UNITED STATES
DEPARTMENT OF THE INTERIOR
Defense Minerals Exploration Administration

OFFICIAL DOCKET FILE

Terminated (or cancelled) without certification. DMEA No. 356

This is the official contract file containing all official records of the project. Duplicate material has been removed. The records contained in the files are checked and are arranged in this manner:

Left Side

- ✓ Certificate of Audit (Final).
- Interim Audit(s).
- Report of Review.
- ✓ CLOSING LETTER Termination Notice or Agreement.
- Recision Notice.
- Assignment of Contract.
- ✓ Contract Amendments (latest on top).
- ✓ Contract with all exhibits and annexes.
- Owner's Consent to Lien.
- ✓ Subordination Agreement.
- ✓ Leases and assignments of leases.
- ✓ Application and attachments.
- Schedule of Collections.
- ✓ Operator's monthly reports and all attachments (latest on top).

Right Side

- ✓ Project summary.
- ✓ Work completed analysis.
- ✓ All other material is filed in chronological order with correspondence including the following reports as checked:
  - ✓ Final Field Team Report. (Tab)
  - Operator's Final Report.
  - ✓ Interim Reports.
  - ✓ On-site Exam Report(s). (Tab)
  - Settlement Sheets.

If additional folders are required because of volume of records, show folder numbers and contents below:

Maps in folder number _____

Operator's Monthly Reports in folder number _____

S. B. M
Reviewer's Initials

7973

DEFENSE MINERALS EXPLORATION ADMINISTRATION
CONTRACT ADMINISTRATION AND AUDIT DIVISION

AUDIT CERTIFICATE

I have examined the records and transactions of the:

Pennsylvania Mine, a partnership
Elgin, Nevada

pertaining to Exploration Project Contract No. Idm-E212, Docket No. DMA-356X, dated November 15, 1951, including Amendments Nos. 1, 2 and 3, covering a project for the exploration of copper and silver, for the period of November 15, 1951 to July 9, 1953, inclusive.

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		$26,580.65
Less: Salvage Proceeds on Property		300.00
Net Claimed Cost		26,280.65
Exceptions (see Audit Report for details):		
Prior to this audit	$ -0-	
During this audit	1,917.40	1,917.40
Total Accepted Cost		$24,363.25

The contract calls for a 50 percent participation of exploration expenses by the United States Government. Therefore, payment to the contractor by the Government in the amount of Twelve thousand one hundred eighty-one and 62/100 Dollars,

$12,181.62

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.

E. D. Talbert
E. D. Talbert
Auditor

July 24, 1953

AUDIT REPORT

I INTRODUCTION

During the months of June and July, 1953, a final audit (covering operations for the period of November 15, 1951 to July 9, 1953) was made of the records and accounts pertaining to Exploration Project Contract No. Idm-E212, Docket No. DMA-356X, dated November 15, 1951, including Amendments Nos. 1, 2 and 3, with the:

Pennsylvania Mine, a partnership
Elgin, Nevada

covering a project for the exploration of copper and silver.

The original accounting records under this contract were maintained by and are in the custody of Lt. Col. Elmer F. Smith, USAF, 2730 Ordway Street, N. W., Washington 8, D. C.; however, for the purposes of this audit, Lt. Col. Smith brought the records to the office of the Contract Administration and Audit Division. Lt. Col. Smith is one of the partners and, also, the attorney-in-fact for the other partners, Frank L. Smith, Robert L. Smith and Stephen F. Leo.

Prior to the actual audit of the accounts Mr. George Mavor, DMEA Auditor for Region III, rendered considerable preparatory assistance by reviewing the records of the DMEA Finance Officer for Region III. The Executive Officer of the DMEA Field Team for Region III, Mr. H. C. Miller, also was consulted by means of correspondence on questions arising during the audit.

II GENERAL INFORMATION ON RECORDS

The accounting records of the partnership consisted of a simple expense journal, in which were recorded all cash disbursements, plus accruals for payroll taxes and insurance, with the items charged to the project contract being indicated by symbols. Payments were made directly to employees and venders, or to Frank L. Smith as reimbursements, by checks signed by Elmer F. Smith and drawn on (a) the Bank of America, National Trust & Savings Association, Paramount Branch, Paramount, California, prior to March 8, 1952 and (b) The City Bank, Connecticut Avenue Office, Washington, D. C., after January 20, 1952.

Subsidiary records available for audit consisted of (a) a standard payroll record book, (b) a file of letters from Frank L. Smith, partner and supervising miner, (c) venders' invoices, (d) Federal and State quarterly payroll tax returns, (e) State monthly payroll insurance reports, and (f) cancelled checks.

III SCOPE OF AUDIT AND FINDINGS

The audit was limited to ascertaining the accuracy, propriety and validity of the costs shown in the "Totals to Date" column of Form MF-104, Operator's Monthly Report and Voucher, for the month of April, 1953, but including the subsequent settlement on July 9, 1953 of the Government's equity in certain project equipment. Since a preliminary review of the records indicated a considerable amount of improper distribution of charges to the "Items of Cost" shown on the Form MF-104, as well as some charges of questionable propriety, a detailed audit and analysis of costs was necessary. The findings, after correction of the cost distribution, follow:

(1) Independent Contracts:

This item is not applicable to this contract.

(2) Labor and Supervision:

The basic record for this item of cost was a standard payroll record book, which was posted from information, as to shifts worked by the day labor and footage accomplished by the contract labor, contained in semi-monthly letters from the miner (Frank L. Smith) who acted as supervisor of the project. During the audit all entries in the payroll record book were checked against the expense journal, the information contained in the semi-monthly letters, the applicable cancelled checks, the quarterly payroll tax returns and the monthly payroll insurance reports.

The audit disclosed (a) that a considerable portion of the labor was at shift rates in excess of the maximums specified in the contract; (b) a portion of the labor was contracted at footage rates; (c) during December, 1951, three employees (F. L. Smith, C. P. Smith and Harry Mathews) were paid, recorded in the accounts and reported on the federal tax return at $5.00 each less than the amounts claimed in the month's MF-104; (d) during January, 1952, two employees (F. L. Smith and Harry Mathews) were paid $1.00 each less than the amounts claimed in the month's MF-104; and (e) during October, 1952, one employee (J. Vetteri) was shown on the payroll record and claimed in the month's MF-104 for 5 hrs. @ $13.00/hr., but there was no evidence of payment and the amount was not reported on either federal or state tax and insurance returns or reflected in the accounts. The audit findings are summarized as follows:

Shifts Worked	Rate Paid	Costs Claimed	Allowable @ $12.50	Disallowed by Audit
293 shifts	$12.50	$ 3,662.50	$ 3,662.50	$ -
435 "	13.00	5,655.00	5,437.50	217.50
102 "	14.00	1,428.00	1,275.00	153.00
20-1/ "	15.00	307.00	255.83	51.17
187 feet	$10./ft.	1,870.00	1,562.50	307.50
Sub-totals		$12,922.50	$12,193.33	$729.17
Additional disallowances:				
(c) above			- 15.00	15.00
(d) above			- 2.00	2.00
(e) above (less $2.50 included in the disallowances for excess rates)			- 62.50	62.50
Totals		$12,922.50	$12,113.83	$808.67

Since the records did not indicate the man-shifts worked under contract at the footage rates, the allowable costs for the contract labor were determined by computations based on the difference between the man-shifts worked by each contract laborer at shift rates and the total man-shifts worked by the supervising-miner during each month.

The contract provided that "one miner will supervise work" and, accordingly, one of the miners (F. L. Smith, a partner) acted as supervisor and his wages were charged to Labor.

(3) Operating Materials & Supplies:

The costs chargeable to this category were determined by a detailed audit and analysis of the vendors' invoices, the cancelled checks and the book entries. The following listing summarizes the audit findings:

	Costs Claimed	Disallowed by Audit	Acceptable Costs
Timber (Ties)	$ 45.00	$ -	$ 45.00
Explosives	958.23	-	958.23
Pipe	47.83	40.00	7.83
Track	60.00	40.00	20.00
Drill Steel & Bits	537.35	140.00	397.35
Fuels & Lubricants	2,835.01	200.29	2,634.72
Other: Tires & Tubes	416.66	5.82	410.84
Prestone	126.40	-	126.40
Hdwe.,Tools,Misc.	543.45	-	543.45
Totals	$5,569.73	$426.11	$5,143.82

The disallowances shown in the above summary cover costs incurred before the date of the contract (November 15, 1951), as follows:

(a) Documented by invoices and cancelled checks and reflected in the accounting records:

Stoops Motor Co.	Sales Slip	11/2/51	Fuel	$ .35
" " "	Invoice	10/31/51	"	13.10
" " "	"	10/31/51	Tube	5.82
Standard Oil Co.	Invoice	10/25/51	Fuel	29.70
" " "	"	9/22/51	"	157.05

(b) Not documented and, according to the Operator, acquired before he kept project records:

Dec. 1951	MF-104	Drill Steel & Bits	$140.00
" "	"	Track	40.00
" "	"	Pipe	20.00
Oct. 1952	"	"	20.00

These items have been disallowed in accordance with Art. 10 of the contract which states, in part, "No items of * * * costs incurred before the date of this contract shall be allowed as costs of the project in which the Government will participate."

Also included in the disallowances is $.09 for an invoice of Stoops Motor Co., dated November 30, 1951, for Gas & Oil in amount of $9.01 charged to the project in the amount of $9.10.

(4) Operating Equipment

Equipment purchased and charged to this project, the disallowances and the accepted costs were disclosed by this audit to be as follows:

	Costs Claimed	Disallowed by Audit	Acceptable Costs
Flamo stove (second-hand)	$ 47.00	$ 47.00	$ -
Electrolux Refrigerator	200.00	-	200.00
Scraper	50.00	-	50.00
Ventube (24 25' sections)	609.60	163.20	446.40
Slusher	1,110.00	-	1,110.00
Totals	$2,016.60	$210.20	$1,806.40
Less: Salvage Proceeds	300.00	-	300.00
Net Totals	$1,716.60	$210.20	$1,506.40

The amount of $47.00 claimed for the Flame Stove has been disallowed in accordance with Art. 10 of the contract since it was purchased prior to the date of the contract (November 15, 1951) from the City Gas & Appliance Company on an invoice dated September 22, 1951. The actual cost was $47.50 but the charge against the project was made in the amount of $47.00.

The $163.20 disallowance for Ventube is due to the Operator having duplicated a charge for 8 25' sections purchased from the Salt Lake Hardware Company during January, 1952 but paid by a check dated February 3, 1952. The cost was erroneously claimed on both the January, 1952 and the February, 1952 forms MF-104.

The Slusher, which was included in Exhibit "A" of the contract under "To be rented" for 8 mos. @ $100./mo., was acquired under a rental-purchase agreement. Since the completion date of the contract was extended by Amendment No. 3, the Operator continued to pay and claim rentals and thereby acquired title to the equipment in October, 1952, upon the completion of 11 months' rental.

By letter to the Field Team under date of June 29, 1953, the Operator offered to buy the Government's interest (50% of the salvage value) in the refrigerator, 600 ft. of ventube and the slusher. The Executive Officer of the Field Team has indicated that he accepts this offer as being a fair settlement.

Depreciation on equipment furnished by the Operator was allowable in accordance with Exhibit "A" of the contract at the rate of $239.58 per month for an aggregate of fifteen items of equipment. The Operator has claimed depreciation only for the periods when the equipment was in use, and, accordingly, the full amount claimed is being allowed, as follows:

Dec. 1951	All items for full month	$ 239.58
Jan. 1952	All items for half month	119.79
Feb. 1952	Trucks, light plant, blower & motor & water pumps for part time	66.66
Mar. 1952	Trucks, light plant, water pumps for part time	51.62
Apr. 1952	All items for part time	151.00
May to July 1952	All items for full time	718.74
Aug. 1952	All items for half month	119.79
Sept. to Dec. 1952	All items for full time	958.32
Mar. 1953	All items for half month	119.79
	Total	$2,545.29

(5) Initial Rehabilitation & Repairs

This item is not applicable to this contract. It should be noted, however, that the Operator has claimed $1,794.53 under this item on the forms MF-104. The audit disclosed that these costs, which included numerous rather arbitrary allocations and prorations, covered the underground work of conditioning the shaft, and, accordingly, was improperly reported under this item.

(6) New Buildings, Improvements, etc.

This item is not applicable to this contract.

(7) Miscellaneous

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

	Costs Claimed	Disallowed by Audit	Acceptable Costs
Repairs to Equipment	$1,251.13	$ 20.00	$1,231.13
Payroll Taxes	540.58	216.03	324.55
Liability Insurance	1,423.94	236.39	1,187.55
Travel	10.68	-	10.68
Bookkeeping Services	300.00	-	300.00
Totals	$3,526.33	$472.42	$3,053.91

Repairs to Equipment included an invoice dated October 31, 1951 from the Stoops Motor Co. for truck repairs in the amount of $20.00 which has been disallowed in accordance with Art. 10 of the contract since it was incurred prior to the date of the contract (November 15, 1951). The acceptable costs for repairs were distributed as follows:

Trucks	$ 587.41
Compressor	481.16
Hoist	95.93
Other	66.63
Total	$1,231.13

Payroll Taxes applicable to this project were determined to be:

Federal Insurance Contributions Act (Social Security) @ 1.5%
Nevada Unemployment Compensation @ 2.7%

Taxes under the Federal Unemployment Tax Act were not applicable since the Operator had less than 8 employees.

A detailed audit of the accounts, cancelled checks, the Employer's Quarterly Federal Tax Returns (Identification No. 88-0056550) and the Nevada Employer's Unemployment Compensation Contribution Report (Acct. No. 1031-09-011) indicated that the charges to the project were in excess of the actual taxes paid or incurred and that wages paid a partner had been included erroneously in the tax returns. Also, since the wages reported in the tax returns include the amounts disallowed under the item (2) Labor and Supervision, the taxes thereon must be disallowed.

Disallowances, accordingly, are required as follows:

Total Payroll Taxes claimed, per April, 1953, MF-104			$540.58
Paid, per tax returns:			
F. I. C. A. $11,583.50 @ 1.5%	$173.75		
Unemployment 11,026.00 @ 2.7%	297.71	$471.46	
Accrued for April, 1953:			
F. I. C. A. $1,259.00 @ 1.5%	$ 18.89		
Unemployment 1,259.00 @ 2.7%	33.99	52.88	524.34
Difference disallowed			16.24
Other Disallowances --			
(a) Wages of partner included in above:			
F. I. C. A. $4,557.50 @ 1.5%		$ 68.36	
Unemployment 3,990.00 @ 2.7%		107.73	176.09
(b) Wages in excess of contract rates, exclusive of excesses of $168.75 for partner included in (a) and $2.50 for J. Vettori not included in tax returns:			
F. I. C. A. $557.92 @ 1.5%		$ 8.37	
Unemployment 557.92 @ 2.7%		15.06	23.43
(c) Wages for Dec. 1951, on State tax returns in excess of actual wages, exclusive of $5.00 for partner included in (a):			
Unemployment $10.00 @ 2.7%			.27
Total disallowances of payroll taxes			$216.03

Liability Insurance chargeable to this project consisted of premiums paid or payable to Nevada Industrial Commission at the following rates:

December, 1951 to December, 1952, incl. @ $11.00
January, 1953 to April, 1953, incl. @ 7.01

per $100 of the monthly gross payrolls, excluding amounts in excess of $300 per month earned by individual employees.

A detailed audit of the accounts, cancelled checks and the monthly Payroll Reports (Acct. No. 17,942) to the Nevada Industrial Commission disclosed that the charges to the project were in excess of the actual premiums paid, due primarily to the inclusion of an initial refundable deposit. Furthermore, since both the reportable wages and the excluded wages are affected by the disallowances under item (2) Labor and Supervision, a re-computation of the allowable monthly payrolls was necessary to determine the disallowances applicable to the insurance premiums.

The audit indicated that disallowances are required as follows:

Insurance Premiums claimed per April, 1953, MF-104		$1,423.94
Paid, per Payroll Reports:		
$9,923.25 @ $11.00 per $100.	$1,091.50	
1,735.00 @ 7.01 per $100.	121.63	1,213.13
Difference disallowed		210.81
Plus disallowances for reportable wages in excess of allowable maximum rate of $12.50 per shift:		
$160.75 @ $11.00 per $100.	$ 17.68	
112.67 @ 7.01 per $100.	7.90	25.58
Total disallowance of insurance premiums		$ 236.39

Travel in the amount of $10.68 has been claimed, and allowed as a necessary and reasonable cost, for a two-day trip by the supervising miner and partner (Frank L. Smith) to Salt Lake City for the purpose of obtaining emergency repairs to compressor parts.

Bookkeeping Services in the amount of $300.00 have been claimed for 15 months at $20.00 per month for the work performed by a partner (Lt. Col. Elmer F. Smith) in maintaining the project accounts, preparing payrolls, paying invoices, rendering tax returns and preparing the monthly reports. This charge has been allowed as being reasonable since Exhibit "A" of the contract included an estimate for the employment of "1 - Bookkeeper @ $300./mo. - part time for 30 days only" on the basis that the contract would be completed within 9 months, whereas by Amendment No. 3 it was extended to 17½ months.

(8) Contingencies

This item is not applicable to this contract. The Operator, however, has claimed $519.32 for Transportation and $793.78 for Road Repairs under this item. The audit disclosed that the Transportation covered necessary items of gas and oil, tires and tubes, and other operating costs of the trucks used on the project and that the Road Repairs consisted of very arbitrary prorations of labor, supply and equipment costs based on estimated time devoted to the road maintenance. The Executive Officer of the DMEA Field Team has determined that this road maintenance was a necessary, reasonable direct cost of the project within the meaning of Art. 10 of the contract. The various charges involved have been shown under the proper "Items of Costs" in the preceding sections.

IV CONCLUSIONS

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

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

	Totals Apr.MF-104	Corrected Distribution	Disallowed By Audit	Accepted Costs
(2) Labor & Supervision:				
Labor	$11,191.25	$12,922.50	$ 808.67	$12,113.83
(3) Operating Materials and Supplies:				
Timber	-	45.00	-	45.00
Explosives	1,224.57	958.23	-	958.23
Pipe	40.00	47.83	40.00	7.83
Track	60.00	60.00	40.00	20.00
Drill Steel & Bits	630.95	537.35	140.00	397.35
Fuels & Lubricants	2,352.38	2,835.01	200.29	2,634.72
Other	-	1,086.51	5.82	1,080.69
(4) Operating Equipment:				
Rental	1,110.00	-	-	-
Purchase	728.40	2,016.60	210.20	1,806.40
Depreciation	2,545.29	2,545.29	-	2,545.29
(5) Initial Rehab. and Repairs	1,794.53	-	-	-

	Totals Apr.MF-104	Corrected Distribution	Disallowed by Audit	Accepted Costs
(7) Miscellaneous:				
Repairs to Eqm't.	$ 1,325.66	$ 1,251.13	$ 20.00	$ 1,231.13
Payroll Taxes	540.58	540.58	216.03	324.55
Liability Ins.	1,423.94	1,423.94	236.39	1,187.55
Travel	-	10.68	-	10.68
Bookkeeping	300.00	300.00	-	300.00
(8) Contingencies:				
Transportation	519.32	-	-	-
Road Repairs	793.78	-	-	-
Totals	$26,580.65	$26,580.65	$1,917.40	$24,663.25
Proceeds from Property	300.00	300.00	-	300.00
Adjusted Totals	$26,280.65	$26,280.65	$ -	$24,363.25

There were no "allowable maximums" under this contract except for the rates of wages, which are discussed under item (2) of Section III of this report.

The findings of this audit were discussed in detail with Lt. Col. Elmer F. Smith, USAF, a partner and the attorney-in-fact of the Pennsylvania Mine.

E. D. Talbert, Auditor

July 24, 1953

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

FILE COPY
SURNAME

F.L. Knouse
Mrs
Rufin
Ogilvie
Talbert

OCT 30 1953

Lt. Col. Elmer E. Smith (USAF)
6730 Army Street, N. W.
Washington 16, D. C.

Re: Docket No. [illegible]-356 (Copper)
Contract No. [illegible]-272
Pennsylvania Mine
Lincoln County, Nevada

Dear Colonel Smith:

This is with reference to the subject exploration contract between the Pennsylvania Mine, a partnership consisting of: Elmer E. Smith, Frank E. Smith, Robert L. Smith, and Stephen F. Leo and the Government.

The final audit of the contract expenditures and the final reports of the Operator and of the Field Team have been received and accepted by this Administration. Although the total amount approved under the contract was $25,192.22, the sum of $24,290.04 was expended, from which exceptions, amounting to $1,917.10, were deducted. The total accepted cost, therefore, was $24,363.25, 50 percent of which, or $12,181.62, represented the Government's share. Your offer to purchase the Government's equity in the equipment purchased under the contract was accepted by the Executive Officer, DMA Field Team, Region III, under date of August 21, 1953, by appropriate release. The exploration work was completed in a satisfactory manner.

Because the results of the exploration were unfavorable, it is not our intention to make a certification of discovery or development which would create a lien against the subject property. We are, therefore, closing our books and records with respect to this project. Your attention is called to Article 11 of the Contract which requires the Operator to "keep and preserve said records and accounts for at least 3 years after the completion of the project or the termination of this contract".

Your interest in the Exploration Program of the Defense Minerals Exploration Administration and your willingness to participate therein are appreciated.

Sincerely yours,

C. O. Mittendorf (for)

Administrator

FLKnouse/db
10-22-53
cc to: Adm. Reading File
Opr. Committee
Docket
Messrs: C.H.Johnson, Rm. 3621
E.H.Kinkel, Rm. B-242A, GSA
Ellis
Knouse
DMA Field Team, Region III (2)

R.C.G.
10-30-53

Gove[illegible]ent's Copy

AMENDMENT NO. 3

DEFENSE MINERALS EXPLORATION ADMINISTRATION

Exploration Project Contract Idm-E212

Docket DMA-356X Pennsylvania Mine

Defense Minerals Exploration Administration Exploration Project Contract Idm-E212, dated November 15, 1951, amended January 31, 1952, and September 3, 1952, between the United States of America and Pennsylvania Mine, a partnership consisting of Elmer F. Smith, Frank L. Smith, Robert L. Smith, and Stephen F. Leo is hereby further amended as follows:

1. Discontinue drifting north on the 550-foot level(as approved by Amendment No. 1) and use the remaining allowable footage of 142 feet in driving a similar size drift south on the 550-foot level from the end of the approximately 60-foot long stub drift opposite the discontinued north drift (See map attached to Amendment No. 1).

2. Completion date of contract 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 March 10, 1953.

UNITED STATES OF AMERICA

By H. C. Miller

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

PENNSYLVANIA MINE, a partnership consisting of: Elmer F. Smith, Frank L. Smith, Robert L. Smith, and Stephen F. Leo by their Atty-in-Fact

By Elmer F. Smith

Atty-in-Fact

DEPARTMENT OF INTERIOR
BUREAU OF MINES

DEPARTMENT OF INTERIOR
BUREAU OF MINES
REGION III
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1953 MAR 23 AM 9:29

SAN FRANCISCO, CALIFORNIA

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
MAR 27 1953

AMENDMENT NO. 3

Docket No. 356X

Mineral Copper

Exploration Project Contract Idm-E212

Date of Contract November 15, 1951

Date of Amendment March 10, 1953

Operator Pennsylvania Mine - Elmer F. Smith et al

JUSTIFICATION

Driving north on the 550-foot level as permitted by Amendment No. 1 reached a total of 458 feet as of November 22, 1952, without exposing ore of commercial value and drifting was suspended. A sample said to have been taken at the face of the drift by Mr. Frank L. Smith ran only 0.04% copper, a trace of gold and 0.02 ounces of silver per ton. A balance of about $2781 remains unexpended and it is believed wise to spend this amount or the major part of it in exploring the area south on the 550-foot level by a drift approximately 140 feet long. It was the area to the south that the Bureau of Mines and Geological Survey originally recommended should be explored.

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

Defense Department of the Interior
Defense Mapping Agency Publication
MAR 27 1953

Government Copy
Copper

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
FILE
SEP 16 1952

AMENDMENT NO. 2

DEFENSE MINERALS EXPLORATION ADMINISTRATION

Exploration Project Contract Idm-E212

Docket DMA-356X Pennsylvania Mine

Article 3 of the Defense Minerals Exploration Project Contract Idm-E212, dated November 15, 1951, between the United States of America, acting through the Department of the Interior, Defense Minerals Exploration Administration, and the Pennsylvania Mine, a partnership consisting of: Elmer F. Smith, Frank L. Smith, Robert L. Smith, and Stephen F. Leo, is hereby amended by extending the time for completion of the project an additional one hundred (100) days; the duration of the original contract was to be for 270 days.

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 3, 1952

UNITED STATES OF AMERICA

By S. Ricker
S. Ricker, Acting for
H. C. Miller, Executive Officer
DMEA - Region III

PENNSYLVANIA MINE, a partnership consisting of: Elmer F. Smith, Frank L. Smith, Robert L. Smith, and Stephen F. Leo by their Atty-in-Fact

By Elmer F. Smith
Atty-in-Fact

DEPARTMENT OF INTERIOR
BUREAU OF MINES
REGION III
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1952 SEP 11 PM 1:51

SAN FRANCISCO, CALIFORNIA

SEP 18 1952

AMENDMENT NO. 2

Docket No. DMEA-356X Mineral Copper

Exploration Project Contract Idm-E 212

Date of Contract November 15, 1951

Date of Amendment September 3, 1952

Operator Pennsylvania Mine (A partnership), Elmer F. Smith, Atty-in-Fact

JUSTIFICATION

Although the work under this contract started on December 3, 1951, and the project was to be completed in 270 days, because of the extremely severe winter weather, heavy spring run-offs, and several equipment breakdowns that prevented operation, more than 100 operating days were lost.

Amendment No. 2 was drawn up in order to give the Operator additional time to complete the work started under this contract.

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

Contracts + Audits Copy

AMENDMENT NO. 1

DEFENSE MINERALS EXPLORATION ADMINISTRATION

Exploration Project Contract Idm-E212

Docket DMA-356X
Elmer F. Smith, Frank L. Smith,
Robert L. Smith, and Stephen F. Leo,
"Partners"

The original contract Idm-E212, dated November 15, 1951, provides for:

1. Condition North Shaft for sinking from collar to bottom.
2. Sink North Shaft 50 feet (includes a 20-foot sump) shaft cross-section size 7 x 7 feet.
3. Drift North on veins (650 level) 600 feet (Drift cross-section size 5 x 7 feet).
4. Raise 100 feet on vein from 650 level if approved by Government Field Team Engineers (raise cross-section size 5 x 7 feet)

After unwatering the shaft, it was found that heavy timbering and expensive excavating would be required to sink the shaft an additional 50 feet as provided in (2) above and an alternate program is to drift north on a 550 foot level, and if ore is encountered in the drift, to sink a winze in ore to a depth of 60 feet.

Inasmuch as the proposed alternate program will accomplish the same purpose in exploring the extension of the main ore shaft, Exhibit "A" of the contract is amended as follows:

Under "The work will consist of", strike out all four items and substitute the following:

1. Condition North Shaft from collar to 550 foot level.
2. Drift North on 550 foot level 600 foot (drift cross-section size 5 x 7 feet). See attached map.
3. Sink 60 feet on vein from 550 foot level, if approved by Government Field Team Engineers.
4. Carry out additional drifting, cross-cutting, and sinking, if approved by Government Field Team Engineers.

FEB 1 0 1952

Mr Ellis renewed
2/19/52

Estimated cost of project (amended):

Conditioning North Shaft to 550 foot level	$ 500.00
Drifting North 600 feet (550 foot level) at $20.00 per ft.	12,000.00
Sinking on vein (550 foot level) 60 ft. at $30.00 per ft.	1,800.00
Additional drifting, cross-cutting, and sinking, estimated cost	1,950.00
Equipment rental	800.00
Equipment use allowance of operator's equipment	2,156.22
Equipment to be purchased	2,586.00
Miscellaneous costs; gasoline, oil, equipment repairs, transportation, engineering, sample analysis, and office expenses	4,000.00
Total	$ 25,792.22

This amendment shall not be construed to increase the estimated total cost of the project, the aggregate total amount which the Government may be obligated to pay, or the percentage of the costs which the Government may be obligated to pay, under the provisions of Article 13 of the contract form.

Dated January 31, 1952.

UNITED STATES OF AMERICA

By H Allen
Executive Officer - DMEA

PENNSYLVANIA MINE, a partnership
By Frank L. Smith, Robert L. Smith and
Stephen F. Leo by their Attorney-in-Fact

By Elmer F. Smith
Attorney-in-Fact

By Elmer F. Smith

DEPARTMENT OF INTERIOR
BUREAU OF MINES
REGION III
RECEIVED

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SAN FRANCISCO, CALIFORNIA

Docket Copy

AMENDMENT NO. 1

Docket No. DMA-356X Mineral Copper-Silver

Exploration Project Contract Idm-E 212

Date of Contract Nov. 15, 1951

Date of Amendment Jan. 31, 1952

Operator Pennsylvania Mine

JUSTIFICATION

Original contract called for unwatering and conditioning the North Shaft for sinking from collar to bottom and then sinking another 50 feet. When shaft was unwatered, it was found that heavy timbering and expensive excavating would be required to sink the shaft. This amendment permitted a more feasible alternate program of drifting from the 550 foot level, and if ore is encountered in the drift, to sink a winze in ore to a depth of 60 feet. This work would accomplish the same purpose in exploring the extension of the main ore shoot as the program proposed in the original contract.

Department of the Interior
Bureau of Mines
FEB 14 1952

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

S65
7-25-52

Sa

POWER OF ATTORNEY

I, the undersigned, one of the partners in the Pennsylvania Mine, Lincoln County, Nevada, hereby authorize Lt. Col. Elmer F. Smith to sign on my behalf any Exploration Project Contract between the Pennsylvania Mine and the United States Government.

Dated this 20 day of Oct 1951.

Frank L Smith

Frank L. Smith

6

POWER OF ATTORNEY

I, the undersigned, one of the partners in the Pennsylvania Mine, Lincoln County, Nevada, hereby authorize Lt. Col. Elmer F. Smith to sign on my behalf any Exploration Project Contract between the Pennsylvania Mine and the United States Government.

Dated this 17 day of October, 1951.

Robert L. Smith

Robert L. Smith

Tullahoma, Tennessee
6 November 1951

I the undersigned, one of the partners in the Pennsylvania Mine, Lincoln County, Nevada, hereby authorize Lt. Colonel Elmer F. Smith, USAF, to sign on my behalf any exploration project contract between the Pennsylvania Mine and the United States Government.

Stephen F. Leo

STEPHEN F. LEO

MF-200
(June 1951)

Docket No. DMA 356X
Commodity Copper-Silver
Idm-E 212

UNITED STATES OF AMERICA
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS ADMINISTRATION

EXPLORATION PROJECT CONTRACT[1]

It is agreed this 15th day of November, 1951, between the United States of America, acting through the Department of the Interior, Defense Minerals Administration, hereinafter called the "Government," and[2] Pennsylvania Mine, a Partnership consisting of: Elmer F. Smith, 2730 Ordway St., N.W., Washington 8, D.C., Frank L. Smith, Box 873, Ely, Nevada, Robert L. Smith, 5218 Cudahy, Maywood, California, Stephen F. Leo, Princes Point Road, Brunswick, Maine.
hereinafter called the "Operator," as follows:

1. *Authority for contract.* This agreement is entered into under the authority of the Defense Production Act of 1950, pursuant to Mineral Order 5, entitled "Regulations Governing Government Aid in Defense Exploration Projects."

2. *Operator's property rights.* The exploration project shall be conducted on that certain property situated in the State of Nevada, County of Lincoln described as follows:[3] Hope Lode Mining Claim known as the Pennsylvania Mine. The property is located about seven (7) miles east of Elgin, in the Pennsylvania Mining District. Dimensions of the property are outlined on the attached map.

with respect to which the Operator represents and undertakes:[4]

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

(*b*) That he is a lessee, in possession and entitled to possession, and the subordination agreement of the lessor is attached.

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] Copper and Silver; shall prosecute the work efficiently, expertly, in a workmanlike manner, in accordance with good mining standards, with suitable and adequate equipment, materials, and labor, all properly designed to bring the project to completion within a period of[6] Two hundred and Seventy days from the date of this contract. The exploration project and the work to be performed are more fully described on Exhibit "A" attached hereto, which, with any maps or drawings thereto attached, is made a part of this contract.

4. *Performance of the work.* The work shall be performed by the Operator, under his sole direction and control: *Provided,* That with the consent of the Government and its written approval of the contract or contracts, all or any part of the work may be performed by the Operator through contract or contracts with independent contractors. 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.

5. *Fixtures and improvements.* 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. Any additional facilities, buildings, and fixtures, to be purchased, installed, or erected by the Operator, with the estimated cost of each, to which the Government will contribute currently its agreed pro rata share, are listed in Exhibit "A" attached hereto. The difference between the cost of such additional facilities, buildings, or fixtures, and the salvage value thereof at the conclusion of the work, shall be charged as a cost of the project to which the Government has contributed its pro rata share.

6. *Operating equipment.* Any operating equipment to be rented, purchased, or furnished by the Operator, with the allowable rental, purchase price, or depreciation, as the case may be, is listed under appropriate headings in Exhibit "A" attached hereto. As to equipment purchased for the project, the Government will contribute its agreed pro rata share of the cost thereof, and the difference between the cost and the salvage value at the conclusion of the work shall be charged as a cost of the project to which the Government has contributed its pro rata share.

[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.
[4] Strike out the provision not applicable.
[5] Name of mineral.
[6] Not in excess of 2 years.

7. *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.

8. *Labor and supervision.* An itemized schedule of labor, by numbers and classes (miners, muckers, millmen, etc.), and of supervisors, by numbers and positions, with the maximum wages or salaries that may be paid to each as an allowable cost of the project is set forth in Exhibit "A" attached hereto.

9. *Rehabilitation and repairs.* A statement of the cost of any necessary rehabilitation or repairs to put existing facilities, buildings, installations, and fixtures into useful and operable condition and which are to be allowed as costs of the project is included in Exhibit "A."

10. *Allowable costs of the project.* The costs of the project in which the Government will participate are limited to the necessary, reasonable, direct costs of performing the exploration work, including the costs of materials, supplies, engineering, power, water, analytical work, accounting, and utilities, including items of equipment costing less than $50 each; and the costs referred to in Articles 5, 6, 8, and 9, and the exhibits annexed to and referred to in this contract. Although the Government may pay part of the cost of new or additional facilities, structures, buildings, and equipment, only the depreciation on such items, computed as indicated in Articles 5 and 6, will be charged as a cost of the project. No items of general overhead, corporate management, interest, taxes, or any other indirect costs not expressly allowed by these provisions, 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.

11. *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.

12. *Progress reports.* The Operator shall provide the Government with monthly reports of work performed under the contract upon forms to be provided by the Government. Each monthly progress report shall bear the certification of the Operator and shall constitute the Operator's invoice of costs incurred on the project during the period covered by the report.

13. *Payment to the Operator.* The monthly progress report (invoice), to the extent approved by the Government, shall be processed for payment by the Government. Payment shall be made in the amount of 50 percent of the approved costs incurred; *Provided,* That the aggregate total of all sums paid by the Government under this agreement shall not exceed $12,896.11, which is 50 percent of the agreed estimated total cost of this project, $25,792.22.

14. *Final reports by Operator.* Upon completion of the project or termination of this contract, the Operator shall provide the Government with a comprehensive geologic and engineering report, including an estimate of ore reserves, to the best of his ability. Four copies of all reports shall be furnished to the Government.

15. *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 (1½) percent.

Of net smelter returns or other net proceeds in excess of eight dollars ($8.00) per ton of ore: One and one-half (1½) percent, plus one-half (½) 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.

16. *No assignment of contract.* Without the written consent of the Government, the Operator shall not assign or otherwise transfer or hypothecate this contract or any rights thereunder.

17. *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 worthwhile 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 render to the Government a full and final accounting of his operations under the contract and his expenditures of money; shall dispose of any unused materials, supplies, and equipment for the joint account of the Operator and the Government in the proportion of their respective interests; and shall pay to the Government its pro-rata share of any money remaining.

Executed in sextuplicate the day and year first above written.

PENNSYLVANIA MINE, a partnership
By, Frank L. Smith, Robert L. Smith and
Stephen F. Leo by ~~Operator~~ their Atty-in-Fact

By Elmer F. Smith
Atty-in-Fact

THE UNITED STATES OF AMERICA

By Frank P. Johnson
Acting Director, Production Expansion Division
Defense Minerals Administration

U. S. GOVERNMENT PRINTING OFFICE 16—64066-2

By Elmer F. Smith

Docket No. DMA - 356X
Elmer F. Smith, Frank L. Smith,
Robert L. Smith, and Stephen F. Leo,
"Partners"
Exploration Project Contract

EXHIBIT "A"

Performance of work:

This project involves the exploration of a copper-silver deposit, locally known as the Pennsylvania Mine located in Lincoln County and in the Pennsylvania Mining District.

The (Hope Lode Claim) Pennsylvania deposit is a quartz vein 3 to 15 feet wide that follows a fault zone striking N 20° W and dipping 20° N.E. The vein can be traced on the surface for 3,000 feet and is enclosed in altered diorite. The ore minerals are chiefly chalcopyrite, bornite and covellite, with some malachite and azurite. These minerals occur in narrow shoots that rake northeast within the vein. The main ore shoot was mined down the dip 450 feet having widths as great as 40 feet. The deposit has been developed through two shafts (see attached map). The north shaft (the main operating shaft) is 625 feet deep down the slope and is bottomed in the main ore shoot. Measured ore reserves in the main ore shoot total 7,000 tons averaging 1.61% copper and 8.3 oz. silver per ton, and 1,300 tons of indicated ore below the main 550 level.

This exploration program will explore the extension of the main ore shoot down the dip of the vein as well as the veins northern extension for a distance of 600 feet from the North Shaft on the 650 foot level.

The work will consist of:

1. Condition North Shaft for sinking from collar to bottom.
2. Sink North Shaft 50 feet (includes a 20-foot sump) shaft cross-section size 7 x 7 feet.
3. Drift North on veins (650 level) 600 feet (Drift cross-section size 5 x 7 feet).
4. Raise 100 feet on vein from 650 level if approved by Government Field Team Engineers (raise cross-section size 5 x 7 feet).

Estimated cost of Project:

Conditioning North Shaft for sinking operations	$ 500.00
Sinking North Shaft 50 feet @ $35./ft.	1,750.00
Drifting North 600 feet on vein (650 level) @ $20./ft.	12,000.00
Raising 100 feet on vein (650 level) @ $20./ft.	2,000.00
Equipment rental	800.00
Equipment use allowance of Operator's equipment	2,156.22
Equipment to be purchased	2,586.00
Misc. expenses; gasoline, oil, equipment repairs, transportation, engineering, sample analysis, and office expense.	4,000.00
Total	$25,792.22

Fixtures and Improvements:

None

Operating Equipment:

To be purchased:

500 feet 8" diam. vent tube	$ 425.00	
700 feet 2" diam. B.I. pipe @ $0.30/ft.	210.00	
700 feet 1" diam. B.I. pipe @ $0.14/ft.	98.00	
1 - Flamo stove	325.00	
1 - Flamo Refrigerator		
Drill steel for drifter and Jack hammer drills	278.00	
3000 Throw away drill bits @ $0.20	600.00	
650 feet-12 pound mine track @ $1.00/ft. (Incl. two rails, ties, spikes and splice bars)	650.00	
Total equipment to be purchased.		$2,586.00

To be rented:

Slusher mucker @ $100.00/month-8 mos.	$800.00

To be furnished by operator:	Fair market value.
1 - 315 c.f.m. Sullivan diesel compressor	$6,000.00
1 - D.A. 35 I.R-Drifter drill, automatic, w/accessories-bar, shell and hose.	1,200.00
1 - J.B. 35 I.R. Jackhammer w/accessories bar, shell and hose.	650.00
1 - Hoist-15 H.P. gasoline engine driven Fairbanks-Morse w/cable	850.00
1 - Hoist 5 H.P. Fairbanks Morse-gasoline engine driven w/cable	150.00
1 - 5 H.P. 8" diam-Buffalo Blower Fan and gasoline driven engine	300.00
600 feet of 8" diam. vent tube	500.00
1 - 10 H.P. Electric generating plant-gasoline engine driven	400.00
1 - Worthington PNEU. pump 50 g.p.m. 200' head capacity	200.00
1 - Fairbanks-Morse Electric driven pump 50 g.p.m. 100 foot head capacity.	75.00
1 - Chevrolet pick-up Truck	2,000.00
1 - Army type 4 x 4 Chevrolet Truck w/winch	1,500.00
2 - 16 cu. ft. mine cars	250.00
1 - 20 cu. ft. capacity mine skp	250.00
1 - 2 H.P. PNEU. motor for air blower	50.00
Total value of equipment	$14,375.00

$14,375 depreciated over a period of 60 months (5 years)

$\frac{\$14,375}{60 \text{ months}}$ = - $239.58 monthly use allowance

$239.58 x 9 months operation - total use allowance for operating equipment $2,156.22.

Labor and Supervision:

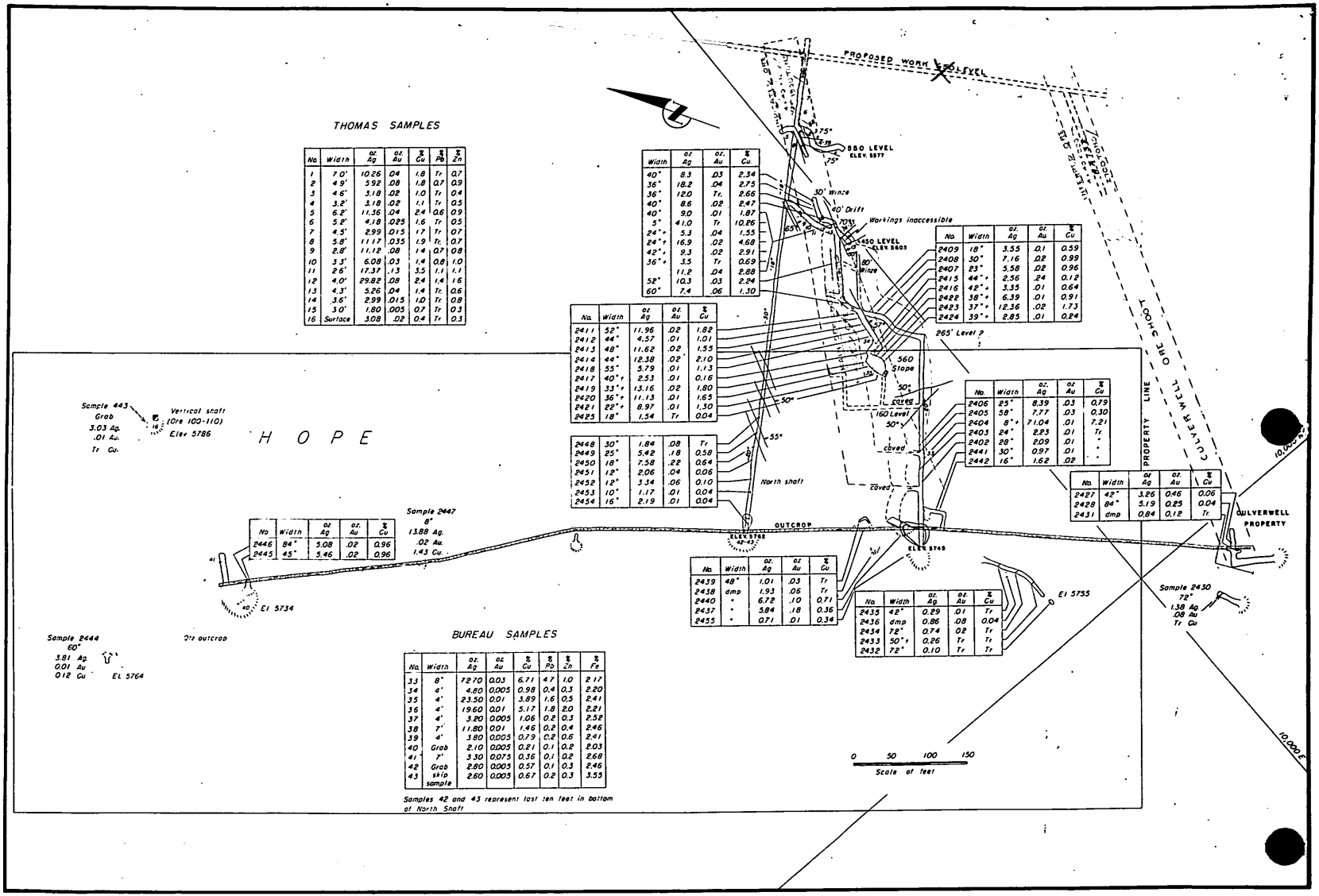
* 2 - Miners @ $12.50/8-hr. shift.
1 - Hoistman @ $12.50/8-hr. shift.
1 - Bookkeeper @ $300./mo. - part time for 30 days only
** 1 - Engineer @ $50./day - 9 days only

* One miner will supervise work
** One engineer will do mapping and sample the exploration work.

Note: Rates/shift do not include overtime, Ind. comp. S.S. Unemployment insurance @ 15.2% of payroll.

Rehabilitation and Repairs:

None



THOMAS SAMPLES

No	Width	oz. Ag	oz. Au	% Cu	% Pb	% Zn
1	7.0'	10.26	.04	1.8	Tr.	0.7
2	4.9'	5.92	.08	1.8	0.7	0.9
3	4.6'	3.18	.02	1.0	Tr.	0.4
4	3.2'	3.18	.02	1.1	Tr.	0.5
5	6.2'	11.36	.04	2.4	0.6	0.9
6	5.2'	4.18	.025	1.6	Tr.	0.5
7	4.5'	2.99	.015	1.7	Tr.	0.7
8	5.8'	11.17	0.35	1.9	Tr.	0.7
9	2.8'	11.12	.08	1.4	0.7	0.8
10	3.3'	6.08	.03	1.4	0.8	1.0
11	2.6'	17.37	.13	3.5	1.1	1.1
12	4.0'	29.82	.08	2.4	1.4	1.6
13	4.3'	5.26	.04	1.4	Tr.	0.6
14	3.6'	2.99	.015	1.0	Tr.	0.8
15	3.0'	1.80	.005	0.7	Tr.	0.3
16	Surface	3.08	.02	0.4	Tr.	0.3

Width	oz. Ag	oz. Au	% Cu
40"	8.3	.03	2.34
36"	18.2	.04	2.75
36"	12.0	Tr.	2.66
40"	8.6	.02	2.47
40"	9.0	.01	1.87
5"	41.0	Tr.	10.26
24"+	5.3	.04	1.55
24"+	16.9	.02	4.68
42"+	9.3	.02	2.91
36"+	3.5	Tr.	0.69
	11.2	.04	2.88
52"	10.3	.03	2.24
60"	7.4	.06	1.30

No.	Width	oz. Ag	oz. Au	% Cu
2411	52"	11.96	.02	1.82
2412	44"	4.57	.01	1.01
2413	48"	11.62	.02	1.55
2414	44"	12.38	.02	2.10
2418	55"	5.79	.01	1.13
2417	40"+	2.53	.01	0.16
2419	33"+	13.16	.02	1.80
2420	36"+	11.13	.01	1.63
2421	22"+	8.97	.01	1.30
2425	18"	1.54	Tr	0.04

No	Width	oz. Ag	oz. Au	% Cu
2448	30"	1.84	.08	Tr.
2449	25"	5.42	.18	0.58
2450	18"	7.58	.22	0.64
2451	12"	2.06	.04	0.06
2452	12"	3.34	.06	0.10
2453	10"	1.17	.01	0.04
2454	16"	2.19	.01	0.04

No.	Width	oz. Ag	oz. Au	% Cu
2409	18"	3.55	.01	0.59
2408	30"	7.16	.02	0.99
2407	23"	5.58	.02	0.96
2415	44"+	2.56	.24	0.12
2416	42"+	3.35	.01	0.64
2422	38"+	6.39	.01	0.91
2423	37"+	12.36	.02	1.73
2424	39"+	2.85	.01	0.24

No.	Width	oz. Ag	oz. Au	% Cu
2406	25"	8.39	.03	0.79
2405	58"	7.77	.03	0.30
2404	8"+	71.04	.01	7.21
2403	24"	2.23	.01	Tr.
2402	28"	2.09	.01	"
2441	30"	0.97	.01	"
2442	16"	1.62	.02	"

No	Width	oz. Ag	oz. Au	% Cu
2427	42"	3.26	0.46	0.06
2428	84"	5.19	0.25	0.04
2431	dmp	0.84	0.12	Tr.

No	Width	oz. Ag	oz. Au	% Cu
2446	84"	5.08	.02	0.96
2445	45"	5.46	.02	0.96

No	Width	oz. Ag	oz. Au	% Cu
2439	48"	1.01	.03	Tr.
2438	dmp	1.93	.06	Tr.
2440	"	6.72	.10	0.71
2437	"	5.84	.18	0.36
2455	"	0.71	.01	0.34

No.	Width	oz. Ag	oz. Au	% Cu
2435	42"	0.29	.01	Tr.
2436	dmp	0.86	.08	0.04
2434	72"	0.74	.02	Tr.
2433	50"+	0.26	Tr.	Tr.
2432	72"	0.10	Tr.	Tr.

BUREAU SAMPLES

No.	Width	oz. Ag	oz. Au	% Cu	% Pb	% Zn	% Fe
33	8"	72.70	0.03	6.71	4.7	1.0	2.17
34	4'	4.80	0.005	0.98	0.4	0.3	2.20
35	4'	23.50	0.01	3.89	1.6	0.5	2.41
36	4'	19.60	0.01	5.17	1.8	2.0	2.21
37	4'	3.20	0.005	1.06	0.2	0.3	2.52
38	7'	11.80	0.01	1.46	0.2	0.4	2.46
39	4'	3.80	0.005	0.79	0.2	0.6	2.41
40	Grab	2.10	0.005	0.21	0.1	0.2	2.03
41	7'	3.30	0.075	0.36	0.1	0.2	2.68
42	Grab	2.80	0.005	0.57	0.1	0.3	2.46
43	skip sample	2.60	0.005	0.67	0.2	0.3	3.55

Samples 42 and 43 represent last ten feet in bottom of North Shaft

Fig 3.- Plan map of Pennsylvania Mine showing location and assays of samples.

MF-202

LANDLORD'S SUBORDINATION AGREEMENT

KNOW ALL MEN BY THESE PRESENTS:

WHEREAS, the undersigned is the owner in fee simple of that certain parcel of ground in the county of Lincoln, State of Nevada, described in a certain Exploration Project Contract dated November 15, 1951, between Elmer F. Smith, Frank L. Smith, Robert L. Smith, and Stephen F. Lee, Partners, the Lessee ~~the Lessee~~ of said property, and the United States of America;

NOW, THEREFORE, the undersigned, as Lessor of said property under lease dated 31st day of January 1949, does by these presents subordinate all of his right, title, and interest under the provisions of said lease to the right, title, and interest of the United States of America under the provisions of said Exploration Project Contract, and agrees that the lien and claim of the United States of America under the provisions of said contract shall be prior to the undersigned's rights to rentals or royalties under the terms of said lease; and

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

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

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

Dated this 5th day of September, 1951.

James J. Smith

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

U. S. GOVERNMENT PRINTING OFFICE 940768

MF-202

LANDLORD'S SUBORDINATION AGREEMENT

KNOW ALL MEN BY THESE PRESENTS:

WHEREAS, the undersigned is the owner in fee simple of that certain parcel of ground in the county of Lincoln, State of Nevada, described in a certain Exploration Project Contract dated November 15, 1951, between Elmer F. Smith, Frank L. Smith, Robert L. Smith and Stephen F. Leo, the Lessee of said property, and the United States of America;

NOW, THEREFORE, the undersigned, as Lessor of said property under lease dated January 31, 1949, does by these presents subordinate all of his right, title, and interest under the provisions of said lease to the right, title, and interest of the United States of America under the provisions of said Exploration Project Contract, and agrees that the lien and claim of the United States of America under the provisions of said contract shall be prior to the undersigned's rights to rentals or royalties under the terms of said lease; and

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

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

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

Dated this 25 day of October, 1951

E.E. Smith

E.E. Smith

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

MF-202

LANDLORD'S SUBORDINATION AGREEMENT

KNOW ALL MEN BY THESE PRESENTS:

WHEREAS, the undersigned is the owner in fee simple of that certain parcel of ground in the county of Lincoln, State of Nevada, described in a certain Exploration Project Contract dated November 15, 1951, between Elmer F. Smith, Frank L. Smith, Robert L. Smith and Stephen F. Leo, the Lessee of said property, and the United States of America;

NOW, THEREFORE, the undersigned, as Lessor of said property under lease dated January 31, 1949, does by these presents subordinate all of his right, title, and interest under the provisions of said lease to the right, title, and interest of the United States of America under the provisions of said Exploration Project Contract, and agrees that the lien and claim of the United States of America under the provisions of said contract shall be prior to the undersigned's rights to rentals or royalties under the terms of said lease; and

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

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

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

Dated this 20 day of Oct, 1951

Frank L. Smith

Frank L. Smith

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

MF-202

LANDLORD'S SUBORDINATION AGREEMENT

KNOW ALL MEN BY THESE PRESENTS:

WHEREAS, the undersigned is the owner in fee simple of that certain parcel of ground in the county of Lincoln, State of Nevada, described in a certain Exploration Project Contract dated November 15, 1951, between Elmer F. Smith, Frank L. Smith, Robert L. Smith and Stephen F. Leo, the Lessee of said property, and the United States of America;

NOW, THEREFORE, the undersigned, as Lessor of said property under lease dated January 31, 1949, does by these presents subordinate all of his right, title, and interest under the provisions of said lease to the right, title, and interest of the United States of America under the provisions of said Exploration Project Contract, and agrees that the lien and claim of the United States of America under the provisions of said contract shall be prior to the undersigned's rights to rentals or royalties under the terms of said lease; and

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

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

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

Dated this 25 day of October, 1951.

Charles P. Smith

Charles P. Smith

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

MF-202

LANDLORD'S SUBORDINATION AGREEMENT

KNOW ALL MEN BY THESE PRESENTS:

WHEREAS, the undersigned is the owner in fee simple of that certain parcel of ground in the county of Lincoln, State of Nevada, described in a certain Exploration Project Contract dated November 15, 1951, between Elmer F. Smith, Frank L. Smith, Robert L. Smith, and Stephen F. Leo, the Lessee of said property, and the United States of America;

NOW, THEREFORE, the undersigned, as Lessor of said property under lease dated January 31, 1949, does by these presents subordinate all of his right, title, and interest under the provisions of said lease to the right, title, and interest of the United States of America under the provisions of said Exploration Project Contract, and agrees that the lien and claim of the United States of America under the provisions of said contract shall be prior to the undersigned's rights to rentals or royalties under the terms of said lease; and

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

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

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

Dated this 1 day of November, 1951

Helen E. Smith

Helen E. Smith

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

IF-200
(June 1951)

Docket No. DMA 356X
Commodity Copper

UNITED STATES OF AMERICA
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS ADMINISTRATION

EXPLORATION PROJECT CONTRACT [1]

Void

It is agreed this _____ day of _____, 195__, between the United States of America, acting through the Department of the Interior, Defense Minerals Administration, hereinafter called the "Government," and [2] Elmer F. Smith, 2730 Ordway Street, N. W., Washington 8, D. C.

hereinafter called the "Operator," as follows:

1. *Authority for contract.* This agreement is entered into under the authority of the Defense Production Act of 1950, pursuant to Mineral Order 5, entitled "Regulations Governing Government Aid in Defense Exploration Projects."

2. *Operator's property rights.* The exploration project shall be conducted on that certain property situated in the State of Nevada, County of Lincoln described as follows: [3] Hope Lode Mining Claim formerly known as the Pennsylvania Mine

with respect to which the Operator represents and undertakes: [4]

(*a*) That he is the sole owner, in possession and entitled to possession, and that the property is subject only to the following claims, liens, or encumbrances as to each of which the subordination agreement of the holder is attached: No liens or encumbrances

(*b*) That he is a lessee, in possession and entitled to possession, and the subordination agreement of the lessor is attached.

3. *Exploration project.* The Operator, within 10 days from the date of this contract shall commence work on a project of exploration for [5] Copper, Lead, Silver; shall prosecute the work efficiently, expertly, in a workmanlike manner, in accordance with good mining standards, with suitable and adequate equipment, materials, and labor, all properly designed to bring the project to completion within a period of [6] 240 working days from the date of this contract. The exploration project and the work to be performed are more fully described on Exhibit "A" attached hereto, which, with any maps or drawings thereto attached, is made a part of this contract.

4. *Performance of the work.* The work shall be performed by the Operator, under his sole direction and control: *Provided,* That with the consent of the Government and its written approval of the contract or contracts, all or any part of the work may be performed by the Operator through contract or contracts with independent contractors. 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.

5. *Fixtures and improvements.* 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. Any additional facilities, buildings, and fixtures, to be purchased, installed, or erected by the Operator, with the estimated cost of each, to which the Government will contribute currently its agreed pro rata share, are listed in Exhibit "A" attached hereto. The difference between the cost of such additional facilities, buildings, or fixtures, and the salvage value thereof at the conclusion of the work, shall be charged as a cost of the project to which the Government has contributed its pro rata share.

6. *Operating equipment.* Any operating equipment to be rented, purchased, or furnished by the Operator, with the allowable rental, purchase price, or depreciation, as the case may be, is listed under appropriate headings in Exhibit "A" attached hereto. As to equipment purchased for the project, the Government will contribute its agreed pro rata share of the cost thereof, and the difference between the cost and the salvage value at the conclusion of the work shall be charged as a cost of the project to which the Government has contributed its pro rata share.

[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.
[4] Strike out the provision not applicable.
[5] Name of mineral.
[6] Not in excess of 2 years.

7. *Title to and disposition of property.* All facilities, buildings, fixtures, equipment, and 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.

8. *Labor and supervision.* An itemized schedule of labor, by numbers and classes (miners, muckers, millmen, etc.), and of supervisors, by numbers and positions, with the maximum wages or salaries that may be paid to each as an allowable cost of the project is set forth in Exhibit "A" attached hereto.

9. *Rehabilitation and repairs.* A statement of the cost of any necessary rehabilitation or repairs to put existing facilities, buildings, installations, and fixtures into useful and operable condition and which are to be allowed as costs of the project is included in Exhibit "A."

10. *Allowable costs of the project.* The costs of the project in which the Government will participate are limited to the necessary, reasonable, direct costs of performing the exploration work, including the costs of materials, supplies, engineering, power, water, analytical work, accounting, and utilities, including items of equipment costing less than $50 each; and the costs referred to in Articles 5, 6, 8, and 9, and the exhibits annexed to and referred to in this contract. Although the Government may pay part of the cost of new or additional facilities, structures, buildings, and equipment, only the depreciation on such items, computed as indicated in Articles 5 and 6, will be charged as a cost of the project. No items of general overhead, corporate management, interest, taxes, or any other indirect costs not expressly allowed by these provisions, 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.

11. *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.

12. *Progress reports.* The Operator shall provide the Government with monthly reports of work performed under the contract upon forms to be provided by the Government. Each monthly progress report shall bear the certification of the Operator and shall constitute the Operator's invoice of costs incurred on the project during the period covered by the report.

13. *Payment to the Operator.* The monthly progress report (invoice), to the extent approved by the Government, shall be processed for payment by the Government. Payment shall be made in the amount of 50 percent of the approved costs incurred; *Provided,* That the aggregate total of all sums paid by the Government under this agreement shall not exceed $11,935.00, which is 50 percent of the agreed estimated total cost of this project, $23,870.00.

14. *Final reports by Operator.* Upon completion of the project or termination of this contract, the Operator shall provide the Government with a comprehensive geologic and engineering report, including an estimate of ore reserves, to the best of his ability. Four copies of all reports shall be furnished to the Government.

15. *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 (1½) percent.

Of net smelter returns or other net proceeds in excess of eight dollars ($8.00) per ton of ore: One and one-half (1½) percent, plus one-half (½) 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.

16. *No assignment of contract.* Without the written consent of the Government, the Operator shall not assign or otherwise transfer or hypothecate this contract or any rights thereunder.

17. *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 worthwhile 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 render to the Government a full and final accounting of his operations under the contract and his expenditures of money; shall dispose of any unused materials, supplies, and equipment for the joint account of the Operator and the Government in the proportion of their respective interests; and shall pay to the Government its pro-rata share of any money remaining.

Executed in sextuplicate the day and year first above written.

THE UNITED STATES OF AMERICA

(Operator)

By ---

By ---

U. S. GOVERNMENT PRINTING OFFICE 16—64066-2

Exploration Aid Application (DMA 356X)

Pennsylvania Mine

Exhibit "A"

1. Proposed exploration work:

   A. Clean up the shaft and retimber caved portion (five sets).
   b. Sink north shaft 50 ft. which includes 20 ft. for a sump.
   c. Drift north in new 650 level, a distance of about 600 ft. to confirm the downward extension of the main ore shoot.
   d. Should this drift encounter an ore shoot raise in the middle of the ore shoot to ascertain its continuity.

   Summary of costs

Rehabilitation of north shaft (incline)	$ 300.00
Shaft sinking, drifting and raising	13,750.00
Allowance for operating equipment	3,200.00
Cost of equipment to be purchased	1,400.00
Gasoline and oil	3,600.00
Insurance on trucks	120.00
Repairs, sampling, engineering advice, part time bookkeeper and misc. expenses	1,500.00
Total	$23,870.00

   Estimated time for project is 10 months.

2. Maps: attached

3. Repairs to buildings and existing facilities: none

4. Additional facilities to be purchased: none

5. Operating equipment:

   a. To be rented:

      no equipment to be rented

5. Operating equipment: (Continued)

b. To be purchased:

1 5-HP double drum tugger and slush scraper	$ 600.00
500 lineal ft. 8" vent pipe (new)	425.00
1 2-HP air motor	50.00
1 Flame stove and 1 Flame refrigerator	325.00
Timber (standing, cost 10¢ per stump)	1,000.00
*Drill steel	250.00
*Hose -9 air, 3 water	100.00
*Pipe and rail -2200 lineal ft. 1" and 2" pipe	300.00
1500 lineal ft. 12 lb. rail	
600 lineal ft. 8 lb. rail	
Powder, caps, and fuse	1,200.00
Gasoline and oil	3,600.00
	$6,450.00

*It is assumed that these articles have been purchased new and have not been used.

c. Equipment furnished by operator:

	Allowance for use per month
1 315 cfm Sullivan air compressor	$ 135.00
3 drilling machines -1 #30 Ing. Hand drifter	40.00
1 #25 Ing. Hand drifter	
1 #35 Ing. Hand jackhammer	
2 hoists and 1 10-HP electric plant	30.00
1 5-HP 8" Buffalo blower and 600 lineal ft. 8" vent pipe	20.00
2 pumps -1 Worthington 50 gals. per min. 200' head	20.00
1 small gas pump for drinking water	
2 trucks -1 Chevrolet 1 ton	75.00
1 Army 4x4	
	$320.00

10 months @ $320.00 $ 3,200.00

6. Labor:

2 miners @ $14 per day
1 hoistman @ $14 per day

Supervision

one of the miners

7. Miscellaneous items:

Industrial insurance		$ 416.00
Social Security tax		101.00
Unemployment tax		272.00
Insurance on trucks		120.00
Repair, sampling, engineering advice, part-time bookkeeper and others		1,500.00
	Total	$ 2,409.00

LEASE AND OPTION

THIS INDENTURE, made this 31st day of January, 1949, by and between E. E. SMITH, CHARLES P. SMITH, HELEN E. SMITH, JAMES J. SMITH and PHIL SMITH, Lessors, and ELMER F. SMITH, STEPHEN F. LEO and FRANK L. SMITH, Lessees,

W I T N E S S E T H:

That said Lessors, for and in consideration of the royalties hereinafter reserved, and the covenants and agreements hereinafter contained by said Lessees to be kept and performed, do hereby lease unto said Lessees the certain unpatented lode mining claim situate in the Pennsylvania Mining District, Lincoln County, Nevada, particularly described as follows, to wit:

Hope lode mining claim, formerly known as the Pennsylvania Mine.

TO HAVE AND TO HOLD unto said Lessees for the period of ten (10) years from January 31, 1949, until midnight, January 31, 1959, unless sooner forfeited or terminated through the violation of any covenant hereafter against said Lessees reserved, or unless sooner terminated as hereinafter provided.

And, in consideration of such Lease, said Lessees do further covenant and agree with said Lessors as follows, to wit:

1. To enter upon said mine or premises, and work the same miner-fashion, in manner necessary to good and economical mining, so as to take out the greatest amount of ore possible, with due regard to the development and preservation of the same as a workable mine, and to the special covenants hereinafter reserved.

2. To work and mine said premises as aforesaid steadily and continuously, from the date of this lease, with at least sixty (60) one-man shifts each calendar month, said shifts to consist of eight (8) hours working time.

3. To well and sufficiently timber said mine at all points where proper, in accordance with good mining; and to repair all old timbering wherever it may become necessary.

4. To allow said Lessors and their agents, from time to time, to enter upon and into all parts of said mine for purposes of inspection.

5. To not assign this lease or any interest hereunder, and to not sub-let the said premises or any part thereof without written assent of said Lessors, and to not allow any person not in privity with the parties hereto to take or hold possession of said premises, or any part thereof, under any pretense whatever.

6. To occupy and hold all cross or parallel lodes, spurs or mineral deposits of any kind which may be discovered by said Lessees, or any person under them, in any manner, by working within, or from the demised ground, as the property of said Lessors, with privileges to said Lessees of working the same as parcel of said demised premises.

7. To keep at all times, the drifts, shafts, tunnels and other workings thoroughly drained and clear of loose rock and rubbish, unless prevented by extraordinary mining casualty.

8. To pay to said Lessors, as royalty upon all ores mined and bonuses and/or subsidies allowed upon the said premises a royalty of ten

per cent (10%), such royalty to be deducted at the smelter and to be based upon the net smelter returns and bonuses and/or subsidies allowed on all ores to be extracted from said premises. Said ores shall be delivered with all convenient speed and expedition to some regular smelter. Shipment shall be made in the name of Pennsylvania Mine with instructions to said smelter to distribute the proceeds as follows:

(a) The royalties as hereinabove indicated to the Lessors.

(b) The remainder to the Lessees.

(c) Copies of all settlement sheets to be supplied to both Lessors and Lessees.

9. To, at all times, keep said premises and all parts thereof free from any and all liens and encumbrances by reason of Lessees' operation under this lease; provided, however, that Lessees shall have and are hereby granted the right to purchase machinery and/or equipment for installation on the leased premises by Conditional Sales Contracts, by executing Chattel Mortgages on the equipment purchased in favor of the vendors, or on whatever terms of cash or credit may seem most desirable to Lessees.

10. To, at all times, fully comply with the provisions of the Workmen's Compensation Laws of the State of Nevada; and a failure at any time to fully comply with such provision shall automatically render this lease null and void.

11. To deliver to said Lessors said premises, with the appurtenances and all improvements, in good order and condition, with all drifts, shafts, tunnels and other passages thoroughly clear of loose rock and rubbish and ready for immediate continued working, without demand or further notice, at the time of expiration of this lease, or at any time previous, upon demand for forfeiture, or at any time previous upon this lease becoming null and void as herein provided, or at any time previous by the sooner termination of said lease, as herein provided.

12. To not record or file this lease in any Recorder's office, or other place of public records, and any violation of this covenant shall automatically, on such recording or filing, render this lease null and void.

13. And, finally, that upon violation of any covenant or covenants herein reserved, and on the part of tenant to be performed, the term of this lease shall, at the option of said Lessors, expire, and the same and said premises with the appurtenances shall become forfeit to said Lessors; and said Lessors or their agent may thereupon, without notice, enter upon said premises and dispossess all persons occupying the same, with or without force, and with or without process of law, but no such demand of possession shall be required of said Lessors in case this Lease shall become automatically null and void for violation of any covenant herein contained; or, at the option of said Lessors, the said tenants and all persons found in occupation may be proceeded against as guilty of unlawful detainer.

It is agreed by and between the parties hereto that the obligation of Lessees hereunder is and shall be joint and several, and any notice relating to said lease given to any one of said Lessees shall be deemed notice to all.

It is agreed by and between the parties hereto that any notice required hereunder may be served upon the party to whom it is intended, in person, or may be served by mailing the same to the party to whom it is intended by United States registered mail, addressed to them respectively as follows: Notice to Lessors addressed to JAMES J. SMITH, at Goodsprings, Nevada; and notice to Lessees addressed to either ELMER F. SMITH, STEPHEN F. LEO or FRANK L. SMITH, at Elgin, Nevada. Three (3) days after date of mailing, as shown by receipt of mailing, shall be deemed date of receipt of notice.

