DMEA Form 9

UNITED STATES
DEPARTMENT OF THE INTERIOR
Defense Minerals Exploration Administration

OFFICIAL DOCKET FILE

DMEA NO. 2309

Application (Denied
(Withdrawn
(After disposition, delete items not applicable)

Contract (Terminated - not Certified
(Cancelled
(Terminated - Certified
(Royalty Agreement

This is the official contract file containing all official records of the project. The records contained in the files are checked and are arranged in this order:

Left Side

- Interim Royalty Audits
- Reports of Royalty Review
- Certification of Discovery
- Certificate of Audit (Final)
- Interim Audit(s)
- Report of Review
- 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
- (3) Envelope for maps

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) 3-3-58
  - Operator's Final Report. 11-22-57
  - (2R) Interim Reports
  - (2R) Operator's monthly reports and all attachments (latest on top)
  - On-site Exam Report(s) (Tab)
  - (4) Settlement Sheets

When the volume of records is expected to warrant additional folders, or when convenience of reference warrants separate folders for certain records, they should be set up in this order:

Left Side

Folder No. 2: (In chron. order) Interim Summary Reports by W. O. Engineers

Right Side

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

Folder No. 3: Maps (Use pocket folder or envelope. Fold maps with title block out and show reference to related document or correspondence.)

Folder No. 4: Settlement Sheets

Folder No. 5: Drill Logs

OFFICE OF MINERALS EXPLORATION
CONTRACT ADMINISTRATION AND AUDIT DIVISION

REPORT OF ROYALTY REVIEW

I have reviewed the files of the Washington office pertaining to Amended Contract Idm-E295, Docket DMEA-2309 (lead-zinc), effective April 16, 1952, with

Comet Mines, Incorporated
Pioche, Nevada
and
218 Felt Building
Salt Lake City, Utah

for the purpose of determining the amount of royalty payable to the U. S. Government on sales of minerals from property referred to as the Comet Mine located in Lincoln County, Nevada, during the period July 1, 1955, through November 15, 1961.

In accordance with Article 8 and Amendments Nos. 1 and 2 of the Amended Contract, royalty is payable on all minerals produced from the land described in Article 2 of the contract for a period of 14 years from April 16, 1952, or until the total net amount contributed by the Government without interest is fully repaid, whichever occurs first. A Report of Review dated December 4, 1957, indicated accepted costs under the exploration contract amounting to $124,072.00 with the Government's contribution on a 50 percent basis being $62,036.00.

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

This review established no sales subject to the Government's royalty subsequent to the period covered by a prior Royalty Audit Certificate, which found the sales subject to the Government's royalty through June 30, 1955, to be $2,773.04. The royalty account as of June 30, 1955, was:

Total Royalty Payable	$41.60
Total Royalty Paid	41.60
Balance of Royalty Due	$ -0-

At November 15, 1961, the royalty account of this project was found to be:

Total Royalty Payable	$41.60
Total Royalty Paid	41.60
Balance of Royalty Due	$ -0-

E. D. Talbert

E. D. Talbert, OME Auditor

November 21, 1961

STATUS OF PROJECT, SCOPE OF REVIEW
AND REASONS THEREFOR

Subsequent to the period covered by a Royalty Audit Certificate and Report dated October 28, 1955, Amendments Nos. 1 and 2 to the Amended Exploration Project Contract were executed. Under the effective provisions of these amendments, certification of discovery or development is waived and the Operator is obligated, as principal if the producer or as surety if not the producer, to pay the Government's percentage royalty on production for a maximum of 14 years from April 16, 1952.

The property under the contract has been inactive since termination of the exploration work in June 1957. The $2,773.40 proceeds on 505.462 short dry tons of lead-zinc ores, as covered by the royalty audit, represent all sales of production since the effective date of the contract.

Upon the June 1957 termination of the exploration work, 440 short wet tons of ore (averaging .081 ounce of gold per ton, 5.06 ounces of silver per ton, 1.52 percent lead, and .82 percent zinc) were stockpiled at the mine. Under Article 8(d) of the contract the Government has the option of requiring computation and payment of royalty on any unsold production after a lapse of six months from the date of extraction.

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

(1) The records indicate that, except for a stockpile of low-grade ores, all production has been reported and proper royalty thereon paid;

(2) The property has been inactive since June 1957; and

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

Check Sheet of Examining Engineer

Operator's Name Comet Mines, Inc.

Address Poiche,

Lincoln County, Nevada

Exploration Contract No. Idm-E 295 Docket No. DMEA-2309

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

8. Comment on any item 2 (b) to 6 if answer is No.

The operator discontinued work on the project on June 15, 1957

Glenn G. Gentry
Mining Engineer
Acting Field Officer, OME
Region 11

Date November 15, 1961

82448

DEFENSE MINERALS EXPLORATION ADMINISTRATION
CONTRACT ADMINISTRATION AND AUDIT DIVISION

Betty

FIRST ROYALTY AUDIT CERTIFICATE

I have examined the records and sales documents pertaining to the sale of lead and zinc ore, for the period April 16, 1952 to June 30, 1955, by the:

Comet Mines, Incorporated,
a Nevada Corporation
Pioche, Nevada and
218 Felt Building
Salt Lake City, Utah

produced from the Comet Mine, located in Lincoln County, Nevada, under the terms of Contract No. Idm-E295, Docket No. DMEA-2309, dated April 16, 1952, and Amended Contract No. Idm-E295, Docket No. DMEA-2309, dated April 16, 1952.

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

The audit established the total net sales of lead and zinc ore for this period to be $2,773.04. Royalties due the U.S. Government at the contract rate of 1 1/2 percent are $41.60. The royalty paid and balance due are as follows:

Total Royalties Due	$41.60
Total Royalties Paid	41.60
Balance of Royalties Due	-0-

George Mavor
George Mavor
Auditor

October 28, 1955

Sheet 2
Final Audit
$124,012.00

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FIRST ROYALTY AUDIT REPORT

I INTRODUCTION

On September 8, 1955, an audit of royalty payments received, was made for the period April 16, 1952 to June 30, 1955, covering lead and zinc ore produced and sold under Contract No. Idm-8295, Docket No. DMEA-2309, dated April 16, 1952, and Amended Contract No. Idm-8295, Docket No. DMEA-2309, dated April 16, 1952, by the:

Comet Mines, Incorporated,
a Nevada Corporation
Pioche, Nevada
and
218 Felt Building
Salt Lake City, Utah

covering a project of exploration for lead and zinc ore, on property known as the Comet Mine, located in Lincoln County, Nevada.

The mining properties are reached by proceeding on highway 93, approximately 3 miles north from Pioche, Nevada and turn southwest on unnumbered paved road approximately 5 miles and then turn northwest on unnumbered gravel road approximately 17 miles to mine site.

The records pertaining to this contract are located in the company's office, 218 Felt Building, Salt Lake City, Utah, and the following officials were consulted during the course of the audit.

C. F. Burton, Treasurer
O. Nordfelt, Accountant

Their cooperation and assistance greatly facilitated the audit.

Mr. Glenn G. Gentry, Mining Engineer, U. S. Bureau of Mines, collaborated in the audit, for which his assistance is hereby acknowledged.

II GENERAL INFORMATION

No certificate of discovery has been issued, however Article 8 (b) of the Amended Contract states that the producer shall pay the Government a royalty on all minerals mined or produced from the land, regardless of any certification of discovery or developement, from the date of the contract until the lapse of the time within which the Government may make such certification, or until the total net amount contributed by the Government without interest is fully repaid, whichever occurs first. Article 13 of the Amended Contract states that the repayment period of 10 years has been changed to 13 years from date of contract April 16, 1952.

.he producing area subject to royalties is described in of the Amended Contract as follows:

The land referred to in Article 2 of the contract form con-.ts of unpatented mining claims situated in the Comet Mining District, as follows:

Kimer No. 1
Burnett
Tungsten
Greenback Nos. 1 through 5

The claims are delineated on a map entitled "Geologic Map of the Comet Area," attached to the Prior Contract and incorporated herein by reference.

The cost of the contract as of June 30, 1955 and the Government 50% participation is as follows:

	Cost	Government Participation 50%
Cost of Contract	$101,430.78	$50,715.39

The sum of $41.60 has been received by the Finance Officer, covering royalty repayments on lead and zinc ore sales. This leaves an unpaid balance of $50,673.79 due on the Government loan as of June 30, 1955.

III SCOPE OF AUDIT AND FINDINGS

The audit was limited to determining the accuracy and propriety of royalty payments received by the Finance Officer during the period April 16, 1952 to June 30, 1955, and a determination that all indicated sales of ore subject to repayment royalties under the exploration contract, for which settlement sheets had been released, have been properly accounted for.

The extent of the audit and findings follow:

Conference with Examining Engineer

Conference with the Examining Engineer, U. S. Bureau of Mines, during the audit disclosed the following:

The operator does not stockpile ore subject to DMEA royalty repayment.

The operator does not commingle production subject to DMEA royalties with exempt production.

The operator does not stockpile mine or mill rejects that may have potential value within the royalty payment period.

The assay controls in effect are considered adequate.

The manner of disposing of production is considered as giving the Government its fair royalty returns.

Periodic examinations indicate the operator is properly reporting the production of ores subject to DMEA repayment royalties.

There has been no indication that sales of ore have been made by the operator to other than the Combined Metals Reduction Company, at their Caselton Plant, Nevada.

Audit of Settlement Statements

A detailed summarization of Royalty Purchases by Smelter was prepared from settlement statements submitted by the operator during the audit period of April 16, 1952 to June 30, 1955. The total net sales of lead and zinc ore as shown on this summary aggregated $2,773.04 and the royalty payment of 1 1/2 percent amounted to $41.60. The royalty payments were verified to the certificates of deposit and the Finance Office ledger record.

Operator's Accounts and Records

The operator maintains a general ledger and subsidiary records for the exploration project activities, including the supporting records on royalty repayments to DMEA. The net amount of $2,773.04 subject to royalties was verified to Mining Revenue Account, and the royalties paid in amount of $41.06 was verified to royalty payments charged to the Development Cost Account in the general ledger. The cash records covering the foregoing transactions were also examined.

During the course of the audit an examination was made of a price schedule dated January 1, 1951 between Comet Mines, Inc. and Combined Metals Reduction Company, and prices verified to settlement statements.

The ore is shipped by truck from the Comet Mine to the Combined Metals Reduction Company Mill at Caselton, Nevada, a distance of approximately 17 miles, and during the audit an examination was made of invoices covering trucking charges which were listed as a deduction on settlement statements.

IV CONCLUSIONS

An analysis of the operator's production and sales of lead and zinc ore to the Combined Metals Reduction Company, Caselton, Nevada, subject to DMEA royalties, are as follows:

Gross Weight	1,033,700 lbs
Dry Weight	1,010,924 lbs
Dry Weight	505.462 tons
Gross Value	$3,305.39
Less: Truck Hauling	532.37
Net Value	$2,773.04
Average Value Per Ton (Dry Weight)	$5.49
Royalty Percentage	1 1/2%
Royalties Due	$41.60
Royalties Paid	$41.60
Balance Royalties Due	-0-

A detail of royalty payments is filed as part of my audit working papers.

The audit has confirmed the accuracy and propriety of the royalty payments received by the Finance Officer, during the period April 16, 1952 to June 30, 1955. It has also determined that all indicated sales of ore subject to DMEA Royalties under the exploration contract, for which settlement sheets have been released, have been properly accounted for.

George Mavor

George Mavor
Auditor

November 7, 1955

Check Sheet of Examining Engineer

Operator's Name Comet Mines, Inc.

Address Pioche, Nevada

Exploration Contract No. Idm-E295 Docket No. DMEA-2309

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

Glenn G. Gentry
Glenn G. Gentry
Mining Engineer

Date 9/27/55

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Operator's Name: Comet Mines, Inc.

Address: Pioche, Nevada

Exploration Contract No.: Idm-E295 Docket No.: DMEA-2309

COMMENTS

2 (b) There has been no co-mingling of production, and royalties are payable to DMEA on rock classified as ore grade, when stockpiled and/or milled.

3 (a) The very slight lead-zinc mineralization observed in the quartz vein indicated no potential value within the royalty payment period. This type of vein material is classified as "waste" and is moved to the mine waste dump.

3 (b) The Operator maintains a daily record of the number of mine cars trammed to the waste dump.

Glenn G. Gentry
Mining Engineer

DEFENSE MINERALS EXPLORATION ADMINISTRATION

CONTRACT ADMINISTRATION AND AUDIT DIVISION

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3rd INTERIM AUDIT CERTIFICATE

I have examined the records and transactions of:

Comet Mines, Incorporated
Pioche, Nevada

pertaining to Exploration Project Contract No. Idm-E295, Docket No. DMEA-2309, including Amendments Nos. 1, 2, 3 and 4, for the period June 1, 1952 to August 14, 1954, covering a project of exploration for lead and zinc, located in Lincoln County, Nevada, commonly known as the Comet Mine.

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		$101,640.34
Less: Proceeds from disposition of property		2,526.42
Net claimed cost		$ 99,113.92
Exceptions (see Audit Report for details)		
By DMEA Finance Officer	$308.41	
Prior Audit	51.17	
This Audit	5.44	365.02
Total Accepted Cost		$ 98,748.90

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 Forty Nine Thousand Three Hundred Seventy Four and 45/100 Dollars.

$49,374.45

is valid and proper.

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

George Mayer
George Mayer
Auditor

October 25, 1955

AUDIT REPORT

I. INTRODUCTION

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On September 9 and 10, 1955, a third interim audit (covering operations for the period June 1, 1952 to August 14, 1954) was made of the records and accounts pertaining to Exploration Contract No. Idm-8295, Docket No. DMEA-2309, including Amendments Nos. 1, 2, 3 and 4, with the:

Comet Mines, Incorporated
Pioche, Nevada

covering a project for the exploration of lead and zinc, located in Lincoln County, Nevada, and commonly known as the Comet Mine.

The Comet Mines, Incorporated is a subsidiary company of the Combined Metals Reduction Company, and the control accounting records under this contract are located in the office of the Treasurer of the Comet Mines, Incorporated, 218 Felt Building, Salt Lake City, Utah. The source documents for payrolls, material and other charges are maintained in the office of the Combined Metals Reduction Company, Caselton Plant, Pioche, Nevada.

During the course of the audit, this auditor consulted the following officers and employees of the operator who were in the following locations:

Caselton Plant, Pioche, Nevada
Paul Gemmill, Vice-President
Frank H. Anderson, Office Manager
218 Felt Building, Salt Lake City, Utah
Clyde Stevenson, Accountant
Orlem Nordfelt, Accountant

The cooperation and assistance rendered by the above officials, greatly facilitated the audit.

II GENERAL INFORMATION ON RECORDS

The accounting records for this project are co-mingled with the Combined Metals Reduction Company operations at the Caselton Plant, Pioche, Nevada, however, all charges to the exploration project can be readily identified by cost account classification numbers assigned to the operations of the Comet Mines, Incorporated. At the end of each month the Caselton Plant Office prepares a series of journal vouchers covering the plant operations, which includes the Comet Mines, Incorporated. These journal vouchers are then forwarded to the Combined Metals Reduction Company Office in Salt Lake City, Utah, for further review and reconciliation of the monthly

transactions involved, and subsequently entered in the general ledgers of the various enterprises.

A general ledger is maintained for the Comet Mines, Incorporated at 218 Felt Building, Salt Lake City, Utah, and after the above referred to journal vouchers have been received and reconciled, then the items applicable to the exploration project are entered in the general ledger control account No. 412.11. The balance shown in this account as of August 14, 1954, was in agreement with the "Totals to Date" column of the MF-104 for August 1954. The MF-104 is prepared in Salt Lake City office each month, and signed by O. F. Burton, Treasurer.

All hourly rate employees for the exploration project are on the Caselton Plant payroll, and all salaried employees are paid direct by Combined Metals Reduction Company, Salt Lake City, Utah. The checks for hourly employees are drawn by Combined Metals Reduction Company on Nevada Bank of Commerce, Pioche Branch, Pioche, Nevada, and the bank statements are sent direct each month to the Combined Metals Reduction Company, Salt Lake City, for reconciliation. After reconciliation the cancelled payroll checks are stored at Bauer, Utah. All checks are countersigned by Combined Metals Reduction Company officials.

All material used on the exploration project is drawn from Caselton Plant Storeroom by requisitions and billed by the Combined Metals Reduction Company at the end of each month.

In addition to the above payroll and material charges, the Combined Metals Reduction Company also bill the Comet Mines, Incorporated each month for operating equipment rental, power, sampling and analysis, truck transportation, and a 7 1/2 percent fee for warehouse, accounting and general expense.

From the above description it is apparent that the entire exploration project program of the Comet Mines, Incorporated, is being financed by the Combined Metals Reduction Company.

The Company's accounts are audited after the close of each calendar year by (Wells, Baxter and Miller, Salt Lake City, Utah) a certified public accounting firm.

III SCOPE OF AUDIT AND FINDINGS

The first interim audit was made for the period June 1, 1952 to July 31, 1953, and Audit Report issued September 14, 1953. The second interim audit covered the period August 1, 1953 to

May 31, 1954, and Audit Report issued September 23, 1954. This third interim audit covered the period June 1, 1954 to August 14, 1954, and the combined results of the three audits are discussed in this report. The Amended Contract states in the second paragraph of the preamble to Annex 11, that work under the original contract would be suspended August 14, 1954, and paragraph 4(a) of Annex 11, further states "During the period beginning August 14, 1954, and ending not later than September 1, 1955, work under this Amended Contract shall be suspended". This third interim audit has therefore been made in order to properly account for all costs reimbursable under the terms of the original contract as of August 14, 1954. The additional work to be performed under the Amended Contract when work is resumed is on a fixed unit cost basis.

The audit was limited to ascertaining the accuracy, propriety and validity of the costs as shown in the "Totals to Date" column of Form MF-104, Operator's Monthly Report and Voucher, for the month of August 1954. The extent of the audit and the findings under each of the "Items of Cost" follows:

(2) Labor and Supervision $60,802.92

The payroll records for the period June 1, 1952 to August 14, 1954, were examined and during the course of the audit a substantial test of time cards and payroll checks was made. The audit also disclosed that the costs shown under this item on August 1954 MF-104, as compared to the costs properly chargeable, and allowable, under the terms of the contract to be:

	Charged	Disallowed	Allowable
Labor	$50,111.32	$	$50,111.32
Supervision	10,356.11	43.80	10,312.31
Technical Services	379.29		379.29
Totals	$60,846.72	$ 43,80	$60,802.92

This disallowance of $43.80 was due to the operator charging $5,443.80 for part time Superintendent's salary, whereas the contract allowed $5,400.00 as a maximum allowable cost.

The labor and supervision is further analyzed as follows:

Labor

Miners	$27,851.26	
Underground Hoistmen	14,001.17	
Muckers	2,171.10	
Topman	3,999.01	
Maintenance Labor	2,088.78	$50,111.32

Supervision

Supervisor	$5,400.00	
Foreman	4,912.31	$10,312.31

Technical Services

Engineer	379.89
Total Labor and Supervision	$60,802.92

The units completed as of August 14, 1954 and shown on Form MF-104a are as follows:

Drifting	1,276.8 ft.
Crosscutting	86.0 ft.
Raising	381.1 ft.
Shaft	6.0 ft
Station Excavation and Work Preparation to Raising	6,456.0 cu.ft.

The hourly wage rates paid for labor were made in accordance with Union Contracts, between the Combined Metals Reduction Company, and the United Steel Workers of America, C.I.O. Union. Most of the wages paid for drifting, crosscutting and raising were on a bonus contract footage basis, and the hourly rates established for this work were in accordance with Union Contracts.

The supervision charge in amount of $10,312.31 was made up as follows:

E. I. McIntyre, Superintendent			
9 mos.	at $250.00	$2,250.00	
3 1/2 mos.	at $300.00	1,050.00	
1 mo.	at $375.00	375.00	
1 mo.	at $500.00	500.00	$ 4,175.00
R. R. Duck, Superintendent			
August 16, 1953 to October 31, 1953			
1 1/2 mos. at $300.00		$ 450.00	
Oct. '53 prorata		103.80	553.80
J. D. Russell, Superintendent			
March 29, 1954 to August 14, 1954			
March '54 prorata		$ 40.00	
4 mos.	at $150.00	600.00	
Aug. '54 prorata		31.20	671.20
Total Paid to Superintendents			$ 5,400.00
James Hulse, Mine Foreman			4,912.31
Total Supervision			$10,312.31

The salaries paid in amount of $5,400.00 to three superintendents who were employed successively during the period June 1, 1952 to August 14, 1954, did not exceed the "allowable maximum" of $5,400.00 as shown in Exhibit "A" of the contract, which shows the estimated part-time salary for one superintendent at $300.00 per month for 18 months.

In the case of E. S. McIntyre the operator charged $375.00 for part time superintendent's salary during June 1952 and this was due to additional time required in getting project started, and during October 1952, the amount of $500.00 was charged representing full time supervision on raise work. After discussion with S. Ricker, Executive Officer, it was agreed to accept these salary costs, due to the necessity of work operations, which benefited the Government's interest in the project, and at the same time it was determined that the total salary paid to E. S. McIntyre amounted to $4,175.00 over a period of 14 1/2 months, for an average monthly charge of $287.93, which was less than the estimated $300.00 per month shown in contract, therefore, no exception was taken.

The amount of $4,912.31 charged to supervision, represented wages paid to James Hulse, Mine Foreman, and did not exceed the "allowable maximum" of $9,900.00 allowed under item 2 in Exhibit "A" of the contract. The hourly base rate for forman's wages was $1.885 per hour and included in the total charge of $4,912.31 was overtime $347.57 and holiday pay $75.40.

The charge for technical services in amount of $379.29 was a proportionate part of salaries paid to the following Combined Metals Reduction Company Engineers, for services rendered to exploration project.

	Monthly Salary	Project Proportion
Sept. & Oct. 1952 R.H.Godbe, Engineer	$475.00	$199.29
June & Sept. 1953 K.E.Anderson, Engineer	425.00	40.00
Sept.'53, Apr., June, July, Aug.'54 O. E. Schraeder, Engineer	475.00	140.00
Total Technical Services		$379.29

The above technical services are allowable costs and are applicable to Item (7) Miscellaneous listed in Exhibit "A" of the Contract, with an "allowable maximum" of $14,145.00.

During the course of the audit, it was ascertained that no jobs other than those provided for in the contract were charged to the project.

(3) Operating Materials and Supplies $18,689.67

A complete examination was made of all charges under this category, which included a review of requisitions and verifications of prices, together with extensions and footings. The audit also disclosed that the costs shown under this item on August 1954 MF-104, as compared to the costs properly chargeable, and allowable, under the terms of the contract to be:

	Charged	Less: Sale of Property	Allowable
Timber	$ 4,338.22	$	$ 4,338.22
Explosives	3,899.12		3,899.12
Pipe	1,309.28	981.96	327.32
Track	1,609.98	1,207.49	402.49
Power	1,632.78		1,632.78
Sub-total	$12,789.38	$2,189.45	$10,599.93
Miscellaneous			
Drill Steel & Bits	$ 6,004.26	$ 108.00	$ 5,896.26
12" Ventube	527.12	52.71	474.41
Oil and Grease	481.41		481.41
Nails	95.85		95.85
Oxygen & Acetylene	91.90		91.90
Nuts, Bolts, Washers, Etc.	1,049.91		1,049.91
Total Miscellaneous	$ 8,250.45	$ 160.71	$ 8,089.74
Total Materials & Supplies	$21,039.83	$2,350.16	$18,689.67

The material sold and listed above in amount $2,350.16, was comprised chiefly of material in place on the operator's property. Therefore it was more advantageous to the Government to accept the offer of $2,350.16 made by the operator, rather than dismantle the property, for sale on a bid basis. The offer of $2,350.16 was accepted by the Executive Officer under date of September 21, 1955, and waiver in settlement of property issued September 21, 1955. There was a 7 1/2% surcharge refund of $176.26, applicable to the sale and explained under Item (7) Miscellaneous.

All the above materials and supplies were issued by requisitions from the Combined Metals Reduction Company, Caselton Plant storeroom, other than 143 feet of 12" ventube, $118.90, issued by the operator. The Caselton Plant storeroom accounting procedure for material control is well organized and the system includes purchase orders, receiving reports and invoices, together with a systematic recording in stock record cards of all material movements. The storeroom also maintains a purchase order file by

vendor's name and a purchase order master file by purchase order number, which has all of the documents attached, which include the purchase orders, shipping notices, receiving reports, freight charges and invoices.

The requisitions issued for materials and supplies used on the project are prepared, priced and amounts extended by warehouse clerk, the receipt of material is signed by the workman, and approved by the foreman. The requisitions are dated but not numbered. The requisition shows the account to be charged and the requisitions chargeable to the exploration project are maintained in a separate file. At the end of the month, a schedule is prepared from the requisitions, and lists each item of material issued, showing the quantity, description, price and amount. This monthly schedule is certified as being correct by the superintendent of the project and approved by three officials of the Caselton Plant.

An average inventory price is used when pricing material requisitions, and the method used is to recompute the inventory card prices as new purchases are made. During the course of the audit, prices were traced from the stock record cards to the material purchase invoices in order to verify the prices used on material charged to the exploration project.

The electric power used during the period June 1, 1952 to August 14, 1954, amounted to $1,632.78 and represented a total of 307,906 KWH, at an average rate of .530 cents per KWH. The Lincoln County Power District No. 1, Pioche, Nevada, furnishes the power and bills the Combined Metals Reduction Company each month, listing all of the various locations where power is furnished and shows the meter readings for each location, including the Comet Mines, Incorporated. The Combined Metals Reduction Company then bills the exploration project for the amount of power consumed at the project. The project gains the benefit of any reduction in rates on the overall plant power consumption which may be over the maximum demand. There is no power contract and the rates used are established at nonprofit by the Board of Directors of the Lincoln Count Power District No. 1, Pioche, Nevada.

<u>Operating Equipment</u> <u>$4,141.57</u>

All charges for operating equipment were examined and the rates verified to the contract. The audit disclosed that the costs shown under this item on the August 1954 MF-104, as compared to the costs properly chargeable and allowable, under the terms of the contract to be:

	Charged	Disallowed	Allowable
Rental	$2,077.51	$	$2,077.51
Depreciation	2,357.81	293.75	2,064.06
Totals	$4,435.32	$293.75	$4,141.57

The disallowance of $293.75 was due to the operator claiming depreciation in excess of the "allowable maximum" set forth in Exhibit "A" of the contract, and accounted for as follows:

2-Compressors 20 mo. 24da. at $100.00		$2,093.75
Less: "Allowable Maximum"		
2-Compressors 18 mo.	at $100.00	1,800.00
Depreciation Disallowed		$ 293.75

The equipment rental was billed by the Combined Metals Reduction Company each month for the following items:

Drills at $15.00 each per month				
2 Stopers	9 mo. at	$30.00	$270.00	
3 Stopers	1 mo. at	45.00	45.00	
1 Stoper	1 mo. at	15.00	15.00	$ 330.00
1 Jaklag & Hammer	2 mo. at	15.00	30.00	
2 Jaklags & Hammers	8 mo. 24da. at	30.00	268.13	298.13
1 Drifter	2 mo. at	15.00		30.00
Total Drill Rental				$ 658.13
1 Mucking Machine	9 mo. 24da. at $70.00			695.63
1 Locomotive	7 mo. 6da. at 100.00			723.75
Total Equipment Rental				$2,077.51

The depreciation charges for equipment were accounted for as follows:

2 Mine cars	4 mo. at	$ 10.00	$ 40.00	
3 Mine cars	14 mo.24da.at	15.00	224.06	$ 264.06
2 Compressors	18 mo. at	100.00		1,800.00
Total Allowable Depreciation				$2,064.06

(7) Miscellaneous $15,114.74

The audit of miscellaneous charges included an examination of invoices, requisitions, and other supporting data pertaining to payroll taxes, compensation insurance and transportation charges, all of which were billed by the Combined Metals Reduction Company. The audit disclosed that the costs shown under this item on the August 1954 MF-104, as compared to the costs properly chargeable and allowable, under the terms of the contract to be:

	Charged	Disallowed	Less: Sale of Property	Allowable
Repairs to Equipment	$ 1,358.60		$	$ 1,358.60
Sampling & Analysis	232.45			232.45
Payroll Taxes	1,389.29			1,389.29
Liability Insurance	3,499.25	$ 2.00		3,497.25
Pick-up Transportation	1,807.69			1,807.69
Warehouse, Accounting and General Expense	7,091.19	25.47	176.26	6,889.46
Totals	$15,318.47	$27.47	$176.26	$15,114.74

The repairs to equipment cost of $1,358.60, represented materials issued on requisitions, from the Caselton Plant Storeroom and was used as follows:

Repairs to Equipment

Hoisting Equipment	$ 383.95
Drilling Machines	551.58
Compressors	170.88
Mucking Machine	48.60
Slusher	19.79
Sump Pump	26.66
Electric Power Equipment	57.91
Change Room	18.32
Other	80.96
Total Repairs to Equipment	$1,358.60

During the course of the audit, the repair material requisitions were examined, and a sufficient test of prices verified.

The sampling and analysis charges in amount of $232.45 covered 460 determinants at 50 cents each $230.00, and 10 sample sacks $2.45, all of which were billed by Combined Metals Reduction Company.

The charges for payroll taxes and compensation insurance were verified by computation at the rates used by the operator, which were as follows:

Payroll Tax Rates	1953	1954
Federal Old Age Benefit	1.5%	2.0%
Federal Unemployment	.3%	.3%
Nevada Unemployment	1.0%	1.0%
Total Payroll Tax Rates	2.8%	3.3%

Compensation Insurance Rates		
Nevada Industrial Commission	3.25%	3.25%
Pioche Mutual Benefit Ass'n. Hospital Division	1.32%	1.32%
Total Comp. Insur. Rates	4.57%	4.57%

Payroll taxes are exempt on any one employee earning over $3,600.00 for Federal Taxes and $3,000.00 for State taxes. This limitation was taken into consideration when computing payroll taxes. During August, September and October 1953 and June, July and August 1954, the Combined Metals Reduction used an average payroll tax rate, which included exempt salaries as part of the divisor, and the procedure had the result of reducing payroll tax rates during these periods.

The compensation insurance is covered jointly by the Nevada Industrial Commission, and the Pioche Benefit Association, Hospital Division. The hospital accident benefit contract now in effect is between the Combined Metals Reduction Company, and the Pioche Mutual Benefit Association, Hospital Division. A copy of this contract, which cites the various medical benefits, is filed with the Nevada Industrial Commission. Compensation Insurance coverage of the Combined Metals Reduction Company employees, includes employee of the operator.

The disallowance of $2.00 applicable to liability insurance was due to disallowance of supervision $43.80 under Item (2) Labor and Supervision. The supervision salary disallowed $43.80 at compensation insurance rate of 4.57% equals $2.00.

The pick-up transportation represents the cost of transporting men, materials and supplies to Comet Mine and charged on the following mileage basis:

Truck #20	204 miles at	$.07	$ 14.28
Truck #22	34 miles at	.07	2,38
Ford Sedan #26	34 miles at	.07	2.38
Truck #38	17,655 miles at	.07	1,235.85
Truck #44	408 miles at	.07	28.56
Truck #46	68 miles at	.07	4.76
Ranch Wagon	170 miles at	.07	11.90
R. O. Maki-Private Car	4,243.8mls. at	.06	254.62
G. W. Bleak-Private Car	2,720 miles at	.06	163.20
E. E. Dent-Private Car	102 miles at	.06	6.12
J.F.Mooney-Private Car	68 miles at	.06	4.08
D. Sherwood-Private Car	306 miles at	.06	18.36
E. LeFavre-Private Car	1,020 miles at	.06	61.20
Totals	27,032.8 miles		$1,807.69

The above transportation costs were billed by the Combined Metals Reduction Company and the mileage taken from mileage meter readings listed in Monthly Mileage reports, which were examined during the course of the audit.

The Warehouse, accounting and general expense charge in amount of $6,889.46, represents 7 1/2% of the total project costs to August 14, 1954, after disallowance and sale of property adjustments, and accounted for as follows:

	Charged	Disallowed	Less: Sale of Property	Allowable
Total project costs before surcharge	$ 94,549.15	$339.55	$2,350.16	$91,859.44
Add: Surcharge of 7 1/2%	7,091.19	25.47	176.26	6,889.46
Total Project costs to 8/14/54	$101,640.34	$365.02	$2,526.42	$98,748.90

The disallowed project costs in amount of $339.55, and the disallowed 7 1/2% surcharge of $25.47 can be identified as follows:

Project Costs Disallowed		7 1/2% Disallowed
Item (2) Labor and Supervision	$ 43.80	$ 3.29
Item (4) Depreciation	293.75	22.03
Item (7) Liability Insurance	2.00	.15
Totals	$339.55	$25.47

The sale of project property in amount of $2,350.16 plus 7 1/2% surcharge of $176.26, represents total bid by operator of $2,526.42, which was accepted by the Executive Officer and explained in the narrative of this report under Item (3) Operating Materials and Supplies.

The surcharge of 7 1/2% is a proportional amount of Combined Metals Reduction Company, Caselton Mine, Direct Expense, attributable to the cost of the exploration project, and covers such items as engineering, assaying, accounting, warehouse, boarding house, safety, watchman and general supervision.

The 7 1/2% charge is not considered an overhead charge, but a percentage established to simplify the distribution of direct costs, heretofore enumerated and the method of applying the 7 1/2% surcharge was agreed to by the field engineer as reasonable and equitable.

The following figures showing how the surcharge of 7 1/2% was computed were furnished this auditor, in letter dated September 10, 1953, from Mr. Sam S. Arents, Manager, Nevada Operations for the Combined Metals Reduction Company.

Direct Operating Cost	Caselton Mine Accounts Year 1950	Year 1951
Included direct labor, supplies, power supervision, engineering, assaying, vacations, haulage, etc.	$1,467,651.76	$1,763,917.08
Caselton Mine's Prorate Share of Plant Overhead		
Including engineering, assaying, repairs, maintenance, accounting, warehousing, safety and watchman.	112,747.09	149,647.77

The above does not include taxes other than payroll and sales taxes, and did not include any portion of general office expense.

Surcharge Rates	7.68%	8.48%
Rate used for contract rounded off for convenience	7.50%	-0-

The application was prepared during 1951, and on page 13 thereof the 7 1/2% surcharge was explained, and it was understood that in Exhibit "A" of the contract, under Item (7) Miscellaneous, the "allowable maximum" of $14,145.00 covered the 7 1/2% surcharge expense. Therefore, due to the foregoing explanations, the 7 1/2% surcharge expense, has been accepted as an allowable cost item to the exploration project.

IV CONCLUSIONS AND RECOMMENDATIONS

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

The audit also disclosed that the status as of August 14, 1954, of "allowable maximums" under this contract was as follows:

Item	Maximum	Total Costs	Balance
Labor, F/R Taxes & Liab. Insurance	$ 90,000.00	$54,937.86	$35.062.14
Supervision	5,400.00	5,400.00	-0-
Foreman	9,900.00	4,912.31	4,987.69
Operating Materials and Supplies	64,600.00	18,689.67	45,910.33
Operating Equipment Rental	3,630.00	2,077.51	1,552.49
Operating Equipment Depreciation	2,325.00	2,064.06	260.94
Miscellaneous	14,145.00	10,667.49	3,447.51
Totals	$190,000.00	$98,748.90	$91,251.10

*Miscellaneous costs include Repairs to Equipment $1,358.60, sampling and analysis $232.45, Pick-up Transportation $1,807.69, Technical Services $379.29, and Warehouse, Accounting and General Expense $6,889.46.

As previously stated in the narrative of this report, when work is resumed in accordance with the terms of the Amended Contract, then the costs will be reimbursable on a fixed unit cost basis.

This report has been discussed with Mr. S. Ricker, Executive Officer, Region II, and he concurred with my findings, including disallowances, and agreed the final allowable costs as presented, were necessary and allowable under the terms of the contract.

The adjustments between Items of Costs, as shown on the August 1954 MF-104, the recommended disallowances, proceeds from sale of property, and approved amounts, are summarized as follows:

	Totals August MF-104	Distribution Corrected	Disallowed by Audit	Proceeds Disposition of Property	Allowed by Audit
(2) Labor and Supervision					
Labor	$ 50,111.32	$ 50,111.32	$	$	$50,111.32
Supervision	10,356.11	10,356.11	43.80		10,312.31
Technical Services	379.29	379.29			379.29
(3) Operating Mat'ls. & Supplies					
Timber	4,338.22	4,338.22			4,338.22
Explosives	3,899.12	3,899.12			3,899.12
Pipe	1,309.28	1,309.28		981.96	327.32
Track	1,609.98	1,609.98		1,207.49	402.49
Power	1,632.78	1,632.78			1,632.78
Misc.Supp.& Drill Steel		8,250.45		160.71	8,089.74
(4) Operating Equipment					
Rental	4,435.32	2,077.51			2,077.51
Depreciation		2,357.81	293.75		2,064.06
(7) Miscellaneous					
Repairs to Equipment	1,358.60	1,358.60			1,358.60
Sampling & Analysis	232.45	232.45			232.45
Payroll Taxes	1,329.29	1,329.29			1,329.29
Liability Insurance	3,499.25	3,499.25	2.00		3,497.25
Pick-up Transportation	1,807.69	1,807.69			1,807.69
Misc.Tools & Supplies	8,250.45				
Warehouse,Actg. & Gen.Expense	7,091.19	7,091.19	25.47	176.26	6,889.46
Totals	$101,640.34	$101,640.34	$365.02	$2,526.42	$98,748.90

At the conclusion of the audit the findings were discussed with Paul Gemmill, Vice President, Frank H. Anderson, Office Manager, and O. F. Burton, Treasurer.

George Mavor

George Mavor
Auditor

October 25, 1955

DEFENSE MINERALS EXPLORATION ADMINISTRATION

CONTRACT ADMINISTRATION AND AUDIT DIVISION

Defense Minerals Administration
RECEIVED
OCT 21 1954

2nd INTERIM AUDIT CERTIFICATE

I have examined the records and transactions of:

Comet Mines, Incorporated
Pioche, Nevada

pertaining to Exploration Project Contract No. Idm-E295, Docket No. DMEA-2309, including Amendments Nos. 1 and 2, for the period June 1, 1952 to May 31, 1954, covering a project of exploration for lead and zinc, located in Lincoln County, Nevada, commonly known as the Comet Mine.

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	$91,738.56
Exceptions (see Audit Report for details) During this audit	51.17
Total accepted cost	$91,687.39

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 Forty-Five Thousand, Eight Hundred Forty-Three and 70/100 Dollars,

$45,843.70

is valid and proper.

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

George Mavor

George Mavor
Auditor

September 23, 1954

I INTRODUCTION

Under date of July 21 and 22, 1954, a second interim audit (covering operations for the period June 1, 1952 to May 31, 1954) was made of the records and accounts pertaining to Exploration Contract No. Idm-E295, Docket No. DMEA-2309, including Amendments No. 1, 2 and 3, with the:

Comet Mines, Incorporated
Pioche, Nevada

covering a project for the exploration of lead and zinc, located in Lincoln County, Nevada, commonly known as the Comet Mine.

The Comet Mines, Incorporated is a subsidiary company of the Combined Metals Reduction Company, and the control accounting records under this contract are located in the office of the Treasurer of the Comet Mines, Incorporated, 218 Felt Building, Salt Lake City, Utah. The source documents for payrolls, material and other charges are maintained in the office of the Combined Metals Reduction Company, Caselton Plant, Pioche, Nevada.

During the course of the audit, this auditor consulted the following officers and employees of the operator who were in the following locations:

Caselton Plant. Pioche, Nevada
Paul Gemmill, Vice-President
Frank H. Anderson, Office Manager
218 Felt Building, Salt Lake City, Utah
Clyde Stevenson, Accountant

The cooperation and assistance rendered by the above officials, greatly facilitated the audit.

II GENERAL INFORMATION ON RECORDS

The accounting records for this project are co-mingled with the Combined Metals Reduction Company operations at the Caselton Plant, Pioche, Nevada, however, all charges to the exploration project can be readily identified by cost account classification numbers assigned to the operations of the Comet Mines, Incorporated. At the end of each month the Caselton Plant Office prepares a series of journal vouchers covering the plant operations, which includes the Comet Mines, Incorporated. These journal vouchers are then forwarded to the Combined Metals Reduction Company Office in Salt Lake City, Utah for further review and reconciliation of the monthly transactions involved, and subsequently entered in the general ledgers of the various enterprises.

A general ledger is maintained for the Comet Mines, Incorporated at 218 Felt Building, Salt Lake City, Utah and after the above referred to journal vouchers have been received and reconciled, then the items applicable to the exploration project are entered in the general ledger control account No. 412-11. The balance shown in this account as of May 31, 1954, was in agreement with the "Totals to Date" column of the MF-104 for May 1954. The MF-104 is prepared in the Salt Lake City office each month, and signed by O. F. Burton, Treasurer.

All hourly rate employees for the exploration project are on the Caselton Plant payroll and all salaried employees are paid direct by Combined Metals Reduction Company, Salt Lake City, Utah. The checks for hourly employees are drawn by Combined Metals Reduction Company on the Nevada Bank of Commerce, Pioche Branch, Pioche, Nevada, and the bank statements are sent direct each month to the Combined Metals Reduction Company, Salt Lake City for reconciliation. After reconciliation the cancelled payroll checks are stored at Bauer, Utah. All checks are countersigned by Combined Metals Reduction Company officials.

All material used on the exploration project is drawn from Caselton Plant Storeroom by requisitions and billed by the Combined Metals Reduction Company at the end of each month.

In addition to the above payroll and material charges, the Combined Metals Reduction Company also bill the Comet Mines, Incorporated each month for operating equipment rental, power, sampling and analysis, truck transportation and a 7-1/2 percent fee for warehouse, accounting and general expense.

From the above description it is apparent that the entire exploration project program of the Comet Mines, Incorporated is being financed by the Combined Metals Reduction Company.

The company's accounts are audited after the close of each calendar year by (Wells, Baxter and Miller, Salt Lake City, Utah) a certified public accounting firm.

III SCOPE OF AUDIT AND FINDINGS

The first interim audit was made for the period June 1, 1952 to July 31, 1953, and Audit Report issued September 14, 1953. This second interim audit covered the period August 1, 1953 to May 31, 1954, and the combined results of the two audits are discussed in this report. There were no operations under this contract from October 12, 1953 to March 27, 1954.

The audit was limited to ascertaining the accuracy, propriety and validity of the costs as shown in the "Totals to Date" column of Form MF-104,

Operator's Monthly Report and Voucher, for the month of May 1954. The extent of the audit and the findings under each of the "Items of Cost" follows:

(2) Labor and Supervision $55,903.81

The payroll records for the period June 1, 1952 to May 31, 1954, were examined and during the course of the audit a substantial test of time cards and payroll checks was made.

An analysis of labor and supervision showed the following classification:

Labor		
Miners	$24,940.61	
Underground Hoistmen	12,535.16	
Muckers	2,171.10	
Topman	3,999.01	
Surface Labor	45.20	
Maintenance Labor	1,952.33	$45,643.41
Supervision		
Supervisor	$ 5,068.80	
Foreman	4,912.31	9,981.11
Technical Services		
Engineer		279.29
Total Labor & Supervision		$55,903.81

The units completed as of May 31, 1954 and shown on Form MF-104a are as follows:

Drifting	1,005.7 ft.
Crosscutting	64.0 ft.
Raising	381.1 ft.
Shaft	6.0 ft.
Station Excavation and Work Preparation to Raising	6,456. cu. ft.

The hourly wage rates paid for labor were made in accordance with Union Contracts, between the Combined Metals Reduction Company, and the United Steel Workers of America, C.I.O. Union. Most of the wages paid for drifting, crosscutting and raising were on a bonus contract footage basis and the hourly

rates established for this work was in accordance with Union Contracts. All of the work performed on the shaft and station excavation was paid on straight time hourly rates. The total hourly wages paid for labor in amount of $45,643.41, included overtime $2,838.13 and holiday pay $699.40, and paid in accordance with Union Contracts.

The supervision charge in amount of $9,981.11 was made up as follows:

E. S. McIntyre, Superintendent		
June 1, 1952 to August 15, 1953		
9 mos. at $250.00	$2,250.00	
3-1/2 mos. at $300.00	1,050.00	
1 mo. at $375.00	375.00	
1 mo. at $500.00	500.00	$4,175.00
R. R. Burk, Superintendent		
August 16, 1953 to October 31, 1953		
1-1/2 mos. at $300.00	$ 450.00	
Oct. '53 prorata	103.80	$ 553.80
J. J. Russell, Superintendent		
March, April & May 1954		
March '54 prorata	$ 40.00	
2 mos. at $150.00	300.00	$ 340.00
Total Paid to Superintendents		$5,068.80
James Hulse, Mine Foreman		4,912.31
Total Supervision		$9,981.11

The salaries paid in amount of $5,068.80 to three superintendents who were employed successively during the period June 1, 1952 to May 31, 1954, did not exceed the "allowable maximum" of $5,400.00 as shown in Exhibit "A" of the contract, which shows the estimated part time salary for one superintendent at $300.00 per month for 18 months.

In the case of E. S. McIntyre the operator charged $375.00 for part time superintendent's salary during June 1952 and this was due to additional time required in getting project started, and during October 1952, the amount of $500.00 was charged representing full time supervision on raise work. After discussion with H. O. Miller, Executive Officer, it was agreed to accept these salary costs, due to the necessity of work operations which benefited the

Government's interest in the project, and at the same time it was determined that the total salary paid to E. S. McIntyre amounted to $4,175.00 over a period of 14-1/2 months, for an average monthly charge of $287.93, which was less than the estimated $300.00 per month shown in contract, therefore, no exception was taken.

The amount of $4,912.31 charged to supervision, represented wages paid to James Hulse, Mine Foreman, and did not exceed the "allowable maximum" of $9,900.00 allowed under item 2 in Exhibit "A" of the contract. The hourly base rate for foreman's wages was $1.885 per hour and included in the total charge of $4,912.31 was overtime $347.57 and holiday pay $75.40.

The charge for technical services in amount $279.29 was a proportionate part of salaries paid to the following Combined Metals Reduction Company engineers services rendered to exploration project.

	Monthly Salary	Project Proportion
Sept. & Oct. 1952 R. H. Godbe, Engineer	$475.00	$199.29
June & Sept. 1953 K. E. Anderson "	425.00	40.00
Sept. '53 & Apr. '54 O. E. Schraeder"	475.00	40.00
Total Technical Services		$279.29

The above technical services are allowable costs and are applicable to Item (7) Miscellaneous listed in Exhibit "A" of the contract, with an "allowable maximum" of $14,145.00.

During the course of the audit, it was ascertained that no jobs other than those provided for in the contract were charged to the project.

(3) Operating Materials and Supplies $18,308.80

The following materials and supplies charged to the exploration project were obtained from the Combined Metals Reduction Company, Caselton Plant:

Timber	$ 4,330.85
Explosives	3,235.36
Pipe	1,043.88
Track	1,284.46
Power	1,395.68

Miscellaneous		
Drill Steel & Bits	$4,892.59	
12" Ventube	527.12	
Oil & Grease	403.04	
Nails	95.85	
Oxygen & Acetylene	91.90	
Nuts, Bolts, Washers, etc.	1,008.07	$ 7,018.57
Total Materials and Supplies:		$18,308.80

All of the above materials and supplies were issued by requisitions from the Combined Metals Reduction Company, Caselton Plant storeroom, other than 145 feet of 12" ventube, $118.90, issued by the operator. The Caselton Plant storeroom accounting procedure for material control is well organized and the system includes purchase orders, receiving reports and invoices, together with a systematic recording in stock record cards of all material movements. The storeroom also maintains a purchase order file by vendor's name and a purchase order master file by purchase order number, which has all of the documents attached, which include the purchase orders, shipping notices, receiving reports, freight charges and invoices.

