DMA Form 1

DEFENSE MINERALS ADMINISTRATION
Control Slip

CONTROLLED DOCUMENT

DMA Docket No. 1504X

DO NOT DETACH THIS SLIP

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

This document has been recorded as

Copy of Field Team Rpt to Wrough DMPA 2/2/52

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

Routing Slip

To:		Date
To:	Gaven	Date
To:	Coordinating Com. ~~Field Team~~	Date 7/10/51
To:	Field Team	Date 7/11/51
To:	P.E. Div.	Date 11/29/51
To:	Ellis	Date 11-30-51
To:	Johnson C.H. Rm 3619	Date 12-4-51
To:	Mr. Ellis ✓	Date 12/5/51
1 To:	Johnson C.H. (Rm. 3619 Int.)	Date 12/6/51
2 To:	Nelson, Ned (Rm 4216 G.S.)	Date
3 To:	Oper. Comm. (Rm. 4626 Int.)	Date
4 To:	Administrator (Rm 4646 Int.)	Date
5 To:	Mail & Files Br. (Rm. 4636 Int.)	Date 12/11/51
To:		Date
To:		Date

DO NOT DETACH

CONTROLLED DOCUMENT

FEB 5 1952

Mr. Paul G. Lyon, Jr., Secretary
National Coppermines, Inc.
Suite 409 Kane Building
28 West Second South
Salt Lake City, 1, Utah

Re: [illegible]
Commodity-Copper

Dear Mr. Lyon:

This is to acknowledge your letter of January 21, 1952 applying for an over-the-market price for your copper production.

The correspondence you referred to in your letter is a memorandum from Tom Lyon to E. G. Miller dated, October 11, 1951, in which Mr. Lyon merely suggested that an exploration project on a smaller scale *might* be feasible and that the field team should investigate its possibilities. This cannot be construed as an endorsement of the project by Mr. Lyon.

As to your inquiry of over-the-market price for your present copper production, enclosed herewith please find six copies of Form MF-106 (Application for a Purchase Contract) which will aid you in applying for this type of Government assistance.

It is necessary that the following material accompany your particular application:

1. Itemized and detailed cost of past, present and anticipated costs figured on a per ton of ore basis and a per pound of recovered metal paid for by the smelter.

2. Financial sheet for the years 1950 and 1951.

3. A written statement outlining the reasons why the subsidy is needed.

4. A written statement outlining the method used in calculating your depletion and depreciation costs.

5. A brief summary of your mining operations.

Because we must justify the base price for any over-the-market price or subsidy, it is necessary that your cost data, both past and anticipated be completely detailed and itemized, including smelter costs as revealed by settlement sheets if your concentrates are sold to a smelter. It is also important that adequate reasons be given for any upward revision of costs.

Very truly yours,

J. B. Gowen

J. B. Gowen, Chief
Copper Branch

Copy to: Mr. Gowen, DMPA Files, Field Team III
Mr. Young
Mr. Fales
Mr. Douglas
Mr. Lyon

RTKnapp:pk
2/4/52
256093

NATIONAL COPPERMINES INC.

SUITE 409 NESS BUILDING - 28 WEST SECOND SOUTH

SALT LAKE CITY 1, UTAH

January 21, 1952

Mr. J.B.Gowen, Chief
of copper branch
Defense Materials Procurement Agency
Washington, 25, D.C.

Re: DMA 1504X

Dear Mr. Gowen:

Thanks for your letter of the 18th regarding our application for a DMA loan for our copper mine.

According to your letter, the last paragraph, you have no correspondence or verbal commitments on the part of Tom Lyon. This is strange indeed, because I personally read the copy of his letter in the Salt Lake office, which was addressed to Mr. Miller of the San Francisco office. This letter was what the Salt Lake office used in trimming down the loan to a much smaller loan.

It is a very discouraging situation to have engineers and geologists unfamiliar with our local conditions, trying to make stock decisions where their ability to understand the deposition is not sufficient to judge.

You will see by the record of production of this mine during the war that it was a steady and consistent producer of copper, and that it was all produced without any exploration or development work. The property was under lease and option at that time to David Garrick of Ely, Nevada. The entire mine crew consisted of two men, and Mr. Garrick did the hauling.

We have noticed by the papers that your agency has entered into contracts with copper producers for a much as 5¢ above the present market price. If we could get such a deal, we can get financed to produce copper without any DMA loan. We are in an isolated locality where hauling costs $3.50 per ton to the railroad 33 miles away, and the freight on the railroad to the smelter is $5.00 minimum. We need some consideration inprice to offset this high cost, and we feel that being a small concern should not bar us from the benefits handed to the large operators. Copper is in short supply and we have the ore and can mine and ship it if we can get either a loan or a price that will pay the added costs of our operation. All we ask is the same opportunity given the big mines. We then will be able to go ahead and help supply the copper so badly needed.

Very truly yours

NATIONAL COPPERMINES INC.

Paul C. Lyon Jr.
Secretary

PCL/1

RECEIVED
JAN 25 12 07 PM '52
DEFENSE MATERIALS
PROCUREMENT AGENCY

256093

RECEIVED
JAN 31 1952
Copper Branch

Mr. Paul C. Lyon, Jr.
National Copper Mines, Inc.
Suite 400 Ness Building
28 W. 2nd. South
Salt Lake City 1, Utah

JAN 18 1952

Re: DMA 150AK

Dear Mr. Lyon:

This is to acknowledge your letter of December 31, 1951 addressed to Mr. J. Larson and which was referred to the Copper Branch, Program Development Division for reply.

Due to a reorganization of the Government assistance program for the mining industry, the Defense Minerals Administration is no longer in existence. Its duties were redelegated to the Defense Materials Procurement Agency and the Defense Minerals Exploration Administration. The latter organization, as the title implies, handles all applications for exploration aid. Therefore, any correspondence pertaining to such application should be directed to Mr. C. O. Mittendorf, Director of that Administration.

It is to be noted that we do not have any correspondence nor were there any verbal commitments made indicating any action on the part of Mr. Tom Lyon concerning ultimate recommendations regarding your project.

Very truly yours,

J. B. Gowen

J. B. Gowen, Chief
Copper Branch

RVMaugh:pk
258776

1/17/52
Copy to: Mr. Young
Mr. Feiss
Mr. Douglas
Mr. Lyon
Mr. Gowen
Mr. Johnson DMEA
Field Team IIII
DMPA Files

NATIONAL COPPERMINES, INC.
Suite 409 Ness Building 28 West Second St.
Salt Lake City
Utah

December 21,1952

Mr. Jess Larson, Chief
Defense Minerals Admin.
Washington 25, D. C.

Dear Mr. Larson:

For months we have been trying to get a D.M.A. exploration loan to do the necessary work to get our copper mine in production again.

We have been given the business month after month. Finally we found out that Tom Lyon had recommended the loan on a reduced amount, which was O.K. with us. After going over all the details in the Salt Lake office, the loan was trimmed by them to what they said was in line with the recommendation of Tom Lyon to the San Francisco office. The papers were again sent to Washington.

We recently received a letter from Frank E. Johnson, Engineer saying the loan had been denied.

What we want to know and what we are entitled to know is why Johnson turned down the loan after Tom Lyon had given it his recommendation. We know that Johnson is an old time bureaucrat engineer who who has been living off the taxpayers for many years and probably doesnt know a mine from a gravel pit. Such actions as this are a crime against the mining industry.

Our property, as can be seen by the application was a steady and profitable copper producer all during the war, and if given just a little help, will far outproduce what it did before. It is not just a prospect-it is a mine that needs some work done to get it back into production.

We are willing to put up our own funds to match the D. M. A. loan and we wouldnt do this if we didnt expect to get it back. We are not able to finance the entire program ourselves.

All we ask is a fair chance to operate, and at least have a competent man pass on our data submitted. The engineers and the geologists in the Salt Lake office were certain our loan would be approved. They know more about the property and more about what its possibilities than anyone in Washington.

We ask that our application and all data be re-examined by someone besdies Frank E. Johnson, and that we be given a fair and impartial decision. We were amazed that this man could turn down our loan after we were assured it would be made.

Kindly let us hear from yourregarding this matter.

Very truly yours,
NATIONAL COPPERMINES, INC.

/s/ Paul G. Lyon, Jr. Vice President

COPY

700

FILE COPY
SURNAME:

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

AIR MAIL

DEC 12 1951

Mr. Paul Lyon, Jr., Vice President
National Coppermines, Inc.
409 Wess Building
Salt Lake City 1, Utah

Re: Docket No. DMA-1504X, (Copper)

Dear Mr. Lyon:

This Agency, the Defense Minerals Exploration Administration, has recently taken over the work of the former Supply Division of the Defense Minerals Administration. Your application under the above captioned docket number, has been reviewed by this office and other interested Government Agencies.

In the light of all the data available, there is insufficient evidence that would indicate an important discovery of copper might be made at your property large enough to be of importance to the National Defense. Under the circumstances we regret to inform you that your application for an exploration contract is denied.

We wish to thank you for bringing this property to the attention of the Government.

Sincerely yours,

(signed) FRANK E. JOHNSON (for)

Acting Administrator
Defense Minerals Exploration
Administration

12-12

EWEllis/jem 12-6-51
cc to: Adm. Reading File
Mails & Files Branch
Docket
Messrs. Mittendorf
Johnson, C. H.
Nelson, Ned
Ellis
Field Team, Reg. III (2)

12/4/57

Mr. E W Ellis DMEA

Cap -

I will go along with a denial, although I'm sorry that the Field Team credit report favorably on the reduced project. Their report is so definite that I don't see how one could go against it.

Charlie

Noted
EWE

OFFICE OF THE ADMINISTRATOR

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

DEPARTMENT OF THE INTERIOR
RECEIVED
DEC 3 1951
Defense Minerals Administration,
Production Expansion Division.

Office of
Executive Officer
DMA Field Team
Region III

1012 Flood Bldg.
870 Market St.
San Francisco 2, Calif.

November 30, 1951

Air Mail

Memorandum

To: E. W. Ellis, Defense Minerals Administration, Interior Building, Washington 25, D. C.

From: Executive Officer, DMA Field Team, Region III

Subject: Application for Exploration Aid of National Copper Mines, 409 Ness Building, Salt Lake City 1, Utah; DMA-1504X Commodity-Copper

Reference is to your telephone call of today, at which time I promised to contact the Geological Survey concerning the status of the Washington Office request (see memorandum to me from A. B. Parsons dated October 11, 1951) that we contact the subject applicant and, if possible, get him to agree to a smaller project that would effectively test the possibilities of his property.

By coincidence the report from Mr. Ralph J. Roberts, Geologist, U. S. Geological Survey, in Salt Lake City, arrived in San Francisco shortly after I contacted the Survey's office here in San Francisco and told them about your request.

Accordingly, there are attached four copies of a memorandum report on the Kansas Claims by Ralph J. Roberts. The report, which was prepared with the aid of Roscoe Smith, of the Survey, and M. H. Howes, of the Bureau of Mines, proposes a program which is suitable to the applicant. They wish to emphasize, however, that there is little chance that a significant discovery will be made.

DEFENSE MINERALS ADMINISTRATION WASHINGTON D.C.
DEC 3 10 11 AM 1951

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

Attachments

Copy to: E. H. Bailey, U.S.G.S.
Copy by Regular Mail (without attachments)

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

DEPARTMENT OF THE INTERIOR
RECEIVED
DEC 6 1951
Defense Minerals Administration,
Production Expansion Division.

Office of
Executive Officer
DMA Field Team
Region III

1012 Flood Bldg.
870 Market St.
San Francisco 2, Calif.

November 30, 1951

Air Mail

DEC 4 8 20 PM '51
DEFENSE MINERALS ADMINISTRATION WASHINGTON, D.C.

Memorandum

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H. C. MILLER

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

Attachments

Copy to: E. H. Bailey, U.S.G.S.
Copy by Regular Mail (without attachments)

Decline written
Dec. 6-51

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

Room 307, 320 South Main
Salt Lake City 1, Utah
26 November 1951

Memorandum

To: Mr. Edgar H. Bailey

From: Ralph J. Roberts

Subject: Revised exploration program, DMA 1504X, National Copper Mines, 409 Ness Building, Salt Lake City, Utah, Commodity-Copper.

At the request of the Coordinating committee (Memorandum Lyon to Miller, October 11, 1951), it was suggested that we contact the applicant and discuss a smaller exploration project that would effectively test the possibilities of the property. Accordingly, Roscoe Smith conferred with the applicant and an amended program estimated to cost $22,063 was worked out.

The amended program includes two projects:

Project No. 1 consists of rehabilitating the Middle Tunnel (fig. 3a) then driving N. 25° W. to intersect the Kansas fault; the intersection is estimated to be about 50 to 60 feet from the point of departure from the Middle Tunnel. If promising copper showings are found on the fault, provision is made for drifting 100 feet along the showings and raising as much as 50 feet to test them above the level. The drift and raise are not shown on fig. 3a; the locations of these openings will be directed by mutual agreement between company officials and the examining geologist.

In the event that no encouraging copper showings are found in the crosscut, it is recommended that the project be discontinued without doing the proposed drifting and raising and that Project No. 2 be started.

Project No. 2 should follow concurrently after Project No. 1. Project No. 2 consists of rehabilitating the lower tunnel, then raising about 150 feet along the Kansas fault which is exposed near the face of the lower tunnel level. Provision is made for drifting as much as 200 feet on any promising copper showings that may be found in the raise. In the event that no promising showings are found in the raise, it is recommended that Project No. 2 be discontinued and the contract be cancelled.

Roscoe Smith believes that the proposed exploration will adequately test the ground. He wishes to emphasize, however, that there is little chance that a significant discovery will be made. No calculations of the tonnage of copper ore expected in the block was made as it is not known whether favorable limestone units are present along the fault.

A revised map showing the proposed exploratory work, and cost estimates prepared by M. H. Howes of the Bureau of Mines are attached.

Ralph J. Roberts

cc: Johnson

Docket DMA 1504X, Copper, Kansas Claims, Aurum district,

White Pine County, Nevada

Time Schedule

Rehabilitation

Middle tunnel	1 month	
Lower tunnel	1 month	
Total		2 months

Project No. 1 (Middle tunnel)

160 feet crosscut and drift @ 93 feet per month	45 days or 1 3/4 months	
50 feet raise @ 78 feet per month	17 days or 3/4 months	
Total		62 days or 2 1/2 months

Project No. 2 (Lower tunnel)

150 feet raise @ 78 feet per mo.	50 days or 2 mo.	
200 feet drift @ 100 feet per mo.	52 days or 2 mo.	
Total		102 days or 4 months
Total time for entire program		8 1/2 months

COSTS

Labor Costs (Based on 26 working days per month)

Drifting and raising labor contract (3 men)	$12.00 per foot
2 - Miners (base pay plus overtime plus 11 percent payroll taxes) @ $14.43 per day each	28.86 per day
Supervision, engineering, bookkeeping, etc. (includes 11 percent payroll taxes) @ $325.00 per month	12.50 per day

Costs (continued)

Rental Costs

2 - Dwelling houses @ $30.00 per month	$ 1.15 per day
1 - 240 cu. ft. compressor @ $100.00 per mo.	3.85 per day
1 - Stoper @ $65.00 per month	2.50 per day
1 - Jackhammer @ $39.00 per month	1.50 per day
1 - Double drum Tugger and Scraper @ $52.00 per mo.	2.00 per day
1 - Mine car @ $13.00 per month	0.50 per day

Equipment purchases

Mine track (includes 2 - 12 lb. rails, splice bars bolts, spikes and ties)	$ 0.80 per foot
2 inch pipe	0.35 per foot
1 inch pipe	0.16 per foot
Miscellaneous tools and equipment	2.60 per day

Miscellaneous costs

Equipment maintenance and repairs	$ 2.60 per day
Transportation of equipment and supplies	2.60 per day
Assaying	0.25 per foot advance

Supplies costs

Explosives (powder, caps, and fuse)	$ 2.50 per foot advance
Drill steel and bits	1.00 per foot advance
Drift timber	1.00 per foot advance
Raise timber	3.00 per foot advance
Gasoline and oil for compressor	10.00 per day
Miscellaneous (machine oil, carbide, nails, etc.	2.50 per day

Costs (continued)

Rehabilitation costs			
Middle tunnel (26 days)			
Labor			
2 - miners @	$28.86 per day		
Supervision @	12.50 per day		
	$41.36 per day		$1,075.36
Rentals			
Dwelling house @	1.15 per day		
Compressor @	3.85 per day		
Tugger and scraper @	2.00 per day		
Mine car @	0.50 per day		
	$ 7.50 per day		195.00
Equipment purchases (for 225 feet of tunnel)			
Mine track @	$ 0.80 per foot		
2 inch pipe @	0.35 per foot		
1 inch pipe @	0.16 per foot		
	$ 1.31	$294.75	
Miscellaneous tools and equip. @ $2.60 per day		67.60	
			362.35
Miscellaneous costs			
Equip. maint. and repairs @	$ 2.60 per day		
Trans. of equip. and supplies @	2.60 per day		
	$ 5.20 per day		135.20

Supplies costs			
Gasoline and oil for compressor @	$10.00 per day		
Miscellaneous @	2.50 per day		
	$12.50 per day		$ 325.00
Total cost Middle tunnel rehabilitation			$2,092.91
Lower Tunnel (26 days)			
Labor			
2 - miners @	$28.86 per day		
Supervision @	12.50 per day		
	$41.36 per day		$1,075.36
Rentals			
Dwelling house @	$ 1.15 per day		
Mine car @	0.50 per day		
	$1.65 per day		$ 42.90
Equipment purchases (for 1,025 feet of tunnel)			
Mine track @	$ 0.80 per foot		
2 inch pipe @	0.35 per foot		
1 inch pipe @	0.16 per foot		
	$ 1.31	$1,342.75	
Misc. tools and equip. @ $2.60 per day		67.60	
			$1,410.35
Miscellaneous costs			
Trans. of equip. and supplies @	$ 2.60 per day		67.60
Supplies costs			
Miscellaneous @	$ 2.50 per day		65.00
Total cost of Lower tunnel rehabilitation			$2,661.21

Project No. 1 (210 feet drifting and raising) (62 days)

Labor

210 feet contracting @ $12.00 per foot	$2,520.00	
Supervision @ $12.50 per day	775.00	
		$3,295.00

Rental

Dwelling house @	$ 1.15 per day	
Compressor @	3.85 per day	
Stoper @	2.50 per day	
Jackhammer @	1.50 per day	
Tugger and scraper @	2.00 per day	
Mine car @	0.50 per day	
	$ 11.50 per day	
		$ 713.00

Equipment purchases

100 feet mine track @ $0.80 per foot	$ 80.00	
210 feet 2 inch pipe @ $0.35 per foot	73.50	
210 feet 1 inch pipe @ $0.16 per foot	33.60	
Misc. tools and equip. @ $2.60 per day	161.20	
		$ 348.30

Miscellaneous

Equip. maint. and repairs @ $2.60 per day	$ 161.20	
Trans. of equip. and supplies @ $2.60 per day	161.20	
Assaying @ $0.25 per foot	52.50	
		$ 374.90

Supplies costs

Explosives - 210 feet @ $2.50 per foot	$525.00	
Drill steel and bits - 210 feet @ $1.00 per foot	210.00	
Drift timber - 160 feet @ $1.00 per foot	160.00	
Raise timber - 50 feet @ $3.00 per foot	150.00	
Gas and oil for compressor - 62 days @ $10.00 per day	620.00	
Miscellaneous - 62 days @ $2.50 per day	155.00	
		$1,820.00
Total Cost Project No. 1		$6,551.20

Project No. 2 (350 feet drifting and raising) (102 days)

Labor

350 feet contracting @ $12.00 per foot	$4,200.00	
Supervision @ $12.50 per day	1,275.00	
		$5,475.00

Rentals

Dwelling house @	$ 1.15 per day	
Compressor @	3.85 per day	
Stoker @	2.50 per day	
Jackhammer @	1.50 per day	
Tugger and scraper @	2.00 per day	
Mine car @	0.50 per day	
	$ 11.50 per day	
		$1,173.00

Equipment purchases		
150 feet 2 inch pipe @ $0.35 per foot	$ 52.50	
150 feet 1 inch pipe @ $0.16 per foot	24.00	
Misc. tools and equip. @ $2.60 per day	265.20	
		$ 341.70
Miscellaneous		
Equip. Maint. and repairs @ $2.60 per day	$ 265.20	
Trans. of equip. and supplies @ $2.60 per day	265.20	
Assaying @ $0.25 per foot	87.50	
		$ 617.90
Supplies costs		
Explosives - 350 feet @ $2.50 per foot	$ 875.00	
Drill steel and bits - 350 feet @ $1.00 per foot	350.00	
Drift timber - 200 feet @ $1.00 per foot	200.00	
Raise timber - 150 feet @ $3.00 per foot	450.00	
Gas and oil for compressor - 102 days @ $10.00 per day	1,020.00	
Miscellaneous - 102 days @ $2.50 per day	255.00	
		$ 3,150.00
Total cost Project No. 2		$10,757.60

Cost Summary

Rehabilitation		
Middle tunnel	$2,092.91	
Lower tunnel	2,661.21	
		$ 4,754.12
Project No. 1		6,551.20
Project No. 2		10,757.60
TOTAL COST OF EXPLORATION PROGRAM		$22,062.92

60/210 x 6500 = 2000

150/300 x 11600 = 6500

6000
2000
5000
13500

Room 307, 320 South Main
Salt Lake City 1, Utah
26 November 1951

Memorandum

To: Mr. Edgar H. Bailey

From: Ralph J. Roberts

Subject: Revised exploration program, DMA 1504X, National Copper Mines, 409 Moss Building, Salt Lake City, Utah, Commodity-Copper.

At the request of the Coordinating committee (Memorandum Lyon to Miller, October 11, 1951), it was suggested that we contact the applicant and discuss a smaller exploration project that would effectively test the possibilities of the property. Accordingly, Roscoe Smith conferred with the applicant and an amended program estimated to cost $22,063 was worked out.

The amended program includes two projects:

Project No. 1 consists of rehabilitating the Middle Tunnel (fig. 3a) then driving N. 25° W. to intersect the Kansas fault; the intersection is estimated to be about 50 to 60 feet from the point of departure from the Middle Tunnel. If promising copper showings are found on the fault, provision is made for drifting 100 feet along the showings and raising as much as 50 feet to test them above the level. The drift and raise are not shown on fig. 3a; the locations of these openings will be directed by mutual agreement between company officials and the examining geologist.

In the event that no encouraging copper showings are found in the crosscut, it is recommended that the project be discontinued without doing the proposed drifting and raising and that Project No. 2 be started.

Project No. 2 should follow concurrently after Project No. 1. Project No. 2 consists of rehabilitating the lower tunnel, then raising about 150 feet along the Kansas fault which is exposed near the face of the lower tunnel level. Provision is made for drifting as much as 200 feet on any promising copper showings that may be found in the raise. In the event that no promising showings are found in the raise, it is recommended that Project No. 2 be discontinued and the contract be cancelled.

Roscoe Smith believes that the proposed exploration will adequately test the ground. He wishes to emphasize, however, that there is little chance that a significant discovery will be made. No calculations of the tonnage of copper ore expected in the block was made as it is not known whether favorable limestone units are present along the fault.

