DMEA Form 9
Rev. 6/57

UNITED STATES
DEPARTMENT OF THE INTERIOR
Defense Minerals Exploration Administration

OFFICIAL DOCKET FILE

Idm-E NO. 331

DMEA NO. 2495

Application
- [ ] Denied
- [ ] Withdrawn

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

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

Folder No. 1:

Left Side

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

Right Side

- [x] Project summary (final)
- [x] Work Completed analysis (final)

All other material filed in chronological order including the following reports if checked:

- [ ] Field Team Semi-Annual Report for Certified Project
- [ ] Final Field Team Report (Tab)
- [ ] Operator's Final Report (Tab)
- [ ] Interim Field Team Reports
- [ ] Operator's monthly reports and all attachments
- [ ] On-site Exam Report (Tab)
- [ ] Settlement Sheets
- [ ] Drill Logs

Additional Folders:

Left Side

Folders No._____: Reports
- [ ] Analysis of Semi-Annual Inspection Reports
- [ ] Project Summary (Interim) by DMEA Engineers

Right Side

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

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

Folders No._____: Settlement Sheets

Folders No._____: Drill Logs

Folders No._____: Royalty material

Inactive all 1960 (v-15-61)

R.S.G.

17963

OFFICE OF MINERALS EXPLORATION
CONTRACT ADMINISTRATION AND AUDIT DIVISION

REPORT OF ROYALTY REVIEW

I have reviewed the files of the Washington office pertaining to Contract Idm-E331, Docket DMEA-2495 (zinc-copper), dated June 2, 1952, with

Copper Hill Mine Venture
R. E. Fitzgerald, Trustee
c/o Dr. C. O. Hartwell
209 Post Street
San Francisco, California

for the purpose of determining the amount of royalty payable to the U. S. Government on sales of minerals from property referred to as the Jackass Shaft Exploration Project at the Copper Hill Mine located in Amador County, California, during the period January 1, 1959, through September 19, 1960.

A certification of discovery or development was issued on April 30, 1955, and, in accordance with Article 9 of the contract, royalty is payable on all minerals produced from the land described in Article 2, except that excluded by Amendment No. 6, of the contract for a period of 10 years from the date of the contract or until the total net amount contributed by the Government without interest is fully repaid, whichever occurs first. An Audit Certificate dated March 30, 1955, indicated accepted costs under the exploration contract amounting to $18,586.80 with the Government's contribution on a 50 percent basis being $9,293.40.

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

This review established no sales subject to the Government's royalty subsequent to the period covered by a prior Report of Royalty Review which also found no sales subject to the Government's royalty through December 28, 1958. The royalty account as of December 28, 1958, was:

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

As of September 19, 1960, the royalty account of this project was found to be:

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

March 6, 1962

E. D. Talbert, OME Auditor

STATUS OF PROJECT, SCOPE OF REVIEW
AND REASONS THEREFOR

The Operator, a partnership composed of 29 persons, was in possession of the property under the contract at the time of its execution by virtue of a lease granted to R. E. Fitzgerald, Trustee, by Stanley L. VanVleck and Gordon K. VanVleck of Michigan Bar, California. In consideration of the exploration project contract, the landowners executed an Owner's Consent to Lien on April 10, 1952, which grants the Government a lien on the mineral deposit "upon the terms and conditions set forth in said Contract". This contract contains the so-called "abandonment" provision.

The land under the contract consists of lots 37 and 38 in Sec. 3, T. 7 N., R. 9 E., and Sec. 34, T. 8 N., R. 9 E. Amendment No. 6, however, excluded from the land certain Main Copper Hill Shaft ore bodies which were developed and blocked out prior to the date of the contract.

No ore was produced from the subordinated area during the exploration work which was discontinued on February 7, 1953. The property was inactive thereafter until July 1954, when the Operator sub-leased to the Volo Mining Co. and The Amador Copper Hill Corporation. The president of the Volo Mining Co., F. V. Phillips, 464 Main Street, Placerville, California, advised an examining engineer on February 7, 1956, that the sub-lease had been relinquished and that all production (about 6,000 tons of ore) had come from the excluded area. Work in the excluded area was continued by the Operator until July 1956, when mining and milling operations were suspended and apparently the lease was terminated.

Subsequent examinations of the property have found the property idle. The landowners, in reply to an inquiry on MME Form 63 dated September 19, 1960, advised that since June 30, 1957, there had been neither production from the property nor change in ownership, lease, or sub-lease.

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

(1) The files indicate that no ores have been produced from the area subject to royalty;
(2) The property has been inactive since July 1956; and
(3) The administrative cost to the Government of an on-site royalty audit at this time would be excessive in relation to the amount of possible royalty which might be disclosed.

MAY 21 1959
O.M.E.

OFFICE OF MINERALS EXPLORATION
CONTRACT ADMINISTRATION AND AUDIT DIVISION

REPORT OF ROYALTY REVIEW

I have reviewed the files and records of the OME Field Team, Region II, pertaining to Contract No. Idm-E331, Docket No. DMEA-2495 (Zinc-Copper), dated June 2, 1952, including Amendment Nos. 1 to 6, inclusive, with

R. E. Fitzgerald
Trustee for Copper Hill Mine Venture
c/o Dr. C. O. Hartwell
209 Post Street
San Francisco, California

for the purpose of determining the amount of royalties due the U. S. Government on sales of zinc-copper ores from property known as the Copper Hill Mine, located in Amador County, California, during the period June 2, 1952, to December 31, 1958.

A certification of discovery or development was issued on April 30, 1953 and accordingly royalty is payable on all production from the land described in Article 2 of the contract, for a maximum period of 10 years from the date of contract. A Final Audit Certificate and Report dated March 30, 1953, indicated acceptable costs under the exploration contract amounted to $18,586.80 with the Government's contribution on a 50 percent basis being $9,293.40.

No royalties have been paid to date in connection with this contract.

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

(a) According to the Field Team's Semi-Annual Report of Certified Projects for the period July 1, 1958 to December 31, 1958, there has been no production from the land included in the exploration contract. Most of the mining equipment has been removed and the property is idle.

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

May 18, 1959

George Mayer

George Mayer, OME Auditor

FILE COPY
SURNAME:
300

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

Griswold
Chamberlin
Carson
Gribin
Fitzgerald
Pinkel
Hedges
Lefrentz

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

To: R. E. Fitzgerald, Trustee
Copper Hill Mine Venture
c/o Dr. O. C. Hartwell
209 Post Street
San Francisco, California

Pursuant to the provisions of Exploration Project Contract No. Idm-E331, dated June 2, 1952, Docket No. DMA 2495, hereinafter called the "Contract" between you and the United States of America, hereinafter called the "Government"; to establish and fix the Government's percentage royalty on production and its lien thereon and on the land described in the contract, the Government considers and therefore certifies that discovery or development from which production may be made, has resulted from the exploration work.

The nature of said discovery or development is described broadly or indicated as follows: Crosscutting from the 150-foot level of the Jackass shaft of the Copper Hill Mine and drifting at this level exposed mineralized zones containing zinc, with auxiliary amounts of copper, gold and silver. Such mineralized zones lie within the tract of land as described in the contract.

Dated APR 30 1953

THE UNITED STATES OF AMERICA

By O. O. Mattenedor
Administrator, Defense Minerals
Exploration Administration

WRGriswold/hmj
(4/23/53)
CC to: Docket
Cont. Admin. & Audit Div.
Region III (2)
Finance Office
Base Metals Division
Russell Forbes, Acting Adm. DMPA
Adm. R. File
Op. Committee
Mr. Hedges, Rm 4604
Mr. Thayer, Rm 5216, GSA Bldg.
Mr. Murkland
Mr. Griswold
Chron.

S.H.
4-30-53

DEFENSE MINERALS EXPLORATION ADMINISTRATION

CONTRACT ADMINISTRATION AND AUDIT DIVISION

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
APR 8 1953

AUDIT CERTIFICATE

I have examined the records and transactions of:

R. E. Fitzgerald, Trustee for Copper Hill Mine Venture, a partnership composed of 29 partners listed in Annex I, attached to and made a part of contract.

c/o Dr. C. C. Hartwell
209 Post Street
San Francisco, California

pertaining to Exploration Project Contract No. Idm-E331, Docket No. DMEA-2495, including Amendments No. 1, 2, 3, 4 and 5 for the period June 16, 1952, to February 28, 1953, covering a project for the exploration of zinc and copper.

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

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

Total cost as billed by contractor	$ 18,586.80
Exceptions:	None
Total accepted cost	18,586.80

The contract calls for a 50 per cent participation of exploration expenses by the United States Government. Therefore, payment to the contractor by the Government in the amount of Nine Thousand, Two Hundred Ninety-Three and 40/100 Dollars.

- $ 9,293.40 -

is valid and proper.

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

George Mavor

George Mavor
Auditor

March 30, 1953

I INTRODUCTION

On March 19, 1953, a final audit (covering the period June 16, 1952 to February 28, 1953) was made of the records and accounts of operations pertaining to Contract No. Idm-E331, Docket No. DMEA-2495, including Amendments No. 1, 2, 3, 4 and 5, with:

R. E. Fitzgerald, Trustee for Copper Hill Mine Venture, a partnership composed of 29 partners listed in Annex I, attached to and made a part of contract.

c/o Dr. C. O. Hartwell
209 Post Street
San Francisco, California

covering a project for the exploration of zinc and copper.

The accounting records under this contract are located in the office of Dr. C. O. Hartwell, 209 Post Street, San Francisco, California.

The audit was performed in the DMEA Auditor's office in San Francisco, California, and Mr. R. E. Fitzgerald was present and his cooperation and assistance greatly facilitated the audit.

II GENERAL INFORMATION ON RECORDS

The accounting records were adequate to properly account for the expenditures made for the exploration project. The operator did not maintain any general ledger; however, the check register, payroll register and cost distribution register were sufficient to conduct a satisfactory audit.

This project was on a site-audit basis, and the MF-104 was prepared at the end of each month from the cost distribution register. The operator filed all supporting documents by months in large manila envelopes. These documents consisted of original invoices, social security and compensation insurance payments. A bank account was maintained with the Bank of Amador County, Jackson, California, and checks covering payment of supplies and payrolls were drawn on this bank account.

III SCOPE OF AUDIT AND FINDINGS

This being a final audit, a complete analysis of all expenditures was made in order to ascertain the accuracy, propriety and validity of the costs as shown in the "Totals to Date" column of Form MF-104,

Operator's Monthly Report and Voucher, for the month of February 1953. The extent of the audit and the findings under each of the "Items of Cost" follows:

(1) Independent Contracts — - 0 -

Not applicable to this contract.
See comments under item (2)
labor and supervision.

(2) Labor and Supervision — $ 7,712.71

Due to the mixed nature of labor charges, made up of payments on a footage basis and hourly wage rates, it was preferable for audit report purposes to consider these charges under the one category of labor; however, the distribution is set forth and explained in the narrative of this report.

The payroll records for the period June 16, 1952 to February 28, 1953, were examined and the payroll charges under this category comprised the following:

Labor	
Crosscutting	$ 1,275.00
Drifting	1,976.50
Sinking and Timbering	2,886.21
Total Labor	$ 6,137.71
Supervision	
Superintendent	$ 1,075.00
Technical Services	
Engineering	500.00
Total Labor and Supervision	$ 7,712.71

Amendment No. 2 of the contract shows the following maximum amounts for work to be performed.

Crosscutting (60')	$ 1,500.00
Drifting (200')	5,200.00
Sinking and Timbering (60')	5,010.00

A footnote under the above items states: "The lump sum estimate for each item of work listed under this category includes all costs of labor, supervision, operating materials and supplies."

The operator maintained his records in accordance with contract provisions and accumulated the labor and material costs under crosscutting, drifting and sinking and timbering. For audit report purposes a segregation of labor and material was made with the following results:

	Cross-cutting	Drifting	Sinking & Timbering	Engineering	Total
Labor	$1,275.00	$1,976.50	$2,886.21	$	$6,137.71
Supervision		200.00	875.00		1,075.00
Engineering				500.00	500.00
Total Labor & Supervision	$1,275.00	$2,176.50	$3,761.21	$500.00	$7,712.71
Material & Supplies	225.00	330.59	1,248.79		1,804.38
Total MT-104 before Redistribution	$1,500.00 -25.00	$2,507.09 ? 12.59	$5,010.00	$500.00	$9,517.09

The materials and supplies were made up of the following items:

	Cross-cutting	Drifting	Sinking & Timbering	Engineering	Total
Concrete			$ 252.00		$ 252.00
Lumber			189.85		189.85
Explosives	$ 115.73	$ 57.72	243.92		417.37
Gas and Oil	71.75	89.13	39.24		200.12
Diesel Oil		55.05	74.18		129.23
Rock Drills			97.15		97.15
Blasting Machine			57.50		57.50
Misc. Material	37.52	68.42	93.98		199.92
Hauling Material		60.27	200.97		261.24
Totals	$ 225.00	$ 330.59	$1,248.79	- 0 -	$1,804.38

The above material will be redistributed for audit report purposes and included under item (3) Material and Supplies.

Crosscutting: The operator entered into an agreement under date of November 20, 1952, for crosscutting the first 50 feet at $20.00 per foot, and this agreement was approved by the Government November 25, 1952. A second

agreement was made for additional crosscutting under date of January 10, 1953, and was approved by the Government January 12, 1953. The cost of crosscutting is made up of the following items:

60 feet at $20.00	$ 1,200.00
Handling Material & Equipment	75.00
Material and Supplies	225.00
Total	$ 1,500.00

The above costs are in agreement with the contract and subcontract terms. The $1,500.00 was the maximum amount allowed under the contract.

Drifting: The drifting costs were comprised of the following items:

67 feet at $20.00	$ 1,340.00
Taking out Equipment	75.00
Slabbing, Install Track, etc.	192.00
125-feet-long Hole Drilling	109.75
Labor sump and air lines	259.75
Supervision	200.00
Total Labor and Supervision	$ 2,176.50
Material and Supplies	330.59
Total Cost Drifting	$ 2,507.09

The $20.00-per-foot rate for drifting was covered by agreement entered into by operator under date of January 10, 1953, and approved by the Government January 12, 1953. The remaining costs were considered necessary for the drifting operation and no exceptions were taken.

SINKING AND TIMBERING

Sinking and Timbering: The sinking and timbering costs were made up as follows:

Labor at Hourly Rates	$ 3,151.49
Less: Excess labor for concreting collar of shaft transferred to item (8) Contingencies.	265.28
Total Labor	2,886.21

Supervision	$ 875.00
Total Labor and Supervision	$ 3,761.21
Material and Supplies	1,248.79
Total Cost of Sinking & Timbering	$ 5,010.00

The excess labor, $265.28, for concreting collar of shaft was brought about by the collar shaft being changed from wood to concrete, for which are additional comments under item (8), Contingencies. The total cost, $5,010.00, was the maximum amount allowed under the contract.

Technical Services: The following items were paid to Francis H. Frederick, Mining Geologist, San Francisco, California, for engineering services and preparation of final report and section map.

8 days at $50.00	$ 400.00
890 miles at .07	62.30
Hotel and Meals	37.70
Total	$ 500.00

The above amount of $500.00 was allowable under contract terms.

During the course of the audit an examination was made of time book, payroll register and cancelled payroll bank checks. The supervisor was paid $500.00 per month from June 16, 1952, to October 15, 1952; wage rates paid to hourly employees were comparable to wage rates in other mining operations.

(3) Operating Materials and Supplies $ 2,873.63

A complete examination was made of invoices charged to this category, which included the verification of footings and extensions, together with examination of cancelled bank checks. The project did not maintain any stores account, and all purchases were charged to the cost of the project. The type of material purchased and used is as follows:

Timber	$ 189.85
Explosives	417.37
Pipe	302.25
Gasoline and Oil	332.62

Drill Steel and Bits	$ 479.06
Hose and Fittings	231.09
Concrete	252.00
Hauling Charge - Material	278.16
Miscellaneous Supplies	391.23
Total	$ 2,873.63

The above material includes items which had been incorrectly classified as purchases under operating equipment. A credit of $55.00 is also included covering material sold to operator on a competitive bid basis after project was completed.

(4) Operating Equipment $ 2,001.80

All charges for operating equipment covered the rental of equipment and the charges were examined by verification of invoices and cancelled bank checks. The equipment rented comprised the following items:

Compressor, 4 months at $365.00		$ 1,460.00
Air Blower, 6 " " $ 50.00	$ 300.00	
Add: Final Payment on Purchase	17.45	
Total Cost of Blower	$ 317.45	
Less: Amount Recovered from Sale	60.00	257.45
Truck, 2 months at $50.00		100.00
Jackhammer, 4-1/2 months at $25.00		112.50
Anvil, 1 month at $10.00		10.00
Sump Pump, 6 months vs. rates		61.85
Total Equipment Rental		$ 2,001.80

The contract showed compressor rental for 3 months; however, due to delay in starting drifting operations, an additional 1-month rental was allowed. This action was taken as there was no maximum allowance on rented equipment. The air blower listed above was on a rental-purchase agreement, and upon completion of contract same was sold to the operator for $60.00 on a competitive bid basis.

(5) Initial Rehabilitation and Repairs $ 3,078.93

An examination of charges to this category was made, which included the verification of payrolls and material invoices. The

total charges were within the maximum allowed by the contract and were made up of the following items:

Labor		$ 1,743.71
Supervision		550.00
Material:		
Lumber	$ 208.65	
Truck Rental	50.00	
Gasoline and Oil	107.12	
Concrete	70.00	
Other Material	203.12	
Hauling - Material	146.33	785.22
Total		$ 3,078.93

(6) New Buildings and Improvements $ 1,256.26

The charges to this classification were examined and found to be made up of the items listed below:

Labor		$ 684.26
Supervision		250.00
Material:		
Lumber	$ 125.47	
Gasoline and Oil	21.37	
Other Material	57.16	
Hauling - Material	118.00	322.00
Total		$ 1,256.26

The costs charged to newbuildings and improvements, as shown above in amount of $1,256.26, were within the maximum amount of $1,270.00 allowed by the contract.

(7) Miscellaneous $ 1,398.19

The audit of miscellaneous charges included the examination of invoices, cancelled bank checks and other supporting data pertaining to payroll taxes and compensation insurance. The items charged under this category were as follows:

Sampling and Analysis	$ 154.50
Payroll Taxes	453.15
Liability Insurance	635.18
Accounting	155.36
Total	$ 1,398.19

1,243.19

The sampling and analysis, $154.50, and accounting, $155.36, were nominal amounts and allowable under the contract. The payroll taxes, $453.15, and liability insurance, $635.18, were verified by computation at the rates used by the operator, which were as follows:

Social Security Tax	1.5	
Unemployment: California	2.7	4.2
Workmen's Compensation - Underground		11.07%
" " - Surface		3.50%

Ralph E. Fitzgerald, Trustee for the project, was employed as a general utility worker at $300.00 per month with a total compensation of $1,050.00. The payroll tax of 4.2% was applicable; however, the compensation insurance did not apply, as he was not covered by the insurance policy.

(8) Contingencies $ 265.28

The charges under this category represented the excess of costs for sinking and timbering, and can be accounted for as follows:

Labor	$ 3,151.49
Supervision	875.00
Material and Supplies	1,248.79
Total Costs	$ 5,275.28
Less: Maximum allowed by Contract	5,010.00
Excess Costs	$ 265.28

During the month of July 1952, the State safety engineer inspected the shaft collar and insisted that concrete be used instead of wood. The original estimate did not consider a concrete collar, with the result that the replacement cost the operator an additional $682.28, which brought the cost over the allowable maximum by the above amount of $265.28. After giving consideration to the necessity of making this change in the collar shaft, it was decided to allow this additional excess cost by charging same to contingencies.

IV CONCLUSIONS AND RECOMMENDATIONS

Upon completion of the project, the operator had the following equipment and supplies on hand for which competitive bids had been received.

	Bid No. 1	Bid No. 2
Equipment		
Coppus Blower	$ 60.00	$ 50.00
Material and Supplies		
Used Jointed Steel, 1 lot-1' hex.	40.00	40.00
Blasting Machine, 50-hole	6.00	5.00
Used 1" Air Hose, 50'	2.50	2.50
Used 1/2" Air Hose, 100'	2.50	2.50
Used 3/4" Air Hose, 100'	2.50	2.50
Black Pipe, 2"-230'	No offer	No offer
Total Bid	$ 113.50	$ 102.50

The operator offered $115.00, which was accepted, and $60.00 was credited to equipment rental and $55.00 was credited to Material and Supplies on February 1953 MF-104. The disposal of the property was discussed with Mr. H. C. Miller, Executive Officer, who agreed that the bids were reasonable due to transportation costs and an outside bidder would have to pay for the removal of the equipment and material from mine site.

The audit also disclosed that the status as of February 28, 1953, of "allowable maximums" under this contract was as follows:

Item	Maximum Allowable	Total Costs	Balance
Sinking and Timbering (60')	$ 5,010.00	$ 5,010.00	$ - 0 -
Crosscutting (60')	1,500.00	1,500.00	- 0 -
Drifting (200')	5,200.00	2,507.09	2,692.91
Engineering	500.00	500.00	- 0 -
Rehabilitation and Repairs	3,125.00	3,078.93	46.07
New Buildings, Improvements, etc.	1,270.00	1,256.26	13.74

As the operator brought his books and records into the EMEA auditor's office for audit purposes, the final MF-104 for the month of February 1953 was not prepared until the audit was complete, with the result that any cost adjustments made were reflected in the February 1953 costs of the MF-104, and no disallowances are shown in audit report.

This audit disclosed that all costs, as charged to this project, are reasonable and proper under the terms of the contract.

The adjustments between Items of Costs, as shown on the February 1953 MF-104, and the approved amounts, are summarized as follows:

		Totals Feb MF-104	Distribution Corrected	Disallowed by Audit	Allowed by Audit
(1)	Independent Contracts				
	Crosscutting	$ 1,500.00			
	Drifting	2,507.09			
	Sinking and Timbering	5,010.00			
		9,017.09			
(2)	Labor and Supervision				
	Labor		$ 6,137.71		$ 6,137.71
	Supervision		1,075.00		1,075.00
	Technical Services	500.00	500.00		500.00
(3)	Operating Mat'ls & Supplies				
	Timber		189.85		189.85
	Explosives		417.37		417.37
	Pipe		302.25		302.25
	Gasoline and Oil		332.62		332.62
	Drill Steel and Bits		479.06		479.06
	Hose and Fittings		231.09		231.09
	Concrete		252.00		252.00
	Hauling Charge - Material		278.16		278.16
	Miscellaneous Supplies		391.23		391.23
			2813.63		
(4)	Operating Equipment				
	Rental	2,001.80	2,001.80		2,001.80
	Purchase	981.13			
(5)	Initial Rehabilitation and Repairs	3,078.93	3,078.93		3,078.93
(6)	New Buildings, Improvements, etc.	1,256.26	1,256.26		1,256.26
(7)	Miscellaneous				
	Sampling and Analysis	154.50	154.50		154.50
	Payroll Taxes	453.15	453.15		453.15
	Liability Insurance	635.18	635.18		635.18
	Accounting	155.36	155.36		155.36
	Sales Tax	88.12			
					1398.19
					154.50
					1543.69
(8)	Contingencies				
	Concrete Collar of Shaft	265.28	265.28		265.28
	Totals	$18,586.80	$18,586.80	None	$18,586.80

At the conclusion of audit, the findings were discussed with Mr. Ralph E. Fitzgerald, Trustee for the project.

George Mavor

George Mavor
Auditor

March 30, 1953

UNITED STATES
DEPARTMENT OF THE INTERIOR

DOCKET COPY

DEFENSE MINERALS ADMINISTRATION
WASHINGTON 25, D. C.

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

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
APR 3 1953

To: R. E. Fitzgerald
c/o Dr. E. C. Hartwell
209 Post Street
San Francisco 4, California

The United States of America, acting through the Department of the Interior, Defense Minerals Exploration Administration, for a valuable consideration hereby sells, assigns, transfers and sets over to you all of its right, title and interest in all property acquired under Exploration Project Contract Idm-E331, Docket DMEA-2495, dated June 2, 1952.

Dated March 19, 1953

THE UNITED STATES OF AMERICA

By H. C. Miller

Executive Officer,
DMEA Field Team, Region III
Title

Copy to: Operating Committee, DMEA, Washington (3)
Finance Officer, Region III
A. C. Johnson, Reno
E. H. Bailey, USGS
Geo. Mavor

C

Docket copy

RECEIVED
FEB 29 1956

EXPLORATION PROJECT CONTRACT
R. E. FITZGERALD, TRUSTEE FOR
COPPER HILL MINE VENTURE
DOCKET NO. DMEA-2495

AMENDMENT NO. 6

WITNESSETH:

The United States of America, acting through the Department of the Interior, Defense Minerals Exploration Administration, and R. E. Fitzgerald, Trustee for Copper Hill Mine Venture, are parties to Exploration Project Contract Idm-E331 (Docket No. DMEA-2495), dated June 2, 1952, as amended, hereinafter called the "Contract." The existence of the Main Shaft copper ore body and the full development of said ore body were well-known to the parties prior to the execution of the Contract and it was not the intention of the parties that royalty be paid to the Government on production from said ore bodies. However, through inadvertence and mutual mistake these ore bodies were included in the description of the land. The purpose of this amendment is to correct this mutual mistake.

NOW THEREFORE, it is agreed that the Contract is further amended effective June 2, 1952, as follows:

> Excluded from the land referred to in Article 2 of the Contract are the Main Shaft ore bodies indicated in color on the map attached hereto and made a part hereof, entitled "Copper Hill Mine, Vertical Longitudinal Projection, Main Shaft Workings, Amador County, California."

This amendment shall not be construed to increase the estimated total cost of the project, the aggregate total amount which the Government may be required to contribute, nor the amount of any item designated as "allowable maximum."

Executed in sextuplicate this 26th day of November, 1954.

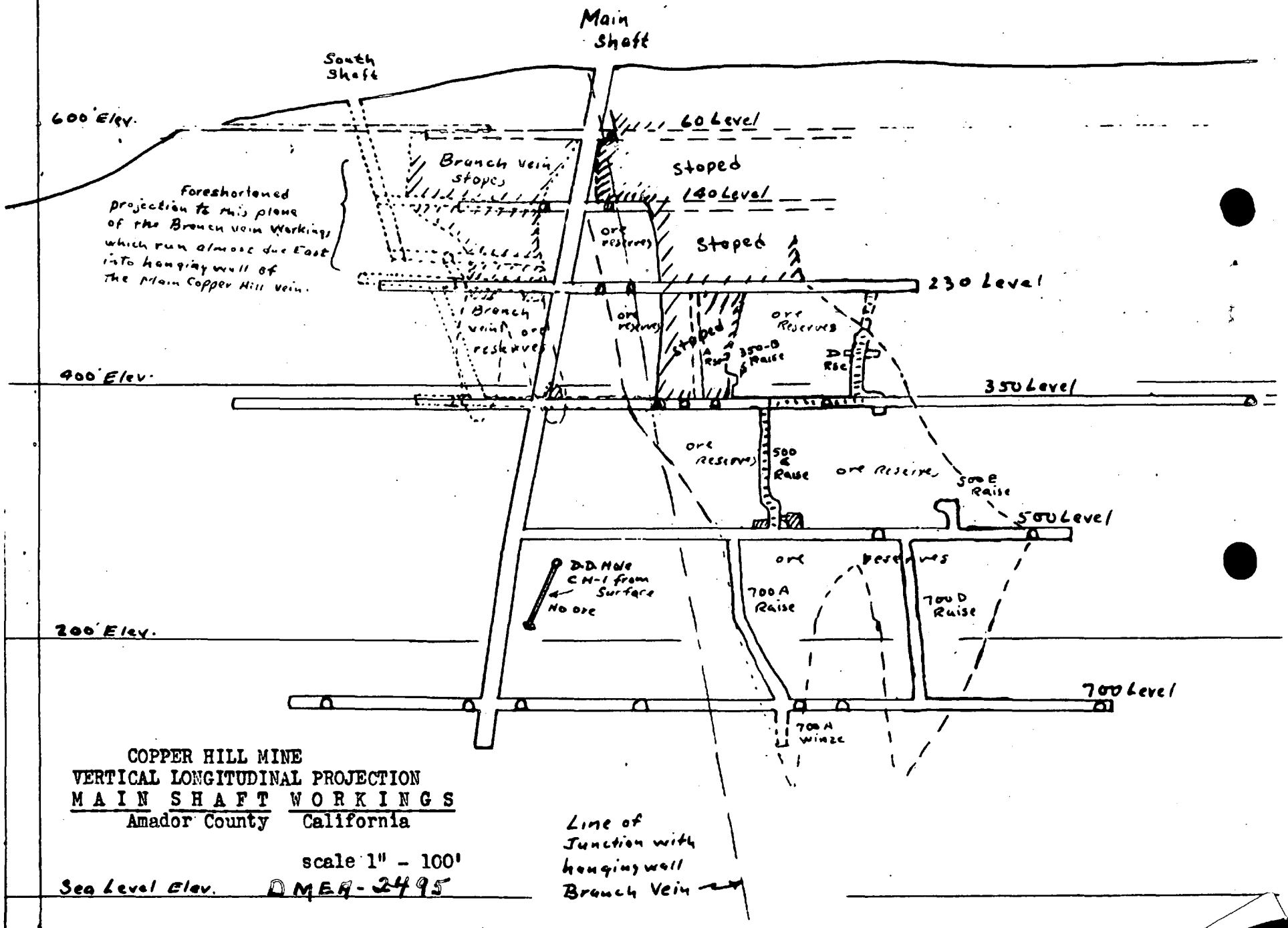
THE UNITED STATES OF AMERICA

By C. Mitchenor
Administrator, Defense Minerals Exploration Administration

COPPER HILL MINE VENTURE

By R. E. Fitzgerald (Trustee)
R. E. Fitzgerald (Trustee)

Robin
Hoffland
Maxwell
Chandler
Ellis
F. Epler



COPPER HILL MINE
VERTICAL LONGITUDINAL PROJECTION
MAIN SHAFT WORKINGS
Amador County California

scale 1" - 100'

RECEIVED
FEB 29 1956

DOCKET COPY

M. E. FITZGERALD, TRUSTEE FOR
COPPER HILL MINE VENTURE
CONTRACT Idm-2251
DOCKET NO. DMEA-2495

alk one
2/17/53
Hoffland

AMENDMENT NO. 8

Whereas, by Amendment No. 3, dated November 25, 1952, independent contracting was approved under contract Idm-2251; and

Whereas, Operator on November 20, 1952, entered into an agreement with Ed Blayed of Jackson, California, to furnish all labor and supervision for 50 of the 60 feet of crosscutting listed in Item 2 of Amendment No. 2, dated November 10, 1952, for $20.00 a lineal foot, plus $75.00 for labor at the beginning of the work and an additional $75.00 on its completion, and

Whereas, on January 10, 1953, Operator further agreed with said Ed Blayed to complete all crosscutting and drifting listed in Item 2 of Amendment No. 2 for $20.00 a lineal foot with no extra charge for labor performed at the beginning and completion of the subcontract other than that already agreed upon in the contract, dated November 20, 1952.