The requisitions issued for materials and supplies used on the project are prepared, priced and amounts extended by warehouse clerk, the receipt of material is signed by the workman, and approved by the foreman. The requisitions are dated but not numbered. The requisition shows the account to be charged and the requisitions chargeable to the exploration project are maintained in a separate file. At the end of the month, a schedule is prepared from the requisitions, and lists each item of material issued, showing the quantity, description, price and amount. This monthly schedule is certified as being correct by the superintendent of the project and approved by three officials of the Caselton Plant.

An average inventory price is used when pricing material requisitions and the method used is to recompute the inventory card prices as new purchases are made. During the course of the audit, prices were traced from the stock record cards to the material purchase invoices in order to verify the prices used on material charged to the exploration project.

The electric power used during the period June 1, 1952 to May 31, 1954, amounted to $1,395.68 and represented a total of 264,797 KWH, at an average rate of .527 cents per KWH. The Lincoln County Power District No. 1, Pioche, Nevada, furnishes the power and bills the Combined Metals Reduction Company each month, listing all of the various locations where power is furnished and shows the meter readings for each location, including

the Comet Mines, Incorporated. The Combined Metals Reduction Company then bills the exploration project for the amount of power consumed at the project. The project gains the benefit of any reduction in rates on the overall plant power consumption which may be over the maximum demand. There is no power contract and the rates used are established at nonprofit by the Board of Directors of the Lincoln County Power District No. 1, Pioche, Nevada.

(4) Operating Equipment $3,612.34

All charges for operating equipment were examined and the rates verified to contract, and the audit disclosed that the costs shown under this item on the May 1954 MF-104, as compared to the costs properly chargeable and allowable, under the terms of the contract to be:

	Charged	Disallowed	Allowable
Rental	$1,585.20	$	$1,585.20
Depreciation	2,074.74	47.60	2,027.14
Totals	$3,659.94	$ 47.60	$3,612.34

The disallowance of $47.60 was due to the operator claiming depreciation in excess of the "allowable maximum" set forth in Exhibit "A" of the contract, and accounted for as follows:

2-Compressors	18 mo. 12 da. at	$100.00	$1,847.60
Less: "Allowable Maximum"			
2-Compressors	18 mo. at	100.00	1,800.00
Depreciation Disallowed			47.60

The equipment rental was billed by the Combined Metals Reduction Company each month for the following items:

Drills at $15.00 each per month

2 Stopers	9 mo. at $30.00	$270.00	
3 Stopers	1 mo. at 45.00	45.00	
1 Stoper	1 mo. at 15.00	15.00	$330.00
1 Jackleg & Hammer	2 mo. at 15.00	30.00	
2 Jacklegs & Hammers	6 mo. 12 da. at 30.00	194.28	224.28
1 Drifter	2 mo. at 15.00		30.00
Total Drill Rental			$584.28
1 Mucking Machine	7 mo. 12 da. at $70.00		523.32
1 Locomotive	4 mo. 21 da. at 100.00		477.60
Total Equipment Rental			$1,585.20

The depreciation charges for equipment were accounted for as follows:

2 Mine Cars	4 mo.	at $10.00	$ 40.00	
3 Mine Cars	12 mo. 12 da.	at 15.00	187.14	$ 227.14
2 Compressors	18 mo.	at $100		1,800.00
Total Allowable Depreciation				$2,027.14

(7) Miscellaneous $13,862.44

The audit of miscellaneous charges included an examination of invoices, requisitions, and other supporting data pertaining to payroll taxes, compensation insurance and transportation charges, all of which were billed by the Combined Metals Reduction Company. The audit disclosed that the costs shown under this item on the May 1954 MF-104, as compared to the costs properly chargeable and allowable, under the terms of the contract to be:

	Charged	Disallowed	Allowable
Repairs to Equipment	$ 1,152.01	$	$ 1,152.01
Sampling and Analysis	194.95		194.95
Payroll Taxes	1,198.24		1,198.24
Liability Insurance	3,284.79		3,284.79
Pick-up Transportation	1,635.65		1,635.65
Warehouse, Accounting & General Expense	6,400.37	3.57	6,396.80
Total Miscellaneous Costs	$13,866.01	$ 3.57	$13,862.44

The disallowance of $3.57 is explained below, under the caption of "Warehouse Accounting & General Expense."

The repairs to equipment cost of $1,152.01 represented material issued on requisitions, from the Caselton Plant storeroom and was used as follows:

Repairs to Equipment

Hoisting Equipment	$ 383.95
Drilling Machines	402.85
Compressors	167.78
Mucking Machine	24.12

Slusher	$ 19.79
Sump Pump	26.66
Electric Power Equipment	57.91
Change Room	18.32
Other	50.63
Total Repairs to Equipment	$1,152.01

During the course of the audit, the repair material requisitions were examined, and a sufficient test of prices verified.

The sampling and analysis charges in amount of $194.95 covered 385 determinations at 50 cents each $192.50, and 10 sample sacks $2.45, all of which were billed by Combined Metals Reduction Company.

The charges for payroll taxes and compensation insurance were verified by computation at the rates used by the operator, which were as follows:

Payroll Tax Rates

	1953	1954
Federal Old Age Benefit	1.5%	2.0%
Federal Unemployment	.3%	.3%
Nevada Unemployment	1.0%	1.0%
Total Payroll Tax Rates	2.8%	3.3%

Compensation Insurance Rates

Nevada Industrial Commission	3.25%	3.25%
Pioche Mutual Benefit Ass'n Hospital Division	1.32%	1.32%
Total Comp. Insur. Rates	4.57%	4.57%

Payroll taxes are exempt on any one employee earning over $3,600.00 for Federal taxes and $3,000.00 for State taxes. This limitation was taken into consideration when computing payroll taxes. The Combined Metals Reduction Company maintains Employees' Earnings Records for all employees, which includes employees of the operator. These records were examined during the course of the audit.

The compensation insurance is covered jointly by the Nevada Industrial Commission, and the Pioche Mutual Benefit Association, Hospital Division. The hospital accident benefit contract now in effect is between the Combined Metals Reduction Company, and the Pioche Mutual Benefit Association, Hospital Division. A copy of this contract, which cites the various medical benefits, is filed with the Nevada Industrial Commission. Compensation insurance coverage of the Combined Metals Reduction Company employees includes employees of the operator.

The pick-up transportation represents the cost of transporting men, materials and supplies to Comet Mine and charged on the following mileage basis:

Truck #22	34	miles	at	$.07	$ 2.38
Ford Sedan #26	34	"	"	"	2.38
Truck #38	17.655	"	"	"	1,235.85
Truck #44	136	"	"	"	9.52
Truck #46	68	"	"	"	4.76
Ranch Wagon	170	"	"	"	11.90
R. O. Maki-Private Car	4,243.8	"	"	.06	254.62
G. W. Bleak-Private Car	1,904	"	"	"	114.24
Totals	24,244.8	miles			$1,635.65

The above transportation costs were billed by the Combined Metals Reduction Company and the mileage taken from mileage meter readings listed in monthly mileage reports, which were examined during the course of the audit.

The warehouse, accounting and general expense charge in amount of $6,396.80, represents 7-1/2% of the total project costs to May 31, 1954, after disallowance adjustments and accounted for as follows:

	Charged	Disallowed	Allowable
Total project costs before surcharge	$85,338.19	$ 47.60	$85,290.59
Add: Surcharge of 7-1/2%	6,400.37	3.57	6,396.80
Total project costs to 5/31/54	$91,738.56	$ 51.17	$91,687.39

The surcharge of 7-1/2% is a proportionate amount of Combined Metals Reduction Company, Caselton Mine, Direct Expense, attributable to the cost of the exploration project, and covers such items as engineering, assaying, accounting, warehouse, boarding house, safety, watchmen and general supervision.

The 7-1/2% charge is not considered an overhead charge, but a percentage established to simplify the distribution of direct costs, heretofore enumerated and the method of applying the 7-1/2% surcharge was agreed to by the field engineer as reasonable and equitable.

The following figures showing how the surcharge of 7-1/2% was computed were furnished this auditor, in letter dated September 10, 1953, from Mr. Sam S. Arentz, Manager, Nevada Operations for the Combined Metals Reduction Company.

	Caselton Mine Accounts	
	Year 1950	Year 1951
Direct Operating Cost		
Including direct labor, supplies, power, supervision, engineering, assaying, vacations, haulage etc.	$1,467,651.76	$1,763,917.08
Caselton Mine's Prorate Share of Plant Overhead		
Including engineering, assaying repair, maintenance, accounting warehousing, safety and watchman	$ 112,747.09	$ 149,647.77
The above does not include taxes, other than payroll and sales taxes, and did not include any portion of general office expense.		
Surcharge Rates	7.68%	8.48%
Rate used for contract rounded off for convenience	7.50%	-0-

The application was prepared during 1951, and on page 13 thereof the 7-1/2% surcharge was explained, and it was understood that in Exhibit "A" of the contract, under Item (7) Miscellaneous, the "allowable maximum" of $14,145.00 covered the 7-1/2% surcharge expense. Therefore, due to the foregoing explanations, the 7-1/2 surcharge expense, has been accepted as an allowable cost item to the exploration project.

IV CONCLUSIONS AND RECOMMENDATIONS

This audit has disclosed that all costs, as charged to this project, with the exception of the disallowances itemized under Items (4) Operating Equipment and Item (7) Miscellaneous of the preceding section of this report, are reasonable and proper under the terms of the contract.

The audit also disclosed that the status as of May 31, 1954, of "allowable maximums" under this contract was as follows:

Item	Maximum	Total Costs	Balance
Labor, P/R Taxes & Liab. Insur.	$ 90,000.00	$ 50,126.44	$ 39,873.56
Supervision	5,400.00	5,068.80	331.20
Foreman	9,900.00	4,912.31	4,987.69
Operating Material & Supplies	64,600.00	18,308.80	46,291.20
Operating Equipment Rental	3,630.00	1,585.20	2,044.80
Operating Equipment Depreciation	2,325.00	2,027.14	297.86
Miscellaneous	14,145.00	*9,658.70	4,486.30
Totals	$190,000.00	$ 91,687.39	$ 98,312.61

*Miscellaneous costs include Repairs to Equipment $1,152.01, Sampling and Analysis $194.95, Pick-up Transportation $1,635.65, Technical Services $279.29, and Warehouse, Accounting & General Expense $6,396.80.

The exceptions in amount of $10.76 listed in 1st Interim Audit Report dated September 14, 1953, were subsequently adjusted by operator.

The adjustments between Items of Costs, as shown on the May 1954 MF-104, and approved amounts are summarized as follows:

	Totals May MF-104	Distribution Corrected	Disallowed by Audit	Allowed by Audit
(2) Labor and Supervision				
Labor	$45,643.41	$45,643.41	$	$45,643.41
Supervision	9,981.11	9,981.11		9,981.11
Technical Services	279.29	279.29		279.29
(3) Operating Mat'ls & Supplies				
Timber	4,330.85	4,330.85		4,330.85
Explosives	3,235.36	3,235.36		3,235.36
Pipe	1,043.88	1,043.88		1,043.88
Track	1,284.46	1,284.46		1,284.46
Power	1,395.68	1,395.68		1,395.68
Misc. Supplies & Drill Steel	7,018.57	7,018.57		7,018.57
(4) Operating Equipment				
Rental	3,659.94	1,585.20		1,585.20
Depreciation		2,074.74	47.60	2,027.14
(7) Miscellaneous				
Repairs to Equipment	1,152.01	1,152.01		1,152.01
Sampling and Analysis	194.95	194.95		194.95
Payroll Taxes	1,198.24	1,198.24		1,198.24
Liability Insurance	3,284.79	3,284.79		3,284.79
Pick-up Transportation	1,635.65	1,635.65		1,635.65
Warehouse, Accounting & General Expense	6,400.37	6,400.37	3.57	6,396.80
Totals	$91,738.56	$91,738.56	$ 51.17	$91,687.39

At the conclusion of the audit, the findings were discussed with Paul Gemmill, Vice President, Frank H. Anderson, Office Manager, and Clyde Stevenson, Accountant.

George Mavor

George Mavor
Auditor

September 23, 1954

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration

DEFENSE MINERALS EXPLORATION ADMINISTRATION

CONTRACT ADMINISTRATION AND AUDIT DIVISION

INTERIM AUDIT CERTIFICATE

I have examined the records and transactions of:

Comet Mines, Incorporated
Pioche, Nevada

pertaining to Exploration Project Contract No. Idm-E295, Docket No. DMEA-2309, including Amendment No. 1, for the period June 1, 1952 to July 31, 1953, covering a project for the exploration of lead and zinc.

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	$74,285.82
Exceptions (see Audit Report for details) During this audit	10.76
Total accepted cost	$74,275.06

The contract calls for a 50 per cent participation of exploration expenses by the United States Government. Therefore, payment to the contractor by the Government in the amount of Thirty Seven Thousand, One Hundred Thirty-Seven and 53/100 Dollars

$37,137.53

is valid and proper.

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

George Mayor
George Mayor
Auditor

September 14, 1953

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration

I INTRODUCTION

During the period of August 19 to 22, 1953, an interim audit (covering operations for the period June 1, 1952 to July 31, 1953) was made of the records and accounts pertaining to Exploration Project Contract No. Idm-E295, Docket No. DMEA-2309, including Amendment No. 1 with the:

Comet Mines, Incorporated
Pioche, Nevada
and
218 Felt Building
Salt Lake City, Utah

covering a project for the exploration of lead and zinc.

The Comet Mines, Incorporated is a subsidiary company of the Combined Metals Reduction Company, and the control accounting records under this contract are located in the office of the Treasurer of the Comet Mines, Incorporated, 218 Felt Building, Salt Lake City, Utah. The source documents for payrolls, material and other charges are maintained in the offices of the Combined Metals Reduction Company, Caselton Plant, Pioche, Nevada.

During the course of the audit, this auditor consulted the following officers and employees of the operator who were in the following locations:

Caselton Plant, Pioche, Nevada
Sam S. Arentz, President
Paul Gemmill, Vice-President
218 Felt Building, Salt Lake City, Utah
Clyde Stevenson, Accountant

In order to expedite the auditing of documents and explain the accounting procedure, James B. King, Chief Clerk of the Caselton Plant Office, was assigned for this purpose and his cooperation and assistance greatly facilitated the audit.

II GENERAL INFORMATION ON RECORDS

The accounting records for this project are co-mingled with the Combined Metals Reduction Company operations at the Caselton Plant, Pioche, Nevada, however all charges to the exploration project can be readily identified by cost account classification numbers assigned to the operations of the Comet Mines, Incorporated. At the end of each month the Caselton Plant Office prepares a series of journal vouchers covering the plant operations which includes the Comet Mines, Incorporated. These journal vouchers are then forwarded to the Combined Metals Reduction Company Office in Salt Lake

City, Utah for further review and reconciliation of the monthly transactions involved, and subsequently entered in the general ledgers of the various enterprises.

A general ledger is maintained for the Comet Mines, Incorporated at 218 Felt Building, Salt Lake City, Utah and after the above referred to journal vouchers have been received and reconciled, then the items applicable to the exploration project are entered in the general ledger control account No. 412-11. The balance shown in this account as of July 31, 1953, was in agreement with the "Total to Date" column of the MF-104 for July 1953. The MF-104 is prepared in the Salt Lake City Office each month, and signed by O. F. Burton, Treasurer.

All hourly rate employees for the exploration project are on the Caselton Plant payroll and all salaried employees are paid direct by Combined Metals Reduction Company, Salt Lake City, Utah. The checks for hourly employees are drawn by Combined Metals Reduction Company on the Nevada Bank of Commerce, Pioche Branch, Pioche, Nevada, and the bank statements are sent direct each month to the Combined Metals Reduction Company, Salt Lake City for reconciliation. After reconciliation the cancelled payroll checks are stored at Bauer, Utah. All checks are countersigned by Combined Metals Reduction Company officials.

All material used on the exploration project is drawn from the Caselton Plant Storeroom by requisitions and billed by the Combined Metals Reduction Company at the end of each month.

In addition to the above payroll and material charges, the Combined Metals Reduction Company also bill the Comet Mines, Incorporated each month for operating equipment rental, power, sampling and analysis, truck transportation and the 7-1/2% fee for warehouse, accounting and general expense.

From the above description it is apparent that the entire exploration project program of the Comet Mines, Incorporated is being financed by the Combined Metals Reduction Company.

The company's accounts are audited after the close of each calendar year by (Wells, Baxter and Miller, Salt Lake City, Utah) a certified public accounting firm.

III SCOPE OF AUDIT AND FINDINGS

The audit was limited to ascertaining the accuracy, propriety and validity of the costs as shown in the "Totals to Date" column of Form MF-104, Operator's Monthly Report and Voucher, for the month of July 1953. The extent of the audit and the findings under each of the "Items of Cost" follows:

(2) Labor and Supervision $46,241.26

The payroll records for the period June 1, 1952 to July 31, 1953 were examined and during the course of the audit a substantial test of time cards and cancelled payroll checks was made. The result of the audit revealed a small overcharge in labor costs which was disallowed and accounted for as follows:

	Charged	Not Allowable	Allowable
Labor	$37,085.42	$ .76	$37,084.66
Supervision	8,937.31		8,937.31
Technical Services	219.29		219.29
Total	$46,242.02	$ .76	$46,241.26

The $.76 disallowed was a payroll distribution error made December 1952. The wages of R. French, starting mechanic, was charged to the project in amount of $64.66 instead of $63.90.

A further analysis of labor and supervision is classified as follows:

Labor		
Miners	$19,801.36	
Underground Hoistmen	9,740.20	
Muckers	2,171.10	
Topman	3,599.28	
Surface Labor	45.20	
Maintenance Labor	1,727.52	$37,084.66
Supervision		
Supervisor	4,025.00	
Foreman	4,912.31	8,937.31
Technical Services		
Engineer		219.29
Total		$46,241.26

The units completed as of July 31, 1953 and shown on Form MF-104a is as follows:

Drifting	465.7 ft.
Crosscutting	56.0 ft.
Raising	381.1 ft.
Shaft	6.0 ft.
Station Excavation & Work Preparation to Raising	6,456 cu. ft.

The hourly wage rates paid for labor were made in accordance with Union Contracts, between the Combined Metals Reduction Company and the United Steel Workers of America, C.I.O. Union. Most of the wages paid for drifting, crosscutting and raising were on a bonus contract footage basis and the hourly rates established for this work was in accordance with Union Contracts. All of the work performed on the shaft and station excavation was paid on straight time hourly rates. The total hourly wages paid for labor in amount $37,084.66, included overtime $2,253.12 and holiday pay $598.99, and paid in accordance with Union Contracts.

The supervision charge in amount of $8,937.31 was made as follows:

E. S. McIntyre, Superintendent			
9 mos. at	$250.00	$2,250.00	
3 mos. at	300.00	900.00	
1 mo. at	375.00	375.00	
1 mo. at	500.00	500.00	$4,025.00
James Hulse, Mine Foreman			4,912.31
Total Supervision			$8,937.31

The monthly salary of E. S. McIntyre was $500.00 per month, and a proportionate amount was charged to the exploration project, based on the time devoted to the project. The contract shows under item 2 of Exhibit "A" an allowable maximum cost of $5,400.00 for superintendent, and was estimated on a part time basis at $300.00 per month for 18 months.

The operator charged $375.00 for part time for superintendent's salary during June 1952 and this was due to additional time required in getting project started, and during October 1952, the amount of $500.00 was charged representing full time supervision by superintendent on raise work. As the $300.00 per month for superintendent shown under item 2 in Exhibit "A" of the contract was only an estimate in arriving at the allowable maximum of $5,400.00 for superintendent's salary, and the operator had consistently charged the actual time devoted which in many instances was less than the

estimate of $300.00 per month, no disallowance was made and this action was agreed to by H. C. Miller, Executive Officer. The part time salary paid to E. S. McIntyre, Superintendent, and charged to project amounted to $4,025.00, and this amount did not exceed the allowable maximum of $5,400.00 as set forth under item 2, in Exhibit "A" of the contract.

The amount of $4,912.31, charged to supervision, represented wages paid to James Hulse, Mine Foreman, and did not exceed the allowable maximum of $9,900.00 allowed under item 2 in Exhibit "A" of the contract. The hourly base rate for foreman's wages was $1,885 per hour and included in the total charge of $4,912.31 was overtime $347.57 and holiday pay $75.40.

The charge for technical services in amount of $219.29 was a proportionate part of salaries paid to the following Combined Metals Reduction Company engineers for engineering services rendered to exploration project.

	Monthly Salary	Project Proportion
Sept. 1952 R. H. Godbe, Engineer	$475.00	$ 75.79
Oct. 1952 R. H. Godbe, Engineer	475.00	123.50
June 1953 Kenneth Anderson, Engineer	415.00	20.00
Total Technical Services		$219.29

The above technical services are allowable costs and are applicable to item (7) Miscellaneous listed in Exhibit "A" of the contract, with an allowable maximum of $14,145.00.

(3) Operating Material and Supplies $14,456.69

The following material and supplies charged to the exploration project was obtained from the Combined Metals Reduction Company, Caselton Plant:

Timber		$ 4,238.85
Explosives		2,182.30
Pipe		826.02
Track		866.68
Power		1,013.34
Miscellaneous		
Drill Steel & Bits	$3,870.52	
12" Ventilation Pipe	155.82	
Oil & Grease	162.69	
Nails	95.85	
Oxygen & Acetylene	67.50	
Nuts, Bolts, Washers, etc.	977.12	5,329.50
Total		$14,456.69

All of the above material and supplies were issued by requisitions from the Combined Metals Reduction Company, Caselton Plant storeroom. The accounting procedure for material control is well organized and the system includes purchase orders, receiving reports and invoices, together with a systematic recording in stock record cards of all material movements. The storeroom also maintains a purchase order file by vendor's name and a purchase order master file by P.O. number which has all of the documents attached which include the purchase orders, shipping notices, receiving reports, freight charges and invoices.

The requisitions issued for material and supplies used on the project are prepared, priced and amounts extended by warehouse clerk, the receipt of the material is signed by workman and approved by foreman. The requisitions are dated but not numbered. The requisition shows the account to be charged and the requisitions chargeable to the exploration project are maintained in a separate file. At the end of each month a schedule is prepared from the requisitions, and lists each item of material issued, showing the quantity, description, price and amount. This schedule is certified as being correct by the superintendent of the project and approved by three officials of the Caselton Plant.

An average inventory price is used when pricing material requisitions and the method used is to recompute the inventory card prices as new purchases are made. During the course of the audit, prices were traced from the stock record cards to the material purchase invoices in order to verify the prices used on material charged to the exploration project.

The electric power used during the period June 1, 1952 to July 31, 1953 amounted to $1,013.34 and represented a total of 193,974 KWH, at an average rate of 00.5224 mills per KWH. The Lincoln County Power District No. 1, Pioche, Nevada furnishes the power and bills the Combined Metals Reduction Company each month, listing all of the various locations where power is furnished and shows the meter readings for each location, including the Comet Mines, Incorporated. The Combined Metals Reduction Company then bills the exploration project for the amount of power consumed at the project. The project gains the benefit of any reduction in rates on the overall plant power consumption which may be over the maximum demand. There is no power contract and the rates used are established at nonprofit by the Board of Directors of the Lincoln County Power District No. 1, Pioche, Nevada.

(4) Operating Equipment $2,250.00

All charges for operating equipment were examined and the rates verified to contract. The result of the examination revealed an overcharge of $10.00 which was disallowed and accounted for as follows:

	Charged	Not Allowable	Allowable
Rental	$ 690.00	$	$ 690.00
Depreciation	1,570.00	10.00	1,560.00
Total	$2,260.00	$10.00	$2,250.00

The overcharge of $10.00 was depreciation on two mine cars at $5.00 per month each, charged during July 1952 as $20.00 instead of $10.00.

The equipment rental was billed by the Combined Metals Reduction Company each month for the following items:

Drills at $15.00 each per month

2 Stopers	9 mos. at $30.00	$270.00	
3 Stopers	1 mo. at 45.00	45.00	
1 Stoper	1 mo. at 15.00	15.00	$330.00
1 Jack Leg & Hammer	2 mos. at 15.00	30.00	
2 Jack Legs & Hammers	2 mos. at 30.00	60.00	90.00
1 Drifter	2 mos. at 15.00		30.00
Total Drill Rental			$450.00
1 Mucking Machine	3 mos. at $70.00 per mo.		210.00
1 Locomotive	9 da. at $100.00 per mo.		30.00
Total Equipment Rental			$690.00

The rates used were in agreement with item 4 as shown under Exhibit "A" of the contract.

The depreciation charges for equipment were accounted for as follows:

2 Mine Cars	4 mos. at $10.00	$ 40.00	
3 Mine Cars	8 mos. at $15.00	120.00	$ 160.00
2 Compressors	14 mos. at $100.00		1,400.00
Total Allowable depreciation			$1,560.00

The depreciation rates were in agreement with item 4 as shown under Exhibit "A" of the contract.

(7) Miscellaneous $11,327.11

The charges for miscellaneous costs were examined and comprised the following items, billed by the Combined Metals Reduction Company.

Repairs to Equipment	$ 968.66
Sampling and Analysis	99.45
Payroll Taxes	1,006.55
Liability Insurance	2,845.95
Pick-up Transportation	1,258.86
Warehouse, Accounting & General Expense	5,147.64
Total	$11,327.11

The repairs to equipment represented material issued on requisitions from the Caselton Plant storeroom and was used as follows:

Repairs to Equipment

Hoisting Equipment	$377.53
Drilling Machines	285.70
Compressors	146.89
Mucking Machine	14.31
Slusher	19.79
Sump Pump	26.66
Electric Power Equipment	57.91
Other	39.87
Total	$968.66

During the course of the audit, the repair material requisitions were examined and a sufficient test of prices verified.

The sampling and analysis charges in amount of $99.45 covered 194 determinations at 50 cents each $97.00 and 10 sample sacks $2.45, all of which were billed by Combined Metals Reduction Company.

The charges for payroll taxes and compensation insurance were verified by computation at the rates used by the operator, which were as follows:

Payroll Tax Rates

Federal Old Age Benefit	1.5%	
Federal Unemployment	.3%	
Nevada Unemployment	1.0%	2.8%

Compensation Insurance Rates

Nevada Industrial Commission	3.25%	
Pioche Mutual Benefit Ass'n Hospital Division	1.32%	4.57%

Payroll taxes are exempt on any one employee earning over $3,600.00 for Federal Taxes and $3,000.00 for State Taxes. The Combined Metals Reduction Company maintains Employees' Earnings Records for all employees, which includes employees of the operator. These records were examined during the course of the audit. The compensation insurance is covered jointly by the Nevada Industrial Commission and the Pioche Mutual Benefit Association, Hospital Division. The hospital accident benefit contract now in effect is between the Combined Metals Reduction Company and the Pioche Mutual Benefit Association, Hospital Division. A copy of this contract, which cites the various medical benefits, is filed with the Nevada Industrial Commission. Compensation insurance coverage of the Combined Metals Reduction Company employees includes employees of the operator.

The pick-up transportation represents the cost of transporting men, materials and supplies to Comet Mine and charged on the following mileage basis:

Truck #38	16,805.0 miles at $.07	$1,176.35
R. O. Maki - Private Car	1,375.3 miles at .06	82.51
Total		$1,258.86

The above transportation costs were billed by the Combined Metals Reduction Company and the mileage taken from mileage meter readings listed in monthly mileage reports.

The warehouse, accounting and general expense charge in amount of $5,147.64 represents 7-1/2% of the total project costs to July 31, 1953 and arrived at as follows:

Total project costs before surcharge			$69,138.18
Add:	Surcharge of 7-1/2%	$5,185.36	
	Deduct computation error	37.72	
	Amount charged by operator		5,147.64
Total cost billed by operator to 7/31/53			$74,285.82

The surcharge of 7-1/2% is a proportionate amount of Combined Metals Reduction Company. Caselton Mine direct expense chargeable to the project to cover such items as engineering, assaying, accounting, warehouse, boarding house, bunkhouse, safety, watchmen, and general supervision.

The following figures showing how the surcharge of 7-1/2% was computed were furnished by Mr. Sam S. Arentz, Manager, Nevada Operations for the Combined Metals Reduction Company.

	Caselton Mine Accounts	
	Year 1950	Year 1951
Direct Operating Cost		
Including direct labor, supplies, power, supervision, engineering, assaying, vacations, haulage, etc.	$1,467,651.76	$1,763,917.08
Caselton Mine's Prorata Share of Plant Overhead		
Including engineering, assaying, repair, maintenance, accounting, warehousing, safety and watchmen.	$ 112,747.09	$ 149,647.77
The above does not include taxes, other than payroll and sales taxes, and did not include any portion of general office expense.		
Surcharge Rates	7.68%	8.48%
Rate used for contract rounded off for convenience	7.50%	- 0 -

The application was prepared during 1951 and on page 13 thereof the 7-1/2% surcharge was explained, and it was understood that in Exhibit "A" of the contract under Item (7) Miscellaneous the allowable maximum amount of $14,145.00 covered the 7-1/2% surcharge expense. Therefore the costs for this expense have been accepted as an allowable cost item to the exploration project.

IV CONCLUSIONS AND RECOMMENDATIONS

The audit also disclosed that the status as of July 31, 1953, of "allowable maximums" under this contract was as follows:

Item	Maximum	Total Costs	Balance
Labor, P/R Taxes & Liab. Insur.	$90,000.00	$40,937.16	$49,062.84
Supervision	5,400.00	4,025.00	1,375.00
Foreman	9,900.00	4,912.31	4,987.69
Operating Material & Supplies	64,600.00	14,456.69	50,143.31
Operating Equipment Rental	3,630.00	690.00	2,940.00
Operating Equipment Depreciation	2,325.00	1,560.00	765.00
Miscellaneous	14,145.00	7,693.90*	6,451.10

*Miscellaneous costs include Repairs to Equipment $968.66, Sampling and Analysis $99.45, Pick-up Transportation $1,258.86, and Warehouse, Accounting & General Expense $5,147.64. Also Technical Services $219.29.

This audit has disclosed that all costs, as charged to this project, with the exception of the disallowances itemized under item (2) Labor and Supervision and item (4) Operating Equipment, of the preceding section of this report, are reasonable and proper under the terms of the contract.

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

	Totals July MF-104	Distribution Corrected	Disallowed by Audit	Allowed by Audit
(2) Labor and Supervision				
Labor	$37,085.42	$37,085.42	$ .76	$37,084.66
Supervision	8,937.31	8,937.31		8,937.31
Technical Services	219.29	219.29		219.29
(3) Operating Mat'ls & Supplies				
Timber	4,238.85	4,238.85		4,238.85
Explosives	2,182.30	2,182.30		2,182.30
Pipe	826.02	826.02		826.02
Track	866.68	866.68		866.68
Power	1,013.34	1,013.34		1,013.34
Misc. Supplies & Drill Steel	5,329.50	5,329.50		5,329.50
(4) Operating Equipment				
Rental	2,260.00	690.00		690.00
Depreciation		1,570.00	10.00	1,560.00
(7) Miscellaneous				
Repairs to Equipment	968.66	968.66		968.66
Sampling and Analysis	99.45	99.45		99.45
Payroll Taxes	1,006.55	1,006.55		1,006.55
Liability Insurance	2,845.95	2,845.95		2,845.95
Pick-up Transportation	1,258.86	1,258.86		1,258.86
Warehouse, Accounting & General Expense	5,147.64	5,147.64		5,147.64
Totals	$74,285.82	$74,285.82	$10.76	$74,275.06

At the conclusion of the audit, the findings were discussed with Sam S. Arentz, President, Paul Gommill, Vice-President, and Clyde Stevenson, Accountant.

George Mavor

George Mavor
Auditor

September 14, 1953

EXTRA COPY
DMEA
RECEIVED DEC 9 1957

DATE	INITIALS	CODE
12-9	JC	800
11	CEM	100
"	FEJ	110
		120
12/11	Jwa	500
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DEFENSE MINERALS EXPLORATION ADMINISTRATION
CONTRACT ADMINISTRATION AND AUDIT DIVISION

REPORT OF REVIEW

I have reviewed the Monthly Reports of:

Comet Mines, Incorporated
Pioche, Nevada

pertaining to Exploration Project Contract No. DMA-295, Docket No. DMA-2309, dated April 16, 1952, including Amendment Nos. 1 to 4, inclusive, and Amended Contract, including Amendment Nos. 1 and 2 for the period June 1, 1952 to June 30, 1957, covering a project for the exploration of lead-zinc, on property known as the Comet Mine, located in Lincoln County, Nevada.

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

This review was made in lieu of a final audit of the Operator's accounts and records for the reasons given on the attachment to this report.

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

Total cost as billed by the Contractor	$124,072.00
Exceptions	-0-
Total Accepted Cost	$124,072.00

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 Sixty Two Thousand Thirty Six and 00/100 Dollars, is valid and proper, provided that the Regional Executive Officer, the Administrator, or other competent official has accepted or will accept the project as having otherwise met the terms of the contract.

Amount payable to Operator	$62,036.00
Amount reimbursed	61,830.96
Balance due Operator	$ 205.04

George Mavor

December 4, 1957

George Mavor, Auditor

Reasons for Report of Review in lieu of final audit

14m-8295 | Court Mines, Incorporated | [illegible]-0399

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

(b) the accepted costs ($98,748.90) of all work on an actual cost basis were covered by an Interim Audit Report and Audit Certificate, dated October 25, 1955, issued by this auditor;

(c) all subsequent costs incurred ($85,383.10) were under a contract provision for payment by the Government on the basis of fixed unit costs of units of work actually performed.

Docket Copy

AMENDED EXPLORATION PROJECT CONTRACT
COMET MINES, INCORPORATED
DOCKET NO. DMEA-2309

AMENDMENT NO. 2

It is agreed this 1st day of March, 1957, between the United States of America, acting through the Department of the Interior, Defense Minerals Exploration Administration, and Comet Mines, Incorporated, that Amended Exploration Project Contract Idm-E295 (Docket No. DMEA-2309), dated as of April 16, 1952, is hereby amended as follows:

1. (a) Work under the Contract shall be suspended during the period beginning July 1, 1956, and ending not later than May 1, 1957.

(b) The Government shall not contribute to any costs incurred by the Operator during the period of suspension or to any costs of rehabilitation or repair which in the Government's opinion would not have occurred had there been no suspension of work.

(c) The Operator, at its own cost and expense, without contribution by the Government, during the period of suspension shall preserve and protect the project work.

2. The time for completion of the work, specified in item 1 of Amendment No. 1, is extended from June 16, 1957, to September 16, 1957.

3. It is of the essence of this Contract that the work be resumed before the termination of the period here fixed for suspension and be completed before the termination of the period here fixed for completion of the work; and if it is not so resumed and completed in the manner required by the Contract, the following provisions shall then become effective:

(a) The Contract and all obligations of the parties thereunder, except as otherwise herein expressly provided, shall be and are hereby terminated, as follows:

(i) Effective July 1, 1956, if the work has not been resumed on or before May 1, 1957;

(ii) Effective September 16, 1957, if the work is resumed on or before May 1, 1957, but is not completed on or before September 16, 1957.

(b) The Government shall contribute only to allowable costs incurred prior to said effective date, and to allowable costs incurred or to be incurred beginning with said effective date in performing winding-up and settlement actions provided for in the Contract, including (a) the preservation and disposal of property to the cost of which the Government has contributed; and (b) the making and rendering of reports and accounts.

(c) The Operator, as principal if the Operator is the producer, or as surety if the Operator is not the producer, shall pay to the Government the royalty on production provided for in the Contract, in the same manner and amount and for the full time provided in the Contract, as amended, as if certification of discovery or development had been made, such certification being hereby waived by the Operator. In addition, all rights of the Government provided for in the Contract with respect to a certification of discovery or development, percentage royalty and liens for its payment, records, audit, and recovery of any overpayment, are preserved.

(d) The Operator shall promptly perform all winding-up and settlement actions provided for in the Contract, including (a) the disposal of any facilities, buildings, fixtures, equipment, or other items to the cost of which the Government has contributed; and (b) the rendering of the final report and final account.

(e) The Operator hereby releases and agrees to save the Government harmless from all claims or demands under or arising out of the Contract, except as otherwise provided in this Amendment No. 2.

This amendment shall not be construed to increase the estimated total cost of the project, the aggregate total amount which the Government may be required to contribute, or the amount of any item designated as "maximum."

Executed in sextuplicate the day and year first above written.

Andritz 2/26/57

THE UNITED STATES OF AMERICA

COMET MINES, INCORPORATED

By [signature]

Title President

By [signature]
Administrator, Defense Minerals
Exploration Administration

Selfridge
Johnson

Docket copy

AMENDED EXPLORATION PROJECT CONTRACT
COMET MINES, INCORPORATED
DOCKET NO. DMEA-2309

AMENDMENT NO. 1

It is agreed this 15th day of October, 1956, between the United States of America, acting through the Department of the Interior, Defense Minerals Exploration Administration, and Comet Mines, Incorporated, that Amended Exploration Project Contract Idm-8295 (Docket No. DMEA-2309), dated as of April 16, 1952, is hereby amended as follows:

1. The time for completion of the work, specified in Article 3 of the Contract, is extended from October 16, 1956, to June 16, 1957.

2. The maximum period for royalty payments and lien for the payment thereof is increased from "thirteen years" to "fourteen years."

This amendment shall not be construed to increase the estimated total cost of the project, the aggregate total amount which the Government may be required to contribute, or the amount of any item designated as "maximum."

Executed in sextuplicate the day and year first above written.

THE UNITED STATES OF AMERICA

By C. J. Mattundorf
Administrator, Defense Minerals
Exploration Administration

COMET MINES, INCORPORATED

By [signature]

Title President

Judrity Dunger 10/9/56
"Approved. Off."
J. ALD
Chambers
Selfridge

FROM SOLICITOR
OCT 10 1956
FOR SIGNATURE

COMBINED METALS REDUCTION COMPANY

September 12, 1955

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

Dear Mr. Rieker:

In accordance with item 5, Annex II of Amended Exploration Project Contract, Comet Mines, Incorporated, Docket No. DMEA-2309, the following are inventory and appraisal of material and supplies in which the Government has in interest remaining after the completion of the work performed under the prior contract.

	Cost $	Appraisal %	Appraisal Amount $	Gov't Part. 50% $
Pipe				
1250'-2" I.P. for compressed air.				
1250'-1" I.P. for water.				
105'-2" I.P. new not installed.				
1' Pressure reducing water valve.				
Misc. valves and fittings on 2" air and 1" water lines.	1,309.28	75%	981.96	490.98
Ventube - 545' - 12" Ventube	527.12	10%	52.71	26.36
Track				
2550' - (12.75 tons) - 30# rail.				
2 - Track Switches.	1,609.98	75%	1,207.49	603.74
Drill Steel				
100' - 7/8 Hex, drill steel, ceromat chisel bits with tungsten carbide inserts.				
12 Pcs @ $18.00 ea.	216.00	50%	108.00	54.00
Totals	$3,662.38		$2,350.16	$1,175.08
ADD:				
Whse Acctg & Gen. Exp. @ 7½%			176.26	88.13
			$2,526.42	$1,263.21

COPY

COMBINED METALS REDUCTION COMPANY

The operator hereby requests to purchase the above listed material and supplies at the fair market value show. If this is approved by the Government, the operator requests to deduct this amount from total cost of project.

Very truly yours,

Reginald G. Lee

Reginald G. Lee
Gen. Supt. of Mines

Approved:

Paul Gemmill

Paul Gemmill, President

COPY

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

1605 Evans Avenue
Reno, Nevada

September 21, 1955

Mr. Reginald G. Lee
Supt. of Mines
Combined Metals Reduction Company
Caselton Plant
Pioche, Nevada

Re: Docket No. DMEA-2309 (Lead-zinc)
Comet Mines, Inc.
Comet Mine, Lincoln County, Nevada
Contract No. Idm-E295

Dear Mr. Lee:

Reference is made to your letter of September 12, 1955 relative to above noted docket in which you make an offer of $1,263 for the Government's 50 percent equity in the agreed salvage value of $2,526.42 for the material as listed below. This will advise you that the Government will accept your offer. This amount ($1,263) will be deducted from the Government's participation in the cost of the project.

	Cost	Appraisal %	Appraisal Amount	Gov't Part. 50%
Pipe				
1250' - 2" I.P. for compressed air				
1250' - 1" I.P. for water				
105' - 2" I. P. new not installed				
1' Pressure reducing water valve				
Misc. valves and fittings on 2" air and 1" water lines	1,309.28	75%	981.96	490.98
Ventube - 545' - 12" Ventube	527.12	10%	52.71	26.36
Track				
2550' - (12.75 tons) - 30# rail				
2 - Track Switches	1,609.98	75%	1,207.49	603.74

	Cost	Appraisal %	Appraisal Amount	Gov't Part. 50%
Drill Steel				
100' - 7/8 Hex, drill steel, coro-mat chisel bits with tungsten carbide inserts				
12 Pcs @ $18.00 ea.	216.00	50%	108.00	54.00
Totals	$3,662.38		$2,350.16	$1,175.08
Add:				
Whse Acctg & Gen. Exp. @ 7-1/2%			176.26	88.13
			$2,526.42	$1,263.21

Very truly yours,

S. Ricker
Executive Officer
DMEA Field Team, Region II

SRicker:gh
cc: H. C. Miller, Regional Director, Region II
R. M. Smith, USGS
Opr. Com., Wash., D.C. (2)
Geo. Mavor, Auditor, DMEA
Finance Office, Region II
File

DISPOSAL OF GOVERNMENT'S INTEREST IN PROPERTY

(FORM A)

To: Combined Metals Reduction Co.,
Comet Mines, Inc.
P. O. Box 150
Salt Lake City 10, Utah

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-E295, Docket No. DMEA-2309, dated April 16, 1952.

Dated September 21, 1955 THE UNITED STATES OF AMERICA

By S. Ricker
S. Ricker
Executive Officer
DMEA Field Team, Region II

Docket Copy

RECEIVED

AUG 15 1955

MF-200
(Revised June 1954)

Docket No. DMEA-2309

Commodity Lead-Zinc

Contract No. Idm-E235

UNITED STATES OF AMERICA
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION
AMENDED
EXPLORATION PROJECT CONTRACT[1]

It is agreed as of 16th day of April, 1952, between the United States of America, acting through the Department of the Interior, Defense Minerals Exploration Administration, hereinafter called the "Government," and [2] Comet Mines, Incorporated, a Nevada Corporation, whose mailing address is Pioche, Nevada, hereinafter called the "Operator," as follows:

ARTICLE 1. *This contract* is entered into under the authority of the Defense Production Act of 1950, as amended. It consists of this form (MF-200), the attached Exhibit "A," Annex I, Annex II and a map.

The Operator shall not transfer or assign this contract or any right thereunder without the written consent of the Government.

ARTICLE 2. *Operator's property rights.*—(a) The land which is the subject of this contract (hereinafter called "the land") is in the State of Nevada, County of Lincoln, and is described in Annex I.[3]

(b) The Operator represents and undertakes that:

(1) The Operator is the [4] owner of [5] the entire interest in the land, in possession and entitled to possession for all of the purposes of this contract, under and by virtue of a [6] —, [7] — recorded in Book —, page —, official records of said County; and

(2) The Operator's right, title, or interest (whether as owner, lessee, or otherwise) is subject only to the following claims, liens, or encumbrances: None

(c) The Subordination Agreement of the holder of any claim, lien, or encumbrance listed above, and (if the Operator does not hold the legal title) the Consent to Lien of any holder of the legal title

[1] If sufficient space is not provided in any blank, use an extra sheet of paper and refer to it in the blank.
[2] Insert name, and if an organization, its nature (corporation and place of incorporation, partnership with names of partners, etc.).
[3] State on a separate sheet marked "Annex I" the legal description or enough to identify the property, particularly excluding any areas from which the production is not to be subject to the Government's percentage royalty.
[4] Insert "owner," "lessee," "contract purchaser," "locator," etc.
[5] Insert "the entire interest," "the mineral rights," "an undivided one-third," etc.
[6] Insert "deed," "lease," "contract," "location notice," "patent," etc.
[7] If not recorded, so indicate by inserting "un."

of the land (lessor, seller, optionor, etc.), are attached, as follows: .....

.....

.....

(d) The Operator shall preserve and maintain his right, title, and interest in the land and his right to the possession thereof for the purposes of this contract, and shall devote the land and all existing improvements, facilities, buildings, installations, and appurtenances to the purposes of this contract. Until the lapse of the time within which the Government may make a certification of discovery or development without any such certification having been made, and after any such certification has been made, the Operator shall neither transfer, convey, nor surrender the land nor any right, title, or interest therein, nor permit nor suffer any claim, lien, or encumbrance thereon, without expressly referring to and providing in the instrument of conveyance, lien, or encumbrance for the preservation of the Government's right to a percentage royalty on production and lien for the payment thereof. If the Government makes no certification of discovery or development within the time limited in Article 8, it shall thereafter have no claim against the land or any production therefrom except for any production referred to in Article 8(b)(1).

ARTICLE 3. *The exploration project.*—The project is a search for indicated or undeveloped deposits of lead-zinc. The work to be performed is described in Exhibit "A." The Operator on or before September 1, 1955 shall [redacted] the work, and on or before October 16, 1956 (unless the Operator's obligation to prosecute the work is terminated—see Article 10) shall either have completed the work or shall have incurred allowable costs (see Article 6) in a sum not less than the estimated total allowable cost set forth in Exhibit "A."

ARTICLE 4. *Performance of the work.*—(a) *Operator's responsibility.*—The work shall be performed with reasonable diligence, efficiently, expertly, in a workmanlike manner, in accordance with good mining standards and State regulations for health and safety and for liability insurance covering employment; and with suitable and adequate equipment, facilities, materials, supplies, and labor, to bring it to completion within the time fixed.

(b) *Independent contracts.*—To the extent that the allowable costs are estimated in Exhibit "A" with express reference to performance by independent contractors on a unit-price basis (such as per foot of drilling, per foot of drifting, per hour of bulldozer operations), the work may be so performed; but if the reference in Exhibit "A" to any such independent contract requires the Government's approval thereof, payments under such contract will not be allowable costs unless the Government gives its written approval of the contract. Any such independent contract shall refer to some specific and identifiable part of the work, and shall be subject to all of the pertinent terms and conditions of this exploration contract; but the Government shall not be considered a party thereto, and its rights under this contract, including the right to terminate its contributions, shall not be affected thereby. Regardless of the provisions of any such independent contract and regardless of the Government's approval thereof, the Government will participate in payments to the independent contractor only on account of work performed in accordance with the provisions of this exploration project contract, and only to the extent that the Government deems the unit prices for the work under the independent contract to be reasonable.

(c) *Government may inspect.*—The Operator shall consult with and inform the Government on all phases of the work as it progresses. The Government may enter at all reasonable times to inspect the work under the contract, and also after a certification of discovery or development to inspect production operations and underground workings. The operator shall provide the Government with all reasonable means of access for such inspections.

