000 feet. That this can be done at no increase in the total cost of the contract is shown in Exhibit F and Mr. Mitchell's letter of September 12, 1952. The additional drilling will outline the cobalt zone on the Marle No. 3 claim so that subsequent underground exploration can be laid out to get the maximum information at the minimum cost.

Under the present contract savings made from trenching, road rehabilitation and diamond drilling cannot be applied to additional drilling as not only the footage of diamond drilling is specific as an allowable maximum but also the amounts provided for other parts of the contract are likewise allowable maximums. The result is that savings made in one part of the contract cannot be applied to other parts. The amendment provides the necessary flexibility without increasing the cost.

Docket Copy

AMENDMENT NO. 2

It is agreed this 22nd day of July, 1952, between the the United States of America, acting through the Department of the Interior, Defense Minerals Administration and Northfield Mines, Inc. a corporation, Room 1042, 230 Park Avenue, New York 17, New York (Docket No. 2136 - cobalt-copper)

each acting in consideration of the agreement of the other to the terms hereinafter set forth, that the Exploration Project Contract [illegible] of June 2, 1952 between the parties hereto be modified and amended as described in Exhibit [illegible], attached hereto, which, with any maps or drawings attached thereto, is made a part of this agreement. The effective date of this amendment shall be June 2, 1952.

This amendment is made by authority granted the Executive Office, DMA Field Team, Region II in Order No. 2684 by the Acting Secretary of the Interior.

This amendment shall not be construed to increase the estimated total cost of the project, the amount of the Government's contribution, or any item of allowable cost which is expressly designated "Allowable Maximum".

Executed in sextuplicate the day and year first above written.

Northfield Mines, Inc.
(Operator)

By [signature]

The United States of America

By [signature]
A. E. Weissenborn, Exec. Officer
DMEA Field Team, Region II
For E. D. Volin, Acting Exec. Officer
DMEA Field Team, Region II

SLS
9/29/52

Northfield Mines, Inc.
Exploration Project Contract Idm-E334
Docket No. 2436 (cobalt-copper)

Amendment No. 1

EXHIBIT "F"

Changes and Modifications

1. In Exhibit "A" under Item (7) "Miscellaneous," add the following item:

   Rental for cabin, $50/mo. for 8 months $400.00

2. In Exhibit "A" under Item (7) "Miscellaneous," change the amount shown for boarding house loss from $4,472.50 to $4,072.50.

gd

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

DOCKET DMEA 2436

COMMODITY Cobalt-Copper

Idm-E334

DOCKET COPY

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

EXPLORATION PROJECT CONTRACT[1]

IT IS AGREED this 2nd day of June, 1952, between the United States of America, acting through the Department of the Interior, Defense Minerals Exploration Administration, hereinafter called the "Government," and[2] Northfield Mines, Inc., a corporation organized and existing under the laws of Delaware, Room 1841, 230 Park Avenue, New York 17, New York

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 Idaho, County of Lemhi, described as follows:[3] See Annex I and Exhibits B and B1 attached hereto and made a part hereof.

the Operator represents and undertakes:[4]

(*a*) [redacted]

Landlord's Subordination Agreement

(*b*) That the Operator is a lessee, in possession and entitled to possession, and the [redacted] 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 Thirty(30) days from the date of this contract shall commence work on a project of exploration for[5] cobalt-copper

in or upon the described land; and shall bring the project to completion within a period of Ten (10) 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 i[illegible] cases will be based on actual, necessary [illegible]s (including contract unit prices) incurred not in excess of any "allowable [illegible]ximum," and not in excess of the fixed percenta[illegible]f 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 **70** percent of the allowable costs incurred, as they accrue, in an aggregate total amount not in excess of $**7[illegible],[illegible]30.00**, which is **70** percent of $**108,900.00**, 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

By [signature]

Acting Administrator
Defense Minerals Exploration Administration

Northfield Mines, Inc.
(Operator)

By [signature]

I, Paul W. Reckhausen, certify that I am the [illegible] secretary of the corporation named as Operator herein; that George W. Mitchell, who signed this contract on behalf of the Operator, was then General Manager 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.

Paul W. Reckhausen

[CORPORATE SEAL]

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

ANNEX I

In the Blackbird Mining District

The unpatented lode mining claims Merle, recorded in book Y, page 512; Merle Nos. 1 to 6, inclusive, recorded in book Y, pages 513 to 518, inclusive; David Nos. 16 to 23, inclusive; Woodtick, recorded in book Y, page 519; Woodtick No. 1, recorded in book Y, page 520; Euphemia No. 3, recorded in book Y, page 511; Bob No. 1 and Bob No. 2.

The patented lode mining claims Tom Jefferson No. 2, Diamond Queen, Little Queen, ~~[illegible]~~, all described in Mineral Survey 2128.

not - see report of royalty period

MF-202

LANDLORD'S SUBORDINATION AGREEMENT

KNOW ALL MEN BY THESE PRESENTS:

WHEREAS, the undersigned is the owner in fee simple of that certain parcel of ground in the county of LEMHI, State of IDAHO, described in a certain Exploration Project Contract dated June 2, 1952, between NORTHFIELD MINES, INC. Assignee of Arnold Hoffman and Robert D. Hoffman, the Lessee of said property, and the United States of America;

NOW, THEREFORE, the undersigned, as Lessor of said property under lease dated May 10, 1951, does by these presents subordinate all of his right, title, and interest under the provisions of said lease to the right, title, and interest of the United States of America under the provisions of said Exploration Project Contract, and agrees that the lien and claim of the United States of America under the provisions of said contract shall be prior to the undersigned's rights to rentals or royalties under the terms of said lease; and

The undersigned further agrees that if said leasehold interest should be surrendered or if said lease should terminate at any time prior to the expiration of the rights of the United States of America under said Exploration Project Contract, the undersigned shall assume and does hereby assume all of the obligations of the Lessee under said Exploration Project Contract to make repayment to the United States of America according to the terms of said contract; and

The undersigned agrees to commit no act, nor assert any claim under judicial process or otherwise that may contravene or conflict with the prior lien and claim of the United States of America under the provisions of said Exploration Project Contract.

This undertaking and covenant shall be binding upon the heirs, successors, and assigns of the undersigned.

Dated this 28th day of May, 1952

F. W. Stevenson

F. W. Stevenson

U. S. GOVERNMENT PRINTING OFFICE 16—64582-1

Merle Stevenson

Merle Stevenson

EXPLORATION PROJECT CONTRACT
NORTHFIELD MINES, INC.
DOCKET NO. DMEA-2436

EXHIBIT "A"

Description of the Work

Time Schedule: 0 - 7 months.

The project consists of (1) trenching in the vicinity of areas previously indicated as favorable for cobalt mineralization, and (2) if warranted, subsequent diamond drilling and underground work.

The work includes:

1. Erecting the frames, including floor and sides, for two tent houses to be used as temporary quarters and facilities for the crew until the need for permanent ones is indicated by the exploration.

2. Constructing as needed, through the life of the project, by means of contract bulldozing, 2,500 feet of new road to the various working and camp sites noted below.

3. Constructing as needed, through the life of the project, 2,000 feet of new trails to the various areas that are to be explored.

4. Cutting by contract bulldozing, 5,500 feet of trench to further explore and extend the limits of the mineralized showings previously indicated by work on the Merle No. 5, Merle No. 3 and Little Queen claims as shown on Exhibits B, C, and C1 attached hereto.

5. Preparing by contract bulldozing, a maximum of 10 diamond drill sites. The locations of the drill sites, which are to be selected by the Operator upon the basis of the results of the trenching, are subject to prior Government approval.

6. Drilling, by contract, approximately 10 AX diamond drill holes, not to exceed 2,000 feet in aggregate length, to explore, below the zone of oxidation, the best mineralized

shear zones as indicated by the trenching. The exact number, location, attitude and length of the individual holes will be determined by the Operator upon the basis of the results of the trenching and prior drilling, subject to prior approval by the Government.

7. Constructing a 12' x 20' compressor house and tool shed of rough lumber when diamond drilling indicates that underground work is warranted.

8. Driving one or more adits, not to exceed 1,000 feet in aggregate length, to explore the mineralized zone or zones as suggested by the diamond drilling. The adit or adits shall be approximately 5' x 7' in cross section. The location and length of each, if more than one, which are to be determined by the Operator upon the basis of the results of the diamond drilling, shall be subject to prior Government approval.

9. Constructing one 16' x 20' tar paper-covered frame bunkhouse and one 16' x 20' tar paper-covered cookhouse, the latter to be partitioned with a 6' x 8' room for the cook. These buildings shall be constructed when the exploration indicates the need of permanent structures as determined by the Operator, subject to Government approval.

All subcontracts are subject to prior written approval by the Government.

Estimated Costs of the Project
(* Indicates allowable maximum)

(1) Independent Contracts

2,500 feet of new road construction @ $15.00/hour* for bulldozing, 137 hours*	$ 2,055.00*
5,500 feet of trench @ $15.00/hour* for bulldozing, 500 hours*	7,500.00*
Road rehabilitation @ $15.00/hour* for bulldozing, 112 hours*	1,680.00*
Preparation of diamond drill and building sites, @ $15.00/hour* for bulldozing, 21 hours*	315.00*

NOTE: The hourly rate for the above bulldozing is for a working hour and includes the wages of an operator, fuel, lubrication, transportation, repairs, and all other costs

2,000 feet* or diamond drilling @ $8.00/foot*

The costs of all equipment, supplies, labor, and all other costs necessary for drilling the holes is included in the per foot cost $16,000.00* $27,550.00*

(2) Labor, Supervision and Consultants

The following labor will be employed on a 6-day week basis with time and one half for the sixth day:

No.	Class	Approximate Months	Hourly Rate	Total Wages	
1	Dozer swamper	3	1.73625	1,184.12	
1	Surface laborer	7	1.50	2,352.00	
2	Carpenters	2	1.88625	1,690.08	
1	Carpenter helper	2	1.73625	777.84	
2	Timber framer & compressor man	5½	1.73625	4,278.12	
1	Truck driver	7	1.73625	2,722.44	
2	Miners	5½	1.78625	4,403.11	
2	Muckers	5½	1.73625	4,278.12	21,685.83*
	Bonus for miners and muckers				1,960.00*
1	Cook, 7-day week, 7		1.43000	2,722.72	2,722.72*

1--Engineer part time @ $186.00* per month, 7 months* 1,295.00*

1--Superintendent-geologist @ $600.00* per month, 7 months* 4,200.00* 31,863.55*

NOTE: The superintendent-geologist shall direct the exploration project and shall be responsible for securing representative samples of the deposits, where warranted, and their subsequent handling in a manner approved by the Government.

(3) Operating Materials and Supplies

Furnishings for tent houses and bunk house, including cots, mattresses, blankets, sheets, pillows and cases, stove, lamps and miscellaneous 884.00

Furnishings for cook tent or house, including cook stove, sink and plumbing, dishes, silverware, kitchen utensils, kitchen supplies and miscellaneous	$ 657.00	
Powder, caps, fuse, carbide lamps and carbide	1,645.00	
Steel 1" threaded round, bits	1,020.00	
Black pipe 1" and 2" and pipe fittings, and water hoses	1,140.00	
Mine rail 20#, switches, spikes, bolts and splice bars	1,140.00	
Vent tubing 8"	1,000.00	
Diesel fuel and lub. oil, compressor and rock drill oil, auto lub. oil, grease and tires	2,152.50	
Gasoline	960.00	
Tools including shovels, picks, wrenches, sledge hammers, single jacks, saws, axes, hacksaws, hammers, welding supplies, rope block, rope, set of ½" drive sockets, pliers, screwdrivers, etc.	521.12	
Muck sheets	64.00	
Engineering and geology supplies	1,050.00	
Medical supplies	350.00	
Core boxes	500.00	$13,083.62*

(4) Operating Equipment

To be rented

1--315 cfm Diesel compressor @$470.00 per month, 6 months	2,820.00	
2--Jackhammers with legs @$120.00 per month, 6 months	720.00	

2--Mine cars, 20 cu. ft. @$52.00 per month, 6 months	312.00	
1--Mucking machine 12 B @$325.00 per month, 6 months	1,950.00	
1--Water tank for drilling @$7.65 per month, 6 months	45.90	
1--Water pump, gas driven 90 gpm @$72.00 per month, 7 months	504.00	
1--Universal Jeep @$50.00 per month, 7 months	350.00	
1--Dump truck, 1½ tons @$100.00 per month, 7 months	700.00	
Freight on the above equipment	1,000.00	$ 8,401.90*

To be purchased

1--Chain saw, 20' gas drive	400.00	
1--Gas-driven ventilating fan, 9"	375.00	
1--Light plant, 2.5 K.W.	600.00	
1--Gas welding outfit	150.00	
1--Electric bench grinder ½ H.P.	50.00	
1--Skill saw, 7.25" blade	145.00	
1--Electric hand drill	70.00	
1--Pipe die, ½" to 2"	50.00	1,840.00*

To be furnished by Operator

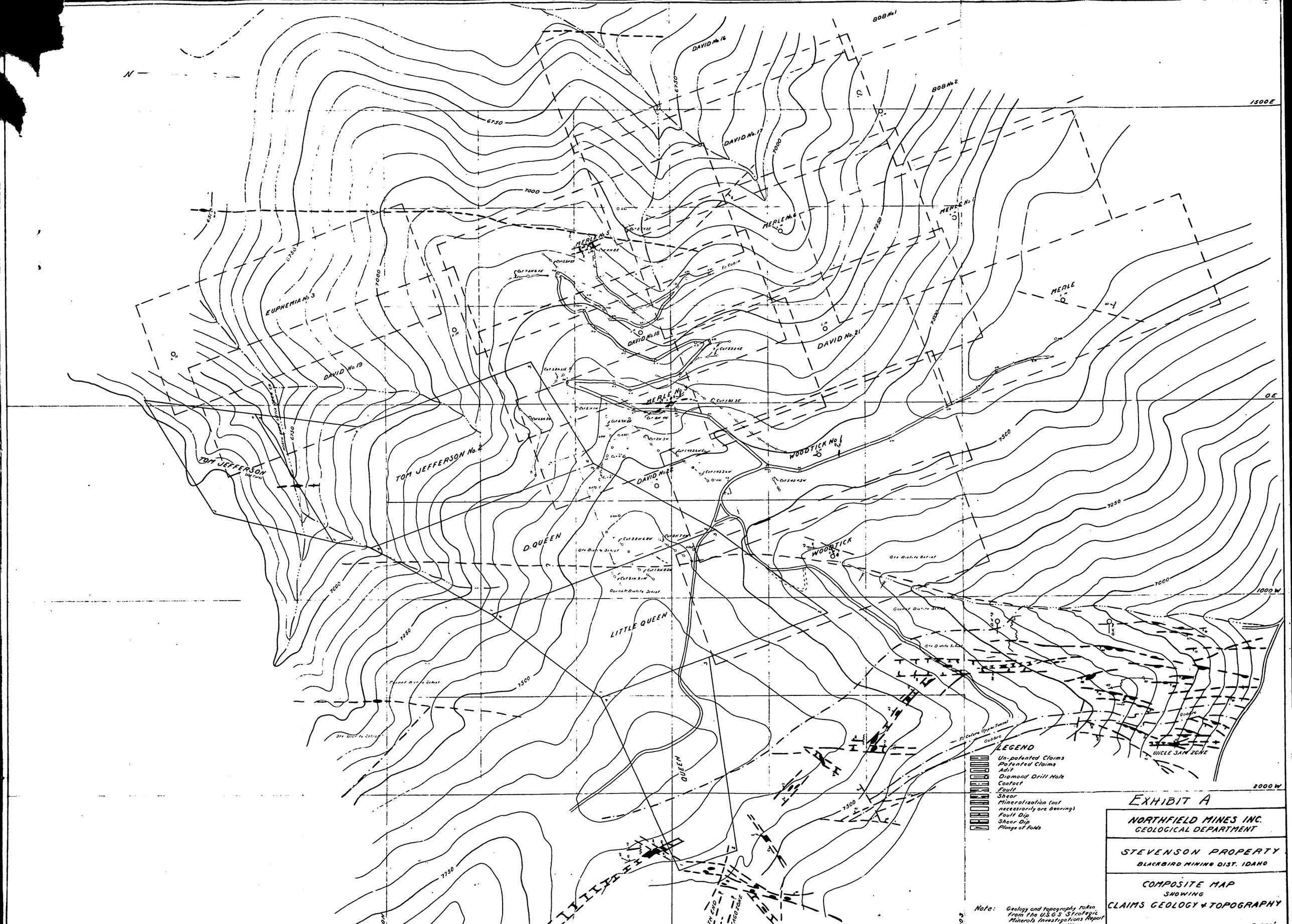
None

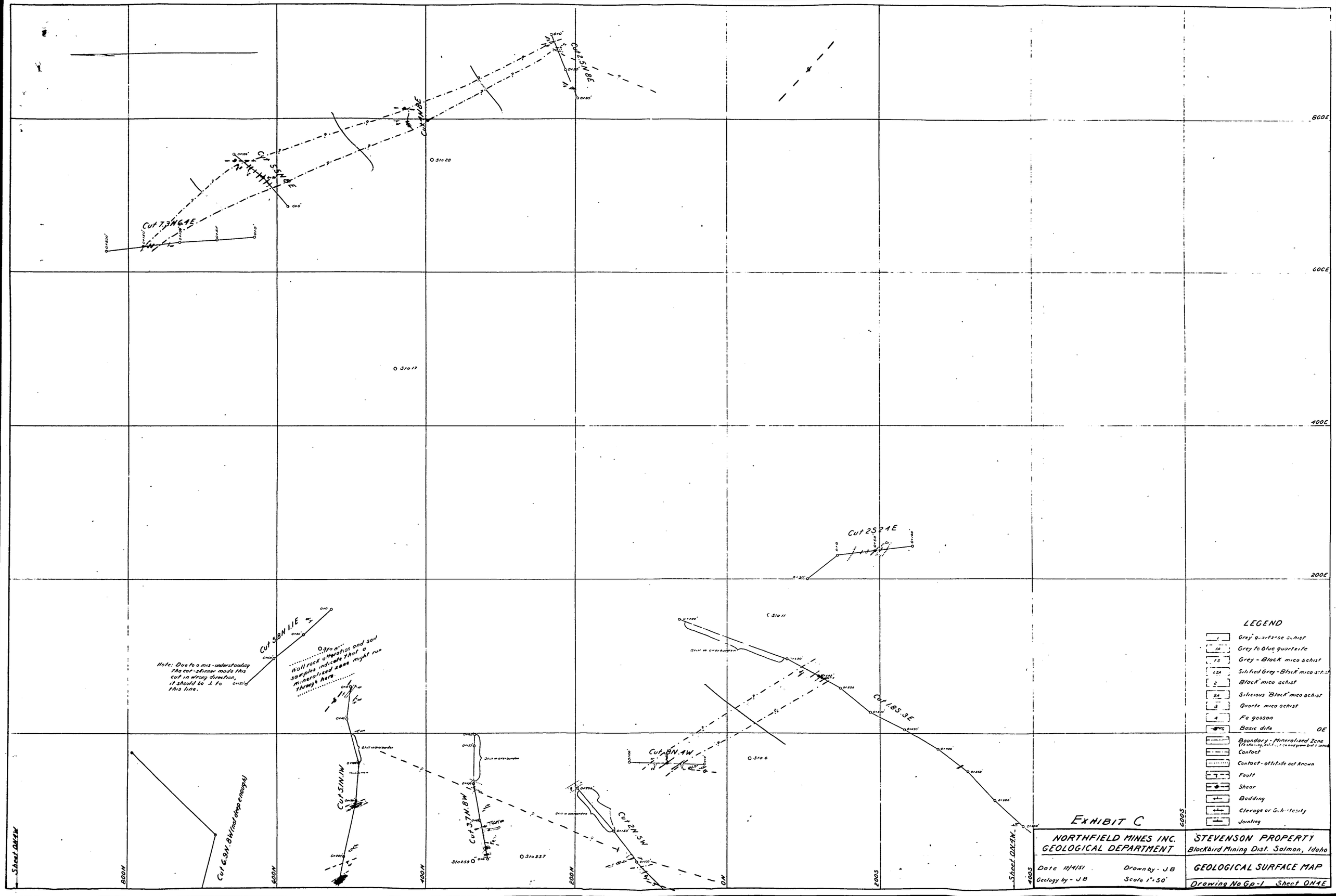
(5) **Rehabilitation and Repairs**

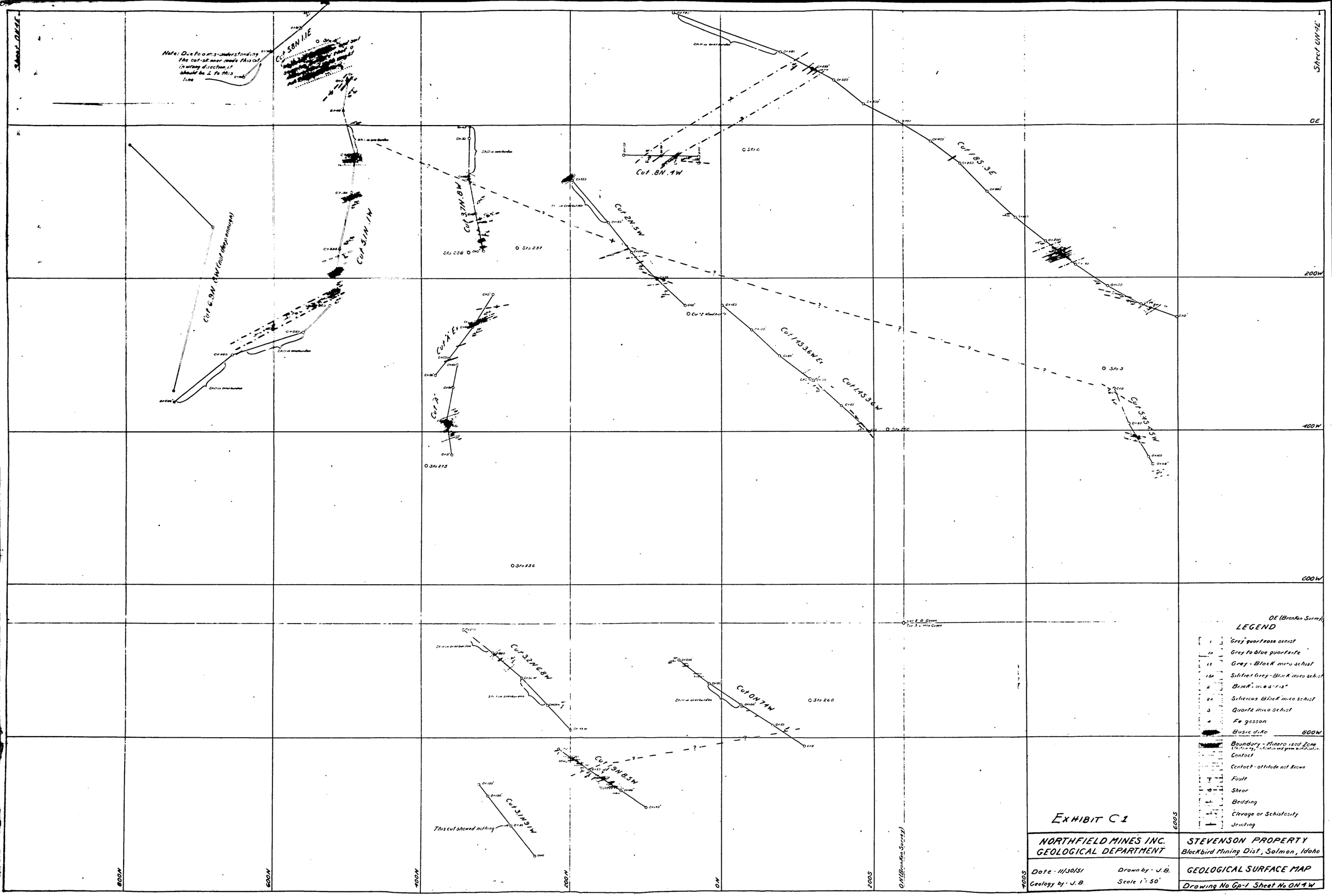
None

(6)	**New Buildings, Improvements, Installations**		
	Two tent houses @$375.00 each	$ 750.00*	
	Materials and supplies for bunkhouse1/	2,500.00*	
	Materials and supplies for cookhouse1/	2,750.00*	
	Materials and supplies for compressor house and tool shed1/	1,500.00*	$ 7,500.00*
(7)	**Miscellaneous**		
	Analytical work	1,000.00	
	Accounting fees as incurred @$150.00* per month, 7 months	1,050.00*	
	Travelling for engineer @$150.00* per month, 7 months	1,050.00*	
	Telephone and telegraph @$50.00* per month, 7 months	350.00*	
	Automotive repair parts and replacement	500.00	
	Repair parts for machine drills	150.00	
	Workmens compensation, OAB, etc.	3,588.43	
	Boardinghouse loss	4,472.50	
	Freight on diamond drill equipment in and out	500.00	12,660.93*
	Total estimated cost		$102,900.00*
	Government participation at 70 per cent		$ 72,030.00*

1/ Labor for this item is included in the category (2) Labor, Supervision and Consultants scheduled above.


N
BOB No. 1
BOB No. 2
DAVID No. 16
DAVID No. 17
DAVID No. 18
DAVID No. 19
DAVID No. 21
DAVID No. 22
EUPHEMIA No. 3
MERLE No. 1
MERLE No. 5
MERLE No. 6
MERLE
TOM JEFFERSON
TOM JEFFERSON No. 2
D. QUEEN
LITTLE QUEEN
QUEEN
WOODTICK No. 1
WOODTICK
UNCLE SAM ZONE
6750
7000
7250
7500
7750
1500 E
0 E
1000 W
2000 W
LEGEND
Un-patented Claims
Patented Claims
Adit
Diamond Drill Hole
Contact
Fault
Shear
Mineralization (not necessarily ore bearing)
Fault Dip
Shear Dip
Plunge of Folds
Note: Geology and topography taken from the U.S.G.S. Strategic Minerals Investigations Report
EXHIBIT A
NORTHFIELD MINES INC.
GEOLOGICAL DEPARTMENT
STEVENSON PROPERTY
BLACKBIRD MINING DIST. IDAHO
COMPOSITE MAP
SHOWING
CLAIMS GEOLOGY & TOPOGRAPHY


Cut 2S 8E
Cut 1S 8E
Cut 3S 8E
Cut 7.3N 6.4E
Sta 28
Sta 17
800E
600E
400E
200E
0
Cut 2S 24E
Cut 5.8N 1.1E
Note: Due to a mis-understanding the cat-skinner made this cut in wrong direction, it should be ⊥ to this line.
Sta 0
Wall rock alteration and soil samples indicate that a mineralized zone might run through here.
Sta 11
Cut 1.8S 3E
Cut 8N 4W
Sta 6
Cut 6.9N 8W (not deep enough)
Cut 5.1N 1W
Cut 3.7N 8W
Sta 857
Cut 2N 5W
800N
600N
400N
200N
0N
200S
400S
600S
Sheet 0N4W
Sheet 0N2W
LEGEND
1 Grey quartzose schist
1a Grey to blue quartzite
1b Grey - Black mica schist
1.5A Silified Grey - Black mica schist
2 Black mica schist
2A Silicious Black mica schist
3 Quartz mica schist
4 Fe gossan
Basic dike
Boundary - Mineralized Zone
Contact
Contact - attitude not known
Fault
Shear
Bedding
Cleavage or Schistosity
Jointing
EXHIBIT C
NORTHFIELD MINES INC.
GEOLOGICAL DEPARTMENT
STEVENSON PROPERTY
Blackbird Mining Dist. Salmon, Idaho
Date 12/4/51
Drawn by - J B
Geology by - J B
Scale 1" = 50'
GEOLOGICAL SURFACE MAP
Drawing No Gp-1 Sheet 0N4E


Sheet ONE
Sheet ONE
Note: Due to a misunderstanding the cat-skinner made this cut in wrong direction, it should be ⊥ to this line
Cut 5BN 1.1E
Cut 5.1N .1W
Cut 6.5N 2.1W (not checked enough)
Cut 3.7N .8W
Cut .8N .4W
Cut 2N .5W
Cut 1.8S .3E
Cut 1.4S 3.6W Ex
Cut 1.4S 3.6W
Cut 3.4S .5W
Cut .4 Ex
Cut .4
Cut 3.2N 6.8W
Cut 0N 7.4W
Cut 1.9N 8.5W
Cut 3.1N 9.1W
This cut showed nothing
Sta 256
Sta 257
Sta 6
Sta 3
Sta 260
Sta 273
Sta 256
OE (Brooken Survey)
0N (Brooken Survey)
200S
400S
600S
800N
600N
400N
200N
0N
200W
400W
600W
LEGEND
1 Grey quartzose schist
1A Grey to blue quartzite
1B Grey - Black mica schist
1BA Silicified Grey - Black mica schist
2 Black mica schist
2A Siliceous Black mica schist
3 Quartz mica schist
4 Fe gossan
Basic dike
Boundary - Mineralized Zone (Stockwork, silicification and green mineralization)
Contact
Contact - attitude not known
Fault
Shear
Bedding
Cleavage or Schistosity
Jointing
EXHIBIT C1
NORTHFIELD MINES INC.
GEOLOGICAL DEPARTMENT
Date - 11/30/51
Drawn by - J.B.
Geology by - J.B.
Scale 1" = 50'
STEVENSON PROPERTY
Blackbird Mining Dist, Salmon, Idaho
GEOLOGICAL SURFACE MAP
Drawing No Gp-1 Sheet No 0N 4W

Form MF-103
(Revised June 1951)

UNITED STATES DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS ADMINISTRATION

Budget Bureau No. 42-R1035.1.

MF-103 Should Be Filed With General Technical Data Form MF-100

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

Not To Be Filled in by Applicant

Docket No. DMEA-2436
Metal or Mineral
Date Received 3-18-52
Amount $
Participation (Government %)

Name and address of applicant

Northfield Mines, Inc.
Cobalt Exploration Syndicate
230 Park Avenue
New York 17, N. Y.

Date March 15, 1952

If you have already filed MF-100, give date filed To be filed, type of assistance requested Loan & Priorities

DMA Docket Number (if available) ~~DMA - 1336X~~ ~~(Letter only dated May 29, 1951~~

INSTRUCTIONS

Read Mineral Order 5, Regulations Governing Government Aid in Defense Projects, before completing this application. Submit four copies each, of the signed application form, General Technical Data Form MF-100, and answers to questions as specified, to Defense Minerals Administration, Department of the Interior, Washington 25, D. C., or to the nearest field executive office thereof, with your name and address on each sheet of the application and all accompanying papers. If you have previously filed MF-100, it is not necessary to file it again. However, you should indicate in space provided above the type of assistance previously applied for (loans, procurement contracts, etc.) and DMA Docket Number, if available. *When a question is inapplicable it should be so stated in the form.* Additional sheets should be attached in answering any questions or in supplying additional information. IF YOU CANNOT ANSWER A QUESTION, SO STATE.

1. (*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*) If you are not the owner of the property, submit a copy of the lease, purchase option, or other agreements under which you are authorized to operate the property with each copy of your application.

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

   NOTE: (1) 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 (*c*) 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.

   (2) If applicant is not the owner of the property or if there are any liens or encumbrances against the property, copy of agreements of claimants, lienors, encumbrances, and lessors subordinating their interests in the property to the interest of the Government under the Exploration Project Contract will be required for attachment to the Contract.

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
MAR 18 1952

2. (*a*) What metals or minerals do you expect to find?

   (*b*) Furnish statement of the geologic features of your property, giving type of ore deposit and reasons for expecting to find commercial ore bodies. Illustrate with maps or sketches. If you have a geologic or engineering report, or assay maps showing width and grade, please send them with application, stating whether or not you wish to have them returned.

16—64067-2

The information requested in questions 3, 4, 5, 6, 7, 8, and 9 below should be answered specifically and in detail, as this information will be attached to and incorporated as part of the Exploration Project Contract, if such contract is entered into with you by the Government.

ANSWER EACH QUESTION ON SEPARATE SHEETS OF PAPER AND SUBMIT A COPY OF EACH ANSWER FOR EACH COPY OF YOUR APPLICATION.

3. (*a*) Describe fully the proposed work and give the total cost of the project.

   (*b*) State the time required to start the project and to complete it.

4. Submit a map or sketch of the property involved showing a plan (and cross section, if needed) of the present mine workings and the *location of the proposed exploration work* as related to geologic features, such as contacts, veins, ore-bearing beds, etc.

5. Furnish an itemized list of existing facilities, buildings, installations, and fixtures with a statement of the cost of any necessary rehabilitation or repairs to put into useful and operable condition.

6. Furnish a detailed list of additional facilities, buildings, and fixtures to be purchased, installed, or erected by you, with the estimated cost of each item.

7. Furnish a detailed list of operating equipment, separated into items to be—

   (*a*) Rented

   (*b*) Purchased

   (*c*) Furnished by you

   with the rental, purchase price, or depreciation of each item, as the case may be, to be charged as a cost of the project.

8. Furnish an itemized schedule of labor, by numbers and classes (miners, muckers, etc.) and of supervisors by numbers and positions, with the maximum wages or salaries to be paid to each.

9. Furnish a detailed list with estimated cost of each item for materials, supplies, engineering, assaying, accounting, power, water, utilities, and any other items not provided for above.

10. (*a*) How much are you prepared to invest in the proposed project?

    (*b*) Is this amount sufficient to pay your part of the cost of the project, in accordance with the regulations on Government participation (Sec. 9 of MO–5)?

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

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.

Northfield Mines, Inc.
(Name of company)

By George Mitchell
(Signature of authorized official)

March 15, 1952
(Date)

George W. Mitchell
General Manager

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

U. S. GOVERNMENT PRINTING OFFICE 16—64067-2

Southfield Mines, Inc.
230 Park Avenue
New York 17, N. Y.

ITEM 1
(a)

The property upon which the exploration is to be carried out includes parts of the following claims:-

Unpatented Claims

David #16
David #17
David #18
David #19
David #20
David #21
David #22
David #23
Merle
Merle #1
Merle #2
Merle #3
Merle #4
Merle #5
Merle #6
Woodtick
Woodtick #1
Euphemia #3
Bob #1
Bob #2

Patented Claims

Tom Jefferson #2
Diamond Queen
Little Queen
Queen

Claim maps surveyed during the 1951 season show the area under exploration. (See Exhibits A & A1)

The properties are located in the Blackbird mining district in Lemhi County, Idaho, adjoining to the east the properties of the Howe Sound Mining Company's Calera Mine.

(b)

A copy of the purchase option with Floyd L. and Merle Stevenson is attached. (See Exhibit B). In addition to the properties mentioned in the purchase option (24 claims) 21 additional

Northfield Mines, Inc.
330 Park Avenue
New York 17, N. Y.

ITEM 1 (b) continued

claims have been staked making a total of 45 claims in the group. The contemplated exploration will be carried out upon 24 of the claims as listed under Item 1 (a).

(c) The legal description of the claims is the same as question 1 (a). The area under exploration is shown on the accompanying claim maps. (See Exhibits A and A#1).

ITEM 2

(a)

The metals being sought are cobalt and copper.

(b)

Two geological maps showing the detailed geology of the area (Exhibits C & C#1) upon which exploration has been started are enclosed.

During the summer and fall of 1951, in cooperation with a geologist of the U. S. Geological Survey familiar with the district, a program of trenching to expose bed rock was undertaken and approximately 4000 feet of trenching crosscutting the formation were dug. The geological maps (Exhibits C & C#1) show the results of this work. More trenching, some exploration drilling and underground work are planned for the 1952 season.

The topography in the Blackbird district is quite rough, varying in elevation from approximately 3500 feet at Salmon City on the Salmon River 30 miles east of the district to approximately 9000 feet above sea level at the higher points near the Northfield Mines, Inc. property. The general elevation at the Northfield property is from 5000 to 7500 feet. Snow fall in the elevations above 5000 feet is quite heavy in the winter. Prospecting and explor-

Northfield Mines, Inc.
200 Park Avenue
New York 17, N. Y.

ITEM 2(b) continued

ation work must be confined to the better seasons of the year from late April to late November. Year round operations are feasible when a permanent camp is established.

The steep slopes and deep canyons are covered with a heavy growth of evergreen timbers which is suitable for mine use. Numerous creeks supply abundant water for all purposes. The area is accessible via good gravel roads from Salmon, Idaho and other towns nearby. A steep mountain road from the Calera property gives access to the Northfield properties.

The rocks of the pre-Cambrian "Belt" series predominate in the district. They are highly metamorphosed and contain schists, impure quartzites and thin bedded quartzites, biotite schist, sandy schist and micaceous schists. Much folding and shearing has taken place. In the area under exploration the general schistosity strikes north to north 30 to 40 degrees west, while the dips are from 60 degrees to vertical. Shears follow the schistosity or strike north to a small angle west of north and dips vary from 60 to 80 degrees east. Some basic dykes of small size have been see in the trenches already excavated.

Because of the fractured, friable nature of the schists and quartzites, few rock outcrops are found on the steep hillsides. Erosion has produced a mantle of talus which varies in thickness from a few feet to ten or fifteen feet and covers the area. The character of the talus and topography lends itself well to bulldozer work to expose bedrock for examination. Many of the shears show cobaltite and copper minerals, but generally these minerals are lacking in the bedrock at the surface because they have been oxidized and leached out by surface waters. Leaching of the surface outcrops

Forchtiels Mines, Inc.
230 Park Avenue
New York 17, N. Y.

ITEM 2(b) continued

has been well demonstrated by the work done at the Calera mine. Assays of the exposed material in the shears are not useful as an indication of ore shoots, so very little sampling has been done, but the appearance of the iron staining and evidence of hydrothermal action, such as bleaching and silicification, indicate in the preliminary work the most favorable fractures. The topography also lends itself well to diamond drilling and adit work to prospect below the zone of oxidation, shown by experience at Calera to be a few feet to a maximum of 100 feet beneath the surface.

The structure upon which work has been started parallels and is identical with the structure in which the exposure called the "Uncle Sam" on Calera Mining Company ground is located. The Uncle Sam vein is only 1500 feet to the west. It is one of the principal vein structures discovered and being mined by Calera Mining Company.

The United States Geological Survey has done considerable geo-chemical survey work in the district and has found the method, which involves soil analysis of the talus covered areas, very useful in locating likely areas for trenching and other exploration. The trenching already done was laid out covering anomalies shown by one of their surveys. It is expected that the U.S. Geological Survey will again cooperate in carrying on further work.

Work done in the district at the Calera Mining Company property has been described in the U. S. Bureau of Mines RI 4012 released in 1947 and entitled "Blackbird Cobalt Deposits, Lemhi County, Idaho". Copies of this paper are not available for inclusion in this application.

Northfield Mines, Inc.
230 Park Avenue
New York 17, N. Y.

ITEM 3
(a)

Three methods of continuing the thorough job of prospecting and exploring the area are planned for the season of 1952.

(1) Continue the systematic trenching to clarify the information already obtained and lay out new trenches both to the north and to the south to follow continuous shears in these directions.

(2) Drill shallow crosscut holes through the more continuous, best looking shears in order to obtain further information below the zone of oxidation.

(3) Follow the drilling with either crosscut or drift adits to further explore the best shears.

The foregoing, briefly stated three methods are each discussed in more detail.

1. Because of the approch of winter weather conditions at the end of the past (1951) season trenches were widely spaced to obtain, as rapidly as possible, the maximum general information. It is now planned to dig trenches in a number of places between those already dug so the structural information will be as complete as possible. The geological maps (Exhibits #C and C#1) show obvious places where this should be done. The purpose is to outline in a positive manner the most continuous and strongest shears.

The plan has been to lay out trenches beginning from three different centers. The most important center to date is that located on the Merle #3 Claim. Secondary centers which give good promise are located on the Merle #5 and the east side line of the Little Queen Claim. Trenches dug in 1951 are marked in these areas on the "Claims and Topography" Map (Exhibit A).

Northfield Mines, Inc.
230 Park Avenue
New York 17, N. Y.

ITEM 3 (a) continued

To expand the picture as it is seen today, more trenches will be laid out extending these three areas both to the north and the south. However, the final location of the trenches should await the development of the picture close to the center. Each zone or continuous shear should be followed by laying out crosscut trenches not too distant from one already completed.

Approximately 4000 feet of trench was bulldozed in the fall of 1951. Fifty five hundred feet more, plus the possible information obtained in making new roads, should be sufficient to show the shear structure quite well.

2. During the time the trenching is proceeding it is planned to use relatively short diamond drill holes to obtain further structural information and to determine the quality of the mineralization because leaching near the surface has rendered surface sampling ineffective in most cases in determining ore values. As soon as a fairly continuous shear with good gossan and evidence of strong hydrothermal action is outlined, the first drill hole will be spotted. The object will be to drill the shallowest hole possible in order to intersect the favorable shear below zone of oxidation where both cobalt and copper minerals are in their primary state. There appears to be considerable variation in the depth of oxidation and leaching so the first hole or two will also have to determine, as nearly as possible, what this depth will be in the area under exploration. The spacing of the holes will be dependent upon the results obtained as each

Northfield Mines, Inc.
230 Park Avenue
New York 17, N. Y.

ITEM 3 (a) continued

hole is drilled. Closer spacing will be used if a well mineralized shear is discovered, in order to outline it satisfactorily.

3. When drilling shows a continuous zone of mineralization or a well mineralized area where drill results are difficult to interpret it is planned to drive either a cross cut or drift adit into the zone to further explore it. The length of the adit will be determined by the results obtained in each case. Several short adits may be driven at various locations or the work may be confined to a single adit. The object will be to obtain the maximum information for the minimum of expenditure.

To facilitate the above work it will be necessary to improve the access road from the Calera Mining Company property and extend it into the newer parts of the area. The extension of the road will serve in further prospecting the area where it crosscuts the favorable structure. More trails for better access on foot to various parts of the property are also necessary.

An estimate of the cost of the total project is as follows:

Northfield Mines, Inc.
230 Park Avenue
New York 17, N. Y.

ITEM 3 (a) continued

COST ESTIMATE OF TOTAL PROJECT

5500' Angledozer Trenching @ $1.71 ft.	$ 9,408.84
2000' Short Hole Diamond Drilling @ $8.50 ft.	17,000.00
1000' Adits @ $334 ft.	33,008.11
2500' New Road @ $1.05 ft.	2,626.87
2000' New Trails @ $.86 ft.	1,721.31
Road Maintenance for Season	3,310.83
Buildings	11,796.74
Transportation Equipment Rental	1,050.00
Misc. Equipment Rental & Purchase	2,666.00
Small Tools & Supplies	2,698.70
General Expenses	6,740.00
Cook Labor	3,469.45
Supervision	6,964.40
TOTAL COST - PROJECT	$ 102,461.25

Note: Details of Trenching, Diamond Drilling, Adits, New Roads, New Trails & Road Maintenence follows.

ANGLEDOZER TRENCHING

5500' Trench	
500 hours Tractor Rental @ $15.00 per hour	$ 7,500.00
533 hours Swamper Labor	1,176.40
Miscellaneous Labor	
Surface Laborer	540.60
Truck Driver	191.84
DIRECT COSTS @ $1.71 ft.	$ 9,408.84

Northfield Mines, Inc.
230 Park Avenue
New York 17, N. Y.

ITEM 3 (a) details continued

DIAMOND DRILLING

2000' diamond drilling - estimated 10 holes of 200 ± ft. per hole	
Contract Basis @ $8.00 per ft. (This figure was submitted by R. S. McClintock)	$16,000.00
Site Preparation 10 locations @ $50.00 per site (includes $17.35 Truck Labor per site)	500.00
Freight on Equipment - in & out	500.00
DIRECT COSTS @ $8.50 per ft.	$17,000.00

ADITS

1000' of Drifting	$17,434.95
Labor - Mining, mucking, etc. Truck Drivers & Surface	1,643.59
Supplies - Powder, caps, fuse. Drilling supplies as steel, bits, machine parts, etc. Pipe, track & supplies	7,569.00
Rental on Equipment including freight in & out	6,360.57
DIRECT COSTS @ $33,00 per ft.	$33,008.11

Northfield Mines, Inc.
230 Park Avenue
New York 17, N. Y.

ITEM 3 (a) details continued

NEW ROADS

2500' new road -

137 hours Tractor Rental @ $15.00 per hr.	$ 2,055.00
149 hours Swamper labor	331.81
Miscellaneous Labor	
Surface laborer	140.50
Truck Driver	99.56
DIRECT COSTS @ $1.05 per ft.	$ 2,626.87

NEW TRAILS

2000' new trails

705 hours Surface laborer	$ 1,374.40
Truck Driver	346.91
DIRECT COSTS @ $0.86 per ft.	$ 1,721.31

ROAD MAINTENANCE for Season

112 hours Tractor Rental @ $15.00 per hr.	$ 1,680.00
Truck Driver	867.27
Surface Laborer	763.56
TOTAL COST ROAD MAINTENANCE	$ 3,310.83

Northfield Mines, Inc.
230 Park Avenue
New York 17, N. Y.

ITEM 3
(b)

TIME SCHEDULE OF THE PROJECT OF:

(1) Trenching 5500' to expose surface geology.

(2) Diamond Drilling 2000' short hole to locate mineralized zone.

(3) Drifting or Crosscutting 1000' to extend mineralized zone.

The beginning date will depend upon snow conditions in the area. It is planned to start the work May 1, 1952, however, more favorable weather conditions could advance this date to possibly late April, 1952. The project as outlined is expected to be completed in late November.

MAY:

Make arrangements for getting equipment on property and possibly removing snow.

Start angledozer trenching (probably in Merle #3 area.

Erect temporary living quarters.

Locate and prepare site for #1 Diamond Drill hole.

JUNE:

Continue trenching.

Start #1 D.D. hole.

Begin construction of permanent bunkhouse and cookhouse.

Prepare site for #2 D.D. hole.

Complete #1 D.D. hole.

Start #2 D.D. hole.

Prepare site for #3 D.D. hole.

Complete #2 D.D. hole.

Northfield Mines, Inc.
230 Park Avenue
New York 17, N. Y.

ITEM 3 (b) continued

JULY:

Continue trenching.

Start #3 D.D. hole.

Continue construction of bunkhouse and cookhouse.

Prepare #4 D.D. hole.

Complete #3 D.D. hole.

Start #4 D.D. hole.

Complete construction of bunkhouse & cookhouse.

Locate & prepare site for Adit (location of Adit dependent on information gained from surface trenching and diamond drilling)

Construct Compressor shed.

Start adit work.

Locate & prepare #5 D. D. Hole

Complete #4 D. D. Hole.

AUGUST:

Complete Trenching (Road building will be carried on simultaneously with Trenching as needed)

Continue with Diamond Drill program completing Holes #5 and #6.

Continue drifting.

SEPTEMBER:

Continue Diamond Drill program Holes #7 & #8.

Continue drifting.

OCTOBER:

Continue Diamond Drill program Holes #9 & #10. And completion of D. D. Program. Continue Drifting.

Northfield Mines, Inc.
230 Park Avenue
New York 17, N. Y.

ITEM 3 (b) continued

NOVEMBER:

Continue Drifting.

Nov.30

Completion of Drifting Program 1000' of drift.

The above tentative time schedule is based on a 6 day week, except for the Diamond Drill program which is on a 7 day week basis, and will consume a 7 month period to November 30, 1952. Since equipment is rented on monthly basis, it would possibly be advantageous to adopt a 7 day week throughout the project. Full utilization of the operating equipment would offset, to a great extent, the resultant wage overtime cost.

Northfield Mines, Inc.
230 Park Avenue
New York 17, N. Y.

ITEM 4

Claim Maps (Exhibit A & A #1) and two geological maps (Exhibit C & C #1) show the work which has already been done. The proposed exploration work will be done in the same area and the north and south extensions of it.

Trenches, drilling and adit work will be laid out as the structural and geological features become more clear as the work progresses. They cannot be definitely defined, therefore, at this time. The first trenches to be dug will be parallel to and between trenches dug in 1951 in order to determine the continuity of the shears in several plans.

All of the work will be carried on within the area covered by Northfield's Claims shown in Exhibit A & A #1.

Northfield Mines, Inc.
230 Park Avenue
New York 17, N. Y.

ITEM 5

No facilities, buildings or other installations exist at the present time.

Northfield Mines, Inc.
230 Park Avenue
New York 17, N. Y.

ITEM 6

The following buildings will be erected to supply the indicated facilities:

1. Bunkhouse - 16'x20' Frame
   Construction - Tar paper
   Covered w/ furnishings:

Building material & supplies, including lumber, tar paper, doors, windows, etc.		$2,500.00	
12 Cots w/mattress	@ $20	240.00	
48 Blankets	@ 7	336.00	
24 Sheets	@ 2	48.00	
12 Pillows w/cases	@ 5	60.00	
Miscellaneous Furnishings - Stoves, Lamps, etc.		200.00	
			$3,384.00
Labor - Carpenters, Truck Driver, laborer		$1,502.46	
Total Labor			1,502.46
TOTAL BUNKHOUSE			$4,886.46

2. Cookhouse - 16'x20' Frame
   construction & Tar paper covered,
   Partitioned w/6'x8' cook room,
   Room for cook w/furnishings:

Building Materials & Supplies	$2,750.00	
1 cook stove	175.00	
1 sink and plumbing	85.00	
Dishes - 14 people @ $4	56.00	
Silverware - 14 people @ $1.50	21.00	
Kitchen Utensils	200.00	
Miscellaneous Kitchen Supplies	120.00	
Total Material & Furnishings		$3,407.00
Labor - Carpenters, Truck Drivers, Laborer	$1,502.46	
Total Labor		1,502.46
TOTAL COOKHOUSE		$4,909.46

Northfield Mines, Inc.
230 Park Avenue
New York 17, N. Y.

ITEM 6 continued

3. Compressor House & Tool Shed-
12' x 20' Frame Shack:

BuildingMaterials & Supplies	$1,500.00		
Total material & supplies		$	$1,500.00
Labr- Carpenter, Truck Driver, Labrer		500.82	
Total Labor			500.82
TOTAL COMPRESSOR HOUSE			$2,000.82
Total Building Supplies and Furnishing	$8,291.00		
Total Building Labr		$3,505.74*	
TOTAL BILDINGS			$11,796.74

* NOTE: This labor included in itemized schedule of labr in question 8.

Northfield Mines, Inc.
230 Park Avenue
New York 17, N. Y.

ITEM 7

Detailed list of operating equipment, separated into items to be rented, purchased or furnished with prices of rental or purchase to be charged as a cost of the project:

(a) **RENTED**

	MONTH	5½ MONTHS	
1 - 315 cu.ft. Compressor	$470.00	$2,585.00	
2 - Jackhammers w/legs	120.00	660.00	
2 - 20 cu.ft. Mine Cars-end dump	52.00	286.00	
1 - 12 B Mucking Machine	325.00	1,787.50	
1 - 15 gal water drilling tank	7.65	42.07	
			$ 5,360.57

		7 MONTHS	
1 - Water Pump - Gas Driven 90 gpm	$ 72.00	$ 504.00	
1 - Universal Jeep	50.00	350.00	
1 - 1½ ton Dump Truck	100.00	700.00	
			$ 1,554.00

Freight on above equipment		1,000.00
Tractor Rental including maintenance & operator @ $15 per hr.	770.77 hrs	11,561.50
Contract - Diamond Drill		16,000.00
Freight on Diamond Drill equipment		500.00
TOTAL - RENTAL OPERATING EQUIPMENT		$35,976.07

Northfield Mines, Inc.
230 Park Avenue
New York 17, N. Y

ITEM 7 continued

(b) PURCHASED

1 - Chain Saw - 20' gas drive	$ 400.00
1 - 8" Gas Drive Ventilating Fan	375.00
1 - 2½ K.W. Light Plant	600.00
1 - Gas Welding Outfit	150.00
1 - Small hand operated Forge	45.00
1 - Electric Bench Grinder ½ H.P.	50.00
1 - Skill Saw - 7½" blade	145.00
1 - Electric Hand Drill	70.00
1 - Vise 4" Swivel Bar	32.00
1 - Pipe Die ¼" to 2"	50.00
1 - Chain Pipe Vise - ¼" to2"	15.00
18 - Miners Carbde Lamps	30.00
2 - Tents w/floor	200.00
TOTAL PURCHASED EQUIPMENT	$2,162.00

(c) FURNISHED

The companyowns no equipment.

Northfield Mines, Inc.
230 Park Avenue
New York 17, N. Y.

ITEM 8

Following is a list of Labor by numbers and classes, and Supervision by numbers and position with wages and salaries to be paid to each.

The following rates are the existing rates in the Blackbird District, Idaho as of January 1, 1952 and are for a six day week with time and a half for the sixth day.

NO.	CLASS	MONTH	HOURLY RATE	TOTAL WAGES	PAYROLL TAX & INS. BUNKHOUSE BLDG. BONUS	TOTAL
1	Dozer Swamper	3/14	1.73625	$1,184.12	$ 324.09	$ 1,508.21
1	Surface Labor	7	1.50	2,352.00	702.24	3,054.24
2	Carpenters	2	1.88625	1,690.08	442.81	2,132.89
1	Carpenter Helper	2	1.73625	777.84	213.41	991.25
2	Miners	5½	1.78625	4,403.11	1,658.61*	6,061.72
2	Muckers	5½	1.73625	4,278.12	1,643.62*	5,921.74
2	Timber Framer & Compressor Man	5½	1.73625	4,278.12	1,173.37	5,451.49
1	Truck Driver	7	1.73625	2,722.44	746.65	3,469.09
1	Cook**	7	1.43	2,722.72	746.73	3,469.45
1	Diamond Driller		Paid by contractor			
1	Diamond Drill Helper		Paid by contractor			
	TOTAL LABOR			$24,408.55	$7,651.53	$32,060.08

* - Includes bonus $198 changed to 6,591.53

** - 7 day week

1	Superintendent	7	$600/mo	$4,200.00	$1,104.00	$5,304.00
1	Part Time Engineer	7	185/mo	1,295.00	365.40	1,660.40
	TOTAL SUPERVISION			$5,495.00	$1,469.40	$6,964.40

Too low should be at least $5000 = Mr.