A revised map showing the proposed exploratory work, and cost estimates prepared by M. H. Howes of the Bureau of Mines are attached.

cc: Johnson

Docket DMA 1504X, Copper, Kansas Claims, Aurum district,

White Pine County, Nevada

Time Schedule

Rehabilitation

Middle tunnel	1 month	
Lower tunnel	1 month	
Total		2 months

Project No. 1 (Middle tunnel)

160 feet crosscut and drift @ 93 feet per month	45 days or 1 3/4 months	
50 feet raise @ 78 feet per month	17 days or 3/4 months	
Total		62 days or 2 1/2 months

Project No. 2 (Lower tunnel)

150 feet raise @ 78 feet per mo.	50 days or 2 mo.	
200 feet drift @ 100 feet per mo.	52 days or 2 mo.	
Total		102 days or 4 months
Total time for entire program		8 1/2 months

COSTS

Labor Costs (Based on 26 working days per month)

Drifting and raising labor contract (3 men)	$12.00 per foot
2 - Miners (base pay plus overtime plus 11 percent payroll taxes) @ $14.43 per day each	28.86 per day
Supervision, engineering, bookkeeping, etc. (includes 11 percent payroll taxes) @ $325.00 per month	12.50 per day

Costs (continued)

Rental Costs

2 - Dwelling houses @ $30.00 per month	$ 1.15 per day
1 - 240 cu. ft. compressor @ $100.00 per mo.	3.85 per day
1 - Stoper @ $65.00 per month	2.50 per day
1 - Jackhammer @ $39.00 per month	1.50 per day
1 - Double drum Tugger and Scraper @ $52.00 per mo.	2.00 per day
1 - Mine car @ $13.00 per month	0.50 per day

Equipment purchases

Mine track (includes 2 - 12 lb. rails, splice bars bolts, spikes and ties)	$ 0.80 per foot
2 inch pipe	0.35 per foot
1 inch pipe	0.16 per foot
Miscellaneous tools and equipment	2.60 per day

Miscellaneous costs

Equipment maintenance and repairs	$ 2.60 per day
Transportation of equipment and supplies	2.60 per day
Assaying	0.25 per foot advance

Supplies costs

Explosives (powder, caps, and fuse)	$ 2.50 per foot advance
Drill steel and bits	1.00 per foot advance
Drift timber	1.00 per foot advance
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Gasoline and oil for compressor	10.00 per day
Miscellaneous (machine oil, carbide, nails, etc.	2.50 per day

Costs (continued)

Rehabilitation costs

Middle tunnel (26 days)

Labor

2 - miners @	$28.86 per day	
Supervision @	12.50 per day	
	$41.36 per day	$1,075.36

Rentals

Dwelling house @	1.15 per day	
Compressor @	3.85 per day	
Tugger and scraper @	2.00 per day	
Mine car @	0.50 per day	
	$ 7.50 per day	195.00

Equipment purchases (for 225 feet of tunnel)

Mine track @	$ 0.80 per foot		
2 inch pipe @	0.35 per foot		
1 inch pipe @	0.16 per foot		
	$ 1.31	$294.75	
Miscellaneous tools and equip. @ $2.60 per day		67.60	
			362.35

Miscellaneous costs

Equip. maint. and repairs @	$ 2.60 per day	
Trans. of equip. and supplies @	2.60 per day	
	$ 5.20 per day	135.20

Supplies costs		
Gasoline and oil for compressor @	$10.00 per day	
Miscellaneous @	2.50 per day	
	$12.50 per day	$ 325.00
Total cost Middle tunnel rehabilitation		$2,092.91
Lower Tunnel (26 days)		
Labor		
2 - miners @	$28.86 per day	
Supervision @	12.50 per day	
	$41.36 per day	$1,075.36
Rentals		
Dwelling house @	$ 1.15 per day	
Mine car @	0.50 per day	
	$1.65 per day	$ 42.90
Equipment purchases (for 1,025 feet of tunnel)		
Mine track @	$ 0.80 per foot	
2 inch pipe @	0.35 per foot	
1 inch pipe @	0.16 per foot	
	$ 1.31 $1,342.75	
Misc. tools and equip. @ $2.60 per day	67.60	
		$1,410.35
Miscellaneous costs		
Trans. of equip. and supplies @	$ 2.60 per day	67.60
Supplies costs		
Miscellaneous @	$ 2.50 per day	65.00
Total cost of Lower tunnel rehabilitation		$2,661.21

Project No. 1 (210 feet drifting and raising) (62 days)

Labor		
210 feet contracting @ $12.00 per foot	$2,520.00	
Supervision @ $12.50 per day	775.00	
		$3,295.00
Rental		
Dwelling house @	$ 1.15 per day	
Compressor @	3.85 per day	
Stoper @	2.50 per day	
Jackhammer @	1.50 per day	
Tugger and scraper @	2.00 per day	
Mine car @	0.50 per day	
	$ 11.50 per day	
		$ 713.00
Equipment purchases		
100 feet mine track @ $0.80 per foot	$ 80.00	
210 feet 2 inch pipe @ $0.35 per foot	73.50	
210 feet 1 inch pipe @ $0.16 per foot	33.60	
Misc. tools and equip. @ $2.60 per day	161.20	
		$ 348.30
Miscellaneous		
Equip. maint. and repairs @ $2.60 per day	$ 161.20	
Trans. of equip. and supplies @ $2.60 per day	161.20	
Assaying @ $0.25 per foot	52.50	
		$ 374.90

Supplies costs

Explosives - 210 feet @ $2.50 per foot	$525.00	
Drill steel and bits - 210 feet @ $1.00 per foot	210.00	
Drift timber - 160 feet @ $1.00 per foot	160.00	
Raise timber - 50 feet @ $3.00 per foot	150.00	
Gas and oil for compressor - 62 days @ $10.00 per day	620.00	
Miscellaneous - 62 days @ $2.50 per day	155.00	
		$1,820.00
Total Cost Project No. 1		$6,551.20

Project No. 2 (350 feet drifting and raising) (102 days)

Labor

350 feet contracting @ $12.00 per foot	$4,200.00	
Supervision @ $12.50 per day	1,275.00	
		$5,475.00

Rentals

Dwelling house @	$ 1.15 per day	
Compressor @	3.85 per day	
Stoker @	2.50 per day	
Jackhammer @	1.50 per day	
Tugger and scraper @	2.00 per day	
Mine car @	0.50 per day	
	$ 11.50 per day	
		$1,173.00

Equipment purchases

150 feet 2 inch pipe @ $0.35 per foot	$ 52.50	
150 feet 1 inch pipe @ $0.16 per foot	24.00	
Misc. tools and equip. @ $2.60 per day	265.20	
		$ 341.70

Miscellaneous

Equip. Maint. and repairs @ $2.60 per day	$ 265.20	
Trans. of equip. and supplies @ $2.60 per day	265.20	
Assaying @ $0.25 per foot	87.50	
		$ 617.90

Supplies costs

Explosives - 350 feet @ $2.50 per foot	$ 875.00	
Drill steel and bits - 350 feet @ $1.00 per foot	350.00	
Drift timber - 200 feet @ $1.00 per foot	200.00	
Raise timber - 150 feet @ $3.00 per foot	450.00	
Gas and oil for compressor - 102 days @ $10.00 per day	1,020.00	
Miscellaneous - 102 days @ $2.50 per day	255.00	
		$ 3,150.00
Total cost Project No. 2		$10,757.60

Cost Summary

Rehabilitation		
Middle tunnel	$2,092.91	
Lower tunnel	2,661.21	
Project No. 1		$ 4,754.12
Project No. 2		6,551.20
		10,757.60
TOTAL COST OF EXPLORATION PROGRAM		$22,062.92

Room 307, 330 South Main
Salt Lake City 1, Utah
26 November 1951

Memorandum

To: Mr. Edgar H. Bailey

From: Ralph J. Roberts

Subject: Revised exploration program, DMA 15041, National Copper Mines, 409 Mesa Building, Salt Lake City, Utah, Commodity-Copper.

At the request of the Coordinating committee (Memorandum Lyon to Miller, October 11, 1951), it was suggested that we contact the applicant and discuss a smaller exploration project that would effectively test the possibilities of the property. Accordingly, Reasoe Smith conferred with the applicant and an amended program estimated to cost $22,063 was worked out.

The amended program includes two projects:

Project No. 1 consists of rehabilitating the Middle Tunnel (fig. 3a) then driving N. 25° W. to intersect the Kansas fault; the intersection is estimated to be about 50 to 60 feet from the point of departure from the Middle Tunnel. If promising copper showings are found on the fault, provision is made for drifting 100 feet along the showings and raising as much as 50 feet to test them above the level. The drift and raise are not shown on fig. 3a; the locations of those openings will be directed by mutual agreement between company officials and the examining geologist.

In the event that no encouraging copper showings are found in the crosscut, it is recommended that the project be discontinued without doing the proposed drifting and raising and that Project No. 2 be started.

Project No. 2 should follow concurrently after Project No. 1. Project No. 2 consists of rehabilitating the lower tunnel, then raising about 150 feet along the Kansas fault which is exposed near the face of the lower tunnel level. Provision is made for drifting as much as 200 feet on any promising copper showings that may be found in the raise. In the event that no promising showings are found in the raise, it is recommended that Project No. 2 be discontinued and the contract be cancelled.

Reasoe Smith believes that the proposed exploration will adequately test the ground. He wishes to emphasize, however, that there is little chance that a significant discovery will be made. No calculations of the tonnage of copper ore expected in the block was made as it is not known whether favorable limestone units are present along the fault.

A revised map showing the proposed exploratory work, and cost estimates prepared by M. H. Howes of the Bureau of Mines are attached.

cc: Johnson

Docket DMA 1504X, Copper, Kansas Claims, Aurum District,

White Pine County, Nevada

Time Schedule

Rehabilitation

Middle tunnel	1 month	
Lower tunnel	1 month	
Total		2 months

Project No. 1 (Middle tunnel)

160 feet crosscut and drift @ 93 feet per month	45 days or 1 3/4 months	
50 feet raise @ 78 feet per month	17 days or 3/4 months	
Total		62 days or 2 1/2 months

Project No. 2 (Lower tunnel)

150 feet raise @ 78 feet per mo.	50 days or 2 mo.	
200 feet drift @ 100 feet per mo.	52 days or 2 mo.	
Total		102 days or 4 months
Total time for entire program		8 1/2 months

COSTS

Labor Costs (Based on 26 working days per month)

Drifting and raising labor contract (3 men)	$12.00 per foot
2 - Miners (base pay plus overtime plus 11 percent payroll taxes) @ $14.43 per day each	28.86 per day
Supervision, engineering, bookkeeping, etc. (includes 11 percent payroll taxes) @ $325.00 per month	12.50 per day

Costs (continued)

Rental Costs

2 - Dwelling houses @ $30.00 per month	$ 1.15 per day
1 - 240 cu. ft. compressor @ $100.00 per mo.	3.85 per day
1 - Stoper @ $65.00 per month	2.50 per day
1 - Jackhammer @ $39.00 per month	1.50 per day
1 - Double drum Tugger and Scraper @ $52.00 per mo.	2.00 per day
1 - Mine car @ $13.00 per month	0.50 per day

Equipment purchases

Mine track (includes 2 - 12 lb. rails, splice bars bolts, spikes and ties)	$ 0.80 per foot
2 inch pipe	0.35 per foot
1 inch pipe	0.16 per foot
Miscellaneous tools and equipment	2.60 per day

Miscellaneous costs

Equipment maintenance and repairs	$ 2.60 per day
Transportation of equipment and supplies	2.60 per day
Assaying	0.25 per foot advance

Supplies costs

Explosives (powder, caps, and fuse)	$ 2.50 per foot advance
Drill steel and bits	1.00 per foot advance
Drift timber	1.00 per foot advance
Raise timber	3.00 per foot advance
Gasoline and oil for compressor	10.00 per day
Miscellaneous (machine oil, carbide, nails, etc.	2.50 per day

Costs (continued)

Rehabilitation costs

Middle tunnel (26 days)

Labor

2 - miners @	$28.86 per day	
Supervision @	12.50 per day	
	$41.36 per day	$1,075.36

Rentals

Dwelling house @	1.15 per day	
Compressor @	3.85 per day	
Tugger and scraper @	2.00 per day	
Mine car @	0.50 per day	
	$ 7.50 per day	195.00

Equipment purchases (for 225 feet of tunnel)

Mine track @	$ 0.80 per foot		
2 inch pipe @	0.35 per foot		
1 inch pipe @	0.16 per foot		
	$ 1.31	$294.75	
Miscellaneous tools and equip. @ $2.60 per day		67.60	
			362.35

Miscellaneous costs

Equip. maint. and repairs @	$ 2.60 per day	
Trans. of equip. and supplies @	2.60 per day	
	$ 5.20 per day	135.20

Supplies costs			
Gasoline and oil for compressor @	$10.00 per day		
Miscellaneous @	2.50 per day		
	$12.50 per day		$ 325.00
Total cost Middle tunnel rehabilitation			$2,092.91
Lower Tunnel (26 days)			
Labor			
2 - miners @	$28.86 per day		
Supervision @	12.50 per day		
	$41.36 per day		$1,075.36
Rentals			
Dwelling house @	$ 1.15 per day		
Mine car @	0.50 per day		
	$1.65 per day		$ 42.90
Equipment purchases (for 1,025 feet of tunnel)			
Mine track @	$ 0.80 per foot		
2 inch pipe @	0.35 per foot		
1 inch pipe @	0.16 per foot		
	$ 1.31	$1,342.75	
Misc. tools and equip. @ $2.60 per day		67.60	
			$1,410.35
Miscellaneous costs			
Trans. of equip. and supplies @	$ 2.60 per day		67.60
Supplies costs			
Miscellaneous @	$ 2.50 per day		65.00
Total cost of Lower tunnel rehabilitation			$2,661.21

Project No. 1 (210 feet drifting and raising) (62 days)

Labor

210 feet contracting @ $12.00 per foot	$2,520.00	
Supervision @ $12.50 per day	775.00	
		$3,295.00

Rental

Dwelling house @	$ 1.15 per day	
Compressor @	3.85 per day	
Stoper @	2.50 per day	
Jackhammer @	1.50 per day	
Tugger and scraper @	2.00 per day	
Mine car @	0.50 per day	
	$ 11.50 per day	
		$ 713.00

Equipment purchases

100 feet mine track @ $0.80 per foot	$ 80.00	
210 feet 2 inch pipe @ $0.35 per foot	73.50	
210 feet 1 inch pipe @ $0.16 per foot	33.60	
Misc. tools and equip. @ $2.60 per day	161.20	
		$ 348.30

Miscellaneous

Equip. maint. and repairs @ $2.60 per day	$ 161.20	
Trans. of equip. and supplies @ $2.60 per day	161.20	
Assaying @ $0.25 per foot	52.50	
		$ 374.90

Supplies costs

Explosives - 210 feet @ $2.50 per feet	$525.00	
Drill steel and bits - 210 feet @ $1.00 per feet	210.00	
Drift timber - 160 feet @ $1.00 per feet	160.00	
Raise timber - 50 feet @ $3.00 per feet	150.00	
Gas and oil for compressor - 62 days @ $10.00 per day	620.00	
Miscellaneous - 62 days @ $2.50 per day	155.00	
		$1,820.00
Total Cost Project No. 1		$6,551.20

Project No. 2 (350 feet drifting and raising) (102 days)

Labor

350 feet contracting @ $12.00 per feet	$4,200.00	
Supervision @ $12.50 per day	1,275.00	
		$5,475.00

Rentals

Dwelling house @	$ 1.15 per day	
Compressor @	3.85 per day	
Stoker @	2.50 per day	
Jackhammer @	1.50 per day	
Tugger and scraper @	2.00 per day	
Mine car @	0.50 per day	
	$ 11.50 per day	
		$1,173.00

Equipment purchases

150 feet 2 inch pipe @ $0.35 per feet	$ 52.50	
150 feet 1 inch pipe @ $0.16 per feet	24.00	
Misc. tools and equip. @ $2.60 per day	265.20	
		$ 341.70

Miscellaneous

Equip. Maint. and repairs @ $2.60 per day	$ 265.20	
Trans. of equip. and supplies @ $2.60 per day	265.20	
Assaying @ $0.25 per foot	87.50	
		$ 617.90

Supplies costs

Explosives - 350 feet @ $2.50 per feet	$ 875.00	
Drill steel and bits - 350 feet @ $1.00 per foot	350.00	
Drift timber - 200 feet @ $1.00 per feet	200.00	
Raise timber - 150 feet @ $3.00 per feet	450.00	
Gas and oil for compressor - 102 days @ $10.00 per day	1,020.00	
Miscellaneous - 102 days @ $2.50 per day	255.00	
		$ 3,150.00

Total cost Project No. 2 $10,757.60

Cost summary

Rehabilitation		
Middle tunnel	$2,092.91	
Lower tunnel	2,661.21	
Project No. 1		$ 4,754.12
Project No. 2		6,551.20
		10,757.60
TOTAL COST OF EXPLORATION PROGRAM		$22,062.92

Room 307, 320 South Main
Salt Lake City 1, Utah
26 November 1951

Memorandum

To: Mr. Edgar H. Bailey

From: Ralph J. Roberts

Subject: Revised exploration program, DMA 15041, National Copper Mines, 409 Moss Building, Salt Lake City, Utah, Commodity-Copper.

At the request of the Coordinating committee (Memorandum Lyon to Miller, October 11, 1951), it was suggested that we contact the applicant and discuss a smaller exploration project that would effectively test the possibilities of the property. Accordingly, Roscoe Smith conferred with the applicant and an amended program estimated to cost $22,063 was worked out.

The amended program includes two projects:

Project No. 1 consists of rehabilitating the Middle Tunnel (fig. 3a) then driving N. 25° W. to intersect the Kansas fault; the intersection is estimated to be about 50 to 60 feet from the point of departure from the Middle Tunnel. If promising copper showings are found on the fault, provision is made for drifting 100 feet along the showings and raising as much as 50 feet to test them above the level. The drift and raise are not shown on fig. 3a; the locations of these openings will be directed by mutual agreement between company officials and the examining geologist.

In the event that no encouraging copper showings are found in the crosscut, it is recommended that the project be discontinued without doing the proposed drifting and raising and that Project No. 2 be started.

Project No. 2 should follow concurrently after Project No. 1. Project No. 2 consists of rehabilitating the lower tunnel, then raising about 150 feet along the Kansas fault which is exposed near the face of the lower tunnel level. Provision is made for drifting as much as 200 feet on any promising copper showings that may be found in the raise. In the event that no promising showings are found in the raise, it is recommended that Project No. 2 be discontinued and the contract be cancelled.

Roscoe Smith believes that the proposed exploration will adequately test the ground. He wishes to emphasize, however, that there is little chance that a significant discovery will be made. No calculations of the tonnage of copper ore expected in the block was made as it is not known whether favorable limestone units are present along the fault.

A revised map showing the proposed exploratory work, and cost estimates prepared by M. H. Howes of the Bureau of Mines are attached.

cc: Johnson

Docket BM 1504X, Copper, Kansas Claims, Aurum district,

White Pine County, Nevada

Time Schedule

Rehabilitation

Middle tunnel	1 month	
Lower tunnel	1 month	
Total		2 months

Project No. 1 (Middle tunnel)

160 feet crosscut and drift @ 93 feet per month	45 days or 1 3/4 months	
50 feet raise @ 76 feet per month	17 days or 3/4 months	
Total		62 days or 2 1/2 months

Project No. 2 (Lower tunnel)

150 feet raise @ 76 feet per mo.	50 days or 2 mo.	
200 feet drift @ 100 feet per mo.	52 days or 2 mo.	
Total		102 days or 4 months
Total time for entire program		8 1/2 months

COSTS

Labor Costs (Based on 24 working days per month)

Drifting and raising labor contract (3 men)	$12.00 per foot
2 - Miners (base pay plus overtime plus 11 percent payroll taxes) @ $14.43 per day each	28.86 per day
Supervision, engineering, bookkeeping, etc. (includes 11 percent payroll taxes) @ $325.00 per month	12.50 per day

Costs (continued)

Rental Costs

2 - Dwelling houses @ $30.00 per month	$ 1.15 per day
1 - 240 cu. ft. compressor @ $100.00 per mo.	3.85 per day
1 - Stoper @ $65.00 per month	2.50 per day
1 - Jackhammer @ $39.00 per month	1.50 per day
1 - Double drum Tugger and Scraper @ $52.00 per mo.	2.00 per day
1 - Mine car @ $13.00 per month	0.50 per day

Equipment purchases

Mine track (includes 2 - 12 lb. rails, splice bars bolts, spikes and ties)	$ 0.80 per foot
2 inch pipe	0.35 per foot
1 inch pipe	0.16 per foot
Miscellaneous tools and equipment	2.60 per day

Miscellaneous costs

Equipment maintenance and repairs	$ 2.60 per day
Transportation of equipment and supplies	2.60 per day
Assaying	0.25 per foot advance

Shoveling costs

Explosives (powder, caps, and fuse)	$ 2.50 per foot advance
Drill steel and bits	1.00 per foot advance
Drift timber	1.00 per foot advance
Raise timber	3.00 per foot advance
Gasoline and oil for compressor	10.00 per day
Miscellaneous (machine oil, carbide, nails, etc.	2.50 per day

Costs (continued)

Rehabilitation costs

Middle tunnel (26 days)

Labor

2 - miners @	$28.86 per day		
Supervision @	12.50 per day		
	$41.36 per day		$1,075.36

Rentals

Dwelling house @	1.15 per day		
Compressor @	3.85 per day		
Tugger and scraper @	2.00 per day		
Mine car @	0.50 per day		
	$ 7.50 per day		195.00

Equipment purchases (for 225 feet of tunnel)

Mine track @	$ 0.80 per foot		
2 inch pipe @	0.35 per foot		
1 inch pipe @	0.16 per foot		
	$ 1.31	$294.75	
Miscellaneous tools and equip. @ $2.60 per day		67.60	
			362.35

Miscellaneous costs

Equip. maint. and repairs @	$ 2.60 per day	
Trans. of equip. and supplies @	2.60 per day	
	$ 5.20 per day	135.20

Supplies costs		
Gasoline and oil for compressor @	$10.00 per day	
Miscellaneous @	2.50 per day	
	$12.50 per day	$ 325.00
Total cost Middle tunnel rehabilitation		$2,082.50
Lower Tunnel (26 days)		
Labor		
2 - miners @	$28.86 per day	
Supervision @	12.50 per day	
	$41.36 per day	$1,075.36
Rentals		
Dwelling house @	$ 1.15 per day	
Mine car @	0.50 per day	
	$1.65 per day	$ 42.90
Equipment purchases (for 1,025 feet of tunnel)		
Mine track @	$ 0.80 per foot	
2 inch pipe @	0.35 per foot	
1 inch pipe @	0.16 per foot	
	$ 1.31 $1,342.75	
Misc. tools and equip. @ $2.60 per day	67.60	
		$1,410.35
Miscellaneous costs		
Trans. of equip. and supplies @	$ 2.60 per day	67.60
Supplies costs		
Miscellaneous @	$ 2.50 per day	65.00
Total cost of Lower tunnel rehabilitation		$2,661.21

Project No. 1 (210 feet drifting and raising) (62 days)

Labor

210 feet contracting @ $12.00 per foot	$2,520.00	
Supervision @ $12.50 per day	775.00	
		$3,295.00

Rental

Dwelling house @	$ 1.15 per day	
Compressor @	3.85 per day	
Stoper @	2.50 per day	
Jackhammer @	1.50 per day	
Tugger and scraper @	2.00 per day	
Mine car @	0.50 per day	
	$ 11.50 per day	
		$ 713.00

Equipment purchases

100 feet mine track @ $0.80 per foot	$ 80.00	
210 feet 2 inch pipe @ $0.35 per foot	73.50	
210 feet 1 inch pipe @ $0.16 per foot	33.60	
Misc. tools and equip. @ $2.60 per day	161.20	
		$ 348.30

Miscellaneous

Equip. maint. and repairs @ $2.60 per day	$ 161.20	
Trans. of equip. and supplies @ $2.60 per day	161.20	
Assaying @ $0.25 per foot	52.50	
		$ 374.90

Supplies costs

Explosives - 210 feet @ $2.50 per foot	$525.00	
Drill steel and bits - 210 feet @ $1.00 per foot	210.00	
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Raise timber - 50 feet @ $3.00 per foot	150.00	
Gas and oil for compressor - 62 days @ $10.00 per day	620.00	
Miscellaneous - 62 days @ $2.50 per day	155.00	
		$1,620.00
Total Cost Project No. 1		$6,551.20

Project No. 2 (350 feet drifting and raising) (102 days)

Labor

350 feet contracting @ $12.00 per foot	$4,200.00	
Supervision @ $12.50 per day	1,275.00	
		$5,475.00

Rentals

Dwelling house @	$ 1.15 per day	
Compressor @	3.85 per day	
Stoker @	2.50 per day	
Jackhammer @	1.50 per day	
Tugger and scraper @	2.00 per day	
Mine car @	0.50 per day	
	$ 11.50 per day	
		$1,173.00

Equipment purchases

150 feet 2 inch pipe @ $0.35 per foot	$ 52.50	
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Misc. tools and equip. @ $2.60 per day	265.20	
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Supplies costs

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Raise timber - 150 feet @ $3.00 per foot	450.00	
Gas and oil for compressor - 102 days @ $10.00 per day	1,020.00	
Miscellaneous - 102 days @ $2.50 per day	255.00	
		$ 3,150.00

Total cost Project No. 2 $10,757.60

Cost summary

Rehabilitation		
Middle tunnel	$2,092.91	
Lower tunnel	2,661.21	
Project No. 1		$ 4,754.12
Project No. 2		6,551.20
		10,757.60
TOTAL COST OF EXPLORATION PROGRAM		$22,062.92

ROUTING SLIP
OFFICE OF THE ADMINISTRATOR

DATE: 11/7/51

TO: EDWARD I. YOUNG

FROM: JESS LARSON

PLEASE TAKE THE ACTION INDICATED BELOW:

1 [ ] PREPARE REPLY FOR MY SIGNATURE
2 [ ] SEE ME ABOUT ATTACHED
3 [ ] FOR CORRECTION AND RETURN
4 [ ] RETURN WITH YOUR COMMENTS
5 [ ] INVESTIGATE AND REPORT
6 [ ] ANSWER AND FURNISH ME COPY OF YOUR REPLY
7 [✓] NECESSARY ACTION
8 [ ] NOTE AND RETURN
9 [ ] FOR CONCURRENCE AND RETURN
10 [ ] APPROVAL
11 [ ] YOUR INFORMATION
12 [ ] FILING
13 [ ] SIGNATURE
14 [ ] IMMEDIATE ACTION

COMMENT

GSA-WASH DC 51-4861

GSA FORM 8
April 1951

NAME AND ADDRESS: National Copperminas, Inc.
Lyon, Paul C.
Salt Lake City 1, Utah

CONTROL NUMBER: 250044

DATED: 11/2/51

RE: Application for loan for copper production.