ARTICLE 5. *Contribution by the Government.*—The estimated total allowable cost of the project, set forth in Exhibit "A," is the sum of $190,000.00 The Government shall contribute 50 percent of the allowable costs as they are incurred in a total sum not in excess of $95,000.00: *Provided,* That until the Operator has rendered to the Government his final report, and any final auditing required by the Government has been made, and a final settlement of the contract has been made, the Government may withhold from the last

voucher or vouchers such sums as it sees fit not in excess of 10 percent of the estimated total cost of the work or not in excess of the amount of the Government's contribution to the cost of property which is or may become subject to disposal as provided in Article 9(c), whichever is greater. The Government will make its contribution on the basis of the monthly vouchers referred to in Article 7(b), but all payments by the Government are provisional only, subject to audit, until the account between the Operator and the Government is finally audited and settled. "Costs incurred" mean costs that have been paid or have become due and payable, or that in the opinion of the Government have become an obligation. The Government may make payments directly to independent contractors and suppliers for the account of the Operator rather than to the Operator.

ARTICLE 6. *Estimated costs.*—(a) *Categories of costs.*—The allowable costs of the work to which the Government shall contribute are limited to those that are direct, reasonable, necessary, and that are estimated in Exhibit "A" by categories as specified in this article. If any category or subcategory is omitted from the estimate of costs, or if the word "none" is annexed to the listing thereof, costs under such category or subcategory are not allowable. Any excess over any estimate which is indicated as the maximum of any category, subcategory, or item, either as to requirement or related cost, and any excess over the estimated total allowable cost of the work, shall not be allowable. Any excess over the estimate of any category, subcategory, or item, either as to requirement or related cost, not indicated as a maximum shall be allowable within the limit of the estimated total allowable cost of the work. To the extent that excesses over maximums other than the estimated total allowable cost of the work may be necessary for the performance of the work, the Operator shall incur such excesses for his own account without contribution by the Government; but except for any such necessary excesses in categories, subcategories, or items thereunder the Operator is not obligated to incur more than his agreed percentage of the estimated, total allowable cost of the work.

To the extent specified in this article or in Exhibit "A" the following categories, subcategories, and elements thereof are maximums; but if not so specified either here or in Exhibit "A" they are not maximums, and may be exceeded within the limit of the estimated total allowable cost of the work:

CATEGORY (1)—INDEPENDENT CONTRACTS.—Work to be performed under independent contracts (see Article 4(b)). The estimated total amount of this category and the estimated cost of each unit of work for performance under an independent contract are maximums.

CATEGORY (2)—PERSONAL SERVICES.

Subcategory (a)—Supervision.—All elements of this subcategory (number of supervisors, periods of employment, rates of pay, and total) are maximums.

Subcategory (b)—Technical services.—All elements of this subcategory (number of technicians, periods of employment, rates of pay, and total) are maximums.

Subcategory (c)—Labor.

CATEGORY (3)—OPERATING MATERIALS AND SUPPLIES.—Includes such items as drill bits and steel, explosives, fuel, pipe, power, small tools costing less than $50 each, timber, track.

CATEGORY (4)—OPERATING EQUIPMENT.

Subcategory (a)—Rental.—The number of each object to be rented [6 mine cars, 1 truck], the rate of rental [$100 per month, $5 per hour], and the total of this subcategory are maximums.

Subcategory (b)—Purchases.—The estimated total of this subcategory is a maximum.

Subcategory (c)—Depreciation.—All elements of this subcategory (time periods, rate of depreciation, and subcategory total) are maximums.

CATEGORY (5)—INITIAL REHABILITATION AND REPAIRS.—Estimates under this category include all requirements and related costs, such as labor, materials and supplies, and supervision at a rate not higher than provided for in Category (2), and shall not be duplicated under any other category. The estimated total of this category is a maximum.

Subcategory (a)—Initial rehabilitation and repairs of existing buildings, fixtures, and installations (exclusive of mine workings).—The estimated total of this subcategory is a maximum.

Subcategory (b)—Initial rehabilitation and repairs of operating equipment.—The estimated total of this subcategory is a maximum.

CATEGORY (6)—NEW BUILDINGS, FIXTURES, AND INSTALLATIONS (EXCLUSIVE OF MINE WORKINGS).—Estimates under this category include all requirements and related costs, such as labor, materials and supplies, and supervision at a rate not higher than provided for in Category (2), and shall not be duplicated under any other category. The estimated total of this category is a maximum.

CATEGORY (7)—MISCELLANEOUS.—Repairs and maintenance (other than initial) of operating equipment, analytical work, prints and other reproductions, accounting, Operator's share of payroll taxes, liability insurance covering employment, travel, communications, and any other items of requirement or cost that do not fall within any of the first 6 categories.

THE ESTIMATED TOTAL ALLOWABLE COST of the work is a maximum.

(b) *Nonallowable costs.*—The following costs are not allowable for contribution by the Government:

(1) *Costs of the land,* such as rental, depreciation, depletion, or other cost of acquiring, owning, or holding possession;

(2) *Indirect costs,* such as general overhead, corporate management, interest, taxes (other than payroll and sales taxes), insurance (other than liability insurance covering employment), damages to persons, damages to property (other than necessary repairs or replacements of equipment or other property used in the work);

(3) *Previous work* performed or costs incurred before the date of this contract; and

(4) *Deferred payments.*—Any costs incurred by the Operator under any rental-purchase agreement, installment-purchase agreement, or any agreement for the purchase of goods under the provisions of which payment of the full purchase price is deferred more than 90 days from the delivery of the goods; unless the purchase agreement is approved by the Government in writing.

(c) *Reductions in costs.*—The Operator shall account for and give the Government credit for any incidental benefits, credits, or money received in the ordinary course of business in prosecuting the work (as by salvage or sale of materials or equipment, furnishing of room or board, furnishing of power or services to third persons, rebates or discounts on purchases, etc.), in the same ratio in which the Government contributes to costs; and such amounts shall be treated as a reduction in costs incurred so that they are available for use within the limit of the original estimated total cost. This provision does not apply to receipts from production which are subject to the Government's percentage royalty under the provisions of Article 9. And see Article 13.

ARTICLE 7. *Reports, accounts, audits.*—(a) *Operator's records.*—The Operator shall keep suitable records and accounts of the work performed and of any production in which the Government may have an interest; and shall preserve those with respect to work performed for at least three years after final payment by the Government, and those with respect to production for at least three years after any obligation to pay royalties to the Government has terminated. The Government may inspect and audit said records and accounts at any time, either by itself or by a certified public accountant. If the Government elects to audit said records and accounts relating to the exploration work by certified public accountant, it may do so as a cost of the work to which the Operator shall contribute. The Comptroller General of the United States or his representative, until the expiration of said three-year periods, shall have access to and the right to examine any pertinent books, documents, papers, and records of the Operator. All of the Operator's vouchers and records and accounts relating thereto and the Government's payments thereof remain subject to adjustment until final audit by the Government. If work under this contract is carried on in conjunction with any other operations, or if labor, supervision, services, materials, supplies, equipment, facilities, or other requirements for carrying on the work are also used in connection with other operations, the costs shall be segregated and accounted for on a basis and by methods and accounts that are satisfactory to and approved by the Government.

(b) *Progress reports and vouchers.*—The Operator shall provide the Government with five copies of monthly progress reports in three sections as follows: (1) Operator's Monthly Report and Voucher showing detailed costs incurred during the reporting period; (2) Operator's Unit Cost and Progress Report showing the various types of work performed during the reporting period and costs incurred for each type of work; and (3) a Narrative Report of the work performed during the reporting period including adequate engineering-geological maps or sketches, drill hole logs and locations, and assay reports on samples taken concurrently with advance in mineralized ground. (Forms for reporting under (1) and (2) above will be provided by the Government.)

(c) *Final report.*—Upon completion of the work or termination of the Government's obligation to contribute to costs, the Operator shall furnish the Government with five copies of a final report (in addition to the final progress report and voucher). This final report shall include a geological and engineering evaluation of the results of the work performed under the contract with an estimate of the ore reserves resulting from such work, complete assay data, adequate geological and engineering maps or sketches, and a summary of the work performed and related costs incurred.

(d) *Report of sales.*—The Operator shall provide the Government with suitable accounting and documentary evidence covering all production to which the Government's percentage royalty relates, such as copies of smelter or concentrator settlement sheets, and certified accounts of production and sale or other disposition of production.

(e) *Compliance with requirements.*—If in the opinion of the Government any of the Operator's reports, records, or accounts are insufficient or incomplete, or if the Operator fails to make them, the Government may procure the making or completion of such with suitable attachments as an expense of the work to which the Operator shall contribute. The Government may withhold approval and payment of any vouchers relating to insufficient or incomplete reports, records, or accounts.

ARTICLE 8. *Repayment by Operator.*—(a) *Certification.*—If the Government considers that a discovery or development from which production may be made has resulted from the work, the Government, at any time not later than six months after a sufficient final report and final account (see Article 7) has been rendered, may so certify in writing to the Operator. Such certification shall describe broadly or indicate the nature of the discovery or development.

(b) *Royalty on production.*—The Operator, as principal if the Operator is the producer, or as surety if the Operator is not the producer, shall pay to the Government a royalty on all minerals mined or produced from the land, as follows: (1) regardless of any certification of discovery or development, from the date of the contract until the lapse of the time within which the Government may make such certification, or until the total net amount contributed by the Government without interest is fully repaid, whichever occurs first; or (2) if the Government makes a certification of discovery or development, within a period of ten years from the date of the contract, or until the total net amount contributed by the Government without interest is fully repaid, whichever occurs first. See Article 13.

(c) *Basis for computation.*—The Government's royalty shall be a percentage of the gross proceeds (including any bonuses, premiums, allowances, or other benefits) from the production sold, in the form sold (ore, concentrates, metal, or equivalent), at the point of delivery (the f. o. b. point); *except,* that charges of *the buyer* arising in the regular course of business, and shown as deductions on the buyer's settlement sheets, on account of the cost of treatment processes performed by *the buyer,* sampling and assaying to determine the value of the production sold, and freight paid by *the buyer* to a carrier (not the Operator), shall be allowed as deductions in arriving at the "gross proceeds" as that term is used herein. Any costs of treatment processes, sampling or assaying, or transportation, performed or paid by the Operator or by anyone other than the buyer, are not deductible in arriving at the "gross proceeds" as that term is here used. The term "treatment processes," as here used, means those processes (such as milling, concentrating, smelting, refining, or equivalent) applied to the crude ore or other production after it is extracted from the ground, to put it into a commercially marketable form; excluding fabricating or manufacturing.

(d) *Unsold production.*—If any production (ore, concentrates, metal, or equivalent), after the lapse of six months from the date the ore was extracted from the ground, remains neither sold nor used by the Operator in integrated manufacturing or fabricating operations (for instance, if it is stockpiled), the Government, at its option, as long as it so remains, may require the computation and payment of its royalty on the value of such production in the form (ore, concentrates, metal, or equivalent) it is in when the Government elects to require computation and payment. If any production is used by the Operator in integrated manufacturing or fabricating operations before the Government makes its election, the Government's royalty on such production shall be computed on the value therof in the form in which and at the time when it is so used. "Value" as here used means what is or would be gross income from mining operations for percentage depletion purposes in Federal income tax determination, or the market value, whichever is greater.

(e) *Percentages of royalty.*—The percentages of the Government's royalty shall be as follows:

One and one-half (1½) percent of amounts ("gross proceeds" or "value") not in excess of eight dollars ($8.00) per ton of production in the form in which sold, held, or used, plus one-half (½)

percent for each additional full fifty cents ($0.50) by which such amounts exceed eight dollars ($8.00) per ton, but not in excess of five (5) percent of such amounts.

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

(f) *Time for computation and payment.*—The Government's royalty shall be computed and paid currently upon each lot sold, held, or used in integrated operations, as the case may be, as above provided in this article.

(g) *Lien for payment.*—To secure the payment of its percentage royalty, there is hereby granted to the Government a lien upon the land or the Operator's interest in the land and upon any production of minerals therefrom, until the royalty claim is extinguished by lapse of time or is fully paid.

(h) *Notice to purchasers.*—The Operator shall give notice of the Government's claim for royalty to any purchaser of the production, and shall authorize and direct such purchaser to pay the royalty directly to the Government and to furnish the Government with copies of the settlement sheets. If the records of any production and sales or other disposition of production, whether the production is by the Operator or by others, are not made available to the Government, the amount of the royalty may be estimated by the Administrator, Defense Minerals Exploration Administration, or his successor, and his estimate thereof shall be final and binding upon the Operator.

(i) *No obligation to produce.*—Nothing in this contract is to be construed as imposing any obligation on the Operator or the Operator's successor in interest to engage in any production operations.

(j) *Government not obligated to buy.*—Nothing in this contract shall be construed as imposing any obligation on the Government to purchase any minerals mined or produced from the land.

ARTICLE 9. *Interests in purchased property.*—(a) *Title and ownership.*—All costs under this contract shall be incurred by the Operator in the Operator's own name and for the Operator's own account; but any property acquired to the cost of which the Government contributes shall belong to the Operator and the Government jointly in proportion to their respective contributions, although title thereto shall be taken in the name of the Operator.

(b) *Preservation of property.*—Until the final disposal of any property in which the Government has an interest the Operator shall preserve and protect same for the best interest of the Government, any reasonable and necessary costs thereof to be treated as an allowable cost of the project. After the completion of the work or termination of the Government's obligation to contribute, or when such property is not in use for or needed for the work, the Operator shall neither use it without the written consent of the Government nor without paying a reasonable rental to be fixed by the Government for its interest.

(c) *Disposal of property.*—Upon the completion of the work or termination of the Government's obligation to contribute to costs, or when the property is no longer needed for the work, the Operator shall promptly dispose of salable or salvageable property in which the Government has an interest for the joint account of the Government and the Operator, either by return to the vendor, by sale to others, or purchase by the Operator or the Government at a price at least as high as could be obtained from others, unless the Government in writing waives its interest in any such property. Without advance approval of the sales price by the Government the Operator shall not sell at any price any item of property the cost of which was more than $500, and shall not sell at less than 25 percent of the purchase price any item of property which cost $500 or less. The Government, in lieu of approving the sales price for any such item, may itself purchase the item at the best price which the Operator is able to obtain or himself cares to give. Property remaining upon any termination of the work shall be considered in groups or categories (such as drill steel, or explosives, or pipe, or rails), and if the original cost of the remaining unexpended portion of any such group or category is less than $50, the Government waives its interest therein. If necessary to accomplish the disposal of any item the Operator shall dismantle and sever it from the land, the cost thereof to be treated as a cost of the project.

(d) *Default of the Operator re disposal.*—If within 90 days after the completion of the work or termination of the Government's obligation to contribute to costs, or after the property is no longer needed for the work, or after such further time as the Government may in writing allow, the Operator has failed to sell or otherwise liquidate or dispose of any property in which the Government has an interest, the Government, at any time prior to final settlement under the contract, may pursue one of the following two courses: (1) the Government, by written notice to the Operator, may place upon such property what in its opinion is a fair valuation thereof, not in excess of the cost less 1.66 percent per month from the

date such property was purchased under this contract to the termination of said 90-day period; and such property shall thereupon be considered and accounted for as having been purchased by the Operator at the valuation so fixed by the Government; or (2) the Government may enter and take possession of such property wherever it may be found, and remove and dispose of it for the joint account of the parties.

ARTICLE 10. *Termination of the Government's obligations.*—(a) If in the opinion of the Government operations at any time have failed to achieve anticipated results that indicate the probability of making a worthwhile discovery, and in the opinion of the Government further operations are not justified, the Government may give the Operator written notice thereof, and thereupon: (1) the Government shall be free of all obligation to contribute to costs not then incurred other than such as may be allowable under the provisions of the contract as necessary and incidental to winding up, reporting, and accounting; and (2) the Operator shall be free of all obligation to prosecute the work other than such as may be necessary and incidental to winding up, reporting, and accounting.

(b) If in the opinion of the Government the Operator is in any manner in default under the terms of the contract, the Government may give the Operator written notice of such default with a specification of reasonable time within which the default must be cured; and if the Operator fails to cure such default as required, thereupon: (1) the Government shall be relieved of all obligation to contribute to costs not incurred when the notice was given, other than such as may be allowable by the provisions of the contract as necessary and incidental to winding up, reporting, and accounting; and (2) the Operator shall be free of all obligation to prosecute the work other than such as may be necessary and incidental to winding up, reporting, and accounting. The remedy provided for the Government in this paragraph "(b)" is in addition to any other remedy provided in this contract, and in addition to any other remedy the law may provide for breach of contract.

(c) The giving of any notice by the Government under the provisions of this Article 10 shall not affect the Government's rights as provided for in the contract with respect to a percentage royalty, and such rights shall be fully preserved.

ARTICLE 11. *Notices to be given by the Government* may be delivered to the Operator, or may be sent by registered mail addressed to the Operator at his mailing address stated in this contract. If mailed, notices are deemed to have been delivered five days after the date of mailing.

ARTICLE 12. *Officials not to benefit.*—No member of or delegate to Congress or resident commissioner shall be admitted to any share or part of this contract or to any benefit that may arise therefrom; but this provision shall not be construed to extend to this contract if made with a corporation for its general benefit.

ARTICLE 13. *Changes and added provisions.*—

(a) To the extent that costs are set forth in Exhibit "A" as "Fixed Unit Costs" they are in lieu of the actual costs that would otherwise be allowable under Article 6 of the contract.

(b) (1) In Article 8(b)(1) substitute the words "date of the Prior Contract (April 16, 1952)" for the words "date of the contract."

(2) In Article 8(b)(2) substitute the words "thirteen years from the date of the Prior Contract (April 16, 1952)," for the words "ten years from the date of the contract."

Executed in sextuplicate the day and year first above written.

THE UNITED STATES OF AMERICA

By O. Mitkendorf
Administrator, Defense Minerals
Exploration Administration

COMET MINES, INCORPORATED
(Operator)

By Paul Gemmill
President

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

Frank H. Anderson
Secretary

[CORPORATE SEAL]

U. S. GOVERNMENT PRINTING OFFICE 16—70617-1

AMENDED
EXPLORATION PROJECT CONTRACT
COMET MINES, INCORPORATED
DOCKET NO. DMEA-2309

ANNEX I

The land referred to in Article 2 of the contract form consists of unpatented mining claims situated in the Comet Mining District, as follows

Elmer No. 1
Burnett
Tungsten
Greenback Nos. 1 through 5

The claims are delineated on a map entitled "Geologic Map of the Comet Area," attached to the Prior Contract and incorporated herein by reference.

AMENDED EXPLORATION PROJECT CONTRACT
COMET MINES, INCORPORATED
DOCKET NO. DMEA-2309

ANNEX II

The parties to this Amended Contract are also parties to a contract dated April 16, 1952, as amended, executed on form MP200 (revised Feb. 1952) having the same contract and docket numbers as this Amended Contract and hereinafter called the "Prior Contract."

Part of the work set forth under the Prior Contract has been completed, and the parties desire that no further work be performed under the Prior Contract; that further work be provided for under this Amended Contract, and that the entire agreement of the parties be restated in this Amended Contract. Work under the Prior Contract has been suspended by agreement since August 14, 1954.

NOW THEREFORE, it is agreed that:

1. Effective as of April 16, 1952, the Prior Contract is superseded by this Amended Contract which shall govern all rights and obligations of both parties, except that vouchers for work performed under the Prior Contract shall be submitted pursuant to and paid under the Prior Contract.

2. The work performed and the money contributed by the Government under the Prior Contract are hereby incorporated into this Amended Contract, and the total amount contributed by the Government under the Prior Contract is repayable under the royalty provisions of this Amended Contract.

3. The Operator hereby releases and agrees to save the Government harmless from all claims and demands under or arising out of the Prior Contract, except as otherwise provided in this Annex II.

4.(a) During the period beginning August 14, 1954, and ending not later than September 1, 1955, work under this Amended Contract shall be suspended.

(b) No costs incurred by the Operator during the period of suspension shall be allowable for contribution by the Government, and the Government shall not contribute to any costs of rehabilitation or repair which, in its opinion, would not have occurred if there had been no suspension of the work.

(c) The Operator at his own cost and expense, without contribution by the Government, during the period of suspension shall preserve and protect the project work and any property in which the Government has an interest.

(d) It is of the essence of this Amended Contract that work be resumed not later than September 1, 1955, and if it is not so resumed in the manner required by the Amended Contract, the following provisions shall thereupon become effective:

(1) The Government shall contribute only to the allowable costs incurred prior to August 14, 1954, and to the costs incurred after September 1, 1955, in winding-up and settlement actions provided for in the contract, including (1) the preservation and disposal of property to the cost of which the Government has contributed, and (2) the making and rendering of reports and accounts.

(2) The Operator shall promptly perform all winding-up and settlement actions provided for in the contract, including (1) the disposal of any facilities, buildings, fixtures, equipment, or other items to the cost of which the Government has contributed; and (2) the rendering of the final report and final account.

(3) The Operator, as principal if the Operator is the producer, or as surety if the Operator is not the producer, shall pay to the Government the royalty on production provided for in the Amended Contract, in the same manner and amount and for the same period as if a certification of discovery or development had been made, such certification being hereby waived.

(4) The Operator hereby releases and agrees to save the Government harmless from all claims and demands under or arising out of said Amended Contract, except as otherwise provided in this Annex II.

5. All salable or salvageable property in which the Government has an interest remaining after the completion of the work performed under the Prior Contract shall be inventoried, and the Government may deduct its share of the cost price of the inventoried items from any money due the Operator. Upon approval by the Government of the inventory, the Government's interest therein shall belong to the Operator.

AMENDED EXPLORATION PROJECT CONTRACT
COMET MINES, INCORPORATED
DOCKET NO. DMEA-2309

EXHIBIT "A"

Description of the work

The work is divided into three stages. Stage I consists of the work performed under the Prior Contract. The Operator shall perform Stage II, and shall perform so much of the work set forth under Stage III as is approved in writing in advance by the Government.

All work shall be timbered as necessary.

The winze and raises shall have timbered manways.

STAGE II

1. From the present face of the drift of the 465 feet level, drift approximately 900 feet northeasterly on the Comet vein to the quartzite-shale contact. The drift is indicated on the attached map entitled, "Comet Mine, Surface Plan and Sections." The drift shall be not less than 5 feet by 7 feet in cross section in the clear of timber.

STAGE III

1. Not to exceed 1,472 feet of drifts and/or crosscuts shall be driven. The drifts and/or crosscuts shall be not less than 5 feet by 7 feet in cross section in the clear of timber.

2. Raise not to exceed an aggregate of 150 feet from the 465 level. The size of the raise or raises shall be not less than 5 feet by 8 feet in cross section in the clear of timber.

3. Sink a winze, not to exceed 150 feet, from the 465 level. The size of the winze shall be not less than 5 feet by 8 feet in the clear of timber.

The location, direction, and extent of the winze, the raise or raises, and the drifts and/or crosscuts shall have prior written approval of the Government.

ESTIMATED COSTS OF PROJECT

STAGE I

Actual costs of work performed under Prior Contract (subject to audit.)	$101,280.00	

FIXED UNIT COSTS OF WORK TO BE PERFORMED UNDER STAGES II & III 1/

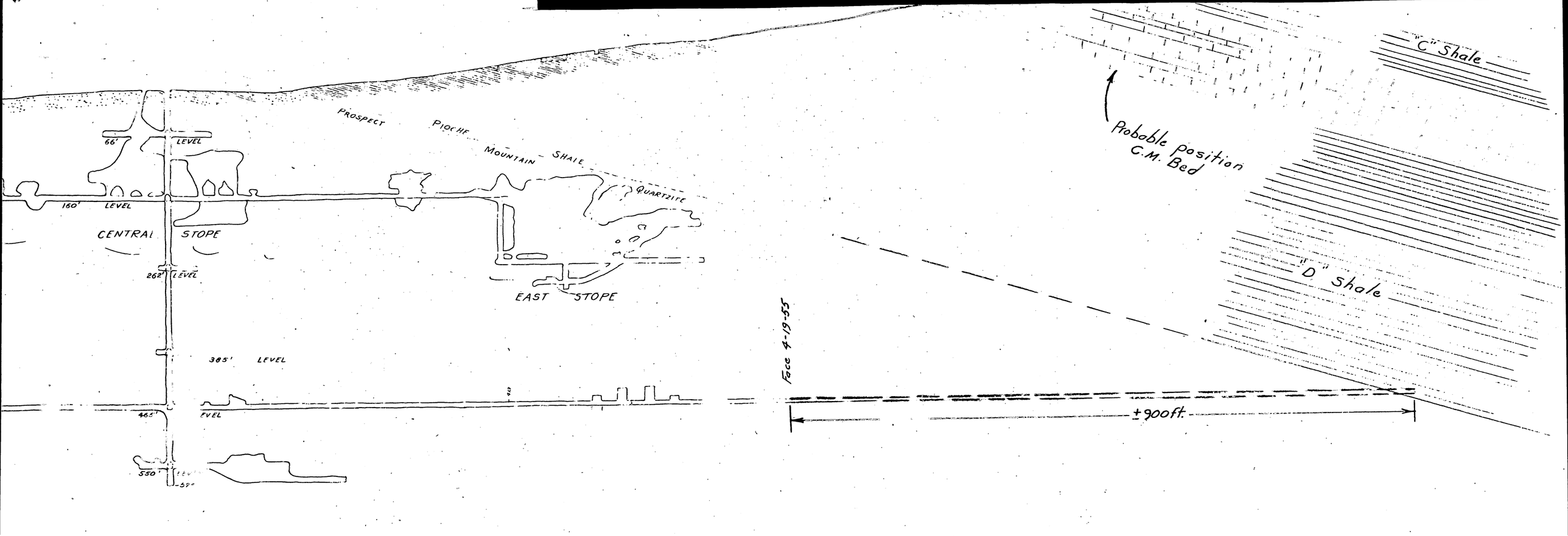
STAGE II

900 feet of drifting @ $30/ft.	$ 27,000.00	
60 samples assayed for lead, zinc, and silver @ $3.50/sample	210.00	
Estimated total costs - Stage II		$ 27,210.00

STAGE III

1,472 feet of drifting and/or crosscutting @ $30/ft.	$ 44,160.00	
150 feet of raising @ $50/ft.	7,500.00	
100 feet of winning @ $95/ft.	9,500.00	
100 samples assayed for lead, zinc and silver @ $3.50/sample	350.00	
Estimated total cost - Stage III		$ 61,510.00
Estimated total cost of project		$190,000.00
Government participation @ 50%		$ 95,000.00

1/ The Government will contribute to the costs of the requirements under Stages II and III on the basis of the "Fixed Unit Costs" set forth above, as they accrue, in lieu of the actual costs otherwise allowable under Article 6 of the Contract form. The unit costs include all costs whatsoever necessary to complete the work.



LONGITUDINAL SECTION A-A
N65° Looking Northerly

Docket No. DMEA-2309

C-1087

Schrader | 12-25-54 | COMBINED METALS REDUCTION CO.
PIOCHE NEV.

COMET MINE
SURFACE PLAN and SECTIONS

SCALE 1"=100'

D-1230

Docket copy

Department of the Interior
Defense Minerals Exploration Administration
RECEIVED
MAY 1 5 1955

EXPLORATION PROJECT CONTRACT
COMET MINES, INCORPORATED
DOCKET NO. DMEA-2309

AMENDMENT NO. 4

It is agreed this 8th day of April, 1955, between the United States of America, acting through the Department of the Interior, Defense Minerals Exploration Administration, and Comet Mines, Incorporated, that Contract Idm-E295 (Docket No. DMEA-2309), dated April 16, 1952, as amended, is further amended, effective April 16, 1952, as follows:

1. (a) Work under the contract shall be suspended during the period beginning August 14, 1954, and ending not later than July 1, 1955.

(b) No costs incurred by the Operator during the period of suspension shall be allowable for contribution by the Government, and the Government shall not contribute to any costs of rehabilitation or repair which, in its opinion, would not have occurred if there had been no suspension of the work.

(c) The Operator at his own cost and expense, without contribution by the Government, during the period of suspension shall preserve and protect the project work and any property in which the Government has an interest.

2. In Article 3 of the contract, the time fixed for completion of the work is further extended from "thirty-two (32) months" to "54 months."

3. Annex I, attached to Amendment No. 2, is cancelled, and Annex II, attached hereto and made a part hereof, is substituted for the royalty provisions of Article 9 of the contract.

4. In Article 10 of the contract, that part of the second sentence beginning with the word "Provided," is deleted.

5. It is of the essence of this contract that work be resumed not later than July 1, 1955; and if it is not

so resumed in the manner required by the contract, the following provisions shall thereupon become effective:

(a) The Government shall contribute only to the allowable costs incurred prior to August 14, 1954, and to the costs incurred after July 1, 1955, in winding-up and settlement actions provided for in the contract, including (1) the preservation and disposal of property to the cost of which the Government has contributed, and (2) the making and rendering of reports and accounts.

(b) The Operator shall promptly perform all winding-up and settlement actions provided for in the contract, including (1) the disposal of any facilities, buildings, fixtures, equipment, or other items to the cost of which the Government has contributed; and (2) the rendering of the final report and final account.

(c) The total net amount contributed by the Government shall be repayable in the form of a percentage royalty on any minerals mined or produced from the land described in Article 2 of the contract, in the manner and amount provided in the contract, for a period of thirteen years from the date of the contract, certification of discovery or development being hereby waived.

(d) The Operator hereby releases and agrees to save the Government harmless from all claims or demands under or arising out of said Contract, except as otherwise provided in this amendment.

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

Executed in sextuplicate the day and year first above written.

THE UNITED STATES OF AMERICA

By O. M. Theodore
Administrator, Defense Minerals
Exploration Administration

Partin
Hoffland
J. All
Reviewed
Chamberlin
Selfridge
Johnson

COMET MINES, INCORPORATED

By Paul Gemmill
President

EXPLORATION PROJECT CONTRACT
COMET MINES, INCORPORATED
DOCKET NO. DMEA-2309

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
MAY 16 1955

ANNEX II

The following provisions are in lieu of Article 9 :

Repayment by Operator.--a. Certification.--If the Government considers that a discovery or development from which production may be made has resulted from the work, the Government, at any time not later than six months after the Operator has rendered the final report and final account, may so certify in writing to the Operator. Such certification shall describe broadly or indicate the nature of the discovery or development.

b. Royalty on production.--The Operator, as principal, if the Operator is the producer, or as surety, if the Operator is not the producer, shall pay to the Government a royalty on all minerals mined or produced from the land,* as follows: (1) regardless of any certification of discovery or development, from the date of the contract until the lapse of the time within which the Government may make such certification, or until the total net amount contributed by the Government without interest is fully repaid, whichever occurs first; or (2) if the Government makes a certification of discovery or development, for a period of ten years* from the date of the contract, or until the total net amount contributed by the Government without interest is fully repaid, whichever occurs first.

c. Basis for computation.--The Government's royalty shall be a percentage of the gross proceeds (including any bonuses, premiums, allowances, or other benefits) from the production sold, in the form sold (ore, concentrates, metal, or equivalent), at the point of delivery (the f.o.b. point); except, that charges of the buyer arising in the regular course of business, and shown as deductions on the buyer's settlement sheets, on account of the cost of treatment processes performed by the buyer, sampling and assaying to determine the value of the production sold, and freight paid by the buyer to a carrier (not the Operator), shall be allowed as deductions in arriving at the "gross proceeds" as that term is used herein. Any costs of treatment processes, sampling or assaying, or transportation, performed or paid by the

* The word "land" refers to the land described in Article 2 of the contract form.

* The period "thirteen years" is substituted for the period "ten years."

Operator or by anyone other than the buyer, are not deductible in arriving at the "gross proceeds" as that term is here used. The term "treatment processes," as here used, means those processes (such as milling, concentrating, smelting, refining, or equivalent) applied to the raw ore or other production after it is extracted from the ground, to put it into a commercially marketable form; excluding fabricating or manufacturing.

d. Unsold production.--If any production (ore, concentrates, metal, or equivalent), after the lapse of six months from the date the ore was extracted from the ground, remains neither sold nor used by the Operator in integrated manufacturing or fabricating operations (for instance, if it is stockpiled), the Government, at its option, as long as it so remains, may require the computation and payment of its royalty on the value of such production in the form (ore, concentrates, metal, or equivalent) it is in when the Government elects to require computation and payment. If any production is used by the Operator in integrated manufacturing or fabricating operations before the Government makes its election, the Government's royalty on such production shall be computed on the value thereof in the form in which and at the time when it is so used. "Value" as here used means what is or would be gross income from mining operations for percentage depletion purposes in Federal income tax determination, or the market value, whichever is greater.

e. Percentages of royalty.--The percentages of the Government's royalty shall be as follows:

> One and one-half ($1\frac{1}{2}$) percent of amounts ("gross proceeds" or "value") not in excess of eight dollars ($8.00) per ton of production in the form in which sold, held, or used, plus one-half ($\frac{1}{2}$) percent for each additional full fifty cents ($0.50) by which such amounts exceed eight dollars ($8.00) per ton, but not in excess of five (5) percent of such amounts.
>
> (For instance: the royalty on an amount of five dollars ($5.00) per ton, would be one and one-half ($1\frac{1}{2}$) percent; on an amount of ten dollars ($10.00) per ton, three and one-half ($3\frac{1}{2}$) percent.)

f. Lien for payment.--To secure the payment of its percentage royalty, there is hereby granted to the Government a lien upon the land or the Operator's interest in the land and upon any production of minerals therefrom, until the royalty claim is extinguished by lapse of time or is fully paid.

g. Notice to purchasers.--The Operator shall give notice of the Government's claim for royalty to any purchaser of the production, and shall authorize and direct such purchaser to pay the royalty directly to the Government and to furnish the Government with copies of the settlement sheets. If the records of any production and sales or other disposition of production, whether the production is by the Operator or by others, are not made available to the Government, the amount of the royalty may be estimated by the Administrator, Defense Minerals Exploration Administration, or his successor, and his estimate thereof shall be final and binding upon the Operator.

h. No obligation to produce.--Nothing in this contract is to be construed as imposing any obligation on the Operator or the Operator's successor in interest to engage in any mining or production operations.

i. Government not obligated to buy.--Nothing in this contract shall be construed as imposing any obligation on the Government to purchase any minerals mined or produced from the land.

Docket Copy

Pentin 8/29/54

COMET MINES, INCORPORATED
EXPLORATION PROJECT CONTRACT IDM-5295
DOCKET NO. DMEA-2309

AMENDMENT NO. 3

It is agreed this 3rd day of August, 1954, between the United States of America, acting through the Department of the Interior, Defense Minerals Exploration Administration, and Comet Mines, Incorporated, that effective as of July 16, 1954, Exploration Project Contract Idm-5295, Docket No. DMEA-2309, dated April 16, 1952, as amended, is further amended as follows:

In Exhibit "A" of the contract, Statement of the Work delete Item 7, reading:

"Drift on vein at 640' level, allowable maximum of 2,100 feet including crosscut from shaft to vein."

and substitute the following:

"Drift on vein at 640' level, allowable maximum of 1,500 feet, including crosscut from shaft to vein."

The 600 feet of drifting thus deducted from work to be done on the 640' level, is to be switched to the 465' level (Amendment No. 1 approved switching the work allowed under Item 6 of Exhibit "A" of the contract from the 385' level to the 465' level) so that by this amendment, Item 1 of Amendment No. 1 is changed to read as follows:

1. Exhibit "A" - Item 6. Drift on vein at 465' level, allowable maximum of 1,700 feet (500 feet southwesterly and 1,200 feet northeasterly) and rehabilitation of present 189 feet of drift to be included as part of the 1,700 feet allowed.

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

Executed in sextuplicate the day and year first above written.

THE UNITED STATES OF AMERICA

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

COMET MINES, INCORPORATED

By Sam S. Arents
Sam S. Arents, President

AMENDMENT NO. 3

Docket No. DMEA-2309 Mineral Lead-Zinc

Exploration Project Contract E-295

Date of Contract April 16, 1952

Date of Amendment August 3, 1954

Operator Comet Mines, Incorporated

JUSTIFICATION

Exploration work under the contract indicates that drifting 600 feet northeasterly on the 465' level will not be sufficient to explore the ground in the area toward which the 465' level is directed and to thoroughly prospect the good exposure of commercial ore encountered in drifting. As it is to the best interest of the Government to have the 465' level extended northeasterly an additional 600 feet, this amendment was drawn switching that footage from that allowed on the 640 level.

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

Docket Copy

EXPLORATION PROJECT CONTRACT
COMET MINES, INCORPORATED
DOCKET NO. DMEA-2309

AMENDMENT NO. 2

It is agreed this 18th day of December, 1953, between the United States of America, acting through the Department of the Interior, Defense Minerals Exploration Administration, and Comet Mines, Incorporated, that effective as of October 13, 1953, Exploration Project Contract Idm-E295, Docket No. DMEA-2309, dated April 16, 1952, as amended, is further amended as follows:

1. In Article 3 of the contract form, the words "twenty (20) months" are deleted, and in their place the words "thirty-two (32) months" are substituted.

2. Article 9 of the contract form is deleted, and in lieu thereof the provisions of Annex I are substituted.

3. Article 10 is amended so that where the word "ten" appears, it is changed to read "eleven."

4. During the period from October 13, 1953, to March 29, 1954,

(a) the project work shall be recessed;

(b) the Government shall not contribute to any costs of operation or maintenance incurred by the Operator; and

(c) the Operator shall save the Government harmless from any and all claims, and preserve and protect the project work and any property in which the Government has an interest.

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

Executed in sextuplicate the day and year first above written.

THE UNITED STATES OF AMERICA

By C O Mittendorf
Administrator, Defense
Minerals Exploration
Administration

COMET MINES, INCORPORATED

By Geo E Beasley, President

ANNEX I

The following provisions are in lieu of Article 9 :

Repayment by Operator.--a. Certification.--If at any time the Government considers that a discovery or development from which production may be made has resulted from the exploration work, the Government, at any time not later than six months after the Operator has rendered the final report and final account, may so certify in writing to the Operator. Such certification shall describe broadly or indicate the nature of the discovery or development.

b. Percentage royalty.--The Operator, or his successor in interest, shall pay to the Government a royalty on all minerals mined or produced from the land described in Article 2,--(1) regardless of any certification of discovery or development, from the date of the contract until the lapse of the time within which the Government may make such certification of discovery or development, or until the total net amount contributed by the Government, without interest, is fully repaid, whichever occurs first, unless the Government waives its right to a royalty; or (2) if the Government makes a certification of discovery or development, for a period of ten* years (or other period fixed by this contract) from the date of the contract, or until the total net amount contributed by the Government, without interest, is fully repaid, whichever occurs first. Said royalty shall be a percentage of the net smelter returns, the net concentrator returns, or other net amounts realized from the sale or other disposition of any such production (including any bonuses), in whatever form disposed of, including ore, concentrates, or metal, as follows:

(a) One and one-half ($1\frac{1}{2}$) per cent of any such net amounts not in excess of eight dollars ($8.00) per ton.

(b) One and one-half ($1\frac{1}{2}$) per cent of any such net amounts, plus one-half ($\frac{1}{2}$) per cent of such net amounts for each additional full fifty cents ($0.50) by which such net amounts exceed eight dollars ($8.00) per ton, but not in excess of five (5) per cent of such net amounts.

(For instance: the percentage royalty on a net amount of five dollars ($5.00) per ton, would be one and one-half ($1\frac{1}{2}$) per cent; on a net amount of ten dollars ($10.00) per ton, three and one-half ($3\frac{1}{2}$) per cent.)

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

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

e. Notice to Purchasers.--The Operator shall notify any purchaser of the production of the Government's royalty interest, and shall authorize and direct the purchaser to pay the royalty directly to the Government and to furnish the Government with copies of the settlement sheets; but failure or refusal by the purchaser to comply shall not relieve the Operator of liability to pay any royalty falling due.

f. No Obligation to Produce.--This article is not to be construed as imposing any obligation on the Operator or the Operator's successor in interest to engage in any mining or production operations.

* The period eleven years is substituted for the period ten years.

49450

AMENDMENT NO. 2

Docket No. DMA-2309 Mineral Lead-Zinc

Exploration Project Contract [illegible]

Date of Contract April 16, 1952

Date of Amendment December 18, 1953

Operator Comet Mines, Inc.

JUSTIFICATION

Work on the project was stopped temporarily on October 15, 1953, due to the continued low price for lead and zinc. Operator requested an extension of the contract of one year and promised to resume operations on March 29, 1954. Amendment grants the operator's wish as it was to the Government's interest to do so.

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

Docket's Copy

Putin
A.G. Stone

COMET MINES, INCORPORATED
CONTRACT Idm-R295
DOCKET No. DMEA-2309

AMENDMENT NO. 1

Contract Idm-R295 (Docket No. DMEA-2309), dated April 16, 1952, between the United States of America, acting through the Department of the Interior, Defense Minerals Exploration Administration, and Comet Mines, Incorporated, is amended as follows, effective April 21, 1955:

1. Exhibit "A" - Item 6. Drift on vein at 465 level, allowable maximum of 1,100 feet, instead of drifting on vein at 385 level, allowable maximum of 1,100 feet, and rehabilitation of present 189 feet of drift to be included as part of the 1,100 feet allowed.

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 April 21, 1955.

UNITED STATES OF AMERICA

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

COMET MINES, INCORPORATED

By Sam S. Arentz
Sam S. Arentz, President

AMENDMENT NO. [illegible]

Docket No. [illegible] Mineral [illegible]

Exploration Project Contract [illegible]

Date of Contract [illegible]

Date of Amendment [illegible]

Operator [illegible]

JUSTIFICATION

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

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

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

Docket No. DMEA-2309
Commodity Lead-Zinc
Idm-E295

DOCKET COPY

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

EXPLORATION PROJECT CONTRACT 1/

It is agreed this 16th day of April, 1952, between the United States of America, acting through the Department of the Interior, Defense Minerals Exploration Administration, hereinafter called the "Government," and 2/ Comet Mines, Incorporated Pioche, Nevada hereinafter called the "Operator," as follows:

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

ARTICLE 2. Operator's property rights. With respect to that certain land situated in the State of Nevada, County of Lincoln, described as follows:

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/ The following unpatented lode mining claims; situated in the Comet Mining District: Elmer No. 1, Burnett, Tungsten, Greenback No. 1, Greenback No. 2, Greenback No. 3, Greenback No. 4, and Greenback No. 5, all as delineated on map attached hereto marked "Geologic Map of the Comet Area".

the Operator represents and undertakes:4/

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

None

(b) [redacted]

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

ARTICLE 3. Exploration project. The Operator, within sixty (60) days from the date of this contract shall commence

3/ Give legal description or enough to identify the property, particularly excluding any land or interest therein to which the Government's lien is not to attach or the production from which is not to be subject to the Government's percentage royalty.

4/ Strike out the provision not applicable.

on a project of exploration for[5] lead and zinc

in or upon the described land; and shall bring the project to completion within a period of twenty (20) months from the date of this contract. The work to be performed is more fully described in Exhibit "A" attached hereto, which, with any maps or drawings thereto attached, are made a part of this contract. The Government will contribute to the cost of this work as hereafter provided.

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

(b) Independent contracts. Any independent contract for the performance of work shall be on a unit-price basis (such as per foot of drilling, per foot of drifting, per hour of bulldozer operations, per cubic yard of material moved), or on some basis that will indicate the amount due for work performed at any stage of the work to be performed

5/ Name of mineral or minerals.

under such independent contract. The Government shall not be nor be considered to be a party to any such independent contract, and the Government's right to terminate the exploration project contract under any of its provisions shall not in any manner be affected by reason of any such independent contract. If the reference in Exhibit "A" to any such independent contract states that the Government's approval thereof is required, the Government may refuse to participate in the cost thereof unless and until it has given its written approval of the independent contract.

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

ARTICLE 5. Estimated costs of the project. A statement of the estimated cost of the project is set forth in Exhibit "A", attached hereto. Except insofar as any item of requirement or the estimated cost thereof set forth in Exhibit "A" is there or elsewhere designated as an "allowable maximum," such items of requirement and of related cost are estimates only, and may be exceeded to the extent that the Government may from time to time approve for the most economic and beneficial performance of the work within the limitation of the total aggregate estimate of costs. The Government's approval of any such excess over the estimate for an item of requirement or related cost will be signified by its approval and payment of any invoice or voucher for payment which expressly calls attention to such excess. Items expressly designated in Exhibit "A" or

elsewhere as "allowable maximum," and the total aggregate estimated cost are limitations, and any excess therein will be for the sole account of the Operator in which the Government will not participate.

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

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

(2) Labor, supervision, consultants. Labor, supervision and technical services (including engineering and geological consultants),

a schedule of which is included in the estimate of costs set forth in Exhibit "A". The requirements and related estimated costs for supervision and technical services are allowable maximums.

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

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

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

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

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

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

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

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

ARTICLE 7. Reports, accounts, audits. (a) Progress reports. The Operator shall provide the Government with monthly reports of work performed and costs (including contract unit prices) incurred under the contract, in quintuplicate (five copies), upon forms provided by the Government. These progress reports shall be certified by the Operator,

and shall constitute both the Operator's invoice of costs incurred on the project during the period covered by the report and his voucher for repayment by the Government, unless the Government requires the use of a standard voucher form with invoice attached. Progress reports shall include surface and/or underground engineering-geological maps or sketches showing the progress of the exploration, with assay-reports on samples taken concurrently with the advance in mineralized ground.

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

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

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

ARTICLE 8. Payments by the Government. (a) The Government will pay 50 per cent of the allowable costs incurred, as they accrue, in an aggregate total amount not in excess of $ 95,000.00, which is 50 per cent of $ 190,000.00, the agreed, estimated total cost of the project in which the Government will participate; Provided, that until the Operator's final report and final accounting have been rendered to the Government, and any final auditing required by the Government has been made, and a final settlement of the contract has been made, the Government may withhold from the last voucher or vouchers such sums as it sees fit not in excess of ten (10) per cent of the maximum total which the Government might have been called upon to pay under the terms of the contract.

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

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

the Operator or his successor in interest shall pay to the Government, upon the net smelter returns, the net concentrator returns, or other net amounts realized from the sale or other disposition of any such production, in whatever form disposed of, including ore, concentrates, or metal, until the total amount contributed by the Government, without interest, is fully repaid, or said ten years have elapsed, whichever occurs first, as follows:

(1) One and one-half ($1\frac{1}{2}$) per cent of any such net amounts not in excess of eight dollars ($8.00) per tons

(2) One and one-half ($1\frac{1}{2}$) per cent of any such net amounts, plus one-half ($\frac{1}{2}$) per cent of such net amounts for each additional full fifty cents ($0.50) by which such net amounts exceed eight dollars ($8.00) per ton, but not in excess of five (5) per cent of such net amounts.

(For instance: the percentage royalty on a net amount of five dollars ($5.00) per ton, would be one and one-half ($1\frac{1}{2}$) per cent; on a net amount of ten dollars ($10.00) per ton, three and one-half ($3\frac{1}{2}$) percent.)

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

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

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

ARTICLE 10. Assignment, transfer, or loss of Operator's interest. Without the written consent of the Government, the Operator shall not assign or otherwise transfer or hypothecate this contract or any rights thereunder. The Operator shall not make any voluntary nor permit any involuntary transfer or conveyance of the Operator's rights in the land described in Article 2, without making suitable provision for the preservation of the Government's right to a percentage royalty on production and lien for the payment thereof; Provided, that mere failure by the Operator to maintain the Operator's rights in the land, without any consideration running to the Operator other than relief from the cost of maintaining such rights (as by surrender of a leasehold, failure to perform assessment work, or failure to exercise an option), coupled with complete abandonment by the Operator of all interest in or operations on the land for a period of ten years from the date of this contract, shall not constitute such a transfer or conveyance. Should the Operator make or permit any transfer or conveyance in violation of this provision, the Operator shall be and remain liable for payment to the Government of the same amounts, at the same times, as would have been paid under the terms of the percentage royalty on production. If for any

reason the net smelter returns, net concentrator returns, or other net amounts realized from the sale or other disposition of such production are not available as a means of measuring the amount of the Operator's liability, the amount thereof shall be estimated as well as may be, and in the event of dispute as to such estimates, the determination thereof by the Administrator of Defense Minerals Exploration Administration or by his successor shall be final and binding upon the Operator.