Now Therefore, Amendment No. 2, dated November 10, 1952, is amended as follows:

Under Item 2, the lump sum estimate for crosscutting ($1,500.00) is to be broken down to include $1,200.00 for labor and supervision under the independent contract, plus $75.00 for additional labor performed at the beginning of the work, and $225.00 for operating materials and supplies to be furnished by the Operator, and

The lump sum estimate for drifting ($5,300.00) is to be broken down to include $4,000.00 for labor and supervision under the independent contract plus $75.00 for additional labor to be performed at the completion of the work, and $1,125.00 for operating materials and supplies to be furnished by the Operator.

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

Dated: January 12, 1983.

UNITED STATES OF AMERICA

By H. O. Miller

H. O. Miller, Executive Officer
DMRA Field Team, Region III

COPPER HILL MINE VENTURE

By R. E. Fitzgerald Trustee

R. E. Fitzgerald (Trustee)

AMENDMENT NO. 6

Docket No. 2495 Mineral Zinc-Copper

Exploration Project Contract [illegible]

Date of Contract June 2, 1952

Date of Amendment January 10, 1953

Operator R. H. Fitzgerald (Trustee) Copper Hill Mine Venture

JUSTIFICATION

Reference is made to letter, dated January 5, 1953, from Hugh E. Johnson to H. C. Miller, requesting Operator's subcontract with Ed Floyed, dated December 28, 1952, to be covered by an amendment. That contract was a trial contract covering only 60 feet of the proposed 50 feet of crosscutting and did not cover the drifting allowed under Amendment No. 5. Operator entered into another agreement with Ed Floyed, dated January 10, 1953, to complete the crosscutting and drifting under the same conditions as set down in the trial contract. Amendment No. 6 covers all work and is drawn to reflect the changes necessitated by both subcontracts.

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

Docket Copy

Orlando
7/2/53
Hoffman

R. E. FITZGERALD, TRUSTEE FOR
COPPER HILL MINE VENTURE
CONTRACT Idm-E331
DOCKET NO. DMEA-2495

AMENDMENT NO. 4

Contract Idm-E331 (Docket No. DMEA-2495), dated June 2, 1952, and Amendment No. 1, dated September 12, 1952, between the United States of America, acting through the Department of the Interior, Defense Minerals Exploration Administration, and R. E. Fitzgerald, Trustee for Copper Hill Mine Venture, are amended as follows, effective January 2, 1953:

Completion date extended to May 1, 1953.

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

Dated January 5, 1953.

UNITED STATES OF AMERICA

By [signature]
H. C. Miller, Executive Officer
DMEA Field Team, Region III

COPPER HILL MINE VENTURE

By R. E. Fitzgerald (Trustee)
R. E. Fitzgerald (Trustee)

AMENDMENT NO. 4

Docket No. 2495 Mineral Zinc-Copper

Exploration Project Contract Idm-E 331

Date of Contract June 2, 1952

Date of Amendment Jan. 5, 1953

Operator R. E. Fitzgerald, Trustee for Copper Hill Mine Venture

JUSTIFICATION

Completion of the contract within the stipulated time, as extended by Amendment No. 1, dated September 12, 1952, was impossible as during the construction of the nearby Bear River Dam of the Pacific Gas & Electric Company it was impossible to maintain an adequate labor force at the Copper Hill Mine. Miners have now been found who will contract the drifting and the contract is extended to May 1, 1953, to permit completion of the work.

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

ERKane
1/14/53
Hoffland

R. E. FITZGERALD, TRUSTEE FOR
COPPER HILL MINE VENTURE
CONTRACT Idm-E331
DOCKET NO. DMEA-2495

AMENDMENT NO. 3

Contract Idm-E331 (Docket No. DMEA-2495), dated June 2, 1952, between the United States of America, acting through the Department of the Interior, Defense Minerals Exploration Administration, and R. E. Fitzgerald, Trustee for Copper Hill Mine Venture, is amended as follows, effective November 25, 1952:

In Exhibit "A" under Estimate of Costs

1. Delete Item (1) Independent Contracts

None

2. Substitute in lieu of Item (1):

Independent Contracts

The work outlined in the contract and as amended by Amendments No. 1 and No. 2, may be carried out under independent contracts. Written approval by the Government of the independent contracts is required in accordance with Article 4 (b) of the contract.

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

Dated: November 25, 1952

UNITED STATES OF AMERICA

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

COPPER HILL MINE VENTURE

By R. E. Fitzgerald (Trustee)
R. E. Fitzgerald (Trustee)

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
JAN 1953

AMENDMENT NO. 3

Docket No. DMEA-2495 Mineral Zinc-Copper

Exploration Project Contract Idm-E331

Date of Contract June 2, 1952

Date of Amendment Nov. 25, 1952

Operator R. E. Fitzgerald, Trustee for Copper Hill Mine Venture

JUSTIFICATION

Due to scarcity of good miners, weather conditions, and housing facilities, miners in the area of the Copper Hill Mine will not work for day wages but insist on taking contracts which give them a chance to increase their daily wage. Operator has been able to contract for 50 feet of crosscutting under his amended contract and plans later to contract for drifting, if drifting is to be carried out. This amendment permits his sub-contracting the first 50 feet of work.

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

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
JAN 6 1953

Docket Copy

EXPLORATION PROJECT CONTRACT
R. E. FITZGERALD, TRUSTEE FOR
COPPER HILL MINE VENTURE
DOCKET NO. DMEA-2495

Amendment No. 2

WHEREAS, it is desired to discontinue sinking the shaft at its present depth of 164', which includes 60' of shaft sinking under the contract; and

WHEREAS, it is desired to increase the footage of drifting from 150' to 200'; and

WHEREAS, it is desired to increase the footage of crosscutting from 22' to 60' in order to properly explore certain mineralization;

NOW THEREFORE, Contract No. Idm-E331, Docket No. DMEA-2495, is amended, effective June 2, 1952, as follows:

1. In Exhibit "A", delete the second paragraph under the heading "Description of the Work," and substitute the following paragraph:

> The work consists of unwatering and retimbering the Jackass shaft; sinking the shaft 60'; crosscutting 60' to the hanging wall; and drifting 100' each way on the vein, or a total of 200' of drifting.

2. In Exhibit "A" under the heading "Estimate of Costs," delete the items under category (2) Labor, Supervision, Consultants, and substitute the following items:

Sinking and timbering (60')	$5,010.00*
Crosscutting (60')	1,500.00*
Drifting (200')	5,200.00*

(NOTE: The lump sum estimate for each item of work listed under this category includes all costs of labor, supervision, operating materials and supplies.)

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
Received
NOV 25 1952

Engineering $ 500.00* $12,210.00*

Dated November 10, 1952

UNITED STATES OF AMERICA

By O P Mitchenson
Administrator, Defense Minerals
Exploration Administration

Butler
Jackson
DC/Onc

COPPER HILL MINE VENTURE

By R. E. Fitzgerald (Trustee)
R. E. Fitzgerald, Trustee

17

AMENDMENT NO. 2

Docket No. DMEA-2495 Mineral Zinc-Copper

Exploration Project Contract Idm-E 331

Date of Contract June 2, 1952

Date of Amendment November 10, 1952

Operator Copper Hill Mine - R. E. Fitzgerald, Trustee

JUSTIFICATION

After unwatering the shaft and sinking it an additional 60 feet, it appeared that the most efficient way to explore the ore zone would be to crosscut 60 feet to the hanging wall of the vein and drift 100 feet laterally each way on the vein.

This amendment is to permit doing the above, instead of following the original proposal stipulated in Exhibit "A" of the contract.

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

R. E. FITZGERALD, TRUSTEE FOR
COPPER HILL MINE VENTURE
CONTRACT Idm-R331
DOCKET NO. DMEA-2495

AMENDMENT NO. 1

Contract Docket No. DMEA-2495, dated June 2, 1952, between the United States of America, acting through the Department of the Interior, DMEA, and R. E. Fitzgerald, Trustee for Copper Hill Mine Venture, is amended as follows, effective September 12, 1952: In Article 3,

(1) Extend the time of completion to two hundred and ten (210) days from the date of the contract.

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

Dated September 12, 1952.

UNITED STATES OF AMERICA

By H. G. Miller
H. G. Miller, Executive Officer
DMEA Field Team, Region III

COPPER HILL MINE VENTURE

By R. E. Fitzgerald
R. E. Fitzgerald (Trustee)

AMENDMENT NO. 1

Docket No. 2495 Mineral Zinc-Copper

Exploration Project Contract Idm-E 331

Date of Contract June 2, 1952

Date of Amendment September 12, 1952

Operator Copper Hill Mine Venture--R. E. Fitzgerald, Trustee

JUSTIFICATION

Completion time extended because due to extraordinary fire hazard in the Copper Hill Mine area, the State of California, through the Mine Safety Division would not permit timber to be used for the collar of the shaft and insisted on tearing out the wooden collar and top sets and replacing them with concrete. This considerably delayed work down the shaft.

Also, the original proposal was based on 2-shift per day operation but the starting of a Pacific Gas and Electric Company dam in the area (subsequent to the time the application for a loan was made) has drawn off virtually all available labor in the area attracted by the high wages paid by the P. G. & E. The Copper Hill project is of such nature that permanent employment cannot be offered so that the company has been able to get only enough help to work on a 1-shift basis. As accomodations at the Copper Hill Mine do not compare with those offered by the P. G. & E. Co., it will become increasingly difficult for the Copper Hill Mine to hire good men after the rainy season starts. The P. G. & E. dam work will be completed this fall after which there will undoubtedly be plenty of labor available. The 90-day extension of the completion time is believed ample, though much depends upon how early and how severe the coming winter will be.

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

BW.

APPROVAL OF SUBCONTRACT

DOCKET COPY

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration

To: Mr. R. E. Fitzgerald, Trustee, Copper Hill Mine Venture

That certain contract, a copy of which you have submitted with your request for approval, dated January 10, 1953, between you and Ed Bleyed for the performance of the following work:

Crosscut and drift at the Copper Hill Mine

which is a specific element of the work described in an Exploration Project Contract, dated June 2, 1952, Idm-[illegible], Docket DMEA-2495 and in Amendment No. 2 thereto, dated November 10, 1952, is hereby approved by the United States of America, subject to all of the terms and conditions relating to such independent contracts set forth in said Exploration Project Contract.

Dated: January 13, 1953.

Defense 2/12/53 Approved

THE UNITED STATES OF AMERICA

By [signature]
H. C. Miller, Executive Officer
DMEA Field Team, Region III

Copyto: DMEA, Inter Building, Washington (3)
A. C. Johnson, Reno
Finance Officer, Region III
E. H. Bailey, USGS
George Mavor

This agreement entered into this 10th day of January 1953 by and between R. E. Fitzgerald, Trustee of San Francisco and hereinafter referred to as owner and Ed Bloyed of Jackson, California, hereinafter referred to as contractor.

WITNESSETH

That the contractor hereby agrees to furnish all labor and supervision for the performance of certain underground mining as hereinafter specified and described upon the property known as the Jackass Shaft on the Copper Hill property in Amador County, California.

The owner agrees to pay to the contractor for the faithful performance of the work herein required to be performed, the unit price hereinafter set out for each lineal foot of crosscut or drift, as designated below.

Contractor agrees to crosscut or drift at the location and in the direction, to be designated by the owner and as full compensation therefor, shall accept the sum of Twenty Dollars ($20.00) per lineal foot.

The crosscut or drift shall have the minimum dimension of four feet by six feet five inches (4' x 6'5") in the clear.

Owner agrees to furnish the equipment now on the property and necessary material for carrying on the work in a minerlike manner.

The contractor further agrees to furnish all necessary labor for the preliminary work required and at the completion of the contract to remove all pipe, material and equipment from the crosscut and the shaft; also to return rented or borrowed equipment. For this additional labor, owner agrees to pay $75.00 at the beginning of the work and the additional $75.00 on the completion as agreed in contract dated November 1952.

This compensation shall pay for all work done regardless of the number of hours involved as labor or working time.

The completion date shall be March 20, 1953.

In witness whereof we have hereunto set our hands the day and year above written.

Ed Bloyed

R. E. Fitzgerald

DOCKET COPY

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration

APPROVAL OF SUBCONTRACT

To: Mr. R. E. Fitzgerald, Trustee, Copper Hill Mine Venture

That certain contract, a copy of which you have submitted with your request for approval, dated November 20, 1952, between you and Ed Bloyed for the performance of the following work:

Crosscutting 50 feet at the Copper Hill Mine

which is a specific element of the work described in an Exploration Project Contract, dated June 2, 1952, Idm-E33I, Docket No. DMEA-2495 and in Amendment No. 2 thereto, dated November 10, 1952, is hereby approved by the United States of America, subject to all of the terms and conditions relating to such independent contracts set forth in said Exploration Project Contract.

Dated: November 25, 1952

THE UNITED STATES OF AMERICA

By H. C. Miller

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

Copy to: DMEA, Washington (3)
A. C. Johnson, Reno
Finance Officer, Region III
E. H. Bailey
George Mavor

This agreement entered into this 20th day of November 1952 by and between R. E. Fitzgerald, Trustee of San Francisco and hereinafter referred to as owner and Ed Bloyed of Jackson, California, hereinafter referred to as contractor.

WITNESSETH

That the contracter hereby agrees to furnish all labor and supervision for the performance of certain underground mining as hereinafter specified and described upon the property known as the Jackass Shaft on the Copper Hill property in Amador County, California.

The owner agrees to pay to the contractor for the faithful performance of the work herein required to be performed, the unit price hereinafter set out for each lineal foot of crosscut, as designated below.

Contractor agrees to crosscut 50 feet at the location and in the direction, to be designated by the owner and as full compensation therefor, shall accept the sum of Twenty Dollars ($20.00) per lineal foot.

The cross cut shall have the minimum dimension of four feet by six feet five inches (4' x 6'5") in the clear.

Owner agrees to furnish the equipment now on the property and necessary material for carrying on the work in a minerlike manner.

The contractor further agrees to furnish all necessary labor for the preliminary work required and at the completion of the contract to remove all pipe, material and equipment from the crosscut and the shaft; also to return rented or borrowed equipment. For this additional labor, owner agrees to pay $75.00 at the beginning of the work and the additional $75.00 on the completion.

This compensation shall pay for all work done regardless of the number of hours involved as labor or working time.

The completion date shall be December 20, 1952.

In witness whereof we have hereunto set our hands the day and year above written.

R. E. Fitzgerald (Trustee)

Ed. Bloyed

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

DOCKET NO. DMEA 2495

COMMODITY Zinc - Copper

IdmOE331

DOCKET COPY

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

EXPLORATION PROJECT CONTRACT [1]

IT IS AGREED this 2nd day of June, 1952, between the United States of America, acting through the Department of the Interior, Defense Minerals Exploration Administration, hereinafter called the "Government," and [2] R. E. Fitzgerald, trustee for Copper Hill Mine Venture, a partnership composed of 29 partners listed in Annex I, attached to and made a part hereof.
c/o Dr. C. O. Hartwell
209 Post Street
San Francisco, California
hereinafter called the "Operator," as follows:

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

ARTICLE 2. *Operator's property rights.*—With respect to that certain land situated in the State of California, County of Amador, described as follows: [3]
Lots 37 and 38, in Section 3 - T. 7 N., R. 9 E.; and Section 34, T. 8 N. R. 9 E.; and see Figure 5, attached to and made a part hereof

the Operator represents and undertakes: [4]

(*a*) [redacted]

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

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

ARTICLE 3. *Exploration project.*—The Operator, within thirty (30) days from the date of this contract shall commence work on a project of exploration for [5] zinc and copper

in or upon the described land; and shall bring the project to completion within a period of 120 days from the date of this contract. The work to be performed is more fully described in Exhibit "A" attached hereto, which, with any maps or drawings thereto attached, are made a part of this contract. The Government will contribute to the cost of this work as hereafter provided.

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

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

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

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

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

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

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

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

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

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

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

(7) *Miscellaneous.*—Repairs to and maintenance of operating equipment (not including initial rehabilitation or repairs of the Operator's equipment), analytical work, accounting, workmen's compensation and employers' liability insurance and payroll taxes.

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

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

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

(*c*) No items of general overhead, corporate management, interest, taxes (other than payroll and sales taxes) or any other indirect costs, or work performed or costs incurred before the date of this contract, shall be allowed as costs of the project in which the Government will participate.

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

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

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

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

ARTICLE 8. *Payments by the Government.*—(*a*) The Government will pay ---50--- percent of the allowable costs incurred, as they accrue, in an aggregate total amount not in excess of $---10,310.00---, which is ---50--- percent of $---20,620.00---, the agreed, estimated total cost of the project in which the Government will participate; *Provided,* that until the Operator's final report and final accounting have been rendered to the Government, and any final auditing required by the Government has been made, and a final settlement of the contract has been made, the Government may withhold from the last voucher or vouchers such sums as it sees fit not in excess of ten (10) percent of the maximum total which the Government might have been called upon to pay under the terms of the contract.

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

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

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

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

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

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

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

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

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

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

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

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

Executed in sextuplicate the day and year first above written.

THE UNITED STATES OF AMERICA

By C. D. Mattauer

Acting Administrator
Defense Minerals Exploration
Administration

Copper Hill Mine Venture

By R. E. Fitzgerald (Trustee)

R. E. Fitzgerald (Trustee)

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

[CORPORATE SEAL]

ANNEX I

LIST OF PARTICIPANTS IN COPPER HILL MINE VENTURE

Name	Address: California
Battaglieri, J.	San Francisco
Bodwell, D.	Watsonville
Boragno, R.	San Francisco
Coke, [illegible]	Jamestown
Ennar, P.	San Francisco
Fancerston, F.	San Francisco
Farrell, D.	Stockton
Fitzgerald, E. [illegible]	San Francisco
Green, H.	San Francisco
Griffith, A. B.	San Francisco
Grover, G.	San Francisco
Harris, E.	Los Angeles
Hartwell, [illegible]	San Francisco
Hornstein, G.	San Francisco
Hornstein, H.	San Francisco
Howard, F. D.	San Francisco
Lanning, A. B.	San Francisco
Loneke, S.	Oakland
Luenberger	San Francisco
Mullenque, [illegible]	Quincy
Robertson, A.	San Francisco
Rouse, [illegible]	Watsonville
Schmitz, C.	San Francisco
Scott, M.	San Francisco
Simpson, [illegible]	San Francisco
Smith, V.	Watsonville
Thomas, [illegible]	San Francisco
Tuck, [illegible]	San Francisco
Zumstee, J.	Santa Barbara

EXPLORATION PROJECT CONTRACT
P. E. FITZGERALD, TRUSTEE FOR
COPPER HILL MINE VENTURE
DOCKET NO. DAFA-2495

EXHIBIT "A"

Description of the Work

The purpose of this work is to determine the extent of a body of zinc-copper ore indications of which have been found in a diamond drill hole.

The work will consist of unwatering and retimbering the shafts; sinking the shaft 115'; crosscutting 22' to the hanging wall; and drifting 75' each way, or 150', on the vein. See attached map.

Estimate of Costs
(* Indicates allowable maximum)

(1) Independent Contracts

None

(2) Labor, Supervision, Consultants

Sinking and timbering (115')	$7,245.00*	
Crosscutting (22')	600.00*	
Drifting (150')	3,865.00*	
NOTE: The lump sum estimate for each item of work listed under this category includes all costs of labor, supervision, operating materials and supplies.		
Engineering	500.00*	$12,210.00*

(3) Operating Materials and Supplies

Schedule waived. Costs under this category are included in total estimated cost of each work item listed under (2) Labor, Supervision and Consultants, (5) Rehabilitation and Repairs, and (6) New Buildings, Improvements and Installations.

(4) Operating Equipment

To be purchased:

Pipe and fittings, drill-steel, bits, rails and fittings, turn sheet, mine skip		$ 1,095.00

To be rented:

365' CFM compressor	$1,095.00	
Pump	150.00	
Truck	150.00	
Rock Drills	180.00	
Air Receiver	45.00	1,620.00

To be furnished by Operator:

None

NOTE: Hoist, drill column, hoses, tools, to be furnished by Operator at no charge.

(5) Rehabilitation and Repairs:

Unwater and rehabilitate 125' shaft including all costs of labor, supervision, materials and supplies		2,125.00*

(6) New Buildings, Improvements, Installations

Head frame, hoist house, including all costs of labor, supervision, materials and supplies		1,270.00*

(7) Miscellaneous

Social Security, Compensation Insurance sales tax, etc.	$1,000.00	
Assaying $150.00, Accounting $150.00	300.00	1,300.00
Total cost of project		$20,620.00*
Government participation @ 50%		$10,310.00*

Summary

Labor, supervision, consultants, materials and supplies	$12,210.00
Operating equipment	2,715.00
Rehabilitation and repairs	3,125.00
New buildings, improvements, installations	1,270.00
Miscellaneous	1,300.00
Total cost of project	$20,620.00*
Government's participation - 50%	$10,310.00*

OWNER'S CONSENT TO LIEN

WHEREAS, the undersigned, as owner, co-owner, lessor, or seller has an interest in certain property in the State of CALIFORNIA, County of AMADOR, which is the subject of a proposed Exploration Project Contract, hereinafter called the "Contract", between the United States of America, hereinafter called the "Government", and

1/ R. E. FITZGERALD, TR[redacted]

hereinafter called the "Operator"; and

WHEREAS, under certain provisions of said Contract which are set forth on the reverse side hereof, the Government will acquire certain rights and equities which do or may conflict with or be adverse to the interest of the undersigned in said property;

NOW THEREFORE, the undersigned, in consideration of said Contract and as an inducement to the Government and Operator to enter into same, undertakes and agrees as follows:

1. The Government's equity in and right to remove facilities, buildings, fixtures, and equipment, as provided in the Contract, shall prevail over and be prior and superior to any conflicting or adverse rights of the undersigned.

2. The Government's percentage royalty on net smelter returns or other net proceeds realized from ore, concentrates, or metal produced within ten (10) years from the date of the Contract, and the Government's lien for the payment of said percentage royalty shall attach to the mineral deposit and the production therefrom, in the amount of the Government's contribution, not in excess of 2/ $ 10,310.00, all upon the terms and conditions set forth in said Contract.

3. The undersigned shall commit no act nor assert any claim that may contravene or conflict with the lien, claim, or rights of the Government under the provisions of the said Contract. This agreement shall be binding upon the heirs, executors, administrators, successors, and assigns of the undersigned.

Dated this TENTH (10) day of APRIL, 1952.

Stanley L Van Vleck

Gordon K Van Vleck

1/ Insert the name of the Operator as it will appear in the Exploration Project Contract.

2/ Insert the maximum amount of the Government's contribution.

10919

RELEVANT CONTRACT PROVISIONS

Title to and disposition of property. All facilities, buildings, fixtures, equipment, or other items costing more than $50 each, paid for or purchased with funds contributed jointly by the Operator and the Government, shall belong to the Operator and the Government jointly, in proportion to their respective contributions, and upon the termination of the contract, if they have any salvage value, shall be disposed of for their joint account unless the Government, in writing, waives its interest in any such items. The Government may require the dismantling, severance from land, and removal of any such items in order to realize its interest in the salvage value thereof, and the cost of any such removal and of the disposal of the items shall be for the joint account of the parties in proportion to their respective interests.

Repayment by Operator. If, upon the completion of the exploration project or termination of the contract, the Government considers that a discovery or development has resulted from the work from which commercial production of ore may be made, the Government, within 6 months thereafter, shall so certify to the Operator, particularly describing and delimiting its estimate of the discovery or the development. Thereafter, if and as ore is produced as a result of such discovery or development, the Operator and his successor in interest shall be and become obligated to pay to the Government a percentage royalty on the net smelter returns or other net proceeds realized from such ore, concentrates, or metal produced within ten (10) years from the date of this contract, until the total amount contributed by the Government, without interest, is fully repaid or said 10 years have elapsed, whichever occurs first, as follows:

> Of net smelter returns or other net proceeds not in excess of eight dollars ($8.00) per ton of ore: One and one-half (1-1/2) percent.
>
> Of net smelter returns or other net proceeds in excess of eight dollars ($8.00) per ton of ore: One and one-half (1-1/2) percent, plus one-half (1/2) percent for each additional full fifty cents ($0.50) in excess of eight dollars ($8.00) per ton of ore, but not in excess of a maximum of five (5) percent.

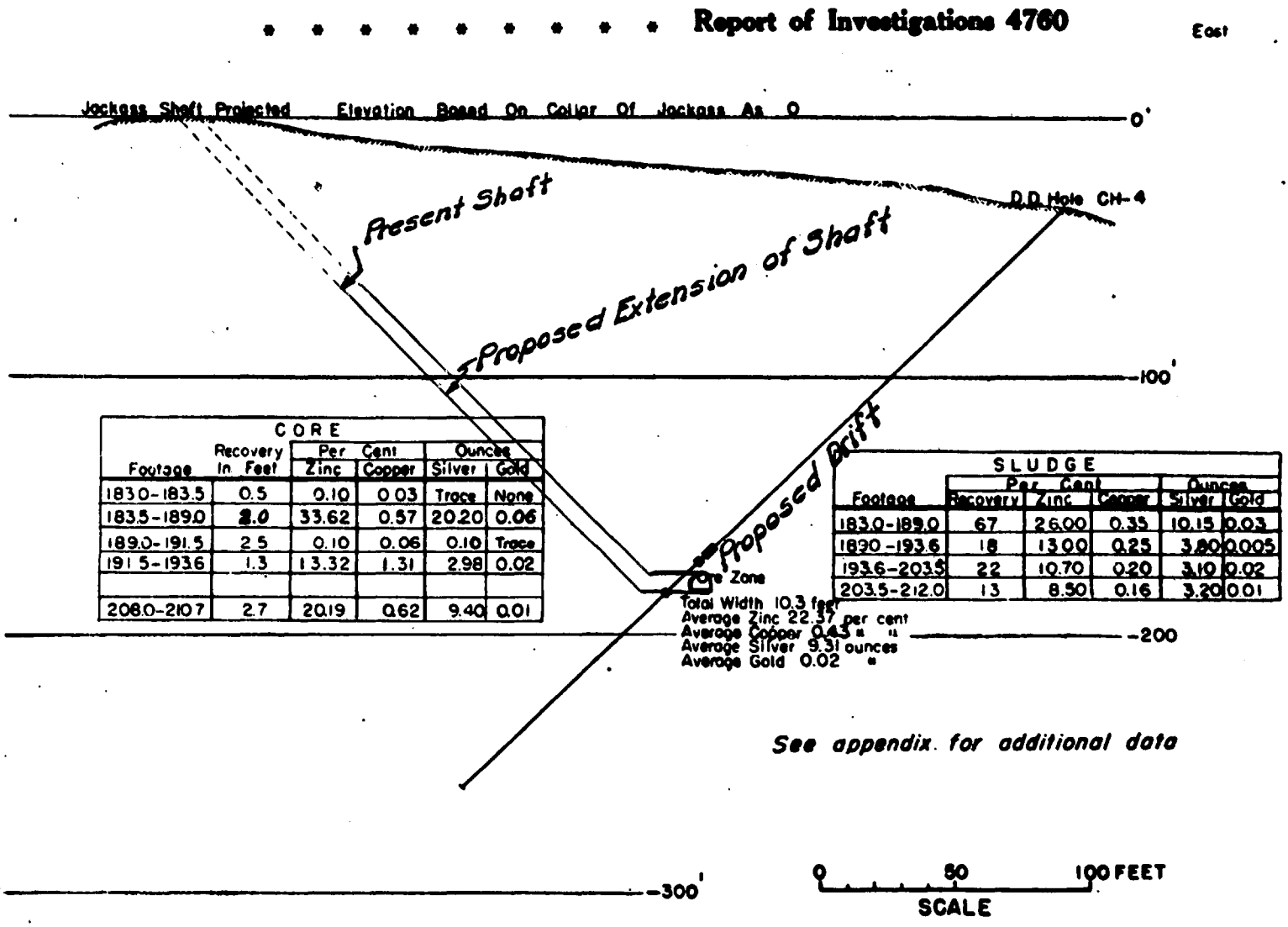
This obligation to repay from net returns or proceeds shall be and remain a claim and lien upon the mineral deposit which is the subject of the exploration project and upon any production resulting from such discovery or development, in favor of the Government, until fully paid, or until said 10-year period has elapsed; and this claim and lien and the Government's right to repayment shall survive any termination of the contract, whether by completion of the exploration project or otherwise. This article is not to be construed as imposing any obligation on the Operator or his successor in interest to produce ore from any such discovery or development.