Lessees agree that they will carry liability and accident insurance covering the demised premises and all operations of Lessees thereon and that Lessees will indemnify Lessors against any claim of any person whomsoever for any injury to either person or property occasioned by any occurrence on the demised premises or by any work or operation of Lessees in connection with ores shipped from the demised premises.

It is hereby agreed that all equipment and/or improvements placed on the demised premises by Lessees and fixed thereto shall be left on the demised premises and shall be and become the property of Lessors.

Time is and shall be of the essence hereof; and the covenants and agreements herein contained shall extend to and be binding upon the heirs, executors, administrators and lawful assigns of the parties hereto.

OPTION

And, in consideration of the acceptance of the foregoing Lease, and the expenditures to be made hereunder, and the well and faithful keeping of the covenants of the foregoing Lease the said Lessees shall have and they are hereby granted the right to purchase the above described demised premises by a payment to the Lessors of the sum of Twenty-five Thousand Dollars ($25,000.00), lawful money of the United States, provided that Lessees shall have a right to exercise this Option only in the event the foregoing Lease is then in full force and effect.

Provided further that all royalties paid upon ores mined as hereinabove set forth shall apply on the purchase price of said premises.

And, upon the payment of the total purchase price in full, as herein indicated, Lessors will make, execute, acknowledge and deliver, at their own cost and charges, a good and sufficient deed or deeds conveying the said property to Lessees, or such person or company as they shall nominate.

The forfeiture, surrender or termination of the above lease for any cause shall render this option void, and the above mentioned payment may not be thereafter tendered.

Provided further, however, in the event of termination of the foregoing lease or this option, any and all sums theretofore paid for and on behalf of said lease and/or option shall be retained by Lessors as and for liquidated damages.

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

E. E. SMITH

CHARLES P. SMITH

HELEN E. SMITH

JAMES J. SMITH

PHIL SMITH

Lessors

ELMER F. SMITH

STEPHEN F. LEO

FRANK L. SMITH

Lessees

ASSIGNMENT AGREEMENT

THIS AGREEMENT, made and executed this _____ day of _____, 1949, by and between FRANK L. SMITH, hereinafter called the Party of the First Part, and ROBERT L. SMITH, hereinafter called the Party of the Second Part,

W I T N E S S E T H:

WHEREAS, the Party of the First Part is, together with ELDER F. SMITH and STEPHEN F. LEO, a lessee of a certain unpatented lode mining claim situate in the Pennsylvania Mining District, Lincoln County, Nevada, under a certain Lease and Option dated January 31, 1949, and,

WHEREAS, the Party of the First Part desires to assign to the Party of the Second Part one-half of all his right, title and interest as a lessee under said Lease and Option.

NOW, THEREFORE, in consideration of the premises herein contained and the payment to the Party of the First Part by the Party of the Second Part of the sum of ten dollars ($10.00), lawful money of the United States, receipt whereof by the Party of the First Part is hereby acknowledged, it is agreed as follows:

The Party of the First Part has assigned to and does by these presents assign one-half of his right, title and interest as a lessee of, in and to the certain unpatented lode mining claim situate in the Pennsylvania Mining District, Lincoln County, Nevada, more particularly described in a certain Lease and Option dated January 31, 1949.

The Party of the Second Part hereby agrees to accept and abide by all the terms and conditions to which the Party of the First Part is subject under the Lease and Option aforementioned.

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

_____
FRANK L. SMITH

_____
ROBERT L. SMITH

The lessors, under the aforementioned Lease and Option, by subscribing their names hereunto, give their assent to this assignment.

_____
E. E. SMITH

_____
CHARLES P. SMITH

_____
HELEN E. SMITH

_____
JAMES J. SMITH

_____
PHIL SMITH

Form MF-103
(April 1951)

U. S. DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS ADMINISTRATION

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

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

DO NOT FILL IN THIS BLOCK

Docket No. 356 X

Date received

Participation

Elmer F. Smith
2730 Ordway St. N.W.
Washington 8, D.C.

Name and address of applicant

Date 27 April 1951

FILL IN THIS BLOCK

Date of application 27 April 1951

Estimated cost $25,188.60

Mineral or metal Copper, Lead and Silver

Percentage of Government participation 50%

Location of mine Elgin, Nevada

Date of filing MF-100

DMA Docket Number, if available 356

INSTRUCTIONS

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

THE APPLICANT

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

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

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

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

16—64067-1

THE PROPERTY

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

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

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

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

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

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

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

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

*16. History:

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

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

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

*17. Production:

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

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

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

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

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

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

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

THE EXPLORATION

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

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

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

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

THE REQUIREMENTS AND COSTS

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

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

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

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

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

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

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

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

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

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

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

CERTIFICATION

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

Pennsylvania Mine
(Name of company)

By Elmer F. Smith
(Signature of authorized official)

27 April 1951
(Date)

Partner
(Title)

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

*Same as footnote on page 1.

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

The Applicant

1. Partnership

2. Elmer F. Smith 2730 Ordway St. N.W., Washington 8, D.C.
Frank L. Smith Box 873, Ely, Nevada
Robert L. Smith 5218 Cudahy, Maywood, California
Stephen F. Leo Princes Point Road, Brunswick, Maine

3. does not apply

4. Frank L. Smith has had 35 years of experience as a mining contractor and miner

5. Lessee

6. Claim is reported to be free of liens or encumbrances

7. Copy of lease and agreement of lessors subordinating their interests in the property to the interest of the Government will follow

8. All property and equipment owned by the applicant is fully paid for

9. $5,894.30, yes

The Property

10. The Hope claim is owned by J.J. Smith and associates and is in good standing with assessment work completed for 1950-51. The property consists of one unpatented claim, the Hope, which is a full size claim, measuring 600' x 1500' and trends N50E, and is located in the Pennsylvania Mining district of Lincoln County, Nevada

11. The Hope and The Penn

12. The mine is located about seven miles east of Elgin, a post office and railroad station on the Union Pacific Railroad, about 15 miles south of Caliente a railroad division point in the south easter part of Lincoln County, Nevada. The road from Elgin to the mine is fair with the exception of 1 mile of poor road.

13. Water is sufficient for all exploration work at the mine. Camp water is taken from a near by spring.

14. Useable facilities etc.: 20' x 24' hoist house and shop, 20'x24' and 20'x48' houses for quarters, two hoists, portable compressor, 3 machines, 3 trucks, 7½KW light plant, two water pumps, 500 gal. water tank, headframe and ore bin, 3 mine cars, skip, drill steel, 1400' 2" pipe, 800' of 1" pipe, power saw, 1200' rail, hand tools, air and water hose, etc..

15. Ore should be milled at mine and concentrates shipped by railroad to Garfield, Utah.

16. See DMA 356

17. Not in production

18. The vein, along which all workings are located, appears epithermal as a filled skrinkage fracture of the quartz-calcite-andularia type, in a soft medium grained olivine diorite porphyry. It is from three to eight feet wide and is exposed for about 3000 feet on the surface.
See DMA 356 for assay data, maps and tonnage estimates

The Exploration

20. Copper, lead and silver in a quartz fissure deposit

2

21. a. Sink incline shaft on north end of claim to connect with north vertical shaft and then drift north and south to explore ore shoot

b. Drift 250' north from the 290' level of the main shaft to explore the ore shoot in that area

c. Totals:

250' of sinking
500' of drifting
240 working days to complete the job using three men

22. See DMA 356

The Requirements and Costs

23.

A.	2 Miners @14.00 each	$6720.00
	1 Hoistman @14.00	3360.00
B.	Supervision will be by F.L. Smith who will be one of the miners	
C.	Repairs to shaft and building	400.00
D.	Headframe at north end of claim	200.00
E.	Flamo Stove and Refrigerator	400.00
F.	Slusher	200.00
G.	Compressor	2000.00
	3 Machines	400.00
	2 hoists and light plant	300.00
	fan and tubing	200.00
	2 pumps, power saw, 3 mine cars	200.00
	trucks	1500.00
H.	Timber (owned by applicant)	1000.00
	Drill steel (owned by applicant)	250.00
	Air and water hose (owned by applican)	100.00
	Pipe and rail (owned by applicant)	300.00
	Misc. tools and equipment(owned by applica	200.00
	Bits (owned by applicant)	300.00
	Powder, caps and fuse	1200.00
	Gasoline and oil	3600.00
I.	Industrial insurance	415.64
	Social Sec. tax	100.80
	Unemployment tax	272.16
	Insurance on trucks	120.00
	Repairs, sampling, engineering advice, parttime bookkeeper and miscellaneous expenses	1500.00
	Total	$25188.60

24. The project will take 240 working days to complete

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

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

August 21, 1953

Lt. Colonel Elmer F. Smith, USAF
2730 Ordway Street N. W.
Washington 8, D. C.

Re: Docket DMA 356X (Copper)
Pennsylvania Mine
Lincoln County, Nevada
Contract Idm-E212

Dear Colonel Smith:

Reference is to your letter dated June 29, 1953, addressed to Mr. A. C. Johnson, concerning your offer to buy the Government's equity in the equipment purchased under the captioned contract.

I have discussed your offer with Mr. A. C. Johnson and Mr. Glenn G. Gentry of our Reno Mining Office and they both recommend that your offer of $150 be accepted.

Accordingly, I am accepting your offer and attached hereto is a release of the Government's interest in the equipment.

A copy of this letter is being sent to Mr. E. D. Talbert, DMEA Auditor in Washington, D. C., so that he may know of my acceptance of your offer.

Sincerely yours,

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

Enclosure

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

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

DEPARTMENT OF THE
Defense Minerals Adm.
RECEIVED
AUG 3 1953

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

To: Elmer F. Smith
2730 Ordway Street N. W.
Washington 8, D. C.

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-E212, Docket DMA-356X, dated November 15, 1951.

Dated August 21, 1953

THE UNITED STATES OF AMERICA

By H. C. MILLER
H. C. Miller

Executive Officer
DMEA Field Team, Region III
Title

Budget Bureau No. 42-R1036.3.
Approval expires 6-30-53.

ACCOUNTS JUL 15 1953

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION
OPERATOR'S MONTHLY REPORT AND VOUCHER

Month of April, 1953 Docket No. DMEA 356X Contract No. Idm-E212
Operator's Name Pennsylvania Mine Minerals copper
Address Elgin, Nevada
Contract Amount, $25,792.22 Government Participation: 50 % Amount, $2642.44

ITEMS OF COSTS	FOR OPERATOR'S USE			FOR GOVERNMENT USE ONLY		
	Monthly Total	Totals Previously Reported	Totals To Date	Approved Monthly Total	Approved Totals Previously Reported	Approved Totals To Date
(1) Independent Short Form Contracts:						
Drilling						
Bulldozing						
Crosscutting						
Drifting						
(2) Labor and Supervision:						
Labor	1259.00	9932.25	11191.25			
Supervision	-0-	-0-	-0-			
Technical Services	-0-	-0-	-0-			
(3) Operating Mat'ls. and Supplies:						
Timber						
Explosives	219.62	1004.95	1224.57			
Pipe	-0-	40.00	40.00			
Track	-0-	60.00	60.00			
Steel ~~[illegible]~~/etc	87.20	543.75	630.95			
Fuel etc.	90.73	2261.65	2352.38			
(4) Operating Equipment:						
Rental	279.00	831.00	1110.00			
Purchase	-0-	728.40	728.40			
Depreciation	-0-	2545.29	2545.29			
(5) Initial Rehabilitation and Repairs	-0-	1794.53	1794.53			
(6) New Bldgs., Improvements, etc.	-0-	-0-	-0-			
(7) Miscellaneous:						
Repairs to Equipment	265.75	1059.91	1325.66			
Sampling and Analysis	-0-	-0-	-0-			
Payroll Taxes	52.88	487.70	540.58			
Liability Insurance	88.26	1335.68	1423.94			
Bookkeeping	300.00	-0-	300.00			
(~~15 months~~ → $20.00 month)						
(8) Contingencies (specify):						
Transportation	-0-	519.32	519.32			
Road repairs	-0-	793.78	793.78			
Suspension for final audit				-2217.40		-2217.40
TOTALS	2642.44	23938.21	26580.65	425.04	23,938.21	24,363.25

I certify that the above bill is correct and just and that payment therefor has not been received.

Date 29 June 53 *Payee Pennsylvania Mine

Per Elmer F. Smith Title Partner

Elmer F. Smith Partner

*When a voucher is signed or receipted in the name of a company or corporation, the name of the person writing the company or corporate name, as well as the capacity in which he signs, must appear. For example: "John Doe Company, per John Smith, Secretary," or "Treasurer," as the case may be.

→ NOTE.—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.

(Instructions on reverse)

Pursuant to authority vested in me, I certify that this account is correct and proper for payment in the amount of:

$212.52

Signature [illegible]
(Authorized Certifying Officer)

Date SEP 3 1953 Vou. No. 3F-DmEa-10

(See other side)

(For Government use only)

CERTIFICATION BY GOVERNMENT REPRESENTATIVE:

I certify that to the best of my knowledge and belief the contractor submitting this voucher is operating a Defense Minerals Exploration Administration project under Contract No. Idn-1272 in accordance with the terms of the contract.

Signature A. C. Johnson Title Chief, Mining Div. Region III Date July 10, 1953.

APPROVAL BY DMEA EXECUTIVE OFFICER OR ALTERNATE:

Signature H. C. Miller Title Executive Officer DMEA Field Team Region III Date July 13, 1953

MONTHLY REPORT OF OPERATOR

The Operator (Contractor) of an exploration project is required to make a monthly report to the Government through the Regional Executive Officer. This report consists of three parts as follows:

(a) *Form MF-104—Operator's Monthly Report and Voucher.*—This form details expenditures and constitutes a voucher for reimbursing the Operator for the Government's share of costs;

(b) *Form MF-104A—Operator's Unit Cost and Progress Report.*—This is a statistical report of expenditures which shows costs for the various types of operation; and

(c) *Narrative.*—A concise narrative description of progress made, results accomplished, and any unusual difficulties encountered must be furnished as an attachment to this Report and Voucher. Wherever possible, the narrative is to be illustrated with maps or sketches showing formations penetrated and location and assays of samples taken as well as advances in workings. In the case of diamond drilling or churn drilling, the location and inclination of holes is to be shown on a map; logs and assays also are to be submitted.

The Monthly Report of Operator should be prepared in an original and four copies all of which must be sent to the Executive Officer of the Region not later than the 15th of the month following.

Preparation of Form MF-104—Operator's Monthly Report and Voucher.—All the applicable spaces in Form MF-104 should be filled in by the Operator, and the Operator or his agent should sign the certification in the lower left corner of the form.

The items of costs are arranged in the order they appear in Article 6 (a) of Form MF-200 (Revised February 1952), however, this form is readily adaptable for use in reporting activities under other contract forms.

Under Item (1) delete words "Short Form" if the contract is a sub-contract under Form MF-200; and delete word "Independent" if the contract reported is on Form MF-200 (A). Also, report work paid for on a unit basis under contract Form MF-200 as though it were performed under an independent contract.

Under Item (2) include labor, supervision and technical services incurred for the exploratory operations. Do not include labor, supervision and technical services used for work performed under items (5) and (6).

Under Item (3) include the costs of material and supplies used in the project other than that used under items (5) and (6).

Under Item (4) appear the three types of operating equipment expenditures, that is, rental, purchase and depreciation. The expenditures made for renting equipment belonging to a third party will be reported under "Rental". The amount paid or duly obligated for payment for the purchase of equipment will be reported under "Purchase". The amount of expenditures due the Operator to reimburse him for depreciation of equipment owned will be reported under "Depreciation".

Item (5) comprises costs of labor, supervision, technical services, materials, etc., which are used in the initial rehabilitation and repair of existing buildings, installations, fixtures, and equipment. These costs, therefore, should not be reported under items (2) and (3).

Item (6) includes the labor, supervision, technical services, materials, etc., used in the installation or construction of new buildings, fixed improvements, etc., necessary for the project. These costs, therefore, should not be reported under items (2) and (3).

Item (7) covers miscellaneous types of expenditure such as payroll taxes, liability insurance, workmen's compensation insurance, repairs to equipment and sampling and analysis. Only that part of payroll taxes, liability insurance and workmen's compensation which are paid by the operator should be reported under item (7). The share paid by the employee as a payroll deduction is to be included under item (2) as labor costs.

Item (8) includes any unforeseen costs not included in the other seven categories.

The original of Form MF-104 when submitted for reimbursable expenses incurred under contract Form MF-200 must be supported by original documentation or by certified copies of purchase orders, payrolls or transcripts of payrolls, unless such documentation has been waived by the Regional Executive Officer. This certification may be stated thus, "Certified True Copy (or Transcript)", followed by appropriate signature. If the Executive Officer of the Region determines that a contract under Form MF-200 should have an "on-site" audit, that is, a Government auditor should make an audit of the Operator's books and records of account, the Operator need not support his monthly voucher with original or certified documents except in cases of equipment purchases whose individual costs exceed $50.00. In these cases the original or a certified copy of the purchase order or invoice should be attached to the Monthly Voucher. N. B.—Only the *original* of Form MF-104 is required to be documented. The four copies of Form MF-104 are not to be thus supported.

Form MF-104 submitted for reimbursement under fixed price contracts on Form MF-200 (A), however, are not required to be supported by documentation of any kind. The Operator will submit his claim under item (1) of Form MF-104 by deleting as stated above the word "Independent" and by showing the number of feet or other units immediately after the appropriate descriptive word, such as, drilling, bulldozing, crosscutting, drifting, etc., and giving the "Monthly Total" amount due. "Totals Previously Reported", and "Totals to Date" columns should also be filled in.

GPO 83-38476

4A
(502)

Budget Bureau No. 42-R1151
Approval expires 6-30-53.

ACCOUNTS JUL 15 1953

UNITED STATES
DEPARTMENT OF THE INTERIOR

DEFENSE MINERALS EXPLORATION ADMINISTRATION

OPERATOR'S UNIT COST AND PROGRESS REPORT

Month of April 1953 Docket No. DMEA 356X Contract No. Idm-1212

Operator's Name Pennsylvania Mine Minerals Copper

Address Elgin, Nevada

OPERATION	UNIT	COSTS THIS MONTH	UNITS THIS MONTH	COSTS TO DATE	UNITS TO DATE	UNIT COSTS TO DATE	AUTHORIZED BY CONTRACT Units	AUTHORIZED BY CONTRACT Unit Costs
Drifting	feet	2,642.44	98	21,[illegible]7.9	686	32.05		
Crosscutting								
Raising								
Shafts								
Winzes								
Drilling: Core								
Churn								
Auger								
Stripping								
Trenching								
Test Pits								
Roads and Trails				883.48				
Compressor repairs & snow damage				1178.72				
TOTAL DISTRIBUTED COSTS		2,642.44						TOTAL COSTS AUTHORIZED BY CONTRACT
Operating Equipment Purchased				736.[illegible]				
Initial Rehabilitation and Repairs				17[illegible]4.55				
New Buildings, Improvements, etc.								
Deferred Purchase Audit				- 2217.40				
TOTAL COSTS				[illegible] 24,363.25				

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

Date 29 June 53 Operator Pennsylvania Mine

Per Elmer F. Smith Title Partner

Elmer F. Smith

REMARKS:

NOTE.—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.

(Instructions on reverse)

(For Government use only)

INSTRUCTIONS

Preparation of Form MF–104A—Operator's Unit Cost and Progress Report.—Applicable places on Form 104A should be filled in by the Operator. The purpose of this form is twofold as follows: (1) to furnish the supervising engineers and other administrators with statistical information necessary to better determine the progress of the project; and (2) to furnish more permanent information on mining costs for future use. The more important phases of operation on which permanent information is desired have been outlined in the form. There are blank lines, however, for those unusual phases which may need to be reported for a particular project. It will be necessary for the Operator to distribute his costs among the applicable phases reported with the exception of three items the costs of which are not to be distributed by the Operator. These three items are: "Operating Equipment Purchased", "Initial Rehabilitation and Repairs", and "New Buildings, Improvements, etc." The reason for not distributing these items on a monthly basis is doubtless clear to the Operator, since such distribution might well overstate the cost for any one month or period short of the entire contract period.

Form MF–104A has been designed to tie in with Form MF–104 for both monthly and cumulative costs. The "Total Costs" on Form MF–104A for each month should equal the monthly "Total Costs" as reported on Form MF–104. This is also true of the "Total Costs To Date".

In preparing Form MF–104A, it will be necessary frequently to distribute certain costs over a number of items. For instance, supervisory and engineering costs may have to be distributed over several phases, such as, drifting, crosscutting, raising, etc., provided that these items were reported active for the month. Such distributions should be made on the basis of time spent on the various phases, on man days of labor charged to such phases, or on some other equitable basis. "Operating Equipment", "Initial Rehabilitation and Repairs", and "New Buildings Improvements, etc.", will be distributed to the several phases of the project by the Washington Office of DMEA at the close of the project if determined necessary. The last two columns headed "Authorized by Contract" will be filled in by the Operator if such information is found in the contract. This information is usually a part of Exhibit "A" of the contract. A space for remarks has been provided for the use of the Operator to call attention to any unusual circumstances causing excessive or disproportionate unit costs.

GPO 83-38475

PENNSYLVANIA MINE

April Report
Final Report on Contract Idm-X212

An advancement of 98 feet was made during the month of April. A small portion of the advancement was in a mineralized zone, however, it did not appear to be of commercial grade due to its limits. In view of the failure to develop a commercial ore body, the Pennsylvania Mine will be closed indefinitely until such time as capital can be raised for future development or the installation of a small mill.

On behalf of the contractor I wish to express our appreciation for the cooperation and assistance provided us by the Field Engineers who visited the project. I wish to especially commend Mr. Gentry of the Reno office who was most helpful in giving professional advice to the contractor.

Form M[illegible]04 (Rev.)
(April 1952)

DEPARTMENT OF THE INTERIOR
Defense Minerals Exploration Administration
ACCOUNTS APR 23 1953

Budget Bureau No. 42-R1036.3.
Approval expires 6-30-53.

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION
OPERATOR'S MONTHLY REPORT AND VOUCHER

Month of March, 1953 Docket No. DMEA 356X Contract No. Idm-1212
Operator's Name Pennsylvania Mine Minerals copper
Address Elgin, Nevada
Contract Amount, $25,792.22 Government Participation: 50 % Amount, $ 927.54

ITEMS OF COSTS	FOR OPERATOR'S USE			FOR GOVERNMENT USE ONLY		
	Monthly Total	Totals Previously Reported	Totals To Date	Approved Monthly Total	Approved Totals Previously Reported	Approved Totals To Date
(1) Independent Short Form Contracts:						
Drilling						
Bulldozing						
Crosscutting						
Drifting						
(2) Labor and Supervision:						
Labor	476.00	9456.25	9932.25			
Supervision						
Technical Services						
(3) Operating Mat'ls. and Supplies:						
Timber						
Explosives	-0-	1006.35	1006.35			
Pipe	-0-	40.00	40.00			
Track	-0-	60.00	60.00			
Steel and bits	-0-	448.78	448.78			
Fuel and etc.	134.37	2256.68	2391.05			
(4) Operating Equipment:						
Rental	-0-	831.00	831.00			
Purchase	-0-	728.40	728.40			
Depreciation	119.72	2125.50	2245.22			
(5) Initial Rehabilitation and Repairs	-0-	1794.63	1794.63			
(6) New Bldgs., Improvements, etc.						
(7) Miscellaneous:						
Repairs to Equipment	-0-	1059.91	1059.91			
Sampling and Analysis						
Payroll Taxes	19.90	467.71	487.70			
Liability Insurance	88.37	1302.31	1386.68			
(8) Contingencies (specify):						
Transportation	70.42	446.90	517.32			
Road repairs	- -	793.70	793.70			
TOTALS	927.54	23010.67	23938.21			

I certify that the above bill is correct and just and that payment therefor has not been received.

Date 13 April 53 *Payee Pennsylvania Mine

Per Elmer T. Smith Title Partner

*When a voucher is signed or receipted in the name of a company or corporation, the name of the person writing the company or corporate name, as well as the capacity in which he signs, must appear. For example: "John Doe Company, per John Smith, Secretary," or "Treasurer," as the case may be.

NOTE.—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.

(Instructions on reverse)

Pursuant to authority vested in me, I certify that this account is correct and proper for payment in the amount of:

$ 463.77

Signature Lloyd H. Sjolander
Authorized Certifying Officer
(Authorized Certifying Officer)

Date MAY 12 1953 Vou. No. SE-DMEA-42 (13)

(See other side)

(For Government use only)

CERTIFICATION BY GOVERNMENT REPRESENTATIVE:

I certify that to the best of my knowledge and belief the contractor submitting this voucher is operating a Defense Minerals Exploration Administration project under Contract No. Ith-1212 in accordance with the terms of the contract.

Signature A. C. Johnson Title Chief, Mining Div. Date April 20, 1953.

A. C. JOHNSON Region III

APPROVAL BY DMEA EXECUTIVE OFFICER OR ALTERNATE:

Signature N. C. Miller Title Executive Officer DMEA Field Team Date April 22, 1953

N. C. Miller Region III

MONTHLY REPORT OF OPERATOR

The Operator (Contractor) of an exploration project is required to make a monthly report to the Government through the Regional Executive Officer. This report consists of three parts as follows:

(a) *Form MF-104—Operator's Monthly Report and Voucher.*—This form details expenditures and constitutes a voucher for reimbursing the Operator for the Government's share of costs;

(b) *Form MF-104A—Operator's Unit Cost and Progress Report.*—This is a statistical report of expenditures which shows costs for the various types of operation; and

(c) *Narrative.*—A concise narrative description of progress made, results accomplished, and any unusual difficulties encountered must be furnished as an attachment to this Report and Voucher. Wherever possible, the narrative is to be illustrated with maps or sketches showing formations penetrated and location and assays of samples taken as well as advances in workings. In the case of diamond drilling or churn drilling, the location and inclination of holes is to be shown on a map; logs and assays also are to be submitted.

The Monthly Report of Operator should be prepared in an original and four copies all of which must be sent to the Executive Officer of the Region not later than the 15th of the month following.

Preparation of Form MF-104—Operator's Monthly Report and Voucher.—All the applicable spaces in Form MF-104 should be filled in by the Operator, and the Operator or his agent should sign the certification in the lower left corner of the form.

The items of costs are arranged in the order they appear in Article 6 (a) of Form MF-200 (Revised February 1952), however, this form is readily adaptable for use in reporting activities under other contract forms.

Under Item (1) delete words "Short Form" if the contract is a sub-contract under Form MF-200; and delete word "Independent" if the contract reported is on Form MF-200 (A). Also, report work paid for on a unit basis under contract Form MF-200 as though it were performed under an independent contract.

Under Item (2) include labor, supervision and technical services incurred for the exploratory operations. Do not include labor, supervision and technical services used for work performed under items (5) and (6).

Under Item (3) include the costs of material and supplies used in the project other than that used under items (5) and (6).

Under Item (4) appear the three types of operating equipment expenditures, that is, rental, purchase and depreciation. The expenditures made for renting equipment belonging to a third party will be reported under "Rental". The amount paid or duly obligated for payment for the purchase of equipment will be reported under "Purchase". The amount of expenditures due the Operator to reimburse him for depreciation of equipment owned will be reported under "Depreciation".

Item (5) comprises costs of labor, supervision, technical services, materials, etc., which are used in the initial rehabilitation and repair of existing buildings, installations, fixtures, and equipment. These costs, therefore, should not be reported under items (2) and (3).

Item (6) includes the labor, supervision, technical services, materials, etc., used in the installation or construction of new buildings, fixed improvements, etc., necessary for the project. These costs, therefore, should not be reported under items (2) and (3).

Item (7) covers miscellaneous types of expenditure such as payroll taxes, liability insurance, workmen's compensation insurance, repairs to equipment and sampling and analysis. Only that part of payroll taxes, liability insurance and workmen's compensation which are paid by the operator should be reported under item (7). The share paid by the employee as a payroll deduction is to be included under item (2) as labor costs.

Item (8) includes any unforeseen costs not included in the other seven categories.

The original of Form MF-104 when submitted for reimbursable expenses incurred under contract Form MF-200 must be supported by original documentation or by certified copies of purchase orders, payrolls or transcripts of payrolls, unless such documentation has been waived by the Regional Executive Officer. This certification may be stated thus, "Certified True Copy (or Transcript)", followed by appropriate signature. If the Executive Officer of the Region determines that a contract under Form MF-200 should have an "on-site" audit, that is, a Government auditor should make an audit of the Operator's books and records of account, the Operator need not support his monthly voucher with original or certified documents except in cases of equipment purchases whose individual costs exceed $50.00. In these cases the original or a certified copy of the purchase order or invoice should be attached to the Monthly Voucher. N. B.—Only the *original* of Form MF-104 is required to be documented. The four copies of Form MF-104 are not to be thus supported.

Form MF-104 submitted for reimbursement under fixed price contracts on Form MF-200 (A), however, are not required to be supported by documentation of any kind. The Operator will submit his claim under item (1) of Form MF-104 by deleting as stated above the word "Independent" and by showing the number of feet or other units immediately after the appropriate descriptive word, such as, drilling, bulldozing, crosscutting, drifting, etc., and giving the "Monthly Total" amount due. "Totals Previously Reported", and "Totals to Date" columns should also be filled in.

GPO 83-38476

Form [illegible]-104A
(April 1952)

Budget Bureau No. 42-R1351
Approval expires 6-30-53.

Defense Minerals Administration
RECEIVED
MAY 22 1953
ACCOUNTS APR 23 1953

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION

OPERATOR'S UNIT COST AND PROGRESS REPORT

Month of March 1953 Docket No. DMEA 356X Contract No. Ion-E315
Operator's Name Pennsylvania Mine Minerals copper
Address Elgin, Nevada

OPERATION	UNIT	COSTS THIS MONTH	UNITS THIS MONTH	COSTS TO DATE	UNITS TO DATE	UNIT COSTS TO DATE	AUTHORIZED BY CONTRACT Units	AUTHORIZED BY CONTRACT Unit Costs
Drifting	feet	927.54	32	19,345.25	578	33.46	688	
Crosscutting								
Raising								
Shafts								
Winzes								
Drilling: Core								
Churn								
Auger								
Stripping								
Trenching								
Test Pits								
Roads and Trails				883.48				
Compressor repairs and snow garage				1,178.72				
TOTAL DISTRIBUTED COSTS								TOTAL COSTS AUTHORIZED BY CONTRACT
Operating Equipment Purchased				730.23				
Initial Rehabilitation and Repairs				1,794.58				
New Buildings, Improvements, etc.								
TOTAL COSTS		927.54		23,936.21				

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

Date 13 April 53 Operator Pennsylvania Mine

Per Elmer T. Smith Title Partner

REMARKS:

NOTE.—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.

(Instructions on reverse)

(For Government use only)

INSTRUCTIONS

Preparation of Form MF–104A—Operator's Unit Cost and Progress Report.—Applicable places on Form 104A should be filled in by the Operator. The purpose of this form is twofold as follows: (1) to furnish the supervising engineers and other administrators with statistical information necessary to better determine the progress of the project; and (2) to furnish more permanent information on mining costs for future use. The more important phases of operation on which permanent information is desired have been outlined in the form. There are blank lines, however, for those unusual phases which may need to be reported for a particular project. It will be necessary for the Operator to distribute his costs among the applicable phases reported with the exception of three items the costs of which are not to be distributed by the Operator. These three items are: "Operating Equipment Purchased", "Initial Rehabilitation and Repairs", and "New Buildings, Improvements, etc." The reason for not distributing these items on a monthly basis is doubtless clear to the Operator, since such distribution might well overstate the cost for any one month or period short of the entire contract period.

Form MF–104A has been designed to tie in with Form MF–104 for both monthly and cumulative costs. The "Total Costs" on Form MF–104A for each month should equal the monthly "Total Costs" as reported on Form MF–104. This is also true of the "Total Costs To Date".

In preparing Form MF–104A, it will be necessary frequently to distribute certain costs over a number of items. For instance, supervisory and engineering costs may have to be distributed over several phases, such as, drifting, crosscutting, raising, etc., provided that these items were reported active for the month. Such distributions should be made on the basis of time spent on the various phases, on man days of labor charged to such phases, or on some other equitable basis. "Operating Equipment", "Initial Rehabilitation and Repairs", and "New Buildings Improvements, etc.", will be distributed to the several phases of the project by the Washington Office of DMEA at the close of the project if determined necessary. The last two columns headed "Authorized by Contract" will be filled in by the Operator if such information is found in the contract. This information is usually a part of Exhibit "A" of the contract. A space for remarks has been provided for the use of the Operator to call attention to any unusual circumstances causing excessive or disproportionate unit costs.

GPO 83-38475

PENNSYLVANIA MINE

APRIL REPORT

Work was resumed at the mine during March. An advance of 32 feet was made drifting south on the 850 foot level. The vein in the face is well mineralized; however it is only two feet wide.

Form [illegible] (Rev.)

Budget Bureau No. 42-R1036.3.
Approval expires 6-30-53.

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
MAY 12 1953

OPERATOR'S MONTHLY REPORT AND VOUCHER

Month of December, 1952 Docket No. DMEA 356X Contract No. Idm-8212
Operator's Name Pennsylvania Mine Minerals copper
Address Elgin, Nevada
Contract Amount, $ 25,792.22 Government Participation: 50 % Amount, $ 2160.36

ITEMS OF COSTS	FOR OPERATOR'S USE			FOR GOVERNMENT USE ONLY		
	Monthly Total	Totals Previously Reported	Totals To Date	Approved Monthly Total	Approved Totals Previously Reported	Approved Totals To Date
(1) Independent Short Form Contracts:						
Drilling						
Bulldozing						
Crosscutting						
Drifting						
(2) Labor and Supervision:						
Labor	966.00	8,501.25	9,466.25			
Supervision						
Technical Services						
(3) Operating Mat'ls. and Supplies:						
Timber	-0-	-0-	-0-			
Explosives	185.60	819.35	1,004.95			
Pipe	-0-	40.00	40.00			
Track	-0-	60.00	60.00			
Steel and Bits	189.42	503.35	693.75			
Fuel & etc.	218.27	1,838.41	2,056.68			
(4) Operating Equipment:						
Rental	-0-	851.00	851.00			
Purchase	-0-	728.40	728.40			
Depreciation	239.58	2,185.92	2,425.50			
(5) Initial Rehabilitation and Repairs	-0-	1,794.53	1,794.53			
(6) New Bldgs., Improvements, etc.	-0-	-0-	-0-			
(7) Miscellaneous:						
Repairs to Equipment	151.08	908.83	1,059.91			
Sampling and Analysis	-0-	-0-	-0-			
Payroll Taxes	39.91	427.80	467.71			
Liability Insurance	99.93	1,202.38	1,302.31			
(8) Contingencies (specify):						
Transportation	90.59	355.31	445.90			
road repairs	-0-	793.78	793.78			
TOTALS	2,160.36	20850.31	23,010.67			

I certify that the above bill is correct and just and that payment therefor has not been received.

Date 11 January 1953 Payee Pennsylvania Mine

Per Elmer F. Smith Title Partner

*When a voucher is signed or receipted in the name of a company or corporation, the name of the person writing the company or corporate name, as well as the capacity in which he signs, must appear. For example: "John Doe Company, per John Smith, Secretary," or "Treasurer," as the case may be.

NOTE.—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.

(Instructions on reverse)

Pursuant to authority vested in me, I certify that this account is correct and proper for payment in the amount of:

$ 1080.18

Lloyd H. Sjolander
Authorized Certifying Officer

Signature
(Authorized Certifying Officer)

Date MAY 12 1953 Vou. No SF-DMEA-42(A)

(See other side)

(For Government use only)

CERTIFICATION BY GOVERNMENT REPRESENTATIVE:

I certify that to the best of my knowledge and belief the contractor submitting this voucher is operating a Defense Minerals Exploration Administration project under Contract No. Idm-1212 in accordance with the terms of the contract.

Signature A. C. Johnson Title Chief, Mining Div. Region III Date January 15, 1953.

APPROVAL BY DMEA EXECUTIVE OFFICER OR ALTERNATE:

Signature H. C. Miller Title Executive Officer DMEA Field Team Region III Date January 20, 1953

MONTHLY REPORT OF OPERATOR

The Operator (Contractor) of an exploration project is required to make a monthly report to the Government through the Regional Executive Officer. This report consists of three parts as follows:

(a) *Form MF-104—Operator's Monthly Report and Voucher.*—This form details expenditures and constitutes a voucher for reimbursing the Operator for the Government's share of costs;

(b) *Form MF-104A—Operator's Unit Cost and Progress Report.*—This is a statistical report of expenditures which shows costs for the various types of operation; and

(c) *Narrative.*—A concise narrative description of progress made, results accomplished, and any unusual difficulties encountered must be furnished as an attachment to this Report and Voucher. Wherever possible, the narrative is to be illustrated with maps or sketches showing formations penetrated and location and assays of samples taken as well as advances in workings. In the case of diamond drilling or churn drilling, the location and inclination of holes is to be shown on a map; logs and assays also are to be submitted.

The Monthly Report of Operator should be prepared in an original and four copies all of which must be sent to the Executive Officer of the Region not later than the 15th of the month following.

Preparation of Form MF-104—Operator's Monthly Report and Voucher.—All the applicable spaces in Form MF-104 should be filled in by the Operator, and the Operator or his agent should sign the certification in the lower left corner of the form.

The items of costs are arranged in the order they appear in Article 6 (a) of Form MF-200 (Revised February 1952), however, this form is readily adaptable for use in reporting activities under other contract forms.

Under Item (1) delete words "Short Form" if the contract is a sub-contract under Form MF-200; and delete word "Independent" if the contract reported is on Form MF-200 (A). Also, report work paid for on a unit basis under contract Form MF-200 as though it were performed under an independent contract.

Under Item (2) include labor, supervision and technical services incurred for the exploratory operations. Do not include labor, supervision and technical services used for work performed under items (5) and (6).

Under Item (3) include the costs of material and supplies used in the project other than that used under items (5) and (6).

Under Item (4) appear the three types of operating equipment expenditures, that is, rental, purchase and depreciation. The expenditures made for renting equipment belonging to a third party will be reported under "Rental". The amount paid or duly obligated for payment for the purchase of equipment will be reported under "Purchase". The amount of expenditures due the Operator to reimburse him for depreciation of equipment owned will be reported under "Depreciation".

Item (5) comprises costs of labor, supervision, technical services, materials, etc., which are used in the initial rehabilitation and repair of existing buildings, installations, fixtures, and equipment. These costs, therefore, should not be reported under items (2) and (3).

Item (6) includes the labor, supervision, technical services, materials, etc., used in the installation or construction of new buildings, fixed improvements, etc., necessary for the project. These costs, therefore, should not be reported under items (2) and (3).

Item (7) covers miscellaneous types of expenditure such as payroll taxes, liability insurance, workmen's compensation insurance, repairs to equipment and sampling and analysis. Only that part of payroll taxes, liability insurance and workmen's compensation which are paid by the operator should be reported under item (7). The share paid by the employee as a payroll deduction is to be included under item (2) as labor costs.

Item (8) includes any unforeseen costs not included in the other seven categories.

The original of Form MF-104 when submitted for reimbursable expenses incurred under contract Form MF-200 must be supported by original documentation or by certified copies of purchase orders, payrolls or transcripts of payrolls, unless such documentation has been waived by the Regional Executive Officer. This certification may be stated thus, "Certified True Copy (or Transcript)", followed by appropriate signature. If the Executive Officer of the Region determines that a contract under Form MF-200 should have an "on-site" audit, that is, a Government auditor should make an audit of the Operator's books and records of account, the Operator need not support his monthly voucher with original or certified documents except in cases of equipment purchases whose individual costs exceed $50.00. In these cases the original or a certified copy of the purchase order or invoice should be attached to the Monthly Voucher. N. B.—Only the *original* of Form MF-104 is required to be documented. The four copies of Form MF-104 are not to be thus supported.

Form MF-104 submitted for reimbursement under fixed price contracts on Form MF-200 (A), however, are not required to be supported by documentation of any kind. The Operator will submit his claim under item (1) of Form MF-104 by deleting as stated above the word "Independent" and by showing the number of feet or other units immediately after the appropriate descriptive word, such as, drilling, bulldozing, crosscutting, drifting, etc., and giving the "Monthly Total" amount due. "Totals Previously Reported", and "Totals to Date" columns should also be filled in.

DEPARTMENT OF INTERIOR
BUREAU OF MINES
REGION III
RECEIVED

Form [illegible]A
(April 1952)

Budget Bureau No. 42-R1151
Approval expires 6-30-53.

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
MAY 22 1953

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION
OPERATOR'S UNIT COST AND PROGRESS REPORT

Month of December 1952 Docket No. DMEA 356X Contract No. Idm-E212
Operator's Name Pennsylvania Mine Minerals copper
Address Elgin, Nevada

OPERATION	UNIT	COSTS THIS MONTH	UNITS THIS MONTH	COSTS TO DATE	UNITS TO DATE	UNIT COSTS TO DATE	AUTHORIZED BY CONTRACT Units	AUTHORIZED BY CONTRACT Unit Costs
Drifting	feet	2,160.36	50	16,417.71	546	33.73	600	
Crosscutting								
Raising							100	
Shafts								
Winzes							60	
Drilling: Core								
Churn								
Auger								
Stripping								
Trenching								
Test Pits								
Roads and Trails	-0-	-0-		883.48				
compressor repairs & snow damage				1,170.72				
TOTAL DISTRIBUTED COSTS		2,160.36						TOTAL COSTS AUTHORIZED BY CONTRACT
Operating Equipment Purchased		-0-		736.23				
Initial Rehabilitation and Repairs		-0-		1,794.65				
New Buildings, Improvements, etc.								
TOTAL COSTS		2,160.36		23,010.67				

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

Date 11 December 1953 Operator Pennsylvania Mine

Per Elmer T. Smith Title Partner

REMARKS:

NOTE.—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.

(Instructions on reverse)

(For Government use only)

INSTRUCTIONS

Preparation of Form MF–104A—Operator's Unit Cost and Progress Report.—Applicable places on Form 104A should be filled in by the Operator. The purpose of this form is twofold as follows: (1) to furnish the supervising engineers and other administrators with statistical information necessary to better determine the progress of the project; and (2) to furnish more permanent information on mining costs for future use. The more important phases of operation on which permanent information is desired have been outlined in the form. There are blank lines, however, for those unusual phases which may need to be reported for a particular project. It will be necessary for the Operator to distribute his costs among the applicable phases reported with the exception of three items the costs of which are not to be distributed by the Operator. These three items are: "Operating Equipment Purchased", "Initial Rehabilitation and Repairs", and "New Buildings, Improvements, etc." The reason for not distributing these items on a monthly basis is doubtless clear to the Operator, since such distribution might well overstate the cost for any one month or period short of the entire contract period.

Form MF–104A has been designed to tie in with Form MF–104 for both monthly and cumulative costs. The "Total Costs" on Form MF–104A for each month should equal the monthly "Total Costs" as reported on Form MF–104. This is also true of the "Total Costs To Date".

In preparing Form MF–104A, it will be necessary frequently to distribute certain costs over a number of items. For instance, supervisory and engineering costs may have to be distributed over several phases, such as, drifting, crosscutting, raising, etc., provided that these items were reported active for the month. Such distributions should be made on the basis of time spent on the various phases, on man days of labor charged to such phases, or on some other equitable basis. "Operating Equipment", "Initial Rehabilitation and Repairs", and "New Buildings Improvements, etc.", will be distributed to the several phases of the project by the Washington Office of DMEA at the close of the project if determined necessary. The last two columns headed "Authorized by Contract" will be filled in by the Operator if such information is found in the contract. This information is usually a part of Exhibit "A" of the contract. A space for remarks has been provided for the use of the Operator to call attention to any unusual circumstances causing excessive or disproportionate unit costs.

GPO 83-38475

PENNSYLVANIA MINE

December Report

The expected footage was not made during this period because heavy rains and snows closed the road to the mine and made it impossible to move in supplies to sustain operations.

The vein continues to show signs of mineralization.

Fo[redacted] (Rev.)

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION

Budget Bureau No. 42-R1036.3.
Approval expires 6-30-53.

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration

OPERATOR'S MONTHLY REPORT AND VOUCHER

DEC 23 1952

Month of November 1952, 1952 Docket No. DMEA 366X Contract No. Idm-E212
Operator's Name Pennsylvania Mine Minerals copper
Address Elgin, Nevada
Contract Amount, $25,792.22 Government Participation: 50 % Amount, $ 2463.20

ITEMS OF COSTS	FOR OPERATOR'S USE: Monthly Total	Totals Previously Reported	Totals To Date	FOR GOVERNMENT USE ONLY: Approved Monthly Total	Approved Totals Previously Reported	Approved Totals To Date
(1) Independent Short Form Contracts:						
Drilling						
Bulldozing						
Crosscutting						
Drifting						
(2) Labor and Supervision:						
Labor	1303.00	7198.25	8501.25			
Supervision						
Technical Services						
(3) Operating Mat'ls. and Supplies:						
Timber						
Explosives	145.37	67.98	213.35			
Pipe	-0-	40.00	40.00			
Track	-0-	30.00	30.00			
Steel Bits	35.81	350.54	362.35	364.35		
Fuel & etc.	258.66	1622.76	1881.41			
(4) Operating Equipment:						
Rental	-0-	831.00	831.00			
Purchase	-0-	728.40	728.40			
Depreciation	239.58	1946.34	2185.92			
(5) Initial Rehabilitation and Repairs	-0-	1794.53	1794.53			
(6) New Bldgs., Improvements, etc.						
(7) Miscellaneous:						
Repairs to Equipment	321.96	586.87	908.83			
Sampling and Analysis						
Payroll Taxes	54.73	373.07	427.80			
Liability Insurance	111.09	1091.29	1202.33			
(8) Contingencies (specify):						
Transportation	-0-	355.31	355.31			
road repairs	-0-	793.78	793.78			
TOTALS	2463.20	18,388.11	20,851.31			

I certify that the above bill is correct and just and that payment therefor has not been received.
Date 5 December 1952 *Payee Pennsylvania Mine
Per Elmer T. Smith Title Partner

*When a voucher is signed or receipted in the name of a company or corporation, the name of the person writing the company or corporate name, as well as the capacity in which he signs, must appear. For example: "John Doe Company, per John Smith, Secretary," or "Treasurer," as the case may be.

NOTE.—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.

(Instructions on reverse)

Pursuant to authority vested in me, I certify that this account is correct and proper for payment in the amount of:
$ 1231.60
Signature A. J. Renner
Authorized Certifying Officer
(Authorized Certifying Officer)
Date DEC 17 1952 Vou. No. SF-DMEA-29
(See other side)

(For Government use only)

CERTIFICATION BY GOVERNMENT REPRESENTATIVE:

I certify that to the best of my knowledge and belief the contractor submitting this voucher is operating a Defense Minerals Exploration Administration project under Contract No. Idm-E212 in accordance with the terms of the contract.

Signature R. C. Johnson Title Chief, Mining Div., Region III Date Dec. 9, 1952

APPROVAL BY DMEA EXECUTIVE OFFICER OR ALTERNATE:

Signature W. C. Miller Title Executive Officer, DMEA Field Team Region III Date Dec. 15, 1952

MONTHLY REPORT OF OPERATOR

The Operator (Contractor) of an exploration project is required to make a monthly report to the Government through the Regional Executive Officer. This report consists of three parts as follows:

(a) *Form MF-104—Operator's Monthly Report and Voucher.*—This form details expenditures and constitutes a voucher for reimbursing the Operator for the Government's share of costs;

(b) *Form MF-104A—Operator's Unit Cost and Progress Report.*—This is a statistical report of expenditures which shows costs for the various types of operation; and

(c) *Narrative.*—A concise narrative description of progress made, results accomplished, and any unusual difficulties encountered must be furnished as an attachment to this Report and Voucher. Wherever possible, the narrative is to be illustrated with maps or sketches showing formations penetrated and location and assays of samples taken as well as advances in workings. In the case of diamond drilling or churn drilling, the location and inclination of holes is to be shown on a map; logs and assays also are to be submitted.

The Monthly Report of Operator should be prepared in an original and four copies all of which must be sent to the Executive Officer of the Region not later than the 15th of the month following.

Preparation of Form MF-104—Operator's Monthly Report and Voucher.—All the applicable spaces in Form MF-104 should be filled in by the Operator, and the Operator or his agent should sign the certification in the lower left corner of the form.

The items of costs are arranged in the order they appear in Article 6 (a) of Form MF-200 (Revised February 1952), however, this form is readily adaptable for use in reporting activities under other contract forms.

Under Item (1) delete words "Short Form" if the contract is a sub-contract under Form MF-200; and delete word "Independent" if the contract reported is on Form MF-200 (A). Also, report work paid for on a unit basis under contract Form MF-200 as though it were performed under an independent contract.

Under Item (2) include labor, supervision and technical services incurred for the exploratory operations. Do not include labor, supervision and technical services used for work performed under items (5) and (6).

Under Item (3) include the costs of material and supplies used in the project other than that used under items (5) and (6).

Under Item (4) appear the three types of operating equipment expenditures, that is, rental, purchase and depreciation. The expenditures made for renting equipment belonging to a third party will be reported under "Rental". The amount paid or duly obligated for payment for the purchase of equipment will be reported under "Purchase". The amount of expenditures due the Operator to reimburse him for depreciation of equipment owned will be reported under "Depreciation".

Item (5) comprises costs of labor, supervision, technical services, materials, etc., which are used in the initial rehabilitation and repair of existing buildings, installations, fixtures, and equipment. These costs, therefore, should not be reported under items (2) and (3).

Item (6) includes the labor, supervision, technical services, materials, etc., used in the installation or construction of new buildings, fixed improvements, etc., necessary for the project. These costs, therefore, should not be reported under items (2) and (3).

Item (7) covers miscellaneous types of expenditure such as payroll taxes, liability insurance, workmen's compensation insurance, repairs to equipment and sampling and analysis. Only that part of payroll taxes, liability insurance and workmen's compensation which are paid by the operator should be reported under item (7). The share paid by the employee as a payroll deduction is to be included under item (2) as labor costs.

Item (8) includes any unforeseen costs not included in the other seven categories.

The original of Form MF-104 when submitted for reimbursable expenses incurred under contract Form MF-200 must be supported by original documentation or by certified copies of purchase orders, payrolls or transcripts of payrolls, unless such documentation has been waived by the Regional Executive Officer. This certification may be stated thus, "Certified True Copy (or Transcript)", followed by appropriate signature. If the Executive Officer of the Region determines that a contract under Form MF-200 should have an "on-site" audit, that is, a Government auditor should make an audit of the Operator's books and records of account, the Operator need not support his monthly voucher with original or certified documents except in cases of equipment purchases whose individual costs exceed $50.00. In these cases the original or a certified copy of the purchase order or invoice should be attached to the Monthly Voucher. N. B.—Only the *original* of Form MF-104 is required to be documented. The four copies of Form MF-104 are not to be thus supported.

Form MF-104 submitted for reimbursement under fixed price contracts on Form MF-200 (A), however, are not required to be supported by documentation of any kind. The Operator will submit his claim under item (1) of Form MF-104 by deleting as stated above the word "Independent" and by showing the number of feet or other units immediately after the appropriate descriptive word, such as, drilling, bulldozing, crosscutting, drifting, etc., and giving the "Monthly Total" amount due. "Totals Previously Reported", and "Totals to Date" columns should also be filled in.

U. S. GOVERNMENT PRINTING OFFICE 205675

F6[redacted]
(A[redacted]32)

Budget Bureau No. 42-R1151
Approval expires 6-30-53.

UNITED STATES
DEPARTMENT OF THE INTERIOR

DEFENSE MINERALS EXPLORATION ADMINISTRATION

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
DEC 23 1952

OPERATOR'S UNIT COST AND PROGRESS REPORT

Month of November 1952 Docket No. DMEA 356X Contract No. Idm-E212
Operator's Name Pennsylvania Mine Minerals copper
Address Elgin, Nevada

OPERATION	UNIT	COSTS THIS MONTH	UNITS THIS MONTH	COSTS TO DATE	UNITS TO DATE	UNIT COSTS TO DATE	AUTHORIZED BY CONTRACT Units	AUTHORIZED BY CONTRACT Unit Costs
Drifting	feet	2455.37	76	16,258.35	496	32.77	600	
Crosscutting								
Raising							100	
Shafts								
Winzes							60	
Drilling: Core								
Churn								
Auger								
Stripping								
Trenching								
Test Pits								
Roads and Trails		-0-		603.48				
Compressor repairs snow damage				1,179.72				
TOTAL DISTRIBUTED COSTS		2455.37						TOTAL COSTS AUTHORIZED BY CONTRACT
Operating Equipment Purchased		7.65*		736.25				
Initial Rehabilitation and Repairs		-0-		1,754.55				
New Buildings, Improvements, etc.								
TOTAL COSTS		2463.20		20,661.31				

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

Date 5 December 1952 Operator Pennsylvania Mine

Per Elmer T. Smith Title Partner

REMARKS: * freight bill for ~~[illegible]~~ on Oct. report

→ NOTE.—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.

(Instructions on reverse)

(For Government use only)

INSTRUCTIONS

Preparation of Form MF–104A—Operator's Unit Cost and Progress Report.—Applicable places on Form 104A should be filled in by the Operator. The purpose of this form is twofold as follows: (1) to furnish the supervising engineers and other administrators with statistical information necessary to better determine the progress of the project; and (2) to furnish more permanent information on mining costs for future use. The more important phases of operation on which permanent information is desired have been outlined in the form. There are blank lines, however, for those unusual phases which may need to be reported for a particular project. It will be necessary for the Operator to distribute his costs among the applicable phases reported with the exception of three items the costs of which are not to be distributed by the Operator. These three items are: "Operating Equipment Purchased", "Initial Rehabilitation and Repairs", and "New Buildings, Improvements, etc." The reason for not distributing these items on a monthly basis is doubtless clear to the Operator, since such distribution might well overstate the cost for any one month or period short of the entire contract period.

Form MF–104A has been designed to tie in with Form MF–104 for both monthly and cumulative costs. The "Total Costs" on Form MF–104A for each month should equal the monthly "Total Costs" as reported on Form MF–104. This is also true of the "Total Costs To Date".

In preparing Form MF–104A, it will be necessary frequently to distribute certain costs over a number of items. For instance, supervisory and engineering costs may have to be distributed over several phases, such as, drifting, crosscutting, raising, etc., provided that these items were reported active for the month. Such distributions should be made on the basis of time spent on the various phases, on man days of labor charged to such phases, or on some other equitable basis. "Operating Equipment", "Initial Rehabilitation and Repairs", and "New Buildings Improvements, etc.", will be distributed to the several phases of the project by the Washington Office of DMEA at the close of the project if determined necessary. The last two columns headed "Authorized by Contract" will be filled in by the Operator if such information is found in the contract. This information is usually a part of Exhibit "A" of the contract. A space for remarks has been provided for the use of the Operator to call attention to any unusual circumstances causing excessive or disproportionate unit costs.

U. S. GOVERNMENT PRINTING OFFICE 205676

PENNSYLVANIA MINE

NOVEMBER REPORT

During this period the vein for a distance of 50 feet narrowed down to a few inches. However, the vein has now widened to several feet and appears to be carrying some mineralization.

The labor turn over continues to be high as men do not like to stay in isolated camps.

F-104 (Rev.)
(April 1952)

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION

Budget Bureau No. 42-R1036.3.
Approval expires 6-30-53.

Defense Minerals Administration
RECEIVED
NOV 1952

OPERATOR'S MONTHLY REPORT AND VOUCHER

Month of October, 1952 Docket No. DMEA 256X Contract No. 14-[illegible]212
Operator's Name Pennsylvania Mine Minerals copper
Address Elgin, Nevada
Contract Amount, $25,7[illegible].22 Government Participation: 50 % Amount, $2467.92

ITEMS OF COSTS	FOR OPERATOR'S USE: Monthly Total	Totals Previously Reported	Totals To Date	FOR GOVERNMENT USE ONLY: Approved Monthly Total	Approved Totals Previously Reported	Approved Totals To Date
(1) Independent / Short Form Contracts:						
Drilling						
Bulldozing						
Crosscutting						
Drifting						
(2) Labor and Supervision:						
Labor	1128.00	6013.25	7138.25			
Supervision						
Technical Services						
(3) Operating Mat'ls. and Supplies:						
Timber						
Explosives	1[illegible].50	4[illegible].32	575.[illegible]			
Pipe	20.00	20.00	40.00			
Track	20.00	40.00	60.00			
Steel bits, etc.	20.70	331.64	352.34			
Fuel & etc.	216.09	1366.66	1582.75			
(4) Operating Equipment:						
Rental	101.00	780.00	871.00			
Purchase	320.00	402.40	722.40			
Depreciation	239.68	1700.76	1543.34			
(5) Initial Rehabilitation and Repairs	-0-	1704.53	1704.53			
(6) New Bldgs., Improvements, etc.	-0-	-0-	-0-			
(7) Miscellaneous:						
Repairs to Equipment	-0-	585.57	585.57			
Sampling and Analysis	-0-	-0-	-0-			
Payroll Taxes	48.78	324.29	373.07			
Liability Insurance	69.00	962.35	1032.35			
(8) Contingencies (specify):						
Transport ore	-0-	356.31	356.31			
road repairs	-0-	7[illegible].75	7[illegible].75			
TOTALS	2467.92	16,[illegible]	16,[illegible].11			

I certify that the above bill is correct and just and that payment therefor has not been made. October 1952 Pennsylvania Mine

Date NOV 6 1952 *Payee

Per Elmer S. Smith Title Partner

*When a voucher is signed or receipted in the name of a company or corporation, the name of the person writing the company or corporate name, as well as the capacity in which he signs, must appear. For example: "John Doe Company, per John Smith, Secretary," or "Treasurer," as the case may be.

NOTE.—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.

(Instructions on reverse)

Pursuant to authority vested in me, I certify that this account is correct and proper for payment in the amount of:

$1233.96

Signature A. J. Renner
Authorized Certifying Officer
(Authorized Certifying Officer)

Date [illegible] 1952 Vou. No. SF-DMEA-26

(See other side)

(For Government use only)

CERTIFICATION BY GOVERNMENT REPRESENTATIVE:

I certify that to the best of my knowledge and belief the contractor submitting this voucher is operating a Defense Minerals Exploration Administration project under Contract No. [illegible]212 in accordance with the terms of the contract.

Signature [illegible] Title Mining Methods Research Engr. Date Nov. 10, 1952.

George H. Holmes, Jr.

APPROVAL BY DMEA EXECUTIVE OFFICER OR ALTERNATE:

Signature [illegible] Title Executive Officer DMEA Field Team Date Nov. 13, 1952

H. C. Miller Region III

MONTHLY REPORT OF OPERATOR

The Operator (Contractor) of an exploration project is required to make a monthly report to the Government through the Regional Executive Officer. This report consists of three parts as follows:

(a) *Form MF-104—Operator's Monthly Report and Voucher.*—This form details expenditures and constitutes a voucher for reimbursing the Operator for the Government's share of costs;

(b) *Form MF-104A—Operator's Unit Cost and Progress Report.*—This is a statistical report of expenditures which shows costs for the various types of operation; and

(c) *Narrative.*—A concise narrative description of progress made, results accomplished, and any unusual difficulties encountered must be furnished as an attachment to this Report and Voucher. Wherever possible, the narrative is to be illustrated with maps or sketches showing formations penetrated and location and assays of samples taken as well as advances in workings. In the case of diamond drilling or churn drilling, the location and inclination of holes is to be shown on a map; logs and assays also are to be submitted.

The Monthly Report of Operator should be prepared in an original and four copies all of which must be sent to the Executive Officer of the Region not later than the 15th of the month following.

Preparation of Form MF-104—Operator's Monthly Report and Voucher.—All the applicable spaces in Form MF-104 should be filled in by the Operator, and the Operator or his agent should sign the certification in the lower left corner of the form.

The items of costs are arranged in the order they appear in Article 6 (a) of Form MF-200 (Revised February 1952), however, this form is readily adaptable for use in reporting activities under other contract forms.

Under Item (1) delete words "Short Form" if the contract is a sub-contract under Form MF-200; and delete word "Independent" if the contract reported is on Form MF-200 (A). Also, report work paid for on a unit basis under contract Form MF-200 as though it were performed under an independent contract.

Under Item (2) include labor, supervision and technical services incurred for the exploratory operations. Do not include labor, supervision and technical services used for work performed under items (5) and (6).

Under Item (3) include the costs of material and supplies used in the project other than that used under items (5) and (6).

Under Item (4) appear the three types of operating equipment expenditures, that is, rental, purchase and depreciation. The expenditures made for renting equipment belonging to a third party will be reported under "Rental". The amount paid or duly obligated for payment for the purchase of equipment will be reported under "Purchase". The amount of expenditures due the Operator to reimburse him for depreciation of equipment owned will be reported under "Depreciation".

Item (5) comprises costs of labor, supervision, technical services, materials, etc., which are used in the initial rehabilitation and repair of existing buildings, installations, fixtures, and equipment. These costs, therefore, should not be reported under items (2) and (3).

Item (6) includes the labor, supervision, technical services, materials, etc., used in the installation or construction of new buildings, fixed improvements, etc., necessary for the project. These costs, therefore, should not be reported under items (2) and (3).

Item (7) covers miscellaneous types of expenditure such as payroll taxes, liability insurance, workmen's compensation insurance, repairs to equipment and sampling and analysis. Only that part of payroll taxes, liability insurance and workmen's compensation which are paid by the operator should be reported under item (7). The share paid by the employee as a payroll deduction is to be included under item (2) as labor costs.

Item (8) includes any unforeseen costs not included in the other seven categories.

The original of Form MF-104 when submitted for reimbursable expenses incurred under contract Form MF-200 must be supported by original documentation or by certified copies of purchase orders, payrolls or transcripts of payrolls, unless such documentation has been waived by the Regional Executive Officer. This certification may be stated thus, "Certified True Copy (or Transcript)", followed by appropriate signature. If the Executive Officer of the Region determines that a contract under Form MF-200 should have an "on-site" audit, that is, a Government auditor should make an audit of the Operator's books and records of account, the Operator need not support his monthly voucher with original or certified documents except in cases of equipment purchases whose individual costs exceed $50.00. In these cases the original or a certified copy of the purchase order or invoice should be attached to the Monthly Voucher. N. B.—Only the *original* of Form MF-104 is required to be documented. The four copies of Form MF-104 are not to be thus supported.

Form MF-104 submitted for reimbursement under fixed price contracts on Form MF-200 (A), however, are not required to be supported by documentation of any kind. The Operator will submit his claim under item (1) of Form MF-104 by deleting as stated above the word "Independent" and by showing the number of feet or other units immediately after the appropriate descriptive word, such as, drilling, bulldozing, crosscutting, drifting, etc., and giving the "Monthly Total" amount due. "Totals Previously Reported", and "Totals to Date" columns should also be filled in.

GPO 83-38476

Form MF-104A
(April 1952)

Budget Bureau No. 42-R1151
Approval expires 6-30-53.

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
NOV 4 1952

OPERATOR'S UNIT COST AND PROGRESS REPORT

Month of October 195 2 Docket No. DMEA 356X Contract No. Idm-E212
Operator's Name Pennsylvania Mine Minerals copper
Address Elgin, Nevada

OPERATION	UNIT	COSTS THIS MONTH	UNITS THIS MONTH	COSTS TO DATE	UNITS TO DATE	UNIT COSTS TO DATE	AUTHORIZED BY CONTRACT	
							Units	Unit Costs
Drifting	feet	2147.92	68	13802.98	420	32.86	600	
Crosscutting								
Raising							100	
Shafts								
Winzes							60	
Drilling: Core								
Churn								
Auger								
Stripping								
Trenching								
Test Pits								
Roads and Trails				883.48				
Compresser repairs & snow damage				1178.72				
TOTAL DISTRIBUTED COSTS		2147.92						TOTAL COSTS AUTHORIZED BY CONTRACT
Operating Equipment Purchased		320.00		728.40				
Initial Rehabilitation and Repairs		-0-		1794.53				
New Buildings, Improvements, etc.								
TOTAL COSTS		2467.92		18388.11				

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

Date 6 October 1952 Operator Pennsylvania Mine

Per Elmer F. Smith Title Partner

REMARKS:

NOTE.—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.

(Instructions on reverse)

(For Government use only)

INSTRUCTIONS

Preparation of Form MF-104A—Operator's Unit Cost and Progress Report.—Applicable places on Form 104A should be filled in by the Operator. The purpose of this form is twofold as follows: (1) to furnish the supervising engineers and other administrators with statistical information necessary to better determine the progress of the project; and (2) to furnish more permanent information on mining costs for future use. The more important phases of operation on which permanent information is desired have been outlined in the form. There are blank lines, however, for those unusual phases which may need to be reported for a particular project. It will be necessary for the Operator to distribute his costs among the applicable phases reported with the exception of three items the costs of which are not to be distributed by the Operator. These three items are: "Operating Equipment Purchased", "Initial Rehabilitation and Repairs", and "New Buildings, Improvements, etc." The reason for not distributing these items on a monthly basis is doubtless clear to the Operator, since such distribution might well overstate the cost for any one month or period short of the entire contract period.

Form MF-104A has been designed to tie in with Form MF-104 for both monthly and cumulative costs. The "Total Costs" on Form MF-104A for each month should equal the monthly "Total Costs" as reported on Form MF-104. This is also true of the "Total Costs To Date".

In preparing Form MF-104A, it will be necessary frequently to distribute certain costs over a number of items. For instance, supervisory and engineering costs may have to be distributed over several phases, such as, drifting, crosscutting, raising, etc., provided that these items were reported active for the month. Such distributions should be made on the basis of time spent on the various phases, on man days of labor charged to such phases, or on some other equitable basis. "Operating Equipment", "Initial Rehabilitation and Repairs", and "New Buildings Improvements, etc.", will be distributed to the several phases of the project by the Washington Office of DMEA at the close of the project if determined necessary. The last two columns headed "Authorized by Contract" will be filled in by the Operator if such information is found in the contract. This information is usually a part of Exhibit "A" of the contract. A space for remarks has been provided for the use of the Operator to call attention to any unusual circumstances causing excessive or disproportionate unit costs.

GPO 83-38475

PENNSYLVANIA MINE

OCTOBER REPORT

The vein continued to be faulted and contains no visual signs of copper ore; however, the iron content in the vein has increased.

Several operating days were lost at the beginning of the month when two men quit and it was necessary to close down operations until new men could be hired.

Per Elmer L. Smith Title Partner

*When a voucher is signed or receipted in the name of a company or corporation, the name of the person writing the company or corporate name, as well as the capacity in which he signs, must appear. For example: "John Doe Company, per John Smith, Secretary," or "Treasurer," as the case may be.

NOTE.—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.

(Instructions on reverse)

$ 883.17

A. J. Renner
Signature Authorized Certifying Officer
(Authorized Certifying Officer)

Date OCT 24 1952 Vou. No. SF-DMEA-23

(See other side)

Form [illegible] (Rev.)
(April 1952)

Budget Bureau No. 42-R1036.3.
Approval expires [illegible]

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION

Defense Minerals Administration
RECEIVED
OCT 28 1952

OPERATOR'S MONTHLY REPORT AND VOUCHER

Month of September, 1952 Docket No. DMEA 356x Contract No. Ia-E212
Operator's Name Pennsylvania Mine Minerals copper
Address Elgin, Nevada
Contract Amount, $ 25,792.22 Government Participation: 50 % Amount, $ 1766.38

ITEMS OF COSTS	FOR OPERATOR'S USE: Monthly Total	Totals Previously Reported	Totals To Date	FOR GOVERNMENT USE ONLY: Approved Monthly Total	Approved Totals Previously Reported	Approved Totals To Date
(1) Independent Short Form Contracts:						
Drilling						
Bulldozing						
Crosscutting						
Drifting						
(2) Labor and Supervision:						
Labor	1085.50	4927.75	6013.25			
Supervision						
Technical Services						
(3) Operating Mat'ls. and Supplies:						
Timber	-0-	-0-	-0-			
Explosives	-0-	487.02	487.02			
Pipe	-0-	20.00	20.00			
Track	-0-	40.00	40.00			
Steel shtr, etc.	-0-	301.84	301.84			
Fuel & etc.	192.50	1173.35	1365.85			
(4) Operating Equipment:						
Rental	101.00	629.00	730.00			
Purchase	-0-	408.40	408.40			
Depreciation	233.55	1467.18	1700.73			
(5) Initial Rehabilitation and Repairs	-0-	1794.53	1794.53			
(6) New Bldgs., Improvements, etc.	-0-	-0-	-0-			
(7) Miscellaneous:						
Repairs to Equipment	3.10	583.58	586.67			
Sampling and Analysis	-0-	-0-	-0-			
Payroll Taxes	45.61	278.88	324.49			
Liability Insurance	93.00	699.29	792.29			
(8) Contingencies (specify):						
Transportation	-0-	355.31	355.31			
Road repairs	-0-	793.70	793.70			
TOTALS	1766.38	14153.81	15920.19			

I certify that the above bill is correct and just and that payment therefor has not been received.