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

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

ARTICLE 13. Changes and added provisions. _____

Executed in sextuplicate the day and year first above written.

THE UNITED STATES OF AMERICA

Comet Mines, Incorporated
Operator

By Frank E. Johnson
Acting Administrator, Defense
Minerals Exploration Administration
Hefland (form)
Chamberlin

By Sam S. Arentz
Pres., Comet Mines, Incorporated

I, Frank H. Anderson, certify that I am the secretary of the corporation named as operator herein; that Sam S. Arentz who signed this contract on behalf of the operator, was then President and General Manager of said corporation; that said contract was duly signed for and in behalf of said corporation by authority of its governing body, and is within the scope of its corporate powers.

Frank H. Anderson [Corporate Seal]
Secretary

16042

EXPLORATION PROJECT CONTRACT
COMET MINES, INCORPORATED
DOCKET NO. DMPA-2309

EXHIBIT "A"

Statement of the Work

The work consists of the following items:

Item 1. Repair of existing facilities and equipping present vertical shaft with necessary operating facilities.

Item 2. Reaming present vertical shaft to present bottom (168' below collar) to provide 1½ compartments.

Item 3. Extending 1½ compartment vertical shaft from 168' level to 550' level by raising from present winze, 390 feet of raise, allowable maximum.

Item 4. Drive 3 crosscuts from present winze to provide raising stations for vertical shaft. Crosscuts to be at such location to provide access to 385' level and permit use of winze for raising operation, 120 feet of crosscut, allowable maximum.

Item 5. Extend 1½ compartment shaft to proposed 640' level plus sump room, 110 feet of shaft, allowable maximum.

Item 6. Drift on vein at 385' level, allowable maximum of 1,100 feet.

Item 7. Drift on vein at 640' level, allowable maximum of 2,100 feet including crosscut from shaft to vein.

None of the cost required to complete the performance of work stated in Items 1 and 2 above shall be charged to the project as cost to which the Government will contribute. The Government will participate only in the expense of Items 3 to 7, inclusive, as listed, to the extent allowable under the provisions of this contract.

Estimated Costs of the Project

(1) Independent Contracts

None

(2) Labor, Supervision, Consultants

Labor:

2 - Hoistmen	1 - Topman
10 - Miners	1 - Repairman
6 - Muckers	1 - Truck driver
2 - Motormen	2 - Laborers

The above list shall constitute the maximum crew for direct labor on the project. The above labor shall be paid the standard wage scale for the Pioche District as approved by the Wage Stabilization Board and such labor costs shall include fringe payments, shift differentials, employee insurance and payroll taxes as are customarily paid in the District for like work. Where applicable and as practiced in the Pioche District, a unit bonus basis is allowable for computing and paying wages.

On the basis described above, project labor costs are allowable for the work approved to a maximum of $ 90,000.00*

Supervision:

1 - Superintendent (part time) @ $300.00 per month for 18 months	$5,400.00*	
1 - Foreman @ $550.00 per month for 18 months	9,900.00*	15,300.00*

Consultants:

See "Miscellaneous"

(3) Operating Materials and Supplies

Necessary materials and supplies including items of equipment costing less than $50.00 each, and power, freight, and local transportation	64,600.00*

---

* Allowable maximum

(4) Operating Equipment

To be rented:

4 - Drills @ $60.00/mo. for 18 months	$1,080.00	
1 - Mucking machine @ $70.00/mo. for 15 months	1,050.00	
1 - Locomotive @ $100.00/mo. for 15 months	1,500.00	$ 3,630.00*

To be purchased:

None

To be furnished by the Operator:

7 - Mine cars @ $35.00/mo. for 15 months	525.00	
2 - Compressors @ $100.00/mo. for 18 months	1,800.00	2,325.00*

(5) Rehabilitation and Repairs

None

(6) New Buildings, Improvements, Installations

None

(7) Miscellaneous

The direct expense of services required to provide engineering, assaying, repair, maintenance, accounting, warehousing, safety and watchman. The expense of maintaining boarding house and bunkhouse services and facilities.

All or any of the above services may be provided by the Caselton Plant of the Combined Metals Reduction Company, of which the Operator is a subsidiary, and shall be chargeable to the project only on the basis of actual costs apportioned to the satisfaction and approval of the Government. 14,145.00*

Total estimated cost $190,000.00*

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* Allowable maximum

Form MF-103
(Revised June 1951)

UNITED STATES DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS ADMINISTRATION

Budget Bureau No. 42-R1035.1.

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

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

Not To Be Filled in by Applicant

Docket No. Dmea-2309
Metal or Mineral
Date Received 1/2/52
Amount $
Participation (Government %)

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
JAN 2 - 1952

Name and address of applicant

Comet Mines Incorporated

Pioche, Nevada

Date October 24, 1951

If you have already filed MF-100, give date filed ....., type of assistance requested .....,

Previously filed MF 103 April 1951 under name Combined Metals Reduction Company, lessee. This was assigned docket number DMA-1671 X. Combined Metals Reduction Company has since acquired essentially all the stock and proposes to operate property under Comet Mines Inc.

DMA Docket Number (if available) .....

INSTRUCTIONS

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

   (*a*) Rented

   (*b*) Purchased

   (*c*) Furnished by you

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

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

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

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

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

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

CERTIFICATION

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

Comet Mines Incorporated
(Name of company)

By [signature]
(Signature of authorized official)

October 24, 1951
(Date)

President and Manager
(Title)

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

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

COMBINED METALS REDUCTION COMPANY
Pioche, Nevada

APPLICATION FOR AID

COMET MINE EXPLORATION PROJECT FOR TUNGSTEN, LEAD AND ZINC

The following pages answer the questions listed in MF-103, Application for Aid for an Exploration Project, Pursuant to Mineral Order 5, Under Defense Production Act of 1950, as they apply to a proposed exploration project for Tungsten, Lead and Zinc ore in the Comet Mine located in the Comet Mining District, Lincoln County, Nevada.

Detailed supporting data are given in the attached report by Paul Gemmill, Geologist, Combined Metals Reduction Company, and on the accompanying maps.

THE APPLICANT

1. The Combined Metals Reduction Company is a Utah corporation licensed to do business in the State of Nevada.

2. Question does not apply.

3. E. H. Snyder - 218 Felt Building, Salt Lake City, Utah
President and General Manager
Otto Herres - 218 Felt Building, Salt Lake City, Utah
Vice President
W. H. Kelsey - 218 Felt Building, Salt Lake City, Utah
Vice President
C. M. Christensen - 218 Felt Building, Salt Lake City, Utah
Secretary
O. F. Burton - 218 Felt Building, Salt Lake City, Utah
Treasurer
Allan Hoover - 865 Orlando Road, Pasadena, California
Director
Jermiah Milbank, Jr. - 44 Wall Street, New York, New York
Director
George W. Snyder - 218 Felt Building, Salt Lake City, Utah
Director
S. S. Arentz - Pioche, Nevada
General Superintendent - Nevada Operations

4. The Combined Metals Reduction Company has been continously engaged in conducting large scale mining and milling operations for the production of lead and zinc for a period of approximately 30 years.

E. H. Snyder, President and General Manager, is a technical graduate with approximately forty years experience in the successful development and operation of mining and metallurgical operations.

S. S. Arentz, General Superintendent, Nevada Operations, is a technical graduate with approximately twenty years experience in mining and metallurgical engineering and operation, ten years of which has been gained in the Pioche Area.

E. S. McIntyre, Mine Superintendent, Comet Operations, is a technical graduate with approximately ten years experience in mining, engineering and mine operating.

The Combined Metals Reduction Company has a large staff of trained technical and supervisory employees with long experience in mining and metallurgical plants generally, and particularly qualified with reference to problems peculiar to the Pioche area.

5. The Combined Metals Reduction Company holds the Comet Mine property under lease with option to purchase from the Comet Mines Inc., Owner.

6.

7. The property was taken over by the Combined Metals Reduction Company on May 15, 1951 under a lease and option agreement which runs until May 15, 1961 and calls for the payment of a royalty of 10 to 12½% of mill and smelter settlements on all ore shipped from the property. The lease agreement is in good standing. Attached is an agreement subordinating lesser's interest to the interest of the government.

8. See attached financial statement of Combined Metals Reduction Company.

9. The Combined Metals Reduction Company is prepared to invest $53,240.75 in the project which covers the Company's share in the cost of the project based on 75% participation by the government.

THE PROPERTY

10. a) The following unpatented mining claims are included in the property held under lease from the Comet Mines Inc.,:

Jackson	Greenback #1	Tungsten
Jackson #1	Greenback #2	Sparton
Jackson #2	Greenback #3	Viking
Jackson #3	Greenback #4	Gladiator
Minerva	Greenback #5	Trojan
Burnitt	Elmer #1	

The Comet Mine workings are located on the Elmer #1 claim. The workings consist of a vertical shaft to the 160 level and a prospect winze to 575 level. There are several hundred feet of drifts on the Comet fissure and stopes extend to the surface from the 160 level. The mine has been in limited production for the past six years. It is equipped with hoists, compressors and tools. A small mill on the property has been worked from time to time, but the bulk of the production in recent years has been shipped to the Caselton mill of the Combined Metals Reduction Company.

b) The proposed exploration project will be limited to the Elmer "1 and

the Greenback #1 unpatented mining claims located in the Comet Mining District, Lincoln County, Nevada.

11. The property is known as the Comet Mine. It has formerly been known as the Silver Comet and the Tungsten Comet.

12. The property is located about nine miles west and slightly south of Pioche, Nevada, on the west slope of the Highland Range in Section 5-T1SR66E Mt. Diablo Base and Meridian. Its precise location is shown on the Geologic Map of the Pioche District which accompanies Geological Survey Professional Papers #171 and on the accompanying sketch map.

    The property is seventeen miles by road from the Caselton Mill of the Combined Metals Reduction Company and from the shipping point on the Caselton Branch of the Union Pacific Railroad. Eleven miles of this total road distance is over newly constructed State and Federal highway, The remaining five miles is over improved county road. The State highway is scheduled for completion to the Comet Mine during the fiscal year beginning July 1, 1951. This will provide highway connection with the Caselton mill and with the main north-south highway 93 to Ely and Las Vegas, Nevada.

13. Water is supplied from a spring located about one mile north of the property through a pipeline to storage tanks on the property. About 10 GPM is available in all seasons. This is sufficient for mine and camp use, but is not sufficient to operate a mill of large enough capacity to be profitable.

    Estimated power required will be 30,000 KWH per month. This power is available from the Lincoln County Power District whose distribution lines already serve the property, at rates averaging 3/4 cents per KWH.

14. Useable facilities and equipment now on the property and which will be devoted to the proposed exploration project include the following:

    a) Bunkhouse and boarding house.
    b) Power distribution lines and sub-station.
    c) Water distribution lines and storage tanks.
    d) Electric driven compressors, compressor house and receivers.
    e) Hoist house and small repair shop.
    f) Ore bins, cars, and surface track.
    g) Miscellaneous tools and equipment.

    It appears that it will be necessary to replace the present hoist and headframe and to augment the mine equipment by the addition of a mucking machine, skips, and a trammer, and extra drilling machines. All of this equipment is available from the other Company properties and can be furnished for the project on equitable basis.

15. The ore can be trucked from the property to the Caselton Plant of the Combined Metals Reduction Company. Present trucking rates are less than $1.50 per ton, and with scheduled road improvements to be completed this

year, it is anticipated that trucking rates will be reduced to approximately $1.00 per ton.

Sulphide lead-zinc ore can be milled at the Caselton Mill. During the past six years over 13,000 tons of ore from the Comet Mine have been milled at Caselton with good results. The Caselton mill has ample capacity to handle any reasonable tonnage that may be anticipated from Comet Mine operation.

The Combined Metals Reduction Company is planning on the construction of a mill at Caselton to treat tungsten ores from Comet and other properties controlled by the Company, in addition to custom ores from the eastern Nevada area. The Company has already purchased much of the equipment required for the proposed tungsten mill, including all of the milling equipment now at the Comet property.

16. a) The Elmer #1 claim was located in 1906 and the Greenback #1 claim was located in 1913. They were originally owned by the Frudenthal brothers, who were early Pioche mine operators. In 1913 E. D. Smiley purchased the claims and organized the Tungsten Comet Mining Company. In excess of $150,000.00 was spent on developing the property and on constructing a small mill designed to treat the tungsten ores exposed by surface workings.

Lack of water and metallurgical difficulties forced a shut-down of operations.

In 1924 the property was sold to Squires and Gemmill, operators of the Prince Mine at Pioche. They organized the Comet Mines Company. Development was continued and the mill was revised to make recoveries of the lead, silver and gold in the oxide ores. Lack of water and metallurgical difficulties incident to treating oxide ores, plus a drop in the price of metals, again forced a shut-down of operations.

In 1930 the property was taken over by the Prince Consolidated Mining Company and the Comet Mines Company was reorganized as Comet Mines Inc. Some production was had from both company and lease operations during the following years.

In 1941, Mr. D. L. Gemmill acquired the major interest in Comet Mines Inc. from the Prince Company, and proceeded to develop the mine and to revamp the mill. Development on the 160 level to the east was successful in opening up a sulphide ore-body having a strike length of nearly 300' and a width of up to 12 feet. This ore-body was stoped for over 100' below the level and produced about 13,000 tons of good sulphide lead-zinc ore containing an average of 0.5% WO_3. During the past year development has consisted of retimbering the winze, from the 160 level to the bottom at the 480 level, and sinking the shaft on down to the approximate 575 level. A good showing of sulphide ore is now exposed on the 550 level, but the difficulties of mining or developing the lower levels of the mine through the crooked winze are too great to warrant further work until the present vertical shaft to the 160 level is continued to the lower levels.

The following is a summary of past production from the property. No information is available as to production prior to 1924 although it is known that several tungsten shipments were made from the property and some oxide ore was put through the mill.

CONDENSED SUMMARY OF PRODUCTION:

Date	Remarks	Dry Tons	oz Au.	oz Ag.	Settlement Assay % Pb	% Zn	% WO_3
1925-44	Concentrates	113.0	1.74	45.00	9.22	4.02	-
1928-50	Concentrates	31.2					18.0
1927-50	Crude Oxide Ore	1,497.1	0.257	10.35	5.33	-	-
1945-51	Crude Sulphide Ore	13,664.0	0.064	7.00	1.96	9.86	0.5

16. b) The adjoining property extending several miles north and south and about one mile east has been consolidated under the ownership of the Comet Coalition Mines Company. This property is under lease to the Combined Metals Reduction Company. The consolidated property includes the Pan American and Schodde mines to the south and the Log Cabin and Forlorn Hope properties to the north. Early day production of high grade ore was obtained from the Schodde mine and from the Stella fissure workings at the Pan American mine. Exact production figures are not available.

During the period 1929 through 1935 activity in the Comet district resulted in the sinking of a 2300 foot incline shaft at the Pan American Mine, an 800 foot incline shaft at the Log Cabin Mine and a 600 foot vertical shaft at the Forlorn Hope Mine. This development was designed to prospect the Combined Metals limestone horizon at each of these properties. The exploration was successful in developing large tonnages of low grade lead, zinc, silver, and manganese ore, but did not develop ore of sufficiently high grade to warrant mining under the prevailing conditions at that time.

In 1947 the Combined Metals Reduction Company took the Comet Coalition property under lease. Since early 1947 this company has spent approximately $200,000.00 on development, including unwatering the Pan American shaft, driving several thousand feet of development drifts, churn drilling, diamond drilling, road constructions, etc. About 6,000 tons of ore was shipped to the Caselton mill and an estimated 3,000,000 tons of ore has been developed. A crew is currently at work completing necessary preliminary work preparatory to starting large scale mining operations at the Pan American Mine.

The U. S. Bureau of Mines conducted a drilling program on the east extension of the Pan American ore-body and beneath the surface workings of the Schodde Mine during 1947. This program consisted of three deep diamond drill holes. All three holes were successfull in finding ore of a grade similar to that developed by the Pan American mine workings.

At the Caselton Plant of the Combined Metals Reduction Company, about 5 miles east of the Comet Mine, the company operates the Caselton mine

having a daily production of about 700 tons of lead, zinc, silver ore. A modern selective flotation mill having a daily capacity of approximately 1100 tons is operated in conjunction with the mine. The mill treats custom ores from other properties in the area in addition to ores from the Caselton mine. The Caselton Plant is fully equipped with shops, warehouses, and camp facilities and the use of the facilities will be available as required by the proposed Comet exploration project.

16. c) See attached report by Paul Gemmill, geologist, Combined Metals Reduction Company.

17. Comet Mines Inc. has operated the Comet Mine for the production of sulphide lead - zinc ore from early 1945 to May 15, 1951. The Company lacked adequate financing to carry out necessary exploration and development, or to correct the operating difficulties resulting from the crooked winze below the 160 level.

The total mine production during this period has been appreciable both as to tonnage and value, but lack of development has made it impossible to attain a daily production rate that would permit sustained profitable operation.

The average mine value of the sulphide ore produced during the past six years, based on present metal prices and mill schedules, is approximately $22.00 per ton. This does not include any payment for the tungsten content of the ore, as no provision has heretofore been made for its recovery at the Caselton mill.

With the improvements contemplated by the proposed exploration project, it is anticipated that a production rate of 75 tons of ore per day can be obtained and that mining and trucking costs will not exceed $11.00 per ton. Assuming a grade equal to the average of past production, and additional mine earnings from recovered tungsten, the ore will yield a sufficient operating margin to permit continued exploration and development out of mine earnings and a fair return of invested capital. Geologic conditions indicate that such a mining program could continue for many years as long as the existing relation between costs and metal prices continues.

18. a) The mineral deposit consists of a quartz fissure containing galena, sphalerite, wolframite, pyrite, argentite and gold. The fissure is inclosed in Cambrian sediments (Prospect Mountain Quartzite and Pioche Shale), and can be traced on the surface for over 2,000 feet. In the brittle quartzite the fissure is well defined and varies in width from a few inches to over twelve feet. In the overlying shale the fissure contains only a few inches of quartz and is not visible except in prospect pits along the trace of the outcrop. The mine workings are confined to the fissure in the quartzite. The shale and quartzite dip into the mountain range to the east with no major faulting, and it is probable that the fissure will warrant exploration in the quartzite in this direction for some distance beyond the limits of the present exploration project.

The orebodies within the fissure appear to occur in ore shoots raking to the east along the dip of the fissure. On accompanying map #C-1087, longitudinal section A-A shows present and proposed mine workings. The 160 level extends over 1300 feet along the strike of the fissure and crosses four ore shoots having a combined length of 728 feet, or over half the distance developed along the fissure. The ore shoots have been stoped to the surface or to the contact with the overlying shale, and there is good evidence that they continue below the level.

Most of the present mine workings are in the oxide zone with all of the zinc and part of the lead and silver leached out. As the fissure extends into the mountain range to the east, the overlying shale will afford a protective cover for sulphide orebodies, and the winze below the 160 level is entering the sulphide zone in that area of the mine. It is probable that the proposed 640 level will be entirely within the sulphide zone, as is indicated on map #C-1087.

The length of the surface outcrop of the fissure; the type of mineralization and the strength of mineralization; the similarity of the deposit to other deposits within the area which have been followed to depth, all indicate that the Comet Mine overbodies will continue at depth. The favorable quartzite horizon has a known thickness in this area of over 2,000 feet without exposing the bottom of the formation.

A prospect pit has been sunk on the oxidized outcrop of a roughly parallel fissure several hundred feet north of the Comet fissure. A grab sample of the dump from this pit assays 1.4% WO_3, indicating mineralization similar to that found in sections of the Comet fissure outcrop. The topography adjacent to the mine surface workings suggest the possibilities of another parallel fissure a few hundred feet south of the Comet fissure, but surface wash covers any possible outcrops. While this has no direct bearing on the proposed exploration project, it does indicate that the orebodies mined to date are not isolated occurrences, and that the property offers possibilities for the extension of mining to parallel fissures.

18. b) See accompanying maps.

The best available assay data are the records of past production. These records indicate that with further development the mine will yield ore assaying as follows:

	Au	Ag	Pb	Zn	WO_3
Oxide Ore	0.26	10.0	5.3	-	0.3
Sulphide Ore	0.06	7.0	1.9	9.8	0.3

Face samples of ore exposures in present mine workings tend to confirm the estimated averages stated above, which are based on past production records. It should be noted, however, that ore of substantially better grade has been mined from the property, and should metal prices or other factors make it necessary to restrict mining to higher grade ore, it would be possible to do so, although only at a sacrifice of tonnage. The 1946 production averaged .059-Au, 7.42-Ag, 2.59-Pb, 20.71-Zn, 0.5-WO_3, and it is probable that ore of similar grade could be selectively mined in limited amounts.

18. c) Fully developed ore reserves are limited to ore exposures in the faces of underhand stopes below the 160 level and in the face of the 550 level. While it is reasonable to assume that the continuation of present ore shoots will be found on lower levels, such possible ore tonnage would hardly be classed as reserves. As has been mentioned earlier, the property has been operated for a period of six years prior to May 16, 1951, on limited working capital. As a result mining has kept up with development leaving no developed ore reserves.

Possible ore resulting from the proposed development and exploration as estimated by Mr. Gemmill in his accompanying report is as follows:

Oxide Ore	5,000 tons,	- Assays as given above
Sulphide Ore	34,000 tons,	- Assays as given above

It appears probable that the proposed work will develop the tonnage estimated by Mr. Gemmill, and that a considerably greater tonnage will be indicated by the proposed work.

19. The Comet Mine offers attractive possibilities for successful exploration. The mine has an excellent production record considering the limited development work done on the property to date, particularly as most of the development has been done in the oxide zone, where most of the metal content of the ore has been leached out. Practically all of the production has come from stopes above the 160 level and most of the work has been handicapped by lack of adequate transportation or milling facilities. These handicaps are largely removed as the property is now readily accessible by good roads to the excellent milling facilities at Caselton, and the proposed exploration will make two new mine levels available for development and mining.

The fissure is of a type that may reasonably be expected to have both vertical and lateral extension. Geologic conditions at the property are favorable for such extension of present ore bodies and for the development of new ore bodies.

In view of the present shortage of tungsten, lead and zinc, and the favorable prices that now apply on these metals, the property is particularly attractive at this time.

THE EXPLORATION

20. The proposed exploration project is for the purpose of developing orebodies containing tungsten, lead and zinc in the Comet fissure. The project is primarily designed to develop sulphide lead-zinc ore containing tungsten, but will also develop some oxide ores containing tungsten and lead. It is estimated that the project will develop ore having the following metal content:

Gold	2,300 ounces
Silver	289,250 ounces
Lead	933 tons
Zinc	3,352 tons
WO_3	10,200 units

Based on present metal prices and custom mill schedules, this ore would have a settlement value of approximately one million dollars, and a net mine value before royalty, taxes, depletion and depreciation, or over five hundred thousand dollars.

21. The proposed exploration project consists of the following steps listed more-or-less in chronological order:

(a) Drive three forty foot crosscuts from the present winze below the 160 level, at intervals of about 130' along the winze, to points vertically under the present vertical shaft from the surface to the 160 level.

(b) Drive vertical raises connecting the crosscuts with the bottom of the vertical shaft. The raises will total approximately 390 feet in length and will be excavated and timbered to provide a $2\frac{1}{2}$ compartment vertical shaft.

(c) Ream out and retimber the present single compartment vertical shaft from the surface to the 160 level to provide a $2\frac{1}{2}$ compartment shaft. This coupled with the raises, will provide a $2\frac{1}{2}$ compartment shaft to the 550 level, and will make the lower levels of the mine accessible.

(d) Sink the completed $2\frac{1}{2}$ compartment shaft from the 550 level 110 feet to provide sump room below the proposed 640 level.

(e) Excavate and construct loading pockets in the shaft at the 385 and 640 levels.

(f) Drive 500 feet west and 600 feet east along the fissure on the 385 level.

(g) Drive 500 feet west and 1500 feet east along the fissure on the 640 level.

(h) Move steel headframe from the Golden Eagle shaft of the Combined Metals Reduction Company, and set it up at the Comet shaft complete with a surface ore bin. Repair spare Prince hoist and set it on the Comet shaft. Make minor repairs to camp buildings and electrical and mechanical equipment.

Several of the above listed steps can proceed simultaneously. The drifting on the 385 level can be carried out while the shaft is being extended to the 640 level, and the surface repair and hoist and headframe jobs can be carried out with a minimum of delay to underground operations, particularly as the present hoist and headframe can be used for at least the preliminary steps of the work.

Underground equipment including machine drills, mucking machine, cars, mancha trammer, etc., can probably be furnished from equipment now on hand at the company's Caselton or Prince operations at a rental value equivalent to the amortization cost of the equipment.

Total time required to complete the project is estimated at twenty-two months, as outlined in the time and cost schedule set out in answer to question # 24 below. If men are available the schedule may be speeded up by carrying more of the work on a two shift basis.

20. The general geological conditions applying to the property are discussed in the accompanying report by Mr. Gemmill. The factors that lead us to the belief that the project will develop commercial orebodies are outlined in our answer to question # 18 and # 19 above. They may be summarized as follows:

1. The Comet fissure is a strong, well defined fissure carrying appreciable quantities of tungsten, lead and zinc.

2. A substantial production has been obtained from the property with comparatively little development.

3. The ore shoots show strong mineralization in mineable widths. Stopes have been mined for an average of over six feet in width and the east stope shows ore widths of over 12 feet.

4. The type of mineralization and the geologic conditions at the property indicate mineralization continuing in the vein to depth.

5. Most recent work on the property, on the 550 level and in the bottom of the winze at the 575 level, expose good showings of sulphide ore below any previous stopes.

6. The project is designed to explore the fissure below the productive stopes on the 160 level and should find the continuation of these old shoots on two lower levels.

The Requirements and Costs

23. a) A standard wage schedule is attached showing base wage rates in effect for each labor classification under the terms of our union contract. These wage rates are subject to change after July 1, 1951, following pending negotiations with the union, and of course subject to the approval of the Wage Stabilization Board.

To the standard wage scale must be added fringe payments including shift differentials, overtime pay on a standard work week of 48 hours, industrial insurance, payroll taxes, vacation and holiday benefits, health benefits, group life insurance, etc. In the aggregate, these added payments increase labor costs about 25%.

In addition to the above, we have found it desireable to place drifting, raising and shaft sinking on a bonus contract basis which allows men to earn a bonus over base wage rates for over standard production. Such a system has been in successful application at our Caselton operations for over ten years.

The crew contemplated for the proposed project will vary from a starting

minimum of five men consisting of two hoistmen, two miners and one mucker to a maximum of eighteen consisting of two hoistmen, eight miners, five muckers, two motormen, and one topman. Mechanical and electrical maintenance will be provided from the Caselton shop crew and a service truck and crew will be available from Caselton as needed. Timber framing for shaft and raise timber will be handled at the Caselton timber framing shop, and the Caselton construction crew will set up the hoist and headframe and make the minor repairs to surface facilities. This service from the Caselton plant will have the effect of adding an average of two men to the average crew working on the Comet exploration.

On the basis outlined above, project operating labor is estimated to total $92,550.00.

b) At the beginning of the project, one superintendent will be charged half time to the project and half time to company operations now in progress at the neighboring Pan American Mine. After the project is well underway, it will be necessary to add a full time foreman to supervise work on the project.

Salaries including insurance, payroll taxes, vacations, etc., will be as follows:

Superintendent	half time	$280.00 per month-22 months	$ 6,160.00
Foreman	full time	510.00 per month-18 months	9,180.00
			$15,340.00

c) Cost of necessary repairs to existing facilities, structures and buildings are estimated as follows:

1. Repairs to electrical equipment	$ 600.00	
2. Repairs to mechanical equipment	1,000.00	
3. Repairs to buildings	500.00	
Total estimated repairs		$2,100.00

d) Cost of necessary installation or construction of additional facilities, structures, and buildings is estimated as follows:

1. Moving and setting up steel headframe	$ 800.00	
2. Constructing bin at cellar of shaft	780.00	
3. Setting double drum hoist	2,500.00	
Total estimated construction		$4,080.00

e) Cost of items of equipment which must be purchased for operations at a cost of $50.00 or more each, are estimated as follows:

1. Golden Eagle headframe, purchase at Junk velve plus modification	$2,000.00
2. Prince hoist (spare) purchase at Junk valve, plus motor, controller and repairs	3,000.00

3. Two skips for vertical shaft	@	$750.00	$1,500.00
4. Two hoist ropes	@	1,000'	900.00

Total estimated cost of equipment - - - - - - - - - - - - $7,400.00

f) None

g) Rental value of items of equipment now owned and which will be devoted to the work are estimated as follows:

1. 4 Machine drills 22 months - per month - - -	@	$ 15.00	$1,320.00
2. 7 Mine cars 15 months - per month - - -	@	5.00	525.00
3. 1 Mucking machine 15 months - per month - - -	@	70.00	1,050.00
4. 1 Battery trammer 15 months - per month - - -	@	100.00	1,500.00
5. 2 Compressors 22 months - per month - - -	@	50.00	2,200.00

Total estimated rental value of equipment furnished - - $6,595.00

h) Cost of materials and supplies including items of equipment costing less than $50.00 is estimated as follows: - - - - - - - - - $60,140.00

i) Cost of power, transportation and haulage not provided for above is estimated as follows:

1. Average monthly power consumption is estimated at 20,000KWH 22 months - - - - - - - - - - - -	@	3/4¢	$3,300.00
2. Operation, repairs and maintenance of a pickup truck to service operations per month - 22 months - - - - - - - - - - - -	@	$150.00	3,300.00
3. Service and supply truck estimated requirements will average three round trips per week from Caselton to Comet 22 months - per month-	@	150.00	3,300.00

Total estimated cost of service and utilities $9,900.00

j) General expense including engineering, assaying, accounting, warehouse, boarding house, bunkhouse, safety, shop expense, watchman, general supervision, but not including Salt Lake office or corporate expense. Estimated on basis of present cost distribution at Caselton plant at 7½% of direct cost - - - - - - - - - - - - - - - - - - $14,858.00
Total estimated cost of proposed project - - - - - - - - - -$212,963.00

24. The tabulation shown on the attached sheet is a time schedule of the project, stated in terms of months after the project is approved, showing progress expected to be accomplished and money expected to be spent.

Tabulation Showing Estimated Progress and Expense by Monthly Based on 1 Shift Operation

Months	Estimated Progress				Estimated Expense as detailed in Question # 23										
After Approval	Raise Footage	Drifts Crosscuts	Shaft Reaming	Shaft Sinking	A	B	C	D	E	F	G	H	I	J	Total
1	16	40			$ 1,360	$ 280	$ 800	$	$		$ 160	$ 960	$ 450	$ 358	$ 4,368
2	78				2,556	280	500				160	2,340	450	500	6,786
3	56		35		2,556	280	500		2,000		160	2,555	450	700	9,201
4			125		2,556	280	300		3,000		160	3,125	450	700	10,571
5	37	40			2,556	790		2,500	2,400		160	1,590	450	700	11,146
6	78				2,560	790		1,580			160	2,340	450	700	8,580
7	75				2,556	790					160	2,250	450	700	6,906
8	50	140			4,845	790					365	3,150	450	700	10,300
9	35	140		8	4,841	790					365	3,200	450	700	10,346
10		130		34	4,841	790					365	2,580	450	700	9,726
11		130		34	4,841	790					365	2,580	450	700	9,726
12		130		34	4,841	790					365	2,580	450	700	9,726
13		130			4,841	790					365	2,810	450	700	9,956
14		260			5,200	790					365	3,120	450	700	10,625
15		260			5,200	790					365	3,120	450	700	10,625
16		260			5,200	790					365	3,120	450	700	10,625
17		260			5,200	790					365	3,120	450	700	10,625
18		260			5,200	790					365	3,120	450	700	10,625
19		260			5,200	790					365	3,120	450	700	10,625
20		260			5,200	790					365	3,120	450	700	10,625
21		260			5,200	790					365	3,120	450	700	10,625
22		260			5,200	790					365	3,120	450	700	10,625
Total	460	3,220	160	110	$92,550	$15,340	$2,100	$4,080	$7,400		$6,595	$60,140	$9,900	$14,848	$212,963

Certification

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

_____
(Name of company)

By [illegible]
(Signature of authorized official)

_____
(Date)

_____
(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.

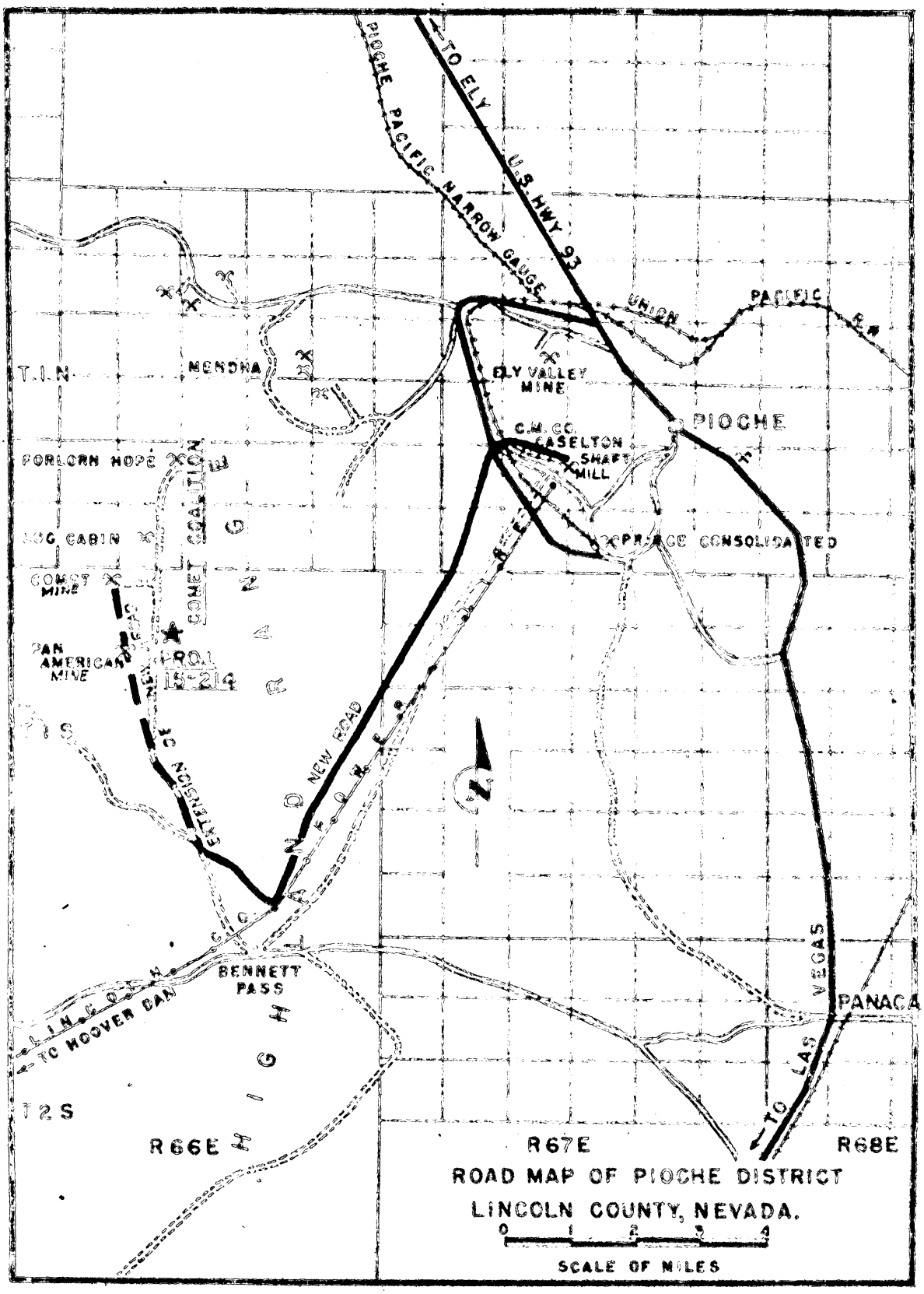

Figure 1. - Road map of Pioche district, Lincoln County, Nev.

COMBINED METALS REDUCTION CO.

INTER-OFFICE CORRESPONDENCE

Subject Comet Mine Exploration

Date May 29, 1951

To Mr. S. S. Arentz, General Superintendent

From Paul Gemmill

Dear Sam,

Herewith is my "Report on Proposed Exploration for the Comet Mine."

During 1933 I shipped some of the oxidized ore from this mine and became familiar with the nature of ore occurrence. Since that time I have followed operations by occasional visits to the property.

Until sulphide ore was located it would have been difficult to make a reliable forecast as to the future of the property but operations in the east stope and in the bottom levels of the winze give us a sort of "yardstick" for estimating exploration possibilities.

The calculated risk shows that this project is thoroughly justified and I particularly draw your attention to the heading at the end of the report entitled "Future of the Mine" showing the healthy exploration outlook if this project is successful.

Sincerely,

Paul Gemmill

Paul Gemmill
Geologist

PG:JEM

REPORT ON PROPOSED EXPLORATION OF THE COMET MINE

Combined Metals Reduction Co.
Pioche, Nevada

Summary

Exploration work is proposed for the Comet mine to find ore bodies in both the oxidized and the sulphide zones of the Comet fissure. The tonnage and grade of possible ore that may be developed by this exploration work has been estimated on the basis of past production and is summarized as follows:

Objectives	Dry Tons	Oz Au	Oz Ag	% Pb	% Zn	% WO_3
Oxidized Ore	5,000	.0257	10.25	5.33		0.3
Sulphide Ore	34,000	.064	7.00	1.96	9.86	0.3
Total	39,000	(Ores do not mix.)				

Metal contained in this ore would be as follows:

Gold	2,299.5 Oz
Silver	289,250. Oz
Lead	932.9 Tons
Zinc	3,352.4 Tons
Tungsten Trioxide	10,200. Units

Gross mine value of this ore is estimated at $976,000, or an average of $25.03 per ton on current market prices of 17 cents/lb. for lead, 17.5 cents/lb. for zinc and $63.00 per short ton unit of tungsten trioxide, and on current custom mill schedules at the Caselton mill.

Operating costs, based on production rate of 75 tons per day, are estimated at $10.00 per ton, leaving an operating margin of $15.03 per ton or $586,000 operating margin on the estimated possible ore.

The proposed exploration work is shown on the accompanying map C-1087 and is summarized as follows:

1. Drive 390' of $2\frac{1}{2}$ compartment, timbered, vertical raise.
2. Drive 3,220' of drifts and crosscuts.
3. Ream out 160' of present single compartment vertical shaft and retimber for $2\frac{1}{2}$ compartments.
4. Sink 110' of $2\frac{1}{2}$ compartment shaft.
5. Raise two shaft pockets.
6. Make necessary repairs to existing facilities and purchase or construct a headframe and shaft hoist.

The total estimated cost of the proposed project is $212,963.00.

From the results of previous exploration on the Comet fissure, it appears probable that the proposed project has at least one chance in two of achieving the estimated results. Should the project be successful, it will result in a self-sustaining mining operation that will ultimately produce several times the ore tonnage forecast for the project

Description and Geology of the Comet Mine

The Comet mine is briefly described in U. S. G. S. Professional Paper #171 to which referrence is made for the geology of the district. The attached print from a Bureau of Mines road map shows the location of the mine with respect to highways towns and other mines in the area. Drawing C-1087, in the map pocket, shows the surface plan and section of mine workings on the Comet Vein.

The surface cropping of the Comet Vein bears N65°E and dips steeply to the north. On downward extension, the dip reverses for some distance and becomes almost vertical. The vein is a quartz-filled fissure outcropping in Prospect Mountain (Cambrian) quartzite for about 700 feet. The eastward extension of the fissure in Pioche Shale, which overlies the quartzite, can be traced over 1500 feet but contains only a few inches of vein filling and is not visible except in prospect pits. To the west, the fissure-vein is covered by alluvium and is probably cut within 300 feet west of the No. 1 shaft by a major north-south fault dipping west which can be traced several miles along the base of the Highland Range.

The vein varies in width from a mere stringer to over 12 feet. The best ore has occurred where the vein is widest and the average width of sulphide ore stopes is 6.25 feet.

The fissure was caused by nearly horizontal fault movement. This is demonstrated by striations on the fissure walls and by transverse movement along bedding planes. This type movement has caused abrupt steps in the fissure walls with consequent widening or narrowing of the vein. Evidence accumulated here and elsewhere in the Pioche district demonstrates quite conclusively that this type movement was common before the principal periods of normal faulting and took place before the Cambrian sediments had been tilted.

Weakness of the fissure in Pioche shale is due to the change in wall rock from brittle quartzite to more plastic shale. The vein should maintain its strength east of the mine workings farther than it can be traced on surface as long as exploration is confined to the quartzite.

Some angular fragments of quartzite and shale are noted in the vein filling and show that brecciation accompanied fault movement. All stages of replacement of the breccia fragments may be noted. Shale fragments have been observed to be less amenable to replacement than the glassy quartzite fragments.

A few feet of vertical displacement is noted across the fissure which is interpreted to represent normal faulting that probably occurred during the vein formation, opening the fissure in preparation for quartz filling and replacement.

Introduction of the heavy sulphide mineralization was preceeded by brecciation of the earlier vein quartz. This fact, together with other

evidence, demonstrates that there have been at least two stages of fissure filling; the first stage being low grade to almost barren quartz; and the second stage being quartz with relatively abundant lead and zinc sulphides. Tungsten and gold-silver values without the heavy sulphide mineralization, as mined in the central stopes above the 160 ft. level, probably occurred as part of the earlier stage vein filling. This type mineralization overlaps into the areas later filled and replaced by the heavier sulphides.

Frequently the vein is "frozen" to the walls and shows replacement of the wall rock by quartz and sulphides. No appreciable brecciation or fracturing, either on the vein or on the minor cross fractures appears to be post mineral.

Primary ore minerals are sphalerite, galena, pyrite, wolframite, argentite and gold in a gangue of quartz. Minor copper valves probably occur as chalcopyrite.

In the process of oxidation, zinc has almost wholly dissappeared because of the lack of limestone or other suitable precipitant. Galena remains with oxidized lead minerals anglesite and cerussite in some places where all the sphalerite has been oxidized and leached away. Plumbojarosite (basic sulphate or iron and lead) is common in the oxidized ore, and usually carries good silver valves.

The silver has migrated to some extent in the oxidized portion of the vein and some enrichment is usually found where the change from oxidized ore to sulphide ore takes place. Better than average silver assays are common in the upper 5' to 10' of sulphide ore just under the zone of oxidation in the east part of the mine where sulphide ore has been stoped above the 160' level. In the central portion of the mine, sulphide ore first shows just above the 465 ft. level.

The estimated division of oxidized and sulphide ore areas in the vein is shown on the accompanying map.

Production:

Prior to the time sulphide ore production started, the mine was started several times and closed down. There is no record of production by E. D. Smiley prior to 1925, but it is known that some lead-silver ore was shipped and the mill was operated for a short while producing tungsten concentrates.

Since 1925 fairly complete records have been kept and the following tabulation shows a summary of the record of production:

Summary of Production

Date	Remarks	Dry Tons	Oz Au	Oz Ag	% Pb	% Zn	% WO_3
1925-44	Concentrates	113.0	1.74	45.0	9.22	4.02	
1928-50	Concentrates	31.2					18.0
1927	Crude Ore (Oxide)	29.6	0.47	21.4	14.7	0.5	

1933-34	Crude Ore (Oxide)	285.4	0.247	13.2	12.9	0.5
1940-41	Crude Ore ()xide)	971.2	0.251	7.3	1.8	
1944-50	Crude Ore (Oxide)	211.0	0.268	19.1	9.8	
1945	Crude Ore (Sulphide)	269.5	0.04	7.01	3.53	15.92
1946	Crude Ore (Sulphide)	1,671.0	0.059	7.42	2.59	20.71
1947	Crude Ore (Sulphide)	1,986.3	0.111	10.01	2.95	6.01
1948	Crude Ore (Sulphide)	5,040.0	0.052	7.48	1.87	9.79
1949	Crude Ore (Sulphide)	3,595.5	0.058	5.72	1.10	7.00
1950	Crude Ore (Sulphide)	608.4	0.075	3.45	2.43	10.02
1951 Thru March	Crude Ore(Sulphide)	492.4	0.050	2.26	1.60	6.33

Lead concentrates carried between 5% and 10% WO_3 but were not assayed for tungsten, as at the time these concentrates were made there was no attempt to save tungsten. Likewise the tungsten concentrates were high in lead-silver values. The crude ore shipments also carried tungsten but were not assayed for tungsten except that occasional pulps of sulphide shipments to the Caselton mill were assayed and found to average about 0.5% WO_3.

Since concentrates, oxide ore and sulphide ore would not average together to show a typical type of ore, the following condensed summary is presented:

Condensed Summary of Production

Date	Remarks	Oz Au	Oz Ag	% Pb	% Zn	% WO_3	
1925-44	Concentrates	113.0	1.74	45.0	9.22	4.02	
1928-50	Concentrates	31.2					18.0
1927-50	Crude Oxide Ore	1,497.1	0.257	10.35	5.33		
1945-51	Crude Sulphide Ore*	13,664.0	0.064	7.00	1.96	9.86	0.5

*Settlement assay on lead and zinc does not include non-sulphide lead and zinc contained. Tungsten values estimated from occasional pulp assays but tungsten was not paid for.

In addition to the above production, several truck loads of 2% to 4% tungsten ore were hauled to the Minerals Research Co., Glendale, California of which we have no record. This was during 1941.

Exploration Objective and Anticipated Ore

On section B-B' of drawing C 1087, it will be noted that the vertical shaft extends only to the 160 ft. level and the winze below that point is crooked. This winze is small and inadequate for economic operation. Therefore, the first work proposed involves raising from the winze levels, enlarging the present vertical shaft and sinking the shaft thus provided another 110 feet.

On the longitudinal section it will be noted that exploration is proposed to develop both oxide and sulphide ore. On the average, oxide ore should run higher in tungsten than sulphide ore due to oxidation and removal of zinc sulphide, however, reports of smapling in the oxidized areas gave an average of 0.3% WO_3 and pulps assayed on sulphide ore from the east stope ran 0.5% WO_3. More recent

sulphide ore shipments from the 550 level show about 0.1%. Therefore, the average grade used for both oxide and sulphide ore is 0.3% WO_3.

It should be noted that the west oxide stope area was originally the same type ore, heavy in sulphide zinc and lead, as the east stope. On oxidation, the areas assaying highest in zinc leave a porous silica boxwork that may be likened to corn flakes. Commonly this material weighs less than 25 lbs. per cubic foot.

In estimating the amount of ore that proposed exploration should encounter, it is simply assumed that past production will be repeated for equivalent areas of the fissure. No structural or mineralogical changes are known to indicate a change in the proportion of total fissure area that will be commercial ore.

Estimated Oxidized Ore and Operating Margin:

Production of oxidized ore since 1924 amounted to 1497 tons of crude ore shipments plus 144.2 tons of concentrates. Recoveries in concentrate were poor compared to what present day milling could do and we have no records showing what the mill heads assayed. For estimating purposes, it is assumed that each ton of concentrate represented ten tons of ore. Total production of oxidized ore would include a considerable amount of material that was sorted out from crude ore production before shipping to the smelter. The major part of oxide ore tonnage shipped (1940-41 production) was not sorted. For estimating purposes, it is assumed that the material sorted out would be milled but would break even on costs. Pre-1924 production is estimated at 2500 tons from the size of openings. It is further estimated that this 2500 tons would have yielded 2,000 tons of ore after partial sorting to the average grade crude oxide ore.