INVESTIGATION OF WEST BELT COPPER-ZINC MINES

EL DORADO, AMADOR, CALAVERAS, AND MARIPOSA COUNTIES, CALIF.

BY FRANK J. WIEBELT, W. C. SANBORN, R. R. TRENGOVE, AND SPANGLER RICKER

Report of Investigations 4760



CORE					
Footage	Recovery In Feet	Per Cent Zinc	Per Cent Copper	Ounces Silver	Ounces Gold
183.0-183.5	0.5	0.10	0.03	Trace	None
183.5-189.0	2.0	33.62	0.57	20.20	0.06
189.0-191.5	2.5	0.10	0.06	0.10	Trace
191.5-193.6	1.3	13.32	1.31	2.98	0.02
208.0-210.7	2.7	20.19	0.62	9.40	0.01

SLUDGE					
Footage	Per Cent Recovery	Per Cent Zinc	Per Cent Copper	Ounces Silver	Ounces Gold
183.0-189.0	67	26.00	0.35	10.15	0.03
189.0-193.6	18	13.00	0.25	3.80	0.005
193.6-203.5	22	10.70	0.20	3.10	0.02
203.5-212.0	13	8.50	0.16	3.20	0.01

Figure 6. - Section through drill hole CH-4, Copper Hill mine, Amador County.

Work on manuscript completed October 1950. The Bureau of Mines will welcome reprinting of this paper, provided the following footnote acknowledgment is made: "Reprinted from Bureau of Mines Report of Investigations 4760."

UNITED STATES DEPARTMENT OF THE INTERIOR
Oscar L. Chapman, Secretary
BUREAU OF MINES
James Boyd, Director

February 1951

DEPARTMENT OF THE NAVY
Defense Records Management
RECEIVED
JUN 9 1952

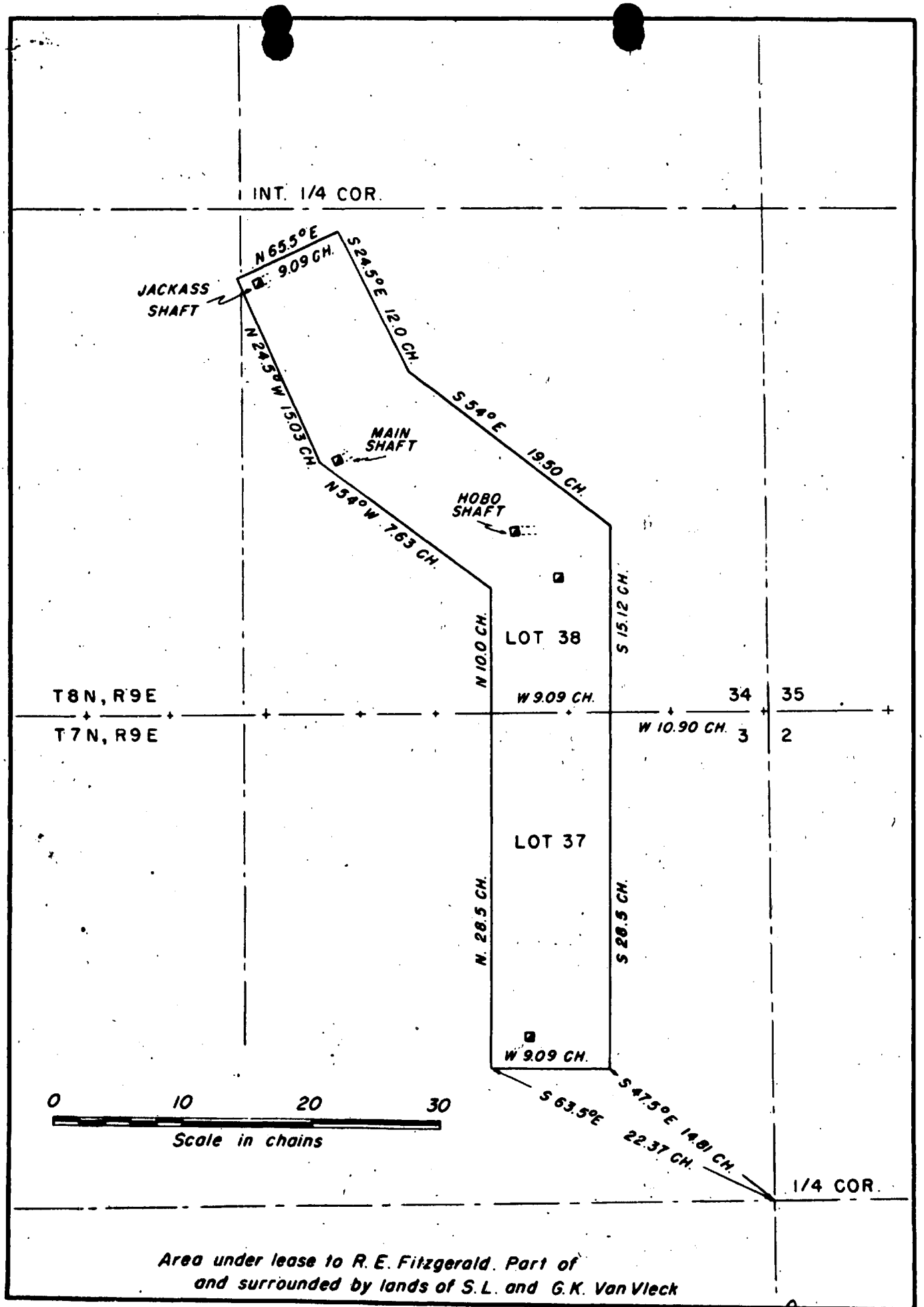


Figure 5 - Copper Hill mine lease

Dma - 477

Form MF-103
(Revised June 1951)

UNITED STATES DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS ADMINISTRATION

Budget Bureau No. 42-R1035.1.

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

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

Not To Be Filled in by Applicant

Docket No. DMEA-2495
Metal or Mineral
Date Received 4-21-52
Amount $
Participation (Government %)

Name and address of applicant

R. E. Fitzgerald, (Trustee)
c/o Dr. E. C. Hartwell
209 Post Street
San Francisco, Calif.

Date April 15, 1952

If you have already filed MF-100, give date filed _____, type of assistance requested Production Loan Application,
DMA Docket Number (if available) D. M. A. - 477

INSTRUCTIONS

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

1. (*a*) Give a description of the real property that will be in any way involved in the exploration project, including any existing mine or operating property. Copper Hill Mine, Amador Co., Calif. (See D.M.A. - 477)

   (*b*) If you are not the owner of the property, submit a copy of the lease, purchase option, or other agreements under which you are authorized to operate the property with each copy of your application. (See D.M.A. - 477)

   (*c*) Give the legal description of the exact parcel, plot, or area upon which the exploration is to be conducted. Calif.
   Lots 37 and 38, sections 3, T7N, R9E, and 34, T8N, R9E in the N.W. part of Amador Co.

   NOTE: (1) If both areas are the same, so state. The only obligation to repay the Government is from the net earnings from any commercial discovery made in the area specified in (*c*) above in which the exploration is to be conducted, and the expenditure of funds which may be charged as costs of the project must be limited to that area or to work necessary to perform the exploration in that area.

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

2. (*a*) What metals or minerals do you expect to find? Zinc - some copper, silver and gold.

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

See attachments.
Also see D.M.A. - 477
for reports.

(U.S. Geological Survey)
(U.S. Bureau of Mines)
(Independent consulting Engineer and geologist)

16—64067-2

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

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

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

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

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

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

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

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

   (*a*) Rented

   (*b*) Purchased

   (*c*) Furnished by you

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

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

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

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

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

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

CERTIFICATION

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

(Name of company)

By R. E. Fitzgerald
(Signature of authorized official)

April 15, 1952
(Date)

Trustee
(Title)

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

U. S. GOVERNMENT PRINTING OFFICE 16—84067-2

R.E. Fitzgerald, (Trustee)

c/o Dr. E. C. Hartwell

209 Post Street

San Francisco, Calif. Date April 15, 1952

3 (a) The purpose of the proposed work is to explore for zinc and copper by pumping out and repairing an existing 125 ft. shaft, and extending it on the vein an additional 115 ft., crosscutting through the vein 22 ft. to the hanging wall of ore cut by diamond drill hole drilled by U.S. Bureau of Mines. If ore is proven, to drift 75 ft. each direction in the vein. Estimated total cost of project will be $ 20,870.00 itemized as follows:

Erect head frame and hoist house, install surface equipment and repair collar of shaft.	1,270.00
Pump out and clean up existing 125 ft. shaft. Install pipe, ladders and rail.	3,125.00
Sinking additional 115 ft. of shaft to diamond drill hole.	5,135.00
Timbering *If solid timbering is necessary.	2,110.00
Crosscutting 22 ft.	600.00
Drifting 150 ft.	3,865.00
Accounting $100. per mo. 3 months.	300.00
Social Security, Compensation Insurance, Sales Tax, etc.	1,000.00
Assaying	250.00
Engineering	500.00
Rental of Equipment	1,620.00
Purchase of Equipment and Supplies	1,095.00
	$ 20,870.00

3 (b) The time required to start is seven (7) days.

Completion to be 90 to 120 days.

R. E. Fitzgerald, (Trustee)
c/o Dr. E. C. Hartwell
209 Post Street
San Francisco, Calif. Date April 15, 1952

4. Map attached. Also see D.M.A. Docket # 477 for additional maps and information.

5. None.

R. E. Fitzgerald, (Trustee)
c/o Dr. E. C. Hartwell
209 Post Street
San Francisco, Calif.

Date April 15, 1952

6.	Head frame 20 feet in height to be constructed	$ 470.00
	Hoist house shed, with concrete foundation for the hoist	333.30
	Purchase and install air, water and pump lines	1,030.70

R. E. Fitzgerald, (Trustee)

c/o Dr. E. C. Hartwell

209 Post Street

San Francisco, Calif. Date April 15, 1952

7. 7 A RENTED

Diesel driven compressor, 365 cu. ft. cap.	$ 365.00	monthly
Air driven pump	50.00	"
Truck, (will also be used instead of installing ore bin, track & rail at surface.)	50.00	"
Rock Drills, 2 at $30.00 ea.	60.00	"
Air received at $15.00 per month	15.00	"
	540.00	
Three months -		$ 1,620.00

7 B PURCHASE

Mine skip, 30" gauge, 16 to 20 cut. ft.	$ 200.00	used
Drill steel, made up, 4 sets, 3 lengths ea.	104.00	190 lbs.
Detachable bits, 100 at 3 gauges	38.00	
Pipe, 960 ft. 1" and 2"	384.00	
Pipe fittings, valves, unions, etc.	82.40	
Rails	220.00	
Rail spikes, 200 lbs.	30.00	
Steel sheets for shoveling	36.00	
	$ 1,095.00	

7 C Air driven hoist)
Column bar & arm)
Rock drill hoses, air & water)
Miscellaneous tools & appliances)

furnished project by applicant at no cost.

R. E. Fitzgerald, (Trustee)
c/o Dr. E. C. Hartwell
209 Post Street
San Francisco, Calif.

Date April 15, 1952

8.	1 - Mill wright	$16.00 per day plus $2.00 travel time.							
	2 - Miners or Timbermen	14.00	"	"	"	1.75	"	"	each.
	1 - Hoist Engr.	14.00	"	"	"	1.75	"	"	
	1 - Supt. (working)	500.00 per month.							

NOTE: (Insurance, Social Security, etc., included in estimate of 3 A.)

R. E. Fitzgerald, (Trustee)
c/o Dr. E. C. Hartwell
209 Post Street
San Francisco, Calif.

Date April 15, 1952

9.	Engineering	$ 500.00
	Assaying	250.00
	Accounting	300.00
		$1,050.00

R. E. Fitzgerald, (Trustee)

c/o Dr. E. C. Hartwell

209 Post Street

San Francisco, Calif. Date April 15, 1952

10. A - $10,435.00 or 50% of cost.

B - This amount is sufficient to pay applicants part of the cost of the project in accordance with the Regulations on government participation.

R. E. Fitzgerald, (Trustee)
c/o Dr. E. C. Hartwell
209 Post Street
San Francisco, Calif.

Date April 15, 1952

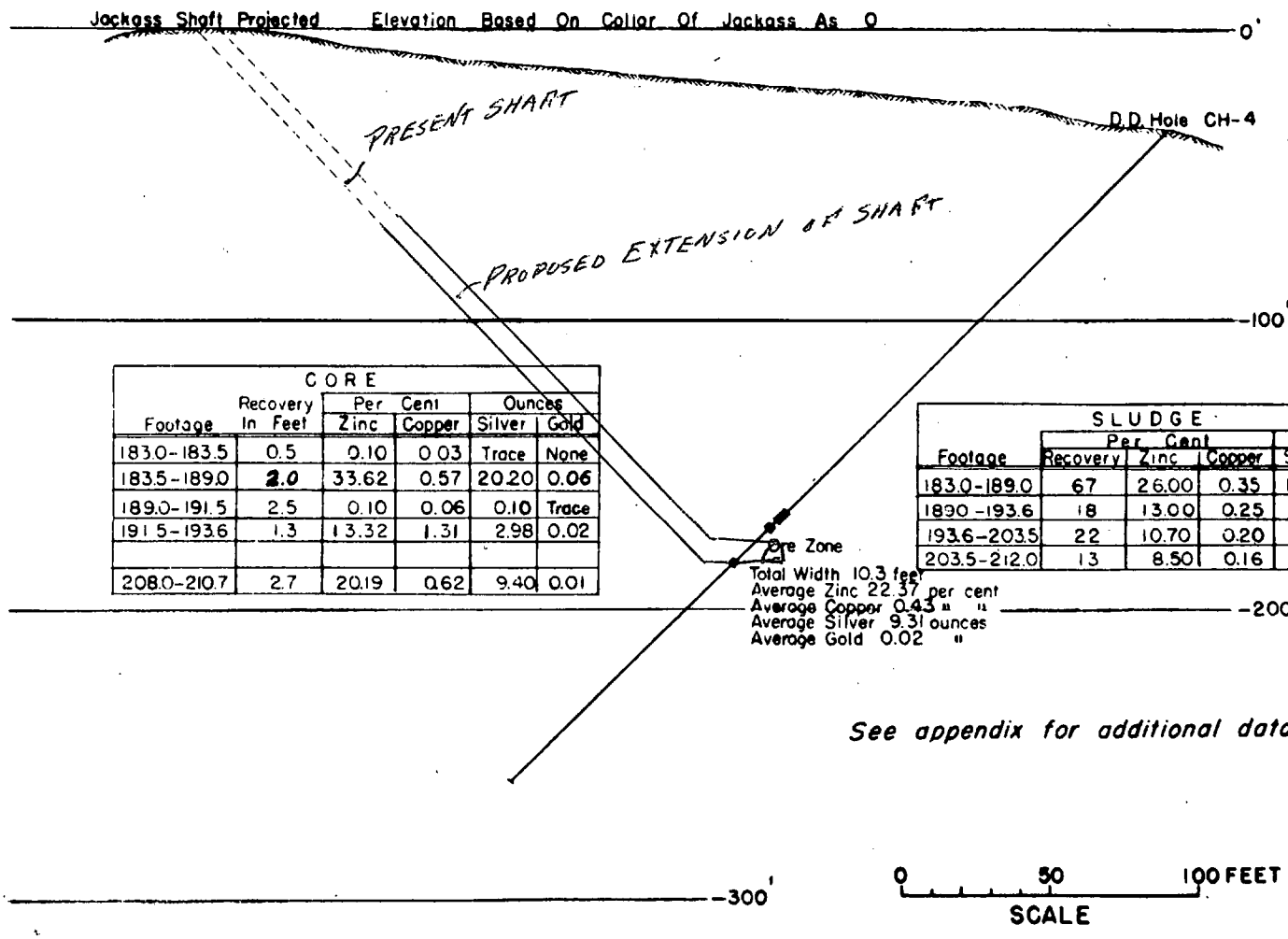
11. To explore an area about the jackass shaft where a U.S. Bureau of Mines diamond drill hole revealed slightly more than 10 feet of 22.37% zinc ore at a depth of approximately 150 feet. Production loan dependant upon opening up this particular area. See attached letter and map.

INVESTIGATION OF WEST BELT COPPER-ZINC MINES

EL DORADO, AMADOR, CALAVERAS, AND MARIPOSA COUNTIES, CALIF.

BY FRANK J. WIEBELT, W. C. SANBORN, R. R. TRENGOVE, AND SPANGLER RICKER

West * * * * * * * * * **Report of Investigations 4760** East



CORE					
Footage	Recovery In Feet	Per Cent Zinc	Per Cent Copper	Ounces Silver	Ounces Gold
183.0-183.5	0.5	0.10	0.03	Trace	None
183.5-189.0	2.0	33.62	0.57	20.20	0.06
189.0-191.5	2.5	0.10	0.06	0.10	Trace
191.5-193.6	1.3	13.32	1.31	2.98	0.02
208.0-210.7	2.7	20.19	0.62	9.40	0.01

SLUDGE					
Footage	Recovery	Per Cent Zinc	Per Cent Copper	Ounces Silver	Ounces Gold
183.0-189.0	67	26.00	0.35	10.15	0.03
189.0-193.6	18	13.00	0.25	3.80	0.005
193.6-203.5	22	10.70	0.20	3.10	0.02
203.5-212.0	13	8.50	0.16	3.20	0.01

See appendix for additional data

Figure 6. - Section through drill hole CH-4, Copper Hill mine, Amador County.

Work on manuscript completed October 1950. The Bureau of Mines will welcome reprinting of this paper, provided the following footnote acknowledgment is made: "Reprinted from Bureau of Mines Report of Investigations 4760."

UNITED STATES DEPARTMENT OF THE INTERIOR
Oscar L. Chapman, Secretary
BUREAU OF MINES
James Boyd, Director

February 1951

OWNER'S CONSENT TO LIEN

WHEREAS, the undersigned, as owner, co-owner, lessor, or seller has an interest in certain property in the State of CALIFORNIA, County of AMADOR, which is the subject of a proposed Exploration Project Contract, hereinafter called the "Contract", between the United States of America, hereinafter called the "Government", and 1/ R. E. FITZGERALD, TRUSTEE

hereinafter called the "Operator"; and

WHEREAS, under certain provisions of said Contract which are set forth on the reverse side hereof, the Government will acquire certain rights and equities which do or may conflict with or be adverse to the interest of the undersigned in said property;

NOW THEREFORE, the undersigned, in consideration of said Contract and as an inducement to the Government and Operator to enter into same, undertakes and agrees as follows:

1. The Government's equity in and right to remove facilities, buildings, fixtures, and equipment, as provided in the Contract, shall prevail over and be prior and superior to any conflicting or adverse rights of the undersigned.

2. The Government's percentage royalty on net smelter returns or other net proceeds realized from ore, concentrates, or metal produced within ten (10) years from the date of the Contract, and the Government's lien for the payment of said percentage royalty shall attach to the mineral deposit and the production therefrom, in the amount of the Government's contribution, not in excess of 2/ $_____, all upon the terms and conditions set forth in said Contract.

3. The undersigned shall commit no act nor assert any claim that may contravene or conflict with the lien, claim, or rights of the Government under the provisions of the said Contract. This agreement shall be binding upon the heirs, executors, administrators, successors, and assigns of the undersigned.

Dated this TENTH (10) day of APRIL, 195_.

Stanley L Van Vleck

Gordon K. Van Vleck

1/ Insert the name of the Operator as it will appear in the Exploration Project Contract.

2/ Insert the maximum amount of the Government's contribution.

10919

RELEVANT CONTRACT PROVISIONS

Title to and disposition of property. All facilities, buildings, fixtures, equipment, or other items costing more than $50 each, paid for or purchased with funds contributed jointly by the Operator and the Government, shall belong to the Operator and the Government jointly, in proportion to their respective contributions, and upon the termination of the contract, if they have any salvage value, shall be disposed of for their joint account unless the Government, in writing, waives its interest in any such items. The Government may require the dismantling, severance from land, and removal of any such items in order to realize its interest in the salvage value thereof, and the cost of any such removal and of the disposal of the items shall be for the joint account of the parties in proportion to their respective interests.

Repayment by Operator. If, upon the completion of the exploration project or termination of the contract, the Government considers that a discovery or development has resulted from the work from which commercial production of ore may be made, the Government, within 6 months thereafter, shall so certify to the Operator, particularly describing and delimiting its estimate of the discovery or the development. Thereafter, if and as ore is produced as a result of such discovery or development, the Operator and his successor in interest shall be and become obligated to pay to the Government a percentage royalty on the net smelter returns or other net proceeds realized from such ore, concentrates, or metal produced within ten (10) years from the date of this contract, until the total amount contributed by the Government, without interest, is fully repaid or said 10 years have elapsed, whichever occurs first, as follows:

> Of net smelter returns or other net proceeds not in excess of eight dollars ($8.00) per ton of ore: One and one-half (1-1/2) percent.
>
> Of net smelter returns or other net proceeds in excess of eight dollars ($8.00) per ton of ore: One and one-half (1-1/2) percent, plus one-half (1/2) percent for each additional full fifty cents ($0.50) in excess of eight dollars ($8.00) per ton of ore, but not in excess of a maximum of five (5) percent.

This obligation to repay from net returns or proceeds shall be and remain a claim and lien upon the mineral deposit which is the subject of the exploration project and upon any production resulting from such discovery or development, in favor of the Government, until fully paid, or until said 10-year period has elapsed; and this claim and lien and the Government's right to repayment shall survive any termination of the contract, whether by completion of the exploration project or otherwise. This article is not to be construed as imposing any obligation on the Operator or his successor in interest to produce ore from any such discovery or development.

Form MF-100
(May 1951)

U. S. DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS ADMINISTRATION

Form approved.
Budget Bureau No. 42-R1026.

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

NOT TO BE FILLED IN BY APPLICANT

Docket No. DMEA-2495

Date received 4-21-52

R. E. Fitzgerald (Trustee)
c/o Dr. E. C. Hartwell
209 Post Street
San Francisco, Calif.

Name and address of applicant

Date April 15, 1952

INSTRUCTIONS

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

GENERAL TECHNICAL DATA

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

1. Materials produced:
   (*a*) What are the chief mine, mill, or smelter products? Production Loan Application
   (*b*) What are the byproducts, if any? See Docket D.M.A. #477
2. Name(s) and type(s) of mine(s), mill(s), smelter(s), refinery(ies), pit(s), quarry (ies), drilling operation(s). Include old names of property, if any. Show extent of workings, including the following:
   (*a*) Linear feet of shafts.
   (*b*) Linear feet of drifts and crosscuts.
   (*c*) Linear feet of tunnels or adits.
   (*d*) Linear feet of other mine openings (explain briefly).

   Indicate whether mine is flooded or not. Describe any pumping problems. Give size or productive capacity.
3. For each operation listed above supply the following:
   (*a*) Distance and direction from nearest town and shipping point. See Docket D.M.A. #477
   (*b*) Mining district.
   (*c*) Township, Section, Range.
   (*d*) County, State.
4. (*a*) State whether or not property is now in operation, and if in operation, by whom operated.
   (*b*) Are you operating this property as:
   - ☐ Owner.
   - ☒ Lessee.
   - ☐ Contractor.
5. Number of years in production _____

   If not in production or operation, estimated date when production will begin _____
6. Experience of operators:

   Describe the mining and general business experience of (*a*) the applicant, and (*b*) the person or persons who manage the project.
7. History: Docket D. M. A. # 477
   (*a*) Give a statement, as complete as possible, of previous exploration, development, operation, and production of property, with reasons for suspension of operation.
   (*b*) State briefly the known history and production of adjoining and neighboring properties.
   (*c*) Furnish any available (private) reports that may apply to this application, including results of mine examinations, recommended exploration and development, and metallurgical investigations.

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

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

If more lines are needed continue on separate sheet.

9. Capital Stock Issues:

For Corporate Applicants

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

*Indicate period covered.

10. Production:

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

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

12. Ore or Mineral Reserves:

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

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

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

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

TOTAL ORE OR MINERAL RESERVES

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

(*c*) If placer:

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

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

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

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

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

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

13. Access Roads:

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

14. Water Supply:

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

15. Power:

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

16. Labor:

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

17. Equipment and Facilities: See Docket D.M.A. # 477 . See MF-103 dated April 15, 1952.

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

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

CERTIFICATION

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

(Name of company)

By R. E. Fitzgerald
(Signature of authorized official)

April 15, 1952
(Date)

Trustee
(Title)

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

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

FILE COPY
SURNAME:

UNITED STATES
DEPARTMENT OF THE INTERIOR

500

DEFENSE MINERALS ADMINISTRATION
WASHINGTON 25, D. C.

N. S. in R. P.

January 22, 1954

Project Summary Report

By: W. R. Griswold

1. DMEA-2495 (zinc-copper)
   Contract No. Idm-E331
   Copper Hill Mine
   Amador County, California

   Operator: R. E. Fitzgerald, Trustee for Copper Hill Mine Venture
   C/O Dr. O. C. Hartwell
   209 Post Street
   San Francisco, California

   Operator's property rights:
   Lease (no copy in docket) — Owner's Consent to Lien (4/10/195_)

2. Contract dated 6/2/52 Completion date 10/2/52

   Work authorized:

Rehabilitation and Repairs	$ 3,125.00
Headframe and hoist house	1,270.00
Miscellaneous	1,300.00
Equipment rental	1,620.00
Equipment purchases	1,095.00
Sinking & timbering 115 ft. @ $63.00	7,245.00
Crosscutting 22 ft. @ $27.26	600.00
Drifting 150 ft. @ $25.77	3,865.00
Engineering	500.00
	$20,620.00
Government participation @ 50%	$10,310.00

   Amendments:

   No. 1 - Completion time extended to 1/2/53
   No. 2 - Shaft sinking decreased to 60 feet. Crosscutting increased to 60 feet. Drifting increased to 200 feet. No change in project cost.
   No. 3 - Independent contracts are allowed. No cost change.
   No. 4 - Completion date extended to 5/1/53.
   No. 5 - Subdivides drifting and crosscut costs. No over-all cost changes.

Work completed:

60 ft. of shaft sinking @ $83.50	$ 5,010.00
60 ft. of crosscutting @ $25.00	1,500.00
67 ft. of drifting @ $37.42	2,507.09
Concrete shaft collar	265.28
Technical services	500.00
Assaying	154.50
Equipment rental	2,001.80
Liability insurance	635.18
S.S. tax	88.12
Accounting	155.36
P.R tax	453.15
Equipment purchased	981.13
Rehabilitation and repairs	3,078.93
New buildings	1,256.26
	$18,586.80
Government participation @ 50%	$ 9,293.40

Work completed in February 1953

3. Audit Certificate issued 4/8/53.

4. Certificate of Discovery issued 4/30/53

Ore estimate:

5,400 tons
Grade 18.2 per cent zinc and 0.4 per cent copper

5. Comments:

Work was not done in a very efficient manner, though after a contractor was called in, the efficiency improved to a reasonable degree.

The work of the project was done on the Jackass vein of the Copper Hill mine, a vein occurring in a silicified amphibolite. Possibilities are fair for additional ore bodies, though probably not on a large scale. Possible additional work should probably first take the form of diamond drilling, to be followed by underground work if good results were obtained from the drilling.

A few rough preliminary metallurgical tests were made in this ore. While not conclusive, yet such tests indicate that this would not be an easy ore to treat.

W. R. Griswold

☑ Audited

☑ Certified

Name R.E. Fitzgerald, Trustee

State California

RK ANALYSIS SHEET - DMEA PROJEC

Analysis as of 12/6/54
Incl. Voucher for Feb.-53

Commodity Zinc-Copper

☑ Actual Cost

☐ Agreed Unit Costs

Docket No. 2495

Idm-E No. 331

OPERATION	AUTHORIZED Units	AUTHORIZED Cost	COMPLETED Units	COMPLETED Cost	NET COST
Drifting & Crosscutting	260	6,700.00*	127	5,076.34	6,940.12
Raising					
Shafts	60	5,010.00*	60	5,010.00	6,454.00
Winzes					
Drilling (Specify)					
Surface Excavation					
Underground Excavation					
Roads and Trails					
Operating Equipment Purchased		1095.00		00	00
Surface Rehabilitation & Repairs					
Underground Rehabilitation		3,125.00*		3,078.9	3,797.73
New Building, Improvements, etc.		1,270.00*		1,256.26	1,394.95
Other (Specify) Assaying, equipment rental, engineering and misc.		3,420.00		4,165.27	4,165.27
Totals		20,620.00		18,586.80	18,586.80

* Maximum

Net Cost:
Assaying - 154.80 charged to Dr-Xc.
Concreting shaft collar - 265.28 charged to shafts

Prepared by JY

Equipment rental - 2001.80 charged to Dr-Xc & shafts.
Technical services - 500.00* charged to Dr-Xc & shafts.
Misc. distributed prorata.

71626

UNITED STATES
DEPARTMENT OF THE INTERIOR
OFFICE OF MINERALS EXPLORATION

555 Battery Street
San Francisco 11, California

October 30, 1962

Memorandum

To: Chief, Division of Field Operations, OME, Washington, D. C.

From: Acting Field Officer, Region II

Subject: DMEA-2495 (Zinc, Copper)
Copper Hill Mine Venture
Copper Hill Mine
Amador County, California
Contract Idm-E331

Enclosed for your files are copies of letters concerning the expiration of the royalty period for the subject contract.