Northfield Mines, Inc.
230 Park Avenue
New York 17, N. Y.

ITEM 9

Following is a list of materials, supplies, services, fees, etc. not provided for above with estimated cost of each item.

(1) Mining Supplies:

150 boxes	- Blasting powder @ $10.00	$1,500.00
3000	- No.6 Blasting Caps @ $2.50 C	75.00
~~1800'~~ 6000'	- Blasting Fuse @ $35 M	210.00
200'	- 1" Round shanked threaded drill steel @ $1.25	250.00
	Tungsten Carbide Throwaway Bits	360.00
3-50' lgths	- 1/2" Coupled Water Hose @ $20	60.00
7- 50' lgths	1" Coupled Air Hose @ $35	245.00
	Repair Parts - Drill Machines	150.00
7ton	- 20# Mine Rail @ $135.00	945.00
	Track spikes, Bolts and Splice Bars	145.00
2	- Switches	50.00
1500'	- 1" Black Pipe @ $17.00	255.00
1000'	- 2" Victaulic Pipe	350.00
	Pipe Fittings, Valves, etc.	230.00
1000'	- 8" Vent Tubing	1,000.00
7500 gal	- Diesel Fuel for Compressor @20¢	1,500.00
200 gal	- Diesel Lub. Oil @75¢	150.00
55 gal	- Compressor Oil @ 60¢	33.00
30 gal	- Rock Drill Oil @ 70¢	21.00
400 #	- Miner's Lamp Carbide	40.00
	TOTAL MINING SUPPLIES	$7,569.00

Northfield Mines, Inc.
230 Park Avenue
New York 17, N. Y.

ITEM 9 continued

(2) Miscellaneous Small Tools & Supplies

Misc. Grease, Oil, Tires & Motor Repair	$ 350.00
3000 gal Gasoline @ 32¢	960.00
150 gal Automotive Lub. Oil @ 99¢	148.50
Automotive Repair Parts & Replacement	350.00
12 - Round Point Shovels @ $3.50	42.00
6 - Square Point Shovels @ $3.25	19.50
12 - Drift Picks @ $3.00	36.00
2 - Muck Sheets	64.00
1 - 36" Stilson Wrench	10.00
2 - 24" Stilson Wrench @ $7.50	15.00
3 - 18" Stilson Wrench @ $4.50	13.50
3 - 12" Stilson Wrench @ $2.50	7.50
3 - 8" Stilson Wrench @ $1.80	5.40
2 - 24" Crescent Wrenches @ $6.00	12.00
2 - 18" Crescent Wrenches @ $5.00	10.00
2 - 12" Crescent Wrenches @ $3.20	6.40
2 - 8" Crescent Wrenches @ $1.65	3.30
2 - 16# Sledge Hammers @ $4.00	8.00
3 - 4# Single Jack Hammers @ $2.10	6.30
2 - 2½' Mine Saws @ $4.85	9.90
4 - Miner's Axes @ $3.70	14.80
2 - Hacksaws @ $2.50	5.00
2 - Carpenter Saws @ $5.00	10.00
2 - Claw Hammers @ $1.80	3.60
Welding Suplies	150.00
1 - Set Rope Blocks for 3/4" Rope	8.00
200' Rope	25.00
1 - Set ½" Drive Sockets	30.00
Lot Misc. Tools, Pliers, Screwdrivers, etc.	75.00
TOTAL MISC, SMALL TOOLS & SUPPLIES	$2,698.70

(3) GENERAL

Engineering and Geology Supplies	@ $150/mo	$1,050.00
Accounting Fees	@ $150/mo	1,050.00
Sampling, Assay & Research		1,000.00
Medical & Safety	@ $50/mo	350.00
Travelling, Telephone, Telegraph	@ $470/mo	3,290.00
TOTAL GENERAL		$6,740.00

Northfield Mines, Inc.
230 Park Avenue
New York 17, N. Y.

ITEM 9 continued

SUMMARY OF COSTS - DETAILED IN ABVE QUESTIONS 6 thru 9

Buildings	$ 8,291.00
Rental on Operating Equipment	35,976.07
Purchased Equipment	2,162.00
Labor & Supervision	39,024.48
Mining Supplies	7,569.00
Misc. Small Tools & Supplies	2,698.70
General (not given above)	6,740.00
TOTAL PROJECT	$102,461.25

Northfield Mines, Inc
230 Park Avenue
New York 17, N. Y.

ITEM 10

(a) The company is prepared to invest $11,000.00, which is approximately 10% of the total cost, in the project. ?

(b) This amount, $11,000.00, is sufficient to pay Northfield Mines, Inc's part of the cost of the proposed project, in accordance with the regulations of Government participation.

ITEM 11

There are no conditions or circumstances which have not been fully explained by the foregoing questions.

DMEA-2436

March 15, 1952

Mr. C. C. Mittendorf
Administrator
Defense Minerals Exploration Administration
U. S. Department of the Interior
Washington 25, D. C.

Att: Mr. George Selfridge
Domestic Cobalt Exploration
Docket #DMA 1336-X
Northfield Mines, Inc.

Dear Mr. Mittendorf:

We are submitting, herewith, Form M.-103 with the pertenant data on our Blackbird District, Idaho cobalt property about which we talked February 28, 1952.

We shall be pleased to discuss the application and clarify any details not intirely clear when you have sufficient time to review it.

Very truly yours,

NORTHFIELD MINES, INC.

George W. Mitchell
General Manager

GWM/m

DMEA-2436

ROOM 704
452 FIFTH AVENUE
NEW YORK, N. Y.

March 14, 1952

Mr. Thayer Lindsley, President,
Northfield Mines, Inc.,
230 Park Avenue,
New York, N. Y.

Dear Mr. Lindsley:

At your request, I herewith assign and transfer to Northfield Mines, Inc., the following mining claims, held on location in the Blackbird District, near Salmon, Lemhi County, Idaho, designated as follows:

Bob Nos. 1 and 2

David Nos. 2 to 24 inclusive.

I agree that if I stake any additional claims in this immediate area, I will transfer them to Northfield Mines or your assignee, upon request.

Very truly yours,

/S/ Robert D. Hoffman

Robert D. Hoffman

G

COPY

DMEA-2436

ROOM 704

452 FIFTH AVENUE
NEW YORK CITY

March 14, 1952

Mr. Thayer Lindsley, President,
Northfield Mines, Inc.
230 Park Avenue
New York, N.Y.

Dear Mr. Lindsley:

As per your request, I herewith assign to Northfield Mines, Inc., all rights, benefits and other obligatons of agreement btween F. W. Stevenson and Merle Stevenson, husband and wife, and myself, dated May 10, 1951, and executed July 14, 1951, and also rights, benefits and obligations of supplemental ageement between F. W. Stevenson and Merle Stevenson and myself, dated May 10, 1951, and executed July 14, 1951. Copies of tbse ageements, together with escrow agreement with the Stevensons, The First Security Bank of Idaho in Boise acting as depositary, are herewith attached.

Please note that a payment of $10,000 falls due to the Stevensons on May 10, 1952, and similar payments each year thereafter until a total of $70,000 is paid, the last payment being due on May 10, 1958.

Please note that, since the original agreements were executed, the address of F.W. Stevenson and Merle Stevenson has been changed and is now - 332 G Street, North Richard, Washington, c/o General Delivery.

In the event I obtain any additional options and leases for ground in the Blackbird District, Lemhi County, Idaho, I will transfer them, upon request, to Northfield Mines, Inc. or your assignee.

Very turly yours,

/S/ Arnold Hoffman

Arnold Hoffman

G-Encs.

C
O
P
Y

DMEA-2436

NORTHFIELD MINES, INC.

COBALT EXPLORATION SYNDICATE

230 PARK AVENUE, NEW YORK 17, N.Y.

FORM MF-103 DATE - MARCH 15, 1952

DOCKET NO. DMA -1336X

Northfield Mines, Inc.
230 Park Avenue
New York 17, N. Y.

INDEX DMA FORM MF-103

		Page
ITEM 1	Description of Property	1 2
2	Geology	2
3 a)	Proposed Exploration & Cost	5
b)	Time Schedule	11
4	Location of Exploration Work	14
5	Present Facilities	15
6	Additional Buildings, etc.	16
7 a)	Rented Operating Equipment	18
b)	Purchased Operating Equipment	19
c)	Furnished Operating Equipment	19
8	Labor Cost	20
9	Materials, Supplies, Etc.	21
10	Company Investment	24
11		24

EXHIBITS

EXHIBIT "A"	Stevenson Property Composite Map showing Claims Geology and Topography.
EXHIBIT "A#1"	Little Deer Creek Group Mining Claims.
EXHIBIT "B"	Purchase Options
EXHIBIT "C"	Geological Surface Map - Sheet No. ON4E.
EXHIBIT "C#1"	Geological Surface Map - Sheet No. ON4W.

LEASE AND OPTION AGREEMENT:

Between: F. W. STEVENSON and
MERLE STEVENSON, husband
and wife,
Address: 518 West Antiat Ave.
Kennewick, Wash.

LESSORS

and

ARNOLD HOFFMAN,
Address: Room 704,
452 Fifth Ave.
New York City, N.Y.

LESSEE

THIS LEASE AND OPTION AGREEMENT, Made and entered into as of the 10th of May, 1951, by and between F. W. STEVENSON and MERLE STEVENSON, husband and wife, the address is 518 W. Antiat Avenue, Kennewick, Washington, parties of the first part, hereinafter referred to as the lessors, and ARNOLD HOFFMAN, whose address is Room 704, 452 Fifth Avenue, New York City, N.Y., party of the second part, hereinafter referred to as the lessee.

W I T N E S S E T H:

WHEREAS, the lessors are the owners of those unpatented lode mining claims located and situated in Lemhi County, Idaho, consisting as follows, to-wit:

EUPHEMIA lode mining claim, the location notice whereof is recorded in the office of the County Recorder of the County of Lemhi, State of Idaho, in Book Y of Mining Claims at page 508;

EUPHEMIA NO. 1 lode mining claim, the location notice whereof is recorded in the office of the County Recorder of the County of Lemhi, State of Idaho, in Book Y of Mining Claims at page 509;

EUPHEMIA NO. 2 lode mining claim, the location notice whereof is recorded in the office of the County Recorder of the County of Lemhi, State of Idaho, in Book Y of Mining Claims at page 510;

EUPHEMIA NO. 3 lode mining claim, the location notice whereof is recorded in the office of the County Recorder of the County of Lemhi, State of Iasho, in Book Y of Mining Claims at page 511;

MERLE lode mining claim, the location notice whereof is recorded in the office of the County Recorder of the County of Lemhi, State of Idaho, in Book Y of Mining Claims at page 512;

MERLE NO. 1 lode mining claim, the location notice whereof is recorded in the office of the County Recorder of the County of Lemhi, State of Idaho, in Book Y of Mining Claims at page 513;

MERLE NO. 2 lode mining claim, the location notice whereof is recorded in the office of the County Recorder of the County of Lemhi, State of Idaho, in Book Y of Mining Claims at page 514;

MERLE NO. 3 lode mining claim, the location notice whereof is recorded in the office of the County Recorder of the County of Lemhi, State of Idaho, in Book Y of Mining Claims at page 515;

MERLE NO. 4 lode mining claim, the location notice whereof is recorded in the office of the County Recorder of the County of Lemhi, State of Idaho, in Book Y of Mining Claims at page 516;

MERLE NO. 5 lode mining claim, the location notice whereof is recorded in the office of the County Recorder of the County of Lemhi, State of Idaho, in Book Y of Mining Claims at page 517;

MERLE NO. 6 lode mining claim, the location notice whereof is recorded in the office of the County Recorder of the County of Lemhi, State of Idaho, in Book Y of Mining Claims at page 518;

COOL BREEZE lode mining claim, the location notice whereof is recorded in the office of the County Recorder of the County of Lemhi, State of Idaho, in Book Y of Mining Claims at page 507;

WOODTICK lode mining claim, the location notice whereof is recorded in the office of the County Recorder of the County of Lemhi, State of Idaho, in Book Y of Mining Claims at page 519;

WOODTICK NO. 1 lode mining claim, the location notice whereof is recorded in the office of the County Recorder of the County of Lemhi, State of Idaho, in Book Y of Mining Claims at page 520;

DUFFY lode mining claim, the location notice whereof is recorded in the office of the County Recorder of the County of Lemhi, State of Idaho, in Book II of Mining Claims at page 215;

DUFFY NO. 2 lode mining claim, the location notice whereof is recorded in the office of the County Recorder of the County of Lemhi, State of Idaho, in Book II of Mining Claims at page 313;

SHADY lode mining claim, the location notice whereof is recorded in the office of the County Recorder of the County of Lemhi, State of Idaho, in Book II of Mining Claims at page 213;

SHADY NO. 2 lode mining claim, the location notice whereof is recorded in the office of the County Recorder of the County of Lemhi, State of Idaho, in Book II of Mining Claims at page 214;

LITTLE DEER CREEK placer mining claim, the location notice whereof is recorded in the office of the County Recorder of the County of Lemhi, State of Idaho, in Book III of Mining Claims at page 95;

All together with all water rights and ditch rights of whatsoever nature appurtenent thereto, and together with the tenements, hereitaments and appurtenances thereunder belonging or in anywise appertaining;

And, WHEREAS, the lessors are the owners of those certain patented mining claims located and situated in Lemhi County, Idaho, identified and consisting as follows:

TOM JEFFERSON, TOM JEFFERSON NO. 2, LITTLE QUEEN, QUEEN and D. QUEEN lode mining claims known as the Little Queen Consolidated lode mining claims, platted and described in the office of the United States Cadastral Engineer at Boise, Idaho (now Land and Survey Office of the Bureau of Land Management of the Department of Interior) as Mineral Survey No. 2128;

All together with all water rights and ditch rights of whatsoever nature appurtenant thereto, and together with the tenements, hereditaments and appurtenances thereunto belonging or in anywise appertaining;

And, WHEREAS, the lessee desires a lease with an option to purchase all said mining claims and property, together with all water rights, ditch rights, tenements and hereditaments thereunto belonging or in anywise appertaining, all hereinafter referred to as the mining claims, and the lessors desire to give and grant to the lessee a lease with an option to purchase the same, all under the terms and conditions hereinafter set forth;

NOW, THEREFORE, For and in consideration of the sum of Five Hundred Dollars ($500.00) by the lessee to the lessors in hand heretofore paid on May 6th, 1951, the receipt whereof by the lessors is hereby acknowledged, and in consideration of the covenants and agreements hereinafter contained and on the part of the respective parties to be done and performed, and in consideration of the royalties reserved and the rentals to be paid by the lessee, the lessors hereby lease to the lessee and do hereby give and grant unto the lesee the exclusive right, privilege and option to purchase, all said mining claims upon the terms and conditions hereinafter set forth.

The term of this lease and option, unless sooner forfeited, cancelled, terminated or surrendered as hereinafter provided, shall be from the day and date hereof until and to

shall be from the day and date hereof until and to expire on the 1st day of June, 1958.

The lessors hereby grant unto the lessee the exclusive right to enter into the immediate possession of said mining claims and to prospect the same for cobalt, copper and all other minerals and elements, and to continue in possession of such mining claims so long as the lessee shall not be in default in the terms of this agreement, and to develop said mining claims and to mine, extract, mill, smelt, refine and process all ores, minerals and other products therefrom, and to sell and dispose of the ores, minerals, and mineral products so extrasted during the term hereof, and subject to the covenants, terms and conditions herein provided.

The lessors hereby reserve from the operation of this lease and option agreement the residence house and buildings thereat, and the spring thereat, situate on either the Duffy or Duffy No. 2 lode mining claims above designated, and the yard used in connection with said residence house, as a place of residence and domicile with the right to erect other surface structures at and about said residence house and to fully utilize the same, all to the extent that such structures and use shall not interfere with the mining operations on the mining claims or any of said mining claims covered hereby.

The lessors hereby expressly reserve unto themselves, their heirs, administrators, executors and assigns, as royalty, the equal five percent (5%) of the net smelter or mill returns on all ore and minerals of every kind which shall be mined or taken

from said mining claimsand milled, smeltered or otherwise turned to account. In determining the net returns on which royalty shall be computed there shall be deducted in addition to the charges of the mill or smelter or both mill and smelter, the railroad freight, if any, to the mill or smelter or both, if shipped to a mill or smelter, and charges for trucking or hauling the ore from the mine to the railroad and the mill or smelter. The royalty to be paid to the lessors shall become due on each smelter or mill return and shall be paid by the lessee to the lessors within thirty (30) days after receipt by the lessee of the net smelter or mill return upon which the royalty payment shall be due. At the time of making each such payment of royalty the lessee shall transmit to the escrow holder hereinafter named a duplicate smelter or mill return, statement or settlement sheet covering the smelter or mill return upon which the royalty is then being paid; PROVIDED, however, that the lessee agrees to pay to the lessors a minimum rental or royalty as follows:

The sumof Five Hundred Dollars ($500.00) heretofore paid by the lessee to the lessors under date of May 6th, 1951, the receipt whereof by the lessors is hereby acknowledged;

The sum of Four Thousand Five Hundred Dollars ($4,500.00) coincident with the execution of this lease and option agreement, the receipt whereof by the lessors is hereby acknowledged;

The sum of Ten Thousand Dollars ($10,000.00) on the 10th day of May, 1952;

The sum of Ten Thousand Dollars ($10,000.00) on the 10th day of May, 1953;

The sum of Ten Thousand Dollars ($10,000.00) on the 10th day of May, 1954;

The sum of Ten Thousand Dollars ($10,000.00) on the 10th day of May, 1955;

The sum of Ten Thousand Dollars ($10,000.00) on the 10th day of May, 1956;

The sum of Ten Thousand Dollars ($10,000.00) on the 10th day of May, 1957; and

The sum of Ten Thousand Dollars ($10,000.00) on the 10th day of May, 1958;

PROVIDED, However, that in the event such five percent (5%) royalty shall exceed the minimum royalty or rental next thereafter to be paid, then any and all excess shall be carried over and applied to the payment of the minimum rental or royalty payment next thereafter successively to become due.

In the event of comingling of ores from the mining claims covered by this agreement and any other mining claims or mining property, the royalties reserved to which the lessors shall be entitled as hereinabove set forth shall be determined by, and based upon, dry weights and samples of ore, and percentage of recovery, made and taken by lessee in accordance with good engineering practice, from the mining claims covered hereby prior to the comingling and milling with other ores upon other claims.

The lessors hereby give and grant unto the lessee throughout the term of this lease the exclusive right, privilege and option to purchase from the lessors all said mining claims for the sum of Seventy-five Thousand Dollars ($75,000.00), and in

the event such option to purchase shall be exercised by the lessee, all payments, rentals or reserved royalties theretofore paid by the lessee under the terms of this agreement shall be credited upon the said purchase price of Seventy-five Thousand Dollars ($75,000.00). Termination of this lease by reason of default of the lessee shall also terminate such option to purchase, time being of the essence thereof.

THE LESSEE FURTHER AGREES AS FOLLOWS:

1. To furnish copies of results of prospecting and drilling to the lessors within a reasonable time after drilling and prospecting shall have been performed;

2. To record and post all statutory notices required by the laws of the State of Idaho now or hereafter in effect, to keep the mining claims covered by this lease and option agreement free and clear of all claims for labor or materials;

3. To do all work that shall be performed upon and at such mining claims in a good and miner-like manner;

4. To keep the said mining claims and property free and clear of all liens and encumbrances suffered by the lessee;

5. After lessee begins mining operations of said mining claims, to make monthly returns to the lessors, with duplicate returns and statements or receipt and/or statement of revenues, showing the amount of royalties payable;

6. To permit the lessors, or their agents, at reasonable times to examine the books relating to the mining operations of said mining claims and the sale of the mine products therefrom,

and examine said property and the mining operations conducted thereon or therein;

7. To do and perform all assessment work and annual labor which shall be necessary to hold said unpatented mining claims under the laws of the United States of America and under the laws of the State of Idaho each year before the first day of July at 12:00 o'clock Noon, including the assessment work and annual labor necessary to be done to hold such mining claims for the year ending July 1st, 1951 at 12:00 o'clock Noon.

THE LESSEE FURTHER AGREES That upon the performance of such assessment work each year that he will file, or cause to be filed, the affidavit of the performance thereof as provided by the laws of the State of Idaho.

IT IS MUTUALLY AGREED By and between the parties hereto that in the event there should be enacted in any year during the term of this lease legislation of the United States of America providing moratorium in, or suspension of, the requirement that assessment work and annual labor be done and performed upon mining claims within the United States for such year, that the benefit of each such moratorium or suspension shall accrue to all of the parties hereto and the requirement of this lease and option agreement that the lessee perform the annual labor and assessment work in each such year wherein moratorium or suspension shall be granted, shall be waived or suspended, as the case may be, so long as the lessee shall comply with all of the requirements of such moratorium or suspension legislation, all to the end that such

mining claims shall be maintained in good standing under the laws of the United States of America and of the State of Idaho.

THE LESSEE FURTHUR AGREES To pay all taxes and assessments which may be levied and assessed on said mining claims and all taxes and assessments on all of the improvements now or hereafter situate thereon as such taxes become due and before they become delinquent, and to pay all taxes and assessments which shall be levied and assessed upon all mine products which shall be extracted from said mining claims by the lessee, including the Mines License Tax of the State of Idaho, as such taxes become due and before they become delinquent.

In the event it shall be determined by the lessee in his sole discretion that area adjacent to the mining claims hereinbefore designated is mineral ground, and can be covered by mining claims contiguous to the mining claims hereinbefore designated, then the lessee shall locate in the name of the lessee so much of such area as shall lie in closer proximity to the mining claims hereinbefore designated than to any other mining claims leased, held or controlled by the lessee, and every such mining claim which shall be located by the lessee shall be added to and be considered part of the mining claims covered by this lease and subject to the option to purchase herein set forth.

The lessee, at his sole discretion and expense, shall have the right to erect upon and at and in such mining claims such buildings and structures, and to install such machinery, equipment and other property, as he shall deem necessary or advisable

in carrying on mining operations, milling operations and smelting operations at, upon or in said mining claims. The lessee shall also have full rights of ingress and egress upon and across all such mining claims for all purposes connected with his mining, milling, or smelting operations. Title to all machinery, equipment, and structures, except permanent buildings and structures built into such mining claims, shall remain in the lessee at all times, and in the event of a forfeiture, cancellation or termination of this agreement, any and all machinery, equipment, structures and other property, excepting only permanent buildings and structures built into such mining claims, may be removed from the said mining claims by the lessee within the period of one (1) year from the time of such termination. All permanent buildings which shall be placed upon said mining claims and all structures which shall be built into such mining claims shall become a part thereof and shall not be removed, but the lessee shall have the right to make such alteration thereof and change in the location thereof as he may deem advisable from time to time in his mining, milling and smelting operations and in the use of such buildings and structures.

The First Security Bank of Idaho, N.A., Boise Branch, at Boise, Idaho, is hereby designated as the escrow holder, and collecting agent for the lessors, under the terms of this agreement, and all payments to be made under the terms thereof by the lessee to the lessors, (excepting only the initial payment of Five Hundred Dollars paid under date of May 6th, 1951, and the sum of Four Thousand Five Hundred Dollars paid coincident with

the execution hereof) shall be paid by the lessee to said bank to be by it placed to the credit of the lessors. Upon the exercise of the option to purchase hereinbefore provided, by the lessee, the lessors shall forthwith make and execute a good and sufficient deed for conveyance of the mining claims covered hereby to the lessee, free and clear of all encumbrances of whatsoever nature excepting only encumbrances caused or suffered by the lessee, but subject to paramount title in said unpatented mining claims in the United States of America, and shall deposit such deed with said escrow holder with instructions to it to deliver such deed to the lessee upon payment to such escrow holder by the lessee of the balance of the purchase price, and with instructions to redeliver such deed back to the lessor for cancellation in the event this lease and option agreement shall be terminated by reason of default of the lessee.

In the event the lessee shall default in any of the payments herein provided to be paid or in the performance of any of the covenants and agreements herein on the part of the lessee to be done and performed, then the lessors shall have the right to declare this lease and option and all rights of the lessee under and by virtue of this lease and option to be terminated and forfeited, said right of termination by the lessors to be exercised by the lessors giving written notice to lessee by registered mail specifying the particulars wherein the lessee is then in default and providing that unless the delinquent payment is made, or the failure to perform corrected, within thirty (30) days from the date of said notice, this agreement shall be immediately forfeited

and terminated, and upon such forfeiture or termination all payments which shall have been made to the lessors shall be considered as rents and royalties and shall be retained by the lessors free and clear of any right or claim of the lessee and in this connection time is of the essence of this agreement.

Failure of the lessors to declare a forfeiture upon default in any payment or payments, or in the performance of any other provisions hereof, shall not be construed a waiver of lessors' defaults.

In consideration hereof, the lessors hereby grant unto the lessee the first right, privilege and option of leasing or purchasing any other mining claims of the lessors in the Blackbird Mining District in the County of Lemhi, State of Idaho, should the lessors desire to sell and/or lease any such mining claims, which first right, privilege and option of purchasing and/or leasing shall be upon the same terms as the lessors shall be willing to sell and/or lease to any other person, firm or corporation. In the event of such contemplated sale and/or lease by the lessors herein of any such other mining claims of the lessors or any interest therein, the lessors shall notify the lessee in writing of the terms of such contemplated sale and/or lease and the lessee shall have sixty (60) days after receipt of such notification in writing in which to exercise the first right, privilege and option hereby granted. The termination of this lease shall also terminate the first right, privilege and option to purchase and/or lease to the mining claims or interest in mining claims of the lessors hereby provided.

All of the terms and conditions hereof shall bind and inure to the heirs, devisees, executors, administrators and assigns of the respective parties hereto.

Notwithstanding any of the provisions hereof, IT IS UNDERSTOOD AND AGREED That lessee shall have the right at any time by first giving the lessors thirty (30) days' notice of his election so to do, to surrender this lease and option agreement and to redeliver possession of the mining claims covered hereby to the lessors, and to be relieved of all obligations thereafter to be performed under the terms of this agreement, and such surrender by the lessee shall fully terminate this lease and relieve the lessee of all further obligations hereunder, excepting only the obligation of the lessee to pay the royalty of five percent (5%) herein reserved and due or to become due on any ores or minerals that may have been mined and removed from such mining claims prior to the actual surrender of such mining claims nor shall such surrender relieve either party from any obligation, debt, claim or demand actually incurred or accured to the other prior to the date of such surrender. Upon any such surrender by lessee, all payments which shall have been made to the lessors, either as royalty or as payment on the purchase price of the property covered hereby, shall be retained by the lessors and shall be considered as rent and royalty hereunder, and upon such surrender lessee shall have no further right or option to purchase the mining claims covered hereby.

All notices of any party to the other shall be addressed to them respectively as follows:

To the lessors at 518 W. Antiat Avenue, Kennewick, Washington: and,

To the lessee at Room 704, 452 Fifth Avenue, New York City 18, New York:

PROVIDED, HOWEVER, that any party hereto may notify the other by registered mail of any other or further address to which any such notice shall be addressed, and thereafter any such notice by any party to the other shall be also directed to such address.

IN WITNESS WHEREOF , the parties hereto have hereunto subscribed their names as of the day and year herein first above written.

/S/ F. W. Stevenson
F. W. Stevenson

/S/ Merle Stevenson
Merle Stevenson

LESSORS

/S/ Arnold Hoffman
Arnold Hoffman

LESSEE

STATE OF WASHINGTON)
) ss.
COUNTY OF BENTON)

On this 14th day of July in the year 1951, before me, the undersigned, a Notary Public in and for said State, personally appeared F. W. Stevenson and Merle Stevenson, husband and wife, known to me to be the persons whose names are subscribed to the within instrument, and acknowledge to me that they executed the same.

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

Charles L. Powell
Notary Public for Washington
Residing at Kennewick, Washington.

STATE OF NEW YORK)
) ss.
COUNTY OF NEW YORK)

On this 24th day of July, in the year 1951, before me, the undersigned, a Notary Public in and for said State, personally appeared Arnold Hoffman, known to me to be the person whose name is subscribed to the within instrument, and acknowledged to me that he executed the same.

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

/S/ Edward J. Ross
Notary Public for the State of New York
Residing at New York City, New York.

Edward J. Ross
Notary Public, State of New York
No. 31-8664600
Qualified in New York County
Certificate filed with
New York County Clerk
New York Register's Office
Term expires 3/30/52

SUPPLEMENTARY AGREEMENT TO LEASE AND OPTION AGREEMENT

Between: F. W. STEVENSON and
MERLE STEVENSON, husband and wife,
Address: 518 West Antiat Ave.
Kennewick, Wash.

LESSORS,

and

ARNOLD HOFFMAN,
Address: Room 704,
452 Fifth Ave.,
New York City, N.Y.,

LESSEE,

THIS SUPPLEMENTARY AGREEMENT made and entered into as of the 10th day of May, 1951, by and between F. W. STEVENSON and MERLE STEVENSON, husband and wife, the address of whom is 518 West Antiat Avenue, Kennewick, Washington, parties of the first part, hereinafter referred to as the lessors, and ARNOLD HOFFMAN, whose address is Room 704, 452 Fifth Avenue, New York City, New York, party of the second part, hereinafter referred to as the lessee,

W I T N E S S E T H:

WHEREAS, under date the 10th of May, 1951, the lessors made lease and option agreement to the lessee, covering certain unpatented lode mininc lasims, situate in Lemhi County, Idaho, and in said lease identified and described, and also covering those certain patented lode mining claims located and situate in Lemhi County, Idaho, identified and consisting as follows:

TOM JEFFERSON, TOM JEFFERSON NO. 2, LITTLE QUEEN, QUEEN and D. QUEEN lode mining claims known as the Little Queen Consolidated lode mining claims, platted and described in the office of the

United States Cadastral Engineer at
Boise, Idaho (now Land and Survey
Office of the Bureau of Land Management of the Department of Interior)
As Mineral Survey No. 2128;

And, WHEREAS, the parties hereto desire to make provision for abstract of title and marketable and unencumbered title to said patented lode mining claims;

NOW, THEREFORE, for and in consideration of the sum of Ten Dollars ($10.00) and other valuable consideration by the lessee to the lessors in hand paid, the receipt whereof is hereby acknowledged, and in consideration of the covenants and agreements herein contained on the part of the respective parties to be done and performed, each the lessors and lessee undertake and agree as follows:

The lessors agree to furnish, at their own expense, upon demand in writing therefor and to deliver to the lessee an abstract of title to said patented lode mining claims, which said abstract of title is continued to and certified as of a date subsequent to said written demand by a duly licensed abstractor. The lessee shall make his objections, if any, in respect to lessors' title to said patented mining claims within sixty (60) days from the delivery to him of such abstract of title. Upon receipt of such report on the title, lessors agree to remove the objections thereto, to the end that such title shall be marketable and free of encumbrance, excepting only encumbrances caused by the lessee.

The lessee agrees to reimburse the lessors the amount of all costs and expenditures of the lessors in removing the objections of the lessee to the said Tom Jefferson and Tom Jefferson

No. 2 patented lode mining claims up to, but not in excess of, the sum of $5,000.00 and such reimbursement of costs and expenditures to the lessors shall be in addition to the royalty and option price specified and provided in said lease and option agreement and the obligation of the lessee to reimburse the lessors shall not exceed the actual and necessary costs and expenditures of the lessors in rendering their title to said Tom Jefferson and Tom Jefferson No. 2 patented lode mining claims marketable and free of encumbrance, and in no event in excess of said aggregate sum of $5,000.00.

It is further understood and agreed that the lessors shall not be obligated to take any action or undertake any proceedings which shall create any liability upon the lessors in excess of costs and expenditures aggregating the said sum of $5,000.00 to remove objections of the lessee to the title to said Tom Jefferson and Tom Jefferson No. 2 lode mining claims.

It is further specifically understood and agreed that the lessee shall have the right and privilege, at any time, to withdraw or naive any objection he may make to the title to any of the patented lode mining claims hereinbefore described.

In the event the lessors shall be unable to remove the objections of the lessee to any said patented lode mining claim, or to make the title thereto marketable and free of encumbrances, or to remove the objections of the lessee to said Tom Jefferson or Tom Jefferson No. 2 lode mining claims at costs and expenditures not exceeding $5,000.00, then the lessee shall have the right and privilege of relinquishing any said mining claim to which title cannot be made marketable or free of

encumbrance from all of the terms and provisions of said lease and option agreement without reduction in the rate of royalty or total option price specified in said lease and option agreement.

IN WITNESS WHEREOF the said parties have hereunto subscribed their names as of the day and year herein first above written.

/S/ F. W. Stevenson
F. W. Stevenson

/S/ Merle Stevenson
Merle Stevenson

LESSORS

/S/ Arnold Hoffman
Arnold Hoffman

LESSEE

STATE OF WASHINGTON)
) ss
COUNTY OF BENTON)

On this 14th day of July, in the year 1951, before me, the undersigned, a Notary Public in and for said State, personally appeared F. W. Stevenson and Merle Stevenson, husband and wife, known to me to be the persons whose names are subscribed to the within instrument, and acknowledged to me that they executed the same.

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

/S/ Charles L. Powell
Notary Public for Washington
Residing at Kennewick, Washington

STATE OF NEW YORK)
) ss
COUNTY OF NEW YORK)

On this 24 day of July, in the year 1951, before me, the undersigned, a Notary Public in and for said State, personally appeared Arnold Hoffman, known to me to be person whose name is subscribed to the within instrument, and acknowledged to me that he executed the same.

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

/S/ Edward J. Ross
Notary Public for the State of New York
Residing at New York City, New York.

Edward J. Ross
Notary Public, State of New York
No. 31-8664600
Qualified in New York County
Certificates filed with
New York County Clerk
New York Register's Office
Term Expires March 30, 1952.

DMEA-2436

March 15, 1952

Mr. C. W. Wittendorf
Administrator
Defense Minerals Exploration Administration
U. S. Department of the Interior
Washington 25, D. C.

Att: Mr. George Selfridge
Domestic Cobalt Exploration
Docket #DMA 1336-X
Northfield Mines, Inc.

Dear Mr. Wittendorf:

We are submitting, herewith, Form M-103 with the pertenent data on our Blackbird District, Idaho cobalt property about which we talked February 28, 1952.

We shall be pleased to discuss the application and clarify any details not intirely clear when you have sufficient time to review it.

Very truly yours,

NORTHFIELD MINES, INC.

George W. Mitchell

George W. Mitchell
General Manager

GWM/m

Form MF-100
(May 1951)

U. DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS ADMINISTRATION

Form approved.
Budget Bureau No. 42-R1026.

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

NOT TO BE FILLED IN BY APPLICANT

Docket No. DMEA-2436

Date received 3-18-52

Northfield Mines, Inc.
Cobalt Exploration Syndicate
230 Park Avenue
New York, 17, N. Y.

Name and address of applicant

Date March 15, 1952

INSTRUCTIONS

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

GENERAL TECHNICAL DATA

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

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

   Indicate whether mine is flooded or not. Describe any pumping problems. Give size or productive capacity.
3. For each operation listed above supply the following:
   (*a*) Distance and direction from nearest town and shipping point.
   (*b*) Mining district.
   (*c*) Township, Section, Range.
   (*d*) County, State.

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
MAR 18 1952

4. (*a*) State whether or not property is now in operation, and if in operation, by whom operated.
   (*b*) Are you operating this property as:
   - ☐ Owner.
   - ☐ Lessee.
   - ☐ Contractor.
5. Number of years in production _____

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

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

Name and Address (a)	Official Title (If officer is also director indicate by "D") (b)	Total of Annual Salary, Commissions, Bonuses, Etc., Received From Applicant and Affiliates During Last Fiscal Year (c)	Estimated Net Worth Outside of Interest in Applicant (d)	Number of Shares Held in Applicant Corporation		Life Insurance Carried for Benefit of Applicant	
				Common (e)	Preferred (f)	Amount (g)	Net Cash Surrender Value After Loans (h)
	Total		x x x x x			x x x x x	x x x x x

If more lines are needed continue on separate sheet.

9. Capital Stock Issues:

For Corporate Applicants

Item	Authorized (a)	Outstanding (b)	Par Value (c)	Number of Shares Outstanding (d)	Dividend Rate Last Paid* (e)
Common stock	$	$	$		
Preferred stock	$	$	$		

*Indicate period covered.

10. Production:

Item	Kind of Product (a)	1948 Total (b)	1949 Total (c)	1950 Total (d)	Present Average Monthly (e)
1. Quantity of product mined or quarried (Short, long, metric tons; barrels; pounds; etc.)					
2. Quantity of product processed (specify unit of measure and type of process)					
3. Quantity and grade of product sold or shipped (specify units of measure)					

11. Do you contemplate a change in the present average monthly rate of production? If so, state estimated maximum monthly production and basis of change.

12. Ore or Mineral Reserves:

(*a*) Describe the ore or mineral deposit briefly. Accompany the application by any available report on the geology and ore reserves.

Northfield Mines, Inc.
230 Park Avenue
New York 17, N. Y.

ITEM 1

(a) There is no production

Exploration of the property for cobalt and copper has been started and will continue during 1952.

(b) There are no byproducts.

ITEM 2

The Northfield Mines, Inc. properties, sometimes designated as the Stevenson property or The Little Deer Creek Group.

The exploratory work will include additional trenching as well as underground work and diamond drilling.

The previous work is shown on maps of Exhibits C & C1 of M.F.-103.

(a) Not applicable

(b) Not applicable

(c) Not applicable

(d) 4000 feet of surface trenching. These cuts are approximately 5' deep by 11' wide and expose surface geology.

ITEM 3

(a) The property is about 40 miles by road west of Salmon, Idaho. The shipping points for the district are Mackay, Idaho, 106 miles distant, and Darby, Montana, 114 miles distant; the latter being the only feasible winter route.

(b) The district is known as the Blackbird Mining District.

(c) The property is in Township 21N, Sections 27, 28, & 29, Range 18 E.

(d) The property is in Lemhi County, Idaho.

Northfield Mines, Inc/
230 Park Avenue
New York 17, N. Y.

ITEM 4

(a) The property is not in operation.

(b) Northfield Mines, Inc. has the properties under purchase option. (See Exhibit B of MF-103 for Option Agreement)

ITEM 5

The property has never been in production. Exploratory work was carried on during the summer of 1951.

It is estimated that 2 years will be required to bring the property into production.

Northfield Mines, Inc.
230 Park Avenue
New York 17, N. Y.

ITEM 6

(a) The applicant is an exploration and mining concern which has participated in the exploration and operation of mines and metallurgical plants in the United States and Latin American countries. The company is associated with Ventures Limited, a large well known Canadian mining concern interested in a number of large mining properties such as:-

Falconbeidge Nickel Mines, Ltd. - Canada

New Calumet Mines, Ltd. - Canada

Giant Yellowknife Gold Mines, Ltd. - Canada

La Luz Mines, Ltd. (Gold) -Nicaragua,

and many others. Ventures Ltd. has been in the mining and metallurgical business for more than 30 years.

(b) The General Manager

George W. Mitchell - Degree Engineer of Mines, Colorado School of Mines - 1923; United Verde Copper Co., Jerome, Arizona -6 years; Lake Shore Mines, Ltd., Kirkland Lake, Ontario - 1½ years; International Nickel Co., Sudbury, Ontario - 3½ years; Falconbridge Nickel Mines, Ltd., Sudbury, Ontario - 1½ years; Matachewan Consolidated Mines, Ltd., Matachewan, Ontario - 6 years; Panaminas, Inc. Bishop, Calif. - 1½ years; Eureka Corporation Ltd., Eureka, Nevada - 7 years.

Northfield Mines, Inc.
230 Park Avenue
New York 17, N. Y.

ITEM 7

(a) The previous exploration is fully explained in MF-103 Item 2(b). Operations were suspended in the fall of 1951 because of winter weather conditions.

(b) The Calera Mine of The Howe Sound Mining Company is 1500 feet distant, adjoining the Queen and Woodtick claims of Northfield Mines, Inc. property. The Calera Mine is in production having a mill capacity of 1000 tons daily. See Report of Investigations of U. S. Bureau of Mines entitled "Blackbird Cobalt Deposits, Lemhi County, Idaho" for more detailed history of the Calera Mine.

(c) See Exhibits C & C#1 of MF-103 for recommended exploration program.

ITEM 8

Officers and directors are:

NAME	ADDRESS	CAPACITY
Thayer Lindsley	230 Park Ave. N.Y. 17, N.Y.	Pres. & Director
Herman Riddell	60 Broadway, New York	Vice-President
Paul W. Zeckhausen	230 Park Ave. N.Y.17,N.Y.	Treas., Sec'ty & Director
Joseph Koss	230 Park Ave.N.Y.17, N. Y.	Ass't Treasurer Ass't Secretary & Director

ITEM 8 continued

The five largest stockholders are:

NAME	ADDRESS
C. A. England	30 Broad St., New York, N.Y.
H. A. Whitten	30 Broad St., New York, N. Y.
David L. Poole	87 Bis Avenue de la Wagran Paris 17, France.
Mrs. Molly Lenei	Roseburg, Oregon
T. Lindsley, Trustee	c/o Canadian Bank of Commerce Hanover Street, 2nd Exchange Place New York, N. Y.

ITEM 9

Capital Stock Issues:

Capital stock authorized and issued 500,000 shares of $2.00 par value.

ITEM 10

Not applicable

ITEM 11

Not applicable

ITEM 12

(a) See Item 2(b) MF-103

See Exhibits C & C#1 for geological maps of the area.

(b) Not applicable.

Northfield Mines, Inc.
230 Park Avenue
New York 17, N. Y.

ITEM 13

Salmon, Idaho is the nearest town and supply point and is 40 miles distant by the direct summer route. The winter road, via Shoup and North Fork is 85 miles long. Both roads are good gravel roads. A mountain road leads from the Calera Mine to the Northfield property.

ITEM 14

See Item 2(b) of MF-103.

ITEM 15

There are at present no power lines to the property but power will be readily available when required.

ITEM 16

See Item 8 of MF-103

ITEM 17

See Item 5 of MF-103

ITEM 18

Further information is contained in MF-103.

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

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

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

TOTAL ORE OR MINERAL RESERVES

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

(*c*) If placer:

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

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

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

(4) Describe bedrock, giving type (granite, sandstone, shale, etc.) and state whether it is hard or soft, smooth, uneven or rough.

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

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

13. Access Roads:

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

14. Water Supply:

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

15. Power:

State amount of power used, rate per hour, and source thereof.

16. Labor:

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

17. Equipment and Facilities:

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

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

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.

Northfield Mines, Inc.
(Name of company)

By [signature]
(Signature of authorized official)

March 15, 1952
(Date)

General Manager
(Title)

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

U. S. GOVERNMENT PRINTING OFFICE 16—63792-1

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION
WASHINGTON 25, D. C.
~~XXXXXXXXXXXXXXXXXX~~
So. 157 Howard Street
Spokane 4, Washington

Department of the Interior
Defense Minerals Administration
RECEIVED
AUG 31 1953

August 27, 1953

Air Mail

Mr. George W. Mitchell
Northfield Mines, Inc.
Eureka, Nevada

Re: Docket No. DMEA-2436
Lemhi County, Idaho
Contract Idm-2334

Dear Mr. Mitchell:

Your letter of August 17 has been received and forwarded to our Washington, D. C., office for counsel as to whether DMEA would consider your claim to the ownership of the David 18 claim as acceptable. Following receipt of this information they have advised that Amendment No. 7, which increases the subject contract to $233,150.00, may be executed if:

1. Title to the contested block of ground is cleared or right of way for crosscutting is obtained from the Calera Mining Company.

2. Guarantee is obtained from Ventures Limited or bond furnished by the Operator to protect the Government against damages that might arise from a defective title of the David 18 claim.

Concerning the latter alternative, no amount of bond was specified; however, as this is an amendment increasing the original contract and not a new contract, we would assume the bond should cover the Government's participation or 70 percent of the total amount.

We cannot accept your statement as proof that location work on the Calera claim was done on your Merle 75 claim and therefore that the Calera claim is invalid. Please understand we do not know where the location work was done and we do not question your statement that it was on the Merle 75 claim; however, we have reason to believe the Calera people are equally sure that their location work was valid and therefore it would seem that either you and the Calera company must reach an agreement or settle the issue by court action, with which action the Government does not care to be involved.

We have checked at the Lemhi County Courthouse and find that Calera has filed their proof of labor for the current year on the subject claim. We have also been informed that they have done their assessment work for this year, all of which leads us to believe that they consider their claim as valid.

We are sympathetic with your position in this matter but we must take the stand that we cannot recommend expenditure of public funds in ground over which there is any possibility of disagreement without having some assurrance that the Government will have protection against damages that might ensue.

Upon receipt of your choice of the aforementioned protective measures, we will immediately send the amendment to you for signature.

By DMEA Field Team, Region II

N. E. Volin, Acting Exec. Officer
(U. S. Bureau of Mines)

Thor H. Kiilsgaard, Acting Member
(U. S. Geological Survey)

cc: USBM (2)
DMEA (2)
Nickelson

FILE COPY
SURNAME:

140

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

Chapman
Oliver
Martin

MSin RR August 26, 1953

Memorandum

To: The Administrator
Through: Mr. W. S. Martin

From: Chief Counsel

Subject: Northfield Mines, Inc., Docket No. DMEA-2436X (Cobalt-Copper), Amendment No. 7

The subject proposed amendment increases the scope and cost of the work very extensively. It has been discovered that title to the land covered by claim designated as "David 18," through which a crosscut is to be driven, is in dispute. The Calera Company asserts that they have the title to this block of ground, which they assert is covered by their claim designated as "Chelan No. 77."

Consequently, although the operator is willing to make the representation and undertaking required by the contract that it is the owner, it is clear from the record that the title to this claim is in question. Under these circumstances, it is my opinion that the Government should not accept the mere representation in the exploration contract form, but should require in addition a suitable undertaking, bond, or guaranty to protect the Government against any damages on account of any possible defect in the title to this claim.

With the foregoing in view, I have prepared for your signature a teletype to the Field Team Acting Executive Officer, Region II, instructing him in this respect.

Albert E Kane
for J. L. Hofflund
Chief Counsel

JLHofflund:AEK:ep

Copy to: Mails & Files
Adm. R. File
Mr. Hofflund
Mr. Kane
Chron.

Mr. Martin

HHR 6-28-53

FILE COPY
SURNAME:

Chapman
AEKane
Pubrin

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

140

DMEA

AEKane

2920 4628

14X3923.970 Working Fund, Interior, DMEA
August 26, 1953

Thor H. Kiilsgaard, Acting Executive Officer, DMEA Field Team, Region II, South 157 Howard Street, Spokane, Washington

Reurlet August 14, G. W. Mitchell, Northfield Mines, Docket DMEA-2436, Contract Idm-E334, Amendment No. 7 may be executed (1) if title cleared or right of way for crosscut obtained from Calera, or (2) guaranty obtained from Ventures Limited or bond furnished by Operator to protect Government against damages on account of defective title to claim "David 18."

C. O. Mittendorf

C. O. Mittendorf, Administrator

AEKane:ep 8-26-53

Copy to: Mails & Files
Adm. Reading File
Mr. H. W. Davis, B/M, Rm. 3519
Mr. Phillip Guild, USGS, Rm. 4234 GSA
Confirmation to Reg. II

Mr. Martin
Mr. Hofflund
Mr. Kane
Chron.
Pending

R.C.G. 8-26-53

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION
~~WASHINGTON 25, D.C.~~
So. 157 Howard Street
Spokane 4, Washington

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
AUG 27 1953

August 25, 1953

Air Mail

Mr. George C. Selfridge, Chairman
Operating Committee, DMEA
Department of the Interior
Washington 25, D. C.

Re: Docket No. DMEA-2436 (cobalt-copper)
Northfield Mines, Inc.
Lemhi County, Idaho
Contract No. Idm-E334

Dear Mr. Selfridge:

This letter supplements a telephone conversation between Mr. C. O. Mittendorf and Mr. T. H. Kiilsgaard held on August 25, 1953. During this conversation we were requested to submit copies of Mr. George Mitchell's letter of August 17 discussing a claim title problem on their Northfield property. Four copies of Mr. Mitchell's letter are attached.

Mr. Mitchell's letter should be referred to a letter from the Executive Officer dated August 14 to which was attached a map showing the property in dispute. Perusal of this map will show that Mr. Mitchell may be correct when he says the location work on the Calera claim was done on the Merle No. 5 claim owned by Northfield Mines, Inc. If such is the case, the Calera claim could be invalid. We have no way at this office of knowing where the location work was done nor have we checked the claim boundary as shown on the submitted map.

We would appreciate immediate instructions as to whether we should accept Mr. Mitchell's statement on the ownership of the property in question and mail to him the copies of the amended contract, or whether Mr. Mitchell should be asked to provide further information.

Sincerely yours,

Thor H. Kiilsgaard

Thor H. Kiilsgaard
For: A. E. Weissenborn
Executive Officer, DMEA
Field Team, Region II

Enclosure
cc: USBM (2)
Nickelson

Northfield Mines, Inc.

Cobalt, Idaho

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
AUG 27 1953

Eureka, Nevada
August 17, 1953

Mr. Thor H. Kiilsgaard
Acting Executive Officer
Defense Minerals Exploration Administration
South 157 Howard Street
Spokane, Washington

Docket DMEA 2436
Contract Idm E-334

Dear Mr. Kiilsgaard:

Thank you for your letter of August 14 regarding the alleged dispute about the claim at our Stevenson property near Cobalt, Idaho.

I do not recall whether or not the Calera claim was recorded before our David #18 but I know the location work on the Calera claim was sone on our Merle #5 and thus the claim was invalid. In addition to this no assessment work was done on the Calera claim this year and thus, if they had any claim to it, they have none now. We have, of course, performed the assessment work on our Merle #5 and David #18 as well as on all the others. We have included all of the claims in our proof of work this year.

There has never been a question in my mind regarding the ownership of the claim. It is, without question, the property of Northfield Mines, Inc.

We are glad to hear that the amendment to our contract is ready for signature. Please send it to me in Eureka for signature.

Sincerely yours,

NORTHFIELD MINES, INC.

George W. Mitchell

GWM/m

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION
WASHINGTON 25, D.C.
So. 157 Howard Street
Spokane 4, Washington

DEPARTMENT OF
Defense Minerals
RECEIVED
AUG 23 1953

August 20, 1953

Mr. A. J. O'Connell, Accountant
Northfield Mines, Inc.
Eureka, Nevada

Re: Docket DMEA 2436 (Cobalt - Copper)
Lemhi County, Idaho
Contract Idm-2534

Dear Mr. O'Connell:

Reference is made to your letter of July 28, 1953 in which you request information on your April MF 104 and the restated amount of $1,472.80, as proposed in a letter to Robert M. Hull, Auditor, dated March 21, 1953.

Our Certifying Officer has checked with Mr. Hull and concluded that the following restated items will be allowed:

Nov. 1952 report	Mine rail	$ 25.94
Nov. 1952 report	E. C. Bishop (snow removal)	175.00
Dec. 1952 report	W. E. Corrigan (snow removal)	496.77
Jan. 1952 report	W. E. Corrigan (gas fan)	416.00
Jan. 1952 report	W. E. Corrigan (miner's lamps)	174.00
		$1,287.71

Concerning your MF 104 for April 1953, in the amount of $15,395.69, we are informed the following deletions totaling $4,212.14 will be made:

Item II, Labor, $1,950.00 for supervisory charges of J. C. Salyer, W. A. Faroni, and M. L. Mann. They have exceeded the allowable maximum for supervision.

Item III, Cookhouse furnishings will be increased by $13.05 and Item III, Pipe and Fittings, decreased by $13.05 due to erroneous distribution. This charge is on an invoice from Northwest Butane Gas.

Item III, Drill steel, $81.63 from Gwatney Equipment invoice for trolley and I-beams not allowable under terms of the contract.

Item III, Pipe and Fittings, $634.02 for 500 ft. of 4" pipe billed by Spencer Supply Co. Our engineer states this pipe not applicable to this phase of the work.

Item III, Tools, $130.08. $2.45 was deleted from Challis Transfer Co. for transportation on battery charger not allowable. $127.63 was deleted from Eureka Corp. invoices for unauthorized purchases covering battery charge instruments.

Item III, Engineer and Geology Supplies, $5.15, for labels, envelopes, and stamps purchased from Pembroke Co. These are overhead items not allowable.

Item IV, Rental, was deleted in its entirety as they have exceeded the maximum allowable of $8,481.90.

Item VII, Auto Repair, $12.50, for trailer rent payed by Milo Hunts. This item is not authorized.

Item VII, Payroll Taxes, $834.00, which is adjustment due to deletion of $1,950.00 from payroll.

Item VII, Boarding house lodg, $8.59, which was for candy, Canada Dry, and magazines charged to the contract.

We have been instructed by our Washington, D. C. office to withhold payment in the amount of $2,102.67, which amount is reported due the Government by Northfield Mines, Inc., for overpayment on Contract IAm-1383, a tungsten contract in Inyo County, California. Accordingly, we are withholding this amount and we advise you to contact our Washington, D. C. office for further clarification on this matter if you have questions concerning it.