From the above data, total past production of oxidized ore with assay values equivalent to crude oxide ore production from 1927 to 1950 is estimated as follows:

Indicated from concentrates	
10 x 144.2 tons	1442 tons
Crude Oxide Ore, 1927-1950	1497 tons
Pre-1924 production	2000 tons
Total	4939 tons

In the area to be developed below the 160 ft. level, there remains slightly more than the area from which the above estimated production was mined. Therefore, total oxide ore to be developed is assumed to be 5,000 tons with the 1927-1950 weighted assay and 0.3% WO_3, or:

	% Au	% Ag	% Pb	% Zn	% WO_3
5,000 tons	0.257	10.25	5.33		0.3

Mine value of this ore on 17¢ lead, $63.00 WO_3 prices is calculated on the following approximate basis:

Metal Payment:

Gold	@	0.16/oz (16)	$ 4.11
Silver	@	0.63/oz	6.52?
Lead	@	$ 1.80/Unit	9.59
Tungsten	@	35.00/Unit	10.50
			$30.72

Treatment:

This is estimated at $5.00/Ton for flotation of gold, silver, and lead. Tailings will go to the Tungsten plant and treatment is estimated at $5.00 per ton on tailings from the first float, or $4.25 per ton of crude ore.

Total treatment $5.00 plus $4.25	$ 9.25
Mill Payment	21.47
Transportation	1.00
Mine Value	20.47
Estimated Mining Cost	10.00
Operating Margin	$10.47

Total operating margin on 5,000 tons of oxide ore at $10.47 - $52,350

Estimated Sulphide Ore and Operating Margin:

Ore faces now exposed on the 550 level are expected to continue some distance. A face of ore shows in the east half of the 550 level stope going up and all the bottom of this stope is mill ore going down with widths up to 8 feet. The last round in the winze was taken for ore and the face is reported to be in good ore.

In both the east stope on and below the 160' level and in the 550 level stope, bands and channels of oxidation extended into and through the sulphide ore. This oxidation removed probably 20% or more of the original volume of good zinc ore. Therefore the vein should be at least 20% more productive in sulphide ore as development progresses east under greater thickness of the protective shale capping.

By comparison of areas and disregarding the probable benefit from decrease in amount of oxidation, the sulphide area to be developed by the 385 level east drive and the 640 level work should expose for development and mining at least $2\frac{1}{2}$ times the total past production of sulphide ore. The total sulphide ore to be developed is therefore assumed to be as follows:

	Settlement Assay				
	Oz Au	Oz Ag	% Pb	% Zn	% WO_3
34,000 Tons	.064	7.00	1.96	9.86	0.3*

*Average of past production from pulp samples was 0.5% WO_3, but latest shipments from the 550 level assayed 0.1% so assumed future average is taken as 0.3% WO_3.

The mine value of this ore on 17¢ lead, $17\frac{1}{2}$¢ zinc and $63.00 WO_3

prices is calculated on the following approximate basis:

Metal Payment:

Gold	@	0.16/oz	$ 1.02
Silver	@	0.63/oz	4.40
Lead	@	$ 1.69/Unit	3.31
Zinc	@	1.56/Unit	15.38
Tungsten	@	35.00/Unit	10.50
			$34.61

Treatment:

Based on $3.90 rate for sulphide ore flotation of gold, silver, lead and zinc. Tailings will go to the tungsten plant where treatment is estimated at $5.00 per ton ore tails from the first float, or $4.00 per ton of crude ore.

Total treatment $3.90 plus $4.00	$ 7.90
Mill Payment	26.71
Transportation	1.00
Mine Value	25.71
Estimated Mining Cost	10.00
Operating Margin	$15.71

Total operating margin on 34,000 tons of Sulphide ore at $15.71 - $534,140

Cost Estimate:

A cost estimate has been prepared by Mr. S. S. Arentz, general superintendent of Pioche operation, covering the proposed work involved in this project. The details of his estimate are presented in "Application for Aid for an Exploration Project Persuant to Mineral Order 5, Under Defense Production Act of 1950." The summary for computation of the risk involved in this project is presented above under "Summary."

Future of the Mine:

Assuming that the anticipated results are obtained from this exploration project, it is almost a certainty that the mine will be in position to continue profitable operation for many years, even on much lower metal prices. The sulphide ore zone is, of course, much more productive that the oxidized zone and additional depth should be all in the unoxidized zone below the 2,000 feet of strike length to be explored on the 640 ft. level.

By applying the same ratio of ore production to fissure area used in estimating possible ore above the 640 ft. level, the next 250 feet of depth below that level for a strike length of 2,000 feet would produce 38,600 tons of ore with an operating margin of over $600,000. on present metal prices. With the mine in operation, Mr. Arentz estimates that the 250 feet of shaft sinking and 2,000 feet of drifting would cost not to exceed $100,000. On this basis, the ratio of exploration cost to operating margin would be in the order of six to one.

Respectifully submitted,

Paul Gemmill

Paul Gemmill
Geologist

COMBINED METALS REDUCTION COMPANY
CONDENSED BALANCE SHEET
MARCH 31, 1951

A S S E T S

CURRENT ASSETS	Total	Compared with Previous Month: Increase	Compared with Previous Month: Decrease
111 Cash	1,149,151.03	232,263.62	
112 Notes Receivable	204,444.59	248.03	
113 Accounts Receivable	1,020,643.84		82,968.46
115 Crude Ore & Concts.	710,739.64		18,806.14
116 Material & Supplies	632,652.47	15,762.24	
117 Advances & Deposits	12,935.50		
118 Working Funds	897.70	72.70	
119 Contract Bonus	(225.44)		764.67
Total Current Assets	3,731,239.33	145,807.32	
OTHER ASSETS			
123 Long Term Investments	142,458.57		2,608.52
170 Accounts Rec. Deferred	33,102.37		
Total Other Assets	175,560.94		2,608.52
FIXED ASSETS			
131 Mining Property	3,858,208.01	810.00	
132 Buildings	1,084,534.75	2,761.37	
133 Machinery & Equipment	3,072,546.35		
134 Autos and Trucks	49,030.59		
135 Furniture and Fixtures	28,616.46	259.98	
136 Real Estate	19,114.79		
Total	8,112,050.95	3,831.35	
Less Reserves (see details)	5,983,416.46	856.50	
Net Fixed Assets	2,128,634.49	2,974.85	
INTANGIBLE ASSETS			
140 Patents & Process Development	962,039.18		
Less Reserves	940,590.13		
Net Intangible Assets	21,449.05		
DEFERRED CHARGES			
150 Prepaid Royalty	27,425.93		339.86
160 Deferred Charges	283,469.41	75,854.69	
161 Prepaid Insurance	48,938.37		1,280.62
Total Deferred Charges	359,833.71	74,234.21	
TOTAL ASSETS	6,416,717.52	220,407.86	

L I A B I L I T I E S

CURRENT LIABILITIES	Total	Compared with Previous Month: Increase	Compared with Previous Month: Decrease
212 Accounts Payable	580,552.53	221,569.05	
213 Accrued Liabilities	466,563.19		97,031.79
Total Current Liab.	1,047,115.72	124,537.26	
OTHER LIABILITIES AND CAPITAL			
214 Lease Accounts	13,642.67		75.64
220 Wage Reserve	62,064.36	3,435.09	
250 Long Term Options	66,717.94		1.38
260 Bonds Unmatured	990,000.00		
262 Provision for metal price Variations	397,149.89		64,273.01
280 Capital Stock	436,955.88		
293 Surplus - Capital	1,800.00		
294 Surplus - Earned	2,919,872.43	27,901.95	
291 Current P. & L.	481,398.63	128,883.59	
TOTAL LIABILITIES & CAPITAL	6,416,717.52	220,407.86	

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 May 29, 1951, between Combined Metals Reduction Company, a corporation of Utah, the Lessee of said property, and the United States of America;

NOW, THEREFORE, the undersigned, as Lessor of said property under lease dated May 15, 1951, does by these presents subordinate all of his right, title, and interest under the provisions of said lease to the right, title, and interest of the United States of America under the provisions of said Exploration Project Contract, and agrees that the lien and claim of the United States of America under the provisions of said contract shall be prior to the undersigned's rights to rentals or royalties under the terms of said lease; and

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

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

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

Dated this 29 day of May, 1951, by its officers thereunto duly authorized by resolution this day adopted uninamously by its Board of Directors.

COMET MINES, INCORPORATED,

President

ATTEST:

Secretary

U. S. GOVERNMENT PRINTING OFFICE 940708

WAGE SCALE

NEW STANDARD WAGE SCHEDULE EFFECTIVE NOVEMBER 20, 1950 UNDER CONTRACT WITH LOCAL UNION C.I.O. NO. 4262, UNITED STEEL WORKERS OF AMERICA.

JOB CLASS	JOB TITLE	WAGE RATE PER HOUR	WAGE RATE PER SHIFT
2	Surface Labor (Mine)	$ 1.345	$10.76
2	Engineering Labor	1.345	10.76
2	Laborer (Shop)	1.345	10.76
2	Labor (Construction)	1.345	10.76
2	Crusher Laborer	1.345	10.76
2	Mill Laborer	1.345	10.76
3	Compressor Operator	1.3725	10.98
4	Car Dumper	1.40	11.20
4	Tool Keeper	1.40	11.20
5	Raise Cager	1.4275	11.42
6	Sawer Helper	1.4550	11.64
6	Churn Drill Helper	1.455	11.64
6	Car Loader	1.455	11.64
6	Conveyor Feeder	1.455	11.64
6	Bulkheader	1.455	11.64
6	Helper (Maintenance)	1.455	11.64
6	oiler (Surface	1.455	11.64
6	Picker	1.455	11.64
6	Filter Operator	1.455	11.64
7	Mucker	1.4825	11.86
7	Swamper	1.4825	11.86
7	Sanitation	1.4825	11.86
7	Topmen	1.4825	11.86
7	Diamond Drill Helper	1.4825	11.86
7	Light Truck Driver	1.4825	11.86
7	Oiler (Underground)	1.4825	11.86
7	Carpenter Helper	1.4825	11.86
7	Flotation Helper	1.4825	11.86
7	Sampler	1.4825	11.86
8	Slusherman	1.51	12.08
8	Pumpman	1.51	12.08
8	Ore Pusher	1.51	12.08
9	Powderman	1.5375	12.30
9	Hoistman (Underground)	1.5375	12.30
9	Truck-Grader Operator	1.5375	12.30
10	Sub-Level Motorman	1.565	12.52
10	Crushing Plant Operator	1.565	12.52
11	Motorman	1.5925	12.74
11	Pipe Track Man	1.5925	12.74
12	Maintenance Mechanic (Starter)	1.620	12.96

JOB CLASS	JOB TITLE	WAGE RATE PER HOUR	WAGE RATE PER SHIFT
12	Machinist (Starter)	$ 1.620	$ 12.96
12	Electrician Repairman (Starter)	1.620	12.96
12	Mine Blacksmith	1.620	12.96
12	Drill Doctor	1.620	12.96
12	Carpenter Mill (Starter)	1.620	12.96
12	Cat-Bulldozer	1.620	12.96
13	Sawer	1.6475	13.18
13	Cager-Skiptender	1.6475	13.18
13	Flotation Operator	1.6475	13.18
14	Miner	1.675	13.40
14	Diamond Driller	1.675	13.40
14	Churn Driller	1.675	13.40
14	Maint. Mechanic - Intermediate	1.675	13.40
14	Auto Mechanic	1.675	13.40
14	Machinist - Intermediate	1.675	13.40
14	Electrician Repairman - Intermediate	1.675	13.40
14	Hoistman - Double Drum	1.675	13.40
14	Trouble Shooter	1.675	13.40
14	Carpenter - Mill Intermediate	1.675	13.40
14	Reagent Plant Operator	1.675	13.40
15	Timberman	1.7025	13.62
15	Maintenance Repairman	1.7025	13.62
16	Maintenance Mechanic	1.73	13.84
16	Machinist	1.73	13.84
16	Electrician - Repairman	1.73	13.84
16	Carpenter Millwright	1.73	13.84

In addition to the above wage rates, the following costs are included in the calculations of labor costs on these reports:

(a) Shift Differential (b) Shaft Money (If Applicable)

(c) Overtime Average (d) Holiday Pay

(e) Payroll Taxes

COMET MINES, INC.
Sulphide Ore Shipped to Combined Metals
Reduction Company.

Lot. No.	Dry Tons Sulphide Ore	Net Mill Returns	ASSAYS: Ounces Au	Ounces Ag.	% Lead	% Zinc	% Cu
No. 3 East Stope Shipments:							
1-2	99.199	1,327.62	.0325	6.635	3.275	21.58	.35
3	59.296	540.39	.035	6.95	4.25	13.91	.255
4	57.419	508.44	.0625	7.615	4.67	11.735	.27
5	53.622	398.56	.045	7.1	2.	12.17	.55
6	56.895	836.89	.0375	7.455	3.15	21.17	.715
7	57.748	303.11	.045	4.175	2.1	10.87	.43
8	49.841	243.97	.026	6.115	2.05	9.365	.4
9	55.816	398.06	.0850	6.675	2.2	10.9	.325
10	58.054	1,106.62	.058	10.935	3.3	26.52	.575
11-12	126.561	2,688.59	.0535	10.48	1.75	31.43	.655
13	61.789	1,249.53	.041	7.845	2.775	34.32	.515
14-15	123.478	2,282.72	.041	8.25	2.35	31.17	.56
16	59.969	900.74	.065	7.72	2.8	23.815	.45
Correction on Freight		186.86					
17-18	117.161	1,900.96	.035	9.52	3.325	23.775	.435
19	62.368	1,113.40	.09	7.56	4.5	18.74	.38
20	56.776	847.88	.08	7.785	4.05	19.3	.405
21	60.208	801.51	.045	7.675	3.05	18.505	.4
22	56.836	728.16	.0625	6.015	2.87	19.35	.385
23-24	118.739	1,232.22	.05	4.78	1.6	17.85	.365
25-26	115.998	1,407.12	.05	5.835	2.	19.535	.38
27-28	124.319	1,500.62	.0375	4.265	2.6	20.885	.39
29	65.426	816.94	.045	4.415	2.17	19.575	.41
30	59.127	690.89	.05	4.745	2.5	16.51	.355
Correction on Freight		229.72					
31-32	118.448	1,902.39	.14	9.985	2.475	13.01	.43
33	66.362	949.11	.095	10.035	2.775	11.385	.265

Sulphide Ore Shipped C. . . R. Co. by Comet Mines, Inc.

Lot No.	Dry Tons Sulphide Ore	Net Mill Returns	ASSAYS: Oz. Au	Oz. Ag.	%Pb	%Zn	%Cu
34-35	106.314	1,197.23	.06	5.915	3.575	10.6	.35
36-37	119.957	1,812.52	.11	10.84	5.2	7.85	.375
38	61.783	1,017.51	.12	10.985	5.275	9.35	.455
39-40	107.758	2,194.35	.18	16.25	5.75	9.59	.56
41-42	122.278	1,325.58	.096	9.605	2.975	5.67	.34
43	51.213	552.88	.1635	11.91	3.15	1.575	.53
44	52.419	464.66	.16	11.075	2.35	1.25	.4
45-48	215.18	2,996.11	.172	13.33	4.	3.14	.455
49	63.033	962.13	.22	14.38	3.05	4.515	.58
50	278.759	2,101.42	.085	7.395	1.35	5.235	.3
51	108.993	1,504.69	.11	9.47	2.935	9.22	.325
52	103.552	1,252.67	.0875	7.245	3.365	8.385	.375
53	178.168	2,009.26	.0825	9.17	2.5	7.185	.275
54	155.05	1,810.72	.116	11.425	2.2	4.95	.525
55	148.675	909.84	.0675	7.695	1.3	3.55	.3
56	202.192	1,637.21	.065	8.72	1.65	4.91	.36
57	423.495	5,033.59	.051	10.299	1.85	7.57	.53
58	286.121	3,167.08	.046	8.895	1.7	8.37	.31
59	299.93	4,157.33	.055	9.25	1.85	10.85	.625
60	207.809	2,255.53	.05	6.195	1.35	10.75	.38
61	179.853	2,307.45	.065	6.42	2.35	11.7	.36
62	262.773	2,942.31	.046	7.09	2.	8.64	.43
63	129.318	925.35	.036	4.655	1.325	7.105	.3
64	334.86	3,505.68	.0625	7.01	1.3	8.7	.45
Decrease in Treatment Charge		501.58					
65	406.369	6,360.58	.0575	9.165	2.51	11.5	.475
66	455.161	8,039.43	.0625	7.775	2.4	11.3	.46
67	592.671	9,333.31	.0585	5.525	1.825	11.85	.44

Sulphide Ore Shipped to C.M. R. Co., by Comet Mines, Inc.

Lot No.	Dry Tons Sulphide Ore	Net Mill Returns	ASSAYS: Oz. Au	Oz. Ag	% Pb	% Zn	% Cu
68	384.593	5,135.32	.0525	5.4	1.63	9.875	.43
69	378.474	6,261.31	.05	8.375	2.05	9.86	.52
70	231.604	4,060.50	.046	7.63	1.9	10.05	.405
71	387.001	5,276.18	.03	6.995	1.6	7.705	.38
72	698.669	8,007.03	.035	5.905	1.09	7.165	.45
73	764.375	6,728.14	.046	7.99	.895	6.625	.51
74	719.125	2,809.37	.076	5.56	.9	3.34	.3
75	428.271	4,042.45	.075	7.745	2.05	7.915	.475
76	391.206	1,425.42	.0485	3.635	.75	5.23	.275
Total	11,978.457	$ 143,114.74					

480 and 550 Foot Level Shipments:

76-A	350.187	2,954.83	.08	3.485	1.15	13.38	.3
77	243.631	1,277.83	.06	1.58	1.175	10.575	.275
78	194.662	1,124.68	.05	2.105	1.475	10.79	.27
79	325.571	1,787.90	.066	2.82	2.47	7.745	.2
80	19.644	751.17	.372	18.25	3.8	22.73	1.5
81	15.012	558.32	.2485	10.7	6.825	23.125	1.285
82	53.5	1,054.10	.065	4.705	3.9	12.68	.355
Total	1,202.207	$ 9,508.83					
Grand Total	13,180.664	$152,623.57					

EA Form 7
(12-56)

OFFICIAL FILE COPY

Date	Surname	Code

PROJECT SUMMARY REPORT

By: J. W. Alt June 30, 1958

1. Docket No. DMEA-2309 (Lead-Zinc)
Contract No. Idm-E295
Property: Comet Mine
Lincoln County, Nevada

Operator: Comet Mines, Incorporated
Pioche, Nevada

Operator's Property Rights: Owner

2. Contract dated April 16, 1952. To complete - 20 months.

Work Authorized (Long Form Contract)

Item 1. Repair the existing facilities and equipping present vertical shaft.

Item 2. Reaming present vertical shaft to present bottom (168 ft. below collar) to provide $1\frac{1}{2}$ compartments.

Item 3. Extending $1\frac{1}{2}$ compartment shaft from 168 ft. level to 550 ft. level by raising from present winze. 390 feet of raise allowable maximum.

em 4. Drive 3 crosscuts from present winze to provide raising stations for vertical shaft. 120 feet of crosscut, allowable maximum.

Extend $1\frac{1}{2}$ compartment shaft to proposed 640 level plus sump room, 110 feet of shaft, allowable maximum.

8623

Item 6. Drift on vein at 385 ft. level, allowable maximum 1,100 ft.

Item 7. Drift on vein at 640 ft. level, allowable maximum of 2,100 ft. including crosscut from shaft to vein.

None of the cost required to complete the performance of work stated in Items 1 and 2 above shall be charged to the project as cost to which the Government will contribute.

Estimated Costs of the Project

(2)	Labor, supervision, consultants	
	Labor	$ 90,000.00*
	Supervision	15,300.00*
	Consultants (See "Miscellaneous")	
(3)	Operating materials and supplies	64,600.00*
(4)	Operating equipment	
	To be rented	3,630.00*
	To be purchased	0.00
	To be furnished by the operator	2,325.00*
(7)	Miscellaneous	
	The direct expense of services required to provide engineering, assaying, repair maintenance, accounting, warehousing, safety and watchman. The expense of maintaining boarding house and bunkhouse facilities.	14,145.00*
	Total Estimated Cost	$190,000.00

*Allowable maximum.

Amendments

No. 1 Dated April 21, 1952.

Drift on the 465 ft. level instead of on the 385 ft. level, allowable maximum of 1,100 feet, and rehabilitation of present 189 feet of drift to be included as part of the 1,100 feet allowed.

No. 2 Agreed - dated December 18, 1953.

Completion time extended from 20 months to 32 months.
Work of project recessed from October 13, 1953 to March 29, 1954.

No. 3 Agreed - dated August 3, 1954.

In Item 7 of Exhibit "A" of the contract delete the 2100 feet of drifting on the 640 ft. level and substitute allowable maximum of 1,500 ft.
The 600 ft. of drifting thus deducted from work to be done on the 640 ft. level is to be switched to the 465 ft. level which will allow 1,700 ft. of drifting on this level.

No. 4 Agreed April 8, 1955.

Work to be suspended from August 14, 1954 to July 1, 1955.
Completion time is extended from 32 months to 54 months.
Contains a Pseudo-Certification.

Amended Exploration Contract

STAGE I

Consists of the work performed under the prior contract.

STAGE II

From the present face of the 465 ft. level, drift approximately 900 ft. northeasterly on the Comet vein to the quartzite-shale contact.

STAGE III

1. Not to exceed 1,472 ft. of drifts and/or crosscuts shall be driven.

2. Raise not to exceed 150 ft. from the 465 level.

3. Sink a winze, not to exceed 150 ft. from the 465 level.

Estimated Costs of the Project

STAGE I

Actual costs of work performed under prior contract (subject to audit)		$101,280.00

Fixed Unit Costs of Work to be Performed Under Stages II and III.

STAGE II

900 ft. of drifting @ $30/ft.	$27,000.00	
60 samples assayed for lead, zinc and silver @ $3.50/sample	210.00	
Estimated Total Costs, Stage II		27,210.00

STAGE III

1,472 ft. of drifting @ $30/ft.	$44,160.00	
150 ft. of raising @ $50/ft.	7,500.00	
100 ft. of winzing @ $95/ft.	9,500.00	
100 samples assayed for lead, zinc and silver @ $3.50/sample.	350.00	
Estimated Total Costs, Stage III		61,510.00
Estimated Total Cost of Project		$190,000.00
Government Participation @ 50%		$ 95,000.00

Work to commence September 1, 1955.
Work to be completed October 16, 1956.

Amendment No. 1 - Agreed, dated October 15, 1956.
Completion time extended from October 16, 1956, to June 16, 1957.

Amendment No. 2 - Agreed, dated March 1, 1957.
Work suspended from July 1, 1956 to May 1, 1957.
Completion time extended from June 16, 1957 to September 16, 1957.
Contains a Pseudo-Certification.

Work Completed

STAGE I

381 ft. of shaft raising @ $117.76/ft.	$ 44,879.68
60 ft. of shaft sinking @ $150.87/ft.	905.19
86 ft. of crosscutting @ $46.04/ft.	3,959.16
6,456 cu. ft. shaft station @ $1.80/cu. ft.	11,652.09

STAGES II & III

2,010.97 ft. of drifting @ $29.53/ft.	59,377.88
64.0 ft. raising @ $50/ft.	3,200.00
28 samples assayed for Au., Ag., Pb., Zn. @ $3.50 each	98.00
Total, Stages I, II and III	$124,072.00
Government Participation @ 50%	$ 62,036.00

Work was begun on June 1, 1952 and was terminated on September 16, 1957, as of Amendment No. 2.

3. Report of Review dated December 4, 1957.

Total cost as billed by the contractor	$124,072.00
Exceptions	0.00
Total Accepted Cost	$124,072.00
Government Participation @ 50%	$ 62,036.00

Operator's final report dated November 22, 1957.
Field Team final report dated March 3, 1958.

4. Certification date: Pseudo-Certification by Amendment No. 2 of Amended Contract. 9-16-57

5. Comments

The Field Team states that the work was supervised by competent, experienced personnel, was well done, and is satisfactory to the Government.

Exploration on the 465 level of the Comet Mine did not extend to the contact between the quartzite and the shale

where a concentration of lead-zinc minerals was inferred. The work that was done indicates that if ore bodies are found near the shale contact they will probably be of smaller size and lower grade than was inferred prior to the start of the DMEA work.

Numerous exploration targets exist above and below the 465 level though the Operator discontinued all developments due to insufficient funds and the low prices of lead and zinc.

About 950 tons of low grade lead-zinc ore was mined from small shoots and stringers in the DMEA workings during the period of the contract. The ore averaged about 1% lead, 1% zinc, 0.06 oz. of gold, and 6 oz. of silver per ton. Except for a few tons of material of about the same average grade there are no measured or indicated reserves exposed in the DMEA workings.

The Operator infers about 5,000 tons of oxide ore that contains about 7% lead, 0.3% copper, 0.06 oz. of gold, and 6 oz. of silver per ton in the part of the vein above the DMEA workings. He also infers about 12,000 tons of sulfide ore that contains about 1.75% lead, 8% zinc, 0.05 oz. gold and 5 oz. of silver per ton in the part of the vein below the DMEA workings.

Additional exploration above and below mineralized areas on the 465 level is justified and Government participation in this exploration, if requested, should be given favorable consideration.

J. W. Alt

J. W. Alt

JWAlt/ss 6/4/58
Copy to: Docket
Mr. Johnson
Chron.

☒ Audited 12/4/57. WORK ANALYSIS SHEET - DMEA PROJECT ☒ Actual Cost

☒ Certified Lando (Cont.) Analysis as of effective, Incl. Voucher for June 1957. *☒ Agreed Unit Costs

Name COMET MINES, INCORPORATED Docket No. 2,309

State NEVADA Commodity LEAD-ZINC Idm-E No. 295

AMENDED CONTRACT.

OPERATION	AUTHORIZED Units	AUTHORIZED Cost	COMPLETED Units	COMPLETED Cost	NET COST
Drifting & Crosscutting (5'x7') Stage I.	1,362.8'	$43,843.04	1,362.8'	$43,838.36	$41,311.94
II*	900' @	27,000.00	734.1'	22,025.10	22,025.10
(5'x7') Stage III*	1,47½' 30.00	44,160.00			
Raising (5'x8') Stage I	381.1'	44,879.68	1,381.1'	44,879.68	44,879.68 ✓
Stage III *	150' @ $50.00	7,500.00	64'	3,200.00	3,200.00 ✓
Shafts Stage I-1½ Compart.	6'	905.19	6'	905.19	905.19 ✓
Winzes (5'x8') Stage III*	100' @ $95.00	9,500.00			
Drilling (Specify)					
Surface Excavation					
Underground Excavation Stage I.		11,652.09		11,652.09	11,652.09 ✓
Roads and Trails					
Operating Equipment Purchased					
Surface Rehabilitation & Repairs					
Underground Rehabilitation					
New Building, Improvements, etc.					
Other (Specify) 160 Samples @ *3.50 Stage I, II, III		560.00	28	98.00	98.00 ✓
Totals		$190,000.00		$126,578.43	$124,072.00

Total Royalties to date $41.60

Checks audit,

Project Summary Report - dated June 30, 1958;

Prepared by W. F. Hugenbert

Contract Analyst

Ore Reserves:

Oxide: 5,000T, 0.05 Cu, 6.0 Ag, 7% Pb, 0.03% Cu.

Sulphide: 12,500T, 0.05 Cu, 5.0 Ag, 1.75% Pb, 8.0% Zn.

Reason previous contract to Sept. 1, 1956.

Completion date June 16, 1957.

Audit for Original contract incorporated.

Contract signed — April 3, 1952

Amended Contract " — April 16, 1952

Expiration date of Royalty Payments — April 16, 1966.

Amendment No. 2: Reason for extension of contract to April 16, '57 contains Final Report.

Contains Final Report. Received November 24, 1957.

Field Team Final Report - received March 7, 1958.

more exploration by Govt. is justified.

71626

☒ Audited Interim [redacted]RK ANALYSIS SHEET - DMEA PROJE[redacted] ☒ Actual Cost

☒ Certified Pseudo-Award #4. Analysis as of _____ ☐ Agreed Unit Costs

Incl. Voucher for August 1954

Name COMET MINES, INCORPORATED Docket No. 2,309

State NEVADA Commodity LEAD-ZINC Idm-E No. 295

ORIGINAL CONTRACT.

OPERATION	AUTHORIZED Units	AUTHORIZED Cost	COMPLETED Units	COMPLETED Cost	NET COST
Drifting & Crosscutting	3,320'	$113,947.91	1,362.8'	43,838.36	41,311.94
Raising	390'	46,800.00	381.1'	44,879.68	44,879.68
Shafts	110'	17,600.00	6'	905.19	905.19
Winzes					
Drilling (Specify)					
Surface Excavation					
Underground Excavation		11,652.09		11,652.09	11,652.09
Roads and Trails					
Operating Equipment Purchased					
Surface Rehabilitation & Repairs					
Underground Rehabilitation					
New Building, Improvements, etc.					
Other (Specify)					
Totals		$190,000.00		$101,275.32	$98,748.90

Operation [illegible] #9. about 4/8/55. (Revised & Extended Completion Time.)
Begun Aug 19, 1954 - July 1, 1955 Completion date Oct 16, 1956.

Disposition of Property.

Pipe	$ 989.96
Track	1,207.49
Drill Steel + Bits	108.00
12" Ventube	52.71
	$2,350.16
Warehouse Adj.	176.26
	$2,526.42

Prepared by O. P. Klugescheid

71626

Amended Contract. Stage I.

Actual Costs of work under this Contract. $101,280.00
(Subject to Audit)

Mixed Unit Costs, Stage II.

900' Drifting @ $30.00/ft. (5x7') $27,000.00
60 Samples for Pb, Zn, + Ag @ 3.50/sample 210.00
$27,210.00

Mixed Unit Costs Stage III

1,472' Drifting + or Raising @ 30.00 (5x7') 44,160.00
150' Raising @ $50.00 (5x8') timbered 7,500.00
100' Stoping @ $95.00 (5'x8') timbered 9,500.00
100 Samples for Pb, Zn. + Ag @ 3.50 350.00
61,510.00

Total cost of this Project $190,000.00

June 1957 ~~May~~ June Supp.

~~Spent~~ ~~Sept~~ ~~Oct~~ ~~Nov.~~ ~~Dec.~~ ~~Jan.~~ 1956 ~~Feb.~~ ~~March~~ ~~April~~ ~~May~~

~~June~~ 1955.

Old Contract ~~(Subject to Audit)~~ Audit. $ 98,748.90

$ ~~101,280.00~~

~~7440.00~~ ~~10,140.00~~

Drifting ~~21'~~ ~~64'~~ ~~123'~~ ~~248'~~ ~~308'~~ ~~425'~~ ~~525'~~ ~~630'~~ ~~680.5'~~ ~~740.5'~~ 734.17 $ @ 30.00

~~18,900.00~~ ~~5,690.00~~ ~~630.00~~

~~20,415.00~~ ~~12,750.00~~ ~~750.00~~

~~21,615.00~~

22,025.10

Sampling + Assaying @ 35.00 28 98.00

Raising @ 50.00 ~~28'~~ ~~64'~~ ~~30'~~ ~~55'~~ 3,200.00 ~~1,400.00~~

~~2,750.00~~ ~~1,000.00~~

~~Total on Contract~~ $ ~~701,750.00~~

~~121,861.90~~ ~~99,378.90~~

~~125,211.90~~ ~~102,128.90~~

~~125,661.90~~ ~~106,188.90~~

124,072.00

~~108,888.90~~

~~111,498.90~~

~~114,596.90~~

~~117,746.90~~

~~125,261.90~~

Royalties

Dry Tons

505.46½

Rec'd. Royalty

~~$ 241.60~~

[X] Audited

[X] Certified

WORK ANALYSIS SHEET - DMEA PROJECT

Analysis as of
Incl. Voucher for August 1954

[x] Actual Cost

[ ] Agreed Unit Costs

Name Comet Mines, Incorporated

Docket No. 2309

State Nevada

Commodity Lead-Zinc

Idm-E No. 295

ORIGINAL CONTRACT

OPERATION	AUTHORIZED Units	AUTHORIZED Cost	COMPLETED Units	COMPLETED Cost	NET COST
Drifting & Crosscutting	3,320'	$113,947.91	1,362.8'	$ 43,838.36	$ 41,311.94
Raising	390'	46,800.00	381.1'	44,879.68	44,879.68
Shafts	110'	17,600.00	6'	905.19	905.19
Winzes					
Drilling (Specify)					
Surface Excavation					
Underground Excavation		11,652.09		11,652.09	11,652.09
Roads and Trails					
Operating Equipment Purchased					
Surface Rehabilitation & Repairs					
Underground Rehabilitation					
New Building, Improvements, etc.					
Other (Specify)					
Totals		$190,000.00		$101,275.32	$ 98,748.90

Disposition of Property

Pipe	$ 981.96
Track	1,207.49
Drill Steel & Bits	108.00
12" ventube	52.71
	$2,350.16
Warehouse Actg.	176.26
	$2,526.42

Prepared by W. P. Klugescheid/er

71626

UNITED STATES
DEPARTMENT OF THE INTERIOR
OFFICE OF MINERALS EXPLORATION

555 Battery Street
San Francisco 11, California

OFFICIAL FILE COPY
RECEIVED DEC 1 1961

DATE	INITIALS	CODE
12/4	[illegible]	800
		500
		500
		200

November 27, 1961

Comet Mines, Incorporated
Pioche, Nevada
c/o Combined Metals, Inc.

Re: DMEA-2309 (Lead-Zinc)
Comet Mines, Inc.
Comet Mine
Lincoln County, Nevada
Amended Contract Idm-E 295

Dear Sirs:

Enclosed herewith for your files is a copy of a Report of Review of the subject contract dated November 21, 1961, prepared by Mr. E. D. Talbert, OME Auditor.

The Acting Field Officer, Region 11, concurs in the facts stated in this Report of Review.

Very truly yours,

GLENN G. GENTRY

Glenn G. Gentry
Acting Field Officer, OME
Region 11

Enclosure 1

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

OME Files

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

OFFICIAL FILE COPY
O. M. E
RECEIVED JUN 21 1962

DATE	INITIALS	CODE
6/21		800
		100
		100
		500

JUN 15 1962

Re: DMEA-2309 (Lead, Zinc)
Comet Mines, Incorporated
Comet Mine
Lincoln County, Nevada
Amended Contract Idm-E295

Comet Mines, Incorporated
218 Felt Building
Salt Lake City, Utah

After the completion of the approved exploration work under the contract identified above, we asked to be informed about changes in the status of the property and production from it during the period of royalty obligation.

To assist you to furnish this information and to assure the accuracy of our records, please answer the questions on the back of this letter and return two copies to this office with copies of any pertinent documents.

Sincerely yours,

W. R. Griswold

W. R. Griswold, Chief
Division of Minerals

MME Form 63
Revised 3-62

REQUEST FOR INFORMATION ON CERTIFIED PROJECT AND PROJECT UNDER ROYALTY AGREEMENT

1. Since November 15,1961 , has there been a change in ownership, lease, or sublease? If yes, please state details of the transaction below and provide a true or signed copy of the pertinent documents, unless they have been provided before. Yes ☐ No ☒

2. Since November 15, 1961, has there been any production from the land subject to the contract? Yes ☐ No ☒

   A. If so and it was shipped, give quantity, value, and name and address of purchaser.

	Quantity	Value

   B. If stockpiled awaiting sale, state quantity, grade, and location.

Type	Quantity		Estimated Grade	Location
Ore		Tons		
Concentrates		Tons		
Other		Tons		

3. Since , has any production been transported through workings (see of contract)? Yes ☐ No ☐

   A. If so, state quantity, value, and disposition of material.

Disposition of Material	Quantity	Value

Submitted by:

Name O.F.Burton Title Treasurer

Address P.O.Box 150 Salt Lake City, Utah Date June 18, 1962

4511

MME Form 7
(10-58)

OFFICIAL FILE COPY

Date	Surname	Code
		220

NOV 28 1961

Memorandum

To: Acting Field Officer, Region II

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

Subject: DMEA-2309 (Lead-Zinc)
Comet Mines, Inc.
Comet Mine
Lincoln County, Nevada
Amended Contract Idm-8295

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

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

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

Attachments

EDTalbert/ama
November 21, 1961

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

43683

UNITED STATES
DEPARTMENT OF THE INTERIOR
OFFICE OF MINERALS EXPLORATION

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San Francisco 11, California

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November 15, 1961

Memorandum

To: Contract Administration and Audit Division
Office of Minerals Exploration
Department of the Interior
Washington 25, D. C.

From: Acting Field Officer, OME, Region 11

Subject: DMEA-2309 (Lead-Zinc)
Comet Mines, Inc.
Lincoln County, Nevada
Contract Idm-E 295

Enclosed herewith are the original and one copy of MME Form 22, Check Sheet of the Examining Engineer, on the subject project.

Glenn G. Gentry

Enclosures 2

MME Form 7
(10-58)

OFFICIAL FILE COPY

Date	Surname	Code
		220

NOV 7 1961

Memorandum

To: Acting Field Officer, Region II

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

Subject: DMEA-2309 (Lead-Zinc)
Comet Mines, Inc.
Comet Mine
Lincoln County, Nevada
Contract Idm-E295

This Division is preparing a Report of Royalty Review on the subject contract. Accordingly, your submission of an original and one copy of MME Form 22, Check Sheet of Examining Engineer, will be appreciated.

It appears that this project has been inactive since June 1957. If this is so, please make an appropriate statement under item 8 of MME Form 22.

EDTalbert/ama
November 7, 1961

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

43683

Office Mail Room
DMEA
MAR 12 1958
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Act. 500

IN REPLY REFER TO:

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

March 11, 1958
Re: DMEA 2309, Idm-E295
Comet Mines, Inc.
Comet Mine
Lincoln County, Nevada
Lead-zinc

Memorandum

To: W. R. Griswold, Defense Minerals Exploration Administration

From: N. E. Nelson, U. S. Geological Survey

Subject: Review of Field Team Final Report

The contract awarded April 16, 1952, with amendments, authorized the expenditure of $190,000 in the exploration of a narrow lead, zinc, silver, tungsten-bearing quartz vein in quartzite.

The mine had a recorded production of about 16,000 tons of oxide and sulphide ore and the applicant, based on experience, inferred 5,000 tons of oxide ore and 34,000 tons of sulfide ore would be 'discovered' by the proposed exploration.

The contract was terminated by mutual consent June 15, 1957, only $124,072.00 having been spent. Production, subject to royalty, during operations amounted to 505 tons valued at $2,773.04, and $41.60 royalty was remitted. Stockpiled ore amounts to 440 tons.

Reserves, inferred by the operator, amount to:-

Type	Tons	Au Oz	Ag Oz	Pb %	Cu %	Zn %
Oxide	5,000	.06	6.0	7.0	0.3	---
Sulfide	12,500	.05	5.0	1.75	---	8.0

As no appreciable ore grade material was found in the course of the work, such ore is very much in the inferred class.

The drift east on the 465 level did not reach the quartzite-shale contact zone, the inferred locus of ore bodies.

Certification is provided in paragraph 3(c) of amendment No. 2 dated March 1, 1957.

N. E. Nelson

N. E. Nelson

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION
1605 Evans Avenue
Reno, Nevada

March 5, 1958

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3/12	~~JB~~	130
3/13	C	220
	AW	500

Memorandum

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

From: Executive Officer, DMEA Field Team, Region II

Subject: Docket No. DMEA-2309 (Lead-Zinc)
Comet Mines, Inc.
Comet Mine
Lincoln County, Nevada
Amended Contract No. Idm-E 295

Enclosed are three copies of our final report on subject contract by G. G. Gentry, Bureau of Mines, and H. K. Stager, Geological Survey, on subject contract.

S. Ricker

Attachments

Reviewed by
DMEA OPERATING COMMITTEE
3-12-58
(date)

SUPPORT FILE COPY
DMEA
MAR 7 1958
CODE
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UNITED STATES
DEPARTMENT OF THE INTERIOR
FRED A. SEATON, SECRETARY

DEFENSE MINERALS EXPLORATION ADMINISTRATION

Final Field Team Report.

REPORT OF EXAMINATION BY FIELD TEAM
REGION II

FINAL REPORT

DMEA-2309, Contract Idm-E295 (lead-zinc)
Comet Mines, Inc.
Comet mine, Lincoln County, Nevada

by

G. G. Gentry
U. S. Bureau of Mines

H. K. Stager
U. S. Geological Survey

March 3, 1958

Reviewed by
DMEA OPERATING CONTROL
3-12-58
(date)

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4 . . . . . Sample map

INTRODUCTION

The Comet mine, Lincoln County, Nevada, was explored by Comet Mines, Inc., Pioche, Nevada. Part of this exploration was done in cooperation with the Defense Minerals Exploration Administration, docket DMEA-2309, contract Idm-E295 dated April 16, 1952.

Work was begun on June 1, 1952 and was terminated by mutual consent on June 15, 1957.

The total cost of the DMEA project was $124,072.00, of which the Government's share at 50 percent was $62,036.00.

An examination of the property to evaluate the completed work was made on September 16, 1957 by Glenn G. Gentry, U. S. Bureau of Mines, and H. K. Stager, U. S. Geological Survey. The operator's representative was unable to accompany the examiners during this inspection.

The geology of the district has been studied in detail by the U. S. Geological Survey[1/].

1/ Westgate, Lewis G., and Knopf, Adolph, 1932: Geology and Ore Deposits of the Pioche District, Nevada; U. S. Geol. Survey Prof. Paper 171.

SUMMARY

The purpose of the project was to explore along the Comet vein for the downward continuation of known lead-zinc ore bodies and for new ore bodies.

The project was justified by a favorable geological setting and past production of a significant tonnage of lead-zinc-gold-silver ores.

The shaft was deepened 387.1 feet and exploratory work on the 465 level comprised 86.0 feet of crosscutting, 2010.97 feet of drifting, and 64 feet of raising.

Although lead-zinc bearing material was discovered where ore had been inferred, the mineralized parts were, in general, too low grade to be commercial at current prices.

During the period of the contract 505.462 dry short tons of lead-zinc ore having a net value of $2,773.04 was produced from the DMEA exploration. This ore was milled in the Caselton plant of Combined Metals Reduction Company, and $41.60 in royalty was paid to the Government.

Additional ore produced from DMEA work, stockpiled at the mine, amounts to 440 short wet tons averaging 0.081 ounce of gold per ton, 5.06 ounces of silver per ton, 1.52 percent lead, and 0.82 percent zinc.

The reserves resulting from DMEA exploration total 5,000 tons of oxide ore averaging 0.06 ounce of gold per ton, 6.0 ounces of silver per ton, 7.0 percent lead, 0.03 percent copper, and 12,500 tons of sulfide ore averaging 0.05 ounce of gold per ton, 5.0 ounces of silver per ton, 1.75 percent lead, and 8.0 percent zinc.

The Government has no equity in equipment or supplies purchased by the operator for the project and all royalties due the Government have been paid.

The operator's final report, dated November 22, 1957, was transmitted to the DMEA Operating Committee on November 26, 1957.

CONCLUSIONS AND RECOMMENDATIONS

Exploration on the 465 level of the Comet mine did not extend to the contact between the quartzite and shale where a concentration of lead-zinc minerals was inferred. The work that was done indicates that if ore bodies are found near the shale contact they will probably be of smaller size and lower grade than was inferred prior to the start of the DMEA work.

Numerous exploration targets exist above and below the 465 level though the operator discontinued all development due to insufficient funds and the low prices of lead and zinc.

Additional exploration above and below mineralized areas on the 465 level and between coordinates 5500E - 5305N extending to 5610E - 5380N and 6200E - 5640N extending to 6300E - 5685N, is justified and Government participation in this exploration, if requested, should be given favorable consideration.

Certification of discovery is warranted for the ore found by the DMEA work and has been so provided in paragraph 3(c) of Amendment No. 2 dated March 1, 1957.

LOCATION, ACCESSIBILITY, AND LOCAL FACILITIES

The Comet mine is in secs. 5 and 6, T. 1 S., R. 66 E., M.D.B.&M., Lincoln County, Nevada (fig. 1). It is in the Comet mining district, on the western slope of the Highland Range at an altitude of 6,500 feet.

From Pioche, Nevada, the mine is reached by traveling north 3 miles on U.S. Highway 93, an all-weather road, then turn left (southwest) 6 miles on alternate U.S. Highway 93, then turn right (west) 17 miles on a graded, graveled State of Nevada secondary road.

The roads are maintained by the Nevada Highway Department. The mine is accessible by ordinary passenger car except during occasional heavy snow storms that cause temporary blocking of the secondary road. Milling facilities are available at the Caselton plant of Combined Metals Reduction Company, approximately 18 miles southeast of the mine. All-year operations can be maintained.

Mine labor, equipment, and supplies are usually available at the Combined Metals Reduction Company warehouse, Pioche, Tonopah, and Las Vegas, Nevada.

The closest railroad is at Pioche where mail, telephone, and trucking services may be obtained.

Electric power is supplied from a transmission line installed by the Lincoln County power district and connected to transformers at the mine.

A pipeline having a gravity flow and connected to springs about a mile northeast of the mine supplies water for all purposes during a normal season. Water for mining may be hauled from the Pan American mine, 3 miles south of the Comet mine.

PROPERTY

History and Ownership

The Comet mine was discovered in 1882 and some shipments of silver-lead ore containing minor amounts of gold and copper were made from 1913 to 1920 and the Tungsten Comet Mining Co. was active in 1923.

We do not have a detailed history of the property from 1923 to 1930 when the Gemmill family acquired the claims. During this period, however, a flotation and gravity concentration plant having an estimated capacity of 150 tons per day was constructed and operated for several years. When the supply of ore was exhausted the mill closed down and the machinery was removed.

After acquiring the property the Gemmill family formed Comet Mines, Inc., and some intermittent work was conducted over a period of years.

Claims

The property consists of 14 unpatented mining claims, owned by Comet Mines, Inc. of Pioche, Nevada, and recorded at Pioche, Lincoln County, Nevada.

The DMEA contract area is confined to eight unpatented claims which are the Elmer, Burnett, Tungsten, and Greenback Nos. 1 through 5 (fig. 2). The DMEA exploration was conducted on the Elmer and Greenback No. 1 claims.

Development

The mine is developed by approximately 3,600 feet of underground workings on four levels: the 168, 262, 465, and 550, connected by a vertical shaft from the surface to the 550 level.

Early mining operations were in open and/or stulled stopes.

The mine shaft is timbered with sets on 5-foot 3-inch centers and the mine workings below the 168 level require little support.

All workings were in good condition and accessible when inspected on September 26, 1957.

Compressor capacity is about 600 c.f.m. One battery trammer of three-ton size is used with one-ton mine cars. Adequate ventilation is supplied by fans on working levels.

There are no milling facilities on the property and only one residential building.

Production

Definite details of early production are not available, but the operator's incomplete records list the following ore produced from the 168 level:

	Tons	Net smelter returns
Concentrates	87.161	$3,593.31
WO_3 concentrates	1.783	443.66
Crude ore	1095.5	8,519.38
		$12,556.35

During the period of the contract 505.462 dry short tons of lead-zinc ore having a net value of $2,773.04 was produced from the DMEA workings and milled at the Caselton plant of the Combined Metals Reduction Company. A royalty of $41.60 was paid to the Government on this ore.

An additional 440 tons of ore that averages 1.52 percent lead, 0.82 percent zinc, 0.081 ounce of gold and 5.06 ounces of silver per ton was mined and is stockpiled at the mine.