Paul V. Fillo

Paul V. Fillo

Enclosures

MME Form 7
(10-58)

OFFICIAL FILE COPY

Date	Surname	Code
10/22	Murphy	500
10/22	on leave	500
10/22	Talbot	800
/	Selfridge	130
10/22	Johnson	110
10/22	Fumich	100
		820
		500

10-30-62

Copper Hill Mine Venture
R. E. Fitzgerald, Trustee
c/o Dr. C. O. Hartwell
209 East Street
San Francisco, California

Re: DMEA-2495 (Zinc-Copper)
Copper Hill Mine Venture
Copper Hill Mine
Amador County, California
Contract Idm-E331

Gentlemen:

By the terms of the subject Exploration Project Contract and the certification of discovery or development dated April 30, 1953, all minerals mined or produced from June 2, 1952, to June 2, 1962, were subject to the Government's percentage royalty as set forth in the said contract.

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

Sincerely yours,

George Fumich, Jr.

Director

cc: Director's Reading File
Region II (2)
CA&A Division
Docket
Code 500
Messrs Stanley L. and Gordon K. Van Vleck
Sloughhouse, Michigan Bar, California

FMMurphy/mm
lo-22-62

43683

MME Form 7
(10-58)

10-30-62

OFFICIAL FILE COPY

Date	Surname	Code
10/22	Murphy	500
10/22	Van Ledue	500
10/22	Talbot	800
	Selfridge	130
10/22	Johnson	110
	Fumich	100
		~~320~~
		~~500~~

Mr. Stanley L. VanVleck
Mr. Gordon K. VanVleck
General Delivery
Sleughhouse, Michigan Bar, California

Re: DMEA-2495 (Zinc-Copper)
Copper Hill Mine Venture
Copper Hill Mine
Amador County, California
Contract Idm-E331

Gentlemen:

Enclosed is a self-explanatory letter of today to Copper Hill Mine Venture under the subject contract.

This correspondence relates to the Owner's Consent to Lien signed by you on April 10, 1952, under the Defense Minerals Exploration Administration program which has been succeeded by the Office of Minerals Exploration program.

Sincerely yours,

George Fumich, Jr.

(eh)

Director

Enclosure

cc: Director's reading
Region II (2)
~~XXXXXXXXXXXX~~
Docket✓
Code 500
FMMURPHY/mm
10-22/62

43683

NMS Form 7
(10-58)

OFFICIAL FILE COPY

Date	Surname	Code
10/22	Murphy	500
10/22	Van Lear	500
10/22	Talbert	800
	SCL	130
10/22	Johnson	110
10-22	Ferrel	100
		220
		~~500~~

OCT 2 2 1962

Memorandum

To: Acting Field Officer, Region II

From: Chief, Division of Field Operations

Subject: DMEA-2495 (Zinc-Copper)
Copper Hill Mine Venture
Copper Hill Mine
Amador County, California
Contract Idm-E331

If the enclosed letters to Copper Hill Mine Venture and Messrs. Stanley L. and Gordon K. VanVleck concerning the expiration of the royalty period for the subject contract meet with your approval and if you have no present information to the contrary, kindly date and mail them, returning the distribution copies to us.

George C. Selfridge (gb)

Enclosures
FMMurphy/mm
10-22-62
cc: Director's reading file
~~XXXXXXXXX~~ Review Committee
~~XXXXXXXXXXXXX~~
Docket
Code 500

43683

UNITED STATES
DEPARTMENT OF THE INTERIOR
OFFICE OF MINERALS EXPLORATION

555 Battery Street
San Francisco 11, California

March 13, 1962

OFFICIAL FILE COPY
O. M. E
RECEIVED MAR 19 1962

DATE		
3/19	[illegible]	800
		~~500~~
		229

Memorandum

To: Fiscal Section
Division of Administrative Services
Office of the Secretary
Department of the Interior
Washington 25, D. C.

From: Acting Field Officer, OME, Region II

Subject: DMEA-2495 (Zinc-Copper)
Copper Hill Mine Venture
Copper Hill Mine
Amador County, California
Contract Idm-E331

Enclosed herewith is the original of a Report of Royalty Review covering the subject contract.

This office concurs in the facts as stated in the Report of Royalty Review.

PAUL V. FILLO

Paul V. Fillo

Copy to: Contract Administration and Audit Division
OME, Washington 25, D. C.

OME Files

MME Form 7
(10-58)

OFFICIAL FILE COPY

Date	Surname	Code
		220

MAR 6 1962

Memorandum

To: Acting Field Officer, Region II

From: E. D. Talbert, Acting Chief (Signed) E. D. Talbert
Contract Administration and Audit Division

Subject: DMEA-2495 (Zinc-Copper)
Copper Hill Mine Venture
Copper Hill Mine
Amador County, California
Contract Idm-8331

The original and one copy of a Report of Royalty Review covering the subject contract are enclosed. If you concur in the facts stated therein, please make the following distribution:

(a) Original to the Fiscal Section, Division of Administrative Services, Office of the Secretary, Department of the Interior, Washington 25, D. C.; and
(b) One copy for your files.

This Report of Royalty Review is made for record purposes only; therefore, no copy for the Operator is provided.

As evidence of your concurrence, a copy of your memorandum transmitting the original report to the Fiscal Section should be furnished this Division. If for any reason you do not concur, both copies of the report should be returned to this Division with your comments.

Enclosures

EDTalbert/ama 3-6-62

cc:
Docket
Director's Reading File
CA & A Division
Mr. Rothrock

43683

MME Form 7
(10-58)

OFFICIAL FILE COPY

Date	Surname	Code
5/21	C	220
		500

MAY 21 1959

Memorandum

To: Mr. George Mavor, OME Auditor

From: E. D. Talbert, Acting Chief (Signed) E. D. Talbert
Contract Administration and Audit Division

Subject: Docket No. DMEA-2495 (Zinc-Copper)
R. E. Fitzgerald
Contract No. Idm-E331

In the copies of your Report of Royalty Review of the subject contract, the following words in reason (a):

"mining and milling operations in the main shaft area were suspended in July 1956."

have been replaced with:

"there has been no production from the land included in the exploration contract."

Distribution of the regional copies is authorized after this revision is made.

EDTalbert/ama
May 21, 1959

Copy to: Docket
Director's Reading File
CA & A Division

43683

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

RECEIVED
FEB 29 1956

1605 Evans Avenue
Reno, Nevada

February 27, 1956

Memorandum

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

From: Executive Officer, DMEA Field Team, Region II

Subject: Docket No. DMEA-2495 (Zinc-Copper)
Copper Hill Mine Venture
(R. E. Fitzgerald, Trustee)
Copper Hill Mine
Amador County, California
Contract No. Idm-E331

Reference is made to your letter of January 30, 1956 concerning amendment 6 to subject contract.

The amendment has been executed by the Operator and we are attaching the Government, Docket, and Division copies. The remaining copies have been distributed in the usual manner.

Attached also are two copies of covering letter dated Feb. 15, 1956 from Mr. Fitzgerald in which he requests that the amendment be reviewed. I will discuss this matter with Roscoe Smith when he visits our office and give you our suggestions.

S. Ricker

Attach.

BUREAU OF MINES
WASHINGTON, D. C.

FEB 29 8 34 AM '56

San Francisco
Feb. 15, 1956

Mr. S. Miller
Executive Officer
D.M.E.A. Field Team, Region III
[illegible] Evans Ave.
[illegible], Nevada

Dear Mr. Miller:

Enclosed find the signed copies of Amendment # 6. All the ore produced to date has been from the Copper Hill Shaft area which is excluded from any royalty payments by said amendment.

Due to the low price of zinc in the period since the exploration loan was granted no work has been attempted in the area of the Jackass Shaft where the exploratory work was done with the aid of the loan. This shaft is approximately 1000 ft. North East of the Copper Hill Shaft and several hundred feet in the Hanging Wall of the Copper Hill vein and no connection to the Copper Hill Vein or workings which is high in copper. This Jackass Shaft area which was developed with the aid of the loan is high in zinc and assumed to be a separate and distinct vein from the Copper Hill Vein.

When the D.M.E.A. approved and certified our loan it was our intention to erect a milling plant on the property but the R.F.C. wanted more proof of the existence of the zinc ore body in the Jackass area. This area was then developed with the aid of the exploration loan and the discovery was certified. By this time the price of zinc had fallen to such an extent that we abandoned the idea of building the mill.

Our group had previous to the exploratory loan expended between $35,000. — $40,000. in the development of the Copper Hill Shaft area (copper) ore. The only possibility of recovering our investment seemed to be a lease to Velo Mining Co. and The Amador Copper Hill Corporation who had a mill, on a share the profit plan. About 25 cars of copper concentrates were shipped to the smelter with no profit so the mine reverted to our original group.

We have since shipped 10 cars of copper concentrates from the excluded area but with a 30 mile haul to a mill plus the rental of the mill makes it a very marginal operation. Our group have received no Royalties or payments to date from any of the operations.

In December it looked like we could show an operating profit for the first time when the heaviest storm in 30 years flooded the mine & washed out the roads & we were forced to close.

It is now necessary to secure additional funds to resume operations

and as the ore that was blocked out and easily mined has been depleted to such an extent the mine does not have the appeal for investment it formerly had.

We would appreciate it very much if the enclosed amendment could be reviewed and consideration given the facts of the exploration loan conditions with the idea of excluding more of the Copper Hill Shaft area both to the North and to the South of the Copper Hill Shaft which would allow us to try and develop additional ore and enable us to continue operations on the Copper Hill Vein.

We hope to be able to work the Jackass Shaft area which the loan was granted for exploration, if our milling operations are changed or there is an advance in the price of zinc and at that time will be very happy to repay the loan.

R. E. Fitzgerald

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

RECEIVED
FEB 6 1956

1605 Evans Avenue
Reno, Nevada

February 2, 1956

Mr. R. E. Fitzgerald
c/o Dr. E. C. Hartwell
209 Post Street
San Francisco, California

Re: Docket No. DMEA-2495 (Zinc-copper)
Copper Hill Mine Venture
(R. E. Fitzgerald, Trustee)
Copper Hill Mine
Amador County, California
Contract No. Idm-E331

Dear Mr. Fitzgerald:

We have records of appreciable ore shipments from above referenced property. Will you please, promptly send royalty payments that are due the Government in accordance with contract No. Idm-E331.

Also, you should promptly return all copies of Amendment No. 6, either signed or unsigned. If they are signed, production from the area excluded from royalty as set forth therein is not subject to royalty payments to the Government.

Checks should be made payable to The Defense Minerals Exploration Administration and forwarded to this office along with three copies of each settlement sheet.

Very truly yours,

S. Ricker
Executive Officer
DMEA Field Team, Region II

SRicker:gh
cc: Opr., Com., DMEA, Wash., D.C.
Finance Off., Reg. II
Geo.Mayor
R. M. Smith
File

File Copy
Surname
Griswold
Selfridge
Johnson
Mittendorf

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

JAN 30 1956

Mr. Spangler Rieker
Executive Officer
DMEA Field Team, Region II
1605 Evans Avenue
Reno, Nevada

Re: Docket No. DMEA-2495 (Zinc-Copper)
Copper Hill Mine Venture
(R. E. Fitzgerald, Trustee)
Copper Hill Mine
Amador County, California
Contract No. Idm-8331

Dear Mr. Rieker:

On November 26, 1954, we forwarded you the original and five copies of a proposed Amendment No. 6 to the cited contract. The amendment provided for the exclusion of certain lands from the certification.

We now note in the December 31, 1955 semi-annual report covering this contract that the Operator has not signed the proposed Amendment No. 6.

We also note the statement:

"Property active during period in area excluded from DMEA royalties."

However, no area has been excluded from DMEA royalties until Amendment No. 6 is signed. Please advise this Operator at once that he must either sign this amendment or else pay royalty on all production from the land under the contract. If he should refuse to do either, please refer the matter to us for action here.

Sincerely yours,

George C. Selfridge
Chairman, Operating Committee GCS

APPROVED:

/s/ Robert W. Geehan GCS
Member, Bureau of Mines

Thor H. Kiilsgaard GCS
Member, Geological Survey

WRGriswold/er 1/30/56
Copy to: Docket
Admr R File
Op. Committee
Base Metals
Mr. Bishop, USBM
Mr. Kiilsgaard, USGS
Chron.

R.C.G.

1605 Evans Avenue
Reno, Nevada

April 20, 1955

Mr. R. E. Fitzgerald
c/o Dr. E. C. Hartwell
209 Post Street
San Francisco, California

Re: Docket No. DMEA-2495 (Zinc-Copper)
Copper Hill Mine Venture
(R. E. Fitzgerald, Trustee)
Copper Hill Mine
Amador County, California
Contract No. Idm-E331
Amendment No. 6

Dear Mr. Fitzgerald:

Our records show that six copies of Amendment No. 6 to above referenced contract were given to you in our San Francisco office on January 14, 1955.

Will you please advise us what action if any you intend to take relative to the amendment.

Very truly yours,

S. Ricker
Executive Officer
DMEA Field Team, Region II

SRicker:gh
cc: DMEA, Washington, D.C.
Finance Office, Reg. II
File

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

420 Custom House
555 Battery Street
San Francisco 11, Calif.

January 12, 1955

Mr. R. E. Fitzgerald
c/o Dr. E. C. Hartwell
209 Post Street
San Francisco, California

Re: Docket No. DMEA-2495 (Zinc-Copper)
Copper Hill Mine Venture
(R. E. Fitzgerald, Trustee)
Copper Hill Mine
Amador County, California
Contract No. Idm-E331
Amendment No. 6

Dear Mr. Fitzgerald:

All of the copies of Amendment No. 6 to the above-subject contract which were returned to Washington attached to a copy of your letter of December 14, 1954, to us have been returned by the Washington office to us.

Our Washington office advises us that they are unable to give favorable consideration to your request for deletion of additional land from royalty obligations.

Please advise us if you wish us to send you the copies of Amendment No. 6 for your further consideration and possible approval.

Sincerely yours,

S. Ricker
Executive Officer
DMEA Field Team, Region II

Copy to: DMEA, Washington, D. C.
R. M. Smith, USGS

File Copy
Surname

signed
Selfridge
Johnson
Mitchell

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

500

Mr. Spangler Ricker, Executive Officer
DMEA Field Team, Region III
420 Custom House
555 Battery Street
San Francisco 11, California

JAN - 6 1955

Re: Docket No. DMEA-2495 (Zinc-Copper)
Copper Hill Mine Venture
(R. Z. Fitzgerald, Trustee)
Copper Hill Mine
Amador County, California
Contract No. Idm-E331

Dear Mr. Ricker:

We have your letter of December 22, returning the unsigned copies of Amendment No. 6 to the cited contract, together with a copy of the December 14 letter from the Operator.

The contract is clear and explicit, with no reasonable possibility of a misunderstanding, stating: "In the event of such certification, any minerals mined or produced from the land described in Article 2," etc.

We must assume that the contract was signed in good faith by the Operator. Nevertheless, we desire at all times to be fair and reasonable, and since the Operator was able to point out ores which were known and developed prior to the contract date, we consented to exempting such previously known ores from royalty payments to the Government, though there was no obligation on our part to do so. Actually, the Operator should have read his contract with some care before signing it, and requested the exemption of known reserves at that time.

It appears that he now wishes other land deleted from the contract, since he plans work in such area, and desires that ores which might be discovered should likewise be exempted from royalties which properly would be due the Government. Please advise Mr. Fitzgerald that we are unable to give favorable consideration to his request for deletion of additional land.

We are returning the copies of Amendment No. 6.

Sincerely yours,

George C. Selfridge (GHB)
Chairman, Operating Committee

Enclosures

APPROVED:

J. H. Hedges (GHB)
Member, Bureau of Mines

Thor H. Kiilsgaard (GHB)
Member, Geological Survey

Mr. Bishop, USBM
Mr. Kiilsgaard, USGS
Chron.

12/30/54 & 1/4/55)
Docket
Admr R. File
Op. Committee
Base Metals

R.C.S.

File Copy
Surname

Selfridge

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

500

Mr. Spangler Ricker, Executive Officer
DMEA Field Team, Region III
420 Custom House
555 Battery Street
San Francisco 11, California

Re: Docket No. DMEA-2495 (Zinc-Copper)
Copper Hill Mine Venture
(R. E. Fitzgerald, Trustee)
Copper Hill Mine
Amador County, California
Contract No. Idm-2331

Dear Mr. Ricker:

We have your letter of December 22, returning the unsigned copies of Amendment No. 6 to the cited contract, together with a copy of the December 14 letter from the Operator.

Please advise him that his request for additional exemptions of lands from the contract is denied. The contract is clear and explicit, with no reasonable possibility of a misunderstanding, stating: "In the event of such certification, any minerals mined or produced from the land described in Article 2," etc.

We must assume that the contract was signed in good faith by the Operator. Nevertheless, we desire at all times to be fair and reasonable, and since the Operator was able to point out ores which were known and developed prior to the contract date, we consented to exempting such previously known ores from royalty payments to the Government, though there was no obligation on our part to do so. Actually, the Operator should have read his contract with some care before signing it, and requested the exemption of known reserves at that time.

It appears that he now wishes other land deleted from the contract, since he plans work in such area, and desires that ores which might be discovered should likewise be exempted from royalties which properly would be due the Government. It is completely impossible that such a request be considered.

We are returning the copies of Amendment No. 6.

Sincerely yours,

George C. Selfridge
Chairman, Operating Committee (24B)

Enclosures

APPROVED:

J. H. Hedges (24B)
Member, Bureau of Mines

Thor H. Kiilsgaard (24B)
Member, Geological Survey

Mr. Bishop, USBM
Mr. Kiilsgaard, USGS
Chron.

1/30/54
Docket
Admr R. File
Op. Committee
Base Metals

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

420 Custom House
555 Battery Street
San Francisco 11, California

December 22, 1954

Memorandum

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

From: Executive Officer, DMEA Field Team, Region III

Subject: Docket No. DMEA-2495 (Zinc-Copper)
Copper Hill Mine Venture (R.E.Fitzgerald, Trustee)
Copper Hill Mine, Amador County, California
Contract No. Idm-E331 (Amendment No. 6)

Reference is made to your letter of November 26, 1954 in which you enclosed the original and five copies of Amendment No. 6 to the contract on above subject docket.

We are enclosing all copies of the amendment as they did not meet with the approval of the operator. Two copies of the operator's letter of December 14, 1954, in which he states his objections to the amendment, are also enclosed.

Mr. Roscoe Smith and I have discussed this problem and suggest that the amendment be changed to read as follows:

> "Excluded from the land referred to in Article 2 of the Contract are the Main Shaft orebodies south of a vertical plane extending east-west through cross cut, as shown on 350 foot level, and above a horizontal plane 100 feet above sea level, as shown on the attached map, which is made a part hereof, entitled "Copper Hill Mine, Vertical Longitudinal Projection, Main Shaft Workings, Amador County, California."

The red line shown on the map would be the dividing line and we believe that the amendment should be approved. This would conclude any further negotiations and remove any prejudice Mr. Fitzgerald has regarding the DMEA project. We also believe the adjustment would be fair to the interests of the Government as well as to the operator.

S. Ricker
Executive Officer, DMEA Field Team, Region III

Enclosures To 5 00

Refer to	Dated
S. Ricker	
Answered	

c/o Dr. E. C. Hartwell
Room 905 209 Post St.
San Francisco, Calif.
December 14, 1954

Mr. S. Ricker, Executive Officer
DMEA Field Team, Region III
420 Custom House
555 Battery Street
San Francisco 11, Calif.

Re: Docket No. DMEA-2495 (Zinc-Copper)
Copper Hill Mine Venture
(R. E. Fitzgerald, Trustee)
Copper Hill Mine
Amador County, California
Contract No. Idm-E331
Amendment No. 6

Dear Mr. Ricker:

This is in reply to your letter of November 29, 1954 enclosing proposed amendment to the subject contract.

I would like to propose that the amendment be changed to exclude all of that area south of the red line drawn on the enclosed map (Field Team copy), this line to extend east and west, vertical plane.

We are at present contemplating some additional work south of the Main Copper Hill Shaft in the area not colored, and any ore mined from this area would have no bearing on the Jackass Shaft exploration project.

Very truly yours,

R. E. Fitzgerald

R. E. Fitzgerald, Trustee
Copper Hill Mine

REF/ln
Enclosures

File Copy
Surname
Griswold
Chamberlin
Ellis
Johnson

UNITED STATES
DEPARTMENT OF THE INTERIOR 500
DEFENSE MINERALS EXPLORATION ADMINISTRATION
WASHINGTON 25, D. C.

NOV 26 1954

Mr. Spangler Ricker, Executive Officer
DMEA Field Team, Region III
420 Custom House
555 Battery Street
San Francisco 11, California

Re: Docket No. DMEA-2495 (Zinc-Copper)
Copper Hill Mine Venture
(R. E. Fitzgerald, Trustee)
Copper Hill Mine
Amador County, California
Contract No. Idm-8331

Dear Mr. Ricker:

With reference to the letter of Mr. H. C. Miller, dated October 21, covering the cited project, we are enclosing the original and five copies of Amendment No. 6 to the contract, which we believe covers the point in question.

If the amendment meets with your approval, please present it to the Operator for signature and distribute the copies in the usual manner. Otherwise, all copies should be returned to us with your comments.

Sincerely yours,

Ernest Wm. Ellis by 257
ACTING Chairman, Operating Committee

WRGriswold/er 11/24/54

Enclosures

APPROVED:
J. H. Hedges by 257
Member, Bureau of Mines
Thor H. Kiilsgaard by 257
Member, Geological Survey

Copy to: Docket
Admr R File
Op Committee
Base Metals
Mr. Bishop, USBM
Mr. Kiilsgaard, USGS
Chron.

R.C.

File Copy
Surname

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

500

November 12, 1954

Memorandum

To: Acting Assistant Solicitor, DMEA

From: Chief, Base Metals Division

Subject: Docket No. DMEA-2495, Copper Hill Mine Venture, (R. E. Fitzgerald, Trustee), Copper Hill Mine, Amador County, California, Contract No. Idm-E331, Zinc-Copper

The Executive Officer of Region III states in his letter of September 30 that the Main Shaft copper ore body of this property was included into the contract by mutual error, in that it was fully developed and known prior to the date of the cited contract.

Will you therefore, please prepare an amendment deleting such ores from the contract. The Main Shaft orebody to be so deleted is shown in color on the attached map.

W. R. Griswold

W. R. Griswold

WRG/er

Copy to: Docket
Base Metals
Chron.

File Copy
Surname
Selfridge
Hylemon
Whitendorf

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

OCT 2 5 1954

T E L E T Y P E

Code 500

[redacted]

[redacted], Ext. [redacted]

Base Metals Div., DMEA

14X4401(01) Revolving Fund, Defense Production Act, Interior (allocated Working Fund to Office of Secy.)

Date:

To: Mr. [illegible] C. Miller, Executive Officer, DMEA Field Team, Region III, San Francisco, California

Reurlet October 21, Docket DMEA-2495, Copper Hill Mine Venture, Contract Idm-E331. Please forward us six photostatic copies of maps showing ore reserves to be excluded from the certification.

George C. Selfridge
Chairman, Operating Committee

~~Ellex~~

(written 10/28/54)

Copy to: Docket
Admr. R. File
Op. Committee
Base Metals
Mr. Bishop
Mr. Kiilsgaard
Chron.

R.C.S.

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

Defense Minerals Administration
RECEIVED
OCT 25 1954

420 Custom House
555 Battery Street
San Francisco 11, Calif.

October 21, 1954

Memorandum

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

From: Executive Officer, DMEA Field Team, Region III

Subject: Docket No. DMEA-2495 (Zinc-Copper)
Copper Hill Mine Venture
(R. E. Fitzgerald, Trustee)
Copper Hill Mine
Amador County, California
Contract No. Idm-E331

Reference is to your October 14, 1954, letter requesting an ore reserve map showing the specific ore bodies which are to be excluded from the certification of the subject ore body and which were known and developed prior to the date of the DMEA contract.

Mr. R. E. Fitzgerald, Trustee, called at the office on October 20, to discuss the matter with me. He is unable to furnish any other map than he has already submitted to Washington in connection, first with his application for an RFC loan (Docket DMA-477) and later with his application (DMEA-2495) for a DMEA loan.

I am assuming that you will be able to consult Docket DMA-477 if you do not have it in the DMEA files. In that docket you will find a report entitled "Jackass Shaft Workings, Copper Hill Mine, Amador County, California, March 6, 1953," by Francis H. Frederick, Mining Geologist. This report contains a composite plan map of the Copper Hill Mine and shows the Main shaft workings and those of the Jackass shaft. On this map, Mr. Frederick shows where he believes the Jackass vein may be on the 350 Main shaft level and the approximate location of the Copper Hill vein at the same elevation. This map indicates that a vertical plane at 5850 N paralleling the 5800 N coordinate would approximately separate the Jackass ore body area from the Copper Hill ore body area.

As for the reserve picture, you should consult the report entitled "DMA-477, Copper Hill Mine, Amador County, California," by Glenn G. Gentry and Russell R. Trengove, Mining Engineers, U. S. Bureau of Mines, and Arvid A. Stromquist, Geologist, U. S. Geological Survey, dated April 26, 1951. Figure 3 of that report gives the ore reserves by blocks in the Copper Hill Mine as of that date.

The report shows that 17,000 tons of indicated ore averaging 5 per cent copper, and 7000 tons of inferred ore averaging 3.3 per cent copper were the reserves in the Main shaft ore body at the time of the examination. As for the Jackass ore body, the examiners report an indicated reserve of 4,500 tons of 22.4 per cent zinc ore carrying only 0.4 per cent copper.

We believe the cited reports and maps give you the answers you need. If they are not available to you, we will gladly lend you our file copies.

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

Copy to: Roscoe Smith, USGS

File Copy
Surname

Griswold
Selfridge
Johnson
Waterdorf

UNITED STATES
DEPARTMENT OF THE INTERIOR 500
DEFENSE MINERALS EXPLORATION ADMINISTRATION
WASHINGTON 25, D. C.

OCT 14 1954

Mr. H. C. Miller, Executive Officer
DMEA Field Team, Region III
420 Custom House
555 Battery Street
San Francisco 11, California

Re: Docket No. DME-2495 (Zinc-Copper)
Copper Hill Mine Venture
(R. E. Fitzgerald, Trustee)
Copper Hill Mine
Amador County, California
Contract No. 1dm-E331

Dear Mr. Miller:

We have your letter of September 30 referring to an amendment to the cited contract which would exclude from the certification ores which were known and developed prior to the date of the DMEA contract.

We will require an ore reserve map showing, in plan and section, the specific ore bodies which are to be excluded, and which states that such ores had been fully developed prior to the DMEA work.

Sincerely yours,

George C. Selfridge
Chairman, Operating Committee (GCS)

APPROVED:

J. H. Hedges
Member, Bureau of Mines (JHH)

Thor H. Kiilsgaard
Member, Geological Survey (THK)

WRGriswold/er 10/12/54

Copy to: Docket
Adrm R. Rile
Op Committee
Base Metals
Mr. KTilsgaard, USGS
Mr. Bishop, USBM
Chron

R

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

RECEIVED
OCT 4 1954

420 Custom House
555 Battery Street
San Francisco 11, Calif.

September 30, 1954

Memorandum

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

From: Executive Officer, DMEA Field Team, Region III

Subject: Docket No. DMEA-2495 (Zinc-Copper)
Copper Hill Mine Venture
(R. E. Fitzgerald, Trustee)
Copper Hill Mine, Amador County, California
Contract No. Idm-E331

Reference is made to your letter dated September 23, 1954, concerning the Operator's objection to the Government's claim for royalty on production of ore from ore developed and blocked out in the Main Shaft area before his application for an exploration loan was made.

In January 1951, the Applicant filed an application for a production loan on the Copper Hill Mine with DMA (DMA-477). The Applicant requested a loan of $120,000.00 to build a mill, to purchase a mucking machine, and to drift on the Main Shaft 350 level about 200 feet to the Jackass ore body. Although there was, according to our engineers and a geologist from the Survey, enough ore developed in the Main Shaft ore body to repay the loan, RFC wanted additional security and advised the Applicant to develop the Jackass ore body and then come back with his request for a loan.

Without a loan, the Applicant had no funds to erect a mill to treat the ore from the main oreshoot. Also, about that time the price of zinc advanced and as a previously drilled diamond drill hole put down by the Bureau of Mines had revealed the presence of a high-grade zinc ore body in the Jackass area, the Applicant made application to carry the Jackass Shaft to the level at which the diamond drill hole ran into zinc ore and to crosscut to the ore body.

The Jackass oreshoot was entirely unexplored at the time the application was filed except for a shallow shaft and the one diamond drill hole put down by the Bureau of Mines. As the Main Shaft area already had been fully developed (for copper), the Applicant and we had only one purpose in mind during the entire time the project was active, and that was to explore the area about the Jackass shaft where the Bureau of Mines drill hole had revealed some 10 feet of 22.37% zinc ore at a depth of approximately 150 feet. All of us recognized that the Jackass shaft was directed to a new, unexplored ore body entirely separated from the already developed Main shaft oreshoot.

// I believe that the inclusion of the Main Shaft ore body in the area from which royalties are due the Government is a mutual mistake that should be corrected by amending the contract so that the royalties due the Government will be only from ore taken from the distinctly new, and at the time the contract was drawn, unexplored oreshoot whose only connection with the Main or Copper oreshoot was that it might have been explored by extending the Main workings. Sinking the Jackass Shaft, however, and staying with ore was deemed the better plan of exploration which subsequently was followed.//

The preparation of a suitable amendment correcting the mistake is the recommendation of the Region III Field Team.