Date 30 October 1952 *Payee Pennsylvania Mine

Per Elmer F. Smith Title Partner

*When a voucher is signed or receipted in the name of a company or corporation, the name of the person writing the company or corporate name, as well as the capacity in which he signs, must appear. For example: "John Doe Company, per John Smith, Secretary," or "Treasurer," as the case may be.

→ NOTE.—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.

(Instructions on reverse)

Pursuant to authority vested in me, I certify that this account is correct and proper for payment in the amount of:

$ 883.19

Signature A. J. Renner
Authorized Certifying Officer
(Authorized Certifying Officer)

Date OCT 24 1952 Vou. No. SF-DMEA-23

(See other side)

(For Government use only)

CERTIFICATION BY GOVERNMENT REPRESENTATIVE:

I certify that to the best of my knowledge and belief the contractor submitting this voucher is operating a Defense Minerals Exploration Administration project under Contract No. [illegible] in accordance with the terms of the contract.

Signature [illegible] Title [illegible] Date [illegible]

APPROVAL BY DMEA EXECUTIVE OFFICER OR ALTERNATE:

Signature [illegible] Title [illegible] Date [illegible]

MONTHLY REPORT OF OPERATOR

The Operator (Contractor) of an exploration project is required to make a monthly report to the Government through the Regional Executive Officer. This report consists of three parts as follows:

(a) *Form MF-104—Operator's Monthly Report and Voucher.*—This form details expenditures and constitutes a voucher for reimbursing the Operator for the Government's share of costs;

(b) *Form MF-104A—Operator's Unit Cost and Progress Report.*—This is a statistical report of expenditures which shows costs for the various types of operation; and

(c) *Narrative.*—A concise narrative description of progress made, results accomplished, and any unusual difficulties encountered must be furnished as an attachment to this Report and Voucher. Wherever possible, the narrative is to be illustrated with maps or sketches showing formations penetrated and location and assays of samples taken as well as advances in workings. In the case of diamond drilling or churn drilling, the location and inclination of holes is to be shown on a map; logs and assays also are to be submitted.

The Monthly Report of Operator should be prepared in an original and four copies all of which must be sent to the Executive Officer of the Region not later than the 15th of the month following.

Preparation of Form MF-104—Operator's Monthly Report and Voucher.—All the applicable spaces in Form MF-104 should be filled in by the Operator, and the Operator or his agent should sign the certification in the lower left corner of the form.

The items of costs are arranged in the order they appear in Article 6 (a) of Form MF-200 (Revised February 1952), however, this form is readily adaptable for use in reporting activities under other contract forms.

Under Item (1) delete words "Short Form" if the contract is a sub-contract under Form MF-200; and delete word "Independent" if the contract reported is on Form MF-200 (A). Also, report work paid for on a unit basis under contract Form MF-200 as though it were performed under an independent contract.

Under Item (2) include labor, supervision and technical services incurred for the exploratory operations. Do not include labor, supervision and technical services used for work performed under items (5) and (6).

Under Item (3) include the costs of material and supplies used in the project other than that used under items (5) and (6).

Under Item (4) appear the three types of operating equipment expenditures, that is, rental, purchase and depreciation. The expenditures made for renting equipment belonging to a third party will be reported under "Rental". The amount paid or duly obligated for payment for the purchase of equipment will be reported under "Purchase". The amount of expenditures due the Operator to reimburse him for depreciation of equipment owned will be reported under "Depreciation".

Item (5) comprises costs of labor, supervision, technical services, materials, etc., which are used in the initial rehabilitation and repair of existing buildings, installations, fixtures, and equipment. These costs, therefore, should not be reported under items (2) and (3).

Item (6) includes the labor, supervision, technical services, materials, etc., used in the installation or construction of new buildings, fixed improvements, etc., necessary for the project. These costs, therefore, should not be reported under items (2) and (3).

Item (7) covers miscellaneous types of expenditure such as payroll taxes, liability insurance, workmen's compensation insurance, repairs to equipment and sampling and analysis. Only that part of payroll taxes, liability insurance and workmen's compensation which are paid by the operator should be reported under item (7). The share paid by the employee as a payroll deduction is to be included under item (2) as labor costs.

Item (8) includes any unforeseen costs not included in the other seven categories.

The original of Form MF-104 when submitted for reimbursable expenses incurred under contract Form MF-200 must be supported by original documentation or by certified copies of purchase orders, payrolls or transcripts of payrolls, unless such documentation has been waived by the Regional Executive Officer. This certification may be stated thus: "Certified True Copy (or Transcript)", followed by appropriate signature. If the Executive Officer of the Region determines that a contract under Form MF-200 should have an "on-site" audit, that is, a Government auditor should make an audit of the Operator's books and records of account, the Operator need not support his monthly voucher with original or certified documents except in cases of equipment purchases whose individual costs exceed $50.00. In these cases the original or a certified copy of the purchase order or invoice should be attached to the Monthly Voucher. N. B.—Only the *original* of Form MF-104 is required to be documented. The four copies of Form MF-104 are not to be thus supported.

Form MF-104 submitted for reimbursement under fixed price contracts on Form MF-200 (A), however, are not required to be supported by documentation of any kind. The Operator will submit his claim under item (1) of Form MF-104 by deleting as stated above the word "Independent" and by showing the number of feet or other units immediately after the appropriate descriptive word, such as, drilling, bulldozing, crosscutting, drifting, etc., and giving the "Monthly Total" amount due. "Totals Previously Reported", and "Totals to Date" columns should also be filled in.

DEPARTMENT OF INTERIOR
BUREAU OF MINES
REGION III

GPO 83-38476

Form MF-104A
(April 1952)

Budget Bureau No. 42-R1151
Approval expires 6-30-53.

UNITED STATES
DEPARTMENT OF THE INTERIOR

DEFENSE MINERALS EXPLORATION ADMINISTRATION

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
OCT 28 1952

OPERATOR'S UNIT COST AND PROGRESS REPORT

Month of September 1952 Docket No. DMEA 356x Contract No. Idm-8212
Operator's Name Pennsylvania Mine Minerals copper
Address Elgin, Nevada

OPERATION	UNIT	COSTS THIS MONTH	UNITS THIS MONTH	COSTS TO DATE	UNITS TO DATE	UNIT COSTS TO DATE	AUTHORIZED BY CONTRACT Units	AUTHORIZED BY CONTRACT Unit Costs
Drifting	feet	1766.38	60	11656.06	352	33.11	600	
Crosscutting								
Raising							100	
Shafts								
Winzes							60	
Drilling: Core								
Churn								
Auger								
Stripping								
Trenching								
Test Pits								
Roads and Trails				883.48				
Compressor repairs & snow garage				1178.72				
TOTAL DISTRIBUTED COSTS		1766.38						TOTAL COSTS AUTHORIZED BY CONTRACT
Operating Equipment Purchased				408.40				
Initial Rehabilitation and Repairs				1794.53				
New Buildings, Improvements, etc.								
TOTAL COSTS		1766.38		15920.19				

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

Date 9 October 1952 Operator Pennsylvania Mine

Per Elmer T. Smith Title Partner

NOTE.—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.

REMARKS:

(Instructions on reverse)

(For Government use only)

INSTRUCTIONS

Preparation of Form MF–104A—Operator's Unit Cost and Progress Report.—Applicable places on Form 104A should be filled in by the Operator. The purpose of this form is twofold as follows: (1) to furnish the supervising engineers and other administrators with statistical information necessary to better determine the progress of the project; and (2) to furnish more permanent information on mining costs for future use. The more important phases of operation on which permanent information is desired have been outlined in the form. There are blank lines, however, for those unusual phases which may need to be reported for a particular project. It will be necessary for the Operator to distribute his costs among the applicable phases reported with the exception of three items the costs of which are not to be distributed by the Operator. These three items are: "Operating Equipment Purchased", "Initial Rehabilitation and Repairs", and "New Buildings, Improvements, etc." The reason for not distributing these items on a monthly basis is doubtless clear to the Operator, since such distribution might well overstate the cost for any one month or period short of the entire contract period.

Form MF–104A has been designed to tie in with Form MF–104 for both monthly and cumulative costs. The "Total Costs" on Form MF–104A for each month should equal the monthly "Total Costs" as reported on Form MF–104. This is also true of the "Total Costs To Date".

In preparing Form MF–104A, it will be necessary frequently to distribute certain costs over a number of items. For instance, supervisory and engineering costs may have to be distributed over several phases, such as, drifting, crosscutting, raising, etc., provided that these items were reported active for the month. Such distributions should be made on the basis of time spent on the various phases, on man days of labor charged to such phases, or on some other equitable basis. "Operating Equipment", "Initial Rehabilitation and Repairs", and "New Buildings Improvements, etc.", will be distributed to the several phases of the project by the Washington Office of DMEA at the close of the project if determined necessary. The last two columns headed "Authorized by Contract" will be filled in by the Operator if such information is found in the contract. This information is usually a part of Exhibit "A" of the contract. A space for remarks has been provided for the use of the Operator to call attention to any unusual circumstances causing excessive or disproportionate unit costs.

DEPARTMENT OF INTERIOR
BUREAU OF MINES
REGION III
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SAN FRANCISCO, CALIFORNIA

GPO 83-38475

PENNSYLVANIA MINE

SEPTEMBER REPORT

The vein contained ore from approximately 300 feet north of the shaft to 320 feet north. After passing thru this narrow ore body a fault was encountered, and on passing thru this a noticeable increase of iron content occurred in the vein.

DEPARTMENT OF INTERIOR
BUREAU OF MINES
REGION III
RECEIVED

OCT 17 AM 9:07

SAN FRANCISCO, CALIFORNIA

Form [redacted]-104 (Rev.) [redacted]52)

Budget Bureau No. [redacted]R1036.3.
Approval expires 6-30-53.

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION

OPERATOR'S MONTHLY REPORT AND VOUCHER

OCT 1 8 1952

Month of August, 1952 Docket No. DMEA Contract No. [redacted]
Operator's Name Pennsylvania Mine Minerals Copper
Address Elgin, Nevada
Contract Amount, $25,792.22 Government Participation: 50 % Amount, $1,823.70

ITEMS OF COSTS	FOR OPERATOR'S USE: Monthly Total	Totals Previously Reported	Totals To Date	FOR GOVERNMENT USE ONLY: Approved Monthly Total	Approved Totals Previously Reported	Approved Totals To Date
(1) Independent / Short Form Contracts:						
Drilling						
Bulldozing						
Crosscutting						
Drifting						
(2) Labor and Supervision:						
Labor	799.50	4,128.25	4,927.75			
Supervision						
Technical Services						
(3) Operating Mat'ls. and Supplies:						
Timber						
Explosives	249.97	237.05	487.02			
Pipe	-0-	20.00	20.00			
Track	-0-	40.00	40.00			
Steel & Bits, etc.	13.73	288.11	301.84			
Fuel & etc.	210.59	962.76	1,173.35			
(4) Operating Equipment:						
Rental	101.00	528.00	629.00			
Purchase	-0-	408.40	408.40			
* Depreciation	119.79	1,347.39	1,467.18			
(5) Initial Rehabilitation and Repairs	-0-	1,794.53	1,794.53			
(6) New Bldgs., Improvements, etc.						
(7) Miscellaneous:						
Repairs to Equipment	197.64	386.04	583.68			
Sampling and Analysis	-0-					
Payroll Taxes	33.58	245.10	278.68			
Liability Insurance	87.95	805.34	893.29			
(8) Contingencies (specify):						
Transportation	9.95	345.36	355.31			
Road Repairs	-0-	793.78	793.78			
TOTALS	1,823.70	12,330.11	14,153.81			

I certify that the above bill is correct and just and that payment therefor has not been received.

Date 12 Sept 52 *Payee Pennsylvania Mine

Per Elmer F. Smith Title Partner

*When a voucher is signed or receipted in the name of a company or corporation, the name of the person writing the company or corporate name, as well as the capacity in which he signs, must appear. For example: "John Doe Company, per John Smith, Secretary," or "Treasurer," as the case may be.

NOTE.—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.

(Instructions on reverse)

Pursuant to authority vested in me, I certify that this account is correct and proper for payment in the amount of:

$ 911.85

Signature D. E. BENNER
(Authorized Certifying Officer)

Date 10/10/52 Vou. No. SF-10m ea-18
(See other side)

* only one half month depreciation claimed

(For Government use only)

CERTIFICATION BY GOVERNMENT REPRESENTATIVE:

I certify that to the best of my knowledge and belief the contractor submitting this voucher is operating a Defense Minerals Exploration Administration project under Contract No. 1h-1212 in accordance with the terms of the contract.

Signature A. E. Johnson Title Calif. Mining Div. Date September 17, 1952.

A. E. Johnson
Reg. III

APPROVAL BY DMEA EXECUTIVE OFFICER OR ALTERNATE:

Executive Officer
DMEA Field Team
Region III

Signature H. E. Miller Title Date Sept. 18, 1952

MONTHLY REPORT OF OPERATOR

The Operator (Contractor) of an exploration project is required to make a monthly report to the Government through the Regional Executive Officer. This report consists of three parts as follows:

(a) *Form MF-104—Operator's Monthly Report and Voucher.*—This form details expenditures and constitutes a voucher for reimbursing the Operator for the Government's share of costs;

(b) *Form MF-104A—Operator's Unit Cost and Progress Report.*—This is a statistical report of expenditures which shows costs for the various types of operation; and

(c) *Narrative.*—A concise narrative description of progress made, results accomplished, and any unusual difficulties encountered must be furnished as an attachment to this Report and Voucher. Wherever possible, the narrative is to be illustrated with maps or sketches showing formations penetrated and location and assays of samples taken as well as advances in workings. In the case of diamond drilling or churn drilling, the location and inclination of holes is to be shown on a map; logs and assays also are to be submitted.

The Monthly Report of Operator should be prepared in an original and four copies all of which must be sent to the Executive Officer of the Region not later than the 15th of the month following.

Preparation of Form MF-104—Operator's Monthly Report and Voucher.—All the applicable spaces in Form MF-104 should be filled in by the Operator, and the Operator or his agent should sign the certification in the lower left corner of the form.

The items of costs are arranged in the order they appear in Article 6 (a) of Form MF-200 (Revised February 1952), however, this form is readily adaptable for use in reporting activities under other contract forms.

Under Item (1) delete words "Short Form" if the contract is a sub-contract under Form MF-200; and delete word "Independent" if the contract reported is on Form MF-200 (A). Also, report work paid for on a unit basis under contract Form MF-200 as though it were performed under an independent contract.

Under Item (2) include labor, supervision and technical services incurred for the exploratory operations. Do not include labor, supervision and technical services used for work performed under items (5) and (6).

Under Item (3) include the costs of material and supplies used in the project other than that used under items (5) and (6).

Under Item (4) appear the three types of operating equipment expenditures, that is, rental, purchase and depreciation. The expenditures made for renting equipment belonging to a third party will be reported under "Rental". The amount paid or duly obligated for payment for the purchase of equipment will be reported under "Purchase". The amount of expenditures due the Operator to reimburse him for depreciation of equipment owned will be reported under "Depreciation".

Item (5) comprises costs of labor, supervision, technical services, materials, etc., which are used in the initial rehabilitation and repair of existing buildings, installations, fixtures, and equipment. These costs, therefore, should not be reported under items (2) and (3).

Item (6) includes the labor, supervision, technical services, materials, etc., used in the installation or construction of new buildings, fixed improvements, etc., necessary for the project. These costs, therefore, should not be reported under items (2) and (3).

Item (7) covers miscellaneous types of expenditure such as payroll taxes, liability insurance, workmen's compensation insurance, repairs to equipment and sampling and analysis. Only that part of payroll taxes, liability insurance and workmen's compensation which are paid by the operator should be reported under item (7). The share paid by the employee as a payroll deduction is to be included under item (2) as labor costs.

Item (8) includes any unforeseen costs not included in the other seven categories.

The original of Form MF-104 when submitted for reimbursable expenses incurred under contract Form MF-200 must be supported by original documentation or by certified copies of purchase orders, payrolls or transcripts of payrolls, unless such documentation has been waived by the Regional Executive Officer. This certification may be stated thus, "Certified True Copy (or Transcript)", followed by appropriate signature. If the Executive Officer of the Region determines that a contract under Form MF-200 should have an "on-site" audit, that is, a Government auditor should make an audit of the Operator's books and records of account, the Operator need not support his monthly voucher with original or certified documents except in cases of equipment purchases whose individual costs exceed $50.00. In these cases the original or a certified copy of the purchase order or invoice should be attached to the Monthly Voucher. N. B.—Only the *original* of Form MF-104 is required to be documented. The four copies of Form MF-104 are not to be thus supported.

Form MF-104 submitted for reimbursement under fixed price contracts on Form MF-200 (A), however, are not required to be supported by documentation of any kind. The Operator will submit his claim under item (1) of Form MF-104 by deleting as stated above the word "Independent" and by showing the number of feet or other units immediately after the appropriate descriptive word, such as, drilling, bulldozing, crosscutting, drifting, etc., and giving the "Monthly Total" amount due. "Totals Previously Reported", and "Totals to Date" columns should also be filled in.

GPO 83-38476

Form [redacted]104A
(April 1952)

Budget Bureau No. 42-R1151
Approval expires 6-30-53.

UNITED STATES
DEPARTMENT OF THE INTERIOR

DEFENSE MINERALS EXPLORATION ADMINISTRATION

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
OCT 17 1952

OPERATOR'S UNIT COST AND PROGRESS REPORT

Month of [redacted] 1952 Docket No. DMEA [redacted] Contract No. [redacted]
Operator's Name [redacted] Minerals [redacted]
Address [redacted]

OPERATION	UNIT	COSTS THIS MONTH	UNITS THIS MONTH	COSTS TO DATE	UNITS TO DATE	UNIT COSTS TO DATE	AUTHORIZED BY CONTRACT Units	AUTHORIZED BY CONTRACT Unit Costs
Drifting	[redacted]	1,[redacted].30	[redacted]	9,[redacted].68	292	33.86	600	
Crosscutting								
Raising							[redacted]	
Shafts								
Winzes							60	
Drilling: Core								
Churn								
Auger								
Stripping								
Trenching								
Test Pits								
Roads and Trails		09.70		863.[redacted]				
[redacted]		89.70		1,178.72				
TOTAL DISTRIBUTED COSTS								TOTAL COSTS AUTHORIZED BY CONTRACT
Operating Equipment Purchased				108.10				
Initial Rehabilitation and Repairs				1,794.53				
New Buildings, Improvements, etc.								
TOTAL COSTS		1,823.70		11,153.81				

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

Date 12 September 1952 Operator Pennsylvania Mine

Per Elmer F. Smith Title Partner

REMARKS:

NOTE.—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.

(Instructions on reverse)

(For Government use only)

ACCOUNTS SEP 19 1952

INSTRUCTIONS

Preparation of Form MF–104A—Operator's Unit Cost and Progress Report.—Applicable places on Form 104A should be filled in by the Operator. The purpose of this form is twofold as follows: (1) to furnish the supervising engineers and other administrators with statistical information necessary to better determine the progress of the project; and (2) to furnish more permanent information on mining costs for future use. The more important phases of operation on which permanent information is desired have been outlined in the form. There are blank lines, however, for those unusual phases which may need to be reported for a particular project. It will be necessary for the Operator to distribute his costs among the applicable phases reported with the exception of three items the costs of which are not to be distributed by the Operator. These three items are: "Operating Equipment Purchased", "Initial Rehabilitation and Repairs", and "New Buildings, Improvements, etc." The reason for not distributing these items on a monthly basis is doubtless clear to the Operator, since such distribution might well overstate the cost for any one month or period short of the entire contract period.

Form MF–104A has been designed to tie in with Form MF–104 for both monthly and cumulative costs. The "Total Costs" on Form MF–104A for each month should equal the monthly "Total Costs" as reported on Form MF–104. This is also true of the "Total Costs To Date".

In preparing Form MF–104A, it will be necessary frequently to distribute certain costs over a number of items. For instance, supervisory and engineering costs may have to be distributed over several phases, such as, drifting, crosscutting, raising, etc., provided that these items were reported active for the month. Such distributions should be made on the basis of time spent on the various phases, on man days of labor charged to such phases, or on some other equitable basis. "Operating Equipment", "Initial Rehabilitation and Repairs", and "New Buildings Improvements, etc.", will be distributed to the several phases of the project by the Washington Office of DMEA at the close of the project if determined necessary. The last two columns headed "Authorized by Contract" will be filled in by the Operator if such information is found in the contract. This information is usually a part of Exhibit "A" of the contract. A space for remarks has been provided for the use of the Operator to call attention to any unusual circumstances causing excessive or disproportionate unit costs.

GPO 83-38475

PENNSYLVANIA MINE

AUGUST REPORT

The anticipated footage was not made this month because of the loss of the compressor for two weeks when the clutch plates failed. While the compressor was down several days were spent retimbering several sets in the shaft and improving the road from Elgin to the mine.

The drift has been in ore for the last three rounds. several samples will be taken in September and their values will be in the report for that month.

Form 7[illegible]4 (Rev.)
(April [illegible]52)

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION

Budget Bureau No. 42-R1036.3.
Approval expires 6-30-53.

OPERATOR'S MONTHLY REPORT AND VOUCHER

SEP 15 1952

Month of July, 195 2 Docket No. DMEA 3861 Contract No. idm-E212
Operator's Name Pennsylvania Mine Minerals copper, silver
Address Elgin, Nevada
Contract Amount, $ 25,792.22 Government Participation: 50 % Amount, $1882.29

ITEMS OF COSTS	FOR OPERATOR'S USE			FOR GOVERNMENT USE ONLY		
	Monthly Total	Totals Previously Reported	Totals To Date	Approved Monthly Total	Approved Totals Previously Reported	Approved Totals To Date
(1) Independent Short Form Contracts:						
Drilling						
Bulldozing						
Crosscutting						
Drifting						
(2) Labor and Supervision:						
Labor	1053.00	3,075.25	4128.25			
Supervision						
Technical Services						
(3) Operating Mat'ls. and Supplies:						
Timber						
Explosives	-0-	237.08 ✓	237.08			
Pipe	-0-	20.00	20.00			
Track	-0-	40.00	40.00			
Steelbits, etc.	87.42	200.69	288.11			
Fuel, etc.	152.18	810.58	962.76			
(4) Operating Equipment:						
Rental	101.00	427.00 ✓	528.00			
Purchase	-0-	408.40	408.40			
Depreciation	239.68	1107.81 ✓	1347.39			
(5) Initial Rehabilitation and Repairs	-0-	1794.53	1794.53			
(6) New Bldgs., Improvements, etc.	-0-					
(7) Miscellaneous:						
Repairs to Equipment	99.35	267.69 ✓	366.04			
Sampling and Analysis	-0-					
Payroll Taxes	44.21	200.89 ✓	245.10			
Liability Insurance	99.00	706.34 ✓	805.34			
(8) Contingencies (specify):						
Transportation	7.53	337.81 ✓	345.34			
Road repairs	-0-	703.79	703.79			
TOTALS	1882.29	10447.82	12330.11			

I certify that the above bill is correct and just and that payment therefor has not been received.
Date 10 August 1952 *Payee Pennsylvania Mine
Per Elmer F. Smith Title Partner

*When a voucher is signed or receipted in the name of a company or corporation, the name of the person writing the company or corporate name, as well as the capacity in which he signs, must appear. For example: "John Doe Company, per John Smith, Secretary," or "Treasurer," as the case may be.

NOTE.—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.

(Instructions on reverse)

Pursuant to authority vested in me, I certify that this account is correct and proper for payment in the amount of:
$ 941.15

Lloyd L. Norvell
Authorized Certifying Officer
Signature (Authorized Certifying Officer)
Date SEP 9 1952 Vou. No. SE-DMCa-13
(See other side)

(For Government use only)

CERTIFICATION BY GOVERNMENT REPRESENTATIVE:

I certify that to the best of my knowledge and belief the contractor submitting this voucher is operating a Defense Minerals Exploration Administration project under Contract No. Idb-2212 in accordance with the terms of the contract.

Signature A. C. Johnson Title Chief, Mining Div. Region III Date August 15, 1952.

A. C. Johnson

APPROVAL BY DMEA EXECUTIVE OFFICER OR ALTERNATE:

Signature H. C. Miller Title Executive Officer DMEA Field Team Region III Date August 18, 1952.

H. C. Miller

MONTHLY REPORT OF OPERATOR

The Operator (Contractor) of an exploration project is required to make a monthly report to the Government through the Regional Executive Officer. This report consists of three parts as follows:

(a) *Form MF-104—Operator's Monthly Report and Voucher.*—This form details expenditures and constitutes a voucher for reimbursing the Operator for the Government's share of costs;

(b) *Form MF-104A—Operator's Unit Cost and Progress Report.*—This is a statistical report of expenditures which shows costs for the various types of operation; and

(c) *Narrative.*—A concise narrative description of progress made, results accomplished, and any unusual difficulties encountered must be furnished as an attachment to this Report and Voucher. Wherever possible, the narrative is to be illustrated with maps or sketches showing formations penetrated and location and assays of samples taken as well as advances in workings. In the case of diamond drilling or churn drilling, the location and inclination of holes is to be shown on a map; logs and assays also are to be submitted.

The Monthly Report of Operator should be prepared in an original and four copies all of which must be sent to the Executive Officer of the Region not later than the 15th of the month following.

Preparation of Form MF-104—Operator's Monthly Report and Voucher.—All the applicable spaces in Form MF-104 should be filled in by the Operator, and the Operator or his agent should sign the certification in the lower left corner of the form.

The items of costs are arranged in the order they appear in Article 6 (a) of Form MF-200 (Revised February 1952), however, this form is readily adaptable for use in reporting activities under other contract forms.

Under Item (1) delete words "Short Form" if the contract is a sub-contract under Form MF-200; and delete word "Independent" if the contract reported is on Form MF-200 (A). Also, report work paid for on a unit basis under contract Form MF-200 as though it were performed under an independent contract.

Under Item (2) include labor, supervision and technical services incurred for the exploratory operations. Do not include labor, supervision and technical services used for work performed under items (5) and (6).

Under Item (3) include the costs of material and supplies used in the project other than that used under items (5) and (6).

Under Item (4) appear the three types of operating equipment expenditures, that is, rental, purchase and depreciation. The expenditures made for renting equipment belonging to a third party will be reported under "Rental". The amount paid or duly obligated for payment for the purchase of equipment will be reported under "Purchase". The amount of expenditures due the Operator to reimburse him for depreciation of equipment owned will be reported under "Depreciation".

Item (5) comprises costs of labor, supervision, technical services, materials, etc., which are used in the initial rehabilitation and repair of existing buildings, installations, fixtures, and equipment. These costs, therefore, should not be reported under items (2) and (3).

Item (6) includes the labor, supervision, technical services, materials, etc., used in the installation or construction of new buildings, fixed improvements, etc., necessary for the project. These costs, therefore, should not be reported under items (2) and (3).

Item (7) covers miscellaneous types of expenditure such as payroll taxes, liability insurance, workmen's compensation insurance, repairs to equipment and sampling and analysis. Only that part of payroll taxes, liability insurance and workmen's compensation which are paid by the operator should be reported under item (7). The share paid by the employee as a payroll deduction is to be included under item (2) as labor costs.

Item (8) includes any unforeseen costs not included in the other seven categories.

The original of Form MF-104 when submitted for reimbursable expenses incurred under contract Form MF-200 must be supported by original documentation or by certified copies of purchase orders, payrolls or transcripts of payrolls, unless such documentation has been waived by the Regional Executive Officer. This certification may be stated thus, "Certified True Copy (or Transcript)", followed by appropriate signature. If the Executive Officer of the Region determines that a contract under Form MF-200 should have an "on-site" audit, that is, a Government auditor should make an audit of the Operator's books and records of account, the Operator need not support his monthly voucher with original or certified documents except in cases of equipment purchases whose individual costs exceed $50.00. In these cases the original or a certified copy of the purchase order or invoice should be attached to the Monthly Voucher. N. B.—Only the *original* of Form MF-104 is required to be documented. The four copies of Form MF-104 are not to be thus supported.

Form MF-104 submitted for reimbursement under fixed price contracts on Form MF-200 (A), however, are not required to be supported by documentation of any kind. The Operator will submit his claim under item (1) of Form MF-104 by deleting as stated above the word "Independent" and by showing the number of feet or other units immediately after the appropriate descriptive word, such as, drilling, bulldozing, crosscutting, drifting, etc., and giving the "Monthly Total" amount due. "Totals Previously Reported", and "Totals to Date" columns should also be filled in.

U. S. GOVERNMENT PRINTING OFFICE 205675

Form [illegible]4A
(Apr[illegible])

Budget Bureau No. 42-R1151
Approval expires 6-30-53.

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration

SEP 15 1952

UNITED STATES
DEPARTMENT OF THE INTERIOR

DEFENSE MINERALS EXPLORATION ADMINISTRATION

OPERATOR'S UNIT COST AND PROGRESS REPORT

Month of July 195 2 Docket No. DMEA 356X Contract No. idm-2212
Operator's Name Pennsylvania Mine Minerals copper, silver
Address Elgin, Nevada

OPERATION	UNIT	COSTS THIS MONTH	UNITS THIS MONTH	COSTS TO DATE	UNITS TO DATE	UNIT COSTS TO DATE	AUTHORIZED BY CONTRACT Units	AUTHORIZED BY CONTRACT Unit Costs
Drifting	feet	1882.29	60	8244.38	251	32.84	600	
Crosscutting								
Raising							100	
Shafts								
Winzes							60	
Drilling: Core								
Churn								
Auger								
Stripping								
Trenching								
Test Pits								
Roads and Trails		-0-		793.78				
Compressor repairs and Crew damage				1089.02				
TOTAL DISTRIBUTED COSTS		1882.29		10127.10				TOTAL COSTS AUTHORIZED BY CONTRACT
Operating Equipment Purchased		-0-		408.40				
Initial Rehabilitation and Repairs		-0-		1794.63				
New Buildings, Improvements, etc.		-0-						
TOTAL COSTS		1882.29		12330.11				

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

Date 10 August 1952 Operator Pennsylvania Mine

Per Elmer F. Smith Title Partner
Elmer F. Smith

→ NOTE.—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.

REMARKS:

(Instructions on reverse)

(For Government use only)

INSTRUCTIONS

Preparation of Form MF–104A—Operator's Unit Cost and Progress Report.—Applicable places on Form 104A should be filled in by the Operator. The purpose of this form is twofold as follows: (1) to furnish the supervising engineers and other administrators with statistical information necessary to better determine the progress of the project; and (2) to furnish more permanent information on mining costs for future use. The more important phases of operation on which permanent information is desired have been outlined in the form. There are blank lines, however, for those unusual phases which may need to be reported for a particular project. It will be necessary for the Operator to distribute his costs among the applicable phases reported with the exception of three items the costs of which are not to be distributed by the Operator. These three items are: "Operating Equipment Purchased", "Initial Rehabilitation and Repairs", and "New Buildings, Improvements, etc." The reason for not distributing these items on a monthly basis is doubtless clear to the Operator, since such distribution might well overstate the cost for any one month or period short of the entire contract period.

Form MF–104A has been designed to tie in with Form MF–104 for both monthly and cumulative costs. The "Total Costs" on Form MF–104A for each month should equal the monthly "Total Costs" as reported on Form MF–104. This is also true of the "Total Costs To Date".

In preparing Form MF–104A, it will be necessary frequently to distribute certain costs over a number of items. For instance, supervisory and engineering costs may have to be distributed over several phases, such as, drifting, crosscutting, raising, etc., provided that these items were reported active for the month. Such distributions should be made on the basis of time spent on the various phases, on man days of labor charged to such phases, or on some other equitable basis. "Operating Equipment", "Initial Rehabilitation and Repairs", and "New Buildings Improvements, etc.", will be distributed to the several phases of the project by the Washington Office of DMEA at the close of the project if determined necessary. The last two columns headed "Authorized by Contract" will be filled in by the Operator if such information is found in the contract. This information is usually a part of Exhibit "A" of the contract. A space for remarks has been provided for the use of the Operator to call attention to any unusual circumstances causing excessive or disproportionate unit costs.

U. S. GOVERNMENT PRINTING OFFICE 205676

PENNSYLVANIA MINE

JULY REPORT

Progress was made in the drift on the 550 feet level with a 60 foot advance. However, the expected footage was not made because loose ground was encountered and it became necessary to put in several sets of timber. Several rounds were missed because of faulty electric caps.

SF-D[redacted]5

MF-104
(April 1951)

Budget Bureau No. 42-R1036.
Approval expires 6-30-51.

E 212

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS ADMINISTRATION

STRATEGIC AND CRITICAL MINERAL EXPLORATION PROGRAM
OPERATOR'S MONTHLY PROGRESS REPORT

Operators are to submit monthly reports to the designated field representative of the Defense Minerals Administration. Reports are to be submitted in quadruplicate prior to the 15th day of the month following the reporting period.

Narrative.—A concise narrative description of progress made, results accomplished, and any unusual difficulties encountered is to be furnished.

Maps.—Wherever possible, the narrative is to be illustrated with maps or sketches showing formations penetrated and location and assays of samples taken as well as advances in workings. In the case of diamond drilling or churn drilling, the location and inclination of holes is to be shown on a map; logs and assays also are to be submitted.

Cost Accounts.—All applicable parts of this form are to be filled in. This report will form the basis for payments of the Government's participating share of expenses. Audits of accounts will be made from time to time.

CERTIFICATION

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

Pennsylvania Mine
(Name of Company)

By Elmer F. Smith
(Signature of Authorized Official)

10 July 1952
(Date)

Partner
(Title)

NOTE.—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.

16—64068-1

MONTHLY SUMMARY COST STATEMENT

Name of operator Pennsylvania Mine
Project No. DMA 356X
Total contract amount $25,792.22
Government participation percent 50%

Distribution of Expenditures for Month of June 1952

Item	Monthly Total	Totals Previously Reported	Totals to Date	For Government Use Only: Approved Monthly Total	Approved Totals Previously Reported	Approved Totals to Date
Wages and salaries	1079.00	3727.50	4806.50			
Equipment purchase [1]	163.20	623.40	786.60			
Equipment rental [2]	340.58	1194.23	1534.81			
Buildings	-0-	-0-	-0-			
Explosives	50.05	187.00	237.05			
Repair parts	24.81	262.88	287.69			
Other supplies	46.81	555.60	602.41			
Power	223.71	724.01	947.72			
Transportation	39.08	298.73	337.81			
Withholding taxes	-0-	-0-	-0-			
Compensation insurance	99.00	607.34	706.34			
Other insurance	-0-	-0-	-0-			
Contract work	-0-	-0-	-0-			
Other (specify) Soc. Sec.	16.19	54.93	71.12			
Nev. Unemployment	29.13	100.64	129.77			
Total	2111.56	8336.26	10447.82			
Totals previously reported	8336.26					
Totals to date	10447.82					

FOR GOVERNMENT USE ONLY

Checked by PW
Entered by
Approved by A. C. Johnson
Amount approved for payment $1055.78
Remarks

AUG 12 1952

Lloyd L. Norvell
Authorized Certifying Officer

[1] Enter total purchase price in month purchase is made.
[2] Payments for rental of equipment or prorated depreciation on equipment owned by contractor.

16—64068-1

PENNSYLVANIA MINE

JUNE REPORT

Progress was made in the drift on the 550 foot level with an 80 foot advance. The vein has softened a little and now only requires 12 holes to break a round. Copper sulfieds have appeared in the foot-wall of the vein for the last thirty feet.

DISTRIBUTION OF WAGES AND SALARIES FOR MONTH OF June 1952

Name of operator Pennsylvania Mine
Project No. DMA 356X
Total contract amount $25,792.22
Government participation percent 50%

Type	Number	Man-Shifts	Rate	Total
Miners	3	55	$13.00	$715.00
Muckers				
Trammers				
Timbermen				
Pumpmen				
Hoistmen	1	28	13.00	364.00
Surface				
Samplers				
Assayers				
Shift bosses				
Mechanics				
Electricians				
Blacksmiths				
Carpenters				
Drill runners				
Drill helpers				
Teamsters				
Manager				
Superintendent				
Engineers				
Geologists				
Bookkeeper				
Foreman				
Clerks				
Stenographers				
Other				
Total	3	83		1079.00

Note.—Show only that portion of supervisory, office, and engineering salaries that is chargeable to this project.

FOR GOVERNMENT USE ONLY

Checked by
Entered by
Approved by A. C. Johnson
Remarks

16—64068-1

EXPLORATION UNIT COST AND PROGRESS REPORT FOR MONTH OF June 1952

Name of operator Pennsylvania Mine
Project No. DMA 356X
Total contract amount $25,792.22
Government participation, percent 50%

Item	Costs					Progress				
	Wages [1] and salaries	Equipment [2]	Supplies	Other [3]	Total	Unit	Units this month	Units previously reported	Units to date	Units authorized by contract
Drifting	1079.00	503.78	320.57	208.21	2111.56	feet	80	111	191	600
Crosscutting										
Raising										100
Shafts										
Winzes										60
Drill holes										
Overburden										
Rehabilitation and preparation										
Geology and geophysics										
Trenching										
Sampling and assaying										
Roads and trails										
Test pits										
Other (specify)										
Totals	1079.00	503.78	320.57	208.21	2111.56	feet	80	111	191	

[1] Prorate supervisory, engineering, and office salaries in proportion to man-shifts of direct labor.
[2] Prorate charges for equipment that is not exclusively for one type of job (such as compressors) against authorized units of work in each category.
[3] Where entries in the "Other" column (above) are more than 25 percent of the total expenditures, a breakdown of this item should be made.

16—64068-1 U. S. GOVERNMENT PRINTING OFFICE

FOR GOVERNMENT USE ONLY

Checked by
Entered by
Approved by A. C. Johnson
Remarks

A. C. Johnson, Chief, Mining Div., Reg. III June 6, 1952

Russell R. Trengove, Mining Engineer, Bureau of Mines, Reg. III

Docket DMA-386X Pennsylvania Mine (copper) - Contract Idm-R212

This property was inspected on June 5, 1952.

#6509/#4

The drift to the north on the 550-level advanced 21 feet during month of May, making a total advance of 111 feet. No ore has been encountered to date. Measurements were made to the supposed fault (deep ravine) on surface, and the fault, if vertical, should be found about 240 feet ahead of the present face. If no mineralization is found, Frank Smith stated that he would like to drift south on the 550-level as originally approved by Frank Smith, part owner, Roscoe Smith of the U.S.G.S. and Russell R. Trengove of the Bureau of Mines.

The miners wage of $12.50 per 8-hour shift which was set up in the contract, is much too low to attract miners into this isolated area. As a result, 5 days were lost attempting to hire a miner and Frank Smith worked alone in the drift for 15 shifts. This accounts for the slow progress.

Russell R. Trengove

Russell R. Trengove.

MF-104
(April 1951)

SF-[redacted]

Budget Bureau No. 42-R1036.
Approval expires 6-30-51.

E 212

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS ADMINISTRATION

STRATEGIC AND CRITICAL MINERAL EXPLORATION PROGRAM
OPERATOR'S MONTHLY PROGRESS REPORT

Operators are to submit monthly reports to the designated field representative of the Defense Minerals Administration. Reports are to be submitted in quadruplicate prior to the 15th day of the month following the reporting period.

Narrative.—A concise narrative description of progress made, results accomplished, and any unusual difficulties encountered is to be furnished.

Maps.—Wherever possible, the narrative is to be illustrated with maps or sketches showing formations penetrated and location and assays of samples taken as well as advances in workings. In the case of diamond drilling or churn drilling, the location and inclination of holes is to be shown on a map; logs and assays also are to be submitted.

Cost Accounts.—All applicable parts of this form are to be filled in. This report will form the basis for payments of the Government's participating share of expenses. Audits of accounts will be made from time to time.

CERTIFICATION

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

Pennsylvania Mine
(Name of Company)

By Elmer F. Smith
(Signature of Authorized Official)

10 June 1952
(Date)

Partner
(Title)

NOTE.—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.

16—64068-1

MONTHLY SUMMARY COST STATEMENT

Name of operator Pennsylvania Mine
Project No. DMA 356X
Total contract amount $25,792.22
Government participation percent 50%

Distribution of Expenditures for Month of May 1952

Item	Monthly Total	Totals Previously Reported	Totals to Date	For Government Use Only: Approved Monthly Total	Approved Totals Previously Reported	Approved Totals to Date
Wages and salaries	740.00	2987.50	3727.50			
Equipment purchase [1]	-0-	623.40	623.40			
Equipment rental [2]	340.58	853.65	1194.23			
Buildings	-0-	-0-	-0-			
Explosives	-0-	187.00	187.00			
Repair parts	3.08	259.80	262.88			
Other supplies	22.55	533.05	555.60			
Power	131.91	592.10	724.01			
Transportation	22.74	275.99	298.73			
Withholding taxes	-0-	-0-	-0-			
Compensation insurance	75.90	531.44	607.34			
Other insurance	-0-	-0-	-0-			
Contract work	-0-	-0-	-0-			
Other (specif Soc. Sec.	10.10	44.83	54.93			
Nev. Unemployment	19.98	80.66	100.64			
	1366.84	6969.42	8336.26			
Total						
	6969.42					
Totals previously reported						
Totals to date	8336.26					

FOR GOVERNMENT USE ONLY

Checked by fh
Entered by
Approved by A. C. Johnson
Amount approved for payment $ 682.42
Remarks

AUG 12 1952

Lloyd L. Norvell
Authorized Certifying Officer

[1] Enter total purchase price in month purchase is made.
[2] Payments for rental of equipment or prorated depreciation on equipment owned by contractor.

16—64068-1

PENNSYLVANIA MINE

May Report

Progress was made in the drift on the 550 feet level although the expected footage was not obtained because of the loss of one man and the inability to obtain a replacement at $12.50 per day rate. A man was finally hired for $13.00 per day. (With the mines in the Pioche area paying the equivalent of $15.00 per day it is very hard to get men to work in an isolated area for less.)

The vein continues to be hard, showing signs of mineralization, and is requiring 20 holes to break a round.

DISTRIBUTION OF WAGES AND SALARIES FOR MONTH OF May 1952

Name of operator Pennsylvania Mine
Project No. DMA 356X
Total contract amount $25,792.22
Government participation percent 50%

Type	Number	Man-Shifts	Rate	Total
		5	13.00	65.00
Miners	2	28	$ 12.50	$ 350.00
Muckers				
Trammers				
Timbermen				
Pumpmen				
Hoistmen	1	26	12.50	325.00
Surface				
Samplers				
Assayers				
Shift bosses				
Mechanics				
Electricians				
Blacksmiths				
Carpenters				
Drill runners				
Drill helpers				
Teamsters				
Manager				
Superintendent				
Engineers				
Geologists				
Bookkeeper				
Foreman				
Clerks				
Stenographers				
Other				
Total	3	59		740.00

Note.—Show only that portion of supervisory, office, and engineering salaries that is chargeable to this project.

FOR GOVERNMENT USE ONLY

Checked by
Entered by
Approved by A. C. Johnson
Remarks

16—64068-1

EXPLORATION UNIT COST AND PROGRESS REPORT FOR MONTH OF May 1952

Name of operator: Pennsylvania Mine
Project No. DMA: 356X
Total contract amount: $25,792.22
Government participation, percent: 50%

Item	Costs					Progress				
	Wages [1] and salaries	Equipment [2]	Supplies	Other [3]	Total	Unit	Units this month	Units previously reported	Units to date	Units authorized by contract
Drifting	740.00	340.58	157.54	128.72	1366.84	feet	21	90	111	600
Crosscutting										
Raising										100
Shafts										
Winzes										60
Drill holes										100
Overburden										
Rehabilitation and preparation										
Geology and geophysics										
Trenching										
Sampling and assaying										
Roads and trails										
Test pits										
Other (specify)										
Totals	740.00	340.58	157.54	128.72	1366.84	feet	21	90	111	

[1] Prorate supervisory, engineering, and office salaries in proportion to man-shifts of direct labor.
[2] Prorate charges for equipment that is not exclusively for one type of job (such as compressors) against authorized units of work in each category.
[3] Where entries in the "Other" column (above) are more than 25 percent of the total expenditures, a breakdown of this item should be made.

16—64068-1 U. S. GOVERNMENT PRINTING OFFICE

FOR GOVERNMENT USE ONLY

Checked by
Entered by
Approved by A. C. Johnson
Remarks

A. C. Johnson, Chief, Mining Division, Reg. III May 5, 1952

Russell R. Trengove, Mining Engineer, Bureau of Mines, Reg. III

Docket DMA-356X - Contract Idm-E212, Pennsylvania Mine

This property was included in my itinerary on this inspection trip but met the operator of the Pennsylvania mine, Frank Smith in Ely. He advised me that the mine crew were not at the mine and also of the difficulty in making the several river crossings enroute to the mine.

Mr. Smith gave me the following information on the progress since my last visit January 11, 1952: Project work was done intermittently during the severe winter and several weeks were lost.

Work was resumed April 9, and the 550-level drift north advanced 40 feet since my last visit January 11, making a total advance of 90 feet. No ore has been encountered.

Russell R. Trengove

Russell R. Trengove

SF- Dm ca. 26

MF-104
(April 1951)

Budget Bureau No. 42-R1036.
Approval expires 6-30-51.

E 212

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS ADMINISTRATION

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
MAY 26 1952

STRATEGIC AND CRITICAL MINERAL EXPLORATION PROGRAM
OPERATOR'S MONTHLY PROGRESS REPORT

Operators are to submit monthly reports to the designated field representative of the Defense Minerals Administration. Reports are to be submitted in quadruplicate prior to the 15th day of the month following the reporting period.

Narrative.—A concise narrative description of progress made, results accomplished, and any unusual difficulties encountered is to be furnished.

Maps.—Wherever possible, the narrative is to be illustrated with maps or sketches showing formations penetrated and location and assays of samples taken as well as advances in workings. In the case of diamond drilling or churn drilling, the location and inclination of holes is to be shown on a map; logs and assays also are to be submitted.

Cost Accounts.—All applicable parts of this form are to be filled in. This report will form the basis for payments of the Government's participating share of expenses. Audits of accounts will be made from time to time.

CERTIFICATION

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

Pennsylvania Mine
(Name of Company)

By Elmer F. Smith
(Signature of Authorized Official)

6 May 1952
(Date)

Partner
(Title)

NOTE.—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.

16—64068-1

MONTHLY SUMMARY COST STATEMENT

Name of operator Pennsylvania Mine
Project No. DMA 356-X
Total contract amount $25,792.22
Government participation percent 50%

Distribution of Expenditures for Month of April 1952

Item	Monthly Total	Totals Previously Reported	Totals to Date	For Government Use Only: Approved Monthly Total	Approved Totals Previously Reported	Approved Totals to Date
Wages and salaries	650.00	2337.50	2987.50			
Equipment purchase [1]	-0-	623.40	623.40			
Equipment rental [2]	226.00	627.65	853.65			
Buildings	-0-	-0-	-0-			
Explosives	-0-	187.00	187.00			
Repair parts	-0-	259.80	259.80			
Other supplies	-0-	533.05	533.05			
Power	176.55	415.55	592.10			
Transportation	-0-	275.99	275.99			
Withholding taxes	-0-	-0-	-0-			
Compensation insurance	71.50	459.94	531.44			
Other insurance	-0-	-0-	-0-			
Contract work	-0-	-0-	-0-			
Other (specify) Soc. Sec.	9.75	35.08	44.83			
Nev. Unemployment	17.55	63.11	80.66			
Total	1151.35	5818.07	6969.42			
Totals previously reported	5818.07					
Totals to date	6969.42					

FOR GOVERNMENT USE ONLY

Checked by fh
Entered by
Approved by A. C. Johnson
Amount approved for payment $575.68
Remarks

MAY 19 1952

Author for Contracting Officer

[1] Enter total purchase price in month purchase is made.
[2] Payments for rental of equipment or prorated depreciation on equipment owned by contractor.

16—64068-1

Pennsylvania Mine

April Report

Work was resumed at the Pennsylvania Mine in April, and an advance of 40 feet was made in the drift on the 550 foot level. At the present time it is taking 22 holes to break a round. This same hard formation was encountered when sinking the north shaft between the 350 foot level and the 470 foot level.

DISTRIBUTION OF WAGES AND SALARIES FOR MONTH OF April 1952

Name of operator Pennsylvania Mine
Project No. DMA 356 X
Total contract amount $25,792.22
Government participation percent 50%

Type	Number	Man-Shifts	Rate	Total
Miners	2	38	$ 12.50	$ 475.00
Muckers				
Trammers				
Timbermen				
Pumpmen				
Hoistmen	1.	14	12.50	175.00
Surface				
Samplers				
Assayers				
Shift bosses				
Mechanics				
Electricians				
Blacksmiths				
Carpenters				
Drill runners				
Drill helpers				
Teamsters				
Manager				
Superintendent				
Engineers				
Geologists				
Bookkeeper				
Foreman				
Clerks				
Stenographers				
Other				
Total	3	52		650.00

Note.—Show only that portion of supervisory, office, and engineering salaries that is chargeable to this project.

FOR GOVERNMENT USE ONLY

Checked by
Entered by
Approved by A. C. Johnson
Remarks

16—64068-1

EXPLORATION UNIT COST AND PROGRESS REPORT FOR MONTH OF April 1952

Name of operator Pennsylvania Mine
Project No. DMA 356 X
Total contract amount $25,792.22
Government participation, percent 50%

Item	Costs					Progress				
	Wages [1] and salaries	Equipment [2]	Supplies	Other [3]	Total	Unit	Units this month	Units previously reported	Units to date	Units authorized by contract
Drifting	650.00	226.00	176.55	98.80	1151.35	feet	40	50	90	600
Crosscutting										
Raising										100
Shafts										
Winzes										60
Drill holes										
Overburden										
Rehabilitation and preparation										
Geology and geophysics										
Trenching										
Sampling and assaying										
Roads and trails										
Test pits										
Other (specify)										
Totals	650.00	226.00	176.55	98.80	1151.35	feet	40	50	90	

[1] Prorate supervisory, engineering, and office salaries in proportion to man-shifts of direct labor.
[2] Prorate charges for equipment that is not exclusively for one type of job (such as compressors) against authorized units of work in each category.
[3] Where entries in the "Other" column (above) are more than 25 percent of the total expenditures, a breakdown of this item should be made.

16—64068-1 U. S. GOVERNMENT PRINTING OFFICE

FOR GOVERNMENT USE ONLY

Checked by
Entered by
Approved by A. C. Johnson
Remarks

SF-Omea.26

MF-104
(April 1951)

Budget Bureau No. 42-R1036.
Approval expires 6-30-51.

E 212

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS ADMINISTRATION

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
MAY 26 1952

STRATEGIC AND CRITICAL MINERAL EXPLORATION PROGRAM
OPERATOR'S MONTHLY PROGRESS REPORT

Operators are to submit monthly reports to the designated field representative of the Defense Minerals Administration. Reports are to be submitted in quadruplicate prior to the 15th day of the month following the reporting period.

Narrative.—A concise narrative description of progress made, results accomplished, and any unusual difficulties encountered is to be furnished.

Maps.—Wherever possible, the narrative is to be illustrated with maps or sketches showing formations penetrated and location and assays of samples taken as well as advances in workings. In the case of diamond drilling or churn drilling, the location and inclination of holes is to be shown on a map; logs and assays also are to be submitted.

Cost Accounts.—All applicable parts of this form are to be filled in. This report will form the basis for payments of the Government's participating share of expenses. Audits of accounts will be made from time to time.

CERTIFICATION

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

Pennsylvania Mine
(Name of Company)

By Elmer F. Smith
(Signature of Authorized Official)

11 April 1952
(Date)

Partner
(Title)

NOTE.—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.

16—64068-1

MONTHLY SUMMARY COST STATEMENT

Name of operator Pennsylvania Mine
Project No. DMA 356X
Total contract amount $25,792.22
Government participation percent 50%

Distribution of Expenditures for Month of March 1952

Item	Monthly Total	Totals Previously Reported	Totals to Date	For Government Use Only: Approved Monthly Total	Approved Totals Previously Reported	Approved Totals to Date
Wages and salaries	262.50	2075.00	2337.50			
Equipment purchase [1]	-0-	623.40	623.40			
Equipment rental [2]	51.62	576.03	627.65			
Buildings	-0-	-0-	-0-			
Explosives	-0-	187.00	187.00			
Repair parts	116.70	144.10	259.80			
Other supplies	17.85	515.20	533.05			
Power	30.14	385.41	415.55			
Transportation	127.15	148.84	275.99			
Withholding taxes	-0-	-0-	-0-			
Compensation insurance	28.88	431.06	459.94			
Other insurance	-0-	-0-	-0-			
Contract work	-0-	-0-	-0-			
Other (specify) Employer Sec Sec	3.94	31.14	35.08			
Nev. Unemployment	7.08	56.03	63.11			
Total	644.86	5173.21	5818.07			
Totals previously reported	5173.21					
Totals to date	5818.07					

FOR GOVERNMENT USE ONLY

Checked by Ph
Entered by
Approved by A. C. Johnson
Amount approved for payment 322.43
Remarks

MAY 19 1952

~~*Approved only in the amount of $322.43~~

[1] Enter total purchase price in month purchase is made.
[2] Payments for rental of equipment or prorated depreciation on equipment owned by contractor.

16—64068-1

Floyd L. Norrell
Authorized Signature

PENNSYLVANIA MINE

March report

Severe weather continued to hamper operations at the Pennsylvania Mine in March. The heavy snowfall kept the camp snowbound for seven days, and as a result it was decided to close the mine until better working conditions prevailed. The heavy runn-off from the snows in the Meadow Valley Wash has prevented travel between Caliente and the mine for the past month. It is believed that work can be resumed at the mine on or about 9 April.

DISTRIBUTION OF WAGES AND SALARIES FOR MONTH OF March 1952

Name of operator Pennsylvania Mine
Project No. DMA 356X
Total contract amount $25,792.22
Government participation percent 50%

Type	Number	Man-Shifts	Rate	Total
Miners	2	14	$ 12.50	$ 175.00
Muckers				
Trammers				
Timbermen				
Pumpmen				
Hoistmen	1	7	12.50	87.50
Surface				
Samplers				
Assayers				
Shift bosses				
Mechanics				
Electricians				
Blacksmiths				
Carpenters				
Drill runners				
Drill helpers				
Teamsters				
Manager				
Superintendent				
Engineers				
Geologists				
Bookkeeper				
Foreman				
Clerks				
Stenographers				
Other				
Total	3	21		$262.50

Note.—Show only that portion of supervisory, office, and engineering salaries that is chargeable to this project.

FOR GOVERNMENT USE ONLY

Checked by
Entered by
* Approved by R. A. Johnson
Remarks

~~*Approved only in the amount of $398.25~~

16—64068-1

EXPLORATION UNIT COST AND PROGRESS REPORT FOR MONTH OF March 1952

Name of operator Pennsylvania Mine
Project No. DMA 356X
Total contract amount $25,792.22
Government participation, percent 50%

Item	Costs					Progress				
	Wages [1] and salaries	Equipment [2]	Supplies	Other [3]	Total	Unit	Units this month	Units previously reported	Units to date	Units authorized by contract
Drifting			47.99			feet	-0-	50	50	600
Crosscutting										
Raising										100
Shafts										
Winzes										60
Drill holes										
Overburden										
Rehabilitation and preparation										
Geology and geophysics										
Trenching										
Sampling and assaying										
Roads and trails	75.00	10.00		11.40						
Test pits										
Other (specify) Snowbound	112.50	31.62		134.25						
Compressor repair	75.00	10.00	115.70	11.40						
Totals	262.50	51.62	163.69	157.05		feet	-0-	50	50	

[1] Prorate supervisory, engineering, and office salaries in proportion to man-shifts of direct labor.
[2] Prorate charges for equipment that is not exclusively for one type of job (such as compressors) against authorized units of work in each category.
[3] Where entries in the "Other" column (above) are more than 25 percent of the total expenditures, a breakdown of this item should be made.

16—64068-1 U. S. GOVERNMENT PRINTING OFFICE

FOR GOVERNMENT USE ONLY

Checked by
Entered by
Approved by A. C. Johnson
Remarks

~~Approved only in the amount of $[illegible].25~~

SF. Dmea-20

MF-104
(April 1951)

Budget Bureau No. 42-R1036.
Approval expires 6-30-51.

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS ADMINISTRATION

E 212

STRATEGIC AND CRITICAL MINERAL EXPLORATION PROGRAM
OPERATOR'S MONTHLY PROGRESS REPORT

Operators are to submit monthly reports to the designated field representative of the Defense Minerals Administration. Reports are to be submitted in quadruplicate prior to the 15th day of the month following the reporting period.

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
MAR 31 1952

Narrative.—A concise narrative description of progress made, results accomplished, and any unusual difficulties encountered is to be furnished.

Maps.—Wherever possible, the narrative is to be illustrated with maps or sketches showing formations penetrated and location and assays of samples taken as well as advances in workings. In the case of diamond drilling or churn drilling, the location and inclination of holes is to be shown on a map; logs and assays also are to be submitted.

Cost Accounts.—All applicable parts of this form are to be filled in. This report will form the basis for payments of the Government's participating share of expenses. Audits of accounts will be made from time to time.

ACCOUNTS MAR 13 1952

CERTIFICATION

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

Pennsylvania Mine
(Name of Company)

By Elmer F. Smith
(Signature of Authorized Official)

8 March 1952
(Date)

Partner
(Title)

NOTE.—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.

16—64068-1

MONTHLY SUMMARY COST STATEMENT

Name of operator ---Pennsylvania Mine---
Project No. DMA ---356 X---
Total contract amount ---$25,792.22---
Government participation percent ---50%---

Distribution of Expenditures for Month of ---February 1952---

Item	Monthly Total	Totals Previously Reported	Totals to Date	For Government Use Only: Approved Monthly Total	Approved Totals Previously Reported	Approved Totals to Date
Wages and salaries	700.00	1375.00	2075.00			
Equipment purchase [1]	163.20	460.20	623.40			
Equipment rental [2]	66.66	509.37	576.03			
Buildings	-0-	-0-	-0-			
Explosives	-0-	187.00	187.00			
Repair parts	144.10	-0-	144.10			
Other supplies	65.37	451.83	515.20			
Power	208.78	176.63	385.41			
Transportation	50.67	98.17	148.84			
Withholding taxes	-0-	-0-	-0-			
Compensation insurance	77.00	354.06	431.06			
Other insurance	-0-	-0-	-0-			
Contract work	-0-	-0-	-0-			
Other (specify) Employer Social Sec.	10.51	20.63	31.14			
Nev. Unemployment	18.90	37.13	56.03			
Total	1503.19	3670.02	5173.21			
Totals previously reported	3670.02					
Totals to date	5173.21					

FOR GOVERNMENT USE ONLY

Checked by Ph
Entered by
Approved by A. C. Johnson
Amount approved for payment $751.00
Remarks

MAR 24 1952

Lloyd L. Nervell
Authorized Certifying Officer

[1] Enter total purchase price in month purchase is made.
[2] Payments for rental of equipment or prorated depreciation on equipment owned by contractor.

16—64068-1

February Report

The severe weather continued to hamper operations at the Pennsylvania Mine in February, and as a result only 18 working days were spent at the mine, as follows:

1. two days laying track and pipe and resetting slusher on the 550 foot level

2. 8 days repairing roads

3. 8 days repairing compressor that failed internally

4. one man two days taking compressor parts to Salt Lake City for repair

DISTRIBUTION OF WAGES AND SALARIES FOR MONTH OF February 1952

Name of operator Pennsylvania Mine
Project No. DMA 356 X
Total contract amount $26,792.22
Government participation percent 50%

Type	Number	Man-Shifts	Rate	Total
Miners	2	38	$ 12.50	$ 475.00
Muckers				
Trammers				
Timbermen				
Pumpmen				
Hoistmen	1	18	12.50	225.00
Surface				
Samplers				
Assayers				
Shift bosses				
Mechanics				
Electricians				
Blacksmiths				
Carpenters				
Drill runners				
Drill helpers				
Teamsters				
Manager				
Superintendent				
Engineers				
Geologists				
Bookkeeper				
Foreman				
Clerks				
Stenographers				
Other				
Total	3	56		$700.00

Note.—Show only that portion of supervisory, office, and engineering salaries that is chargeable to this project.

FOR GOVERNMENT USE ONLY

Checked by
Entered by
Approved by R. C. Johnson
Remarks

16—64068-1

EXPLORATION UNIT COST AND PROGRESS REPORT FOR MONTH OF February 1952

Name of operator Pennsylvania Mine
Project No. DMA 356 X
Total contract amount $25,792.22
Government participation, percent 50%

Item	Costs					Progress				
	Wages [1] and salaries	Equipment [2]	Supplies	Other [3]	Total	Unit	Units this month	Units previously reported	Units to date	Units authorized by contract
	10.7%	10.2%	68.2%	7.2%	22.5%					
Drifting	75.00	7.32	395.35	11.42	489.09	feet	-0-	50	50	600
Crosscutting										
Raising										100
Shafts										
Winzes										60
Drill holes										
Overburden										
Rehabilitation and preparation										
Geology and geophysics										
Trenching										
Sampling and assaying	12.8%	4.2%	6.9%	36.8%	28.3%					
Roads and trails	300.00	29.28	40.00	56.27	425.55					
Test pits	46.4%	45.1%	24.8%	56.9%	39.1%					
Other (specify) Compressor repair	325.00	30.06	144.10	89.39	588.55					
Totals	700.00	66.66	579.45	157.08	1503.19	feet	-0-	50	50	

[1] Prorate supervisory, engineering, and office salaries in proportion to man-shifts of direct labor.
[2] Prorate charges for equipment that is not exclusively for one type of job (such as compressors) against authorized units of work in each category.
[3] Where entries in the "Other" column (above) are more than 25 percent of the total expenditures, a breakdown of this item should be made.

16—64068-1 U. S. GOVERNMENT PRINTING OFFICE

FOR GOVERNMENT USE ONLY

Checked by
Entered by
Approved by A. C. Johnson
Remarks

SF-DMCA-18

MF-104
(April 1951)

Budget Bureau No. 42-R1036.
Approval expires 6-30-51.

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS ADMINISTRATION

E 212

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
MAR 3 - 1952

STRATEGIC AND CRITICAL MINERAL EXPLORATION PROGRAM
OPERATOR'S MONTHLY PROGRESS REPORT

Operators are to submit monthly reports to the designated field representative of the Defense Minerals Administration. Reports are to be submitted in quadruplicate prior to the 15th day of the month following the reporting period.

Narrative.—A concise narrative description of progress made, results accomplished, and any unusual difficulties encountered is to be furnished.

Maps.—Wherever possible, the narrative is to be illustrated with maps or sketches showing formations penetrated and location and assays of samples taken as well as advances in workings. In the case of diamond drilling or churn drilling, the location and inclination of holes is to be shown on a map; logs and assays also are to be submitted.

Cost Accounts.—All applicable parts of this form are to be filled in. This report will form the basis for payments of the Government's participating share of expenses. Audits of accounts will be made from time to time.

CERTIFICATION

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

Pennsylvania Mine
(Name of Company)

By Elmer F. Smith
(Signature of Authorized Official)

8 February 1952
(Date)

Partner
(Title)

NOTE.—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.

16—64068-1

MONTHLY SUMMARY COST STATEMENT

Name of operator Pennsylvania Mine
Project No. DMA 356X
Total contract amount $25,792.22
Government participation percent 50%

Distribution of Expenditures for Month of January 1952

Item	Monthly Total	Totals Previously Reported	Totals to Date	For Government Use Only: Approved Monthly Total	Approved Totals Previously Reported	Approved Totals to Date
Wages and salaries	418.75	956.25	1375.00			
Equipment purchase [1]	213.20	247.00	460.20			
Equipment rental [2]	169.79*	339.58	509.37			
Buildings						
Explosives	187.00		187.00			
Repair parts						
Other supplies	87.52	364.31	451.83			
Power	176.63**		176.63			
Transportation	15.29	82.88	98.17			
Withholding taxes						
Compensation insurance	46.06	308.00	354.06			
Other insurance						
Contract work						
Other (specify) Employer Soc. Sec.	6.28	14.35	20.63			
Other (specify) Nev. Unemployment	11.51	25.82	37.13			
Total	1331.83	2338.19	3670.02			
Totals previously reported	2338.19	2338.19	2338.19			
Totals to date	3670.02	2338.19	3670.02			

* ½ of monthly rental
** engine fuel will be listed as power

Floyd R. Norrell

665.72

FOR GOVERNMENT USE ONLY

Checked by
Entered by
Approved by A. C. Johnson
Amount approved for payment
Remarks

[1] Enter total purchase price in month purchase is made.
[2] Payments for rental of equipment or prorated depreciation on equipment owned by contractor.

16—64068-1

Pennsylvania Mine January report

We were compelled to stop operations at the Pennsylvania Mine after working 11 days in January because of severe weather and excessive snowfall. During the time of operation an advance of 35 feet was made in the North drift on the 550 foot level.

We expect to be able to resume operation at the mine early in February.

DISTRIBUTION OF WAGES AND SALARIES FOR MONTH OF January 1952

Name of operator Pennsylvania Mine
Project No. DMR 56 X
Total contract amount $25,792.22
Government participation percent 50%

Type	Number	Man-Shifts	Rate	Total
Miners	2	22	12.50	275.00
Muckers				
Trammers				
Timbermen				
Pumpmen				
Hoistmen	1	11.5	12.50	143.75
Surface				
Samplers				
Assayers				
Shift bosses				
Mechanics				
Electricians				
Blacksmiths				
Carpenters				
Drill runners				
Drill helpers				
Teamsters				
Manager				
Superintendent				
Engineers				
Geologists				
Bookkeeper				
Foreman				
Clerks				
Stenographers				
Other				
Total	3	33.5		418.75

Note.—Show only that portion of supervisory, office, and engineering salaries that is chargeable to this project.

FOR GOVERNMENT USE ONLY

Checked by
Entered by
Approved by A. C. Johnson
Remarks

16—64068-1

EXPLORATION UNIT COST AND PROGRESS REPORT FOR MONTH OF January 1952

Name of operator Pennsylvania Mine
Project No. DMA 356 X
Total contract amount $25,792.22
Government participation, percent 50%

Item	Costs					Progress				
	Wages [1] and salaries	Equipment [2]	Supplies	Other [3]	Total	Unit	Units this month	Units previously reported	Units to date	Units authorized by contract
Drifting	418.75	382.99	274.52	255.57	1331.83	feet	35	15	50	600
Crosscutting										
Raising										100
Shafts										
Winzes										60
Drill holes										
Overburden										
Rehabilitation and preparation										
Geology and geophysics										
Trenching										
Sampling and assaying										
Roads and trails										
Test pits										
Other (specify)										
Totals	418.75	382.99	274.52	255.57	1331.83	feet	35	15	50	

[1] Prorate supervisory, engineering, and office salaries in proportion to man-shifts of direct labor.
[2] Prorate charges for equipment that is not exclusively for one type of job (such as compressors) against authorized units of work in each category.
[3] Where entries in the "Other" column (above) are more than 25 percent of the total expenditures, a breakdown of this item should be made.

16—64068-1 U. S. GOVERNMENT PRINTING OFFICE

FOR GOVERNMENT USE ONLY

Checked by
Entered by
Approved by A. C. Johnson
Remarks

SF- [redacted] 8

MF-104
(April 1951)

Budget Bureau No. 42-R1036.
Approval expires 6-30-51.

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS ADMINISTRATION

E 212

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
MAR 3 - 1952

STRATEGIC AND CRITICAL MINERAL EXPLORATION PROGRAM
OPERATOR'S MONTHLY PROGRESS REPORT

Operators are to submit monthly reports to the designated field representative of the Defense Minerals Administration. Reports are to be submitted in quadruplicate prior to the 15th day of the month following the reporting period.

Narrative.—A concise narrative description of progress made, results accomplished, and any unusual difficulties encountered is to be furnished.

Maps.—Wherever possible, the narrative is to be illustrated with maps or sketches showing formations penetrated and location and assays of samples taken as well as advances in workings. In the case of diamond drilling or churn drilling, the location and inclination of holes is to be shown on a map; logs and assays also are to be submitted.

Cost Accounts.—All applicable parts of this form are to be filled in. This report will form the basis for payments of the Government's participating share of expenses. Audits of accounts will be made from time to time.

CERTIFICATION

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

Pennsylvania Mine (Name of Company) By Elmer F. Smith (Signature of Authorized Official)

22 January 1952 (Date) Partner (Title)

NOTE.—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.