FILE

PLEASE ACKNOWLEDGE WITHIN DAYS

REFER TO
1. ~~Admin~~
2. ~~Fiscal~~ ~~NOV 5 1951~~ 9 - 1951
3. ~~Leo Lyon~~
4. ~~Gov~~ ~~Mon~~ & Mon'l-Interior

DATE 11/2/51

TYPE OF CORRESPONDENCE: REG. MAIL, AIR MAIL, SPEC. DEL., REG'TD, TEL'GR'M, N. A. D.MEA

CORRESPONDENCE CONTROL RECORD $

FWA - E 368

Admin — D
Young

NATIONAL COPPERMINES INC.

SUITE 409 NESS BUILDING - 28 WEST SECOND SOUTH
SALT LAKE CITY 1, UTAH

DEPARTMENT OF THE INTERIOR
RECEIVED
NOV 29 1951
Defense Minerals Administration,
Production Expansion Division.

November 2, 1951.

Mr. Jess Larson, Director
Defense Minerals Procurement Agency
Washington, 25, D.C.

Docket #1504X

Dear Mr. Larson:

Itbhas been brought to our attention through the daily papers that a bonus price is being paid to certain big mines for production of copper to relieve the acute shortage.

Our mine has a record of steady production up until 1947 and can be put on production inside of a few weeks if our loan is granted. We have ore in sight and the mine will produce a lot of ore if given a chance to do so. Look up the record of production in the application.

We have been told by the local office that they did not recommend the loan because they couldnt be sure there was enough ore to pay off the loan at 5 per cent of the production.

If that is the way the loans are to be made, nobody would get one. We do not care how much must be paid on our loan, We expect to pay it off, and our mine will do it, regardless of the white livered engineers and geologists who cannot decide what to do because they havent had mining experience.

Winter is almost on us, and the nation needs copper. We have the mine that will produce copper and we want to get started. Even a $10,000.00 loan will get the mine in operation, and when we have opened up enough ore to start a milling operation we want a mill. It will cut costs way down on account of costs of transportation and smelting. Our ore is all sulfide and simple to mill by flotation.

We ask that you give us a chance to operate. The big fellows are getting it, and we think we are just as good americans as they are, and will do far more per man than they will.

Very truly yours

NATIONAL COPPERMINES, INC.

Paul C. Larson
Directing Mgr.

PCL/11

310

FILE COPY
SURNAME:

RWaugh
Gowen
Nelson
Johnson-Kan

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

A.E.C.

OCT 22 1951

Mr. Paul Lyon, Jr., Vice President
National Copper Mines, Inc.
409 Ness Building, 28 West Second South
Salt Lake City 1, Utah

Re: Docket No. DMA-1504X

Dear Mr. Lyon:

This is to acknowledge your letter of September 19, 1951 addressed to Mr. Barra C. Jones which was referred to the Supply Division, Defense Minerals Administration for reply.

We wish to inform you that we are resubmitting your application to Field Team, Region III for further study. Therefore, a decision on your project is being withheld pending further consideration by the field staff and the Washington, D. C. office.

Very truly yours,

signed 10/11

A. B. Parsons, Acting Director
Supply Division

RWWaugh:rw
10-5-51

Copy to: Administrator's Reading File
Executive Officer, Region III
Mr. J. B. Gowen
Mr. C. H. Johnson
Mr. D. MacLaren
Files-DMA Docket

FILE COPY
SURNAME:

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

Albert
Lowry
Nelson
Johnson-Hon

A.E.C.

OCT 11 1951

Memorandum

To: H. C. Miller, Executive Officer, DMA Field Team III

From: Chairman, Coordinating Committee

Subject: Application for Exploration Aid of National Copper Mines, 409 Ness Building, Salt Lake City 1, Utah, DMA-1504X, Commodity-Copper

Upon further study of this application it is felt that an exploration project might be possible on a smaller scale than originally asked for by the applicant.

Would you or one of your staff please contact the applicant and suggest a smaller project that would effectively test the possibilities of the property. If 6,000 tons of ore (the past production of the mine) could possibly be developed at a cost of $15,000 to $20,000, we might go along with it.

Parsons 10/11

Tom Lyon, Chairman
Coordinating Committee

Darwell B. Woon

for the Bureau of Mines

Walter No Smith

for the Geological Survey

RVWaugh:rw
10-3-51

Copy to: Administrator's Reading File
Copper Branch
Files-DMA Docket

1504 x

NATIONAL COPPERMINES INC.

SUITE 409 NESS BUILDING - 28 WEST SECOND SOUTH

SALT LAKE CITY 1, UTAH

Sept. 19, 1951.

Mr. Barra C. Jones
c/O D.M.P.A.
Washington, D.C.

Dear Mr. Jones:

We are writing you regarding our application for a loan to start mining copper ore from our mine in Nevada. Mr. C.S. Woodward said you may be able to break open the bottle neck that has our application tied up.

If you will review our application, you will find that the mine produced a lot of copper for the last war, and did it in spite of the fact that the government engineers turned down a loan on it. It was a successful operation and supplied a lot of badly needed copper.

We applied to the Bureau of mines for help and their engineers said it was their opinion that the mine would never produce ore of a grade that would pay. In spite of this the mine was a good producer and shipper.

The local office here doesnt have anything to tell us, so we are writing to you to stir up things. If the country needs copper, we can start mining it within a few months if we can get just a little help.

Thanking you for anything you can do to bring this matter to a conclusion, we are

Very truly yours

NATIONAL COPPERMINES, INC.

Paul C. Lyons Jr.
Vice President

DRAFT RVWaugh:ez September 12, 1951

Mr. Donald T. Miller, President
National Copper Mines, Inc.
409 Ness Building
Salt Lake City 1, Utah.

Re: Docket No. DMA-1504X

Dear Mr. Miller:

Your application for exploration aid has been reviewed by the Defense Minerals Administration and we are sorry to inform you that it must be denied.

On the basis of the material submitted with your application and the material available to the Government it is felt that the geological possibilities of the property do not warrant Government participation in any further exploration at the present time.

Very truly yours,

Tom Lyon, Director
Supply Division

Copy to: Adm. Reading File
Executive Officer, DMA Field Team III
Copper Branch
C.H.Johnson
D.MacLaren
Files - DMA Docket

DRAFT RVWaugh:ez Sept. 13, 1951

To: Administration Management Division

From: Director, Supply Division

Subject: Application for Exploration Aid of National Copper Mines, Inc. 409 Ness Building, Salt Lake City 1, Utah. DMA-1504X Commodity Copper.

Denial of this application is recommended by Field Team Region III for the following reasons:

1. A small tonnage of copper ore might be found above the lower tunnel of the mine, but this tonnage would be inadequate to return the Government's share of the cost.

2. There are no reserves of any class and the chance of making a significant discovery is small.

A letter has been prepared to the applicant notifying him of this denial.

Transmitted herewith for your disposal is the entire file consisting of the following.

3 Forms MF-103 with answer sheets attached

2 Field Team Reports dated August 28, 1951

2 DMA Review of Application for Exploration Assistance

1 Form letter from Tom Lyon to H.C.Miller July 11, 1951

2 Carbon letters to Mr. Miller from
Tom Lyon, July 11, 1951
L. F. Strobel, June 20, 1951

1 DMA Status Change Notes

1 Original letter from H. C. Miller to Tom Lyon, Sept. 5, 1951.

Enclosures.

Copy to: Adm. Reading File
Region III
JBGowen
C.H.Hohnson, D.MacLaren,
Tom Lyon, Director
Supply Division
Files - DMA Docket

Mr Donald T Miller, President 1504X
National Copper Mines Inc
409 Neso Building,
Salt Lake City, Utah

Dear Mr Miller.

Your application for exploration permit has been reviewed by the staff and we are sorry to inform you that it must be denied.

On the basis of the material submitted with your application and the material available to the Government it is felt that the geological possibilities do not warrant Government participation in any further exploration at the present time.

Regs IV

To: A.D.
From: DSD

Subject: Application for Exploration Aid of National Copper Mines Inc., 409 Vera Building, East Salt Lake City, Utah. DMA 15048 Commodity Copper.

Based on this application is recommended by Fred Regan III for the following reasons:

1. Annual tonnage of copper are much to the prospective lower tunnel of the mine, but ~~that~~ this tonnage would be inadequate to justify the financial outlay of the project.

2. There are no reserves by class and the chance of making a significant discovery is small.

A letter has been prepared to the applicant notifying him of this decision.

Transmitted herewith for your signature are the letters pertaining to the following:

3 from NF-103 and the one white attached

2. Fred Regan letter dated August 28, 1981

2. DMA Review Application for Exploration Assistance

1 From Utah Div Tony Lyn to H.C. Mallo July 11, 1981

2. Carter letter to Mr Mallo from

1 Tony Lyn July 11, 1981

LF Stuart Jan. 22, 1981

1 DMA Status Change notice

1 Original letter from HC Mallo to Tony Lyn Sept 8, 81

90
25
22.5

6000 @ 4½% - gross value 22.50

If the profit margin were to be as much as $5 per ton of ore, the profit on the operation would be $30,000, which would not repay the exploration cost, let alone the investment required for production purposes

Mike - I would approve of writing to HC Miller to ~~say that~~ ask if his staff could suggest a smaller project that ~~might~~ would effectively test the possibilities of the property. If 6000 tons of ore (the post production of the mill) ~~autopossibly~~ could be developed at a cost of $15,000 to $20,000, we might go along with it. But if the possibilities are no better than the geologists indicate, I do not think an expenditure of $40,000 is justified.

If we cannot get the field staff to concur in a smaller project and you decide to deny the application, the denial should be based on the opinion that the prospects do not warrant the ~~[illegible]~~ participation

of the Government in the proposed exploitation. Don't put it on a basis of Govt not getting its money back.

If Mr Paul Lyons' letter has to be answered, he can be told that there is a serious question whether or not the project is advisable, and that decision is being withheld pending further consideration by the field staff and the Washington Office.

DMA 1504-x

Preliminary reports indicated that this prospect was a poor one as significant tonnages of additional ore would probably not be found. The Field Team concurred with these old reports on the possibility of finding any notable new ore bodies. Thus I see no reason why the application should not be turned down, unless the government wishes to piddle with a deposit which gave small tonnages in the past and has no glowing prospect of altering the situation in the future. In case the government does wish to consider this application, I am sure that a $6000 diamond drilling program would be much more advisable than the $40,000 program of groping as planned.

R W Lewis

UNITED STATES
DEPARTMENT OF THE INTERIOR
~~BUREAU OF MINES~~
~~REGION XIX~~
DEFENSE MINERALS ADMINISTRATION

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

~~MINE APPRAISERS BLDG.~~
~~130 SANSOME STREET~~
~~SAN FRANCISCO 11, CALIF.~~

OFFICE OF
~~REGIONAL DIRECTOR~~
Executive Officer
DMA Field Team
Region III

September 5, 1951

Memorandum

To: Tom Lyon, Chairman, Coordinating Committee, Defense Minerals Administration, Washington, D. C.

From: Executive Officer, DMA Field Team, Region III

Subject: Docket DMA-1504X - Copper - Donald T. Miller, President, National Copper Mines, Inc., 409 Ness Building, Salt Lake City 1, Utah -- $40,000.

In reply to your subject "Review of Application for Exploration Assistance", dated July 11, subject property has been examined by the Bureau of Mines and the Geological Survey.

Attached are four copies of a report, "DMA-1504X, National Copper Mines, Inc., Kansas Copper Mine, White Pine County, Nevada", by George H. Holmes, Jr., Mining Engineer, U. S. Bureau of Mines, and R. M. Smith and G. C. Simmons, Geologists, U. S. Geological Survey, dated August 28, 1951.

According to the report, there is a possibility that a small tonnage of copper ore might be found, but the tonnage would be inadequate to return the Government's share of the cost for the exploration work. The engineer's and geologists' conclusions are that a Government loan for exploration on the subject property is not warranted.

Docket DMA-1504X is being returned herewith.

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

Attachments
Copy to: E. H. Bailey, USGS

DEFENSE MINERALS ADMINISTRATION WASHINGTON, D.C.
SEP 10 10 17 AM '51

FILE COPY
SURNAME:

Gowen
Johnson for Tom
Tom

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

[illegible] 1952
Re: Docket No. [illegible]-150[illegible]

Q.E.C.

Mr. Tom L. Miller, President
National Corporation, Inc.
[illegible] Mine Mill Bldg
Salt Lake City 1, Utah

not stryjyped in R.R.

Dear Mr. Miller:

This is to inform you that your application for aid for an exploration project has been referred to the field team for further study. You should hear shortly from Mr. ~~[illegible]~~ H.C. Miller, Executive Officer, DMA Field Team, Region IV, 224 New Customhouse, ~~Denver 2, Colorado.~~ San Francisco, Calif.

Very truly yours,

Tom Lyon

Tom Lyon, Director
Supply Division

JBCouenter

Copy to: Executive Officer, DMA Field Team, Region IV
Reports & Records Division
Administrator's Reading File
Coordinating Committee
J.F. Gowen
Charles J. Johnson
D. Loeb
File

UNITED STATES
DEPARTMENT OF THE INTERIOR
OSCAR L. CHAPMAN, SECRETARY

DEFENSE MINERALS ADMINISTRATION

REPORT OF EXAMINATION BY FIELD TEAM
REGION III

DMA-1504X, National Copper Mines, Inc.
Kansas Copper Mine

White Pine County, Nev.

George H. Holmes, Jr., Mining Engineer
U. S. Bureau of Mines

R. M. Smith, Geologist
U. S. Geological Survey

G. C. Simmons, Geologist
U. S. Geological Survey

August 28, 1951

DOCKET DMA-1504X

UNITED STATES DEPARTMENT OF THE INTERIOR - BUREAU OF MINES

NATIONAL COPPER MINES, INC.
Kansas Copper Mine
White Pine County, Nev.

SUMMARY

National Copper Mines, Inc., has requested a loan of $20,000 to do an unspecified amount of exploratory work at the Kansas Mine, Aurum Mining District, White Pine County, Nev. The application, Docket DMA-1504X, Copper, requests the Field Team to propose an exploration program.

The Supply Division has requested a field examination to determine the feasibility of the project. Accordingly an examination was made by R. M. Smith and G. C. Simmons of the U. S. Geological Survey on August 1-4, 1951 to supplement earlier examinations made by Geo. H. Holmes and W. T. Benson of the U. S. Bureau of Mines.

The mine is in thin-bedded Cambrian limestone which strikes northeast and dips 15° - 40° NW. This limestone has been intruded by andesite porphyry dikes, and is metamorphosed to tactite along the contacts with the dikes. The copper minerals, chalcopyrite and bornite, occur in the contact zone. Ore has been largely confined to a thin-bedded limestone unit 15 feet thick that occurs above the upper tunnel.

All production to date has come from two stopes that rake westward at low angles parallel to the bedding. Total production has been from 4,000 to 6,000 tons averaging 4-1/2 percent copper.

Additional ore may be found above the lower tunnel where the contact exposed at the face enters thin-bedded limestone, but it is not known whether other units of the thin-bedded limestone are favorable to ore deposition.

Additional ore may also be found in the downward continuation of the "Iron Dike". Ore occurring in these suggested localities is likely to be in small shoots controlled by favorable bedding and limestone-porphyry contacts.

The examining engineers and geologists conclude that a small tonnage of copper ore might be found above the lower tunnel of the mine, but that the tonnage would be inadequate to return the Government's share of the cost.

As there are no reserves of any class, and as the chance of making a significant discovery is small, it is recommended that the application be denied.

INTRODUCTION

The National Copper Mines, Inc., Kansas Copper property, was examined during August 1951 by geologists[1/] of the U. S. Geological Survey to determine the feasibility of the company's Application for Aid for an Exploration Project.

Previous examinations of the property were made by Bureau of Mines engineers during 1943, 1944, 1946 and 1949. A tabulation of these reports follows:

Grand Deposit Mining Co., Kansas Mine, Nov. 1943; by John M. Price.

Grand Deposit Mining Co., Inc., May 1944; by W. T. Benson.

1/ R. M. Smith and G. C. Simmons.

Grand Deposit Mining Co., Supplementary Report, Oct. 1946; by W. T. Benson.

Grand Deposit Mining Co., Supplementary Report, Sept. 1949; by G. H. Holmes, Jr.

These reports give the history of the property, describe the physical features, labor and living conditions, and production records.

The new sections on Geology, Ore Deposits, and Ore Reserves, supersede similar sections in former reports.

Docket DMA 1504X, Copper, Kansas Mine, Aurum District,

White Pine County, Nevada

GEOLOGY

The oldest rock in the area is the Prospect Mountain quartzite of Cambrian age. In the mine area it is in fault contact with younger limestone also of Cambrian age. Both sedimentary rocks strike northeast and dip 15° - 40° NW; they are overlain by Tertiary andesites. All of these rocks have been intruded by a series of porphyritic rocks that grade from granite porphyry to andesite porphyry.

The limestone is the host rock of the copper deposits and is thin-bedded throughout most of the mine. These beds are about 300 feet thick and rest conformably on massive limestone. The contact can be seen in the Lower tunnel (fig. 3).

Where limestone has been intruded it is altered to a garnet epidote rock for distances ranging up to 15 feet from the contact.

In the stopes above the upper tunnel and in some outcrops the garnet-epidote is supplemented by hematite, magnetite and actinolite containing up to 5 percent copper as chalcopyrite and bornite. The term "Iron dike" has been applied to the outcrop of one contact zone containing much hematite and magnetite.

The area has been complexly faulted by two sets of faults. One set strikes northeast and dips SE; the other set strikes northwest and dips NE. The porphyry dikes occur along both sets of faults.

ORE DEPOSITS

The ore crops out as contact metamorphic zones up to 15 feet wide, along the contacts of limestone and porphyry and in the limestone footwall of this zone (fig. 4) where veinlets of actinolite locally altered to chlorite cut the fresh limestone.

Copper occurs in chalcopyrite and bornite which have been oxidized to malachite and azurite near the surface. Copper sulfides also occur in the outcrops. The "Iron Dike" is reported to assay about 2 percent copper.

Ore has been mined from the upper tunnel only. Grade of ore averaged 4-1/2 percent copper in the shipments. This ore was obtained chiefly from two stopes above the upper tunnel, which rake flatly westward parallel to the bedding, along a discontinuous shoot about 15 feet wide, 20 feet high and 200 feet long.

Ore has been confined to a narrow limestone unit within the thin-bedded limestone. Whether there are other favorable units within the thin-bedded zone is not known.

ORE RESERVES

There are no measured or indicated reserves in the Kansas mine because all ore found in mine workings has been extracted.

Because the effect of all units of the thin-bedded limestones upon ore deposition is not known, no inferred reserves can be calculated.

An exploration program directed at cutting the entire thickness of the thin-bedded limestones (300 feet) where they are in contact with porphyry dikes might, on the chance that there is more than one

favorable unit within the thin-bedded zone, discover some additional ore. As the thin-bedded limestones occur only above the Lower tunnel, the vertical range of possible ore is confined to this area.

If, however, an ore shoot similar in size and grade to the one mined were to exist through the full vertical range of the thin-bedded limestones, the tonnage would be inadequate to repay the Government's share of the cost.

CONCLUSIONS AND RECOMMENDATIONS

It is concluded that a small tonnage of copper ore might be found above the Lower tunnel of the Kansas mine, but the chances of making a significant discovery are small.

Because the Government's share of the cost of an exploration project is not likely to be returned, it is recommended that the application be denied.