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

Copy to: Roscoe Smith, USGS
A. C. Johnson, Reno

SURNAME
Griswold

140
~~xxxxx~~
Rewritten by Hoffhund

signed
Selfridge
Johnson
Nutendorf

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

SEP 23 [illegible]

Mr. H. C. Miller
Executive Officer
DMEA Field Team, Region III
420 Custom House
555 Battery Street
San Francisco 11, California

Re: Docket No. DMEA-2495 (Zinc-Copper)
Copper Hill Mine Venture
(R. E. Fitzgerald, Trustee)
Copper Hill Mine
Amador County, California
Contract No. Idm-E331

Dear Mr. Miller:

We have your letter of September 3 enclosing the Operator's letter to you of September 2 objecting to the Government's claim for royalty on production which the Operator says "was developed and blocked out before any application for a loan was made."

In our letter to you of August 23 we pointed out that as far as the exploration contract is concerned this production seems to be subject to the Government's claim for royalty. However, if neither the Government (as represented by the Field Team) nor the Operator supposed or intended that production from this known and blocked-out ore would be subject to the Government's claim for royalty, it is possible that an amendment could be made excluding such production on the basis of mutual mistake.

The propriety of amending a contract to exclude ore bodies that were known to exist when the contract was entered into depends on the circumstances in each case. Please advise us of the circumstances in this case, and if this production appears to have been included in the contract under a mutual mistake as to the construction of the contract provisions, we will endeavor to draw a suitable amendment to correct the mistake.

Sincerely yours,
George C. Selfridge
Chairman, Operating Committee

Approved:

V. H. Hedges
Member, Bureau of Mines

Thor H. Kiilsgaard
Member, Geological Survey

WRGriswold/er
JLHofflund:bbh 9-16-54
Copy to: Docket
Sol. Docket
Admr. R. File
Base Metals
Operating Committee
Mr. Kiilsgaard, Rm 5227
Mr. Bishop
Chron.

R.C.S.

File Copy
Surname
Griswold

UNITED STATES
DEPARTMENT OF THE INTERIOR 500
DEFENSE MINERALS EXPLORATION ADMINISTRATION
WASHINGTON 25, D. C.

INTERIOR DEPT.
SEP 15 1954
SOLICITOR

Mr. H. C. Miller
Executive Officer
DMEA Field Team, Region III
420 Custom House
555 Battery Street
San Francisco 11, California

Re: Docket No. DMEA-2495 (Zinc-Copper)
Copper Hill Mine Venture
(R. E. Fitzgerald, Trustee)
Copper Hill Mine
Amador County, California
Contract No. Idm-E331

Dear Mr. Miller:

We have your letter of September 3 enclosing the Operator's letter of September 2 relative to royalty payments to the Government under the contract.

The Government's position in this matter was pointed out in our letter of August 23, and may not be modified without good reason. This applies equally to all new form contracts; land which is cited in the contract is subject to certification.

However, we note the Operator's statement, "The Field Teams of the U.S.G.S. and the U.S.B.M. made an examination of this ore in April, 1951" (prior to date of the contract). If such was actually the case, and if it was not the intent of the field to include such previously proven ores into the contract, you may advise us that its inclusion was an error on the part of the Government. We then would be in a position to prepare the necessary amendment, deleting such previously known ores from the contract.

Sincerely yours,

APPROVED:

Chairman, Operating Committee
WRGriswold/er 9/14/54
Copy to: Docket Chron.
Admr. R. File
Base Metals
Operating Committee
Mr. Kiilsgaard, Rm 5227
Mr. Bishop

Member, Bureau of Mines

Member, Geological Survey

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

Defense Minerals Administration
RECEIVED
SEP 10 1954

420 Custom House
555 Battery Street
San Francisco 11, Calif.

September 3, 1954

Memorandum

To: W. S. Martin, Acting Chairman, Operating Committee, DMEA
Interior Building, Washington 25, D. C.

From: Executive Officer, DMEA Field Team, Region III

Subject: Docket No. DMEA-2495 (Zinc-Copper)
Copper Hill Mine Venture
(R. E. Fitzgerald, Trustee)
Copper Hill Mine
Amador County, California
Contract No. Idm-E331

Relative to the above subject, we are enclosing a copy of a letter of September 2, 1954, from Mr. Fitzgerald in reply to Mr. Miller's letter of August 27 regarding royalties on copper ore mined from areas other than that for the certified discovery zone.

I am very much in sympathy with Mr. Fitzgerald's letter and would like to have your reaction to it. Perhaps something more favorable to Mr. Fitzgerald could be worked out that would be more in conformance with that of producers from other certified discovery projects where the exploration area had been more definitely delineated.

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

Attachment

Copy to: Roscoe Smith, USGS
A. C. Johnson, Reno
George Mavor
Finance Office

R. E. Fitzgerald, Trustee
Copper Hill Mine Venture
c/o Dr. O. C. Hartwell
209 Post Street
San Francisco, Califo

OF THE INTERIOR
Minerals Administration
RECEIVED
SEP 10 1954

September 2, 1954

Mr. H. C. Miller
Executive Officer
DMEA Field Team, Region III
555 Battery Street
San Francisco 11, California

Refer to	Noted	Date
L Rushin	JK	9/8

Re: Docket DMEA 2495
Copper Hill Mine Venture
Copper Hill Mine
Amador County, California
Contract No. Idm-E-331

Dear Mr. Miller:

In reply to your letter of August 27, 1954 regarding payment on Exploration Contract DMEA 2495 Idm-331, the ore now being mined is from the Main Copper Hill Shaft and was developed and blocked out before any application for a loan was made. This ore did not have, and does not now have, any specific relation to the area of the exploration project. It was in the nature of a general asset of the operation existing prior to the commencement of the exploratory project and there was no pledge of any general assets as security for repayment of the exploratory loans. The Field Teams of the U.S.G.S. and the U.S.B.M. made an examination of this ore in April, 1951. (It is a copper ore).

June 2, 1952, an Exploration Project Loan was granted for the purpose of exploring for zinc ore. This was done working through the Jackass Prospect Shaft located approximately 1,000 feet N.E. of the Copper Hill Shaft and has no connections with the Copper Hill Workings.

A vein was discovered carrying a good grade of zinc. This vein is several hundred feet in the Hanging Wall (east) of the Copper Hill Vein (copper) and assumed to be a separate and distinct vein. A description of this Project and Certificate of Discovery was issued by the D.M.E.A. April 30, 1953.

In regard to any royalty payments due the Government from this Copper Hill Shaft Ore (copper) would like to refer to Paragraph 2 of the Certification of Discovery April 30, 1953.

"The nature of said discovery or development is described broadly or indicated as follows: Crosscutting from the 150-foot level of the Jackass shaft of the Copper Hill Mine and drifting at this

level exposed mineralized zones containing zinc, with auxiliary amounts of copper, gold and silver. Such mineralized zones lie within the tract of land as described in the contract."

OWNER'S CONSENT TO LIEN, dated April 10, 1952:

1. "Repayment by Operator. If, upon the completion of the exploration project or termination of the contract, the Government considers that a discovery or development has resulted from the work from which commercial production of ore may be made, the Government, within 6 months thereafter, shall so certify to the Operator, particularly describing and delimiting its estimate of the discovery or the development. Thereafter, if and as ore is produced as a result of such discovery or development, the Operator and his successor in interest shall be and become obligated to pay to the Government a percentage royalty on the net smelter returns or other net proceeds realized from such ore, concentrates, or metal produced within ten (10) years from the date of this contract, until the total amount contributed by the Government, without interest, is fully repaid or said 10 years have elapsed, whichever occurs first, as follows:"

4. "This obligation to repay from net returns or proceeds shall be and remain a claim and lien upon the mineral deposit which is the subject of the exploration project and upon any production resulting from such discovery or development, in favor of the Government, until fully paid, or until said 10-year period has elapsed; and this claim and lien and the Government's right to repayment shall survive any termination of the contract, whether by completion of the exploration project or otherwise. This article is not to be construed as imposing any obligation on the Operator or his successor in interest to produce ore from any such discovery or development."

EXPLORATION PROJECT CONTRACT, dated June 2, 1952

Article 9. "Repayment by Operator. - (a) If, at any time, the Government considers that a discovery or a development from which production may be made has resulted from the exploration work, the Government, at any time not later than 6 months after the Operator has rendered the required final report and final account, may so certify in writing to the Operator. The certification shall describe broadly or indicate the nature of the discovery or development. In the event of such certification, any minerals mined or produced from the land described in Article 2 within ten years from the date of this contract . . . shall be subject to a percentage royalty."

Due to the present price of zinc, no operation is planned in the Jackass Area at this time. We hope to keep going on the copper ore until there is a better market for zinc.

Sincerely yours,

R. E. Fitzgerald

R. E. Fitzgerald

REF/bp

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

420 Custom House
555 Battery Street
San Francisco 11, Calif.

August 27, 1954

Mr. R. E. Fitzgerald, Trustee
Copper Hill Mine Venture
c/o Dr. E. C. Hartwell
209 Post Street
San Francisco, California

Re: Docket No. DMEA-2495 (Zinc-Copper)
Copper Hill Mine Venture
Copper Hill Mine
Amador County, California
Contract No. Idm-E331

Dear Mr. Fitzgerald:

On August 10, when you were in my office, you told me that you had leased the Main shaft area of your Copper Hill property to a company or group; that copper ore was being mined, and that a carload of concentrates already had been shipped.

You asked if a royalty was due the Government for the ore mined from this operation which is about 1000 feet away from the Jackass shaft where the DMEA operations centered.

In regard to royalty payments, the Washington Office refers me to the letter addressed to you under date of April 30, 1953, particularly paragraph 2 which reads:

> " . . . all production from the property described in the contract, after June 2, 1952, . . . is subject to the Government's percentage royalty. "

Please refer also to Article 9 of the contract which states:

> "In the event of such certification, any minerals mined or produced from the land described in Article 2 within ten years from the date of this contract . . . shall be subject to a percentage royalty."

Accordingly, payments for royalty on ore mined from the Main shaft area are due the Government. Payments should be made as directed in the third and fourth paragraphs of Mr. Mittendorf's letter to you dated April 30, 1953.

Your prompt attention to this matter will be appreciated.

Sincerely yours,

H. C. MILLER

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

Copy to: DMEA, Washington, D. C.
Roscoe Smith, USGS
A. C. Johnson, Reno
George Mavor
Finance Office

MF-500

WSM

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS ADMINISTRATION

REFERENCE SLIP

DATE 2/15/54

REFERRED TO:
1. ~~O. Mr. Martin~~ ~~Operating Committee~~
2. ~~Mr. Johnson~~
3. ~~Administrator~~ ~~MB~~
4. Mails and Files

FOR:

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

REMARKS: This should either be surnamed by Legal or have a note that it was discussed with Legal and that no Legal surname is necessary
This ltr was discussed with Mr. Rubin and he approved—WRG

Check (X) before the items needing attention.

W. R. Griswold

Initials of sender.

GPO 16—63815-1

Please file routing slip.

File Copy
Surname

500

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

Griswold
Martin
Hedges
Stoudey

AUG 23 1954

Mr. H. C. Miller
Executive Officer
DMEA Field Team, Region III
420 Custom House
555 Battery Street
San Francisco 11, California

Re: Docket No. DMEA-2495 (Zinc-Copper)
Copper Hill Mine Venture
(H. E. Fitzgerald, Trustee)
Copper Hill Mine
Amador County, California
Contract No. Idm-E331

Dear Mr. Miller:

We have your letter of August 11 relative to royalties due the Government under the above-certified project.

Please refer to paragraph two of our letter of April 30, 1953, to this Operator. Note that:

> ". . . all production from the property described in the contract, after June 2, 1952, . . . is subject to the Government's percentage royalty."

Also, please refer to Article 9 of the contract which states:

> "In the event of such certification, any minerals mined or produced from the land described in Article 2 within ten years from the date of this contract . . . shall be subject to a percentage royalty."

Please advise this Operator accordingly.

Sincerely yours,

W. S. Martin
ACTING Chairman, Operating Committee (SHB)

APPROVED:

J. H. Hedges
Member, Bureau of Mines (SHB)

D. M. Larrabee
Member, Geological Survey (SHB)

Rewritten—WRGriswold/bjl (8/20/54)
Copy to: Docket
Admr. R. File
Op. Committee
Base Metals
Mr. Gildersleeve
Mr. Bishop
Chron.

File copy
Surname Griswold
Martin

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

500

Mr. H. C. Miller
420 Custom House
555 Battery Street
San Francisco 11, California

Re: Docket No. DMEA-2495 (Zinc-Copper)
Copper Hill Mine Venture
(R. E. Fritzgerald, Trustee)
Copper Hill Mine
Amador County, California
Contract No. Idm-M331

Dear Mr. Miller:

We have your letter of August 11 relative to royalties due the Government under the above-certified project.

Please refer to paragraph two of our letter of April 30, 1953, to this Operator. Note that:

". . . all production from the property described in the contract, after June 2, 1952, . . . is subject to the Government's 5% percentage royalty".

Please advise this Operator accordingly.

Sincerely yours,

Chairman, Operating Committee

WRGriswold/er 8/18/54

APPROVED:

Member, Bureau of Mines

Member, Geological Survey

Copy to: Docket
Admr. R. File
Op. Committee
Base Metals
Mr. Gildersleeve
C. H. Johnson, USBM
Chron.

D.M.E.A

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

420 Custom House
555 Battery Street
San Francisco 11, Calif.

August 11, 1954

Memorandum

To: C. O. Mittendorf, Administrator, DMEA, Interior Building
Washington 25, D. C.

From: Executive Officer, DMEA Field Team, Region III

Subject: Docket No. DMEA-2495 (Zinc-Copper)
Copper Hill Mine Venture
Copper Hill Mine
Amador County, California
Contract No. Idm-E331

Reference is to your letter dated April 30, 1954, to Mr. R. E. Fitzgerald, Trustee, Copper Hill Mine Venture, c/o Dr. O. C. Hartwell, 209 Post Street, San Francisco, California, with which you transmitted to Mr. Fitzgerald a "Certificate of Discovery or Development" related to Contract No. Idm-E331 on the subject mine.

Mr. Fitzgerald made a casual visit to the office on August 10, during which time he mentioned that he and his associates had leased the Main shaft area of the Copper Hill Mine (see map attached to contract) to a company to mine copper ore. The Main shaft is about 1000 feet southeast of the Jackass shaft where the DMEA project centered. One car load of ± 20 per cent copper concentrates has been shipped to Garfield to date but the returns have not yet been received.

Mr. Fitzgerald is under the impression that the area about the Main shaft is not subject to royalty under the DMEA contract as the ore in the Jackass area is a zinc ore (estimated 18.2 per cent zinc and 0.4 per cent copper), whereas that being mined in the Main shaft area is a copper ore.

BUREAU OF MINES
WASHINGTON, D. C.

AUG 16 1 45 PM '54

It does not seem to me that royalties are due us from ore mined from the Main shaft, but the limits from which royalties are due is not clearly spelled out as I interpret the contract unless it is meant by Figure 5 attached to the contract that any ore mined and sold from any ore within Lots 37 and 38 is subject to royalty.

Your thoughts on this matter will be appreciated.

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

Copy to: Roscoe Smith, USGS
A. C. Johnson, Reno

FILE COPY
SURNAME:

500

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

Griswold
Chamberlin
Odlum
Johnson
Hedges
Selfridge

APR 30 1953

H. E. Fitzgerald, Trustee
Copper Hill Mine Venture
c/o Dr. C. C. Hartwell
209 Post Street
San Francisco, California

Re: Docket No. DMA 2495 (Zinc-Copper)
Copper Hill Mine Venture
Copper Hill Mine
Amador County, California
Contract No. Idm-1331

Dear Mr. Fitzgerald:

Transmitted herewith is a "Certificate of Discovery or Development" related to the Contract No. Idm-1331 on the subject mine.

By the terms of the Exploration Project Contract and of the Certification, all production from the property described in the contract, after June 2, 1952, the date of the contract, is subject to the Government's percentage royalty as set forth in the said contract until such sums as the Government may advance as its participating interest have been repaid or until June 2, 1962.

Payments should be made to Mr. H. C. Miller, Executive Officer, DMA Field Team, 1012 Flood Building, 870 Market Street, San Francisco 2, California. Checks should be drawn in favor of the Treasurer of the United States. The purchaser should be advised to deduct the royalties from the amount due on each shipment and forward the checks to the Executive Officer.

Royalty payments to the Government should be accompanied by suitable evidence, such as copies of settlement sheets, showing quantity and grade of the products sold, the name of the purchaser and the price and charges, certified to be correct by the purchaser.

You are requested to notify Mr. Miller of any changes in ownership or production rights that might affect the Government's right to its percentage royalty. Also, if production ceases at any time for an extended period, please notify Mr. Miller at six-month intervals that such is the case.

Sincerely yours,

C. O. Mittendorf
Administrator

4-30-53

Mr. Hedges, Rm 4604
Mr. Thayer, 5216 GSA Bldg.
Mr. F. E. Johnson
Mr. W. R. Griswold
Chron.

Docket
Cont. Admin. & Audit Div.
Region III (2)
Russell Forbes, Act. Adm. DMPA
Adm. R. File
Op. Committee

WRGriswold/hmj CC to:
4/23/53

FILE COPY
SURNAME:
500

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

Mr. Russell Forbes, Acting Administrator
Defense Materials Procurement Agency
General Services Administration Building
Washington 25, D. C.

APR 30 1953

Re: Docket No. [illegible] 2495 (Zinc-Copper)
Copper Hill Mine Venture
Copper Hill Mine
Amador County, California
Contract No. Idm-E331

My dear Mr. Forbes:

Enclosed is one copy each of a "Certification of Discovery or Development" related to Exploration Project Contract No. Idm-E331 and of a final report by the Field Team.

The contract was dated June 2, 1952, with the Government participating to the extent of 50 per cent in an exploration project estimated to cost $20,620.00. Of such amount $18,586.80 had been expended through February 1953, the Government's share being $9,293.40.

The total program of work done on the project consisted of 60 feet of shaft sinking, 60 feet of crosscutting and 67 feet of drifting. All work has been completed. Ores were encountered on the 150 foot level of the mine.

The discovery may be described as zinc-copper ores containing auxiliary amounts of the precious metals and occurring in a mineralized zone exposed so far on the 150 level. The grade of the ore is estimated to be 18.2 per cent zinc and 0.4 per cent copper. Indicated tonnage from work is stated to be 5,400.

Sincerely yours,

C. O. Mittendorf (for)

Administrator

WRGriswold/hmj (4/24/53)
CC to: Docket
Cont. Admin. & Audit Div.
Region III (2)
Base Metals Division
Adm. R. File
Op. Committee
Mr. Hedges, Rm 4604
Mr. Thayer, Rm 5216
Mr. F. E. Johnson
Mr. Griswold
Mr. Murkland
Chron.

Enclosure

S.H.
4-30-53

FILE COPY
SURNAME:

500

Chambers
Docket
Admin

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

Memorandum

APR 30 1953

To: The Administrator

From: Chief, Base Metals Division

Subject: Certification of Discovery or Development,
Docket No. DMEA 2495 (Zinc-Copper)
Copper Hill Mine
Amador County, California
Contract No. Idm-E331

The exploration project contract was executed June 2, 1952, with a total estimated cost of $20,620.00 -- $18,586.80 had been expended through February 1953.

Amendments to the original contract called for 60 feet of shaft sinking, 60 feet of crosscutting and 200 feet of drifting. The first two items were completed but only 67 feet of drifting was done.

Such work opened up a zinc-copper mineralized zone on the 150 level of the mine. The grade is estimated to be 18.2 percent zinc, 0.4 percent copper, 8.1 ounces silver and 0.04 ounces gold, with a strike length of 40 feet and a width of 10 feet. Indicated tonnage is 5,400.

W. R. Griswold

W. R. Griswold

Attachments

WRGriswold/hmj
(4/23/53)
CC to: Docket
Adm. R. File
Op. Committee
Base Metals Div.
Mr. Griswold
Mr. Hedges
Mr. Thayer
Region III(2)
Mr. Chambers
Chron.

FILE COPY
SURNAME:
500

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

April 17, 1953

Memorandum

To: Mr. George Selfridge

From: Chief, Base Metals Division

Subject: Final Audit, Docket No. [illegible] 2495, D. A. Fitzgerald, Copper Hill Mine, Contract No Idm-[illegible]351.

This will refer to your inquiry regarding the Audit Certificate on the subject docket, in which you had noted that 60 feet of crosscutting showed a cost of $1,500.00, whereas 67 feet of drifting showed a cost of $2,507.09.

I believe that you had understood that 200 feet of drifting had been done. However, since we spoke about it, I have received the final MF-1048 and actual drifting was 67 feet.

Under Amendment No. 2 of the contract, the starred amount stipulated for 60 feet of crosscutting was $1,500. Hence, such sum could not be exceeded. The starred amount for 200 feet of drifting was $5,200.00. Hence, it must be assumed that the expense of $2,507.09 for 67 feet actually done was justified, at least cleared by auditor.

It should be noted that drifting costs include $109.75 for long hole drilling and "preparation for drifting" $633.95. If we subtract those two items from the $2,507.09, we have a net actual drifting cost (for 67 feet) $1,763.39 which is roughly in line with the allotted crosscutting maximum.

W. R. Griswold

W. R. Griswold

Attachment
WRGriswold/hmj
(4/17/53)
CC to: Docket
Op. Committee
Adm. R. File
Base Metals
Chron.

FILE COPY
SURNAME:
800
Chamber

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

BL

APR 15 1953

Mr. George Maver
DMEA Auditor
1012 Flood Building
870 Market Street
San Francisco 2, California

Re: Contract No. Idm-8331
Docket No. DMEA-2495
R. E. Fitzgerald

Dear Mr. Maver:

Receipt is acknowledged of three copies of Audit Certificate and two copies of an Audit Report covering the above-cited contract.

The Certificate and Report have been examined and approved for appropriate distribution.

Sincerely yours,

(Signed) J. L. Chambers J. C. 4/14/53

Jay L. Chambers, Chief
Contract Administration
and Audit Division

WBorovies/wb
April 14, 1953

Copy to: Docket
Admr. Reading File
Mr. Chambers

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

Office of
Executive Officer
DMEA Field Team
Region III

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
APR 10 1953

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

April 6, 1953

Memorandum

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

From: Executive Officer, DMEA Field Team, Region III

Subject: Final Report - Docket DMEA-2495 (Zinc-Copper), Copper Hill Mine, Amador County, California, Contract Idm-E331 R. E. Fitzgerald, Trustee

Attached are four copies of a report on the Copper Hill Mine Project entitled "Final Report, Idm-E331, DMEA-2495, Copper Hill Mine, Amador County, California, (Zinc-Copper)" by Benjamin E. Sheahan, Mining Engineer, U. S. Bureau of Mines, dated March 30, 1953.

Attached also are three copies of the Operator's final report prepared by Francis H. Frederick, Mining Geologist, San Francisco, California. Two copies of a memorandum dated April 2, 1953, from A. C. Johnson to me concerning his recommendations that the project should be certified as a discovery also are attached.

Mr. Bailey and I concur with Mr. Sheahan and Mr. Johnson that a discovery should be certified.

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

Attachments

Copy to: E. H. Bailey, (with copies of both reports and memo from A.C.Johnson)

Copy of final I. T. Rept. in division docket

Reviewed by
DMEA OPERATING COMMITTEE
4-17-53
(date)

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF MINES
P. O. BOX 1551
RENO, NEVADA

April 2, 1953

Memorandum

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

From: Chief, Mining Division, Region III

Reviewed by DMEA OPERATING COMMITTEE 4-17-53 (date)

Subject: Docket DMEA-2495 (Zinc-Copper) - Final Report
Copper Hill Mine, Amador County, California
Contract Idm-E331

Enclosed are five copies of the operators final report and six copies of the Mining Divisions final report on the above mentioned property. The final engineer's report of Region III is by Benjamin H. Sheahan.

The project should be certified as a discovery as the exploration work indicated approximately 5400 tons of ore that will average 18.2% zinc, 0.4% copper, 8.1 oz. silver per ton and 0.045 oz. gold per ton.

The indicated ore is not sufficient to justify capital expenditures for the construction of a mill.

I have reviewed both reports - the one prepared by Francis H. Frederick for the operator and the one prepared by Benjamin H. Sheahan for the Bureau of Mines. In Mr. Sheahan's report, he gives a strike length of 40 feet a width of 10 feet for the ore and a depth of 150 feet on the dip of the vein. Mr. Frederick gives a strike length of 45 feet, a width of 8 feet and a depth of 100 feet on the dip of the vein. These measurements are more or less in agreement.

However, Mr. Frederick indicates two different widths of veins for his measurements and indicated ore and comes up with a total of 6900 tons of measured and indicated ore in the hanging wall vein that will average 20.5% zinc, 0.5% copper, 0.5% lead, 0.04 oz. gold per ton and 5.6% silver per ton. He then presents an estimate of measured and indicated ore for the footwall vein, that in my opinion is more or less a supposition. He also makes the statement and I quote:

"When both veins are considered as one mining block and the low grade material between the veins is also mined as mill feed the reserves are as follows:

	Width feet	Tons	% Zn.	% Cu	% Pb	Au Oz/ton	Ag Oz/ton
Measured	23	10,000	11.0	0.5	0.4	0.03	5.0
Indicated	20	10,000	11.0	0.5	0.4	0.03	5.0
Total		20,000	11.0	0.5	0.4	0.03	5.0 "

OPER. FIN. RPT.

Mr. H. C. Miller, Executive Officer, DMEA Field Team, Region III 4/2/53

A large amount of exploration and development work would have to be done before these tonnages should be considered as a potential reserve for the construction of a mill.

A. C. Johnson

A. C. Johnson

Encls.

DEPARTMENT OF INTERIOR
BUREAU OF MINES
REGION III
RECEIVED

1987 APR 3 AM 8:49

SAN FRANCISCO, CALIFORNIA

UNITED STATES
DEPARTMENT OF THE INTERIOR
DOUGLAS McKAY, SECRETARY

DEFENSE MINERALS EXPLORATION ADMINISTRATION

REPORT OF EXAMINATION BY FIELD TEAM
REGION XIX

Final Report

Idp-2318

DMEA-2195, Copper Hill Mine

Amador County, Calif.

(Zinc-Copper)

Benjamin H. Thacher, Mining Engineer
U. S. Bureau of Mines

March 30, 1953.

NOTE: ORIG. COPY MISSING

FLD. T. FIN. RPT.

FINAL REPORT

Docket No.: DMEA-2195 (Zinc-Copper) Contract No.: Ldc-8311

Name and address of operator: R. E. Fitzgerald, Trustee for Copper Hill Mine Venture, a partnership composed of 29 partners listed in Annex I attached to and made a part of the contract.
% Mr. C. O. Hartzell
209 Post Street
San Francisco, California.

Name and location of property: Copper Hill Mine,
Amador County, California.
The property is located in Section 3, T.7 N., R.9 E.; and Section 34, T.8 N., R. 9 E., M.D.B.& M. The property is reached via Latrobe road 8.6 miles west of Plymouth, California.

SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS

Exploration work completed at the Jackass shaft included 60 feet of shaft sinking, 60 feet of crosscutting and 67 feet of drifting. The operator drilled 125 feet of long holes, however, this was not a part of the exploration contract. Work preparatory to shaft sinking included the construction of a headframe, installation of a hoist and construction of a concrete collar not required by California State safety regulations. The shaft was un-watered and sunk from a starting depth of 106 feet to a final depth of 166 feet.

The original contract included 115 feet of shaft sinking, 22 feet of crosscutting and 150 feet of drifting.

Amendments to the contract authorized 60 feet of shaft sinking, 60 feet of crosscutting and 200 feet of drifting. The drifting was not completed. Amendments also authorized an independent sub-contract for crosscutting and this portion of the work was done more efficiently than previous work by the operator.

Approximately 5400 tons of ore averaging 10.2% zinc, 0.4% copper, 8.1 oz. silver per ton and 0.015 oz. gold per ton might be inferred from exploration work by the contract and by diamond drill hole C.H.4. The ore body is not developed for mining.

The over all efficiency of the work by the operator was poor. The operator encountered difficulty in obtaining labor, and supervision was poor.

Expenditures amounted to $18,586.80 and unit costs were high.

Ore reserves are not sufficient to warrant or justify capital expenditures required for mill plant construction.

It is recommended that:

1. Additional exploration and development work is warranted, however, the objective would be the same as in the original contract.

2. DMEA should certify that the project was successful although the original objective was not reached.

3. Production is not economically feasible, because of (a) low zinc prices and (b) the inferred ore body is not fully developed for mining.

DESCRIPTION OF THE WORK COMPLETED

The exploration work completed on the contract consisted of: (1) sinking the Jackass Shaft an additional 60 feet, (2) crosscutting 60 feet from the 150 foot level of the Jackass Shaft, (3) drifting a total of 67 feet from the 150 foot level cross cut. (See map figures 1 & 2).

Shaft sinking operations were started August 13, 1952. Drifting on the 150 foot level was stopped on February 7, 1953.

Work done prior to actual shaft sinking exploration work was

started late in June 1952. The work consisted of the installation of a hoist and headframe, placing skids in the shaft, installation of pipe lines for air and water and installation of a pump. The shaft was rehabilitated to the bottom 106 feet below the collar. A concrete collar set was constructed to meet requirements of the California State mine safety engineer, of the Division of Industrial Safety.

The operator drilled 125 feet of test holes as shown in his final report. This long hole drilling was not a part of the contract.

The property was inspected by engineers of the U. S. Bureau of Mines, as described by the following interim reports:

First Interim Report, September 3, 1952, by Frank J. Wiebelt, Mining Engr.
Second Interim Report, October 6, 1952, by Benjamin H. Sheahan, Mining Engr.
Third Interim Report, November 10, 1952, by Benjamin H. Sheahan, Mining Engr.
Fourth Interim Report, February 5, 1953, by Benjamin H. Sheahan, Mining Engr.

A final inspection was made February 16, 1953, and is incorporated in this final report by Benjamin H. Sheahan, Mining Engineer.