16—6406

MONTHLY SUMMARY COST STATEMENT

Name of operator Pennsylvania Mine
Project No. DMA 356X
Total contract amount $26,792.22
Government participation percent 50%

Distribution of Expenditures for Month of December 1951

Item	Monthly Total	Totals Previously Reported	Totals to Date	For Government Use Only: Approved Monthly Total	Approved Totals Previously Reported	Approved Totals to Date
Wages and salaries	956.25		956.25			
Equipment purchase [1]	247.00		247.00			
Equipment rental [2]	339.58		339.58			
Buildings						
Explosives						
Repair parts						
Other supplies	364.31		364.31			
Power	82.88		82.88			
Transportation						
Withholding taxes	308.00		308.00			
Compensation insurance						
Other insurance						
Contract work						
Other (specify) Employer Social Sec.	14.35		14.35			
Nevada Unemployment	25.82		25.82			
Total	2338.19		2338.19			
Totals previously reported						
Totals to date	2338.19		2338.19			

* $100.00 slusher rental
239.58 depreciation on equip.
$339.58

FEB 27 1952

FOR GOVERNMENT USE ONLY

Checked by fh
Entered by
Approved by A. C. Johnson
Amount approved for payment $ 1169.10
Remarks

Lloyd L. Norvell
Authorized Certifying Officer

[1] Enter total purchase price in month purchase is made.
[2] Payments for rental of equipment or prorated depreciation on equipment owned by contractor.

16—64068-1

Rehabilitation and preparation for operations under DMA 356X were started at the Pennsylvania Mine on 3 December 1951. Due to the severe weather of the past month work at the mine has been carried on under adverse operating conditions. The following is a report of the work accomplished:

1. After the water was pumped out of the shaft it was discovered that the bottom thirty feet of the shaft had caved in. It is believed that the cost of retimbering this area at the present time would be prohibitive with the limited amount of money available for this project. Request has been made of the Bureau of Mines to amend the contract to permit drifting to the north on the 550 foot level.

2. Three days were spent rebuilding the road from Elgin to the mine.

3. Twenty days were spent reconditioning the shaft, trucking in supplies, cutting timber and miscelleanous work around the camp.

4. Three days of drifting were done on the 550 foot level for an advance of 15 feet.

DISTRIBUTION OF WAGES AND SALARIES FOR MONTH OF December 1951

Name of operator Pennsylvania Mine
Project No. DMA 356X
Total contract amount $25,792.22
Government participation percent 50%

Type	Number	Man-Shifts	Rate	Total
	2	52	12.50	650.00
Miners			$	$
Muckers				
Trammers				
Timbermen				
Pumpmen	1	24.5	12.50	306.25
Hoistmen				
Surface				
Samplers				
Assayers				
Shift bosses				
Mechanics				
Electricians				
Blacksmiths				
Carpenters				
Drill runners				
Drill helpers				
Teamsters				
Manager				
Superintendent				
Engineers				
Geologists				
Bookkeeper				
Foreman				
Clerks				
Stenographers				
Other	3	76.5		$956.25
Total				

Note.—Show only that portion of supervisory, office, and engineering salaries that is chargeable to this project.

FOR GOVERNMENT USE ONLY

Checked by
Entered by
Approved by A. C. Johnson
Remarks

16—64068-1

EXPLORATION UNIT COST AND PROGRESS REPORT FOR MONTH OF December 1951

Name of operator Pennsylvania Mine
Project No. DMA 356X
Total contract amount $25,792.22
Government participation, percent 50%

Item	Costs					Progress				
	Wages [1] and salaries	Equipment [2]	Supplies	Other [3]	Total	Unit	Units this month	Units previously reported	Units to date	Units authorized by contract
	11.76%	11.58%	11.58%	11.58%	11.63%					
Drifting	112.50	67.65	42.03	49.65	271.83	feet	15	none	15	600
Crosscutting										
Raising										100
Shafts										50
Winzes										
Drill holes										
Overburden	76.24%	76.94%	76.94%	76.96%	76.94%					
Rehabilitation and preparation	731.25	451.28	280.25	331.75	1794.53					
Geology and geophysics										
Trenching										
Sampling and assaying	11.76%	11.58%	11.58%	11.58%	11.63%					
Roads and trails	112.50	67.65	42.03	49.65	271.83					
Test pits										
Other (specify)										
Totals	956.25	586.58	364.31	431.05	2338.19	feet	15	none	15	

[1] Prorate supervisory, engineering, and office salaries in proportion to man-shifts of direct labor.
[2] Prorate charges for equipment that is not exclusively for one type of job (such as compressors) against authorized units of work in each category.
[3] Where entries in the "Other" column (above) are more than 25 percent of the total expenditures, a breakdown of this item should be made.

16—64068-1 U. S. GOVERNMENT PRINTING OFFICE

FOR GOVERNMENT USE ONLY

Checked by
Entered by
Approved by A. C. Johnson
Remarks

A. G. Johnson, Chief, Mining Div., Reg. III January 16, 1952

Russell R. Trengove, Mining Engineer, Bureau of Mines, Reg. III

Docket DMA-356X - Contract Idm-8212
Pennsylvania Mine

This property was visited January 11, 1952 by Roscoe H. Smith and John Powers of the U. S. Geological Survey, Salt Lake City, Utah and Fred Muller and Russell R. Trengove of the U. S. Bureau of Mines, Reno, Nev.

Three men are employed. Frank L. Smith, one of the partners, and another man are working as miners and a cousin of Frank L. Smith is the hoisting engineer.

Work was started on December 3, 1951. After some road work and rehabilitation of camp and mine, work was started on unwatering of the shaft.

Mr. Elmer F. Smith, 2730 Ordway St., N. W., Washington 8, D.C., advised me by telephone from Washington, D. C. on December 20, 1951, that when the water was removed from the bottom of the shaft, the last 30 feet of shaft was found to be badly caved (6 feet on both sides of the shaft). He requested permission to abandon the plan of sinking the shaft to the 650 level and suggested driving an exploration drift north on the 550 level, rather than the 650 level. He was advised that this office would recommend his proposal to the DMEA field team for their approval.

Rather than remain idle while waiting for the contract to be amended, work was started drifting north on the 550 level and the drift advanced 35 feet by January 11, 1952. No ore was encountered.

Mr. Frank L. Smith advised me that all paper work in regard to the contract will be handled by Mr. Elmer F. Smith, 2730 Ordway St., N.W., Washington 8, D.C. He agreed to do the drifting only. They work twelve successive days, then lay off two days to get in supplies and mail.

Russell R. Trengove

Russell R. Trengove

A. C. Johnson, Chief, Mining Div., Reg. III January 16, 1952

Russell R. Trengove, Mining Engineer, Bureau of Mines, Reg. III

Docket DMA-356X - Contract Idm-8212
Pennsylvania Mine

Equipment Being Used	Market Value	Depreciation per month
1 - 315 c.f.m. Sullivan Diesel compressor	$ 6,000	$100.00
1 - D.A. 35 I.R. drifter drill with accessories	1,200	20.00
1 - J.R. 35 I.R. jackhammer " "	650	10.83
1 - Hoist, 15 horsepower, gasoline driven	850	14.17
1 - 5-horsepower, 8" diam., Buffalo blower fan and gasoline driven engine	300	5.00
600 feet of 8" diam. vent tube	500	8.33
1 - 10-horsepower electric generating plant - gasoline engine driven (camp)	400	6.67
1 - Worthington PNEU. pump, 50 g.p.m., 200 ft. head capacity	200	3.33
1 - Fairbanks-Morse electric driven pump 50 g.p.m., 100 foot head capacity (camp)	75	1.25
1 - Chevrolet pick-up truck	2,000	33.33
1 - Army type, 4 x 4 Chevrolet truck w/winch	1,500	25.00
2 - 16 cu. ft. mine cars; 1 underground, 1 surface	250	4.17
1 - 20 cu. ft. capacity mine skip	250	4.17
1 - 5-horsepower PNEU. motor for air blower	50	.83
	$14,225	$237.08

Being rented

1 - Slusher mucker @ $100/month.

Purchased

700 feet 2" diam. B.I. pipe @ $0.30/ft.	$ 210
1 - Flamo stove	325
5,000 Throw away drill bits @ $0.20 ea.	600
	$1,135

Russell R. Trengove

Russell R. Trengove

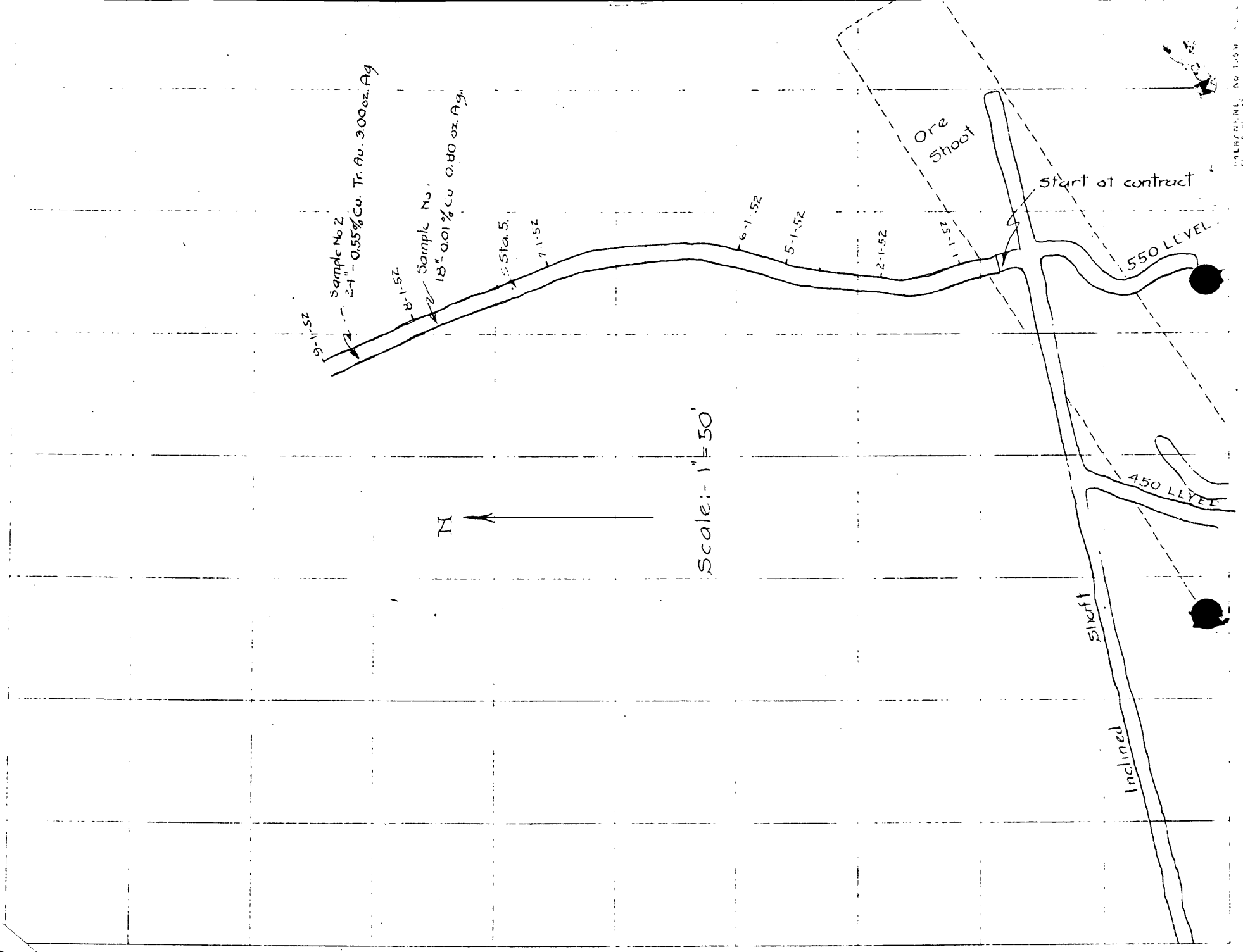


FIG. 1. PROGRESS MAP CONTRACT Idm-212 PENNSYLVANIA COPPER, LINCOLN CO. NEV.

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

PROJECT SUMMARY REPORT

By: F. M. Murphy January 21, 1955

1. Docket No. DMEA-356 (Copper)
Contract No. Idma-E212
Property: Pennsylvania Mine
Lincoln County, Nevada

Consisting of Hope Lode claim, known as Pennsylvania Mine, located 7 miles east of Elgin, in the Pennsylvanian Mining District.

Operators: Partnership: E. F. Smith, F. L. Smith, R. L. Smith, and S. L. Lee; named Pennsylvania Mine.

Operators' Property Rights: Lessee - Lt. Colonel Elmer F. Smith, USAF, Attorney-in-fact, 2730 Ordway St. N.W. Washington 8, D. C.
Landlord's Subordination Agreements signed by:
J. F. Smith, September 5, 1951;
E. E. Smith, October 25, 1951;
F. L. Smith, October 20, 1951;
C. P. Smith, October 25, 1951; and
H. F. Smith, November 1, 1951.

2. Contract dated November 15, 1951 - to Complete - 270 days.

Work Authorized

Conditioning North shaft for sinking operations	$ 500.00
Sinking North shaft 50 feet @ $35.00/ft.	1,750.00
Drifting North 600 feet on 650 level vein	12,000.00
Raising from 650 level on vein 100 feet @ $20.00/ft	2,000.00
Equipment (rental)	800.00
Equipment (depreciation)	2,156.22
Equipment (Purchase)	2,586.00
Gasoline, oil, repairs, transportation, engineering, analyses, office expense	$ 4,000.00
Total estimated cost	$25,792.22
Government's participation 50%	$12,896.11

Amendments

No. 1 Dated January 31, 1952

Allows work on 550 instead of 650 level, permits sinking instead of raising, same total cost.

No. 2 September 3, 1952

Extends completion date to a total of 370 days.

No. 3 Dated March 10, 1953

Discontinues north drift and allows remaining funds to be used drifting south, and extended completion date to May 1, 1953.

Work Completed

Reconditioned North shaft to 550 level
Drifted north from shaft on 550 level, 528 feet
Drifted south from shaft on 550 level, 130.7 feet
Costs after audit exceptions:

Labor and supervision	$12,413.83
Supplies	5,143.82
Equipment (purchased)	1,806.40
Equipment (depreciation)	2,545.29
Equipment (repairs)	1,231.13
Insurance and taxes	1,512.10
Travel	10.68
Total cost	$24,663.25

The project terminated April 30, 1953. At that time the costs billed by the Operator exceeded the total contract maximum, however, in the final audit some of the costs billed were disallowed.

3. Audit Certificate - July 24, 1953

Total cost as billed by contractor	$26,580.65
Less: Proceeds from property disposition	300.00
Net claimed cost	$26,280.65
Audit exceptions	1,917.40
Total accepted cost	$24,363.25
Government's participation @ 50%	$12,181.62

4. Certification of Discovery - None issued.

5. Comments:

The exploration work was was well done, and followed good, standard mining practice. The drifts required no timbering during the program. Three days were spent in repairing the road to the mine and 20 days in reconditioning the shaft.

The object of the project was to explore the main ore shoot on the Hope claim and also to X-cut south to the Culverwell ore shoot, on the same vein, about 600 feet south of the North shaft. The work was originally planned to be done on the 650 level, however, because the shaft had caved below the 550 level, it was agreed that the Operator could do the exploration work on the 550 level. The only exploration done previously on the 550 level consisted of two stub drifts driven on the vein, about 20 feet north and 60 feet south from the shaft.

The vein strikes generally north-south and dips 12° to 30° east. The vein is composed of very fine grained sugary quartz and silicified wall rock enclosed in altered igneous rock which might be either diorite or andesite.

Bornite, the chief copper mineral, is distributed irregularly in the vein material. Thirty-five (35) samples, taken from cuts ranging from 1.6 to 5.6 feet in length across the vein, showed values of 0.03% to 0.81% copper, 0.1 to 0.2% lead, 0.1 to 0.5% zinc, a trace to 0.02 oz in gold, and 0.02 to 6.00 ozs. in silver, per ton of vein material.

At the conclusion of the program the Field Team in their Final Report, dated June 8, 1953, recommended (pg 3) that no additional Government exploration funds be expended at this mine.

F. M. Murphy

F. M. Murphy

FMMurphy/er 5/3/55

Copy to: Docket
Base Metals
Chron.

☑ Audited

☐ Certified

W[redacted] ANALYSIS SHEET - DMEA PROJECT [redacted]

Analysis as of Dec. 1 - 54
Incl. Voucher for April - 53

☑ Actual Cost

☐ Agreed Unit Costs

Name Elmer F. Smith, et al

Docket No. DMA-356 X

State Nevada

Commodity Copper - silver

Idm-E No. 212

OPERATION	AUTHORIZED Units	AUTHORIZED Cost	COMPLETED Units	COMPLETED Cost	NET COST
Drifting & Crosscutting	697.5	$ 20,111.12	686	$ 22,856.85	22,856.85
Raising					
Shafts	60.0	2,595.10	—	—	—
Winzes					
Drilling (Specify)					
Surface Excavation					
Underground Excavation					
Roads and Trails					
Operating Equipment Purchased		$ 2,586.00		1,806.40	1,506.40
Surface Rehabilitation & Repairs					
Underground Rehabilitation		500.00			
New Building, Improvements, etc.					
Other (Specify) Equip. rental, supplies engineering, sample analyses, repairs.		6956.22 ⊛		5,599.20	
Totals		$ 25,792.22		24,663.25	24,863.25

13,950 = 88.57
1800 = 11.43
15,750 100.00

88.57 % of 6,956.22 = 6,161.12
11.43 % of " = 795.10
6,956.22

13950.00 1800
6161.12 795.10
20,111.12 2,595.10

Prepared by [signature]

⊛ Prorated above

FILE COPY
SURNAME:

F. R. Greene

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

October 22, 1953

Memorandum

To: Administrator

From: Rare and Miscellaneous Metals Division

Subject: Closing Review of Docket No. DMA-356X (Copper)
Contract No. Idm-1212
Property: Pennsylvania Mine
Lincoln County, Nevada

Operator: Pennsylvania Mine, a Partnership consisting of:
Elmer F. Smith,
2730 Ordway St., N. W.
Washington 8, D. C.
Frank L. Smith,
Box 873,
Ely, Nevada
Robert L. Smith,
5213 Cudahy,
Maywood, Calif.
Stephen F. Leo,
Princes Point Road,
Brunswick, Maine.

Amount approved in Contract: $25,792.22
Total accepted cost: $24,363.25
Government share 50% $12,181.62
Project work started December 3, 1951.
Stopped April 30, 1953, due to the exhaustion of exploration funds.

Docket Summary:

April 27, 1951 Application date.

May 11, 1951 Letter by Director, Supply Division, DMA, to Applicant advising that application was referred to Executive Officer, DMA, Region III, for a field examination.

May 14, 1951 Letter to Executive Officer, DMA, Region III, requesting a field examination be made.

R.C.S.
11-3-53

July 18, 1951 Memorandum from Executive Officer, Region III, transmitting Field Team report, dated July 12, 1951, by Russell F. Trengove, Mining Engineer, R. K. Smith, Geologist, and D. C. Arnold, Geologist, recommending the granting of an exploration contract in the amount of $25,250.00 on a 50-50 matching basis.

Aug. 1, 1951 Letter to Applicant, requesting copy of the lease and agreement of lessors subordinating their interests in the property.

Aug. 14, 1951 Letter from Elmer F. Smith, representing members of partnership, enclosing a copy of the lease, advising the Subordination Agreement will be forwarded shortly.

Sept. 26, 1951 Memorandum from Director, Supply Division, to Director, Production Expansion Division, recommending project for approval.

Oct. 16, 1951 Memorandum from General Counsel to Director, Production Expansion Division, outlining six reasons why the proposed exploration contract could not be approved.

Oct. 17, 1951 Memorandum from Director, Supply Division, to Director, Production Expansion Division, stating that after discussion with Mr. F. Knouse it is agreed that the total cost of the project should be increased from $23,870.00 to $25,792.20, a total of $1,922.20 above the original total.

Nov. 8, 1951 Letter to DMA from Elmer F. Smith re: a statement concerning the relationship between the partnership of Elmer F. Smith, Frank L. Smith, Robert L. Smith and Stephen F. Leo and the Pennsylvania Mine, etc.

Nov. 9, 1951 Memorandum from General Counsel to Director, Production Expansion Division, stating that the proposed exploration contract, revised and resubmitted to him on November 9, meets the objections listed in his memorandum of October 16, except item No. 4, i.e., an assignment of the lease to the partnership from the three partners who are the lessees named in the lease.

Nov. 15, 1951 Further memorandum from General Counsel to Director, Production Expansion Division, which approved proposed contract for signature on behalf of the Government, subject to the signature of the Applicant and proper dating.

Nov. 15, 1951	Contract dated and assigned No. Idm-E212.
Nov. 20, 1951	Contract Idm-E212 forwarded to Executive Officer, Region III, signed on behalf of the Government and the partner authorized to sign for the partnership. Copy of contract forwarded to Elmer F. Smith.
Feb. 2, 1952	Memorandum from Executive Officer, Region III, enclosing Amendment No. 1, dated January 31, 1952.
Aug. 18, 1952	Interim report by Russell R. Trengove, Mining Engineer, concerning visit to property on August 7, 1952.
Sept. 12, 1952	Executive Officer, Region III, memorandum to Operating Committee, transmitting Amendment No. 2, dated September 3, 1952, extending completion date of contract by 100 additional days, or to November 18, 1952.
Sept. 22, 1952	Interim Report by Russell R. Trengove, Mining Engineer, concerning visited to property on September 11, 1952.
Dec. 2, 1952	Interim Report by Glenn G. Gentry and Russell R. Trengove, Mining Engineers, regarding visit to property on November 22 and 23. Due to the slight evidence of mineralization encountered in the completed 458 feet of the North drift, and since it seemed unlikely that ore would be found in the remaining 142 feet allowed under the contract, the engineers recommended that, should mineralization be negative in this 142 foot section, the exploration project be abandoned.
Jan. 2, 1953	Memorandum from C. H. Johnson, Commodity Member, USBM, recommending that consideration be given to either stopping this project or stopping the north drift and advancing the 550 level southward.
Feb. 19, 1953	Interim Report by Glenn G. Gentry, Mining Engineer, regarding conference with Mr. Frank Smith, superintendent of the mine at his residance in Ely, Nevada, on February 4, 1953. It was learned that the mine had been closed down in December 1952 due to snow-blocked roads. Operations were expected to resume about April 1, 1953, provided the road to the mine was passable by that time. Mr. Smith stated that an extension of time had been made and had been approved.

Feb. 26, 1953 Memorandum from Executive Officer, Region III, to A. C. Johnson, USBM, Reno, Nevada, re advisability of amending the contract to permit a small amount of drifting to the south, and providing for a further extension of time to complete the work.

Mar. 23, 1953 Memorandum to Operating Committee from Executive Officer, forwarding Amendment No. 3, dated March 10, 1953, extending completion date of contract to May 1, 1953, and providing for discontinuance of drifting north on the 550-foot level and using the remaining allowable footage of 142 feet in driving south on the 550-foot level.

Apr. 9, 1953 Interim Report by Glenn G. Gentry, Mining Engineer, regarding visit and inspection on March 28, 29, and 30, 1953.

May 22, 1953 Letter by Chief, Contract Administration and Audit Division, to DMEA Auditor, Region III, re arrangements for final audit, including reference to delay by Operator in the preparation of his final MF-104 because of pending settlement on disposition of jointly-owned property.

June 16, 1953 Letter by Chief, Contract Administration and Audit Division, to Executive Officer, Region III, giving summary of audit findings.

June 30, 1953 Memorandum from Executive Officer, Region III, enclosing Final Report of Field Team, dated June 8, 1953, prepared by Glenn G. Gentry, Mining Engineer, and G. M. Tschanz, Geologist.

The Pennsylvania Copper mine was visited and inspected on May 1, 2, and 3, 1953. The mine was closed down at the end of the day shift on April 30, 1953, due to the fact that all exploration funds had been expended and the time limit under Amendment No. 3 had been reached.

The recommendations of the examining team included: "The costs of operating a mine in such an isolated area will be high, with additional difficulties to be expected on account of transportation. No evidence of economic copper ore was found on the 550-foot level during the Government's exploration project." The examining team recommended that no additional Government exploration funds be expended in this mine. The Executive Officer's letter, dated June 30, 1953, stated

the Field Team concurred with the examining engineer and geologist that no discovery had been made on this property.

It was reported by the examining team that the exploration work was well done and had followed good, standard mining practice.

The Field Team report also stated that, although the Operator advised the Field Team, on May 1, he would submit a final operator's report, it had not been received. They, therefore, recommended that the Field Team report be considered as final, therefore, an operator's report is not considered necessary by the Rare & Miscellaneous Metals Division to close this case.

July 23, 1953 Memorandum to Chief, Rare & Miscellaneous Metals Division, from C. H. Johnson, Bureau of Mines Commodity Member, stating he had reviewed the final Field Team report and found it adequate so far as it relates to the recommendation that no discovery was made.

July 28, 1953 Letter by Assistant Chief, Contract Administration and Audit Division, to DMEA Auditor, Region III, enclosing copies of the Audit Certificate and Audit Report, dated July 24, 1953, requesting that release of the reports to the Operator be withheld until his visit to San Francisco, August 10 and 11, 1953.

Aug. 21, 1953 Letter by Executive Officer, Region III, to Operator, accepting his offer to buy the Government's equity in the equipment purchased under this contract, and attaching a release of the Government's interest in the equipment.

Sept. 16, 1953 Rare and Miscellaneous Metals Division received copy of Auditor's report dated July 24, 1953.

Resume of work:

Original Contract - Description of the Work:

1. Condition north shaft for sinking from collor to bottom.
2. Sink north shaft 50 feet (includes a 20-foot sump) shaft cross section size 7x7 feet.

"3. Drift north on vein (650 level) 600 feet (Drift cross section size 5x7 feet).

"4. Raise 100 feet on vein from 650 level if approved by Government Field Team Engineers (raise cross section size 5x7 feet)."

Amended Contract - work completed.

1. Reconditioned North shaft to 550 level.

2. Drifted north from North shaft along vein 528 feet (550 level).

3. Drifted south from North shaft along vein 130.7 feet (550 level).

The Pennsylvania vein strikes generally north-south and dips 12-30° East. The vein is enclosed in igneous rock diorite or andesite and is composed of very fine grained sugary quartz and fragments of silicified wall rock. Ore minerals are chiefly fine grained bornite and are irregularly distributed. Along the North and South Drift - 550 level - thirty five samples were cut across the vein, widths ranging from 1.6 feet to 5.6 feet showed values of 0.03% to 0.81% Cu, 0.1 to 0.2% Pb, 0.1 to 0.5% Zn, a trace to 0.02 ozs. Au, and 0.02 to 6.00 ozs. Ag.

Unit Cost:

Unit Cost for Drifting to Operator reported by Field Team of $39.15/foot.

Project Cost: (Per final Audit Certificate, dated July 24, 1953)

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

Total cost as billed by contractor		$26,580.65
Less: Salvage Proceeds on Property		$ 300.00
Net Claimed Cost		$26,280.65
Exceptions (see Audit Report for details):		
Prior to audit	$ - o -	
During Audit	$ 1,917.40	$ 1,917.40
Total Accepted Cost		$24,363.25
Government share @ 50%		$12,181.62

Comments and Recommendations:

1. Field Team concluded no discovery of copper ore could be claimed.

2. Rare and Miscellaneous Metals Division concurs that no discovery was made, therefore, a completion letter has been written to operator stating "Because the results of the exploration were unfavorable, it is not our intentions to make a Certificate of Discovery or Development which would create a lien against the subject property".

Ernest Wm. Ellis, Chief
Rare & Misc. Metals Division

MME Form 7
(2/63)

OFFICIAL FILE COPY

Date	Surname	Code
2/3/69		110
		220

Mr. Roger C. Banghart
Silver King Mines, Inc.
385 Murry Street
Box 538
Ely, Nevada 89301

FEB 3 1969

Re: DMEA-356 (Copper)
Elmer F. Smith
Pennsylvania Mine
Lincoln County, Nevada
Contract Idm-E212

Dear Mr. Banghart:

Thank you for your letter of January 28, 1969, enclosing your check in the amount of $5.00 to cover the cost of duplicating and making available factual data on the subject property.

In view of the apparent abandonment by the Operator of his interest in the property, we are enclosing copies of the two plan maps with assays, which comprise the only data available for release.

Sincerely yours,

FRANK E. JOHNSON (gla)

Frank E. Johnson
Chief, Office of
Minerals Exploration

Enclosures

cc: Director's Reading file
Economic Geology file
OME docket
OME Reading File
OME Region II w/cy letter January 28, 1969

FEJohnson/gla 2-3-69

PAYEE: DETACH THIS STATEMENT BEFORE DEPOSITING CHECK

SILVER KING MINES, INC.

DATE	INVOICE NO.	DESCRIPTION	AMOUNT	DISCOUNT OR DEDUCTION	NET AMOUNT
1-28-69		For duplication and copies of maps and reports Lincoln Co. Also mailing charges			$5.00

EMPLOYEE'S NAME

PAY PERIOD ENDING	HOURS	RATE	GROSS EARNINGS	DEDUCTIONS						NET EARNINGS PAID
				F.I.C.A.	FEDERAL INC. TAX	STATE INC. TAX				
	REG. TIME OVERTIME									

EMPLOYEE: THIS IS A STATEMENT OF YOUR EARNINGS AND DEDUCTIONS FOR THE PERIOD INDICATED. KEEP THIS FOR YOUR PERMANENT RECORD.

SILVER KING MINES, INC., EAST ELY, NEVADA 89315

Silver King Mines, Inc.
385 Murry Street
Box 538
Ely, Nevada 89301

OFFICIAL COPY
O. M. E.
RECEIVED
JAN 31 1969
INITIALS | CODE
110

January 28, 1969

Office of Minerals Exploration
U. S. Geological Survey
Washington, D. C. 20242

Dear Sir:

I have written to Mr. H. K. Stager in Region II requesting copies of maps and reports concerning the below listed property:

Re: DMEA-356 (Copper)
Elmer F. Smith
Pennsylvania Mine
Lincoln County, Nevada
Contract Idm-E212

I have checked with the Pioche County Courthouse for Lincoln County, Nevada, and the owner of this property as mentioned by Mr. Stager as being Mr. Elmer F. Smith, is no longer in the records as being the owner. This is an unpatented mining property, which apparently was allowed to lapse in ownership, and apparently has been restaked as a different claim. Therefore, I have not been able to get permission from the owner to acquire these maps, as Mr. Stager has requested that I do.

Enclosed is a check for $5 to cover the charge for duplicating and mailing these maps and reports concerning this mining property. Your help on this would be greatly appreciated.

Sincerely,

Roger C. Banghart

Roger C. Banghart

RCB.lnt
Enclosure

OFFICE OF MINERALS EXPLORATION
U.S. GEOLOGICAL SURVEY

TO: Budget and Finance

FROM: Office of Minerals Exploration

- ABSTRACT OF REMITTANCES -

Date	Amount	Bank, City and State	Name of Remitter	Docket & Contract Numbers	Purpose
1/28/69	$5.00	1st. Natl' Bank of Ely, Nev.	Silver King Mines, Inc.	DMEA 356 E-212	Duplicating

REMARKS: (List smelter or mill lot numbers covered by royalties)

1/31/69
Date Prepared

Person Preparing Abstract

Date Received

Person Receiving Remittance

Office of Minerals Exploration
345 Middlefield Road
Menlo Park, California 94025

January 24, 1969

OFFICIAL COPY
O. M. E.
RECEIVED
JAN 29 1969

INITIALS	CODE
	~~120~~
	~~120~~
HA	~~110~~
	220

Mr. Roger C. Banghart
Silver King Mines, Inc.
385 Murry Street, Box 538
Ely, Nevada 89301

Re: DMEA-356 (Copper)
Elmer F. Smith
Pennsylvania Mine
Lincoln County, Nevada
Contract Idm-E212

Dear Mr. Banghart:

This is in reply to your request of January 21, 1969, for a copy of the DMEA report on the contract referenced above.

The only factual data available on this project are two plan maps with assays, one submitted with the application for DMEA assistance, and the other showing the work completed under the exploration contract.

To obtain copies of these maps you should request them from our Washington, D. C., office. Your request must be accompanied by written authorization to release them signed by the present owner of the property. Our records indicate that Mr. Elmer F. Smith is still the owner. A charge of $5.00 will be made to cover the cost of duplicating and mailing the maps. A check or money order in this amount should be made payable to the U. S. Geological Survey. The mailing address is:

Office of Minerals Exploration
U. S. Geological Survey
Washington, D. C. 20242

Sincerely yours,

H. K. Stager
Field Officer
OME, Region II

cc: Chief, OME, WDC
Dir. RF
ACG RF
MP RF
Docket

RMSmith:mkh

Silver King Mines, Inc.
385 Murry Street
Box 538
Ely, Nevada 89301

January 21, 1969

Mr. Harold Stager,
Field Officer
OME Region II
345 Middlefield Road
Menlow Park, California

Dear Mr. Stager:

I would appreciate acquiring a copy of the Government's DMEA report concerning the Pennsylvania Mine in ~~Landry~~ Lincoln County, Nevada. The property is located more specifically as 18 miles due south of Caliente, Nevada, and 10 miles west from Elgin, Nevada. This is a gold property, which consisted of money being spent for shaft sinking, drifting and crosscutting. I believe this program was probably accomplished in the 1950's.

If there is any expense involved in reproducing this report, please so advise.

Sincerely,

Roger C. Banghart

Roger C. Banghart

RCB.lnt

RECEIVED
JAN 23 1969
OFFICE OF MINERAL EXPLORATION
U.S. DEPT. OF INTERIOR

OF PURCHASING - NEW YORK J. A. MUNSON PURCHASING AGENT - NEVADA MINES DIVISION

KENNECOTT COPPER CORPORATION

PURCHASING DEPARTMENT
NEVADA MINES DIVISION
McGILL, NEVADA 89318

Date July 11, 1968

. Frank E. Johnson
ief, Office of Minerals Exploration
. Geological Survey
shington, D. C. 20740

tlemen:

Our present production schedule requires that we have material(s) ordered m you on our Purchase Order No. 25-R-80071, d March 27, 1968, in our plant as soon as possible.

Lot Available factual data on contract, consisting of plan map with assays received in connection with application for exploration assistance and plan map with assays of work completed under this contract.
REF: DMEA-356 (Copper)
Elmer F. Smith
Pennsylvania Mine
Lincoln County, Nevada
Contract - Idm-E-212

tten Authorization from Mr. Smith was sent to you on May 4, 1968 with copy of order

NDOR PLEASE COMPLETE BELOW AND RETURN IMMEDIATELY BY

[X] First Class Mail [ ] Air Mail

MENT WAS MADE May 8, 1968 VIA Mail

MENT WILL BE MADE

: If shipment is being delayed, advise reason and efforts you are making ccelerate shipment.)

ARKS: Shipment sent to: P. H. Hahn, Geologist
~~Bear Creek Mining Company~~
3075 Mill Street
~~Reno, Nevada 89502~~

. GEOLOGICAL SURVEY
ce of Minerals Exploration

Company Name

By Frank E. Johnson
Chief, Office of
Minerals Exploration

July 16, 1968
Date

m 7

OFFICIAL FILE COPY

Date	Surname	Code
5/8/68		110
		220

MAY 8 - 1968

Mr. P. H. Hahn
Geologist
Bear Creek Mining Company
3075 Mill Street
Reno, Nevada 89502

Re: DMEA-356 (Copper)
Elmer F. Smith
Pennsylvania Mine
Lincoln County, Nevada
Contract Idm-E212

Dear Mr. Hahn:

We have now received written authorization from Mr. Elmer F. Smith to release to Kennecott Copper Corporation available factual data on the subject contract.

In accordance with your request, enclosed are copies of "Fig. 3 Plan map of the Pennsylvania Mine showing location and assays of samples," filed with the application for exploration assistance, and "Plan 550 Ft Level Assay Map" of the Pennsylvania Copper Mine showing the work completed under the exploration contract.

Sincerely yours,

FRANK E. JOHNSON

Frank E. Johnson
Chief, Office of
Minerals Exploration

Enclosures

Copy to: Kennecott Copper Corporation
Nevada Mines Division
McGill, Nevada 89318

cc: Director's Reading File
Division File
Economic Geology File
OME docket
OME Region II
OME Reading File

FEJohnson/gla 5-8-68

C O P Y

R. G. RHETT - DIRECTOR OF PURCHASING - NEW YORK

J. A. MUNSON - PURCHASING AGENT - NEVADA MINES DIVISION

Kennecott Copper Corporation

NEVADA MINES DIVISION
McGILL, NEVADA 89318

ORDER NO. 25-R-80071
DATE March 27, 1968
REQUISITION NO. M-370 (JSV) 3-26-68
F. O. B. S/P-T/A

TERMS Net
SHIPPING DATE 2 Weeks
YOUR REFERENCE

OUR ACCOUNT NO.	OUR AFE/WO NO.
160171	

PURCHASE ORDER

TO: Mr. Frank E. Johnson
Chief, Office of Minerals Exploration
U. S. Geological Survey
Washington, D. C. 20740

SHIP TO: KENNECOTT COPPER CORPORATION
RUTH, NEVADA

08 - 581276

SHIP VIA: MAIL

SUBJECT TO CONDITIONS ON REVERSE SIDE

ITEM NO.	OUR REFERENCE NUMBER U.C.	M & S	QUANTITY	UNIT	DESCRIPTION	NET UNIT PRICE	AMOUNT
1	EA		1	Lot	Available factual data on contract, consisting of plan map with assays received in connection with application for exploration assistance and plan map with assays of work completed under this contract. REF: DMEA-356 (Copper) Elmer F. Smith Pennsylvania Mine Lincoln County, Nevada Contract - Idm-E-212 Voucher check in the amount of $5.00 attached.	5.00 lot	

OFFICIAL COPY
O. M. E.
RECEIVED
APR 17 1968
INITIALS CODE
130
110

IMPORTANT: PLEASE EXPEDITE INVOICING AND INDICATE OUR ORDER NUMBER AND REQUISITION NUMBER ON ALL PACKAGES AND DOCUMENTS. PAGE OF

Kennecott Copper Corporation, Nevada Mines Division, holding Valid Seller's Permit No. 102-510 issued pursuant to the Sales and Use Tax Act, hereby certifies that the tangible personal property described on this order is for resale, use or consumption, and that Kennecott Copper Corporation, Nevada Mines Division, will report and pay the tax under the Nevada Sales and Use Tax Act and applicable rules and regulations.

THREE INVOICES WITH ORIGINAL BILL OF LADING OR SHIPPING RECEIPT MUST BE FORWARDED PROMPTLY TO:

KENNECOTT COPPER CORPORATION
NEVADA MINES DIVISION
McGILL, NEVADA

ATT: J. A. MUNSON, PURCHASING AGENT

Kennecott Copper Corporation
J. A. MUNSON, PURCHASING AGENT

Original signed by
J A. MUNSON
BY:

PD-4N-1/1/65-5M

INSTRUCTIONS

1. Acknowledge receipt of this order.
2. Order Number and Name and Address of Consignee must appear on all invoices.
3. All material must be marked or tagged with complete Order and Requisition Numbers, and be accompanied by Packing List in detail.
4. No charges for packing, boxing or cartage will be allowed unless specified on this order. Material must be packed in conformity with Tariff or Classification requirements so as to secure lowest possible Freight Rates. It is understood we shall receive benefit of any decrease in freight rates between time of quotation and date of shipment in any case where matter of freight enters into price quoted.
5. Do not consolidate on a single invoice shipments applying to different orders. A separate invoice must be rendered for each order.

TERMS AND CONDITIONS

1. Modification: No terms or conditions, other than those stated herein, and no agreement or understanding in any way modifying the terms and conditions herein stated, shall be binding upon Purchaser unless made in writing and signed by its purchasing agent.

2. Warranty: Seller warrants that the articles or materials furnished hereunder will be equal to or will exceed the kind and quality described in any specification in or a part of this purchase order, and will be free from all defects in workmanship and material. Seller further warrants that the articles or materials to be furnished hereunder will be adequate for or capable of exceeding, all operating conditions described or implied in any specifications in or a part of this purchase order.

3. Patents: Seller will indemnify, save harmless and defend Purchaser from and against any and all suits, actions, legal proceedings, claims, demands, damages, costs, expenses and attorneys' fees incident to any infringement or to any claimed infringement of any patent or patents in the manufacture and sale, or either thereof, of the articles or materials covered by this purchase order, or in any way connected therewith or with the use thereof by Purchaser; provided, however, that Purchaser may, at its option, be represented in any such suits, actions or legal proceedings by attorneys of its own selection at its own expense.

4. Incorporation by Reference: Any clause required to be included in a purchase order of this type by any applicable and valid federal, state or local law or administrative rule or regulation having the effect of law shall be deemed to be incorporated herein.

5. Fair Labor Standards Act: Seller represents that the articles, materials or services furnished hereunder will be produced or rendered in accordance with the applicable provisions of the Fair Labor Standards Act of 1938, as amended.

6. Taxes: No tax imposed upon the sale, transfer or possession, use or consumption of the article or material purchased hereunder, or services rendered in connection therewith, shall be charged or collected by the Seller without the prior express consent of the Purchaser. The Seller shall separately state on its invoices to the Purchaser any charges for freight, installation or repair service, or Federal Manufacturers Excise Tax and any credits for purchase discounts and exchange allowances.

7. Payment and Risk of Loss: Purchaser shall take title upon delivery of the purchased articles or materials in good condition at Purchaser's designated point of delivery. Risk of loss or damage prior to such time shall be on seller. Purchaser shall be obligated to pay only upon receipt of articles or materials in good condition.

March 25, 1968

SUBJECT: DMEA-356 (Copper)

I authorize the release by the U. S. Geological Survey to Kennecott Copper Corporation of the available factual data on the above project which consists of a plan map with assays received in connection with the application for exploration assistance and plan map with assays of the work completed under the exploration contract.

Elmer F. Smith

Elmer F. Smith

March 25, 1968

SUBJECT: DMEA-356 (Copper)

I authorize the release by the U. S. Geological Survey to Kennecott Copper Corporation of the available factual data on the above project which consists of a plan map with assays received in connection with the application for exploration assistance and plan map with assays of the work completed under the exploration contract.

Elmer F. Smith

Elmer F. Smith

G. RHETT · DIRECTOR OF PURCHASING · NEW YORK J. A. MUNSON PURCHASING AGENT NEVADA MINES DIVISION

Docket

KENNECOTT COPPER CORPORATION

PURCHASING DEPARTMENT
NEVADA MINES DIVISION
McGILL, NEVADA 89318

Date APRIL 23 1968

Mr. Frank E. Johnson
Chief, Office of Minerals Exploration
U. S. Geological Survey
Washington, D. C. 20740

Gentlemen:

Our present production schedule requires that we have material(s) ordered from you on our Purchase Order No. 25-R-80071, Dated March 27, 1968, in our plant as soon as possible.

1	Lot	Available factual data on contract consisting of plan map with assays received in connection with application for exploration assistance and plan map with assays of work completed under this contract.

REF: DMEA-356 (Copper) Elmer F. Smith Pennsylvania Mine — Lincoln County, Nevada Contract - Idm-E-212

VENDOR PLEASE COMPLETE BELOW AND RETURN IMMEDIATELY BY

☒ First Class Mail ☐ Air Mail

SHIPMENT WAS MADE _____ **VIA** _____

SHIPMENT WILL BE MADE _____
(Note: If shipment is being delayed, advise reason and efforts you are making to accelerate shipment.)

REMARKS: Shipment will be made upon receipt of written authorization from Mr. Elmer E. Smith or the present owners of the property, as requested in our letter of March 20, 1968, to Mr. P. H. Hahn, Geologist, Bear Creek Mining Co.

Geological Survey, Office of Minerals Exploration

~~Company Name~~

By Chief, Office of Minerals Exploration Date 4/30/68

J. A. Munson, Purchasing Agent

MME Form 7
(2/63)

OFFICIAL FILE COPY

Date	Surname	Code
4/24/68		110
		220
		110

APR 24 1968

Mr. F. H. Hahn
Geologist
Bear Creek Mining Company
3075 Mill Street
Reno, Nevada 89502

Re: DMEA-356 (Copper)
Elmer F. Smith
Pennsylvania Mine
Lincoln County, Nevada
Contract Idm-E212

Dear Mr. Hahn:

We are in receipt of a voucher check in the amount of $5.00 from the Kennecott Copper Corporation, Ruth, Nevada, in payment for copies of two plan maps with assays pertaining to the subject contract.

The two maps are being duplicated. However, we have not received written authorization from Mr. Elmer E. Smith or the present owners of the property to release material to you as requested in our letter of March 20, 1968.

Upon receipt of the necessary authorization, copies of the two maps will be forwarded to you.

Sincerely yours,

FRANK E. JOHNSON

Frank E. Johnson
Chief, Office of
Minerals Exploration

cc: Director's Reading File
Division File
Economic Geology File
OME docket
OME Reading File
OME Region III

FEJohnson/gla 4-23-68

OFFICE OF MINERALS EXPLORATION
U.S. GEOLOGICAL SURVEY

TO: Budget and Finance

FROM: Office of Minerals Exploration

- ABSTRACT OF REMITTANCES -

Date	Amount	Bank, City and State	Name of Remitter	Docket & Contract Numbers	Purpose
3/29/68	$5.00	First Natl Bank of Ely, Nevada	Kennecott Copper Corp.	DMEA 356 E-212	Duplicating

REMARKS: (List smelter or mill lot numbers covered by royalties)

4/5/68
Date Prepared

Person Preparing Abstract

Date Received

Person Receiving Remittance

KENNECOTT COPPER CORPORATION • NEVADA MINES DIVISION • Mc GILL, NEVADA

DETACH
BEFORE DEPOSITING

DATE	INVOICE NO.	OUR ORDER NO.	REMARKS	AMOUNT	DISCOUNT	NET
3/27/68		R-80071				5.00

№ FR56170

TOTALS

CKCN-12-10M-3/67 PRINTED IN U.S.A.

R. G. RHETT - DIRECTOR OF PURCHASING [redacted]W YORK

J. A. M[redacted]N - PURCHASING AGENT - NEVADA MINES DIVISION

Kennecott Copper Corporation

NEVADA MINES DIVISION
McGILL, NEVADA 89318

ORDER NO. 25-R-80071
DATE March 27, 1968
REQUISITION NO. M-370 (JSV) 3-26-68
F. O. B. S/P-T/A

TERMS Net
SHIPPING DATE 2 Weeks
YOUR REFERENCE

OUR ACCOUNT NO.	OUR AFE/WO NO.
160171	

PURCHASE ORDER

TO: Mr. Frank E. Johnson
Chief, Office of Minerals Exploration
U. S. Geological Survey
Washington, D. C. 20740

SHIP TO: KENNECOTT COPPER CORPORATION
RUTH, NEVADA

08 - 581276

SHIP VIA: MAIL

SUBJECT TO CONDITIONS ON REVERSE SIDE

ITEM NO.	OUR REFERENCE NUMBER U.C.	M & S	QUANTITY	UNIT	DESCRIPTION	NET UNIT PRICE	AMOUNT
1	EA		1	Lot	Available factual data on contract, consisting of plan map with assays received in connection with application for exploration assistance and plan map with assays of work completed under this contract. REF: DMEA-356 (Copper) Elmer F. Smith Pennsylvania Mine Lincoln County, Nevada Contract - Idm-E-212	5.00 lot	

OFFICIAL COPY
O. M. E.
RECEIVED
APR 5 1968
INITIALS CODE
~~130~~
110

Voucher check in the amount of $5.00 attached.

IMPORTANT: PLEASE EXPEDITE INVOICING AND INDICATE OUR ORDER NUMBER AND REQUISITION NUMBER ON ALL PACKAGES AND DOCUMENTS. PAGE OF

Kennecott Copper Corporation, Nevada Mines Division, holding Valid Seller's Permit No. 102-510 issued pursuant to the Sales and Use Tax Act, hereby certifies that the tangible personal property described on this order is for resale, use or consumption, and that Kennecott Copper Corporation, Nevada Mines Division, will report and pay the tax under the Nevada Sales and Use Tax Act and applicable rules and regulations.

THREE INVOICES WITH ORIGINAL BILL OF LADING OR SHIPPING RECEIPT MUST BE FORWARDED PROMPTLY TO:

KENNECOTT COPPER CORPORATION
NEVADA MINES DIVISION
McGILL, NEVADA

ATT: J. A. MUNSON, PURCHASING AGENT

Kennecott Copper Corporation
J. A. MUNSON, PURCHASING AGENT

BY J. A. Munson

PD-4N-1/1/65-5M

INSTRUCTIONS

1. Acknowledge receipt of this order.
2. Order Number and Name and Address of Consignee must appear on all invoices.
3. All material must be marked or tagged with complete Order and Requisition Numbers, and be accompanied by Packing List in detail.
4. No charges for packing, boxing or cartage will be allowed unless specified on this order. Material must be packed in conformity with Tariff or Classification requirements so as to secure lowest possible Freight Rates. It is understood we shall receive benefit of any decrease in freight rates between time of quotation and date of shipment in any case where matter of freight enters into price quoted.
5. Do not consolidate on a single invoice shipments applying to different orders. A separate invoice must be rendered for each order.

TERMS AND CONDITIONS

1. Modification: No terms or conditions, other than those stated herein, and no agreement or understanding in any way modifying the terms and conditions herein stated, shall be binding upon Purchaser unless made in writing and signed by its purchasing agent.

2. Warranty: Seller warrants that the articles or materials furnished hereunder will be equal to or will exceed the kind and quality described in any specification in or a part of this purchase order, and will be free from all defects in workmanship and material. Seller further warrants that the articles or materials to be furnished hereunder will be adequate for or capable of exceeding, all operating conditions described or implied in any specifications in or a part of this purchase order.

3. Patents: Seller will indemnify, save harmless and defend Purchaser from and against any and all suits, actions, legal proceedings, claims, demands, damages, costs, expenses and attorneys' fees incident to any infringement or to any claimed infringement of any patent or patents in the manufacture and sale, or either thereof, of the articles or materials covered by this purchase order, or in any way connected therewith or with the use thereof by Purchaser; provided, however, that Purchaser may, at its option, be represented in any such suits, actions or legal proceedings by attorneys of its own selection at its own expense.

4. Incorporation by Reference: Any clause required to be included in a purchase order of this type by any applicable and valid federal, state or local law or administrative rule or regulation having the effect of law shall be deemed to be incorporated herein.

5. Fair Labor Standards Act: Seller represents that the articles, materials or services furnished hereunder will be produced or rendered in accordance with the applicable provisions of the Fair Labor Standards Act of 1938, as amended.

6. Taxes: No tax imposed upon the sale, transfer or possession, use or consumption of the article or material purchased hereunder, or services rendered in connection therewith, shall be charged or collected by the Seller without the prior express consent of the Purchaser. The Seller shall separately state on its invoices to the Purchaser any charges for freight, installation or repair service, or Federal Manufacturers Excise Tax and any credits for purchase discounts and exchange allowances.

7. Payment and Risk of Loss: Purchaser shall take title upon delivery of the purchased articles or materials in good condition at Purchaser's designated point of delivery. Risk of loss or damage prior to such time shall be on seller. Purchaser shall be obligated to pay only upon receipt of articles or materials in good condition.

MME Form 7
(2/63)

OFFICIAL FILE COPY

Date	Surname	Code
		110
		220

MAR 20 1968

Mr. P. H. Hahn
Geologist
Bear Creek Mining Company
3075 Mill Street
Reno, Nevada 89502

Re: DMEA-356 (Copper)
Elmer F. Smith
Pennsylvania Mine
Lincoln County, Nevada
Contract Idm-E212

Dear Mr. Hahn:

Your letter of March 6, 1968, to Mr. Harold K. Stager, U. S. Geological Survey, Menlo Park, California, requesting maps and assay data on the work completed under the subject contract, has been referred to this office.

Available factual data on this project consists of a plan map with assays received in connection with the application for exploration assistance and plan map with assays of the work completed under the exploration contract. Copies of these maps can be furnished you upon receipt of written authorization from Mr. Elmer F. Smith or from the present owners of the property. A charge of $5.00 will be made to cover the cost of duplication and mailing the maps. Check or money order in this amount should be made payable to the U. S. Geological Survey.

Sincerely yours,

FRANK E. JOHNSON

Frank E. Johnson
Chief, Office of
Minerals Exploration

cc: Director's Reading File
Division File
Economic Geology File
OME docket
OME Reading File
OME Region II

FEJohnson/gla 3-20-68

IN REPLY REFER TO:

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

Memorandum

March 12, 1968

OFFICIAL COPY
O. M. E.
RECEIVED
MAR 14 1968
INITIALS | CODE
~~120~~
110
220

To: Chief, Office of Minerals Exploration
Washington, D. C.

From: Field Officer
Region II

Subject: DMEA-356 (Copper)
Elmer F. Smith
Pennsylvania Mine
Lincoln County, Nevada
Contract Idm-E212

Enclosed is a letter from Mr. P. H. Hahn, geologist for Bear Creek Mining Company, requesting information on the subject DMEA contract. Our Field Office files contain only DMEA maps and assays for the project and no final report, maps, or assays submitted by the Operator that could be released in response to this request. Will you please reply to the inquiry and inform Mr. Hahn if there is any information in the Washington files available to them.

H. K. Stager

H. K. Stager

Enclosure

Bear Creek Mining Company
Nevada District

3075 MILL STREET
RENO, NEVADA 89502

TELEPHONE: 702-329-0683

March 6, 1968

Mr. Harold K. Stager
U. S. Geological Survey
Office of Mineral Exploration
345 Middlefield Road
Menlo Park, California 94025

Re: Pennsylvania Mine, Lincoln County, Nevada

Dear Mr. Stager:

In connection with some exploratory work we are doing in Nevada, I would like to inquire whether it is possible to obtain or gain access to records of former D.M.E.A. projects.

The area in question is the Pennsylvania mine, located about 15 miles south of Caliente in Lincoln County. I understand that a gentlemen by the name of Frank Smith did some underground work on this copper property about 1943 with the aid of a government loan. Mr. Smith no longer holds the property, and has no records of the work. We would like to know whether the Survey could supply any maps and/or assay data from this work.

Thank you for your assistance.

Very truly yours,

BEAR CREEK MINING COMPANY

P. H. Hahn
GEOLOGIST

PHH:vhr

cc: Mr. J. S. Vanderpool

RECEIVED
1968
OFFICE OF MINERALS EXPLORATION
U.S. GEOLOGICAL SURVEY
MENLO PARK, CALIF.

FILE COPY
SURNAME: 800

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

Talbert
Chambers

OCT - 8 1953

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

Re: Pennsylvania Mine
Contract No. Idm-E212
Docket No. DMA-356X

Dear Mr. Miller:

Receipt is acknowledged of your undated letter in reply to our inquiry of September 15, 1953, in regard to the payments under the referenced contract.

The total costs claimed by the Operator, per the final MF-104 received by this office, are $26,580.65, which is the amount reflected by the Operator's records as audited. The discrepancies between claimed costs are immaterial however; the amount certified by the auditor as valid and proper for payment is the total amount which should have been paid. Therefore, you have overpaid this contract in the amount of 53 cents.

It will not be necessary, however, to collect this small overpayment from the Operator. This Division will initiate an additional obligation document to remove the red balance from your books.

Sincerely yours,

Jay L. Chambers, Chief
Contract Administration
and Audit Division

EDTalbert/ama
October 8, 1953

Copy to: Docket
Admr. Reading File
Mr. Mavor
Mr. Chambers

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

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
OCT 5 1953

Office of
Executive Officer
DMEA Field Team
Region III

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

Mr. Jay L. Chambers, Chief
Contract Administration and Audit Div.
Defense Minerals Exploration Administration
Washington 25, D. C.

Re: Pennsylvania Mine
Contract No. Idm-E212
Docket No. DMA-356X

Dear Mr. Chambers:

Reference is made to your letter, dated September 15, 1953.

Our records of MF-104's are in agreement in amounts certified for payment as shown in your letter. Our copy of MF-104 for April 1953 shows the totals to date to be $26,581.65, and the audit report submitted by E. D. Talbert, Auditor, July 24, 1953, shows the total cost as billed by contractor to be $26,580.65 - the difference of $1.00 of which the Government's share is 50 cents. This is part of the discrepancy.

On the Operator's MF-104 for December 1952, the Operator made an error of $1.00 in his Totals Previously Reported column, which was corrected on our copies, but I am not sure if the copy sent to you was corrected. The Operator showed $20,850.31 - it should have been $20,851.31.

The three cent discrepancy cannot be located.

The balance at present on our records shows a red balance of 53 cents for DMEA Contract 212 after cancelling $714.49 in accordance with notification from your office. Please advise disposition of this red balance.

Sincerely yours,

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

FILE COPY
SURNAME:
800
Chamberlin

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

SEP 1 5 1953

Mr. Lloyd H. Sjolander
Authorized Certifying Officer
Bureau of Mines
1012 Flood Building
870 Market Street
San Francisco 2, California

Re: Pennsylvania Mine
Contract No. Idm-E212
Docket No. DMA-356X

Dear Mr. Sjolander:

Receipt is acknowledged of the paid copies of the April (Final) MF-104 for the above referenced project. It is noted that this MF-104 is certified in the amount of $212.52 which, according to our records, would make the total Government share expended $12,182.15, while our auditor issued his Audit Certificate in the amount of $12,181.62, or a difference of .53¢.

In order that our records may be in agreement there are listed below the amounts certified for payment, month by month, for this project, as shown on our copies of the MF-104's. Please check your records and advise us as to where the discrepancy occurs.

Date	Doc. No.	Month	Total
2-27-52	SF-DMEA-18	December	$ 1,169.10
2-8-52	SF-DMEA-18	January	665.92
3-24-52	SF-DMEA-20	February	751.60
5-19-52	-	March	322.43
5-19-52	-	April	575.68
8-12-52	SF-DMEA- 5	May	683.42
8-12-52	SF-DMEA- 5	June	1,055.78
9-9-52	SF-DMEA-13	July	941.15
10-10-52	SF-DMEA-18	August	911.85
10-24-52	SF-DMEA-23	September	883.19
11-17-52	SF-DMEA-26	October	1,233.96
12-17-52	SF-DMEA-29	November	1,231.60
5-12-53	SF-DMEA-42(A)	December	1,080.18
-	-	January	-
-	-	February	-
5-12-53	SF-DMEA-42(B)	March	463.77
9-3-53	SF-DMEA-10	April	212.52
		Total	$12,182.15

In the event this listing agrees with your ledger, it appears that an overpayment has been made. It will not be in the interest of the Government, however, to go to the expense of making a collection for this small item.

Sincerely yours,

SIGNED

Jay L. Chambers, Chief
Contract Administration
and Audit Division

JLChambers/ama
September 15, 1953

Copy to: Docket
Admr. Reading File
Mr. Chambers
Mr. George Mavor

HHM
9-15-53

800

Talbert

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

AUG 2 4 1953

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

Re: Idm-E212, DMA-356X
Pennsylvania Mine

Dear Mr. Mavor:

Reference is made to your letter of August 12, 1953, requesting an additional copy of the Audit Report and Audit Certificate, if available, for the subject contract.

I regret to advise that we have no additional copies available. If it is necessary for Mr. Johnson to have a copy, I suggest that you release your copy to him. I do not believe it absolutely essential that you have a copy in this case, since the audit was not performed by you and also since two other copies are available within the immediate office of Region III.

Sincerely yours,

(Signed) J. L. Chambers

Jay L. Chambers, Chief
Contract Administration
and Audit Division

EDTalbert/wb
August 24, 1953

Copy to: Mails & Files
Admr. Reading File
Mr. Chambers

HHR
8-24-53

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

1012 Flood Building
870 Market Street
San Francisco 2, California

August 12, 1953

Mr. Jay L. Chambers, Chief
Contract Administration and
Audit Division
Defense Minerals Exploration
Administration
Washington 25, D. C.

Re: Idm-E212, DMA-356X
Pennsylvania Mine

Dear Mr. Chambers:

Referring to letter dated July 28, 1953, wherein E. D. Talbert enclosed the following copies of subject operator's final audit report:

For	Audit Report	Audit Certificate
Finance Officer	1	2
Executive Officer	1	1
DMEA Auditor	1	1
Operator	1	1

Should you have an additional copy of audit report and audit certificate available, I would appreciate receiving same for A. C. Johnson, Chief, Mining Division, Reno, Nevada, as I have made it a policy of furnishing the Reno Office with copies of all audit reports.

Sincerely yours,

George Mavor

George Mavor
DMEA Auditor

File

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS ADMINISTRATION
WASHINGTON 25, D. C.
1012 Flood Building
870 Market Street
San Francisco 2, California

August 12, 1953

Lt. Colonel Elmer F. Smith, USAF
2730 Ordway Street N. W.
Washington 8, D. C.

Re: Idm-E212, DMA-356X
Pennsylvania Mine

Dear Sir:

Enclosed herewith is copy of final audit report as prepared by E. D. Talbert, DMEA Auditor in our Washington Office. Final settlement of your contract will be based on this report, and you should receive check for the net settlement in a few days.

Yours very truly,

George Mavor

George Mavor
DMEA Auditor

Enclosure

2 copies for Jay L. Shorbers
1 copy for W. C. Miller
1 " " Lawrence Norton
1 " " George Mavor

Docket Copy

mdt

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

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
AUG 4 1953

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

July 31, 1953

Elmer F. Smith, Lt. Colonel, USAF
2730 Ordway Street, N. W.
Washington 8, D. C.

Re: Docket DMEA-356X (Copper)
Pennsylvania Mine
Lincoln County, Nevada
Contract Idm-E212

Dear Colonel Smith:

I acknowledge your registered air-mail letter dated July 29, 1953.

You write that you have not received a reply to your letter of June 24. I am sorry that you have been awaiting your reply to that letter, as I had concluded that none was necessary. The matters you brought up in that letter have been subjected to correspondence between this office and the DMEA auditors in Washington, and I concluded that my last letter to the auditors, dated July 8, 1953, gave all the information needed to close the account.

It is unfortunate that the mine books were kept in Washington, as otherwise we could have audited the account completely out here. As the matter is in the hands of the Washington office auditors and Mr. Talbert is on a field trip which will bring him to this office on August 10, there is nothing further that we can do until we have the opportunity to discuss the matter with him.

I can assure you that we are just as anxious as you are to close this account.

Sincerely yours,

H. C. MILLER

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

Copy to: DMEA, Washington, D. C.
Jay I. Chambers
E. H. Bailey

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

JUL 28 1953

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

Re: Idm-E212, DMA-356X
Pennsylvania Mine

Dear Mr. Mavor:

Transmitted herewith are the original and four copies of the Audit Certificate and the original and three copies of the Audit Report covering my findings as the result of my recent audit of the referenced project.

In addition to the usual copies for the Regional Executive Officer and the Finance Officer, I am enclosing the Operator's copy as well as a copy for your files.

For the purpose of finalizing this audit I have presumed that Mr. Miller has accepted the Operator's offer of $150.00 for the Government's equity in the refrigerator, ventube and slusher and waived interest in any remaining items of property in accordance with DMEA Circular 30, Supplement No. 1. In Mr. Miller's letter of July 9, 1953 to Mr. Chambers on this subject he states merely that "Mr. Johnson recommends accepting the offer of $150.00 and I agree that it is a fair settlement".

In connection with the equipment Mr. Miller's attention should be invited to the discrepancies between both the items and the purchase cost of the equipment as listed in (1) Mr. Johnson's memorandum of July 3, 1953 to Mr. Miller, (2) the Field Team's final report, and (3) the attached Audit Report. Of course I do not know the origin of the other lists, but I am certain that my list is correct according to the accounting records.

The attorney-in-fact for the Operator, Lt. Col. Elmer F. Smith, intends to protest the disallowances I have made for wages in excess of the maximum rates specified in Exhibit "A" of the contract. He feels that the Field Team had full knowledge of the necessity of the higher rates, and, in effect, gave implied approval during the course of the work. His contention possibly may be justified since the file indicates that the Field Team should have had full knowledge of both the need for, and the fact that he was paying the higher rates, for example:

R.C. Gray
7-28-53

(a) Mr. Trengrove's memorandum of June 6, 1952 to Mr. Johnson states "The miners wage of $12.50 *** is much too low to attract miners in this isolated area",

(b) The third page of both the May 1952 and June 1952 Forms MF-104 indicate that wages have been charged at a $13.00 rate,

(c) The Operator's narrative for May 1952 comments on his inability to hire a replacement at $12.50 and states "A man was finally hired for $13.00 per day", and

(d) All Forms MF-104, except for the first two months of the project, were documented with transcripts of payrolls showing the rates of pay.

It is suggested that you discuss this matter with Mr. Miller, since before releasing the Audit Report we must be sure that the Government has not in some manner given approval for the higher wage rates which should be covered by a confirming amendment to the contract. Under the circumstances it may be best to withhold release of the Audit Report until we can discuss it during my contemplated visit to San Francisco, August 10 and 11, 1953.

Also enclosed for release to Mr. Miller are the Executive Officer's and Finance Officer's copies of a Report of Review for Idn-246, IMA-1288X, Rysh and Corwin. Release of this Report, which I prepared during last August's visit to San Francisco, has been held in suspense pending disposition of the Government's interest in the project property. This was accomplished by Mr. Miller's recent acceptance of the Operator's bid.

Sincerely yours,

(Signed) E. D. Talbert

E. D. Talbert, Assistant Chief
Contract Administration
and Audit Division

Enclosures

EDTalbert/wb
July 27, 1953

Copy to: Docket
Admr. Reading File
Mr. Chambers

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

July 23, 1953

Memorandum

To: E. W. Ellis, DMEA

From: C. H. Johnson, Bureau of Mines

Subject: DMEA-356X (Copper), Elmer F. Smith, Pennsylvania Mine, Lincoln County, Nevada

I have reviewed the final Field Team report on the above-named project (by Gentry and Tschanz, June 8, 1953) and am of the opinion that it is adequate insofar as relates to the recommendation that no discovery was made, and that the information gained in the course of the exploration has been fully and clearly recorded.

C. H. Johnson

C. H. Johnson

Copy to - Mr. Kinkel, GSA, B-242-A
Minerals Division
Mr. Johnson
Files

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

RECEIVED

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

July 22, 1953

Memorandum

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

From: Executive Officer, DMEA Field Team, Region III

Subject: Operators' Monthly Reports - Forms MF-104 & MF-104A

For your records, enclosed herewith are two copies of each of the subject reports submitted by the Bristol Silver Mines Company, covering Contract Idm-E10 (Docket DMA-420X) for the months of January and February 1953, rendered by Operator as of June 29, 1953. These vouchers have been audited and passed to the Treasury for payment.

In connection with Contract Idm-E212, Docket DMA-356X, Pennsylvania Mine, enclosed herewith is one copy each of Forms MF-104 and MF-104A submitted by the Operator for the month of April 1953, which is the final report on this operation. The originals of these forms are being held in this office pending receipt of the final audit report. Although your instructions of March 20, 1953, specify that only a copy of Form 104A and the narrative of a final monthly progress report are to be sent promptly to your office, we have included Form 104 in this instance, as we understand your office is also auditing this account. As soon as final liquidation and settlement are made of this account, the retained set of forms will be sent to you, properly audited and certified.

SENT TO BASE METALS ONLY

For your information, we have also included a copy of Mr. A. C. Johnson's memorandum of July 10 concerning the Pennsylvania Mine's vouchers.

SENT TO BASE METALS ONLY

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

Attachments

Copy to: E. H. Bailey, USGS

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.

July 8, 1953

Memorandum

To: Jay L. Chambers, Chief, Contract Administration and Audit Division, DMEA, Interior Building, Washington 25, D. C.

From: Executive Officer, DMEA Field Team, Region III

Subject: Docket DMEA-356 (Copper)
Pennsylvania Mine, Lincoln County, Nevada
Contract Idm-E212

Reference is made to your letter dated June 16, 1953, regarding Col. Smith's request for amendments to his contract. I appreciate your straightening me out on several of the issues that are involved.

In regard to the road repairs, Mr. A. C. Johnson, Chief, Mining Division, Region III, reportsthat they were necessary for the operation of the property and should be considered necessary and reasonable direct costs to the project. Therefore, the costs of road repairs come within the meaning of Article 10 of the contract and should be allowed.

As for the 5HP Fairbanks Morse gasoline engine hoist, Mr. Johnson informs me that the Operator used the 5HP Fairbanks Morse gasoline engine driven hoist in conjunction with the 15HP hoist, which was listed in Mr. Trengove's report. The 5HP motor was used while drifting was being done on the north drift and the south drift. The periods that the hoist were used are as follows:

On the north drift from Dec. 3, 1952, through December, 1952. The south drift was started on March 15, 1953, and was completed on April 30, 1953.

I trust that the above information will be sufficient for you to close the account. If there are any other questions, kindly let us have them and we will do our best to supply you with the answers.

Letter is going forward to you tomorrow recommending acceptance of Smith's offer of $150 for equipment remaining on the property

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

Copy to: E.H. Bailey, USGS
Finance Officer, and George Mavor

Mr. Note Attached/pc

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.

July 9, 1953

Memorandum

To: Jay L. Chambers, Chief, Contract Administration and Audit Division, DMEA, Interior Building, Washington 25, D. C.