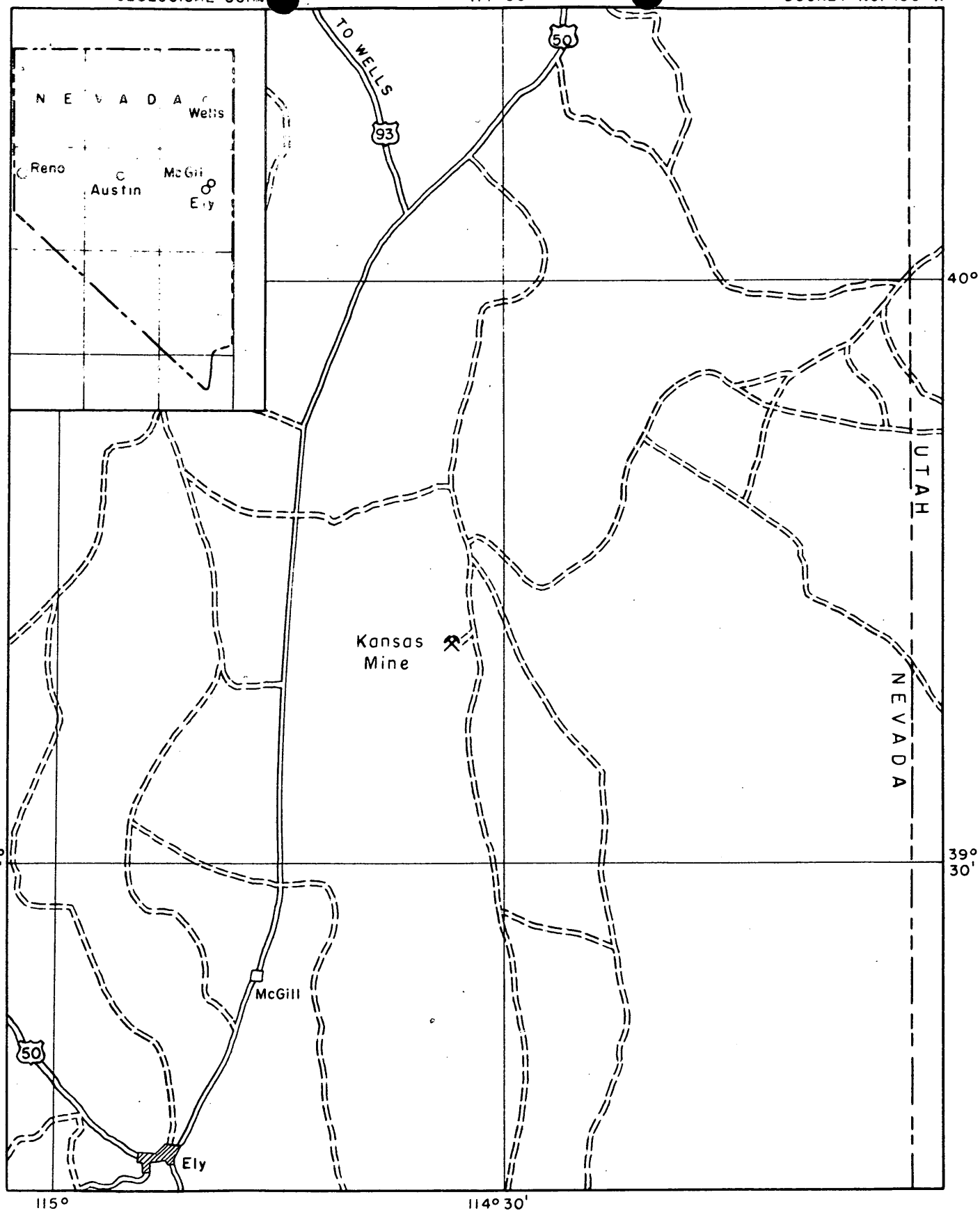


FIG. I

INDEX MAP OF NEVADA

0 5 10 MILES
Scale

U. S. DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

DEFENSE MINERALS ADMINISTRATION
DOCKET NO. 1504 X

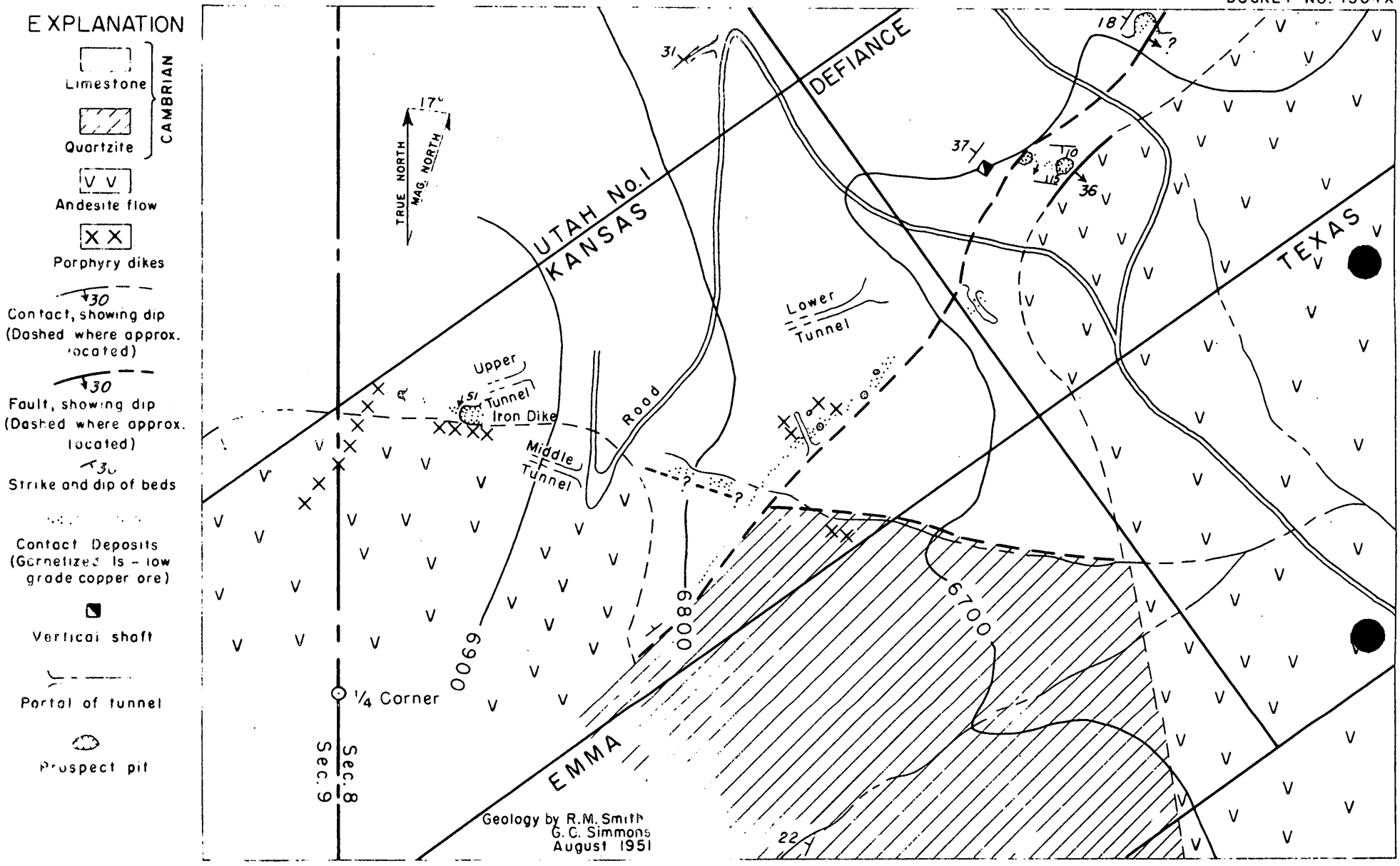


FIG. 2

GEOLOGIC MAP OF THE KANSAS MINE AREA
AURUM DISTRICT, WHITE PINE COUNTY, NEVADA

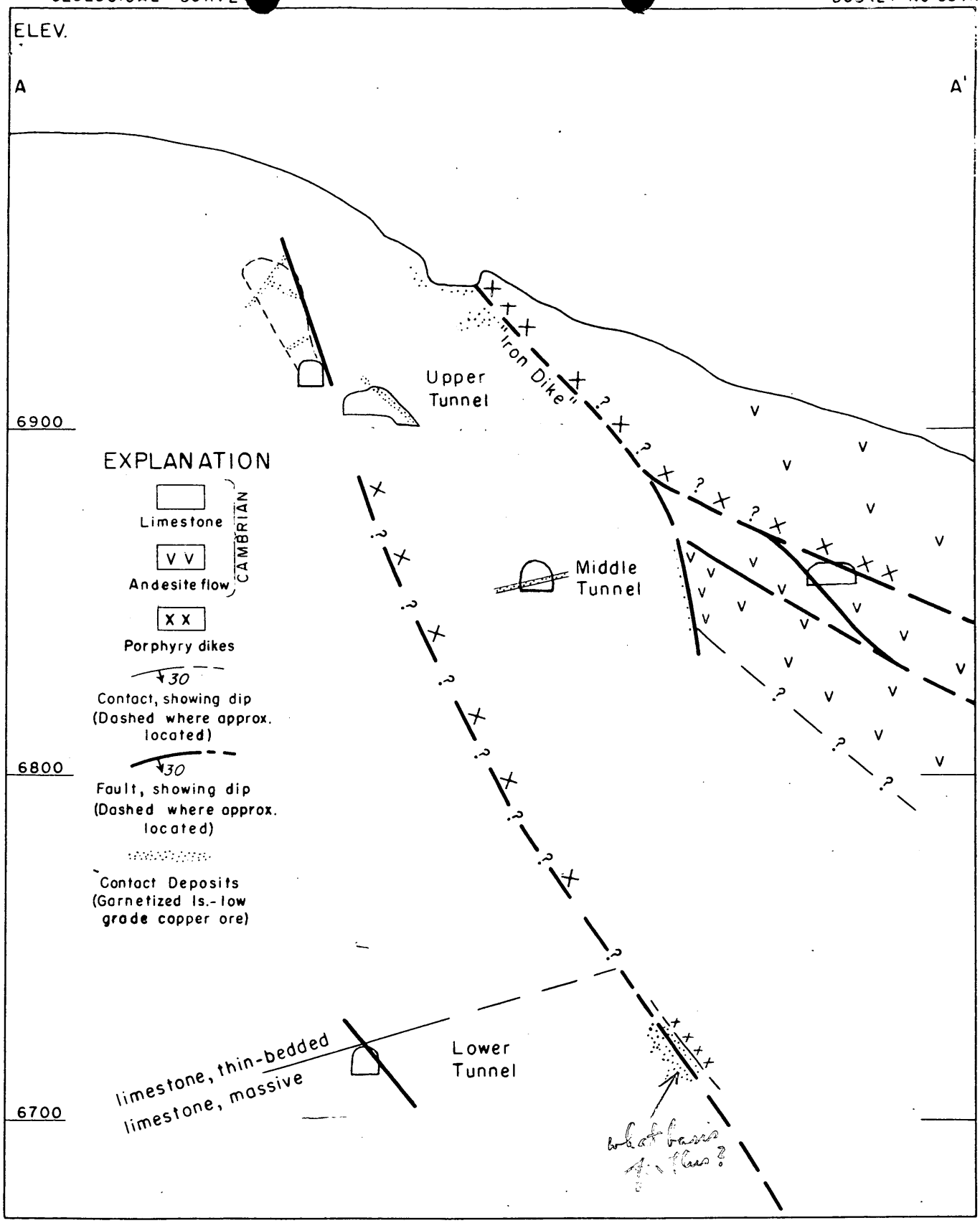


FIG. 4 SECTION ALONG LINE A-A'
KANSAS MINE, WHITE PINE COUNTY, NEVADA

0 40 80 FEET
Scale

6/5/51

Defense Minerals Administration

Review of Application for Exploration Assistance

Docket No. DMA 1504-X

Commodity Copper

Total Amount $40,000

Govt. Participation 50%

1. Name and Address of Applicant National Copper Mines Inc.
407 News Building, Salt Lake City 1, Utah

2. Location of Property Aurum District, Silver Mountain Area, White Pine County, Nevada Kansas Mine

3. Mineral or metal Copper Is it listed in Section 9 of MO-5?

yes If not, application will be rejected.

4. Geologic probability of discovery—based on data in application (question #16, 17, 18, 20 and 22)*

Mines or Survey reports, etc., do you rate chances:

a) Good

b) Poor (See sheet attached, also BofM report Dec. 1943

c) None

d) Don't know—needs field examination ✓

e) Is there an alternative and favorable project?
(If so, attach an explanation)

5. Is the applicant's right to the property clearly stated? yes
(question 5, 6, 7)*

6. If applicant is a lessee, is a copy of the lease attached? yes

Does the lease have sufficient time to run to cover a future

productive period? Apparently

*question numbers are those of MF-103

Docket No DMA 1509-X

Question 4 Probability of discovery.

A report on the (Silver Mountain area) Aurum District, White Pine County, Nevada made by Geological Survey in 1942 refers to the Pioche Kansas property in part as follows:

"The mineralization has been along small faults in the limestone and some of the limestone has been metamorphosed by a syenitic porphyry dyke Perhaps 5 to 10 tons of 2% to 5% ore are on the dumps in each of five prospects, none of which have been developed to depths of more than 6 to 8 feet. The main adit passes 175 feet vertically beneath one of the surface mineralized faults and there has been no mineralization in the limestone cut by this adit, indicating that the faults and their mineralized zones are probably not very deep in this section." Referring to the Grand Deposit mine, lying north of the Pioche Kansas "Although the main ore body there is fairly large, the others are small and irregular," and "no additional work is recommended for the Geological Survey or the Bureau of Mines in this district."

From this report it appears that the chances of discovering an ore body of any considerable tonnage are poor.

7. Are subordination agreements necessary? yes

a) MF-201? _____

b) MF-202 ✓

8. From the data presented, does the proposed project appear feasible from the point of view of:

a) Available manpower yes

b) Equipment and supplies yes
(Question 14 plus general knowledge of availability)*

c) Accessibility (question 12)* yes

d) Water (question 13)* yes

e) Power (question 13)* not applicable

Is a field check needed on any of these points? No

9. Does the experience of the applicant appear to be adequate to assure that he can properly conduct the proposed project? (question 4)* yes

Is a field check needed on this point? No

10. Exhibit A. (questions 21 and 22)*

a) Is the project adequately described? No

If not, are there sufficient data given so that you can describe the project? Very generally If so, attach a draft.

b) Is there an adequate map or sketch of the proposed work? No

c) Is the proposed work "exploration" under the definition of Section 8, MO-5? yes

If not, what part of it is? _____

Exhibits Docket No DMA 1504-X

Exhibit A

1) Applicant proposes "about 1100 feet of drifting, raising and sinking --- from the lower adit level upward to the surface. ---- rehabilitation of the middle adit and extension of it to the ore zone." The proportion of the 1100 feet to be composed of drifting, raising, sinking is not indicated, nor are the rates per foot for each type of work

2) Summary of cost estimates

Labor - contract mining	$13,200
Engineering + supervision @ $300.00 per month	6,000
Repairs and maintenance	1,500
Construction of bins etc	3,000
Purchase of new equipment	4,600
Equipment rental + dwelling rental	1,300
Rental value of present equipment	600
Materials and supplies	9,800
Total	$40,000

Exhibits B, C, D, + E

Only given as in above summary

Is this part a worthwhile exploration project? —

d) Are the cost estimates detailed? No

Can they be summarized, as on page 2 of Procedural Instruction 5-A, from the available data? Yes If so, attach a draft.

e) Are the cost estimates reasonable? Data insufficient to say

f) Should more information be requested from applicant?

g) Is a field examination necessary to complete Exhibit A? Yes

11. Exhibit B (question 23-d)*

a) Is it applicable? Yes

b) If so, are sufficient data furnished? No If so, attach a draft.

c) Is a field check needed? Yes

12. Exhibit C (question 23-e, f and g)*

a) Is it applicable? Yes

b) Sufficient data? No If so, attach a draft.

c) Are rents and charges reasonable? Data insufficient to say

d) Is a field check needed? Yes

13. Exhibit D (question 23-a, b)*

a) Are there sufficient data? No

b) Is the schedule adequate for the work proposed? Data insufficient to say

c) Is the schedule excessive for the work proposed? " " " "

d) Are the proposed wages and salaries reasonable? Salary, O.K. wages not itemized

e) Is a field check needed? Yes

14. Exhibit E (question 23-c)*

a) Is it applicable? Yes

b) Sufficient data? No

c) Reasonable? Insufficient data

d) Field check needed? Yes

15. In your judgment, can the proposed work be done in the proposed time? Yes

(All exploration must be completed within two years)

16. If field examination is not needed, attach your recommendation.

17. If field examination is needed, do you have any special instructions for the field team not indicated by your answers to the foregoing question? Field Team should examine property and if prospect is encouraging confer with applicant to arrive at best exploration plan and prepare detailed exhibits for contract. If part of the work is to be under contract get firm bids

Reviewed by: [illegible]

[illegible]

[illegible]

Date 7/9/51

97692

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

DEPARTMENT OF INTERIOR
BUREAU OF MINES
REGION III
RECEIVED
JUL 13 1951
SAN FRANCISCO, CALIFORNIA

JUL 11 1951

~~Mr. J. H. East, Jr.~~
~~Executive Officer, DMA Field Team~~
~~224 New Customhouse~~
~~Denver 2, Colorado~~

Mr. H. C. Miller, Executive Officer
DMA Field Team, Region III
1012 Flood Bldg.
870 Mkt. St.
San Francisco, Calif

Refer to	Noted	Date
Answered		

Dear Sir:

We attach "Review of Application for Exploration Assistance" on:

Docket No. 1504X

Commodity Copper Branch

Applicant Mr. Donald T. Miller, President, National Coppermines Inc.
409 Ness Building, Salt Lake City 1, Utah

Please expedite the consideration of this application with particular reference to the points raised in the attached "Review."

Very truly yours,

Tom Lyon
Chairman
Coordinating Committee

C. H. Johnson
For Bureau of Mines

Olaf T. Rove
For Geological Survey

6/5/51

Defense Minerals Administration

Review of Application for Exploration Assistance

Docket No. DMA 1504-X

Commodity Copper

Total Amount $40,000

Govt. Participation 50%

1. Name and Address of Applicant National Copper Mines Inc.
409 Neso Building, Salt Lake City 1, Utah

2. Location of Property Aurum District, Silver Mountain Area, White Pine County, Nevada. Kansas Mine

3. Mineral or metal Copper Is it listed in Section 9 of MO-5?

yes If not, application will be rejected.

4. Geologic probability of discovery—based on data in application (question #16, 17, 18, 20 and 22)*

Mines or Survey reports, etc., do you rate chances:

a) Good

b) Poor See sheet attached

c) None

d) Don't know—needs field examination ✓. See attached sheet, also B. of M. report 12/43

e) Is there an alternative and favorable project?
(If so, attach an explanation)

5. Is the applicant's right to the property clearly stated? yes
(question 5, 6, 7)*

6. If applicant is a lessee, is a copy of the lease attached? yes

Does the lease have sufficient time to run to cover a future productive period? Apparently

*question numbers are those of MF-103

Docket No DMA 1504-X

Question 4 Probability of discovery.

A report on the (Silver Mountain area) Aurum District, White Pine County, Nevada made ~~by~~ by Geological Survey in 1942 refers to the Pioche Kansas property in part as follows:

"The mineralization has been along small faults in the limestone and some of the limestone has been metamorphosed by a syenitic porphyry dyke. Perhaps 5 to 10 tons of 2% to 5% ore are on the dumps in each of five prospects, none of which have been developed to depths of more than 6 to 8 feet. The main adit passes 175 feet vertically beneath one of the surface mineralized faults and there has been no mineralization in the limestone cut by this adit, indicating that the faults and their mineralized zones are probably not very deep in this section." Referring to the Grand Deposit mine, lying north of the Pioche Kansas "Although the main ore body there is fairly large, the others are small and irregular;" and "no additional work is recommended for the Geological Survey or the Bureau of Mines in this district."

From this report it appears that the chances of discovering an ore body of any considerable tonnage are poor.

7. Are subordination agreements necessary? yes

a) MF-201? _____

b) MF-202 ✓

8. From the data presented, does the proposed project appear feasible from the point of view of:

a) Available manpower yes

b) Equipment and supplies yes
(Question 14 plus general knowledge of availability)*

c) Accessibility (question 12)* yes

d) Water (question 13)* yes

e) Power (question 13)* not applicable

Is a field check needed on any of these points? No

9. Does the experience of the applicant appear to be adequate to assure that he can properly conduct the proposed project? (question 4)* yes

Is a field check needed on this point? No

10. Exhibit A. (questions 21 and 22)*

a) Is the project adequately described? No

If not, are there sufficient data given so that you can describe the project? Very generally If so, attach a draft.

b) Is there an adequate map or sketch of the proposed work? No

c) Is the proposed work "exploration" under the definition of Section 8, MO-5? yes

If not, what part of it is? —

Exhibits Docket No DMA 1504-X

Exhibit A

1) Applicant proposes "about 1100 feet of drifting, raising and sinking --- from the lower adit level upward to the surface. ---- rehabilitation of the middle adit and extension of it to the ore zone." The proportion of the 1100 feet to be composed of drifting, raising, sinking is not indicated, nor are the rates per foot for each type of work.

2) Summary of cost estimates

Labor - contract mining	$13,200
Engineering + supervision @ $300.00 per month	6,000
Repairs and maintenance	1,500
Construction of bins etc -	3,000
Purchase of new equipment	4,600
Equipment rental + dwelling rental	1,300
Rental value of present equipment	600
Materials and supplies	9,800
Total	$40,000

Production

Exhibits B, C, D, + E

Only given as in above summary

Is this part a worthwhile exploration project? —

d) Are the cost estimates detailed? no

Can they be summarized, as on page 2 of Procedural Instruction 5-A, from the available data? yes If so, attach a draft.

e) Are the cost estimates reasonable? Data insufficient to say

f) Should more information be requested from applicant?

g) Is a field examination necessary to complete Exhibit A? Yes

11. Exhibit B (question 23-d)*

a) Is it applicable? yes

b) If so, are sufficient data furnished? no If so, attach a draft.

c) Is a field check needed? Yes

12. Exhibit C (question 23-e, f and g)*

a) Is it applicable? yes

b) Sufficient data? no If so, attach a draft.

c) Are rents and charges reasonable? Data insufficient to say

d) Is a field check needed? Yes

13. Exhibit D (question 23-a, b)*

a) Are there sufficient data? no

b) Is the schedule adequate for the work proposed? Data insufficient to say

c) Is the schedule excessive for the work proposed? " " " "

d) Are the proposed wages and salaries reasonable? Salary OK. wages not identified

e) Is a field check needed? Yes

14. Exhibit E (question 23-c)*

a) Is it applicable? Yes

b) Sufficient data? No

c) Reasonable? Insufficient data

d) Field check needed? Yes

15. In your judgment, can the proposed work be done in the proposed time? Yes

(All exploration must be completed within two years)

16. If field examination is not needed, attach your recommendation.

17. If field examination is needed, do you have any special instructions for the field team not indicated by your answers to the foregoing question? Field team should examine property and, if prospect is encouraging, should confer with applicant to arrive at best exploration plan and prepare detailed exhibits for contract. If part of the work is to be done under contract, get firm bid.

Reviewed by: [illegible]

[illegible]

[illegible]

Date 7/9/51

97692

FILE COPY
SURNAME:

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

June 20, 1951

Mr. Donald T. Miller, President
409 Ness Building
Salt Lake City 1, Utah

Subject: DMA-1504X
Re: Exploration Loan -
Kansas Copper Mine

My dear Mr. Miller:

Receipt is acknowledged of your application and attachments of May 31, 1951 for an exploration loan under the Defense Production Act of 1950.

The application was assigned Docket Number DMA-1504X and referred to Mr. J. B. Gowen, Chief, Copper Branch on June 7, 1951.

In any future correspondence relating to your application, kindly refer to DMA-1504X.