The property was examined by mining engineers[1] of the U. S. Bureau of Mines and by a geologist[2] of the U. S. Geological Survey early in 1951.

A metallurgical concentration test[3] was made from the zinc-copper ore from the Jackson shaft and described by memorandum from A. L. Engel, metallurgist. The memorandum was included with the fourth Interim Report.

DESCRIPTION OF THE GEOLOGY

The exploratory shaft was sunk in silicified amphibolite schist. The strike of the schist was northwesterly with a dip of 45° to the north-

1/Report of examination, Copper Hill Mine, Amador County, California, Inclosr IMA-477 by Russell R. Thompson and Glenn G. Gantzy, Mining Engineers, U. S. Bureau of Mines (and)
2/Arvid A.Strangquist, Geologist, U.S.Geological Survey
3/Concentration Tests on Various Base Metal Ores, R.I. 4927, by A.L.Engel Metallurgist, Metallurgical Division, Reg.III, Reno, Nevada. Copper-zinc ore from Amador County, California. Pages 10 to 12.

shaft. Mineralization exposed in the shaft was too low grade to constitute mill ore. Three samples of this mineralization follow:

Sample No.	% Cu	% Zn	Oz. Au/T	Oz. Ag/T	Remarks
No. 1	1.68	3.9	0.01	1.50	4' cut at 120' depth
S-134	1.18	1.8	0.02	0.70	Dump composite from shaft - 106 to 166 feet
S-186	0.12	4.3	0.03	2.60	3' cut 150' level

A 60 foot crosscut driven northeasterly from the shaft cut zinc, copper, silver mineralization similar to that found by U. S. Bureau of Mines diamond drill hole No. C.H. 4.

Exploratory drifting on the 150 foot level amounted to 67 feet. The mineralized zone had a strike length of 40 feet, and a width of 10 feet. If this ore body continues 15 feet above the level and also continues 135 feet down the dip, for a distance of 50 feet below the ore found in diamond drill hole C.H.4, the following tonnage and grade might be inferred:

Tons	% Zn	% Cu	Oz. Ag/T	Oz. Au/T
5,400	10.2	0.4	8.1	0.045

The ore body is not developed for mining.

The following samples whose locations are shown on Figure 1 assay:

Sample No.	% Cu	% Pb	% Zn	Oz. Au/T	Oz. Ag/T
S-134	1.18	—	1.8	0.02	0.70
S-173	0.69	0.2	11.5	0.09	23.10
174	0.09	0.1	2.3	0.01	1.80
175	0.09	0.2	2.1	0.08	12.10
176	0.23	0.6	7.5	0.02	2.80
177	0.41	2.6	19.8	0.025	4.20
178	0.39	0.1	40.7	0.025	2.80
179	0.48	0.1	22.6	0.04	3.15
180	0.32	0.8	8.6	0.02	8.60
181	0.18	0.2	2.4	0.01	0.70
182	0.57	0.2	35.0	0.025	3.40
183	0.22	0.2	4.7	0.08	1.00
184	0.07	0.2	0.3	Trace	0.20

Sample chart continued:

Sample No.	% Cu	% Pb	% Zn	Oz. Au/T	Oz. Ag/T
185	0.03	0.1	0.3	0.02	0.20
186	0.12	0.3	4.3	0.03	2.60
187	0.27	0.2	0.9	0.01	0.60
188	0.13	0.2	0.8	0.02	1.20
No. 1	1.68	—	3.9	0.01	1.50

EXPENDITURES

a.	Total approved * * * * * * * * * * * * * * *	$20,620.00
b.	Total cost of project - * * * * * * * * * *	18,506.80
c.	*Governments share of cost * * * * * * * *	9,293.40
d.	Governments share unexpended * * * * * * *	1,016.60
e.	Value of production during operations and Governments royalty	None

*Cost data from Operator's monthly report and voucher January-February 1953. According to Mr. R. E. Fitzgerald, trustee for operator, this form has been audited by Mr. George Ewer, DMEA Auditor. However, an adjustment will be required to include the Governments share of sales made from disposition of equipment purchased under the contract.

EFFICIENCY OF OPERATIONS

The exploration work was not conducted efficiently. The original objective of the exploration work was never reached. The competency of the trustee for the operator was poor.

A summary description of the exploration work with expenditures with a brief narrative follows:

Month	Expenditure	Cumulative Total	Description & Remarks
June '52	$ 719.90	—	Preparatory work
July '52	3,591.14	$4,262.04	Preparatory work. Rehabilitation. Benched bottom of shaft at 106 feet
Aug. '52	4,199.86	8,506.90	Extended shaft 25 foot
Sept. '52	3,799.37	12,302.85	Extended shaft 34 feet
Oct. '52	368.40	12,671.25	Amendment to contract requested by operator
Nov. & Dec. '52	1,836.12	14,507.37	Crosscut 60 feet by independent contract. Drift started.
Jan. & Feb. '53	4,079.43	18,586.80	Total drifting 67 feet by independent contract. Operator prepared final report.

EQUIPMENT PURCHASED FOR PROJECT

Listing of equipment purchased follows:

Description		Purchase Price	Salvage Value
1. Gaspar blower 8"	(1 ea)		500.00
2. Sets Drill Steel	(2 ea.)		40.00
3. Blasting Machine	(1 ea.)		6.00
4. Oil hose, 1 inch	(50 ft.)		2.50
5. Air hose	(100 ft)		2.50
6. Oil hose, 1/4 in.	(100 ft)		2.50
7. Black iron pipe 1/4 inch to 2 inch size	(230 ft)		No offer

Mr. R. E. Fitzgerald received written bids from the Howard Drullard Company, Mines Engineering Equipment Company, and others, for the equipment and supplies in which the Government has an interest.

The operators bid of $315. was the highest offer. This bid was accepted by the Government.

DEPARTMENT OF INTERIOR
BUREAU OF MINES
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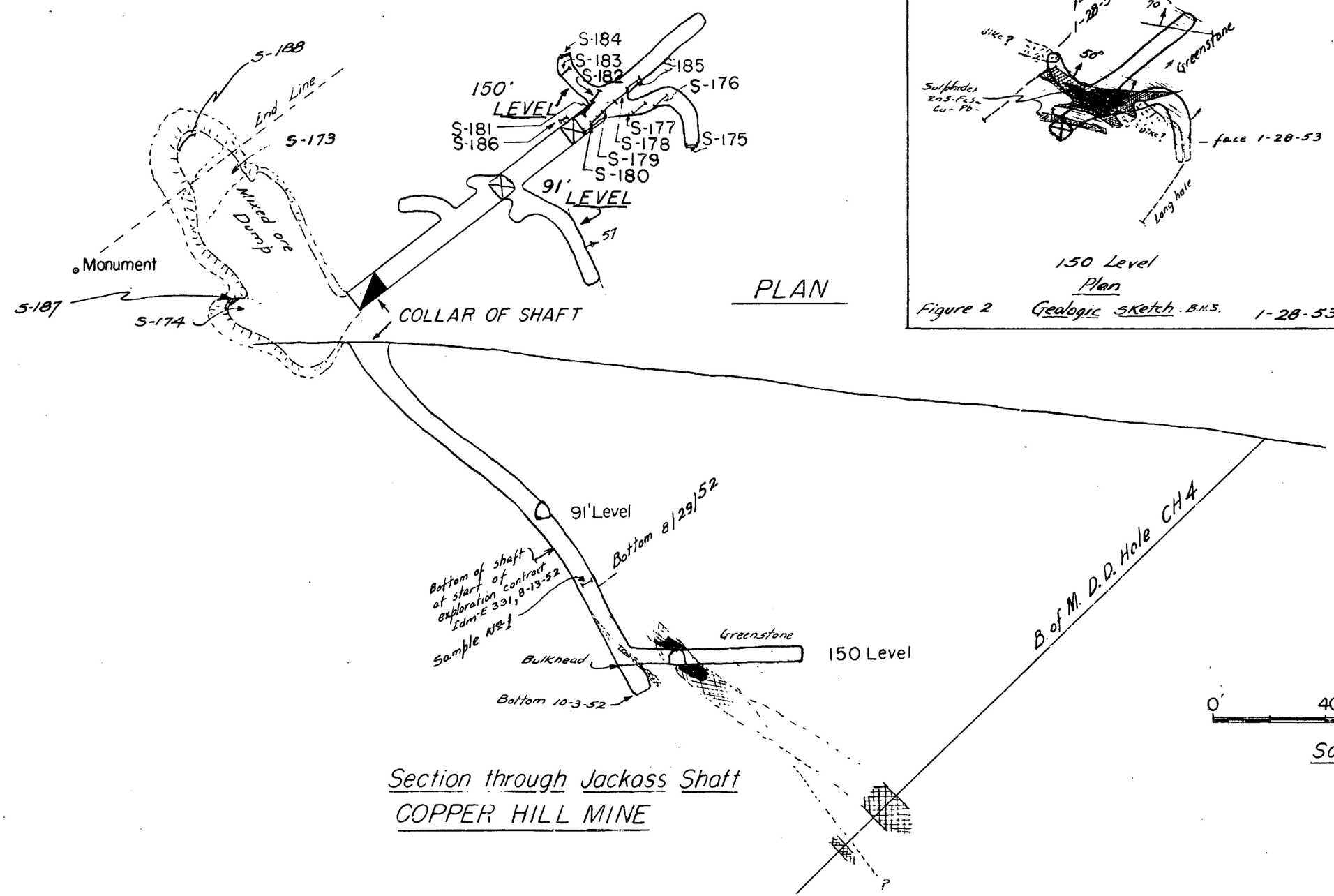
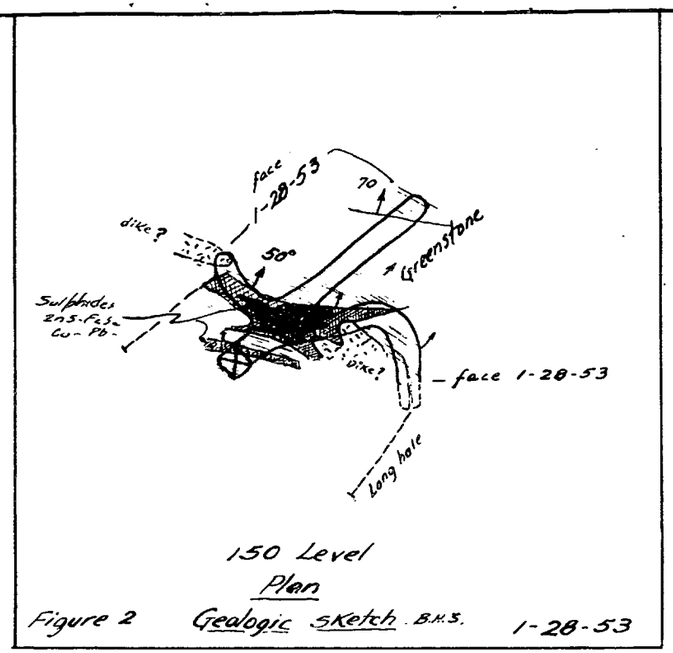


Section through Jackass Shaft
COPPER HILL MINE



Map to accompany
Interim report 2-4-53
& Final Report

Figure 1 & 2
3-31-53

COPPER HILL MINE, AMADOR County, CALIFORNIA - DMEA 2495, Contract Idm-E 331

FRANCIS H. FREDERICK
MINING GEOLOGIST

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SAN FRANCISCO 5, CALIFORNIA
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2715 STUART STREET
BERKELEY 5, CALIFORNIA
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DEPARTMENT OF THE INTERIOR
Bureau of Mines Administration
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APR 10 1953

March 6, 1953

Mr. R. E. Fitzgerald
Room 903
209 Post Street
San Francisco 4, California

Dear Sir:

This report is a description of the work performed at the Jackass shaft area of the Copper Hill Mine, Amador County, California between June 15, 1952 and February 15, 1953. The report also shows geologic, assay, and ore reserve information resulting from the work performed. Examination trips for this report data were made to the mine October 9, December 22, 1952, January 21, and February 6 and 7, 1953.

On October 9, shaft sinking operations were stopped and preparations were made to establish the 160 level at a point near the bottom of the shaft and to crosscut into the hanging wall of the shaft to explore for the best part of the vein zone at that elevation. The crosscutting was completed at 62 feet from the shaft about December 28. Drifts were then started northwesterly and southeasterly on a higrade zinc-silver ore shoot. That ore shoot proved to be 45 feet long and averages about 8 feet width. An oblique crosscut-drift was run southerly from the end of the southeast drift to explore the vein zone in the footwall of the higrade ore zone. In February some test holes, 6 to 29 feet long, were drilled at several places on the 160 level and at one place on the 95 level to explore the possibilities for ore extensions in areas of particular interest.

Total exploration work done during the period from June 15 to February 15 was as follows:

Shaft sinking	60 feet	60 ft. shaft work
160 Level crosscut	62 feet	
160 Level NW drift	24 feet	
160 Level SE drift	26 feet	
160 Level S XC drift	18 feet	130 ft. laterals
160 Level Test Holes	88 feet	
95 Level Test Holes	37 feet	125 ft. test holes

Plates 1 and 2 attached to this report show the new work, and the old workings, in plan and cross section.

Maps and Sections:

Five maps and sections, plates 1 thru 5, are submitted with this report. Plate 1 is a plan of the Jackass mine workings at 20 feet to one inch scale showing the position of the ore shoots as known at the 160 level and at the USBM drill

hole CH-4 below the 160 level, and the probable position of the main high grade ore shoot at the 95 level. Assays of the samples taken during the course of the work are also shown.

Plate 2 is a 40 feet to one inch scale vertical cross section of the Jackass mine at the shaft, showing assays of the samples taken from the area represented by the section, and showing the elevation position of the areas sampled with respect to the ore originally discovered by the USBM in drill hole CH-4. Assay data shown at the drill hole CH-4 include, in addition to the assays directly reported by the USBM, average ore contents for various widths of the ore zone. The averages are based on the USBM assays with the conservative assumption that there is no metal content in the unreported zones between the assayed sections shown.

Plate 3 is a vertical longitudinal projection of the Jackass and Copper Hill mines showing all of the workings projected to the one vertical plane. The veins dip at angles of 25 to 65 degrees so the distances down the vein dip appear shortened in plate 3. The strike of the Branch vein area in the Copper Hill mine and of the Jackass vein drift at the 160 level of the Jackass mine are not parallel to the plane of plate 3 so the strike length of those workings is foreshortened on the longitudinal projection. Plate 3 also shows the assays of samples taken in the ore bodies of the Jackass mine, and also shows a table of figures giving the tonnage and ore grade of the ore bodies explored and developed by the work performed in the Jackass mine. The ore reserves of the Copper Hill mine workings are shown in an earlier report prepared for the original DMPA application submitted January, 1951.

Plate 4 is a 40 feet to one inch scale cross section at the Jackass shaft like the section in Plate 2, but showing a larger area of section than Plate 2 and showing the position of A.S. & R. drill hole CH-6, the position of the measured and indicated ore reserve blocks in the Jackass vein, detail on the assays of drill hole CH-4, and the probable position of the Jackass ore shoot zone at the elevation of the 350 level of the Copper Hill Mine. Plate 4, without the recent additions resulting from the recent work, was submitted with the original application to the DMPA in January, 1951.

Plate 5 is a plan of the Copper Hill-Jackass mine area at a scale of 40 feet to one inch showing all the mine workings in the area of the two shafts. The map was submitted in the original DMPA application January, 1951. Sample numbers referred to in the area of the Copper Hill shaft workings are listed with the respective assays in the DMPA application. Some changes and additions have been made in the northerly end of the map as a result of the information gained by the recent work in the Jackass mine. It is now thought that the Copper Hill vein and the Jackass vein are separate and distinct veins, the Jackass vein being several hundred feet in the hanging wall (east) of the Copper Hill vein. The relative positions of the two veins at the north end of the 350 level are indicated on the map.

Sampling:

Twenty-five assays were made on samples taken from the Jackass mine during the recent operation. All of the samples were assayed for zinc, copper, gold, and silver. Some of the samples contained visible galena so 7 were also assayed

for lead. On the following page is a list of the samples and assays, showing the approximate date the sample was taken, a description of the location sampled, width of vein matter or formation represented by the sample, and the assay results. Samples were assayed by C. M. Ball, Berkeley, California or Abbot A. Hanks, Inc., San Francisco.

Ore Reserves and Possibilities:

The main ore block developed in the Jackass mine is determined by the sampling of the USBM drill hole CH-4 drilled in 1942 and the sampling of the crosscut and drift work done recently at the 160 level. The data on the 5 maps submitted here show the size, ore content, and shape of the orebody. Assays from the drill hole are very much like the assays from the 160 level. Drifting at the 160 level shows the hanging wall, better grade ore body to be 45 feet long with horizontal width varying from 3 to 11 feet. A three to 5 feet wide band along the hanging wall part of the vein is very highgrade zinc ore with some gold, silver, copper, and lead content. One sample 3 feet wide assayed 40% zinc, 8.1 ounces silver per ton, and some gold, copper and lead. Measurement on the cross sections shows that the dip distance of known ore at the hanging wall vein, between points 10 feet up the dip above the 160 level and 10 down the dip below the drill hole CH-4 is 100 feet. The measured ore of the main high grade ore shoot is calculated as 45 feet long, 8 feet wide, 100 feet on the dip. Using a weight figure of 10 cu. ft. per ton for ore in place, the known orebody calculates to 3600 tons containing 20.5% Zn, 0.5% Cu, 0.5% Pb, 0.04 ounces gold, and 5.6 ounces silver per ton. In calculating the indicated (probable) ore the same orebody can be extended 85' up and 70' down the dip from the limits of the measured block. Figured at 40 and 30 feet long, respectively, and 6 feet wide, the indicated ore calculates out to 3300 tons of about the same grade ore as in the measured block. Total combined measured and indicated ore in the highgrade hanging wall vein is 6900 tons of 20.5% zinc ore, plus silver, gold, copper and lead. There are additional ore possibilities in the same vein up and down the dip and along the strike direction. Plates 4 and 5 show the general area in which the Jackass vein probably exists at the elevation of the 350 level.

An important footwall block of ore in the Jackass vein has been exposed by the work done in the Jackass mine, confirming the indications of the footwall ore block in the assays reported by the U. S. Bureau of Mines in drill hole CH-4. Reports on drill hole CH-4 show a footwall vein section assaying 20.2% zinc, 9.4 ounces silver per ton, 0.6% copper, and 0.01 ounces gold per ton for 2.7 feet width, and with visible zinc and pyrite mineralization in wall rock on both sides of the assayed section. A sample taken across 6 feet of footwall vein matter at the 160 level shaft crosscut, at 6 to 12 feet from the shaft assayed 8.9% zinc, 12.8 ounces silver, 0.03 ounces gold, 0.5% copper and 1.5% lead. A sample taken in the shaft across 2.2 feet vein width, at 117 feet down the shaft, about 9 feet below the start of the new work in the shaft, assayed 15.8% zinc, 3.4% copper, 5.1 ounces silver, and 0.03 ounces gold per ton with zinc and copper showing in the wall rocks. Those three samples represent an ore width calculated at 5 feet averaging 9% zinc, 0.6% copper, 1.0% lead, 6.3 ounces silver, and 0.02 ounces gold per ton. A block 100 feet along the dip, 5 feet wide, and 30 feet horizontal length can be considered as assured or measured - that is a block of 1500 tons. Indicated ore extending 50 feet down the dip below drill hole CH-4, 4 feet wide and 20 feet long calculates to 400 tons. Additional indicated ore extending 90 feet up the dip from the 160 level, 4 feet wide and 20 feet

ASSAYS

Samples taken at Jackass mine, and assayed, between June 15, 1952 and February 15, 1953.

95 Level

Date	Location	Ft. Width	% Zn	% Cu	% Pb	Au Oz/ton	Ag Oz/ton	
10/ 9/52	Cut, F.W. vein	1.0	15.6	2.8		0.08	11.0	F.W. vein
10/ 9/52	Cut, in F.W. of vein	6.0	0.1	1.5		Trace	1.0	In F.W.
2/ 7/53	Test hole 95A to H.W.	5.0	1.2	0.2		0.01	0.8	H.W. Zone
2/ 7/53	Test hole 95A to H.W.	3.5	0.2	0.1		Trace	0.6	In H.W.
2/13/53	Test hole 95B to H.W.	2.0	0.0	0.1		0.02	1.0	In H.W.
2/13/53	Test hole 95B to H.W.	3.0	0.1	0.0		0.01	0.9	In H.W.
2/13/53	Test hole 95B to H.W.	2.0	0.2	0.0		0.01	0.5	In H.W.
2/13/53	Test hole 95B to H.W.	2.0	0.1	0.0		0.01	0.5	In H.W.

Shaft

8/27/52	117' down, cut	2.2	15.8	3.4		0.08	5.1	F.W. vein
10/ 9/52	122' down, cut	3.5	2.4	2.1		0.01	2.4	In F.W.
10/ 4/52	160-164' skips	5.0	1.6	1.4		Trace	1.2	In F.W.
10/ 8/52	164-168' skips	5.0	0.8	1.1		Trace	0.9	In F.W.

160 Level

12/ 5/52	8-18' in Xcut, cars	10.0	11.6	0.4		0.05	17.1	Vein zone
12/22/52	6-12' in Xcut, cut	6.0	8.9	0.5	1.5	0.03	12.8	F.W. vein
12/22/52	16-29' in Xcut, cut	13.0	22.1	0.5	0.5	0.01	4.3	H.W. vein
1/13/53	8-12', NW.Drift, cars	5.0	23.0	0.4	0.6	0.10	4.7	H.W. vein
1/14/53	10-15', SW.Drift, cars	5.0	21.6	0.5	0.5	0.05	3.1	H.W. vein
1/20/53	15-20', SW.Drift, cars	5.0	11.8	0.3	0.2	0.06	2.8	H.W. vein
1/23/53	20-25', SW.Drift, cars	4.0	4.8	0.5	0.2	0.01	4.7	H.W. vein
1/23/53	16' in NW, Drift, cut	3.0	40.0	0.6	0.5	0.02	8.1	H.W. vein
2/ 6/53	Test hole 160A	9.0	2.0	0.5		0.01	1.2	In F.W.
1/26/53	0-5', SX-cut, cars	5.0	3.3	0.2		0.01	1.9	F.W. zone
1/28/53	5-10', SX-cut, cars	5.0	1.7	0.1		0.01	1.6	F.W. zone
1/30/53	10-15', SX-cut, cars	5.0	1.2	0.1		0.01	1.7	F.W. zone
2/ 2/53	15-20', SX-cut, cars	5.0	1.3	0.3		0.01	1.3	F.W. zone

(Note: Assays made by U. S. B. M. in 1942 from Drill Hole CH-4, in the Jackass ore shoots all shown elsewhere in this report in the maps and sections).

long amounts to 700 tons. Thus, measured and indicated ore in the footwall vein totals 2600 tons of about the same metal content as the measured block.

In actual mining operations it may be possible to profitably mine both the hanging wall and footwall veins at one time and include the lower grade material between the two main veins as ore. At drill hole CH-4 the total zone so mined would be 27 feet wide and contain in excess of 9.5% zinc and 5.3 ounces silver per ton. At the 160 level the zone would be 20 feet wide and contain about 16.5% zinc, and 7.0 ounces silver per ton. A block 100 feet along the dip averaging 23 feet wide and 45 feet long can be considered assured or measured; it would contain 10,000 tons carrying 11% zinc, 5 ounces of silver per ton plus some gold, copper and lead. Indicated ore of the same grade and character would amount to 10,000 tons additional making a total amount of 20,000 tons of measured and indicated ore containing 11% zinc, 5 ounces silver per ton plus gold, copper, and lead.

The following tables show ore reserves of measured and indicated ore of various grades:

Hanging Wall vein

	Width feet	Tons	% Zn	% Cu	% Pb	Au Oz/ton	Ag Oz/ton
Measured ore,	8	3600	20.5	0.5	0.5	0.04	5.6
Indicated ore,	6	3300	20.5	0.5	0.5	0.03	5.6
Total		6900	20.5	0.5	0.5	0.04	5.6
Footwall vein							
Measured ore,	5	1500	9.0	0.6	1.0	0.02	6.3
Indicated,	4	1100	9.0	0.6	0.5	0.02	6.0
Total		2600	9.0	0.6	0.8	0.02	6.2
Grand Total		9500	17.3	0.5	0.6	0.03	5.8

When both veins are considered as one mining block and the low grade material between the veins is also mined as mill feed the reserves are as follows:

Measured,	23	10,000	11.0	0.5	0.4	0.03	5.0
Indicated,	20	10,000	11.0	0.5	0.4	0.03	5.0
Total		20,000	11.0	0.5	0.4	0.03	5.0

(Note: There are additional ore possibilities along the strike and dip of the veins in the Jackass area.)

Observations on position of ore shoots:

It was observed in the Copper Hill mine workings that the best parts of the ore shoots are where the veins strike to the left of the average strike of the veins

in the mine area. Favorable strike directions for ore are when the veins strike anywhere between N30° W to due west. Unfavorable strike directions are when the veins strike between N and N15°W. There is an indication that the low angle dips are better for ore than the steeper dips although that observation is not conclusive. The ore developed in the Jackass mine is on veins striking about N70°W.

Now that something reasonably definite is known about the favorable strike direction for ore occurrence, as confirmed by the position of the ore in the Jackass workings, it may now be possible to find additional favorable areas for specific exploration by means of rapid geophysical methods of study at the surface. The area of greatest interest within the property is along a length of 2500 feet from near the Jackass shaft to south of the Hobo shaft. Part of that distance contains at least two veins. The Hobo shaft has been productive and has some rather extensive workings along veins as indicated by the dumps at the shaft.

In plotting the ore position at the 160 level, and the vein structures at the 95 and 75 levels it is concluded that the ore shoots are north of the present workings on the 95 and 75 levels. A convenient set-up location for long test hole drilling just south of the shaft at the 95 level was used to attempt to find the south end of the hanging wall ore shoot. It is thought now that the position was 5 or 10 feet too far south to allow the test holes to get into the ore. The estimated position of the ore shoot at the 95 level is shown on Plate 1.

Test hole 160D was made to make sure that a branch vein did not exist in the area cut by the hole. Test Hole 160C explored the southeasterly extension possibility of the hanging wall vein at 10 feet beyond the end of the drift for a much smaller cost than drifting the 10 feet, no ore was found in the test hole.

Test holes 160A and 160B tested the footwall ore possibilities NW and SE of the shaft where several small seams of highgrade zinc and copper were observed in favorable strike position. Both holes showed zinc and pyrite mineralization scattered over the full 29 feet lengths of each hole. All the drillings were not assayed as it was judged that the material was low grade. The extreme footwall part of hole 160A was assayed and 9 feet showed 2% zinc, 0.5% copper, 1.2 ounces silver and 0.01 ounces gold per ton.

The northerly end of the 350 level of the Copper Hill mine was examined in 1950 and 1951 and there is no evidence of vein structures in the last 200 feet of that level. The Copper Hill vein zone is surely in the footwall (west) of the northerly part of the 350 level. Now that the Jackass mine has been opened and developed it is clear that the Jackass vein lies east of the 350 level workings of the Copper Hill mine. That means there are two veins relatively unexplored for strike lengths of 600 to 1000 feet each between the two mine areas. In order for the Jackass vein to avoid the 350 level crosscuts at the north end of the Copper Hill mine the vein strike has to be in a favorable direction for at least part of the distance in the area between the two mines. Similarly, for the Copper Hill vein to line up with the mineralized zone reported in diamond drill hole CH-5 at 383 to 413 feet in the hole the vein would have to have a strike direction favorable for ore for part of the distance from where the vein is observed farthest north at the

350 level in the Copper Hill mine and where it may be in drill hole CH-5. The hole cuts the mineralized zone about at the elevation of the 350 level. The report on the drill hole log is 'mineralized zone, silicious amphibolite, copper, zinc, and pyrite, very low grade, not ore.' There is an unexplored distance of 500 feet between that drill hole and the point where the vein is observed at the 350 level. The favorable strike area in the vicinity of the Jackass shaft is 200 feet northwesterly from the vein point in the drill hole.

When work is resumed in the Copper Hill mine for production of copper ore an underground diamond drill core drilling program to explore the ore possibilities of the Copper Hill and Jackass veins on the two sides of the north end of the 350 level should be considered.

The possible positions of the two vein zones in that area are indicated on plate 5.