From: Executive Officer, DMEA Field Team, Region III

Subject: Docket DMEA-356 (Copper)
Pennsylvania Mine, Lincoln County, Nevada
Contract Idm-E212

Attached is a copy of a memorandum dated July 3, 1953, from Mr. A. C. Johnson, concerning an offer of $150.00 made by Colonel Elmer F. Smith for equipment remaining at the Pennsylvania Mine.

Mr. Johnson recommends accepting the offer of $150.00 and I agree that it is a fair settlement.

I believe you now have all the information you need to complete your audit on the subject property.

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

Attachment

Copy to: E. H. Bailey, USGS
Finance Officer
George Mavor

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF MINES
P. O. BOX 1031
RENO, NEVADA

Refer to	Initial	Date
Answered		

July 3, 1953

Memorandum

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

From: Chief, Mining Division, Region III

Subject: Docket 356X (Copper), Pennsylvania Copper Mine, Lincoln County, Nevada - Contract Idm-E212

Enclosed is a copy of a letter that was received by this office from Mr. Elmer F. Smith, operator of the Pennsylvania Copper mine.

Mr. Smith has made an offer of $150.00 for the equipment remaining on the property. As you will note from his letter, he states the only equipment involved is one refrigerator, 600 feet of ventube, and one slusher acquired when rental equaled the purchase price.

According to Mr. Gentry's final report, the following equipment was listed:

	Cost	Condition		Estimated Salvage value
Mine rail, 2.19 tons - 1,096 ft.	$328.50	Fair	25%	$ 82.13
Pipe, B.I., 2-inch - 706 ft.	211.80	Good	35%	74.13
" 1-inch - 376 ft.	52.64	"	30%	15.79
" 1-1/4 " - 126 ft.	31.50	Fair	20%	6.30
1 Stove, flame	325.00 ✓	"	10%	32.50
1 Refrigerator, Servel	200.00 ✓	"	20%	40.00
Vent tube, 8-inch - 600 ft.	510.00 ✓	"	10%	51.00
1 Slusher, I.R.	800.00	"	20%	160.00 ○
	$2,459.44			$461.85
Government participation	$1,229.72			$230.925

○Acquired from rental.

In discussing the equipment with Mr. Gentry, he considered the estimated Government's value at approximately $231.00 and is of the opinion that the equipment is worth approximately $200.00. However, the equipment that has been left from the DMEA project is in an isolated section and I would recommend that the Government accept the $150.00 that has been offered by Mr. Smith.

A. C. Johnson

A. C. Johnson

2710 Quincy Street, N.W.
Washington 8, D. C.
29 June 1951

Mr. A. G. Johnson
U. S. Bureau of Mines
Reno, Nevada

3 copies

Dear Mr. Johnson:

I wish to submit the following plan for the disposal of equipment under Contract I6s-1212. Inasmuch as the equipment cannot be sold locally to any monetary advantage to the government or to the contractor, it is requested that the contractor be permitted to buy the government's interest in the equipment. In view of the fact that there is a remote possibility that the contractor may be able to raise the money to install a small mill on the property in which case the equipment could be used to advantage. The only equipment involved is one refrigerator, 600 feet of ventube, and one blower acquired when rental equaled the purchase price. The lumber sale value of the above items to a used equipment dealer is $300. The contractor therefore offers to buy the government's interest for $150.

Very truly yours,

ELMER F. SMITH
Lt Colonel, USAF

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.

June 30, 1953

Memorandum

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

From: Executive Officer, DMEA Field Team, Region III

Subject: Docket DMEA-356 (Copper)
Pennsylvania Mine, Lincoln County, Nevada
Contract Idm-E212

Attached are four copies of the final report on the subject property entitled "DMEA-356X, Pennsylvania Copper Mine, Lincoln County, Nevada," by Glenn G. Gentry, Mining Engineer, U. S. Bureau of Mines, and C. M. Tschanz, Geologist, U. S. Geological Survey, dated June 8, 1953.

The exploration work on this property comprised drifting 528 feet north of the shaft and 130.7 feet south of the shaft. The exploratory work did not indicate any ore of mineable grade.

Mr. Bailey and I concur with the examining engineer and geologist that no discovery has been made on this property.

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

Attachment

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

Reviewed by
DMEA OPERATING COMMITTEE
7-10-53
(date)

UNITED STATES
DEPARTMENT OF THE INTERIOR
DOUGLAS McKAY, SECRETARY

DEFENSE MINERALS EXPLORATION ADMINISTRATION

REPORT OF EXAMINATION BY FIELD TEAM
REGION III

Final Report

Contract No.: Idm-E212

DMEA-356X, Pennsylvania Copper Mine

Lincoln County, Nev.

Glenn G. Gentry, Mining Engineer
U. S. Bureau of Mines

C. M. Tschanz, Geologist
U. S. Geological Survey

June 8, 1953

FINAL F.T. REPORT.

Reviewed by
DMEA OPERATING COMMITTEE

2-10-53
(date)

FINAL REPORT

Docket No.: DMEA-356X (copper)

Name and address of operator: Elmer F. Smith
2730 Ordway Street, N. W.,
Washington 8, D.C.

Name and location of property: Pennsylvania Copper Mine
Lincoln County, Nev.

Contract No.: Idm-E212

SUMMARY

The Pennsylvania Copper mine was visited and inspected on May 1, 2, and 3, 1953 by an engineer[1/] of the Bureau of Mines of Region III accompanied by a geologist[2/] of the Geological Survey. The purpose of the inspection was to make a final examination of the work performed under the exploration contract, to secure additional samples, and to prepare a final report.

The field team were shown through the mine workings by Mr. Frank Smith, mine superintendent. Lt. Col. Elmer F. Smith also visited the mine on the afternoon and evening of May 2 and during that period was available for discussions relative to the property.

The mine was closed down at the end of the day shift on April 30, 1953 due to the fact that all exploration funds had been expended and the time limit under Amendment No. 3 had been reached.

On the afternoon of May 1, the applicants started removing their operating equipment from the mine and expect to discontinue all mining operations.

1/ Glenn G. Gentry.
2/ C. M. Tschanz.

The applicants have explored the quartz vein on the 550 foot level both north and south of the inclined shaft for a total lateral distance of 658.7 feet.

CONCLUSIONS

The examining engineer cut 15 channel samples in the drift north of the shaft and 19 channel samples in the drift south of the shaft.

The north drift samples averaged: 0.158% Cu, less than 0.1% Pb, 0.0125% Zn and 1.096 ounces Ag per ton.

The south drift samples averaged: 0.288% Cu, less than 0.1% Pb, 0.221% Zn, and 2.09 ounces Ag per ton.

The drift north of the shaft, on the 550-foot level, followed the quartz vein for a distance of 528 feet and only very slight evidence of copper minerals were encountered. For this reason additional work in this drift was abandoned in December 1952 when operations were closed down for the winter.

When work was resumed on March 15, 1953, operations were confined to extending the South drift in the hopes of encountering at least some part of the northward raking Culverwell ore shoot. However, as no copper ore of commercial grade was found, the operators decided to discontinue further exploration.

All of the small machinery and mining tools belonging to the applicants were to be transferred to Ely, Nevada and stored at the residence of Frank Smith.

The almost total absence of copper minerals in the quartz vein has been disappointing to both parties to the exploration contract

and the field team consider that no discovery of copper ore could be claimed.

RECOMMENDATIONS

From the evidence obtained during the inspections and from the analysis of 34 samples, the field team recommends that no additional Government exploration funds be expended in this mine.

Due to the high degree of speculation, it appears doubtful that private capital could finance the construction of a milling plant and realize a profit on the block of low grade ore which has only been partially defined above the 550-foot level.

The costs of operating a mine in such an isolated area will be high, with additional difficulties to be expected on account of transportation. No evidence of economic copper ore was found on the 550-foot level during the Government's exploration project.

WORK COMPLETED

The exploration contract was dated November 15, 1951 and 30 days time were allowed in which to start work on the project. The contract was to be completed within 275 days. Three amendments of the contract have been granted to the applicant, as follows:

Amendment No. 1, dated Nov. 15, 1951, provides for:

(a) To recondition North shaft from collar to 550-foot level.

(b) Drift north on 550-foot level for 600 feet.

(c) Sink 60 feet on vein from 550-foot level, if approved by Government field team engineers.

(d) Carry out additional drifting, crosscutting and sinking, if approved by Government field team engineers.

Amendment No. 2, dated Sept. 3, 1952:

Extending duration of project for 100 days.

Amendment No. 3, dated March 10, 1953:

Extending duration of project to May 1, 1953, to discontinue exploration work in the North drift in the 550-foot level and to extend the South drift on the 550-foot level.

Rehabilitation and preparation for operations were started on December 3, 1951. Twenty days time were spent in reconditioning the shaft, trucking in supplies, cutting timber and miscellaneous work around the camp. Three days time were spent in repairing the road between Elgin, Nevada and the mine.

Considerable time was lost during the winter months in 1952 and 1953 due to weather and road conditions and together with slow progress in the extension of the North drift, accounted for the request for extension of time in Amendments Nos. 2 and 3.

North drift, 550-foot level:

Started Dec. 3, 1952
Advance - 528 feet
Completed - December 1952

528
130.7
658.7

South drift, 550-foot level:

Started March 15, 1953
Advance - 130.7 feet
Completed - April 30, 1953

Total exploration advance - 658.7 feet
Total cost per foot advance - $39.15

No exploration work was done on items c and d under Amendment No. 1 as both contract funds and time were exhausted on May 1, 1953.

GEOLOGY

The Pennsylvania vein strikes generally north-south and dips from 12°-30° to the east. The vein is entirely enclosed in altered igneous rock which is either diorite or andesite. The principal ore shoot rakes north from the No. 1 shaft and crosses the north shaft at about the 550 level. This ore shoot contains an appreciable tonnage of copper ore which, however, is not economic under present conditions without a mill. The vein is composed of very fine-grained sugary-quartz and contains many silicified fragments of the wall rock. The ore minerals, chiefly bornite, are extremely fine-grained and irregularly distributed.

North drift:

DMEA exploration began 10 feet north of the shaft on the edge of the principal ore shoot. The vein was followed generally N. 20° W. for a distance of 528 feet. The drift was along the footwall of the vein throughout most of its length. Oxidized copper minerals were exposed for about 20 feet just south of Station 6, but in no other place were appreciable amounts of ore minerals cut. A cross fault, striking generally north, just north of Station 6, bounds the vein quartz and little quartz was encountered between this point and Station 9. Vein quartz was encountered in the last 50 feet of the drift.

South drift:

DMEA exploration program began at a point about 80 feet from the shaft (Station 6). Low grade copper ore is present between Station 6 and the shaft. Several parallel fissures, striking south or south 20° west, were encountered in the new work. These fissures are a part of the Pennsylvania vein system. About 20 feet of mineralized rock was

encountered near Station 7 and no other mineralization of consequence was encountered in the DMEA work. South of Station 7 several small cross faults, striking generally northwest and dipping steeply to either the north or south, were encountered. These faults apparently did not cut the main vein system. An interval of about 25 feet of very hard, sugary quartz containing minute sulfide crystals was cut just south of Station 8. This silicified zone is bounded on either side by the minor cross faults. The last 25 feet of the drift was entirely within igneous rock which contained a few quartz stringers; the vein at this point is overhead.

SAMPLING

Sample No.	Ft. Width	%,Cu	%,Pb	%,Zn	Oz./T Au	Oz./T Ag	Location
No. 1	1.5	0.01				0.80	North drift; east wall; 5 feet north of Station 6; quartz vein mixed with diorite.
No. 2	2.0	0.55			Trace	3.00	North drift; east wall; 5 feet north of Station 7; narrow quartz vein mixed with diorite.
BM-436	4.4	0.02	0.20	0.30	Trace	Trace	North drift; east wall; 3.5 feet south of Station 4; vein shows considerable iron-stained quartz.
BM-480	2.0	0.04			Trace	0.20	Across vein in face of North drift.
BM-489	2.2	0.04	0.1*	0.1*	Trace	Trace	North drift; across vein in face of drift; mostly diorite with small quartz seams.
BM-490	2.7	0.05	0.1*	0.1*	Trace	Trace	North drift; east wall; 21 feet south of face; vein is mostly diorite containing small amount of quartz.
BM-491	3.0	0.05	0.1*	0.1*	Trace	Trace	North drift; east wall at fault; 21 feet south of Station 9; vein is mostly diorite with small amount of quartz.
BM-492	5.3	0.04	0.1*	0.2	Trace	Trace	North drift; east wall; at Station 8; small quartz seams in red diorite.
BM-493	5.6	0.07	0.1*	0.1	Trace	0.45	North drift; east wall; 61 feet south of Station 6; vein is mostly quartz.

Sample No.	Ft. Width	%,Cu	%,Pb	%,Zn	Oz./T Au	Oz./T Ag	Location
BM-494	4.4	0.03	0.1*	0.1	Trace	Trace	North drift, east wall, 10 feet north of Station 3; mixed diorite and quartz.
BM-495	3.8	0.04	0.1*	0.1*	Trace	Trace	North drift, west wall, at Station 2; vein is mostly quartz.
BM-496	5.1	0.34	0.1*	0.2	0.005	2.20	North drift, west wall, 23 feet south of Station 1; mostly quartz and should be in ore shoot.
BM-497	2.7	0.56	0.1*	0.2	0.005	2.10	South drift, east wall, 8 feet south of shaft; vein is mostly quartz and should be in ore shoot.
BM-498	3.9	0.15	0.1*	0.1	Trace	0.90	South drift, east wall, at Station 4; vein is mostly quartz.
BM-499	4.1	0.16	0.1*	0.2	Trace	0.85	South drift, east wall, 8 feet south of Station 6; quartz in vein has increased in width.
BM-500	2.4	0.31	0.1*	0.2	0.005	2.30	South drift, east wall, face of drift; width of quartz vein has decreased.
BM-529	2.4	0.33	0.1*	0.3	0.005	2.70	South drift, across back at Station 7
BM-530	2.8	0.11	0.1*	0.2	Trace	0.60	South drift, east wall, 30 feet south of Station 7; small amount of quartz in vein.
BM-531	2.6	0.08	0.1*	0.2*	Trace	0.45	South drift, east wall, 1 foot north of fault and 20 feet north of face; very little quartz.
BM-532	2.6	0.25	0.1*	0.3	0.005	3.05	South drift, directly above BM-531 and across fault into back of drift.
BM-533	3.2	0.05	0.1*	0.2*	Trace	Trace	Face of South drift, and across several small quartz seams.
BM-534	4.0	0.59	0.1	0.4	0.01	5.55	South drift; across back and 1 foot north of Station 7.
BM-535	4.0	0.41	0.1	0.3	0.005	2.80	South drift, across back, 32 feet south of Station 6; quartz and diorite with some copper stain.
BM-536	3.0	0.72	012	0.5	0.01	5.80	South drift, east wall, joins BM-534; mostly diorite, some quartz showing more copper.

Sample No.	Ft. Width	%,Cu	%,Pb	%,Zn	Oz./T. Au	Oz./T. Ag	Location
BM-537	2.3	0.16	0.1*	0.2	Trace	0.85	South drift, west wall, opposite BM-530; red diorite and quartz, light copper stain.
BM-538	2.4	0.14	0.1*	0.2	Trace	1.00	South drift, lower part of east wall, 52.5 feet south of Station 7; hard quartz and diorite; copper stained.
BM-539	4.0	0.10	0.1*	0.2*	Trace	1.20	South drift, back of drift, 9 feet north of face; quartz vein showing some sulphides.
BM-540	3.6	0.20	0.1*	0.2	0.01	1.70	South drift, east wall, 10 feet south of BM-530; north edge of small fault (S70°E, vertical) cuts bedding
BM-541	3.0	0.08	0.1*	0.2*	Trace	0.30	South drift, across back, 12 feet south of BM-529; mostly copper stained diorite; quartz vein nearly pinched out.
BM-542	1.8	0.11	0.1*	0.2*	0.005	2.40	South drift, east wall, 8feet south of BM-499; mostly diorite 2-inch quartz seam at top of sample shows some copper.
BM-543	2.3	0.31	0.1*	0.2	0.005	2.30	South drift, east wall, 3.5 feet south of BM-542; mostly diorite with some copper stained quartz.
BM-544	3.5	0.81	0.2	0.4	0.005	3.80	South drift, east wall, 4.5 feet north of Station 2; mixed quartz and diorite; more copper shows here in vein.
BM-545	3.3	0.64	0.1	0.3	0.02	6.00	North drift, west wall, 8 feet south of BM-496; mixed quartz and diorite in upper part of vein; should be ore.
BM-546	3.3	0.14	0.1*	0.2*	Trace	1.40	North drift, across back, 12 feet south of Station 6; mixed quartz and diorite; copper stained.
BM-547	4.0	0.31	0.1*	0.3	0.005	2.40	North dirft, east wall, 5.5 feet south of BM-546; mixed diorite and quartz; shows some copper.

* less than.

ORE RESERVES

In the field team report which preceded the DME[A] exploration program, the ore reserves above the proposed 650-foot level were estimated

to be as follows:

Location	Class	Tons	%,Cu	Oz.Ag/T
Main ore shoot	Measured	7,000	1.61	8.3
" " "	Indicated	1,300	1.61	8.3
Culverwell ore shoot	Inferred	2,700	1.61	8.3
		11,000		

As no work was done in either of the ore shoots and no ore was revealed in the DMEA drifts, no change in estimated ore reserves has been made.

EXPENDITURES

Total amount approved by contract	$25,792.22
Total cost of the project	$25,792.22
Government's share @ 50%	$12,896.11
Government's share unexpended	None
Value of production during operations . . .	No production No royalty

EFFICIENCY OF OPERATIONS

The exploration work has been well done and has followed good, standard mining practice. Frank L. Smith, operator and mine superintendent, is a thoroughly competent miner and has done the major portion of the work himself. The North and South drifts had required no timbering during the exploration program.

Equipment reported as purchased for the project:

600 feet of 8-inch diameter, vent tubing @ $0.85/ft.	$510.00
700 feet of 2-inch " , BI pipe @ $0.30/ft.	210.00
700 feet of 1-inch " , BI pipe @ $0.14*/ft.	98.00
650 feet (1.3 tons) of second hand, 12-pound mine rail @ $150.00* per ton	195.00
1 Flamo stove (spark), second hand	325.00
1 Servel refrigerator, Model G500, second hand	200.00
	$1,538.00

* = Estimated.

Equipment on hand:

Location	Item	Cost	Condition	Estimated Salvage	Value
North drift South drift	12 lb. rail, 936 feet 12 lb. rail, 160 feet (2.19 tons) 1,096 feet	$328.50	Fair	25%	$82.13
This rail is installed in the mine.					
North drift Shaft	2-inch B.I.pipe - 206 feet 2-inch B.I.pipe - 500 feet 706 "	211.80	Good	35%	74.13
North drift South drift	1-inch B.I.pipe - 260 feet 1-inch B.I.pipe - 116 " 376 "	52.64	Good	30%	15.79
South drift	1-1/4-inch B.I.pipe 126 "	31.50	Fair	20%	6.30
This pipe is installed in the mine.					
Cookhouse	1 Flamo stove	325.00	Fair	10%	32.50
F. L. Smith Residence in Ely, Nev.	1 Servel refrigerator	200.00	Fair	20%	40.00
In shaft and South drift	8-inch vent tube 600 ft.	510.00	Fair	10%	51.00
		$1,659.44			$301.85

No operating supplies remained on hand when project terminated.

The ventilation tubing, mine rail and pipe were left in the mine by the operators, when the project was completed and the mine closed down. It appears doubtful that the salvage value of this material would equal the cost of removing it from the mine. However, unless this equipment is removed from the mine in the very near future, considerable difficulty and added expense will be encountered, for several reasons:

1. It will now be necessary to ventilate the mine before again entering it.

2. Water will accumulate in the North drift and it will also be necessary to pump out the shaft sump.

3. Some caving ground is to be expected, in various locations, in the North drift and may make it impossible to reclaim some of the mine rail.

The operators may possibly have some future use for this equipment and Lt. Col. Smith stated that he would consider making an offer to purchase. If this offer is reasonable, it is recommended that it be accepted.

The operator advised the field team, on May 1, that he would submit a final operators report. However as this report has not been received, it is recommended that the field team report be considered as final.

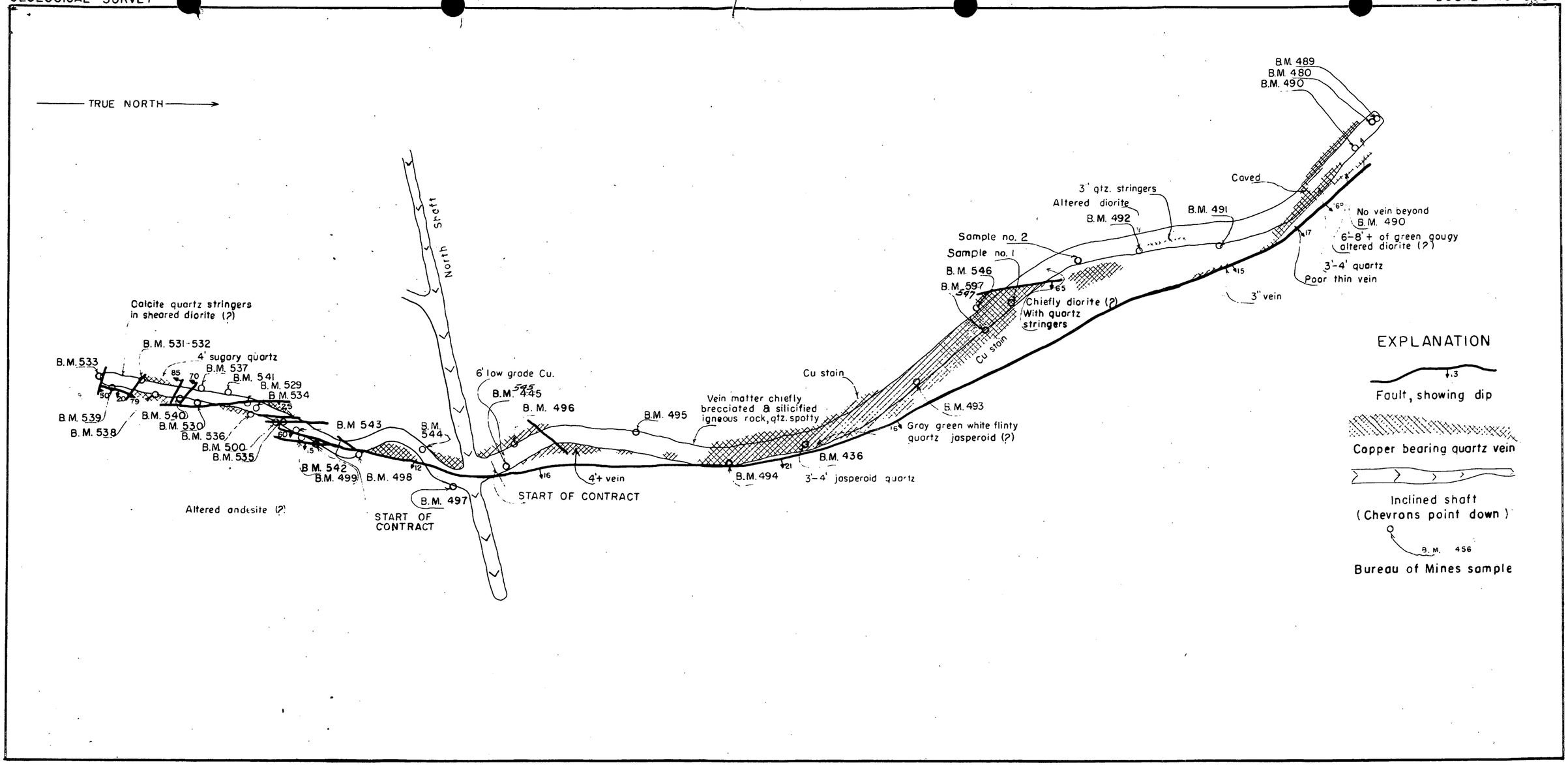


FIG. 1

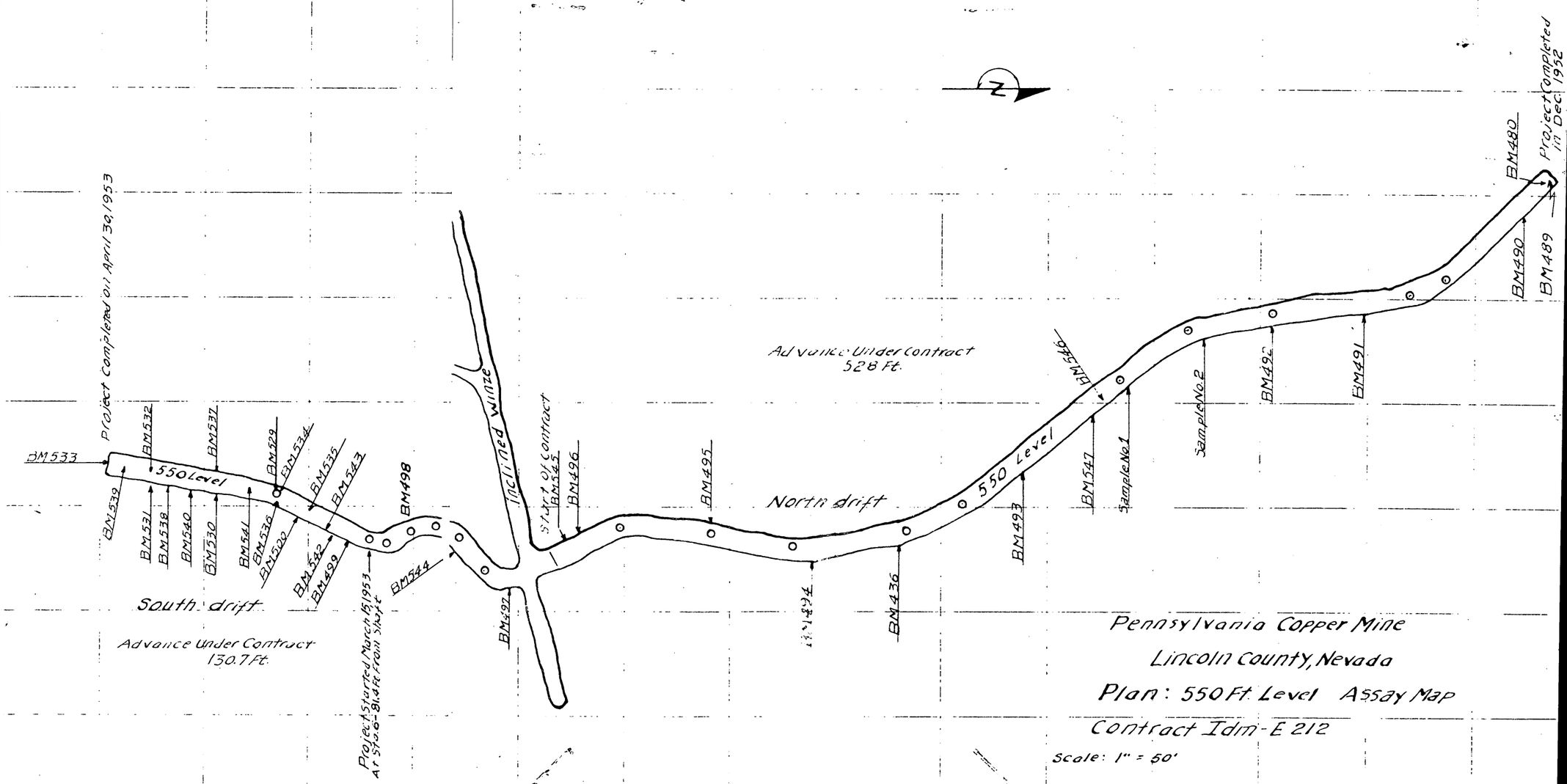
PLAN OF 550 LEVEL, PENNSYLVANIA MINE (COPPER)
PENNSYLVANIA MINING DISTRICT, LINCOLN COUNTY, NEVADA
Contract Idm.-E212

0 50 100 150 ft.
Scale

Brunton survey by Gentry G.G. & Tschanz C. M.
Geology by C. M. Tschanz

South Drift					Ozs/T	
No.	Width	%Cu.	%Pb	%Zn	Au	Ag.
BM497	2.7 Ft.	0.56	*0.1	0.2	0.005	2.10
544	3.5 "	0.81	0.2	0.4	0.005	3.80
499	4.1 "	0.16	*0.1	0.2	Tr.	0.85
542	1.8 "	0.11	*0.1	*0.2	0.005	2.40
543	2.3 "	0.31	*0.1	0.2	0.005	2.30
500	2.4 "	0.31	*0.1	0.2	0.005	2.30
535	4.0 "	0.41	0.1	0.3	0.005	2.80
534	4.0 "	0.59	0.1	0.4	0.01	5.55
536	3.0 "	0.72	0.2	0.5	0.01	5.80
529	2.4 "	0.33	*0.1	0.3	0.005	2.70
541	3.0 "	0.08	*0.1	0.2	Tr.	0.30
[illegible]	2.8 "	0.11	*0.1	0.2	"	0.60
537	2.3 "	0.16	*0.1	0.2	"	0.85
540	3.6 "	0.20	*0.1	0.2	0.01	1.70
538	2.4 "	0.14	*0.1	0.2	Tr.	1.00
531	2.6 "	0.08	*0.1	*0.2	"	0.45
532	2.6 "	0.25	*0.1	0.3	0.005	3.05
539	4.0 "	0.10	*0.1	*0.2	Tr.	1.20
533	3.2 "	0.05	*0.1	*0.2	Tr.	Tr.
North Drift						
545	3.3 Ft	0.64	0.1	0.3	0.02	6.00
496	5.1 "	0.34	*0.1	0.2	0.005	2.20
495	3.8 "	0.04	*0.1	*0.1	Tr.	Tr.
494	4.4 "	0.03	*0.1	0.1	Tr.	Tr.
436	4.4 "	0.02	0.20	0.30	Tr.	Tr.
[illegible]	5.6 "	0.07	*0.1	0.1	Tr.	0.45
547	4.0 "	0.31	*0.1	0.3	0.005	2.40
546	3.3 "	0.14	*0.1	*0.2	Tr.	1.40
No. 1	1.5 "	0.01				0.80
No. 2	2.0 "	0.55			Tr.	3.00
492	5.3 "	0.04	*0.1	0.2	Tr.	Tr.
491	3.0 "	0.05	*0.1	*0.1	Tr.	Tr.
490	2.7 "	0.05	*0.1	*0.1	Tr.	Tr.
480	2.0 "	0.04			Tr.	0.20
489	2.2 "	0.04	*0.1	*0.1	Tr.	Tr.

* Less Than



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SURNAME:
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UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS ADMINISTRATION
WASHINGTON 25, D. C. JUN 16 1953

Talbert
Chamberlin

AIR MAIL

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

Re: Idm-8212, DMEA-356
Pennsylvania Mine

Dear Mr. Miller:

There has come to the attention of this Division a copy of your letter of June 10, 1953, to Lt. Col. Elmer F. Smith in regard to his request for an amendment to the contract to provide for payment of (1) wages at rates in excess of maximum rate of $12.50 per shift allowable under the contract and (2) necessary repair and maintenance costs of the access road.

Since the accounting records for this project are located in Washington, D. C., on Mr. Mayer's request this Division has been performing the final audit of this contract. Therefore, your letter is of immediate concern and interest to this Division.

We concur with your reasoning that the contract may not be amended since the work thereunder has been completed. However, it appears that you have been misinformed relative to the allowance of such costs requiring an increase in the total amount of the contract. Both the increased wage rates and the cost of road repairs and maintenance have been included in the monthly forms MF-104 heretofore approved and paid by your office.

It also appears that the third and fourth paragraphs of your letter are in error in stating that the sinking, drifting, crosscutting and raising were on a unit cost basis. The costs shown in Amendment No. 1 are estimated costs. In fact Amendment No. 1 revised only the items of work and the summary of estimated costs as indicated on page 1 of Exhibit "A". The detailed estimates as shown on pages 2 and 3 of Exhibit "A" were not changed by the amendment.

For your information a summary of the audit findings in regard to wages paid follows:

Shifts Worked	Rate Paid	Charged on MF-104	Allowable @ $12.50	Indicated Disallowances
293 shifts	$12.50	$ 3,662.50	$ 3,662.50	$ -
435 "	13.00	5,655.00	5,437.50	217.50
102 "	14.00	1,428.00	1,275.00	153.00
20½ "	15.00	307.00	255.83	51.17
187 feet	$10/Ft.	1,870.00	1,562.50	307.50
Totals		$12,922.50	$12,193.33	$729.17

The total wages charged of $12,922.50 will not agree with the amount shown on the March MF-104, the last submitted by the Operator, for several reasons, i. e.:

(a) A charge of $1,259.00 for labor appears on the April MF-104 not as yet submitted by the Operator;

(b) Labor costs of $731.25 are included in the Operator's charge of $1,794.53 for conditioning the shaft, which was erroneously reported as Initial Rehabilitation and Repairs;

(c) The item of Road Repairs in the amount of $793.78 includes a very arbitrary pro-ration of labor in the amount of $487.50; and

(d) Other labor costs of $512.50 have been distributed erroneously to other items of costs on the MF-104.

The audit has disclosed that the amount of $793.78 charged to Road Repairs on the forms MF-104 represents a very arbitrary pro-ration of costs incurred during the months of December, 1951, February, 1952 and March, 1952. The original application indicated that the access road was in poor condition but passable and the Operator's files indicate that the repairs and maintenance were required as the result of torrential rains, floods and wash-outs in order to continue to prosecute the project. Accordingly, it appears that these road repairs may be "necessary reasonable, direct costs" within the meaning of Article 10 of the contract and therefore allowable, provided that you, as the Field Team Executive Officer, concur (see Question and Answer No. 1 to Supplement No. 1, IMDA Circular 19). A statement from you as to your determination on this item will be appreciated.

These two items of costs were among the questions raised during a review of the files prior to audit and were included in a letter dated May 22, 1953, addressed to Mr. Maver. I requested him to check these items and discuss the matter with you, but it appears that he did not

have an opportunity prior to his departure for Spokane. Fortunately, however, the audit has cleared most of the questions except that relating to the road repairs and another relative to depreciation charges.

In a memorandum dated January 16, 1952, from Mr. Trengrove, Mining Engineer, to Mr. Johnson, Chief of the Mining Division, covering a visit to the project on January 11, 1952, there is a listing of the "equipment being used" on the project. The allowable depreciation on the items shown therein amounts to only $237.08 a month, whereas, the Operator has claimed and has been paid at the rate of $239.58 per month. The difference of $2.50 per month apparently covers the depreciation allowance on a 5HP Fairbanks Morse gasoline engine driven hoist. Advice is requested as to whether or not this hoist (in addition to a 15HP hoist which was listed by Mr. Trengrove) was used on the project, and if so, for what periods.

Sincerely yours,

(Signed) J. L. Chambers

Jay L. Chambers, Chief
Contract Administration
and Audit Division

EDTalbert/wb
June 16, 1953

Copy to: Docket
Admr. Reading File
Mr. Ellis
Mr. Mavor
Mr. Chambers

P.N.
6-16-53

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

June 10, 1953

Elmer F. Smith, Lt. Colonel, USAF
2730 Ordway Street, N. W.
Washington 8, D. C.

Re: Docket DMEA-356 (Copper)
Pennsylvania Mine
Lincoln County, Nevada
Contract Idm-E212

My dear Colonel Smith:

Your letter of June 5, 1953, requesting amendment to your contract to permit (1) to charge the project with wages not to exceed the prevailing rates for the district, and (2) to charge the contract for repair and maintenance of the access road as allowable costs of the project, is acknowledged.

Based upon recent engineers' inspection reports received in this office, I am under the impression that the funds allotted to you under the contract have been exhausted and that work on the project has been terminated. That, together with the fact that wages based upon prevailing rates and the costs of maintenance and repair of the access road, originally or by amendment during the life of the contract were not a part of the contract, prevents me from amending the contract as suggested. To allow such added costs would increase the total cost of the contract.

In reviewing your contract I note in Amendment No. 1 that sinking, drifting, crosscutting and raising costs were on a unit basis. For sinking you were allowed $30.00 a foot and for drifting, crosscutting, and raising $20.00 a foot. Included in these unit costs are your labor costs at rates indicated on the third page of Exhibit "A". In addition to the above unit costs, you were allowed certain estimated sums for conditioning the shaft, equipment rental, use of your equipment, equipment to be purchased and miscellaneous expenses.

I note that you did not submit your costs on the MF-104 vouchers in conformance with the schedule as set out in Exhibit "A" and have turned in your costs for labor separately, though they are

included in the above $30.00 and $20.00 per foot allowable. Also, you have vouchered an item of $793.78 for road repairs which is not allowed under the contract. Our auditor is away from the office at the present time on a field assignment so I cannot discuss your account with him. I, therefore, have no idea of what he will find when he makes his final audit of your account, but you can rest assured that his audit will be one that is fair to both parties.

Sincerely yours,

H. C. MILLER

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

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

RECEIVED
JUN 8 5 38 PM '53
GENERAL SERVICES ADMIN
PUBLIC BLDGS. SERVICE
BMD - COMMUNICATIONS

4 WA SP /I-BOM/

SPOKANE 6-8-53 200P

J. L. CHAMBERS

CHIEF CONTRACT ADMINISTRATION AND AUDIT DIVISION

DMEA

WA 25 DC

REURTEL JUNE 8 PENNSYLVANIA MINE E 212 LETTER NOT SUBMITTED DUE TO MY DOCTOR VISIT AND H. C. MILLER-S ABSENCE FROM OFFICE AND PREPARATION FOR SPOKANE ASSIGNMENT. AS STATED MY LETTER MAY 19 I DISCUSSED ALL COSTS WITH H. C. MILLER AND HE WAS OF OPINION THAT THEY WERE ACCEPTABLE. YOUR LETTER REFERS TO TRENGROVE MEMORANDUM JANUARY 16 1952 ON DEPRECIATION . COPY OF THIS LETTER NOT IN SANFRANCISCO FILE. WAGE RATE INCREASE $12.50 TO $13.00 OPERATORS NARRATIVE ATTACHED TO MY 104 STATES INCREASE WAS DUE TO $15.00 RATES PAID IN PIOCHE AREA SEMI COLON HOWEVER $13.00 RATE NOT APPROVED BY EXECUTIVE OFFICER. IF FOREGOING EXPLANATIONS ARE NOT SATISFACTORY, PLEASE LET ME KNOW AND I WILL COMPLETE SAME UPON MY RETURN TO SANFRANCISCO.

GEORGE MAVOR DMEA AUDITOR.

8 E212 19 16 1952 $12.50 $13.00 104 $15.00 $13.00

VA 212P

JUN 9 10 31 AM '53
BUREAU OF MINES
MAIL ROOM
WASHINGTON, D. C.

FILE COPY
SURNAME:

Talbert
Chambers

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

BL

Contract Admin. and Audit Division

Defense Minerals Exploration
Administration
14X3923.970 Working Fund,
DMEA

June 8, 1953

Mr. George Mayor
DMEA Auditor
c/o Mr. Robert M. Hall
1201 North Division Street
Spokane 2, Washington

Re Pennsylvania Mine, DMA-356, E212. Advise whether you dispatched reply to my letter of May 22, 1953. Project now being audited and answers to questions are required.

(Signed) J. L. Chambers

Jay L. Chambers, Chief
Contract Administration
and Audit Division

6-8-53

EDTalbert/wb
June 8, 1953

cc: Docket

2730 Ordway Street, N.W.
Washington 8, D. C.
5 June 1953

Mr. H. C. Miller
Executive Officer
DMEA Field Team, Region 3
112 Flood Building
870 Market Street
San Francisco 2, California

Reference: Exploration Project
Contract Idm-E-212

Dear Mr. Miller:

A review of my contract Idm-E-212 discloses that paragraphs eight (8) and nine (9) as set forth in Exhibit "A" attached, do not appear to adequately define certain items of allowable cost.

Therefore, prior to the submission of my records for final audit, it is requested that the suggested changes be approved in substance and the contract be properly amended to reflect the following:

Paragraph 8, Labor and Supervision; as set forth in Exhibit "A" should be amended to read:

"Wages shall not exceed the prevailing rates for the district."

Paragraph 9, Rehabilitation and Repairs; as set forth in Exhibit "A" should be amended to read:

"Repair and maintenance of the access road shall be accomplished by the contractor and shall be allowed as costs of the project."

This request for approval and contract amendment will, I believe, preclude any controversy in the matter at the time of final audit.

Very truly yours,

ELMER F. SMITH
Lt Colonel, USAF

FILE COPY
SURNAME:

Talbert
Chamberlin

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

MAY 22 1953

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

AIR MAIL

Subj: DMA-2212, DMA-396X
Pennsylvania Mine

Dear Mr. Hover:

Reference is made to your letter of May 19, 1953, submitting your work papers on the subject project and requesting advice as to whether a Report of Review should be issued or a site audit should be made of the Operator's records located in Washington, D. C.

In view of the amount of the contract, the lack of documentation for the first use of the monthly forms MF-104, and evidence of certain questionable charges, it is my opinion that an audit is preferable.

Mr. Talbert has contacted Col. Smith by telephone to make arrangements for a final audit. Col. Smith advised him that preparation of his final MF-104 was being held in abeyance pending settlement with vendors, but that the amount involved will approximate $1,800.00. He will advise us when he has completed the final MF-104 and arrangements will be made at that time for a final audit.

Col. Smith was questioned about the amount of $1,794.53 brought forward as "Totals previously reported" on the July voucher, the first month in which the April 1952 revision of the MF-104 was used. This item appeared on the surface to be questionable even though you state that you believe it to be acceptable. The original Exhibit "A" indicated under Rehabilitation and Repairs the single word "none" and initial repairs of equipment or facilities are an allowable cost only when specifically provided for in the contract (see Question and Answer No. 3 in Supplement No. 1, DMA Circular 19). Furthermore, Amendment No. 1, which was issued two months after the costs were first claimed (in November 1951) and which completely restated the items of work and the summary of costs, did not indicate any initial rehabilitation and repairs as such.

Col. Smith advised, however, that "most" of this cost covered cutting timber for and doing work in connection with the reconditioning of the shaft. If this is so the charge of course is allowable as a cost of work item No. 1, which was stated in Exhibit "A", as amended, as "Condition North Shaft from collar to 550 foot level", and is improperly shown on the MF-104 under Initial Rehabilitation and Repairs.

These costs properly should be distributed to the various other items of Labor, Supervision, Materials and Supplies, etc., since Initial Rehabilitation and Repairs ordinarily refers to aboveground work.

It does appear, however, that the item of Road Repairs in the amount of $793.78 may be questionable. This apparently is properly Initial Rehabilitation and Repairs, though not shown as such, since the narrative covering the first monthly MF-104, in which part of the costs are included, indicates that three days were spent "rebuilding" the road. Will you check the Region's files on this item, discuss the matter with Mr. Miller, and advise me of your joint conclusions?

In a memorandum dated January 16, 1952 from Mr. Trengrove, Mining Engineer, to Mr. Johnson, Chief of the Mining Division, covering a visit to the project on January 11, 1952, there is a listing of the "equipment being used" on the project. The allowable depreciation on the items shown therein amounts to only $237.06 a month, whereas, the Operator has claimed depreciation at the monthly rate of $239.58, the maximum monthly amount allowable under the contract. It also appears quite possible that all of the equipment listed was not put to use during the first month of operations, that is November, and a partial disallowance on this score may be in order (See Question and Answer No. 2 in Supplement No. 1, DMA Circular 19). Please check into this and advise me.

Several of the monthly forms MF-104 indicate that the miners and hoistmen were paid at the rate of $13.00 a shift, whereas, Exhibit "A" specified a rate of $12.50 a shift. This latter rate must be considered an allowable maximum which cannot be exceeded except by amendment of the contract (See Question and Answer No. 1 in Operating Committee Memorandum No. 8). Unless the Region's files contain evidence that this increase in wage rates had the Executive Officer's approval, in such form as may be construed as an implied amendment, the excess costs necessarily must be disallowed. Please look into this item and advise me.

During the conversation with Col. Smith he stated that he had not been paid on either the December, 1952, or March, 1953, forms MF-104. Mr. Talbert, of course, could not give him the reason for nonpayment, but told him that inquiry would be made. Possibly, they are being withheld pending the audit but if the project was in operation up to April 30, 1953, the final MF-104 (for April) should be in a amount sufficient to cover possible disallowances (that is, provided that the item of rehabilitation was in fact the conditioning of the shaft, which information Mr. Trengrove should be able to confirm).

Col. Smith also advised that he intends to make an offer for the Government's interest in the project property, since there is no chance of other disposal due to the isolated location.

Sincerely yours,

(Signed) J. L. Chambers

Jay L. Chambers, Chief
Contract Administration
and Audit Division

S.H.
5-22-53

EDTalbert/wb
May 22, 1953

Copy to: Docket
Admr. Reading File
Mr. Ellis
Mr. Chambers

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION

Office of
Executive Officer
DMEA Field Team
Region III

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

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
MAY 4 1953

Date: April 29, 1953

Memorandum

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

From: Executive Officer, DMEA Field Team, Region III

Subject: Interim Inspection Report

Attached are four copies of Interim Report on -

Docket DMEA 356X

Contract Idm-E 212

Commodity Copper

Operator - Elmer F. Smith, 2730 Ordway Street, N. W.
Washington 8, D. C.

Property - Pennsylvania Copper Mine
Lincoln County, Nevada

By Glenn G. Gentry, Mining Engineer

Dated April 9, 1953

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

Attachment

Copy to: Finance Officer, Region III (With one copy of report)

E. H. Bailey, USGS (With one copy of report)

George Mavor

INTERIM REPORT

Docket No.: DMEA-356X (copper) April 9, 1953

Name and address of operator: Elmer F. Smith
2730 Ordway Street, N.W.,
Washington 8, D.C.

Name and location of property: Pennsylvania Copper Mine
Lincoln County, Nev.

Contract No.: Idm-E212

SUMMARY

The Pennsylvania Copper Mine was visited and inspected on March 28, 29, and 30, 1953 for the purpose of observation and inspection of past work performed in the North drift on the 550 level and new exploration being presently conducted in the South drift on the same level.

Due to weather and road conditions, the exploration project was closed down in December 1952 and work resumed on March 15, 1953.

The personnel at the mine consisted of:

Mr. Frank Smith, superintendent-miner
Lt. Colonel Elmer F. Smith, miners helper
Mr. Charles Smith, hoistman-topman

The examining engineer was conducted through the mine by Mr. Frank Smith and Lt. Colonel Elmer F. Smith. On March 10, 1953, amendment No. 3 was granted. Item No. 1 of this amendment provides:

"Discontinue drifting north on the 550-foot level (as approved by amendment No. 1) and use the remaining allowable footage of 142 feet in driving a similar size drift south on the 550-foot level from the end of the approximately 60-foot long stub drift op-

posite the discontinued North drift (see map attached to amendment No. 1)."

Completion date of contract extended to May 1, 1953.

Under amendment No. 1, 600 feet of drifting in a northerly direction was allowed on the 550-foot level. At the time of the inspection trip on Nov. 22 and 23, 1952, this North drift had been advanced a distance of 458 feet and at the time operations were discontinued in December 1952, had been further advanced to a total of 528 feet, or 88% of the allowable footage.

Assuming that the actual measured advance in the North drift, between Nov. 22-23 to the date of closing in December, amounting to 70 feet, would be deducted from the 142 feet of allowable drifting, the remaining allowable drifting south of the shaft would amount to 72 feet, of which 47.92% has been completed.

According to the operators financial report for the last months operation in December 1952, the unexpended funds amounted to $2,781.55. At the present rate of expenditure, this fund will be exhausted on May 1, 1953.

The examining engineer recommends that drifting along the vein, south of the shaft on the 550-foot level be continued to the First of May, 1953, provided that expenditures shall not exceed the contract allowance.

Very slight evidence of copper mineralization was encountered in the North drift and while there is some noticeable increase in the amount of sulphide minerals in the South drift, the entire exploration has been disappointing to both Government and the operators. The

applicant's future plans for the mine are indefinite, however, due to lack of finances, Mr. Frank Smith expects to discontinue all operations on May 1, 1953 and to transfer all small equipment, tools and supplies to Ely, Nevada for safe keeping.

Lt. Colonel Elmer F. Smith is tentatively considering the possibility of installing a small mill at the property to be used in treating copper ore from around the old stope areas and as a custom mill for other small mines in the district. However, the erection of a mill is only a consideration and no plans have been made to finance such a venture.

GEOLOGY

The North drift has been driven along the fissure which has a general northwest strike and dips from 20 degrees to 25 degrees to the east. The rock encountered has been principally quartzite, though some andesite diorite is noted on the footwall side of the vein. The hanging wall appears to be composed of a limey shale which has a tendency to cave, in places, after exposure to the air.

The South drift has been extended in much the same character of rock. However, the face of the drift on March 30, 1953, showed a noticeable increase of the diorite. The quartz, varying from dull to glassy, also contains an increased amount of iron, lead and zinc sulphides.

SAMPLING

During the inspection, the following channel cut samples were taken by the examining engineer and are plotted on the enclosed drawings:

Sample No.	Width/Ft.	Location	Description
BM-489	2.2	North drift	Face of North drift. Mostly andesite diorite. Small quartz seams.
490	2.7	"	21 feet south of face of drift. East side of drift. Mostly diorite. Small amount of quartz.
491	3.0	"	21 feet south of station 9. East side of drift. Mostly diorite. Small amount of quartz.
492	5.3	"	East wall of drift at station 8 Small quartz stringers in red diorite.
493	5.6	"	61 feet south of station 6. East wall of drift. Mostly quartzite.
494	4.4	"	10 feet north of station 3. East wall of drift. Mixed diorite and quartzite.
495	3.8	"	West side of drift at station 2. Mostly quartzites.
496	5.1	"	23 feet south of station 1. West wall of drift. Mostly quartzites.
497	2.7	South"drift	8 feet south of shaft. East wall of drift. Quartz and quartzites.
498	3.9	"	East wall of drift at station 4. Quartz and quartzites.
499	4.1	"	8 feet south of station 6. East wall of drift. Increasing amount of quartz.
500	2.4	"	Face of drift on 3/30/53. Mixed diorite and quartz.

Sample No.	Width/Ft.	%,Cu	%,Pb	%,Zn	Oz Au/T	Oz Ag/T	Description
BM-501	3.0	0.54	*0.1	0.5	0.12	17.70	No.1 shaft. North side of shaft; 75 feet below collar. Mostly oxidized quartz; some copper stain.
BM-503	Grab	0.03	*0.1	0.2	Trace	Trace	Surface gossan. Adjacent to the mine camp.

STATEMENT OF WORK COMPLETED

Financial:

Amount of contract	$25,792.22
Government participation @ 50% = $12,896.11	
Expenditures reported to end of Dec. 1952 . .	23,010.67
Unexpended	$ 2,781.55

Contract period:

Contract dated: Nov. 15, 1951
Allowable time to start work: 30 days
Contract period: 270 days
Increase due to amendment No. 2: 100 days
Total time: 370 days
Original contract time expire: Nov. 18, 1952
Amendment No. 3 extends expiration of time to: May 1, 1953

Progress report:

North drift, contract allowance		600 feet
" " advance to Nov. 22, 1952 .	458 feet	
" " " Nov. 22, 1952 to Dec. 1952 . . .	70 "	
	528	528 "
Remaining allowed under contract		72 "

The North drift was discontinued in December when the mine was closed down for the winter, after completing 88% of the project. The reason for discontinuing the drift was due to lack of mineralization and no geological indications that would indicate justification for additional work in the area.

South drift, drifting allowed under amendment No. 3 .	142.0 feet
" " advance March 15, 1953 to Mar. 30, 1953	34.5 "
Balance	107.5 "

COMMENTS

The operations conducted in extending the South drift are being done on a day shift basis only for a six day week. Frank Smith does the drilling, blasting and mucking with the assistance of one helper underground. The broken rock in the heading is removed by an air-

powered slusher to a mine car which is then hand trammed to the inclined shaft. The hoistman also acts as surface trammer and general mechanic.

The size of the drift will vary from 5 feet to 6 feet in width, depending upon the overbreak. The height of the drift is approximately 6.5 feet. A heading round usually consists of from 14 to 16 holes drilled to a depth of 5 feet. This type of round produces from 16 to 20 cars of broken rock. Blasting fuse is cut in 7½ foot lengths. The operators endeavor to drill, blast and muck out each day in order to maintain a daily advance of 4 feet. The work has been done in a satisfactory manner, has followed good mining practice, and the drift has not required timbering.

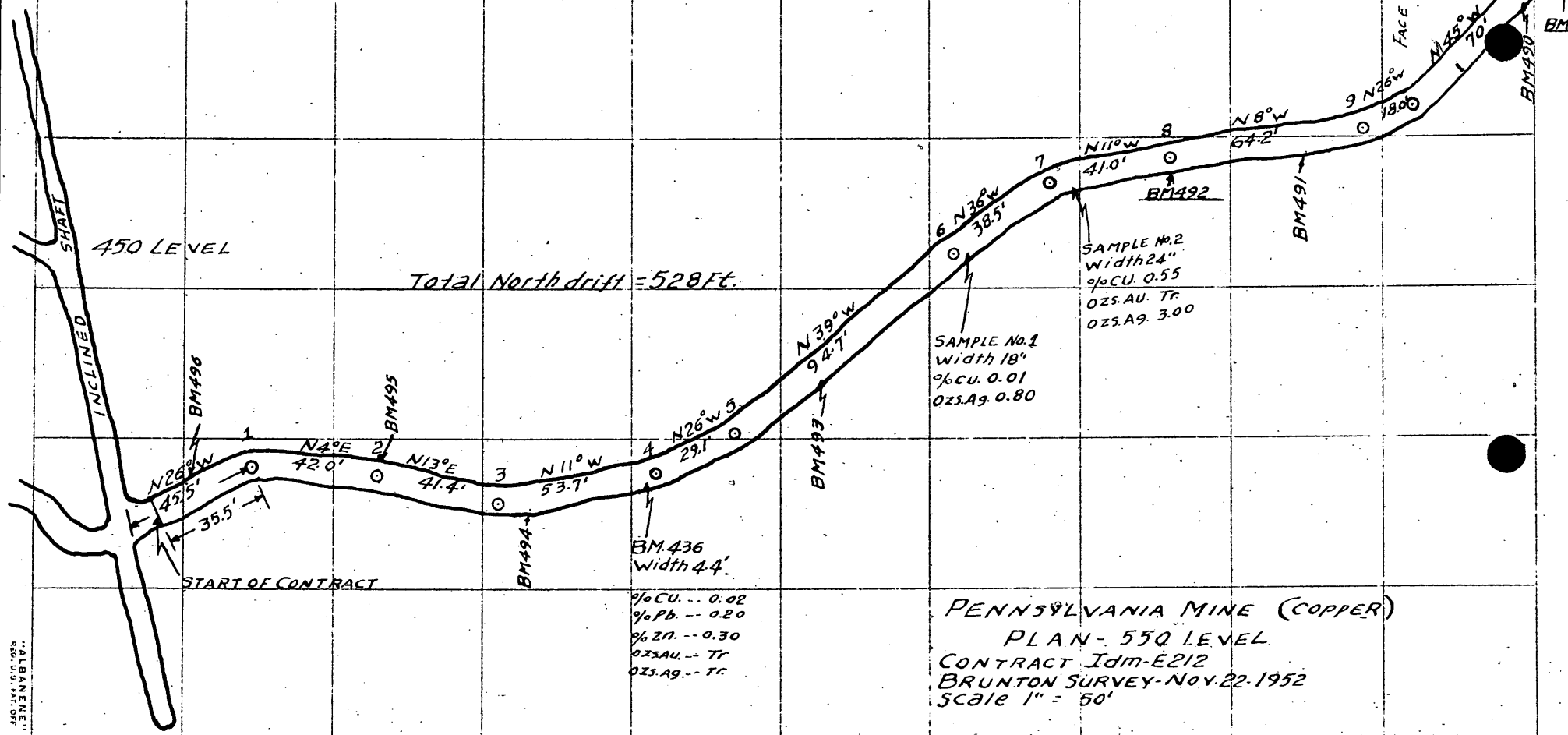
The South drift on March 30, 1953 was almost directly under and in line with the possible extension of the ore body in the Pennsylvania No. 1 shaft.

Glenn G. Gentry
Mining Engineer

SAMPLES

No.	Width	%Cu.	%Pb.	%Zn.	OZS.AU/T	OZS.AG/T
BM480		0.04			Tr.	0.20
489	2.2 Ft.	0.04	*0.1	*0.1	"	Tr.
490	2.7 "	0.05	*0.1	*0.1	"	"
491	3.0 "	0.05	*0.1	*0.1	"	"
492	5.3 "	0.04	*0.1	0.2	"	"
493	5.6 "	0.07	*0.1	0.1	"	0.45
494	4.4 "	0.03	*0.1	0.1	"	Tr.
495	3.8 "	0.04	*0.1	*0.1	"	"
496	5.1 "	0.34	*0.1	0.2	0.005	2.20

* Spectrographic determination



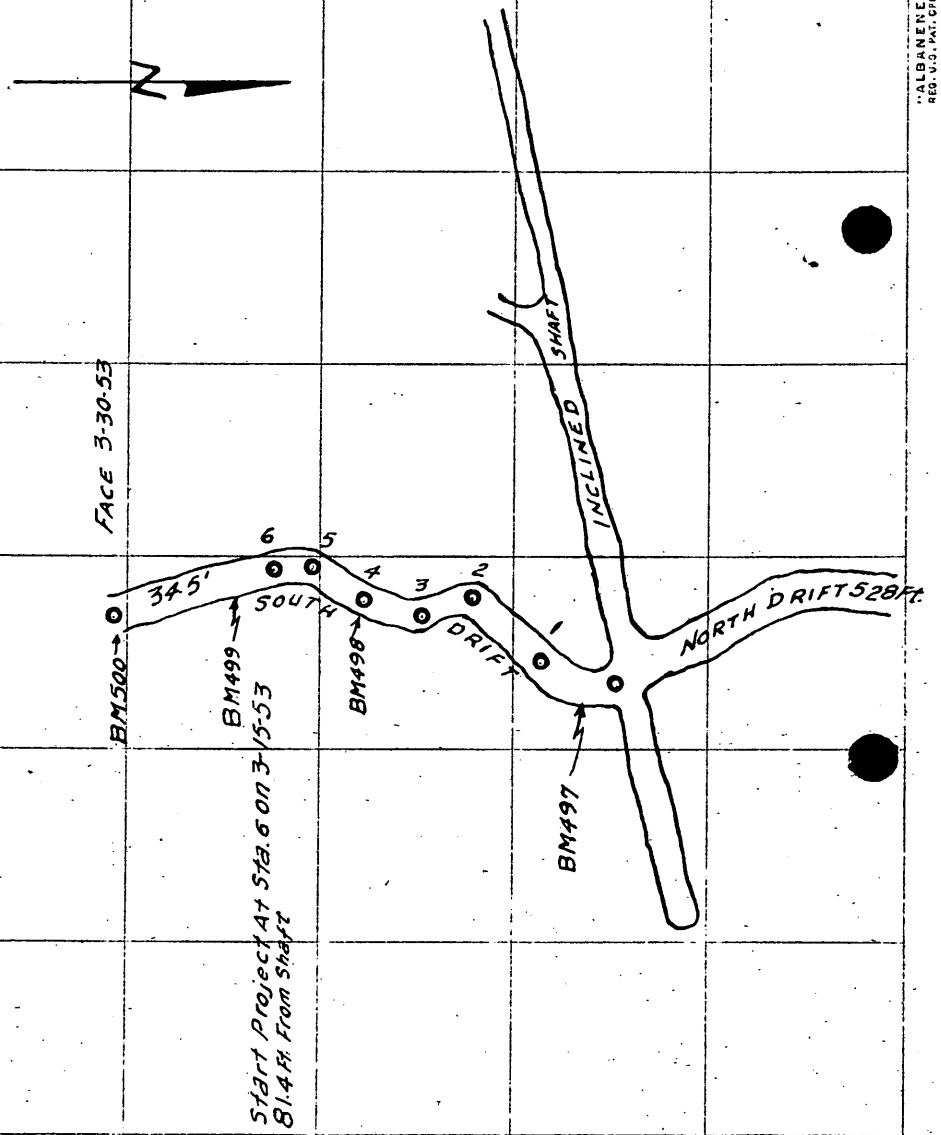
PENNSYLVANIA MINE (COPPER)
PLAN - 550 LEVEL
CONTRACT Idm-E212
BRUNTON SURVEY-NOV. 22. 1952
Scale 1" = 50'

"ALBANENE" No. 1668 K&E CO., N.Y.
REG. U.S. PAT. OFF.

SAMPLES

No.	Width	%Cu.	%Pb.	%Zn.	OZS/T Au.	Ag.
BM497	2.7 Ft.	0.56	*0.1	0.2	0.005	2.10
498	3.9 "	0.15	*0.1	0.1	Tr.	0.90
499	4.1 "	0.16	*0.1	0.2	"	0.85
500	2.4 "	0.31	*0.1	0.2	0.005	2.30

* Spectrographic determination



PENNSYLVANIA MINE - COPPER

PLAN - SOUTH DRIFT ON 550 LEVEL

CONTRACT Idm-E212

Scale 1" = 40 Ft.

"ALBANENE" NO. 105M K&E CO., N.Y. REG. U.S. PAT. OFF.

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

March 30, 1953

Memorandum

To: Hazel Berry, Operating Committee

From: Grace L. Ault, Rare & Misc. Metals Division

Subject: Amendment to contract

Mr. Ellis has reviewed Amendment No. 3, dated March 10, 1953, to Contract Idm-E212, Docket No. DMA-356X, Pennsylvania Mine, and approves it.

Grace L. Ault
Grace L. Ault

Posted 3-31-53

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 Building
870 Market Street
San Francisco 2, Calif.

March 23, 1953

Memorandum

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

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
MAR 27 1953

From: Executive Officer, DMEA Field Team, Region III

Subject: Contract Idm-E212 - Docket DMEA-356 (Copper)
Pennsylvania Mine, Lincoln County, Nevada
Amendment No. 3

Attached are the original and two copies of Amendment No. 3, dated March 10, 1953, outlining provisions in the proposed work and extending the date to May 1, 1953.

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
APR - 9 1953
GENERAL COUNSEL
DEFENSE MINERALS
ADMINISTRATION

3/27

3/18/53 gla

Office of
Executive Officer
DMEA Field Team
Region III

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

March 10, 1953

Mr. Elmer F. Smith
2750 Ordway Street, N. W.
Washington 8, D. C.

Re: Contract Idm-2212
Docket DMA-3282
Pennsylvania Mine
Lincoln County, Nevada

Amendment No. 3

Dear Mr. Smith:

In compliance with your recent telephone request, we have prepared Amendment No. 3 to subject contract, outlining provisions in the proposed work and extending the date to May 1, 1953.

If you are in accord with the amendment as we have drawn it up, will you kindly sign all of the six enclosed copies, returning the original and four carbon copies to this office, retaining the remaining copy for your records.

Sincerely yours,

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

Enclosure

Copy to: DMEA, Washington, D. C. (2)
E. H. Bailey, [illegible]
A. C. Johnson, Reno

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
MAR 2 1953

Office of
Executive Officer
DMA Field Team
Region III

1612 Flood Building
870 Market Street
San Francisco 2, Calif.

February 26, 1953

Memorandum

To: A. G. Johnson, Bureau of Mines, Reno, Nevada

From: Executive Officer, DMA Field Team, Region III

Subject: Contract DMA-248 (Copper), Contract 1da-2812, Pennsylvania Mine (Elmer F. Smith), Lincoln County, Nevada

Glenn Gentry's report on the subject property, dated February 18, 1953, has been received and read. Copies of the report have been distributed to the proper parties.

I note a statement on the first page of the report to the effect that Col. Frank Smith told Gentry that a "request for an extension of time had been made and such an extension had been approved." It is true that by letter, dated January 20, 1953, the tenant, Elmer Smith, requested an extension of 140 days in which to complete the contract. The extension, however, has not yet been approved by this office.

Attached to Gal Smith's letter of January 20 is a slip on which I had made the following notation: "Wait for Gentry's report before preparing an amendment extending the completion date. It may be advisable to terminate the contract." As Gentry was not able to reach the mine on account of snow, we are right back to where we started. Apparently the drift to the north is getting nowhere. The analysis of the one sample taken from the face of the north drift off the 200-foot level certainly is not encouraging as it ran only 0.64 percent copper. The question then is should work be done on a drift to the south as was suggested by Mr. Emmons in a telephone conversation I had with him early in January.

Gentry's report indicates an unexpended balance of $2,741.25. This amount of money would probably be enough to drift about 150 feet to the south. Do you think that amount of work is justified and has prospects of expecting better ground than is indicated in the north drift?

If you think it advisable to amend the contract to permit a small amount of drifting to the south, it may be possible to amend the contract to allow it. At the same time, an extension of time can be approved. I will await, therefore, Gentry's recommendations and inspection report to be submitted as soon as the roads to the mine are passable.

Am I right in my thought that the north drift is on the [illegible]-foot level and that the proposed south drift is to be on the [illegible]-foot level?

H. C. MILLER

H. C. Miller
Executive Officer
[illegible] Field Team, Region III

Copy to: [illegible], Interior Building, Washington
R. M. Bailey, [illegible]

P. S. Gentry's report is in error in that the expiration date of the contract is not December [illegible], [illegible]. Original contract called for completion within 270 days which, with the 100 day extension granted by Amendment No. 2, makes the expiration date 370 days from November 18, [illegible], or November 12, [illegible].

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
MAR 2 1953

Bed

Office of
Executive Officer
DMA Field Team
Region XII

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

February 26, 1953

AIR MAIL

Mr. Elmer F. Smith
3700 Sidney Street, N. W.
Washington 8, D. C.

Re: Contract 14m-2012
Docket DMA-8242
Pennsylvania Mine
Lincoln County, Nevada

Dear Mr. Smith:

I have the following to submit in reply to your telegram of February 24, inquiring about non-payment of vouchers submitted by you on January 23, covering December disbursement under the above captioned contract.

On investigation, I found that our Accounts Section was holding up payment on your December voucher awaiting the granting of an extension of time on your contract. Your contract is dated November 14, 1952, and run for 270 days. Subsequent amendment No. 2 extended the completion date 120 days so that your contract expired on November 13, 1953.

The first request we had for another extension was your letter, dated January 20, 1953, which we received on January 23. In this letter you requested an further extension of 140 days. This request should have been made over two months earlier.

Inasmuch as the work in the north drift off the 850-foot level is not encouraging and a sample from the face of the drift ran only 0.24 percent copper, we have been considering the possibility of requesting that no further work be done in that direction and to use the small amount of funds remaining to drive a drift in a southerly direction.

I expect to have the recommendations of our Reno office in a couple of days. If Mr. Johnson's recommendations are favorable, I will then draw up an amendment to permit you to drive a south drift. At the same time, the amendment will include the necessary extension of time from November 13, 1953, for you to complete the work.

Should Mr. Johnson's recommendations be negative, it will then be necessary for us to prepare an amendment extending the completion date from November 13, 1953, through the last day you operated before

shutting down for the winter. If the mobile drift is not recommended, we will consider that no additional work is advisable and will terminate the contract. In that event, payment of the December voucher will have to await the final audit of your account.

Sincerely yours,

H. C. MILLER

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

Copy to: NMFS, Washington
R. K. Bailey, WSSE
A. S. Johnson, Reno

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION

Office of
Executive Officer
DMEA Field Team
Region III

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

Date: Feb. 24, 1953

Memorandum

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

From: Executive Officer, DMEA Field Team, Region III

Subject: Interim Inspection Report

Attached are four copies of Interim Report on -

Docket DMEA 356X

Contract Idm-E 212

Commodity Copper

Operator - Elmer F. Smith
2730 Ordway Street, N. W.
Washington 8, D. C.

Property - Pennsylvania Copper Mine
Lincoln County, Nevada

By Glenn G. Gentry, Mining Engineer

Dated Feb. 19, 1953

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

Attachment

Copy to: Finance Officer, Region III (With one copy of report)

E. H. Bailey, USGS (With one copy of report)

INTERIM REPORT

Docket No.: DMEA-356X (Copper) Feb. 19, 1953

Name and address of operator: Elmer F. Smith
2730 Ordway Street, N.W.,
Washington 8, D.C.

Name and location of property: Pennsylvania Copper Mine
Lincoln County, Nev.

Contract No.: Idm-E212

SUMMARY

The inspecting engineer conferred with Mr. Frank Smith, superintendent of the Pennsylvania mine at his residence in Ely, Nev., during the evening of Feb. 4, 1953.

During this conference, Mr. Smith stated that the mine had been closed down in December 1952 due to snow blocked roads which made it impossible to transport supplies necessary to the operation of the property. Mr. Smith expects to resume active mine operations about April 1, 1953 provided the road to the mine is passable on that date.