Sincerely yours,

LANDON F. STROBEL

Landon F. Strobel
Executive Secretary

L. F. Strobel:jc
cc: Strobel
File
Gowen
Lyon

Form MF-103
(April 1951)

U. S. DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS ADMINISTRATION

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

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

DO NOT FILL IN THIS BLOCK

Docket No. DMA 1504 X

Date received 6-1-51

Participation

NATIONAL COPPERMINES, INC.
409 Ness Building
Salt Lake City 1, Utah

Name and address of applicant

Date May 31, 1951

FILL IN THIS BLOCK

Date of application May 31, 1951

Estimated cost $40,000.00

Mineral or metal Copper Ore

Percentage of Government participation 50%

Location of mine Near McGill, Nevada

Date of filing MF-100

DMA Docket Number, if available 1504 X

INSTRUCTIONS

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

THE APPLICANT

*1. Is applicant an individual, partnership, or corporation? Corporation

*2. If a partnership, state names and addresses of partners. Not Applicable

*3. If a corporation, state names and addresses of officers, directors, and five largest stockholders. Attached

*4. Describe the mining and general business experience of (*a*) the applicant, and (*b*) the person or persons who will manage the project. (a) New Corporation (b) Attached

*5. Are you the owner or the lessee of the property? Lessee

6. If owner, state what claims, liens, or encumbrances, if any, are against the property. None

7. If lessee, attach a copy of the lease and state if it is in good standing. Attached

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

8. Furnish current financial statement, showing assets and liabilities, and a profit and loss statement New Corporation

9. How much money is applicant prepared to invest in proposed project? Is it sufficient to pay your part of the cost of the project as detailed in question 23 of this application form, in accordance with the regulations on Government participation (Section 9 of Mineral Order 5)? $20,000.00 cash, equipment & labor.

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

16—64067-1

THE PROPERTY

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

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

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

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

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

*13. State source and quantity of water available for operations and its sufficiency at all seasons. **Attached**
State amount of power to be used, rate per hour or other cost, and source. **Not Applicable**

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

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

*16. History:

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

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

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

*17. Production:

(*a*) If mine is in production, furnish the following information: **Not Applicable**

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

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

(*a*) Describe the ore or mineral deposits briefly.

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

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

19. State any conditions or circumstances regarding the property not sufficiently brought out by the foregoing questions. **None**

THE EXPLORATION

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

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

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

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

THE REQUIREMENTS AND COSTS **Attached**

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

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

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

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

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

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

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

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

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

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

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

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.

National Coppermines, Inc.
(Name of company)

By Paul E. Lyon Jr.
(Signature of authorized official)

May 31, 1951
(Date)

Vice President & 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.

*Same as footnote on page 1.

NATIONAL COPPERMINES, INC.
409 Ness Building
Salt Lake City 1, Utah

Supplemental information.

3-

Officers of corporation:

President, Donald T. Miller, McGill, Nevada.
Vice President
and Manager, Paul C. Lyon Jr, 409 Ness Bldg. Salt Lake City,1, Utah.
Secretary-Treasurer, Edward J. Reilly, 409 Ness Bldg. Salt Lake City, 1, Utah.

Directors of corporation:

M.L.Mafen, 15 South 3rd East, Salt Lake City,2, Utah.
K.L.Lueck, 3339 So. Redwood Road, Salt Lake City,19, Utah.
Paul C. Lyon jr. 409 Ness Bldg. Salt Lake City,1, Utah.
Donald T. Miller, McGill, Nevada.
Edward J. Reilly, 409 Ness Bldg. Salt Lake City,1, Utah.

Five Largest Stockholders:

M.L.Mafen, 15 So. 3rd East, Salt Lake City,2, Utah.
K.L.Lueck, 3339 So. Redwood Road, Salt Lake City,19, Utah.
Barney Meisle, P.O.Box, San Francisco, California.
Edward J. Reilly, 409 Ness Bldg. Salt Lake City,1, Utah.
Samuel J. Reilly, P.O.Box, San Francisco, California.

4-a-

Applicant is a new corporation.

4-b-

Donald T. Miller, Mine Supt. is an experienced mining operator, and a successful leaser.
Paul C. Lyon jr. Engineer and Manager, is a competent mining engineer with years of experience in operating mines. He is also a metallurgist, and a member of the AIMME. He is well equipped as a manager also, having done this too.

8-

Applicant is a new corporation and has not transacted any business as yet, except to obtain a lease and option and arrange for purchasing some equipment. It intends to secure approximately $20,000.00 by subscription of its stock, in the very near future. This it considers it can do without difficulty.

NATIONAL COPPERMINES, INC.
409 Ness Building
Salt Lake City 1, Utah

10.(a). KANSAS patented lode mining claim, Survey No. 4567, situated in Township 20 N, Range 66 E, Mount. Diablo Base & Meridian. Also UTAH No. 1 unpatented lode mining claim, adjoining the Kansas claim on its Northwest sideline.

(b) Proposed exploration is to be done in the area bounded as follows: Beginning at a point on the NW sideline of the Kansas claim (the SE sideline of Utah No. 1) 350 feet SW from the North corner of the Kansas claim; thence 400 feet South, thence 400 feet West, thence 400 feet North, thence 400 feet East to place of beginning.

12. The mine is situated in Spring Valley, about 21 miles NE of McGill, Nevada via the Kalamazoo Pass road which is open during the summer months. The usual all-year route to the mine is via Schellbourne Pass; the road is graded and maintained. The mine is 28 miles from Schellbourne Station on U.S. 50 and it is 33 miles from Ray Spur on the Nevada Northern Railroad.

13. Water is piped to within a few hundred yards from Muncy Creek, about a mile south of the mine. Adequate water is available at all seasons of the year.

14. Existing facilities include a small wooden bin at the upper adit level, a stoper, jackhammer, forge, receiver, rail & pipe and a single-stage gasoline compressor. Adequate housing is available at low rental at the Grand Deposit Camp.

15. The better grade ores may be shipped directly to the smelter at McGill, Nevada or to Garfield, Utah. There is a considerable indicated tonnage of lower grade ore that should be milled, althpugh much of it has been shipped directly in the past. It is expected that the Company will build a 50-ton flotation mill to treat the ore as soon as sufficient tonnage has been proven.

16.(a). The property has been worked by leasers only, since the lessor acquired it in 1937. Most of the ore shipments were made by one lessee who made a substantial profit under the Premium Price Plan. The leasers were not interested in exploration, but only in "gouging" ore, much of which outcropped; all ore mined was very near to the surface, at and above the upper-tunnel level. The middle and lower tunnels (adits) were driven long ago, and before any ore was shipped from the property. We have some smelter sheets of shipments made by leasers in 1944-1947 and in 1950; they total 5809.66 dry tons containing a little gold, 7934.94 oz. Silver, and 507,527 pounds of Copper. or an average of 1.366 oz. silver and 4.37% copper per ton. There were other shipments, but we have no settlement sheets on them. Most of the ore was shipped to McGill, Nevada.

NATIONAL COPPERMINES, INC.
409 Ness Building
Salt Lake City 1, Utah

16.(b). The Grand Deposit Mine, about a mile northward, has produced about 15,000,000 pounds of copper, lead and zinc and 100,000 ounces of silver. The Piermont Mine, about nine miles to the South, produced a large tonnage of ore, principally silver ore, but we have no record of the actual value or tonnage. Other nearby mines have produced considerable ore, also.

18.(a). The ore, except for that mined very near to the surface, consists principally of chalcopyrite in stringers and disseminated in a gangue of porphyry, garnet, magnetite, etc. It appears to be a contact-metamorphic deposit. The seams of ore have averaged about ten feet thick. The principal geologic features are andesite flows, limestones, magnetite dike, and porphyritic intrusions.

(b). Map of the workings is enclosed.

(c). Ore reserves are difficult to estimate, but from past experience, they should be considerable. Actual ore exposed now is as much as was usually exposed when leasers were shipping ore before. Present ore reserves are mostly indicated; our exploration program is designed to prove them.

20. Exploration will be for copper ore. The copper will occur as chalcopyrite. The ore will probably occur in steeply-dipping seams of irregular shape. The deposit is contact-metamorphic.

21. The proposed work consists of about 1100 feet of drifting, raising and sinking in igneous material in the area described in 10.(b). and from the lower adit level upward to the surface. The first work will be rehabilitation of the middle adit and extension of it to the ore zone. The work can be completed within two years.

22. The geology is complex. The ore deposit is of the contact-metamorphic type, and the ore is associated with a magnetite dike and intrusive porphyritic rock. The ore gives every indication of persisting downward from where it has been mined. The area is well-mineralized. No geologic maps of this deposit are available, and we invite the government engineers to make a thorough study of the geology and to assist us by their recommendations.

23.(a) See next sheet.

NATIONAL COPPERMINES, INC.
409 Ness Building
Salt Lake City 1, Utah

23.(a).	Labor - contract mining	$13,200
(b).	Engineer & Superintendent ($300.00/mo)	6,000
(c).	Repairs & Maintenance	1,500
(d).	Construction of bins, etc	3,000
(e).	Purchase of new equipment	4,800
(f).	Equipment rental & dwelling rental	1,300
(g).	Rental value of present equipment	600
(h).	Materials & Supplies	9,800
		$40,000.

24. It is expected that the money will be spent at the rate of about $2000.00 per month. Because of the nature of the deposit and the complex geology, the actual footage of work done at a given time is difficult to predict; it is expected that the first two months will be used to build a bin and rehabilitate the middle adit and do other preliminary work. Thereafter, work should progress at about 80 feet per month.

We feel confident that the exploration program will be successful and that we will repay any money lent to us by the government out of profits from ore shipments.

WORKING LEASE AGREEMENT OF SURFACE SHOWINGS AND ISOLATED TRACTS OR WORKINGS OF GRAND DEPOSIT MINING COMPANY, 409 NESS BUILDING, SALT LAKE CITY 1, UTAH

****

This agreement, made and entered into at Salt Lake City, Utah this 28th day of May, 1951, by and between Grand Deposit Mining Company, a Nevada Corporation, party of the first part, hereinafter called Lessor, and National Coppermines, Inc., party of the second part, herein called Lessee, WITNESSETH:

That for and in consideration of certain specified royalties to be paid Lessor, and certain covenants, agreements, duties and work to be by Lessee kept and performed, Lessor hereby grants unto said Lessee a working lease and option on that certain block or parcel of mining ground herein described. This lease and option shall remain in force until terminated by mutual consent of both Lessor and Lessee, or by violation of any of the terms of said lease and option by Lessee. The said lease and option shall be designated Kansas Mine Lease and option, and shall embrace all the ground as follows, to wit: Emma Surey No. 4567 and Kansas Survey 4567, both patented lode mining claims, and also Utah No. 1, and Nevada Copper Nos. 8, 9 and 12, unpatented lode mining claims, same being recorded in the office of the County Recorder of White Pine County, Nevada, in book 123.

Lessor agrees not to mine any ore from said block during the time said lease is in good standing, and/or until Lessee has had an opportunity to remove his mined ore and personal property from said block of ground in case of cancellation for cause, provided that Thirty (30) days notice is hereby agreed upon mutually as ample opportunity for said removal of ore and personal property.

Lessee agrees to do his mining in a minerlike manner, having due regard for the safety of others, and to keep all drifts, raises, stopes, crosscuts and winzes open and workable, and to timber whenever necessary, but where backfilling would not be detrimental to future operations, same shall be permissible, but all other waste must be disposed of according to Company practice and good mining practice. In case of any dispute regarding mining methods employed by Lessee, the decision of the Nevada State Mine Inspector shall be final.

Lessee shall have sixty (60) days from date hereof in which to examine the said mining claims. An additional ninety (90) days shall be allowed for preliminary exploration work, including any drilling, etc. After the above periods, a minimum of seventy-five (75) shifts per month must be performed during the next four (4) months, after which time a minimum of one hundred twenty-five (125) shifts per month must be performed so long as the said lease and option shall remain in force. In case of extreme weather conditions and acts of God, the required shifts shall not be required to be worked. Lessee shall be required to furnish evidence of shifts performed, when requested.

Lessor agrees to accept and Lessee agrees to pay to Lessor a royalty of fifteen per cent (15%) of net smelter returns on crude ore shipments and ten percent (10%) on concentrates, as defined below.

By net smelter returns is meant the net amount received from the smelter after deducting hauling and freight to the smelters, assaying and sampling charges, smelter treatment charges and watching charges. Lessor shall also be entitled to royalty on any and all premiums paid by the Government as incentive or exploration, or on any portion thereof that is subject to royalty payment.

All ore shall be shipped in the name of both Lessor and Lessee to the smelter or treatment plant which will pay the most net return. Lessee shall authorize and instruct the smelter to pay the royalty to Lessee according to the above schedule. Lessee may ship by truck to smelters, and railroad freight rates will be allowed.

NATIONAL CO[illegible]ERMINES, INC,
409 Ness Building
Salt Lake City 1, Utah

Lessor assumes no responsibility for any accounts of Lessee to any extent whatever.

Lessee agrees to pay all taxes accruing against any machinery and improvements owned by Lessee on or adjacent to said leased ground. Lessee agrees that any buildings or permanent improvements, including timber, pipe, track, ore bins, chutes, head frames, ladders, and platforms shall revert to Lessor at the termination of this lease without payment for same by Lessor.

Lessor agrees that this lease is not a supervised lease and Lessor shall not be required to cover said lease with Nevada Industrial Commission Insurance. Lessee agrees to cover said lease with compensation insurance taken out in the name of Lessee, and agrees to hold Lessor blameless for any accidents that may happen to employees or other persons.

Lessor does not agree to finance of furnish materials or supplies to Lessee. Any such money, materials or supplies advanced by Lessor to Lessee will be paid for by Lessee.

Lessee agrees to pay a reasonable rental on any equipment belonging to Lessor used by Lessee in connection with this lease, but Lessor does not agree to furnish any equipment to Lessee.

Lessee shall not have the right to assign this lease to any individual, partnership, or corporation without permission of Lessor. Lessee shall have the right to sub-lease any part or all of the said block of ground, but shall in no wise be released from any of the terms or conditions of this lease.

Lessee shall have complete possession and shall operate the said mining property under this lease and option, and all royalties paid to Lessor shall apply toward the purchase price of same; the said purchase price being two hundred fifty thousand dollars ($250,000.00), with a provision that when Lessee has paid to Lessor the sum of two hundred thousand dollars ($200,000.00) in royalties or otherwise, Lessor shall have the right to retain unto itself an undivided ten per cent (10%) interest in the said mining property by issuing a deed to Lessee for an undivided ninety per cent (90%) interest therein, and no further royalties shall be due or become payable under this lease and option. Lessor, however, then will be entitled to receive from Lessee, and Lessee agrees to pay to Lessor the sum of ten per cent (10%) of the net earnings, after taxes, from the said properties in lieu of royalty. Should Lessor decide not to retain the said ten per cent (10%) interest as stated, then Lessee shall be obligated to continue to pay royalty until the full purchase price of two hundred fifty thousand ($250,000.00) has been paid to Lessor, at which time Lessor agrees to execute a deed to Lessee for the full one hundred per cent (100%) interest in the said claims.

Should Lessee fail to comply with any of the terms and conditions of this lease, or default in any way concerning it, and shall continue such failure or default for thirty (30) days after written notice of such failure or default has been mailed by registered mail to Lessee, McGill, Nevada, then this lease and option shall become null and void and shall terminate at 12:00 O'Clock Midnight of that day, and Lessor shall have the right to take possession of said premises at the end of an additional thirty (30) days from date of termination, according to the terms outlined in this lease and option, and all timbering, chutes, ladders, ore bins, platforms, rails, pipe and fittings in place, mine buildings, and ore opened up by Lessee (whether mined or unmined) shall revert to Lessor as liquidated damages, and any and all royalties that have been paid to Lessor to apply on the purchase of said claims shall be forfeited as liquidated damages to Lessor. It is specifically agreed that Lessee shall not remove any of the personal property mentioned in this paragraph after notification of failure of default has been mailed by Lessor, except a provided in this lease and option for the removal of ore by Lessee during the period of thirty (30) days for notification and thirty (30) days thereafter.

NATIONAL COPPERMINES, INC.
409 Ness Building
Salt Lake City 1, Utah

All privileges, compensations, covenants and requirements contained herein shall be binding upon the heirs, administrators, assigns, and/or successors of bothLessor and Lessee.

IN WITNESS WHEREOF, Lessor and Lessee have hereunto affixed their signatures at the time and place first above written.

GRAND DEPOSIT MINING COMPANY
Lessor

Attest:

Paul C. Lyon, Jr.
Secretary

by: Paul C. Lyon
President

NATIONAL COPPERMINES, Inc.

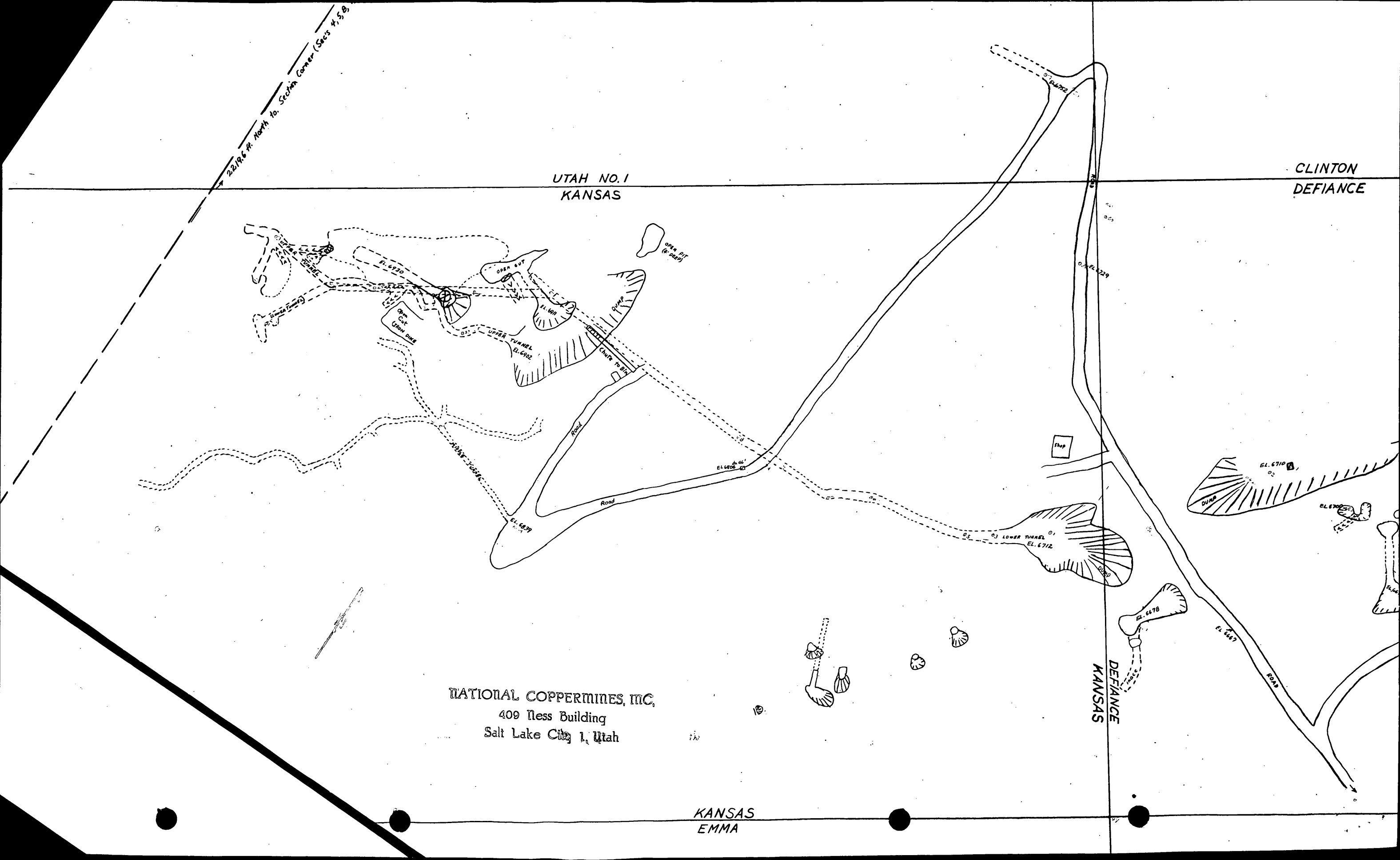
Attest:

Edward J. Reilly
Secretary

by: Barney Meisle
President

Witness to all signatures:

Byron A. Ray



NATIONAL COPPERMINES, INC.
409 Ness Building
Salt Lake City 1, Utah

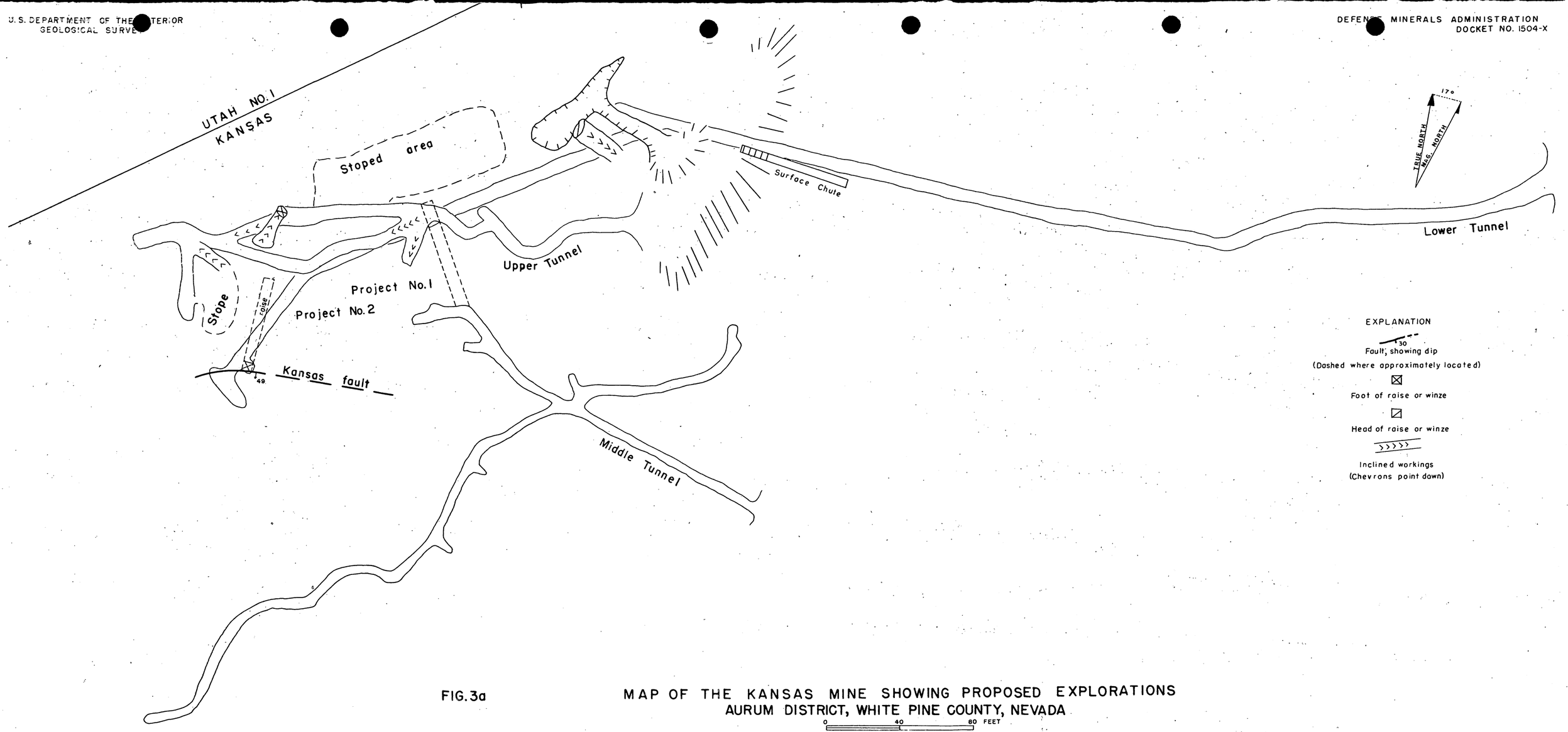


FIG. 3a

MAP OF THE KANSAS MINE SHOWING PROPOSED EXPLORATIONS
AURUM DISTRICT, WHITE PINE COUNTY, NEVADA

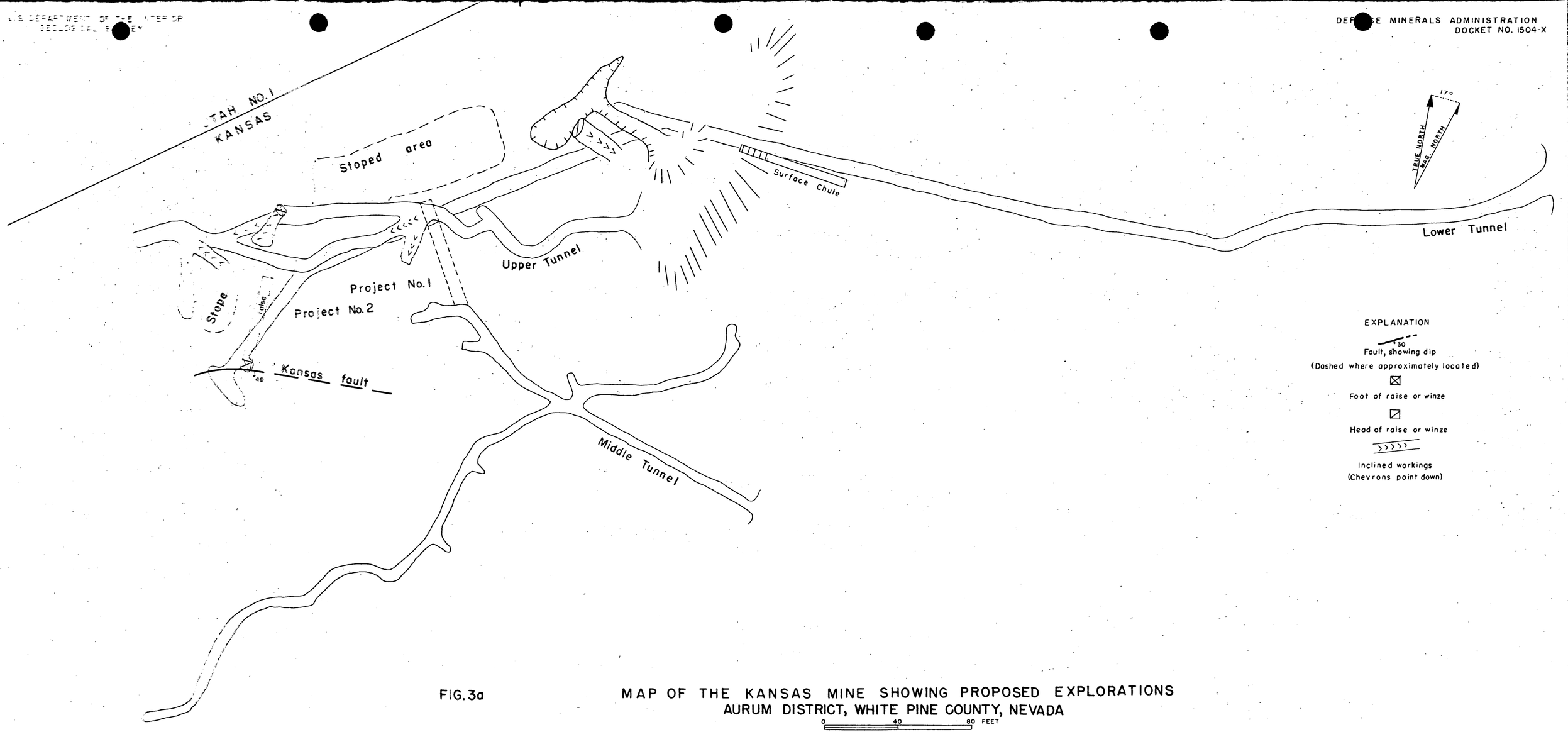


FIG. 3a

MAP OF THE KANSAS MINE SHOWING PROPOSED EXPLORATIONS
AURUM DISTRICT, WHITE PINE COUNTY, NEVADA

0 40 80 FEET
Scale

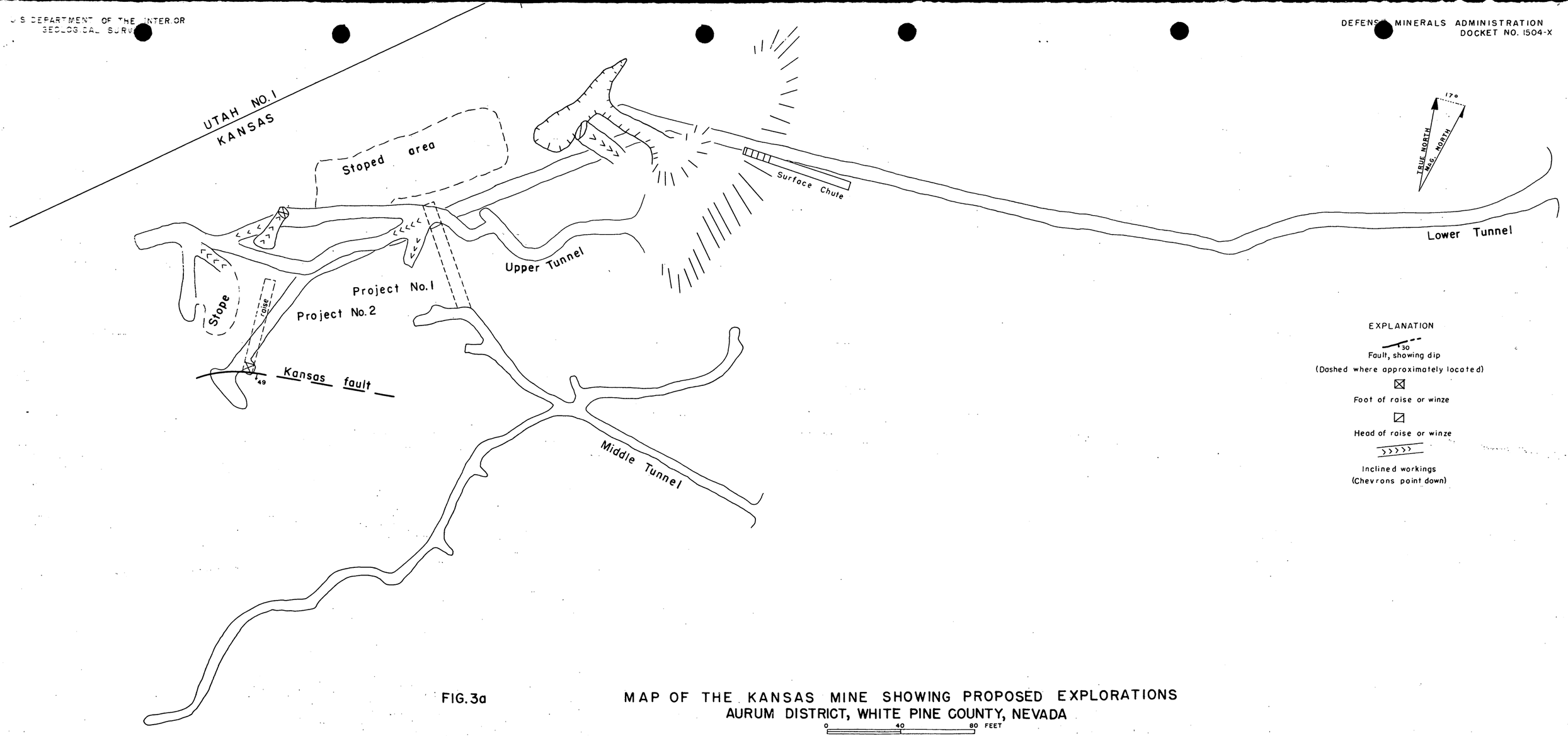


FIG. 3a

MAP OF THE KANSAS MINE SHOWING PROPOSED EXPLORATIONS
AURUM DISTRICT, WHITE PINE COUNTY, NEVADA

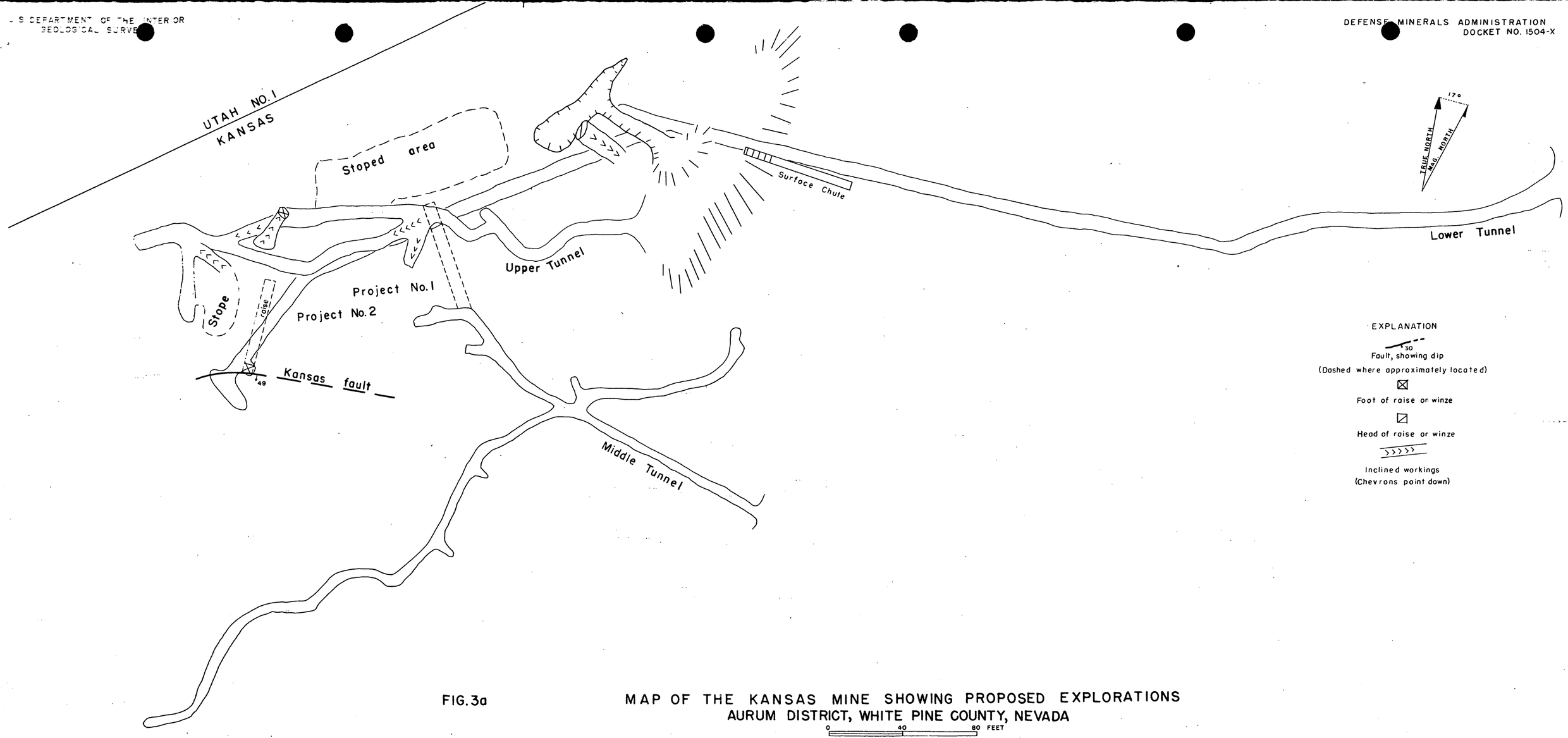


FIG. 3a

MAP OF THE KANSAS MINE SHOWING PROPOSED EXPLORATIONS
AURUM DISTRICT, WHITE PINE COUNTY, NEVADA

0 40 80 FEET
Scale

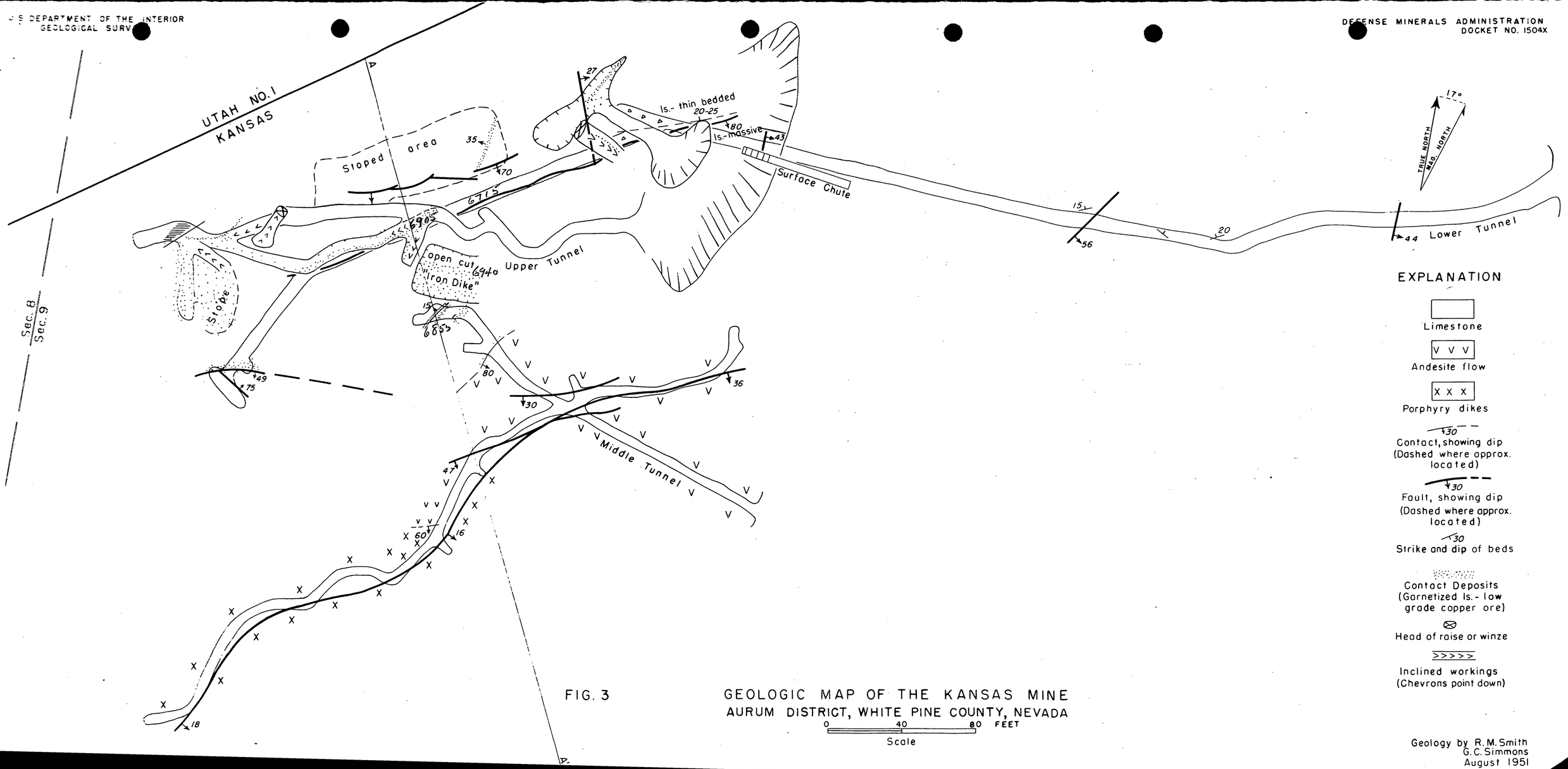


FIG. 3

GEOLOGIC MAP OF THE KANSAS MINE
AURUM DISTRICT, WHITE PINE COUNTY, NEVADA

0 40 80 FEET
Scale

Geology by R.M. Smith
G.C. Simmons
August 1951

Form MF-103
(April 1951)

U. S. DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS ADMINISTRATION

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

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

DO NOT FILL IN THIS BLOCK

Docket No. DMA 15044

Date received 2-1-51

Participation

NATIONAL COPPERMINES, INC.
409 Ness Building
Salt Lake City 1, Utah

Name and address of applicant

Date May 31, 1951

FILL IN THIS BLOCK

Date of application May 31, 1951

Estimated cost $40,000.00

Mineral or metal Copper Ore

Percentage of Government participation 50%

Location of mine Near McGill, Nevada

Date of filing MF-100

DMA Docket Number, if available 15044

INSTRUCTIONS

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

THE APPLICANT

*1. Is applicant an individual, partnership, or corporation? Corporation

*2. If a partnership, state names and addresses of partners. Not Applicable

*3. If a corporation, state names and addresses of officers, directors, and five largest stockholders. Attached

*4. Describe the mining and general business experience of (*a*) the applicant, and (*b*) the person or persons who will manage the project. (a) New Corporation (b) Attached

*5. Are you the owner or the lessee of the property? Lessee

6. If owner, state what claims, liens, or encumbrances, if any, are against the property. None

7. If lessee, attach a copy of the lease and state if it is in good standing. Attached

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

8. Furnish current financial statement, showing assets and liabilities, and a profit and loss statement. New Corporation

9. How much money is applicant prepared to invest in proposed project? Is it sufficient to pay your part of the cost of the project as detailed in question 23 of this application form, in accordance with the regulations on Government participation (Section 9 of Mineral Order 5)? $20,000.00 cash, equipment & labor.

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

16—64067-1

THE PROPERTY

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

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

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

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

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

*13. State source and quantity of water available for operations and its sufficiency at all seasons. **Attached**
State amount of power to be used, rate per hour or other cost, and source. **Not Applicable**

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

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

*16. History:

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

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

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

*17. Production:

(*a*) If mine is in production, furnish the following information: **Not Applicable**

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

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

(*a*) Describe the ore or mineral deposits briefly.

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

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

19. State any conditions or circumstances regarding the property not sufficiently brought out by the foregoing questions. **None**

THE EXPLORATION

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

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

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

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

THE REQUIREMENTS AND COSTS **Attached**

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

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

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

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

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

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

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

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

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

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

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

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.

National Coppermines, Inc.
(Name of company)

By Paul E. Lyon Jr.
(Signature of authorized official)

May 31, 1951
(Date)

Vice President & 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.

*Same as footnote on page 1.

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

NATIONAL COPPERMINES, INC.
409 Ness Building
Salt Lake City 1, Utah

Supplemental information.

3-

Officers of corporation:

President, Donald T. Miller, McGill, Nevada.
Vice President
and Manager, Paul C. Lyon Jr, 409 Ness Bldg. Salt Lake City,1, Utah.
Secretary-Treasurer, Edward J. Reilly, 409 Ness Bldg. Salt Lake City, 1, Utah.

Directors of corporation:

M.L.Hafen,	15 South 3rd East, Salt Lake City,2, Utah.
K.L.Lueck,	3339 So. Redwood Road, Salt Lake City,15, Utah.
Paul C. Lyon jr.	409 Ness Bldg. Salt Lake City,1, Utah.
Donald T. Miller,	McGill, Nevada.
Edward J. Reilly,	409 Ness Bldg. Salt Lake City,1, Utah.

Five Largest Stockholders:

M.L.Hafen,	15 So. 3rd East, Salt Lake City,2, Utah.
K.L.Lueck,	3339 So. Redwood Road, Salt Lake City,15, Utah.
Barney Meisle,	P.O.Box, San Francisco, California.
Edward J. Reilly,	409 Ness Bldg. Salt Lake City,1, Utah.
Samuel J. Reilly,	P.O.Box, San Francisco, California

4-a-

Applicant is a new corporation.

4-b-

Donald T. Miller, Mine Supt. is an experienced mining operator, and a successful lessor.
Paul C. Lyon Jr. Engineer and Manager, is a competent mining engineer with years of experience in operating mines. He is also a metallurgist, and a member of the AIMME. He is well equipped as a manager also, having done this too.

8-

Applicant is a new corporation and has not transacted any business as yet, except to obtain a lease and option and arrange for purchasing some equipment. It intends to secure approximately $20,000.00 by subscription of its stock, in the very near future. This it considers it can do without difficulty.

10.(a). KANSAS patented lode mining claim, Survey No. 4567, situated in Township 20 N, Range 66 E, Mount. Diablo Base & Meridian. Also UTAH No. 1 unpatented lode mining claim, adjoining the Kansas claim on its Northwest sideline.

(b) Proposed exploration is to be done in the area bounded as follows: Beginning at a point on the NW sideline of the Kansas claim (the SE sideline of Utah No. 1) 350 feet SW from the North corner of the Kansas claim; thence 400 feet South, thence 400 feet West, thence 400 feet North, thence 400 feet East to place of beginning.

12. The mine is situated in Spring Valley, about 21 miles NE of McGill, Nevada via the Kalamazoo Pass road which is open during the summer months. The usual all-year route to the mine is via Schellbourne Pass; the road is graded and maintained. The mine is 28 miles from Schellbourne Station on U.S. 50 and it is 33 miles from Ray Spur on the Nevada Northern Railroad.

13. Water is piped to within a few hundred yards from Muncy Creek, about a mile south of the mine. Adequate water is available at all seasons of the year.

14. Existing facilities include a small wooden bin at the upper adit level, a stoper, jackhammer, forge, receiver, rail & pipe and a single-stage gasoline compressor. Adequate housing is available at low rental at the Grand Deposit Camp.

15. The better grade ores may be shipped directly to the smelter at McGill, Nevada or to Garfield, Utah. There is a considerable indicated tonnage of lower grade ore that should be milled, althpugh much of it has been shipped directly in the past. It is expected that the Company will build a 50-ton flotation mill to treat the ore as soon as sufficient tonnage has been proven.

16.(a). The property has been worked by leasers only, since the lessor acquired it in 1937. Most of the ore shipments were made by one lessee who made a substantial profit under the Premium Price Plan. The leasers were not interested in exploration, but only in "gouging" ore, much of which outcropped; all ore mined was very near to the surface, at and above the upper-tunnel level. The middle and lower tunnels (adits) were driven long ago, and before any ore was shipped from the property. We have some smelter sheets of shipments made by leasers in 1944-1947 and in 1950; they total 5809.66 dry tons containing a little gold, 7934.94 oz. Silver, and 507,527 pounds of Copper. or an average of 1.366 oz. silver and 4.37% copper per ton. There were other shipments, but we have no settlement sheets on them. Most of the ore was shipped to McGill, Nevada.

NATIONAL COPPERMINES, INC.
409 Ness Building
Salt Lake City 1, Utah

16.(b). The Grand Deposit Mine, about a mile northward, has produced about 15,000,000 pounds of copper, lead and zinc and 100,000 ounces of silver. The Piermont Mine, about nine miles to the South, produced a large tonnage of ore, principally silver ore, but we have no record of the actual value or tonnage. Other nearby mines have produced considerable ore, also.

18.(a). The ore, except for that mined very near to the surface, consists principally of chalcopyrite in stringers and disseminated in a gangue of porphyry, garnet, magnetite, etc. It appears to be a contact-metamorphic deposit. The seams of ore have averaged about ten feet thick. The principal geologic features are andesite flows, limestones, magnetite dike, and porphyritic intrusions.

(b). Map of the workings is enclosed.

(c). Ore reserves are difficult to estimate, but from past experience, they should be considerable. Actual ore exposed now is as much as was usually exposed when leasers were shipping ore before. Present ore reserves are mostly indicated; our exploration program is designed to prove them.

20. Exploration will be for copper ore. The copper will occur as chalcopyrite. The ore will probably occur in steeply-dipping seams of irregular shape. The deposit is contact-metamorphic.