From the foregoing deletions we calculate the amount owed to you as:

70 percent of restated items totaling $1,287.75-	$ 901.43
70 percent of April 1953 MP 104 of $11,383.55-	7,968.49
	$8,869.92
Less amount owed Government on Contract IAm-1383	$2,102.67
	$6,767.25 *

We are instructed to withhold up to 10 percent of the final payment to the Operator on work completed to protect the Government equity in jointly-owned equipment and supplies and to insure the closing out of the contract. For these reasons we are withholding payment on the $6,767.25

* Subject to change pending completion of audit by Mr. Hull.

In this respect, we wish to call your attention to the amendment extending Contract Idm-E334. This amendment is currently at this office and needs only clarification of certain property rights and signature of the Operator to become effective. As soon as the amendment is signed and work has started we shall release the remainder of the amount due to you; otherwise, we will need to effectively complete the present contract by disposing of equipment and supplies, and completing the final report before these funds will be payable.

By Field Team, Region II

A. E. Weissenborn, Executive Officer
(U. S. Geological Survey)

Thomas R. Howard, Acting Member
(U. S. Bureau of Mines)

Distribution:
IDMEA (2)
USGM (2)
Auditor Hull
Certifying Officer Hindman
Cont. Adm. & Aud. Div., Wash. D. C.

Notes on telephone conversation between Mittendorf and Kiilsgaard

Kiilsgaard reports that Mitchell has stated following in reply to Field Team's letter of August 14, 1953, to Mitchell.

The location work for the Calera claim in question, Chelan #77, was done on Northfield's Merle No. 5 claim.

While Calera filed in September, Northfield had done prior location work.

Northfield filed in November.

No question of ownership according to Mitchell.

Calera has not done their assessment work according to Mitchell.

Field Team reports that Calera has on file recording of proof of labor.

Field Team also reports that Calera intends to keep their interest.

Question? What do we do next. Field Team is holding amendment #7 awaiting clarification.

RECEIVED
AUG 25 1953
GENERAL COUNSEL
DEFENSE MINERALS
ADMINISTRATION

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

xxxxxxxxxxxxxxxxxx
So. 157 Howard Street
Spokane 4, Washington

August 14, 1953

Mr. George W. Mitchell
Northfield Mines, Inc.
Eureka, Nevada

Re: Docket No. DMEA-2436 (cobalt-copper)
Northfield Mines, Inc.
Lemhi County, Idaho
Contract No. Idm-E334

Dear Mr. Mitchell:

We have received from Washington, D. C., an amendment to your Lemhi County contract. This amendment extends the total amount of contract funds to a total of $233,150.50. The amendment is drawn along the lines discussed during your recent visit to this office and will become effective once you have signed the amendment.

In examining the outline of the work to be done, we note that the crosscut, to be driven to the Merle #3 zone from the 702 drift extends across a block of ground, the title of which we are uncertain of. This block of ground is shown in the copy of the attached map. We have reason to believe that one of the Calera claims, recorded in the Lemhi County Court House on September 6, 1951, covers this block of ground. We note that your David #18 claim also covers this block of ground but this claim was recorded on November 14, 1951, and therefore its validity is subject to question. Inasmuch as we are not sure of the title of this block, we hesitate to recommend Government participation in an exploration program crossing the block. There is no question in our minds as to the justification of the work in the Merle #3 and #5 claims; however, we believe that as this block of ground will also benefit from the work it should be adequately covered in the contract.

It is suggested that you immediately check on the title of this block in question. It may be that we have been misinformed and that you hold clear title to the ground, in which case we will be most willing to listen to your explanation and to forward the amendment to you for signature. If, on the other hand, you should find that Calera has title to this block of ground, it will be necessary for you to obtain an easement from that company for the crosscut that will extend to the Merle #3 claim.

Your immediate attention to this will be appreciated.

Sincerely yours,

Thor H. Kiilsgaard, Acting Exec. Officer
DMEA Field Team, Region II

cc: DMEA (2)
USBM (2)
Nickelson
Enclosure

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

OFFICIAL BUSINESS

FILE COPY
400 SURNAME: 215

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

GRC
Martin
Selfridge
FEJohnson

AUG 7 1953

Mr. A. E. Weissenborn, Executive Officer
DMEA Field Team, Region II
South 157 Howard Street
Spokane 4, Washington

Re: Docket No. DMEA 2436 - Cobalt-Copper
Northfield Mines, Inc.
Lemhi County, Idaho
Contract Idm-E334

Dear Mr. Weissenborn:

In Amendment No. 7 of the subject contract we have indicated extra payments when heavy timbering is necessary, but have not defined "heavy timbering" because we wished to leave that detail to the Field Team's discretion. For your guidance we have in mind conditions that would require sets at 2½ feet centers, adjoining sets, lining sets, stulls or other significant additional timbering to give extra support to the normal timbering at 5 foot centers.

Sincerely yours,

SIGNED

George C. Selfridge
Special Assistant to the
Administrator

TLChapman:foc
8-6-53
cc: Docket
Code 400
Adm. Reading File
Operating Comm.
FT. Reg. II
H. W. Davis, USBM
T. P. Thayer, USGS

R.C.A.
8-7-53

FILE COPY
SURNAME: 13

RLC
Martin
Olson
Bryson
Selfridge

UNITED STATES
DEPARTMENT OF THE INTERIOR

DEFENSE MINERALS ADMINISTRATION
WASHINGTON 25, D. C.

AUG 7 1953

Air Mail

Mr. A. L. Weissenborn, Executive Officer
DMEA Field Team, Region II
South 157 Howard Street
Spokane 4, Washington

Re: Docket No. DMEA 2436, Cobalt-Copper
Northfield Mines, Inc.
Lemhi County, Idaho
Contract No. Idm-E334

Dear Mr. Weissenborn:

We are enclosing the original and five copies of Amendment No. 7 to the subject contract, signed by the Administrator for the Government, together with Exhibit "B" (4 pages) and one map.

If the terms and conditions of this amendment are satisfactory to you and the Operator, all copies should be signed and the usual distribution made.

If any part of this amendment does not have either your approval or that of the Operator and cannot be altered within your delegated authority, the original and all copies of the amendment are to be returned to this office, together with the proposed changes for consideration.

Please note that the following major changes have been made in the amendment as originally outlined:

(1) The drifting and crosscutting has been decreased 300 feet.
(2) An additional charge is being added for heavy timbering; the price for normal timbering has been decreased; and the price for spiling increased.
(3) Diamond drilling has been decreased 800 feet.
(4) The estimated cost of the new work allowed has been decreased from $150,675.00 to $130,250.00.

Sincerely yours,
George C. Selfridge
Chairman, Operating Committee

Enclosures

APPROVED:

J. H. Hedges
Member, Bureau of Mines

A. R. Kinkel, Jr.
Member, Geological Survey

TLChapman/ls 7/30/53
cc; DOCKET
FT, REG. II
ADM. READ. FILE
CODE 400
OPER. COMMITTEE
H. W. DAVIS, USBM
T. P. THAYER, USGS

R.C.H. 8-7-53

MF-500 a DO NOT DETACH

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS ADMINISTRATION

REFERENCE SLIP

DATE 7/30/53

REFERRED TO:

1. ~~Mr. Chambers Code 800~~ Mr. Johnson
2. ~~Legal Div. - Rm. 4627~~
3. ~~Operating Committee~~
4. ~~Mr. Mittendorf~~ ~~[illegible]~~
Mail Room - 4539

FOR:

	Action		Recommendation
	Approval		Record
	Comment		of
	Conference		Referring
	Consideration		to
	Filing		Reply for signa-
	Instructions		ture of
	Investigation		Rewriting
X	Initials	X	Signature (Amend)
X	Mailing		Suggestions
	Previous correspondence		Your information

RECEIVED
AUG - 3 1953
GENERAL COUNSEL
DEFENSE MINERALS ADMINISTRATION

REMARKS: Operating Committee believed the term "Heavy Timbering" should be defined in the contract.

Check (X) before the items needing attention.

W. A. Mittendorf
Initials of sender.

GPO 16—63815-1

COPY

Defense Minerals Exploration Administration
C. O. Mittendorf
5371 4624

14X3923, Working Fund, Interior, DMEA
August 4, 1953

Mr. A. E. Weissenborn, Executive Officer, DMEA Field Team, Region II,
South 157 Howard Street, Spokane 4, Washington

Our phone conversation today.

Assignment of Amador contract, docket DMEA 1175, approved and should come before Operating Committee tomorrow.

Amended Northfield contract 2436 ~~on~~ unit basis should also come before Committee tomorrow.

Regarding Taylor-Knapp case, our intention to case same as amended contract approving new work and incorporating money already spent in package deal.

Have reviewed Roger Pierce contract 574. We will draft amendment here changing item one, rehabilitation, on cost basis with maximum of $15,000 to the unit basis recommended by you listing subitems a, b, and c totaling $12,445. Amendment being prepared. Operator may sign contract and proceed with work at his own risk, however, with understanding that amendment will be submitted in accordance with above. Did you point out to Pierce the firm commitment aspect of short form contract?

Have discussed Bradley contract 2453 with Legal. Since shift of drilling from C.D.H. area to airport area will entail addition of new claims not included in map exhibit of contract, our opinion amendment must be drafted here. Upon receipt your memo. justifying shift with map and description airport area claims we will immediately draft amendment. You may advise operator accordingly.

SIGNED

C. O. MITTENDORF, ADMINISTRATOR

COMittendorf/fw

cc: CONFIRMATION COPY
Admr Reading File
Mails & Files
Base Metals Div.
Rare Metals Div.
Iron and Ferro-Alloys Div.

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

August 3, 1953

Memorandum

To: Mr. Frank E. Johnson
Deputy Administrator

From: Jay L. Chambers, Chief
Contract Administration and Audit Division

Subject: Docket No. DMEA-2436, Contract No. Idm-E334
Northfield Mines, Inc. (Cobalt-Copper)

I would suggest that all the items under "agreed unit cost" be changed to estimated cost with a maximum per unit established, for example, 400 ft. of drifting and crosscutting at $32.50/ft.*, for the reason that this is a long period contract. It would not be necessary to make estimates of the component parts of the unit, in other words, the contract would be similar to the short form contract with the exception that a drastic reduction of costs over a period would be participated in by the Government. On first reading the contract it sounds like a very low price, but all of the component parts of the contract average over $43.00/ft. for drifting and crosscutting.

Discussed with Martin and Chambers - Amendment extends time for 30 months, of which 14 months have gone by. Thus, only 16 months remain in which to complete contract.

FEJ.

Copies from Engineering and
Mining Journal
August 1953

Idaho - 2436

QUEBEC METALLURGICAL INDUSTRIES LTD., subsidiary Ventures, Ltd., is reported to be heavily interested in cobalt exploration and development in the Blackbird district of Lemhi County. Under development is the Stevenson property which adjoins Calera Mining Co.'s cobalt-copper- operation on the east. Plans call for treatment of concentrates from the property at the new smelting plant of Cobalt, Chemicals Ltd., near Cobalt, Ontario. Nevada interests are developing another cobalt prospect west of the Blackbird mine.

FILE COPY
SURNAME:

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

Martin

Chief Counsel, DMEA July 23, 1953

Iron and Ferro-Alloys Division

Review and preparation of Amendment No. 7 to Exploration Project Contract
Docket No. DMEA 2436, Cobalt-Copper
Northfield Mines, Inc.
Lemhi County, Idaho
Contract No. Idm-E334

Transmitted herewith is the rough draft of a proposed Amendment No. 7 to Contract No. Idm-E334 for your use in preparing the amendment in final form.

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

Attachment

LScott/ 7/23/53

Copy to: Docket
Code 400

DRAFT

400

AMENDMENT NO. 7
To
EXPLORATION PROJECT CONTRACT
NORTHFIELD MINES, INC.
DOCKET NO. DMEA 2436

EXHIBIT "A" AMENDED

Description of the Work

The objective of this project is exploration for cobalt and copper, and the work is indicated on the attached maps entitled "Northfield Mines, Inc. Horiz. Projection 7000 Level." The work is to be performed in three stages, and is to be completed prior to July 1, 1955.

Stage I

The work under Stage I of the amendment shall consist of the following:

Extend cross-cut No. 7000 to intersect Merle No. 3 vein structure	900 feet
Extend drift No. 701 on Merle No. 5 vein structure	400 "
Drive 5 short X-cuts into footwall at 75' intervals	150 "
Drive No. 704 drift on Merle No. 3 vein	400 "
Drive No. 705 drift on Merle No. 3 vein	400 "
Total Stage I	2250 feet

Stage II

The work under Stage II of the amendment shall consist of the following, but each phase may be limited in extent by being subject to prior written approval by the Field Team, Region IV,

Extend cross-cut No. 7000 to Queen vein	200 feet
Drive drift No. 709	150 "
Drive drift No. 707	250 "
Drive drift No. 705	300 "

Stage II Continued

Drive drift No. 704	300 feet
Drive drift No. 703	200 "
Drive drift No. 701 with short x-cuts into footwall at 75' intervals	250 "
Total Stage II	1650 feet

By written consent of the Field Team, Region IV, 200 feet of raises may be substituted for like amount of drifting under this Stage.

Stage III

The work under Stage III of the amendment shall consist of the following, but each phase may be limited in extent by being subject to prior written approval by the Field Team, Region IV.

Extend drift No. 701	200 feet
" " " 703	200 "
" " " 704	200 "
" " " 705	200 "
" " " 707	150 "
" " " 709	150 "
Total Stage III	1100 feet

The drifts and crosscuts shall be not less than 4 feet by 6 feet in the clear and timbered where necessary.

Sampling and analysis shall be carried on concurrently with the work. Sampling procedure is to be carried out in a manner approved by the Government representative. Each sample will be divided into not less than two equal parts, one to be forwarded to the Field Team and the other retained by the Operator.

All work in each stage may be carried on concurrently.

Estimated Costs of Project
Agreed Unit Costs

Stage I

2250 feet of drifting and crosscutting at $40.00 per foot including all costs except timbering and assaying	$90,000.00

Stage II

1650 feet of drifting, crosscutting and/or raising at $40.00 per foot including all costs except timbering and assaying	66,000.00

Stage III

1100 feet of drifting and crosscutting at $40.00 per foot including allcosts except timbering and assaying	44,000.00
1000 feet of timbering where necessary at $5.00 per foot	5,000.00
Total Agreed Unit Costs	$205,000.00

The Government will contribute to the costs of the drifting, crosscutting and for raising and timbering in heavy ground on the basis of the above agreed unit costs as they accrue for the units of work actually performed, in lieu of actual costs. These unit costs include all costs incident to completing the work except assaying. Work to the costs of which the Government will contribute on the basis of agreed unit costs may be performed by independent contractor without reference to the provisions relating to independent contracts in Articles 4(a) and (b) and 6(a) (1) of the contract form.

Actual Costs

Miscellaneous	
Analytical Work	$2,000.00
Total estimated cost of project	$207,000.00
Government participation 70%	144,900.00

ANNEX III

The following provisions are in lieu of all of paragraph (a) Article 9 which precedes the colon:

Note to Legal Division

If usual form used suggest change of period to fifteen (15) years to agree with amended contract

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

So. 157 Howard Street
Spokane 4, Washington

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
JUL 10 1953

July 9, 1953

Mr. George C. Selfridge, Chairman
Operating Committee, DMEA
Department of the Interior
Washington 25, D. C.

WSM

Re: Docket No. DMEA 2436 (cobalt-copper)
Northfield Mines, Inc.
Stevenson claims
Lemhi County, Idaho
Contract Idm-E334

Dear Mr. Selfridge:

On the 29th of June a conference was held in Spokane with George Mitchell and Jack Brozo of Northfield Mines, Inc. and Howard, Nickelson, Johnson, and Weissenborn representing the Field Team, concerning the proposed addition to the Northfield contract for the exploration of the Stevenson cobalt-copper claims in Lemhi County, Idaho.

We discussed with Mr. Mitchell the plan of exploration which was described in a recent Field Team memorandum to you. Mr. Mitchell felt that more work should be done than was provided for in this plan but appeared to be willing to accept our proposal. He apparently would still like to do some surface drilling on the Merle 5 zone, but we are convinced that this work would not yield information sufficiently valuable to be worth the expense. Mr. Mitchell also, with some reservations, seemed willing to accept the unit prices which we had discussed with you. He felt that he would be able to operate within these unit costs for most of the work, but he did feel that he should be allowed more in exceptionally bad ground. Without making any commitments, we told him that we doubted exceedingly if costs higher than the ones we were discussing could be approved. However, Mr. Mitchell did mention one point which we think is worthy of favorable consideration. He states that part of his cost is the result of the expense of maintenance and repair of the drifts and crosscuts in bad ground. He believes that this cost can be made less than it is at present, but he feels that some provision should be made for it. We are in agreement that since no other work but exploration is going on, the cost of maintaining and repairing the drift timbers and keeping the drifts open and in good condition is a valid and real exploration expense. This cannot be

taken account of in setting the unit costs because there is no feasible way of foreseeing the type of ground which we are going to encounter or how it will stand. We suggest that in addition to the unit cost of driving the drifts and crosscuts that a sum of approximately $5,000 be set up to be used with the approval of the Field Team for the repair and maintenance of the drifts and for other unforeseen contingencies back from the face.

On further considering the unit costs which we had previously proposed, we think perhaps that a distinction might be made between ground which requires little timbering and ground which requires heavy timbering. We would, therefore, like to revise our proposed unit costs as follows:

$32.50 for an untimbered drift or crosscut; an additional $5.00, or a total of $37.50, for timbering where the sets are placed at 5-foot centers or greater. An allowance of $11.00, or a total of $43.50, where the sets are placed on less than 5' centers, and an additional allowance of $6.50, or a total of $50.00, where spiling is necessary.

As already stated, we have made no commitments to Mr. Mitchell and nothing that we have said would bind you in any way in working out the final contract. We do feel, however, that costs of this approximate order of magnitude are about as fair as can be worked out and that Mr. Mitchell would be willing to accept them.

By Field Team, Region II

A. E. Weissenborn

A. E. Weissenborn, Exec. Officer
(U. S. Geological Survey)

Thomas E Howard

Thomas E. Howard, Acting Member
(U. S. Bureau of Mines)

cc: USBM (2)
Nickelson

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION
~~WASHINGTON 25, D. C.~~
No. 197 Howard Street
Spokane 4, Washington

pc

DEPARTMENT OF THE INTERIOR
Mail & Records Administration
RECEIVED
JUL 13 1953

July 7, 1953

DMEA-2436

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

Dear Mr. Miller:

In answer to your letter of July 3, I have instructed Mr. Eldman, our Certifying Officer, to withhold the amount of $2,102.67 from the sum due the Northfield Mines, Inc., on their contract Idm-8394 in this area.

Will you please advise me at once if the bill for collection of the overpayment mailed from your office to the operator on April 9, 1953, has been paid, or if the operator has indicated to you his intention of honoring this bill for collection.

Sincerely yours

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

cc: DMEA (2)
USBM (2)
Hindman
Hull

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION
~~WASHINGTON 25, D.C.~~
So. 157 Howard Street
Spokane 4, Washington

July 7, 1953

Memorandum

To: Ray Hindman, Certifying Officer, DMEA, Region II

From: Executive Officer, DMEA Field Team, Region II

Subject: Collection of overpayment on DMEA contract Idm-E323 in Region III

This is to advise you that I have received a letter from Mr. Miller, Executive Officer, DMEA Field Team, Region III, asking that $2,102.67 be withheld from the amount owed to Northfield Mines, Inc. on Contract Idm-E334. Mr. Hull's file contains the details of this deduction in a copy of a memo from Miller to Shelton at Albany dated April 9, 1953, with attachments.

A. E. Weissenborn

cc: DMEA (2)
USBM (2)
Hull

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION
~~WASHINGTON 25, D.C.~~
So. 157 Howard Street
Spokane 4, Washington

July 3, 1953

Executive Officer, DMEA, Region III
1012 Flood Building
870 Market Street
San Francisco, California

Re: Northfield Mines, Inc.
Docket No. DMEA-2436
Contract Idm-E334

Dear Sir:

Mr. Selfridge wrote me a letter dated May 4, 1953, regarding an overpayment on the above contract made by your Certifying Officer, Mr. Sjolander. He requested that we cooperate with your Region in collecting this overpayment. To date, however, we have not received a letter from you stating the exact amount that we should withhold, nor do we know if Northfield Mines, Inc., has reimbursed the Government for this overpayment.

Will you please advise as soon as possible the status of this contract. If we are to withhold any amount of money for your Region, we will have to know right away as final payment on Contract Idm-E334 in Region II will be made very shortly.

Sincerely

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

cc: USBM (2)
DMEA (2)
Nickelson

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION
~~WASHINGTON 25, D.C.~~
So. 157 Howard Street
Spokane 4, Washington

DOCKET COPY

June 26, 1953

Mr. George C. Selfridge, Chairman
Operating Committee, DMEA
Department of the Interior
Washington 25, D. C.

Re: Docket No. DMEA-2436 (cobalt-copper)
Northfield Mines, Inc.
Lemhi County, Idaho
Contract Idm-E334

Dear Mr. Selfridge:

Attached are the original and two signed copies of Amendment No. 6 to the subject contract, with attached justification.

Distribution of this amendment has been made in the usual manner.

Sincerely yours,

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

Attachment

cc: USBM (2)
Nickelson

RECEIVED
AUG 10 1953
GENERAL COUNSEL
DEFENSE MINERALS
ADMINISTRATION

7-3

FILE COPY
SURNAME:

140

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

June 24, 1953

W. E. Kane
Rubin

N.S. in R.v.R.

Memorandum

To: The Administrator
Through: Mr. W. S. Martin

From: Chief Counsel

Subject: Northfield Mines, Inc., Docket No. DMEA-2436 (Cobalt-Copper)

There is attached, in satisfactory legal form for execution, Amendment No. 7 to Contract covering the above-described project, subject to attachment of the map entitled "Northfield Mines, Inc. Horiz. Projection 7,000 Level," referred to in paragraph numbered 5 of the Amendment.

/S/ AEKane
for ~~Reg~~ J. L. Hofflund
Chief Counsel

Attachments

AEKane:ep

Copy to: Mails & Files
Mr. Hofflund
Mr. Kane
Chron.

FILE COPY
SURNAME:

Hopkins
Rutledge
Martin

400

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

June 17, 1953

Memorandum

To: Chief Counsel, DMEA

From: Iron and Ferro-Alloys Division, DMEA

Subject: Review and preparation of Amendment No. 7 to Contract Docket No. DMEA-2436 - Cobalt and copper
Northfield Mines, Inc.
Stevenson Property
Lemhi County, Idaho
Contract No. Idm-E334

Transmitted herewith is a rough draft of a proposed amendment to cited contract for your use in preparing the amendment in final form.

The draft consists of the following:

1. Exhibit "A" (Amended)
2. Annex III
3. Copies of Map

Please note that the period for the collection of royalty has been extended to 15 years from the date of the amendment.

Copies of the map are being prepared and will follow shortly.

JHopkins:foc
cc: Docket
Code 400
Adm. Reading File

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

Enclosures

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION
~~WASHINGTON 25, D.C.~~
So. 157 Howard Street
Spokane 4, Washington

June 13, 1953

Memorandum

To: George C. Selfridge, Chairman, Operating Committee, DMEA

From: Field Team, Region II

Subject: Docket No. DMEA-2436 (Cobalt-Copper), Proposal by the Northfield Mines for additional work on the Stevenson Project, Northfield Mines, Inc., Lemhi County, Idaho, Contract Idm-E334

Northfield Mines, Inc., has submitted a request for additional funds for further exploration on Contract Idm-E334. The Operator proposes additional drifting and crosscutting on the Merle 5 zone; the Operator also proposes to explore the Merle 3 zone by crosscutting from the Merle 5 zone and exploration of the zone by drifting, crosscutting and underground diamond drilling. Some additional surface work, including geochemical prospecting, bulldozing and diamond drilling also is requested.

The Field Team agrees that additional exploration is necessary to determine the extent and grade of the cobalt mineralization and is justified by the results to date and the potential size of the discovery that might develop. Basis for this conclusion is contained in the Operator's letter forwarding his request and in various Field Team inspection reports in your possession. The Field Team, however, advocates some changes in the plan proposed by the Operator. These changes and a trimming down of the size of the program are discussed below.

Exploration on the Merle 5 Zone

On the Merle 5 zone the Operator has requested additional drifting to the northeast from the north end of 701 drift plus a number of crosscuts from this drift to crosscut the zone. The drifting and crosscutting is not precisely indicated, but according to the map submitted, totals about 300 feet of drifting and approximately 270 feet of crosscutting, The exploration to date has cut the main Merle 5 zone in two places as shown on the attached maps. At both of these places oxidation has been extreme so that not only are ground conditions bad, but the structure is obscure and assays are obviously not indicative of the grade of the unoxidized material. 701 drift

has been driven in the footwall rather than in the main northwest-trending Merle No. 5 zone. If our interpretation is correct, the north end of 701 drift may be as much as 200 feet away from the main Merle 5 zone and therefore the extension of the 701 drift in the manner suggested by the Operator does not appear to be the most effective way of exploring the zone as his crosscut may not be long enough to test it. The divergence of the 701 drift from the Merle 5 zone has been discussed in an inspection report of May 27, 1953, and in a letter to Mr. Mitchell of Northfield Mines, Inc., dated June 3, 1953. A map illustrating the situation has been previously sent to you with the carbon of the letter to Mr. Mitchell but is included here again for your convenience.

The Field Team is of the opinion that further exploration of the Merle 5 zone should be by crosscutting directly to the Merle 5 zone from the end of 701 drift. This crosscut should be continued completely through the zone. Thereafter, exploration should be by drifting either in the zone itself--the most desirable method if the ground permits--or by drifting in either the hanging wall or the footwall depending on ground conditions. In any event, but particularly if the drift has been in the hanging or footwall, the zone should be tested by frequent short diamond drill holes and an occasional crosscut to be sure that the zone is being followed closely.

The total amount of drifting and crosscutting on the Merle No. 5 zone recommended by the Field Team amounts to 400 feet. The Field Team also suggests that 400 feet of diamond drilling, as indicated on the attached map, be permitted for further testing of the Merle 5 zone. Some additional footage is provided if necessary, as is discussed below under "Additional Work."

Merle 3 Zone

The Operator proposes to crosscut to the Merle 3 zone from the 702 drift. He does not state the precise length of this crosscut, but according to his map, it would be approximately 1,120 feet long. Apparently, he expects to intersect the main Merle No. 3 zone approximately 900 feet from the 702 drift. The Operator evidently has assumed that the zone dips to the northeast. This may be correct, but as there is, in our opinion, equally strong evidence to suggest that the zone dips to the southwest, provision should be made for approximately 1,300 feet of crosscutting so as to be sure that the Merle 3 zone is reached in the crosscut. This should cut the zone approximately 500 feet below the surface.

The Field Team suggests a total of 550 feet of drifting to the north and south along the Merle 3 zone together with 300 feet of crosscutting in appropriate places only one of which is shown on the map. Six hundred feet of underground diamond drilling is recommended for testing the full width of the Merle 3 zone.

Additional Work

Further exploration cannot be planned until after the driving of the crosscut and the drifting along both zones provides data for the better interpretation and correlation of the drilling previously done, but the Field Team recommends an additional 500 feet of drifting and crosscutting plus further testing by approximately 1,000 feet of underground diamond drilling. This can be used to test not only the Merle 3 and 5 zones but other mineralization already known from the existing surface drilling and trenching as well as possible zones cut in the underground workings. (Note that the Operator's map indicates a number of other mineralized zones in the area under exploration, and the relation of these to the Merle 3 and 5 zones is not at present clear.) Location of this work will have to be determined by conference between the Operator and the Field Team as more information becomes available.

Other Work Proposed

The Operator proposes to prospect for the extensions of the known ore-bearing zones and to search for new ones by geochemical prospecting (i.e., soil sampling), bulldozing, and surface diamond drilling. The Field Team does not recommend this at this time. It feels that the most pressing problem at the moment is not to extend the known mineralized area but to determine the grade and continuity of the mineralized zones underground where they are relatively unoxidized. Surface investigation will be the most effective method of determining the lateral extent of the zones or of finding new ones, but gives little information on grade. It is the Field Team's recommendation, therefore, that the present effort be concentrated on determining the grade and extent of the Merle 3 and Merle 5 zones and any intermediate or branching zones that may be found in the crosscut or in the underground development exploration suggested above.

A study of the Operator's application will indicate that he has not been too specific concerning his plans. This, in part, is the result of the difficulty or impossibility of lining out a specific plan based wholly on the drilling results at hand. However, although he does not say specifically where it is to be done, he does plan "5,000 feet of rock work, drifts, crosscut, winze or raise." (Item 1, page 2, letter 3 of Operator's application for increased funds) His total estimated cost of the project amounts to $460,000.00. This includes surface and underground diamond drilling and bulldozing which is to be done on independent contracts. The independent contracts amount to an estimated $44,375. Subtracting this from $460,000 leaves $415,625 as the all-in cost for 5,000 feet of underground exploration exclusive of underground diamond drilling. This includes equipment, supervision, supplies, boarding house loss, and bookkeeping, as well as fire insurance and some other items which would not be allowable. Dividing this by 5,000 gives $83.00 as the cost per foot of the

underground exploration. This may be a little high as it includes the cost of the geochemical work which cannot readily be segregated from the underground costs. It is apparent, however, that the costs are extremely high. Supervision appears excessive, a good many questionable items are included; for instance, allowances are made for a full-time geologist, and a full-time bookkeeper in addition to which there is an allowance of a little over $4000 for consulting and auditing. Because of these high costs and to avoid the difficulties in administering and making payments which we have had on the existing contracts, the Field Team strongly favors placing all of the new work outlined in this application on a unit cost basis with the exception of analytical work which would be on an actual cost-incurred basis and of snow removal which would be by independent contract. Our experience with the Operator indicates that this will be the most effective method of administering the contract.

In summary, it is recognized that the present contract has encountered exceptionally difficult ground conditions and that costs consequently were high. However, some of this high cost was due to inefficiency. If the proposed underground work is conducted efficiently on a two-heading basis, the Field Team believes that the crosscutting and drifting could be done for $32.50 per foot with additional allowances of $9 for timbering and $8.50 for spiling where required. On this basis, the cost of the project would be as follows:

Summary of Suggested Exploration and Probable Costs

Merle 5 Zone (Unit Costs)

400'	drifting and crosscutting at	$32.50	$13,000.00
400'	timbering ** at	9.00	3,600.00
200'	spiling ** at	8.50	1,700.00
400'	underground diamond drilling * at	5.00	2,000.00
5	diamond drill stations at	25.00	125.00
		Total	$20,425.00

Merle 3 Zone (including crosscut from 702 drift)

2650'	drifting and crosscutting at	$32.50	$ 86,125.00
2400'	timbering ** at	9.00	21,600.00
350'	spiling at	8.50	2,975.00
1600'	underground diamond drilling at	5.00	8,000.00
24	diamond drill stations at	25.00	600.00
		Total	$119,300.00

* Includes compressed air, water, and core boxes and all other costs except assaying and cutting drill stations.

** Estimated footage; timbering and spiling will be paid for only where actually done.

Other Costs (actual costs - not unit costs)

Analytical work ***	$ 7,200.00
Snow Removal **** 250 hours at $15	3,750.00
(May be subcontracted if operator desires)	
Total	$10,950.00

*** Estimated on basis of 1200 analyses for copper and cobalt.
**** May be on independent contract.

Total Cost

Merle 5 Zone Exploration	$ 20,425
Merle 3 Zone and Crosscut Exploration	119,300
Other Cost	10,950
Total	$150,675

The Field Team is of the opinion that these costs are about as equitable as can be devised. However, you have available to you from the monthly MF-104 forms and other sources as much information on costs as is available to us. Therefore, any revision in these proposed unit costs that you deem appropriate will be acceptable to us.

In order to insure that the exploration will follow the structures as closely as practicable, the contract should contain specific provision that the location of all drifts, crosscuts, and diamond drill holes not specifically located in the contract must have the prior approval of the Field Team or else payment will not be made.

The number of assays required (1200) may at first sight appear excessive. This estimate was made on the basis of 2 samples for every 5 feet of drift and crosscut in ore and 1 sample for every 5 feet of drill hole. Estimating that 1750 feet of the workings would be in ore, 700 assays would be required for the drifts and crosscuts plus 400 assays from the drill holes, or a total of 1100 samples. An additional allowance is made for 100 samples of drill sludge, check assays, muck samples, etc. bringing the total to 1200 samples. In a deposit of this type close determination of the grade is essential, and this will require meticulous assaying.

The suggested program undertakes to do considerably less than the proposal submitted by Northfield Mines, Inc., and its estimated cost is less than half of that estimated by the company. The Field Team believes that the work proposed above will establish whether the cobalt-copper mineralization is of commercial importance. Any further investigation could be considered on its merits.

By Field Team, Region II

A. E. Weissenborn

A. E. Weissenborn, Exec. Officer
(Geological Survey)

Thomas E Howard

Tom E. Howard, Acting Member
(Bureau of Mines)

cc: DMEA (Orig. & 3)
USBM (2)
Nickelson

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION
~~WASHINGTON 25, D.C.~~
So. 157 Howard Street
Spokane 4, Washington

June 12, 1953

Mr. George M. Mitchell
Northfield Mines, Inc.
Eureka, Nevada

Re: Docket No. DMEA-2436 (cobalt-copper)
Contract No. Idm-2334
Northfield Mines, Inc.

Dear Mr. Mitchell:

Enclosed are 7 copies of Amendment No. 6 to your contract. This amendment is necessary because the original contract specified that the total amounts for (1) Independent Contracts, (2) Labor, Supervision and Consultants, and (3) Operating Materials and Supplies, were allowable maximums. In order that payment for drifting done under the subcontract provided for in Amendment No. 3 may be allowed, these limitations must be removed; otherwise, the original contract payments made for this work would have to be deleted from the final settlement.

If the amendment meets with your approval, kindly sign all copies, retain the one marked "Operator's Copy" and return the remainder of the copies to this office.

The removal of these restrictions has been authorized by our Washington office and upon receipt of the signed amendment from you we can authorize the payments which we have had to withhold.

Sincerely yours,

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

Enclosure

cc: DMEA (2)
USBM (2)
Nickelson

FILE COPY
SURNAME:

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

Defense Minerals Exploration Administration

Hopkins
Jlopkins/foc
Ruth
Martin
Selfridge
Nettleton

5285

BV

14 X 3923.970 - Working Fund - DMEA
June 12, 1953

A. E. Weissenborn, DMEA Executive Officer, Region 2, Spokane, Washington

Reurlet May 28. Docket No. 2436, Contract Idm-5334, Northfield Mines, Inc. Please expedite earliest quote further comments and recommendations unquote noted in paragraph four.

George C. Selfridge

(243)

G. C. Selfridge
Chairman, Operating Committee

Copy to: Docket
Code 400
Adm. Read. File
Confirmation to FT, Reg. 2
Audits Div., BU. Mines
Operating Committee
T. P. Thayer, USGS
H. W. Davis, USBM

J.H.
6-12-53

dmeo 2436

400

Northfield Mines, Inc.

Cobalt, Idaho

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
JUN 1953

WSM

June 10, 1953

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

Dear Mr. Johnson:

As per your recent request to Mr. George W. Mitchell we herewith submit maps and proposed bookkeeping set up on the estimated future costs of the Stevenson Operation near Cobalt Idaho.

Very truly yours,

NORTHFIELD MINES INC.

A. J. O'Connell

A. J. O'Connell

NORTHFIELD MINES, INC.
STEVENSON OPERATION

ESTIMATED DRIFTING COST STATEMENT
10 MONTH PERIOD

Acct No.		10 Month Period Cost	Cost Per Foot 5000 Foot Advance
	Direct Charges		
C-1	Drilling & Blasting	64,269.77	12.85
C-2	Mucking & Tramming	71,918.70	14.38
C-3	Timbering	25,461.48	5.09
C-4	Contract Bonus	21,539.04	4.32
C-5	Supervision	12,574.31	2.51
	Sub Total	$195,763.30	$ 39.15
	Services		
11	Pipe & Fittings	6,128.00	1.23
12	Ventilation	2,895.00	.58
13	Compressed Air	27,088.59	5.42
14	Drill Steel Expense	2,250.00	.45
15	Drilling Machine Expense	3,977.55	.80
16	Dumping Expense	3,620.61	.72
17	Mine Lights & Power	5,188.96	1.04
18	Mine Tool & Miners Lamp Expense	4,505.08	.90
50	Power Cost	27,596.04	5.52
51	Automotive	13,141.20	2.63
52	Shop	3,040.47	.60
	Sub Total	$ 99,431.50	$ 19.89
	Total Drifting	$295,194.80	$ 59.04

ESTIMATED DIAMOND DRILLING COST

Contract Underground - 4200 feet	21,000.00
Contract Surface - 2000 feet	14,000.00
Contract Drill Sites - Dozer 20 hours	300.00
Core Boxes	260.00
Freight on Drill	300.00
Total Diamond Drilling	$35,860.00

ESTIMATED TRENCHING COST

Contract Dozer - 280 hours @ $15	4,200.00
Freight on Dozer	350.00
Total Trenching	$4,550.00

NORTHFIELD MINES, INC.
STEVENSON OPERATION

ESTIMATED ADMINISTRATIVE & OFFICE EXPENSE AT PROPERTY
10 MONTH PERIOD

Acct No.		Total Cost
431	Administrative Salary & Expense	6,574.00
432	Office Salaries & Expense	8,798.00
433	Engineering Salaries & Expense	17,054.00
434	Warehouse Salaries & Expense	3,250.00
435	Telephone & Telegraph	1,000.00
436	Travelling	
438	Audit & Legal	350.00
439	Subscriptions, Dues & Donations	
440	Group Insurance	2,000.00
		$39,026.00

ESTIMATED GENERAL EXPENSE AT PROPERTY
10 MONTH PERIOD

437	Local Transportation	
442	Property Taxes	
443	Fire Protection	
444	Buildings, Grounds & Roads	10,563.96
445	Medical & Safety	
446	Water & Sewerage	2,455.60
447	Cookhouse Expense	17,896.44
447A	Campsite Expense (Housing)	3,905.00
448	Assay & Research	9,910.66
		$44,731.66

NORTHFIELD MINES, INC.
STEVENSON OPERATION

ESTIMATED NEW BUILDINGS & FURNISHINGS

Acct No.		Total Cost
60-1	Carpenter Shop	$ 1,264.76
60-2	Water Pump Building	764.00
60-3	Shop Building	1,573.64
60-4	Compressor House	2,092.00
60-5	Cookhouse	4,877.67
60-6	Bunkhouse	6,414.48
60-7	First Aid Room	725.00
60-8	Office & Warehouse	1,826.40
60-9	Change Room	1,832.72
		$21,370.67

ESTIMATED CONTINGENCIES
10 MONTH PERIOD

Unforeseen Expense	$19,266.87

Total Project	$460,000.00

NORTHFIELD MINES, INC.
STEVENSON OPERATION

DETAIL OF ESTIMATED COSTS
10 MONTH PERIOD
DRIFTING CHARGES

Ref. No.	Acct No.		Detail	Total	Cost per Foot
		Direct Charges			
	C-1	Drilling & Blasting:			
2		Labor - Miners	46,725.12		
7		Payroll Taxes	4,484.65		
3		Supplies - Blasting	13,060.00	64,269.77	12.85
	C-2	Mucking & Tramming			
2		Labor - Muckers	20,947.68		
7		Payroll Taxes	2,005.78		
2		Labor - Motormen	11,224.98		
7		Payroll Taxes	1,075.30		
2		Labor - Trackmen	3,612.96		
7		Payroll Taxes	346.00		
3		Supplies -Rail, Etc.	9,276.00		
7		Repair Parts	1,500.00		
4		Rents - Mucking Machines	5,850.00		
4		Mancha Trammers	8,100.00		
4		Mine Cars	5,400.00		
4		Slushers & Tuggers	1,035.00		
4		Rail Benders	45.00		
7		Freight	1,500.00	71,918.70	14.38
	C-3	Timbering			
2		Labor - Timbermen	3,912.48		
7		Payroll Taxes	374.00		
3		Supplies - Timber, Etc	20,870.00		
4		Rents - Power Saws	305.00	25,461.48	5.09
	C-4	Contract Bonus			
2		Bonuses - Contract	19,656.00		
7		Payroll Taxes	1,883.04	21,539.04	4.32
	C-5	Supervision			
2		Day Foreman	6,750.00		
7		Payroll Taxes	646.65		
2		Night Shift Boss	4,725.00		
7		Payroll Taxes	452.66	12,574.31	2.51
		Total Direct Charges		$195,763.30	$ 39.15

NORTHFIELD MINES, INC.
STEVENSON OPERATION

DETAILS OF ESTIMATED COSTS
10 MONTH PERIOD
DRIFTING CHARGES

Ref. No.	Acct No.	Services	Detail	Total	Cost Per Foot
	11	Pipe			
		Labor			
3		Pipe & Fittings	6,128.00	6,128.00	1.23
	12	Ventilation			
		Labor			
3		Ventube	1,950.00		
4		Rents - Blower	945.00	2,895.00	.58
	13	Compressed Air			
2		Labor - Compressor & Power Men	5,324.67		
7		Payroll Taxes	510.10		
2		Labor - Mechanic	978.12		
7		Payroll Taxes	93.70		
3		Fuel Oil, Lube, Etc	10,440.00		
7		Repair Parts	1,500.00		
4		Rents - Air Receiver	90.00		
4		Compressors	7,452.00		
7		Freight	700.00	27,088.59	5.42
	14	Drill Steel Expense			
		Labor			
3		Steel, Bits, Etc.	2,250.00	2,250.00	.45
	15	Drilling Machine Expense			
2		Labor - Mechanic	391.25		
7		Payroll Taxes	36.30		
7		Repair Parts	750.00		
4		Rents - Drilling Machines	2,700.00		
7		Freight	100.00	3,977.55	.80
	16	Dumping			
2		Labor - Dumpmen	3,304.08		
7		Payroll Taxes	316.53	3,620.61	.72
	17	Mine Lights & Power Lines			
2		Labor - Electrician & Carpenter	2,547.46		
7		Payroll Taxes	244.00		
3		Supplies - Electrical	2,397.50	5,188.96	1.04
	18	Mine Tools & Miners Lamp Expense			
2		Labor - Nipper	3,304.08		
7		Payroll Taxes	316.00		
3		Mine Tools	660.00		
		Miners Lamp Expense			
4		Miner Lamp Rental	225.00	4,505.08	.90

NORTHFIELD MINES, INC.
STEVENS N OPERATION

DETAILS OF ESTIMATED COSTS
10 MONTH PERIOD
DRIFTING CHARGES

Ref No.	Acct No.	Services	Detail	Total	Cost Per Foot
	50	Power Costs			
2		Labor - Compressor & Powermen	5,324.67		
2		Mechanics	978.12		
7		Payroll Taxes	603.00		
3		Supplies - Fuel & Lube Oil	10,260.00		
7		Repair Parts	1,000.00		
3		Power Lines	1,530.25		
4		Rentals - Power Units	7,200.00		
7		Freight	700.00	27,596.04	5.52
	51	Automotive			
2		Labor - Truck Driver	3,304.08		
7		Payroll Taxes	316.00		
2		Labor - Mechanic	978.12		
7		Payroll Taxes	93.00		
3		Gas, Oil, Tires, Etc.	2,475.00		
7		Repair Parts	1,500.00		
4		Rentals - 4 Vehicles	4,275.00		
7		Freight	200.00	13,141.20	2.63
	52	Shop			
2		Labor - Mechanic	586.87		
7		Payroll Taxes	56.00		
3		Tools & Supplies	962.00		
4		Rentals	1,335.60		
7		Freight	100.00	3,040.47	.60
		Total Services Charges		$99,431.50	$19.89
		Total Drifting		$295,194.80	$59.04

NORTHFIELD MINES, INC.
STEVENSON OPERATION

DETAIL OF ESTIMATED COSTS
10 MONTH PERIOD
DEFERRED DEVELOPMENT

Ref. No.	Acct No.	Services	Detail	Total
		Diamond Footage Advanced		
1		Underground Drilling-4200 ft.	21,000.00	
1		Surface Drilling - 2000 ft.	14,000.00	
1		Drill Sites	300.00	
3		Core oxes	260.00	
7		Freight on Drill	300.00	35,860.00
		Surface Cuts & Trenching		
1		280 hours @ $15.00	4,200.00	
7		Freight on Equipment	350.00	4,550.00
		OFFICE EXPENSE AT PROPERTY		
	431	Superintendent		
2		Salary	6,000.00	
7		Payroll Taxes	574.00	6,574.00
	432	Office		
2		Salaries -Bookkeper & Typist	6,875.00	
7		Payroll Taxes	658.00	
3		Supplies and Expense	950.00	
4		Rentals 3- Items	315.00	8,798.00
	433	Engineering and Geology		
2		Salaries	10,750.00	
7		Payroll Taxes	1,029.00	
8		Consultants	3,700.00	
3		Supplies	900.00	
4		Rents	675.00	17,054.00
	434	Warehouse		
2		Labor	2,875.00	
7		Payroll Taxes	275.00	
3		Supplies and Expense	100.00	3,250.00
7	435	Telephone	1,000.00	1,000.00
8	438	Audit and Legal	350.00	350.00
7	440	Group Insurance	2,000.00	2,000.00
		TOTAL OFFICE EXPENSE		$ 39,026.00

NORTHFIELD MINES, INC.
STEVENSON OPERATION

GENERAL EXPENSE AT PROPERTY
DETAIL OF ESTIMATED COSTS

Ref. No.	Acct No.		Detail	Total
	437	Local Transportation		
	442	Porperty Taxes		
	443	Fire Protection		
	444	Buildings, Grounds & Roads		
2		Labor - Elect. & Carpenter	2,547.46	
7		Payroll Taxes	244.00	
3		Tools	500.00	
3		Power Lines	2,397.50	
1		Contract - Roads & Snow Removal	4,875.00	10,563.96
	445	Medical & Safety		
	446	Water & Sewerage		
2		Labor	1,085.00	
7		Payroll Taxes	103.00	
3		Pipe, Etc.	1,267.60	2,455.60
	447	Camp Expense		
2		Labor - Cook & Helpers	7,115.44	
7		Payroll Taxes	681.00	
7		Boarding House Loss	10,100.00	17,896.44
	447A	Campsite Expense		
4		Rent - Trailer Houses	1,080.00	
3		Repairs & Furnishings	1.200.00	
7		Freight	1,625.00	3,905.00
	448	Assay & Research		
2		Geologists	2,812.50	
2		Geochemical Assistant	1,304.16	
7		Payroll Taxes	394.00	
7		Analytical & Geochemical	5,400.00	9,910.66
		Total General Expense at Property		$44,731.66

NORTHFIELD MINES, INC.
STEVENSON OPERATION

DETAIL OF ESTIMATED COSTS
BUILDINGS & REHABILITATION

Ref No.	Acct No.		Detail	Total
	60-1	Carpenter Shop		
6		Material	401.00	
2		Labor	551.76	
7		Payroll Taxes	52.00	
3		Fire Extinguishers	260.00	1,264.76
	60-2	Water Pump Building		
6		Material	299.36	
2		Labor	200.64	
7		Payroll Taxes	19.00	
3		Fire Extinguishers	245.00	764.00
	60-3	Shop Building		
6		Material	516.00	
2		Labor	618.64	
7		Payroll Taxes	59.00	
3		Garage Fire Extinguishers	120.00	
3		Fire Extinguishers	260.00	1,573.64
	60-4	Compressor Building		
6		Material	677.64	
2		Labor	1,053.36	
7		Payroll Taxes	101.00	
3		Fire Extinguishers	260.00	2,092.00
	60-5	Cook House		
6		Material	1,480.00	
2		Labor	1,019.92	
7		Payroll Taxes	97.00	
3		Furnishings	2,280.75	4,877.67
	60-6	Bunkhouse		
6		Material	2,663.14	
2		Labor	2,039.84	
7		Payroll Taxes	195.00	
3		Furnishings	1,516.50	6,414.48
	60-7	First Aid Room		
5		Material	9.00	
		Labor		
3		Fire Extinguisher	65.00	
3		Furnishings	651.00	725.00

NORTHFIELD MINES, INC.
STEVENSON OPERATION

DETAIL OF ESTIMATED COSTS
BUILDINGS & REHABILITATION

Ref No.	Acct No.		Detail	Total
	60-8	Office & Warehouse		
5		Material	644.00	
2		Labor	334.40	
7		Payroll Taxes	32.00	
3		Furnishings	426.00	
3		Fire Extinguishers	390.00	1,826.40
	60-9	Change Room		
5		Material	420.00	
2		Labor	434.72	
7		Payroll Taxes	41.00	
3		Fire Extinguishers	130.00	
3		Furnishings	807.00	1,832.72
		Total Buildings		$21,370.67

CONTINGENCIES

Unforeseen Expense	$19,266.87
Total Cost of Project	$460,000.00

FILE COPY
SURNAME:

UNITED STATES
DEPARTMENT OF THE INTERIOR
Defense Minerals Exploration Administration
DEFENSE MINERALS ADMINISTRATION
WASHINGTON 25, D. C.

14 X 3923.970 - Working Fund - DMEA
June 8, 1953

JUN 9 1953

WSMartin/JCChambers/
AKane/lm 3538

Martin
Rutledge
Chambers
AKane
Bryan
F.E. Johnson
Hoffendorf

A. E. Weissenborn, DMEA Executive Officer, Region 2, Spokane, Washington

Reurtel June 4. Contract Idm-3334, Docket 2436, Northfield Mines, Inc.

No maximum on existing independent contract may be waived. However, total allowed for all independent contracts may be increased and new such contracts entered into provided total cost of project is not increased.

(signed) FRANK E. JOHNSON (J.H.)
Deputy Administrator

Copy to: Docket
Code 400
Adm. Read. File
Confirmation to FT, Reg. 2
Audits Division, Bur. Mines
Operating Committee
T. P. Thayer, USGS
Mr. Hedges
J. L. Chambers
F. E. Johnson

RECEIVED
JUN 4 6 21 PM '53
GENERAL SERVICES ADMIN
PUBLIC BLDGS SERVICE
BND - COMMUNICATIONS

Dmea 2 4 36

404 WA SP /I-GS-G/

SPOKANE WASH 6-4-53 230

GEORGE C SELFRIDGE

CHAMIRMAN DMEA OPERATING COMMITTEE WA

REURTEL JUNE 1 NORTHFIELD MINES INC., CONTRACT IDM-E334. REQUEST AUTHORIZATION TO REMOVE ALLOWABLE MAXIMUM OF ITEM 1 UNDER EXHIBIT "A", INDEPENDENT CONTRACTS. SUCH REMOVAL WILL VALADATE AMMENDMENT 3 AND PERMIT PAYMENT OF WORK DONE UNDER SUB CONTRACT. SEE LETTER TO R. N. HULL FROM JAY L. CHAMBERS DATED APRIL 1, AND REFERRED TO IN FIELD TEAM LETTER OF MAY 22ND. ALLOWABLE MAXIMUM ON FUNDS FOR INDEPENDENT CONTRACTS WILL HAVE TO BE REMOVED BEFORE WORKABLE AMMENDMENT CAN BE PREPARED. PLEASE TELETYPE REPLY.

THOR H KIILSGAARD FOR A E WEISSENDORN EXEC OFCR DMEA FLD TEAM REG II

SP

1 IDM-E334 1 "A" 3 1 22ND

AC 232

UNITED STATES
DEPARTMENT OF THE INTERIOR

DEFENSE MINERALS ADMINISTRATION
~~WASHINGTON 25, D. C.~~
So. 157 Howard Street
Spokane 4, Washington

June 3, 1953

Mr. George W. Mitchell
Northfield Mines, Inc.
Eureka, Nevada

Re: Docket No. DMEA-2436 (Cobalt-Copper)
Merle et al Claims
Lemhi County, Idaho
Contract No. Idm-E~~344~~ 334

Dear Mr. Mitchell:

The enclosed sketch map of the Merle No. 5 area shows the drill holes, trenches, and underground workings. Information from this exploration has given us sufficient data to project the Merle No. 5 mineralized zone to the adit level, and this is illustrated on the map by two heavy lines. The dip was assumed 60 degrees to the southwest. The data for this dip figure was taken from the recent cut south of the portal which exposed the Merle No. 5 mineralized zone. A dip of 53 degrees was taken on the hanging wall side and 60 degrees was taken on the footwall side of the zone. Other data show the dip of the zone to range between 55 to 65 degrees to the southwest.

The enclosed map shows the bulk of the drifting has avoided the Merle No. 5 mineralized zone. The 702 drift crossed the zone at such a shallow depth below the surface that the cobalt minerals probably were leached away as is evident by the low assay results. The 701 drift is getting farther away from the mineralized zone as it is being advanced, making it useless for any exploration on the zone.

Any future work on the Merle No. 5 zone should consist of drifting northwest on the zone or just west of the zone with crosscuts or drill holes to each wall for sampling and mining purposes.

Drifting northwest along the zone in this manner will determine several factors which are of utmost importance for developing a cobalt mine on the Merle No. 5 zone:

(1) Drifting on the zone to the northwest will increase the back over the drift to more than 200 feet which should be under the greater portion of the leached zone encountered from exposures of

the Merle No. 5 zone in the present underground workings. Samples from the drift at this depth below the surface should be more representative of the cobalt content than any encountered from the present workings.

(2) Drifting on the zone or next to the zone should determine the feasibility of mining any ore encountered in the Merle No. 5 zone. Troubles encountered in the drifting will be a yardstick for judging the difficulties that may be encountered in mining.