Therefore, it was impossible for the inspecting engineer to visit the property and examine the work performed since Nov. 23, 1952.

The expiration of the contract as of December 20, 1952 was again brought to the attention of Mr. Smith, who stated that a request for an extension of time had been made and such an extension had been approved. However, this office has not been notified that such an extension has been granted.

PROGRESS

Amount of contract: $25,792.22
Government participation 50% = $12,896.11
Expenditures as of Dec. 30, 1952 . . $23,010.67
Unexpended . . . . . $ 2,781.55

Contract period:
Contract dated: Nov. 15, 1951
Allowable time to start work: 30 days
Contract period: 270 days
Increase due to amendment No. 2: 100 days
Total: 370 days
Contract expired on: Dec. 20, 1952

Drifting:

Drift north on 550-foot level (amendment No. 1)	600	feet allowed
Total drift advance as of Nov. 22, 1952	* 458	"
To be completed under contract	142	"

*No advance measured since Nov. 22, 1952.

At the time Mr. Smith discontinued operations, he secured a small sample of ore which he stated was exposed in the face of the North drift off the 550-foot level. This sample No. BM-480 returned the following analysis: 0.04% Cu, Trace Au, and 0.20 oz. Ag/T. Ore ?

Further inspection of the Pennsylvania Mine will be made as soon as the roads are passable.

Glenn G. Gentry
Mining Engineer

DEPARTMENT OF INTERIOR
BUREAU OF MINES
REGION III
RECEIVED

FEB 24 AM 9:

SAN FRANCISCO, CALIFORNIA

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

January 2, 1953

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
JAN 5 1953

Memorandum

To: E. W. Ellis, DMEA

From: C. H. Johnson, U. S. Bureau of Mines

Subject: DMEA-356X (Copper) Elmer F. Smith, Pennsylvania Copper Mine, Lincoln County, Nevada

I have been interested in this project from the start, and recently, reading the progress reports have been very sorry to observe the almost complete lack of mineralization in the drift. As far back as August 18, 1952 the reporting engineer said that, "Another hundred feet of drifting will be necessary to intersect the probable fault zone where mineralization should be expected." He then appeared to be in favor of the contractor's wish to cross-cut southward on the 550 level if he failed to pick up any ore in the vicinity of the supposed fault zone. Now in the latest report, dated December 2, 1952, after having advanced the 550 level drift more than 200 feet farther to the north and having found practically nothing, the only concern seems to be whether the remaining $7,000 can be spent before winter stops the work or whether it will have to be put off until spring. Nothing more is said about giving up the north drift and drifting southward, which in my opinion was a sensible suggestion.

It is recommended that consideration be given to either stopping this project or stopping the north drift and advancing the 550 level southward, which would put it under some old stopes.

C. H. Johnson

C. H. Johnson

Copy to - Minerals Division
Mr. A. R. Kinkel, Jr., Room 4234 GSA
Base Metals Branch
C. H. Johnson
Files

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
DEC 1 9 1952

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION

Office of
Executive Officer
DMEA Field Team
Region III

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

Date: Dec. 12, 1952

Memorandum

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

From: Executive Officer, DMEA Field Team, Region III

Subject: Interim Inspection Report

Attached are four copies of Interim Report on -

Docket DMEA 356X

Contract Idm-E 212

Commodity Copper

Operator - Elmer F. Smith - Pennsylvania Mine

Property - Pennsylvania Mine
Lincoln County, Nev.

By Glenn G. Gentry & Russell R. Trengove

Dated Dec. 2, 1952

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

Attachment

Copy to: Finance Officer, Region III (With one copy of report)

E. H. Bailey, USGS (With one copy of report)

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
DEC 2 0 1952

INTERIM REPORT

Docket No.: DMEA-356X (copper) Dec. 2, 1952

Name and address of operator: Elmer F. Smith
2730 Ordway Street, N.W.,
Washington 8, D. C.

Name and location of property: Pennsylvania Copper Mine,
Lincoln County, Nev.

Contract No.: Idm-E212

SUMMARY

This property was visited on Nov. 22 and 23, 1952 for the purpose of inspecting the work being performed under the exploration contract. Mr. Frank Smith, mine superintendent, was unable to accompany the inspecting engineers during their examination of the project as it was necessary for him to drive to Caliente and Caselton, Nevada for food and mine supplies. Therefore the mine was idle on Nov. 22.

Work was resumed on the morning of Nov. 23 by Mr. Smith and two miners, who are engaged in extending the North drift off the 550-foot level.

The North drift is following the course of the vein of quartz but has encountered only very slight copper mineralization.

One sample, BM-436, was taken across a width of 4.4 feet of quartz at 3.5 feet south of station 4 (see attached map). The analyses are as follows: %,Cu 0.02, %,Pb 0.2, %,Zn 0.3, Oz/T, Au, Trace, and Oz/T, Ag Trace.

PROGRESS

Amount of contract		$25,792.22
Government participation 50%	$12,896.11	
Expenditures as of Oct. 31, 1952		18,388.11
Balance		$ 7,404.11

Contract period

Contract dated Nov. 15, 1951

Allowable time to start work - 30 days

Contract period - 270 days

Increase due to amendment No. 2 - 100 days

Total - 370 days

Time used under contract to Nov. 3, 1952 - 330 days

Remaining time - 40 days

Drifting

Drift North on 550-foot level (Amendment No. 1)	600	feet allowed
Total drift advance as of Nov. 22, 1952	458	"
To be completed under the contract	142	"

Since the last inspection on Sept. 11, 1952, the North drift had been advanced 173 feet. The two miners working in the drift heading expect to drill, blast and muck out a round each day. Mucking is done by means of a slusher bringing the broken rock to an inclined ramp and thence into mine cars which are then hand trammed to the ore pocket at the inclined shaft. Mr. Smith acts as mine superintendent, hoisting engineer and general mechanic.

The mine work has been performed in a satisfactory manner. The continuance of the work at the mine will probably depend upon weather and road conditions, that is, should weather and snow conditions make it very difficult or impossible to drive from the camp to the mine, prior to completing the remaining 142 feet of the North drift, operations will probably be discontinued until the spring of 1953. However, all efforts will be made to complete the drift phase of the project before severe weather conditions occur.

RECOMMENDATIONS

Due to the slight evidence of mineralization encountered in the completed 458 feet of the North drift, there seems to be only a slim hope of finding ore in the remaining 142 feet allowed under the contract.

Should mineralization in this 142 foot section also prove to be negative, then it is recommended that the exploration project be abandoned.

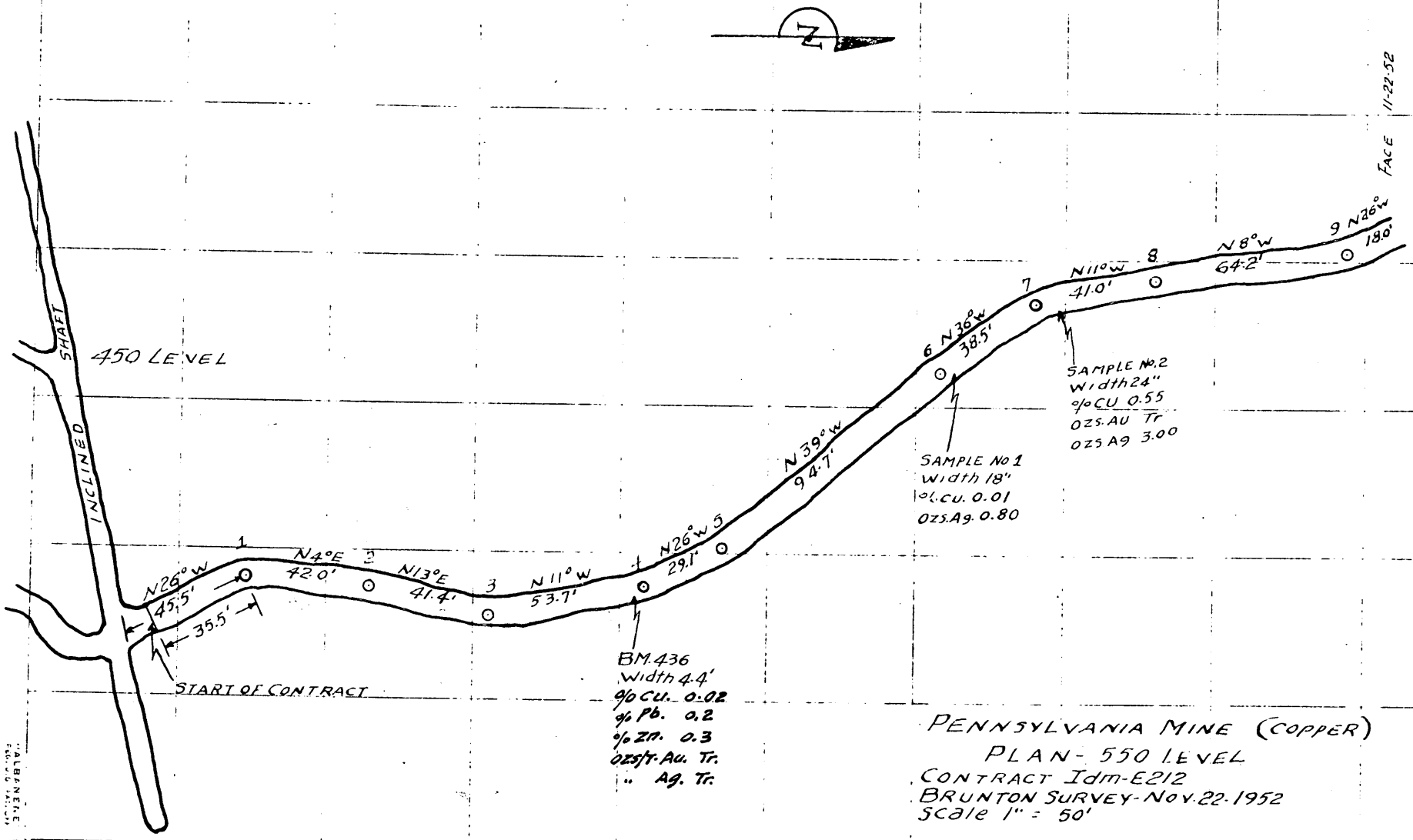
Glenn G. Gentry
Mining Engineer

Russell R. Trengove
Mining Engineer

DEPARTMENT OF INTERIOR
BUREAU OF MINES
REGION III
RECEIVED

1952 DEC 10 AM 8:4

SAN FRANCISCO, CALIFORNIA



PENNSYLVANIA MINE (COPPER)
PLAN - 550 LEVEL
CONTRACT Idm-E212
BRUNTON SURVEY - NOV. 22. 1952
Scale 1" = 50'

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
OCT 3 1952

UNITED STATES
DEPARTMENT OF THE INTERIOR
Defense Minerals Exploration Administration

Office of
Executive Officer
DMEA Field Team
Region III

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

Date: September 29, 1952

Memorandum

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

From: Executive Officer, DMEA Field Team, Region III

Subject: Interim Inspection Report

Attached are four copies of Interim Report on -

Docket DMEA 356

Contract Idm-E 212

Commodity Copper

Operator - (Elmer F. Smith) Pennsylvania Mine

Property - Pennsylvania Copper
Lincoln County, Nevada

By Russell R. Trengove

Dated September 22, 1952

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

Attachment

Copy to: Finance Officer, Region III (with one copy of report)
E. H. Bailey, USGS (with one copy of report)

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
OCT 3 1952

INTERIM REPORT

Docket No. DMA-356X (copper) September 22, 1952

Name and address of operator: Elmer F. Smith
2730 Ordway Street, N.W.,
Washington 8, D.C.

Name and location of property: Pennsylvania Copper, Lincoln Co., Nev.

Contract No.: Idm-E212

This property was visited on Sept. 11, 1952. The drift on the 550-foot level advanced 36 feet since last inspection on August 7, 1952, making a total advance on the contract of 285 feet. This slow progress was due to a breakdown of the compressor requiring two weeks of waiting for parts and making repairs.

Some spotty malachite mineralization was encountered at about 275 feet from the shaft on Sept. 11, 1952. A sample was taken over a two-foot thickness, 12 feet back from the face by the Bureau engineer. The malachite occurred 5 feet above the bottom of the adit and extends into the back of the drift. An effort was made to drill into the back to get a sample and obtain the thickness of the mineralization above the back of the adit but two starter drills were stuck and the attempt abandoned. The analysis of this sample is as follows: 0.55% Cu, Tr. Au and 3.00 oz. Ag. The sample taken of some slight mineralization over an 18-inch width at the face on Aug. 7, 1952 analyzed less than 0.01% Cu and 0.80 oz. Ag.

The road to the property is almost impassable on the 26 to 30 percent grade out of Elgin, Nevada to trucks equipped with a low-low gear. The Lincoln County road crew arrived with their road and camping equipment on Sept. 10, intending to improve this particular portion of the road. They inspected the grade and refused to use their equipment because of the hazards involved on the steep mountain slope and rocky, narrow truck trail. They were returning to their headquarters, Sept. 11, 1952, and did no work on the road.

Recommendations: None.

Russell R. Trengove
Russell R. Trengove
Mining Engineer

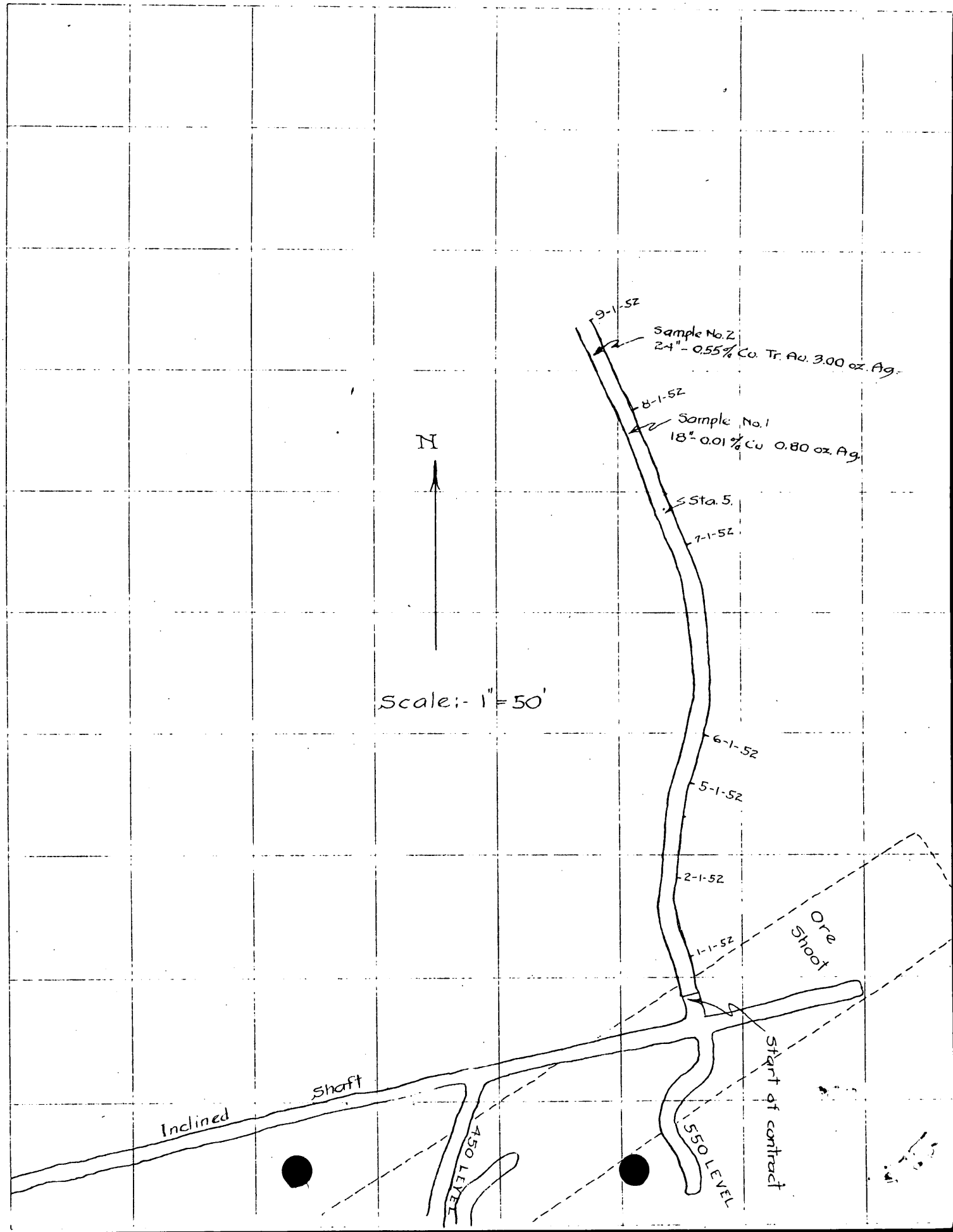


FIG. 1. PROGRESS MAP CONTRACT Idm-212 PENNSYLVANIA COPPER, LINCOLN CO. NEV.

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

DEPARTMENT OF THE INTERIOR
Defense Minerals Exploration Adm.
SEP 16 1952

Office of
Executive Officer
DMEA Field Team
Region III

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

Sept. 12, 1952

Memorandum

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

From: Executive Officer, DMEA Field Team, Region III

Subject: Docket DMEA-356X (Copper), Contract Idm-E212, Amendment No. 2 Pennsylvania Mine (Elmer F. Smith)

Attached are the original and two copies of Amendment No. 2, dated September 3, 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
SEP 18 1952
GENERAL COUNSEL
DEFENSE MINERALS
ADMINISTRATION

pds
9/17/52

UNITED STATES
DEPARTMENT OF THE INTERIOR
Defense Minerals Exploration Administration

Office of
Executive Officer
DMEA Field Team
Region III

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

Date: August 21, 1952

Memorandum

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

From: Executive Officer, DMEA Field Team, Region III

Subject: Interim Inspection Report

Attached are four copies of Interim Report on -

Docket DMEA 356X

Contract Idm-E 212

Commodity Copper

Operator - Pennsylvania Mine (Elmer F. Smith)

Property - Pennsylvania Copper
Lincoln County, Nevada

By Russell R. Trengove

Dated August 18, 1952

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
AUG 25 1952

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

Attachment

Copy to: Finance Officer, Region III (with one copy of report)
E. H. Bailey, USGS (with one copy of report)

INTERIM REPORT

Docket No. DMA-356X (copper) August 18, 1952

Name and address of operator: Elmer F. Smith
2730 Ordway Street, N.W.
Washington 8, D.C.

Name and location of property: Pennsylvania Copper, Lincoln Co., Nev.

Contract No.: Idm-E212

This property was visited on August 7, 1952. Since the previous inspection, July 10, 1952, the drift on the 550-foot level advanced 58 feet, making a total advance of 249 feet. A slightly mineralized flat zone, 12 inches to 18 inches in width and dipping 12 degrees east, was encountered about 30 feet back from the face of the drift. A sample of an 18-inch width of mineralization was taken at the face. The analyses of this sample will not be available for from one to two weeks.

Because of the isolation and consequent difficulty in securing men and keeping them on the job, the lost time involved in obtaining repair parts and replacing miners, progress has been slow.

Recent cloudbursts have made the steep mountain road with grades up to 25 percent or more impassible to anything but jeeps or trucks. It requires one hour to travel the 10 miles from Elgin, Nevada to the mine.

An example of a typical delay is as follows: The compressor required new rings. Mine work was stopped, motor torn down, and then it was found that the rings were too small. This necessitated a 330-mile round trip by truck to Ely, a telephone call to Salt Lake City for the

correct size rings, an overnight wait for the rings to arrive by stage resulting in a loss of 3 to 4 days of drifting.

Recommendations:

1. Frank Smith, one of the owners, and one miner comprise the underground crew and only one man is employed on surface who is compressor and hoist man. If anything mechanical gives trouble, Frank Smith has to come up from the mine and do the necessary repairing. If he was allowed and able to put another miner to work, drifting would be expedited and should one miner quit, which often happens, Mr. Smith could substitute for him until he was able to get another miner. When everything was operating nicely, Mr. Smith could assist the underground crew. Although the crews work Saturdays and Sundays, every 10 or more days two days are lost when everyone goes to town for food and other supplies.

It is estimated that another 100 feet of drifting will be necessary to intersect the probable fault zone where mineralization should be expected.

2. No recommendations are made for changes in project or target.

3. No recommendations are made for amendments to contract at present but if any money remains after intersecting the fault to the north, Mr. Smith would like to crosscut to the south on the 550-foot level to intersect the downward extension of the Culverwell orebody. This was the program recommended originally by the Bureau engineer and the U.S.G.S. geologist.

No analysis available at present on sample taken by Bureau engineer.

Russell R. Trengove

Russell R. Trengove
Mining Engineer

A. C. Johnson, Chief, Mining Div., Reg. III July 14, 1952

Russell R. Trengove, Mining Engineer, Bureau of Mines, Reg. III

Pennsylvania Mine (copper) Contract Idm-E212

This property was inspected on July 10, 1952

The drift to the north on the 550-level advanced 80 feet during the month of June, making a total advance of 191 feet. Another 5-foot advance was made from July 1 to July 10. In July, 2 days were lost repairing the air compressor and one day hauling in supplies. Five timber sets were also installed.

About 30 feet back from the face and 176 feet from the north side of the shaft, a sulphide (bornite and chalcopyrite) stringer , ranging from 0" to 5" in width, was encountered, lying on the top of the flat lying footwall. This stringer continued to the face. As the small width of mineralization is far from being commercial, no samples were taken.

Colonel Smith, one of the partners, and now working for the DPA, spent two weeks on the property during the month of June.

Russell R. Trengove

Russell R. Trengove

July 10, 1953.

Memorandum

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

From: Chief, Mining Division, Region III

Subject: Docket DMEA-356X (Copper) Pennsylvania Mine, Lincoln County, Nevada
Contract Ldn-E212
MF-104 - Transmittal

Enclosed are four copies each of MF-104 form, MF-104A form, narrative report and one copy of substantiating documents submitted by Elmer F. Smith, Partner in the Pennsylvania Mine, covering expenses incurred in April, 1953, under Contract Ldn-E212.

One of the substantiating documents is an invoice from the Combined Metals Reduction Company, dated May 18, 1953, in the amount of $115.69. Evidently the unit price is incorrectly stated on the third item and should be .0767 per pound. The hat band in the amount of .98 would hardly be an allowable item under the terms of the contract. Since the sales ticket is apparently dated April 29 and the project closed on the 30th, it seems a little unusual to purchase 100 pounds of carbide, 200 feet of cable and 8 boxes of powder on such a small project.

There is a charge made on the MF-104 of $279. for equipment rental - the only invoice attached covering equipment rental is in the amount of $[illegible] for the period Dec. 14, 1951 to April 13, 1952. It is not understood why even part of such an old account would appear on the final MF-104 form a year later.

The contract covers automotive repair and also office expense. However, it seems a little unusual to incur $265.75 for the former service just as the project is closing and include 15 months for bookkeeping service at such a late date.

The total cost of the project, under the contract, is $25,792.22 - which would mean a disallowance of $768.43 either by individual unauthorized items or as a lump sum from the total. Of course, if all the above mentioned items are found, upon checking in your office, to be unauthorized the total amount allowable on the MF-104 would be less than that stated in the contract.

Mr. H. C. Miller, Executive Officer, DMA Field Team, Region III 7/10/53

Form has been approved, with the recommendation, that the all the charges mentioned above be clarified before payment is made.

A. C. Johnson

Encls.

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

MAY 22 1953

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

AIR MAIL

Subj: Idm-E212, DMA-356X
Pennsylvania Mine

Dear Mr. Mavor:

Reference is made to your letter of May 19, 1953, submitting your work papers on the subject project and requesting advice as to whether a Report of Review should be issued or a site audit should be made of the Operator's records located in Washington, D. C.

In view of the amount of the contract, the lack of documentation for the first use of the monthly forms MF-104, and evidence of certain questionable charges, it is my opinion that an audit is preferable.

Mr. Talbert has contacted Col. Smith by telephone to make arrangements for a final audit. Col. Smith advised him that preparation of his final MF-104 was being held in abeyance pending settlement with vendors, but that the amount involved will approximate $1,800.00. He will advise us when he has completed the final MF-104 and arrangements will be made at that time for a final audit.

Col. Smith was questioned about the amount of $1,794.53 brought forward as "Totals previously reported" on the July voucher, the first month in which the April 1952 revision of the MF-104 was used. This item appeared on the surface to be questionable even though you state that you believe it to be acceptable. The original Exhibit "A" indicated under Rehabilitation and Repairs the single word "none" and initial repairs of equipment or facilities are an allowable cost only when specifically provided for in the contract (see Question and Answer No. 3 in Supplement No. 1, DMEA Circular 19). Furthermore, Amendment No. 1, which was issued two months after the costs were first claimed (in November 1951) and which completely restated the items of work and the summary of costs, did not indicate any initial rehabilitation and repairs as such.

Col. Smith advised, however, that "most" of this cost covered cutting timber for and doing work in connection with the reconditioning of the shaft. If this is so the charge of course is allowable as a cost of work item No. 1, which was stated in Exhibit "A", as amended, as "Condition North Shaft from collar to 550 foot level", and is improperly shown on the MF-104 under Initial Rehabilitation and Repairs.

These costs properly should be distributed to the various other items of Labor, Supervision, Materials and Supplies, etc., since Initial Rehabilitation and Repairs ordinarily refers to aboveground work.

It does appear, however, that the item of Road Repairs in the amount of $793.78 may be questionable. This apparently is properly Initial Rehabilitation and Repairs, though not shown as such, since the narrative covering the first monthly MF-104, in which part of the costs are included, indicates that three days were spent "rebuilding" the road. Will you check the Region's files on this item, discuss the matter with Mr. Miller, and advise me of your joint conclusions?

In a memorandum dated January 16, 1952 from Mr. Trengrove, Mining Engineer, to Mr. Johnson, Chief of the Mining Division, covering a visit to the project on January 11, 1952, there is a listing of the "equipment being used" on the project. The allowable depreciation on the items shown therein amounts to only $237.08 a month, whereas, the Operator has claimed depreciation at the monthly rate of $239.58, the maximum monthly amount allowable under the contract. It also appears quite possible that all of the equipment listed was not put to use during the first month of operations, that is November, and a partial disallowance on this score may be in order (See Question and Answer No. 2 in Supplement No. 1, DMEA Circular 19). Please check into this and advise me.

Several of the monthly forms MF-104 indicate that the miners and hoistmen were paid at the rate of $13.00 a shift, whereas, Exhibit "A" specified a rate of $12.50 a shift. This latter rate must be considered an allowable maximum which cannot be exceeded except by amendment of the contract (See Question and Answer No. 1 in Operating Committee Memorandum No.8). Unless the Region's files contain evidence that this increase in wage rates had the Executive Officer's approval, in such form as may be construed as an implied amendment, the excess costs necessarily must be disallowed. Please look into this item and advise me.

During the conversation with Col. Smith he stated that he had not been paid on either the December, 1952, or March, 1953, forms MF-104. Mr. Talbert, of course, could not give him the reason for nonpayment, but told him that inquiry would be made. Possibly, they are being withheld pending the audit but if the project was in operation up to April 30, 1953, the final MF-104 (for April) should be in a amount sufficient to cover possible disallowances (that is, provided that the item of rehabilitation was in fact the conditioning of the shaft, which information Mr. Trengrove should be able to confirm).

Col. Smith also advised that he intends to make an offer for the Government's interest in the project property, since there is no chance of other disposal due to the isolated location.

Sincerely yours,

(Signed) J. L. Chambers

Jay L. Chambers, Chief
Contract Administration
and Audit Division

EDTalbert/wb
May 22, 1953

Copy to: Docket
Admr. Reading File
Mr. Ellis
Mr. Chambers

DMEA-356

28 WA SFS /I-BOM/

SAN FRANCISCO 2-27-52 1127A

C. O. MITTENDORF, ACTING ADMINISTRATOR.

DEFENSE MINERALS EXPLORATION ADM. INTERIOR BLDG WA.

REURTT FEB. 27 PENNSYLVANIA MINE REPORT DATED JANUARY 22 COVERING MONTH OF DECEMBER IS BEING PASSED TO TREASURY TODAY FOR PAYMENT. COMPANY SHOULD RECEIVE CHECK WITHIN WEEK.

H. C. MILLER EXECUTIVE OFFICER DMEA FIELD TEAM.

27 22

GD1128A

(DMA-356X)

RECEIVED FEB 27 2 11 CENTRAL SERVICES ADM. FIELD RECORDS SERVICE AND CORRESPONDENCE

DEPARTMENT OF THE INTERIOR Defense Minerals Administration RECEIVED FEB 28 1952

FEB 28 1 25 PM '52
BUREAU OF MINES
MAIL ROOM
WASHINGTON, D. C.

FILE COPY
SURNAME:

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

800
Jay L. Chambers
3461 2612
Chambers

1420137 Salaries & Expenses, Defense Production Activities, Interior, 1952
February 28, 1952

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

Pennsylvania Mine Contract DMA-356X State of Nevada report dire need of reimbursement. Are their vouchers in order for payment.

C. O. Mittendorf (fw)
Acting Administrator
Defense Minerals Exploration
Administration

S.H.
2-27-52

JLChambers/wb
February 28, 1952

Copy to: Mails & Files
Admin. Reading File
Mr. Chambers

B2

OFFICE OF THE ADMINISTRATOR

S.a.
2-18-52

UNITED STATES
DEPARTMENT OF THE INTERIOR

DEFENSE MINERALS ADMINISTRATION

WASHINGTON 25, D. C.

1012 Flood Building
870 Market Street
San Francisco 2, California

Office of
Executive Officer
DMEA Field Team
Region III

February 12, 1952

Memorandum

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

From: Executive Officer, DMEA Field Team, Region III

Subject: Docket DMA-356 - Pennsylvania Mine - Exploration Project Contract Idm-E212, Amendment No. 1

Attached are the original and three copies of Amendment No. 1 to subject exploration project contract, signed by me for the Government, and by Elmer F. Smith for the Pennsylvania Mine.

The field engineer's copy is being retained in this office and we will expect to receive the finance officer's copy back from you shortly. The applicant has retained his copy.

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

Attachment

Copy to E. H. Bailey, USGS

Defense Minerals Administration
RECEIVED
FEB 16 1952

COPY

A. C. Johnson, Chief, Mining Div., Reg. III January 16, 1952

Russell R. Trengove, Mining Engineer, Bureau of Mines, Reg. III

Docket DMA-356X - Contract Idm-E212
Pennsylvania Mine

This property was visited January 11, 1952 by Roscoe M. Smith and John Powers of the U. S. Geological Survey, Salt Lake City, Utah and Fred Muller and Russell R. Trengove of the U. S. Bureau of Mines, Reno, Nev.

Three men are employed. Frank L. Smith, one of the partners, and another man are working as miners and a cousin of Frank L. Smith is the hoisting engineer.

Work was started on December 3, 1951. After some road work and rehabilitation of camp and mine, work was started on unwatering of the shaft.

Mr. Elmer F. Smith, 2730 Ordway St., N.W., Washington 8, D.C., advised me by telephone from Washington, D. C. on December 20, 1951, that when the water was removed from the bottom of the shaft, the last 30 feet of shaft was found to be badly caved (6 feet on both sides of the shaft). He requested permission to abandon the plan of sinking the shaft to the 650 level and suggested driving an exploration drift north on the 550 level, rather than the 650 level. He was advised that this office would recommend his proposal to the DMEA field team for their approval.

Rather than remain idle while waiting for the contract to be amended, work was started drifting north on the 550 level and the drift advanced 35 feet by January 11, 1952. No ore was encountered.

Mr. Frank L. Smith advised me that all paper work in regard to the contract will be handled by Mr. Elmer F. Smith, 2730 Ordway St., N.W., Washington 8, D.C. He agreed to do the drifting only. They work twelve successive days, then lay off two days to get in supplies and mail.

Russell R. Trengove

COPY

A. C. Johnson, Chief, Mining Div., Reg. III January 16, 1952

Russell R. Trengove, Mining Engineer, Bureau of Mines, Reg. III

Docket DMA-356X - Contract Idm-E212
Pennsylvania Mine

Equipment Being Used	Market Value	Depreciation per month
1 - 315 c.f.m. Sullivan Diesel compressor	$ 6,000	$100.00
1 - D.A. 35 I.R. drifter drill with accessories	1,200	20.00
1 - J.B. 35 I.R. jackhammer " "	650	10.83
1 - Hoist, 15 horsepower, gasoline driven	850	14.17
1 - 5-horsepower, 8" diam., Buffalo blower fan and gasoline driven engine	300	5.00
600 feet of 8" diam. venttube	500	8.33
1 - 10-horsepower electric generating plant - gasoline engine driven (camp)	400	6.67
1 - Worthington PNEU. pump, 50 g.p.m., 200 ft. head capacity	200	3.33
1 - Fairbanks-Morse electric driven pump 50 g.p.m., 100 foot head capacity (camp)	75	1.25
1 - Chevrolet pick-up truck	2,000	33.33
1 - Army type, 4 x 4 Chevrolet truck w/winch	1,500	25.00
2 - 16 cu. ft. mine cars; 1 underground, 1 surface	250	4.17
1 - 20 cu. ft. capacity mine skip	250	4.17
1 - 5-horsepower PNEU. motor for air blower	50	.83
	$14,225	$237.08

Being rented

1 - Slusher mucker @ $100/month.

Purchased

700 feet 2" diam. B.I. pipe @ $0.30/ft.	$ 210
1 - Flamo stove	325
3,000 Throw away drill bits @ $0.20 ea.	600
	$ 1,135

Russell R. Trengove

Lovins AF 2-monthly progress
Report card NT. 3337.

Questions and Answers on the
Uranium Exploration programme
were delivered to Mr Smith
Personally.

J.H.R.

FILE COPY
SURNAME:

410

F.L. Knowe
Mittendorf

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

NOV 20 1951

Mr. Elmer F. Smith
2730 Ordway Street, N. W.
Washington 8, D. C.

Re: Docket No. DMA - 356X
Pennsylvania Mine - A Partnership
Elmer F.Smith, Frank L.Smith,
Robert L.Smith, and Stephen F. Leo
Exploration Project Contract Idn-E212

Dear Mr. Smith:

In accordance with your request we are transmitting herewith your approved copy of the above-referenced contract, together with the attached Exhibit "A" (3 pages), five "Landlord's Subordination Agreements", one map, three copies authorizing Power of Attorney, and one letter of General Partnership Agreement.

This contract authorizes you to begin work on your project. If you have any questions regarding this contract, please contact Mr. H. C. Miller, Executive Officer, Region III, 1012 Flood Building, 870 Market Street, San Francisco 2, California.

Sincerely yours,

C. O. Mittendorf (fw) cc 11/23

C. O. Mittendorf, Director
Production Expansion Division

Enclosures

FLKnouse/meb
11/20/51

cc to: Adm.Reading Files
Reports & Records
PED
Field Team,Reg.III(2)
FLKnouse
Docket

BL

FILE COPY
SURNAME:

410

J.L. Knouse
Mittendorf (for)

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

NOV 20 1951

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

Re: Docket No. DMA - 356X
Pennsylvania Mine - A Partnership
Elmer F.Smith, Frank L.Smith,
Robert L.Smith, and Stephen F. Leo
Exploration Project Contract Idm-E212

Dear Mr. Miller:

We are enclosing your file copy of the above-subject contract, signed by this office for the Government, and the partner authorized to sign for the partners, together with the attached Exhibit "A" (3 pages), five "Landlord's Subordination Agreements", one map, three copies authorizing Power of Attorney, and one letter of General Partnership Agreement.

The copy for your Field Finance Officer has been passed to the Chief of the Finance Section for recording and mailing to the Field, and one copy has been delivered to the authorized partner, Mr. Elmer F. Smith, who lives here in Washington and has requested that his copy be delivered to him here so he can instruct his partners to begin the work.

Sincerely yours,

C. O. Mittendorf (for) cc 11/23

C. O. Mittendorf, Director
Production Expansion Division

Enclosures
APPROVED:
C. O. Mittendorf

Chairman, Coordinating Committee

Member, Geological Survey

Member, Bureau of Mines

BL

JLKnouse/meb
11/20/51
cc to: Adm.Files
Reports and Records
PED
C.H.Johnson McKnight
Knouse
Docket

FILE COPY
140 SURNAME:
DMA-356X

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

not stripped in RTR.

November 15, 1951

Memorandum

To: Director, Production Expansion Division

From: General Counsel Smith, Edward F.

Subject: Pennsylvania Mine, a Partnership, exploration contract -- DMA Docket No. 356X

Reference is made to our memo to you of November 9, 1951, on this case.

Upon further examination of the file we find that one of the three grantees under the lease has conveyed half of his interest under the lease to a fourth party with the written permission of the lessors, and that the four individuals thus currently having an interest as lessees under the lease are the four individuals constituting the partnership applicant. In view of this identity of lessees and members of the partnership applicant, we do not believe it necessary to have an assignment of the lease to the partnership and therefore, of course, no permission for such an assignment is necessary.

For similar reasons we do not believe it necessary to obtain new subordination agreements simply because they refer to the proposed exploration contract as one to run between the four individuals and the United States rather than the partnership and the United States.

Under the circumstances the contract as resubmitted to us on November 9, 1951, is approved as to legal form and sufficiency for signature on behalf of the Government, subject to proper signature on behalf of the applicant and proper dating.

Your file is returned herewith.

RRGuthrie/ema

J. L. Hofflund

Copy to: Reports & Records
J. L. Hofflund
R. R. Guthrie
Chron.

J. L. Hofflund
General Counsel

Attachment

J. L. Hofflund

FILE COPY
SURNAME:

Author

140

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

not stipped in RAR

November 9, 1951

Memorandum

To: Director, Production Expansion Division

Elmer F Smith

From: General Counsel

Subject: Pennsylvania Mine, a Partnership, exploration contract — DMA Docket No. 356X

The proposed exploration contract, revised and resubmitted to us on November 9, meets the objections listed in my memorandum of October 16, except No. 4. As indicated, there must be an assignment of the lease to the partnership from the three partners who are the lessees named in the lease. The written permission of the lessors for this assignment must be obtained as previously indicated.

The applicant-operator is now a named partnership, "Pennsylvania Mine" but the Landlord's Subordination Agreement refers to an Exploration Project Contract with four named individuals without indicating that they comprise this partnership. I could pass this defect, but inasmuch as it is necessary to procure the consent of the lessors to the assignment of the lease to the partnership, an easy way to do it would be to rewrite the Landlord's Subordination Agreement as follows:

1. Insert in the blank provided for that purpose the name of the operator: Pennsylvania Mine, a partnership consisting of Elmer F. Smith, Frank L. Smith, Robert L. Smith, and Stephen F. Leo.

2. Add after the last sentence of the subordination agreement, just above the date, this sentence: The undersigned hereby consents to the assignment of the above-mentioned lease to the above-named partnership.

Your file is returned herewith.

J. L. Hofflund

J. L. Hofflund
General Counsel

Attachment

JLHofflund/bjl

Copy to: Repts. & Records
R. R. Guthrie
J. L. Hofflund
Chron.

OK

2730 Ordway St., N.W.
Washington 8, D.C.
November 8, 1951

Defense Minerals Administration
U.S. Dept. of the Interior
Washington 25, D. C.

Gentlemen:

This is pursuant to Mr. Knouse's telephone request for a statement concerning the relationship between the partmership of Elmer F. Smith, Frank L. Smith, Robert L. Smith and Stephen F. Leo and the Pennsylvania Mine.

In 1948 a general partnership was formed by the above individuals for the sole purpose of mining copper, silver and other ore from the "Hope" mining claim located in Lincoln County, Nevada, 7 miles East of Elgin. The mine had been known locally for some time as the Pennsylvania Mine, and it was therefore decided by the partners to operate as the Pennsylvania Mine. All business and accounts have been handled in that name (Industrial Insurance, State and Federal Taxes, local supply houses, etc.).

Mr. Knouse has requested a further statement explaining Frank L. Smith's position as both lessor and lessee of the "Hope" mining claim.

In 1949 a lease was executed by J. J. Smith, Helen E. Smith, E. E. Smith, Phil Smith and Charles P. Smith, lessors, and Elmer F. Smith, Frank L. Smith, Robert L. Smith and Stephen F. Leo, lessees. Phil Smith, one of the lessors, previous to his death in June, 1951, signed over his interest in the "Hope" mining claim to his brother, Frank L. Smith. The quitclaim deed for transfer of interest from Phil Smith to Frank L. Smith has been recorded in White Pine County, Nevada.

Very truly yours,

Elmer F. Smith

Elmer F. Smith
Lt. Col., USAF

310

FILE COPY
SURNAME:

Nelson
Gowen

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

not stripped in RKR.

OCT 17 1951

Memorandum:

To: Director, Production Expansion Division

From: Director, Supply Division

Subject: Application for Exploration Aid of Mr. Elmer Smith, DMA-356X, Commodity-Copper

After reviewing the exploration contract of the above applicant with Mr. F. Knouse it is agreed that the total cost of the project should be increased from $23,870.00 to $25,792.20, a total of $1,922.20 above the original total.

Tom Lyon

Tom Lyon, Director
Supply Division

RVWaugh:ez
10/15/51
Copy to: Adm. Reading File
Copper Branch
Files-DMA Docket

a.e.e.

140 FILE COPY
DMA-356X SURNAME:

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS ADMINISTRATION
WASHINGTON 25, D. C. October 16, 1951

Memorandum

To: Director, Production Expansion Division

From: General Counsel

Subject: Elmer F. Smith, a Partnership exploration contract -- Docket No. DMA-356X

We are unable to approve the proposed exploration contract in this case, submitted to us on October 15 for the following reasons:

1. If the four individuals are acting as partners without the use of a partnership name, the statement of the names in the initial paragraph of the contract should be changed by the deletion of the words "a Partnership" following the first name and the addition after the last name of a comma and the word "Partners".

2. The name Stephen F. Lee in the initial paragraph should be Stephen F. Leo, judging from the Subordination Agreement and the Lease and Option.

3. In the section of Exhibit A covering operating equipment to be furnished by the operator the word "rental" should be eliminated wherever it occurs and the words "use allowance" or "depreciation" substituted.

4. Inasmuch as the lease runs to three of the four partners as individuals, there must be an assignment of the lease from those three individuals to the partnership. By the terms of the lease the permission of the lessors is necessary to an assignment so this permission must be obtained as well as the assignment.

5. In the subordination agreement after the names filled in on the fifth line there should be added a comma and the words "partners, the assignees of the lease" and the first two words of the following line should be stricken out.

6. All of the lessors must sign the subordination agreement.

Your file is returned herewith.

RRGuthrie/ema
Copy to: Reports & Records
J.L.Hofflund
R. R. Guthrie
Chron.
Attachment

J. L. Hofflund

J. L. Hofflund
General Counsel

310

FILE COPY
SURNAME:

Gowen
Johnson

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

Memorandum

To: Director, Production Expansion

From: Director, Supply Division

Subject: Application for Exploration Aid, Elmer F. Smith, Docket No. DMA-356X, Commodity-Copper, Government Participation-$11,935

Transmitted herewith are two copies of the subject application, one copy of field team report dated July 12, 1951, one copy of preliminary report of Pennsylvania Mine, one copy of ore lease and option, one copy of a report by the Galigher Company, one report by Leonard G. Thomas, six copies of a contract with exhibits attached and six copies of Landlord's Subordination Agreement.

This project is recommended for approval by the DMA Field Team Region III. The Supply Division concurs in the recommendation. However, it is to be noted that the Copper Branch recommends 500 feet of drifting northerly from the shaft rather than 100 feet northerly and 400 feet southerly.

Tom Lyon, Director
Supply Division

Attachments

RVWaugh:JBGowen:rw
9-26-51

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

August 14, 1951

Mr. J. B. Gowen, Chief
Copper Branch
Department of the Interior
Defense Minerals Administration
Washington 25, D. C.

Your reference: Docket No. DMA-356

Dear Mike:

I have received your letter of August 1st requesting a copy of our lease and the lessors' subordinating agreement. I am enclosing a copy of the lease, and you should receive the lessors' subordinating agreement in a few days.

I am returning to Washington on the 20th of August and will come in to discus the project with you.

Very truly yours,

Elmer F. Smith

Elmer F. Smith
Lt. Col. USAF

Enclosure - 1

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
AUG 16 1951

10
FILE COPY
SURNAME:

Gowen

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

August 1, 1951

Re: Docket No. DMA-356

Colonel Elmer W. Smith
2730 Drawy Street, N.W.
Washington 8, D. C.

Dear Colonel Smith:

We have received the report of production by the Field Team but cannot complete the processing of your application until we receive from you a copy of the lease and agreement of lessors subordinating their interests in the property.

In your application dated April 27, 1951 in answer to question 7 you state and we quote: "Copy of the lease and agreement of lessors subordinating their interest in the property to the interest of the Government will follow." We do not have record that we have received by the Copper Branch of the Defense Minerals Administration.

For your convenience we are enclosing six copies of form DMA-202-L, Landlord's Subordination Agreement.

Very truly yours,

J. B. Gowen

J. B. Gowen, Chief
Copper Branch

Enclosures - 6

J Altier

Copy to: Executive Officer, DMA Field Team, Region IX
Reports and Records Branch
Administrator's Reading File
Files
Mr. Frank L. Smith, Box 873, Ely, Nevada
Copper Branch

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

Office of
Executive Officer
DMA Field Team
Region III

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

July 18, 1951

Memorandum

To: Tom Lyon, Chairman, Coordinating Committee, DMA, Washington, D. C.

From: Executive Officer, DMA Field Team, Region III

Subject: Docket DMA-356, Pennsylvania Mine, Lincoln County, Nev.--Copper

Reference is to your subject letter dated May 14, requesting us to make a further study of the Pennsylvania Mine, Lincoln County, Nevada, from the viewpoint of an exploration loan, as the applicant was denied a production loan on February 2, 1951.

Attached are four copies of report entitled "DMA-356, Pennsylvania Mine, Lincoln County, Nev., (Copper)," by Russell R.Trengove, Mining Engineer, R. H. Smith, Geologist, and D. C. Arnold, Geologist, dated July 12.

The examining team recommends the granting of the exploration loan in the amount of $25,700 on a 50-50 matching basis to develop ore reserves. If sufficient reserves are developed, consideration then should be given to the erection of a mill from other funds.

I note a statement at the bottom of Page 5 of the report to the effect that "it is further recommended that the DMA advance $7,000 as its share of the money needed to do the proposed exploratory work." That, of course, cannot be done, but I am wondering if the statement indicates that the applicant does not have the funds to match those to be put up by the Government. This matter should be cleared through Colonel Elmer F. Smith, 2730 Ordway Street, N.W., Washington, D. C., before further consideration is given to the application.

Subject docket is returned herewith.

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration

JUL 23 1951

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

Attachments (Docket file)

Copy to: E. H. Bailey, Geological Survey

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

DEFENSE MINERALS ADMINISTRATION

REPORT OF EXAMINATION BY FIELD TEAM
REGION III

DMA-356, Pennsylvania Mine

Lincoln County, Nev.
(Copper)

Russell R. Trengove, Mining Engineer
U. S. Bureau of Mines

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

D. C. Arnold, Geologist
U. S. Geological Survey

July 12, 1951

DOCKET DMA-356

UNITED STATES DEPARTMENT OF THE INTERIOR - BUREAU OF MINES

PENNSYLVANIA MINE, LINCOLN COUNTY, NEV.

By Russell R. Trengove[1], R. M. Smith[2], and D. C. Arnold[2]

SUMMARY, RECOMMENDATIONS and CONCLUSIONS

The Pennsylvania mine, Lincoln County, Nev. was examined by an engineer[3] of the Bureau of Mines in April 1950. His report follows as a supplement to this report.

The property was again examined in June 1951 by an engineer[3] of the Bureau of Mines and geologists[4] of the U. S. Geological Survey.

The purpose of this examination was:

a. To determine if the request for a Government loan, DMA-356, for $25,188.60 is justified.

b. The feasibility of the exploration plan as proposed by the applicant.

c. A complete description of the equipment owned by the applicant and the rental value he is entitled to charge for use of same.

d. The equipment to be purchased to be charged on an equal basis to both parties of the contract.

a. The Bureau engineer[3] in his report of 1950 concluded that: "The property warrants further development. Additional ore must be found to justify the erection of a mill."

1/ Mining engineer, U. S. Bureau of Mines.
2/ Geologists, U. S. Geological Survey.
3/ Russell R. Trengove.
4/ R. M. Smith and D. C. Arnold.

Two consulting engineers[5], employed by the applicant, submitted favorable reports for an exploration program.

The engineer of the Bureau of Mines and geologist of the U. S. Geological Survey, after an examination in June 1951, believe that enough additional tonnage of milling ore could be developed to justify the erection of a 50-ton mill.

The Pennsylvania deposit is a quartz vein 3 to 15 feet wide that follows a fault zone striking N. 20° W. and dipping 20° NE. The vein can be traced on the surface for 3,000 feet and cuts altered diorite. The ore bodies consist mainly of chalcopyrite, bornite, and covellite which are partly altered to malachite and azurite. These minerals occur in narrow shoots that rake northeast within the vein. The Main ore shoot was mined down dip for 450 feet and as much as 40 feet wide; the average thickness was about 4 feet. Another shoot, the Culverwell, is exposed about 400 feet southeast of the Main shoot.

The measured ore reserves total 7,000 tons of ore in the Main shoot averaging 1.61 percent copper and 8.3 oz. silver per ton. It is estimated that an additional 1,300 tons of indicated ore occurs in the Main shoot below the 550 level and that 2,700 tons of inferred ore may be present in the Culverwell shoot above the proposed 650 level. The ore blocks are outlined on fig. 3.

The applicant originally proposed to explore the extensions of known ore bodies by churn drilling and sinking. The cost of this work was estimated to be $20,000. As a result of this examination, it is concluded that this program is not suitable because the targets are too

5/ Leonard G. Thomas, Combined Metals Reduction Co.; and M. J. Sayers, metallurgist, The Galigher Company, Salt Lake City, Utah.

small to be outlined by churn drilling at a reasonable cost. It is therefore suggested that the program be revised and that exploration be confined to two northeastward trending ore shoots (fig. 3).

In order to do this work, it is proposed that the inclined shaft be deepened to the 650 level and drifts be driven to explore the downward extensions of the Main and Culverwell ore shoots.

b. The following facts were considered in changing the applicants exploration program:

1. The existing ore reserve must be mined through the main shaft which is fully equipped for immediate production.

2. Additional reserves could be mined more efficiently through this shaft than at other locations. Therefore, exploration should be confined at present to areas in proximity of the shaft.

3. Any secondary enrichment at the water table will be developed by work on the proposed 650 level.

4. Mr. Frank Smith, who has an interest in the property and who will supervise the exploration, does not approve of the program outlined in the loan application. He does, however, concur with the following program proposed by representatives of the Bureau of Mines[6] and U. S. Geological Survey[7].

Exhibit A — Exploration Project

A. Clean up the shaft and retimber caved portion (five sets).

B. Sink north shaft 50 feet, which includes 20 feet for a sump.

C. Drift north on new 650 level, a distance of about 100 feet to confirm the downward extension of the Main ore shoot.

6/ Russell R. Trengove, Mining Engineer.
7/ R. M. Smith and D. C. Arnold, Geologists.

D. Drift south on new 650 level, a distance of about 400 feet, to explore for the possible downward extension of the Culverwell ore shoot.

E. Should this south drift encounter the Culverwell ore shoot, raise in the middle of the ore shoot to ascertain its continuity.

If this exploration is unsuccessful in increasing the reserves to any great extent, further exploration should not be considered.

The cost of this revised exploration is as follows:

1.	Rehabilitation of north shaft (incline)	$ 300
2.	Shaft sinking, 50 ft. @ $35	1,750
3.	Drifting north on 650 level 100 ft. @ $20	2,000
4.	Drifting south on 650 level 400 ft. @ $20	8,000
5.	Raising from 650 level, south drift 100 ft. @ $20	2,000
	Total exploration	$14,050

Recommend 500 feet. Applicant concurs. not approved by Copper Branch

c. Rental value of items of equipment which the applicant now owns and which will be devoted to the work:

	Article	Rental per month
1	160 cu. ft. portable Ingersoll-Rand air compressor, gasoline driven	$200
3	Drilling machines (1 #30 Ing.Rand drifter (1 #25 Ing.Rand drifter (1 #35 Ing.Rand jackhammer	40
2	Hoists and 1 10-HP electric plant	30
1	5-HP, 8" Buffalo blower and 600 lineal ft. 8" vent pipe	20
2	Pumps (1 Worthington, 50 gals. per min. 200' head (1 small gas pump for drinking water, power saw, 3 mine cars	20
4	Trucks (1 Chevrolet, 3/4 ton (1 Chevrolet, 1 ton (1 Chevrolet, 2 ton (1 Army 4x4	150
		$460

10 months @ $460 = $4,600

Cost of materials and supplies, including items of equipment costing less than $50 each, owned by applicant:

Timber (standing, cost 10¢ per stump)		$1,000
Drill steel		250
Hose (9 air (3 water		100
Pipe and rail	(2200 lineal ft. 1" & 2" pipe (1500 " " 12 lb. rail (600 " " 8 lb. rail	300
Powder, caps and fuse		1,200
Gasoline and oil		3,600
		$6,450

Cost of power, water, utilities, and any other items not provided for above:

Industrial insurance	Included in	(416
Social Security tax	cost of drift-	(101
Unemployment tax	ing & sinking.	(272
Insurance on trucks		120
Repairs, sampling, engineering advice, part-time bookkeeper and misc. expenses		1,500
		$2,409

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

		Estimated cost of used equipment
1	5-HP double drum tugger and slush scraper	$ 600
	500 lineal ft. 8" vent pipe (new)	425
1	2-HP air motor	50
1	Flamo stove and 1 flamo refrigerator	325
		$1,400

Summary of costs (10 months period)

Rehabilitation of north shaft (incline)	$ 300
Shaft sinking, drifting & raising	13,750
Rental value of items of equipment now owned by applicant	4,600
Cost of additional equipment	1,400
Gasoline and oil	3,600
Insurance ontrucks	120
Repairs, sampling, engineering advice, part-time bookkeeper and misc. expenses	1,500
Amount of loan	$25,270

It is recommended that the Defense Minerals Administration enter into an exploration contract with the company; it is further recommended that the DMA advance $7,000 as its share of the money needed to do the proposed exploratory work.

~~FILE COPY~~
SURNAME:

Brown
~~Mackaren~~

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

Fell
Sent To

Air Mail

May 14, 1951

Re: Docket No. DMA-356

Mr. H. C. Miller
Executive Officer, DMA Field Team, Region III
1415 U. S. Appraisers Building
San Francisco 11, California

Dear Mr. Miller:

We desire to have a Field Team study and report of the Pennsylvania Mine, Lincoln County, Nevada. Application for exploration assistance was submitted by Elmer H. Smith, 2730 Ordway Street, N. W., Washington 8, D. C.

As a production loan the application was denied on February 2, 1951.

The following points of the proposed plan need special consideration by a field team.

1. The feasibility of the exploration plan as proposed by the applicant.

2. A complete description of the equipment owned by the applicant and the rental value he is entitled to charge for use of same.

3. The equipment to be purchased to be charged on an equal basis to both parties of the contract.

4. To aid and assist Mr. Frank L. Smith as much as possible.

5. To endeavor to determine the accuracy of the applicants cost items.

6. Any additional information you may obtain which would be helpful in processing the application.

Docket 356

258

Mr. Elmer F. Smith advised us that when you are ready to make the field study of the property you can contact his father Frank L. Smith, Box 873, Ely, Nevada.

For your convenience we are enclosing all of the information pertaining to this property. Please return this file when you have completed your report.

Very truly yours,

Tom Lyon
P.B.

Tom Lyon, Chairman
Coordinating Committee

JWAlt:pf

Attachments

APPROVED:

Lowell B. Moon

Director, Bureau of Mines

Thayer

Director, Geological Survey

Copy to: Executive Secretary
Copper Branch, Room 3423
Mr. Lyon
Mr. Moon
Mr. Meacharen
Files

0

FILE COPY
SURNAME:

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

J. Cebe
Gowen
Moon
Thayer

May 11, 1951

Re: Docket No. DMA-356

Colonel Elmer F. Smith
2730 Ordway Street, N. W.
Washington, D. C.

Dear Colonel Smith:

This is to inform you that a request has been made for a field team study and report on your property, the Pennsylvania Mine.

You should hear shortly from Mr. H. C. Miller, Executive Officer of DMA Field Team Region III, 1415 U. S. Appraisers Building, San Francisco 11, California. We advised Mr. Miller that your father, Mr. Frank L. Smith, Box 873, Ely, Nevada could be contacted when they are ready to make the field study.

Very truly yours,

Tom Lyon
p.p. Director
Tom Lyon, Chairman
~~Coordinating Committee~~
Supply Division

JWAlt:bsl

Copy to: H. C. Miller, Executive Officer, DMA FT, Region III
Executive Secretary
Copper Branch
Mr. Lyon
Mr. Moon
Mr. McLaren
Files

FILE COPY
SURNAME:

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

April 19, 1951

Col. Elmer F. Smith
2730 Ordway St., N. W.
Washington 8, D. C.

Dear Col. Smith:

Enclosed herewith is a copy of a press release dated April 11, 1951, a copy of the pertinent regulations, Form MO-5, also five copies each of the Form MF-100 (General Technical Data) and Form MF-103 (Application for Aid for an Exploration Project).

Very truly yours,

J. B. Gowen, Acting Chief
Copper Branch, DMA

Enclosures

JBGowen:bal

Copy to: Executive Secretary
Copper Branch
Files

FILE COPY
SURNAME:

Johnson

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

March 21, 1951

Re: Docket No. DMA-356

Col. Elmer F. Smith
2730 Ordway St., N. W.
Washington 8, D. C.

Dear Col. Smith

This is in reference to your letter of February 28, 1951, addressed to Mr. James Boyd, Administrator, Defense Minerals Administration, regarding funds for exploration of the Pennsylvania Mine, located near Caliente, Nevada. The letter was referred to the Copper Branch for reply.

The program for encouragement of exploration provides for direct government participation in the form of matching funds. The enclosed press notice dated February 20, 1951 sets forth the policies and procedures. DMA Regulations and Application forms for exploration program loans will be sent to you when copies are available.

If you wish to submit an application we shall be pleased to review and act on it as promptly as possible.

Very truly yours,

Tom Lyon, Chief
Copper Branch

not sent

Enclosures

SFHolt:bsl

Copy to: Executive Officer, DMA Field Team, Region III - WCI
Executive Secretary - WCI
Copper Commodity Committee - WCI
Files

COMBINED METALS REDUCTION COMPANY

P. O. BOX 150

SALT LAKE CITY 8, UTAH

March 6, 1951.

Major Elmer F. Smith,
2730 Ordway Street,
Washington 8, D.C.

Dear Major Smith:-

I have received your letter of February 19th, relative to The Pennsylvania Mine.

The work which you might try to accomplish with a $30,000.00 exploration program, could be outlined as follows:

"A" Adjoining Ground. Obtain title to the three lodes which adjoin you on the South and East. If you could send the names of these claims to say, Mr. A.L.Scott, Attorney, Pioche, Nevada, the status of required assessment work can be checked with the Lincoln County Recorder. The ground might be open for location.

In the event that titles held by C. Johnson and Chas. Culverwell are good, it seems probable that a cash purchase of the three claims could be made for less than $1500.00, otherwise offer a lowered cash and a 5 to 10% royalty on net smelter return, to be applied on purchase price, not exceeding about $1500 per claim.

The claim to the North, which is owned by C. Lane, might be included if you think it worthwhile.

Be sure to stake out more claims of your own on open ground about the property.

"B" North Incline (Main Shaft). Drive about 100 feet North from the bottom of North Incline in order to expose the vein at the North-east intersections from the upper stopes. If good results are obtained, consider continuing the main incline on down below water level.

"C" Culverwell Diggings. Explore down dip of vein from the old workings. If another North-east ore channel exists, follow it down the dip in a North-east direction, or drive South about 400 feet on the vein from 450 or 550 Level to cut it.

"D" 150 Foot Vertical Shaft. I did not see the vein well at this location, near which you have driven the new 40 foot incline. However, if a good North-east fissure shows in the vicinity, it might be well to layout part of your program, there.

COMBINED METALS REDUCTION COMPANY

P. O. BOX 150

SALT LAKE CITY 8, UTAH

"E" Drilling. Churn Drilling preferred to Diamond Drill. Suggest two churn drill holes:

One located 500 feet East from the portal of Incline "B" (South Incline), to cut a possible North-east ore channel down from the Culverwell Diggings, on the main vein. This hole would be about 200 to 300 feet in depth, depending on the topography.

Another churn drill hole to be located about 1000 feet North 35 Degrees East from portal of the North or Main Incline. This hole to cut your present ore channel below water level and ahead of incline. Depth of hole would be between 500 and 750 feet.

Estimated Expense:

North Incline - 100 feet @ $20	$2000.00
Culverwell Diggings- Incline 150 feet @ $30	4500.00
Drive South from 450 or 550 Level, 400 feet @ $20	8000.00
100 Foot Vertical Shaft 200 feet drifts or incline @ $25	5000.00
Churn Drilling: 1000 feet at $7.50	7500.00
Overhead or Miscellaneous Expense @ 10%	3000.00
TOTAL ESTIMATED EXPENSE	$30000.00

The above gives a rough outline to use in development of your ground. I hope that it will be of service to you and that you have success with your plans.

I talked with your mother in Ely a few days ago and advised her about receiving your letter. Your father was away in Battle Mountain on a shaft job, so I did not get to see him.

With best personal regards,

Sincerely yours,

Leonard G. Thomas

Leonard G. Thomas

COMBINED METALS REDUCTION

PENNSYLVANIA MINE -- ELGIN, NEVADA.

Approximate Arrangement Of Unpatented Claims

(Indicated by Mr. Frank L. Smith)

DECEMBER 22, 19

MADE BY L. G. THOMAS

TRACED BY

CHECKED BY

SCALE 1 inch = 1000 feet

[illegible] Y

[illegible]

[illegible] en-soft-older than rhyolite flows- Tertiary.

No [illegible] in immediate vicinity of Mine.

[illegible]
(Dolomite Pendish)

15-20°

[illegible]

6-25

VISITOR Date 2/28/51

Name Smith, Lt. Col. Elmer T.

Firm U S A F

Street 2730 Ordway St. N.W. City Wash 8, State D.C.

Nature of inquiry Exploration appl.

Referred from Mr. Tom Mueller

Action RE: Pennsylvania Mine near Caliente, Nevada

GPO 16—61266-1

By

Mr. Tom Lyon
answered 3/21/51
J.P.H. bsl

Docket-
DMA-356

2730 Ordway St. N.W.
Washington 8, D.C.
28 February 1951

Mr. James Boyd, Administrator
Defense Minerals Administration
Department of the Interior
Washington, D.C.

Dear Mr. Boyd:

I wish to resubmit my application for funds for exploration work under the Defense Production Act of 1950. The exploration work is to be done at the Pennsylvania Mine, which is ~~located~~ near Caliente, Nevada. My original application DMA 356 was for funds for exploration and development work.

check Stobie's office?

Mr. Trengove of the Bureau of Mines station at Reno made an examination of the mine in May of 1950, and the metallurgical work on the ore was done by the Hydrometallurgical and Ore Dressing Branch of the Reno Office. In his report Mr. Trengove recommended that further exploration and development work be done at the mine to increase the known ore reserve.

The contemplated work would consist of:

1. a topagraphical map
2. 2000 feet of core drilling
3. 200 feet of sinking
4. 750 feet of drifting
5. core interpretation and testing

Since the examination of the mine by Mr. Trengove an additional examination was made by the Galigher Company of Salt Lake City to determine mill requirements. This report and one by Mr. Thomas of Combined Metals Reduction Company are enclosed for your study.

Hoping for an early and favorable reply, I am

Very truly yours,

Elmer F. Smith

Elmer F. Smith
Lt. Colonel USAF

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

BUREAU OF MINES
JAMES BOYD, DIRECTOR

PRELIMINARY REPORT

PENNSYLVANIA MINE, LINCOLN COUNTY, NEV.

Copper, Lead, Gold, Silver

By Russell R. Trengove
Mining Engineer

ON-SITE REPORT

PRELIMINARY REPORT

UNITED STATES DEPARTMENT OF THE INTERIOR - BUREAU OF MINES

PENNSYLVANIA MINE, LINCOLN COUNTY, NEV.

Copper, Lead, Gold, Silver

By Russell R. Trengove[1]

SUMMARY

The Pennsylvania Mine, formerly called the Hope Mine, was located in about 1873. Records of the tonnage milled or shipped as crude ore are not available.

Mineralization occurs in three concentrations along the intersection of a moderately dipping quartz vein with north-east fractures. The primary mineralization consists of silver as the sulphide, argentite; the gold, native; the copper as disseminated sulphides of covellite, bornite and chalcopyrite in seams. Partial oxidation throughout the workings down to the lowest level contains cuprite malachite, and azurite in seams and stains. Check samples of the ore in place taken by the Bureau of Mines engineer assayed very closely in most instances with the assays of samples taken by consulting engineers. The average content is from 1.0% to 2.0% copper and from 7 ounces to 9 ounces of silver.

The property warrants further development. Additional ore must be found to justify the erection of a mill.

1/ Mining engineer, Reno Branch, Mining Division, Bureau of Mines, U. S. Department of the Interior.

INTRODUCTION

The Pennsylvania mine was brought to the attention of the Bureau of Mines by Major Elmer F. Smith, 2730 Ordway St., N. W., Washington 8, D. C., for consideration as a Bureau of Mines development project. It was examined by a Bureau of Mines engineer[2/] in April 1950.

HISTORY

The Hope claims were located by a Mr. Barton in about 1873. The claims are on file at Pioche, the county seat. In 1888 the property was acquired by the father of the present owners and has since been held by the Smiths and associates. A pan amalgamation mill was installed in the late seventies or early eighties but was apparently a failure. Records of the tonnage milled or shipped as crude ore are not available. A comparison of the size of the dumps with the extent of the underground workings indicate that a considerable tonnage was milled or shipped. It is reported that two shipments were made to a smelter in 1914. The property has been worked by lessees; the Stewart interests of Salt Lake City in 1917 and the Corning interests in 1945 and 1946. The Culverwell interests, who own the adjoining property to the south, made eight shipments from surface workings from September 1940 to October 1941.

These shipments totaled 338 tons and averaged 0.54 oz. Au, 7.19 oz. Ag, and 0.16% Cu.

OWNERSHIP

The property, consisting of three unpatented lode claims, namely; the Hope, Pennsylvania and Pennsylvania No. 2, are owned by Elmer F.

2/ Trengove, Russell R.

Smith and associates (fig. 2).

LOCATION AND ACCESSIBILITY

The mine is situated in T. 6 S., R. 67 E., M.D.B. & M., about ten miles (airline) southeast of Caliente, Lincoln County, Nev., a town of 1,500 population on U. S. Highway 93 and on the Union Pacific railroad (fig. 1). It is accessible from Caliente by two routes over rough mountain roads and washes. One route over Ellis Mountain, a distance of 22 miles, required over two hours of travel. The southern route by way of Elgin, a distance of 31 miles, is the best route, requiring one and three-fourths hours of travel. This route is south of Caliente following the Meadow Valley wash and the Union Pacific Railroad, a distance of 22 miles to the Elgin railroad station and post office. From this point, a rough mountain road with some grades of over 20 percent and the Pennsylvania wash is followed a distance of nine miles in a northeasterly direction to the mine.