THE DMEA PROJECT

The exploration work was performed on the Elmer and the Greenback No. 1 claims. The work proposed in the contract comprised 500 feet of shaft raising, 120 feet of crosscutting, and a total of 3,200 feet of drifting on the 385 and 640 levels.

Exploration completed amounted to 387.1 feet of shaft raising, 86 feet of crosscutting, and 6,456 cubic feet of shaft station excavation, 2,010.97 feet of drifting and 64 feet of raising on the 465 level.

During the period of this work four amendments were issued:

No. 1, April 21, 1953--drift on vein on the 465 level, 1100 feet, instead of on the 385 level, because of a better chance of discovering an entirely new ore body.

No. 2, December 18, 1953--project recessed from October 13, 1953 to March 29, 1954, because of the low market prices of lead and zinc.

No. 3, August 3, 1954--deleted 2,100 feet of drifting on the vein on the 640 level and substituted 1,500 feet of drifting on the 640 level, approved additional 600 feet of drifting on the 465 level in order to explore more ground on the 465 level.

No. 4, April 8, 1955--suspended work under the contract from August 14, 1954 to July 1, 1955, and extended royalty payments to 13 years. Work was resumed before July and provision for pseudo-certification was thereby voided.

An amended contract dated as of April 16, 1952, signed August 12, 1955, states: "The prior contract is superseded by this amended contract.

"The work performed and money contributed by the Government under the prior contract are hereby incorporated into this amended contract.

"The work is suspended from August 14, 1955 to September 1, 1955. The work is divided into three stages:

"Stage I consists of the work performed under the prior contract. Work in Stages II and III to be performed on a unit-cost basis.

"Stage II drift approximately 900 feet northeasterly on the 465 level. Sixty samples to be assayed for lead, zinc, and silver.

"Stage III not to exceed 1,472 feet of drifts and/or crosscuts shall be driven. Raise not to exceed 150 feet from the 465 level. Sink a winze not to exceed 150 feet from the 465 level. One hundred samples to be assayed for lead, zinc, and silver."

Exploration completed under the amended contract comprised 2,010.97 feet of drifting, 64 feet of raising, and lead, zinc analyses on 28 samples.

During the period of the amended contract two amendments were issued:

No. 1, October 15, 1956--time for completion of the work was extended from October 16, 1956 to June 16, 1957. The maximum period for royalty payments and lien for payment was increased from 13 years to 14 years.

No. 2, March 1, 1957--the work was suspended during the period beginning July 1, 1956 and ending May 1, 1957. Time for completion of the work was extended from June 16, 1957 to September 16, 1957. This amendment has the effect of certification effective September 16, 1957, because the work was resumed April 24, 1957 but was not completed (see paragraph 3a ii).

The operator discontinued work on the project on June 15, 1957 owing to lack of funds and on August 24, 1957 he requested a recess beginning September 16, 1957 and ending March 16, 1958.

On September 30, 1957 the request was denied and the operator was advised that pursuant to Amendment No. 2 of the amended contract the contract was automatically terminated as of September 16, 1957.

On November 25, 1957 the operator's final report was received and on November 26, 1957 it was transmitted to Washington.

The exploration work was supervised by competent, experienced personnel, was well done, and is satisfactory to the Government.

Expenditures

Total approved cost of project:

Stage I: Actual costs of work performed under prior contract (subject to audit)	$101,280.00
Stages II and III of amended contract	88,720.00
	$190,000.00

Units, Unit Cost, and Total Expenditures:

Stage I:

381 ft. shaft raising @ $117.76/ft.	$44,879.68	
60 ft. shaft sinking @ $150.87/ft.	905.19	
86.0 ft. crosscutting @ $46.04/ft.	3,959.16	
6,456 cu.ft. shaft station excavation @ $1.80/cu.ft.	11,652.09	
Stages II and III:		
2,010.97 ft. drifting @ $29.53/ft.	59,377.88	
64.0 ft. raising @ $50.00/ft.	3,200.00	
28 samples assayed for Au, Ag, Pb, Zn @ $3.50/ea.	98.00	
Total, Stages I, II, and III		$124,072.00
Government's share of total costs (at 50 percent) . .		$62,036.00
Government's share unexpended		$32,964.00
Value of production during operations, subject to DMEA royalty		$ 2,773.04
Government's share at 1.5 percent		$ 41.60(paid)

Equipment

Work performed under the prior contract (Stage I of the amended contract) was on an actual cost basis and the Government participated in the purchase of materials and supplies. The Government's interest in these items, amounting to $2,526.42,

was purchased by the operator on September 12, 1955.

The amended contract was on a unit-cost basis and the Government did not participate in the purchase of equipment, materials, or supplies.

GEOLOGY

Geologic Setting

The rocks in the mine area are quartzite, shales, and limestones of Lower and Middle Cambrian age (fig. 2). These rocks are gently tilted and are cut by several sets of faults. The lead-zinc deposits are in a quartz vein that fills a fault fissure in the quartzite.

The sedimentary rocks have been subdivided into five formations. Listed in order of youngest to oldest they are:

Formation	Thickness (in feet)	Age
Highland Peak	2,500	Middle Cambrian
Chisholm shale	150	Middle Cambrian
Lyndon limestone	400	Middle Cambrian
Pioche shale	1,000	Lower Cambrian
Prospect Mountain quartzite	+1,500	Lower Cambrian

The Prospect Mountain quartzite is light- to dark-red, vitreous, fine- to medium-grained, and thin- to thick-bedded. The base is not exposed in the district and the thickness is not known. It grades into the overlying Pioche shale by interbedding of shaly quartzite and quartzitic shale. The Pioche shale consists of arenaceous and argillaceous shaly beds interbedded with thin beds of limestone. It is yellow or brown and in places is so micaceous as to approach a schist in appearance. There are four shale members known as the Pioche A, B, C, and D shales. The interbedded limestones range from thin layers a few inches thick to aggregate beds as much as 70 feet thick. They are gray to olive-brown, laminated, nodular, locally fossiliferous, and commonly carbonaceous. The two lowermost limestone layers, known as the C.M. (or Combined Metals) limestone and the Susan Duster limestone, are commonly replaced by sulfide minerals and are the most productive ore zones in the district. The Pioche shale is overlain by the Lyndon limestone. The lower half of the Lyndon is a fine-grained, dark-gray, thick-bedded limestone known locally as the Blue Prince limestone. The upper half is a light-gray, coarsely crystalline rock known locally as the

White Prince limestone. Overlying the Lyndon limestone is the Chisholm shale. It is yellow or red-brown, laminated, argillaceous, and abundantly fossiliferous. Overlying the Chisholm shale is the Highland Peak limestone, a light- to dark-gray, fine- to medium-coarse-grained recrystallized rock. It is thin- to thick-bedded and some of the more crystalline beds are dolomitic. It is locally divided into about 20 members or units. Only the four lowermost members, the Davidson Blue limestone, the Davidson dolomite, the Davidson Black limestone, and the False Prince B limestone are exposed on the west side of the Highland Range east of the mine area.

The rocks strike north and dip about 12° E. into the Highland Range. They are cut by three sets of steeply-dipping normal faults, a N. 65° E. set, a North set, and a N. 55° W. set. Displacement on these faults ranges from several feet to as much as 1,500 feet. The Comet vein is in a N. 65° E. fault, and the displacement is principally lateral with the south side having moved about 30 feet east.

Ore Deposits

The ore deposit at the Comet mine consists of lead- and zinc-rich ore shoots in a quartz vein that fills a steeply-dipping, northeast-striking fault fissure in the Prospect Mountain quartzite.

The principal ore minerals in the sulfide zones are sphalerite and galena, with lesser amounts of chalcopyrite, chalcocite, wolframite, and rarely scheelite. Gold and silver are present in the ore but minerals of these metals have not been identified. The average grade of the sulfide ore is about 15 percent zinc, 4 percent lead, 0.5 percent copper, 0.3 percent WO_3, 0.2 ounce of gold and 10 ounces of silver per ton. The oxidized ore contains cerusite, anglesite, and sparse copper silicates, and averages about 1 percent zinc, 10 percent lead, 0.3 percent copper, a trace of WO_3, 0.25 ounce of gold and 10 ounces of silver per ton. The principal gangue mineral is quartz, with lesser amounts of pyrite, limonite, and calcite. The vein filling consists chiefly of breccia fragments of quartzite recemented with clear and milky quartz. Except for some parts of the ore shoots near the top of the quartzite, and overlain by the Pioche shale, most of the vein above the 550 level is oxidized. Oxidation extends about 300 feet deeper than at the

nearby Pan American mine (DMEA-4096) where it extends to only about 250 feet below the surface. This is probably a result of the more ready passage of ground water down and along the Comet fissure in hard quartzite, than through the tight fractures cutting the relatively impervious Pioche shale at the Pan American.

All of the ore bodies are in the Comet quartz vein in the Prospect Mountain quartzite but not all of the vein is mineralized. The vein also crops out in the Pioche shale but the vein is thin and is not ore-bearing at this horizon. The vein pinches and swells along the strike and down the dip from a few inches in width to 15 feet and averages about 5 feet. The best ore bodies occupy the wider parts of the vein. Ore shoots rake about 15° E., are a few tens of feet to 300 feet long, and have been mined down dip for as much as 300 feet. All of the major ore shoots dip steeply north although much of the vein dips steeply south. The principal ore bodies that have been mined are above the 262 level but several smaller shoots have been mined on the 465 and 550 levels.

All of the DMEA exploration was on the 465 level and although the work did not discover minable ore bodies it contributed valuable geological information and provided access to areas that may yield ore discoveries by some additional exploration.

SAMPLING

South West drift, 465 level

DMEA Samples (designated "BM" on assay map, fig. 4):

Thirteen chip samples across the Comet vein averaged approximately 0.047 ounce of gold per ton, 1.3 ounces of silver per ton, 0.2 percent lead, 0.6 percent zinc, and 0.6 percent copper.

Operator's Samples (designated "C" on assay map, fig. 4):

Twenty-three chip samples averaged approximately 0.05 ounce of gold per ton, 2.5 ounces of silver per ton, 0.6 percent lead, 1.48 percent zinc, and 3.7 percent copper.

Eleven grab samples, representing 231 cars, averaged approximately 0.03 ounce of gold per ton, 1.40 ounces of silver per ton, 0.6 percent lead, 0.5 percent zinc, and 0.8 percent copper.

Additional car samples, representing about 366 tons, taken during March and April 1956 averaged approximately 0.13 ounce of gold per ton, 5.67 ounces of silver per ton, 4.0 percent lead, and 0.7 percent zinc.

North East drift, 465 level

DMEA Samples:

Fifty-seven chip samples across the Comet vein averaged approximately 0.10 ounce of gold per ton, 7.0 ounces of silver per ton, 1.9 percent lead, 2.6 percent zinc, 0.3 percent copper.

Five samples taken in the 56.63 B raise averaged approximately 0.09 ounce of gold per ton, 3.7 ounces of silver per ton, 1.7 percent lead, and 0.1 percent zinc.

Five samples representing an estimated 440 tons of ore stockpiled near the mine averaged approximately 0.08 ounce of gold per ton, 5.0 ounces of silver per ton, 1.6 percent lead, and 0.8 percent zinc.

Operator's Samples:

Nine chip samples averaged 0.03 ounce of gold per ton, 2.0 ounces of silver per ton, 1.4 percent lead, 1.5 percent zinc.

Thirty-five samples representing 477 mine cars averaged approximately 0.08 ounce of gold per ton, 6.30 ounces of silver per ton, 3.0 percent lead, and 1.2 percent zinc and 0.07 percent copper.

DMEA Samples, South West drift, 465 level

BM Sample No.	Width, feet	Percent Pb	Zn	Cu	WO_3	Ounces per ton Au	Ag
552	4.3	0.5	0.4	0.2	<0.02	0.04	1.35
617	4.0	0.2	<0.2	0.15		0.03	0.90
618	4.6	0.2	0.2	1.55		0.03	2.00
619	1.6	<0.2	15.5	0.25		0.01	1.90
778	1.0	0.1	2.5	15.30		0.07	6.60
779	3.0	0.2	0.4	0.22		0.02	0.70
780	3.0	0.2	0.3	2.48		0.03	2.30
781	grab, 22 cars	0.2	0.4	0.72		0.02	0.80
921	1.5	0.2	0.2	0.38		0.05	1.30
922	1.5	0.3	0.3	0.52		0.04	0.60
923	1.5	0.1	1.3	0.40		0.17	1.30
1355	1.5	0.5	0.5	0.02		0.02	1.10
1356	1.2	0.6	0.5	0.35		0.08	1.60

DMEA Samples, North East drift, 465 level

378	3.3	1.7	2.3		0.03	0.05	1.85
379	4.9	0.2	3.3		0.03	0.02	1.20
553	2.4	2.7	10.2	0.30	<0.02	0.03	2.10
620	1.0	2.1	7.3	0.35		0.24	4.55
621	3.5	0.2	0.4	0.06		0.07	0.75
622	1.5	<0.2	3.9	0.04		0.01	0.20
623	0.8	<0.2	2.8	0.20		0.01	0.20
774	2.0	0.2	0.4	0.5		0.02	trace
775	2.0	0.2	0.4	0.5		0.02	trace
776	1.5	0.2	0.3	0.5		0.015	trace
777	2.0	0.2	0.4	0.3		0.03	trace
924	2.0	0.2	0.2	0.15		0.06	1.0
925	0.25	0.2	4.1	0.10		0.33	2.50
926	2.6	0.1	0.1	0.10		0.075	0.20
927	1.2	0.2	0.1	0.05		0.14	0.90
1121	grab	3.9	0.1	0.27		0.005	0.40
1212	3.8	0.4	0.2	0.08		0.04	0.65
1213	1.2	0.3	0.1	0.05		trace	trace
1214	0.8	0.3	0.2	0.05		trace	trace
1318	0.9	0.2	9.9			0.01	8.10
1319	1.5	0.5	15.9			0.03	4.00
1320	2.0	0.7	33.6			0.07	52.40
1321	2.5	4.3	11.8			0.14	9.00
1357	4.7	0.4	1.8	0.40		0.02	4.30

BM Sample No.	Width, feet	Percent Pb	Zn	Cu	WO_3	Ounces per ton Au	Ag
1358	1.8	0.3	0.8	0.17		0.02	4.85
1359	2.4	0.4	0.7	2.34		0.02	16.40
1360	2.8	2.8	13.0	0.03		0.04	2.65
1361	1.2	1.4	7.4	0.04		0.03	0.35
1362	--	0.3	1.3	3.10		0.02	51.65
1387	4.0	0.6	1.6	0.50		0.02	4.70
1388	5.0	0.3	1.5	0.28		0.04	2.05
1389	3.6	0.4	0.8	0.12		0.03	1.60
1390	1.0	1.5	3.7	0.20		0.05	3.05
1756	horiz.10 ft.	<0.1	0.1	0.22		0.02	13.00
1848	4.0	0.2	0.6	0.26		0.05	6.65
1849	3.5	0.2	0.4	0.16		0.22	3.60
1850	5.0	0.2	0.4	0.32		0.05	7.05
1912	2.8	1.5	0.5			0.17	4.75
1913	1.7	3.1	0.4			0.10	3.80
1914	5.0	0.5	0.4			0.10	4.10
1935	3.5	<0.10	0.1	0.03		trace	0.70
1936	1.0	4.5	4.5	0.42		0.17	11.75
1937	1.8	4.2	0.1	0.12		0.05	3.85
1938	1.5	2.1	0.3	0.13		0.54	2.65
1939	1.5	2.1	0.2	0.10		0.08	12.90
1940	1.5	1.6	0.1	0.10		0.11	2.20
1976	1.75	<0.10	0.4	0.05		0.01	1.80
1977	1.5	12.8	0.5	0.02		0.28	41.45
1978	0.7	7.8	0.4	0.09		0.50	16.60
1979	3.0	6.5	0.5	0.06		0.12	8.80
1980	1.3	3.8	0.4	0.06		0.25	7.40
2041	0.7	3.6	0.3			0.08	5.30
2042	2.5	0.3	0.2			0.05	3.65
2043	2.3	6.3	0.2			0.31	12.80
2044	2.2	3.5	0.3			0.24	4.45
2357	1.4	0.2	0.2			0.04	4.25
2358	1.0	15.5	0.2			0.30	23.10
2359	0.6	6.4	0.2			0.28	10.75

DMEA Samples, 56.63B raise, coordinates 5685N - 6295E

BM Sample No.	Width, feet	Percent Pb	Zn	Cu	WO_3	Ounces per ton Au	Ag
2298	1.8	<0.1	0.2			0.03	2.90
2299	2.0	<0.1	0.1			0.015	1.00
2300	2.0	2.20	<0.1			0.09	3.60
2301	2.0	1.4	<0.1			0.07	5.05
2302	2.0	4.9	<0.1			0.11	5.90

DMEA Samples, ore stockpiled adjacent to mine shaft

								Tons*
1851	shovel	0.3	0.5	0.58		0.05	6.55	75
2045	shovel	1.5	0.3			0.08	3.40	150
2360	shovel	4.3	0.2			0.13	7.30	40
2361	shovel	0.9	0.7			0.07	4.15	100
2362	shovel	1.1	2.1			0.05	3.55	75

*estimated

Operator's samples, 465 level, South West drift

101510	-	1.2	2.0	0.25		0.05	2.95
101524	5.0	0.5	0.6	---	trace	0.02	1.18
101526	5.0	0.6	1.0	8.8	nil	0.05	4.25
101528	2.0	0.8	1.6	11.4		0.03	3.87
101529	3.0	0.6	1.5	12.9	-	0.02	3.88
101531	-	0.7	0.8	1.5	trace	0.02	1.38
101534	-	0.6	0.7	0.1	trace	trace	trace
101535	6.0	0.7	3.0	---		0.05	1.55
101542	3.4	0.4	0.5	---	trace	trace	trace
101543	3.0	0.8	0.3	0.3	trace	0.03	1.27
101544	3.0	1.0	0.3	2.0	trace	0.08	1.22
101547	2.0	0.7	1.8	---	trace	0.23	1.77
106195	6.0	0.7	2.0	0.3		0.05	1.35
106197	0.5	---	---	21.3		0.03	3.17
106198	2.0	0.5	13.0	---		0.02	1.08
112952	2.9	0.8	0.5	0.4	trace	0.01	1.19
112953	1.5	0.6	0.5	0.5	trace	0.01	1.39
118455	5.0	0.6	1.7			0.10	1.30
118456	5.5	---	---	0.02	trace	0.25	1.15
118457	4.5	0.8	0.6			0.05	1.55
118459	4.2	0.7	0.6	0.1	nil	0.01	0.99

Sample No.	Width, feet	Percent Pb	Zn	Cu	WO_3	Ounces per ton Au	Ag
118460	1.4	0.3	0.5	28.2	---	0.03	20.37
118461	3.8	0.3	0.5	0.3		0.01	0.89

Operator's samples, 465 level, South West drift

Sample No.	No. cars	Percent Pb	Zn	Cu	Ounces per ton Au	Ag
101514	21	0.6	0.8	0.1	0.04	0.96
101516	22	0.5	0.6	0.1	0.03	1.17
101517	23	0.6	0.6	0.2	0.03	1.27
101518	20	0.6	0.6	0.85	0.03	1.67
101519	23	0.6	0.6	0.4	0.02	0.68

South West drift, 465 level, Operator's samples from cars hoisted

101509	20	0.6	0.8		0.03	1.37
101511	23	0.5	0.9		0.03	1.07
101527	8			3.65	0.04	2.26
101530	24	1.1		3.0	0.02	1.98
101532	23	0.7		0.95	0.01	1.89
106513	24	0.8	0.8	0.1	0.08	1.12

Operator's Progress Report and samples during March 1956, 465 level, South West drift

1st 25 ft. advance, car samples, from about 100 tons:

3.3	0.7		0.08	4.8

Next 20 ft. advance, car samples from about 66 tons:

7.6	0.7		0.27	10.52

Last 55 ft. advance, car samples from about 160 tons:

2.6	0.7		0.08	2.70

Operator's Progress Report and sample during April 1956, 465 level, South West drift

1st 45 ft. advance, car sample from about 40 tons:

3.5	0.7		0.11	4.69

Operator's Samples, 465 level, North East drift

Sample No.	Width, feet	Percent Pb	Zn	Cu	WO_3	Ounces per ton Au	Ag
101541	0.8	0.5	0.8		trace	0.02	0.98
101550	2.0	0.4	0.6		trace	0.04	0.26
106176	2.0	0.6	2.0			0.05	1.65
106199	---	0.6	0.6			0.01	0.49
112954	2.4	2.1	0.5	0.1	trace	0.01	1.29
118454	2.0	7.2	6.8			0.14	12.66
118458	1.4	0.6	0.6			trace	trace
118461	3.8	0.3	0.5	0.3		0.01	0.89
118463	2.0	0.8	1.0			trace	0.20

Operator's car samples, 465 level, North East drift

Sample No.	Date	No. cars	Percent Pb	Zn	Cu	Ounces per ton Au	Ag
112963	11/25/55	17	1.0	0.8	0.2	0.04	4.86
112964	11/26/55	15	0.9	0.9	2.5	0.03	4.27
112965	11/28/55	15	1.0	0.9	1.0	0.06	7.14
112966	11/29/55	17	1.0	1.4	2.4	0.08	11.92
112967	11/30/55	19	1.0	0.9	0.5	0.05	5.95
112969	12/2/55	17	0.9	1.4	1.0	0.04	2.86
112970	12/3/55	-	1.0	1.0	0.5	0.03	5.97
112971	12/6/55	13	0.9	1.4	2.7	0.03	6.87
112972	12/7/55	18	0.5	2.7	9.1	0.05	14.35
1129731	12/8/55	-	0.7	1.0	1.3	0.04	6.86
112974	12/9/55	-	0.8	1.0	0.25	0.03	3.97
114829	2/28/56	19	4.0	0.8	0.25	0.33	8.47
114830	2/29/56	26	3.5	0.8	0.2	0.18	5.02
114831	3/1/56	19	2.8	0.7	0.2	0.03	3.57
114832	3/2/56	22	2.4	0.8	0.2	0.08	4.12
114833	3/3/56	0	4.0	0.7	0.1	0.17	5.73
114834	3/4/56	25	4.1	0.6	0.35	0.09	5.21
114835	3/5/56	21	2.8	0.6	0.15	0.05	5.15
114836	3/6/56	20	6.2	0.8	0.15	0.22	8.28
114837	3/7/56	14	7.9	0.7	0.2	0.30	8.20
114838	3/8/56	13	6.0	0.6	0.35	0.25	11.55 (shipping ore)
114839	3/9/56	19	9.7	0.7	0.3	0.30	13.90
114840	3/8/56	-	3.2	0.7	0.4	0.14	5.66 (15 tons stockpile)
114841	3/10/56	10	3.0	0.7	0.3	0.10	3.70
114842	3/12/56	10	6.0	0.7	0.2	0.16	9.14 (ore)

Operator's car samples, 465 level, North East drift

Sample No.	Date	No. cars	Percent Pb	Zn	Cu	Ounces per ton Au	Ag
114843	3/12/56	10	1.6	0.7	0.15	0.02	1.28
114844	3/14/56	16	2.0	0.6	0.2	0.05	2.07
114845	3/15/56	16	1.2	0.6	0.25	0.04	1.16
114846	3/16/56	15	2.0	0.7	0.2	0.04	1.76
114847	3/17/56	15	2.5	0.6	0.2	0.09	2.91
114848	3/20/56	19	2.2	0.6	0.15	0.10	2.90
114849	3/21/56	12	3.4	1.6	0.2	0.12	4.98
114850	3/23/56	12	2.7	2.2	0.15	0.08	4.82
116351	3/23/56	-	10.3	9.5	0.7	0.32	24.28
116352	3/26/56	13	1.4	1.3	0.2	0.05	1.37

ORE RESERVES

About 950 tons of low grade lead-zinc ore was mined from small shoots and stringers in the DMEA workings during the period of the contract. This ore averaged about 1 percent lead, 1 percent zinc, 0.06 ounce of gold and 6 ounces of silver per ton. Except for a few tens of tons of material of about the same average grade there are no measured or indicated reserves exposed in the DMEA workings.

The operator infers about 5,000 tons of oxide ore that contains about 7 percent lead, 0.3 percent copper, 0.06 ounce of gold, and 6 ounces of silver per ton in the part of the vein above the DMEA workings. He also infers about 12,500 tons of sulfide

ore that contains about 1.75 percent lead, 8 percent zinc, 0.05 ounce of gold, and 5 ounces of silver per ton in the part of the vein below the DMEA workings. A review of production records and the occurrence of ore shoots in the Comet vein indicates that this estimate of reserves is reasonable.

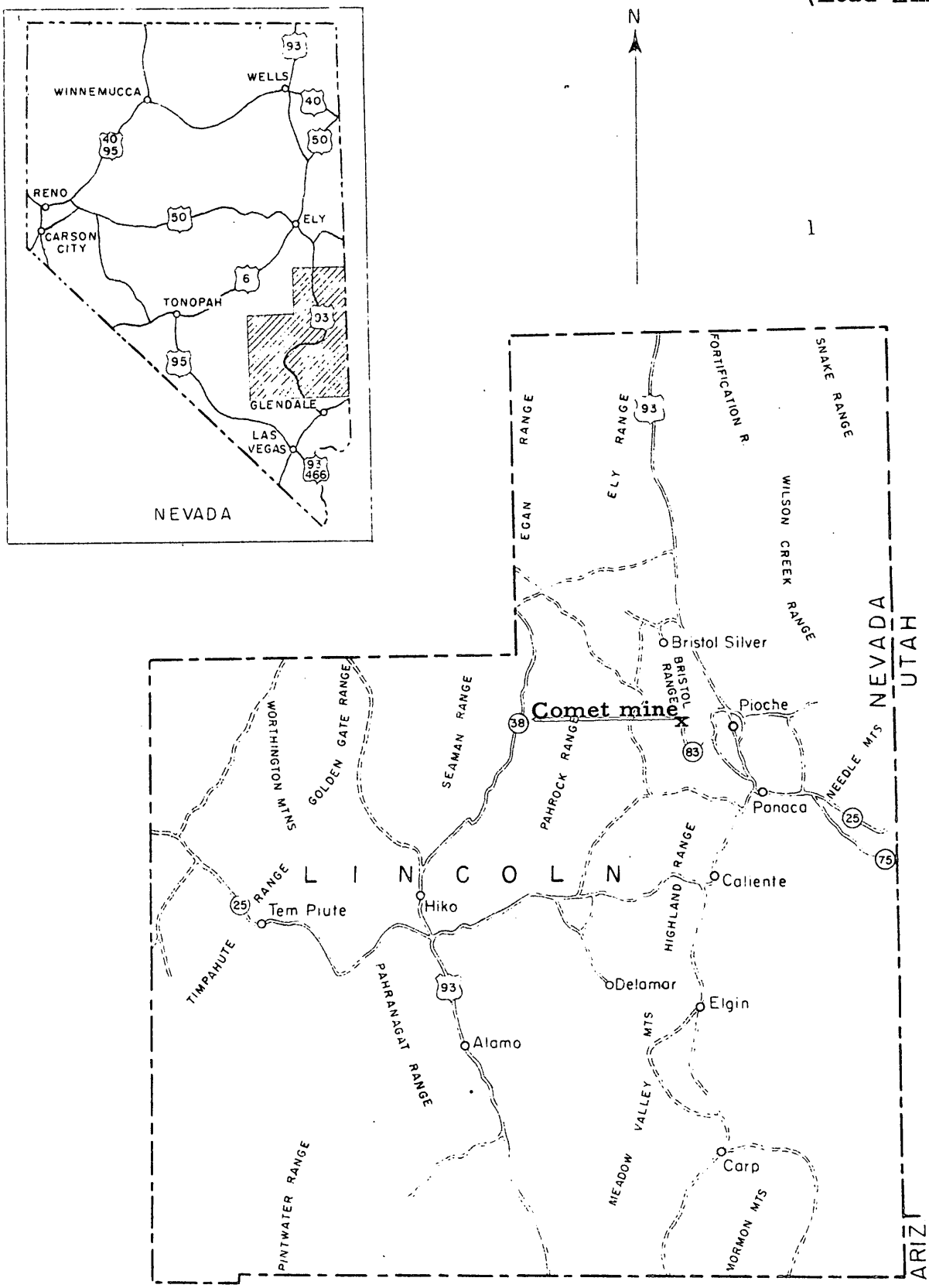

Figure 1. INDEX MAP OF LINCOLN COUNTY, NEVADA

0 20 40 60 Miles

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DATE	INITIALS	CODE

UNITED STATES DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

DMEA 2309
Idm E295
(LEAD-ZINC)

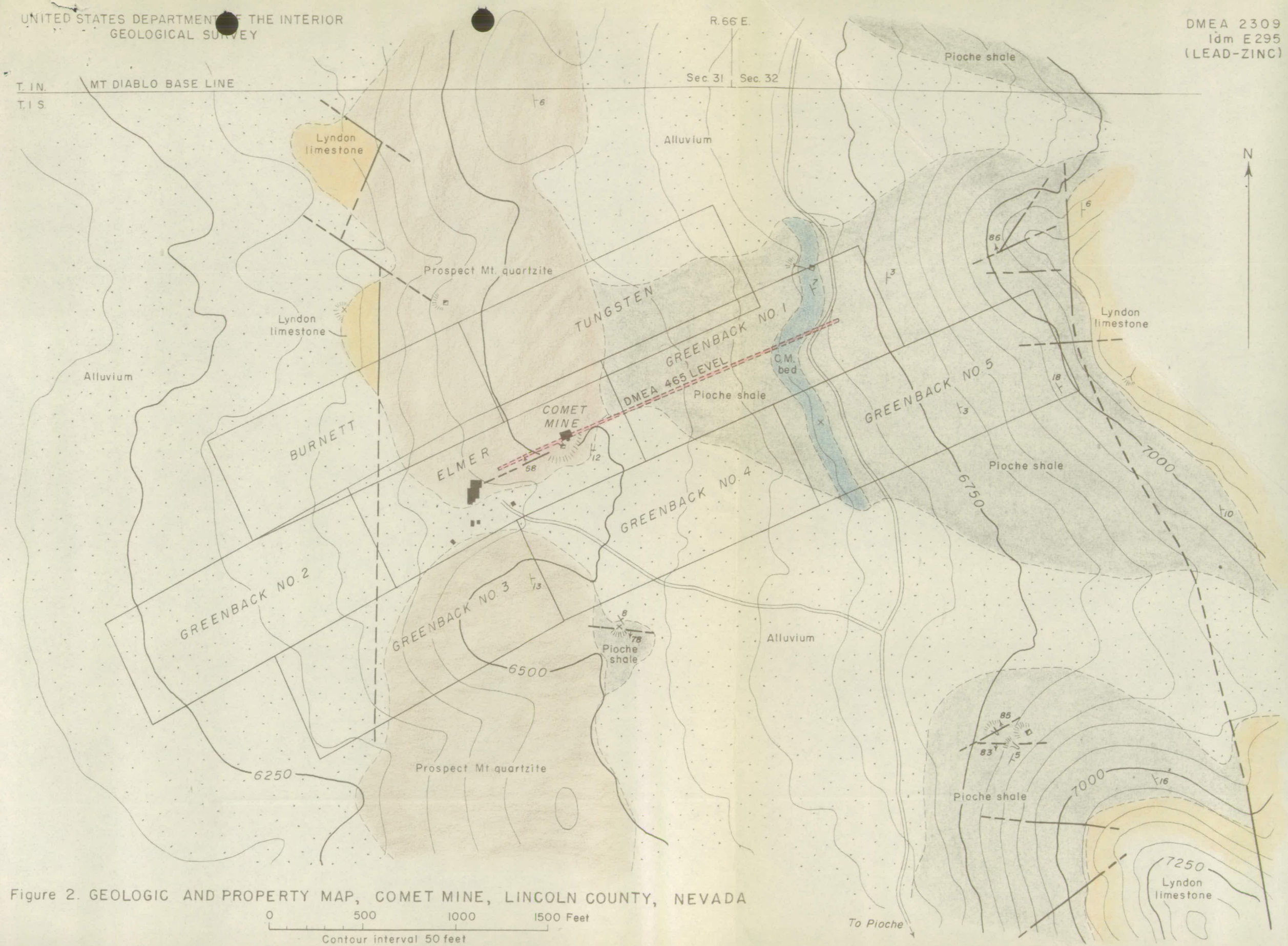

Figure 2. GEOLOGIC AND PROPERTY MAP, COMET MINE, LINCOLN COUNTY, NEVADA

0 500 1000 1500 Feet

Contour interval 50 feet

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DATE	INITIALS	CODE

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DMEA
RECEIVED MAR 7 1958

DATE	INITIALS	CODE

UNITED STATES DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

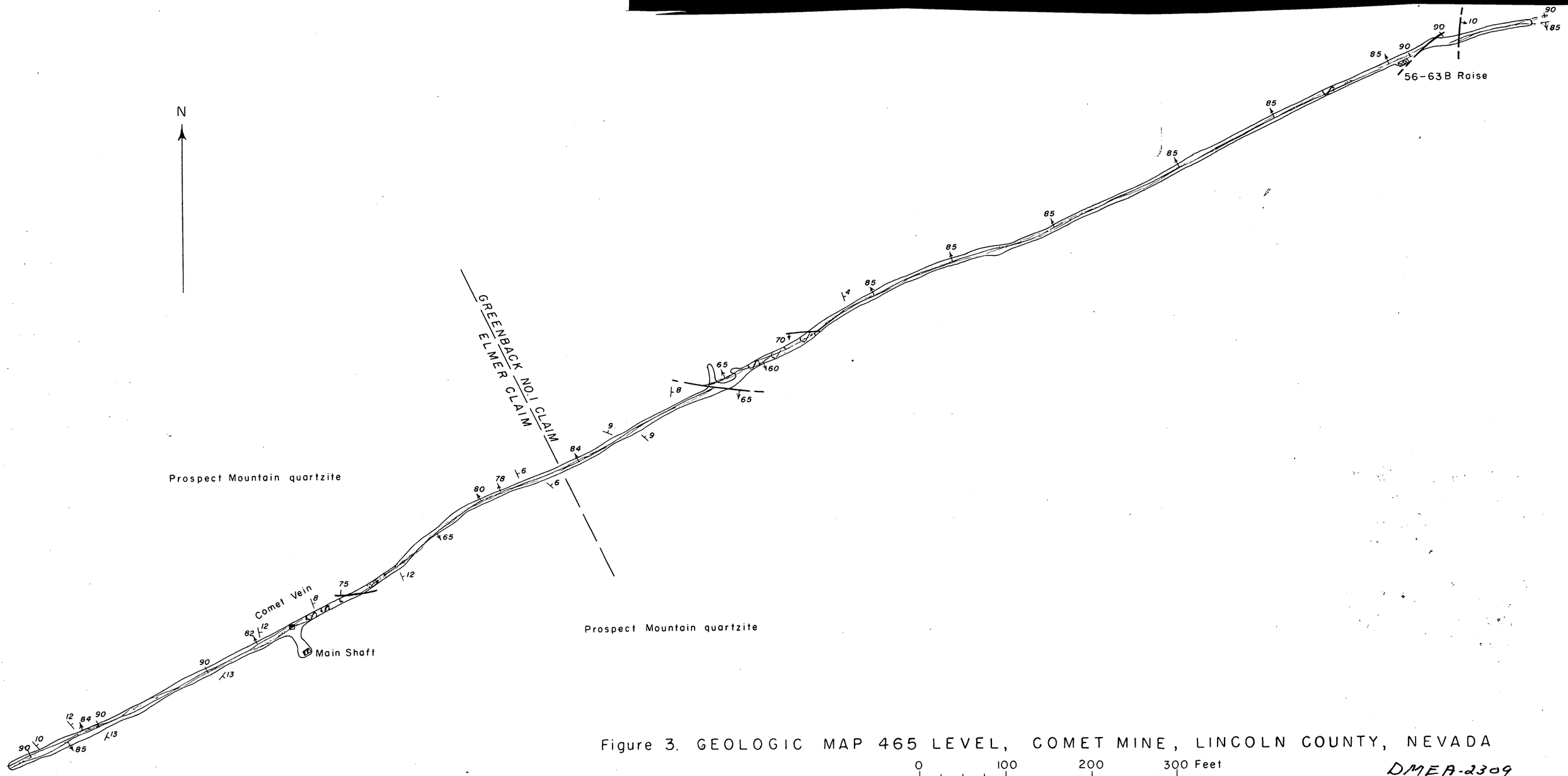

Figure 3. GEOLOGIC MAP 465 LEVEL, COMET MINE, LINCOLN COUNTY, NEVADA

0 100 200 300 Feet

DMEA-2309

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12/31 | C 350
1/2/58 Jwa 500

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

December 30, 1957

Re: 2309; Lead-Zinc
Combined Metals Reduction Co.,
Comet Mines, Inc.
Lincoln County, Nevada

Memorandum

To: W. R. Griswold, DMEA

From: O. M. Bishop, USBM

Subject: Review of Final report by Combined Metals Co. on DMEA exploration project at Comet Mine 4/16/52 to 9/16/57

The report outlines the exploration work done and evaluates it briefly. In summation 387 feet of shaft opening, 2,097 feet of drift and crosscut and about 120 feet of raise were driven to explore the Comet fissure on the 465-foot level.

The work showed that oxidation and leaching of the zinc sulfide had impoverished the ore shoots leaving uneconomic bodies containing some lead and copper carbonates with some silver and gold values. Reginald G. Lee, who wrote the report for Combined Metals says, "The work completed under the project gave valuable geological information that will aid in future exploration." He further notes that the vertical shaft in sound rock and the drifting completed will be of value in future exploration.

I quite agree with Mr. Lee in these views for it appears to me that the best and cheapest remaining exploration bets along the Comet fissure lie to the east of the face of the 460-east drift in the 100 feet or so of Prospect Mountain quartzite underlying the Pioche Shale. It also appears that there is a fair potential for ore at depth below the oxidized leached zone on the 460-foot level.

For these reasons it would appear that certification of the exploration would be justified so that in case these workings become instrumental in a future discovery, the Government will recover part or all of its investment.

O. M. Bishop

O. M. Bishop

cc: Division of Minerals
Mr. Kiilsgaard
Mr. Lamb
Mr. Bishop
F I L E S

DMEA Form 7
(12-56)

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Date	Surname	Code
12/9	Talbert	800
12/10	gb	220
12/10	[illegible]	500

DEC 9 1957

Mr. George Mavor
DMEA Auditor
420 Custom House
555 Battery Street
San Francisco 11, California

Re: Report of Review
Comet Mines, Inc.
Contract No. Idm-E295
Docket No. DMEA-2309

Dear Mr. Mavor:

Your Report of Review in lieu of a final audit of the referenced project is acceptable and normal distribution is authorized after correction of the date in reason (b) of the attachment from "February 6, 1957", to "October 25, 1955".

This correction has been made in the Washington copies.

Sincerely yours,

(Signed) J. L. Chambers

Jay L. Chambers, Director
Contract Administration
and Audit Division

EDTalbert/wb
December 9, 1957

Copy to: Docket
Admr. Reading File
Mr. Chambers

8623

OPERATIONS
FINAL
RPTS.

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION

1605 Evans Avenue
Reno, Nevada

November 26, 1957

Memorandum

To: Operating Committee, DMEA, Washington, D. C.

From: Acting Executive Officer, DMEA Field Team, Reg. II

Subject: Docket DMEA-2309 (Lead-Zinc)
Combined Metals Reduction Company
Comet Mines, Inc.
Lincoln County, Nevada
Contract Idm-E295

Enclosed are the original and two copies of the operator's final report dated November 22, 1957.

Our records show that the Government has no equity in equipment and that the operator's final voucher (MF-104) can now be paid.

The Field Team's final report is in preparation and will recommend certification.

Roscoe M. Smith

Roscoe M. Smith
Acting Executive Officer

Attachment

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DATE	INITIALS	CODE
11/29	C	220
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COMBINED METALS REDUCTION COMPANY

CASELTON PLANT PIOCHE, NEVADA

Official
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DATE INITIALS CODE

November 22, 1957

Mr. S. Ricker, Executive Officer
DMEA Field Team, Region II
1605 Evans Avenue
Reno, Nevada

Re: Docket No. DMEA 2309 (Lead-Zinc)
Comet Mines, Inc.
Lincoln County, Nevada
Contract No. Idm-E 295

copy to Menlo Park 11/26/57

Dear Mr. Ricker:

In compliance with article 7(c) of above referred contract, the following is the final report upon termination of DMEA Project No. 2309.

(1) Exploration Project Contract No. Idm-E 295

On April 16, 1952 the Defense Minerals Exploration Administration entered into an Exploration Contract with Comet Mines, Incorporated, a Nevada Corporation.

On September 16, 1957 the contract was terminated after completint 65% of the exploration program.

(II) Work Completed and Evaluation

(A) Geological Evaluation Exploration project's work on 465 Level has demonstrated that the Comet Fissure is a strong and persistent mineralized fault fissure in the upper horizon of the Prospect Mountain Quartzite.

Oxidation and leaching with subsequent transportation in solution to unknown destinations have removed all the zinc sulphide from ore shoots drifted through on the 465 Level. The remaining materials between the walls of the fissure contain some lead and copper carbonate in a silicious honey-combed gangue. This was good grade zinc sulphide ore before oxidation.

Depth of oxidation is not known but is believed to be at least 200 feet below the 465 Level.

Local ore shoots of sulphides have been mined near the contact of the Pioche Shale and Prospect Mountain Quartzite at points where the shale acted as an impervious cover which retarded the ground water circulation. However, further under the shale ground water movements were less restricted; oxidation and leaching of the sulphide ore shoots were very intense at or near the descending water table.

The work completed under the Project gave valuable geological information that will aid in future exploration.

DEPARTMENT OF INTERIOR
BUREAU OF MINES
REGION II
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RENO, NEVADA

(B) Engineering Evaluation Evaluation of the Project's work from an engineering standpoint can be summed up as follows:

381.1 feet of raising completed the vertical shaft from 550' Level to surface in solid ground that requires a minimum of maintenance. Without this shaft exploration drifting cost on 465 Level would have been unreasonable. Also this will encourage future exploration.

Exploration drifting to east and west on the fissure proper on 465 Level has demonstrated a zone of oxidation and leaching, but as this level and deeper levels are extended further east into the Comet Mountain, the oxidized zone should fade out.

Drifting completed on 465 Level under the Project will be of value in future exploration.

(C) Ore Reserves Resulting from the Project's Work

No measurable ore reserve was found or developed during the life of the Project.

From past production record coupled with the nature of ore occurrence in the Comet Fissure, inferred ore in the Project's ground is here estimated as follows:

5,000 tons of oxide ore assaying .06 oz. Au, 6.0 oz. Ag, 7.0% Pb, .3% Cu.

* 12,500 tons of Sulphide ore assaying .05 oz. Au, 5.0 oz. Ag, 1.75% Pb, 8.00% Zn.

* Below present workings.

(III) Summary of Work Performed and Cost of Project.

Units	Type of Work	Unit Cost $	Total Cost $
2,010.97 ft.	Drifting	29.53	59,377.88
86.00 ft.	Crosscutting	46.04	3,959.16
381.10 ft.	Raising (Shaft)	117.76	44,879.68
64.00 ft.	Raising (Fissure)	50.00	3,200.00
6,456.00 cu.ft.	Raising	1.80	11,652.09
6.00 ft.	Sinking	150.87	905.19
28	Samples Assayed	3.50	98.00

Total Expenditure on Project $ 124,072.00

Maps D 1230, D 1253 and D 1254 show detail of Project and are a part of this report.

COMBINED METALS REDUCTION COMPANY

SHEET 3 DATE 11-22-57 TO S. Ricker

(IV) Conclusions:

Exploration work completed under Project No. DMEA 2309 did not locate or expose a body of commercial ore.

The work completed indicates that primary ore zones are deeper and, perhaps, more easterly of present face on 465 Level.

Additional exploration work is warranted on this property.

Respectfully submitted

Reginald G. Lee

Reginald G. Lee
General Supt. of Mines

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

OFFICIAL BUSINESS

PENALTY FOR PRIVATE
PAYMENT OF POSTA
(PMGC)

DMEA
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11/6	C	220
11/6	[illegible]	800
11/7	Jwd	500

1605 Evans Avenue
Reno, Nevada

November 4, 1957

Combined Metals Reduction Co.
Comet Mines, Inc.
218 Felt Building
Salt Lake City, Utah

Re: Docket No. DMEA-2309 (Lead-Zinc)
Comet Mines, Inc.
Comet Mine
Lincoln County, Nevada
Amended Contract No. Idm-E 295

Gentlemen:

Reference is made to Mr. O. F. Burton's letter of October 17, 1957 with which were enclosed copies of MF-104 "Supplementary Report" for the month of June, 1957.

The report appears to be in order but, in accordance with our policy, payment must be held in abeyance on the concluding MF-104 voucher until the Operator's final report has been received. Upon receipt of final report as called for in the contract we shall be pleased to forward the forms to our San Francisco office for payment.

Very truly yours,

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

SRicker:ft
cc: Opr. Com., DMEA, Wash., D.C.
Finance Office, Reg. II
GeoMavor
RMSmith
File
Chron

1605 Evans Avenue
Reno, Nevada

November 5, 1057

11/7 gb 220 500

Mr. O. F. Burton
Combined Metals Reduction Co.
218 Felt Building
Salt Lake City 10, Utah

Re: Docket No. DMEA-3629 (Lead-Zinc)
Contract No. Idm-E 767
Docket No. DMEA-2309
Contract No. Idm-E 295

Dear Mr. Burton:

We are returning MF-104 and MF-104A forms for September, 1957 on referenced Docket No. DMEA-3629 and MF-104-MF-104A form for Supplementary Report for June, 1957 on referenced Docket No. DMEA-2309.

The accounts must be rendered on our Standard Forms MF-104 and MF-104A which are provided the Operator. I note that Roscoe Smith sent you seven months' supply under cover of his letter dated October 23, 1957. Would be pleased to send you additional copies as needed.

Very truly yours,

S. Ricker
Executive Officer
DMEA Field Team, Region II

Attachments
SRicker:ft
cc: Opr. Com., DMEA, Wash., D.C.
Finance Office, Region II
Geo Mavor
RMSmith
File
Chron

A Form 7
-56)

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Date	Surname	Code
9/30	[illegible]	500
9/30	Talbot	800
9/30	[illegible]	130
	Lamb	
	Williams	
9/30	[illegible]	110
"	[illegible]	100
10/1	[illegible]	220 500

SEP 30 1957

Mr. Paul Gemmill, President
Combined Metals Reduction Co.
Comet Mines, Inc.
218 Felt Building
Salt Lake City, Utah

Re: Docket No. DMEA-2309 (Lead-Zinc)
Comet Mines, Inc.
Comet Mine
Lincoln County, Nevada
Amended Contract No. Idm-E295

Dear Mr. Gemmill:

Mr. S. Ricker, Executive Officer, DMEA Field Team, Region II, has sent us a copy of a letter from Mr. Reginald Lee, dated August 24, 1957, in which he requests a recess beginning September 16, 1957 and ending March 16, 1958, and an extension of completion time to September 16, 1958, for the cited project.

By Amendment No. 2, work of the project was to be completed by September 16, 1957. Ample time was allowed to complete the approved work of the Amended Contract. We believe it would not be in the interest of the Government to recess the work of the project and again extend the completion time. Therefore, we regret to inform you that the contract was automatically terminated as of September 16, 1957, by the terms of Amendment No. 2.

Your attention is called to Item 3(d) of Amendment No. 2, which provides that the Operator shall promptly perform all winding-up and settlement actions provided for in the contract, including the rendering of a final report and final account.