Respectfully submitted,

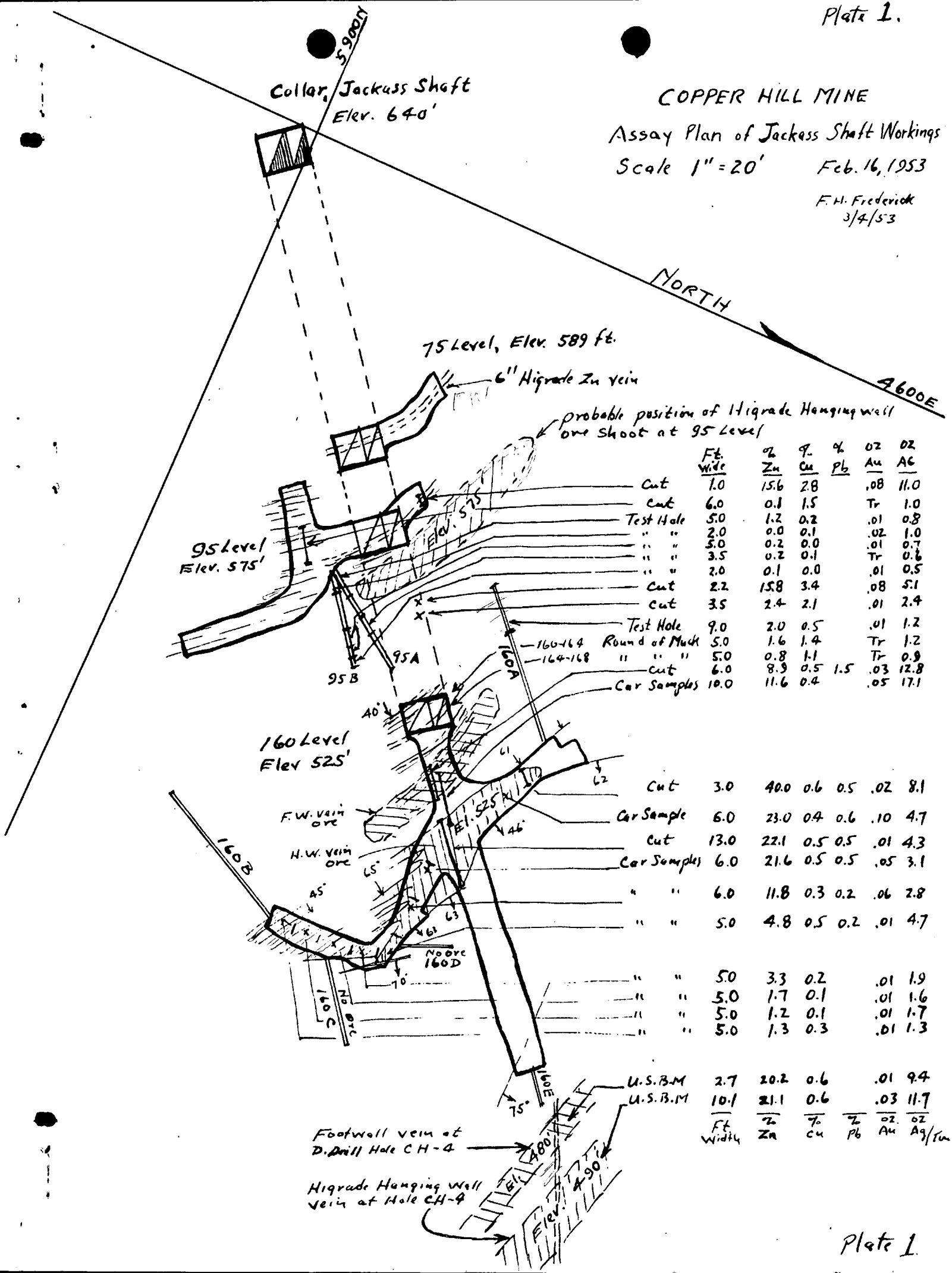
Francis H. Frederick

COPPER HILL MINE

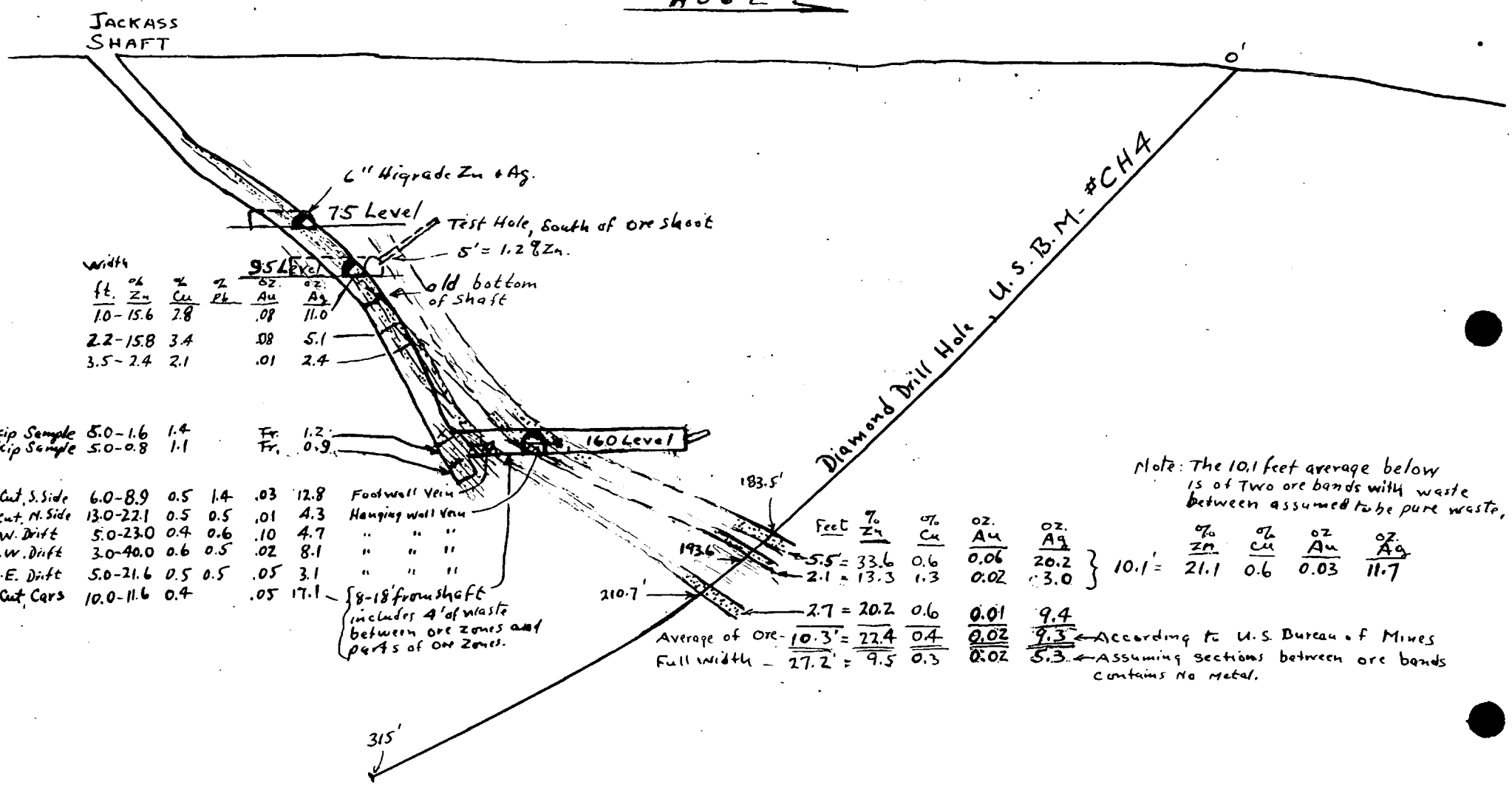
Assay Plan of Jackass Shaft Workings

Scale 1" = 20' Feb. 16, 1953

F. H. Frederick
3/4/53



	Ft. Wide	% Zn	% Cu	% Pb	oz Au	oz Ag
Cut	1.0	15.6	2.8		.08	11.0
Cut	6.0	0.1	1.5		Tr	1.0
Test Hole	5.0	1.2	0.2		.01	0.8
" "	2.0	0.0	0.1		.02	1.0
" "	5.0	0.2	0.0		.01	0.7
" "	3.5	0.2	0.1		Tr	0.6
" "	2.0	0.1	0.0		.01	0.5
Cut	2.2	15.8	3.4		.08	5.1
Cut	3.5	2.4	2.1		.01	2.4
Test Hole	9.0	2.0	0.5		.01	1.2
Round of Muck	5.0	1.6	1.4		Tr	1.2
" " "	5.0	0.8	1.1		Tr	0.9
Cut	6.0	8.9	0.5	1.5	.03	12.8
Car Samples	10.0	11.6	0.4		.05	17.1
Cut	3.0	40.0	0.6	0.5	.02	8.1
Car Sample	6.0	23.0	0.4	0.6	.10	4.7
Cut	13.0	22.1	0.5	0.5	.01	4.3
Car Samples	6.0	21.6	0.5	0.5	.05	3.1
" "	6.0	11.8	0.3	0.2	.06	2.8
" "	5.0	4.8	0.5	0.2	.01	4.7
" "	5.0	3.3	0.2		.01	1.9
" "	5.0	1.7	0.1		.01	1.6
" "	5.0	1.2	0.1		.01	1.7
" "	5.0	1.3	0.3		.01	1.3
U.S.B.M	2.7	20.2	0.6		.01	9.4
U.S.B.M	10.1	21.1	0.6		.03	11.7
	Ft Width	% Zn	% Cu	% Pb	oz Au	oz Ag/ton



	Width ft.	% Zn	% Cu	% Pb	oz. Au	oz. Ag	
	1.0-15.6	2.8			.08	11.0	
	2.2-15.8	3.4			.08	5.1	
	3.5-2.4	2.1			.01	2.4	
Skip Sample	5.0-1.6	1.4			Tr.	1.2	
Skip Sample	5.0-0.8	1.1			Tr.	0.9	
X Cut, S. Side	6.0-8.9	0.5	1.4		.03	12.8	Footwall Vein
X Cut, N. Side	13.0-22.1	0.5	0.5		.01	4.3	Hanging wall Vein
N.W. Drift	5.0-23.0	0.4	0.6		.10	4.7	" " "
N.W. Drift	3.0-40.0	0.6	0.5		.02	8.1	" " "
S.E. Drift	5.0-21.6	0.5	0.5		.05	3.1	" " "
X Cut, Cars	10.0-11.6	0.4			.05	17.1	8-18' from shaft includes 4' of waste between ore zones and parts of ore zones.

Feet	% Zn	% Cu	oz. Au	oz. Ag
5.5 =	33.6	0.6	0.06	20.2
2.1 =	13.3	1.3	0.02	3.0
2.7 =	20.2	0.6	0.01	9.4
Average of Ore- 10.3' =	22.4	0.4	0.02	9.3 ← According to U.S. Bureau of Mines
Full width - 27.2' =	9.5	0.3	0.02	5.3 ← Assuming sections between ore bands contains no metal.

Note: The 10.1 feet average below is of two ore bands with waste between assumed to be pure waste.

	% Zn	% Cu	oz Au	oz. Ag
10.1' =	21.1	0.6	0.03	11.7

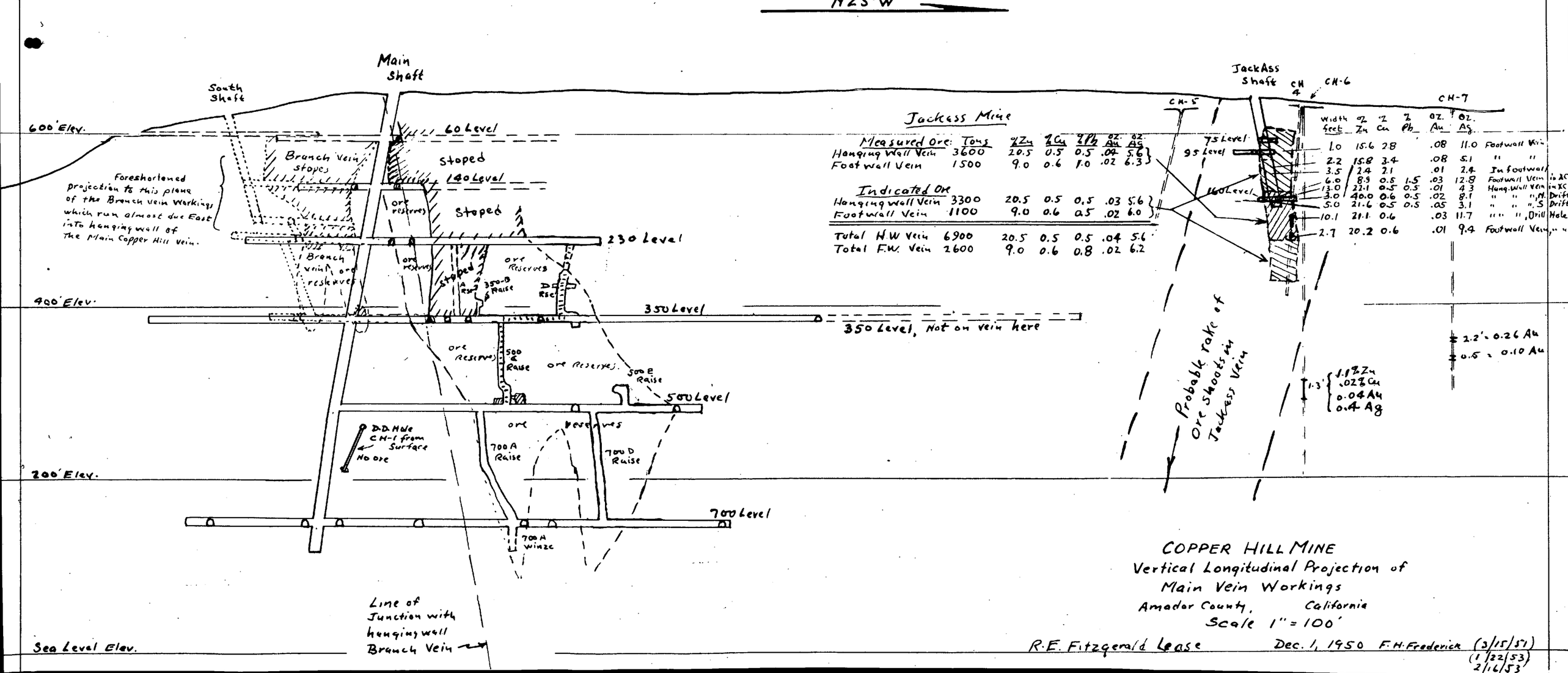
Vertical Cross Section — Plate 2.

JACKASS SHAFT, COPPER HILL MINE

Amador County, California

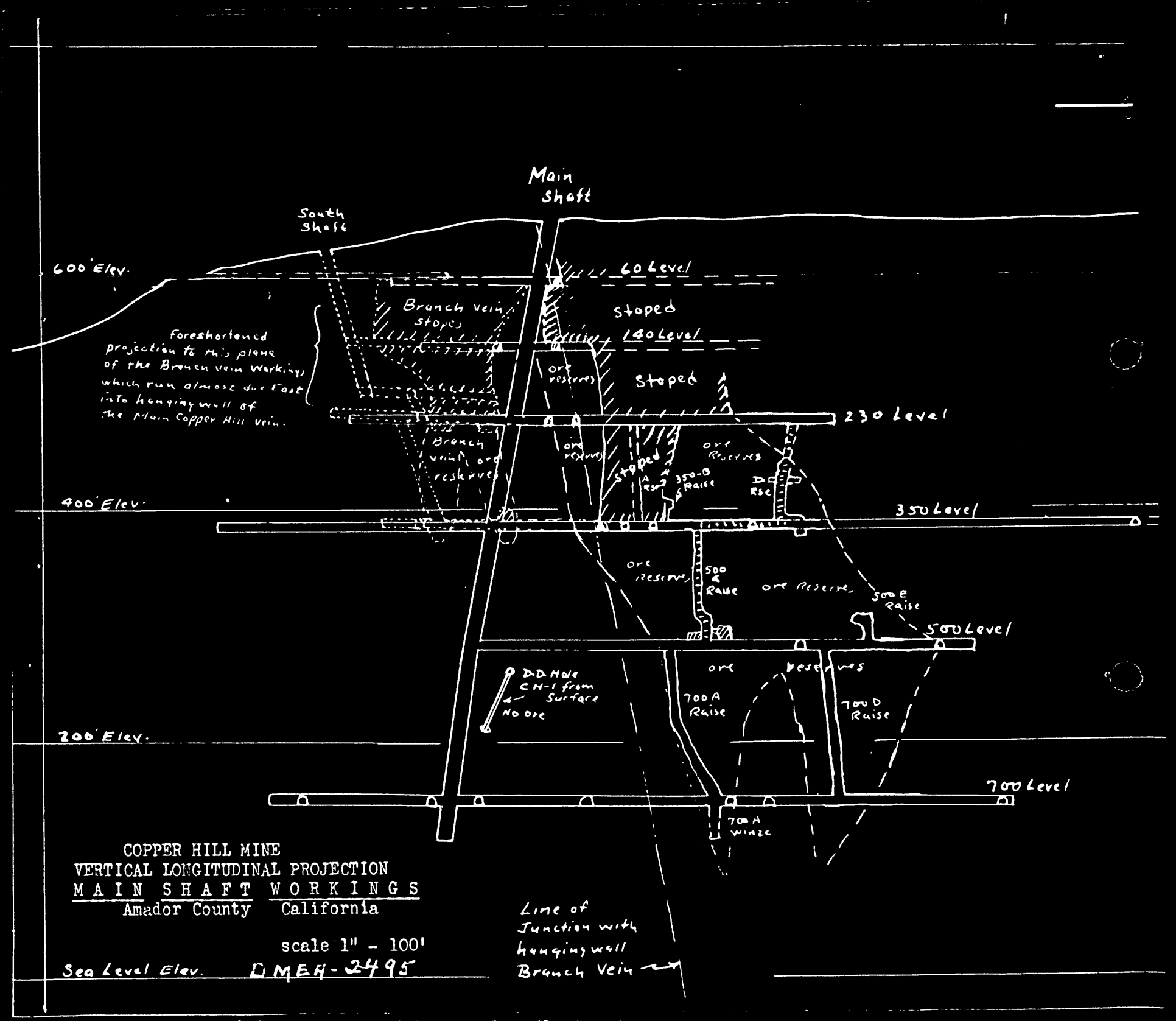
Scale 1" = 40'

12/10/52
1/22/53 F.H.F.
2/16/53



COPPER HILL MINE
Vertical Longitudinal Projection of Main Vein Workings
Amador County, California
Scale 1" = 100'

R.E. Fitzgerald Lease Dec. 1, 1950 F.H. Frederick (3/15/51) (1/22/53) 2/16/53



COPPER HILL MINE
VERTICAL LONGITUDINAL PROJECTION
MAIN SHAFT WORKINGS
Amador County California

scale 1" - 100'

DMEH-2495

Docket Copy

FEB 2 1953

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

Office of
Executive Officer
DMEA Field Team
Region III

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

January 27, 1953

Memorandum

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

From: Executive Officer, DMEA Field Team, Region III

Subject: Contract Idm-E331 - Docket DMEA-2495 - (Zinc-Copper)
Copper Hill Mine, Amador County, California
Amendment No. 5

Attached are the original and two copies of Amendment No. 5, dated January 12, 1953, made in connection with subject contract.

A justification sheet is attached to each copy of the amendment.

Proper distribution has been made of the remaining copies.

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

Attachments

Copy to: A. C. Johnson, Reno (With copy of amendment)
Finance Officer, Region III (With copy of amendment)
E. H. Bailey, USGS
George Mavor

RECEIVED

FEB 19 1953

GENERAL COUNSEL
DEFENSE MINERALS
ADMINISTRATION

case 2/3/53

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

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
JAN 1 - 1953

Office of
Executive Officer
DMEA Field Team
Region III

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

January 9, 1953

Memorandum

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

From: Executive Officer, DMEA Field Team, Region III

Subject: Contract Idm-E331 - Docket DMEA-2495 (Zinc-Copper), R. E. Fitzgerald, Trustee for Copper Hill Mine Venture, Amador County, California
Amendment No. 4

Attached are the original and two copies of Amendment No. 4, dated January 5, 1953, extending the time of completion of subject contract.

A justification sheet is attached to each copy of the amendment.

Proper distribution has been made of the remaining copies.

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

Attachment

Copy to: A. C. Johnson, Reno (With copy of amendment)
Finance Officer, Region III (With copy of amendment)
E. H. Bailey, USGS
George Mavor

RECEIVED
JAN 30 1953
GENERAL COUNSEL
DEFENSE MINERALS
ADMINISTRATION

Docket Copy

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
JAN 6 1953

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

Office of
Executive Officer
DMEA Field Team
Region III

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

January 2, 1953

Memorandum

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

From: Executive Officer, DMEA Field Team, Region III

Subject: Docket DMEA-2495 (Zinc-Copper) - Contract Idm-E331
Amendment No. 3
Copper Hill Mine - R. E. Fitzgerald

Attached are the original and two copies of Amendment No. 3, dated November 25, 1952, made in connection with subject contract.

A justification sheet is attached to each copy of the amendment.

Distribution has been made of the remaining copies.

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

Attachments

Copy to: E. H. Bailey, USGS
A. C. Johnson, Reno (With copy of amendment)
Finance Officer, Region III (With copy of amendment)
George Mavor

cae 1/6/53

RECEIVED
JAN 15 1953
GENERAL COUNSEL
DEFENSE MINERALS
ADMINISTRATION

2495
FILE COPY
SURNAME:

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

140
BEW.

Keating
AEKane
Hofflund
Chamber

JAN 5 1953

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

Re: R. E. Fitzgerald
Docket No. DMEA-2495
(Zinc-Copper)
Contract No. Idm-E331

Dear Mr. Miller:

Reference is made to your approval of the subcontract between the Operator and one Ed Bloyed, for 50 feet of crosscutting. There is no inherent objection to the terms of this subcontract. However, in order to make your approval effective, the contract should be amended to allow for the making of subcontracts as item (1) of Exhibit "A" provides that there are to be none such. Furthermore, the estimate of costs should now be amended to reflect the changes necessitated by this subcontract.

Sincerely yours,

Frank E. Johnson (JHB)

Chairman, Operating Committee

AEKane/ema/1/2/53
cc: Mails & Files
Adm. R. File
Op. Comm.
Mr. Hedges
Mr. Thayer
Mr. Keating
J. L. Hofflund
A. E. Kane
Chron.
Pending

Approved:

J. H. Hedges (JHB)

Member, Bureau of Mines

A. R. Kinkel, Jr. (JHB)

Member, Geological Survey

J.H. 1-5-53

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

Office of
Executive Officer
DMEA Field Team
Region III

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

November 20, 1952

Memorandum

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

From: Executive Officer, DMEA Field Team, Region III

Subject: Docket DMEA-2495 (Zinc-Copper) - Contract Idm-E331
Amendment No. 2
Copper Hill Mine - R. E. Fitzgerald

Attached are the original and two copies of Amendment No. 2, dated November 10, 1952, made in connection with subject contract.

A justification sheet is attached to each copy of the amendment.

Distribution has been made of the Field Engineer's and the Finance Officer's copies.

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

Attachments

Copy to: E. H. Bailey, USGS
A. C. Johnson, Reno (With copy of amendment)
Finance Officer, Region III (With copy of amendment
George Mavor

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
NOV 25 1952

cor 11-26

Office of
Executive Officer
DMEA Field Team
Region III

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

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
NOV 1 4 1952

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

November 10, 1952

Mr. R. E. Fitzgerald, Trustee
Copper Hill Mine Venture
c/o Dr. E. C. Hartwell
209 Post Street
San Francisco 4, California

Re: Docket DMEA-2495 (Zinc-Copper)
Contract Idm-E331
Copper Hill Mine
Amador County, California

Dear Mr. Fitzgerald:

Six copies of Amendment No. 2, dated November 10, 1952, which were prepared in the Washington Office of the DMEA and signed for the Government by Mr. C. O. Mittendorf, Administrator, Defense Minerals Exploration Administration, are attached for your signature.

Kindly sign all six copies and return the original and four copies to this office. You may retain the copy marked "Operator's Copy" for your files.

Sincerely yours,

H. C. MILLER

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

Enclosure

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

FILE COPY
SURNAME:

UNITED STATES
DEPARTMENT OF THE INTERIOR 140
DEFENSE MINERALS EXPLORATION ADMINISTRATION
WASHINGTON 25, D. C.

NOV 4 1952

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

Re: Docket No. DMEA-2495
(Zinc-Copper)
R. E. Fitzgerald, Trustee
for Copper Hill Mine Venture

Dear Mr. Miller:

This responds to your memorandum dated October 17, 1952, to this Agency concerning the above-described project.

Your memorandum recommended that the contract be amended to change the description of the work by revising the requirements of shaft sinking, crosscutting, and drifting, and asked whether you could prepare the amendment. As the estimated costs of these requirements were stated as allowable maximums, you could not execute an amendment of these items. (See Departmental Order No. 2684, Sec. 3 (a) (4), and Sec. 4 (a).) However, we have prepared the attached amendment, along the lines you recommended, and have executed it. The amendment should be executed by the Operator and the same distribution of the copies made as was made of the contract.

Sincerely yours,

(signed) FRANK E. JOHNSON (JHB)
Chairman, Operating Committee

Enclosures-6

APPROVED:

J. H. Hedges (JHB)
Member, Bureau of Mines

A. R. Kinkel, Jr. (JHB)
Member, Geological Survey

HCRubin/mef 10/27/52
cc to: Mails and Files
Adm. R. File
Op. Committee
Mr. Thayer
Hedges
Keller
Hofflund
Rubin
Chron.
Pending

11/4/52

FILE COPY
SURNAME:

Corbett
H. Keller
F. Johnson

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

DMEA- Base Metals Div.

3669 FXCorbett/bjl 2616

October 21, 1952

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

Reur memo October 17, Docket No. DMEA-2495, Copper Hill Mine amendment will be drawn here.

(signed) FRANK E. JOHNSON

F. E. Johnson, Chairman
Operating Committee

10-21

FXCorbett/bjl written 10/21/52

Copy to: Docket
Admr. R. File
Op. Committee
H. F. Keller (2)
F. X. Corbett
Mr. Bishop
Mr. McKnight
Chron.

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

Office of
Executive Officer
DMEA Field Team
Region III

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

October 17, 1952

Air Mail

Memorandum

To: DMEA, Interior Building, Washington 25, D. C.

From: Executive Officer, DMEA Field Team, Region III

Subject: Docket DMEA 2495 (Zinc-Copper), Copper Hill Mine, R. E. Fitzgerald (Trustee), Amador County, Calif. Contract Idm-E331

(note — by reply air mail)

Mr. R. E. Fitzgerald called at this office on October 17, regarding a proposed change in carrying out his contract.

After unwatering the Jackass Shaft at the Copper Hill Mine, it was found that the bottom part of the shaft had been sunk at a somewhat steeper angle than the upper part. Nevertheless, because there were showings of ore in the shaft and the desire of the operator to sink along the footwall of the vein, the shaft was continued on the steeper angle. It now appears that if the shaft is continued the full additional depth of 115 feet to the level on which the good showings were found in the diamond drill hole put down by the Bureau of Mines, the bottom of the shaft will be some eighty feet from that showing. On the strength of what was happening, Mr. Fitzgerald had Mr. Frederick, a mining consultant, report on his operations and recommend what he thought should be done.

A copy of Mr. Frederick's letter report to Mr. Fitzgerald, dated October 16, 1952, is attached. The map attached thereto was traced in this office from the map attached to the original letter.

On the strength of Mr. Frederick's report, Mr. Fitzgerald called to inquire if his contract could be amended to permit him to crosscut to the main vein as shown on the map, and if good showings are found to drift both ways on them. It looks as though his request should be granted as the crosscut would determine if ore is between

that found at the approximate 97-foot level and that found in the diamond drill hole. If ore is found at the intermediate point and drifting on it shows the existence of an ore body, the company later on could sink the shaft and run the 80-foot crosscut to the ore on its own account.

If the applicant's request is granted there will remain unspent about $2,000 in his sinking and shaft timbering account. On the other hand, the $600 allowed for crosscutting 22 feet will not be enough to crosscut approximately 55 feet as proposed.

My question then is: Have you any objection to amending the contract to do the proposed crosscutting as indicated on the map? If there is no objection, may I prepare the amendment in such manner as to increase the $600 maximum allowed for crosscutting and decreasing the shaft sinking allotment by the same amount? That will leave some unexpended funds in the shaft sinking account which Mr. Fitzgerald says would not be used. An air mail reply will be appreciated.

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

Attachments

Copy to E. H. Bailey, USGS

C
O
P
Y

FRANCIS H. FREDERICK
MINING GEOLOGIST

503 Market Street
San Francisco 5, California
Phone SUtter 1-7982

Residence:
2715 Stuart Street
Berkeley 5, California
Phone Ashberry 3-7651

October 16, 1952

Mr. R. E. Fitzgerald
c/o Dr. E. C. Hartwell
209 Post Street
San Francisco 4, California

Dear Sir:

On October 9, 1952 I visited the Copper Hill Mine property to examine the new work done in the recent sinking operations at the Jackass Shaft, and to also examine the old workings exposed by the dewatering of the shaft in preparation for the skinking program.

The new work, amounting to about 60 feet of sinking, puts the present shaft bottom at 164 feet incline distance from the collar of the shaft, and shows that there is considerable low grade ore mineralization distributed over a wide zone in the immediate footwall of the main vein. Two dikes of waste matter cut thru the vein zone near the start of the new work and the shaft followed down along some of the low grade footwall ore bands. It is now apparent from the position of the known ore at the old 77 and 97 foot levels and in the diamond drill hole that the best ore is in the hanging wall east of the shaft.

I understand the reason for the shutdown October 9 was to reconsider the exploration plan and the manner of accomplishing the most work for the least expenditure.

It now appears that the best way to explore the main ore zone is to crosscut laterally from near the present shaft bottom directly through the wide ore zone to the easterly or hanging wall limit of the ore, and then to drift laterally, northerly and southerly, along the best ore band or bands found in the zone. The crosscut would be 55 to 60 feet long. The subsequent drifting along the vein, or veins, should total a minimum of about 100 feet. If ore proves up as expected the total drifting might exceed 250 feet, making a total 300 feet or more of lateral work at this proposed 160 level.

The best ore bands are near the easterly or hanging wall edge of the ore zone and, at this level, would be about 25 feet in elevation (about 50 feet incline distance) above the point where the diamond drill hole cut the best ore.