The Field Team will gladly assist and advise you to the best of its knowledge in any future exploration in the Merle No. 5 and Merle No. 3 zones.

Very truly yours,

Howard B. Nickelson
for: A. E. Weissenborn
Executive Officer, DMRA
Field Team, Region II

Enclosure
cc: USBM (2)
DMRA (2)
Nickelson

FILE COPY
SURNAME:

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

Rewritten by
2436

Rutledge
Martin
Selfridge

Defense Minerals Exploration Administration
W.S.Martin/A.E.Kan
2917 4627

June 1
~~May~~ 28, 1953

A. E. Weissenborn, DMEA Executive Officer, Region 2, Spokane, Washington

Reurlet May 22. You are hereby authorized and requested to amend Contract Idm-2334, Docket 2436, Northfield Mines, Inc., by removing any maxima that are causing you administrative difficulty in Exhibit "A" under the headings: (2) Labor, supervision, consultants (excepting salary engineer and superintendent), (3) Operating materials and supplies, (4) Operating equipment, and (7) Miscellaneous. Please expedite reimbursement of Operator for allowable items on MF-104 vouchers now pending. Instruct your staff to exercise caution to make no commitments for new contract, or for additional work requiring new funds for current contract. Refer ~~to letter to you October 30, regarding Independent Contracts~~.

George C. Selfridge

G. C. Selfridge, Chairman
Operating Committee

cc: Mails & Files
Adm. R. File
W. S. Martin
Audits Div., Bur. of Mines
Op. Comm.
Thayer
Hedges
A. E. Kane
J. L. Hofflund
Chron.
Pending

6-1-53

FILE COPY
SURNAME:

Rutledge

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

Defense Minerals Exploration Administration

W. S. Martin
5285 3538

May 28, 1953

A. E. Weissenborn, DMEA Executive Officer, Region 2, Spokane, Washington

Reurlet May 22. You are hereby authorized and requested to amend Contract Idm-8334, Docket 2436, Northfield Mines, Inc., by removing any maxima that are causing you administrative difficulty, excepting only the maxima that are automatic under the contract form. Please expedite reimbursement of Operator for allowable items on MF-104 vouchers now pending. Instruct your staff to exercise caution to make no commitments for new contract, or for additional work requiring new funds for current contract.

G. C. Selfridge, Chairman
Operating Committee

Copy to: FT, Reg. 2 - Confirmation
Docket
Adm. Read. File
Code 400
Audits Div., Bur. of Mines
Operating Committee
T. P. Thayer, USGS
H. W. Davis, USBM

WSMartin/ls
5/28/53

Docket

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION

~~WASHINGTON 25, D.C.~~
So. 157 Howard Street
Spokane 4, Washington

JUN 1 1953

May 28, 1953

Mr. George C. Selfridge, Chairman
Operating Committee, DMEA
Department of the Interior
Washington 25, D. C.

Re: Docket No. DMEA-2436 (Cobalt-copper)
Northfield Mines, Inc.
Stevenson Property
Lemhi Co., Idaho
Contract No. Idm-E334

Dear Mr. Selfridge:

Enclosed are three copies of a DMEA application submitted by the Northfield Mines, Inc. The application proposes further exploration of the Northfield Stevenson property, Lemhi County, Idaho. One copy of the application has been retained for the files of this office.

Previous Field Team reports on the Northfield property, coupled with interim reports on the existing Northfield contract by the Operator and DMEA field examiners, are believed to adequately describe the general features of the property, therefore, no further field examinations will be made unless requested by the Operating Committee.

Perusual of the application leads us to believe that it is "padded" and solicits the expenditure of more money than is needed for the proposed work. We wish to call specific attention to the excessive amounts allotted to such items as supervision and technical help, furnishings for buildings and camp facilities, equipment to be rented, new buildings, miscellaneous and contingencies. Inasmuch as any changes in the proposed work and estimated costs will probably be negotiated directly between Washington DMEA officials and the applicant, no itemized breakdown of the proposed work is being made at this office. It is recommended, however, that the contract, if negotiated, be on a unit cost basis and not for costs incurred.

Copies of all Forms MF-104, submitted by the Operator on the existing contract, are in the Washington DMEA office, and these could be used to calculate the unit costs for the proposed work. Further comments and recommendations on the location and extent of the proposed program will be forwarded in a memorandum now in preparation.

The Field Team would recommend granting the proposed contract as the property unquestionably warrants more exploration. There should, however, be an understanding between DMEA officials and the applicant as to the extent and estimated costs of the work to be done.

Enclosed also for your information are the original and three copies of the last inspection report on this property together with maps.

By Field Team, Region II

Thor H. Kiilsgaard

for Thor H. Kiilsgaard
A. E. WEissenborn, Exec. Officer
U. S. Geological Survey

Enclosures

M. E. Volin

M. E. Volin, Member
U. S. Bureau of Mines

NORTHFIELD MINES, INC.

STEVENSON OPERATION
Cobalt, Idaho

Docket DMEA 2436 May 20, 1953

Letter #1

Eureka, Nevada
April 29, 1953

Mr. A. E. Weissenborn
Executive Officer (U. S. Geological Survey)
Field Team Region II
Defense Minerals Exploration Administration
South 157 Howard Street
Spokane, Washington

Docket #DMEA 2436
Contract #Idm E-334

Dear Mr. Weissenborn:

At the suggestion of Mr. C. O. Mittendorf, DMEA Administrator, this letter is an application to continue and expand the above named contract during the coming season.

The work done to the present time is outlined in the attached, as well as the work proposed under the continued and expanded program. Cost estimates for this year's work are given in detail.

We are presenting this information to you for your consideration, per Mr. Mittendorf's suggestion in his letter of April 1, 1953, and hope it will receive your usual prompt attention.

Sincerely yours,

NORTHFIELD MINES, INC.

George W. Mitchell

GWM/m
cc: C. O. Mittendorf

Letter #2

Eureka, Nevada
April 29, 1953

Mr. A. E. Weissenborn
Executive Officer
Field Team, Region LL
Defense Minerals Exploration Administration
South 157 Howard Street
Spokane, Washington

Docket #DMEA 2436
Contract #Idm-E334

Dear Mr. Weissenborn:-

The following is a short review of the work accomplished under the above contract as of April 1, 1953 together with a summary of the results obtained. The cost figures are those approved by your office as of February 28, 1953 plus our invoice for March. The exact approved amount of the latter is not yet known.

Work Done and Cost

Costs Claims Made to April 1, 1953	$92,519.67
Total Amount of Contract	$102,900.00

Work Accomplished

Bulldozer Trench	7048 lineal feet
New Road	2248 lineal feet
Road Maintenance	73-3/4 hours bulldozer work
Diamond Drilling & Sites	3028 feet
Adit Crosscut & Drift	679.5 feet
Buildings	1 Bunkhouse
	1 Cookhouse
	1 Compressor House

Work Remaining to be done under Contract

Adit Crosscut & Drift	320.5 feet

A comparison of work accomplished to work originally estimated in the contract follows:-

Work Done		Work Estimated	Difference
Trenching	7048 feet	5500 feet	+ 1548 feet
New Road	2248 feet	2500 feet	- 252 feet
Road Maintenance	73-3/4 hours	112 hours	- 38¼ hours
Diamond Drilling	3028 feet	2000 feet	+ 1028 feet
Adit	679.5 feet	1000 feet	- 320.5 feet *
Buildings	Bunkhouse	1	0
	Cookhouse	1	0
	Compressor House	1	0

Note: * This work still in progress.

It is worthy of note that 28% more trenching and 51% more diamond drilling than estimated was done with the funds provided. At this time it appears that the adit footage will fall short of the original goal by about 200 feet. Considering the fact that ground conditions have been much worse than anticipated, results have been excellent.

Our monthly reports and accompanying plans and sections have very graphically shown the progress made. The geology of the trenches, drill holes and the adit is accurately mapped and well presented.

At least three favorable structures were outlined by the bulldozer trenches; (1) Merle #3, (2) Merle #5 and (3) the Queen. Each was named from the claim on which it is located. The first two were confirmed by diamond drilling while the third was not drilled this year.

No surface sampling was done because of the leached condition of the surface showings.

The diamond drilling was carried on with the prime purpose of (1) determining depth continuity of the shear zones, (2) determining the depth of oxidation and leaching and (3) determining assay values. These are named in the order of their importance. Assay values were not considered of first importance because of possible cobalt leaching and imperfect core recovery.

The Merle #3 and Merle #5 structures showed good continuity for distances up to 1500 feet in length and to 450 feet in depth. Oxidation was much deeper in the Merle #3, presumably because the mixed quartzite and schist appears more permeable to percolating surface waters than does the soft biotite schist at the Merle #5. The Queen structure showed much less surface continuity so further work there was deferred to a later date.

The Merle #5

The total length of Merle #5 shear exposed in the surface trenches is in excess of 1500 feet. To date, 300 feet along the strike has been explored through the 7000 Adit, 702 Drift (south) and 701 Drift (north). The structure is very strong and well mineralized. Trenching and diamond drilling indicates at least another 300 feet to the north and some 900 feet to the south. Most of

the latter will have to be explored at a deeper horizon because 702 Drift is in a mixed oxide-sulphide zone.

The Merle #5 zone was selected for the first underground exploration because the sulphide zone is relatively close to the surface for at least half its length. The 7000 Adit site (7000 feet above sea level) makes easily available not only this length but it is at the proper elevation to be extended 800 feet west to the Merle #3 at a horizon well below the deep oxidized zone.

All of the rock work in the adit and drifts has required close timbering and in many cases spiling has been used. The cost of the work has, therefore, been higher than original estimates and progress has been slower.

The 7000 Adit crosscuts the Merle #5 formation through the structure outlined in the diamond drill holes. The shear of very soft biotite schist, from 188 to 248 from the portal, was 60 feet wide. Average assays were 0.31% cobalt and 0.81% copper from 26 cut samples equally divided between each wall. No oxidation is present in this material.

In 702 drift, turned south west from a point 88 feet from the portal of the 7000 Adit, a similar zone was cut. Its true width is 30 feet and assays from 90 to 120 feet from the turn out averaged 0.15% cobalt and 0.93% copper. Arsenate stain and other evidences of oxidation are present but the degree of oxidation was not determined. Cobalt values are almost certain to be higher than the assays. A turn in the shear to the east is indicated though the two zones appear connected. 702 is now being driven south to follow the zone close to the west wall. Only about 75 feet of back is above 702 at the present location.

701 Drift was turned to the north in the east wall of the zone 130 feet from the portal of the 7000 adit. The drift is following the east wall to avoid the soft heavy biotite schist of the shear zone which gave trouble in the 7000 adit. Crosscuts will be driven through the zone at about 75 foot intervals to explore it. If the crosscuts are of sufficient grade it is planned to drill diamond drill holes at 25 foot centers between them. The first crosscut, 701a, has penetrated the shear zone 16 feet. Mineralization in the section excavated has been poor,as it was in the 7000 Adit close to the east wall.

Merle #3

In many respects, the Merle # 3 structure appears more favorable for mineralization than the above described Merle #5. The shear traverses thin bedded quartzites and schist of a more competent character than at the Merle #5, and generally a more "open" condition is expected which may have allowed mineralizing solutions better access. The length to be explored will probably exceed 1200 feet.

Diamond drilling shows some oxidation to depths of about 400 feet below the surface. The extension of the 7000 Adit 800 feet west will intersect the Merle #3 about 500 feet below the surface, well within the sulphide zone. A turn out west from the 702 Drift will permit the 7000 Adit extension to avoid the heavy ground in the west end of the main adit.

Docket #DMEA 2436
Contract Idm E334

The full lateral extent of the three shear zones has not yet been determined. Some further surface geochemical work and bulldozing is planned, both to the north and south as well as some other parts of the property, to more thoroughly explore it.

The encouragement already obtained, plus the possibilities remaining to be explored, fully justify continuance of the project this year. In fact, it seems doubtful that sufficient work can be done in one year to properly complete the work.

Sincerely yours,

NORTHFIELD MINES, INC.

George W. Mitchell
General Manager

GWM/m
cc: C. O. Mittendorf

Letter #3

Eureka, Nevada
May 12, 1953

Mr. A. E. Weissenborn
Executive Officer, Field Team, Region II
Defense Minerals Exploration Administration
South 157 Howard Street
Spokane 4, Washington

Docket #DMEA 2436
Contract #Idm E-334

Dear Mr. Weissenborn:-

The proposed work under the above contract for a continued and expanded project, together with the cost estimate is included in this letter. Please refer, also to letters #1 and #2 attached.

In summary the expanded project consists of:-

(1) Underground Work

Driving drifts, crosscuts, raises, winzes, short drill holes, etc. on the Merle #5 and Merle #3 structures outlined by surface work and diamond drilling from June 1952 to October 1952. This includes continuation of the underground work started November 1952 on the Merle #5.

(2) Surface Exploration

Exploring on the surface north and south of the known structures for their extensions and for possible non-contiguous structures by geochemical and other means; trenching and diamond drilling, if warranted, any anomalies or ore indications thus found.

(3) Equipment and Construction

Obtaining and installing adequate equipment and buildings to carry on the above work.

(4) Housing and General

Providing shelter and other facilities for the people engaged in the foregoing work.

(5) Personnel

Providing adequate personnel to supervise and perform the work in the most efficient manner possible.

(6) Road

Making a preliminary survey of a road from Panther Creek up Little Deer Creek and construction of the road late in the season if exploration at the property appears to warrant such road.

A more detailed description of the project follows:-

(1) Underground Work

The accompanying map outlines, tentatively, the underground work in so far as is possible at this time. The 7000 Crosscut is to be driven from 702 Drift in the Merle #5 workings to intersect the Merle #3 structure near the indicated center. This horizon on the Merle #3 is in excess of 450 feet deeper than the surface outcrop. In some of the drill holes, partial oxidation is indicated to be as deep as 350 feet in the area.

Drifts will be turned off from the 7000 Crosscut to the north and south to follow the Merle #3 structure. There are good surface indications of veins or structures paralleling the Merle #3. Crosscuts and drifts have been laid out to explore any such structures after they have been found by short underground diamond drilling and/or drifting. Work on the Merle #5 will continue approximately as shown.

Five thousand feet of rock work (drift, crosscut, winze or raise) has been outlined, together with 4200 feet of diamond drilling. For obvious reasons, only a portion of this work is shown on the map. Exact layouts will be made as exact information is obtained in each case.

Based on conditions which have prevailed in the drifts and crosscuts already driven on the Merle #5, provision has been made for timbering 100% of the rock work laid out, though probably a large part will not require timber. The distances from the adit portal demand mechanical haulage and provision for adequate ventilation. Hydroelectric power could be provided from the Calera Mining Company power line, but the installation expense prohibits its use for this particular program. Two 50 KW diesel electric power units will satisfy a maximum demand of about 110 HP. Diesel driven compressors will supply sufficient compressed air. Ventilation fans and slushers are to be electrically driven. An arc-welder, power driven saws and other tools are provided as well as sufficient electric lighting for the plant and other buildings.

(2) Surface Exploration

Geochemical surveys, with our own personnel and equipment, are planned to further explore the surface north and south as well as in other areas on the property. In the event of success in locating extensions and other favorable indications of good structure, 300 hours of bulldozer work and 2000 feet of surface diamond drilling have been planned. All except the geochemical work are set up as contract work similar to the current DMEA contract.

(3) Equipment and Construction

The major equipment required include:-

(a) The two diesel electric units already mentioned.
(b) 2- 315 cu. ft. minute diesel powered compressors.
(c) 2 Mucking machines (one additional to the one now in use).
(d) 2 Mancha trammers
(e) 10 Mine cars
(f) 2 Small slushers
(g) 1 Tugger hoist
(h) 5 Jack-leg drills (3 additional to the 2 in use)
(i) 3 TM9 Coppus centrifugal fans
(j) Power saws, water pump and pressure tank, bunkhouse and cook house equipment and many other small items.

Practically 100% of the above equipment has been set up for rental because this method is much cheaper than outright purchase when it is considered that no positive ore has been exposed in the work to date. Investigation shows that, with the possible exception of a Mancha trammer, all of the equipment will be available on the rental basis. Rental rates as shown are considered to be reasonable.

The buildings to house the equipment, though estimated for construction by our own personnel, can probably be contracted for equivalent prices. Construction is of wood framing, sheeted with wood and paper, the cheapest possible construction and design for the purpose required. Existing buildings are utilized. Plant buildings consist of:-

(a) Change house (shower and dry room) - Convert present compressor house.
(b) First aid room (and visitors' quarters) - Convert present bunk house.
(c) Office and warehouse - Convert present cook house and add 14 x 16 room with bins for small warehouse supplies.
(d) Compressor and power house - New building 20 x 36.
(e) Shop - New building 16 x 24.
(f) Timber framing shed - New building 16 x 24.
(g) Domestic water pump house - New building 10 x 12.

(4) Housing and General

The cook house and bunk house, though of cheapest design and construction are the highest cost buildings planned, for the reason that we are competing in a labor market with properties with established well constructed town site dwellings. House trailers for staff and other married employees will provide comfortable temporary housing at minimum expense. Freight for moving the trailers from Nevada to the adit site is the principal cost of the latter.

Provision is being made for approximately 25 single men and 12 or more to occupy trailers. Building and other contractors will be expected to furnish

their own housing unless room for them is available with the above facilities.

Water supply at the adit site will be provided with an inexpensive pump and pressure tank arrangement housed in a small building. Water may come from an adjacent spring or from the 702 Drift underground. The water for underground operations will be an independent air pressure tank arrangement underground. Sewage will be handled in the simplest manner possible.

Transportation facilities include a standard jeep, a jeep pick-up and one of another make and a truck with a dump body. Incoming freight will be handled, to a large extent, by outside carrier. Funds are set up for road repair and snow removal in the winter.

First aid facilities are provided, but the first aid room will be occupied by visitors or others at the property except when actually required for injured persons. Injured persons will be transported to the nearest hospital as promptly as possible.

Furnishings for all the buildings, including beds, cook stove, small refrigerator, office furniture, heating stoves, etc., are set up at minimum cost.

A contingency fund of less than 5% of the total cost has been set up. It should be made available for any unforeseen or unexpected contingency.

(5) Personnel

The staff will consist of a superintendent, mine foreman, engineer and two geologists (one full time and one half time). To assist them a bookkeeper-purchasing-warehouseman and a typist are arranged for. An assistant for the geologist doing geochemical work will be selected from one of the younger men on the labor force as will a night shift boss for the mine. A small amount has been set aside for consulting and auditing.

(6) Road

Funds for a shorter, better graded road have not been set up, but a road up Little Deer Creek direct from Trapper Flat on Panther Creek plus a bridge across the latter must be considered later this season if exploration results warrant the expenditure. The elevation at Trapper Flat is 4400 and that at the 7000 Adit is approximately 7000, the difference being 2600 feet. The horizontal distance between the two points is 3¼ miles (approximately 17,200 ft.) and the average natural grade is close to 15%. A road with an average grade of 6% would be 43,300 feet in length or approximately 8.2 miles. It is estimated that a heavy duty bridge, constructed of good native timber, will cost approximately $3,500. If about $2,000 for blasting is allowed and $1,000 for engineering, a good road can be built for an additional $1,000 per mile. Thus, the bridge and an 8.2 mile average 6% grade road will cost approximately $14,700.

No preliminary road survey has been made but the above appears to be practical.

Docket #DMEA 2436
Contract #Idm E-334

(7) Townsite

A good townsite has been reserved for the operation at Trapper Flat by the Forestry Department if future development requires it. The site can be held for at least a year without cost.

General

It is suggested, because of difficulty experienced with the current contract, that maximum flexibility be allowed within each division of the contract. For instance, division #3 "Operating materials and supplies" in the estimate has been carefully reviewed and minimum timber allowed for timbering 100% of the rock work, exclusive of any possible timber repairs. Explosives have been estimated at only slightly in excess of requirements if the work is 100% timbered. If less timber is required, it is likely that more explosives will be needed and it is expected that these items will thus balance, if sufficient flexibility is permitted. The same can be applied to most of the smaller items within each division.

The contingency fund is much less than is usually provided by engineers for work where more positive estimates are possible. If, as mentioned above, maximum flexibility is allowed, it is believed the contingency fund will be sufficient.

Because of the fact that the funds remaining in the current contract are practically exhausted, we urge early consideration of our application so the work may be continued without interruption.

Very truly yours,

NORTHFIELD MINES, INC.

George W. Mitchell
General Manager

GWM/m

cc: C. O. Mittendorf

NORTHFIELD MINES, INC.
STEVENSON OPERATION

EXPLORATION PROJECT CONTRACT NO._____ ____

ESTIMATED COSTS OF THE PROJECT

(1) Independent Contracts

(A) Underground Diamond Drilling

84 - 50 foot holes or equivalent @ $4.50 ft.	$ 18,900.00	
84 - Drill Stations @ $25.00 each	2,100.00	

(B) Surface Diamond Drilling

2,000 feet Surface Drilling @ $7.00 per foot	14,000.00	

(C) Bulldozing

Trenching and Cutting Drill Sites 300 hours @ $15.00 per hour	4,500.00	
Road Rehabilitation 75 hours @ $15.00 per hour	1,125.00	
Snow Removal 250 hours @ $15.00 per hour	3,750.00	$44,375.00

Note: The hourly rate of above bulldozing is for a working hour and includes the wages of an operator, fuel, lubrication and repairs.

NORTHFIELD MINES, INC.
STEVENSON OPERATION

EXPLORATION PROJECT CONTRACT NO._____

ESTIMATED COST OF THE PROJECT

(2) Labor, Supervision and Engineers and Geologists

Days' pay labor will be employed on a 6-day week basis with time and one-half for the sixth day. Rates based on rates paid in district.

No.	Class	Months	Rate	Total Pay	
12	Miners	9	$ 2.08	$ 46,725.12	
6	Muckers	9	1.865	20,947.68	
3	Motormen	9	1.99875	11,224.98	
1	Dumpman	9	1.765	3,304.08	
1	Timberman	9	2.09	3,912.48	
1	Trackman	9	1.93	3,612.96	
1	Electrician	9	2.09	3,912.48	
1	Night Shift Boss	9	525.00 Mo.	4,725.00	
1	Mechanic	9	2.09	3,912.48	
3	Compressor & Power Op.	9	1.89625	10,649.34	
1	Tool Nipper	9	1.765	3,304.08	
2	Carpenters	6	2.09	5,216.64	
1	Laborer	9	1.765	3,304.08	
1	Truck Driver	9	1.765	3,304.08	
1	Geochemical Assistant	3	2.09	1,304.16	
1	Bookkeeper & Pur. Agent	10	575.00 Mo.	5,750.00	
1	Typist	10	400.00 Mo.	4,000.00	
1	Cook	9	2.03625	3,811.36	
1	Cook's Helper	9	1,765	3,304.08	
	Bonus for Miners, Etc.			19,656.00	$165,881.08
1	Superintendent	10	600.00 Mo.	6,000.00	
1	Day Foreman	9	750.00 Mo.	6,750.00	12,750.00
1	Geologist	10	625.00 Mo.	6,250.00	
1	Engineer	9	500.00 Mo.	4,500.00	
1	Geologist	4½	625.00 Mo.	2,812.50	13,562.50
			Total		$192,193.58

NORTHFIELD MINES, INC.
STEVENSON OPERATION

EXPLORATION PROJECT CONTRACT NO._____

ESTIMATED COSTS OF THE PROJECT

(3) Operating Materials & Supplies

Furnishings for Pump House, Cookhouse, Bunkhouse, First Aid Room, Office & Warehouse, Change Room and Trailer Houses, including Pressure Pump, Tanks, Stoves, Plumbing, Lockers, Fire Protection and Miscellaneous	$ 8,611.25	
Timber & Timber Supplies	20,870.00	
Blasting Supplies & Miners' Lamp Exp.	13,060.00	
Pipe, Fittings & Ventube	9,345.60	
Mine Rail & Track Supplies	9,276.00	
Drill Steel, Bits, etc.	2,250.00	
Tools, Metals and Shop Supplies	2,122.00	
Electrical Supplies	6,325.25	
Fuel Oil, Gasoline, Oils, Greased Tires, etc.	23,175.00	
Engineering, Geology, Office & Warehouse Supplies & Expense	1,950.00	
Core Boxes	260.00	$97,245.10

NORTHFIELD MINES, INC.
STEVENSON OPERATION

EXPLORATION PROJECT CONTRACT NO._____

ESTIMATED COSTS OF THE PROJECT

(4) Operating Equipment

To Be Rented	Months	Monthly Rental	Totals
2 - Mucking Machines	9	325.00 ea.	$5,850.00
2 - Mancha Trammers	9	450.00 "	8,100.00
10 - Mine Cars - 45 cu. ft.	9	60.00 "	5,400.00
2 - Small Slushers Complete	9	40.00 "	720.00
1 - Large Tugger	9	35.00	315.00
1 - Air Receiver	9	10.00	90.00
5 - Jackleg Drills	9	60.00 ea.	2,700.00
3 - 25 H.P. Blowers	9	35.00 "	945.00
1 - Rail Bender - 40# Rail	9	5.00	45.00
20 - Miners Electric Lamps & Chargs.	9	25.00 lot	225.00
2 - 315 cu. ft. Compressors	9	414.00 ea	7,452.00
2 - 50 KW Diesel Electric Units	9	400.00 ea.	7,200.00
1 - Electric Printing Calculator	10	25.00	225.00
1 - Typewriter	10	9.00	90.00
1 - Transit	9	75.00	675.00
1 - Electric Welder	9	27.75	249.75
1 - Acetylene Welding Outfit	9	16.65	149.85
1 - Drill Press & Nec. Drills	9	20.00	180.00
1 - 1ton Chain Block	9	16.45	148.05
1 - 2 ton Chain Block	9	25.55	229.95
1 - 3 ton Chain Block	9	33.35	300.15
1 - Bench Vise	9	8.65	77.85
3 - Power Saws	9	15.00 ea.	305.00
12 - House Trailers	9	10.00 ea.	1,080.00
2 - Jeeps	9	100.00 ea.	1,800.00
1 - Pickup	9	100.00 ea.	900.00
1 - Dump Truck	9	175.00	1,575.00
			$47,027.60

NORTHFIELD MINES, INC.
STEVENSON OPERATION

EXPLORATION PROJECT CONTRACT NO. _____

ESTIMATED COST OF THE PROJECT

(5) Rehabilitation and Repairs

First Aid Room From Old Bunkhouse	9.00	
Office and Warehouse from Cookhouse	644.00	
Change Room from Old Compressor House	420.00	$1,073.00

(6) New Buildings

Carpenter Shop 16' x 24'	401.00	
Water Pump Building 10' x 12'	299.36	
Shop Building 16' x 24'	516.00	
Compressor and Power House 20' x 36'	677.64	
Cook House 24' x 32'	1,480.00	
Bunkhouse 36' x 42'	2,663.14	6,037.14

NORTHFIELD MINES, INC.
STEVENSON OPERATION

EXPLORATION PROJECT CONTRACT NO. _____

ESTIMATED COST OF THE PROJECT

(7) **Miscellaneous**

Repairs to Mine Machinery- Drills, Compressors, Power Plants, Vehicles, Etc.	6,250.00	
Analytical and Geochemical	5,400.00	
Payroll Taxes and Insurance	20,406.71	
Telephone and Telegraph	1,000.00	
Boardinghouse Loss	10,100.00	
Freight Rented Equipment Contract, etc	5,575.00	48,731.71

(8) **Contingencies**

Consulting and Auditing	4,050.00	
Fire Insurance and other unforseeable Expense	19,266.87	23,316.87

TOTAL EXTIMATED COST OF THE PROJECT 460,000.00

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

1201 N. Division St.
Spokane 2, Washington
May 28, 1953

Mr. W. S. Martin, Acting Chairman
Operating Committee, DMEA
Department of the Interior
Washington 25, D. C.

Subject: Docket No. DMEA 2436 (cobalt-copper)
Contract Idm-E334
Northfield Mines, Inc.

Dear Mr. Martin:

Reference is made to your letter of May 21, 1953, taking exception to our instructions to the subject Operator for submitting a supplemental MF-104 revising cost data in accordance with Amendment No. 6.

We had noted that Amendment No. 6 stated that the unit costs specified for drifting were to include all costs. Equipment purchases normally have not been included in the estimated unit costs in other contracts of this type effective in Region II. The unit cost amendment made by your office did not completely restate the estimated costs shown in Exhibit "A", and we assumed that the equipment would not be included in the unit costs because it would become difficult to determine the Government's equity in this equipment at the close of the project. Nothing was said about waiving or otherwise allowing credit for this equipment.

We hope this will answer your question. In any event, the instructions were unnecessary as the Operator refused to sign the amendment.

By Field Team, Region II

A. E. Weissenborn

A. E. Weissenborn, Exec. Officer
U. S. Geological Survey

M. E. Volin

M. E. Volin, Member
U. S. Bureau of Mines

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION
WASHINGTON 25, D. C.
~~XXXXXXXXXXXXXXXXXX~~
So. 1[illegible] Howard Street
Spokane 4, Washington

May 2[illegible], 1[illegible]

Mr. George W. Mitchell
Northfield Mines Inc.
Eureka, Nevada

Re: Docket No. DMEA-24[illegible] (cobalt-copper)
Northfield Mines property
Lemhi County, Idaho
Contract [illegible]

Dear Mr. Mitchell:

This will acknowledge the receipt of Amendment No. [illegible] which was signed by the Administrator but not by the Operator.

We have advised Washington DMEA officials of your decision to not sign the amendment and have suggested that they give the matter their immediate attention so that payment may be made on invoices you have previously submitted but in payment of which the Government has thus far not participated.

If you desire further information on this matter, it is suggested that you contact the Washington office.

Sincerely yours,

Thor H. Kalsgaard
For: M. E. Volin
Acting Executive Officer
DMEA Field Team, Region [illegible]

cc: USBM (2)
DMEA (2)
Vhs,

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

1201 N. Division St.
Spokane 2, Washington
May 22, 1953

Mr. C. O. Mittendorf
Administrator, DMEA
Department of the Interior
Washington 25, D. C.

Re: Docket No. DMEA 2436
Cobalt-copper
Northfield Mines, Inc.
Lemhi County, Idaho
Contract No. Idm-E334

Dear Mr. Mittendorf:

This letter follows up on the telephone conversation between yourself and M. E. Volin, Acting Executive Officer, Region II, regarding Amendment No. 6 to the subject contract. As stated in the telephone conversation, the Operator refused to sign this amendment.

For clarification of the record we shall review the various events leading up to the present stalemate and then present our recommendations for a possible settlement of the issues involved.

The complicated manner in which the Northfield contract was written has resulted in difficulties in contract administration from the day work was started; however, the present dilemma really started last October when the Operator let a subcontract to Mr. William E. Corrigan for drifting. The Executive Officer approved the subcontract and at that time we prepared Amendment No. 3 which provided for this subcontract and also allowed snow removal to be charged as an expense related to the drifting. Signed copies of the amendment were forwarded to Washington on November 26, 1952. The Field Team's detailed reasons for preparing the amendment were presented in a long letter to the Operating Committee dated February 2, 1953.

On January 12, 1953 we received a letter from the Operating Committee implying that Amendment No. 3 was no good and that another amendment should be drawn. After thoroughly considering all aspects of the contract, the Field Team decided that because of the intricate way in which the contract was written no amendment could be prepared in the field that would cover the issues involved, and therefore we wrote our letter of February 2 in which we made certain recommendations concerning removal of "allowable maximums," which, in our opinion, would remove the administrative troubles plaguing the contract. We were somewhat surprised to receive a letter from the Operating Committee on February 16 which noted that Amendment No. 3 had been examined by the Legal Division and that no legal objection opposed the amendment but that there were certain unsatisfactory features.

On March 6 we received from Mr. George Mitchell, representing the Operator, a letter in which he proposed certain changes in the contract, such proposed changes having been suggested during a conference he had with Mr. Frank Johnson and Mr. George Selfridge in Washington, D.C. on February 10, 1953. As the proposed changes involved changes in "allowable maximums" which the Field Team did not have authority to make, we forwarded copies of the Operator's letter to Washington, under Field Team letter of March 11, with the suggestion that the proposed amendment be drawn in Washington. On March 19 we received a letter from the Operating Committee, asking us to prepare a unit cost amendment for drifting, but on the same day we also received a telegram advising that the amendment would be prepared in Washington.

Further complications in the administration of the contract arose when Mr. R. M. Hull, DMEA auditor for Region II, received a letter from Mr. Jay Chambers, dated April 1, 1953, pertaining in part to the aforementioned Amendment 3 and quoted in part as follows: "In view of provisions of Article (6) A (1) of the contract an amendment effecting this change in 'allowable maximums' is required before you can allow either the drifting costs under subcontract or any costs in excess of the total of $27,500 designated as 'allowable maximums' for Independent Contracts." From this letter we inferred that Amendment No. 3 was considered impracticable from an auditing standpoint, and we therefore ceased making any further payments on the Operator's invoices. We even reasoned that some of the earlier payments we had made on the drifting project were illegal as we knew they had exceeded the amount set up in the contract for Independent Contracts.

On April 28, Mr. Thor Kiilsgaard called at Mr. Selfridge's office in Washington, D.C. and inquired as to the status of the Northfield amendment referred to in the Operating Committee's teletype of March 19. Mr. Selfridge advised that he thought it had been sent to the field for signature some time previously but that he would check to make sure. On May 1, Mr. Selfridge advised Kiilsgaard that the amendment had been unintentionally filed in the Washington office where it had remained for some weeks but that it had been recovered and was at that time on its way to the field.

The amendment was received at this office and forwarded to the Operator on May 11 for signature; it was returned unsigned on May 18, attached to a letter from the Operator, a copy of which is enclosed.

The Operator does not state in his attached letter all of his reasons for not signing the unit cost amendment, but these reasons are quite obvious. Drifting expenses have been higher than the original estimates and higher even than the unit cost figure discussed by Mitchell, Johnson and Selfridge on February 10. As near as we can figure from our records, drifting expenses have been in excess of $60 per foot. Contract funds are now exhausted. The April invoice shows expenditures in excess

of the amount of the contract; however, some of the costs claimed in this as well as previous invoices would be disallowed under the existing contract. For example, on both the March and April invoices a large part of the labor cost shown is for supervision which has already reached its allowable maximum. While we cannot be sure until an audit is completed it would appear that funds were exhausted after the drift had been advanced about 800 feet. Thus, had the Operator signed the amendment he would have been eligible for only a maximum of about $40,000 and had the contract been enforced he could have been held to 200 feet of additional advance on his own account. As he stood to lose upward of $10,000 he would not sign the amendment; from a practical standpoint he can hardly be blamed for his decision in the matter. As the contract was not set up originally as a unit cost contract it would seem only reasonable for him to expect DMEA to participate in the project on a cost incurred basis; furthermore, while his drifting costs have been high they are not considered unreasonable as he has encountered unexpected difficulties that have made drifting very difficult and expensive.

We are enclosing the March and April invoices submitted by the Operator. These invoices could be paid under the present contract as the work is now being done with day's pay labor as specified; however, if we consider Amendment No. 3 invalid we must deduct payments already made to the Operator for drifting previously done under subcontract. As the Operator performed this part of the work in good faith, we believe that the Government should contribute its share, and we think that even if the deletion is made for the work done by subcontract it should be reinstated in some way so as to properly reimburse the Operator for his performance. To pay these outstanding invoices and adjust for the payments already made for the subcontract would only further confuse an already complicated situation. We are still of the opinion that the easiest way to solve the dilemma would be to adopt the first three contract changes proposed in the Field Team letter of February 2, 1953. These changes would remove the "allowable maximums" and permit DMEA to participate in the drifting program on a cost incurred basis. Admittedly, the costs will be higher than were foreseen when the contract was negotiated; however, to demand the Operator to accept an amendment providing for costs less than were incurred is, at this late date, hindsight and probably will accomplish nothing but to prolong the already needlessly extended period in which contract changes have been under negotiation.

If the aforementioned "allowable maximums" are deleted and the outstanding invoices cleared for payment, the Field Team will have to carefully check all invoices to date to see that the Operator is not overpaid or paid for work or other items not allowable in the contract. We are prepared to accept this responsibility. We believe that if the contract is handled in this manner the entire problem can be cleared up in a minimum of time.

We are holding the unsigned copies of Amendment No. 6 pending further instructions from Washington. We are also notifying the Operator that we have referred the amendment problem to the Washington Office and that he should contact that office for further information.

By Field Team, Region II

M. E. Volin, Acting Exec. Officer
U. S. Bureau of Mines

Thor Kiilsgaard, Acting Member
U. S. Geological Survey

Enclosure

cc: DMEA Oper. Comm. (2)
USGS (2)

FILE COPY
SURNAME:

400

Rutledge
Martin

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

MAY 21 1953

Mr. A. E. Weissenborn, Executive Officer
DMEA Field Team, Region II
South 157 Howard Street
Spokane 4, Washington

Re: Docket No. DMEA 2436 - Cobalt and Copper
Northfield Mines, Inc.
Stevenson Property
Lemhi County, Idaho
Contract No. Idm-E334

Dear Mr. Weissenborn:

Reference is made to the subject docket and my telephone conversation with M. E. Volin on May 20, 1953.

Enclosed are two copies of Mr. Mitchell's letter of March 24, 1953, in which he states that plans are under way to ask for additional exploration assistance in the amount of $300,000.00. Also enclosed, although you should have received copies already, are two copies of our reply of April 1, 1953, to Mr. Mitchell outlining the procedure to be followed in making an application to expand an exploration program.

Sincerely yours,

C. O. Mittendorf (for)

Administrator

S.H.
5-21-53

Enclosures

FARutledge:foc
5-21-53
cc: Docket
Code 400
FT. Reg. II
Adm. Read. File
Oper. Comm.
H. W. Davis, USBM
T.P. Thayer, USGS

FILE COPY
SURNAME:

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

Talbert
Chambers
Rutledge
Martin
Johnson

MAY 21 1953

Mr. A. E. Weissenborn
Executive Officer
DMEA Field Team, Region II
South 157 Howard Street
Spokane 4, Washington

Subject: Docket No. DMEA 2436
(cobalt-copper)
Contract Idm-2330
Lemhi County, Idaho

Dear Mr. Weissenborn:

Reference is made to a letter dated May 11, 1953, addressed to Mr. A. J. O'Connell of Northfield Mines, Inc., by Mr. Velin, Member Field Team, Region II, requesting the submission of a supplemental MF-104, revising all cost data to date in accordance with Amendment No. 6 to the subject contract.

The Operating Committee concurs that the requested action is the most practical way to proceed under the new amendment. It is noted, however, that you state that all costs previously charged to and paid for drifting "except for purchases of equipment" should be shown as credits on the supplemental MF-104.

Since Amendment No. 6 places the drifting operations on a basis of agreed unit costs, which include all costs of the drifting, this exception is not understood. The forms MF-104 submitted by the Operator indicate that purchases of equipment have been made since the date the drifting was commenced. The amounts of such purchases appear to be properly for credit to the Government.

Your advice on this matter will be appreciated.

Sincerely yours,

S.N.
5-21-53

W. S. Martin
(JHB)
ACTING Chairman, Operating Committee

APPROVED:

J. H. Hedges (JHB)
Member, Bureau of Mines

A. R. Kinkel, Jr. (JHB)
Member, Geological Survey

EDTalbert/ama - May 20, 1953
Copy to: Mails and Files
Admr. Reading File
Region II
Operating Committee
Messrs. T. P. Thayer, J. H. Hedges,
W. S. Martin, G. C. Selfridge,
J. L. Chambers

400

FILE COPY
SURNAME:

Rutledge
Martin

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

MAY 18 1953

Mr. George W. Mitchell
Northfield Mines, Inc.
Eureka, Nevada

Re: Docket No. DMEA 2436 - Cobalt
and Copper
Northfield Mines, Inc.
Stevenson property
Lemhi County, Idaho
Contract No. Idm-N334

Dear Mr. Mitchell:

Reference is made to the subject docket and your letter of May 12, 1953, requesting payment of the March and April vouchers as submitted with further adjustment after the execution of Amendment No. 6.

Amendment No. 6 to the referenced contract was signed by the Administrator, DMEA, and sent to the Field Team on May 4, 1953. Therefore, you should have received the amendment by this date and future payments may be made on the agreed unit basis.

We sincerely hope that the unit cost method of payment by the Government will eliminate further difficulties.

Sincerely yours,

C. O. Mittendorf

Administrator

Copy to: Docket
Field Team, Region 2
Code 400
Adm. Reading File
H. W. Davis, USBM
T. P. Thayer, USGS

5-18-53

FARutledge/ls
5/15/53

C
O
P
Y

Docket

NORTHFIELD MINES, INC.
Cobalt, Idaho

May 16, 1953

Mr. A. E. Weissenborn
Executive Officer, Field Team, Region II
Defense Minerals Exploration Administration
157 South Howard Street
Spokane 4, Washington

Docket #DMEA 2436
Contract #Idm E-334

Dear Mr. Weissenborn:-

We are returning, herewith, unsigned Amendment #6.

At the time we first requested an amendment along the lines of Amendment #6, a considerable sum remained for continuance of the adit work. We thought such an amendment would help in the administration of the contract.

At the present time the funds are practically exhausted and we feel that the added accounting work for your accounting department and for Northfield's will serve no useful purpose. We, therefore, suggest that you process our March, April and May vouchers in the usual manner.

We have been forced to borrow some $30,000 to carry the operation during the past three months so will appreciate as prompt action as possible on the vouchers in order to keep our interest payments at a minimum.

Please accept our sincere thanks for your efforts in securing the amendment.

Sincerely yours,

NORTHFIELD MINES, INC.

/s/ Geo. W. Mitchell

Note: We have practically completed an estimate on a program for the project for this year. It will be forwarded in the next few days for your consideration. We are hopeful that the contract will be somewhat more flexible this time so its administration will be less burdensome. Hope to see you at the property in the near future.

G. W. M.

Northfield Mines, Inc.

Cobalt, Idaho

Eureka, Nevada
May 12, 1953

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
MAY 14 1953

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

Subject: Docket #DMEA 2436
Contract #Idm E-334

Dear Mr. Mittendorf:

We are advised by letter, dated April 22 from Field Team, Region II, that their office would be unable to make any further payments for the DMEA's portion on above exploration project. The reasons being that an amendment was in the process of being drawn up to place the contract cost on a unit basis.

As the March payment has not as yet been received, our company is finding it very difficult to finance continuance of the project. It is important to maintain the best credit standing possible with our suppliers and to meet our payrolls when due.

We would appreciate you wiring authorization to the Spokane office to make settlement for our March and April vouchers as submitted, then adjustment can be made upon signing the amendment.

Sincerely yours,

NORTHFIELD MINES, INC.

George W. Mitchell
General Manager

GWM/m
cc: A. E. Weissenborn

400

XXXXXXXXXXXXXXXX
1201 N. Division St.
Spokane 2, Washington
May 11, 1953

WSM

Mr. A. J. O'Connell,
Northfield Mines, Inc.
Stevenson Operation,
Eureka, Nevada.

Subject: Docket No. DMEA 2436
(cobalt-copper)
Contract Idm-5334
Lemhi County, Idaho

Dear Mr. O'Connell:

Enclosed are six copies of Amendment No. 6 to your contract Idm-5334, which has been signed by the Government and now needs signature of an authorized officer of your company before it becomes effective. If the amendment meets with your approval, please sign all copies, retain the copy marked for the Operator and return all others to this office.

Under this amendment No. 6 the Government will contribute to the cost of drifting on the basis of the unit costs shown in lieu of actual costs for units of work completed.

Before further payment can be made under the contract it will be necessary for you to submit a supplemental MF-104, revising all cost data to date so that they correspond to the provisions of this amendment. All costs that have been charged to drifting previously and for which payment has been made should be shown as credits; this will include the labor that was used for drifting, as well as all other expenses such as supervision, engineering, supplies, repairs, rental, and items directly or indirectly used except for purchases of equipment. The cost of drifting then can be reclaimed under Item I, Unit Contracts, on your supplemental MF-104. This is a lot of trouble, we realize, but it seems to be the most practical way to start under the new amendment.

Sincerely yours,

cc:
DMEA
USGS
AD
DF
Wash.(2)
Engineer
R. M. Hull

M. E. Volin, Member
Field Team, Region II

FILE COPY
SURNAME:

Rutledge
Martin
McKane
Selfridge
Hedges

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

MAY 4 1953

Mr. A. E. Weissenborn
DMEA Executive Officer, Region II
South 157 Howard Street
Spokane 4, Washington

Re: Docket No. DMEA 2436 -
Cobalt - Copper
Northfield Mines, Inc.
Stevenson Property
Lemhi County, Idaho
Contract No. Idm-E-334

Dear Mr. Weissenborn:

We are enclosing the original and five copies of Amendment No. 6 to the above-referenced contract, which have been signed by the Administrator for the Government.

If the terms and conditions of this amendment are satisfactory to you and the Operator, all six copies should be signed and the usual distribution made.

If any part of this amendment does not have either your approval or that of the Operator and cannot be amended within your delegated authority, the original and all copies of the subject amendment are to be returned to this office, together with the proposed changes for consideration.

Sincerely yours,

George C. Selfridge

Chairman, Operating Committee

Enclosures

APPROVED:

J. H. Hedges

Member, Bureau of Mines

A. R. Kinkel, Jr.

Member, Geological Survey

FARutledge/ls 4/29/53

CC: Docket
FT, Reg. 2
Code 400
Oper. Comm.
Adm. Read. File
E. W. Davis, USBM
T. P. Thayer, USGS

FILE COPY
SURNAME:

Martin

pb

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

May 4, 1953

MEMORANDUM

To: Docket No. DMPA 2436, Cobalt-Copper
Northfield Mines
Contract Idm-E-334

From: W. S. Martin

On May 1, 1953, Mr. Peter M. Borwick, Extension 3463 at Housing and Home Finance Agency, called Mr. George Roll in the Mining Requirements Division of DMPA about the subject project.

Northfield Mines had asked the Seattle office of Housing and Home Finance Agency for permission to use some of the 75 trailers which that Agency had provided for Calera Mines at Cobalt, Idaho. Although Housing and Home Finance Agency usually prepares the trailer sites, in this instance the site preparation was made by Calera Mines at its own expense.

Mr. Borwick was advised that Northfield is operating under a contract given under authority of the Defense Production Act of 1950, and that we have been advised by Northfield that it will apply for further funds when the present contract has been completed. Mr. Borwick was told that we could make no request in the matter but that it seemed reasonable to us to allow Northfield to use the housing if an acceptable arrangement could be reached between Northfield and Calera for that purpose.

J.C. 5/6/53

WSMartin/ls

Copy to: Docket
Code 400

FILE COPY
SURNAME:

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

Rutledge
Martin

Chief Counsel, DMEA 4-22-53

Iron and Ferro-Alloys Division, DMEA

Review and preparation of amended contract
Docket No. DMEA 2436 - Cobalt and Copper
Northfield Mines, Inc.
Stevenson Property
Lemhi County, Idaho
Contract No. Idm-E334

Transmitted herewith is the rough draft of a proposed amendment to the referenced contract for your use in preparing an amended contract on the new form.

The effective date of the amended contract shall be October 1, 1952.

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

Enclosure

FARutledge:foc

cc: Docket
Code 400
Admr. Reading File

D R A F T

EXPLORATION PROJECT CONTRACT
NORTHFIELD MINES, INC.
DOCKET NO. DMEA-2436

EXHIBIT "A"

DESCRIPTION OF THE WORK

Time Schedule: 0 - 12 months

The project consists of (1) trenching in the vicinity of areas previously indicated as favorable for cobalt mineralization, and (2) if warranted, subsequent diamond drilling and underground work.

The work includes:

1. Erecting the frames, including floor and sides, for two tent houses to be used as temporary quarters and facilities for the crew until the need for permanent ones is indicated by the exploration.

2. Constructing as needed, through the life of the project, by means of contract bulldozing, 2,500 feet of new road to the various working and camp sites noted below.

3. Constructing as needed, through the life of the project, 2,000 feet of new trails to the various areas that are to be explored.

4. Cutting by contract bulldozing, 8,000 feet of trench to further explore and extend the limits of the mineralized showings previously indicated by work on the Merle No. 5, Merle No. 3, and Little Queen claims as shown on Exhibits B, C, and C1 attached hereto.

5. Preparing by contract bulldozing, a maximum of 10 diamond drill sites. The locations of the drill sites, which are to be selected by the Operator upon the basis of the results of the trenching, are subject to prior Government approval.

6. Drilling, by contract, approximately 10 AX diamond drill holes, not to exceed 3,030 feet in aggregate length, to explore, below the zone of oxidation, the best mineralized shear zones as indicated by the trenching. The exact number, location, attitude, and length of the individual holes will be determined by the Operator upon the basis of the results of the trenching and prior drilling, subject to prior approval by the Government.

7. Constructing a 12' x 20' compressor house and tool shed of rough lumber when diamond drilling indicates that underground work is warranted.

8. Driving one or more adits, not to exceed 1,000 feet in aggregate length, to explore the mineralized zone or zones as suggested by the diamond drilling. The adit or adits shall be not less than approximately 5' x 7' in cross section. The location and length of each, if more than one, which are to be determined by the Operator upon the basis of the results of the diamond drilling, shall be subject to prior Government approval.

9. Constructing one 16' x 20' tar paper-covered frame bunkhouse and one 16' x 20' tar paper-covered cookhouse, the latter to be partitioned with a 6' x 8' room for the cook. These buildings shall be constructed when the exploration indicates the need of permanent structures as determined by the Operator, subject to Government approval.

All subcontracts are subject to prior written approval by the Government.

ESTIMATED COSTS OF THE PROJECT

AGREED UNIT COSTS

Copy this

Drive 1,000 feet of adit at $40.00 per foot, including ~~the~~ all costs of the work ~~of underground and surface labor, mine and other supplies, rented equipment, purchased equipment, repairs and maintenance, engineering, supervision, sampling, snow removal, cookhouse and bunkhouse operation, accounting, and other miscellaneous items such as pay roll taxes and contingencies, except assaying.~~ assaying of work. $40,000.00

Timber 600 feet of adit, where necessary, at $5.00 per foot 3,000.00

Spile 400 feet of adit, where necessary, at $5.00 per foot 2,000.00

$45,000.00

The Government will contribute to the costs of driving the adit, ~~and~~ timbering and spiling on the basis of these agreed, ~~estimated~~ unit costs in lieu of actual costs. The ~~rest of the described work and that item of the~~ cost of ~~the above~~ assaying work which is excluded therefrom will be contributed to by the Government on the basis of the actual costs specified in Article 6(a) of the contract form, a schedule of which ~~are~~ is set forth ~~below:~~ under category (7) Miscellaneous in Exhibit "A."

ACTUAL COSTS
(*Indicates allowable maximum)

(1) Independent Contracts

(a) 2,500 feet of new road construction @ $13.00 per hour* for bulldozing, 100 hours* — $1,300.00*

(b) 8,000 feet of trench @ $13.00 per hour* for bulldozing, 435 hours* — 5,655.00*

(c) Road rehabilitation @ $13.00 per hour* for bulldozing, 71 hours* — 923.00*

(d) Preparation of diamond drill and building sites @ $13.00 per hour* for bulldozing, 24 hours* — 312.00*

(e) ~~Approximately~~ 3,030 feet of diamond drilling @ $6.49 per foot.* The costs of all equipment, supplies, labor, and all other costs necessary for drilling the holes are included in the per foot cost — 19,664.70*

Note: The hourly rate for the above bulldozing is for a working hour and includes the wages of an operator, fuel, lubrication, transportation, repairs, and all other costs.

$27,854.70

(2) Labor, Supervision, and Consultants

The following labor will be employed on a 6-day week basis with time and one-half for the sixth day:

No.	Class	Approximate Months	Hourly Rate	Total Wages
1	Dozer swamper	2½	$1.73625	$ 900.00
1	Surface laborer	3	1.50000	1,100.00
2	Carpenters	2	1.88625	1,690.08
1	Carpenter helper	1	1.73625	388.92
1	Truck driver	7	1.43000	2,722.72
				$6,801.72

1 Engineer-geologist @ $500.00 per month;* 5 months* (June - October inclusive) — 2,500.00*

1 Superintendent-geologist @ $600.00 per month;* 7 months* — 4,200.00*

$13,501.72

Note: The superintendent-geologist shall direct the exploration project and shall be responsible for securing representative samples of the deposits, where warranted, and their subsequent handling in a manner approved by the Government.