You are also referred to Item 3(c) relating to royalty payments. Pursuant to the terms of the Exploration Project Contract, as amended, all minerals mined from April 16, 1952, to April 16, 1966, are subject to the Government's percentage of royalty as set forth in the contract until the sum of $61,830.96 (subject to audit) which the Government has advanced as its participating interest is repaid.

8623

Payments should be made to Mr. Spangler Ricker, Executive Officer, DMEA Field Team, Region II, 1605 Evans Avenue, Reno, Nevada. Checks should be drawn in favor of the Defense Minerals Exploration Administration. The purchaser should be advised to deduct royalties from the amount due on each shipment and forward the checks to the Executive Officer.

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

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

Sincerely yours,

C. O. Mittendorf

Administrator

JWAlt/er 9/25/57
Copy to: Docket
Admr R File
Op. Committee
Mr. Bishop, USBM
Mr. Kiilsgaard, USGS
Region II (2)
Chron.

DMEA Form 7
(12-56)

OFFICIAL FILE COPY

Date	Surname	Code
9/27	Alt.	500
9/27	Talbut	800
		130
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		100
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		220

Lamb

Mr. Paul Gemmill, President
Combined Metals Reduction Co.
Comet Mines, Inc.
218 Felt Building
Salt Lake City, Utah

Re: Docket No. DMEA-2309 (Lead-Zinc)
Comet Mines, Inc.
Comet Mine
Lincoln County, Nevada
Amended Contract No. Idm-E295

Dear Mr. Gemmill:

Mr. S. Ricker, Executive Officer, DMEA Field Team, Region II, has sent us a copy of a letter from Mr. Reginald Lee, dated August 24, 1957, in which he requests a recess beginning September 16, 1957 and ending March 16, 1958, and an extension of completion time to September 16, 1958, for the cited project.

By Amendment No. 2, work of the project was to be completed by September 16, 1957. Ample time was allowed to complete the approved work of the Amended Contract. ~~We believe it would not be of interest to the Government to again extend the completion time and to recess the work of the project.~~ Therefore, we regret to inform you that the contract was automatically terminated as of September 16, 1957, by the terms of Amendment No. 2.

Your attention is called to Item 3(d) of Amendment No. 2, which provides that the Operator shall promptly perform all winding-up and settlement actions provided for in the contract, including the rendering of a final report and final account.

You are also referred to Item 3(c) relating to royalty payments. Pursuant to the terms of the Exploration Project Contract, as amended, all minerals mined from April 16, 1952, to April 16, 1966, are subject to the Government's percentage of royalty as set forth in the contract until the sum of $61,830.96 (subject to audit) which the Government has advanced as its participating interest is repaid.

8623

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION
1605 Evans Avenue
Reno, Nevada

OFFICIAL FILE COPY
DMEA
RECEIVED SEP 9 1957

DATE	INITIALS	CODE
9/9	G	220
		130
9/10	alt	500

September 5, 1957

Memorandum

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

From: Executive Officer, DMEA Field Team, Region II

Subject: Docket No. DMEA-2309 (Lead-Zinc)
Comet Mines, Inc.
Comet Mine
Lincoln County, Nevada
Amended Contract No. Idm-E 295

Enclosed are two copies of a letter dated August 24, 1957 requesting a recess of subject contract from September 16, 1957 to March 16, 1958.

The amended contract was dated April 16, 1952 and has been active for more than five years. The uncompleted raising allowed in Amendment No. 2 amounts to 70.5 feet at a cost of only $1,762.50 to the Operator. This is such a modest amount, regardless of the price of lead and zinc, that I do not believe the Government is justified in granting another recess and I recommend that the contract be terminated in accordance with Article 3(a) (ii) of amended contract. The funds released can be used to better advantage elsewhere and, in addition, there is no assurance from past experience with the Operator that the work would be resumed on March 16, 1958.

If the Operator wishes DMEA exploration aid in the future, he is at liberty to submit a new application.

S. Ricker

Attachments —

OFFICIAL FILE COPY
DMEA
RECEIVED SEP 9 1957

DATE	INITIALS	CODE

August 24, 1957

Mr. S. Ricker, Executive Officer
DMEA Field Team, Region II
1605 Evans Avenue
Reno, Nevada

Re: Docket No. DMEA 2309
Lead-Zinc
Comet Mines Inc.
Lincoln County, Nevada
Contract No. IDM - E295

Dear Mr. Ricker:

We hereby request a recess in the above referred contract for six months beginning September 16th, 1957 and ending March 16th, 1958, and time to complete project to be September 16, 1958.

Work on the project was started April 26, 1957 and continued to June 15, 1957 at which time lead and zinc prices had fallen below cost of production. For purely economical reasons the project had to be closed down.

We think that the project should be carried on further at a later date as requested in the first paragraph above.

Respectfully submitted

Reginald G. Lee

Comet Mines Inc.
by Reginald G. Lee

cc: E. H. Snyder
Paul Gemmill
O. F. Burton
H. E. Swanson
Files

Tomorrow

This is a pretty "stiff" letter. It could be more tactfully written.

JLC

4/8/57

If words are assumed by 9/16/57

pseudo. Cont. & Tum are bein

[illegible]

Form 7
(12-56)

OFFICIAL FILE COPY

Date	Surname	Code
8/8	[illegible]	500
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8-8	Chambers	800
8/9	Martin	130
"	Johnson	110
"	[illegible]	100
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		500

AUG 12 1957

Mr. Spangler Micker
Executive Officer
DMEA Field Team, Region XI
1605 Evans Avenue
Reno, Nevada

Re: Docket No. DMEA-2309 (Lead-Zinc)
Comet Mines, Inc.
Comet Mine
Lincoln County, Nevada
Amended Contract No. [illegible]-1295

Dear Mr. Micker:

We have just received the Operator's Monthly Report and Voucher (DF-104) for the month of June 1957 for the cited project. In the Operator's Progress Report, dated July 11, 1957, we note that Mr. Reginald G. Lee, in the first paragraph, states:

> "The D.M.E.A. Project No. 2309 at the Comet Mine was active during the first week of June."

In the last paragraph, he states:

> "Due to the hardship from suppressed lead and zinc prices and the fact that in nearly 60 feet of raising no ore has been found in the 56-630 raise on the 465 level, expenditures on this project must be deferred until lead-zinc prices are in line with cost of production."

From the above statements, work on this project has been suspended and no payment should have been made on this voucher. As it now stands, the Government has not withheld funds to insure the rendition of the Operator's final report. It is normal administrative procedure to withhold funds on any project at any time when operations are suspended. We wish to call your attention to the special notice in the Operating Committee Minutes No. 574, September 30, 1955.

8623

This matter is brought to your attention in order that corrective action may be taken to prevent the recurrence of such a situation.

Sincerely yours,

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

APPROVED:

P. F. Yopes (JHB)
Member, Bureau of Mines

N. E. Nelson (JHB)
Member, Geological Survey

JWAlt/bjm (8/8/57)

Copy to: Mr. Lloyd H. Sjolander
Authorized Certifying Officer
Bureau of Mines
San Francisco 11, California

Docket
Admr. R. File
Op. Committee
Mr. Bishop
Mr. Kiilsgaard
Mr. Chambers
Chron.

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION
1605 Evans Avenue
Reno, Nevada

March 13, 1957

OFFICIAL FILE COPY
DMEA
RECEIVED MAR 15 1957

DATE	INITIALS	CODE
3/18	C	220
3/18	JWA	500
	Kley.	

Memorandum

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

From: Executive Officer, DMEA Field Team, Region II

Subject: Docket No. DMEA-2309 (Lead-Zinc)
Comet Mines, Inc.
Comet Mine
Lincoln County, Nevada
Amended Contract No. Idm-E 295
(Your letter dated March 1, 1957)

Enclosed are the Government's, Division, and Docket copies of Amendment No. 2, which have been executed by the Operator. The remaining copies have been distributed in the usual manner.

S. Ricker

Encls.

Amendment

1605 Evans Avenue
Reno, Nevada

March 4, 1957

Combined Metals Reduction Company
Comet Mines, Inc.
218 Felt Building
Salt Lake City, Utah

Re: Docket No. DMEA-2309 (Lead-Zinc)
Comet Mines, Inc.
Comet Mine
Lincoln County, Nevada
Amended Contract No. Idm-E 295

Gentlemen:

Enclosed are the original and five copies of a proposed Amendment No. 2 to the above-referenced Amended Contract, signed by the Administrator for the Government.

If the terms and conditions of this proposed Amendment No. 2 are satisfactory, all six copies should be signed by your Firm. The copy marked "Operator's copy" should be retained by you and the original and other four copies should be returned to this office.

If any part of the proposed amendment does not meet with your approval, the original and all copies should be returned together with your suggested changes.

DMEA
RECEIVED MAR 6 1957

DATE	INITIALS	CODE
3-6	C	220
3/6		800
		225

S. Ricker

Encls.
SRicker:ft
cc: Opr. Com., DMEA, Interior Bldg., Wash., D.C.
Finance Office, Region II
GeoMavor
RMSmith
File

DMEA Form 7
(12-56)

OFFICIAL FILE COPY

Date	Surname	Code
2/14/57	J. Alt	500
	Lumsel	500
2-14	Chamber	800
3/1	Selfridge	130
3/4	C.	220

500

3/1 Johnson 110
" Attendorf 100
225

MAR - 1 1957

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

Re: Docket No. DMEA-2309 (Lead-Zinc)
Comet Mines, Inc.
Comet Mine
Lincoln County, Nevada
Amended Contract No. Idm-E295

Dear Mr. Ricker:

Enclosed are the original and five copies of a proposed Amendment No. 2 for the cited Amended Contract, signed by the Administrator for the Government. There are also enclosed two extra copies of the proposed amendment for the Field Team use. This amendment has been prepared in conformance with your memorandum dated February 1, 1957.

If the proposed amendment meets with your approval, kindly present it to the Operator for approval and signature and, when completed, distribute the copies in the usual manner. In the event that the amendment is not satisfactory, and cannot be amended within your delegated authority, return all copies with your recommendation concerning any modification.

Sincerely yours,

George C. Selfridge

Chairman, Operating Committee (JB)
JWAlt/er 2/14/57
Copy to: Docket
Admr R File
Op. Committee
Base Metals
Mr. Bishop, USBM
Mr. Kiilsgaard, USGS
Chron.

Enclosures

APPROVED:

Frank D. Lamb (JB)
Member, Bureau of Mines
N. E. Nelson (JB)
Member, Geological Survey

8623

Docket copy

AMENDED EXPLORATION PROJECT CONTRACT
COMET MINES, INCORPORATED
DOCKET NO. DMEA-2309

AMENDMENT NO. 2

It is agreed this _____ day of _____, 1957, between the United States of America, acting through the Department of the Interior, Defense Minerals Exploration Administration, and Comet Mines, Incorporated, that Amended Exploration Project Contract Idm-E295 (Docket No. DMEA-2309), dated as of April 16, 1952, is hereby amended as follows:

1. The time for completion of the work, specified in item 1 of Amendment No. 1, is extended from June 16, 1957, to September 16, 1957.

2. (a) Work under the Contract shall be suspended from July 1, 1956, to May 1, 1957.

(b) The Government shall not contribute to any costs incurred by the Operator during the period of suspension or to any costs of rehabilitation or repair which, in the Government's opinion, would not have occurred if there had been no suspension of the work.

(c) The Operator at its own cost and expense, without contribution by the Government, during the period of suspension shall preserve and protect the project work and any property in which the Government has an interest.

This amendment shall not be construed to increase the estimated total cost of the project, the aggregate total amount which the Government may be required to contribute, or the amount of any item designated as "maximum."

Executed in sextuplicate the day and year first above written.

THE UNITED STATES OF AMERICA

Indritz 2/11/57
Bunger
J. Alt
Greenwald
Chambers

By _____
Administrator, Defense Minerals Exploration Administration

COMET MINES, INCORPORATED

By _____

Title _____

DMEA Form 7
(12-56)

OFFICIAL FILE COPY

Date	Surname	Code
2/19/57	Alt.	

February 19, 1957

Memorandum

To: Associate Solicitor, Division of Mineral Resources

From: Chief, Base Metals Division

Subject: Preparation of Amendment No. 2 for Amended Contract No. Idm-E295, Docket No. DMEA-2309, Comet Mines, Inc., Comet Mine, Lincoln County, Nevada, Lead-Zinc.

Will you please rewrite Amendment No. 2 for the cited Amended Contract. It has been deemed necessary to include additional clauses.

This amendment will allow the Operator to suspend work from July 1, 1956, to not later than May 1, 1957. The time for completion of the work, specified in item 1 of Amendment No. 1, is extended from June 16, 1957, to September 16, 1957.

If work is not started on or before May 1, 1957, a pseudo certification should be included. Also, if work is started on or before May 1, 1957, and is not completed on or before September 16, 1957, there should be a pseudo certification.

We would not waive the right to certify.

This amendment can be prepared similar to Amendment No. 5, Ely Valley Mines, Inc., Docket No. DMA-66X, Contract No. Idm-E404.

Before drawing up the amendment, J. W. Alt, would like to discuss it with you.

W. R. Griswold

W. R. Griswold

JWAlt/er 2/19/57

Copy to: Docket
Base Metals
Chron.

8623

DMEA Form 7
(12-56)

OFFICIAL FILE COPY

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		225

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February 7, 1957

Memorandum

To: Associate Solicitor, Division of Mineral Resources

From: Preparation of Amendment No. 2 for Amended Contract No. Idm-E295, Docket No. DMEA-2309, Comet Mines, Inc. Comet Mine, Lincoln County, Nevada, Lead-Zinc.

Will you please prepare an Amendment No. 2 for the cited amended contract. A draft of this amendment is attached to this memorandum.

W. R. Griswold

W. R. Griswold

Attachment

JWAlt/er
Copy to: Docket
Base Metals
Chron.

8623

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

OFFICIAL FILE COPY
DMEA
RECEIVED FEB 4 1957

DATE	INITIALS	CODE
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1605 Evans Avenue
Reno, Nevada

February 1, 1957

Memorandum

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

From: Executive Officer, DMEA Field Team, Region II

Subject: Docket No. DMEA-2309 (Lead-Zinc)
Comet Mines, Inc.
Comet Mine
Lincoln County, Nevada
Amended Contract No. Idm-E 295
(Your letter, January 4, 1957)

Enclosed are two copies of letter, dated January 29, 1957, requesting a recess in the subject contract to May 1, 1957.

Our records would indicate that your last MF-104 report should be for the month of June, 1956 instead of for May, 1956, which you mentioned in your letter of January 4, 1957. If you do not have a copy of the June report, we shall be pleased to make a duplicate and forward it to you.

We recommend that a recess from July 1, 1956 to May 1, 1957 be approved and that the date of completion be extended from June 16, 1957 to September 1, 1957.

A certification of the project will be recommended. We believe, however, that the completion of the raising, approved by the Government, may improve the chances of bringing the property into operation.

S. Ricker

Encls.

COMBINED METALS REDUCTION COMPANY

CASELTON PLANT PIOCHE, NEVADA

[illegible]

IR 1/31/57

Gentry

OFFICIAL FILE COPY
DMEA
RECEIVED FEB 4 1957

DATE	INITIALS	CODE

[illegible]

Docket No. [illegible]
[illegible]
[illegible] Mine
[illegible] Nevada
Contract [illegible]

[illegible]

[illegible] Nevada Mine[illegible]

cc: [illegible] H. [illegible]nyder
Paul [illegible]emmill
Files (2)

DMEA

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

OFFICIAL FILE COPY
DMEA
RECEIVED JAN 22 1957

DATE	INITIALS	CODE
1·22	C	220
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1605 Evans Avenue
Reno, Nevada

January 17, 1957

Memorandum

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

From: Executive Officer, DMEA Field Team, Region II

Subject: Docket No. DMEA-2309 (Lead-Zinc)
Comet Mines, Inc.
Comet Mine
Lincoln County, Nevada
Contract No. Idm-E 295

Reference is made to your letter of January 4, 1957, relative to status of subject contract.

I am enclosing two copies of my letter of January 17, 1957 to the Operator. Would suggest that further action be held in abeyance until we receive a reply.

A certification of the project will be recommended.

S. Ricker

BUREAU OF MINES
WASHINGTON, D. C.

JAN 22 9 47 AM '57

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

EXTRA COPY
DMEA
RECEIVED JAN 22 1957

DATE	INITIALS	CODE

1605 Evans Avenue
Reno, Nevada

January 17, 1957

Mr. Reginald G. Lee
Combined Metals Reduction Co.
Caselton Plant
Pioche, Nevada

Re: Docket No. DMEA-2309 (Lead-Zinc)
Comet Mines, Inc.
Comet Mine
Lincoln County, Nevada
Contract No. Idm-E 295

Dear Mr. Lee:

Since execution of Amendment No. 1, dated October 15, 1956, there has been no report of any activity on referenced contract. Would you please advise if and when you intend to start work on the raising approved by the Government in our letter to you dated August 9, 1956?

Operations, according to reports by our engineers, have been completely suspended since June 20, 1956 and unless operations start in the immediate future it would appear that a request for a recess in the contract by the Operator is in order. We would appreciate your prompt attention to this matter.

Very truly yours,

S. Ricker
Executive Officer
DMEA Field Team, Region II

SRicker:ft
cc: Opr. Com., DMEA, Interior Bldg., Wash., D.C.
Combined Metals Reduction Co., Salt Lake City, Utah
Finance Office, Region II
Geo. Mavor
R. M. Smith
File

DMEA Form 7
(12-56)

500

OFFICIAL FILE COPY

Date	Surname	Code
1/3/57	[illegible]	500
	[illegible]	500
1/4/57	[illegible]	130
1/4	[illegible]	100
1/4	[illegible]	225

4 JAN 1957

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

Re: Docket No. DMEA-2309 (Lead-Zinc)
Comet Mines, Inc.
Comet Mine
Lincoln County, Nevada
Amended Contract No. Idm-E195

Dear Mr. Ricker:

We have just received Glenn G. Gentry's Interim Report, dated December 28, 1956, regarding the cited contract. He states that the mine is idle and that there is no progress to report and that:

> "The Operator's plans for the resumption of work are indefinite though the representative hopes to begin operations in the near future."

If an amendment is needed allowing the Operator a recess of operations, we would appreciate receiving your recommendation and comments at your earliest convenience. We would need to know the date of suspension of operations. The last MF-104 report in our files is for the month of May, 1956.

Sincerely yours,

George C. Selfridge (857)

Chairman, Operating Committee
JWAlt/er 1/3/58
Copy to: Docket
Admr R File
Op. Committee
Base Metals
Mr. Bishop, USBM
Mr. Kiilsgaard, USGS
Chron.

APPROVED:

Frank D. Lamb (857)
Member, Bureau of Mines

N. E. Nelson (857)
Member, Geological Survey

P. S. Please give us your recommendation in regards to certification of this project.

R.G.R.

8623

Cw.

R m Ea

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

1605 Evans Avenue
Reno, Nevada

November 8, 1956

Memorandum

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

From: Acting Executive Officer, DMEA Field Team,
Region II

Subject: Docket No. DMEA-2309 (Lead-Zinc)
Comet Mines, Inc.
Comet Mine
Lincoln County, Nevada
Contract Idm-E 295 Amended

Reference is made to your letter of October 15, 1956, in which was transmitted the original and five copies of Amendment No. 1 to subject contract.

The amendment has been executed by the Operator and the original and two copies are attached. Proper disposition has been made of the remaining copies.

Roscoe M. Smith

Roscoe M. Smith

Attachs.

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

RECEIVED
OCT 26 1956

1605 Evans Avenue
Reno, Nevada

October 23, 1956

Combined Metals Reduction Co.
Pioche
Nevada

Re: Docket No. DMEA-2309 (Lead-Zinc)
Comet Mines, Inc.
Comet Mine
Lincoln County, Nevada
Contract Idm-E 295 Amended

Gentlemen:

We are enclosing the original and five copies of a proposed Amendment No. 1 to above referenced exploration contract signed by C. O. Mittendorf, Administrator, Defense Minerals Exploration Administration, Washington, D. C. for the Government.

If the terms and conditions of the proposed amendment are satisfactory to you, all six copies should be signed by your firm. The copy marked "Operator's copy" should be retained by you and the original and other four copies should be returned to this office.

If any part of this amendment does not meet with your approval, the original and all copies should be returned to this office with your suggested changes.

Very truly yours,

S. Ricker
Executive Officer
DMEA Field Team, Region II

Encls.

SRicker:ft

cc: Opr. Com., DMEA, Wash., D.C.
Finance Off., Region II
GeoMavor
RMSmith
File

File ~~Extra~~ Copy
Surname

J. All
Answered
Chapman
Selfridge.

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

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

Re: Docket No. DMEA-2309 (Lead-Zinc)
Comet Mines, Inc.
Comet Mine
Lincoln County, Nevada
Amended Contract No. Idm-2295

Dear Mr. Rieker:

We are enclosing the original and five copies of Amendment No. 1 to the cited contract, signed by the Administrator. Also enclosed are two extra copies of the amendment for the use of the Field Team. This amendment has been prepared in conformance with your memorandum dated September 24, 1956.

With reference to the last sentence of your memorandum, it is not necessary to include in this amendment the limit of Government participation regarding the work to be done. Exhibit "A" of the contract states:

> "The Operator shall perform Stage II, and shall perform so much of the work under Stage III as is approved in writing in advance by the Government."

We also wish to refer you to the letter accompanying the Amended Contract, dated July 21, 1955.

If the amendment meets with your approval, kindly present it to the Operator for approval and signature and, when completed, distribute the copies in the usual manner. In the event that the amendment is not satisfactory and cannot be amended within your delegated authority, return all copies with your recommendation concerning any modification.

Sincerely yours,

George C. Selfridge
Chairman, Operating Committee

Enclosures

APPROVED:

Frank D. Lamb
Member, Bureau of Mines

Thor H. Kiilsgaard
Member, Geological Survey

JWAlt/er 10/11/56
Copy to: Docket
Admr R File
Op. Committee
Base Metals
Mr. Bishop, USBM
Mr. Kiilsgaard, USGS
Chron.

R.G.L.

File Copy
Surname
J. Ceb.

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

October 1, 1956

Memorandum

To: Associate Solicitor, Division of Mineral Resources

From: Chief, Base Metals Division

Subject: Preparation of Amendment No. 1 for Amended Contract No. Idm-2295, Docket No. DMEA-2309, Comet Mines, Incorporated, Comet Mine (Lead-Zinc), Lincoln County, Colorado.

Will you please prepare Amendment No. 1 for the cited amended contract. This amendment is to allow an extension of completion time from October 16, 1956 to June 16, 1957,

The royalty payment period should be increased from thirteen years to fourteen years.

Please refer to the memorandum to the Operating Committee from S. Ricker, Executive Officer, DMEA Field Team, Region II, dated September 24, 1956.

W. R. Griswold

JWAlt/ef
Copy to: Docket
Base Metals
Chron.

DMEA

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

1605 Evans Ave.
Reno, Nevada

September 24, 1956

Memorandum

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

From: Executive Officer, DMEA Field Team, Region II

Subject: Docket No. DMEA-2309 (Lead-Zinc)
Comet Mines, Inc.
Comet Mine
Lincoln County, Nevada
Contract No. Idm-E 295

Enclosed are two copies of a letter from the Operator requesting an extension of completion time from October 16, 1956, to June 16, 1957.

You will note that the raising, as referred to in our letter of August 9, 1956, has not yet been started by the Operator but that he expects to start work during October. This has been a long drawn-out contract but I can see no advantage to the Government in terminating it at this time and recommend that an extension of time be granted so that at least 122 feet of raising, as suggested in our letter of August 9, be completed, and an appraisal made by our engineer. It may be well, in the amendment, to limit the Government participation in any further work to the 122 feet of raising until the reappraisal is made.

S. Ricker

Encls.

RECEIVED
SEP 26 1956

COMBINED METALS REDUCTION COMPANY

CASELTON PLANT **PIOCHE, NEVADA**

September [illegible], 1958

[illegible]

[illegible] Hickert
[illegible] Director
DMEA Field Team, Region II
[illegible] Evans Avenue
[illegible], Nevada

Re: Docket No. DMEA 2309 (Lead-Zinc)
Comet Mines, Inc.
Comet Mine
Lincoln County, Nevada
Contract No. Idm-E 295

Dear Mr. Hickert:

It is hereby requested that a 9 months extension be granted to complete the work, and that Article 3 of above referred contract be amended to indicate date of completion of project as June 30, 1959.

We are contemplating to start raising at location shown on map [illegible] during the later part of this month or first of October.

Very truly yours,

Reginald [illegible] Lee

[illegible]
File

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

RECEIVED
AUG 13 1956

1605 Evans Avenue
Reno, Nevada

Aug. 9, 1956

Memorandum

To: Operating Committee, DMEA, Washington, D. C.

From: Executive Officer, DMEA Field Team, Region II

Subject: Docket No. DMEA-2309 (Lead-Zinc)
Comet Mines, Inc.
Comet Mine, Lincoln County, Nevada
Contract No. Idm-E 295

Attached are three copies of requested amendment, dated July 26, 1956, from the operator and three copies of memorandum to me from Glenn Gentry, dated August 2, 1956, on subject contract.

In the meantime, this request has been discussed with Roscoe Smith, R. W. Osterstock and we have decided to allow 122 feet of raising which is the balance of raising left in accordance with the contract. Raising will be on Items 3 and 4, as shown on Map D-1230, which accompanied the amendment request.

The operator requests an increase in the cost of sublevel drifting from the allowable cost of drifting from $30 per foot to $39.50. If we approve sublevel drifting, we suggest the allowable cost per foot be $38.00. The sublevel work will be more costly than regular drifting presently being done. Sublevel work would depend on what was found in raises and probably would not be required unless we authorized more raises than that now allotted.

I believe any final decision in the amendment can be held in abeyance until the 122 feet of raising is concluded on Items 3 and 4.

Attached are two copies of letter of August 9, which I have sent to the operator.

S. Ricker

ach.

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

RECEIVED
AUG 13 1956

1605 Evans Avenue
Reno, Nevada

Aug. 9, 1956

Mr. Reginald G. Lee
Combined Metals Reduction Co.
Caselton Plant
Pioche, Nevada

Re: Docket No. DMEA-2309 (Lead-Zinc)
Comet Mines, Inc.
Comet Mine
Lincoln County, Nevada
Contract No. Idm-E 295

Dear Mr. Lee:

Your request of July 26, 1956 to amend referenced contract has been forwarded to our Washington office for appraisal. We have suggested that it be held in abeyance until we can make more definite recommendation regarding it.

In the meantime, the Government authorized 122 feet of raising which is the balance remaining under the contract now in force. The 122 feet of raising shall be done at location No. 3 and No. 4 as shown on Map D-1230 which accompanied your amendment request. Our Engineer and Geologist will visit the project upon advice from you that the work is nearing completion to try to arrive at a decision as to the course of additional work.

Very truly yours,

S. Ricker
Executive Officer
DMEA Field Team, Region II

SRicker:ft
cc: Opr. Com., DMEA, Wash., D.C.

August 6, 1956

RECEIVED
AUG 13 1956

Memorandum

To: S. Ricker, Executive Officer, DMEA Field Team, Region II

From: Glenn G. Gentry, Mining Engin eer, DMEA, Region II

Subject: Docket No. DMEA-2309 (Lead-zinc)
Comet Mine, Lincoln County, Nevada
Contract No. Idm-E295, amended

Under date of July 26, 1956, the operator requested some revision of the work on the 465 level, east of the shaft, and now desires to continue as follows:

		Approved/contract
175 feet of winzing @ $95.00/ft.	$16,625.00	100' @ $95.00/ft.
350 feet raising @ $50.00/ft.	17,500.00	150' @ $50.00/ft.
500 feet sublevel drifting @ $39.50/ft.	19,750.00	1,656.5' @ $30.00/ft.
	$53,875.00	

Financial:

Approved contract costs:	$190,000.00
Expenditures as of 6/30/56	121,861.90
Unexpended	$ 68,138.10

While the unexpended funds are sufficient to cover the requested changes, the amount of winzing and raising exceed the footage allowed in the amended contract and the cost of drifting is $9.50 per foot above the costs allowed for that work. Therefore, a further amendment to the amended contract will be required for the purpose of discontinuing drifting easterly to the shale contact and converting drift footage to winzing, raising and sublevel drifting as follows:

75 feet excess winzing @ $95.00/ft.	= $ 7,125	= 237.5 ft.	drifting/$30/ft.
200 ft. excess raising @ $50.00/ft.	= 10,000	= 333.333 ft.	" "
500 ft. excess sublevel drifting @ $39.50/ft.	= 19,750	= 658.33 ft.	" "
		1,229.163	

It is recommended that drifting under Stage II be discontinued as mineralization in the face of the East drift has decreased to a marked extent, the vein width has decreased to 8 inches and raising may have a better chance of locating the shale contact.

It is further recommended that the contract be amended and the operator authorized to proceed as follows:

1. Sink on the Comet Vein as determined by locations No. 1 and alternate No. 2, a total of 175 feet @ $95.00/ft.	$16,625.00
2. Raise on the Comet Vein as determined by locations No. 3 and alternate Nos. 4 and 5, a total of 350 ft. @ $50.00/ft.	17,500.00
3. 400 feet of sublevel drifting @ $38.00/ft. = 506.66 feet of drift conversion.	15,200.00
	$49,325.00

Each phase of the work subject to approval by Government.

Resume of converted drift footage:

Winzing:	237.5 feet
Raising:	333.3 feet
Sublevel drifting:	506.6 feet
	1,077.4 (rounded to 1,078 feet)

Financial:	Unexpended funds	$68,138.10
	Est. cost of recommended work	49,325.00
	Remainder	$18,813.10

The recommended work has been partially approved by the amended contract and the extension of the program and the locations are justified as these areas have disclosed the best values so far found on the 465 level as evidenced by the following list of samples taken by the writer:

Samples by U.S.B.M. in locations where the Operator proposes further exploration:

Areas Nos. 1 and 5:

Sample No.	Width, ft.	%, Pb	%, Zn	%, Cu	Oz. Au/T	Oz. Ag/T
BM-						
1319	1.5	0.5	15.9	-	0.03	4.0
1320	2.0	0.7	33.6	-	0.07	52.40
1321	2.5	4.3	11.8	-	0.14	9.00
1361	1.2	1.4	7.4	0.04	0.03	0.35
1359	2.4	0.4	0.7	2.34	0.02	16.40
1360	Specimen	2.8	13.0	0.03	0.04	2.65

Areas Nos. 2 and 4:

BM-						
1914	5.0	0.5	0.4	-	0.10	4.10
1850	5.0	0.2	0.4	0.32	0.05	7.05
1848	4.0	0.2	0.6	0.26	0.05	6.65
1849	3.5	0.2	0.4	0.16	0.22	3.60
1756	Horiz. cut 10 ft. long	*0.1	0.1	0.22	0.02	13.00

Areas No. 3:

BM-						
1980	1.3	3.8	0.4	0.06	0.25	7.40
1979	3.0	6.5	0.5	0.06	0.12	8.80
2043	2.3					
1978	0.7	7.8	0.4	0.09	0.50	16.6
1977	1.5	12.8	0.5	0.02	0.28	41.45

Glenn G. Gentry
Mining Engineer

COMBINED METALS REDUCTION COMPANY

CASELTON PLANT PIOCHE, NEVADA

July 26, 1956.

RECEIVED
AUG 13 1956

Mr. S. Ricker, Executive Officer
DMEA Field Team, Region II
1605 Evans Avenue
Reno, Nevada

Re: Docket No. DMEA - 2309
Comet Mine, Lincoln County, Nev.
Contract No. Idm-E 295 (Lead-Zinc)

Dear Mr. Ricker:

Stage II of work under above referred contract calls for approximately 900 feet of drifting northeasterly on the 465 level on the Comet vein to the quartzite-shale contact.

As of this date, 715.5 feet of this drifting has been completed and 184.5 feet remains.

Due to the lesser dip of the quartzite sediments than anticipated, additional drifting of approximately 800 feet is required to reach the quartzite-shale contact.

In view of the above facts, it is requested that:

1. Drifting under Stage II be suspended and the balance of drift footage be transferred to work under Stage III. That work under Stage III be approved as follows:

2. 175 feet of sinking on the Comet vein at location shown as 1, and alternate location shown as 2 on attached map D-1230.

   Location 1 will explore the possibilities of the downward extension of a lead-zinc sulphide showing drifted through at this point.

   In event that after sinking 30 to 40 feet, the vein shows less indications of an ore shoot, the balance of the sinking should be performed at alternate location 2, where a leached ore shoot, exposed in the drift, is 120 feet long and 3½ feet wide, that no doubt, contained commercial grade ore before oxidation.

3. 350 feet of raising on the Comet vein at location shown as 3, and alternate locations as 4 and 5.

COMBINED METALS REDUCTION COMPANY

SHEET 2 DATE July 26, 1956 TO Mr. S. Ricker

Work at location 3 will consist of raising to the quartzite-shale contact which will be from 150 to 250 feet of raising. The additional raise footage will be used to explore for ore above the 465 level at locations shown as 4 and 5.

4. 500 feet of sub-level drifting out from winzes and raises outlined in 2. and 3. above. Request by the Company as to location and length of each sub-level and approval by the D.M.A. Field Team before work is started.

5. Fixed unit cost of sub-level drifting from raises or winze be established at $39.50 per foot which is estimated cost of the proposed sub-level drifting on the Comet vein.

This should not be confused with the already established unit cost extending main level drifts where no transfer of broken rock or material is required and time loss is at a minimum. Sub-level drifting is usually from 20% to 30% higher in cost than main level drifting depending on distance from main level, ventilation, and kind of mechanical means of transportation from main level to sub-level.

6. Cost

175 feet of winzing @ $95.00	$ 16,625.00
350 feet of raising @ $50.00	17,500.00
500 feet of sub-level @ $35.50	17,750.00
Cost of proposed work footage [illegible]	$ 51,875.00
Contract amount	$190,000.00
Funds used	121,[illegible]01.90
Available Funds	$ 6[illegible],13[illegible].10

Sufficient drift footage should be transferred to sinking, raising and sub-levels to cover the cost of these projects.

It is sincerely requested that full consideration be given to the above proposals.

Very truly yours,

Reginald G. Lee

Reginald G. Lee

cc: E. F. Snyder
M. J. Kennard
Paul Gemmill
File

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

RECEIVED
JUN - 7 1956

1605 Evans Avenue
Reno, Nevada

June 4, 1956

Combined Metals Reduction Co.
Pioche, Nevada

Re: Docket No. DMEA-2309 (Lead-zinc)
Comet Mines, Inc.
Comet Mine
Lincoln County, Nevada
Contract No. Idm-E295 amended

Gentlemen:

Reference is made to your request to Mr. Gentry to extend a raise above the northeast drift on the 465-foot level of above referenced mine at station 424 +95 feet.

Pursuant to Item 2 of Stage 3, page 1 of Exhibit "A" of contract, the Government hereby approves of your request.

Very truly yours,

S. Ricker
Executive Officer
DMEA Field Team, Region II

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

Talbert

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

NOV 21 1955

Mr. George Mayer
DMEA Auditor
430 Custom House
555 Battery Street
San Francisco 11, California

Re: Xdm-8295, DMEA-2909
Comet Mines, Inc.

Dear George:

Receipt is acknowledged of the Washington copies of your First Royalty Audit Report and Certificate covering the referenced contract.

Release of the regional copies is authorized after correction of the amount of the Government's participation as stated in the fourth paragraph on page 2 of the report and the unpaid balance indicated in the third line of the following paragraph. The Government's participation and the unpaid balance as of June 30, 1955, correctly should be stated as $90,715.39 and $50,673.79, respectively. These are the amounts shown on this Division's records, which are checked against the Region's monthly statements submitted to the Branch of Finance, Bureau of Mines. The Washington copies of your Royalty Audit Report have been corrected accordingly.

On the Check Sheet of Examining Engineer, submitted with your report, a "No" answer has been indicated for question 3 (a), but the required comment was not included under item 8. Please obtain and submit a supplemental statement for attachment to the Washington copies of your report.

Sincerely yours,

SIGNED

Jay L. Chambers, Chief
Contract Administration
and Audit Division

EDTalbert/wb
November 18, 1955

Copy to: Docket
Admr. Reading File
Mr. Chambers

R.C.G.

Talbert
Chambers

NOV - 3 1955

Mr. George Mayer
DMEA Auditor
420 Custom House
555 Battery Street
San Francisco 11, California

Re: Idm-8295, DMEA-2309
Comet Mines, Incorporated

Dear George:

The 3rd Interim Audit Report and Certificate covering your recent audit of the referenced Exploration Project Contract is acceptable and normal distribution is authorized after the following corrections:

(a) In the 3rd line on page 1 of the report change the word "pretaining" to "pertaining"; and

(b) In the 1st line of the 3rd complete paragraph on page 4 change the amount of $9,981.11 to $10,312.31.

These changes have been made in the Washington copies of the report.

Sincerely yours,

(Signed) J. L. Chambers

Jay L. Chambers, Chief
Contract Administration
and Audit Division

XXE
EDTalbert/wb
November 3, 1955

Copy to: Docket
Admr. Reading File
Mr. Chambers

RCB.

DMEA

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

RECEIVED
OCT 21 1955

1605 Evans Avenue
Reno, Nevada

October 19, 1955

Memorandum

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

From: Executive Officer, DMEA Field Team, Region II

Subject: Docket No. DMEA-2309 (Lead-zinc)
Comet Mines, Inc.
Comet Mine
Lincoln County, Nevada
Amended contract No. Idm-E295

Relative your letter of October 10, 1955, I am enclosing two copies of a letter dated September 14, 1955 from Reginald G. Lee, General Superintendent of Mines for the Combined Metals Reduction Company in which he assured me that work had started prior to September 1, 1955 under the above subject contract.

According to Mr. Lee, the muck from the last round of June, mentioned in Mr. Gentry's interim report, had been cleaned out and the face had been barred down in preparation for drilling. In the meantime, it was found that the locomotive battery could not be recharged and a replacement from the Caselton mine was necessary. The compressor motor also failed and had to be repaired, and repairs to the compressed air lines were required. This work in my opinion can be considered as necessary part of contract.

Twelve feet of advance was made during September and work is reported now to be progressing normally.

S. Ricker

Encl.

COMBINED METALS REDUCTION COMPANY

September 14, 1955

RECEIVED
OCT 21 1955

Mr. S. Ricker, Executive Officer
DMEA Field Team, Region II
1605 Evans Avenue
Reno, Nevada

Re: Comet Mines Inc.
Docket No. DMEA 2309
Contract No. IDM-E 295
Lead-Zinc

Dear Mr. Ricker:

This is to advise you that all preliminary work, after period of suspension, has been completed, and 5 feet of advance under the Amended Contract was made prior to September 1, 1955.

Additional drift advance will be made during this month.

Very truly yours,

COPY

Reginald G. Lee
General Supt. of Mines

FORM 25

File Copy
Surname

GCS
Selfridge
Fleming

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

500

OCT 1 0 1955

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

Re: Docket No. DMEA-2309 (Lead-Zinc)
Comet Mines, Inc.
Comet Mine
Lincoln County, Nevada
Amended Contract No. Idm-2295

Dear Mr. Rieker:

Will you please advise us regarding the status of the cited amended contract. Under the terms of the amended contract, the Operator was to resume work on or before September 1, 1955.

The Interim Report by Glenn G. Gentry, dated September 22, 1955, states that the Comet Mine was inspected on September 14 and further states: "Since drilling and blasting one round, during the month of June, the Operators have made no progress in advancing the Northeast drift on the 465 level. However, some preparatory work has been done and equipment placed in readiness for resumption of operations during the latter part of September".

Your memorandum, dated September 21, states: "Work started on the amended Exploration Contract prior to September 1, 1955".

As the statements are conflicting, we are most interested to learn if the Operator did resume work under the terms of the amended contract on or before September 1, 1955. We would appreciate hearing from you at your earliest convenience regarding this matter.

Sincerely yours,

George C. Selfridge
Chairman, Operating Committee (GCS)

APPROVED:

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

Thor H. Kiilsgaard (GCS)
Member, Geological Survey

WRGriswold/er 10/7/55
Copy to: Docket
Admr R File
Op. Committee
Base Metals
Mr. Bishop, USBM
Mr. Kiilsgaard, USGS
Chron.

R.C.S.

C 23 Ea

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

1605 Evans Avenue
Reno, Nevada

September 21, 1955

Memorandum

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

From: Executive Officer, DMEA Field Team, Region II

Subject: Docket No. DMEA-2309 (Lead-zinc)
Comet Mines, Inc.
Comet Mine
Lincoln County, Nevada
Contract No. Idm-E295

Attached are two copies of a letter of September 12, 1955 from Reginald G. Lee in which the Comet Mines, Inc., make formal application to purchase the Government equity in equipment on above subject property; two copies of my reply of September 21, 1955 accepting their offer in behalf of the Government; and two copies of Form A - Disposal of Government's Interest in Property.

This has been discussed with Mr. George Mavor, and we both believe the enclosed documents are in order.

Work started on the amended Exploration Contract prior to September 1, 1955.

S. Ricker

Attach.

BUREAU OF MINES
WASHINGTON, D. C.

SEP 23 7 58 AM '55

R m Ea

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

1605 Evans Avenue
Reno, Nevada

AIR MAIL

August 12, 1955

Memorandum

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

From: Executive Officer, DMEA Field Team, Region II

Subject: Docket No. DMEA 2309 (Lead-Zinc)
Comet Mines, Inc.
Comet Mine
Lincoln County, Nevada
Contract No. Idm E-295

Reference is made to your letter of July 21, 1955 in which you transmitted the original and five copies of an Amended Contract to the subject contract.

The Amended Contract has been executed by the operator and one copy retained by him for his files. Distribution has been made of finance and field team copies, and the original and two remaining copies are being returned to you herewith.

S. Ricker

Attachs.

RECEIVED
AUG 1 3 1955

BUREAU OF MINES
WASHINGTON, D. C.

AUG 15 12 12 PM '55

Martin
Johnson
Mittendorf

JUL 21 1955

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

Re: Docket No. DMEA-2309 (Lead-Zinc)
Comet Mines, Inc.
Comet Mine
Lincoln County, Nevada
Contract No. Idm-E295

Dear Mr. Richer:

We are enclosing the original and five copies of an Amended Contract to the cited contract, signed by the Administrator, together with Annexes I and II, Exhibit "A" (2 pages), and one map.

If the amended contract meets with your approval, kindly present it to the operator for approval and signature and, when completed, distribute the copies in the usual manner. In the event that the amended contract is not satisfactory, and cannot be amended within your delegated authority, return all copies with your recommendation concerning any modification.

You realize, of course, that this is a project that should be watched very closely. Therefore, before any work is started under Stage III, we would like to have your recommendations based upon the results of Stages I and II.

Sincerely yours,

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

APPROVED:

/s/ Robert W. Geehan (SAB)
Director, Bureau of Mines

Thor H. Kiilsgaard (SAB)
Director, Geological Survey

Enclosures

JWAlt/er/fw 7/11/55; 7/20/55
cc: Docket
Admr R File
Op Committee
Base Metals
Mr. Bishop, USBM
Mr. Kiilsgaard, USGS
Chron.

RCS.

File Copy
Surname
Grieves
Talbert
Selfridge
Noted.
B Johnson

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

500

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

Re: Docket No. DMEA-2309 (Lead-Zinc)
Comet Mines, Inc.
Comet Mine
Lincoln County, Nevada
Contract No. Idm-2295

Dear Mr. Ricker:

We are enclosing the original and five copies of an amended Contract to the cited contract, signed by the Administrator, together with Annexes I and II, Exhibit "A" (2 pages), and one map.

If the amended contract meets with your approval, kindly present it to the Operator for approval and signature and, when completed, distribute the copies in the usual manner. In the event that the amended contract is not satisfactory, and cannot be amended within your delegated authority, return all copies with your recommendation concerning any modification.

Sincerely yours,

Noted: George C. Selfridge
Chairman, Operating Committee (JHB)

Enclosures

JWAlt/er 7/11/55
Copy to: Docket
Admr R File
Op. Committee
Base Metals
Mr. Bishop, USBM
Mr. Kiilsgaard, USGS
Chron.

APPROVED:

/s/ Robert W. Geehan (JHB)
Member, Bureau of Mines

Noted: Thor H. Kiilsgaard (JHB)
Member, Geological Survey

P.S. You realize, of course, that this is a project that should be watched very closely. Therefore, before any work is started under Stage III, we would like to have your recommendations based upon the results of Stages I and II.

File Copy
Surname
J. W. Alt.

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

June 24, 1955

Memorandum

To: Acting Assistant Solicitor, Defense Minerals

From: Chief, Base Metals

Subject: Preparation of Amended Contract for Comet Mines, Inc., Comet Mine, (Lead-Zinc), Lincoln County, Nevada, Contract No. Idm-E295, Docket No. DMEA-2309

Will you please prepare an amended contract for the cited contract.

The work is to be completed in 54 months from the date of the original contract, or by October 16, 1956. Work is to be started on the Amended contract not later than ~~August~~ 1, 1955. This I will wish to discuss with you.

The royalty repayment period is be/to 13 years.

Necessary copies of the map referred to in the draft of Exhibit "A" will be forwarded to your office in a few days.

W. R. Griswold

W. R. Griswold

JWAlt/er

Copy to: Docket
Base Metals
Chron.

R

R m E a

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

RECEIVED JUN 1955

AIR MAIL

1605 Evans Avenue
Reno, Nevada

June 20, 1955

Memorandum

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

From: Executive Officer, DMEA Field Team, Region II

Subject: Docket No. DMEA-2309 (Lead-zinc)
Comet Mines, Inc.
Comet Mine
Lincoln County, Nevada
Contract No. Idm-E295

As suggested by Mr. Alt by telephone, June 17, 1955, we have made the following revised list of cost breakdown on the items listed in operator's request for an amendment to above subject contract:

Drifting:	Cost per foot
Supervision and labor	$13.63
Technical services	0.32
Taxes and insurance	1.06
Operation of equipment	2.54
Explosives	2.53
Pipe	1.45
Mine track, installed	0.30
Electric power	0.84
Misc. tools - drill steel - bits - supplies	4.03
Repairs	0.40
Pick up transportation	0.60
Warehouse - accounting - general expense	2.30
Sampling and analyses	0.50
	$30.50

Size of drifts: 5- by 7-feet in the clear.

BUREAU OF MINES
WASHINGTON, D. C.

JUN 22 9 05 AM '55

Winze:	Depth 100 feet	Cost per foot
	Size: 5- by 8-feet in the clear	
	Timbered: 8- by 8-feet on 5-foot centers	
	Estimated progress: 3 feet per day	

Supervision and labor

1 Superintendent @ $20.00/day
2 Hoistmen @ $15.00/day
2 Miners @ $20.00/day
1 Trammer @ $15.00/day
6

Technical services @ $5.00/day

	$110.00 per day	
Insurance	20.76	
	$130.76	$43.59

Winze timbering and bearing sets	17.00
Hanger bolts	1.60
Excavation for hoist and installation	10.00
Ore pocket	5.00
Explosives	3.50
Pipe and ventilation	2.00
Power	1.00
Misc. tools - supplies - drill steel and bits	4.00
Equipment operation	3.00
Repairs	0.50
Pick up transportation	0.60
Warehouse - accounting - general expense	2.30
Sampling and analyses	1.00
	$95.09

Raise:	150 feet - stulled - timbered manway Size: 5- by 8-feet in the clear Progress: 4 feet per day	Cost per foot
Supervision and labor:		
1 Superintendent @ $20.00/day		
1 Hoistman @ $15.00/day		
2 Miners @ $20.00/day		
1 Trammer @ $15.00/day		
Technical services @ $5.00/day		
	$95.00/day	$23.75
Insurance		4.48
Operation of equipment		2.54
Explosives		3.00
Pipe and ventilation		3.00
Electric power		0.84
Misc. tools - drill steel - bits - supplies		4.03
Repairs		0.40
Pick up transportation		0.60
Warehouse - accounting - general expense		2.30
Sampling and analyses		1.00
Timbering		4.00
		$49.94

We agree with your suggestion that the location of winze and raising be held in abeyance until drift is completed.