PHYSICAL FEATURES

Lying at an altitude of 5,750 feet, the Pennsylvania mine can be in operation continuously except probably for the months of January and February. The vegetation is typical of the mountain regions of Eastern Nevada, with a plentiful growth of pine, pinon, junipers and scrub oak. This stand of pole timber and saw timber is four miles from the mine. A small spring, near the mine, is the present source of water for domestic purposes. Water for milling purposes would have to be obtained by developing wells at the junction of Cougar canyon and the Pennsylvania wash, about one mile north of the

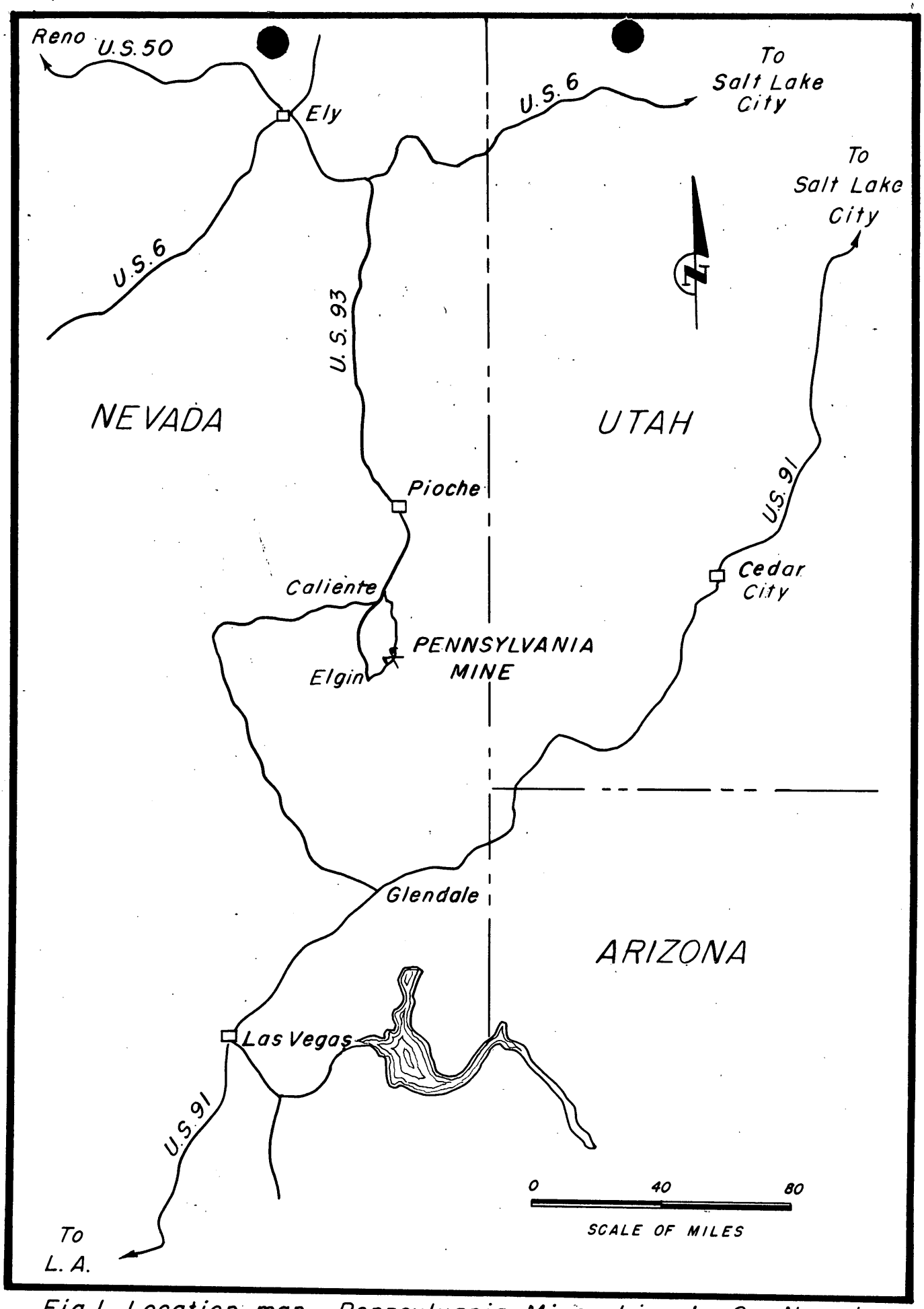


Fig I. Location map, Pennsylvania Mine, Lincoln Co. Nevada

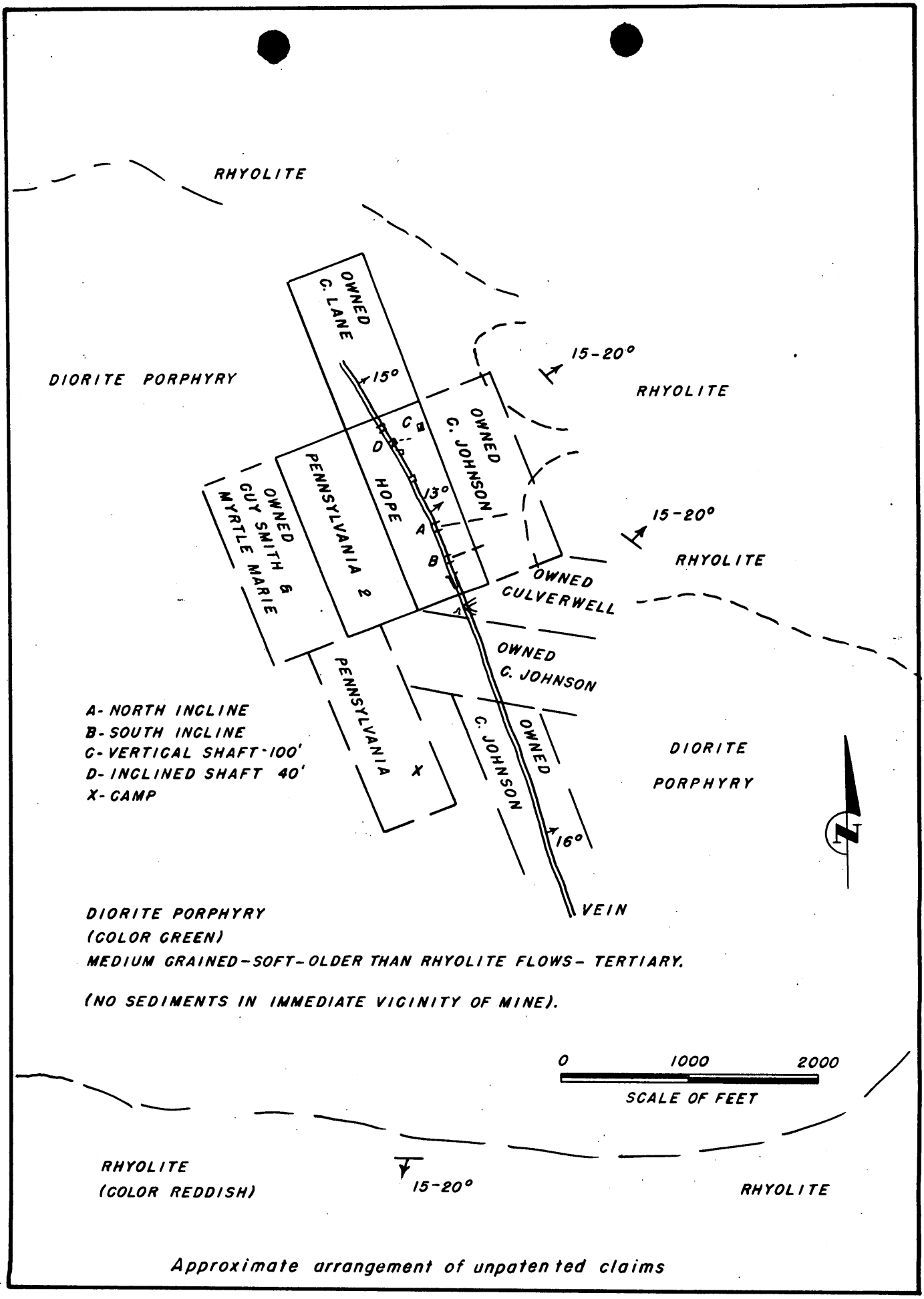


Fig. 2-Claim map, Pennsylvania Mine, Elgin Nev. (as indicated by Frank L. Smith)

property at an elevation of 5,545. Elgin, Nevada is the shipping point on the Union Pacific Railroad. It has a side track but no loading vamp.

DESCRIPTION OF THE DEPOSIT

The vein, along which all workings are located, is in a soft medium grained olivine diorite porphyry. It is from 3 to 7 feet wide, strikes N. 10° to 20° W., dips 12° to 20° to the northeast, and is exposed for about 3,000 feet on surface.

Mineralization occurs in three concentrations along the intersection of a moderately dipping vein with northeast fractures. The siliceous ore contains copper in disseminated sulphides in seams as covellite, bornite, chalcopyrite and possibly others. Malachite, azurite and cuprite occur in the partial oxidation zone throughout the workings down to the bottom of the North Incline, a distance of 620 feet below the collar of the incline. The silver mineralization predominates. It appears to be concentrated at the hanging wall.

MINE WORKINGS AND ORE RESERVES

The Hope claim has been explored by three inclined shafts, one vertical shaft, and several open cuts (fig. 3). The deepest development was through the 620 foot North Shaft. Some of the development areas explored from the South Shaft are inaccessible. It is reported that the ore has been mined from the surface to the 100-foot level for a width of 50 feet.

The 160-foot level to the north and the two winzes are in ore. These workings are inaccessible. One of the winzes from the 160-foot level ties in with an accessible stope above the 265-foot level.

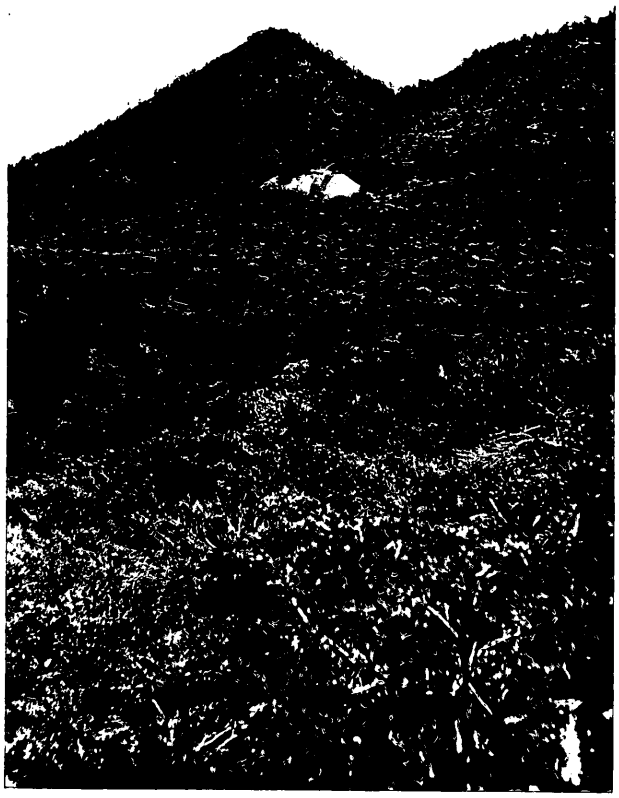
About 120 feet from the 265 station, a winze was sunk about 80 feet on the vein. The drift caved at the collar of this winze and a drift was driven around the cave. Another winze was sunk from this drift to a depth of 100 feet, a drift driven 40 feet to the north and another winze sunk for 30 feet. It is reported that all this work was in ore.

The North Shaft, situated 230 feet north of the South Shaft, was sunk to a depth of 620 feet and entered the ore midway between the 450 and 550 levels and it is reported that the bottom of the shaft is in ore. Water had accumulated to the 550 level at the time of the Bureau of Mines examination but car samples from the last 10 feet of shaft sinking were at the ore pocket at the surface and a sample was taken.

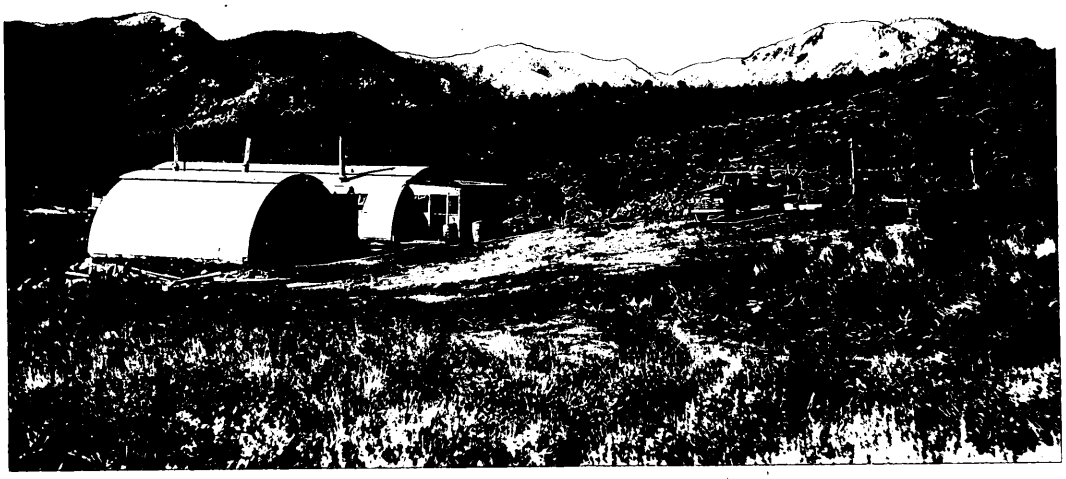
Near the north property line, a vertical shaft was sunk 110 feet during the earlier stages of development. It is inaccessible but it was reported that ore was found between 100 and 110 feet. The dump shows considerable mineralized quartz and confirms the statement on the presence of mineralization. In addition to the diorite, some basalt was noted on the dump.

The mine was thoroughly sampled by a consulting engineer, L. G. Marshall in October 1948. It was sampled again in 1949 by Leonard G. Thomas of the Combined Metals Reduction Co. The Bureau of Mines took check samples underground and at various surface dumps.

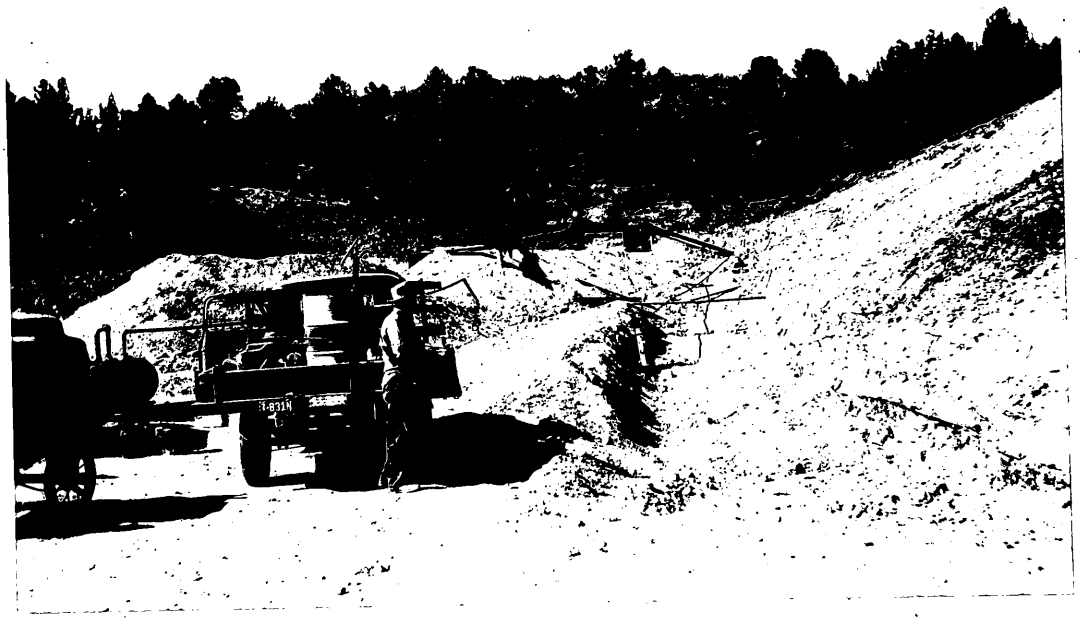
Using old assays in the inaccessible area, and a factor of 13 cu. ft. per ton, and before the North Shaft reached the mineralization, Mr. Marshall estimated a tonnage of 9,300 tons @ 8.24 oz. Ag, 0.02 oz.



North shaft as seen from camp.



Pennsylvania Mine camp (Alt. 5,600)



Trench on outcrop near New shaft
north of North shaft.

Au, and 1.54% Cu.

In a report by Mr. Thomas[3] in January 1950, he estimates the tonnage and grade of ore as follows:

> Grade of ore is calculated by combining 14 cuts, by Thomas, across the 450 and 550 levels, to represent two-thirds of the ore body and 15 cuts by Marshall[4] across 5,680 stope and drift, for the upper third.

	Length of cut (feet)	Assay Au (Oz.)	Ag (Oz.)	Cu (%)
Average of 14 cuts by Thomas on 450 & 550 levels (Equiv. 2/3)	4.5	0.043	8.71	1.74
Average of 15 cuts by Marshall across 5,680 stope and drift (Equiv. 1/3)	3.3	.030	7.50	1.34
Calculated average grade and thickness of 6,833 tons assured ore	4.1	.038	8.31	1.61

A factor of 12 cu. ft. per ton was used.

CONCENTRATION TESTS

A representative sample of 200 pounds was cut from ore in place on the 450 and 550 levels. This was float tested at the Combined Metals Reduction Company's mill at Caselton, Nev.

The results are as follows:

Crude sample		Concentrates (Wt. % of heads 2.5)
		1 ton of copper concentrates is produced from 40 tons of crude
Copper sulphide	2.1 %	
Copper solution	.48%	Copper 38.6%

3/ Thomas, Leonard G., Mining Engineer, Combined Metals Reduction Co., Caselton, Nev.

4/ Marshall, L. G., Consulting Engineer, Combined Metals Reduction Co., Caselton, Nev.

Lead sulphide	1.1%	Copper	38.6%
Lead sulphide	1.1%	Lead	7.6%
Lead nonsulphide	.15%		
Zinc sulphide	.7%	Zinc	7.1%
Zinc nonsulphide	.4%		
Gold	.055 oz.	Gold	1.28 oz.
Silver	7.85 oz.	Silver	276.32 oz.

Mr. Frank Smith also took a representative sample of 200 pounds from various places underground. This was sent to J. B. Zadra, U. S. Bureau of Mines, Hydrometallurgical and Ore Dressing Branch, Reno, Nevada, for assays and flotation tests. The results are as follows:

Crude Sample		Concentrates	Tailings	Percent Recovery
Copper	2.1 %	17.68%	0.52%	78.5
Lead	1.0 %	8.65%	.10%	88.3
Zinc	.7 %	3.25%	.49%	44.6
Gold	.01 oz.	.15 oz.	.0032 oz.	83.5
Silver	10.7 oz.	108.36 oz.	.402 oz.	96.7

For detailed report of Bureau of Mines metallurgical test, see Appendix "A"

EQUIPMENT

The camp has two well-equipped quonset huts. One hut, 20 feet by 48 feet, is used as a combination cook and boarding house and several rooms with bunks that will accommodate 10 men. The other hut, 20 feet by 24 feet, is used as an office and lodging for the staff. Both huts are equipped with running water, shower baths, and electric lights.

One 20 feet by 24 feet quonset hut situated at the collar of the North Shaft is used as a repair shop and hoist house.

Other equipment is as follows:

1 15-horsepower Fairbanks Morse gasoline hoist
1 1-ton skip
2 Ingersoll-Rand drilling machines - 1 jackhammer & 1 Leynor

1	160 c.f.m. Ingersoll-Rand air compressor
2	Delco light plants, 110 volt
4	Trucks: 2 pickups, 1 5-5on dump, 1 2-1/2-ton platform
1500	Lineal feet, 16 lb. rail
700	" " , 8 lb. rail
1000	" ", 2" pipe
1000	" " , 1-1/2" pipe
1000	" " , mixed 1", 3/4", and 1/2" pipe
	Picks, shovels, drill steel, detachable bits

CONCLUSIONS

The ore as exposed can be mined economically only if milled at the property before shipping to smelter. It is amenable to flotation. Ore reserves should be increased to at least 25,000 or 50,000 tons before the erection of a 50 to 75 ton concentration plant can be justified.

Geologically, there is every reason to expect the ore to continue downward.

RECOMMENDATIONS

The property warrants further development.

1. A topographic map would be necessary before a drilling program could be recommended.

2. Drilling would be for the purpose of determining mineralization at depth and for possible extensions along the strike.

3. To carry out this program would necessitate an expenditure of approximately $15,000.

COPY

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF MINES
Hydrometallurgical and Ore Dressing Branch
Box D, University Station

Metallurgical Division
Region III

Reno, Nevada

May 5, 1950

Major Elmer F. Smith
2750 Ordway St., N. W.
Washington 8, D. C.

My dear Major Smith:

In compliance with the request stated in your letter of March 9, 1950 concerning a flow-sheet for the Pennsylvania Mine near Caliente, Nevada, I am attaching hereto the preliminary metallurgical results obtained on the sample of ore submitted by you together with a tentative flow-sheet for treating this ore.

I wish to point out that recently our field engineer obtained additional samples from your property. These samples appear to contain less sulfides than the sample you have submitted for the above test. No doubt, the characteristics of your ore will change with development. It is extremely difficult to give you a representative flow-sheet until we are able to obtain a representative sample of the orebody which, of course, cannot be obtained at the present stage of development. The attached preliminary flow-sheet will serve for the present conditions. Modifications of this flow-sheet will be necessary when the characteristics of the ore have changed.

I trust that this flow-sheet and metallurgical data will serve your purpose.

Sincerely yours,

J. B. Zadra
Supervising Engineer

Attach.

cc: M. Ivanovo

APPENDIX A

Project Mn-08.38 Copper-Silver Ore from Caliente, Nevada
(Major Elmer L. Smith, 2750 Ordway St., N.W., Washington, D. C.)

The sample received was a siliceous rock, mostly quartz, with some altered porphyry, showing iron oxides and stains. Copper occurred as disseminated grains of the sulphides covellite, bornite, chalcopyrite and probably minor amounts of others. The copper carbonates, malachite and azurite were present in seams and stains, and the oxide cuprite was also present. Some pyrite and oxidized pyrite were noted. Lead was present as an occasional grain of galena. Lead and zinc carbonates were also present. The grain size and texture of the minerals was not suitable for gravity concentration. Analyses showed:

Cu	2.1 percent		Au	0.01 - 0.02 oz/T
Pb	1.0 "		Ag	10.7 "
Zn	.7 "			
Total Sulphur	.01 "			
Sulphate "	.045 "			

In a typical flotation test of ore ground to minus 100-mesh, the following reagents were used:

Collector	- Amyl xanthate	Z-6	0.05 pound per ton of ore
"	- Aerofloat 25		.10 " " " " "
Frother	- Cresylic acid		.10 " " " " "

These produced a small amount of black, metallic froth. This procedure was followed by the addition of:

Conditioning reagent	- Sodium sulphide	- 1.0 pound per ton of ore
Collector	- Aerofloat 25	.10 " " " " "
Frother	- Cresylic acid	.10 " " " " "

More black froth was produced and combined with the first concentrates.

The combined concentrates assayed:

Cu	17.68	percent,	representing	78.5	percent	recovery
Pb	8.65	"	"	88.3	"	"
Zn	3.28	"	"	44.6	"	"
Au	.15	oz/T	"	83.5	"	"
Ag	106.38	"	"	86.7	"	"

The ratio of concentration was 10 to 1.

The flotation tailings from this test assayed:

Cu	0.52	percent
Pb	.10	"
Zn	.42	"
Au	.0052	oz/T
Ag	.402	"

It was found that by further treatment, using either sodium sulphide and the other previously listed reagents, or AC 428 and the other reagents, an additional 5 percent of the copper could be recovered in a very low-grade concentrate, along with about the same amount more of gold and lead, and about 10 percent more of the zinc and 2 percent more of the silver. When this low-grade concentrate, which amounted to about 10 percent of the original weight of ore, was combined with the primary concentrate and cleaned, a cleaner tailing was produced which contained about the same values as the original secondary concentrate, so that no advantage resulted.

Several tests were made attempting to increase the recovery of copper, but results were unsatisfactory. It was also attempted to improve the grade of concentrates. This was found to be readily accomplished, but at the loss of considerable in recoveries. However, in continuous operation, it should be possible to obtain higher grade concentrates and a higher ratio of concentration with little loss of values.

Apparently, about 20 percent of the copper in the sample tested is present as stains in quartz and clay and cannot be recovered by flotation. Most of the malachite, azurite and cuprite can be floated as described, by the use of sodium sulphide as an activator reagent.

For treatment of ore of the type received as a sample for testing, in a small-scale plant, fine grinding and flotation treatment seem satisfactory. Variations in the mineral present in the ore would of course affect the results obtained.

A suggested flow-sheet for treatment of ore of the type of the sample received, is attached.

The general scheme of treatment is shown in Part I, including crushing, grinding, flotation, thickening and filtering. The details of the flotation circuit are shown in Part II.

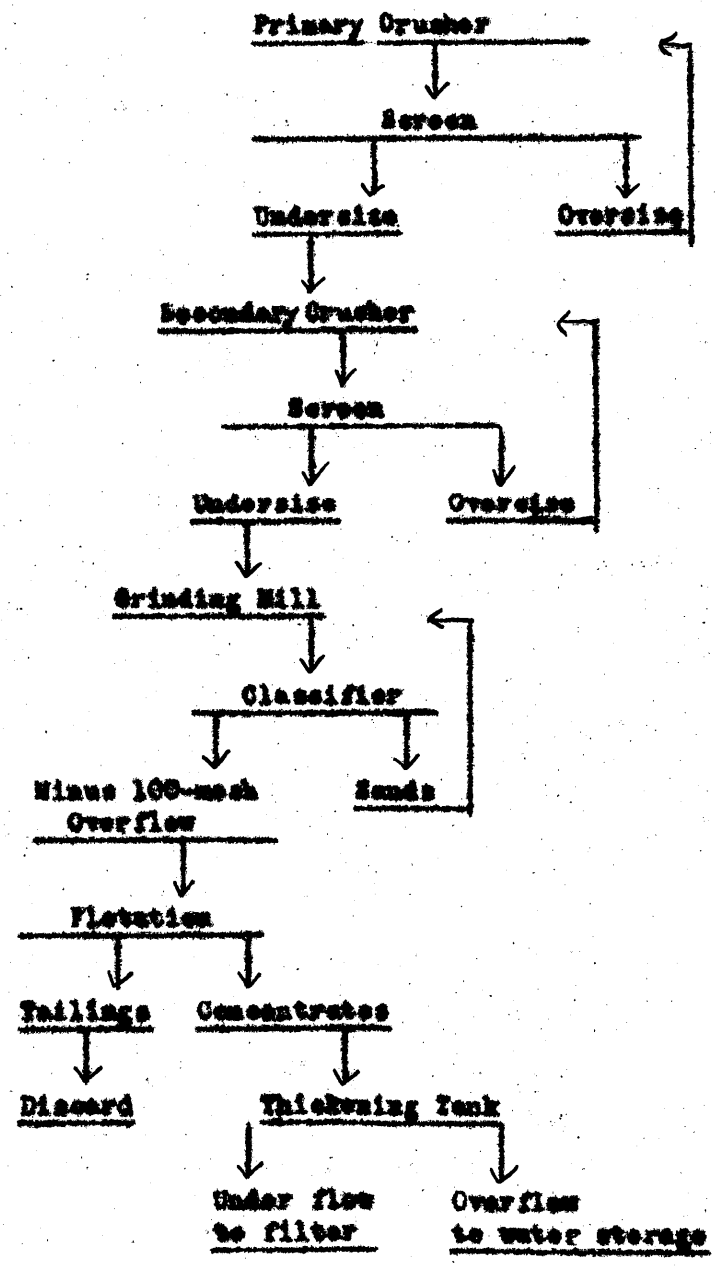
Flotation of this type of ore, containing considerable silver, and other sulphides, as well as oxidised and carbonate minerals must be in two stages, as the sodium sulphide conditioning reagent used to activate the oxidised and carbonate minerals is also a depressant for silver minerals, and hence the latter must be recovered before the addition of the sodium sulphide.

The concentrate produced by the primary flotation should be a finished product, as, using the reagents listed, froth control should be easy. On the other hand, froth control in the secondary flotation may be difficult at times, due to variations in the ore, and for that reason, a cleaner stage is indicated for the purpose of up-grading this product. The tailings from the cleaner cells are returned to the secondary rougher cells for retreatment. Should the primary concen-

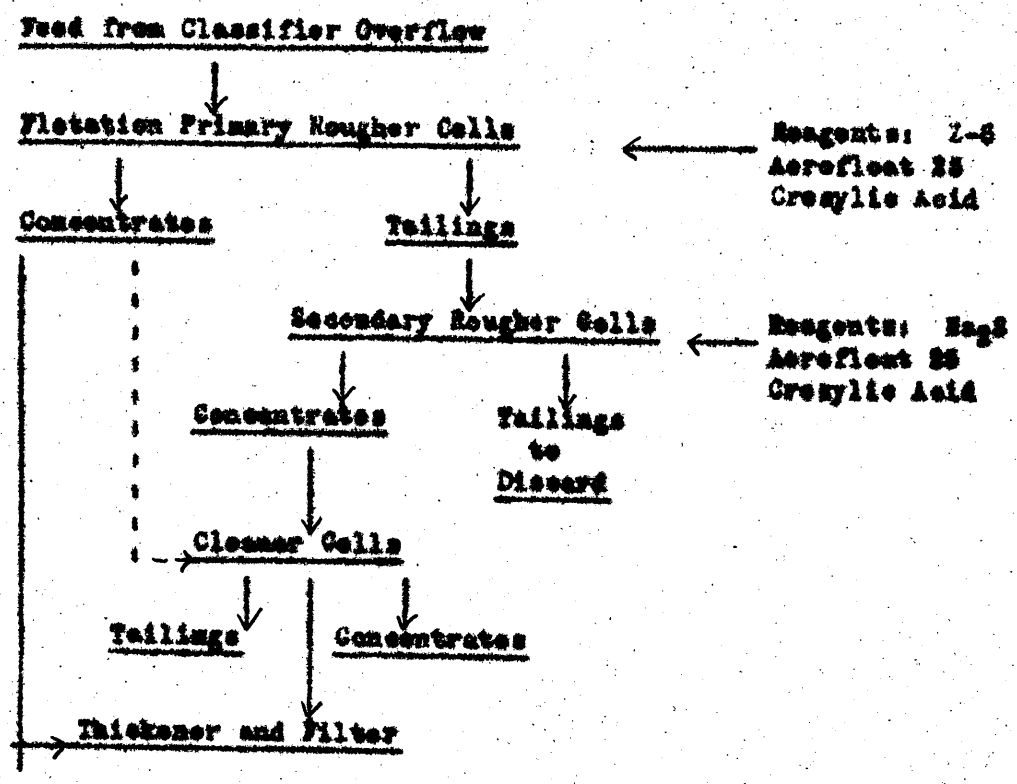
trates require cleaning, it might be possible to use the same cleaner cells for this purpose, or if too much of the silver minerals were dropped at this stage, separate cleaner cells would be required, so that the tailings from these could be returned to the primary rougher cells.

SUGGESTED FLOW-SHEET FOR PROJECT No-C-2.38
COPPER-SILVER ORE FROM GALIENTE, NEVADA

Part I



Part II - Flotation Details



DMA-356

Please return to Major E. F. Smith
2730 Ordway St. NW
Washington, D.C.

REPORT ON PENNSYLVANIA MINE
near Elgin, Nevada

M. J. Sayers, Metallurgist 9/18/50

THE GALIGHER COMPANY
Metallurgical Department
545 West 8th South Salt Lake City 4, Utah

ENGINEERING SERVICE

September 18, 1950

Sverdrup and Parcel, Inc.
Syndicate Trust Building
St. Louis, Missouri

Subject: REPORT ON THE PENNSYLVANIA MINE, NEAR ELGIN, NEVADA

Gentlemen:

In accordance with arrangements made by telephone with Major Elmer F. Smith, the writer met Major Smith, Frank L. Smith and Robert E. Smith in Caliente, Nevada, on July 31, 1950. He was driven to the Pennsylvania Mine, near Elgin, Nevada, for the purpose of making a preliminary examination of this property to determine its present economic status. The writer spent July 31, 1950, and August 1, 1950, making this preliminary examination.

It was evident that it would require considerable time and expense to accurately sample and map the mine workings. Since four separate examinations had been made of this mine during the last two years, it was agreed that it would be more expedient to use the data in these reports. Therefore any data concerning the mine tonnage and grade of ore is necessarily dependent on the accuracy of these former reports. These previous examinations referred to in this report are as follows:

Report by Mr. L. G. Marshall	Nov. 9, 1943
Report by Mr. J. K. Rickardson	Oct. 23, 1949
Report by Mr. Leonard G. Thomas	Jan. 25, 1950
Report by U.S. Bureau of Mines	Reno, Nevada

This Bureau of Mines report included a metallurgical report (Project Re 0-2.38) and a mine assay map. No written report on the mine by the Bureau of Mines was given to the writer.

On two of the above reports some test work was conducted which indicated a considerable difference in the metallurgical results that could be obtained by flotation. It was agreed that enough test work should be done on ore to determine what economic returns could be obtained and to confirm the former test work. Therefore a sample from the ore shoot developed by the North incline shaft was taken. A sample was also taken from the ore shoot at the northern end of the Hope claim.

Location and History

The mine is located about eight miles easterly from Elgin, Lincoln County, Nevada.

The Hope claim was originally staked out in about 1873 and in the late seventies or early eighties a small pan amalgamation mill was installed. This was apparently a failure and no records of this mill are available. In 1883 the property was acquired by the Smiths and their associates and has been held by them since that date.

During the intervening years the property has been worked periodically but no records of shipments are available. It is believed that the ore mined during this period was mainly the higher grade gold ore close to the surface. The workings visited on the adjoining claims were all surface workings.

Property

The property comprises three claims, Hope, Pennsylvania and Pennsylvania No. 2, which are all owned by the Smiths and associates.

Physical Features

The mine is at an elevation of about 6000 feet and the climate is in general mild and dry. There is normally light snow in the winter and occasional flash rains in the summer. The vegetation is typical of the mountain region of eastern Nevada. There is considerable growth of sage, scrub oak and small pine. There is some timber available for mine props in the vicinity above the mine.

The road from Caliente to Elgin is a grade dirt road following the railroad downstream for 22 miles in a southerly direction. This road fords the wash at several points. The road from Elgin to the mine is a dirt road. The part of this road near Elgin is up the face of the valley with steep grades. It is believed that at least a portion of this section of the road would have to be relocated before it would be suitable for hauling heavy equipment and concentrates. Considerable of the remaining portion of this eight miles of road runs up the dry wash which is subject to any cloudbursts which occasionally occur in this region. Elgin, Nevada, is the closest shipping point and is on the Union Pacific Railroad. Due to its location there is a sizeable railroad yard at Elgin, but no loading ramp.

The writer visited the property during the driest part of the year, and at that time there was very little water in the nearby canyons, with a very limited flow from the springs. There is always the possibility that the small amount of water in the incline shaft will increase with depth. It will be necessary for milling 50 tons per day during the dry season of the year to develop more water than is now known.

Geology

The ore occurs in a quartz vein in a diorite porphyry as a fissure deposit. The vein rolls considerably with varying strikes and dips. In general the strike is northwest and dipping about 20° easterly. The mineralization consists of silver, gold, and copper minerals with the silver mineralization predominating.

Development and Equipment

The mine has been developed by two incline shafts. The south incline was sunk on

the ore shoot to a depth of about 450 feet. This area of the mine was not accessible due to caving and bad air. The north incline was sunk on the vein intersecting the ore shoot at about 475 feet and the depth of this incline is about 600 feet. There are two development drifts on this shaft, one on the 450 foot level and one on the 550 foot level with a total footage of about 175 feet of drifting. There is also a section of the ore shoot near the north end of the Hope claim which has been developed by stripping.

At the camp there are two Quonset-type buildings used as boarding house, dormitory and office. The camp has running water and Delco light power. There are at present facilities for about ten men at the camp.

At the mine there is one Quonset-type building housing a small single drum gas hoist. The other mine equipment in general consists of a portable compressor, ventilation fan, mine cars, rock drills, etc. There is no power at the mine and it would have to be supplied by either a diesel plant or by building eleven to twelve miles of line to connect with the Caliente power line.

Samples and Ore Reserves

The mine was sampled by Marshall, Thomas and the U. S. Bureau of Mines, for their examinations. These assays are used for the calculation of the ore reserves and the results are necessarily dependent on the accuracy of these samples. One sample was taken of this ore for test work by the writer and this sample checks fairly well the calculated ore reserves, indicating that these samples are relatively representative of the ore.

The enclosed tracing of a portion of the U. S. Bureau of Mines samples and assay map shows the samples located in the developed ore shoot. The other samples shown on the original Bureau map which were not located in the ore have been left off of this tracing for the sake of making the map easier to read. While these samples were not taken in such a manner as to permit an accurate calculation of the ore reserves, it is believed that the estimated ore reserves calculated using these figures is sufficiently correct for the present work.

The limits of the ore shoot is similar to that defined in the Marshall report with the recent development work by the north incline shaft, permitting the ore to be sampled at the lower levels. The limits used in figuring the ore reserves are as follows: The ore above the 100 foot level is considered to be mined out. Since the ore shoot is indicated throughout the entire developed distance, it is assumed as it has been in the previous reports that the ore shoot extends 50 feet below the present workings. As shown on the enclosed print, the southwest limit of the ore shoot would be a line extending from the vicinity of sample 2405, 100 foot level, intersecting the sample interval between 2407 and 2408, 265 foot level, touching the bottom of the north incline shaft and bottoming 50 feet below this point. The northwest limit of the shoot starts 50 feet north of the 265 shaft on the 100 foot level and roughly parallels the southwest limit of the ore shoot. To give a more accurate calculation, the ore reserves were figured in three blocks of ore as shown on the enclosed print as blocks ABCD, CDEF and EFGH. These calculations give an average width of 4.03 feet and a total volume of 11,600 cubic feet. At 12 cubic feet per ton this represents 9,667 tons. Based on the assays from the

previous reports the average grade of this ore is: 8.59 ounces of silver, 0.028 ounces of gold and 1.50% copper. As the lead assays were not made on most of these samples, it was impossible to calculate the lead content of this block of ore, but based on the assays that were made, it would appear that the average lead content would be below one percent.

Since the development work to date has been limited to one ore shoot, this is the only body of ore on which it is possible to estimate the approximate tonnage of mineable ore. However, it is understood that there is believed to be another ore shoot south of the developed ore shoot and from the surface stripping there is also a strong showing near the north end of the Hope claim. At the present time there is no way to estimate the grade or tonnage of ore which may be present in these two ore shoots.

Approximate Costs of Placing the Property in Production

The previous examinations have been studied by the staff of the Galigher Company, and it appears that a relatively large investment will be required. This is especially true in view of the fact that almost the entire operating facilities of both the mine and mill must be supplied.

It is believed that if a complete 50-ton capacity mill using new equipment were to be built at the present time, that it would cost approximately $2000 per ton day. It is doubtful if a complete mill with good used equipment could be built for much less than half of this figure. This is especially true at the present time due to the cost of labor and to the fact that more labor will be required to place used equipment in operation than if new equipment is used. Some of the initial cost may be saved by eliminating some of the desirable features of a complete mill, but the success of any property is dependent on the mill producing the best possible metallurgy. The approximate cost of the major items needed to place the property in operation would be:

$50,000	50-ton mill installed
33,000	Power line ($1600 per mile) plus transformers
5,000	Water supply
3,000	Roads
3,000	Assay office
10,000	Underground equipment including compressor
10,000	Buildings
3,000	Transportation
10,000	Limited underground development
10,000	Contingencies
$137,000	Approximate first cost

Value of Concentrates Produced from Developed Ore

Test No. 6 of Lot No. 765-A in the metallurgical report which accompanies this report indicates that one ton of concentrate assaying 0.085 oz gold, 153.0 oz silver and 22.4% copper will be produced from each 16.9 tons of ore milled, Based on the

estimated ore reserve of 9667 tons, 572 tons of concentrates would be produced from this ore reserve in 199 days of operation, at 50 tons per day. The value of one ton of concentrate figured from the purchase schedule for silver-copper ores at the Garfield, Utah, plant of the American Smelting and Refining Company, would be approximately $202.87 a ton. This was figured on a copper price of $0.20½ per pound. Allowing $10.00 per ton of concentrate for freight and trucking, this would give a return of $11.41 per ton of ore.

The sample tested in the laboratory was higher in gross values than the calculated ore reserves. The gross values of the gold, silver and copper in Lot. No. 765-A was $17.97 and $14.84 for the value of the calculated ore reserves. Assuming the same relative ratio of returns from the two ores, the value of the concentrate from one ton of ore would be reduced to $9.42. To determine the operating returns that would be obtained, a mining and development cost of $6.50 plus a milling cost of $2.50 were assumed. This would leave an operating margin of $0.42 per ton of ore, or a total of $4,060.14 for the developed ore reserves.

Summary

The study of this mine and the metallurgy of the developed ore has shown the following:

(1) The operating return from a 50 ton per day mill, based on developed ore is $0.42 per ton of ore.
(2) The tonnage of developed ore is too small to warrant the consideration of a mill since the operating margin from such a mill on developed ore would not pay back the capital investment involved.
(3) A larger and higher grade of ore reserves must be developed before the possibility of building a mill should be considered.

Recommendations

Based on the above report the following recommendations are made:

(1) No mill should be built at the present time.
(2) No development work should be done in the mine by private capital, but by virtue of strong mineralization in this area, every effort should be made to have the U. S. Bureau of Mines drill this property in line with their program for increasing the production of strategic metals. This will cost the owners no money and will give an indication of the possible ore reserves that might exist on the Hope claim.
(3) When the results of drilling the property are known it is recommended that these be carefully studied. A decision can then be made as to whether or not the drill samples indicate sufficient ore which would justify further underground development work, or if the project should be abandoned.
(4) If it is decided to proceed with the project and check the drill results, the economics of the developed ore reserves should be rechecked before the building of a mill is considered.
(5) It is believed that for a limited investment, the above recommendations offer the best means of determining if the ore deposit is of commercial value.

The writer wishes to thank you for the opportunity of working with you on this interesting problem and trusts that this report will be of assistance to you and your associates in determining the true value of the Pennsylvania Mine. If there are any questions regarding this work, please do not hesitate to contact us.

Respectfully submitted,

THE GALIGHER COMPANY

By M. J. Sayers
M. J. Sayers, Metallurgist

MJS:clt

September 14, 1950

Sverdrup and Parcel Inc.
Syndicate Trust Building
St. Louis, Missouri

Subject: TEST REPORT ON THE INVESTIGATION OF TWO SAMPLES OF COPPER-SILVER ORE RECEIVED FROM THE PENNSYLVANIA MINE, ELGIN, NEVADA. SAMPLES DESIGNATED AS OUR LOTS NUMBERS 765-A AND 765-B.

Gentlemen:

In accordance with arrangements made with Major E. F. Smith, check test work to confirm previous test work was conducted on two samples of ore. These samples of ore were taken by the writer at the time of his visit to the property. The ore as received was crushed through a jaw crusher and set of rolls to pass 20 mesh, thoroughly mixed and sampled for assay.

Lot No. 765-A represents four cuts across the face of the ore shoot on the 450 foot level and four cuts across the face on the 550 foot level. This area was reached by the north incline shaft and was the only section of the ore shoot which could be sampled at the time of the writer's visit.

Lot No. 765-B represents four samples across the surface of the face of the ore shoot near the north end of the Hope claim. This section of the vein had been exposed by stripping. The sample also contains four samples of the dump which was formed by sinking a short incline shaft on this ore shoot.

The head analysis of these two samples as reported by the Union Assay Office is set forth as follows:

Our Lot No.	Oz Au	Oz Ag	% Pb	% Cu	% Non-sulphide Cu
765-A	0.015	10.9	None	1.887	0.501
765-B	0.015	3.7	0.2	0.382	0.272

LOT NO. 765-A

This lot ore is fairly representative of the calculated ore reserves and the two samples of ore used for previous test work. However, this sample contains no lead while the other test samples contained about 1% lead.

The test work conducted on this lot of ore closely checks the work done by the U. S. Bureau of Mines in their report, Project Re-0-2.38. The test work indicates that the Pennsylvania ore as represented by this sample is quite amenable to flotation and that several reagent combinations can be used to obtain comparable results. The details of the nine tests run on this lot of ore are as shown on the attached test sheet.

Test No. 6 of this lot gave the best overall results and was obtained using the following procedure: The minus 20 mesh ore was ground in the laboratory ball mill with 1.0 pounds of lime per ton of ore to a fineness of 0.1% plus 65 mesh and 78.5% minus 200 mesh. The pulp was then floated for three minutes at a pH of 8.3 using 0.05 pounds Z-5, 0.09 pounds Aerofloat No. 25 and 0.08 pounds Cresylic Acid per ton of ore. The tailing from this first float was then conditioned for five minutes with 1.0 pounds of Sodium Sulphide per ton of ore, followed with an additional twelve minutes of flotation at a pH of 8.9, using 0.08 pounds of Cresylic Acid and 0.10 pounds of Reagent No. 404 per ton of ore. The tailing from this second float was the final tailing. As an acceptable grade of combined concentrate was produced neither of these two rougher concentrates were cleaned. Based on 50 tons per 24 hours being milled, the metallurgical results which would be obtained using the above procedure are as follows:

		Ounces			Distribution %		
	Tons	Au	Ag	% Cu	Au	Ag	Cu
Sulphide concentrate	1.65	0.120	249.7	33.55	57.9	86.5	64.9
Oxide concentrate	1.30	0.040	30.95	8.05	14.5	8.5	12.3
Comb. concentrate	2.95	0.085	153.0	22.4	72.4	95.0	77.2
Tailing	47.05	0.002	0.50	0.418	27.6	5.0	22.8
Heading (calc.)	50.00	0.007	9.48	1.71	100.0	100.0	100.0

Test No. 8 of this lot indicates that it should be possible to shorten the time of the second float from twelve minutes to nine minutes.

LOT NO. 765-B

This lot of ore is lower in grade than the sample obtained from the underground workings and only two tests were run to determine if this ore would respond to the treatment developed for the underground ore.

Test No. 2 indicates that the ore as represented by this sample will respond relatively well to the same treatment used on Lot No. 765-A. The results obtained in this test are as follows: The minus 20 mesh ore was ground in the laboratory ball mill with 1.0 pound of lime per ton of ore to a fineness of 0.3% plus 65 mesh and 78.5% minus 200 mesh. The pulp was then floated for three minutes at a pH of 9.0, using 0.05 pounds of Z-5, 0.09 pounds Aerofloat No. 25 and 0.08 pounds Cresylic Acid per ton of ore. The tailing from this float was conditioned for five minutes with 1.0 pounds of Sodium Sulphide per ton of ore, followed with an additional twelve minutes of flotation at a pH of 9.7, using 0.08 pounds of Cresylic Acid and 0.10 pounds of Reagent No. 404 per ton of ore. The concentrates of these two floats were combined for the finished concentrate. As this ore was too low in values to make it feasible to consider milling it on a small tonnage, no attempt

was made to raise the grade of these rougher concentrates by cleaning. Based on 50 tons milled per 24 hours, the following results would be obtained using the procedure outlined in Test No. 2.

		Ounces			Distribution %		
	Tons	Au	Ag	% Cu	Au	Ag	Cu
Combined Concentrate	1.9	0.380	79.9	7.75	85.7	79.7	72.0
Tailing	48.1	0.0025	0.8	0.118	14.3	20.3	28.0
Heading (calculated)	50.0	0.0168	3.80	0.41	100.0	100.0	100.0

Attached to this report is a flowsheet showing the milling equipment required to treat your ore, based on the above test work on Lot No. 765-A. This flowsheet gives several alternates for part of the equipment in case the purchase of used equipment is considered at some later date.

The value of the concentrates produced from milling your ore, and the economics of milling this ore are discussed in the general report on the Pennsylvania Mine which accompanies this report on the test work.

We wish to thank you for the opportunity of working with you on this interesting problem. If there are any questions regarding this work, please do not hesitate to contact us.

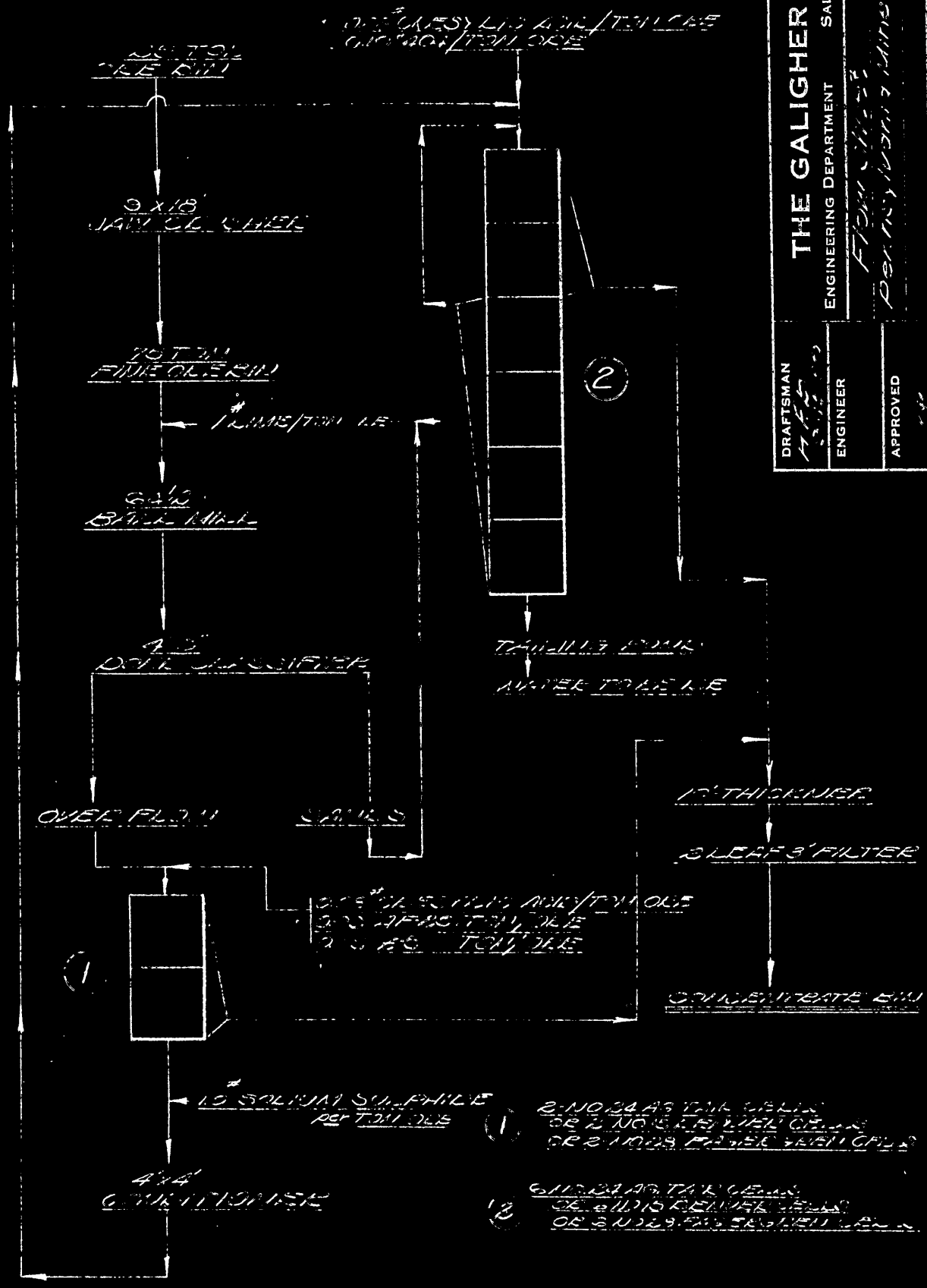
Respectfully submitted,

THE GALIGHER COMPANY

M. J. Sayers

M. J. Sayers
Metallurgist

MJS:clt



FLOW SHEET for PENNSYLVANIA MINE
BASED ON TEST NO. 6
LOT 735 A

THE GALIGHER CO.
ENGINEERING DEPARTMENT SALT LAKE CITY

FLOW SHEET
PENNSYLVANIA MINE

DRAFTSMAN
ENGINEER
APPROVED
REQ'D P. OR M.
SCALE
A4-210

NUMBER	NAME	MATERIAL & DESCRIPTION

Form 110

ORE TESTING DEPARTMENT

THE GALIGHER COMPANY

SALT LAKE CITY 4, UTAH

Our Lot No. 765 A

Test No. 1 Name Pennsylvania Date 8/8/50

By

PRODUCT	Weight	Percent Weight	ASSAY									DISTRIBUTION				
			Oz. Au	Oz. Ag	% Cu							Au	Ag	Cu		
Sul. Ro. Conc.		4.7	0.15	188.35	26.01							64.7	86.0	67.1		
Ox. Ro. "		7.2	0.02	14.6	3.72							13.7	10.2	14.6		
Tailing		88.1	0.0025	0.45	0.382							21.6	3.8	18.3		
Heading		100.0	0.010	10.31	1.83							100.0	100.0	100.0		
Comb. Conc.		11.9	0.068	83.4	12.6							78.4	96.2	81.7		

PLACE ADDED	REAGENTS LBS. PER TON											GRINDING		
	Lime	Z-5	AF 25	Cresylic	Na_2S					Time	pH	Mesh	%	Cum. %
Ball Mill	1.5									13	--	+ 48		
Sulphide Ro.		0.05	0.09	0.08						3	8.9	+ 65	0.7	
Conditioner					1.0					5		+100	5.5	
Oxide Ro.			0.09	0.08						12	9.2	+150		
												+200	25.1	
												—200	68.7	

REMARKS:

Form 110

ORE TESTING DEPARTMENT

THE GALIGHER COMPANY

SALT LAKE CITY 4, UTAH

Our Lot No. 765-A

Test No. 2 Name Pennsylvania Date 8/8/50

By

PRODUCT	Weight	Percent Weight	ASSAY									DISTRIBUTION				
			Oz. Au	Oz. Ag	% Cu							Au	Ag	Cu		
Sul. Conc.		4.0	0.13	220.55	29.68							58.5	86.9	65.8		
Ox. Conc.		7.7	0.02	12.1	3.26							16.9	9.2	14.1		
Tailing		88.3	0.0025	0.45	0.408							24.6	3.9	20.1		
Heading		100.0	0.009	10.16	1.78							100.0	100.0	100.0		
Comb. Conc.		11.7	0.057	83.5	12.1							75.4	96.1	79.9		

PLACE ADDED	REAGENTS LBS. PER TON											GRINDING		
	Lime	Z-5	AF 25	Cresylic	Na_2S					Time	pH	Mesh	%	Cum. %
Ball Mill	1.5									15.0	--	+ 48		
Sulphide Rougher		0.05	0.09	0.08						3	8.9	+ 65	0.3	
Conditioner					1.0					5	--	+100	3.4	
Oxide Rougher			0.09	0.08						12	9.1	+150		
												+200	22.0	
												—200	74.3	

REMARKS:

Form 110

ORE TESTING DEPARTMENT

THE GALIGHER COMPANY

SALT LAKE CITY 4, UTAH

Our Lot No. 765-A

Test No. 3 Name Pennsylvania Date 8/8/50

By

PRODUCT	Weight	Percent Weight	ASSAY									DISTRIBUTION				
			Oz. Au	Oz. Ag	% Cu							Au	Ag	Cu		
Sul. Conc.		3.8	0.20	225.8	30.49							68.5	87.9	66.6		
Ox. Conc.		5.8	0.02	13.5	3.67							10.8	8.0	12.2		
Tailing		90.4	0.0025	0.45	0.408							20.7	4.1	21.2		
Heading Calc.		100.0	0.011	9.79	1.741							100.0	100.0	100.0		
Heading Assay			0.015	10.9	1.887											
Comb. Conc.		9.6	0.092	97.8	14.3							79.3	95.9	78.8		

PLACE ADDED	REAGENTS LBS. PER TON											GRINDING		
	Lime	Z-5	Af 25	Cre-sylic	Na_2S					Time	pH	Mesh	%	Cum. %
Ball Mill	1.5									18	--	+ 48		
Sul. Rougher		0.05	0.09	0.08						3	8.8	+ 65	0.1	
Conditioner					1.0					5	--	+100	1.7	
Oxide Rougher			0.09	0.08						12	9.1	+150		
												+200	19.7	
												-200	78.5	

REMARKS:

Form 110

ORE TESTING DEPARTMENT

THE GALIGHER COMPANY

SALT LAKE CITY 4, UTAH

Our Lot No. 765-A

Test No. 4 Name Pennsylvania Date 8/10/50

By

PRODUCT	Weight	Percent Weight	ASSAY Oz. Au	Oz. Ag	% Cu							DISTRIBUTION Au	Ag	Cu		
Sul. Conc.		3.8	0.140	228.46	30.60							53.0	87.0	63.2		
Ox. Conc.		4.8	0.050	18.45	4.85							24.0	8.9	12.8		
Tailing		91.4	0.0025	0.45	0.484							23.0	4.1	24.0		
Heading		100.0	0.01	10.0	1.84							100.0	100.0	100.0		
Comb. Conc.		8.6	.09	111.2	16.2							77.0	95.9	76.0		

PLACE ADDED	REAGENTS LBS. PER TON Lime	Z-5	AF 25	Cresylic	Na_2S					Time	pH
Ball Mill	1.5									18	--
Sul. Rougher		0.05	0.09	0.08						3	8.8
Conditioner					1.0					5	--
Ox. Rougher		0.10		0.08						12	9.1

GRINDING Mesh	%	Cum. %
+ 48		
+ 65	0.1	
+100		
+150		
+200		
-200	78.5	

REMARKS:

Form 110

ORE TESTING DEPARTMENT

THE GALIGHER COMPANY

SALT LAKE CITY 4, UTAH

Our Lot No. 765-A

Test No. 5 Name Pennsylvania Date 8/10/50

By

PRODUCT	Weight	Percent Weight	ASSAY									DISTRIBUTION				
			Oz. Au	Oz. Ag	% Cu							Cu				
Sul. Conc.		3.8	0.150	229.75	30.70							59.3	87.3	64.5		
Ox. Conc.		4.1	0.040	20.76	5.45							16.7	8.5	12.3		
Tailing		92.1	0.0025	0.45	0.459							24.0	4.2	23.2		
Heading		100.0	0.0096	9.98	1.82							100.0	100.0	100.0		
Comb. Conc.		7.9	0.093	121.0	17.6							76.0	95.8	76.8		

PLACE ADDED	REAGENTS LBS. PER TON											GRINDING		
	Lime	Z-5	AF 25	Cre-sylic	Na_2S					Time	pH	Mesh	%	Cum. %
Ball Mill	1.0									18	—	+ 48		
Sulfide Ro.		0.05	0.09	0.08						3	8.3	+ 65	0.1	
Conditioner					1.0					5	—	+100		
Oxide Rougher		0.10		0.08						12	8.7	+150		
												+200		
												—200	78.5	

REMARKS:

Form 110

ORE TESTING DEPARTMENT

THE GALIGHER COMPANY

SALT LAKE CITY 4, UTAH

Our Lot No. 765-A

Test No. 6 Name Pennsylvania Date 8/14/50

By

PRODUCT	Weight	Percent Weight	ASSAY									DISTRIBUTION				
			Oz. Au	Oz. Ag	% Cu							Ag.	Au.	Cu		
Sul. Conc.		3.3	0.120	249.7	33.55							57.9	86.5	64.9		
Ox. Conc.		2.6	0.040	30.95	8.05							14.5	8.5	12.3		
Tailing		94.1	0.002	0.5	0.418							27.6	5.0	22.8		
Heading		100.0	0.007	9.48	1.71							100.0	100.0	100.0		
Comb. Conc.		5.9	0.085	153.0	22.4							72.4	95.0	77.2		

PLACE ADDED	REAGENTS LBS. PER TON											GRINDING		
	Lime	Z-5	AF 25	Cre-sylic	Na_2S	404				Time	pH	Mesh	%	Cum. %
Ball Mill	1.0									18	--	+ 48		
Sulphide Rougher		0.05	0.09	0.08						3	8.3	+ 65	0.1	
Conditioner					1.0					5		+100		
Oxide Rougher				0.08		0.10				12	9.0	+150		
												+200		
												—200	78.5	

REMARKS:

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ORE TESTING DEPARTMENT

THE GALIGHER COMPANY

SALT LAKE CITY 4, UTAH

Our Lot No. 765-A

Test No. 7 Name Pennsylvania Date 8/16/50

By

PRODUCT	Weight	Percent Weight	ASSAY									DISTRIBUTION				
			Ox.Au	Oz.Ag	% Cu							Au	Ag	Cu		
Sulfide Conc.		3.8	0.160	237.65	31.62							55.5	88.6	66.8		
Oxide Conc.		4.2	0.030	17.75	5.20							10.9	7.3	12.2		
Tailing		92.0	0.004	0.45	0.408							33.6	4.1	21.0		
Heading		100.0	0.011	10.16	1.79							100.0	100.0	100.0		
Comb. Conc.		8.0	0.091	121.8	17.7							66.4	95.9	79.0		

PLACE ADDED	REAGENTS LBS. PER TON											GRINDING		
	Lime	404	AF 25	Cre-sylic	Na_2S					Time	pH	Mesh	%	Cum. %
Ball Mill	1.0									18	--	+ 48		
Sulphide Rougher		0.05	0.09	0.08						3	8.3	+ 65	0.1	
Conditioner					1.0					5	--	+100		
Oxide Rougher		0.10		0.08						12	8.9	+150		
												+200		
												—200	78.5	

REMARKS:

Form 110

ORE TESTING DEPARTMENT

THE GALIGHER COMPANY

SALT LAKE CITY 4, UTAH

Our Lot No. 765-A

Test No. 9 Name Pennsylvania Date 8/16/50

By

PRODUCT	Weight	Percent Weight	ASSAY									DISTRIBUTION				
			Oz. Au	Oz. Ag	% Cu							Au	Ag	Cu		
Sulphide Conc.		3.1	0.190	257.2	33.35							52.3	82.8	60.9		
Oxide Conc.		4.3	0.040	28.95	6.78							15.0	12.9	17.1		
Tailing		92.6	0.004	0.45	0.408							32.7	4.3	22.0		
Heading		100.0	0.011	96.5	1.71							100.0	100.0	100.0		
Comb. Conc.		7.4	0.102	125.0	1.80							67.3	95.7	78.0		

PLACE ADDED	REAGENTS LBS. PER TON											GRINDING		
	Lime	404	AF 25	Cre-sylic	Na_2S					Time	pH	Mesh	%	Cum. %
Ball Mill	1.0									18	--	+ 48		
Sulphide Rougher		0.10	0.09	0.08						5	8.3	+ 65	0.1	
Conditioner					1.0					5		+100		
Oxide Rougher		0.15		0.08						12	8.9	+150		
												+200		
												—200	78.5	

REMARKS:

Form 110

ORE TESTING DEPARTMENT

THE GALIGHER COMPANY

SALT LAKE CITY 4, UTAH

Our Lot No. 765-A

Test No. 8 Name Pennsylvania Date 8/16/50

By

PRODUCT	Weight	Percent Weight	ASSAY									DISTRIBUTION				
			Oz. Au	Oz. Ag	% Cu							Au	Ag	Cu		
Sulphide Conc.		3.4	0.160	250.65	32.74							52.4	86.3	64.5		
Oxide Conc.		3.5	0.035	26.85	6.83							11.7	9.5	13.7		
Tailing		93.1	0.004	0.45	0.408							35.9	4.2	21.8		
Heading		100.0	0.010	9.87	1.74							100.0	100.0	100.0		
Comb. Conc.		6.9	0.096	137.0	19.7							64.1	95.8	78.2		

PLACE ADDED	REAGENTS LBS. PER TON											GRINDING		
	Lime	404	AF 25	Cre-sylic	Na_2S					Time	pH	Mesh	%	Cum. %
Ball Mill	1.0									18	--	+ 48		
Sulphide Rougher		0.05	0.09	0.08						3	8.3	+ 65	0.1	
Conditioner					1.0					5	--	+100		
Oxide Rougher		0.10		0.08						9	8.8	+150		
												+200		
												-200	78.5	

REMARKS:

Form 110

ORE TESTING DEPARTMENT

THE GALIGHER COMPANY

SALT LAKE CITY 4, UTAH

Our Lot No. 765-B

Test No. 1 Name Pennsylvania Date 9/23/50

By

PRODUCT	Weight	Percent Weight	ASSAY									DISTRIBUTION				
			Oz. Au	Oz. Ag	% Cu							Au	Ag	Cu		
Comb. Conc.		4.1	0.270	70.9	6.93							82.2	79.0	71.6		
Tailing		95.9	0.0025	0.80	0.118							17.8	21.0	28.4		
Heading		100.0	0.0135	3.67	0.40							100.0	100.0	100.0		

PLACE ADDED	REAGENTS LBS. PER TON											GRINDING		
	Lime	Z-5	AF 25	Cresylic	Na_2S	404				Time	pH	Mesh	%	Cum. %
Ball Mill	1.0									18	--	+ 48		
Sulphide Rougher		0.05	0.09	0.08						3	9.0	+ 65	0.1	
Conditioner					1.0					5		+100	1.5	
Oxide Rougher				0.08		0.10				12	9.7	+150		
												+200	13.1	
												—200	85.3	

REMARKS: Sulphide and oxide concentrate combined for assay. Oxide Cu floated in oxide conc.

Form 110

ORE TESTING DEPARTMENT

THE GALIGHER COMPANY

SALT LAKE CITY 4, UTAH

Our Lot No. 765-B

Test No. 2 Name Pennsylvania Date 9/23/50

By

PRODUCT	Weight	Percent Weight	ASSAY									DISTRIBUTION				
			Oz. Au	Oz. Ag	% Cu							Au	Ag	Cu		
Combined Conc.		3.8	0.380	79.9	7.75							85.7	79.7	72.0		
Tailing		90.2	0.0025	0.8	0.118							14.3	20.3	28.0		
Heading		100.0	0.0168	3.80	0.41							100.0	100.0	100.0		

PLACE ADDED	REAGENTS LBS. PER TON											GRINDING		
	Lime	Z-5	AF 25	Cre-sylic	Na_2S	404				Time	pH	Mesh	%	Cum. %
Ball Mill	1.0									15		+ 48		
Sulphide Rougher		0.05	0.09	0.08						3	9.0	+ 65	0.3	
Conditioner					1.0					5		+100	3.2	
~~Conditioner~~												+150		
Oxide Rougher				0.08		0.10				12	9.7	+200	18.0	
												—200	78.5	

REMARKS: Sulphide and oxide concentrate combined for assay.

REPORT

PENNSYLVANIA MINE, ELGIN, NEVADA.

January 25, 1950

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COMBINED METALS REDUCTION COMPANY
P. O. BOX 150
SALT LAKE CITY 8, UTAH

January 25, 1950

Sverdrup & Parcel, Inc.
Consulting Engineers
Syndicate Trust Building
St. Louis 1, Missouri

Pennsylvania Mine
(Formerly The Hope Mine)
Elgin, Lincoln County, Nevada

Gentlemen:

My visit to the Pennsylvania Mine, Elgin, Nevada, consisted of four days on the property; from December 8 to 11, 1949.

Careful study was made of operating and geologic conditions. Quantity and grade of ore appear as the two most vital factors to be considered at present so particular care was used to obtain representative samples, dimensions and trend of the ore body.

Ore has been developed by workings from the North and South inclines; it forms in the moderate dipping vein at its intersection with a North-East set of fractures. The dimensions of the assured ore body is estimated to be 500 feet in length, below the 100 level, by 40 feet wide, by 4.1 feet thick; this calculates at 6833 tons, using 12 cubic feet of ore-in-place per ton.

Grade of ore is calculated by combining 14 cuts, by Thomas, across the 450 and 550 levels, to represent two-thirds of the ore body and 15 cuts by Marshall across 5680 stope and drift, for the upper third, as follows:

	Length of Cut	Assay		
		Gold Oz.	Silver Oz.	Copper %
Average of 14 cuts by Thomas on 450 & 550 levels (Equiv. 2/3)	4.5'	.043	8.71	1.74
Average of 15 cuts by Marshall across 5680 stope & drift. (E. 1/3)	3.3'	.030	7.50	1.34
Calculated average grade and thickness of 6833 tons assured ore	4.1'	.038	8.31	1.61

Value, assuming some negotiated credit for silica is about $4.00 per ton, before cost of mining, trucking and freight. This of course precludes shipment as crude.

A representative sample of 200 pounds was cut from the ore faces on the 450 and 550 levels. This was taken to Combined Metals Reduction Company's mill for float testing. It assayed -

		Lead		Zinc				Copper	
Gold Oz.	Silver Oz.	Sulphide %	Non Sulphide %	Sulphide %	Non Sulphide %	Iron %	Insol. %	Sulphide %	Sol. %
0.055	7.85	1.1	.15	.7	.4	2.3	85.0	2.1	.48

Mr. H. E. Swanson and his assistant, Mr. H. A. Dawson, have made the mill tests and the detailed report of their selective flotation test is included with this letter.

One ton of copper concentrates, having a net smelter value of $386.993 is produced from 40 tons of crude ore. These copper concentrates assay -

Weight % of Heads	Gold Oz.	Silver Oz.	Lead %	Zinc %	Iron %	Insol. %	Copper %
2.5	1.28	276.32	7.6	7.1	5.6	15.2	38.6

The net smelter value per ton of crude ore on the above basis, is $9.675. This value might possibly provide a small operating margin, for the mine, in case the following costs could be realized.

Income per ton crude ore		$9.675
Expense per ton crude ore:		
Mining	$6.50	
Milling	2.50	
Freight	.30	
Trucking	.10	9.40
Possible Margin		$ .275

This rough calculation is detailed to show that costs must be quite low in order to cover operating expense, even with a mill on the property. A larger or better grade ore body is necessary to allow more favorable calculations, under present conditions.