(3) Operating Materials and Supplies

Furnishings for tent houses and bunkhouse, including cots, mattresses, blankets, sheets, pillows and cases, stove, lamps, and miscellaneous	$884.00	
Furnishings for cook tent or house, including cook stove, sink and plumbing, dishes, silverware, kitchen utensils, kitchen supplies and miscellaneous	657.00	
Small tools	130.00	
Engineering and geology supplies	700.00	
Medical supplies	350.00	
Fuel, oil, and tires	541.91	
Gasoline	321.30	
Core boxes	235.20	$3,819.41

(4) Operating Equipment

To be rented

1 Water pump, gas driven 90 gpm @ $72.00 per month, 7 months	504.00	
1 Universal Jeep @ $50.00 per month, 7 months	350.00	
1 Dump truck, 1½ tons @ $100.00 per month, 7 months	700.00	
Freight on the above equipment	500.00	$2,054.00

To be purchased

1 Chain saw, 20' gas driver	$400.00	
1 Light plant, 2.5 K.W.	600.00	
1 Gas welding outfit	150.00	
1 Electric bench grinder ½ H.P.	50.00	
1 Skill saw, 7.25" blade	145.00	
1 Electric hand drill	70.00	
1 Pipe die, ½" to 2"	50.00	
		$1,465.00

To be furnished by Operator

None

(5) Rehabilitation and Repairs

None

(6) New Buildings, Improvements, Installations

Two tent houses @ $375.00 each	750.00*	
Materials and supplies for bunkhouse 1/	1,000.00*	
Materials and supplies for cookhouse 1/	1,100.00*	
Materials and supplies for compressor house and tool shed 1/	500.00*	
		$3,350.00*

(7) Miscellaneous

Analytical work	2,000.00
Accounting fees as incurred @ $150.00* per month, 7 months	1,050.00
Travel for engineer @ $150.00 per month, 7 months	1,050.00
Cabin rental @ $50.00 per month, 8 months	400.00

Telephone and telegraph @ $50.00 per month, 7 months	$350.00	
Automotive repair parts and replacement	75.00	
Workman's compensation, OAB, etc.	500.00	
Freight on diamond drill equipment in and out	325.00	
Contingencies	105.17	
		$5,855.17
TOTAL ESTIMATED COST FOR PROJECT		$102,900.00 *
GOVERNMENT PARTICIPATION AT 70 PERCENT		72,030.00 *

1/ Labor for this item is included in the category (2) Labor, Supervision, and Consultants scheduled above.

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

Spokane, Washington
April 22, 1953

Department of the Interior
Defense Minerals Exploration Administration
Received
APR 27 1953

Northfield Mines, Inc.
Eureka, Nevada

Subject: Docket No. DMEA 2436
Contract No. Idm-E334
Monthly operating report
for March 1953

Gentlemen:

This will acknowledge receipt of the MF-104 for the above period.

We have received word from the DMEA Washington Office that an amendment is being prepared which will place the contract costs on a unit basis, retroactive to the start of the crosscut. We will be unable to make any further payments on the contract until we actually receive the amendment which will become our basis for payments. This amendment should be received very shortly as it has been in process for sometime.

In answer to your letter of April 15, 1953 regarding the deletions on the February 1953 MF-104, this amendment, if approved, will automatically correct the deletions that you mentioned.

By Field Team, Region II

A. E. Weissenborn, Exec. Officer
U. S. Geological Survey
157 South Howard St.

M. E. Volin, Member
U. S. Bureau of Mines
1201 N. Division St.

cc: DMEA, Wash. (2)
USGS (2)

Docket

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION

~~WASHINGTON 25, D.C.~~
So. 157 Howard Street
Spokane 4, Washington

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
APR 20 1953

April 15, 1953

Mr. George C. Selfridge, Chairman
Operating Committee, DMEA
Department of the Interior
Washington 25, D. C.

Re: Docket No. DMEA-2436 (Cobalt-copper)
Northfield Mines, Inc.
Stevenson Property
Lemhi County, Idaho
Contract No. Idm-E334

WSM
4/21/53

Dear Mr. Selfridge:

As you stated in your teletype of March 23, our letter of March 11 crossed yours of March 19 re the proposed amendment to the subject contract. We inferred from the teletype that reply to your letter was unnecessary unless we were in serious disagreement with the letter which we were not. We are extremely anxious to have this matter straightened out, and although we assume from your teletype that you are going ahead and are preparing the amendment and that further reply to your letter is unnecessary, we are writing now in case there is some misunderstanding and the processing of the amendment is being delayed awaiting reply from us.

Our only comment is that with the type of ground which the Northfield Company is encountering in the adit, we doubt seriously whether 1000 feet of adit can be driven for $35.00 a foot or $40.35 a foot for timbered and spiled adit. If the company is willing to accept this, however, we would interpose no objections.

Probably a typo for $49.50
WSM

If Amendment 3 to the original contract is now considered legal as we assume it is from Mr. Hofflund's memorandum of January 21, 1953, then, perhaps, it will not be necessary to make the amendment, but we can continue with the present contract in its present form. We hope, however, that whatever is decided, a solution will be forthcoming very soon as this matter has been pending for quite a while and some solution is essential.

By Field Team, Region II

FOR: Thor D. Kildegaard
A. E. Weissenborn, Exec. Officer
(Geological Survey)

M. E. Volin
M. E. Volin, Member
(Bureau of Mines

Copy retained 400

cc: USBM (2)
Vhay

FILE COPY
SURNAME:
[redacted]

Talbert
Chamberlin

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

APR 1 1953

BW

Mr. Robert M. Hall
DMEA Auditor
1201 North Division Street
Spokane 2, Washington

Re: DMEA-2436, Idm-2334
Northfield Mines, Inc.

Dear Bob:

Reference is made to that portion of your letter of March 27, 1953, pertaining to the referenced project.

There appears to be considerable misunderstanding relative to the matter of itemizing sub-contract costs under this project. As the contract was originally written provision was made for sub-contracting the following categories of work on a cost per unit of work basis (with unit costs, number of units, and total costs per category, and total costs for Independent Contracts each being designated as "allowable maximums"):

Road Construction
Trenching
Road Rehabilitation
Preparation of Drill and Building Sites
Diamond Drilling

All other work, including the exploratory drifting, was to be done by the Operator with the Labor, Supervision and Supplies listed (and designated by totals as "allowable maximums") in the Exhibit "A".

By Amendment No. 3, however, the Executive Officer provided that the drifting "may be done by independent contractors with the prior approval of the Field Team." This has the effect of decreasing the "allowable maximums" under Labor and Supervision and Operating Materials and Supplies and increasing the "allowable maximum" under Independent Contracts; and properly the amendment should have incorporated these changes in "allowable maximums". In view of the provisions of Article 6 (a) (1) of the contract an amendment effecting this change in "allowable maximums" is required before you can allow either the drifting costs under sub-contract, or any costs in excess of the total of $27,590 designated as an "allowable maximum" for Independent Contracts.

Since, by the terms of the contract, all independent contracts are required to be on a unit price basis, I cannot perceive of any reason or justification for you, as an auditor, to demand that either the Operator or the sub-contractor account for, or itemize, his charges by labor, supplies, overhead, profit, etc.

I understand that the amendment of this contract is the subject of current correspondence between the Operating Committee and the Executive Officer of Region II, and that the latter has been requested to prepare the necessary amendment.

Sincerely yours,

(Signed) J. L. Chambers

Jay L. Chambers, Chief
Contract Administration
and Audit Division

KDTalbert/wb
March 31, 1953

Copy to: Docket
Admr. Reading File
Mr. Martin
Mr. Chambers

S.N.
4/1/53

400

FILE COPY
SURNAME:

Rutledge
Mathis

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

APR 1 1953

Mr. George W. Mitchell
Northfield Mines, Inc.
Eureka, Nevada

Re: Docket No. DMRA 2436 - Cobalt
and Copper
Northfield Mines, Inc.
Stevenson Property
Lemhi County, Idaho
Contract No. Idm-E334

J. C. 4-1-53

Dear Mr. Mitchell:

This will acknowledge receipt of your letter of March 24, 1953, requesting forms to be used in applying for an expanded exploration program under the referenced contract.

We do not have any special forms to use in making an application to expand an exploration project. In order to apply for an expanded project you should supplement the original application with a letter setting forth the new work you propose to do and the cost thereof in detail, and also furnish us a report on what has been accomplished under the project to date, with justification for doing the new work. It is suggested that this letter and accompanying data be submitted in quadruplicate through the Field Team, since it will be necessary for the Field Team to review your request and make a report on it to us. If your request is approved, the present contract will be amended to incorporate the new work.

Because a new form for "Owner's Consent to Lien" is now in use, the enclosed forms should be signed and returned with your request for additional exploration.

Sincerely yours,

C. O. Mittendorf (fw)

Administrator

Enclosures

FARutledge/FEJohnson/ls
4/1/53

cc: Docket
Field Team, Reg. 2
Admn. Read. File
Code 400
H. W. Davis, USBM
T. P. Thayer, USGS

Docket Copy

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION

~~WASHINGTON 25, D.C.~~
So. 157 Howard Street
Spokane 4, Washington

March 26, 1953

Mr. George C. Selfridge, Chairman
Operating Committee, DMEA
Department of the Interior
Washington 25, D. C.

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
MAR 30 1953

Re: Docket DMEA-2436 (Cobalt-Copper)
Northfield Mines, Inc.
Lemhi County, Idaho
Contract Idm-E334

Dear Mr. Selfridge:

Attached are the original and two signed copies of Amendment No. 5 to the subject contract, with attached justification.

A copy of the amendment has been retained by the Operator, a copy is being retained for our files, and by a carbon copy of this letter we are distributing the Finance Officer's copy.

Sincerely,

Thor H. Kiilsgaard

Thor H. Kiilsgaard
For: M. E. Volin
Acting Executive Officer
DMEA Field Team, Region II

RECEIVED
MAY 6 1953
GENERAL COUNSEL
DEFENSE MINERALS
ADMINISTRATION

Enclosure

cc: USBM (2)
Vhay
Finance Officer w/encl.

Case
3/30

Docke

NORTHFIELD MINES, INC.
Cobalt, Idaho

Eureka, Nevada
March 24, 1953

Mr. C. O. Mittendorf
Administrator DMEA
Department of the Interior
Washington 25, D. C.

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
MAR 26 1953

dmea 2436

Dear Mitt:-

As you know, Northfield Mines, Inc. has had considerable encouragement in the work we are doing on the Stevenson Property adjacent to the Calera Mining Company near Cobalt, Idaho. We are seeking copper and cobalt. We expect to complete contract # Idm E-334, Docket # DMEA 2436 during the next month or so.

We are planning an expanded program, which may total about $300,000, to further explore the zone called "Merle #5" as well as crosscut some 800 feet from the same adit to explore the "Merle #3" zone. Both of these zones were disclosed by trenching and diamond drilling during the past season, under contract Idm E-334. Our 7000 adit, 701 and 702 drifts are presently exploring the Merle #5 where a zone as wide as 60 feet, containing approximately 0.3% cobalt and 0.75% copper has been exposed.

It is our intention to make application to the Defense Minerals Exploration Administration for their participation in the project on the same basis as the contract under which we are now operating. Please forward us the necessary application forms so we may complete them at an early date.

Sincerely yours,

NORTHFIELD MINES, INC.

George W. Mitchell
General Manager

GWM/m
cc: A. E. Weissenborn
G. Selfridge

FILE COPY
SURNAME:

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

Martin
Gibson
Green
Talbert
Johnson
Selfridge

BW

Defense Minerals Exploration Administration
W. S. Martin
5285 3538

March 19, 1953

A. E. Weissenborn, DMEA Executive Officer, Region II, South 157 Howard St.
Spokane, Washington
DMEA 2436 - Worthfield Mines - Idm-W334

Urlet March 11 crossed ours of March 19 and is approximate answer our request for recommendation covering amendment providing unit price basis for subject contract. Accordingly, we will proceed as indicated our above letter. If you have further comments, please wire when you receive letter. For your information Washington made no commitment regarding exact price as implied in recent correspondence.

G. C. Selfridge, Chairman
Operating Committee

3/19/53

WSMartin/ls
3/19/53

cc: Docket
Code 400
Admn. Reading File
FT, Reg. 2 - confirmation
Audits, Bureau of Mines
H. W. Davis, USBM
T. P. Thayer, USGS

FILE COPY
SURNAME:

400

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

Martin
Fleisman
Larsen
Calfee
Bellonde
Whittenberg

AIR MAIL

Mr. A. E. Weissenborn, Executive Officer
DMEA Field Team, Region II
South 157 Howard Street
Spokane 4, Washington

MAR 19 1953

Re: Docket No. DMEA 2436 -
Cobalt - Copper
Northfield Mines, Inc.
Stevenson Property
Lemhi County, Idaho
Contract No. Idm-E334

Dear Mr. Weissenborn:

Copies have been received here of letters of March 2 and 4, 1953, to you from Northfield Mines, Inc., regarding the subject exploration contract.

The first of the above-mentioned letters requests an extension of the contract to July 2, 1953. We approve such extension.

The letter of March 4 lists the distinct items of the contract under the following headings:

Contract Allowance -($102,900.00)
Costs Claimed and Allowed to 12/31/52 - ($60,784.74)
Costs Claimed January 1953 - ($9,454.05)
Balance Available 2/1/53 - ($32,661.21)

The same letter also lists the work performed to January 31, 1953, at a cost of $70,238.79, and suggests that the available balance left in the contract be used for 728 feet of adit work at a flat cost of $44.86 per foot based on existing conditions. The additional suggestion is made that if cost per foot is less, DMEA is to pay 70 percent of the actual cost, and if the cost is higher, Northfield is to absorb everything above $44.86 per foot.

Using our latest available MF-104 report, covering December 1952, we find that the $60,784.74 costs claimed and allowed to December 31, 1952, included $3,261.25 allocated to the adit and $57,523.49

allocated to other items under the contract. Deducting this sum from the total contract amount of $102,900.00 leave $45,376.51 available to use for cost of 1000 feet of adit.

We suggest, therefore, that you prepare an amendment to the contract, effective January 1, 1953, authorizing project costs from and after January 1, 1953, on the following basis:

Drive 1000 feet of adit at $35.00* per foot 1/
Timber 1000 feet of adit at $ 5.00* per foot 2/
Spile 1000 feet of adit at $ 5.35* per foot 2/

* Indicates agreed estimated unit costs in lieu of actual costs.

1/ This covers all costs whatsoever, including the cost of underground and surface labor, mine and other supplies, rented equipment, purchased equipment, repairs and maintenance, engineering, supervision, sampling, analytical work, snow removal, cookhouse and bunkhouse operation, accounting, other miscellaneous items such as pay roll taxes and contingencies.

2/ Timbering and spiling may be done where necessary.

In measuring the adit, start the measurement at the zero mark where the measurement reported in the October MF-104 was started, because we have deducted the reported adit costs from the total contract allowance, as shown above.

As of February 28, 1953, Northfield, if the amendment is executed, could invoice you for 444 feet of adit if that is the measured footage driven. To the amount payable for the drifting, would be added whatever amounts were payable for timbering and spiling.

Please advise us promptly whether the foregoing meets with Northfield's agreement.

Sincerely yours,

[illegible]

(JLB)

Chairman, Operating Committee

Approved:

WSMartin/ls 3/18/53

J. C. 3/19/53

[illegible] (JLB)

Member, Bureau of Mines

D. [illegible] (JLB)

Member, Geological Survey

cc: DOCKET
CODE 400
FIELD TEAM, REGION 2
ADMN. READING FILE
T. P. THAYER, USGS
H. W. DAVIS, USBM
OPERATING COMMITTEE

P. S. - We will prepare the amendment here and rewrite the contract on a new form at the same time. We will, however, need your comments on the foregoing.

Docket

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION

~~WASHINGTON 25, D.C.~~
So. 157 Howard Street
Spokane 4, Washington

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
MAR 17 1953

March 11, 1953

Air Mail

WSM

Mr. George C. Selfridge, Chairman
Operating Committee, DMEA
Department of the Interior
Washington 25, D. C.

Re: Docket DMEA-2436 (cobalt-copper)
Northfield Mines, Inc.
Lemhi County, Idaho
Contract No. Idm-E334

Dear Mr. Selfridge:

Attached are copies of a letter dated March 4, 1953, from Mr. George Mitchell of the Northfield Mines, Inc., outlining a proposal which apparently he worked out with you and Mr. Johnson in Washington on February 10.

We have examined this proposal, and as you will note from the attached comments by Mr. Howard of the Bureau of Mines, we regard the costs proposed by Mr. Mitchell as fair and reasonable. However, Mr. Howard points out that the sliding scale proposed by Mr. Mitchell will require a complete restatement of Exhibit A. The bookkeeping presently required, which has caused the Operator difficulty, would not be eliminated or in any way reduced; it might, in fact, be increased. Furthermore, the conversion of the contract from one basis to the other is bound to be a laborious and time-consuming task and will undoubtedly give rise to a good many complications because of the numerous deletions that have been made by the Finance Officer. We therefore suggest that it would be much simpler either to set a fixed unit price or to follow the suggestion made in the Executive Officer's letter of February 2 and remove some of the restrictions on the present contract caused by the great number of allowable maximums. However, as you know, neither of these solutions nor the amendment proposed by Mr. Mitchell is within the authority of the Field Team to make. Consequently we are forwarding Mr. Mitchell's letter to you with the request that you prepare the necessary contract revision in Washington. Whichever method you choose will be acceptable to us--our only interest is to see the work progress and the account paid.

Copy retained 400

Whatever course is followed, something must be done without delay so that there will be no break in the work. We, therefore, urge that you give this the utmost priority. We shall accept any solution that you make, but an early solution is essential which is the reason that we favor removing the allowable maximums as this can be done much more easily.

Inasmuch as Mr. Mitchell sent copies of his letter to Mr. Mittendorf, a copy of this letter is being sent to him also.

By Field Team, Region II

A. E. Weissenborn

A. E. Weissenborn, Executive Officer
(U. S. Geological Survey)

M. E. Volin

M. E. Volin, Member
(U. S. Bureau of Mines)

Enclosures

cc: George Mitchell
C. O. Mittendorf
USBM (2)
Roberts

Docket

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

1201 N. Division St.
Spokane 2, Washington
March 11, 1953

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
MAR 17 1953

WSM

MEMORANDUM

To: DMEA Field Team, Region II

From: T. E. Howard, Chief, DMEA Section, Bureau of Mines, Region II

Subject: Docket No. DMEA 2436 (cobalt-copper)
Northfield Mines, Inc.
Contract Idm-E334

Reference is made to a letter from George Mitchell of Northfield Mines, Inc., to Mr. Weissenborn, dated March 4, 1953, requesting that the subject contract be amended to provide for Government participation in the cost of the drifting remaining to be done (728 feet on January 31, 1953) on the basis of an agreed unit cost of $44.86 per foot in lieu of actual costs.

Mr. Mitchell suggests that this figure be a maximum, subject to adjustment downward if actual costs proved to be lower. He states that the proposal was submitted to this office at the suggestion of Mr. Selfridge and Mr. Johnson of the Washington, D.C. office of DMEA.

Attached to Mr. Mitchell's letter was a statement of costs of the project and balances available in the contract as of Jan. 31, 1953. These figures cannot be checked as our files have been removed from the office by Mr. Hull, DMEA auditor, for his use in making an audit of the project. However, the company has kept an excellent set of records and they are probably reasonably accurate.

The proposed unit price was obtained by dividing the funds remaining on January 31 by the length of drift remaining to be driven. It is considered reasonable for drifting performed under conditions encountered to date.

Mr. Mitchell's proposal, while it is equitable and would be to the benefit of the Government, would be very difficult to incorporate in an amendment. In order to provide for a downward

Copy retained 400

adjustment in the unit price, Exhibit "A" would have to be completely restated to indicate allowable cost items that could be charged to the project and included in the unit cost. This would not eliminate any of the bookkeeping presently required. It is recommended, therefore, that if any amendment is made it provide for a straight unit price for drifting without complicating provisions for adjustment downward.

T E Howard

T. E. Howard

Orig. & 3 cys - Wash.
USGS (2)
DMEA
AD
VZJ

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

No. 157 Howard Street
Spokane 4, Washington

BW

March 16, 1953

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
MAR 17 1953

Mr. George L. Mitchell
Northfield Mines, Inc.
Eureka, Nevada

Re: Contract IDM-4,5,6 (cobalt-copper)
Lemhi County, Idaho
Contract IDM-1,3,4

Dear Mr. Mitchell:

This will acknowledge your letter of March 4 as well as your previous letter of March 2 requesting an extension of the time for completing the Northfield contract on the Stevenson property. Enclosed is Amendment No. 5 for the extension of time. Will you please sign all copies, retain that copy marked "Operator's Copy" for your files, and return the remaining copies to this office.

In regard to the contract change outlined in your March 4 letter, the proposal you make is agreeable to the Field Team. However, it is not within the authority of the Field Team or the Executive Officer to make this contract amendment. Your letter and supporting data are therefore being sent to Washington with our urgent recommendation for speedy action on the necessary amendment.

Sincerely yours,

[illegible] Weissenborn
Executive Officer, DMEA
Field Team, Region 11

enclosure

cc: DMEA (2)
C. O. Mittendorf
USBM (2)
Roberts

400

NORTHFIELD MINES, INC.

Eureka, Nevada
March 4, 1953

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
MAR 4 1953

WSM

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

Docket DMEA 2436
Contract Idm E-334

Dear Mr. Weissenborn:-

When the adit work at our Stevenson Property near Cobalt, Idaho was discussed with Messrs. Frank Johnson and George Selfridge on February 10, 1953 in Washington, the following was suggested:-

1. That the period of the contract be extended three to four months. We are making application in another letter for this extension.

2. That we list funds in all accounts showing the amounts allowed by the contract, the amounts spent (as nearly as possible to the date of this letter) and the amounts unused. We are enclosing this list as of January 31, 1953. All of the funds to December 31, 1952 are those approved by your office. The January figures have been submitted as shown but we do not yet know whether or not they have all been approved.

3. That we list all of the work performed to date. This list to January 31, 1953 is below:-

For $70,238.79 we have completed:-

7048 feet of bulldozer trench.
2248 feet of new road.
73 3/4 hours - road rehabilitation and maintenance.
3028 feet of diamond drilling (and sites).
272 feet of adit.

Constructed the necessary buildings to house employees and equipment:

272
172
444

1 - bunkhouse
1 - cook house
1 - compressor shed

Note: During February 172 feet of adit work was done but expense figures are not yet available.

4. That we use all of the available balance left in the contract for the adit work at a flat cost per foot based on existing conditions. Included in the cost per foot would be:- all underground and surface labor, mine and other supplies, rented equipment, purchased equipment, repairs and maintenance, engineering, supervision, sampling, analytical work, snow removal, cook house and bunkhouse operation, accounting, other miscellaneous items such as pay roll taxes, etc., and contingencies. The only fixed sum should be the total. Thus our adit cost would be the sum of all our expenses compiled and submitted as they have been in the past. The maximum liability for the DMEA would be 70% of $32,661.21 (remaining funds as of January 31, 1953) divided by 728 feet (remaining footage as of January 31, 1953) or $44.86 per foot. If costs were higher per foot than this figure, Northfield would be required to pay the extra cost. If they were lower, the DMEA would pay 70% of the actual cost. The figure of approximately $45.00 per foot is close to the cost of Calera Mining Company under conditions similar to ours.

By the above method administration of the contract would be the simplest possible with ample protection and we would be enabled to complete all of the work originally set up in the contract for the original amount the DMEA was committed to spend. Northfield expense might be slightly in excess of the original amount.

We suggest that the above change be made as soon as possible if it meets with your approval. The proposal is along the lines discussed with Messrs. Johnson and Selfridge so we believe you will have their support.

Sincerely yours,

NORTHFIELD MINES, INC.

George W. Mitchell

GWM:ej

Enclosure

cc: C. O. Mittendorf - 2
W. A. Pareni
M. T. Mans
A. J. O'Connell
V. A. Manz

NORTHFIELD MINES, INC.

STEVENSON OPERATION - IDAHO

CONTRACT Idm E-334

	Contract Allowance	Costs Claimed and Allowed To 12-31-52	Cost Claimed January 1953	Balances Available 2-1-53
Contracts				
Diamond Drilling	$16,000.00	$19,803.60	$	$ 3,803.60 *
New Roads	2,055.00	630.50		1,424.50
Trenching	7,500.00	5,700.50		1,799.50
Road Rehabilitation	1,680.00	848.00	1,333.00	832.00
Site Preparation	315.00	354.00		39.00 *
Labor				
Dozer Swamper	1,184.12	891.79		292.33
Surface Labor	2,352.00	1,079.43	200.27	1,072.30
Carpenters	1,690.08	839.39	108.56	742.13
Carpenter Helpers	777.84	161.03	55.53	561.28
Timber Framer	4,278.12	24.68	253.12	4,000.32
Truck Driver	2,722.44	247.09	14.34	2,461.01
Miners	4,403.11	290.20	2,556.03	1,556.88
Muckers	4,278.12	86.38	228.12	3,963.62
Bonus for Miners	1,960.00			1,960.00
Cook	2,722.72		293.34	2,429.38
Engineer	1,295.00	2,500.00		1,205.00 *
Superintendent	4,200.00	4,200.00		
Supplies				
Bunkhouse Furnishings	884.00	578.30	140.04	165.66
Cookhouse Furnishings	657.00	356.91	519.49	219.40 *
Blastings & Lamps	1,645.00	3.00	623.10	1,018.90
Drill Steel	1,020.00	625.86		394.14
Pipe & Hose	1,140.00	1,217.67	35.73	113.40 *
Mine Rail	1,140.00	943.65	15.76	180.59
Vent Tubing	1,000.00	488.65		511.35
Diesel Fuel, Tires, Etc.	2,152.50	717.26	188.92	1,246.32
Gasoline	960.00	387.73	56.18	516.09
Tools	521.12	155.79	259.95	105.38
Muck Sheets	64.00			64.00
Engineer & Geologists Supplies	1,050.00	653.61	14.20	382.19
Medical Supplies	350.00	19.42	93.88	236.70
Core Boxes	500.00	235.20		264.80
		1,353.00		

Northfield Mines, Inc.
Stevenson Operation - Idaho
CONTRACT Idm E-334

Continued	Contract Allowance	Costs Claimed and Allowed To 12-31-52	Cost Claimed Jan. 1953	Balances Available 2-1-53
Rented Equipment				
Compressor	$ 2,820.00	$ 1,242.00	$ 414.00	$ 1,164.00
Jackhammers	720.00	440.65	120.00	159.35
Mine Cars	312.00	156.00	52.00	104.00
Mucking Machine	1,950.00	1,083.33	325.00	541.67
Water Tank	45.90		7.65	38.25
Water Pump	504.00	504.00	72.00	72.00 *
Universal Jeep	350.00	350.00	50.00	50.00 *
Dump Truck	700.00	650.00		50.00
Freight on Above	1,000.00	971.60		28.40
		5399.58		
Equipment Purchased				
Chain Saw	400.00			400.00
Vent Fan	375.00		416.00	41.00 *
Light Plant	600.00	527.05		72.95
Welder	150.00		150.53	.53 *
Bench Grinder	50.00			50.00
Skill Saw	145.00			145.00
Miners Lamps & Charger			174.00	174.00 *
Electric Hand Drill	70.00			70.00
Pipe Die	50.00	47.85		2.15
2 - Tent Houses	750.00	750.00		
Bunkhouse	2,500.00	548.99	334.11	1,616.90
Cookhouse	2,750.00	637.12	444.68	1,668.20
Compressor House	1,500.00	455.70	44.84	999.46
		2391.81		
Miscellaneous				
Analytical	1,000.00	899.18	168.00	67.18 *
Accounting Fees	1,050.00	1,039.81		10.19
Travel for Engineer	1,050.00	875.50		174.50
Telephone	350.00	309.38	50.00	9.38 *
Automotive Repairs	500.00	196.23	70.28	233.49
Drill Machine Repairs	150.00	520.58		370.58 *
Boarding House Loss - Cabin Rent	4,472.50	350.00	64.50 **	4,187.00
Payroll Taxes	3,588.43	603.88	395.25	2,589.30
Freight - Diamond Drill	500.00	325.00		175.00
		5119.56		
Drift Contract		3,261.25	573.65	3,834.90 *
	$102,900.00	$60,784.74	$9,454.05	$32,661.21
		3261.25		
		57,523.49		

* Overdrawn
** Income

NORTHFIELD MINES, INC.

Eureka, Nevada
March 2, 1953

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
MAR 6 1953

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

Docket #DMEA 2436
Contract Idm E-334

Dear Mr. Weissenborn:-

Since writing you January 29, 1953, we have had the opportunity of discussing the adit work at our Stevenson Property near Cobalt, Idaho with Frank Johnson and George Selfridge in Washington on February 10, 1953.

They suggest first that we request an extension of the contract period. Please accept this letter as an application to extend the period of the above contract four months from April 2, 1953 to July 2, 1953.

Other suggestions regarding contract revision will follow in a few days.

Sincerely yours,

NORTHFIELD MINES, INC.

George W. Mitchell

GWM/m
cc: C. O. Mittendorf

FILE COPY
SURNAME:

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

FEJohnson
Martin
Chamberlin
Selfridge
Hofflund
Mr. Hofflund

FEB 16 1953

(3W.

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

Re: Docket No. DMEA-2436 (Cobalt-Copper)
Northfield Mines, Incorporated
Contract No. Idm-E334

Dear Mr. Weissenborn:

This is with reference to copy of Mr. Thor H. Kiilsgaard's letter of November 26, 1952 to the Operating Committee, enclosing copy of Amendment No. 3 to the subject contract.

This amendment has been reviewed by our Legal Division. In this connection we are enclosing a copy of the comments of our Chief Counsel for your information. You will note that he has no objection to the amendment from a legal standpoint but does, however, point out several features to the amendment which are unsatisfactory. In addition to the points stressed by the Chief Counsel, we feel that the item for "snow removal" should have been set forth as a separate element and not considered as part of the drifting to be performed under a sub-contract. We have no objection to including "snow removal" as an item under the same sub-contract for drifting; but the cost of "snow removal" should be kept separate from the cost of drifting.

The foregoing points should be kept in mind when drafting amendments to contracts in the future.

P.H. 2-16-53

Enclosure

Sincerely yours,

George C. Selfridge

(JB)

Chairman, Operating Committee

APPROVED:

W. H. Bedges (JB)

Member, Bureau of Mines

D. M. Lemmon (JB)

Member, Geological Survey

FEJohnson/bih 2/9/53
cc to: Docket
Admr. Reading File
Region II
Operating Committee
Messrs. TPThayer GSA Bldg. R-4234
JHHedges R-4604
Hofflund - Chambers
Martin - FEJohnson

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
FEB 2 - 1953

xxxxxxxxxxxxxxxxxxxx
So. 157 Howard Street
Spokane 4, Washington

February 13, 1953

Mr. George B. Mitchell
Northfield Mines, Inc.
Eureka, Nevada

Re: Docket No. DMA-2436 (Cobalt-Copper)
Merle et al Claims
Lemhi Co., Idaho
Contract Idm-1334

Dear Mr. Mitchell:

Wayne Roberts has recently visited the DMA contract on your property in the Blackbird District. He reports that you have started a new crosscut to the southwest, presumably to investigate the .63 percent cobalt cut in Diamond Drill Hole No. 3.

We have no serious objections to this except that we are somewhat concerned about the shallow depth at which this work is being done. Our information indicates that this exploration cannot be much more than about 75 feet below the surface. Because the amount of drifting that can be done under the DMA contract is rather limited compared to the size of the job that should be accomplished, we are of the opinion that it would be better to concentrate on drifting northerly along the mineralized zone where a greater depth would be gained. This is of particular importance because Roberts reports we are still in the zone of oxidation and, therefore, can expect that part of the cobalt has been leached. We are anxious to see the adit get below the zone of oxidation where the cobalt would not have been leached. Incidentally, would it be possible to mail us copies of the assay data sheets on the samples taken underground?

We regret the fact that it has been necessary to make some deletions in recent payments to you. We have taken this matter up with the DMA in Washington and are attempting to work out with them some revisions in the contract which will permit these payments to be made.

Sincerely yours,

A. J. Weissenborn
Executive Officer, DMA
Field Team, Region II

cc: [illegible](2)
[illegible](2)
Roberts
Certifying Officer

Docket #DMEA 2436
Contract Idm-E334

NORTHFIELD MINES, INC.

Adit Work as set up in MF-103

	Per Application	Furnished by Adit Contractor	Furnished by Northfield	Used by Northfield
Labor				
Miners	$ 6,061.72	$ 5,771.52	$ 290.20	$ 290.20
Muckers	5,921.74	5,835.36	86.38	86.38
Timbermen, Compressor Men, Etc.	5,451.49	5,426.81	24.68	24.68
Truck Drivers, Surface	1,643.59		1,643.59	
Rented Equipment				
Compressor	2,585.00		2,585.00	1,242.00
Jackhammers	660.00		660.00	440.65
Mine Cars	286.00		286.00	208.00
Mucking Machine	1,787.50		1,787.50	1,083.33
Drilling Water Tank	42.07		42.07	
Freight on Above Equipment	1,000.00		1,000.00	796.60
Mining Supplies				
Blasting Powder	1,500.00	1,500.00		
Blasting Caps	75.00	72.00	3.00	
Blasting Fuse	210.00	210.00		
Drill Steel	250.00		250.00)	625.86
Drill Bits	360.00		360.00)	
Water Hose	60.00		60.00)	
Air Hose	245.00		245.00)	1,217.67
Pipe	605.00		605.00)	
Pipe Fittings, Valves	230.00		230.00)	
Repair Parts Drilling Machines	150.00		150.00	520.58
Mine Rail, Spikes, Etc.	1,140.00		1,140.00	1,058.38
Vent Tubing	1,000.00		1,000.00	488.65
Diesel Fuel, Lub Oils, Etc.	1,704.00	1,000.00	704.00	353.56
Miners Lamp Carbide	40.00		40.00	
Snow Removal		1,750.00	1,750.00 Cr.	
	$33,008.11	$21,565.69	$11,442.42	$8,336.54
Used by Contractor to 12-31-52 inc.		3,933.02		
Used By Northfield to 12-31-52 inc.			8,336.54	
Available Balance		$17,632.67	$ 3,105.88	

Note: Snow Removal included in Adit Contract as provided in Amendment #3.

MF-500

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS ADMINISTRATION

REFERENCE SLIP

DATE 2/10/53

REFERRED TO:
1. Mr. Martin
2.
3.
4.

FOR:

____ Action	____ Recommendation
____ Approval	____ Record of ____
____ Comment	____ Referring to ____
____ Conference	____ Reply for signature of ____
____ Consideration	____ Rewriting
✓ Filing	____ Signature
____ Instructions	____ Suggestions
____ Investigation	✓ Your information
____ Initials	
____ Mailing	
____ Previous correspondence	

REMARKS: Left by Geo. Mitchell of North Star Mines, Inc. He will submit report to put contract on unit price basis.

Check (X) before the items needing attention.

FEJ
Initials of sender.

GPO 16—63815-1

Estimated Actual Costs

Oregon Commercial

(1) Independent Contracts		
Drilling	19,803.60 *	19,803.60 *
Building	7,533.00 *	7,533.00 *
~~Farm Planting (250 No. 5 acre)~~	~~1,837.50~~ *	
(2) Labor	7,000.00	(3,619.99) *
Supervision	4,200.00 *	4,200.00 *
Tech. Cons.	2,500.00 *	2,500.00 *
(3) Operating Supplies	6,500.00 *	(6,313.05) *
(4) Operating Equipment		
Rented	5,500.00 *	(5,399.16) *
Purchased	600.00 *	(574.70) *
(5) Mow Bundles, Bal. & Pyro.	2,500.00 *	(2,391.41) *
(7) Misc.	5,500.00 *	(5,119.56) *
Analysis	899.18	
Accounting *	1039.81	
Travel for Eng.	875.50	
T.T. *	309.34	
Auto Repair	196.23	
Small Repairs	530.14	
Patrol Plow	350.00	
Payroll Tax, etc.	602.88	
~~Pl. Co. U.D.~~	~~325.00~~	
Total		57,523.49 *

102,900.00
57,523.99

1000) 45,376.51 (45.38 per M.

Agreed Unit Cost.

1000 ft Drifting @ 35.00 per ft = 35,000.00
1000 ft Lining @ 15.00 per ft = 15,000.00
1000 ft Spiling @ 5.38 per ft = 5,380.00
45,380.00
57,523.49
102,903.49

Analytical work on unit basis (?)

2436

FILE COPY
SURNAME:
800

Chambers

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

Chambers, Jay L.

AIR MAIL

Mr. E. D. Talbert
DMEA Auditor
c/o Mr. H. C. Miller
1012 Flood Building
870 Market Street
San Francisco, California

FEB 6 1953

Dear Dal:

Northfield Mines, Inc., whose business address for DMEA projects appears to be Eureka, Nevada, c/o A. J. O'Connell, has project E323 located in Inyo County, California, and project E334 located in Lemhi County, Idaho.

J.C. 3/3/53

It appears that this company may be charging engineer consulting fees for J. W. Mitchell, General Manager, on both contracts in excess of limitation set forth in its contracts. It also appears that they are charging rather exorbitant amounts for bookkeeping and audit work. The question arises as to whether the same auditor who does the work for the general books of the company is drawing money from the company on its regular salary and the company is attempting to recuperate this by charging the amounts to the projects, which amounts may be equal or in excess to his regular salary.

The contract permits $500.00 a month for engineering and technical services. An engineer has drawn almost this amount in addition to amounts charged for the services of J. W. Mitchell, General Manager. The proposition has been offered that the amounts paid Mitchell may have come from the money allowed for Contingencies. Since supervision and Consultants' fees are "allowable maximums", no money can be charged for these services to Contingencies without an amendment to the contract signed or approved by officials in Washington.

The Operating Committee proposes to send a letter in regard to this matter to Mr. Miller suggesting that any payments not yet made to the company will be curtailed in the amounts previously billed and paid to Mitchell for consultation work. Mr. Mitchell

appears to be a regular overhead supervisor for the company. You will probably want the two projects audited and the expenditures of the item mentioned in this letter and any others which may occur to you compared with the allowable expenditures in the project contracts. If you think Mr. Mayor should assist in the two audits, you may ask him to go to Idaho for the audit there after the California audit has been made.

For further background information I am sending you a copy of a proposed letter to be issued by the Operating Committee. It is my opinion after discussing the matter with Mr. Selfridge, that the proposed letter will be approved by the Operating Committee, or at least be sent with only minor changes.

Sincerely yours,

(Signed) J. L. Chambers

Jay L. Chambers, Chief
Contract Administration and
Audit Division

JLChambers/wb
February 2, 1953

Copy to: Admr. Reading File
Mails & Files
Mr. Chambers

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION
~~WASHINGTON 25, D.C.~~
So. 157 Howard Street
Spokane 4, Washington

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
[illegible]
FEB 11 1953

February 2, 1953

Mr. George Selfridge, Chairman
Operating Committee, DMEA
Department of the Interior
Washington 25, D. C.

Copy retained 400

Re: Docket DMEA-2436 (Cobalt-Copper)
Northfield Mines, Inc.
Contract Idm-E334

Dear Mr. Selfridge:

Reply to Mr. Johnson's letter of January 12 has been delayed because we have been completely baffled as to how to solve the difficulties connected with the administration of the project. We have in the Northfield contract a highly desirable project where the opportunities for making a significant discovery of a very strategic metal are good; we are dealing with an established and experienced exploration company (in fact one of the best-known in the country) which, although it was criticized for high supervisory and engineering charges at the start of the contract, has done an effective and efficient job. Yet we find ourselves in the unhappy position on the one hand of being unable to write an acceptable amendment to provide for such a necessary adjunct to winter operation as snow removal and on the other hand from advice by our Certifying Officer that he can no longer pay <u>any</u> voucher unless the contract is entirely rewritten. This, however, cannot be done here as it would be practically impossible to rewrite the contract without exceeding one of the many items which are marked as "allowable maximum."

There is nothing fundamentally wrong with the plan of work outlined in the contract--the trouble is that this contract is another one of those in which an attempt has been made to provide for everything including the kitchen sink, if we may coin a phrase, (although if you will examine the first item on page 4 of Exhibit A, you will find that this is literally true). The administration of this contract for this reason has cost us an inordinate amount of difficulty and time, and payment to the Operator has been delayed on numerous occasions; furthermore, the contract itself is an excellent example of the type of contract which we have protested on several occasions. In fact, we discussed this very contract with you on the occasion of your visit to the Northwest last September. We, therefore, wish to review the specific difficulties which we have met with in trying to make the contract work.

The first difficulty in the administration of the contract arose from the fact that preliminary work done under the contract indicated that there were more mineralized zones than had been anticipated. It thus became evident that more bulldozer trenching and more diamond drilling would be highly desirable, and it happened that less construction of new roads was required. Because of the fact that the Operator had been able to contract his bulldozing and drilling at somewhat cheaper rates than had been anticipated, and because he did not need as much road construction as had been thought necessary, there existed in Stage I of the contract sufficient funds to do the extra work which everyone agreed was desirable. However, since the funds allotted both to the individual items and to the unit costs of these items themselves were specified as allowable maximums, it was not possible for the Field Team to authorize this additional work. Consequently, it was necessary to prepare Amendment No. 2 and submit it to the Administrator for his signature. A second difficulty which also required an amendment by the Administrator arose from the fact that the contract did not allow for sufficient supervisory and engineering personnel. You will recall that this matter was gone into rather thoroughly with Mr. Mitchell when you visited the property early in September, and it was the general agreement among all of us that although during part of the time Northfield Mines, Inc. did appear to have an excessive number of supervisors and engineers on the job, it was also evident that during the time that the trenching was going on, more engineers were required than were provided for in the contract. To take care of this, Amendment No. 4 was prepared in Washington and signed by the Administrator. This, however, was not signed until the 19th of November and, therefore, there was a very considerable delay in the payment of some of the legitimate claims for the engineering salaries put in by Northfield Mines, Inc.

The Operator shortly thereafter began the next phase of the contract which provided for the driving of underground exploration drifts. Northfield Mines decided that this work could be done most effectively by means of a subcontract, and they negotiated a favorable subcontract with William E. Corrigan to do the drifting. This subcontract was approved by the Executive Officer on October 2, and returned to the Operator on the 8th. We were informed by the Chairman of the Operating Committee in a letter dated October 30th that the subcontract was satisfactory but that it would be necessary to amend the contract to provide for independent subcontracts. We had not previously been aware that such an amendment was necessary, but on being informed of this, Amendment No. 3 was drawn up and signed by the Executive Officer on November 7. This provided that drifting as specified in Phase 8 of the contract could be done by independent subcontract with prior approval of the Field Team. Meanwhile, a complication had arisen. The Operator, foreseeing the need for snow removal, if he wanted to continue winter operation, made a rather favorable agreement to provide for the rental of a bulldozer for the purpose of snow removal. We pointed out some objection to the phrasing of this agreement in our letter of November 12 to the Operator. However, these minor objections were not the real difficulty. The fact was that the bulldozing permitted in the contract

was an allowable maximum. Since the bulldozing time had been nearly exhausted, we could not authorize the hiring of a bulldozer as otherwise might have been possible. Furthermore, since the rental on operating equipment was also an allowable maximum, we could not authorize the rental of a bulldozer without deleting some other essential item of equipment. And lastly, we could not make another independent contract because the sum of the independent contracts was also an allowable maximum and could not be exceeded. Our way out of this dilemma was to suggest to the Operator that snow removal be made a part of the drifting subcontract in the belief that Amendment No. 3 permitted drifting to be subcontracted. We are no longer sure that this is so because of the previously mentioned allowable maximum on subcontracts. We were aware, of course, that snow removal is perhaps not normally considered as a drifting cost; yet it is certainly a fact that if winter operation is to continue in such snowy country as the mountains of central Idaho, then snow removal is a very real and tangible cost of drifting. We felt, therefore, that there was no injustice or impropriety in so including it, and we placed a clause in Amendment No. 3 providing that snow removal be considered a cost of drifting. We felt that this could be made a part of the subcontract by an amendment of Section VII of that subcontract which states, "This amendment may be extended to cover other work by written endorsement attached hereto and signed by the parties of the agreement." This, incidentally, is Agreement 7 which appears on the last page of the subcontract above the signature; it is not the item which appears on page two of the contract that is evidently referred to in the Operating Committee's letter. This accounts for the confusion in that letter wherein it is stated that Section VII makes provision only for workmen's compensation, insurance, and like matters. We believe that further study of the subcontract agreement will reveal that we are correct in this statement and that Provision VII, page 4 of the subcontract does indeed permit the agreement to be extended.

We felt that by making this amendment our troubles would be solved, for the time being at least, and that the work could proceed and payment could be made. Unfortunately, Amendment No. 3 was evidentally objectionable to the Operating Committee. Nevertheless, the Operator considers snow removal a most important matter both for the efficient operation of his project and as a safety precaution in case of sickness or accident to the crew and we agree with him. Therefore, some way must be found to permit payment for snow removal. We are frankly stumped, and we actually do not know how to prepare an acceptable amendment which will get by the scrutiny of Washington and the Finance Officer. We feel, I may add, a little bitter about this because the matter of snow removal has been under negotiation since about the 23rd of October. Amendment No. 3, together with the approval of the amendment of Article VII of the subcontract was forwarded to the Operating Committee on the 26th of November. We had thought the matter settled, yet your letter of the 12th of January has upset the whole situation. Because of the difficulties involved and apparently because we have been making illegal payments, we

feel that if Amendment No. 3 was not satisfactory that this matter should have been called to our attention without such a long delay. Certainly adequate time existed to have brought this matter to our attention before the 12th of January. We would also like to suggest that it would have been a great deal more helpful if instead of a negative letter pointing out that the amendment was unsatisfactory, a positive suggestion had been made as to how an acceptable amendment could be prepared. We, frankly, in our ignorance, do not know how it should be done.

A further and utterly frustrating complication is the fact that Mr. Hindman, our Certifying Officer, is not only making numerous deletions in the Operator's invoices but has stated that he can no longer pay <u>any</u> of the drifting costs on the subcontract and has threatened to delete all payments in the subcontract made to date (see his letters of January 29 and 30). This is because the contract specifies so many items as allowable maximum. Mr. Hindman takes the attitude, and it appears that he may be technically on sound grounds, that under a subcontract he has no way of knowing how much of the money is being expended for items of supply, materials, labor, etc., and, therefore, he has no way of knowing whether the items specified as allowable maximums are being exceeded or not. Thus, even though the work is being done at a very favorable footage cost, payment cannot be made.

This was pretty nearly the crowning blow. However, there is yet another complication. A letter received today by the Field Team indicates that Mr. Corrigan, the subcontractor, is going broke and has had to throw up his contract. This is because he has entered into very heavy ground. Northfield Mines, Inc., has advised us that they now propose to employ a shiftboss borrowed from the neighboring Calera mine to supervise the adit work which they now wish to place on a non-subcontract basis. They estimate on consultation with Mr. Douglas, General Manager of the Calera mine, that the adit costs may run between $45 and $50 a foot instead of the $33 which Mr. Mitchell informs was the basis of cost of the contract which he worked out with the Ferro Alloys Division. The Northfield people are willing to absorb the difference between $33.00 a foot and the actual cost which may be $45.00 or $50.00 a foot or higher. We do not feel, however, that this should be done. We are strongly of the opinion that DMEA should either abandon the project or should be prepared to share in the actual and legitimate costs of driving the adit whatever these costs per foot may be. These costs are impossible to estimate because we have no way of knowing how extensive the caving ground may be. As we have pointed out before, we are dealing with a nationally known exploration company, and we can presume that they will have the know-how to do the job right, and that they will endeavor to keep the costs as low as possible.

We wish to point out that we had anticipated that the subcontractor might be unable to do the work for the agreed-on price, thus it seemed pointless to restate the contents of the contract to fit the needs of one particular subcontract when it seemed likely that other subcontracts might have to be negotiated. The inflexibility caused by

the maximum allowables would make it necessary to again rewrite the contract. If we must completely rewrite and restate every contract of this type each time there is some change, we are clearly faced with a complex, endless, and almost hopeless task.

We have not pointed out any of these difficulties in a spirit of malice; we merely wish to show by concrete example that the protests we have made about the unnecessary complications of some of the contracts and the attendant difficulties of administration are not idle imaginings on our part. We hope that with the example quoted here and with our previous letters on the subject we have firmly established this point, and we also hope that future discussions of this sort will not be necessary. They are too time-wasting on the part of all concerned.

Our natural reaction in the face of our inability to administer this contract in a satisfactory manner was to return it to the Operating Committee with a request that it be completely rewritten, and we still think that perhaps the only wholly satisfactory solution is to do just this. Unfortunately affairs have reached such an impasse that this solution would not be fair to the Operator for experience has shown that it may take about as long to revise a contract as it did to negotiate it in the first place. Meanwhile we would be unable to make payments to the Operator. After a great deal of deliberation we have reached the conclusion that by removing the limitations now placed on certain items the contract can be made workable. These changes are as follows:

1) On page 3 of Exhibit "A", remove the asterisk from the figure $27,550.00. This will remove the allowable maximum on independent contracts and will validate Amendment No. 3, which is now of questionable status because of the limitations on independent contracts. The drifting subcontract then could be paid and snow removal could be taken care of as part of this subcontract or by another subcontract.

no, automatically as allowable maximum

2) On page 3 of Exhibit "A", remove the asterisk on the labor allowances $21,685.83, $1,960.00, $2,722.72, and on the total labor and supervision figure of $31,863.55.

3) On page 4 of Exhibit "A", remove the asterisk from the figure $13,083.62, the total for supplies and materials. If these last two changes are made the Certifying Officer need no longer be concerned that in paying the subcontract he has exceeded the amount stipulated for supplies, materials and labor. The detailed listing of supplies and materials can then remain as a "guide," and will not interfere too much with the operation of the contract as long as no radical change is made in the work to be done under the contract.

4) On page 5 of Exhibit "A", remove the asterisk from the Operating Equipment figure of $8,401.90. This limitation has not caused trouble so far but could cause difficulties should it be necessary to rent some unforeseen item of equipment.

5) On page 6 of Exhibit "A", remove the asterisk from the accounting figure of $1,050.00. If we have had our difficulties with the contract so has the Operator, and the unusual amount of bookkeeping required to satisfy the Certifying Officer may well exceed the allowable figure.

As stated previously the above changes are not wholly satisfactory. If for some reason it should become necessary or desirable to modify the work to be done--such as the substitution of some of the drifting by diamond drilling--it would be necessary to restate the entire contract, including a laborious and in our opinion, completely useless retabulation of the materials and supplies. However, this problem can be tackled if and when it arises; the important thing is that some method must be found so that payment can be made without delay.

We believe that the changes that we have described here will permit payment and are the only practicable solution under the circumstances. We thereby request that an appropriate amendment be drawn up and returned to us without delay. Until this is done we will be unable to make fur ther payments. The matter, therefore, is of extreme urgency.

By DMEA Field Team, Region II

A. E. Weissenborn

A. E. Weissenborn, Executive Officer
(U. S. Geological Survey)

M. E. Volin

M. E. Volin, Member
(U. S. Bureau of Mines)

cc: USBM (2)
Vhay

NORTHFIELD MINES, INC.
Eureka, Nevada

January 14, 1953

Mr. A. E. Weissenborn
Executive Officer, Field Team, Region II
U. S. Geological Survey
157 S. Howard Street
Spokane, Washington

Docket #DMEA 2436
Contract Idm E-334

Dear Mr. Weissenborn:

We note your letter of January 7, 1953 to our Mr. A. J. O'Connell regarding the deletion of some of the amounts claimed and the itemization of the items by Mr. R. J. Hindman. We also note the remarks Mr. Hindman made regarding the difficulty of administering the contract. Mr. O'Connell agrees with Mr. Hindman in every respect regarding the latter statement. He is very much interested in trying to work out simpler methods.

We have given the administration of the contract much thought during the past several months in an effort to simplify it, with some considerable success, especially regarding the diamond drilling and trenching. The latter two phases of the job were, we think, completed to the satisfaction of all concerned.

When we started the adit work, we could foresee that administration would be difficult because of the way the labor (especially) was set up. When we applied for the funds to do the adit work, we grouped all of the labor, equipment rentals, supplies and miscellaneous under "Adits," finally arriving at a definite cost per foot. If you have a copy of our MF 103 application, dated March 15, 1952, the above mentioned is on page 9.

The total amount applied for was $33,008.11 which, for 1000 feet of work, is equal to $33.00 per foot. This includes all of the direct charges but not supervision.

When the contract was set up, this entire amount was approved but the labor and supplies were separated and grouped with that for the other phases of the job. Thus the specific amounts lost their identity.

In order to restore this identity, we have requested Mr. O'Connell to take the items from the contract and set them up again under the Adit account. A copy of the list as restored is attached.

We have also separated the items into lists that roughly correspond to those included under our adit contract and those which Northfield is expected to pay. You will see that our contract with William F. Corrigan ($18.00 per foot timbered) is a little less than the amount set up for this work. At the time it was set up we were hopeful that this would be the case.

The lists as set up in the attached is not a perfect separation so far as Northfield and Corrigan are concerned because Northfield collared the adit before Corrigan took it over. Thus, there has been and will probably still be some overlapping which should not seriously affect administration.

Mr. Hindman has pointed out that all of the amounts are starred and thus there is no flexibility. The total amounts for labor, bonus, tools and supplies, rentals on equipment, etc. are starred; but, we think, there is extreme flexibility between the individual items. For instance, if the freight allowed on rented equipment ($1000) is not sufficient, but the funds for other items under rented equipment have not been exhausted, it is our understanding that the latter funds may be used to pay freight.

We hope we have been able to point out ways that will simplify the administration of the adit work, because we feel we are expending more than sufficient time and effort in trying to present our reports to Mr. Hindman in a way that will be satisfactory. We will welcome suggestions from you or Mr. Hindman regarding changes which we can make to accomplish simplification. We regret that we are so far from Spokane because a direct discussion of the problem is much more satisfactory.

Sincerely yours,

NORTHFIELD MINES, INC.

George W. Mitchell

GWM/m
encl.

Docket ADMEA 2436
Contract Idm E-334

NORTHFIELD MINES, INC.