21. The proposed work consists of about 1100 feet of drifting, raising and sinking in igneous material in the area described in 10.(b). and from the lower adit level upward to the surface. The first work will be rehabilitation of the middle adit and extension of it to the ore zone. The work can be completed within two years.

22. The geology is complex. The ore deposit is of the contact-metamorphic type, and the ore is associated with a magnetite dike and intrusive porphyritic rock. The ore gives every indication of persisting downward from where it has been mined. The area is well-mineralized. No geologic maps of this deposit are available, and we invite the government engineers to make a thorough study of the geology and to assist us by their recommendations.

23.(a) See next sheet.

NATIONAL COPPERMINES, INC.
409 Ness Building
Salt Lake City 1, Utah

23.(a).	Labor - contract mining	$13,200
(b).	Engineer & Superintendent ($300.00/mo)	6,000
(c).	Repairs & Maintenance	1,500
(d).	Construction of bins, etc	3,000
(e).	Purchase of new equipment	4,600
(f).	Equipment rental & dwelling rental	1,300
(g).	Rental value of present equipment	600
(h).	Materials & Supplies	9,800
		$40,000.

24. It is expected that the money will be spent at the rate of about $2000.00 per month. Because of the nature of the deposit and the complex geology, the actual footage of work done at a given time is difficult to predict; it is expected that the first two months will be used to build a bin and rehabilitate the middle adit and do other preliminary work. Thereafter, work should progress at about 80 feet per month.

We feel confident that the exploration program will be successful and that we will repay any money lent to us by the government out of profits from ore shipments.

NATIONAL COPPERMINES, INC.
409 Ness Building
Salt Lake City 1, Utah

WORKING LEASE AGREEMENT OF SURFACE SHOWINGS AND ISOLATED TRACTS OR WORKINGS OF GRAND DEPOSIT MINING COMPANY, 409 NESS BUILDING, SALT LAKE CITY 1, UTAH

****

This agreement, made and entered into at Salt Lake City, Utah this 28th day of May, 1951, by and between Grand Deposit Mining Company, a Nevada Corporation, party of the first part, hereinafter called Lessor, and National Coppermines, Inc., party of the second part, herein called Lessee, WITNESSETH:

That for and in consideration of certain specified royalties to be paid Lessor, and certain covenants, agreements, duties and work to be by Lessee kept and performed, Lessor hereby grants unto said Lessee a working lease and option on that certain block or parcel of mining ground herein described. This lease and option shall remain in force until terminated by mutual consent of both Lessor and Lessee, or by violation of any of the terms of said lease and option by Lessee. The said lease and option shall be designated Kansas Mine Lease and option, and shall embrace all the ground as follows, to wit: Emma Surey No. 4567 and Kansas Survey 4567, both patented lode mining claims, and also Utah No. 1, and Nevada Copper Nos. 8, 9 and 12, unpatented lode mining claims, same being recorded in the office of the County Recorder of White Pine County, Nevada, in book 123.

Lessor agrees not to mine any ore from said block during the time said lease is in good standing, and/or until Lessee has had an opportunity to remove his mined ore and personal property from said block of ground in case of cancellation for cause, provided that Thirty (30) days notice is hereby agreed upon mutually as ample opportunity for said removal of ore and personal property.

Lessee agrees to do his mining in a minerlike manner, having due regard for the safety of others, and to keep all drifts, raises, stopes, crosscuts and winzes open and workable, and to timber whenever necessary, but where backfilling would not be detrimental to future operations, same shall be permissible, but all other waste must be disposed of according to Company practice and good mining practice. In case of any dispute regarding mining methods employed by Lessee, the decision of the Nevada State Mine Inspector shall be final.

Lessee shall have sixty (60) days from date hereof in which to examine the said mining claims. An additional ninety (90) days shall be allowed for preliminary exploration work, including any drilling, etc. After the above periods, a minimum of seventy-five (75) shifts per month must be performed during the next four (4) months, after which time a minimum of one hundred twenty-five (125) shifts per month must be performed so long as the said lease and option shall remain in force. In case of extreme weather conditions and acts of God, the required shifts shall not be required to be worked. Lessee shall be required to furnish evidence of shifts performed, when requested.

Lessor agrees to accept and Lessee agrees to pay to Lessor a royalty of fifteen per cent (15%) of net smelter returns on crude ore shipments and ten percent (10%) on concentrates, as defined below.

By net smelter returns is meant the net amount received from the smelter after deducting hauling and freight to the smelters, assaying and sampling charges, smelter treatment charges and watching charges. Lessor shall also be entitled to royalty on any and all premiums paid by the Government as incentive or exploration, or on any portion thereof that is subject to royalty payment.

All ore shall be shipped in the name of both Lessor and Lessee to the smelter or treatment plant which will pay the most net return. Lessee shall authorize and instruct the smelter to pay the royalty to Lessee according to the above schedule. Lessee may ship by truck to smelters, and railroad freight rates will be allowed.

NATIONAL COPPERMINES, INC.
309 Ness Building
Salt Lake City 1, Utah

Lessor assumes no responsibility for any accounts of Lessee to any extent whatever.

Lessee agrees to pay all taxes accruing against any machinery and improvements owned by Lessee on or adjacent to said leased ground. Lessee agrees that any buildings or permanent improvements, including timber, pipe, track, ore bins, chutes, head frames, ladders, and platforms shall revert to Lessor at the termination of this lease without payment for same by Lessor.

Lessor agrees that this lease is not a supervised lease and Lessor shall not be required to cover said lease with Nevada Industrial Commission Insurance. Lessee agrees to cover said lease with compensation insurance taken out in the name of Lessee, and agrees to hold Lessor blameless for any accidents that may happen to employees or other persons.

Lessor does not agree to finance of furnish materials or supplies to Lessee. Any such money, materials or supplies advanced by Lessor to Lessee will be paid for by Lessee.

Lessee agrees to pay a reasonable rental on any equipment belonging to Lessor used by Lessee in connection with this lease, but Lessor does not agree to furnish any equipment to Lessee.

Lessee shall not have the right to assign this lease to any individual, partnership, or corporation without permission of Lessor. Lessee shall have the right to sub-lease any part or all of the said block of ground, but shall in no wise be released from any of the terms or conditions of this lease.

Lessee shall have complete possession and shall operate the said mining property under this lease and option, and all royalties paid to Lessor shall apply toward the purchase price of same; the said purchase price being two hundred fifty thousand dollars ($250,000.00), with a provision that when Lessee has paid to Lessor the sum of two hundred thousand dollars ($200,000.00) in royalties or otherwise, Lessor shall have the right to retain unto itself an undivided ten per cent (10%) interest in the said mining property by issuing a deed to Lessee for an undivided ninety per cent (90%) interest therein, and no furthur royalties shall be due or become payable under this lease and option. Lessor, however, then will be entitled to receive from Lessee, and Lessee agrees to pay to Lessor the sum of ten per cent (10%) of the net earnings, after taxes, from the said properties in lieu of royalty. Should Lessor decide not to retain the said ten per cent (10%) interest as stated, then Lessee shall be obligated to continue to pay royalty until the full purchase price of two hundred fifty thousand ($250,000.00) has been paid to Lessor, at which time Lessor agrees to execute a deed to Lessee for the full one hundred per cent (100%) interest in the said claims.

Should Lessee fail to comply with any of the terms and conditions of this lease, or default in any way concerning it, and shall continue such failure or default for thirty (30) days after written notice of such failure or default has been mailed by registered mail to Lessee, McGill, Nevada, then this lease and option shall become null and void and shall terminate at 12:00 O'Clock Midnight of that day, and Lessor shall have the right to take possession of said premises at the end of an additional thirty (30) days from date of termination, according to the terms outlined in this lease and option, and all timbering, chutes, ladders, ore bins, platforms, rails, pipe and fittings in place, mine buildings, and ore opened up by Lessee (whether mined or unmined) shall revert to Lessor as liquidated damages, and any and all royalties that have been paid to Lessor to apply on the purchase of said claims shall be forfeited as liquidated damages to Lessor. It is specifically agreed that Lessee shall not remove any of the personal property mentioned in this paragraph after notification of failure of default has been mailed by Lessor, except a provided in this lease and option for the removal of ore by Lessee during the period of thirty (30) days for notification and thirty (30) days thereafter.

NATIONAL COPPERMINES, INC.
409 Ness Building
Salt Lake City 1, Utah

All privileges, compensations, covenants and requirements contained herein shall be binding upon the heirs, administrators, assigns, and/or successors of both Lessor and Lessee.

IN WITNESS WHEREOF, Lessor and Lessee have hereunto affixed their signatures at the time and place first above written.

GRAND DEPOSIT MINING COMPANY
Lessor

Attest:

Paul C. Lyon, Jr.
Secretary

by: Paul C. Lyon
President

NATIONAL COPPERMINES, Inc.

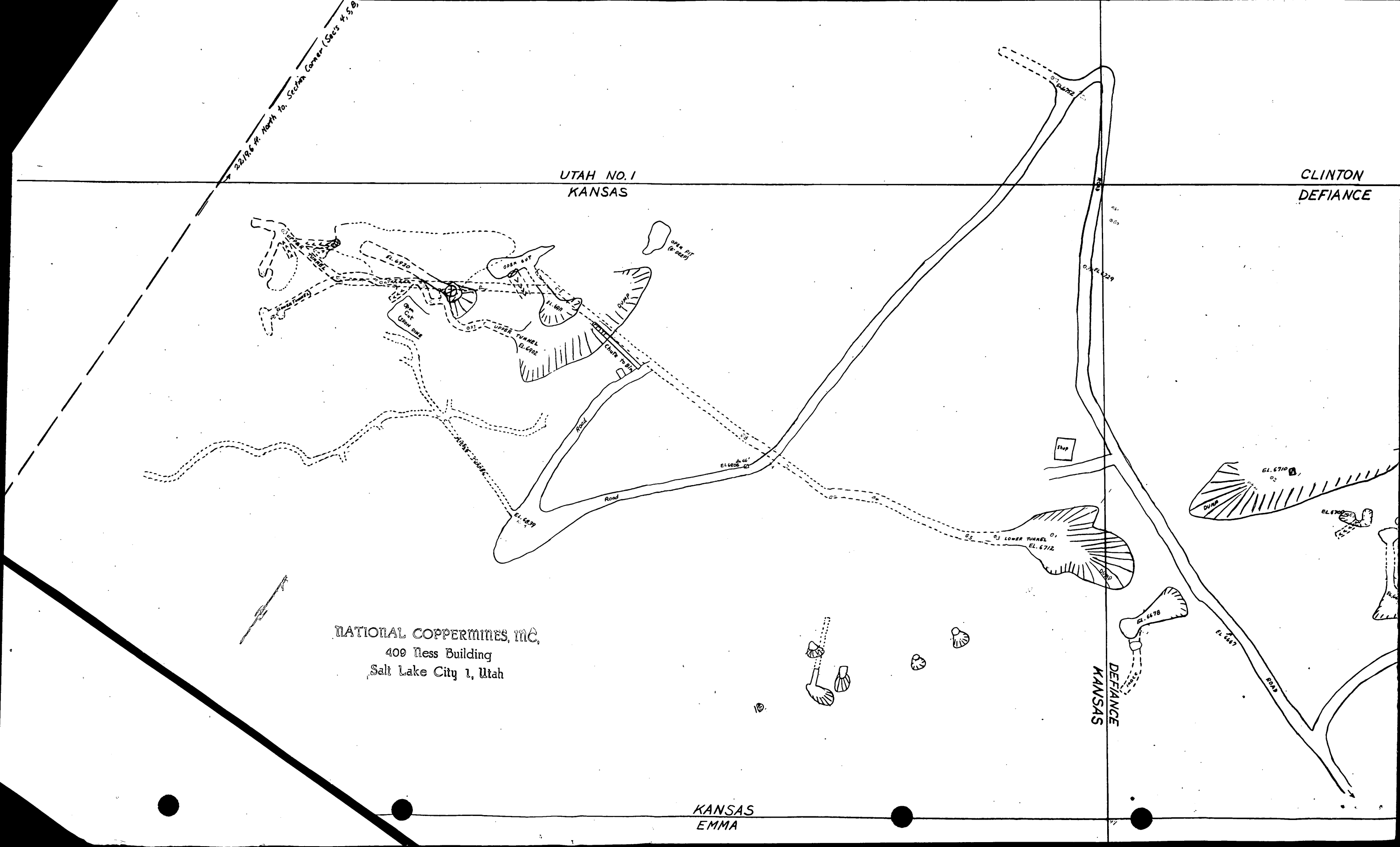
Attest:

Edward J. Reilly
Secretary

by: Barney Meisle
President

Witness to all signatures:

Byron A. Ray


2219.6 ft. North to Section Corner (Secs 4,5,8)
UTAH NO. 1
KANSAS
CLINTON
DEFIANCE
UPPER TUNNEL
EL. 6930
OPEN CUT
EL. 6811
OPEN PIT (8' DEEP)
DUMP
Open Cut Iron Dike
UPPER TUNNEL EL. 6902
Chute to Bin
Road
EL. 6808
EL. 6839
LOWER TUNNEL EL. 6712
Shop
EL. 6710
EL. 6678
EL. 6667
ROAD
NATIONAL COPPERMINES, INC.
409 Ness Building
Salt Lake City 1, Utah
DEFIANCE
KANSAS
KANSAS
EMMA

Form MF-103
(April 1951)

U. DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS ADMINISTRATION

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

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

DO NOT FILL IN THIS BLOCK

Docket No. DMA 1504X

Date received 6-1-51

Participation

NATIONAL COPPERMINES, INC.
409 Ness Building
Salt Lake City 1, Utah

Name and address of applicant

Date May 31, 1951

FILL IN THIS BLOCK

Date of application May 31, 1951

Estimated cost $40,000.00

Mineral or metal Copper Ore

Percentage of Government participation 50%

Location of mine Near McGill, Nevada

Date of filing MF-100

DMA Docket Number, if available 1504X

INSTRUCTIONS

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

THE APPLICANT

*1. Is applicant an individual, partnership, or corporation? Corporation

*2. If a partnership, state names and addresses of partners. Not Applicable

*3. If a corporation, state names and addresses of officers, directors, and five largest stockholders. Attached

*4. Describe the mining and general business experience of (*a*) the applicant, and (*b*) the person or persons who will manage the project. (a) New Corporation (b) Attached

*5. Are you the owner or the lessee of the property? Lessee

6. If owner, state what claims, liens, or encumbrances, if any, are against the property. None

7. If lessee, attach a copy of the lease and state if it is in good standing. Attached

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

8. Furnish current financial statement, showing assets and liabilities, and a profit and loss statement. New Corporation

9. How much money is applicant prepared to invest in proposed project? Is it sufficient to pay your part of the cost of the project as detailed in question 23 of this application form, in accordance with the regulations on Government participation (Section 9 of Mineral Order 5)? $20,000.00 cash, equipment & labor.

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

16—64067-1

THE PROPERTY

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

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

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

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

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

*13. State source and quantity of water available for operations and its sufficiency at all seasons. Attached
State amount of power to be used, rate per hour or other cost, and source. Not Applicable

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

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

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

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

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

*17. Production:

(*a*) If mine is in production, furnish the following information: Not Applicable

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

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

(*a*) Describe the ore or mineral deposits briefly.

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

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

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THE EXPLORATION

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

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

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

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

THE REQUIREMENTS AND COSTS Attached

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

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

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

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

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

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

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

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

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.

National Coppermines, Inc.
(Name of company)

By Paul E. Lyon Jr.
(Signature of authorized official)

May 31, 1951
(Date)

Vice President & 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.

*Same as footnote on page 1.

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

NATIONAL COPPERMINES, INC.
409 Ness Building
Salt Lake City 1, Utah

Supplemental information.

3-

Officers of corporation:

President, Donald T. Miller, McGill, Nevada.
Vice President and Manager, Paul C. Lyon Jr, 409 Ness Bldg. Salt Lake City,1, Utah.
Secretary-Treasurer, Edward J. Reilly, 409 Ness Bldg. Salt Lake City, 1, Utah.

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Applicant is a new corporation.

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Donald T. Miller, Mine Supt. is an experienced mining operator, and a successful leaser.
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Applicant is a new corporation and has not transacted any business as yet, except to obtain a lease and option and arrange for purchasing some equipment. It intends to secure approximately $20,000.00 by subscription of its stock, in the very near future. This it considers it can do without difficulty.

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10.(a). KANSAS patented lode mining claim, Survey No. 4567, situated in Township 20 N, Range 66 E, Mount. Diablo Base & Meridian. Also UTAH No. 1 unpatented lode mining claim, adjoining the Kansas claim on its Northwest sideline.

(b) Proposed exploration is to be done in the area bounded as follows: Beginning at a point on the NW sideline of the Kansas claim (the SE sideline of Utah No. 1) 350 feet SW from the North corner of the Kansas claim; thence 400 feet South, thence 400 feet West, thence 400 feet North, thence 400 feet East to place of beginning.

12. The mine is situated in Spring Valley, about 21 miles NE of McGill, Nevada via the Kalamazoo Pass road which is open during the summer months. The usual all-year route to the mine is via Schellbourne Pass; the road is graded and maintained. The mine is 28 miles from Schellbourne Station on U.S. 50 and it is 33 miles from Ray Spur on the Nevada Northern Railroad.

13. Water is piped to within a few hundred yards from Muncy Creek, about a mile south of the mine. Adequate water is available at all seasons of the year.

14. Existing facilities include a small wooden bin at the upper adit level, a stoper, jackhammer, forge, receiver, rail & pipe and a single-stage gasoline compressor. Adequate housing is available at low rental at the Grand Deposit Camp.

15. The better grade ores may be shipped directly to the smelter at McGill, Nevada or to Garfield, Utah. There is a considerable indicated tonnage of lower grade ore that should be milled, althpugh much of it has been shipped directly in the past. It is expected that the Company will build a 50-ton flotation mill to treat the ore as soon as sufficient tonnage has been proven.

16.(a). The property has been worked by leasers only, since the lessor acquired it in 1937. Most of the ore shipments were made by one leasee who made a substantial profit under the Premium Price Plan. The leasers were not interested in exploration, but only in "gouging" ore, much of which outcropped; all ore mined was very near to the surface, at and above the upper-tunnel level. The middle and lower tunnels (adits) were driven long ago, and before any ore was shipped from the property. We have some smelter sheets of shipments made by leasers in 1944-1947 and in 1950; they total 5809.66 dry tons containing a little gold, 7934.94 oz. Silver, and 507,527 pounds of Copper. or and average of 1.366 oz. silver and 4.37% copper per ton. There were other shipments, but we have no settlement sheets on them. Most of the ore was shipped to McGill, Nevada.

NATIONAL COPPERMINES, INC.
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16.(b). The Grand Deposit Mine, about a mile northward, has produced about 15,000,000 pounds of copper, lead and zinc and 100,000 ounces of silver. The Piermont Mine, about nine miles to the South, produced a large tonnage of ore, principally silver ore, but we have no record of the actual value or tonnage. Other nearby mines have produced considerable ore, also.

18.(a). The ore, except for that mined very near to the surface, consists principally of chalcopyrite in stringers and disseminated in a gangue of porphyry, garnet, magnetite, etc. It appears to be a contact-metamorphic deposit. The seams of ore have averaged about ten feet thick. The principal geologic features are andesite flows, limestones, magnetite dike, and porphyritic intrusions.

(b). Map of the workings is enclosed.

(c). Ore reserves are difficult to estimate, but from past experience, they should be considerable. Actual ore exposed now is as much as was usually exposed when leasers were shipping ore before. Present ore reserves are mostly indicated; our exploration program is designed to prove them.

20. Exploration will be for copper ore. The copper will occur as chalcopyrite. The ore will probably occur in steeply-dipping seams of irregular shape. The deposit is contact-metamorphic.

21. The proposed work consists of about 1100 feet of drifting, raising and sinking in igneous material in the area described in 10.(b). and from the lower adit level upward to the surface. The first work will be rehabilitation of the middle adit and extension of it to the ore zone. The work can be completed within two years.

22. The geology is complex. The ore deposit is of the contact-metamorphic type, and the ore is associated with a magnetite dike and intrusive porphyritic rock. The ore gives every indication of persisting downward from where it has been mined. The area is well-mineralized. No geologic maps of this deposit are available, and we invite the government engineers to make a thorough study of the geology and to assist us by their recommendations.

23.(a) See next sheet.

NATIONAL COPPERMINES, INC
409 Ness Building
Salt Lake City 1, Utah

23.(a).	Labor - contract mining	$13,200
(b).	Engineer & Superintendent ($300.00/mo)	6,000
(c).	Repairs & Maintenance	1,500
(d).	Construction of bins, etc	3,000
(e).	Purchase of new equipment	4,600
(f).	Equipment rental & dwelling rental	1,300
(g).	Rental value of present equipment	600
(h).	Materials & Supplies	9,800
		$40,000.

24. It is expected that the money will be spent at the rate of about $2000.00 per month. Because of the nature of the deposit and the complex geology, the actual footage of work done at a given time is difficult to predict; it is expected that the first two months will be used to build a bin and rehabilitate the middle adit and do other preliminary work. Thereafter, work shpuld progress at about 80 feet per month.

We feel confident that the exploration program will be successful and that we will repay any money lent to us by the government out of profits from ore shipments.

NATIONAL COPPERMINES, INC.
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Salt Lake City 1, Utah

WORKING LEASE AGREEMENT OF SURFACE SHOWINGS AND ISOLATED TRACTS OR WORKINGS OF GRAND DEPOSIT MINING COMPANY, 409 NESS BUIIDING, SALT LAKE CITY 1, UTAH

****

This agreement, made and entered into at Salt Lake City, Utah this 28th day of May, 1951, by and between Grand Deposit Mining Company, a Nevada Corporation, party of the first part, hereinafter called Lessor, and National Coppermines, Inc., party of the second part, herein called Lessee, WITNESSETH:

That for and in consideration of certain specified royalties to be paid Lessor, and certain covenants, agreements, duties and work to be by Lessee kept and performed, Lessor hereby grants unto said Lessee a working lease and option on that certain block or parcel of mining ground herein described. This lease and option shall remain in force until terminated by mutual consent of both Lessor and Lessee, or by violation of any of the terms of said lease and option by Lessee. The said lease and option shall be designated Kansas Mine Lease and option, and shall embrace all the ground as follows, to wit: Emma Surey No. 4567 and Kansas Survey 4567, both patented lode mining claims, and also Utah No. 1, and Nevada Copper Nos. 8, 9 and 12, unpatented lode mining claims, same being recorded in the office of the County Recorder of White Pine County, Nevada, in book 123.

Lessor agrees not to mine any ore from said block during the time said lease is in good standing, and/or until Lessee has had an opportunity to remove his mined ore and personal property from said block of ground in case of cancellation for cause, provided that Thirty (30) days notice is hereby agreed upon mutually as ample opportunity for said removal of ore and personal property.

Lessee agrees to do his mining in a minerlike manner, having due regard for the safety of others, and to keep all drifts, raises, stopes, crosscuts and winzes open and workable, and to timber whenever necessary, but where backfilling would not be detrimental to future operations, same shall be permissible, but all other waste must be disposed of according to Company practice and good mining practice. In case of any dispute regarding mining methods employed by Lessee, the decision of the Nevada State Mine Inspector shall be final.

Lessee shall have sixty (60) days from date hereof in which to examine the said mining claims. An additional ninety (90) days shall be allowed for preliminary exploration work, including any drilling, etc. After the above periods, a minimum of seventy-five (75) shifts per month must be performed during the next four (4) months, after which time a minimum of one hundred twenty-five (125) shifts per month must be performed so long as the said lease and option shall remain in force. In case of extreme weather conditions and acts of God, the required shifts shall not be required to be worked. Lessee shall be required to furnish evidence of shifts performed, when requested.