Estimate of possible cost of a 50 ton (per shift) flotation mill, based on the accompanying mill tests for copper concentrates, is made by Mr. W. H. Kelsey, chief engineer of this company. He presents a minimum figure of $33,650.00 based on purchasing used equipment at a low price. Other costs such as housing, electric power, water, warehouse, shop, office and miscellaneous are not included. Drawing of a typical flow sheet, prices and remarks by Mr. Kelsey, accompany this letter.

Geology

The vein, along which all workings are located, appears epithermal as a filled shrinkage fracture of the quartz-calcite-andularia type, in a soft medium grained olivine diorite porphyry. It is from 3 to 8 feet wide, strikes North 10 to 20 degrees West - dips 12 to 20 degrees to N.E. - exposed for about 3000 feet on surface.

The diorite porphyry shows on the surface as a thick slow cooling volcanic flow surrounded by younger rhyolites and basalts - Tertiary.

Mineralization occurs concentrated along intersection of North-East fractures with the vein. Gold enrichment at spots on surface; silver as Argentite and copper-lead as sulphides, show partial oxidation throughout workings down to lowest level of 620 feet in North incline. Low iron content indicates a reduced migration of the oxidizing metals, but some enrichment should be expected at lower levels.

Development

A greater quantity of ore must be assured before it would be wise to consider construction of a mill or additional capital expense other than the minimum required for further development. There is a good probability in downward development of the present ore body of exposing other parallel channels. A desirable program for this purpose would be:

1. Continue work on the present ore channel down dip from North incline.

2. Proceed with exploration at the 100 foot vertical shaft, either by timbering the shaft and driving therefrom on the vein or by sinking down dip on vein from the mineralized outcrop in that area.

3. Explore probabilities along the zone of North-East fractures which show about 200 feet down from surface in the North incline.

4. Development on vein to South of South incline should be considered on the chance of a parallel channel extending downward in Northeast direction from Culverwell diggings. Prior to this, it is suggested that claims be accurately mapped and possibilities for litigation eliminated by some definite agreement with adjoining owners.

General Information

The report of Mr. L. G. Marshall of November 9, 1948, well covers the general phases of the property with valuable detail. To avoid superfluous duplication, the following descriptions are condensed.

Location

Mine located about 8 miles Easterly via mountain road from Elgin, Lincoln County, Nevada; about in Range 67 East, Township 6 South, Mt. Diablo Base and Meridian, unsurveyed.

Roads

Caliente, Nevada, to Elgin: Leaving paved highway at Caliente, follow graded dirt road down stream, South, fording Meadow Valley Wash at several points; distance is 22 miles.

Elgin to mine - about 8 miles of dirt trail, extremely steep in places, narrow but firm base; can be greatly improved at moderate cost.

Claims

HOPE, PENNSYLVANIA and PENNSYLVANIA No. 2, comprise the three unpatented lode claims which are owned by J. H. Smith, Frank Smith and associates. See attached sketch.

Railroad

Elgin, Nevada, is the shipping point on the Union Pacific Railroad. Has sidetrack but no loading ramp. See attached list for freight rates to Salt Lake valley.

Shipments

Marshall's report shows smelter returns on 338 tons of siliceous gold-silver ore worth $13.45 per ton before cost of mining, trucking and loading. This ore was shipped to the A.S. & R. Co., Garfield, Utah, in 1940 and 1941, from the Culverwell surface diggings. Average assay: Gold 0.54 oz.; silver 7.19 oz.

Climate

Usually mild and dry, moderate snows in winter and occasional cloud bursts in summer; year round operation. Elevation at mine about 5750 feet above sea level.

Vegetation

Sage, small pine, junipers and scrub oak; can obtain considerable timber for mine props in vicinity.

Water

Can be developed in moderate quantities from nearby canyons or covered springs. Small amount now present in bottom of North incline should increase with depth.

Equipment

Camp - Two well-equipped igloo type buildings used as

boarding, rooming and office; capacity about ten men. Delco lights, water, shower baths, coal heating. Mine equipment at North incline not detailed but in general consists of small single drum gas hoist, hoist house, 4 drill portable compressors, ventilating fan, cables, cars, track, pipe, surface bin, drill steel, rock drills using detachable bits, small blacksmith tools and surface trucks.

Conclusion

Advise limited provision of additional speculative funds for further prospecting of the property. Assured mineral reserve of about 50,000 tons must be established before proceeding with capital expense for mill, power or expansion to a regular mining program.

Yours very truly,

Leonard G. Thomas

Leonard G. Thomas

COMBINED METALS REDUCTION CO.

INTER-OFFICE CORRESPONDENCE

Subject Pennsylvania Mine - Copper Ore

Date January 9, 1950

To Mr. L. G. Thomas

From H. E. Swanson

Dear Mr. Thomas:

Test work on Pennsylvania Mine- Copper Ore has been completed and Series Test No. 1526-D is herewith attached.

The ore contains a high percentage of non-sulphide copper in the heads, and consequently total copper recovery is low. When considered on sulphide copper only, results are very good. The ore contains 0.0036% straight water soluble copper in the heads, thus an acid leach would be necessary on tailings to recover copper lost there. Gold and silver recoveries are very good.

The ore can be treated on a simple flow sheet, which would include crushing, grinding, and classifying circuit, rougher and cleaner flotation cells, and suitable means for dewatering concentrates. The ore is very hard and fine grinding would be necessary.

Calculated on our A. S. & R. copper schedule and 18.5¢ copper price, the concentrates have a value of $386.993 per ton, and therefore the net smelter return per ton of ore would be $9.675. Out of this must come mining costs, milling costs, and transportation costs of ore to mill or concentrates to railhead or both.

Very truly yours,

Henry E. Swanson

Asst Mill Supt. & Met.

cc
E. H. Snyder
R. J. Evans
W. G. Fidler
S. S. Arentz

FORM 17A

COMBINED METALS REDUCTION COMPANY

PIOCHE PLANT

DATE Dec. 31, 1949

TEST NO. 1526-D

WT. RCVD.

FLOTATION RESEARCH LABORATORY

SAMPLE

METALLURGICAL ANALYSIS OF Pennsylvania Mine—Copper Ore

PROCESS Selective Flotation—Series Test

PRODUCTS	WEIGHT PER CENT	ASSAY							RECOVERY					
		GOLD OUNCES	SILVER OUNCES	LEAD %	ZINC %	IRON %	INSOL. %	Copper %	GOLD	SILVER	LEAD	ZINC	Iron	Copper %
Copper Concts.	2.5	1.28	276.32	7.6	7.1	5.6	15.2	38.6	81.0	82.3	19.3	23.2	6.6	56.3
Copper Clean. Tails.	0.9	0.33	59.97	2.2	1.0	5.6	61.1	10.1	7.6	6.4	2.0	1.2	2.4	5.3
Tailings # 1	18.5	0.003	0.80	0.8	0.6	1.8	86.1	0.65	1.5	1.9	15.0	14.5	15.8	7.1
Tailings # 2	18.6	0.005	1.10	0.8	0.6	1.7	89.9	0.7	2.4	2.4	15.1	14.6	15.0	7.6
Tailings # 3	19.7	0.005	1.00	0.8	0.6	1.7	89.9	0.7	2.5	2.3	16.1	15.4	15.9	8.0
Tailings # 4	19.7	0.005	1.00	0.8	0.6	2.8	85.7	0.65	2.5	2.3	16.1	15.4	26.2	7.5
Tailings # 5	20.1	0.005	1.00	0.8	0.6	1.9	86.6	0.7	2.5	2.4	16.4	15.7	18.1	8.2
Calc. Heads	100.0	0.04	8.40	1.0	0.8	2.1	85.2	1.7						
Assay Heads		0.055	7.85	1.1	0.7	2.3	85.0	2.1						
Sol. Cu								0.48						70
Tailings (comp.)	96.6	0.005	1.00	0.8	0.6	2.0	87.3	0.7	11.4	11.3	78.7	75.6	91.0	38.4

BALL MILL		LEAD SECTION		ZINC SECTION		SECTION	
REAGENT	POUNDS PER TON	REAGENT	POUNDS PER TON	REAGENT	POUNDS PER TON	REAGENT	POUNDS PER TON
Grind—25 min.		Copper Rougher		Copper Cleaner			
lime	4	Amyl Xanthate	0.12	Amyl Alcohol	1 drp.		
Creosote Oil	1 drp.	A oil (mix)	1 drp.				
		Reagent 208	0.06	Flot. Time—7 min.			
		Amyl Alcohol	1 drp.				
		pH—9.6 (7.5)					
		Flot. Time—15 min.					

REMARKS

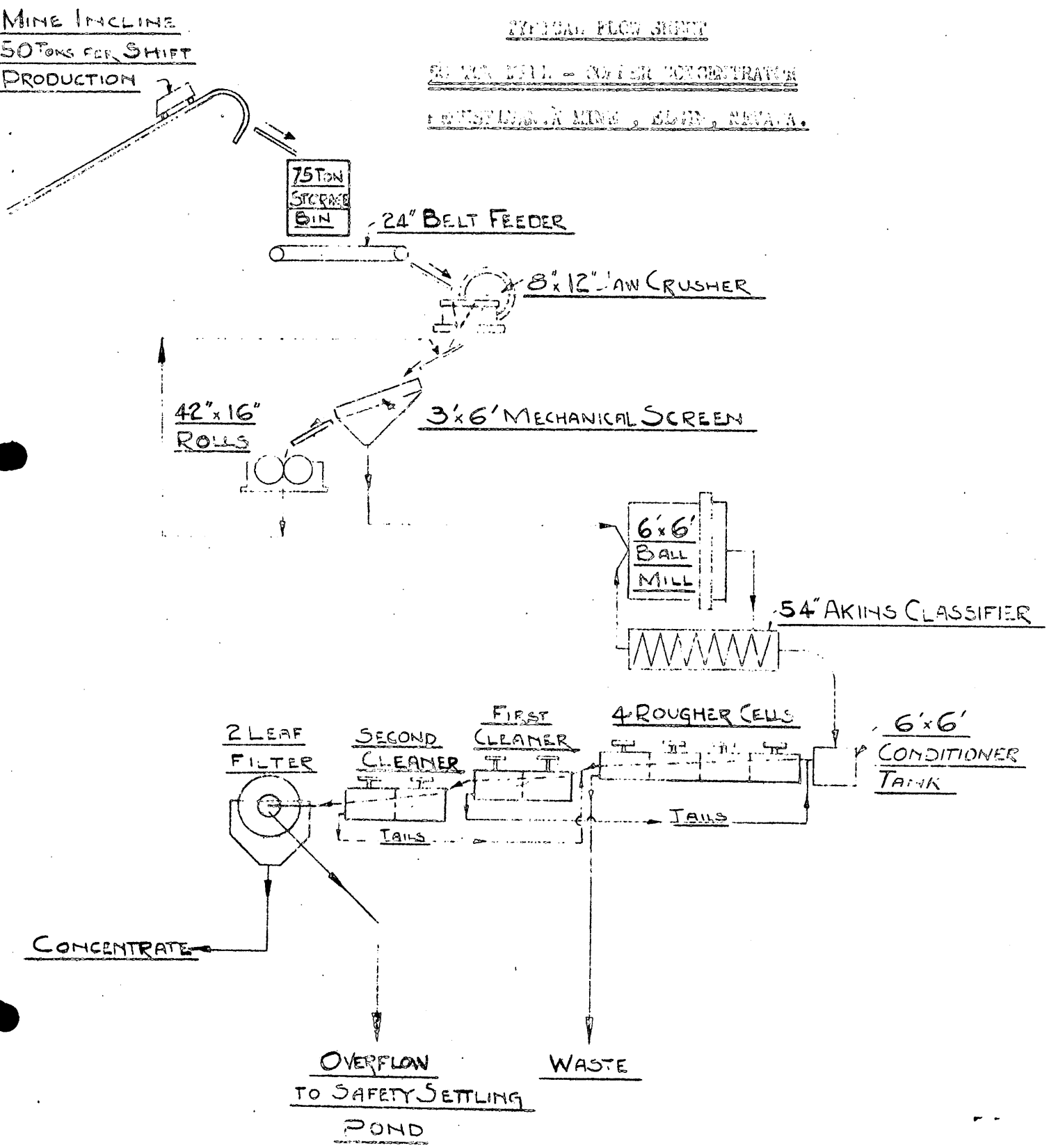
Composite Tailings Soluble Copper—0.6 %
Non-Soluble Copper Recovery—95.5%

H. A. Dawson

TYPICAL FLOW SHEET

[illegible] MILL - [illegible] CONCENTRATOR

[illegible] MINE, [illegible], NEVADA.



PRELIMINARY ESTIMATED COST OF
CRUSHING, GRINDING AND FLOTATION PLANT
50 TON CAPACITY PER SHIFT
PENNSYLVANIA MINE COPPER ORE

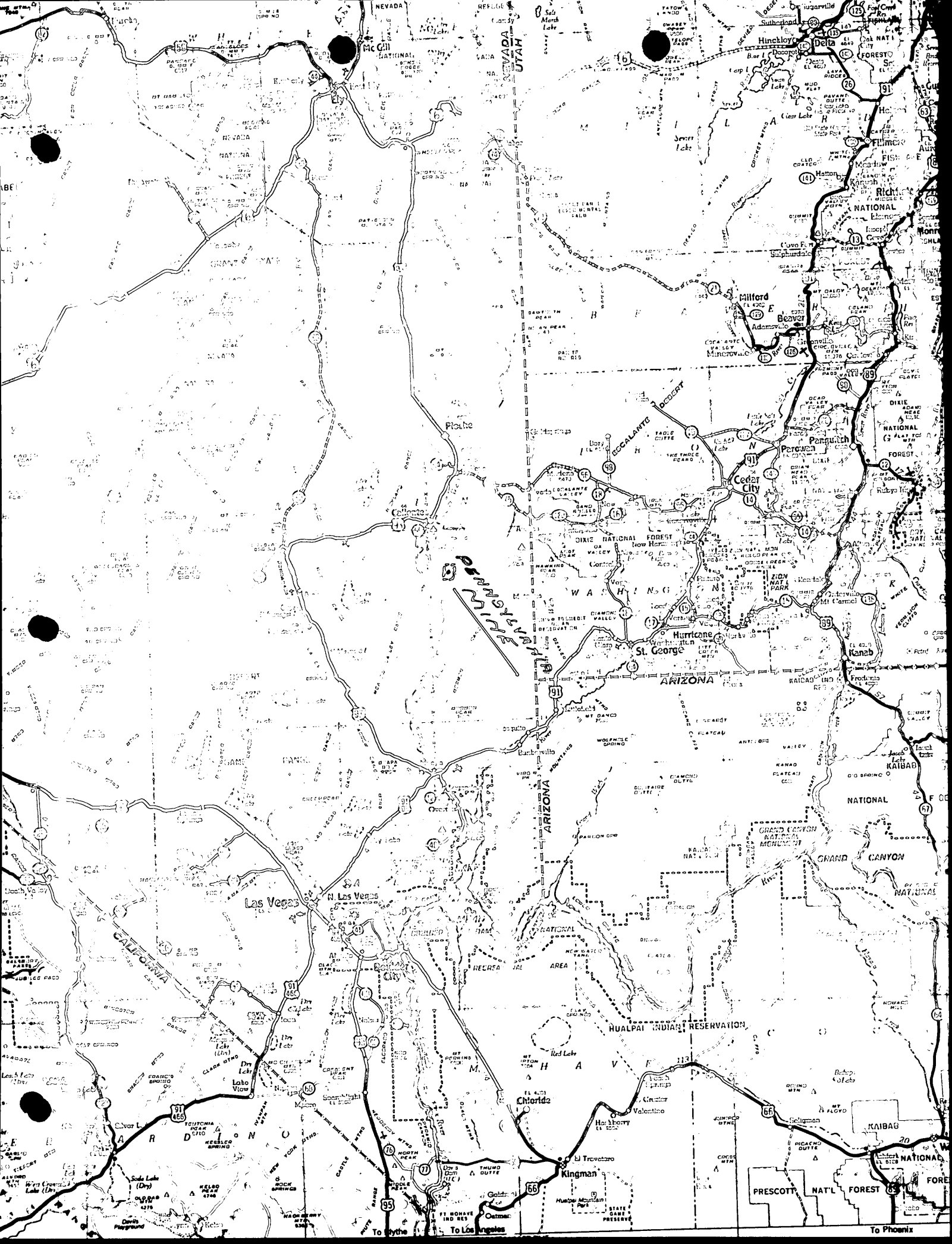
	MATERIAL	LABOR
12' diameter x 20' High Steel Ore Bin, includes foundations and feeder chutes	$1000-	$ 600-
1 - 24" wide x 30' long Belt Feeder and Picking Belt, includes drives, hoppers and chutes	300-	200-
1 - Used 9" x 15" Jaw Crusher set up, includes foundations, feed hoppers and discharge chutes	2500-	500-
1 - Used Mechanical Screen 3' x 6' complete includes supports, chutes, hoppers	600-	300-
1 - Used Set Crushing Rolls, 42" x 16", includes foundations, motors, drives, hoppers and chutes	3000-	1000-
1 - 24" x 50" Return Conveyor, in place, includes chutes, hoppers and drives	400-	200-
1 - Used Ball Mill, includes foundations, motors, drives, feed-boxes, launders	2500-	1000-
1 - Used Conditioner Tank, complete with drive	300-	300-
6 - Used Flotation Cells, in place, complete, includes launders, intake and discharge boxes, motors and drives	2400-	1500-
2 - Used Denver Pulp Pumps, with motors and drives, connected up	500-	200-
1 - Used Filter, 6' x 2 leaf, complete with drive in place, includes wet and dry pumps, receivers, piping, tanks	1200-	1000-
Water and Pulp Piping complete in place	2000-	2000-
Electric Wiring, includes all general wiring, lighting and connections to motors	2500-	2000-
Reagent Feeders - Samplers	500-	500-
Platforms and Runways	300-	200-
Engineering and Supervision 5% and 10%	1000-	1150-
	21,000-	12,500-
TOTAL		33,650-

This estimate is based on purchasing used equipment at a low price. By carefully scouting around and driving bargains, it may be possible to get the equipment as much as 50% better prices than those shown. The prices shown are about as the company has had to pay by driving bargains and are much lower than usually paid.

Labor, as well as material, can be saved by carefully laying out the plant. Labor can be saved by careful supervision. Economy of operation also depends on the layout.

No building is shown in the estimate. The plant could be, as has been done, operated without a building. Or the building could be a light frame covered with sheet iron, since the building would not have to support any equipment.

On the whole, if the plant were built under this estimate, it would be, as things are rated today, an exceptionally low cost mill - Nothing has been provided for water supply, power supply, living accomodations for men, warehouse, shop, office.


NEVADA
UTAH
McGill
Ely
Delta
Hinckley
Sutherland
Fillmore
Hatton
Milford
Beaver
Minersville
Parowan
Cedar City
Panguitch
Kanab
Hurricane
St. George
ARIZONA
Flagstaff
Kingman
Chloride
Las Vegas
N. Las Vegas
Boulder City
Lake View
CALIFORNIA
HUALPAI INDIAN RESERVATION
GRAND CANYON NATIONAL MONUMENT
GRAND CANYON NATIONAL
KAIBAB NATIONAL
PRESCOTT NAT'L FOREST
To Blythe
To Los Angeles
To Phoenix

A

REFERENCES

COMBINED METALS REDUCTION C

PENNSYLVANIA MINE -- ELGIN, NEVADA.

Approximate Arrangement Of Unpatented Claims

DECEMBER 22, 1949

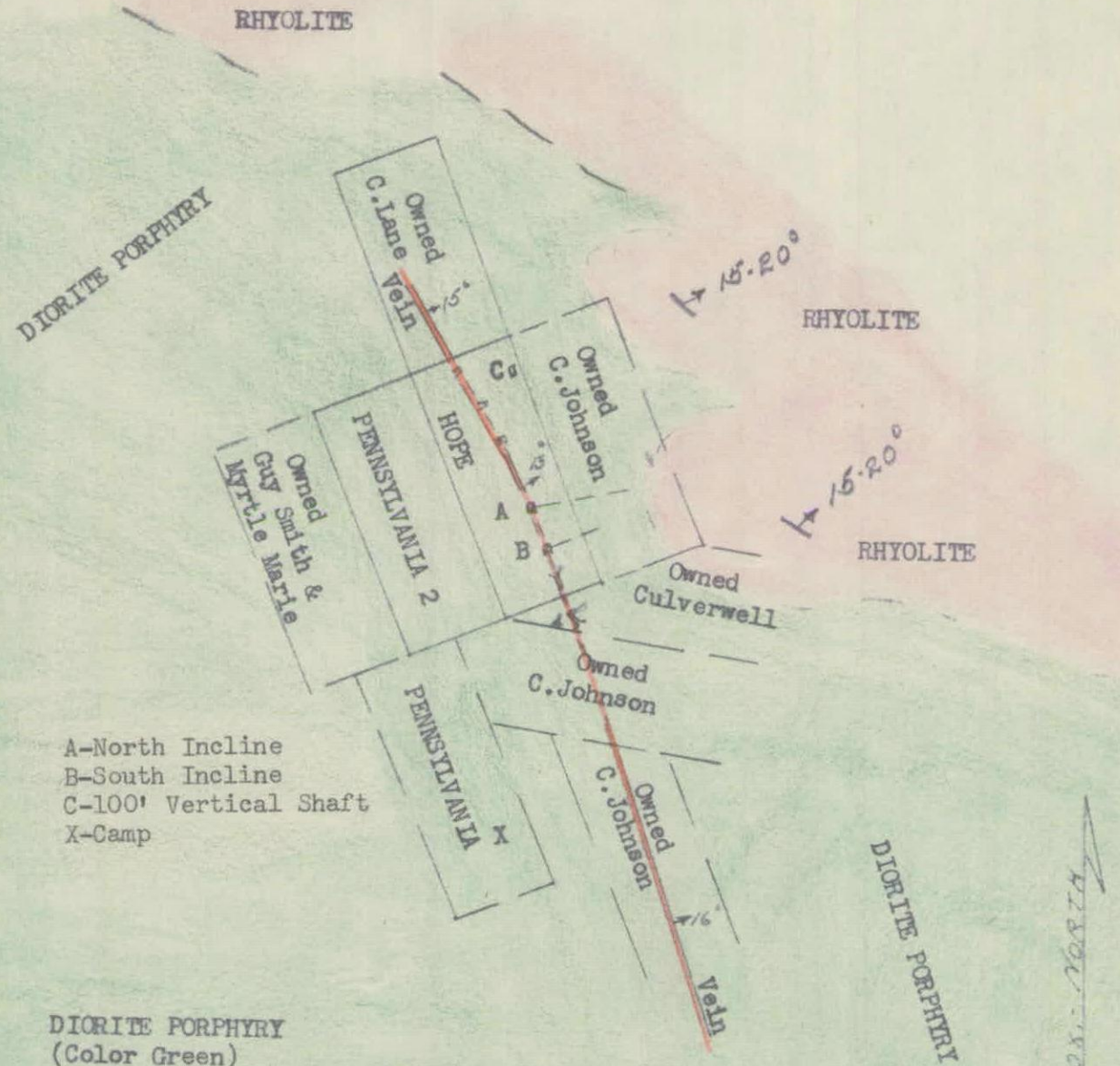
MADE BY L.G. THOMAS

TRACED BY

CHECKED BY

SCALE 1 inch = 1000 feet

(Indicated by Mr. Frank L.Smith)



A-North Incline
B-South Incline
C-100' Vertical Shaft
X-Camp

DIORITE PORPHYRY
(Color Green)
Medium grained-soft-older than rhyolite flows- Tertiary.

(No sediments in immediate vicinity of Mine).

RHYOLITE
(Color Reddish)

15.20°

RHYOLITE

R67E-T6S

FORM 24

COMBINED METALS REDUCTION CO.

PENNSYLVANIA MINE — PIOCHE — PLANT

ELGIN, NEVADA. (L.G.T.) Samples North Incline — Date DECEMBER 15, 1949.

No.	DESCRIPTION	Au Oz.	Ag Oz.	Pb %	Zn %	Fe %	Ins. %	Mn %	CaO %	Cu %
1	7.0' full bed-S.side @ 550 Level	.04	10.26	Tr.	0.7					1.8
2	4.9'-N.wall-10'S.of incline-550 Level One foot more in bottom.	.08	5.92	0.7	0.9					1.8
3	4.6'-S.side-20'S.of incline-550 Level	.02	3.18	Tr.	0.4					1.0
4	3.2'-S.side-30'S.of incline-550 Lev. One foot more in back.	.02	3.18	Tr.	0.5					1.1
5	6.2' full bed-N.side incline-550 Lev.	.04	11.36	0.6	0.9					2.4
6	5.2'-S.side of North Incline 20' below 550 Station.	.025	4.18	Tr.	0.5					1.6
7	4.5'-S.side of North Incline 40' below 550 Station.	.015	2.99	Tr.	0.7					1.7
8	5.8'-S.side of North Incline 20' up incline from 550 Sta. Ore bed tapers to zero @ 40'up.	.035	11.17	Tr.	0.7					1.9
9	2.8'-32'S.of 450 Station Ore tapers to zero @ 5' North.	.08	11.12	0.7	0.8					1.4
10	3.3' Cut down from back @ 42' South of incline- 450 Level.	.03	6.08	0.8	1.0					1.4
11	2.6' Cut in back-N.side @ 52' South of Incline-450 Level.	.13	17.37	1.1	1.1					3.5
12	4.0' S.side @ 62' S.of 450 Station.	.08	29.82	1.4	1.6					2.4
13	4.3' S.side@ 72' S.of 450 Station.	.04	5.26	Tr.	0.6					1.4
14	3.6' S.side@ 82' S.of 450 Station. True thickness of ore-4.0'.	.015	2.99	Tr.	0.8					1.0
15	3.0' Cut face of 450 South.	.005	1.80	Tr.	0.3					0.7
16	Surface. Grab of dump @ 100' Vertical Shaft by Mr. Frank L. Smith.	.02	3.08	Tr.	0.3					0.4
	Calculated average above samples Nos. 1 to 14, inclusive. LGT.	.043	8.71	0.35	0.78					1.74
	200 pound MILL TEST SAMPLE -cut from 450 & 550 Levels-North Incline	.055	7.85	1.1	0.7	2.3	85.0	Nonsulphide Pb. .15	Nonsulphide Zn. .4	2.1

Soluble Copper- 0.48

E.S.PERKES
Assayer

A

REFERENCES

COMBINED METALS REDUCTION CO

PENNSYLVANIA MINE - ELGIN, NEVADA.

Plan of principal workings on vein

Showing ore-body & samples @ North & South Incline

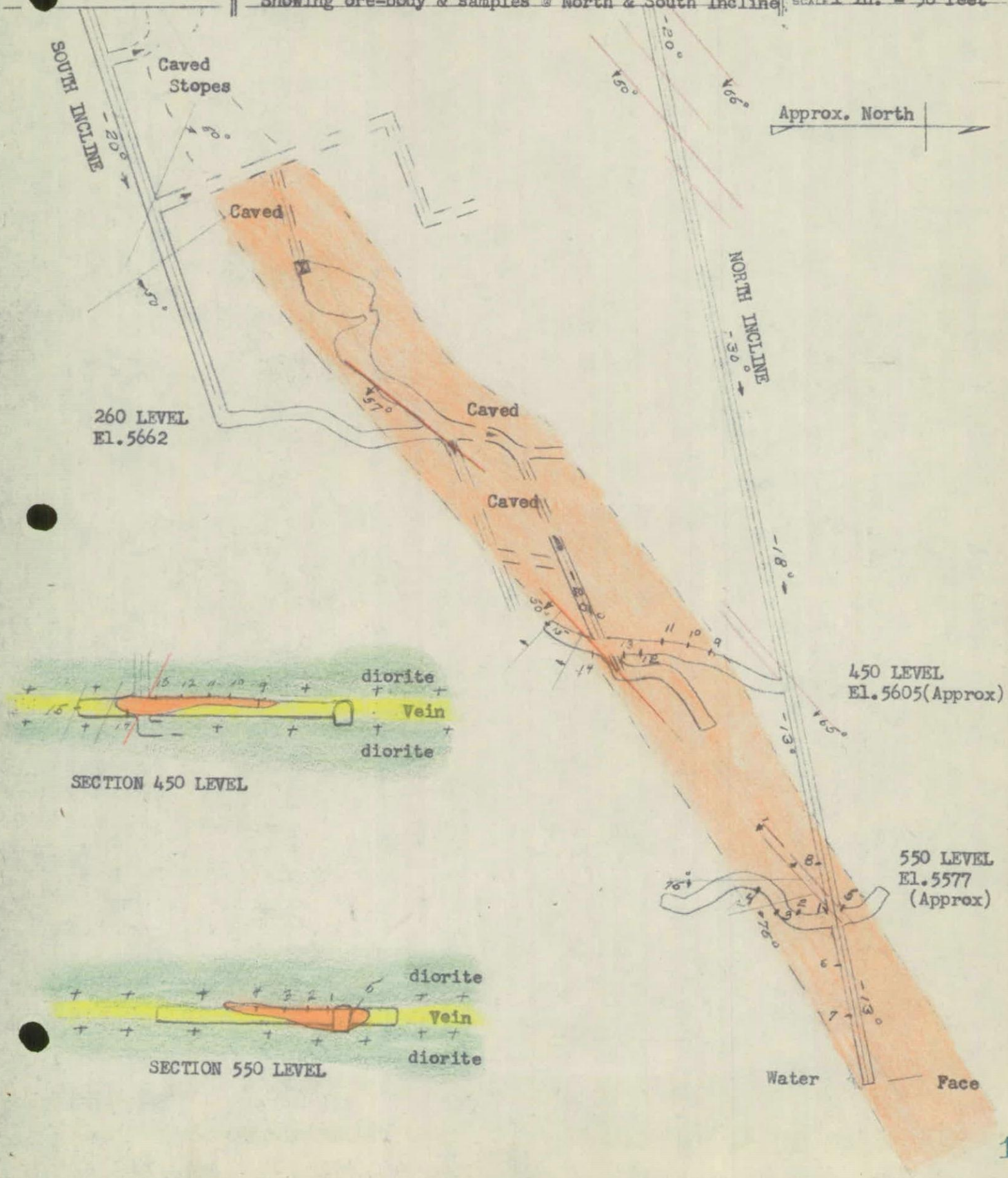
DECEMBER 22, 1949

MADE BY L.G. THOMAS

TRACED BY

CHECKED BY

SCALE 1 in. = 50 feet



A

REFERENCES

COMBINED METALS REDUCTION CO.

PENNSYLVANIA MINE, ELGIN, NEVADA.

PLAN: 450 & 550 LEVELS -NORTH INCLINE

Showing samples & ore channel.

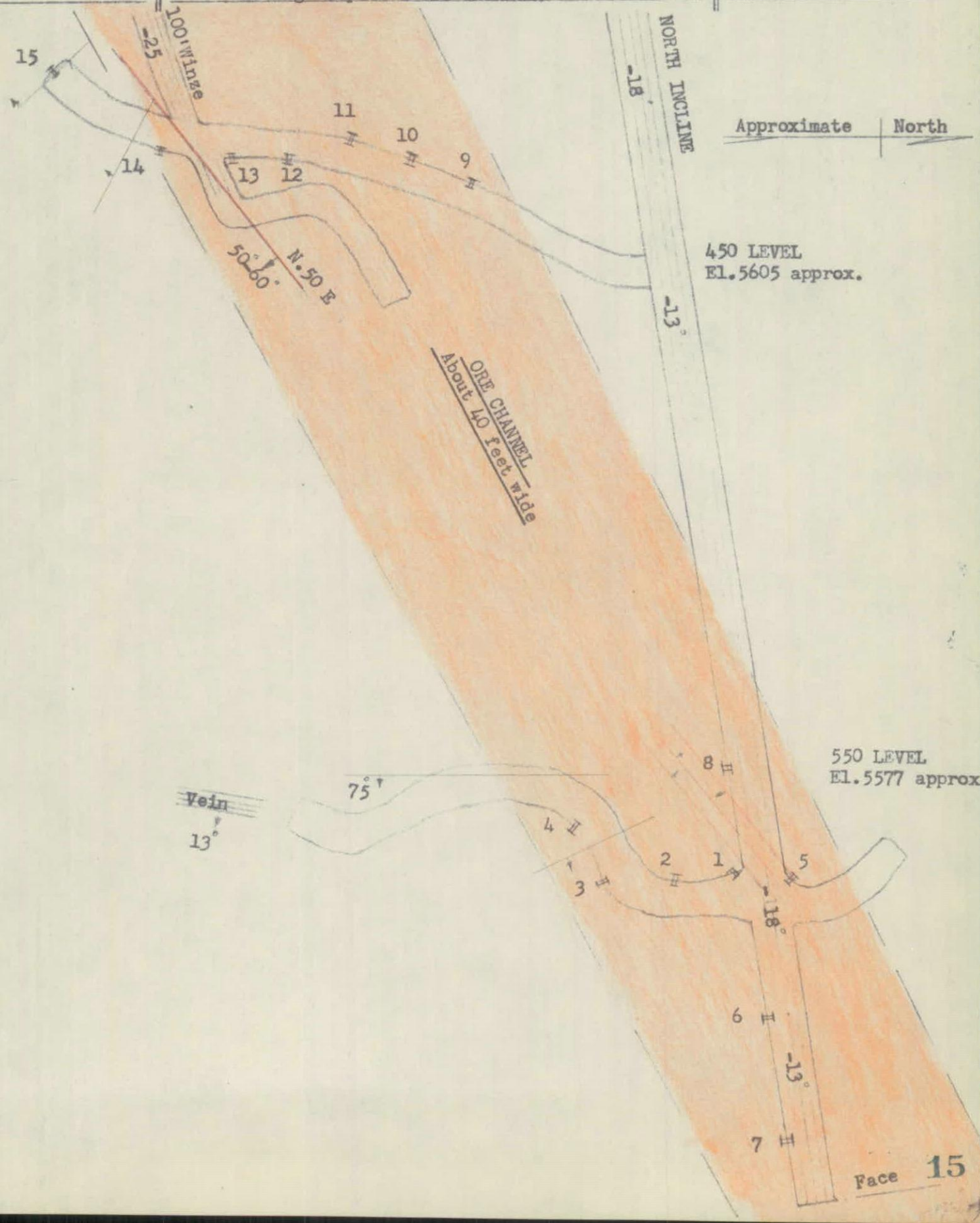
December 22 1949

MADE BY L.G. Thomas

TRACED BY

CHECKED BY

SCALE 1 in. = 20 ft.



Face 15

A

REFERENCES

COMBINED METALS REDUCTION CO.

PENNSYLVANIA MINE, ELGIN, NEVADA.

SECTIONS: 450 & 550 LEVELS -NORTH INCLINE

Showing samples & ore.

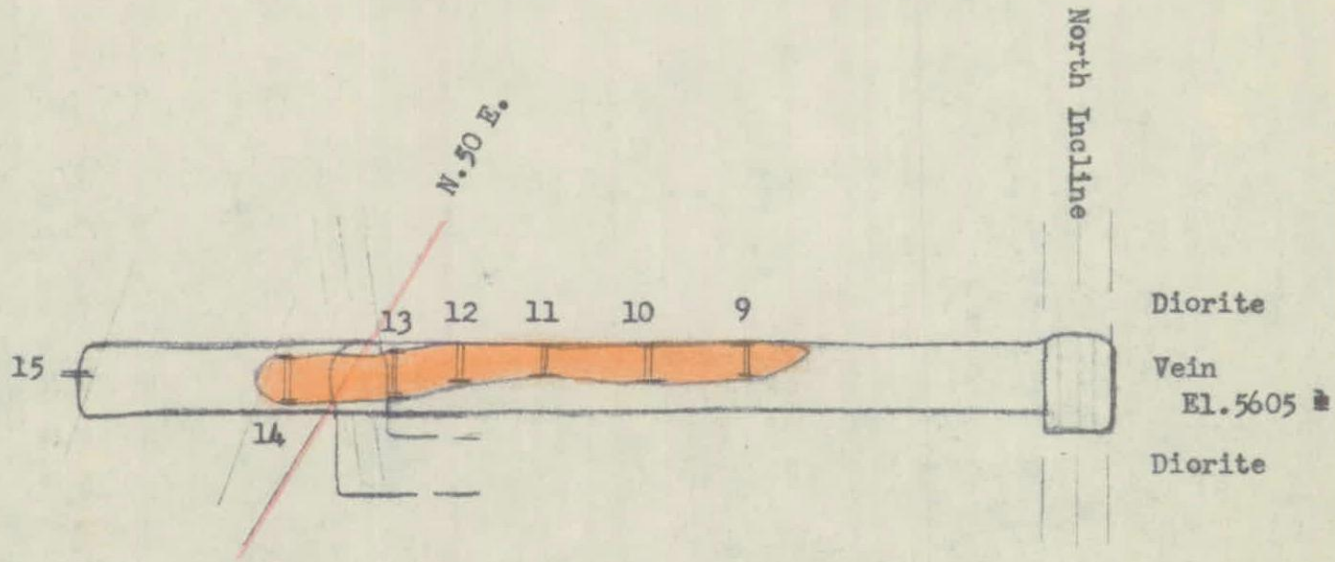
December 22, 1949

MADE BY L.G. Thomas

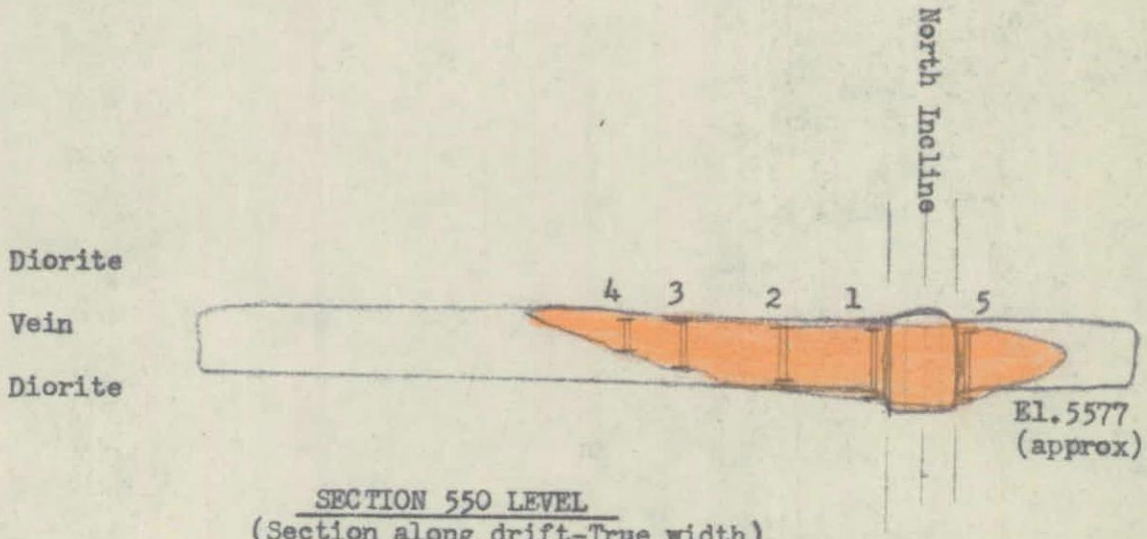
TRACED BY

CHECKED BY

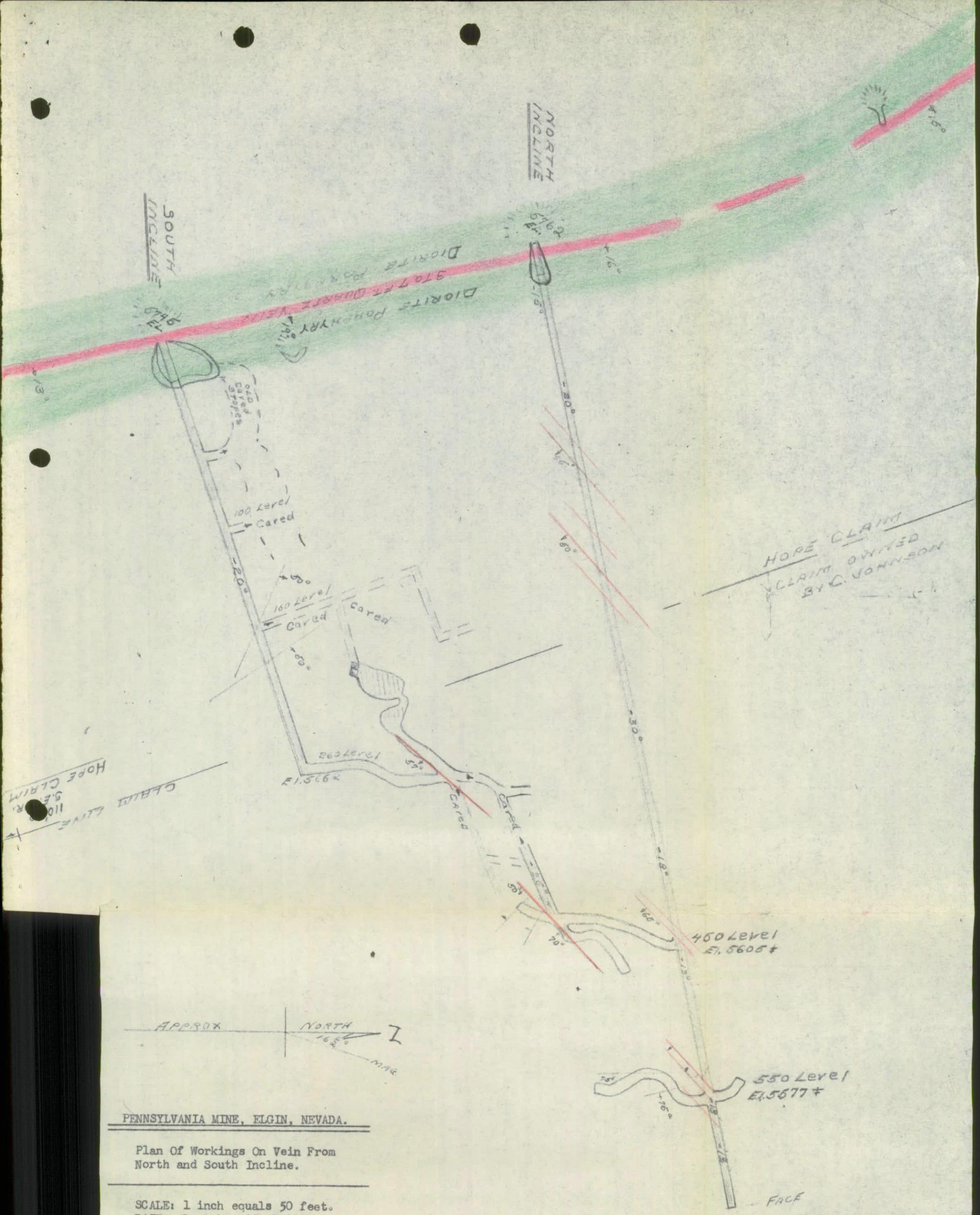
SCALE 1 in. = 20 ft.



SECTION: 450 LEVEL
(Section along drift-True width 40 ft.)



SECTION 550 LEVEL
(Section along drift-True width)
(about 40 ft.)



PENNSYLVANIA MINE, ELGIN, NEVADA.

Plan Of Workings On Vein From North and South Incline.

SCALE: 1 inch equals 50 feet.
DATE: December 22, 1949.
BY: L.G.THOMAS

A

REFERENCES

COMBINED METALS REDUCTION CO

FREIGHT RATES ON CRUDE ORES OR CONCENTRATES

CALIENTE OR PIOCHE, NEVADA

TO: SALT LAKE SMELTERS

Effective January 20, 19

MADE BY

TRACED BY LGT.

CHECKED BY Cowan

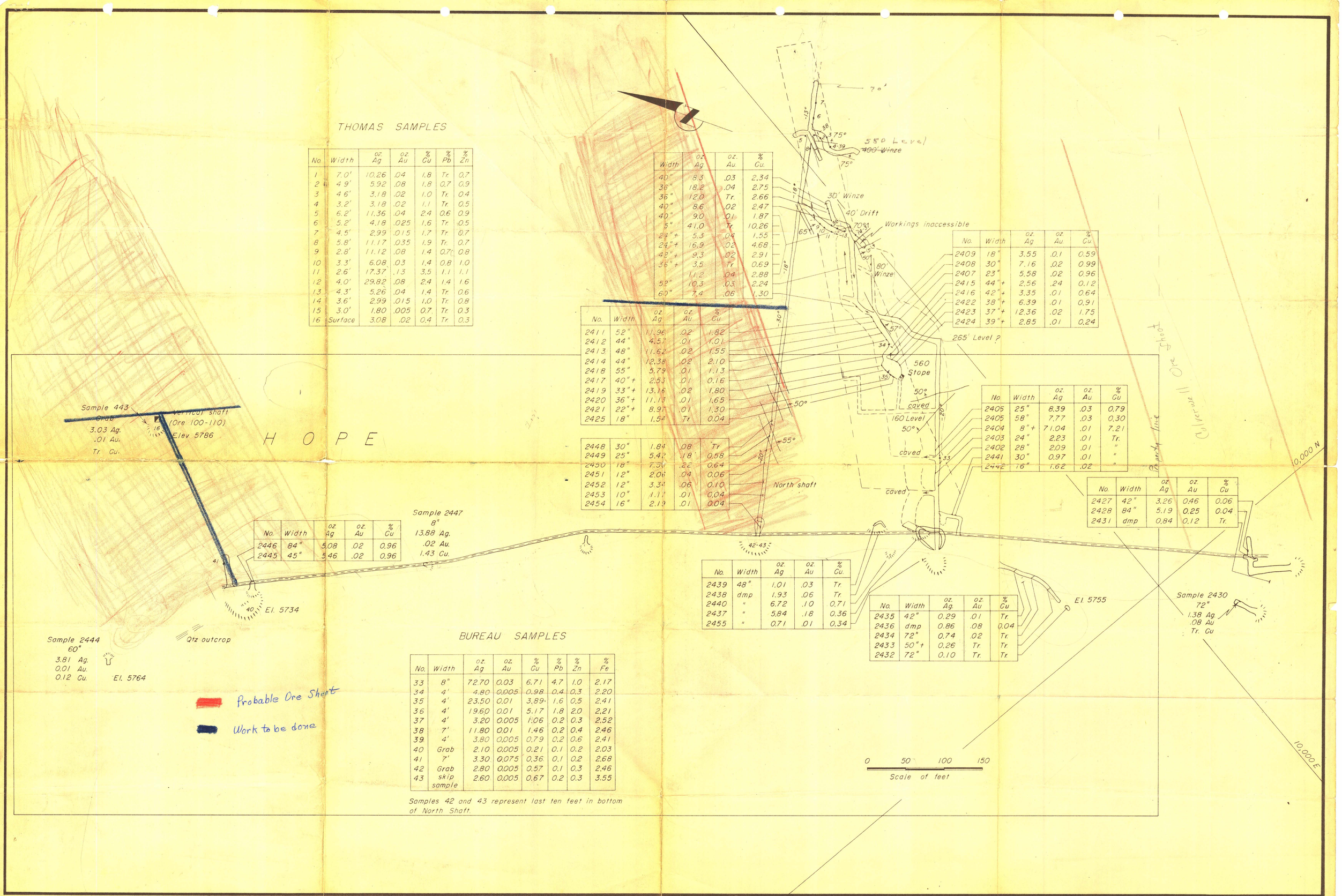
SCALE

UNION PACIFIC RAILROAD

VALUE TON	MINIMUM CAR-LBS.	FREIGHT RATE/TON 3% FED.TAX
$5.00	110,000	$2.82
$10.00	80,000	$2.98
$15.00	"	$3.65
$20.00	"	$4.01
$30.00	"	$4.39
$40.00	"	$5.12
$50.00	100,000	$4.76
$60.00	"	$5.07
$70.00	"	$5.40
$80.00	"	$5.72
$90.00	"	$6.05
$100.00	"	$6.37

NOTE:

ADD 35¢ -CASELTON TO PIOCHE.



THOMAS SAMPLES

No.	Width	oz. Ag	oz. Au	% Cu	% Pb	% Zn
1	7.0'	10.26	.04	1.8	Tr.	0.7
2	4.9'	5.92	.08	1.8	0.7	0.9
3	4.6'	3.18	.02	1.0	Tr.	0.4
4	3.2'	3.18	.02	1.1	Tr.	0.5
5	6.2'	11.36	.04	2.4	0.6	0.9
6	5.2'	4.18	.025	1.6	Tr.	0.5
7	4.5'	2.99	.015	1.7	Tr.	0.7
8	5.8'	11.17	.035	1.9	Tr.	0.7
9	2.8'	11.12	.08	1.4	0.7	0.8
10	3.3'	6.08	.03	1.4	0.8	1.0
11	2.6'	17.37	.13	3.5	1.1	1.1
12	4.0'	29.82	.08	2.4	1.4	1.6
13	4.3'	5.26	.04	1.4	Tr.	0.6
14	3.6'	2.99	.015	1.0	Tr.	0.8
15	3.0'	1.80	.005	0.7	Tr.	0.3
16	Surface	3.08	.02	0.4	Tr.	0.3

Width	oz. Ag	oz. Au.	% Cu.
40"	8.3	.03	2.34
36"	18.2	.04	2.75
36"	12.0	Tr.	2.66
40"	8.6	.02	2.47
40"	9.0	.01	1.87
5"	41.0	Tr.	10.26
24"+	5.3	.04	1.55
24"+	16.9	.02	4.68
42"+	9.3	.02	2.91
36"+	3.5	Tr	0.69
	11.2	.04	2.88
52"	10.3	.03	2.24
60"	7.4	.06	1.30

No.	Width	oz. Ag	oz. Au.	% Cu.
2411	52"	11.96	.02	1.82
2412	44"	4.57	.01	1.01
2413	48"	11.62	.02	1.55
2414	44"	12.38	.02	2.10
2418	55"	5.79	.01	1.13
2417	40"+	2.53	.01	0.16
2419	33"+	13.16	.02	1.80
2420	36"+	11.13	.01	1.65
2421	22"+	8.91	.01	1.30
2425	18"	1.54	Tr	0.04

2448	30"	1.84	.08	Tr
2449	25"	5.42	.18	0.58
2450	18"	7.50	.22	0.64
2451	12"	2.06	.04	0.06
2452	12"	3.34	.06	0.10
2453	10"	1.11	.01	0.04
2454	16"	2.19	.01	0.04

No.	Width	oz. Ag	oz. Au	% Cu
2409	18"	3.55	.01	0.59
2408	30"	7.16	.02	0.99
2407	23"	5.58	.02	0.96
2415	44"+	2.56	.24	0.12
2416	42"+	3.35	.01	0.64
2422	38"+	6.39	.01	0.91
2423	37"+	12.36	.02	1.75
2424	39"+	2.85	.01	0.24

No.	Width	oz. Ag	oz. Au	% Cu
2405	25"	8.39	.03	0.79
2405	58"	7.77	.03	0.30
2404	8"+	71.04	.01	7.21
2403	24"	2.23	.01	Tr.
2402	28"	2.09	.01	"
2441	30"	0.97	.01	"
2442	16"	1.62	.02	"

No.	Width	oz Ag	oz. Au	% Cu
2427	42"	3.26	0.46	0.06
2428	84"	5.19	0.25	0.04
2431	dmp	0.84	0.12	Tr.

No.	Width	oz Ag	oz. Au	% Cu
2446	84"	5.08	.02	0.96
2445	45"	5.46	.02	0.96

No.	Width	oz. Ag	oz. Au	% Cu.
2439	48"	1.01	.03	Tr.
2438	dmp	1.93	.06	Tr.
2440	"	6.72	.10	0.71
2437	"	5.84	.18	0.36
2455	"	0.71	.01	0.34

No.	Width	oz. Ag.	oz. Au	% Cu
2435	42"	0.29	.01	Tr.
2436	dmp	0.86	.08	0.04
2434	72"	0.74	.02	Tr.
2433	50"+	0.26	Tr.	Tr.
2432	72"	0.10	Tr.	Tr.

BUREAU SAMPLES

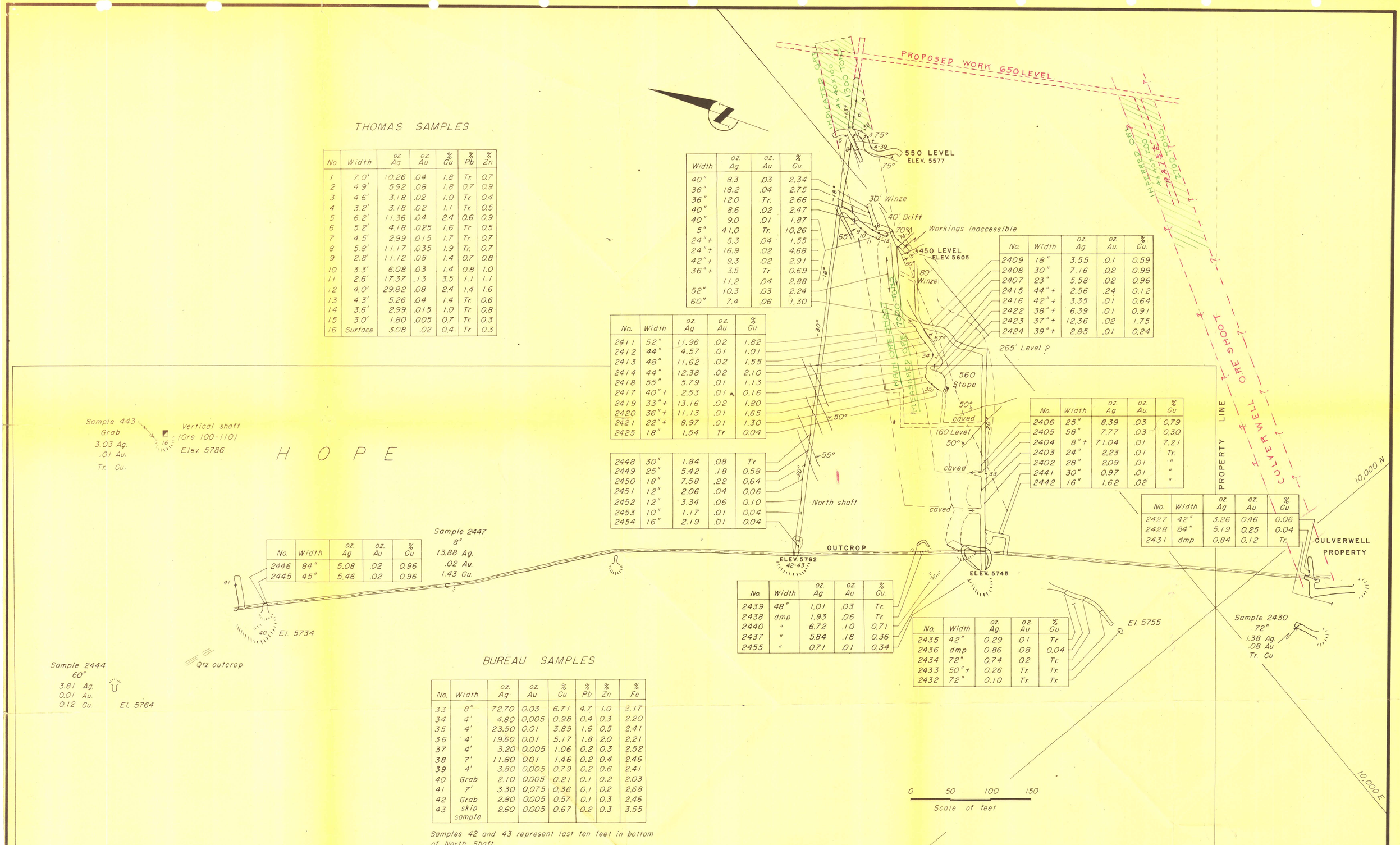
No.	Width	oz. Ag	oz. Au	% Cu	% Pb	% Zn	% Fe
33	8"	72.70	0.03	6.71	4.7	1.0	2.17
34	4'	4.80	0.005	0.98	0.4	0.3	2.20
35	4'	23.50	0.01	3.89	1.6	0.5	2.41
36	4'	19.60	0.01	5.17	1.8	2.0	2.21
37	4'	3.20	0.005	1.06	0.2	0.3	2.52
38	7'	11.80	0.01	1.46	0.2	0.4	2.46
39	4'	3.80	0.005	0.79	0.2	0.6	2.41
40	Grab	2.10	0.005	0.21	0.1	0.2	2.03
41	7'	3.30	0.075	0.36	0.1	0.2	2.68
42	Grab	2.80	0.005	0.57	0.1	0.3	2.46
43	skip sample	2.60	0.005	0.67	0.2	0.3	3.55

Samples 42 and 43 represent last ten feet in bottom of North Shaft.

Fig 3.- Plan map of Pennsylvania Mine showing location and assays of samples.

2 copies

N. Culberte Rev Jan 5, 1 Oct 3 max



THOMAS SAMPLES

No	Width	oz. Ag	oz. Au	% Cu	% Pb	% Zn
1	7.0'	10.26	.04	1.8	Tr.	0.7
2	4.9'	5.92	.08	1.8	0.7	0.9
3	4.6'	3.18	.02	1.0	Tr.	0.4
4	3.2'	3.18	.02	1.1	Tr.	0.5
5	6.2'	11.36	.04	2.4	0.6	0.9
6	5.2'	4.18	.025	1.6	Tr.	0.5
7	4.5'	2.99	.015	1.7	Tr.	0.7
8	5.8'	11.17	.035	1.9	Tr.	0.7
9	2.8'	11.12	.08	1.4	0.7	0.8
10	3.3'	6.08	.03	1.4	0.8	1.0
11	2.6'	17.37	.13	3.5	1.1	1.1
12	4.0'	29.82	.08	2.4	1.4	1.6
13	4.3'	5.26	.04	1.4	Tr.	0.6
14	3.6'	2.99	.015	1.0	Tr.	0.8
15	3.0'	1.80	.005	0.7	Tr.	0.3
16	Surface	3.08	.02	0.4	Tr.	0.3

Width	oz. Ag.	oz. Au.	% Cu.
40"	8.3	.03	2.34
36"	18.2	.04	2.75
36"	12.0	Tr.	2.66
40"	8.6	.02	2.47
40"	9.0	.01	1.87
5"	41.0	Tr.	10.26
24"+	5.3	.04	1.55
24"+	16.9	.02	4.68
42"+	9.3	.02	2.91
36"+	3.5	Tr	0.69
	11.2	.04	2.88
52"	10.3	.03	2.24
60"	7.4	.06	1.30

No.	Width	oz. Ag	oz. Au	% Cu
2411	52"	11.96	.02	1.82
2412	44"	4.57	.01	1.01
2413	48"	11.62	.02	1.55
2414	44"	12.38	.02	2.10
2418	55"	5.79	.01	1.13
2417	40"+	2.53	.01	0.16
2419	33"+	13.16	.02	1.80
2420	36"+	11.13	.01	1.65
2421	22"+	8.97	.01	1.30
2425	18"	1.54	Tr	0.04

No.	Width	oz. Ag	oz. Au	% Cu
2448	30"	1.84	.08	Tr
2449	25"	5.42	.18	0.58
2450	18"	7.58	.22	0.64
2451	12"	2.06	.04	0.06
2452	12"	3.34	.06	0.10
2453	10"	1.17	.01	0.04
2454	16"	2.19	.01	0.04

No.	Width	oz. Ag	oz. Au	% Cu
2409	18"	3.55	.01	0.59
2408	30"	7.16	.02	0.99
2407	23"	5.58	.02	0.96
2415	44"+	2.56	.24	0.12
2416	42"+	3.35	.01	0.64
2422	38"+	6.39	.01	0.91
2423	37"+	12.36	.02	1.75
2424	39"+	2.85	.01	0.24

No.	Width	oz. Ag	oz. Au	% Cu
2406	25"	8.39	.03	0.79
2405	58"	7.77	.03	0.30
2404	8"+	71.04	.01	7.21
2403	24"	2.23	.01	Tr.
2402	28"	2.09	.01	"
2441	30"	0.97	.01	"
2442	16"	1.62	.02	"

No.	Width	oz Ag	oz Au	% Cu
2427	42"	3.26	0.46	0.06
2428	84"	5.19	0.25	0.04
2431	dmp	0.84	0.12	Tr.

No.	Width	oz. Ag	oz. Au	% Cu
2446	84"	5.08	.02	0.96
2445	45"	5.46	.02	0.96

No.	Width	oz. Ag	oz. Au	% Cu.
2439	48"	1.01	.03	Tr.
2438	dmp	1.93	.06	Tr.
2440	"	6.72	.10	0.71
2437	"	5.84	.18	0.36
2455	"	0.71	.01	0.34

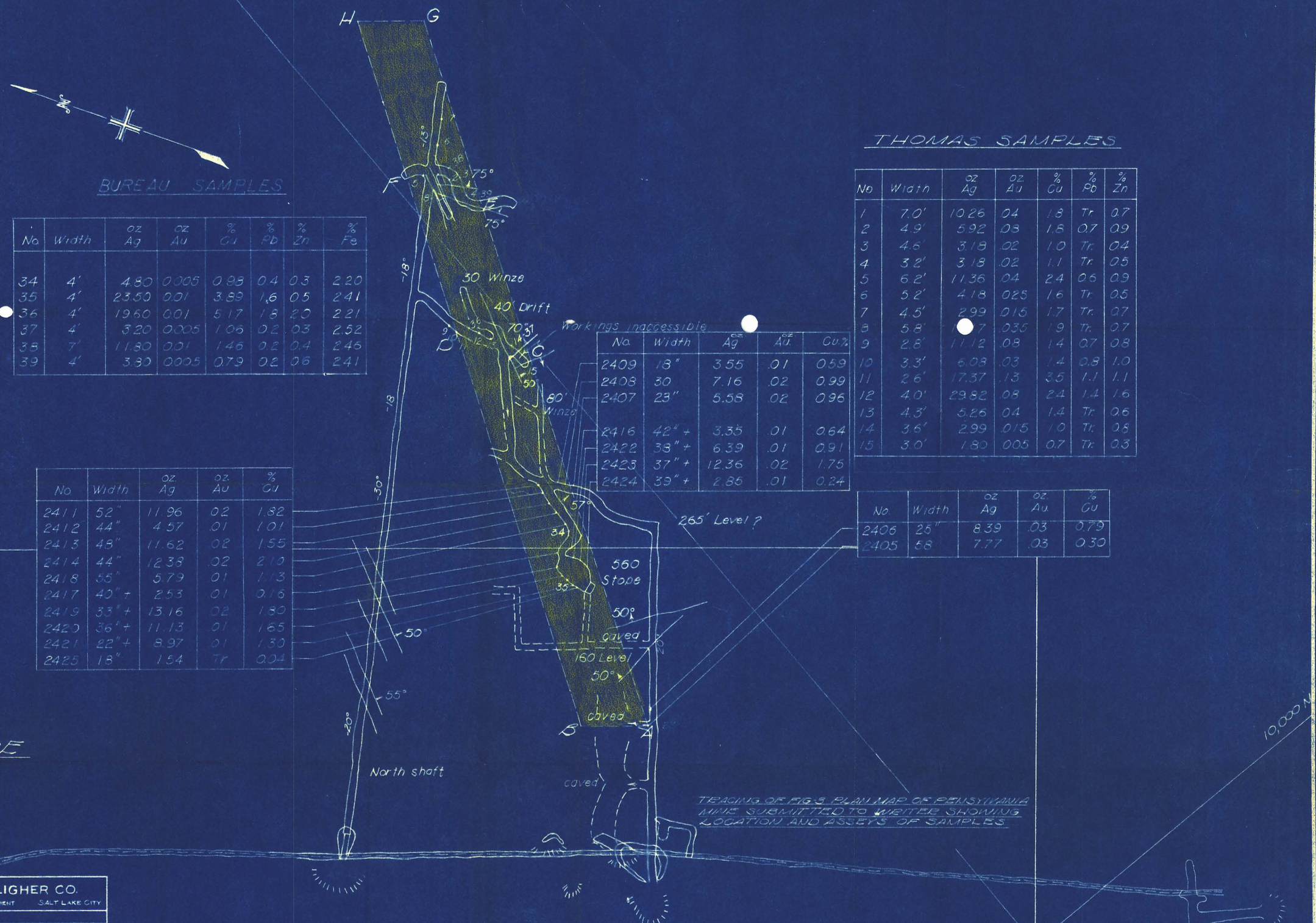
No.	Width	oz. Ag.	oz. Au	% Cu
2435	42"	0.29	.01	Tr.
2436	dmp	0.86	.08	0.04
2434	72"	0.74	.02	Tr.
2433	50"+	0.26	Tr.	Tr.
2432	72"	0.10	Tr.	Tr.

BUREAU SAMPLES

No.	Width	oz. Ag	oz. Au	% Cu	% Pb	% Zn	% Fe
33	8"	72.70	0.03	6.71	4.7	1.0	3.17
34	4'	4.80	0.005	0.98	0.4	0.3	2.20
35	4'	23.50	0.01	3.89	1.6	0.5	2.41
36	4'	19.60	0.01	5.17	1.8	2.0	2.21
37	4'	3.20	0.005	1.06	0.2	0.3	2.52
38	7'	11.80	0.01	1.46	0.2	0.4	2.46
39	4'	3.80	0.005	0.79	0.2	0.6	2.41
40	Grab	2.10	0.005	0.21	0.1	0.2	2.03
41	7'	3.30	0.075	0.36	0.1	0.2	2.68
42	Grab	2.80	0.005	0.57	0.1	0.3	2.46
43	skip sample	2.60	0.005	0.67	0.2	0.3	3.55

Samples 42 and 43 represent last ten feet in bottom of North Shaft.

Fig 3.- Plan map of Pennsylvania Mine showing location and assays of samples.



BUREAU SAMPLES

No.	Width	oz Ag	oz Au	% Cu	% Pb	% Zn	% Fe
34	4'	4.80	0.005	0.98	0.4	0.3	2.20
35	4'	23.50	0.01	3.89	1.6	0.5	2.41
36	4'	19.60	0.01	5.17	1.8	2.0	2.21
37	4'	3.20	0.005	1.06	0.2	0.3	2.52
38	7'	11.80	0.01	1.46	0.2	0.4	2.45
39	4'	3.80	0.005	0.79	0.2	0.6	2.41

THOMAS SAMPLES

No	Width	oz Ag	oz Au	% Cu	% Pb	% Zn
1	7.0'	10.26	.04	1.8	Tr	0.7
2	4.9'	5.92	.03	1.5	0.7	0.9
3	4.6'	3.18	.02	1.0	Tr.	0.4
4	3.2'	3.18	.02	1.1	Tr.	0.5
5	6.2'	11.36	.04	2.4	0.6	0.9
6	5.2'	4.18	0.25	1.6	Tr.	0.5
7	4.5'	2.99	0.15	1.7	Tr.	0.7
8	5.8'	1.7	.035	1.9	Tr.	0.7
9	2.8'	11.12	.08	1.4	0.7	0.8
10	3.3'	6.08	.03	1.4	0.8	1.0
11	2.6'	17.37	.13	3.5	1.1	1.1
12	4.0'	29.82	.08	2.4	1.4	1.6
13	4.3'	5.26	.04	1.4	Tr.	0.6
14	3.6'	2.99	.015	1.0	Tr.	0.8
15	3.0'	1.80	0.05	0.7	Tr.	0.3

No	Width	oz Ag	oz Au	% Cu
2409	18"	3.55	.01	0.59
2408	30	7.16	.02	0.99
2407	23"	5.58	.02	0.96
2416	42" +	3.35	.01	0.64
2422	38" +	6.39	.01	0.91
2423	37" +	12.36	.02	1.75
2424	39" +	2.85	.01	0.24

No	Width	oz Ag	oz Au	% Cu
2411	52"	11.96	0.2	1.82
2412	44"	4.57	.01	1.01
2413	48"	11.62	.02	1.55
2414	44"	12.38	.02	2.10
2418	55"	5.79	.01	1.13
2417	40" +	2.53	.01	0.16
2419	33" +	13.16	.02	1.80
2420	36" +	11.13	.01	1.65
2421	22" +	8.97	.01	1.30
2425	18"	1.54	Tr	0.04

No.	Width	oz Ag	oz Au	% Cu
2406	25"	8.39	.03	0.79
2405	58	7.77	.03	0.30

HOPE

TRACING OF FIG 3 PLAN MAP OF PENNSYLVANIA MINE SUBMITTED TO WRITER SHOWING LOCATION AND ASSAYS OF SAMPLES

NOTE: ONLY THE ASSAYS USED IN FIGURING ORE RESERVES ARE SHOWN ON THIS TRACING

DRAFTSMAN H.R.B. 4-25-50	THE GALIGHER CO. ENGINEERING DEPARTMENT SALT LAKE CITY
ENGINEER	
APPROVED	
	SCALE 1" = 50'-0
	B-49-573