JANUARY 14, 1953

	Per Application	Furnished by Adit Contractor	Furnished by Northfield
Labor			
Miners	$ 6,061.72	$ 6,061.72	$
Muckers	5,921.74	5,921.74	
Timbermen, Compressor Men, Etc.	5,451.49	5,451.49	
Truck Drivers, Surface	1,643.59		1,643.59
Sub-Total	$19,078.54		
Rented Equipment			
Compressor	$ 2,585.00		$ 2,585.00
Jackhammers	660.00		660.00
Mine Cars	286.00		286.00
Mucking Machine	1,787.50		1,787.50
Drilling Water Tank	42.07		42.07
8 Freight on Above Equipment	1,000.00		1,000.00
Sub-Total	$ 6,360.57		
Mining Supplies			
Blasting Powder	$ 1,500.00	$ 1,500.00	$
Blasting Caps	75.00	75.00	
Blasting Fuse	210.00	210.00	
Drill Steel	250.00		250.00
Drill Bits	360.00		360.00
Water Hose	60.00		60.00
Air Hose	245.00		245.00
Repair Parts Drilling Machines	150.00		150.00
Mine Rail, Spikes, Etc.	1,140.00		1,140.00
Pipe	605.00		605.00
Pipe Fittings, Valves	230.00		230.00
Vent Tubing	1,000.00		1,000.00
Diesel Fuel, Lub Oil, Etc.	1,704.00	1,000.00	704.00
Miners Lamp Carbide	40.00		40.00
Sub-Total	$ 7,569.00		
	$33,008.11	$20,219.95	$12,788.16
Cat Rental - Snow Removal	1,750.00		1,750.00
TOTAL	$34,758.11	$20,219.95	$14,538.16

MMA Field Team, Region II

January 29, 1953

R. J. Findman, Certifying Officer

Marthfield Mines, Inc., contract idm-5334, December 1952 MP-104

The above MP-104 was approved this date for the Government's pro rata share of $2,552.60. From the amount submitted by the Operator of $4,592.74, the following deletions were made:

$496.77 was deleted from the W. E. Corrigan bill for rental of tractor for snow removal. There has been no provision made in the contract for this item.

$293.05 was deleted for lumber which the narrative states was for building an office-staff house. This item was not covered in the contract. Payroll taxes were adjusted in accordance with the above deletion.

$83.79 was deleted for the purchase of a rail bender. The contract will have to be amended to allow this item.

$52.00 was deducted under equipment rental. The invoices submitted amounted to only $1,074.65. There was no invoice to cover this $52.00 difference.

$3.25 was deducted from engineer's travel expense. $150.00 a month is the allowable maximum.

The Operator may resubmit some of these items which we have deleted if amendments can be made to allow for them.

As stated in my letter of January 5, 1953, unless I receive the breakdown for the contract drilling for October, November, and now December, I will be forced to delete the entire amounts paid from the next MP-104 submitted.

R. J. Findman

cc:
MP
AM
USGS
Operator
Engineer
R.H. Hall

NORTHFIELD MINES, INC.
Eureka, Nevada
January 29, 1953

Thru USBM cc

Mr. A. E. Weissenborn
Executive Officer, Field Team, Region II
U. S. Geological Survey
157 S. Howard Street
Spokane, Washington

Docket #DMEA 2436
Contract Idm E-334

Dear Mr. Weissenborn:

The foregoing letter was written January 14, but it wasn't mailed because at the time it was obvious that a radical change in the operation of the adit would be necessary. Mr. Corrigan, who had the contract, had started out at a fair pace in November, had intersected some very bad ground in December which cut his footage to 40.8 feet. After passing through the spiling ground into a little better ground his progress did not improve and he was losing money on the contract rapidly. His best month, November, had barely paid his direct expenses.

On January 16, we arrived at the property in company with Milo Manz and Jack Brozo. Walter Paroni has been our engineer in charge since December 1st when Milo Manz, who had been in charge all summer, returned to Nevada.

The work was thoroughly discussed with Mr. Corrigan and a decision made to cancell Corrigan's contract. James Salyer, a shift boss at the Calera Mine, was contacted. Mr. Sayler has obtained leave of absence from his Calera job to supervise the adit work on a non-contract basis. Walter Paroni is remaining as engineer.

Salyer is about 35 years old, has been with Calera throughout their exploration and development program for the past 8 years. He is not an engineer so has worked as miner and timberman as well as shift boss. He knows the miners in the district and as a result will be able to obtain men suited to adit work.

Salyer, in cooperation with Mr. Douglas at Calera, has access to the adit costs of Calera in ground similar to ours. Both he and Douglas believe our adit cost will be considerably higher than our estimate of $33.00 per foot, perhaps between $45 and $50. This would include direct charges comparable to those included in the original estimate.

Our purpose in explaining the above is not to ask for any appreciable changes in our DMEA contract but merely to establish what the DMEA is committed to pay. Northfield will absorb any costs in excess of this. For example, (1) labor including taxes, compensation insurance, a miners' bonus, etc. amounts to $19,078.54 or $19.08 per foot; (2) Supplies are $7,569.00 or $7.57 per foot; (3) rental equipment is $6,360.57 or $6.36 per foot making a total of $33,008.11 or $33.00 per foot. The DMEA portion equals 70%

Docket #DMEA 2436
Contract Idm E-334

of each item or $23.10 per foot. If our costs should be $50 per foot, Northfield's share would be $26.90 while the DMEA share would remain at $23.10.

The above does not include supervision, engineering and snow removal. We shall write you about the snow removal amendment in a separate letter.

While we think the above solution of our problems good, we will welcome suggestions. We think the best way to work out this or any other method is to meet with you and your people in Spokane or elsewhere for a discussion.

We think the property merits our best efforts to arrive at some solution of the problems.

Sincerely yours,

NORTHFIELD MINES, INC.

George W. Mitchell

GWM/m

NORTHFIELD MINES, INC.
Eureka, Nevada

January 29, 1953

Mr. A. E. Weissenborn
Executive Officer
DMEA Field Team, Region II
157 S. Howard Street
Spokane, Washington

Docket DMEA 2436 (copper)
(cobalt)
Contract Idm E-334

Dear Mr. Weissenborn:

Thank you for your letter of January 19, 1953 enclosing Amendment #5 to the above contract.

Attached are copies of agreements sent you for approval on December 5, 1952 and earlier.

The only possible arrangement we could make for snow removal is one in which equipment for snow removal is available at all times to those at the adit site in order that egress be possible at all times in the event of sickness or accident to the crew. We, therefore, investigated the rental of a small tractor and bulldozer, finally obtaining one from the party who did our cat work last summer at a cost considerably under regular rentals.

You can see, therefore, why the funds allowed under the Amendment #5 are inadequate and we suggest that the amendment be changed to take care of expenses as outlined in the attached. It is very unlikely that any more new road will be constructed under the contract, therefore the required funds for snow removal could all come from this account.

We note that the ten month period of the DMEA contract expires April 2, 1953. If our adit work is not completed by this date, what are the possibilities of extending the contract period?

Sincerely yours,

NORTHFIELD MINES, INC.

George W. Mitchell

GWM/m
encl. 2

C
O
P
Y

Challis, Idaho

Nov. 22, 1952

Mr. G. W. Mitchell

Northfield Mines, Inc.

Eureka, Nev.

Dear Sir:

Amendment to Section 7

IT IS MUTUALLY COVENANTED AND AGREED AS FOLLOWS:

That I will bill the Northfield Mines, Inc. for snow removal $350.00 for 47½ hours per month. I will pay snow plow labor (or any labor on the cat) plus fuel and oil, making necessary repairs as per the other equipment. Hours in excess of this amount (47½) in any one calendar month charged at the rate of $7.35 per hour I will pay plus fuel, oil and operator. This agreement shall terminate in 5 months, or until the 1000 feet of drifting is completed, whichever is first.

Very truly yours,

/S/ William E. Corrigan

William E. Corrigan

Approved
Northfield Mines, Inc.

/S/ Geo.W.Mitchell

G. W. Mitchell

Gen. Mgr.

C
O
P
Y

Salmon, Idaho

Oct. 23, 1952

Mr. G. W. Mitchell

Northfield Mines, Inc.

Cobalt, Ida.

Dear Sir:

Confirming our present verbal agreement I will do snow removal and the other bulldozer work at the Stevenson Property, Blackbird Dist., Cobalt, Ida. for the Northfield Mines, Inc. under the following agreement.

I will furnish 1 - TD 14 International tractor and dozer complete but not the fuel, oil or operator, maximum of forty-seven and one half (47½) hours per month, at $350.00 per month. Hours in excess of this amount in any one calendar month will be charged at the rate of $7.35 per hour. I will bill you for the incoming transportation charges for my bulldozer but the outgoing transportation will be my expense. It is expected that if my 1- TD 14 International tractor and dozer is satisfactory and needed for snow removal and other dozer work I will be permitted to collect rental until the 1000 feet of drifting is completed for which Northfield Mines, Inc. has a contract with the DMEA.

Very truly yours,

C. F. Nechanicky
Owner
/S/ C.F.Nechanicky

Approved
Northfield Mines, Inc.
/S/ Geo.W. Mitchell

G. W. Mitchell
Gen. Mgr.

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

January 30, 1953

H. J. Hindman, Certifying Officer

Northfield Mines, Inc., Contract Idm-2334

I again have to certify another month's MP-104 (December) on the above contract. As I stated in my letter to the Field Team of January 9, 1953, this contract is, to say the least, very, very difficult to try to administer. As a matter of fact, I question whether I can allow many of the legitimate costs that are being submitted by the Operator. I do not know why this contract was written up in its present form. I do know that before I can make any additional payments beyond this last MP-104, it will have to be revised.

In October and November amounts were paid that were charged under "drifting" that I feel will have to be deleted on the January 1953 MP-104. Nearly every item listed in the contract was starred as an allowable maximum. To be exact, 29 items were starred. In starring so many items the Field Team was harassed by an inflexible contract requiring Washington approval for every amendment. This caused endless delays with resulting ill feeling on the part of the Operator. The costs this Operator has submitted have been quite low and very fair. Due to this inflexible contract, the Operator will not only be delayed in his payment but penalized unjustly through no fault of his own. I do not believe it is the Field Team's intention, nor Washington's intention, to cause ill will through a poorly written contract. I realize that the Government is doing everything possible to keep costs down. However it should be kept in mind that tying the Field Team's hands as this contract does, will only cause very lengthy delays in rectifying any changes that come up from time to time.

I see no alternative but to completely revise this contract so that I can properly make payment to this Operator. I cannot assume the responsibility for making payments to an Operator that the Field Auditors will unquestionably delete upon a final audit. The main points in revising this contract will be changes that will allow the drifting to be performed on a subcontract basis. Allowance will also have to be made for snow removal. As the contract now stands, the labor has to be shown separately as it is starred, and the supplies have to be shown separately as they are also starred. Specifically, the contract has set an allowable maximum for all types of labor of $31,863.55. It has also set a total maximum for all types of supplies of $13,083.62. This total labor cost and supply cost is for the construction of new buildings, drifting, and other work that the contract calls for. The subcontract approved by the Field Team includes not only the labor, but material used as well, based on a set footage price. Unless the Operator can have the subcontractor submit a breakdown showing the gross wages and total amount of supplies, then this contract will can not be approved. It would

then be necessary for an amendment to be made setting up a sum which would include both labor and supplies. This would necessitate an amendment from Washington, or revision of the entire contract. An amount for supplies and an amount for labor would have to be pulled from each respective item. This would necessitate a considerable amount of work, but I do believe it could be done.

Your earliest consideration of this matter will be appreciated, as I am sending the December voucher to Portland for payment on January 30, 1953. I am not going to make any additional payments other than this last one, until I receive the breakdown for labor and supplies on the drilling contract or the contract is revised. An amendment will have to be made, however, to allow for over-travel. I will gladly give any assistance possible in the revision of this contract.

R. J. Hindman

cc:
DF
AD
Engineer
R. M. Hull
USGS

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS ADMINISTRATION
WASHINGTON 25, D. C.
[redacted]
So. 157 Howard Street
Spokane 4, Washington

January 21, 1953

Mr. George W. Mitchell
Northfield Mines, Inc.
Eureka, Nevada

Dnen
2436

Re: Contract Idm-E334
Northfield Mines, Inc.
Lemhi County, Idaho

Dear Mr. Mitchell:

We recently forwarded to you copies of Amendment No. 5 to your Northfield DMEA contract for signature. This amendment pertains to snow removal.

Please disregard this amendment. The amendment was prepared and forwarded to you at the suggestion of DMEA officials in Washington who pointed out that snow removal is not allowable in the contract. However, Amendment No. 3 makes snow removal an allowable cost to the contract and we therefore believe Amendment No. 5 is not necessary.

In the event Washington officials insist on a separate snow removal amendment, such an amendment will have to be prepared in Washington. If such an amendment is prepared we will forward it to you for signature when it is received at this office. In the meantime we would advise that you continue to submit snow removal costs as you have been doing during recent months.

We wish to call your attention to a letter to you from the Field Team dated January 7, 1953, in which mention was made of a breakdown between labor and supply items as pertaining to your sub-contractor on the Northfield contract. Inasmuch as labor and supplies are allowable maximums we need this cost breakdown to keep our records in order.

Sincerely yours,

Thor H. Kiilsgaard
For: A. E. Weissenborn
Executive Officer, DMEA
Field Team, Region II

cc: DMEA (2)
USBM (2)
Vhay

FILE COPY
SURNAME:

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

January 21, 1953

Memorandum

To: The Administrator

From: Chief Counsel

Subject: Northfield Mines, Inc., Docket No. DMEA-2436, Contract Idm-E334

Under date of January 13, there was submitted to this office, on a routing slip, a letter dated November 26, 1952, from the Field Team, Region II, to the Chairman of the Operating Committee, to which was attached an executed copy of Amendment No. 3 to the contract, dated November 7, 1952. This Amendment No. 3 authorizes the performance of certain drifting by subcontract, and adds snow removal as an element of the drifting to be performed under the subcontract.

This subcontract and the work to be performed thereunder (drifting and snow removal) was the subject of some correspondence between the Operating Committee and the Field Team which this office drafted without any knowledge that Amendment No. 3 had been entered into, because, as may be observed from the dates, it was not in the docket file nor had it been received by this office until more than two months after it went into effect. Amendment No. 3 now presented raises some questions as to the propriety of entering into subcontracts for the performance of work without making suitable amendments of Exhibit "A" to cover such subcontracts. By letter dated November 5, Executive Officer, Region II, to the Chairman of the Operating Committee, Mr. Weissenborn suggests "that all future contracts should state that any part of the work described in the contract may be performed on force account or by independent contract," thus avoiding the necessity for amending Exhibit "A".

The long contract form (MF-200) as it now stands, provides: "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." Amendment No. 3 does amend the exploration contract to provide for the performance of drifting and snow removal by independent contractor, but does not comply with the requirements of the exploration contract form by stating "the work to be so performed and the estimated unit costs thereof" as required by Article 4. The amendment does, however, require the prior written approval of the Field Team before such subcontract may become binding upon the Government.

Inasmuch as Amendment No. 3 has been executed by the parties and is in effect, I will make no objection to it from a legal standpoint. I do not think that Amendment No. 3 is apt to result in any detriment to the Government, if a proper discretion is exercised in approving the subcontract. It is my opinion, however, that in making such amendments, the estimates in Exhibit "A" should be suitably revised to cover them, and that it would be unwise for the contract form to provide simply that any of the described work may be performed by independent contract.

In this particular case, the drifting appears to be a very large element of the work to be performed. The costs are estimated in Exhibit "A" in terms of labor, materials, equipment, etc., in the usual manner. No revision at all has been made in the estimated costs on account of this subcontract. It may well be that certain items of supervision, labor, equipment, materials and supplies, should be extensively modified to reflect the fact that some work is to be performed by an independent contractor rather than by the Operator. Moreover, the subcontract is not stated in terms of "the estimated unit costs thereof" as required by Article 4 of the exploration contract form. It is my opinion that this is bad practice, in that it does not leave either the subcontract or the exploration contract as certain and explicit as they should be.

A circular on amendments, to be published in the near future, will cover these various matters. In the meantime, I think that a copy of this memorandum should be sent to Mr. Weissenborn for his information with respect to this particular exploration contract.

JLHofflund/em
cc to: Mails and Files
Mr. Martin
Mr. Kane
Mr. Hofflund
Chron.

J. L. Hofflund
Chief Counsel

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

So. 157 Howard Street
Spokane 4, Washington

January 19, 1953

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
JAN 23 1953

Northfield Mines, Inc.
Cobalt, Idaho

Re: Docket DMEA-2436 (Cobalt-Copper)
Contract Idm-E334

Gentlemen:

Enclosed are several copies of Amendment No. 5 to your Exploration Project Contract Idm-E334.

If this amendment meets with your approval, please have an authorized official of your company sign all copies, retain that copy marked for the Operator and return the remaining copies to this office.

Sincerely yours,

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

Enclosure

cc: DMEA (2)
USBM (2)
Vhay

FILE COPY
SURNAME:

UNITED STATES 140
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION
WASHINGTON 25, D. C.

Bed.

Kane
Hofflund
Selfridge
Fechnitz
Matthewson

AIR MAIL

Mr. A. E. Weissenborn
Executive Officer
DMEA Field Team, Region II
South 157 Howard Street
Spokane 4, Washington

JAN 12 1953

Re: Docket No. DMEA-2436
Northfield Mines, Inc.
Idm-E334 (Cobalt-Copper)

Dear Mr. Weissenborn:

Reference is made to your letter of December 18, 1952, in which you enclosed an "Approval of Amendment" to a drifting subcontract between the Operator and W. E. Corrigan. The amendment provides for snow removal.

The Exploration Project Contract itself does not provide for snow removal and does not designate this type of work as an element of the exploration work to be performed. Consequently, an amendment to the contract should be drawn accordingly to give effect to this amendment of the subcontract. Finally, the amendment to the subcontract states that it is an amendment to Section 7 thereof. This reference seems erroneous since that section makes provision only for workmen's compensation insurance and like matters.

Sincerely yours,

Frank E. Johnson

(JHB)

Chairman, Operating Committee

AEK/ema 1-6-53
CC: Mails & Files
Adm. R. File
Op. Comm.
Mr. Thayer
Mr. Hedges
J. L. Hofflund
A. E. Kane
G. C. Selfridge
Chron.
Pending

1/12/53 J.C.

APPROVED:

J. H. Hedges (JHB)
Member, Bureau of Mines

A. R. Kinkel, Jr. (JHB)
Member, Geological Survey

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION

~~WASHINGTON 25, D. C.~~
So. 157 Howard Street
Spokane 4, Washington

12/24/52

December 18, 1952

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
DEC 23 1952

Mr. Frank E. Johnson, Chairman
Operating Committee, DMEA
Department of the Interior
Washington 25, D. C.

Re: Docket DMEA-2436 (cobalt-copper)
Northfield Mines, Inc.
Lemhi County, Idaho
Contract Idm-E334

Dear Mr. Johnson:

Attached are the original and two signed copies of an Approval of Amendment to Subcontract between Northfield Mines, Inc., and William E. Corrigan which makes provision for snow removal.

A copy of the Approval has been forwarded to the Operator, we are retaining a copy for our files, and by a carbon copy of this letter we are forwarding the Finance Officer's copy.

Sincerely,

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

Enclosure

cc: Finance Officer w/encl.
Vhay
USBM (2)

RECEIVED
DEC 29 1952
GENERAL COUNSEL
DEFENSE MINERALS
ADMINISTRATION

cc
12-23

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

[redacted]
So. 157 Howard Street
Spokane 4, Washington

December 16, 1952

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
DEC 2[illegible] 1952

Mr. Walter A Paroni
Northfield Mines, Inc.
Cobalt, Idaho

Re: Docket DMEA-2436
Contract Idm-E334

Dear Mr. Paroni:

Enclosed please find your copy of an Approval of Amendment to Subcontract between Northfield Mines, Inc , and William E. Corrigan which makes provision for snow removal from the road leading to your property for the coming winter months.

By the signature of the Executive Officer, DMEA Field Team, Region II, the Government grants approval to this amended subcontract.

Sincerely yours,

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

Enclosure

cc: DMEA (2)
USBM (2)
Vhay

2236-2

DOCKET COPY

AMENDMENT TO SUBCONTRACT
APPROVAL OF ~~SUBCONTRACT~~
(Under Form MF-200, revised February 1952)

To: Northfield Mines, Inc.
(Name of Operator)

That certain contract, or proposed contract, a copy of which you have submitted with your request for approval, dated Sept. 12, 1952, between you and William E. Corrigan
(Name of Independent Contractor)

for the performance of the following work: Snow removal

which is all or a specific element of the work described in an Exploration Project Contract dated June 2, 1952, Idm -E334, Docket No. DMEA 2436 (cobalt-copper) is hereby approved by the United States of America, subject to all of the terms and conditions relating to such independent contracts set forth in said Exploration Project Contract.

Dated: November 1, 1952.

THE UNITED STATES OF AMERICA

By A. E. Weissenborn

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

Challis, Idaho

Nov. 22, 1952

Mr. G. W. Mitchell

Northfield Mines, Inc.

Reno, Nev.

Dear Sir:

Amendment to Section 7

IT IS MUTUALLY COVENANTED AND AGREED AS FOLLOWS:

That I will bill the Northfield Mines, Inc. for snow removal $350.00 for 47½ hours per month. I will pay snow plow labor (or any labor on the cat) plus fuel and oil, making necessary repairs as per the other equipment. Hours in excess of this amount (47½) in any one calendar month charged at the rate of $7.35 per hour I will pay plus fuel, oil and operator. This agreement shall terminate in 5 months, or until the 1000 feet of drifting is completed, whichever is first.

Very truly yours,

William E. Corrigan

Approved
Northfield Mines, Inc.

G. W. Mitchell

Gen. Mgr.

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION

[redacted]
So. 157 Howard Street
Spokane 4, Washington

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
DEC 12 1952

December 10, 1952

Mr. Frank E. Johnson, Chairman
Operating Committee, DMEA
Department of the Interior
Washington 25, D. C.

Re: Docket DMEA-2436 (Copper-Cobalt)
Northfield Mines, Inc.
Lemhi County, Idaho
Contract Idm-E334

Dear Mr. Johnson:

Enclosed are the original and two signed copies of Amendment No. 4 to the captioned contract.

Copies of this amendment have been retained by the Operator and the Field Team, and by a carbon copy of this letter we are distributing the Finance Officer's copy.

Sincerely yours,

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

Enclosure

cc: Finance Officer w/encl.
USBM (2)
Vhay

12/15

FILE COPY
SURNAME:

140

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

Rewritten by AEKane

GCSelfridge
Hofflund
Selfridge
Thayer

DEC 1 1952

Mr. A. E. Weissenborn, Executive Officer
DMEA Field Team, Region II
South 157 Howard Street
Spokane 4, Washington

Re: Northfield Mines, Inc.
Docket No. DMEA-2436
(Cobalt-Copper)

Dear Mr. Weissenborn:

Please refer to your letter of November 5 to me, wherein you note that an Amendment is being drafted to authorize the subcontract between the Operator and Wm. E. Corrigan for drifting. In drawing this amendment, it is necessary to restate the Estimate of Costs in Exhibit "A" to reflect the lessened labor and other costs resulting from the approval of the subcontract.

Your suggestion that all future contracts permit subcontracts with independent contractors, with Government approval thereof, without the necessity of amendment is not practical. Every contract on an actual cost basis would still have to be amended in such cases, as here, to reflect the lessened labor and other costs resulting from the subcontract.

Sincerely yours,

George C. Selfridge

ACTING Chairman, Operating Committee

AEKane/ema/11-25-52

cc: Mails & Files
Adm. R. File
Op. Comm.
G. C. Selfridge
Mr. Thayer
Mr. Hedges
J. L. Hofflund
A. E. Kane
Chron.
Pending

Approved:

J. H. Hedges

Member, Bureau of Mines

A. R. Kinkel, Jr.

Member, Geological Survey

FILE COPY
SURNAME:

Selfridge

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

rewritten by
A E Kane
11/24/52

Mr. A. E. Weissenborn
Executive Officer, DMEA Region II
South 157 Howard Street
Spokane 4, Washington

Re: Docket No. DMEA 2436 -
Cobalt-Copper
Northfield Mines, Inc.
Lemhi County, Idaho
Contract No. Idm-E334

Dear Mr. Weissenborn:

Please refer to your letter of November 5 to Mr. Johnson, which discusses an independent contract and amendment to the subject contract.

With regard to your suggestion in the last paragraph of your letter, we believe that it would be necessary to write an amendment to the contract even though there were a blanket provision in the contract stating that the work described in the contract could be performed on force account or by independent contract.

In this particular case it will be necessary that the amendment remove the estimated sums allotted to the contract for the driving of the adit; otherwise, such monies would be available under the contract to do additional work. In explanation of this, one can say that many times in the past contracts have been amended with the clause that the amendment does not increase the total amount of the contract and yet it did so automatically because funds were not substituted or not available for the work outlined in the amendment.

Sincerely yours,

Chairman, Operating Committee

Approved:

GCSelfridge:ls 11/17/52

Copy to: Docket
Admn. Read. File
Field Team, Reg. 2
Oper. Committee
G. C. Selfridge
H. W. Davis, USBM
T. P. Thayer, USGS

Member, Bureau of Mines

Member, Geological Survey

DOCKET COPY

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

[redacted]
So. 157 Howard Street
Spokane 4, Washington

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
[illegible] 1952

November 26, 1952

Mr. Frank E. Johnson, Chairman
Operating Committee, DMA
Department of the Interior
Washington 25, D. C.

Re: Docket DMA-430 (Cobalt-Copper)
Northfield Mines, Inc.
Lemhi County, Idaho
Contract Idm-2334

Dear Mr. Johnson:

Enclosed are the original and two signed copies of Amendment No. [illegible] to the subject contract, with [illegible]

[illegible] operator [illegible] maintenance [illegible]

[illegible] contract [illegible] operations [illegible] the contract [illegible] the letter [illegible] for- [illegible] amendment could [illegible] letter [illegible] that [illegible] should be [illegible] snow [illegible] reasoning in this was that we believed there was sufficient funds allocated to the drifting program to cover all costs including snow removal and that since cost items under contract terms were allowable maximums any amendment thereto would increase the amount of the contract, which we did not reason as necessary. Moreover, in the way the contract is written, we could not see any way in which an amendment could be made in the field other than to consider snow removal as a drifting charge. It could perhaps be itemized as a separate charge in monthly reports but nevertheless should be charged to drifting expenses.

RECEIVED
JAN 13 1953
GENERAL COUNSEL
DEFENSE MINERALS
ADMINISTRATION

cae
2-16-53

"Should all the Buildings have go into drilling?"
by amendment

Inasmuch as the Operator has signed the proposed amendment it is assumed our suggestion concerning snow removal meets with his approval. We have not however, received an agreement from the Operator specifying terms under which snow removal costs will be incorporated into the drifting subcontract, but we are expecting receipt of this agreement at any time.

Sincerely yours,

Thor H. Kilsgaard
Acting Executive Officer
DMR Field Team, Region II

Enclosure

cc: USRM (2)
Finance Officer w/encl.
Roberts
Vhay

FILE COPY
SURNAME:

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

Rutledge
Selfridge
Pearl
Hedges
Johnson

AIR MAIL

NOV 21 1952

Mr. George W. Mitchell
Northfield Mines, Inc.
Eureka, Nevada

Re: Docket No. DMEA 2436 - Cobalt-Copper
Northfield Mines, Inc.
Lemhi County, Idaho
Contract No. Idm-[illegible]

Dear Mr. Mitchell:

We are enclosing the original and five copies of Amendment No. 4 to the above referenced contract. This amendment increases the salary allotted for a part time engineer to that for one full time engineer-geologist for the period June through October, inclusive, in keeping with our letter of October 6, 1952. We are sorry about the delay in preparing this amendment, but your letter was inadvertently misplaced.

If the terms and conditions of this amendment are satisfactory to you, all six copies should be signed. Retain the "Operator's Copy" and forward the original and four other copies to Mr. A. E. Weissenborn, Executive Officer, DMEA Region II, South 157 Howard Street, Spokane 4, Washington, for distribution.

Sincerely yours,

C. O. Mittendorf

Administrator

11-21-52

Enclosures

FARutledge'lm
11/18/52

cc: Admn. Reading File
Docket
H. W. Davis, USBM
T. P. Thayer, USGS
Field Team Reg. II
G. C. Selfridge
F. A. Rutledge
Operating Committee

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS ADMINISTRATION
WASHINGTON 25, D. C.
[redacted]
So. 157 Howard Street
Spokane 4, Washington

Department of the Interior
Defense Minerals Administration
RECEIVED
NOV 1 0 1952

November 12, 1952

Mr. G. W. Mitchell
Northfield Mines, Inc.
Cobalt, Idaho

Re: Docket No. DMEA 2436
Contract Idm-E334
Cobalt-Copper

Dear Mr. Mitchell:

Reference is made to your letter of November 1, 1952 concerning a snow removal agreement between Northfield Mines Inc. and Mr. C. F. Mechanicky. It is noted that you plan to retain Mr. Mechanicky's bulldozer at $350 per month and to pay an overtime rate of $7.35 per hour for time in excess of 47-1/2 hours per month. This rental period is to continue until the 1000 feet of drifting is completed.

This agreement would be very difficult for us to justify in its present form because of:

1. The bulldozer would be retained on a rental basis and operating equipment according to terms of your contract is an allowable maximum; consequently an amendment pertaining to operating equipment would have to be made in Washington.

2. Our figures indicate that you have only about 30 hours of bulldozing time left from the bulldozing time allotted to your amended contract. This amount would not provide for snow removal.

3. We object to the agreement that the bulldozer will be used for snow removal and other work until the 1000 feet of drifting is completed. We agree that drifting should be completed by spring but would prefer that the snow removal agreement be for a certain period of time or until the drifting is completed whichever is first.

To avoid the entanglements that might arise from an agreement such as you have proposed it is suggested that you make snow removal

a part of your drifting subcontract. In this way you could charge snow removal as a cost of drifting, which it actually will be, and for which we believe there are sufficient funds allotted. As we interpret your drifting subcontract, such an agreement could be included under section 7, ... "IT IS MUTUALLY COVENANTED AND AGREED AS FOLLOWS:" The agreement could be between Mechanicky, Corrigan and yourselves, and should be for a specified time, probably 3 months, or until the 1000 feet of drifting is completed, whichever is first. By such an agreement, Corrigan could bill you monthly for all drifting charges, including snow removal, to which the Government would pay its prorated share.

We have added a snow removal clause to Amendment No. 3, copies of which are enclosed. If this agreement meets with your approval please have your drifting subcontract revised and send this office a copy of your revised agreement for approval. If the agreement is not satisfactory to you, please advise and we will notify Washington that an amendment to the contract, to be signed in Washington, is required.

Sincerely yours,

Thor H. Kiilsgaard
For: A. E. Weissenborn
Executive Officer, DMEA
Field Team, Region II

Enclosure

cc: DMEA (2)
USBM (2)
Vhay

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION

[redacted]
So. 157 Howard Street
Spokane 4, Washington

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
NOV 1 7 1952

November 12, 1952

Mr. Frank E. Johnson, Chairman
Operating Committee, DMEA
Department of the Interior
Washington 25, D. C.

Re: Docket DMEA-2436 (Cobalt-Copper)
Northfield Mines, Inc.
Lemhi County, Idaho
Contract Idm-E334

Dear Mr. Johnson:

Enclosed are the original and two signed copies of Amendment No. 2 to the subject contract, with attached justification.

One copy of the amendment has been retained by the Operator, one copy is being retained for the files of this office, and by a carbon copy of this letter, the Regional Finance Officer's copy is being distributed.

Sincerely yours,

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

Enclosure

cc: USBM (2)
Vhay
Reg. Finance Officer w/encl.

Case
11-17

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION
~~WASHINGTON 25, D.C.~~
So. 157 Howard Street
Spokane 4, Washington

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
NOV 10 1952

11/12/52

November 5, 1952

Mr. F. E. Johnson, Chairman
Operating Committee, DMEA
Dept. of the Interior
Washington 25, D. C.

Re: Docket No. DMEA-2436-Cobalt-Copper
Northfield Mines, Inc.
Contract No. Idm-E334

Dear Mr. Johnson:

This will acknowledge your letter of October ~~13~~ 31 in which you point out that there is no provision under Exhibit "A" Item I for such an independent contract.

In conformance with your suggestion, an amendment is being prepared to provide for this.

You state although the subcontract between the Operator and William E. Corrigan is perfectly satisfactory, an amendment is required because there is, under the contract, no provision for such an independent contract. Until recently we were not aware that a contract amendment was required in such cases; we had thought that Article 4(b) of the contract form implied that an independent subcontract could be made and that the Government's approval for the independent contract was sufficient permission even though provision for an independent contract was not explicitly set forth in Exhibit "A" of the contract. Ever since you have pointed out that this is not the case, we have been checking our contract before approving an independent contract. Unfortunately, in the case of the Northfield Mines, we slipped. We shall check this more carefully in the future.

It occurs to me, however, that all future contracts should state that any part of the work described in the contract may be performed on force account or by independent contract provided that the Government approves the independent contract. A blanket provision like this would, in my opinion, do no harm and would save us a great deal of work in writing a special amendment to the contract for something which the Government must approve anyway before it can be done.

Sincerely yours,

A. E. Weissenborn

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

Copy retained 400

cc: USBM (2)

FILE COPY
SURNAME:

140

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

AEKane
Selfridge
Chamberlin

OCT 30 1952

Mr. A. E. Weissenborn, Executive Officer
DMEA Field Team, Region II
South 157 Howard Street
Spokane 4, Washington

Re: Docket No. DMEA-2436
(Cobalt-Copper)
Northfield Mines, Inc.
Contract No. Idm-E334

Dear Mr. Weissenborn:

In your letter of October 13 to me, you enclosed your approval of a subcontract between the Operator and William E. Corrigan for drifting. However, in Exhibit "A" of the Exploration Project Contract, under Item I, there is no provision for such an independent contract, and an amendment should be drawn to provide therefor and to give effect to this subcontract, the terms of which appear to be satisfactory.

Sincerely yours,

10-30-51

Frank E. Johnson
Chairman, Operating Committee

APPROVED:

J. H. Hedges
Member, Bureau of Mines

A. R. Kinkel, Jr.
Member, Geological Survey

AEKane/mef
10/24/52
cc to: Mails and Files
Adm. R. File
Op. Committee
Mr. Selfridge
Mr. Thayer
Mr. Hedges
Mr. Hofflund
Mr. Kane
Chron.
Pending

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS ADMINISTRATION
~~WASHINGTON 25, D.C.~~
So. 157 Howard Street
Spokane 4, Washington

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
OCT 28 1952

October 28, 1952

Mr. A. J. O'Connell
Northfield Mines, Inc.
Stevenson Operation
Eureka, Nevada

Re: Docket DMEA-2436 (Cobalt-Copper)
Lemhi County, Idaho
Contract Idm-E334

Dear Mr. O'Connell:

Enclosed are 6 copies of Amendment No. 2 to your Contract Idm-E334, Lemhi County, Idaho, which has been signed by the Government and now needs signature by an authorized official of your company before it becomes effective. If the amendment meets with your approval, please sign all copies, retain that copy marked for the Operator and return the others to this office.

Sincerely yours,

Thor H. Kiilsgaard
For: A. E. Weissenborn
Executive Officer, DMEA
Field Team, Region II

Enclosure

cc: Milo Manz
DMEA (2)
USBM (2)
Vhay

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION
WASHINGTON 25, D.C.
So. 157 Howard Street
Spokane 4, Washington

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
OCT 31 1952

October 27, 1952

Mr. Frank E. Johnson, Chairman
Operating Committee, DMEA
Washington 25, D. C.

Re: Docket DMEA-2436 (Cobalt-Copper)
Northfield Mines, Inc.
Lemhi County, Idaho
Contract Idm-E334

Dear Mr. Johnson:

Enclosed are the original and two signed copies of an Approval of Subcontract between the subject operator and Nichols and Thompson Core Drilling Company.

A copy of the Approval has been sent to the Operator, a copy is being retained for our files, and by a carbon copy of this letter we are distributing the Regional Finance Office's copy.

Sincerely yours,

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

Enclosure

cc: USBM (2)
Vhay
Reg. Finance Office w/encl.

Case 10-31-52

Docket Copy
~~2236-2~~ Cobalt or Copper

APPROVAL OF SUBCONTRACT
(Under Form MF-200, revised February 1952)

To: Northfield Mines, Inc.
(Name of Operator)

That certain contract, or proposed contract, a copy of which you have submitted with your request for approval, dated Aug. 20, 1952, between you and Nichols and Thompson Core Drilling Co.
(Name of Independent Contractor)

for the performance of the following work: diamond drilling

which is all or a specific element of the work described in an Exploration Project Contract dated June 2, 1952, Idm 334, Docket No. DMEA 2436, is hereby approved by the United States of America, subject to all of the terms and conditions relating to such independent contracts set forth in said Exploration Project Contract.

Dated: September 1, 1952.

THE UNITED STATES OF AMERICA

By A. E. Weissenborn

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

cae
11-6

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
OCT 31 1952

Nichols & Thompson Core Drilling Co., Inc.

Route 9 • Boise, Idaho

Phone 0255-J1

SUPPLEMENTAL AGREEMENT

Between: NICHOLS & THOMPSON CORE DRILLING CO. INC.

and

NORTHFIELD MINES INC.

IN ADDITION to the original contract of the above parties agreements, Article number 5, it has been agreed upon:

1. That any 2 or 4 inch hole drilled beyond the depth of 250' up to 350' will be paid for by the second party at the rate of $5.50 per linear ft.
2. That all casing left in hole beyond said depth will be paid for by second party at the rate of $5.50 per shift will be paid to the first party while trying to recover said casing, AT THE OPTION OF NORTHFIELD. H.W.N.

This AGREEMENT has been entered this 20th day of August between:

NICHOLS & THOMPSON CORE DRILLING CO. INC.

Glen P. Nichols

President

NORTHFIELD MINES INC.

Leonard Dean

General Manager

11/4/52

UNITED STATES
DEPARTMENT OF THE INTERIOR

DEFENSE MINERALS ADMINISTRATION
[redacted]
WASHINGTON 25, D. C.
So. 157 Howard Street
Spokane 4, Washington

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
OCT 3 _ 1952

October 27, 1952

Mr. A. J. O'Connell
Northfield Mines, Inc.
Stevenson Operation
Eureka, Nevada

Re: Docket DMEA-2436 (Copper-Cobalt)
Northfield Mines, Inc.
Lemhi County, Idaho
Contract Idm-E334

Dear Mr. O'Connell:

Enclosed is your copy of an Approval of Subcontract between the Northfield Mines, Inc., and Nichols and Thompson Core Drilling Company.

By carbon copy of this letter we are sending Mr. Milo T. Manz a copy of the Approval.

Sincerely,

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

Enclosure

cc: DMEA (2)
USBM (2)
Vhay
Manz

400

FILE COPY
SURNAME:

Selfridge.
Chadwick
Cc Kane
Hoffman

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

OCT 24 1952

Mr. A. E. Weissenborn
Executive Officer, DMEA Region II
South 157 Howard Street
Spokane 4, Washington

Re: Northfield Mines, Inc.
Docket No. DMEA 2436 - Cobalt
Contract No. Idm-E-334
Lemhi County, Idaho

Dear Mr. Weissenborn:

Returned herewith are the six copies of Amendment No. 2 to the subject contract which have been signed by Mr. Mittendorf.

Sincerely yours,

(signed) FRANK E. JOHNSON (JHG) cc 10-24

Chairman, Operating Committee

Enclosures

Approved:

Charles N. Merrill
Member, Bureau of Mines

A. R. Kinkel, Jr.
Member, Geological Survey

GCSelfridge:ls 10/20/52

cc: Field Team, Reg. 2
Docket
Admn. Reading File
G. C. Selfridge
Operating Committee
H. W. Davis, USBM
T. P. Thayer, USGS

Operator to Furnish

Compressor	$2,820.00
Mucking machine	1,950.00
Rail	1,140.00
Cars	312.00
Pipe & hose	1,140.00
Antifreeze	
Air vent	1,000.00
Tools	521.12
Steel & bits	1,020.00
Track ties	294.00 (not in contract)
Drifter (2 jackhammers with legs allowed)	720.00
	10,917.12

1 000 feet $10.92 / ft.

Contractor to Furnish

One vent fan with motor	375.00
One jumbo complete	
Mechanic tools	
Blacksmith tools	
Machine shop equipment at Chalk	
Acetylene welding outfit, complete	
Arc welder complete	
One Tractor hoist	
Comp equip	657.00
One oil heater	50.00
Blasting supplies	1545.00
Fuel, gas, oil & grease	2152.52
Tools	960.00
(Timber to be cut for underground)	
	5,839.52

Lotar set up in contract 5½ months

2	Lenses frames & enlargers	4,278.12
2	Mains	4,403.11
2	Masks	4,278.12
		12,959.35
	plus tape	1,500.00
		14,459.35

400

NORTHFIELD MINES, INC.
Cobalt, Idaho
Eureka, Nevada

October 15, 1952

Department of the Interior
Defense Minerals Administration
RECEIVED
OCT 17 1952

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

Docket #DMEA 2436 -Cobalt
Contract Idm - E 334

Dear Mr. Mittendorf:-

Thank you for your letter of October 6, 1952 about engineering salaries and expenses.

The diamond drilling contemplated for this year will be finished this week while the trenching was completed last month. Starting about November 1 only one engineer-geologist will remain at the property to direct the work and map progress while the adit on the Merle #5 shear is driven by a contractor. It is hoped that weather conditions will permit completion of the adit work which probably will take at least 3 months. The portal of the adit is being collared this week and the winter camp set up adjacent to it.

A complete report on the work to date will be prepared for mailing early in November.

While I cannot agree with you on some of the observations in your letter, I think your suggestion that the contract be amended to provide an additional $500 per month for June through October (5 months) will serve as a compromise. Accordingly, I shall appreciate it if you will prepare the amendment and forward it to me in Eureka, Nevada for signature.

Sincerely yours,

NORTHFIELD MINES, INC.

G. W. M.

George W. Mitchell

GWM/m

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION
WASHINGTON 25, D.C.
So. 157 Howard Street
Spokane 4, Washington

October 13, 1952

Mr. Frank E. Johnson, Chairman
Operating Committee, DMEA
Department of the Interior
Washington 25, D. C.

Re: Docket DMEA 2436 (Cobalt-Copper)
Northfield Mines, Inc.
Lemhi County, Idaho
Contract Idm-E334

Dear Mr. Johnson:

Enclosed herewith are the original and two signed copies of an Approval of Subcontract between Northfield Mines, Inc., and William E. Corrigan.

A copy of the Approval has been sent to the Operator, a copy is being retained for the files of this office, and by a carbon copy of this letter a copy is being sent to the Regional Finance Officer.

RECEIVED
OCT 22 1952
GENERAL COUNSEL
DEFENSE MINERALS
ADMINISTRATION

Sincerely yours,

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

Enclosures

cc: USBM (2)
Reg. Finance Officer w/encl.
Vhay

OCT 30 1952

10-20

DOCKET COPY

2236-2

APPROVAL OF SUBCONTRACT
(Under Form MF-200, revised February 1952)

To: [illegible] Mines, Inc.
(Name of Operator)

That certain contract, or proposed contract, a copy of which you have submitted with your request for approval, dated Sept. 12, 1952, between you and [illegible]
(Name of Independent Contractor)

for the performance of the following work: [illegible]

which is all or a specific element of the work described in an Exploration Project Contract dated June 2, 1952, Idm [illegible], Docket No. DMEA 2236 ([illegible]), is hereby approved by the United States of America, subject to all of the terms and conditions relating to such independent contracts set forth in said Exploration Project Contract.

Dated: October 2, 1952.

THE UNITED STATES OF AMERICA

By A. E. Weissenborn
A. E. Weissenborn, Exec. Officer
DMEA Field Team, Region III

[illegible] Defense [illegible]
OCT 2 [illegible] 1952

A G R E E M E N T

THIS AGREEMENT, Made and entered into this 14th day of September, 1952, by and between the NORTHFIELD MINES, INC., a Corporation, by GEORGE W. MITCHELL, General Manager, of Eureka, Nevada, the party of the first part, sometimes hereinafter referred to as the CORPORATION, and WILLIAM E. CORRIGAN, of Challis, Idaho, party of the second part, hereinafter called the CONTRACTOR,

W I T N E S S E T H:

That for and in consideration of the mutual covenants and agreements herein set forth, and in further consideration of the separate covenants of each party herein, the parties hereto agree as follows:

CONTRACTOR COVENANTS BY AND WITH THE CORPORATION:

1. That he will construct, according to good mining practices, a tunnel upon the premises of the Corporation, in Lemhi County, Idaho, according to the terms and specification set forth herein and at a point to be designated by the Corporation or its agents. G.W.M.

2. That said tunnel shall be 5 feet by 7 feet in the clear, timbered where necessary, and properly ditched if water is encountered. Said tunnel shall conform to good mining practices in the community, and shall at all times be subject to the approval of the Corporation Engineer. To construct the grade of the tunnel in such a manner as not to exceed one-half of one per cent and to lay all air and water lines on the floor of the tunnel.

3. To furnish all equipment as listed to be furnished by the Contractor on Exhibit "A" attached to this contract, at no cost to the Corporation. G.W.M.

4. To perform and pay for all labor necessary to construct said tunnel and to furnish all blasting supplies and timber used in the building thereof.

5. To operate at least two shifts per day, six days per week, provided always that proper labor is available.

6. To perform all work in a good and minerlike manner and according to the best mining practices in the neighborhood.

7. To carry all necessary workmen's compensation insurance, liability insurance, state unemployment insurance and to comply with all state and federal laws applicable to the operations contemplated by this agreement; to pay all state or federal taxes including F. O. A. B., and withholding taxes, which are required by law; to properly insure the Corporation and hold the same harmless from all claims or demands against the said Corporation resulting from any and all operations of the Contractor upon the premises.

8. To keep the premises free and clear of all liens made or suffered by the Contractor, regardless of the nature thereof, but including material men's liens and to keep posted in a conspicuous place a written or printed notice that the work upon the premises is being done by an independent Contractor; to hold the Corporation harmless from all claims or demands whatsoever resulting from the Contractor's work.

9. To operate and pay wages in accordance with the prevailing rate provided by the wage hour law.

10. To perform other work for extra remuneration as shall be designated by the agents of the Corporation including repairs on equipment, newly constructed equipment or other work not directly connected with the actual construction of the tunnel. For these services Contractor shall receive the actual cost of the work, plus any taxes due, and this amount, the Corporation covenants to pay.

11. To repair, without charge, all machinery necessary and proper to be used in the construction of the tunnel; provided always that the Corporation shall furnish, at its own expense, the necessary parts.

12. To not assign this contract, or any part thereof, or sublet any of the work herein referred to without the written permission of the Corporation first endorsed hereon in writing.

THE CORPORATION COVENANTS WITH THE CONTRACTOR

1. That Contractor well and truly performing the work and covenants herein enjoined upon him, shall receive a total price of $16.00 per linear foot for every foot of tunnel constructed where timbering is unnecessary in the opinion of the Engineer of the Corporation; to pay unto the Contractor $18.00 per linear foot for every foot of tunnel constructed where timbering is used.

2. To pay the said sums above mentioned to the Contractor on the first and the 15th of each calander month commencing with the first day of October, 1952.

3. To pay to the Contractor the actual cost, plus taxes, for all work by the Contractor in the rebuilding or repairing of equipment not actually used in the construction of the tunnel, or for any new equipment constructed by the Contractor and to furnish all parts needed for the repair of machinery actually used in the construction work.

4. To ~~furnish~~ permit Contractor to cut from their own premises, the necessary timber to be used in the construction of the tunnel.

5. To furnish the necessary equipment, as hereinafter listed, tools, and replacement parts for the machinery used by the Contractor in constructing the said tunnel in a miner-like fashion and ~~to execute~~ the Corporation work specified by the Corporation, it being understood that the Contractor shall maintain said equipment and tools in good repair and in good condition at his own cost.

IT IS MUTUALLY COVENANTED AND AGREED AS FOLLOWS:

1. That all work performed shall be subject to the inspection of the Corporation and its agents, and all work and machinery shall comply in all respects with the quality desired by the Corporation.

2. That either party to this contract may terminate the same by giving unto the other, a 10 day written notice of termination sent by registered mail; deposit in any United States Postoffice of said registered notice with a return receipt requested, shall constitute the first day of said notice. All notices to the Corporation shall be sent to Eureka, Nevada, and all notices to the Contractor shall be sent to him at Challis, Idaho.

3. That Contractor shall have the right to use of a Corporation building on the premises of the Corporation for use as a boarding house. This boarding house shall be operated by Contractor for his own use only and at his own cost and expense. Contractor covenants to comply with all laws relative to Boarding House operation and to hold the Corporation harmless from all liability or claims resulting therefrom and to return the premises to the Corporation in a good condition of repair at the termination of this agreement.

4. That this contract shall be subject to approval by the proper authorities of the United States Defense Mineral Exploration Administration.

5. That the lists of equipment and supplies to be furnished by the Contractor and by the Corporation, are marked Exhibit "A", and are attached hereto and made a part hereof by reference.

6. That the provisions of this contract are personal and the Contractor may not assign the same without the written permission of the Corporation endorsed hereon in writing.

7. Unless sooner terminated by notice as above specified, the provisions of this contract and all agreements herein, shall terminate when the tunnel has been completed and payment made therefor in full to the Contractor; provided however, that this agreement may be extended to cover other work by written endorsement attached hereto and signed by the parties to this agreement.

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

NORTHFIELD MINES, INC.

By _____,
General Manager

_____
Contractor

STATE OF NEVADA :
: SS.
County of Eureka :

On this 18 day of September, 1952, personally appeared before me, a Notary Public in and for Eureka County, GEORGE W. MITCHELL, known to me to be the General Manager of the Corporation that executed the foregoing instrument, and upon oath, did depose that he is the officer of said Corporation as above designated; ~~that he is acquainted with the seal of said Corporation,~~ and that the seal affixed to said instrument is the ~~corporate seal of said Corporation~~; that the signature to said instrument was made by an officer of said Corporation as indicated after said signature; and that the said Corporation executed the said instrument freely and voluntarily and for the uses and purposes therein mentioned.

Notary Public for State of Nevada
Residing at Eureka, Nevada.
My Commission Expires 7-2-57

STATE OF IDAHO :
: SS.
County of ~~Custer~~ Lemhi :

On this 17th day of September, 1952, before me, a Notary Public in and for said State, personally appeared William E. Corrigan, known to me to be the person whose name is subscribed to the within instrument and acknowledged to me that he executed the same.

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

Notary Public for State of Idaho
Residing at Challis, Idaho,

EXHIBIT "A".

CONTRACTOR WILL FURNISH THE FOLLOWING:

One vent fan, with motor.
One Jumbo, complete.
Mechanic's hand tools and wrenches.
Blacksmith tools, forge and anvil
Machine shop available at Challis
Acetylene welding outfit, complete.
Portable arc welder, complete, 200 amp. D.C.
One Trailer house, 8' x 20'.
Cookstove and dishes for eight people.
One oil heater.
Blasting supplies.
Fuel, gas, oil, and grease for equipment pertinent to contract.
Labor for the contract.
Timber to be cut on Company property.

CORPORATION WILL FURNISH THE FOLLOWING:

Compressor of not less than 315 cfm. capacity.
Mucking machine
Rails ~~not less than 20#~~.
Cars for hand tramming of not less than 16 cu. ft. or more than 20 cu. ft. capacity, and of roller or ball bearing type.
Air line pipe should not be less than 2".
Air hose shall be 1" in diameter.
Air hose fittings <u>not</u> to be of the gasket type
Air line valves for manifolds and junctions should be plug type with handles.
Track spikes shall not be less than 3/8" x 3" or more than 1/2" x 4" ~~for 20# rails~~.
Track bolts must be new or reconditioned.
Anti-freeze
Air-vent tubing shall be not less than 10" in diameter, including 50 ft. of bag tubing.
Picks, shovels, bars, rail-bender, steel, bits, axes, saws and other tools pertinent to the job.
All equipment and supplies must be serviceable and in good condition.
Track ties to be sawed at least 4" x 5".
Drifter shall be furnished with 5 ft. shell and at least 3" cylinder.
Steel shall not be less than 1 1/8" diameter, round lugged.

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS ADMINISTRATION
WASHINGTON 25, D. C.
[redacted]
So. 157 Howard Street
Spokane 4, Washington

October 8, 1952

Mr. Milo T. Manz
Northfield Mines, Inc.
Cobalt, Idaho
Via Forney, Idaho

Dear Mr. Manz:

Enclosed is your copy of Approval of Subcontract between Northfield Mines, Inc., and William E. Corrigan, in connection with your DMEA Contract Idm-5334.

Sincerely yours,

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

Enclosure

cc: A. J. O'Connell
Eureka Corporation Limited
Eureka, Nevada

DMEA (2)
USBM (2)
Vhay

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION
[redacted]
So. 157 Howard Street
Spokane 4, Washington

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
OCT 15 1952

Leo

October 6, 1952

Mr. Frank E. Johnson, Chairman
Operating Committee, DMEA
Department of the Interior
Washington 25, D. C.

cae 10-15-52

Re: Northfield Mines, Inc.
Docket DMEA-2436 (Cobalt)
Contract Idm-E334
Lemhi County, Idaho

Dear Mr. Johnson:

Enclosed are copies of a proposed Amendment No. 2 to the subject contract. This is the information desired in your letter of August 21, 1952. Following receipt of this letter the project was visited by George Selfridge of the DMEA and by Weissenborn and Vhay from the Field Team, and it was agreed at that time that an amendment should be prepared permitting more drilling. This additional drilling can be done without any increase in the total cost of the present contract, but it will require an amendment signed by Washington rather than by the Field Team because so many of the items in the original contract are stated as allowable maximums. In other words, in order to do the proposed drilling some money must be taken from the bulldozing and other phases of the work but this can be done without increasing the total cost of the contract. There has been some delay in the preparation of this amendment as Mr. Vhay has been compiling the trenching results. The attached sketch shows the results of all the trenching and indicates the mineralized zones that have been uncovered so far. Also attached is a brief formal justification for the amendment.