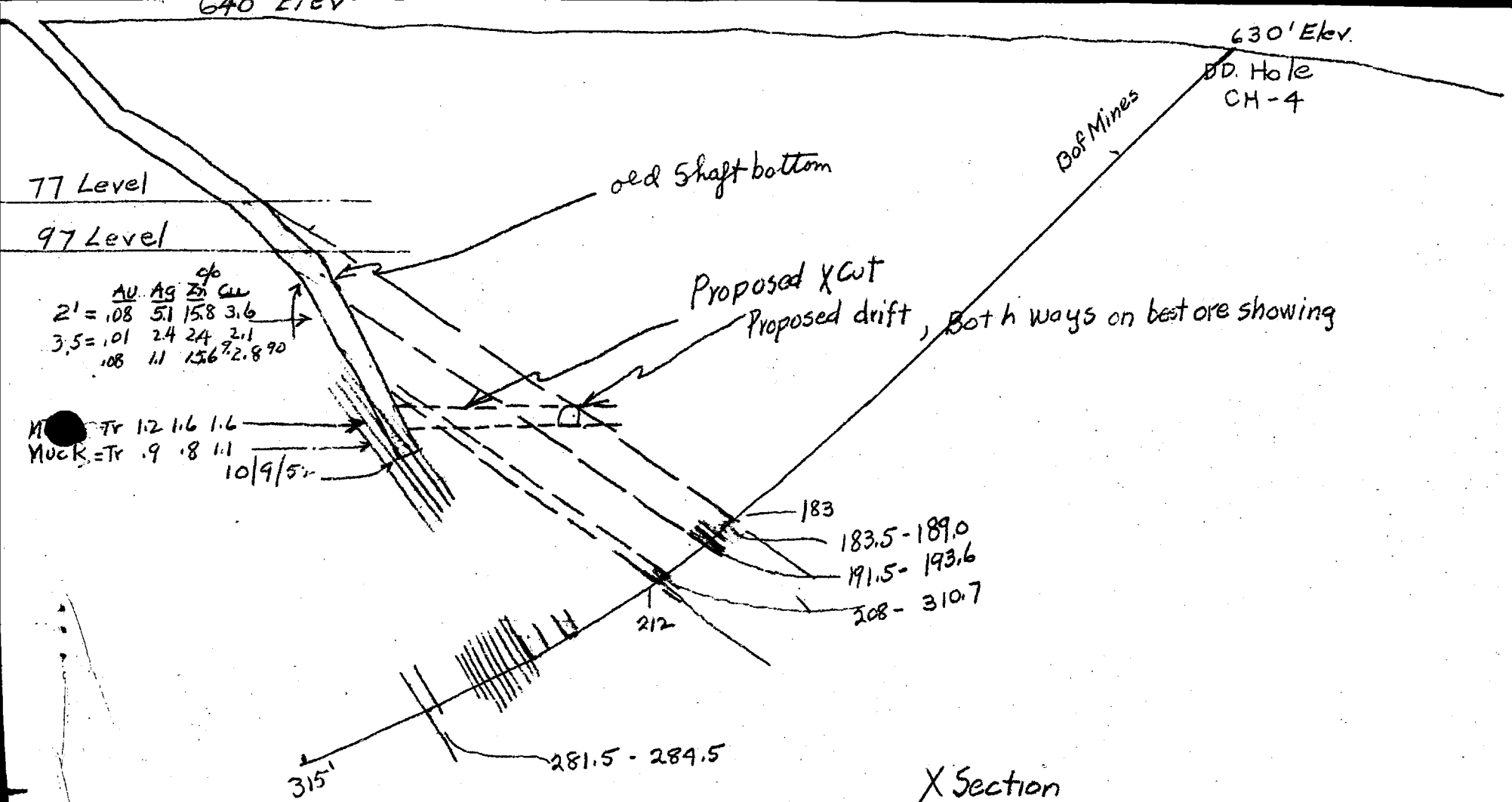
The lateral work proposed at this time will give more information per dollar spent from here on than any combination that includes sinking deeper in the shaft. Any ore found by the proposed lateral work will definitely be part of the ore shoot or block discovered by the diamond drill hole.

All underground exploratory work planned at the Jackass shaft area should be done under a bonus contract or direct contract arrangement. Recent experience almost every where in the Western States shows that work goes very slowly and is very costly unless it is on some incentive plan arrangement.

The work done to date at the Jackass Shaft shows that the project has at least as much promise for developing an ore body as it had when the project started several months. ago.

Very truly yours,

/s/ Francis H. Frederick



X Section
JACKASS Shaft, Copper-Hill Mine
Amador Co, Calif

N 55° E

Scale 1" = 40'

F.H.Fred

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

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
OCT 13 1952

Office of
Executive Officer
DMEA Field Team
Region III

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

October 9, 1952

Memorandum

To: A. C. Johnson, Bureau of Mines, Reno, Nevada

From: Executive Officer, DMEA Field Team, Region III

Subject: Docket DMEA 2495 (Zinc-Copper), Contract Idm-#331, Copper Hill Mine, Amador County, California

Mr. R. E. Fitzgerald, Trustee of the Copper Hill Mine Venture has called at this office a number of times to inform me of the difficulty he is having in hiring miners. He tells me that the Utah Construction Company is hiring every available man in the area regardless of cost in order to complete the Bear River Dam of the Pacific Gas and Electric Company this fall.

Mr. Fitzgerald has been in touch with the Utah Construction Company and has been told that most of the men they now have employed will be laid off in a matter of about thirty days, so that plenty of good help will be available to carry out the Copper Hill contract after that.

When good men are available, Mr. Fitzgerald plans to work two shifts in order to complete his contract. This is to inform you that if you find the work at Copper Hill in recess for the next month or so you will know why. I told Mr. Fitzgerald that under the conditions we would not press him too hard.

I understand that some very good ore has been struck in the shaft. A sample taken by Mr. Fitzgerald and assayed by Smith Emery analyzed -

Gold - .08 oz. per ton
Silver - 5.12 oz. per ton
Copper - 3.4 per cent
Zinc -15.86 per cent.

This ore is almost as good as the ore found in the Bureau of Mines drill hole, the target towards which Mr. Fitzgerald is shooting.

H. C. MILLER

Copy to DMEA, Interior Bldg., Washington, D. C.
E. H. Bailey, USGS

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

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION

Washington 25, D. C.

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
OCT 13 1952

Office of
Executive Officer
DMEA Field Team
Region III

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

October 7, 1952

Mr. R. E. Fitzgerald (Trustee)
Copper Hill Mine Venture
c/o Dr. C. O. Hartwell
209 Post Street
San Francisco, California

Re: Docket DMEA 2495
Contract Idm-E331 (Zinc-Copper)
Copper Hill Mine
Amador County, California

Dear Mr. Fitzgerald:

An examination of your contract indicates the impracticability of requiring complete documentation of the costs incurred as reported on Form MF-104 (Rev.) and 104A, Monthly Progress Reports. Therefore, consistent with authority delegated the Executive Officer, DMEA Field Team, Region III, we hereby waive the requirement for you to provide documentary support of the monthly report, except for support of equipment purchases.

In lieu of documentary support of the monthly report, G. Mavor, Auditor, Contract Administration and Audit Division, DMEA, will make interim audits of your records, and will make a final audit on completion or termination of the contract before the final report is processed for payment.

Sincerely yours,

H. C. MILLER

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

Copy to: DMEA, Interior Building, Washington 25, D. C.
Jay L. Chambers, DMEA, Interior Bldg., Washington 25, D. C.
E. H. Bailey, USGS
G. Mavor, DMEA, San Francisco, Calif.
A. C. Johnson, Reno, Nevada

DOCKET COPY

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

Office of
Executive Officer
DMEA Field Team
Region III

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

Sept. 23, 1952

Memorandum

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

From: Executive Officer, DMEA Field Team, Region III

Subject: Docket DMEA-2495 (Zinc-Copper) - Contract Idm-E331
Amendment No. 1
R. E. Fitzgerald - Copper Hill Mine

Attached are the original and two copies of Amendment No. 1, dated September 12, 1952, made in connection with subject contract.

A justification sheet is attached to each copy of the amendment.

Distribution has been made of the Field Engineer's and the Finance Officer's copies.

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

Attachments

Copy to: E. H. Bailey, USGS
A. C. Johnson, Reno (With Field Engr.'s copy of Amendment)
L. L. Norvell (With Finance Officer's copy of Amendment)

RECEIVED
OCT 28 1952
GENERAL COUNSEL
DEFENSE MINERALS
ADMINISTRATION

SDS 9/29/52

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

Office of
Executive Officer
DMEA Field Team
Region III

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

June 5, 1952

Memorandum

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

From: Executive Officer, DMEA Field Team, Region III

Subject: Docket DMEA-2495 (Zinc-Copper), Copper Hill Mine, R. E. Fitzgerald, Trustee.

Reference is made to subject letter from Frank E. Johnson dated June 2, transmitting the original and five copies of exploration project contract Idm-E331 for the applicant's signature.

Mr. R. E. Fitzgerald (Trustee) has signed all copies of the contract and was given the Operator's copy for his file this morning. The field team's copy is being sent to our mining engineering headquarters at Reno, Nevada, and we shall expect the finance officer's copy from you shortly.

Operator will start work within 30 days of the date of the contract. We note also that this project should be placed on an on-site audit basis and the operator has been so informed. Original and three copies of contract are enclosed herewith.

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

Attachment

Copy to A. C. Johnson, Reno, Nev.
(with Field Team's copy of contract)
E. H. Bailey, USGS

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
JUN 9 1952

500
FILE COPY
SURNAME:

Corbett
Moulds

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

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

JUN 2 1952

Re: Docket No. DMEA 2495
Copper Hill Mine
Zinc-Copper

Dear Mr. Miller:

Enclosed please find the original and five copies of the above referenced contract.

If the contract is satisfactory to those concerned, please have it signed and handled in the regular manner.

Sincerely yours,

(signed) FRANK E. JOHNSON (DB)

Chairman, Operating Committee
Defense Minerals Exploration
Administration

Enclosures-6
APPROVED:

J. H. Hedges (DB)
Member, Bureau of Mines

D. M. Lemmon (DB)
Member, Geological Survey

FXCorbett/mef
5/28/52
cc to: Adm. R. File
Op. Comm.
Docket File Copy
Mr. Moulds
Mr. Corbett
Mr. Bishop
Mr. McKnight
Region III

P.S. It will be necessary to insert in the contract in the space provided under Article 3 the number of days from the date of the contract in which work shall commence.

This project should be placed on an on-site audit basis.

DEFENSE MINERALS EXPLORATION ADMINISTRATION

1420137 2017 4070
Salaries and Expenses, Defense Production Activities, Interior 1952
5-29-52
9:30 am

H.C.Miller, Reg. III,1012 Flood Building,870 Market St.,San Francisco 2, Calif.

DOCKET DMEA-2495

RE DOCKET DMEA-2495, H. E. FITZGERALD, TRUSTEE, COPPER HILL MINE,

APPLICATION APPROVED, CONTRACT BEING FORWARDED TODAY.

ROBERT E. ADAMS
ADMINISTRATIVE OFFICER

READAMS/meb
cc to: Adm.Reading File
Mails & Files Br.
Mr. Creswell,Rm. 2626
Audit Division

2071

BUREAU OF MINES
WASHINGTON, D. C.
MAY 29 3 42 PM '52

188 WA SFS/I-BOM/

SAN FRANCISCO CALIF 5-28-52 945A

DEFENSE MINERALS EXPLORATION ADMIN

INTERIOR BLDG WA

RE DOCKET DMEA-2495, R. E. FITZGERALD, TRUSTEE, COPPER HILL MINE. IMPORTANT TO KNOW WHETHER APPLICATION IS TO BE APPROVED OR DENIED. WOULD APPRECIATE EARLY REPLY.

H C MILLER EXECUTIVE OFFICER DMEA FLD TEAM, REGN III

DMEA-2495

RB 955A

RECEIVED
MAY 28 1 14 PM '52
GENERAL ADMIN
PUBLIC BLDGS SERVICE
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DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
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MAY 28 1952

UNITED STATES 140
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION
WASHINGTON 25, D. C.

May 26, 1952

Memorandum

To: Acting Administrator
Through: Mr. Donald E. Moulds

From: Chief Counsel

Subject: Docket No. DMEA-2495, Copper Hill Mine Venture, R. E. Fitzgerald, Trustee

There is attached, in satisfactory legal form for execution, a contract covering the subject project, subject to the attachment to the contract of copies of "Figure 5, Copper Hill Mine Lease", further describing the property (see paragraph 3(c), DMEA Circular 21); subject to the attachment of Owner's Consent to Lien; and subject to the attachment of map.

We did not find in this file a copy of the Operator's lease, as required by paragraph 1 of DMEA Circular 20. However, in view of the statements in the field-team report concerning ownership by Stanley Van Vleck, and view of the Owner's Consent to Lien executed by Stanley L. Van Vleck and Gordon K. Van Vleck, we will assume, in this case, that the Operator holds a lease which has been properly executed by the real owners of the property.

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

Attachment

IN REPLY REFER TO:

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

May 8, 1952

Memorandum

Re: DMEA-2495
Copper Hill Mine
Amador County, California
$20,870

To: Mr. D. E. Moulds

From: E. L. Newcomb

Subject: Geological recommendation

The applicant requests Government assistance to explore by underground work a zone of zinc-copper mineralization which was intersected by a Bureau of Mines' diamond drill hole.

Orebodies in the Copper Hill area are localized in chloritic felsite along a strong shear zone, which trends N 20° W and dips 55° NE between the Jackass shaft and the Main shaft to the southeast. This shear zone parallels the regional foliation of isoclinally folded metavolcanics and sediments.

intersected

which is 10.3 or 27

The Copper Hill property was drilled by the Bureau of Mines in 1942-43. Out of the 5 holes drilled, only 2 holes intersected zinc-copper mineralization. One of these holes, DDH-C-4 near the Jackass shaft, intercepted 27 feet of mineralization which has an average grade of 22% zinc, 0.43% copper, 9.3 oz. silver, and 0.02 oz. gold through an average thickness of 10.3 feet. Although an ore vein has been intersected at depth by drilling, the Jackass shaft was apparently driven on the footwall of this same vein. Since the shaft is flooded, an examination of mineralization in the shaft cannot be made.

The proposed project will consist of dewatering and rehabilitating the 125-foot Jackass shaft and sinking the shaft an additional 115 feet on the footwall. Then at the depth of the intersected zinc-copper mineralization, a 22-foot crosscut will be driven from the shaft to the hanging wall of the vein. If indicated ore is developed by this crosscut, 75 feet of drifting will be driven in each direction on the vein.

A field team report, which was prepared on DMA-477 (a mining loan application for the Copper Hill mine), is available for our consideration of the present application. At the time of their examination, the field team was completely in agreement with the applicant's plan to prove up the inferred ore near hole DDH-C-4.

The strike length of a possible ore shoot near C-4 is limited to about 300 feet, because DDH-C-5 on the southeast and AS&R hole C-7

on the northwest are barren. However, past experience in Copper Hill area has indicated that the oreshoots plunge very steeply and usually have their greatest dimensions down dip.

The applicant's proposal is considered to have a very good chance of discovering a significant oreshoot and is recommended geologically for approval.

E. L. Newcomb
E. L. Newcomb
Geologist

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

May 5, 1952

Re: DMEA-2495
Zinc-Copper
Copper Hill Mine
Amador Co., Calif.
c/o Dr. E. C. Hartwell
209 Post Street
San Francisco, Calif.

Memorandum

To: Mr. D. E. Moulds, DMEA

From: Mr. H. E. Olund, USBM

Subject: Application from R. E. Fitzgerald, Trustee, for an exploration loan of $20,870 to explore the Jackass shaft at the 220 foot level for zinc ore.

The application No. 477 for a loan of $70,000 to build a mill was denied because the mine did not have sufficient ore to repay the loan. A diamond drill hole, drilled by the Bureau of Mines in 1950, showed a width of 10.3 feet of ore averaging 22.37 percent Zn, 0.43 percent Cu, 9.31 ounces Ag and 0.02 ounces Au at the 220 foot level of the Jackass shaft. Because of the varying widths of the vein it was decided to extend the shaft to this depth and explore this showing for a length of 150 feet.

We have reviewed both Docket Nos. DMA-477 and DMEA-2495 and agree with the findings in both dockets. With reference to Docket No. DMEA-2495 we find that the costs set forth by the applicant are reasonable, in fact his cost of sinking and drifting are probably too low. There are two alternative methods of exploration that would be cheaper. One of them would be by extending the 350 level of the main shaft workings about 250 feet to the north and exploring the area from that point. This program would be cheaper but would not explore the area so well. The other would be by diamond drilling the area. This method is cheaper but would not delineate the ore so well because of the great variations in the width of the ore zone and the difficulty of getting core samples.

The application contains all the detailed costs and the labor costs and the total cost of the program, and they need not be repeated in our memorandum.

We recommend this application for approval without any substantial change. The field team has made a thorough examination of the property and recommended the original loan, which was denied by the Reconstruction Finance Corporation and the Defense Minerals Procurement Agency Copper Division. It might be advisable to review the costs with the applicants for it is likely that the funds asked for may be exhausted before the vein is ~~reached~~ explored.

H. E. Olund

H. E. Olund

DMEA-2495

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

Office of
Executive Officer
DMEA Field Team
Region III

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

April 16, 1952

Memorandum

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

From: Executive Officer, DMEA Field Team, Region III

Subject: Application for Exploration Loan (Zinc-Copper), Copper Hill Mine, Amador County, Calif. - R. E. Fitzgerald, (Trustee)

Attached are three sets of MF-103 and MF-100 forms dated April 15, 1952, by means of which the captioned trustee is making application for an exploration loan costing $20,870. The application was filed in quadruplicate in this office yesterday.

Originally the applicant included the work which now is set out as an exploration project in the Jackass shaft area, in an application (DMA-477) for a production loan on the Copper Hill Mine filed with DMA in January 1951.

It is my understanding that DMPA furnished RFC with a certificate of essentiality in connection with the loan, but that Mr. Charles W. Tully, supervising mining engineer, Office of Loans, RFC, Washington, demanded further exploration be done in the Jackass area before he was willing to give further consideration to a production loan on the entire property. (See copy of Mr. Tully's letter to Mr. Fitzgerald dated March 25, 1952, MF-103 form). In the new application the applicant is "shooting" for the 10-foot ledge of 22% zinc ore found in a Bureau of Mines drill hole.

The property was examined by the Bureau of Mines and the Geological Survey and four copies of a report "DMA-477, Copper Hill Mine, Amador County, California", by Glenn G. Gentry and Russell R. Trengove, mining engineers, U. S. Bureau of Mines, and Arvid A. Stromquist, geologist, U. S. Geological Survey, dated April 26, 1951, were sent to Tom Lyon, Vice Chairman, Copper Commodity Committee, DMA, on April 30, 1951. There will be no need to reexamine the property as no work has been done on it since the examination was made.

H. C. Miller
Executive Officer
DMEA FieldTeam, Region III

Attachment
Copy to E. H. Bailey, USGS

EXPLORATION

Subject: DMEA-2495
Re: Exploration Loan
Copper Hill Mine
April 22, 1952

Dr. E. C. Hartwell
209 Post Street
San Francisco, California

My dear Dr. Hartwell:

This will acknowledge receipt of your application dated April 15, 1952 for a loan under the Defense Production Act of 1950.

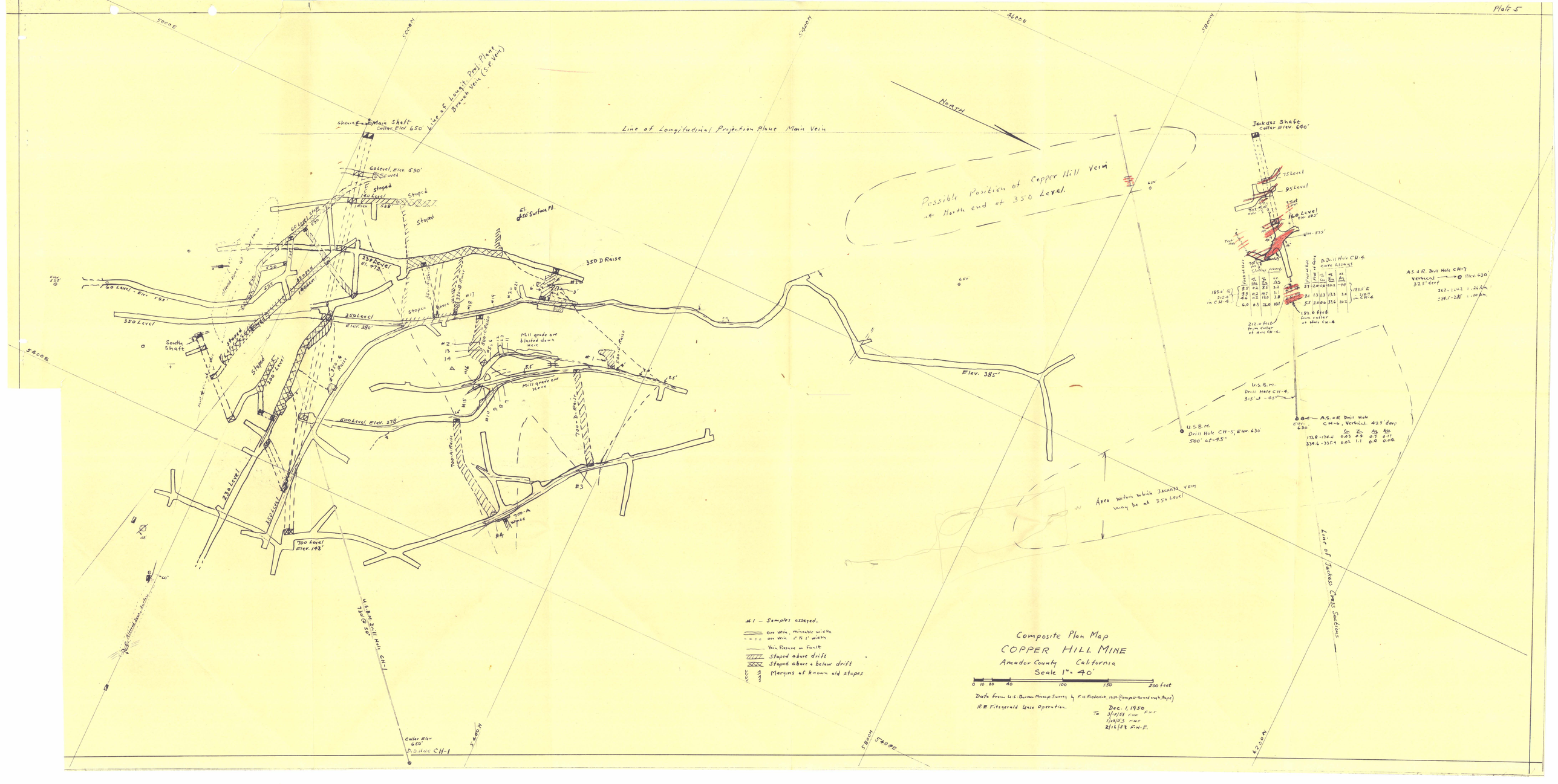
Your application was assigned Docket Number DMEA-2495 and referred to the Base Metals Division.

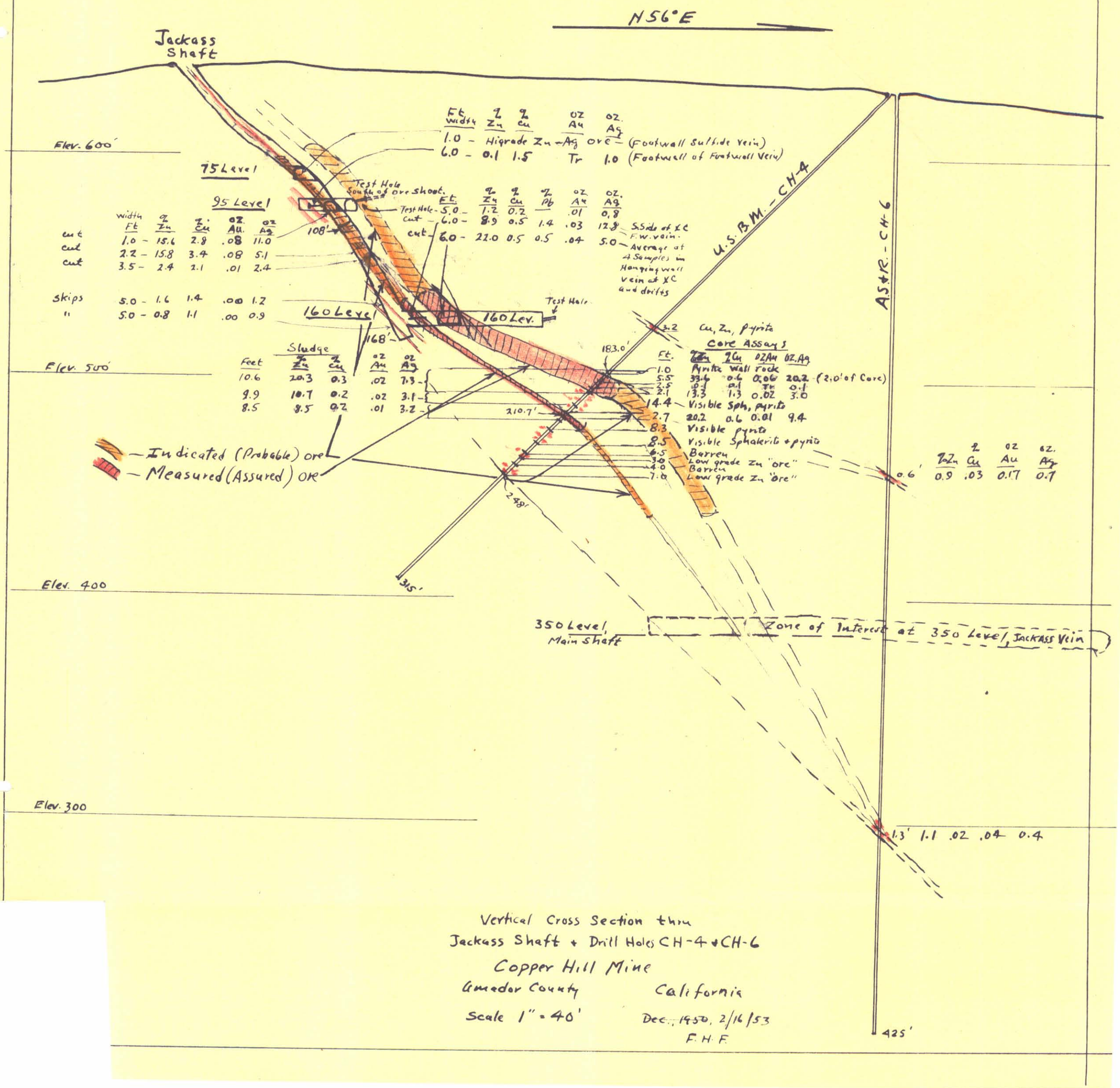
Kindly refer to DMEA-2495 in any future correspondence relating to your application.

Sincerely yours,

Robert E. Adams
Administrative Officer

7862


Composite Plan Map
COPPER HILL MINE
Amador County California
Scale 1" = 40'
0 10 20 40 100 150 200 feet
Data from U.S. Bureau Mines Survey by F.H. Frickenic, 1950 (Compass-tape & tape)
R.E. Fitzgerald lease Operation.
Dec. 1, 1950
To 3/27/51 F.H.F.
1/28/53 F.H.F.
2/16/53 F.H.F.
Line of Longitudinal Projection Plane Main Vein
Line of Longit. Proj. Plane Branch Vein (S.F. Vein)
NORTH
Possible Position of Copper Hill Vein at North end at 350 Level.
Area within which Jackass Vein may be at 350 Level
Line of Jackass Cross Sections
Main Shaft
Collar Elev 650
Jackass Shaft
Collar Elev. 640'
South Shaft
60 Level Elev. 590'
350 Level
250 Level
Elev. 380'
200 Level Elev. 278'
700 Level
Elev. 198'
350 D Raise
Elev. 385'
Mill grade ore blasted down here
Stoped
Elev. 630'
U.S.B.M. Drill Hole CH-5, Elev. 630
500' at -45°
U.S.B.M. Drill Hole CH-4
315' at -45°
A.S. & R. Drill Hole CH-6, Vertical. 423' deep
A.S. & R. Drill Hole CH-7
Vertical 325' deep
D.D. Drill Hole CH-6
Core Assays
Collar Elev 650'
D.D. Hole CH-1
#1 — Samples assayed.
ore vein, minimum width
ore vein, 1" to 1' width
Vein Fissure or Fault
Stoped above drift
Stoped above & below drift
Margins of known old stopes



Vertical Cross Section thru
Jackass Shaft + Drill Holes CH-4 + CH-6
Copper Hill Mine
Amador County California
Scale 1" = 40'
Dec., 1950, 2/16/53
F.H.F.

DMEA-2495

C
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P
Y

RECONSTRUCTION FINANCE CORPORATION

Washington 25, D. C.

March 25, 1952

AIR MAIL

R. E. Fitzgerald, Trustee
c/o Dr. E. C. Hartwell
209 Post Street
San Francisco, California

Dear Mr. Fitzgerald:

Reference is made to the conference on March 21 in the office of the Honorable John F. Shelley at which were present in addition to yourself, the Congressman, his Administrative Assistant Mr. Richard Downs, and Mr. Stuart Bingham and the undersigned of RFC.

This is to confirm the statement made during the conference that I would be unable to recommend approval of your pending application for a production loan because of the unfavorable factors discussed with you during the conference, with which you indicated partial agreement.

Pursuant to your request, action will be withheld temporarily on the pending application while you investigate the possibility of securing financial assistance through Defense Minerals Exploration Administration to further explore the zinc deposit indicated by drilling. It is understood that if you decide to pursue this course you will request withdrawal of the pending application through our San Francisco Loan Agency. It is further understood that if an exploration program is undertaken you would plan, upon its satisfactory conclusion to again file an application for a production loan; such application to incorporate satisfactory evidence of the adequacy of (1) ore reserves, (2) estimates of costs of construction and mine development, (3) management.

Very truly yours,

/S/ Chas. W. Tully

CHAS. W. TULLY
Supervising Mining Engineer
Office of Loans