Lessor agrees to accept and Lessee agrees to pay to Lessor a royalty of fifteen per cent (15%) of net smelter returns on crude ore shipments and ten percent (10%) on concentrates, as defined below.

By net smelter returns is meant the net amount received from the smelter after deducting hauling and freight to the smelters, assaying and sampling charges, smelter treatment charges and watching charges. Lessor shall also be entitled to royalty on any and all premiums paid by the Government as incentive or exploration, or on any portion thereof that is subject to royalty payment.

All ore shall be shipped in the name of both Lessor and Lessee to the smelter or treatment plant which will pay the most net return. Lessee shall authorize and instruct the smelter to pay the royalty to Lessee according to the above schedule. Lessee may ship by truck to smelters, and railroad freight rates will be allowed.

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Salt Lake City 1, Utah

Lessor assumes no responsibility for any accounts of Lessee to any extent whatever.

Lessee agrees to pay all taxes accruing against any machinery and improvements owned by Lessee on or adjacent to said leased ground. Lessee agrees that any buildings or permanent improvements, including timber, pipe, track, ore bins, chutes, head frames, ladders, and platforms shall revert to Lessor at the termination of this lease without payment for same by Lessor.

Lessor agrees that this lease is not a supervised lease and Lessor shall not be required to cover said lease with Nevada Industrial Commission Insurance. Lessee agrees to cover said lease with compensation insurance taken out in the name of Lessee, and agrees to hold Lessor blameless for any accidents that may happen to employees and other persons.

Lessor does not agree to finance of furnish materials or supplies to Lessee. Any such money, materials or supplies advanced by Lessor to Lessee will be paid for by Lessee.

Lessee agrees to pay a reasonable rental on any equipment belonging to Lessor used by Lessee in connection with this lease, but Lessor does not agree to furnish any equipment to Lessee.

Lessee shall not have the right to assign this lease to any individual, partnership, or corporation without permission of Lessor. Lessee shall have the right to sub-lease any part or all of the said block of ground, but shall in no wise be released from any of the terms or conditions of this lease.

Lessee shall have complete possession and shall operate the said mining property under this lease and option, and all royalties paid to Lessor shall apply toward the purchase price of same; the said purchase price being two hundred fifty thousand dollars ($250,000.00), with a provision that when Lessee has paid to Lessor the sum of two hundred thousand dollars ($200,000.00) in royalties or otherwise, Lessor shall have the right to retain unto itself an undivided ten per cent (10%) interest in the said mining property by issuing a deed to Lessee for an undivided ninety per cent (90%) interest therein, and no furthur royalties shall be due or become payable under this lease and option. Lessor, however, then will be entitled to receive from Lessee, and Lessee agrees to pay to Lessor the sum of ten per cent (10%) of the net earnings, after taxes, from the said properties in lieu of royalty. Should Lessor decide not to retain the said ten per cent (10%) interest as stated, then Lessee shall be obligated to continue to pay royalty until the full purchase price of two hundred fifty thousand ($250,000.00) has been paid to Lessor, at which time Lessor agrees to execute a deed to Lessee for the full one hundred per cent (100%) interest in the said claims.

Should Lessee fail to comply with any of the terms and conditions of this lease, or default in any way concerning it, and shall continue such failure or default for thirty (30) days after written notice of such failure or default has been mailed by registered mail to Lessee, McGill, Nevada, then this lease and option shall become null and void and shall terminate at 12:00 O'Clock Midnight of that day, and Lessor shall have the right to take possession of said premises at the end of an additional thirty (30) days from date of termination, according to the terms outlined in this lease and option, and all timbering, chutes, ladders, ore bins, platforms, rails, pipe and fittings in place, mine buildings, and ore opened up by Lessee (whether mined or unmined) shall revert to Lessor as liquidated damages, and any and all royalties that have been paid to Lessor to apply on the purchase of said claims shall be forfeited as liquidated damages to Lessor. It is specifically agreed that Lessee shall not remove any of the personal property mentioned in this paragraph after notification of failure of default has been mailed by Lessor, except a provided in this lease and option for the removal of ore by Lessee during the period of thirty (30) days for notification and thirty (30) days thereafter.

NATIONAL COPPERMINES, INC,
409 Ness Building
Salt Lake City 1, Utah

All privileges, compensations, covenants and requirements contained herein shall be binding upon the heirs, administrators, assigns, and/or successors of bothLessor and Lessee.

IN WITNESS WHEREOF, Lessor and Lessee have hereunto affixed their signatures at the time and place first above written.

GRAND DEPOSIT MINING COMPANY
Lessor

Attest:

Paul C. Lyon, Jr.
Secretary

by: Paul C. Lyon
President

NATIONAL COPPERMINES, Inc.

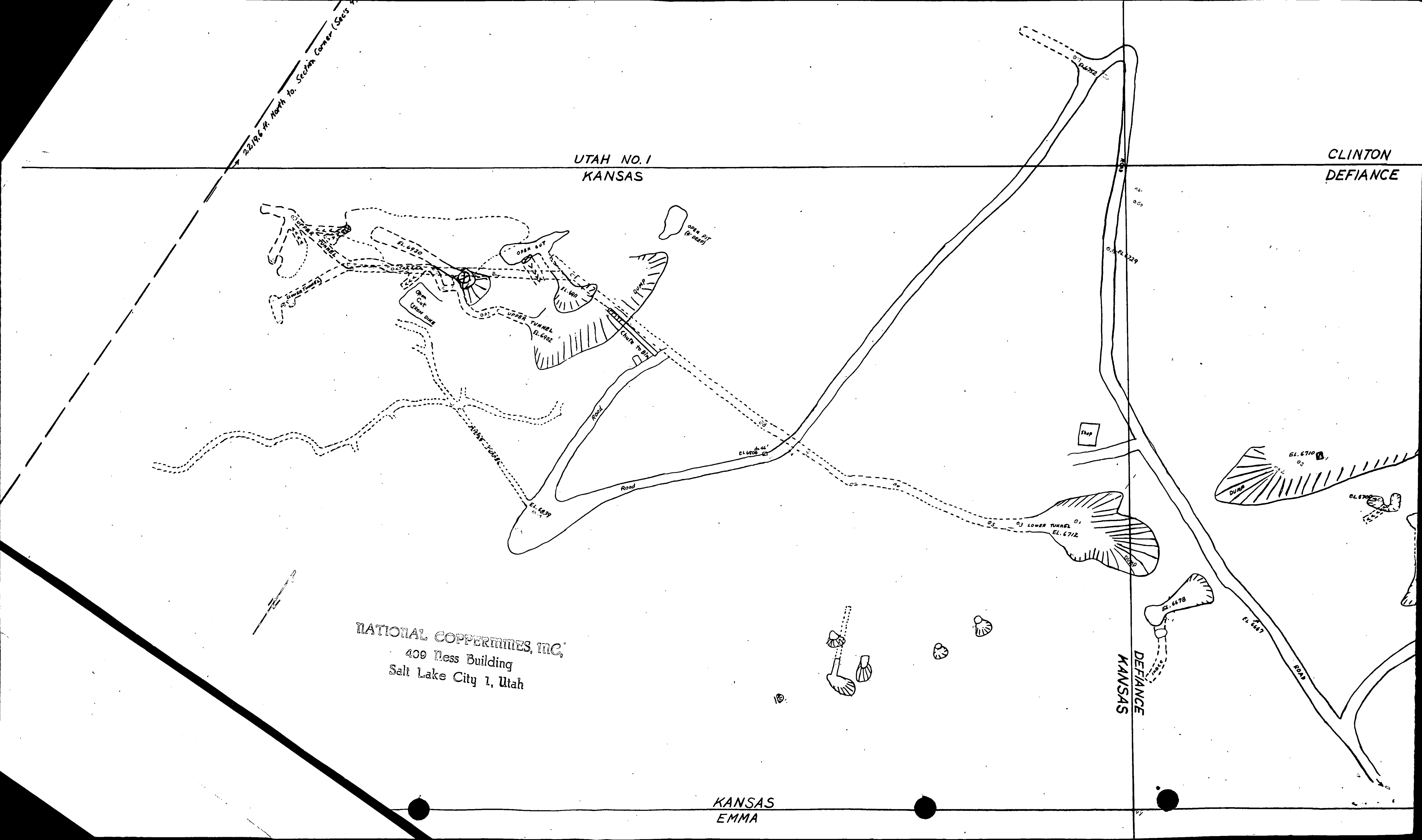
Attest:

Edward J. Reilly
Secretary

by: Barney Meisle
President

Witness to all signatures:

Byron A. Ray



NATIONAL COPPERMINES, INC.
409 Ness Building
Salt Lake City 1, Utah

Form MF-103
(April 1951)

U. DEPARTMENT OF THE INTER R
DEFENSE MINERALS ADMINISTRATION

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

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

DO NOT FILL IN THIS BLOCK

Docket No. DMA 1504X

Date received 6-1-51

Participation

NATIONAL COPPERMINES, INC.
409 Ness Building
Salt Lake City 1, Utah

Name and address of applicant

Date May 31, 1951

FILL IN THIS BLOCK

Date of application May 31, 1951

Estimated cost $40,000.00

Mineral or metal Copper Ore

Percentage of Government participation 50%

Location of mine Near McGill, Nevada

Date of filing MF-100

DMA Docket Number, if available 1504X

INSTRUCTIONS

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

THE APPLICANT

*1. Is applicant an individual, partnership, or corporation? Corporation

*2. If a partnership, state names and addresses of partners. Not Applicable

*3. If a corporation, state names and addresses of officers, directors, and five largest stockholders. Attached

*4. Describe the mining and general business experience of (a) the applicant and (b) the person or persons who will manage the project. (a) New Corporation (b) Attached

*5. Are you the owner or the lessee of the property? Lessee

6. If owner, state what claims, liens, or encumbrances, if any, are against the property. None

7. If lessee, attach a copy of the lease and state if it is in good standing. Attached

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

8. Furnish current financial statement, showing assets and liabilities, and a profit and loss statement. New Corporation

9. How much money is applicant prepared to invest in proposed project? Is it sufficient to pay your part of the cost of the project as detailed in question 23 of this application form, in accordance with the regulations on Government participation (Section 9 of Mineral Order 5)? $20,000.00 cash, equipment & labor.

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

16—64067-1

THE PROPERTY

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

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

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

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

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

*13. State source and quantity of water available for operations and its sufficiency at all seasons. Attached
State amount of power to be used, rate per hour or other cost, and source. Not Applicable

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

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

*16. History:

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

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

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

*17. Production:

(*a*) If mine is in production, furnish the following information: Not Applicable

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

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

(*a*) Describe the ore or mineral deposits briefly.

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

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

19. State any conditions or circumstances regarding the property not sufficiently brought out by the foregoing questions. None

THE EXPLORATION

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

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

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

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(Name of company)

By Paul E. Lyon Jr.
(Signature of authorized official)

May 31, 1961
(Date)

Vice President & Manager
(Title)

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(b). Map of the workings is enclosed.

(c). Ore reserves are difficult to estimate, but from past experience, they should be considerable. Actual ore exposed now is as much as was usually exposed when leasers were shipping ore before. Present ore reserves are mostly indicated; our exploration program is designed to prove them.

20. Exploration will be for copper ore. The copper will occur as chalcopyrite. The ore will probably occur in steeply-dipping seams of irregular shape. The deposit is contact-metamorphic.

21. The proposed work consists of about 1100 feet of drifting, raising and sinking in igneous material in the area described in 10.(b). and from the lower adit level upward to the surface. The first work will be rehabilitation of the middle adit and extension of it to the ore zone. The work can be completed within two years.

22. The geology is complex. The ore deposit is of the contact-metamorphic type, and the ore is associated with a magnetite dike and intrusive porphyritic rock. The ore gives every indication of persisting downward from where it has been mined. The area is well-mineralized. No geologic maps of this deposit are available, and we invite the government engineers to make a thorough study of the geology and to assist us by their recommendations.

23.(a) See next sheet.

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23.(a).	Labor - contract mining	$13,200
(b).	Engineer & Superintendent ($300.00/mo)	6,000
(c).	Repairs & Maintenance	1,500
(d).	Construction of bins, etc	3,000
(e).	Purchase of new equipment	4,600
(f).	Equipment rental & dwelling rental	1,300
(g).	Rental value of present equipment	600
(h).	Materials & Supplies	9,800
		$40,000.

24. It is expected that the money will be spent at the rate of about $2000.00 per month. Because of the nature of the deposit and the complex geology, the actual footage of work done at a given time is difficult to predict; it is expected that the first two months will be used to build a bin and rehabilitate the middle adit and do other preliminary work. Thereafter, work shpuld progress at about 60 feet per month.

We feel confident that the exploration program will be successful and that we will repay any money lent to us by the government out of profits from ore shipments.

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WORKING LEASE AGREEMENT OF SURFACE SHOWINGS AND ISOLATED TRACTS OR WORKINGS OF GRAND DEPOSIT MINING COMPANY, 409 NESS BUILDING, SALT LAKE CITY 1, UTAH

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This agreement, made and entered into at Salt Lake City, Utah this 26th day of May, 1951, by and between Grand Deposit Mining Company, a Nevada Corporation, party of the first part, hereinafter called Lessor, and National Coppermines, Inc., party of the second part, herein called Lessee, WITNESSETH:

That for and in consideration of certain specified royalties to be paid Lessor, and certain covenants, agreements, duties and work to be by Lessee kept and performed, Lessor hereby grants unto said Lessee a working lease and option on that certain block or parcel of mining ground herein described. This lease and option shall remain in force until terminated by mutual consent of both Lessor and Lessee, or by violation of any of the terms of said lease and option by Lessee. The said lease and option shall be designated Kansas Mine Lease and option, and shall embrace all the ground as follows, to wit: Emma Surey No. 4567 and Kansas Survey 4567, both patented lode mining claims, and also Utah No. 1, and Nevada Copper Nos. 8, 9 and 12, unpatented lode mining claims, same being recorded in the office of the County Recorder of White Pine County, Nevada, in book 123.

Lessor agrees not to mine any ore from said block during the time said lease is in good standing, and/or until Lessee has had an opportunity to remove his mined ore and personal property from said block of ground in case of cancellation for cause, provided that Thirty (30) days notice is hereby agreed upon mutually as ample opportunity for said removal of ore and personal property.

Lessee agrees to do his mining in a minerlike manner, having due regard for the safety of others, and to keep all drifts, raises, stopes, crosscuts and winses open and workable, and to timber whenever necessary, but where backfilling would not be detrimental to future operations, same shall be permissible, but all other waste must be disposed of according to Company practice and good mining practice. In case of any dispute regarding mining methods employed by Lessee, the decision of the Nevada State Mine Inspector shall be final.

Lessee shall have sixty (60) days from date hereof in which to examine the said mining claims. An additional ninety (90) days shall be allowed for preliminary exploration work, including any drilling, etc. After the above periods, a minimum of seventy-five (75) shifts per month must be performed during the next four (4) months, after which time a minimum of one hundred twenty-five (125) shifts per month must be performed so long as the said lease and option shall remain in force. In case of extreme weather conditions and acts of God, the required shifts shall not be required to be worked. Lessee shall be required to furnish evidence of shifts performed, when requested.

Lessor agrees to accept and Lessee agrees to pay to Lessor a royalty of fifteen per cent (15%) of net smelter returns on crude ore shipments and ten percent (10%) on concentrates, as defined below.

By net smelter returns is meant the net amount received from the smelter after deducting hauling and freight to the smelters, assaying and sampling charges, smelter treatment charges and watching charges. Lessor shall also be entitled to royalty on any and all premiums paid by the Government as incentive or exploration, or on any portion thereof ~~that is subject to royalty payment.~~

All ore shall be shipped in the name of both Lessor and Lessee to the smelter or treatment plant which will pay the most net return. Lessee shall authorize and instruct the smelter to pay the royalty to Lessee according to the above schedule. Lessee may ship by truck to smelters, and railroad freight rates will be allowed.

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Lessor assumes no responsibility for any accounts of Lessee to any extent whatever.

Lessee agrees to pay all taxes accruing against any machinery and improvements owned by Lessee on or adjacent to said leased ground. Lessee agrees that any buildings or permanent improvements, including timber, pipe, track, ore bins, chutes, head frames, ladders, and platforms shall revert to Lessor at the termination of this lease without payment for same by Lessor.

Lessor agrees that this lease is not a supervised lease and Lessor shall not be required to cover said lease with Nevada Industrial Commission Insurance. Lessee agrees to cover said lease with compensation insurance taken out in the name of Lessee, and agrees to hold Lessor blameless for any accidents that may happen to ~~employees or~~ other persons.

Lessor does not agree to finance of furnish materials or supplies to Lessee. Any such money, materials or supplies advanced by Lessor to Lessee will be paid for by Lessee.

Lessee agrees to pay a reasonable rental on any equipment belonging to Lessor used by Lessee in connection with this lease, but Lessor does not agree to furnish any equipment to Lessee.

Lessee shall not have the right to assign this lease to any individual, partnership, or corporation without permission of Lessor. Lessee shall have the right to sub-lease any part or all of the said block of ground, but shall in no wise be released from any of the terms or conditions of this lease.

Lessee shall have complete possession and shall operate the said mining property under this lease and option, and all royalties paid to Lessor shall apply toward the purchase price of same; the said purchase price being two hundred fifty thousand dollars ($250,000.00), with a provision that when Lessee has paid to Lessor the sum of two hundred thousand dollars ($200,000.00) in royalties or otherwise, Lessor shall have the right to retain unto itself an undivided ten per cent (10%) interest in the said mining property by issuing a deed to Lessee for an undivided ninety per cent (90%) interest therein, and no further royalties shall be due or become payable under this lease and option. Lessor, however, them will be entitled to receive from Lessee, and Lessee agrees to pay to Lessor the sum of ten per cent (10%) of the net earnings, after taxes, from the said properties in lieu of royalty. Should Lessor decide not to retain the said ten per cent (10%) interest as stated, then Lessee shall be obligated to continue to pay royalty until the full purchase price of two hundred fifty thousand ($250,000.00) has been paid to Lessor, at which time Lessor agrees to execute a deed to Lessee for the full one hundred per cent (100%) interest in the said claims.

Should Lessee fail to comply with any of the terms and conditions of this lease, or default in any way concerning it, and shall continue such failure or default for thirty (30) days after written notice of such failure or default has been mailed by registered mail to Lessee, McGill, Nevada, then this lease and option shall become null and void and shall terminate at 12:00 O'Clock Midnight of that day, and Lessor shall have the right to take possession of said premises at the end of an additional thirty (30) days from date of termination, according to the terms outlined in this lease and option, and all timbering, chutes, ladders, ore bins, platforms, rails, pipe and fittings in place, mine buildings, and ore opened up by Lessee (whether mined or unmined) shall revert to Lessor as liquidated damages, and any and all royalties that have been paid to Lessor to apply on the purchase of said claims shall be forfeited as liquidated damages to Lessor. It is specifically agreed that Lessee shall not remove any of the personal property mentioned in this paragraph after notification of failure of default has been mailed by Lessor, except a provided in this lease and option for the removal of ore by Lessee during the period of thirty (30) days for notification and thirty (30) days thereafter.

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All privileges, compensations, covenants and requirements contained herein shall be binding upon the heirs, administrators, assigns, and/or successors of both Lessor and Lessee.

IN WITNESS WHEREOF, Lessor and Lessee have hereunto affixed their signatures at the time and place first above written.

GRAND DEPOSIT MINING COMPANY
Lessor

Attest:

Paul C. Lyon, Jr.
Secretary

by: Paul C. Lyon
President

NATIONAL COPPERMINES, Inc.

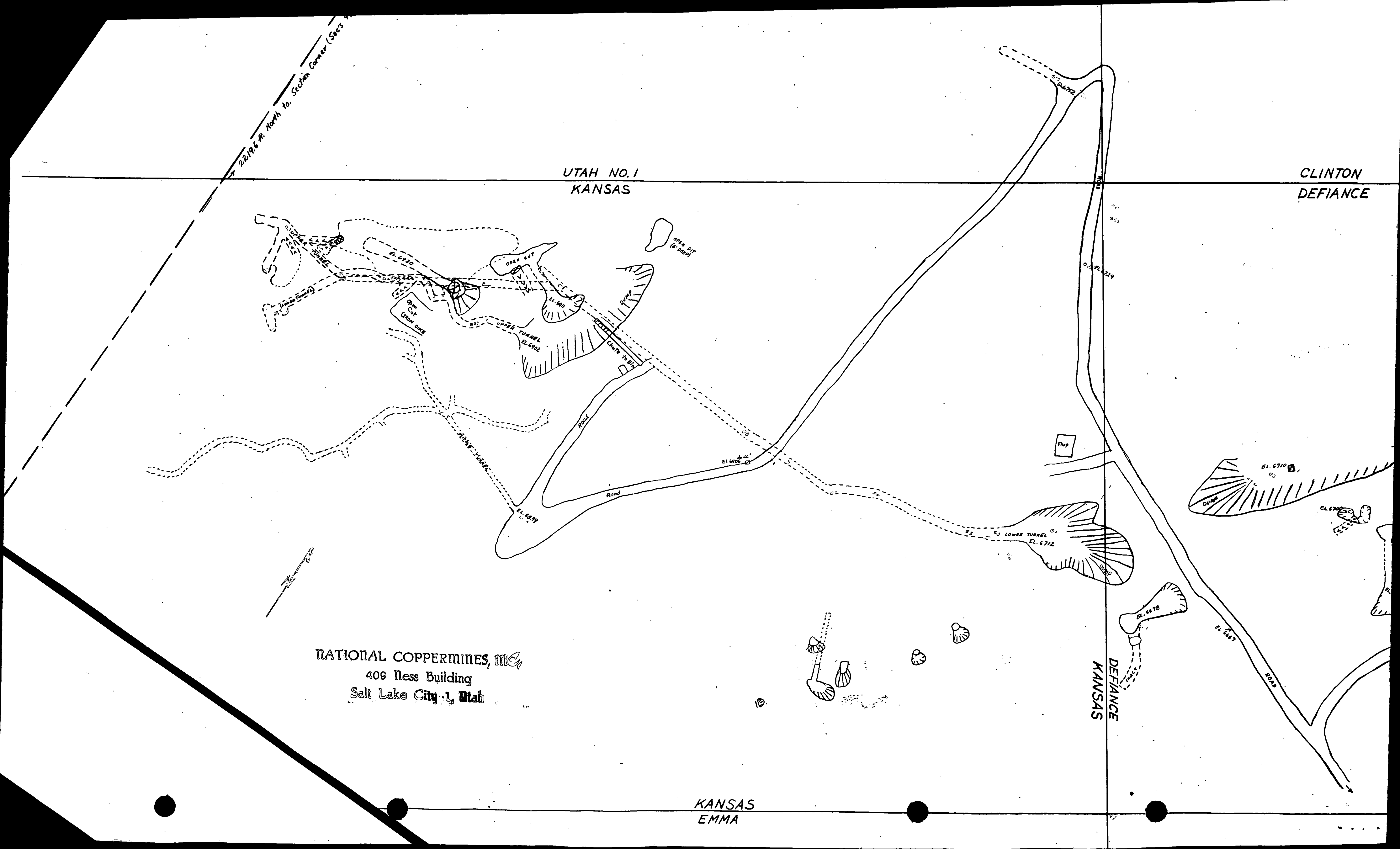
Attest:

Edward J. Reilly
Secretary

by: Barney Meisle
President

Witness to all signatures:

Byron A. Ray



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