We would appreciate it if this amendment can be approved as soon as possible so that payment can be made for the additional drilling. Inasmuch as all have agreed that more drilling should be done, the Operator has continued drilling on the Merle No. 3 zone after he came to the end of his allowable drilling fund about the 20th of September. The amendment has been back-dated to the 15th of September in case accounting should show the funds exhausted before the 20th.

By DMEA Field Team, Region II

A. E. Weissenborn

A. E. Weissenborn, Exec. Officer (USGS)

Thomas E Howard
for M. E. Volin, Member (USBM)

Enclosures
cc: USBM (2)

FILE COPY
SURNAME

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

Selfridge

OCT 6 1952

Mr. George W. Mitchell
Northfield Mines, Inc.
230 Park Avenue
New York 17, New York

Re: Docket No. DMEA 2436 - Cobalt
Merle, et al claims
Blackbird Mining District
Lemhi County, Idaho
Contract No. Idm-M334

Dear Mr. Mitchell:

This is in response to your letter of September 16 to Mr. Selfridge concerning the salaries and expenses of technical personnel employed under the subject contract. We have given especial study to your request because it is not in keeping with our usual policies and experience. Usually the smaller projects are supervised by one engineer or geologist who also does the engineering and often the field bookkeeping. The subject contract provided for a superintendent-geologist at $600.00 a month which should have covered the salary of a fairly competent engineer or geologist. In addition, the contract allowed an item for part time engineering at $186.00 a month plus a maximum of $150.00 a month for travelling expenses of the engineer.

It is my understanding that the exploration work to date has been done under subcontract, that it has consisted of bulldozer trenching and diamond drilling, that the trenching was done faster than contemplated and that the supervisor is neither an engineer nor geologist. Since the supervisor was not expected to do the bookkeeping, this having been allowed for at a maximum charge of $150.00 a month, it would seem that the supervisor should have had a good deal of time to aid in the geologic and engineering work. Since the trenching was done faster than contemplated, it is our opinion that a technical supervisor and a full time engineer or geologist should have been provided for. We do not feel that DMEA would be justified in providing for 3 full time technical people under the contract. If agreeable to you, we would gladly amend the contract for a full time supervisor and a full time engineer only for the months in which trenching and/or drilling is being done.

When the exploration is limited to underground work, it would seem that a competent technical man could handle the job

alone. For the full time engineering months, we believe that $500.00 a month should suffice. This with supervision would amount to $1,100.00 a month. Please understand that when we set up salaries for supervision and engineering we calculate that reasonably competent engineers or geologists will be employed and that they will do an average amount of technical work. If an Operator would rather have a non-technical man as a supervisor, that is his prerogative as long as the work progresses satisfactorily under the contract, but DMEA does not assume the obligation for additional technical services that may be required for the lack of a technical supervisor.

I believe that Mr. Selfridge has already explained to you personally about our general policies on paying the expenses of technical personnel where the time element of a contract is longer than several weeks. Only rarely, as sometimes in Alaska, have we allowed such expenses. We do allow boarding house loss when such exists. From the information at hand, it appears that the technical men contribute nothing toward their keep, but that the company assumes the entire expense. Since the contract calls for 7 months work which if completed will probably require more time, we do not feel that DMEA should assume the obligation which would involve it in future controversies.

I was glad to hear that the preliminary drilling indicated cobalt values in the one zone and hope that drilling in the others is as equally favorable.

Sincerely yours,

C. O. Mittendorf (fw)

Administrator

J.H. 10-6-52

GCSelfridge'lm
10/1/52

cc: Admn. Reading File
Docket
H. W. Davis, USBM
T. P. Thayer, USGS
Field Team Reg. II
G. C. Selfridge

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION
WASHINGTON 25, D. C.
So. 157 Howard Street
Spokane 4, Washington

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
OCT 15 1952

October 1, 1952

Memorandum

To: DMEA Field Team, Region II

From: J. S. Vhay, Commodity Geologist for Cobalt

Subject: Recommendation for additional diamond drilling on Contract No. Idm-E334, Docket No. DMEA-2436 (Cobalt), Northfield Mines, Inc., Blackbird District, Lemhi County, Idaho.

Summary

In view of the excellent signs of additional and widespread mineralized rock, especially on the Merle No. 3 claim, shown by a well-carried-out trenching program, it is strongly recommended that the attached amendment to Contract No. Idm-E334 be accepted. This amendment provides for an additional 945 feet of diamond drilling above the original 2000 feet (allowable maximum) at no additional total cost to the contract, partly because of a cheaper drilling cost than the original estimate, and partly by diverting part of the originally set up for new roads and road rehabilitation. funds

Geology

The sketch map accompanying this memorandum is a rough compilation of information from the company's monthly progress reports up to September 1 and information obtained from a Geological Survey party in the area. Aside from the location of trenches, drill holes and claim lines it shows only the widespread shearing in the area and the occurrence of weathered mineralized rock as exposed in each trench. The weathered mineralized rock may include any or all of the following: sugary quartz, silicified schist, rocks heavily stained by iron oxide, a green hydrothermal biotite replacing country rock, red or brown iron oxide gossan, or yellow iron arsenate gossan. In this part of the Blackbird district the iron arsenates are taken to be direct evidence of the former presence of cobaltite, and all the other types of weathered mineralized rock, especially the sugary quartz, silicified schist and hydrothermal biotite, are known to overly? or accompany cobalt ore elsewhere in the district. In addition, in a few of the trenches

unoxidized cobaltite, or cobalt bloom has been found. The apparent strikes of the mineralized zones cannot be taken as more than rough approximations as the weathering and creep are so deep that good observations on the direction of the zones can rarely be taken.

The mineralized zone on the Merle No. 5 claim is exposed for a length of over 1600 feet, with widths up to at least 100 feet in places. It has an average trend of about N. 20° W., and probably dips nearly vertical. It lies in a zone of intense crumpling and shearing which is over 200 feet wide in places. The mineralized rock in this shear probably occurs as a number of plunging pods of higher grade material with lower grade material between. The diamond drilling to date (holes 1 to 7) has cut mineralized rock in every hole, but has not shown much material of ore grade (see Appendix I). The continuity of this zone as to length and depth has been proved sufficiently by trenching and drilling to justify its examination by underground work.

A number of mineralized zones are exposed in the Merle No. 3 claim, over a total length of about 1200 feet. They occur in one or perhaps several very wide zones of shearing. They have an average trend of about N. 30° W., swinging more northerly apparently at the north end. As exposed in the trenches there are up to six parallel zones of mineralized rock. The so-called Merle No. 3 zone, which is apparently the strongest and shows much iron arsenate and some cobaltite, passes from trench 31, through the south end of trench 11, the northeast parts of trenches 1.8S-.3E and 1, trench .8N-.4W, trenches 2N-.5W, 9 and 13, (where it is apparently joined by a north-south trending zone) through trench AX, and the northwest part of trench 10. A number of faults, only a few of which are shown on the map, have offset the zone sufficiently to make it difficult to tell exactly which one of the mineralized zones exposed in the trenches to the north is the main zone.

A closely parallel zone or group of zones is exposed in trenches 12, 2S-2.4E, the north end of trench 11, and in trenches 9, 3.7N-.8W, 9A, the east end of 10, and in the center part of 5.1N-.1W. Other zones to the northeast can be seen in trenches 32, 5.1N-.1W (east end), 2, and 8A. At least parts of all these zones show iron arsenates and therefore are cobalt-bearing at depth. The area of the north part of the Merle No. 3 claim, as well as that of the D. Queen claim to the west showed a number of high cobalt anomalies during the geochemical investigation.

As the mineralized rock on the Merle No. 3 claim appears to be a wide, complicated structure, considerably more drilling should be done on it than the approximately 555 feet left under the original contract, and it would appear to be wise to use most of the additional footage made available by the proposed amendment (945 feet) in order to prove enough depth continuity and cobalt value to justify exploring this area with underground work.

The mineralized zones on the D. Queen and Little Queen claims show strong mineralization, but in a complicated arrangement which has not been sufficiently proved up as to length to justify more than one or two preliminary holes. The company will probably do more trenching and drilling here at a later date.

Work done to date and results

The trenching done to date has been well planned, and has shown much more mineralized rock than was expected or could be hoped for as can be seen on the sketch map. It has been carried out at a cheaper rate than the original estimate and it would seem to be to the government's advantage to divert some of the money saved here, as well as that assigned to road building and rehabilitation (see Appendix II) to carry out more diamond drilling to test the exposed zones, especially those on the Merle No. 3.

The diamond drilling on the Merle No. 5 has not shown as high metal values as was hoped for (see Appendix I), but it has shown the continuity of the mineralized zones at depth sufficiently to justify underground exploration of the zone.

J. S. Vhay
Commodity Geologist for Cobalt

Enclosures

cc: DMEA (4)
USBM (2)
Vhay

APPENDIX I

Assay Results on Holes 1 to 5, Merle #5 zone

No.	Interval	Type	Cobalt %	Copper %
		Drill Hole D-1		
D1-19	106-112	Core	0.058	0.08
D1-20	112-116	"	0.132	0.52
D1-21	116-120	"	0.088	0.74
D1-22	120-125	"	0.073	0.15
D1-23	125-130	Sludge	0.073	0.18
D1-24	130-138	Core	0.117	0.75
D1-25	138-145	"	0.102	0.35
D1-26	145-150	"	0.088	0.43
D1-27	150-155	"	0.161	0.20
D1-28	155-160	"	0.117	0.25
D1-29	160-165	"	0.102	0.25
D1-30	165-175	"	0.088	0.18
D1-31	175-180	"	0.146	0.60
D1-32	180-185	"	0.088	0.18
D1-33	185-190	"	0.117	0.24
D1-34	190-195	Sludge	0.110	0.20
		Drill Hole D-2		
D2-1	209-212	Core Split	2.64	1.17
D2-2	212-215	" "	0.66	0.35
D2-3	215-218	" "	0.17	0.03
D2-4	218-221	" "	0.17	0.30
D2-5	221-224	" "	0.17	0.30
D2-6	224-229	Sludge Split	0.14	0.13
D2-7	230-233	Core Split	0.46	0.46
D2-8	236-239	" "	0.23	0.39
D2-9	119-121	" "	0.17	1.22
D2-10	121-124	" "	0.10	0.09
D2-11	124-126½	" "	0.11	0.06
D2-12	126½-129	" "	0.11	0.27
D2-13	124-134	Sludge Split	0.20	0.27
D2-14	131½-134	Core Split	0.52	0.44
D2-15	134-139	" "	0.32	0.36
D2-16	139-144	" "	0.22	0.10
D2-17	74-77	" "	0.20	0.44
D2-18	254-259	Sludge Split	0.19	0.28

Drill Hole D-3

No.	Interval	Type	Cobalt %	Copper %
D3-35	146-150	Core	0.102	0.15
D3-36	97-102	"	0.073	1.13
D3-37	107-108.2	"	0.088	0.32
D3-38	109-119	"	0.044	0.27
D3-39	119-128	"	0.058	0.35
D3-40	128-134	"	0.088	0.32
D3-41	144-148	"	0.249	0.63

Drill Hole D-4

D4-42	124.5-131		0.073	0.90
D4-43	131-136		0.088	0.25
D4-44	136-141		0.044	0.12
D4-45	141-149		0.044	0.12
D4-46	151-157		0.073	0.55
D4-47	141-149		0.058	0.22
D4-48	149-157		0.044	0.20
D4-49	157-164		0.073	0.45
D4-50	164-174		0.322	1.18
D4-51	174-181		0.190	0.50
D4-52	181-191		0.029	0.42

Drill Hole D-5

D5-53	71-76	Core	0.073	0.05
D5-54	144-151	"	0.088	0.07
D5-55	151-156.5	"	0.117	1.54

APPENDIX II

NORTHFIELD MINES, INC.
Eureka, Nevada

September 12, 1952

Mr. A. B. Weissenborn
S 157 Howard Street
Spokane, Washington

Docket No. NMSA 2436
Contract No. IDM - 8234

Dear Mr. Weissenborn:-

We have checked the amounts spent for diamond drilling and the footage for the first 7 holes and find the following:-

Footage - D1 to D7 inclusive	1445
Expenditures	$9,431.20
Cost per foot	$ 6.52
Contract allowance	$16,000.00
Balance - Sept. 4, 1952	$ 6,568.80
Additional footage possible at Sept 4 @ $6.50 (approx.)	1000
Total (using $16,000 max.)	2445
Contract allowance	2460

In our conversations September 6, our understanding was that we were all in accord regarding the desirability of doing at least 1500 feet more drilling. We were also in accord that sufficient trenching had already been done for this year in the zones under exploration. Our own opinion is that exploration of the zones should be carried on both north and south but that some geochemical work should be done first to help in locating the trenches. We are planning the geochemical work but believe trenching should be deferred because of the lateness of the season.

The present cash situation regarding trenching, roads, etc. is as follows:-

	Charges to 9/3/52	Contract Allowance	Balance 9/3/52
New Roads	$ 630.50	$ 2,055.00	$ 1,424.50
Road Rehabilitation	224.50	1,690.00	1,465.50
Trenching	5,648.50	7,500.00	1,851.50
Drill & Mfg. Sites	273.00	315.00	42.00
Totals	$ 6,776.50	$ 11,550.00	$ 4,783.50

In preparing for the adit on the Merlo #5 showing, a relatively small amount of new road is necessary as well as some work to provide space for equipment at the portal and a little space for setting up camp quarters near by. This is all bulldozer work and can be classified as new road. The funds remaining in this account are more than ample.

Maintenance of the road after the first snow falls occur and while the adit is being driven can be classified as road rehabilitation (maintenance) and these funds are also more than ample.

Since no further trenching is contemplated, we have $1850 remaining which can be used for diamond drilling. We also suggest that half of the new road allowance and half of the road rehabilitation be applied to diamond drilling, making and additional (approximately) $1400 or a total of approximately $3250, the equivalent of 500 feet of drilling.

In this manner a grand total of 2945 feet can be drilled, instead of the original 2000. All of the money will be from funds already set up in the contract for primary exploration work.

If the above meets with your approval, please prepare the necessary amendment to the contract sending it to us in Eureka, Nevada for signature. We should emphasize the fact that the original 2000 feet will be completed about the end of September so a decision should be reached at an early date.

Sincerely yours,

NORTHERN MINES, INC.

George W. Mitchell

GWM/

FILE COPY
SURNAME:

Selfridge

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

September 23, 1952

Memorandum

To: Administrator, DMEA

From: G. G. Selfridge

Subject: Inspection report
Docket No. DMEA 2436 - Cobalt-Copper
Northfield Mines, Inc.
Stevenson property
Lemhi County, Idaho
Contract No. Idm-a-334

The Stevenson property was visited September 6 in the company of Messrs. Weissenborn and Vhay of the Survey. A number of trenches were visited where shear zones and the presence of iron arsenates were noted. Reportedly several occurrences of cobaltite had been found during the trenching. At the time of the visit over 7,000 feet of trenching had been done under the contract and the trenching program had just been finished. The country rock is deeply weathered so no detail can be secured in some of the trenches. Slumping is prevalent and the noting of strikes and dips is of dubious value in many cases. The chief value of the trenches is to indicate the continuity of the mineralized shear zones.

Eight diamond drill holes aggregating over 1,400 feet had been drilled along the shear of the Merle No. 5 claim. The No. 2 hole cut 3 feet of mineralization assaying 2.64 percent cobalt with an adjacent 3 feet assaying between 0.50 and 1.00 percent. The rest of the zone averaged a few tenths of one percent with the exception of a 3-foot zone which was better. The remaining holes were poorer, with possibly one exception, the assays of which had not been received. The shear zone is outlined for approximately 1,000 feet.

A possible adit site for exploring the Merle No. 5 was visited. The Company tentatively plans on contracting the work for this fall and winter to a person who lives in the area. Provision would have to be made to get supplies in during the winter. A definite plan with attendant costs had not been worked out.

Trenching on the No. 3 Merle indicates a split in the mineralization. This area will be drilled on completion of the No. 8 hole. If the adit is started on the No. 5 Merle and the drilling indicates better values on the No. 3, the remaining footage under the contract will be driven on the latter. Some trenching on the Little Queen claim was also visited.

After examining the trenches a discussion was held regarding the program and the amendments requested by Northfield. While the drilling was not optimistic, Mr. Vhay stated that the first 7 or 8 holes drilled by the Calera Company also gave poor results. As a result of the discussion it was evident that everyone thought that the value of the drilling and the trenching was largely to outline the mineralized zone and that underground work should be done to secure information concerning its true characteristics.

It was also decided that the remaining funds for drilling and trenching should be used for additional drilling. This should allow for a number of additional holes on the No. 3 zone or on the Little Queen. The matter of paying the expenses of the technical men for a period of six months was discussed and it was explained to Mr. Mitchell that only rarely did the contracts provide for expenses in instances where the time period was a month or two.

During the work the Company has had a superintendent, a part time engineer, and a part time geologist-research man on the job. The last will do some soil analysis work. The Company had requested an amendment for funds for 3 men for 6 months, which was tentatively denied. The bulldozer contractor secured this year did appreciably more work than the one they had last year. At approximately the end of 3 months the trenching program was completed and more than half of the drilling program. The Company could have used two men during this period. During the discussion it developed that Milo Manz, the superintendent, was neither an engineer nor a geologist as called for under the contract. This accounted for the poor engineer being snowed under. Since all the work was on contract, there was little the superintendent could do but watch the bulldozing and drilling and manipulate the truck since the Company did not hire a truck driver. In addition, Manz does not want to spend the winter in the area, which means that the Company will have to hire a new man without benefit of the summer's work to watch the adit if it is driven this winter. Furthermore, the part time engineer will have to make trips to the mine to check on the new man. It surely was a poor arrangement and the writer has his qualms about driving the adit this winter unless a good geologist-engineer is employed. The writer recommends that the contract be amended to provide for a full time engineer at least for the months of June, July, August, and September.

Subject: The Calera Mine

The Calera Mine was visited on September 6 with Mr. Weissenborn. A face was visited where one could see the plunge of the formations. The ore shoots also plunge. Several stopes were entered and the type of ore noted. To keep the cobalt heads up, the stopes have to be carefully examined and often assayed. Some of the ground is quite heavy. The mining of the deposits will have its headaches. At present the Company is milling 500 tons a day and is pushed to keep tonnage and heads up to par. Based upon the nature of the mineralization seen at Calera, it is strongly suggested that some adit work should be done on the Northfield property regardless of the drilling results if cobalt is indicated. With the difficulty that Calera has with its cobalt heads, the copper content is quite important, seemingly sufficiently so as to justify Washington's decision making exploration contracts in the area on a 30-70 basis rather than on a 10-90 basis.

George C. Selfridge

Chief, Iron and Ferro-Alloy Division

GCSelfridge:ls
9/23/52

Copy to: Docket
Admn. Read. File
G. C. Selfridge

400

NORTHFIELD MINES, INC.
Eureka, Nevada

September 16, 1952

Mr. George Selfridge
Defense Minerals Exploration Administration
Department of the Interior
Washington 25, D. C.

Docket DMEA 2436
Contract Idm-E334

Dear Mr. Selfridge:

In our conversations September 6, 1952 at the Stevenson property of Northfield Mines, Inc., in the Blackbird District, Idaho, our request number 3 in our letter of August 4 to Mr. C. O. Mittendorf was discussed. The subject was changing part of a money allotment from a boarding house account to that of engineer salaries and expenses.

We pointed out in our letter to Mr. Mittendorf and in our conversations that we had avoided the establishment of a boarding house and had thus saved about $4,000.00 allotted for this purpose. Further, we have found that considerably more engineering help has been required in order to lay out trenches and drill holes advantageously and to map and keep proper record of the information thus obtained. Though the engineers and superintendent's expenses were allowed for in the boarding house account, the funds have not been available because no boarding house has been operated.

We have checked our expenses for June, July and August for engineers' and superintendent's salaries and expenses and find the following:-

Name	Occupation	Salary	Expense
Milo Manz	Superintendent	$1,800.00	$316.60
John K. Brozo	Geologist-Engineer	975.49	173.00
William Sharp	Geologist-Engineer	1,485.23	263.22
	Sub-Total	$4,260.72	$752.82
	Total		$5,013.54

The amount included in our accounts to DMEA for the above items has been only $2,358.00, leaving a balance paid by Northfield alone of $2,655.54.

You have seen the type of records we are keeping and some of the work that has been done. The results of the work have been encouraging enough that an adit on the Merle #5 shear has been laid out, and it is hoped that the weather will permit completion of this work this season.

The boarding house expense set up in the contract was as follows:

Item #2 - Labor	
1 cook	$2,722.12
Item #7 - Miscellaneous	
Boarding house loss	4,472.50
	$7,194.62

Mr. Weissenborn has allowed $400 of the boarding house loss for rental of the office and headquarters ($50 per month) in an amendment dated August 11, 1952 so the above amount is reduced to $6,794.62.

$800 in letter of Aug 4

We request that $650 per month for 6 months (June to November inclusive) be allowed as additional engineers' salaries and for the same period $250 per month as expenses for the three men, making a total of $5,400. The remainder, approximately $1,400, should be made available for analytical work as this item seems underestimated at $1,000.

$400 in letter of Aug 4.

If the above changes meet with your approval, please take the necessary steps to amend the contract to make the funds available.

Very truly yours,

NORTHFIELD MINES, INC.

George W. Mitchell
General Manager

GWM/m

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

No. 157 Howard Street
Spokane 4, Washington

September 12, 1952

Mr. A. J. O'Connell
Northfield Mines, Inc.
Stevenson Operation
Eureka, Nevada

Re: Docket No. DMA-2436
Contract No. Ida-6334
Cobalt-Copper

Dear Mr. O'Connell:

Attached is form 22364-2 giving approval to a subcontract between C. F. Mechanicky and Northfield Mines, Inc., for building on Contract Ida-6334.

Sincerely yours,

A. [illegible] Glassberg
Executive Officer, [illegible]
Field Team, Region II

Enclosure

cc: [illegible] (2)
[illegible] (2)
Wayne Roberts
Jack Whay

SEP 1[illegible] 1952

NORTHFIELD MINES.

IT IS HARDLY POSSIBLE TO BREAK DOWN COSTS FOR ANY RELIABLE RESULTS.

ONLY 38 % CORE RECOVERY WAS MADE IN D.D. HOLE D2, FROM 209' TO 238' INCLUSIVE, (30') AVERAGE 0.34 % Cu. 0.50 % COBALT.

NO SLUDGE SAMPLES WERE TAKEN.

FROM 119' TO 144' INCLUSIVE (25') THE ORE AVERAGED 0.28 % Cu. AND 0.21 % COBALT

CORE RECOVERY 48 %.

ONE SLUDGE SAMPLE 124' TO 134' (10') 0.27 % Cu. 0.20 % Co.

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

So. 157 Howard Street
Spokane 4, Washington

September 12, 1952

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

Re: Docket No. DMEA-2436
Contract Idm-E334
Northfield Mines, Inc.
Cobalt-Copper

Dear Mr. Johnson:

Attached are the original and two copies of an approval of a subcontract in connection with the subject project. A copy has been sent to the Fiscal Officer and to the Operator.

Sincerely,

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

Enclosure (in trip.)

cc: USBM (2)

RECEIVED
SEP 30 1952
GENERAL COUNSEL
DEFENSE MINERALS
ADMINISTRATION

Docket Copy

4
2236-2
1

APPROVAL OF SUBCONTRACT
(Under Form MF-200, revised February 1952)

To: Northfield Mines, Inc.
(Name of Operator)

That certain contract, or proposed contract, a copy of which you have submitted with your request for approval, dated July 30, 1952, between you and C. F. Nechanicky
(Name of Independent Contractor)

for the performance of the following work: 5500 feet of trenching and other bulldozer work

which is all or a specific element of the work described in an Exploration Project Contract dated June 2, 1952, Idm 1334, Docket No. DMEA 2436 (co-cu), is hereby approved by the United States of America, subject to all of the terms and conditions relating to such independent contracts set forth in said Exploration Project Contract.

Dated: August 28, 1952.

THE UNITED STATES OF AMERICA

SDS
9/3/52

By A E Weissenborn

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

Salmon, Idaho.

July [illegible], 1962

Mr. G. R. Mitchell
Northfield Mines, Inc.
Cobalt, Idaho.

COPY

Dear Sir:-

Confirming our present verbal agreement I will do trenching, road and other bulldozer work at the Stevenson Property, Blackbird Dist., Cobalt, Idaho, for the Northfield Mines, Inc. under the following arrangement.

I will furnish 1 - D-7 International tractor and dozer complete, supply fuel oil, repair and operate it for $13.00 per hour. Industrial Accident Compensation premiums will be my expense. I will bill you for incurred transportation charges for my bulldozer but outgoing transportation will be my expense. It is expected that if my work is satisfactory, I will be permitted to complete the 3500 feet of trenching and other bulldozer work for which Northfield Mines, Inc. has a contract with the B.M.M.R.

Very truly yours,

C F Nechanicky

C. F. Nechanicky
Owner

Approved:

Northfield Mines, Inc.

G. R. Mitchell

G. R. Mitchell
Gen. Mgr.

GCL

Docket Copy

NORTHFIELD MINES, INC.
Eureka, Nevada

Mr. C. O. Mittendorf
Acting Administrator
Defense Minerals Exploration Administration
Department of The Interior
Washington 25, D. C.

Docket No. DMEA 2436
Contract Idm -E 334

Dear Mr. Mittendorf:

We have your letter of August 21, 1952 regarding contract changes. We appreciate your instructing the field team to make the necessary changes in the drill and trench footages. No change is made in the total amounts of money.

We are sorry we failed to make ourselves clear in our letter about additional engineering. Our request was for a change in the engineering and geological work allowance rather than supervision. It seems advantageous to keep mapping abreast of the dozer work and drilling in order to obtain the maximum information in the minimum time. The superintendent and engineers living expense was included as "boarding house loss" in the contract, but since we do not expect to operate a boarding house, the funds do not seem to be available. Our request was a matter of applying funds to existing conditions but no overall increase was intended.

We have confined our trenching to the three zones disclosed last year, (1) the Merle #5, (2) the Merle #3 and (3) the Little Queen. To date the Merle #5 showing appears to be the most favorable of the three so trenching and diamond drilling is being carried on most intensively there. We agree that it is too early to draw conclusions.

We are pleased that Mr. Selfridge plans to review the whole program with the field team early in September. We hope he will be able to visit the property. Please tell him that we shall make every effort to be at the property when he is there if he will notify our superintendent, Milo Manz, in Cobalt, Idaho a few days in advance.

Sincerely yours,

NORTHFIELD MINES, INC.

George W. Mitchell

GWM/m

Copy retained 400

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

1201 N. Division St.
Spokane 2, Wash.
August 28, 1952

MEMORANDUM

To: Chairman, Operating Committee, DMEA, Washington, D. C.

From: Acting Executive Officer, DMEA Field Team, Region II

Subject: Amendment No. 1 to exploration project contract Idm-E334, Docket No. 2436 (cobalt-copper), Northfield Mines, Inc., Lemhi County, Idaho

Transmitted herewith are the original and two copies of the captioned amendment together with two copies of a memo of justification prepared by a representative of the Field Team.

M. E. Volin, Acting Exec. Officer

Enclosure

Copy retained 400

Copy retained 400

cc: USGS, Spokane

FILE COPY
SURNAME:

Selfridge
Lemmon
Thurson

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

Mr. George W. Mitchell
Northfield Mines, Inc.
230 Park Avenue
New York 17, New York

AUG 21 1952

Re: Docket No. DMEA 2036 - Cobalt
Merle, et al. claims
Blackbird Mining District
Lemhi County, Idaho
Contract No. Idm-X-334

Dear Mr. Mitchell:

This is in response to your letter of August 4, 1952, requesting that certain changes be made by amendment in the subject contract.

We are requesting the Field Team to prepare an amendment allowing an increased diamond drill footage, if warranted and necessary, based upon the amount of money originally alloved for diamond drilling.

The Field Team can allow the additional trenching under its delegated authority so long as the stipulated sum for trenching is not exceeded.

For the present we do not favor amending the contract to allow for additional supervision and attendant expenses thereto. From your letter one receives the impression that the original target areas are being expanded beyond the scope intended by the contract and that possibly the entire program merits reconsideration in the light of recent findings. We have just been advised that as of July 29 some 18 trenches, aggregating approximately 3,000 feet in length, and two diamond drill holes had been completed. Possibly it is a little early to draw conclusions when so little of the drilling has been done.

Our Mr. Selfridge is planning to visit Spokane at the end of this month and possibly your project in early September. While in the West he will at least discuss the entire program with the field men and, if at all possible, do so on the property being explored. At that time your requested changes can be given further consideration in conjunction with any other changes suggested by the exploration work to that date.

Sincerely yours,

E. O. Mittendorf (fw)

Acting Administrator

GCSelfridge:ls
8/19/52

Copy to: Docket
Admn. Read. File
Field Team, Reg. 2
G. C. Selfridge
H. W. Davis, USBM
T. P. Thayer, USGS
Operating Committee

400

FILE COPY
SURNAME:

Selfridge
Mittendorf

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

AUG 21 1952

Mr. A. E. Weissenborn
Executive Officer, DMEA Region II
South 157 Howard Street
Spokane 4, Washington

Re: Docket No. DMEA 2436 - Cobalt
Northfield Mines, Inc.
Merle, et al. claims
Blackbird Mining District
Lemhi County, Idaho
Contract No. Idm-E-334

Dear Mr. Weissenborn:

Please refer to your copy of Mr. George W. Mitchell's letter of August 4, 1952, to Mr. Mittendorf, and to memoranda by T.E. Howard and J. S. Vhay, dated August 11 and 12, respectively, with covering memorandum of August 11 by the Field Team.

When feasible, will you please prepare a memorandum allowing for an increased amount of diamond drilling under the subject contract which will allow for the expenditure of, but not exceed, the $16,000 allotted to diamond drilling under the contract. The amendment should be substantiated in the usual fashion.

We have no objection to increasing the amount of trenching, if warranted and necessary, to the maximum expenditure allowed under the contract. This is within your delegated authority.

For the present we believe it best that no further changes be made in the contract as information at hand suggests that maybe the scope of the entire program merits reconsideration, possibly resulting in a revision of the contract by one amendment rather than in a series of them. This will be discussed with you while Selfridge is in Spokane.

In conjunction with the preparation of memoranda relating to the results obtained by exploration, we would appreciate receiving available detailed information. In this respect we are referring to Mr. Howard's memorandum which states, "Assay returns from the first hole

indicated 50 feet of cobalt mineralization, about 9 feet of which was of a grade high enough to be considered ore." Receipt of the assays would have been enlightening.

Sincerely yours,

G. C. Selfridge

ACTING Chairman, Operating Committee

APPROVED:

C. H. Johnson

Member, Bureau of Mines

D. M. Lemmon

Member, Geological Survey

GCSelfridge:ls 8/19/52

Copy to: Docket
Admn. Read. File
Field Team, Region 2
Operating Committee
G. C. Selfridge
H. W. Davis, USBM
T. P. Thayer, USGS

Submitted: 8/19/52

Copy to: Docket
Adm. Asst. File
Field Team, Section 2
Operating Committee
G. C. Selfridge
H. V. Davis, USBM
T. P. Thayer, USGS

ICE OF THE ADMINISTRATOR

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

1201 N. Division St.
Spokane 2, Wash.
August 13, 1952

MEMORANDUM

To: Chairman, Operating Committee, DMEA, Washington, D. C.

From: Acting Executive Officer, Field Team, Region II

Subject: Transmittal of Approval of Subcontract

Enclosed herewith are the original and two copies of an approval of subcontract between the Northfield Mines, Inc. and Nichols & Thompson Core Drilling Co. in connection with DMEA Contract Idm-E344, Docket No. 2436 (cobalt-copper).

Glenn A. Reed
for M. E. Volin
Acting Executive Officer
DMEA Field Team, Reg. II

Enclosures

RECEIVED
AUG 19 1952
GENERAL COUNSEL
DEFENSE MINERALS
ADMINISTRATION

AUG 18 1952

Copy retained 400 above Ofs only

Docket Copy
DMEA-2436
Idm- E344
Cobalt, Copper 22364-3

APPROVAL OF SUBCONTRACT
(Under Form MF-200 prior to
revision of February 1952)

To: Northfield Mines, Inc., Cobalt Exploration Syndicate, Salmon, Idaho
(Name of Operator)

That certain contract, or proposed contract, a copy of which you have submitted with your request for approval, dated July 10, 1952, between you and Nichols & Thompson Core Drilling Company, Boise, Idaho
(Name of Independent Contractor)
for the performance of the following work: diamond drilling

which is all or a specific element of the work described in an Exploration Project Contract dated June 2, 1952, Idm E 344, Docket No. DMEA 2436, is hereby approved by the United States of America, subject to the following terms and conditions.

1. The Government shall not be nor be considered to be a party to said 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 said independent contract.

2. Regardless of the provisions of said 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.

3. The said independent contract shall not have the effect of increasing the estimated total cost of the exploration project contract or the maximum amount which the Government will pay as provided in the exploration project contract.

Dated: July 10, 1952.

THE UNITED STATES OF AMERICA

By Glen Reed 8/25/57
for M. E. Volin, Acting Exec. Officer
DMEA Field Team, Region II
(U. S. Bureau of Mines)

CONTRACT

Between: NICHOLS & THOMPSON COAL DRILLING CO., INC.,

First Party

and

MONTFIELD MINES, INC.,
COBALT EXPLORATION SYNDICATE,

Second Party,

THIS AGREEMENT, made and entered into this 10th day of July, 1952, by and between NICHOLS & THOMPSON COAL DRILLING CO., INC., hereinafter called first party, and MONTFIELD MINES, INC., COBALT EXPLORATION SYNDICATE, hereinafter called second party

WITNESSETH:

WHEREAS, Second party has requested first party and first party has agreed to perform certain drilling and other services under the terms and conditions hereinafter specified;

NOW, THEREFORE, for and in consideration of the covenants, conditions and agreements herein contained, the parties agree as follows:

FIRST: The first party agrees:

1. To drill or cause to be drilled diamond drill holes on drill sites at such depths, bearings, inclinations and hole sizes as designated by the second party. Said drilling is to be performed on mining property of second party in the Blackbird Mining District, Idaho.

2. To supply all drilling equipment, tools, labor, materials and supplies, except hereinafter provided, required to complete such holes.

3. That the drill crews of first party will prosecute the drilling in a diligent, expert and workmanlike manner and shall exercise reasonable care and precaution to recover as high a percentage of core and sludge as the nature of the ground will permit and will deliver over all such core and sludge at the drill site to the person or persons designated by second party. Further, first party agrees to report to the designated party or parties, to maintain such core records as ordered.

4. To furnish and place 500 linear feet of drill water piping per site, and pump such water to drill site under a maximum head of 250 feet.

5. That the cost of any delays in drilling due to drill machine failure, loss of tools in hole or any other mechanical breakdowns will be borne solely by the first party.

6. In the event of a delay caused by "ground trouble" the first party shall diligently try to overcome said hole trouble for a period of 6 - eight hour drill shifts and then, if the second party still desires to continue the hole, the second party will pay the first party, instead of the per foot rate, a rate of $ 85.00 per eight hour drill shift until said hole trouble is overcome.

7. To drill a minimum of 550 feet per month with one drill on a two shift basis, provided, that in the event this minimum footage can not be maintained, the first party may use additional drills and work additional shifts at its discretion to maintain the minimum monthly footage. If first party desires to drill in excess of ~~750~~ 1600 feet per month, the written consent of the second party must first be obtained.

8. To carry adequate Workmen's Compensation and Employer's Liability insurance to cover the work and to observe and obey Federal, State and local laws concerning the work to be performed.

9. To indemnify and save harmless the second party from laborer's, mechanic's, materialmen's liens and all other liens and charges upon the operation and/or upon the premises upon which work is located, arising out of the operations to be performed and materials furnished by the first party under this agreement.

10. To transport its crews to and from the FACILITY of SECOND PARTY at its own expense.

11. To commence work within a reasonable length of time after the execution of this agreement and shall pursue the work in a consistent manner until completed.

12. To permit the second party's authorized representatives to examine and inspect the work being performed in order that the purpose for which the holes are being drilled, exploration for minerals, be accomplished

to the second party's satisfaction. The second party agrees that its inspections and observations will be done, insofar as possible, so as to cause a minimum of delay to the first party.

13. To keep secret and confidential all information regarding the geology of ore bodies and not to disclose the same to anyone other than the duly authorized representatives of the second party.

SECOND: The second party agrees:

1. To give the first party and his employees access to the premises upon which the drilling operations are to be conducted at no cost to the first party.

2. To guarantee the first party a total of 1250 feet.

3. To prepare drill sites, roads to drill sites and provide clear lines or permit use of present trails or roads for laying of pipe.

4. To designate drill sites, bearing and inclination of holes and to arrange the sequence of drilling so that the first party will have a reasonable minimum of moving distances and lost time between sites.

5. To pay the first party at the following rates:

(a) NX size	0 to 200 feet	@ $5.50 per linear foot
(b) EX size	0 to 200 feet	@ $5.35 per linear foot
(c) AX size	0 to 250 feet	@ $5.00 per linear foot
(d) Reaming		@ $2.50 per linear foot
(e) Cementing		@ $2.50 per linear foot
(f) Driving surface pipe		@ $8.40 per linear foot
(g) Mobilization (all equipment in & out)		@ $325.00

Further, measurement of hole shall be from collar of holes and no hole shall exceed 250 linear feet unless desired by the second party, in which event, such drilling shall be performed under conditions and at such rates as may be agreed upon in a written instrument supplemental to the within agreements.

6. In case of abandonment of a hole the first party will be paid for footage drilled at the rates herein specified.

7. To pay the first party on the 5th and 20th of each month for footage completed and verified by the second party's engineer, said completed footages to be certified by the first party for verification on the

1st and 16th of each calendar month.

8. To save harmless and indemnify first party's operation for and against any undue delays due to second party's actions at the rate of $10.00 per hour. Delays caused by the conducting of engineering surveys of holes will be paid for at the above stated rate.

9. To furnish all core boxes and sludge sample containers needed by first party in performance of this contract.

10. To furnish first party with one 14 x 16 foot tent house erected at or near the job site, said tent house to remain the property of second party and first party agrees to pay $5.00 per month rental during the time it uses said tent house.

11. That upon completion of drilling the first party shall have the right to remove, within a reasonable length of time, all temporary buildings and other fixtures, trade fixtures, machinery, equipment, appliances and facilities placed by him on second party's real property.

THIRD: It is mutually understood and agreed by and between the parties hereto as follows, to wit:

1. That the cost of any casing INADVERTENTLY left in any hole drilled hereunder shall be shared by first and second parties on a 50-50 basis. In the event second party should desire to leave casing in a hole it is agreed that second party be charged the current replacement cost of said casing.

2. That neither party to this agreement shall be liable for any loss or damage caused by reason of strikes, accidents, acts of God, action of the elements, or any other causes beyond its control.

3. That no representations, promises, agreements or understandings other than those contained herein shall be binding upon the parties hereto, except where the same are set forth under a written instrument supplemental to or superseding the within agreement and such instrument shall be duly executed by the parties hereto.

4. That this contract shall be subject to approval by the proper authorities of the Defense Materials Exploration Administration of the Federal Government.

5. Any notice required to be given by second party shall be in writing and shall be properly given if such writing is delivered personally

to or mailed by registered mail addressed to the first party as follows:

Nichols & Thompson Core Drilling Co., Inc.
c/o Elmer P. Nichols
Route 2
Boise, Idaho

Any notice required to be given by first party shall be in writing and shall be properly given if such writing is delivered personally to or mailed by registered mail addressed to second party as follows:

Cobalt Exploration Syndicate
General Delivery
Salmon, Idaho

6. That if at any time during the life of this contract any dispute, difference or question shall arise between the parties hereto, touching the construction, meaning or effect of this contract, or any clause or thing herein contained, or respective rights or liabilities of the parties under these presents, every such dispute, difference or question shall at the request of either party be referred to the arbitration of three persons, one to be appointed by each party hereto, and the third to be selected by the two thus appointed; and the award and decision of the three arbitrators thus selected shall be binding upon the parties hereto. In the event either party is required to resort to legal action to enforce any of the provisions of this contract, he shall be entitled to recover reasonable attorney's fees incurred thereby.

7. This agreement shall be binding upon and shall inure to the benefit of the heirs, executors, administrators and assigns of the parties hereto; provided, that neither party hereto shall assign his rights in or interest under this contract without first having obtained the other party's consent to such assignment in writing.

IN WITNESS WHEREOF this contract has been executed in triplicate by the parties hereto the day and the year first herein written.

NICHOLS & THOMPSON CORE DRILLING CO., INC.

President

ATTEST:

Secretary

BURNHEAD MINES, INC.
COBALT EXPLORATION SYNDICATE

Thomas Tillett

General Manager

ATTEST:

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

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
Spokane
AUG 15 1952

1201 N. Division St.
Spokane 2, Wash.

August 11, 1952

Memorandum

To: Chairman, Operating Committee, DMEA, Washington, D. C.

From: Field Team, Region II

Subject: Docket No. DMEA 2436 (cobalt - copper), Northfield Mines, Inc., Exploration Project Contract Idm-E334

Reference is made to a letter from Mr. George B. Mitchell to Mr. Mittindorf dated August 4, 1952, a copy of which was received here. The letter requested various amendments to the above indicated contract, some of which cannot be executed in the field.

T. E. Howard, Mining Engineer, U. S. Bureau of Mines, had previously discussed these changes with Mr. Mitchell and a copy of his routine inspection memorandum is enclosed for your information.

As it now appears that 2,000 feet of diamond drilling will be insufficient to properly locate the underground work the Field Team strongly recommends that Mr. Mitchell's request to extend the diamond-drill footage be approved. We should like to go even farther and remove the limitation on the total funds allotted for drilling so that any saving made on trenching could be diverted to the drilling if necessary.

The Operator's request for an additional amount to be allotted for engineering is also considered justified. However, we feel that one engineer at $550.00 per month should be adequate. It appears that the superintendent should be able to devote at least part of his time to technical work as specified in the contract. This is emphasized inasmuch as all work performed to date has been by independent contractors.

An amendment to the contract diverting part of the funds allotted for boarding house loss to provide for cabin rental at $50.00 per month will be prepared here. We hesitate to allow the

Copy retained 400

WNE

other"living expenses" requested by Mr. Mitchell. Living expenses are not allowable under other contracts prepared in this Region. To allow them in this instance might well make for poor relations with other Operators. Therefore, we feel that such expenses should be borne in full by Northfield Mines, Inc.

By Field Team, Region II

For M. E. Volin, Acting Exec. Officer
(Bureau of Mines)

S. Warren Hobbs, Acting Member
(Geological Survey)

Enclosure

CC: 4—Wash.

P. S. Also enclosed are two copies of a memorandum from J. S. Vhay, Cobalt Commodity Geologist of the Geological Survey, dated August 12, 1952 answering the first amendment Mr. Mitchell requested in his letter to Mr. Mittendorf.

S.W.H.

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

So. 157 Howard Street
Spokane 4, Washington

August 12, 1952

Memorandum

To: A. E. Weissenborn, Exec. Officer, DMEA Field Team, Region II

From: J. S. Vhay, Cobalt Commodity Geologist

Subject: Amendment to increase amount of diamond drilling, Northfield Mines, Inc., Lemhi County, Idaho, Cobalt-Copper, Docket No. DMEA-2436, Contract Idm-E334.

In a letter dated August 4, 1952 to Mr. Mittendorf, Mr. G. W. Mitchell, General Manager of Northfield Mines, Inc., requests that certain amendments be made to the contract (Idm-E334). This memorandum deals only with the first requested amendment, namely, "that the drill footage be based on the amount of money allowed instead of any given footage." In the original contract the diamond drilling was specified as 2,000 feet, at $8.00 per foot for a total of $16,000, with both the 2,000 feet and the $8.00 per foot as allowable maximums. Mr. Mitchell requests that inasmuch as the cost of the drilling is close to $6.00 per foot instead of the estimated $8.00 per foot, additional footage be allowed up to the total cost of $16,000.

The bulldozing done this summer plus that done last fall has shown up a number of well mineralized shear zones, at least 4 of which should be diamond drilled sufficiently to prove whether they contain material of ore grade. The total of 2,000 feet of allowable footage would thus allow only 500 feet of drilling per mineralized zone, which is hardly enough to justify underground exploration of each zone. As shown in the nearby Calera mine, although the shear zones in which the mineralized rock occurs are continuous over fairly long distances, the ore shoots within them are usually not continuous for great distances down the dip or along the strike, but instead have their greatest dimension in the direction of the plunge. In the Brown Bear section of the Calera mine this made it more difficult to prove up an ore shoot and necessitated more drilling than if a continuous vein type of ore body were being explored.

For this reason it is strongly recommended that Mr. Mitchell's requested amendment (1) be granted inasmuch as the ore bodies on the Northfield ground are believed to be similar. In fact I would also recommend that, if some additional funds are later requested for even more drilling, the request be granted, as the trenching and drilling done to date indicates that this is an exceptionally strongly mineralized area, and there is a high probability that a cobalt producer will be developed here.

The management of the Northfield mines is doing an excellent exploration job on the property, and has been very cooperative with the Geological Survey party in supplying maps of the area and all other requested assistance.

J. S. Vhay
Cobalt Commodity Geologist

cc: DMEA (2) Airmail
USBM (2)
USGS (SRO)
J.S.Vhay

DMEA Field Team, Region II Aug. 10, 1952

T. E. Howard, Mining Engineer, Bureau of Mines

Docket No. DMEA 2436 (cobalt-copper), Northfield Mines, Inc., Exploration Project Contract Idm-E334, Amendment No. 1

Northfield Mines, Inc. has requested that the captioned contract be amended to provide for the rental of a cabin near Cobalt, Idaho which is used for an office and living quarters for the staff.

This expense is a direct cost of the project and the amendment is considered justifiable in that suitable office space for technical and supervisory personnel will make for more efficient conduct of the work. Additional funds will not be required as the Operator does not intend to build the boarding house specified in the contract, and funds can be diverted from the "boarding house loss" item to provide for cabin rental.

T. E. Howard

cc: DMEA, Wash. (2)
USGS
TEH

NORTHFIELD MINES, INC.
August 4, 1952

Seafridge

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

DOCKET #DMEA 2436
CONTRACT Idm-E 334

Dear Mr. Mittendorf:-

On July 29, 1952 the above project was thoroughly discussed with Mr. T. E. Howard of the Spokane field team. Both he and the Survey team members are very well satisfied with the progress being made and the ore indications which are being brought to light by the trenching and drilling. The possibilities of the property seem good.

Almost two months have elapsed since work was started. The estimates made for the major parts of the program have been adequate, in fact have been a little higher than actual requirements. In some cases the contract permits sufficient flexibility to apply the funds thus saved to more of the same type of work. General results are such that this is most desirable.

In other instances the contract seems to be less flexible and the field team believes that Washington headquarters have sole authority to make suitable adjustments. It should be noted that in all cases no increase in the total amounts of money is requested but merely the adjustments of individual allowances, mainly in footages of trench, drill holes, etc. to use the funds allotted. hedging

The following amendments are requested:-

2000' D.D. set up on footage + not funds starved

(1) The cost of diamond drilling will probably approximate $6.00 per foot instead of the estimated $8.00. This should make available some $4000 for additional drilling or about 700 feet. We request that the drill footage be based on the amount of money allowed instead of any given footage.

5,500' trench estimated on footage which we believe.

(2) It is likely that trenching costs will be about two-thirds of the amount estimated per foot. Thus, it is likely that at least 1500 feet of additional trench can be cut for the funds allotted. We believe the field team has authority to permit the use of all the funds for trenching regardless of the footage. This also applies to the funds allotted to (1) new roads, (2) road rehabilitation and (3) diamond drill sites.

?

no footage

10

Dogy

4472.50
2722.72
1500.00
$8,695.22
7200
1,495.22

(3) Effort is being made to avoid the establishment of a boarding house. It is believed that practically 100% of the $4472.50 allowed for boarding house loss will not be used, as well as the $2722.72 allowed for a cook. Additionally, labor for 2000 feet of trail (about $1500) will probably not be used for this purpose.

doubled — yes — yes

On the other hand the amount of engineers' and geologists' time for laying out the work and recording the engineering and geology (and their living expenses) was under-estimated in the original application and in the contract. We have been complimented by the field team for the excellent records of the work we are keeping and it is very necessary that this continue. Two geologists and one superintendant have been working full time to keep abreast of the trenching and drilling; whereas a superintendant and a part time geologist was provided for in the application and contract. Furthermore, through an inadvertent error, no provision was originally made for the living expenses of these men.

means $986 for 2 men + $600 for 3rd

We request that the boarding house and other expense mentioned above be made available for additional engineer's and geologist's salaries to the extent of $4800 ($800 per month for 6 months) and that $2400 ($400 per month for 6 months) be designated for the "in the district" expenses of the two engineers and the superintendent. If the remainder ($1500) is not used for boarding house expense, it should be made available for analytical expense as this item appears to be under-estimated at $1000.

4800
2400
$7200

$133.33 / 30 per mo/man = 4.44 a day allowed ± 2.25 day for boarding house loss for 7 months.

(4) At this time it appears that much more surface and drilling information than anticipated will have to be obtained before a location can be selected for an adit or adits. It is possible that some of the funds provided for underground work may not be used for this purpose because of the shortness of the operating season. However, a request to change the adit allotment should be deferred for a month or so pending further developments.

We believe some of the above requests can be handled by the field team so we are sending copies of this letter to them. We believe the field team will recommend favorable action by you on the items requiring action by your office. We shall appreciate an early reply in order that the work may not be delayed.

Sincerely yours,

NORTHFIELD MINES, INC.

George W. Mitchell

GWM/m
cc: A. E. Weissenborn
T. E. Howard
George Selfridge

IN REPLY REFER TO:

6/24/52

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY
So. 157 Howard Street
Spokane 4, Washington

June 19, 1952

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
JUN 23 1952

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

Re: Docket DMEA-2436, Cobalt
Merle, et al. claims
Blackbird Mining District
Lemhi County, Idaho
Exploration Project Contract
Idm-E334

Dear Mr. Johnson:

This is in reply to your letter of June 11 regarding my telegram concerning the conflict between the mining claims of Northfield Mines, Inc., and Calera Mining Co. I regret we were unable to get this information to you sooner. However, it was complicated to untangle and there are still many uncertainities which probably can only be settled by mutual agreement between the two companies. We felt, much as you apparently do, that from the Government point of view of finding out more about cobalt reserves, it would be too bad to see an entire field season wasted while these matters were threshed out; and, as long as you are aware of this situation and have advised the Northfield Mines of its responsibilities, we see no reason why the work should not proceed on this basis.

Sincerely yours,

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

cc: USBM

230 PARK AVENUE
NEW YORK 17, N.Y.

gcl
6/24/52

June 17, 1952

Mr. C. O. Mittendorf
Acting Administrator
Defense Minerals Exploration Administration
Department of The Interior
Washington 25, D. C.

Docket No. DMEA 2436
Expl. Proj. Contract Idm E334

Dear Mr. Mittendorf:

We have your letter of June 11, 1952 regarding the possibility of a conflict of interest in some of our claims of the Stevenson Group in the Blackbird District in Lemhi County, Idaho.

All of the claims staked by us last year to cover voids between the claims then held by F. W. Stevenson have a prior location and have been surveyed by a registered professional engineer as per the preliminary map submitted with our application. This can be substantiated by the engineer who made the survey, Mr. Paul B. Bronken, whose address is Salmon, Idaho. Our legal representative, who is also familiar with our affairs, is Mr. Charles Herndon of Salmon, Idaho.

Very truly yours,

NORTHFIELD MINES, INC.

George W. Mitchell
General Manager

GWM/m
cc: P.W.Zeckhausen
Thayer Lindsley
Paul Bronken
Charles Herndon
Bob Hoffman

400

FILE COPY
SURNAME:

Selfridge
Hoffman
Lemon

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

JUN 11 1952

Mr. George W. Mitchell
General Manager
Northfield Mines, Inc.
230 Park Avenue
New York 17, New York

Re: Docket No. DMEA 2436 - Cobalt
Merle, et al. claims
Blackbird Mining District
Lemhi County, Idaho
Expl. Proj. Contract Idm-E334

Dear Mr. Mitchell:

We have received word from the Field Team that there may be some conflict of interests regarding some of the claims recently staked between the Merle claims. It would probably take considerable time to settle any uncertainties regarding the areas covered by the subject claims, so suggest that the Company do the exploration only on ground that it feels is legally held. May we call your attention to the Company's responsibility as outlined in Article 10 of the contract.

Sincerely yours,

C. O. Mittendorf (fw)

P.N. 6-11-52

Acting Administrator
Defense Minerals Exploration
Administration

GCSelfridge:ls 6/10/52

Copy to: Docket
Admn. Reading File
Field Team, Region II
G. C. Selfridge
Operating Committee

Sol

FILE COPY
SURNAME:

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

Selfridge
Hoffman
Lemmon
Hedges
Johnson
Pratt

Mr. A. E. Weissenborn
Executive Officer, DMEA Region II
South 157 Howard Street
Spokane 8, Washington

Re: Docket No. DMEA 2436 - Cobalt
Merle, et al. claims
Blackbird Mining District
Lemhi County, Idaho
Exploration Proj. Contract Idm-E334

Dear Mr. Weissenborn:

This is to acknowledge receipt of your telegram of June 6, 1952, regarding possible conflict between claims of Northfield Mines, Inc., and Calera Mining Company.

As Northfield by signing the contract is responsible for the payment of royalties in case of production from any of the claims included in the contract, it is to Northfield's advantage that it does the exploration on ground which it feels is legally held. Otherwise, the Company would have to abandon all interest in all of the subject claims to avoid its responsibility.

It appears that this field season would be lost if one attempted to iron out any of the uncertainties before starting the exploration. We believe that the work can go ahead and are writing Northfield Mines pointing out its responsibility under Article 10 of the contract.

Sincerely yours,

(Signed) FRANK H. JOHNSON

Chairman, Operating Committee
Defense Minerals Exploration
Administration

Approved:

(Signed) Joe M. Hedges

Member, Bureau of Mines

D. M. Lemmon

Member, Geological Survey

GCSelfridge:ls 6/10/52

Copy to: Docket
Admn. Reading File
Field Team, Reg. 2
G. C. Selfridge
Operating Committee

Docket 400
FILE COPY
SURNAME:

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

Selfridge

JUN 10 1952

Mr. A. N. Weissenborn
Executive Officer, Region II
South 157 Howard Street
Spokane 8, Washington

Re: Docket No. DMEA 2436 - Cobalt-Copper
Worthfield Mines, Incorporated
Marie, et al, Claims
Lemhi County, Idaho
Exploration Project Contract Idn-2174

Dear Mr. Weissenborn:

Forwarded herewith is your office copy of the completed subject contract which was signed by the applicant in Washington in order to save time.

Please note that the contract places a good deal of dependence upon the field team with regard to approvals of part of the work which should be closely followed.

The following major changes have been made in the contract as originally outlined in the application:

1. Two large tents for temporary housing were added.

2. The item for bonus payment was increased $1,900.00 because the applicant omitted 1/2 of the item.

3. The items for fuse, bits and steel were increased.

4. The item for traveling and telephone and telegraph at $470.00 a month was decreased to $200.00 a month, which provides for one round trip per month for an engineer between Eureka, Nevada, and the exploration project.

The above changes increased the total estimated cost from $102,461.25 to $102,900.00 (Government participation 70 percent or $72,030.00).

Sincerely yours,

cc 6/10/52

(Signed) FRANK E. JOHNSON (JHG)

Chairman, Operating Committee
Defense Minerals Exploration
Administration

Enclosure

Approved:

K. H. Hedgen (JHG)

Member, Bureau of Mines

D. M. Lemmon (JHG)

Member, Geological Survey

GCSelfridge'lm
6/5/52

cc: Admn. Reading File
Docket
H. W. Davis, USBM
T. P. Thayer, USGS
Field Team Reg. II
Operating Committee
G. C. Selfridge

FILE COPY
SURNAME:

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

Selfridge
H. Johnson

Mr. Paul W. Zeekhausen
Northfield Mines, Inc.
Room 1841
230 Park Avenue
New York 17, New York

Re: Docket No. DMEA 2436 - Cobalt-Copper
Northfield Mines, Incorporated
Merle, et al, Claims
Lemhi County, Idaho
Exploration Project Contract Idm-M74

Dear Mr. Zeekhausen:

Complying with the request made by Mr. George W. Mitchell in his letter of May 29, 1952, I am enclosing herewith Northfield Mines, Incorporated's completed copy of the subject contract.

Sincerely yours,

C. O. Mittendorf (fw) cc 6/10/52

Acting Administrator
Defense Minerals Exploration
Administration

Enclosure

GCSelfridge'lm
6/5/52

cc: Admn. Reading File
Docket
H. W. Davis, USBM
T. P. Thayer, USGS
Field Team Reg. II
G. C. Selfridge

FILE COPY
SURNAME:

Selfridge

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

JUN 9 1952

Mr. George W. Mitchell
Northfield Mines, Inc.
230 Park Avenue
New York 17, New York

Re: Docket No. DMEA 2436 - Cobalt
Northfield Mines, Inc.
Stevenson Property
Lemhi County, Idaho

Dear Mr. Mitchell:

I am returning to you the map you recently left with me.

Sincerely yours,

SIGNED

G. C. Selfridge, Chief
Iron and Ferro-Alloy Division

Enclosure

GCSelfridge'lm
6/9/52

cc: Admn. Reading File
Docket
G. C. Selfridge

113 WA SP /I-GS-G/

SPOKANE 6-6-52 520P

FRANK E. JOHNSON

CHAIRMAN OPERATING COMMITTEE

DEFENSE MINERALS EXPLORATION ADMINISTRATION

DEPARTMENT OF INTERIOR

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
JUN 10 1952

WA

RE NORTHFIELD MINES DMEA 2436 COBALT. INVESTIGATION LEMHI COUNTY COURTHOUSE CONFIRMS POSSIBLE CONFLICT IN SOME OF CLAIMS RECENTLY STAKED BETWEEN MERLE CLAIMS. ALMOST IMPOSSIBLE LOCATE MERLE CLAIMS CORNERED ON GROUND. SOME OF GROUND STAKED BY NORTH FIELD APPARENTLY PREVIOUSLY STAKED BY CLARA. SITUATION AS TO OWNERSHIP BADLY CONFUSED AND PROBABLY CAN BE SETTLED ONLY BY AGREEMENT BETWEEN COMPANIES OR BY COURT ACTION. MERLE CLAIMS APPARENTLY VALID BUT AREA COVERED UNCERTAIN. BEST SHOWINGS NOT IN DISPUTE AND MERLE CLAIMS MAY COMPRISE ENOUGH GROUND TO JUSTIFY EXPLORATION BUT WOULD BE EXTREMELY DESIRABLE TO HAVE UNCERTAINTIES SETTLED BEFORE LETTING CONTRACTGMM

A. E. WEISSENBORN, EXECUTIVE OFFICER, DMEA FIELD TEAM, REGION II.

2436

VA 525P

Rec'd in 400 at 3:55 pm 6/10/52

230 PARK AVENUE
NEW YORK 17, N. Y.

June 2, 1952

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

Dear Mr. Mittendorf:

With further reference to Mr. Mitchell's letter to you of May 29, I enclose six copies of the "Landlord's Subordination Agreement", signed by F.W. and Merle Stevenson.

I understand that this will enable you to complete execution of exploration project contract Docket No. DMEA2436.

Very truly yours,

Paul W. Beckhausen

NORTHFIELD MINES, INC.

PWZ:his
Encs. 6

230 PARK AVENUE
NEW YORK 17, N. Y.

May 29, 1952

REGISTERED MAIL
RETURN RECEIPT

Mr. C. O. Mittendorf
Acting Administrator
Defense Minerals Exploration Administration
Department of The Interior
Washington 25, D. C.

Dear Mr. Mittendorf:

Enclosed are the six copies of the Exploration Project Contract Docket No. D.M.E.A. 2436 which has been properly signed by Northfield Mines, Inc.

The Landlord's Subordination Agreement signed by F. W. & Merle Stevenson will be sent you as soon as it is received from them, probably next week.

Please send the Operator's Copy of contract to Northfield Mines, Inc., Room 1841, 230 Park Avenue, New York 17, N. Y., Attention Paul W. Zeckhausen.

Very truly yours,

NORTHFIELD MINES, INC.

George W. Mitchell
General Manager

GWM/m
encl: 6
cc: Paul W. Zeckhausen

FILE COPY
SURNAME:

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

Selfridge
Lemmon
Davis
Rhodes
Johnson

Chairman, Operating Committee, DMEA

May 23, 1952

Iron and Ferro-Alloy Division, DMEA

Transmittal of completed contract for approval --
Docket No. DMEA 2436 - Cobalt-Copper
Northfield Mines, Inc.
Stevenson property
Lemhi County, Idaho

Transmitted herewith is the final draft of the contract pertaining to the subject docket as approved by the Chief Counsel. The Field Team's report is attached to the top of the docket.

Mr. Mitchell of Northfield Mines, Inc., plans to come to Washington next week to bring the copies of the subordination agreement and would like to sign the contract at that time if possible. Will you please review the contract and return it to this Division? If the contract is satisfactory and can be signed, it will be held for Mr. Mitchell's signature and then the usual procedure will be followed.

George C. Selfridge

G. C. Selfridge, Chief
Iron and Ferro-Alloy Division

Attachment

GCSelfridge:ls

cc: Admn. Reading File
Docket
G. C. Selfridge
Operating Committee

400

FILE COPY

SURNAME:

140

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

May 23, 1952

H. S. in R. R.

Memorandum

To: Acting Administrator
Through: Mr. G. C. Selfridge

From: Chief Counsel

Subject: Northfield Mines, Inc., Docket No. DMA-2436X

There is attached, in satisfactory legal form for execution, a contract covering the subject project, subject to the redesignating of Exhibits A and A1 as Exhibits B and B1 and attaching them to the contract; subject to the attachment of the exhibits referred to in the description of the work; and subject to attachment of Landlord's Subordination Agreement.

J. L. Hofflund

J. L. Hofflund
Chief Counsel

Attachments 7

Copy to: Mails & File
J. L. Hofflund
H. C. Rubin
Chron.

HCRubin/bjl

FILE COPY A00
SURNAME:

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

Mr. John L. Hoffland, Chief Counsel, DMEA

May 15, 1952

Selfridge
Lakshu

Iron and Ferro-Alloy Division, DMEA

Docket No. DMEA 2436X - Cobalt-copper
Northfield Mines, Inc.
Stevenson Property, et al
Lemhi County, Idaho

Attached hereto is a rough draft of a contract pertaining to the subject docket. The maps and legal papers are inside the docket. Since the Landlord Subordination Agreement has been dated as of March 15, 1952, new copies are being secured.

I would appreciate you giving this contract preference over any others that the Division has in your Department because of the limited season in which the applicant may work.

N.S
R&R

G. C. Selfridge, Chief
Iron and Ferro-Alloy Division

Attachments

GCSelfridge'lm
5/15/52

cc: Admn. Reading File
Docket
G. C. Selfridge

OFFICE OF THE ADMINISTRATOR

UNITED STATES
DEPARTMENT OF THE INTERIOR

DEFENSE MINERALS ADMINISTRATION

WASHINGTON 25, D. C.

So. 157 Howard Street
Spokane 4, Washington

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
MAY 1 3 1952

May 8, 1952

Memorandum

To: Chairman, Operating Committee, DMEA

From: Field Team, Region II

Subject: Application of Northfield Mines, Inc., Docket No. DMEA 2436X-Cobalt.

send contract draft to Legal on 5/15

Field Team NIEMC

Attached are two memorandums from Mr. J. S. Vhay in reply to Mr. Mittendorf's letter of April 10. Mr. Vhay does not discuss the proposal in detail, but has answered the questions raised in Mr. Mittendorf's letter. He regards the area as favorable for cobalt exploration and the geochemical results as very encouraging.

The question of ownership of the David fractions between the full claims mentioned in Vhay's report was discussed by Mr. Selfridge, Mr. Mitchell of the Northfield Co., and Mr. Weissenborn when the latter was in Washington last week. The matter was not resolved to our entire satisfaction. Vhay is at present in Salmon, Idaho, and will check on this situation in so far as he can.

Inasmuch as the Calera ore contains significant quantities of copper (actually more copper than cobalt percentagewise) the question was raised in Washington as to whether the government's participation in the contract should not be something less than the 90 percent applicable to cobalt alone. Although Vhay does not specifically mention it in his memorandum, he has stated orally that the Northfield gossans are not copper-stained to any appreciable extent and consequently the underlying ore is not expected to contain more than minor amounts of copper.

By Field Team, Region II, DMEA

A. E. Weissenborn

A. E. Weissenborn, Exec. Officer
(U. S. Geological Survey)

M. E. Volin

M. E. Volin, Member
(U. S. Bureau of Mines)

Enclosures
cc: USBM
USGS (SRO)

Copy retained 400

OFFICE OF THE ADMINISTRATOR

UNITED STATES
DEPARTMENT OF THE INTERIOR

DEFENSE MINERALS ADMINISTRATION

WASHINGTON 25, D. C.

So. 157 Howard Street
Spokane 4, Washington

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
MAY 1 - 1952

May 1, 1952

Memorandum

To: A. E. Weissenborn, Exec. Officer, DMEA Field Team, Region II

From: J. S. Vhay, U. S. Geological Survey

Subject: Letter from Mittendorf re docket No. DMEA-2436X, Cobalt.

The specific questions in Mr. Mittendorf's letter are taken up below. A separate memorandum regarding the whole application, including geology and recommendations, accompanies this one.

The geochemical data plotted on a map and a brief discussion of the results accompany the other memo.

The reasons for the high cost ($8.50 per foot) of diamond drilling are that it is an isolated place and a camp will have to be built for the crew; the amount of drilling called for is relatively small (McClintock said he would guarantee a $2.00 reduction in cost for all drilling in excess of 2,000 feet); and water will have to be pumped up probably in excess of 800 feet for the drilling. The Bureau of Mines thinks that the figure is therefore reasonable.

I agree that $185.00 per month for "engineering" is insufficient. I think it likely that the superintendent on the job will be a geologist, but feel that the contract should specifically require a competent geologist on the job, if the superintendent is not one.

The item of nearly $12,000 for permanent buildings for a single summer's work is high. However, I think that the program cannot be completed before next winter, and therefore in the other memorandum I have made two alternative proposals. The amount of the contract probably should be increased in either case, to include the cost of building a road up Little Deer Creek. It should be pointed out that a subordination agreement will be required before the contract can be signed.

cc: USBM, Spokane
USBM, Albany
USGS, (SRO)

OFFICE OF THE ADMINISTRATOR

UNITED STATES
DEPARTMENT OF THE INTERIOR

DEFENSE MINERALS ADMINISTRATION

WASHINGTON 25, D. C.

So. 157 Howard Street
Spokane 4, Washington

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
MAY 1 1952

May 1, 1952

Memorandum

To: A. E. Weissenborn, Exec. Officer, DMEA Field Team, Region II

From: J. S. Vhay, U. S. Geological Survey

Subject: Application for an exploration contract by Northfield Mines, Inc., in the Blackbird district, Lemhi County, Idaho. (Docket No. 2436X, Cobalt).

Introduction

On March 24, 1951, the application for an exploration contract by Northfield Mines, Inc., was received by this office. The area is considered to be geologically favorable for prospecting for cobalt. There may be some question regarding ownership of some of the ground involved; this matter is being checked. The application is recommended for approval provided certain changes are acceptable to the operator.

Applicant

Northfield Mines, Inc., is associated with (essentially a subsidiary of) Ventures Limited, a large, well-known Canadian mining company, which has been active over 30 years. It has the resources and personnel to do a good job in the Blackbird district.

History

Not much is known about the older history of this part of the district. Some prospecting and development were done about 1900-1910 to the north and south of the ridge where most of the work is planned by Northfield Mines, but little was done in the immediate area. About 1937 F. S. Stevenson staked a number of claims in the area and obtained control of some of the old patented claims. Since then he has done some development work and road building.

In May 1951 representatives of Ventures, Limited, obtained a lease and option on Stevenson's ground and staked more claims. In

Reviewed by
DMEA OPERATING COMMITTEE
5-16-52
(date)

the fall of 1951 preliminary bulldozing disclosed several mineralized zones. In March 1952 all the ground was transferred to Northfield Mines, Inc.

The geology of the area was studied by the Geological Survey in 1943-45, and in 1951 geochemical testing of the soil was done in the area. The results of this testing were used by the operators in laying out the preliminary bulldozing program.

At the present time there is some doubt as to the ownership of some of the ground covered by the application. As originally staked, the claims did not cover several large areas. Some of this open ground has been staked by both Calera and the Venture's representatives; this matter will be checked in May. If the fractions are owned by Calera, some doubt might be raised as to whether the contract should be entered into.

Location of Property and Accessibility

The property is in T. 21 N., R. 18 E. The sections here are unsurveyed; the application states that the property is in secs. 27, 28, and 29, but transferring the outlines roughly to a Forest Service map gives the impression that most of the property lies in sec. 27, with small parts in secs. 22 and 26. It is in the Blackbird mining district, Lemhi County, Idaho. The area covered by the group of claims listed in the application is approximately 3,500 acres.

The property is about 40 miles by road from Salmon, Idaho. The closest railheads are Mackay, Idaho, 106 miles distant, and Darby, Montana, 114 miles distant.

The property can be reached at present by a very steep, rough, dirt road, which comes across the mountain from the gravel road up Blackbird Creek to the Calera mine. Although it is true, as pointed out in the application, that extension of this road might "serve in further prospecting the area where it crosscuts the favorable structure," it is felt that the road up from Blackbird Creek is so unfavorably situated, so steep and rough, that it would be much preferable to build a new road up Little Deer Creek; this is especially true as the proposed bunkhouse, etc. will have to be built adjacent to Little Deer Creek in order to have sufficient water. About 3.4 miles of new road will be necessary; it is not known what such a road would cost, but the figure will probably not be far from $20,000.

Water and Labor

Some water is available less than one-half mile down the canyon (about 800 feet vertically); more water can be obtained from

Little Deer Creek about a mile away, (1400 feet vertically). This probably accounts in part for the high cost ($8.50 per foot) of diamond drilling.

There is a labor shortage in the district, so that labor will probably have to be imported.

Geology

This area has few natural exposures of bedrock. Most of the following discussion is based on projections from the north and south plus the results of geochemical testing and the maps accompanying the application.

The group of claims covered by the application lies at the head of the Little Deer Creek canyon, covering the south fork of the creek, the spur dividing the south and north forks and extending down to the north fork. It also covers part of the ridge between Little Deer and Blackbird Creeks and laps down a short distance into the Blackbird drainage area. Altitudes of the area are between 6,600 and 7,700 feet. Slopes are everywhere steep, except on the ridges, but are almost everywhere covered with soil; weathering is deep, and the accompanying oxidation and leaching has removed most of the copper and cobalt, so that sampling, even in the bulldozer trenches, is almost useless.

Most of the area is in the eastern part of the Blackbird structural block; the eastern edge of the group of claims probably extends over onto the Haynes-Stellite block. The rocks consist generally of thin-bedded quartz-biotite schist, quartzite, and intermediate variations. They are probably rather strongly folded, with steep limbs and tightly crumpled crests and troughs; the axial planes dip west at from 55° to 75°, and the plunge of the folds is probably between 35° and 45° northerly. The rocks are cut by numerous shear zones and faults; the most important of which are rather broad ones striking N. 20°-30° W., dipping 60° to 80° northeast, and a younger set striking a little east of north and dipping steeply either east or west. Both these directions of shearing are pre-mineral in age. There are probably also some post-mineral east-west striking faults with moderate northerly dips.

Two sorts of mineralized rock are to be expected in this area. The earlier consists of silicified schist or green hydrothermal biotite, which may be accompanied by considerable cobaltite. In places to this type there has been added pyrite, chalcopyrite, and possibly some pyrrhotite and safflorite, with or without an ankerite-muscovite gangue. The earlier minerals formed by replacement of the sheared country rock, the later minerals by both replacement and the filling of openings.

Judging by occurrences elsewhere in the district, the mineralized rock will be found in: a) fairly broad shear zones, striking N. 20°-30° W. and dipping 55°-75° northeast, and b) in relatively narrow shear zones striking north to N. 10 E. with steep dips. The ore shoots will be less continuous in the north to N. 10 E. zones, though they will probably be found to contain a higher grade material. The northwest trending zones can be expected to contain much larger tonnages of ore of a lower, over-all grade, but with possibly more copper than the northerly trending ones. The ore shoots of both zones have plunges of 30°-40° to the north.

A geochemical test was made in this area during the 1951 field season by H. E. Hawkes and F. C. Canney of the U. S. Geological Survey. Results of the work were shown to the operators, who based the 1951 bulldozing on them. The enclosed map shows the results of testing the soil at a depth of 6 inches to 8 inches for cobalt. Study of the map indicates the possibility of three north-south trending zones of high cobalt, and five N. 20°-30° W. trending zones; these possibilities are marked roughly in pencil on the sides of the map.

Recommendations

It is recommended that exploration be carried out on this property, as there is a good possibility of developing cobalt deposits. It is suggested, however, that certain changes be made in the contract. As presented in the application the program is too large to be completed before next winter, putting up permanent buildings (at a cost of $12,000), which could only be reached by the rough road over the mountain does not seem sensible. Therefore, two different proposals are made below:

A. The exploration contract be put on a two-stage basis:--
   Stage I - (1952 season) Bulldozing and diamond drilling the deposit. Temporary housing put up. Then if successful in showing the presence of possible ore bodies

   Stage II - (1953 season) New road be built up Little Deer Creek, permanent camp be built, and underground exploration carried on. (Cost of road be added to contract.)

B. If the operator does not like proposal A because of the trouble involved in breaking up and reassembling a crew, then the contract should be let, including the addition of sufficient funds for the construction of a road up Little Deer Creek to serve the project; in this case the permanent buildings are justified as the underground work would probably have to be completed during the winter months.

cc: USBM, Spokane
USBM, Albany
USGS, (SRO)

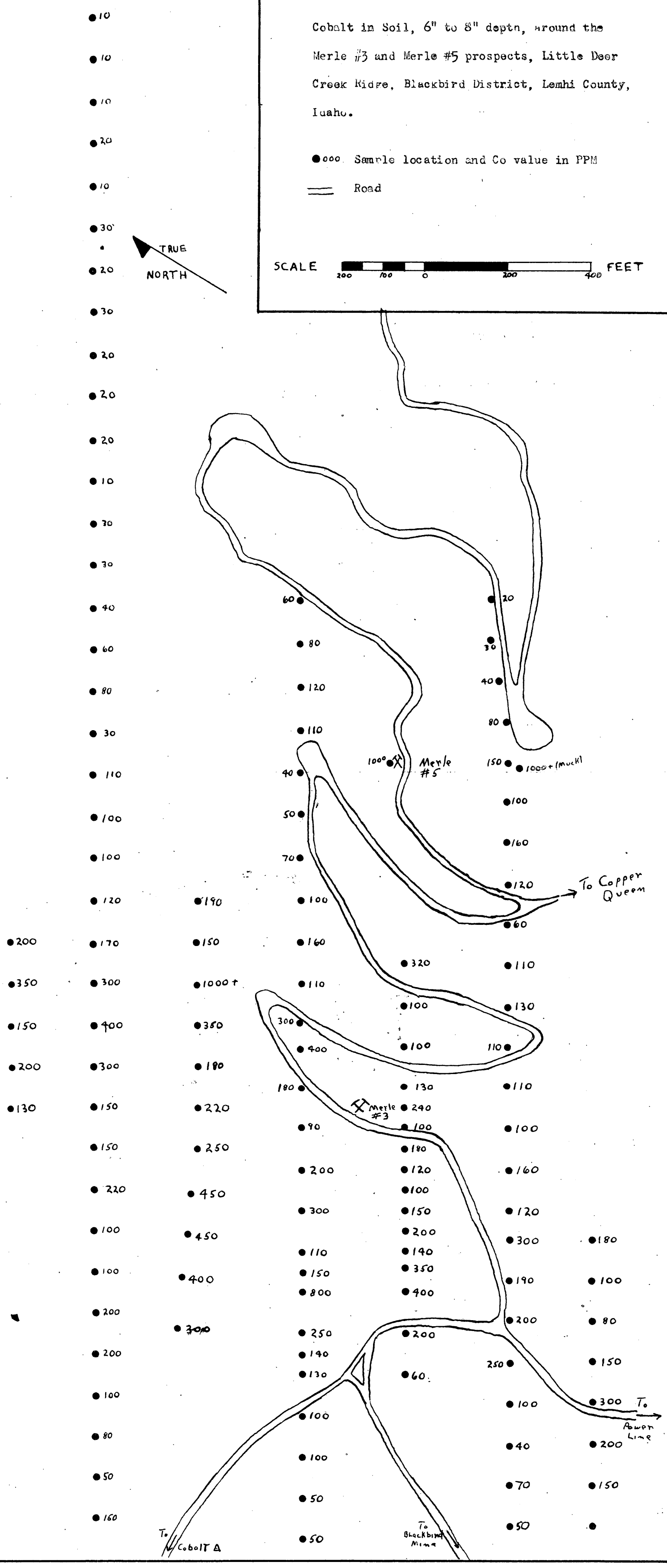
Cobalt in Soil, 6" to 8" depth, around the Merle #3 and Merle #5 prospects, Little Deer Creek Ridge, Blackbird District, Lemhi County, Idaho.

●000 Sample location and Co value in PPM

Road

SCALE 200 100 0 200 400 FEET

TRUE NORTH



Notes on 2436 - Northfield Mines
Application for $10 2,+++ 00

Application is for Bulldozing across Shear zones
D.D. where best showings are found
Adits where OK by D.D.
Road work.

In 3 areas - (numbered by me in order in pictures on claim map)
Merle 3
Merle 5
Little Queen, & line, —

Bulldozing + assaying + Geol (no Bldgs) for stage 1 ?

DD etc for 2nd & 3rd (get Bits from other DD. Company)

Adits etc for 3rd stage -

Some roads in all stages

note $10,000 = amount
Payments under the lease

OFFICE OF THE ADMINISTRATOR

UNITED STATES
DEPARTMENT OF THE INTERIOR

DEFENSE MINERALS ADMINISTRATION

WASHINGTON 25, D. C.

So. 157 Howard Street
Spokane 4, Washington

April 15, 1952

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

Dear Mr. Mittendorf:

This will acknowledge receipt of your letter of April 10 relative to the Northfield Mines, Inc., docket DMEA 2436X, in the Blackbird mining district of Lemhi County, Idaho.

From Mr. Vhay's general knowledge of the area he considers the proposal an attractive one. However, before preparing the report he has requested from the Survey's Denver office the latest information on the geochemical test.

Sincerely yours,

A. E. Weissenborn

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

FILE COPY
SURNAME:

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

Brewer
Selfridge
Thayer
Weissenborn
Johnson

APR 1 0 1952

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

Re: Docket No. DMMA 2436X - Cobalt
Blackbird Mining District
Lemhi County, Idaho

Dear Mr. Weissenborn:

The above noted property, we have been informed, was visited by your Mr. J. S. Vhay last year, and as an aid to us in our review, we request his comments and/or opinion relative to the pending application.

The geochemical data which is the basis of the proposed work is not discussed, nor is there at hand a map or resume of this work. A summary of this data should be made for us.

The cost figure of $8.50 per foot for diamond drilling is observed. This seems to be extraordinarily high, and it is recommended that other prices be obtained from other drilling companies.

It is observed that only $185.00 per month is set up as "engineering". It seems clear that this work requires the constant attendance of a competent geologist for the purpose of mapping and, to a considerable extent, directing the work, taking charge of the sampling, etc. Your comments in this respect are also invited.

The item of nearly $12,000.00 for buildings appears high for a single summer's exploration work. Your comments as to the use of tents, rather than buildings, is requested.

Our records indicate that a copy of the above noted application was sent you on March 19, 1952.

QLBrewer'lm
4/9/52

Sincerely yours,

C. O. Mittendorf

J.N.
4-10-52

Acting Administrator
Defense Minerals Exploration
Administration

cc: Admn. Reading File
Docket
H. W. Davis, USBM
T. P. Thayer, USGS
Field Team Reg. II
G. C. Selfridge
Q. L. Brewer
Operating Committee

IN REPLY REFER TO:

G-MD-TPT

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

April 7, 1952

Memorandum

To: G. C. Selfridge, DMEA

From: T. P. Thayer, U.S.G.S. Thayer

Subject: DMEA 2436 - Cobalt-copper Northfield Mines.

The company proposes to spend $102,461.25 on trenching, shallow diamond drilling, and underground exploration of cobalt-copper veins parallel to and 1500 feet east of the Uncle Sam vein being mined by Calera. Approximately 4000 feet of bulldozer trenching was done in the fall of 1951, on the basis of geochemical prospecting by the Geological Survey. New roads, plus 5,500 more feet of trenching, are believed by the applicant to be sufficient for surface exploration in the coming summer.

The general program outlined appears to make good geologic sense, so long as adequate drilling is done before drifting is undertaken.

As the program is based on geochemical prospecting, a copy of the geochemical map should be made available, and I believe the applicant will do so. It is recommended that the application be referred to the field, for the particular attention and comments of Mr. J. S. Vhay, who is familiar with the area, geochemical prospecting, and probably has seen the trenches dug last summer.

Copy retained 400

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

March 24, 1952

Memorandum

To: George R. Selfridge, Defense Minerals Exploration Admin.

From: H. W. Davis, Bureau of Mines

Subject: DMEA-2436 , Northfield Mines, Inc. Cobalt, Blackbird Mining District, Lemhi County, Idaho. $102,461.25

Applicant requests a loan of $102,461 to explore for cobalt on the company property in the Blackbird District, Idaho. The subject property is adjacent to the holdings of Calera Mining Co., which has developed large reserves of ore containing about 0.6 percent cobalt and about twice as much copper. The company is associated with Ventures Ltd., which has wide experience in the exploration, development, and operation of mining properties.

Because of the proximity of the subject property to that of Calera Mining Co. and of the probability of finding a significant reserve of cobalt, it is believed that the loan on a matching basis should be approved.

H. W. Davis

H. W. Davis

Only 1 copy made
1 to file

EXPLORATION

Subject: DMEA-2436
Re: Exploration Loan
Stevenson Property
March 19, 1952

Mr. George W. Mitchell
Northfield Mines, Inc.
Cobalt Exploration Syndicate
230 Park Avenue
New York 17, N. Y.

My dear Mr. Mitchell:

This will acknowledge receipt of your application dated March 15, 1952 for a loan under the Defense Production Act of 1950.

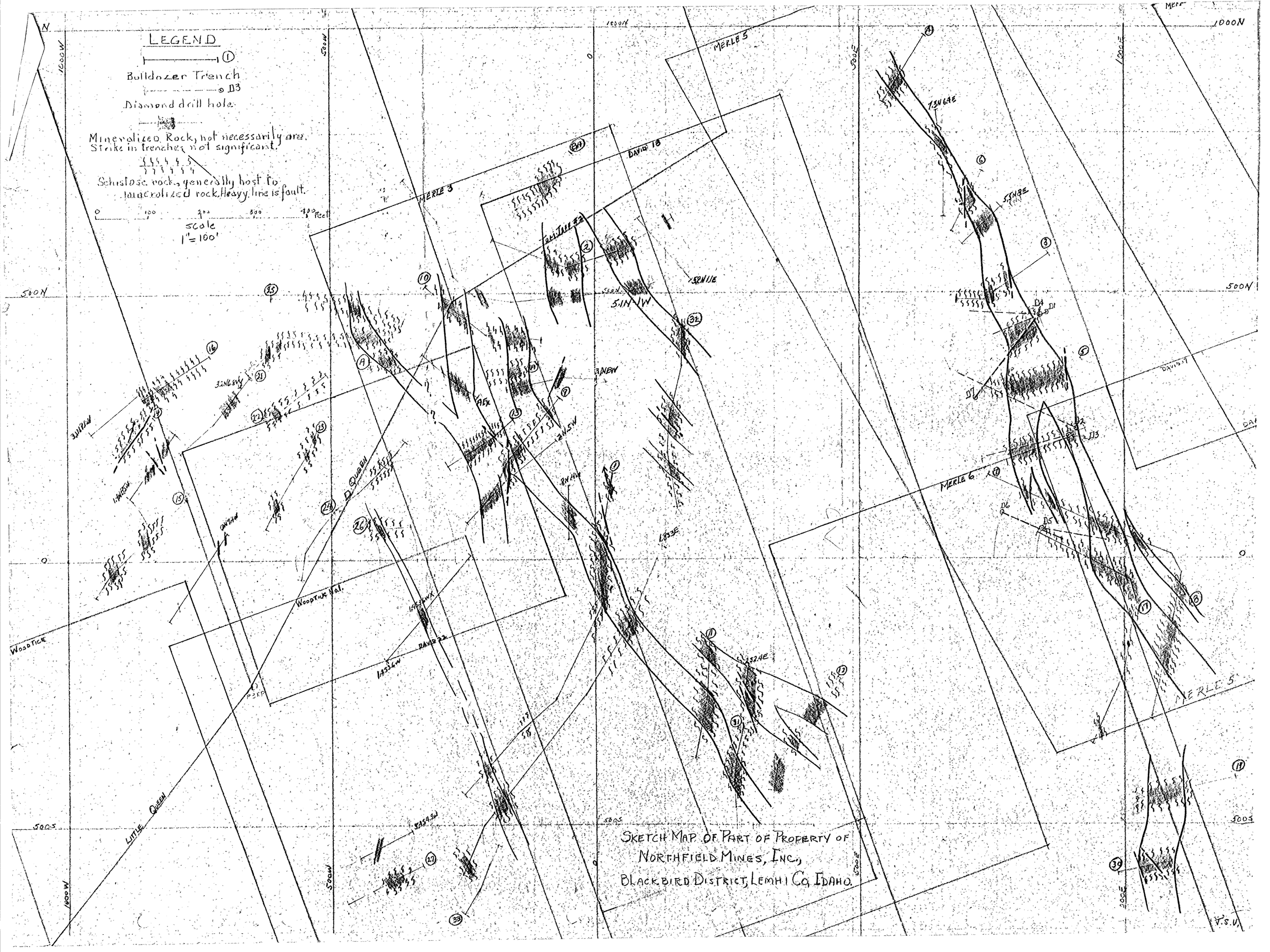
Your application was assigned Docket Number DMEA-2436 and referred to the Iron and Ferro-Alloys Division.

Kindly refer to DMEA-2436 in any future correspondence relating to your application.

Sincerely yours,

Robert E. Adams
Acting Administrative Officer

7862



SKETCH MAP OF PART OF PROPERTY OF NORTHFIELD MINES, INC., BLACKBIRD DISTRICT, LEMHI CO. IDAHO.

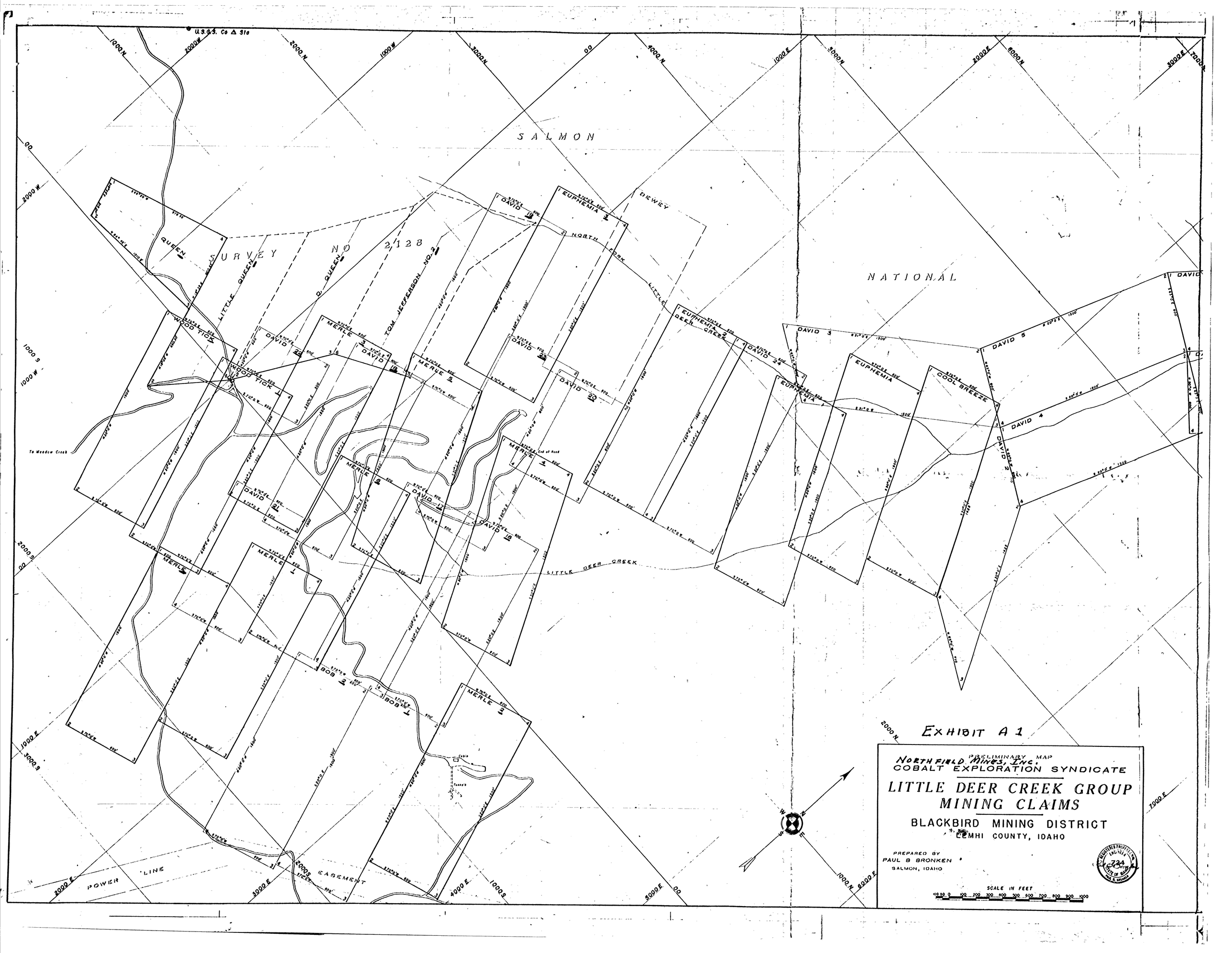
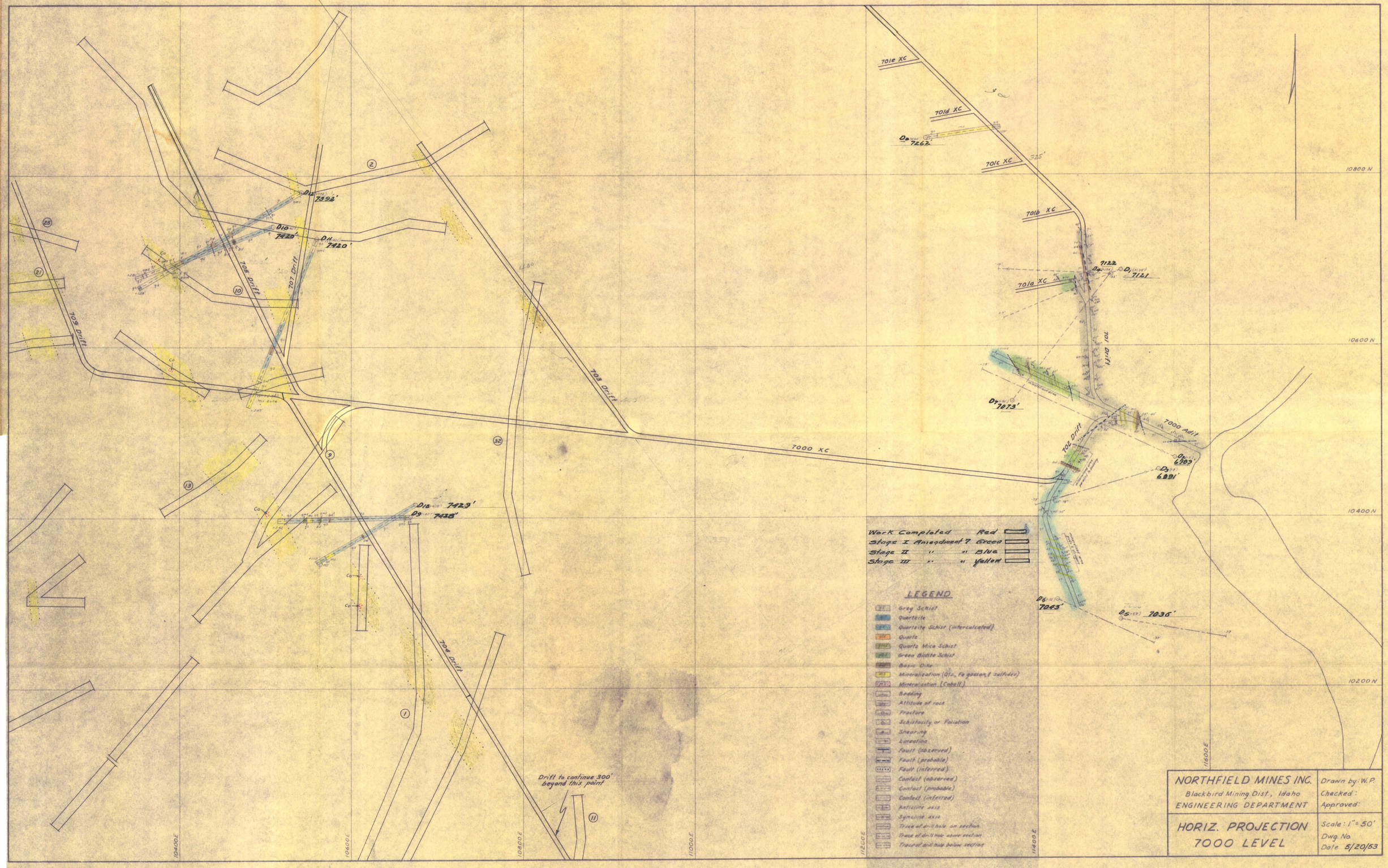
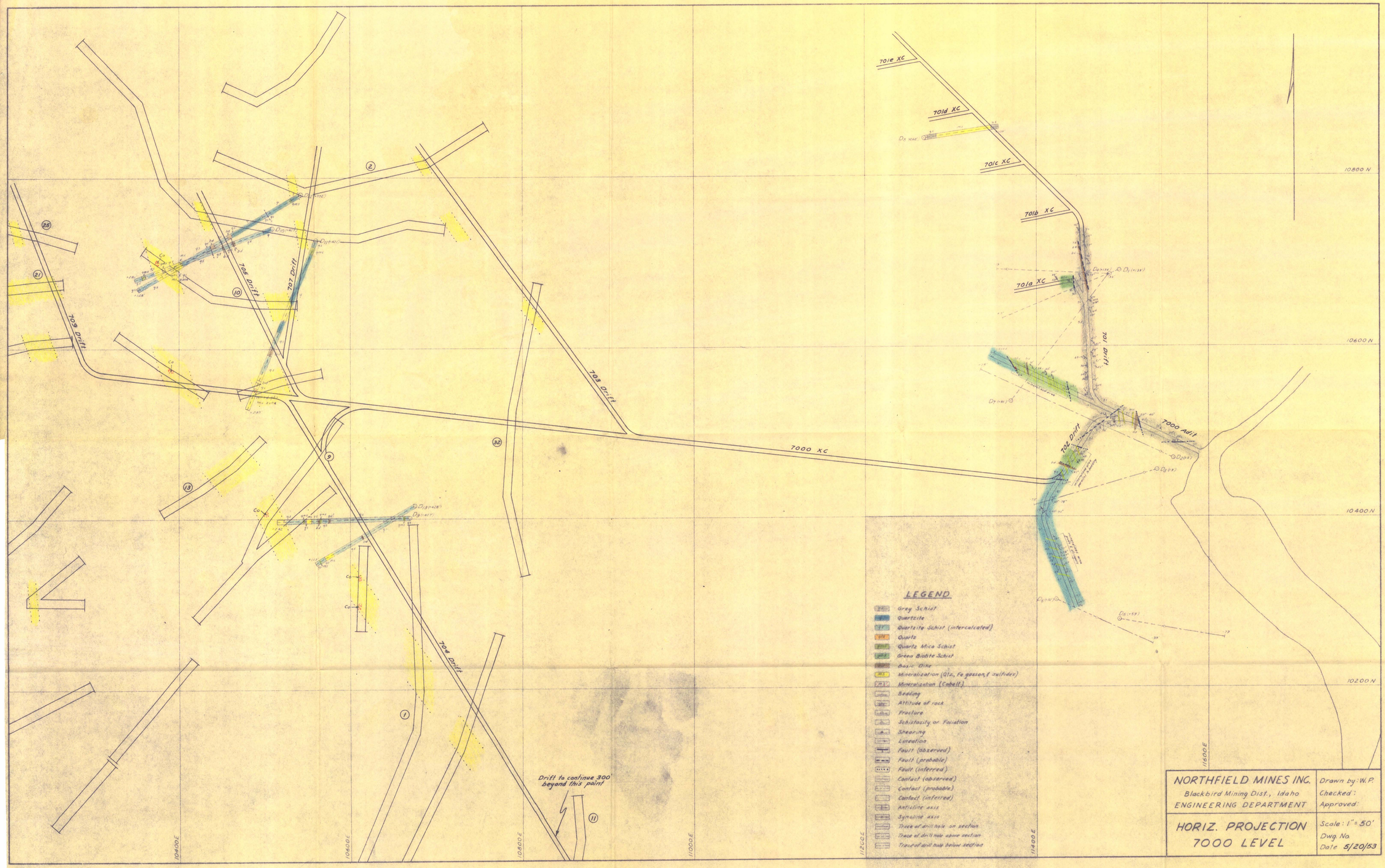
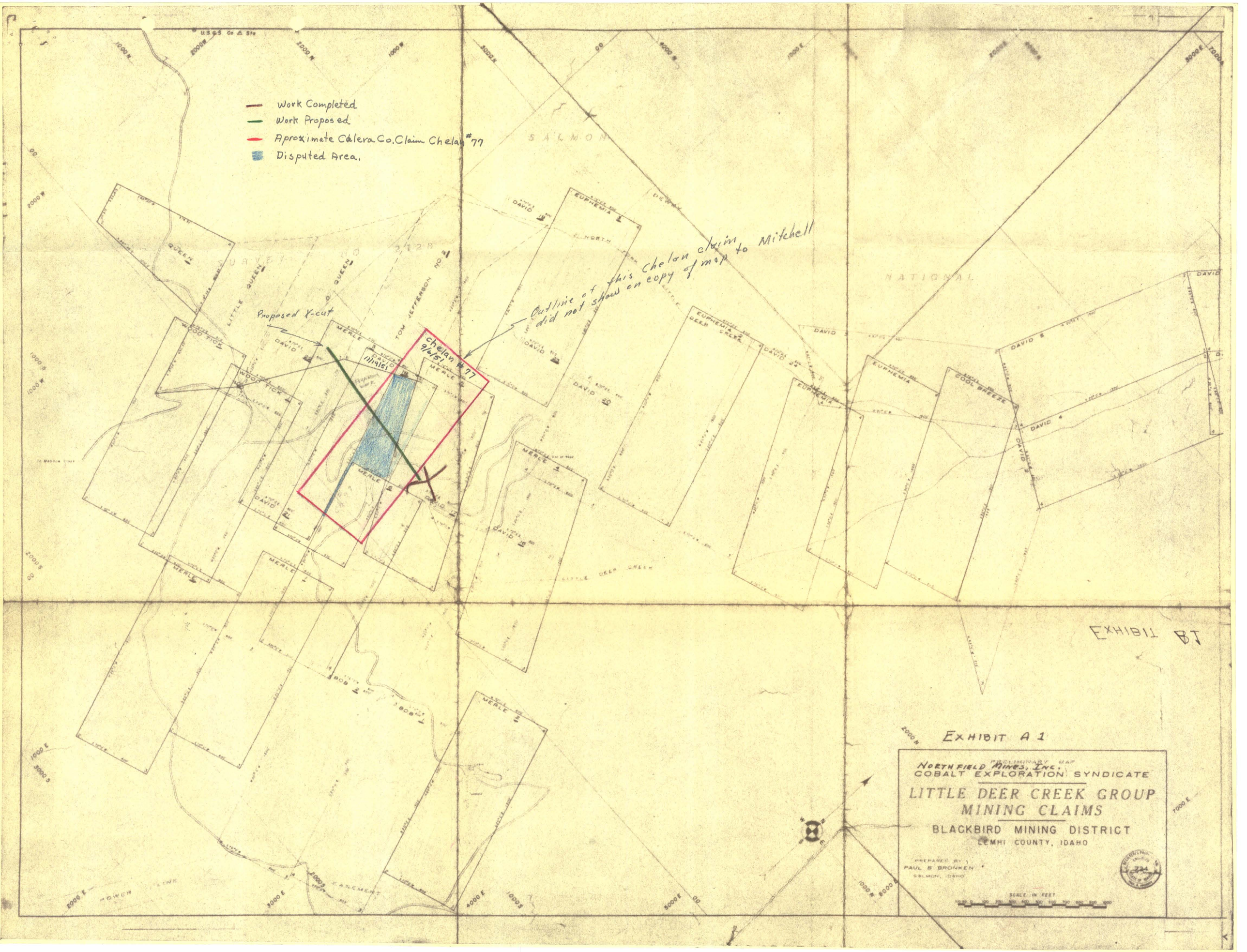


EXHIBIT A 1
PRELIMINARY MAP
NORTHFIELD MINES, INC.
COBALT EXPLORATION SYNDICATE
LITTLE DEER CREEK GROUP
MINING CLAIMS
BLACKBIRD MINING DISTRICT
LEMHI COUNTY, IDAHO
PREPARED BY
PAUL B BRONKEN
SALMON, IDAHO
SCALE IN FEET
SALMON
NATIONAL
U.S.G.S. Co △ 316
QUEEN
LITTLE QUEEN
SURVEY NO 2128
Q. QUEEN
TOM JEFFERSON NO. 2
DEWEY
NORTH FORK
LITTLE DEER CREEK
WOOD TICK
DAVID 1
DAVID 2
DAVID 3
DAVID 4
DAVID 5
DAVID 6
DAVID 7
DAVID 8
DAVID 9
DAVID 10
DAVID 11
DAVID 12
DAVID 13
DAVID 14
DAVID 15
DAVID 16
DAVID 17
DAVID 18
DAVID 19
DAVID 20
DAVID 21
DAVID 22
DAVID 23
DAVID 24
MERLE 1
MERLE 2
MERLE 3
MERLE 4
MERLE 5
MERLE 6
BOB 1
BOB 2
EUPHEMIA 1
EUPHEMIA 2
EUPHEMIA
DEER CREEK
COOL BREEZE
To Meadow Creek
POWER LINE
EASEMENT
CABIN
Cut of Road


701e XC
701d XC
D8 7262'
701c XC
701b XC
701a XC
7122
D1 7121
701 Drift
D7 7073'
7000 Adit
702 Drift
D2 6983
D3 6891'
D6 7043'
D5 7036'
7000 XC
703 Drift
704 Drift
705 Drift
706 Drift
707 Drift
709 Drift
D12 7392'
D10 7420'
D11 7420'
D18 7429'
D9 7436'
Drift to continue 300' beyond this point
10800 N
10600 N
10400 N
10200 N
10400E
10600E
10800E
11000E
11200E
11400E
11600E
Work Completed Red
Stage I Amendment 7 Green
Stage II " " Blue
Stage III " " Yellow
LEGEND
Grey Schist
Quartzite
Quartzite Schist (intercalcated)
Quartz
Quartz Mica Schist
Green Biotite Schist
Basic Dike
Mineralization (Qtz., Fe gossan, & sulphides)
Mineralization (Cobalt)
Bedding
Attitude of rock
Fracture
Schistosity or Foliation
Shearing
Lineation
Fault (observed)
Fault (probable)
Fault (inferred)
Contact (observed)
Contact (probable)
Contact (inferred)
Anticline axis
Syncline axis
Trace of drill hole on section
Trace of drill hole above section
Trace of drill hole below section
NORTHFIELD MINES INC.
Blackbird Mining Dist., Idaho
ENGINEERING DEPARTMENT
Drawn by: W.P.
Checked:
Approved:
HORIZ. PROJECTION
7000 LEVEL
Scale: 1" = 50'
Dwg. No.
Date 5/20/53


701e XC
701d XC
701c XC
701b XC
701a XC
701 Drift
7000 Adit
702 Drift
7000 XC
703 Drift
704 Drift
705 Drift
707 Drift
709 Drift
10800 N
10600 N
10400 N
10200 N
10400 E
10600 E
10800 E
11000 E
11200 E
11400 E
Drift to continue 300' beyond this point
LEGEND
Grey Schist
Quartzite
Quartzite Schist (intercalcated)
Quartz
Quartz Mica Schist
Green Biotite Schist
Basic Dike
Mineralization (Qtz., Fe gossan, & sulfides)
Mineralization (Cobalt)
Bedding
Attitude of rock
Fracture
Schistosity or Foliation
Shearing
Lineation
Fault (observed)
Fault (probable)
Fault (inferred)
Contact (observed)
Contact (probable)
Contact (inferred)
Anticline axis
Syncline axis
Trace of drill hole on section
Trace of drill hole above section
Trace of drill hole below section
NORTHFIELD MINES INC.
Blackbird Mining Dist., Idaho
ENGINEERING DEPARTMENT
HORIZ. PROJECTION
7000 LEVEL
Drawn by: W.P.
Checked:
Approved:
Scale: 1" = 50'
Dwg. No.
Date 5/20/53


Work Completed
Work Proposed
Aproximate Calera Co. Claim Chelan #77
Disputed Area.
Proposed X-cut
Outline of this Chelan claim to Mitchell did not show on copy of map
Chelan #77 9/6/51
SALMON
NATIONAL
LITTLE DEER CREEK
EXHIBIT BT
EXHIBIT A 1
PRELIMINARY MAP
NORTHFIELD MINES, INC.
COBALT EXPLORATION SYNDICATE
LITTLE DEER CREEK GROUP
MINING CLAIMS
BLACKBIRD MINING DISTRICT
LEMHI COUNTY, IDAHO
PREPARED BY
PAUL B. BRONKEN
SALMON, IDAHO
SCALE IN FEET