S. Ricker

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

500

June 17, 1955

Memorandum for the Files

From: J. W. Alt, Base Metals Division

Subject: Comet Mines, Inc., Comet Mine, Docket No. DMEA-2309, Contract No. Idm-E295, Lincoln County, Nevada, (Lead-Zinc)

On this date, I phoned Spangler Ricker, Executive Officer, Region II, in regard to the Field Team recommendation for an amendment to the cited contract. I informed him that we would need a breakdown of the costs for drifting, raising and winzing. The costs of this work are listed in a copy of a letter from the Operator to Mr. S. Ricker. The costs for drifting and raising appear to be right, but we do need justification for them, as the work is to be done on a unit cost basis. The cost for sinking a 6'x 9' winze is too high and we cannot approve of such a cost of $120. per foot.

I informed Mr. Ricker that we are not in accord with the proposed locations of the raise and winze and that the location of this work will be left up to the Field Team and will be dependent on the work of the extended drift. In other words, the raising and winzing must have prior approval of the Government.

Mr. Ricker agreed to supply us with the requested breakdown of costs. He said this would be done the first part of the week. He also stated that the raising and winzing would not be done at the locations as shown on the map.

J. W. Alt

J. W. Alt

JWAlt/er

Copy to: Docket
Base Metals
Chron.

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

Defense Minerals Administration
RECEIVED
MAY 26 1955

May 26, 1955

Re: DMEA-2309
Comet Mines, Inc.
Comet Mine
Lincoln County, Nevada

Memorandum

To: W. R. Griswold, DMEA

From: O. M. Bishop, Branch of Base Metals

Subject: Recommendation for approval of Amendment 5, (Field Team letter May 13, 1955)

Comet Mines, Inc. propose Amendment 5 to contract Idm-E295 to (1) to convert to a unit cost basis, and (2) to revise Amendment 3, replacing work outlined therein with:

(a) 900 feet of drifting northeast on the 465-foot level of Comet fissure.
(b) 100 feet of winzing from 465-foot level on Comet fissure.
(c) 150 feet of raising from 465-foot level.

The unit-cost accounting will facilitate Government administration and simplify Company bookkeeping. If rates are set at the same or a lower level than pertain under the existing contract, a benefit will be derived from the unit-cost method. I am not in a position to know whether the rates outlined by Mr. Lee in his letter to Mr. Ricker are as low or lower, but they appear to be reasonable.

With relation to the revised work program, I believe the drifting, sinking and raising outlined in exploring the Comet fissure on the 465-foot level, are warranted on the basis of production in overlying stopes. The work will, of course, indicate whether exploration on the 640-foot level is to be further considered.

I recommend approval of Amendment 5.

O. M. Bishop

O. M. Bishop

Copy to: Div. of Minerals
Mr. Kiilsgaard, Rm. 5224
O. M. Bishop
Files

IN REPLY REFER TO:

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

May 20, 1955

Memorandum

To: W. R. Griswold, Chief, Base Metals Division, Defense Minerals Exploration Administration

From: Thor H. Kiilsgaard, U. S. Geological Survey

Subject: Proposed amendment to Comet Mine project, DMEA Docket 2309 (Lead-Zinc), Lincoln County, Nevada, Contract Idm-E295

The operator has requested an amendment to the cited contract that would convert it to a unit cost contract, and which would allow 900 feet of continued northeast drifting on the 465 level, 100 feet of winze from the 465 level, and 150 feet of raise above the 465 level. The Field Team concurs with the operator and recommends approval of his request.

Exploration to date on the 465 level has not been too encouraging. The strong and persistent Comet vein has been followed both southwest and northeast from the shaft. Little has been found to the southwest and no further work is planned in this area, but to the northeast, about 650 feet from the shaft, a small ore shoot was encountered which, according to the map, extended for about 130 feet. This shoot was partially explored, on company account, by four stub raises. Production from the level, most of it presumably from the ore shoot area, aggregates 505 tons, the grade of which was 5.6 ozs. silver per ton and 7.7% zinc. Total value of the ore was $3,305.39, the Government's royalty amounting to $41.60.

As now proposed, the operator would extend the 465 northeast drift 900 feet, or until the drift passed from the Prospect Mountain quartzite into the overlying Pioche shale. His reasons for this are that on the above levels the ore bodies occurred in the upper section of the quartzite below and near the shale contact, and that because of the dip of the contact the ore should rake to the east. The operator's explanations appear to be valid, at least one gets that assumption when viewing the longitudinal section attached to his letter requesting the amendment. It therefore appears the drifting would be logical exploration.

The proposed 150 feet of raise will explore the small ore shoot found on the 465 level upward to the overlying East stope. Where found on the 465 level this shoot was not minable, and above the shoot in the East stope it appears to have bottomed as it was not mined from the winze extending below the stope. Exploration value of the raise therefore appears questionable since it will not explore a very big target area and since the vein both above and below the proposed raise is not too good. If the small ore shoot has any value at all the raise will eventually be driven merely to get the ore if for no other reason.

The proposed winze also appears to be of somewhat dubious merit. There is, of course, the possibility the 465 level is on top of a larger ore shoot and that a winze in the ore shoot would be rewarding; however, if the ore rakes east as postulated the winze, starting on the western edge of the ore as it does, would soon be out of ore. It might be more prudent to make any winzing dependent upon the success of the proposed drifting as a better ore body might be found which could then be explored by the winze. As a last resort the proposed winze could be sunk as proposed, although from the facts presented by the field such a winze has little chance of being successful.

I recommend changing the contract to permit payment to the operator on a unit cost basis, and also the 900 feet of drift. One hundred feet of winzing could be also allowed, the winze site to be determined by the Government and the operator when drifting is completed. I do not see adequate justification for the raise as now proposed.

Thor H. Kiilsgaard

Thor H. Kiilsgaard

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

1605 Evans Avenue
Reno, Nevada

May 13, 1955

Memorandum

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

From: Executive Officer, DMEA Field Team, Region II

Subject: Docket No. DMEA-2309 (Lead-Zinc)
Comet Mines, Inc.
Comet Mine
Lincoln County, Nevada
Contract No. Idm-E295

Reference is made to your letter of March 11, 1955 transmitting the original and five copies of Amendment No. 4 to the above subject contract.

The amendment No. 4 has been executed on the part of the Operator and one copy retained by him for his files. Distribution has been made of Finance Office and Field Team copies, and the original and two remaining copies are being returned to you herewith.

Attached also are four copies of letter dated May 2, 1955 from Mr. Paul Gemmill requesting a revision of the project and proposing that the work be placed on a unit cost basis in order that they may more readily finance the continuation of the work.

In addition four copies of letter from Reginald G. Lee with maps attached in which the unit costs and proposed changes in the program are outlined.

I have discussed the proposed amendment with Mr. Roscoe Smith and Glenn Gentry, and we mutually agree that the proposed changes have merit and are warranted based on new geological concept obtained from work done to date.

Size of proposed exploration is recommended as follows:

Drifting:	5- by 7-feet in the clear. Timbered when required.
Winze:	6 by 9 feet - timbered as required. Timbered manway.
Raise:	6 by 9 feet - timbered as required. Timbered manway.

A final audit should be made as soon as possible to dispose of Government's interests in all equipment used in original contract. The Operator will wish to purchase and use said equipment in work proposed under amended contract.

Attached are four copies of memorandum from Roscoe M. Smith on above subject.

Glenn F. Gentry
FOR- S. Ricker

Encls.

BUREAU OF MINES
WASHINGTON, D. C.

MAY 16 7 56 AM '55

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
MAY 16 1955

COMBINED METALS REDUCTION COMPANY

CASELTON PLANT PIOCHE, NEVADA

May 2, 1955.

REFER TO	NOTED	DATE
S. Ricker	SR	5/10/55
ANSWERED		

Mr. S. Ricker, Executive Officer
D.M.E.A. Field Team, Region II
1605 Evans Avenue
Reno, Nevada

Re: Docket No. D.M.E.A. 2309
Comet Mines, Inc.
Contract No. Idm-E 295
(Lead-Zinc)

Dear Mr. Ricker:

Herewith is our application for revision of the Comet project to place further work on a unit cost basis and to perform work which appears to be justified in view of findings to date.

We are not currently in position to continue the project but we have parties interested who may participate with us in resuming operations on a lease-contract basis. This will only be possible, however, if the accounting can be simplified by conversion to a unit cost basis so we will not be required to keep accurate records on all phases of their operation.

We hope this request will meet with the approval of your field personnel but if it does not, we will be glad to consider any alternative suggestions for changes in the actual work or for method of accounting proceedure.

Also enclosed you will find signed copies of Amendment No. 4 for time extension.

Yours very truly,

Paul Gemmill

Paul Gemmill,
Plant Manager

COMBINED METALS REDUCTION COMPANY

CASELTON PLANT PIOCHE, NEVADA

April 27, 1955.

MAY 16 1955

Mr. S. Ricker, Executive Officer
D.M.E.A. Field Team, Region II
1605 Evans Avenue
Reno, Nevada

Re: Docket No. DMEA 2309
Comet Mines, Inc.
Contract No. Idm-E 295
(Lead-Zinc)

Dear Mr. Ricker:

It is hereby requested that consideration be given to the following proposed amendments of subject contract.

1. Contract to be amended to a unit cost basis for drifting, raising, cross cutting and sinking.

The unit cost shown on Form MF-104-A of monthly report for August, 1954 shall be the unit cost for drifting and sinking of main vertical shaft. Unit cost for sinking of winzes on the fissure shall be at $120.00 per linear foot of advance. Unit cost for raising shall be at $50.00 per linear foot of advance.

2. Proposed work of project to be amended as follows:

(a) Drift approximately 900 feet north easterly on 465 foot level on the Comet Fissure to the quartzite-shale contact.

(b) Sink a winze 100 feet deep on the Comet Fissure approximately 700 feet northeast of main shaft on 465 level where small lead-zinc sulphide ore shoot was cut in drift.

(c) Drive a raise 150 feet up from 465 level, approximately 750 feet northeast of main shaft, where some lead-zine sulphide was cut in the 465 level northeast drift.

3. Cost of proposed work in (a), (b) and (c) above:

900 feet of drift on 465 level	@ $31.23/ft. -	$ 28,107.00
100 feet of winze below 465 level	@ $120.00/ft. -	12,000.00
150 feet of raise above 465 level	@ $ 50.00/ft. -	7,500.00
Total cost of proposed work		$ 47,607.00

COMBINED METALS REDUCTION COMPANY

SHEET 2 DATE April 27, 1955 TO S. Ricker

Contract Amount	-	$ 190,000.00
Cost of contract to date	-	101,359.66
Less proposed work	-	47,607.00
Balance for additional work	-	$ 40,752.66

Information from above proposed exploration work should be evaluated before steps are taken to deepen the main shaft and extending the drifts out on 640 level.

If an ore body is encountered under the 465' level in the proposed winze, the company may extend the 550' level from present bottom of the main shaft to develop and mine the ore found in the winze.

Exploration by core drilling below and above the 465' level is not practical due to the fractured and hard quartzite in this area.

Attached are copies of map D-1230 showing the new work proposal.

Approval of the modifications of the contract on basis outlined above is respectfully requested.

Very truly yours,

Reginald G. Lee

Reginald G. Lee
Supt. of Mines

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

Bureau Minerals Administrat...
RECEIVED
MAY 16 1955

Mineral Deposits Branch
4 Homewood Place
Menlo Park, California

May 11, 1955

Memorandum

To: Executive Officer, DMEA Field Team, Region II

From: R. M. Smith

Subject: DMEA-2309
Comet Mines, Inc.
Contract Idm-E-295
Proposed Amendment 5

The Operator has requested an amendment to (1) convert to a unit cost basis and (2) to revise the project work.

The proposal to convert to a unit cost basis would facilitate the Governments' administration of the contract as well as permit the operator to contract the work on a lease-contract basis.

Three items of work are proposed by the Operator to replace the work specified in amendment 3:

1. Drift on the 465 level 900 feet northeast.

This project is justified because it will explore the area near the quartzite-shale contact. The known ore bodies are associated with changes in strike or dip of the vein and near the contact of these two dissimilar rocks such changes are to be expected.

2. Winze from 465 level 100 feet.

This work would explore the downward continuation of the marginal ore body that was cut by the 465 level drift. There is no direct evidence to infer that the vein will be either larger or smaller at greater depth, but this work would explore a favorable area.

Exploration on the 465 level has revealed only marginal ore and and has tested the vein below all of the old stopes indicating that much of the vein area is not favorable for ore. Therefore, extensive work on the 640 level as originally proposed is no longer attractive, but local exploration of the best showings below the 465 level appears to be justified by the production record of the old stopes.

3. Raise from 465 level 150 feet.

This work is justified because it explores the vein above the best showings on the 465 level and below the East stope. The map accompanying the Operator's report of August 1954, when compared with Figure 2 of C. M. Tschanz's memo of April 23, 1953, shows that the drift on the 465 level is north of the drift on the 264 level. The vein must, therefore, dip north and the north-dipping segments are most favorable for ore bodies. (Tschanz, p. 2).

File Copy
Surname
J.W. Alt
Gurnett
Selfridge
E. Johnson

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

APR 11 1955

Mr. Spangler Ricker
Executive Officer
DMEA Field Team, Region II
U. S. Bureau of Mines
1605 Evans Avenue
Reno, Nevada

Re: Docket No. DMEA-2309 (Lead-Zinc)
Comet Mines, Inc.
Comet Mine
Lincoln County, Nevada
Contract No. Idm-E295

Dear Mr. Ricker:

We are enclosing the original and five copies of Amendment No. 4 to the cited contract, signed by the administrator. This amendment is to replace the one that was lost and is in conformance with the request in your memorandum of March 22.

If the amendment meets with your approval, kindly present it to the Operator for approval and signature and, when completed, distribute the copies in the usual manner. In the event that the amendment is not satisfactory and cannot be amended within your delegated authority, return all copies with your recommendation concerning any modification.

Sincerely yours,

George C. Selfridge

Chairman, Operating Committee (JHB)

Enclosures 6

JWAlt/bjl (4/7/55)

APPROVED:

J. H. Hodges (JHB)
Member, Bureau of Mines

Thor H. Kiilsgaard (JHB)
Member, Geological Survey

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

R.C.S.

File Copy
Surname
J.W. Alt.

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

March 28, 1955

INTERIOR DEPT.
MAR 29 1955
SOLICITOR

Memorandum

To: Acting Assistant Solicitor, Defense Minerals

From: Chief, Base Metals Division

Subject: Preparation of Amendment No. 4 to Docket No. DMEA-2309, Contract No. Idm-E295, Comet Mines, Inc., Lincoln County, Nevada, Lead-Zinc.

Will you please prepare a second Amendment No. 4 for the cited contract. You prepared this amendment previously, and the original and five copies of it were mailed to Spangler Ricker, Executive Officer, Region II, on November 22, 1954. The amendment was never executed and apparently was lost by the Operator.

A rewrite of the original Amendment No. 4 will be necessary. The work under the terms of the contract shall be suspended beginning August 14, 1954 and ending not later than July 1, 1955.

In Article 3 of the contract, the time fixed for completion of the work is extended from "thirty-two (32) months" to "54 months".

The royalty repayment provision should be increased to thirteen years.

This amendment should include a pseudo certification.

Please refer to Mr. Ricker's memorandum dated March 22, 1955. A copy of a letter from Paul Gemmill, Plant Manager, to Mr. Ricker, dated March 14, 1955 and a copy of a letter from S. Ricker to Mr. Paul Gemmill, dated March 10, 1955, accompanied the memorandum from Mr. Ricker.

W. R. Griswold

WRG/er

W. R. Griswold

Copy to: Docket
Base Metals
Chron.

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

1605 Evans Avenue
Reno, Nevada

March 22, 1955

Memorandum

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

From: Executive Officer, DMEA Field Team, Region II

Subject: Docket No. DMEA-2309 (Lead-Zinc)
Comet Mines, Inc.
Comet Mine
Lincoln County, Nevada
Contract No. Idm-E295

Reference is made to letter of March 1, 1955 relative to the status of above subject contract.

Attached is a copy of my letter of March 10, 1955 to the Operator and a copy of Mr. Gemmill's reply dated March 14, 1955.

You will note that I suggested a rewrite of Amendment No. 4 in as much as the original Amendment No. 4 was never executed and has apparently been lost. It would seem that the amendment was sent to Mr. S. S. Arentz at the time of his resignation as President of the Comet Mines and was misplaced or lost in the shuffle. It was never received in our office.

I would recommend that the contract be let stand in default until sometime in April as suggested by the Operator. The question as to whether a rewrite of Amendment No. 4, as suggested in my letter, instead of Amendment No. 5 could be used would have to be left up to your judgement.

S. Ricker

Attachments

COMBINED METALS REDUCTION COMPANY

CASELTON PLANT **PIOCHE, NEVADA**

March 14, 1955.

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
MAR 24 1955

Mr. S. Ricker,
Executive Officer
D.M.E.A. Field Team, Region II
1605 Evans Avenue
Reno, Nevada

Re: Docket No. D.M.E.A. 2309
Comet Mine. Lincoln Co., Nev.

Dear Mr. Ricker:

After receiving your letter dated March 10, 1955, we have searched for the missing copies of Amendment No. 4 but have not been able to locate them in this office. It may be they are in our Salt Lake office but since the time extension expired on December 31, 1954 your suggestion that a re-write be prepared with the same amendment number and further time extension sounds like the best proceedure.

We cannot now promise an early resumption of the Comet project but we expect our plans for the next few months will be better crystallized some time in April. Therefore, if there is no objection to letting the contract stand in default for another month, we will try to decide what commitment should be made at that time.

Yours very truly,

Paul Gemmill,
Plant Manager

cc: W. H. Kelsey
E. H. Snyder
S. W. Farnsworth
O. F. Burton
File

Bureau of Mines
RECEIVED
MAR 24 1955

1605 Evans Avenue
Reno, Nevada

March 10, 1955

Mr. Paul Gemmill,
Manager of Operations,
Combined Metals Reduction Co.
Pioche, Nevada

Re: Docket No. DMEA-2369
Comet Mine, Lincoln Co., Nev.
Contract No. Idm-E295 (lead-zinc)

Dear Mr. Gemmill:

Amendment No. 4 suspended work on above contract from August 14, 1954 to not later than December 31, 1954. According to reports from our engineer, work was not resumed on December 31, 1954 and the contract is therefore in default, and we must take some action relative to allowing the Operator a longer recess period.

In the meantime, however, we have never received the signed copies of Amendment No. 4 which were sent to Mr. S. S. Arentz under a letter dated November 26, 1954 and referred to in our letter of January 31, 1955 to Mr. Arentz. These letters were addressed to Mr. S. S. Arentz, President, Comet Mines, Inc., Combined Metals Reduction Co., Pioche, Nev. It is possible that these amendments were either lost in transmission, misscent, or misplaced either in our or your office. The fact remains that they have apparently disappeared.

If you can give me an approximate date, allowing yourself sufficient leeway, as to when you expect to resume operations, we can probably arrange for a rewrite of Amendment No. 4, in which we would only have to change the resumption of work date and avoid the writing of Amendment No. 5. The method would of course be subject to Washington approval.

I would appreciate your suggestions at your earliest convenience.

Very truly yours,

S. Ricker
Executive Officer
DMEA Field Team, Region II

SRicker:gh
cc: R. M. Smith
H. C. Miller
Files

File Copy
Surname
J. W. Alt
Selfridge
Johnson
Partridge

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

MAR 1 - 1955

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

Re: Docket No. DMEA-2309 (Lead-Zinc)
Comet Mines, Inc.
Comet Mine
Lincoln County, Nevada
Contract No. Idm-8295

Dear Mr. Ricker:

With reference to the cited contract we have received the Interim Report by Glenn G. Gentry, dated February 16, 1955. He states that he visited the property on February 3, 1955, and that no work has been done in the mine since the operations were discontinued by the Operator on August 28, 1954.

By Amendment No. 4, work was to be suspended from August 14, 1954 and ending not later than December 31, 1954. According to Mr. Gentry's report, work was not resumed on December 31, 1954, this contract is now in default and it will be necessary to prepare an amendment allowing the Operator a longer recess period. To date we have not received our signed copies of Amendment No. 4.

Will you please contact the Operator to determine his intentions regarding the resumption of work under the terms of this contract.

We would appreciate receiving your recommendations regarding this contract at your earliest convenience.

Sincerely yours,

George C. Selfridge
Chairman, Operating Committee (JWB)

JWAlt/er 2/28/55
Copy to: Docket
Admr. R File
Op. Committee
Base Metals
Mr. Bishop, USBM
Mr. Kiilsgaard, USGS
Chron.

APPROVED:

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

E. L. Newcomb
Member, Geological Survey (JWB)

R.G.S.

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

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
FEB 4 1955

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

January 31, 1955

Memorandum

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

From: Executive Officer, DMEA Field Team, Region II

Subject: Docket No. DMEA-2309 (Lead-Zinc)
Comet Mines, Inc.
Comet Mine
Lincoln County, Nevada
Contract No. Idm-E295

Relative to your letter inquiring in regard to the status of Amendment No. 4 to above-cited contract, we are attaching our letter of January 31, 1955, to Mr. Arentz. You will note that copies of the amendment were sent to Mr. Arentz on November 26, 1954, but have not as yet been returned.

S. Ricker
Executive Officer
DMEA Field Team, Region II

Attachment

Copy to: R. M. Smith, USGS

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

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
FEB 4 1955

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

January 31, 1955

Mr. S. S. Arentz, President
Comet Mines, Inc.
Combined Metals Reduction Co.
Pioche, Nevada

Re: Docket No. DMEA-2309 (Lead-Zinc)
Comet Mine
Lincoln County, Nevada
Contract No. Idm-E295
Amendment No. 4

Dear Mr. Arentz:

Reference is made to our letter of November 26, 1954, with which we enclosed the original and five copies of Amendment No. 4 (2 pages) with Annex II to the cited contract.

Will you please advise us what action has been taken in regard to this amendment.

S. RICKER

S. Ricker
Executive Officer
DMEA Field Team, Region II

Copy to: DMEA, Washington, D. C.
Roscoe Smith, USGS

File Copy
Surname

J. Alt.
Selfridge
Johnson
McCauley

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

JAN 26 1955

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

Re: Docket No. DMEA-2309 (Lead-Zinc)
Comet Mines, Inc.
Comet Mine
Lincoln County, Nevada
Contract No. Idm-E295

Dear Mr. Ricker:

Will you please advise us regarding the status of the cited contract. On November 22, 1954, we mailed to you Amendment No. 4 which recessed the operations from August 14, 1954, to December 31, 1954, and extended the completion time to 48 months or to April 16, 1956. By Amendment No. 2 the completion time of this contract was December 16, 1954.

To date we have not recieved any information regarding Amendment No. 4 and naturally we are concerned if the Operator has signed the amendment and if he has resumed operations.

Sincerely yours,

George C. Selfridge
Chairman, Operating Committee (SHB)

APPROVED:

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

Thor H. Kiilsgaard
Member, Geological Survey (SHB)

JWAlt/er 1/24/55

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

R.C.B.

File Copy
Surname

J. M. Alt
Talbut
Selfridge
Johnson

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

NOV 22 1954

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

Re: Docket No. DMEA-2309 (Lead-Zinc)
Comet Mines, Inc.
Comet Mine
Lincoln County, Nevada
Contract No. Idm-E295

Dear Mr. Ricker:

We are enclosing the original and five copies of Amendment No. 4 (2 pages) with Annex II, to the cited contract, which have been signed by this office for the Government. This amendment has been made in accordance with your memorandum of November 1, 1954.

If the amendment meets with your approval, kindly present it to the Operator for approval and signature and, when completed, distribute the copies in the usual manner. In the event that the amendment is not satisfactory and cannot be amended within your delegated authority, return all copies with your recommendation concerning any modification.

Sincerely yours,
George C. Selfridge
Chairman, Operating Committee

JWAlt/er 11/18/54

Enclosures

APPROVED:

J. H. Hedges
Member, Bureau of Mines

Thor H. Kiilsgaard
Member, Geological Survey

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

R.G.G.

File Copy
Surname
J.W. Alt.
Swinnerton
Chamberlin

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

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

Re: Docket No. DMEA-2309 (Lead-Zinc)
Comet Mine, Inc.
Comet Mine
Lincoln County, Nevada
Contract No. Idm-8295

Dear Mr. Ricker:

We are enclosing the original and five copies of Amendment No. 4 (2 pages) with Annex II, to the cited contract, which have been signed by this office for the Government. This amendment has been made in accordance with your memorandum of November 1, 1954.

If the amendment meets with your approval, kindly present it to the Operator for approval and signature and, when completed, distribute the copies in the usual manner. In the event that the contract is not satisfactory and cannot be amended within your delegated authority, return all copies with your recommendation concerning any modification.

Sincerely yours,

Chairman, Operating Committee
JWAlt/er 11/17/54

Enclosures

APPROVED:

Member, Bureau of Mines

Member, Geological Survey

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

Docket copy

EXPLORATION PROJE CONTRACT
COMET MINES, INRPORATED
DOCKET NO. DM-2309

AMENDMENT . 4

It is agreed this ____ day of _____, 1954, between the United State f America, acting through the Department of the Interio efense Minerals Explora-tion Administration, and Comet nes, Incorporated, that Contract Idm-E295 (Docket No. M-2309), dated April 16, 1952, as amended is further amed, effective April 16, 1952, as follows:

1. (a) Work under the ract shall be suspended during the period beginning Aut 14, 1954, and ending not later than December 31, 1954.

(b) No costs incurrey the Operator during the period of suspension shall be owable for contribution by the Government, and the Govment shall not contribute to any costs of rehabilitation repair which, in its opinion, would not have occurr if there had been no sus-pension of the work.

(c) The Operator at own cost and expense, without contribution by the Gorment, during the period of suspension shall preserve aprotect the project work and any property in which the rnment has an interest.

2. In Article 3 of the ract, the time fixed for completion of the work is exte from "thirty-two (32) months" to "48 months." (Amenct No. 2 extended the time from "twenty (20) months" to tty-two (32) months.")

3. Annex I, attached to dment No. 2, is cancelled, and Annex II, attached hereto made a part hereof, is substituted for the royalty prions of Article 9 of the contract.

This amendment shall be construed to increase the estimated total cost of theject, the aggregate total

amount which the Government may be required to contribute, nor the amount of any item designated as "allowable maximum."

Executed in sextuplicate the day and year first above written.

THE UNITED STATES OF AMERICA

By _____
Administrator, Defense Minerals
Exploration Administration

Potter
Hoffland
Chamberlin
Grimwood

COMET MINES, INCORPORATED

By _____

_____

File Copy
Surname
J.W. Ad.

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

November 9, 1954

Memorandum

To: Acting Assistant Solicitor, DMEA

From: Chief, Base Metals Division

Subject: Preparation of Amendment No. 4, to Docket No. DMEA-2309, Contract No. Idm-8295, Comet Mines, Inc., Lincoln County, Nevada. (Lead-Zinc)

Will you please prepare Amendment No. 4 to the cited contract. This amendment to allow an extension of completion time of sixteen (16) months. This would make the completion time four years from the date of the contract or to April 16, 1956.

Included in this amendment should be a provision to allow the Operations to be recessed from August 14 to not later than December 31, 1954.

The royalty repayment period should be increased from 11 to 12 years.

Please refer to memorandum of H. C. Miller, dated November 1, 1954 and to the letter of Mr. John D. Russell, Mine Superintendent, dated October 14, 1954.

W. R. Griswold

W. R. Griswold

JMAlt/er 11/9/54
Copy to: Docket
Base Metals
Chron.

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

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

November 1, 1954

Memorandum

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

From: Executive Officer, DMEA Field Team, Region III

Subject: Docket No. DMEA-2309 (Lead-Zinc)
Comet Mines, Inc.
Comet Mine, Lincoln County, Nevada
Contract No. Idm-E295

Attached are four copies of a request by Mr. John J. Russell, Mine Superintendent (approved by Mr. Paul Gemmill, Manager of Nevada Operations), Combined Metals Reduction Company, Pioche, Nevada, for a sixteen-months extension of the completion date of the subject project.

In a subsequent letter dated October 29, 1954, Mr. Russell writes as follows:

> "Operations at the Comet Mine from August 1, 1954, through August 14, 1954, consisted of exploration work approved by the Defense Minerals Exploration Administration under Project No. 2309. From August 15 through August 28 company raising operations were carried on in favorable ore showings on the 465 level. All mine operations were suspended on August 28, 1954. The Comet Mine has been idle since that date. No DMEA work was completed after August 14, 1954.
>
> "It is proposed to resume the Comet DMEA operations on or about December 16, 1954."

Our engineers at Reno recommend that the extension of time be granted; otherwise the Company will not be able to complete the contract. Under the conditions, I concur and respectfully ask that your office prepare the necessary amendment.

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

Attachment

Copy to: Roscoe Smith, USGS

October 14, 1954.

Mr. A. C. Johnson
Chief, Mining Division
Region III
1605 Evans Ave.
Reno, Nevada

Re: Docket No. DMEA 2309
(Comet Mines, Inc. Pioche,
Nevada) Nevada Contract
No. IDM-E 295.

Dear Mr. Johnson:

It is requested that consideration be given to the following proposed extension of time.

Our present Comet Contract expires on December 16, 1954. With mine operations curtailed at present for a sixty day period from this date it is evident that the contract would expire before the project could be completed. Upon the resumption of mining operations the approved exploration drive will be resumed on a one shift basis.

On September 1, 1954, the approved exploration not yet completed was as follows: 423.2' of drifting on the 465 level, 1500' of drifting on the 640 level, 104' of sinking. It is therefore requested that an extension of time to total sixteen months from the present expiration date be granted to complete the work on a one shift basis.

Early approval of the modification of the contract on the basis outlined is respectfully requested.

Very truly yours,

John J. Russell
Mine Supt.

Approved:

Paul Gemmill, Manager
of Nevada Operations.

cc: A. C. Johnson (5)
EHS, PG, RL, File

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

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
NOV 1 - 1954

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

October 26, 1954

Mr. John J. Russell
Mine Superintendent
Comet Mines, Inc.
Combined Metals Reduction Co.
Caselton Plant
Pioche, Nevada

Re: Docket No. DMEA-2309 (Lead-Zinc)
Comet Mines, Inc.
Comet Mine, Lincoln County, Nevada
Contract No. 1dm-L295

Dear Mr. Russell:

Mr. A. C. Johnson, Bureau of Mines, Reno, Nevada, has forwarded your October 14, 1954, letter to us for consideration. In that letter you request a sixteen months extension (from December 16, 1954) of the cited contract to complete the work on a one shift basis.

In that letter you also state that mine operations are presently curtailed for a sixty day period from October 14, 1954. Does that mean that DMEA operations are suspended or merely on a reduced scale? Kindly let me know the scale of DMEA operations planned during that sixty-day period.

Your monthly report attached to your August 1954 voucher forms indicates that DMEA work was carried out through August 14, 1954, and all activity temporarily discontinued on August 28, 1954. Was any DMEA work done between August 14 and October 14 - the date of your letter when operations began a sixty-day curtailment period?

Upon receipt of the above requested information, your request for a sixteen months extension from December 16, 1954, will be submitted to the Washington office for consideration and action.

Sincerely yours,

H. C. Miller

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

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

Talbot
Chambers

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

OCT 12 1954

Mr. George Mavor
DMEA Auditor
420 Custom House
555 Battery Street
San Francisco 2, Calif.

Re: Idm-E295, DMEA-2309
Comet Mines, Incorporated

Dear Mr. Mavor:

Returned herewith for several minor corrections are the Washington copies of your 2nd Interim Audit Certificate and Report covering your recent audit of the subject Exploration Project Contract.

In the first paragraph of both the Certificate and Report the reference to Amendment No. 3 should be deleted. This Amendment was dated August 3, 1954 and was effective July 16, 1954, whereas your audit covers the period ending May 31, 1954.

On page 4 of the Audit Report it appears that the dates of the services of R. R. Durk, Superintendent should be "August 16, 1953 to October 13, 1953" rather than "August 16, 1952 to October 31, 1953". Also, the statement "Oct. '52 prorata" apparently should be "Oct. '53 prorata".

In the last paragraph of page 6 of the Audit Report either the number of KWH is erroneously stated or the average rate has been miscalculated. On the basis of the figures presented the average rate would be ".527 cents" rather than "00.5268 mills".

After necessary corrections have been made, normal distribution of the Audit Report and Certificate may be made without further advice from this Division.

Sincerely yours,

(Signed) J. L. Chambers

Jay L. Chambers, Chief
Contract Administration
and Audit Division

Enclosure

EDTalbert/wb 10-12-54

cc to: Docket
Admr. Reading File
Mr. Chambers

R.C.S.

DEFENSE MINERALS EXPLORATION ADMINISTRATION

ROYALTY REPAYMENTS
AS OF AUGUST 31, 1954

OPERATOR

Comet Mines, Inc.

CONTRACT NO.

295

DOCKET NO.

2309

RECEIVED DURING AUGUST

$22.77

TOTAL RECEIVED

$22.77

DATE OF LAST RECEIPT

8/9/54

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

420 Custom House
555 Battery Street
San Francisco 11, California

August 9, 1954

Memorandum

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

From: Executive Officer, DMEA Field Team, Region III

Subject: Docket No. DMEA-2309
Comet Mines, Incorporated
Comet Mine, Lincoln County, Nevada
Contract No. Idm-E295
Amendment No. 3

Attached are the original and two copies of Amendment No. 3, dated August 3, 1954, permitting an additional 600 feet of drifting on the 465 level of the Comet Mine in lieu of a similar amount of drifting on the 640 level.

A justification sheet is attached to each copy of the amendment.

Proper distribution has been made of the remaining copies.

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

Attachments

Copy to: A.C.Johnson, Reno(with attachments)
Finance Officer, Region III(with attachments)
R.M.Smith, USGS
George Mavor

7

File Copy
Surname
Griswold
Selfridge
H. Johnson
Matthewson

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

500

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

Re: Docket No. DMEA-2309 (Lead-Zinc)
Comet Mines, Inc.
Comet Mine
Lincoln County, Nevada
Contract No. Idm-F295

Dear Mr. Miller:

We have your letter of July 22, regarding a proposed change in the work program of the cited project. We can see no reason why you should not prepare such an amendment, if it is your opinion that such a change is to the best interest of both the Operator and the Government.

Sincerely yours,

George C. Selfridge

Chairman, Operating Committee

Approved:

J. H. Hedges

Member, Bureau of Mines

D. M. Larrabee

Member, Geological Survey

WRGriswold/bjl (7/29/54)

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

R.C.S.

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

420 Custom House
555 Battery Street
San Francisco 11, California

July 22, 1954

Memorandum

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

From: Executive Officer, DMEA Field Team, Region III

Subject: Docket No. DMEA-2309 (Lead-Zinc)
Comet Mines, Inc.
Comet Mine
Lincoln County, Nevada
Contract No. Idm-E295

Mr. A. C. Johnson has forwarded to me copies of a request from Mr. Paul Gemmill, Manager, Nevada Operations, Combined Metals Reduction Company, for an amendment to the subject contract to permit switching 600 feet of drifting from the 640 level to the 465 foot level. A copy of Mr. Gemmill's letter, dated July 16, 1954, is attached.

Mr. Johnson recommends that the operator's request be granted and a study of the maps of the property lead me to believe that an amendment is in order. I have not had the opportunity to discuss the request with Roscoe Smith of the Survey but shall do so at the earliest opportunity.

My question is: if Mr. Smith approves, may I prepare Amendment No. 3, as requested?

An early reply will be appreciated.

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

Attachment

Copy to: R. M. Smith-USGS

July 16, 1954.

Mr. A. C. Johnson
U. S. Bureau of Mines
P. O. Box 1551
Reno, Nevada

Re: Docket No. DMEA 2309
(Comet Mines, Inc. Pioche,
Nevada) Nevada Contract
No. IDM-E 295

Dear Mr. Johnson:

It is requested that consideration be given to the following proposed amendment to the subject contract.

Proposed Amendment No. 3

In amendment No. 1 of the contract 1100' of drift was allowed on the 465 level of the Comet Mine. Exploration work already completed has indicated that this footage is not sufficient.

One sulphide ore shoot has been developed about 600' east of the shaft; but the drift to the southwest has remained in the oxide zone of the fissure with indications that oxidation will persist well below the level.

It is therefore proposed that a total of 600' of approved drifting on the 640 level be transferred for our use in the continuation of the 465 level to the northeast.

At this time we have completed our allowed footage on the 465 level and are continuing to drift along the fissure to the northeast. Your field representative, Glenn Gentry, stated that such action was advisable.

Early approval of the modification of the contract on the basis outline is respectfully requested.

Very truly yours,

John J. Russell
Mine Supt.

cc: Mr. A. C. Johnson (5)
EHS
SSA
PG
RL
File

Approved:

Paul Gemmill, Manager of
Nevada Operations

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

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

March 18, 1954

Memorandum

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

From: Executive Officer, DMEA Field Team, Region III

Subject: Docket No. DMEA-2309 (Lead-Zinc)
Comet Mines, Inc.
Comet Mine, Lincoln County, Nevada
Contract No. Idm-E295
Amendment No. 2

Attached are the original and two copies of Amendment No. 2, dated December 18, 1953, made in connection with subject contract.

A justification sheet is attached to each copy of the amendment.

Proper distribution has been made of the remaining copies.

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

Attachment

Copy to: A. C. Johnson, Reno (With copy of amendment)
Finance Officer, Region III (With copy of amendment)
Roscoe Smith, USGS
George Mavor

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

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

February 11, 1954

Mr. G. E. Arentz, President
Comet Mines, Inc.
Pioche, Nevada

Re: Docket No. DMEA-2309 (Lead-Zinc)
Comet Mine
Lincoln County, Nevada
Contract No. Idm-1295
Amendment No. 2

Dear Mr. Arentz:

Thank you for your letter of February 9, 1954, informing us that you plan to resume work under the above-referenced contract on or before April 1, 1954.

Accordingly, I have inserted the date of March 29, 1954, which is the beginning date of the week in which April 1 falls, in Item 4 of Amendment No. 2 of the contract prepared in the Washington office.

Item 4 then reads: "During the period from October 13, 1953, to March 29, 1954, (a) the project work shall be recessed; . . ."

Six copies of Amendment No. 2, dated December 18, 1953, are enclosed. If the amendment meets with your approval, kindly sign all six copies, retain the copy marked "Operator's Copy" for your files, and return the original and four other copies to this office.

Sincerely yours,

R. C. Miller
Executive Officer
DMEA Field Ten, Region III

Enclosure

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

C

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

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

February 2, 1954

Mr. S. S. Arentz, President
Comet Mines, Inc.
Pioche, Nevada

Subject: Docket DMEA-2309 (Lead-Zinc)
Contract Idm-E295
Comet Mine
Lincoln County, Nevada

Dear Mr. Arentz:

Reference is again made to your letter of November 30, 1953, requesting an extension of captioned contract for one year to December 16, 1954, and to my reply of December 28, 1953, informing you that Amendment No. 2, extending the contract from 20 to 32 months, had been drawn up in Washington.

However, as explained in my December 28 communication, before I can send the copies of the amendment to you for signature, I must know the date when the recess of operations for the project will end. I have the beginning date - October 13, 1953, but lack the date when operations will again start.

May I ask that you send me the required information by return mail, so that Amendment No. 2 to your contract may be submitted to you for approval and execution.

Sincerely yours,

H. C. MILLER

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

Copy to: Operating Committee, DMEA, Washington
Roscoe M. Smith, USGS
A. C. Johnson, Reno

FILE COPY
SURNAME

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

DEC 21 1953

Mr. W. J. Miller, Executive Officer
Mineral Field Team, Region III
1012 Flood Building
870 Market Street
San Francisco 2, California

Re: Docket No. 2309 (Lead-Zinc)
Comet Mines, Inc.
Comet Mine
Lincoln County, Nevada
Contract No. Idm-1295

Dear Mr. Miller:

We are enclosing the original and five copies of Amendment No. 2 to the above contract, signed by this office for the Government, together with Annex . An amendment was requested in your memorandum of December 2, 1953.

It will be necessary for you to insert in the blank space in item 4 of the amendment the date when the process of operations for the project will end.

If the amendment meets with your approval, kindly present it to the operator for approval and signature and, when completed, distribute in the usual manner. In the event that the amendment is not satisfactory and cannot be amended within your delegated authority, return all copies, with your recommendation concerning any modification.

Sincerely yours,

George C. Selfridge

Chairman, Operating Committee (JHB)

Enclosures 6
APPROVED:

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

E. P. Thayer (JHB)
Member, Geological Survey

JWAlt/hmj (12-16-53)
CC to: Docket
Adm. R. File
Op. Committee
Mr. Kinkel
Mr. Bishop
Base Metals Division
Chron.

R.C.S. 12-21-53

500

FILE COPY
SURNAME:

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

December 14, 1953

Memorandum

To: Chief Counsel

From: Base Metals Division

Subject: Amendment to allow the Operator an extension of time to complete the work of contract No. Idm-5295, Docket No. MEA 2309, Comet Mines, Inc., Lincoln County, Colorado

Will you please prepare Amendment No. 2 to allow the Operator an extension of time to complete the work of the contract.

The date of the contract is April 16, 1952, and the work was to be completed in 20 months.

We concur with the recommendation of the Field Team that the completion time be extended from December 16, 1953, to December 16, 1954. This would extend the completion time from 20 months to 32 months.

Please refer to memorandum of December 2, 1953 from L. G. Miller, Executive Officer, Region III.

/s/
J. W. Alt

Attachment

Docket
Base Metals
Chron.

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

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

December 2, 1953

Memorandum

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

From: Executive Officer, DMEA Field Team, Region III

Subject: Docket No. DMEA-2309 (Lead-Zinc)
Comet Mines, Inc., Lincoln County, Nevada
Contract No. Idm-E295

I have a request dated November 30, 1953, from Mr. S. S. Arentz, President, Comet Mines, Inc., for an extension of the subject contract to December 16, 1954. As the contract is dated April 16, 1952, an extension to December 16, 1954, will exceed the two-year limit and call for my requesting the Washington office to prepare the amendment if one is to be allowed.

Attached is a copy of the letter received from Mr. Arentz, with attached letter dated November 9, 1953, from Mr. Paul Gemmill, General Superintendent of Mines for Nevada, Combined Metals Reduction Company.

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

Attachments

Copy to: E. H. Bailey, USGS (With attachments)
A. C. Johnson, Reno

COMBINED METALS REDUCTION COMPANY

November 30,1953

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

Docket No. - DMEA 2309
Contract No. - Idm-E295
Comet Mines, Inc.

Dear Sir:

Work on the subject project was temproarily stopped in October due to the continued low prices for lead and zinc. The equipment and tools were left at the property to facilitate an immediate resumption of operations as soon as conditions warrant. The last work indicated that the east heading on the 465 level was entering an ore shoot.

An attached letter from Mr. Paul Gemmill, General Superintendent, Nevada Mines, indicates that the project can be completed within the estimated cost if we are allowed a 12 month extension of the contract. It appears that we shall be able to resume work on the project early in 1954 on the basis indicated.

We herewith request an extension of the contract for one year to December 16, 1954.

Very truly yours,

S. S. Arentz, President
Comet Mines, Inc.

SSA:sp
cc -
Mr. H. C. Miller - 4
Mr. A. C. Johnson - 1
Mr. E. H. Snyder - 1

FORM 25

COMBINED METALS REDUCTION COMPANY

Comet Mine-D. M. S. A. Project #2309

November 9, 1953

S. S. Arents, Manager, Nevada Operations

Paul Gemmill

Dear Sam:

As you are no doubt aware, the expiration date of the Comet Project falls on December 16, 1953.

To date we have completed 381 feet of raising for the shaft, 6 feet of sinking and 826 feet of drifting and cross cutting. To complete the work outlined in our application we must still sink 104 feet of shaft, cut two pockets and drive 2392 feet of drifts and cross cuts. We have spent approximately $85,000 of the $190,000 allowed for the project, leaving $105,000 to be spent.

During the 5-month period, May through September, 676.5 feet of drifting was accomplished at a cost of $20,920 or $30.92 per foot. Using this figure the 2392 feet of drifting will cost $74,000 leaving $29,000 out of which we can sink the shaft, cut pockets and have some money left.

I estimate the balance of the project can be completed in 12 mos. if work is performed on two shifts using the same type crews for drifting that we used on the one shift basis and using an extra man on the shaft sinking crew. This timing would be accomplished in the following manner:

	Time on 1 Shift	Elapsed Time 2 Shifts
Complete 445 level advance as proposed about 300 ft.	2 mo.	
Shaft Sinking - 104 ft.	3 mo.	3 mo.
Shaft Pockets	1 mo.	
640 Level advance - 2100 ft.		8 mo.
Contingency, or period of present shut-down		1 mo.
Total		12 mo.

On this basis, I recommend that formal application be made for a time extension to December 1, 1954.

Yours truly,

Paul Gemmill

Paul Gemmill, Gen. Supt. of Mines for Nevada

cc: E. N. Snyder
3 extra copies
File

FORM 25

FILE COPY
SURNAME:
800
Chambers

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

OCT 13 1953

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

Re: Comet Mines, Inc.
Idm-E295, DMEA-2309
Pioche, Nevada

Dear Mr. Mavor:

Reference is made to my letter of September 25, 1953, and your reply under date of October 8, 1953, in regard to certain points on the above-cited contract.

I wish to emphasize that in an actual costs contract the time, monthly salary, and total salary for supervision are designated "allowable maximums" by Article 6 (a) (2) of the contract form. A star on any one of these items has no effect on the interpretation of the contract. This office, however, has decided that under the extenuating circumstances involved in this particular contract it appears equitable to allow the claim of the contractor, especially since the average supervisory charge for the 14 months was $287.00 a month or $13.00 per month under the contract allowance. This decision should not be used as a precedent or as establishing a policy. The policy of the Administration on this point is the interpretation that I have given above.

The quotation which you gave from a letter of the Operating Committee has the opposite intention than what you gave in your letter. The Operating Committee stressed the point that the monthly salary allowed for supervision was for full time employment unless otherwise stated in the contract and that if a supervisor gave only a part of his time to a project only a part of the allowable salary would be approved.

I am also approving the general direct costs items, since the engineer agreed that a 7½% charge on the total project costs was to the advantage to the Government because of the near impossibility of making detail distribution of the items mentioned both in your report and in the contract itself.

Your explanations on the other questions raised by my letter of September 25 are acceptable. Accordingly, you may release the Audit Report and Certificate for distribution and return the Washington Office copies to me.

Sincerely yours,
(Signed) J. L. Chambers

Jay L. Chambers, Chief
Contract Administration
and Audit Division

JLChamber/wb
October 13, 1953

Copy to: Docket
Admr. Reading File
Mr. Chambers

R. C. G.
10-13-53

FILE COPY
SURNAME

Chamberlin

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

SEP 2 5 1953

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

Re: Comet Mines, Inc.
Idm-1295, DMEA-2309
Pioche, Nevada

Dear Mr. Meyer:

I am returning the Audit Certificates and Audit Reports on the above-cited project, submitted by your memorandum of September 18, 1953, with the following comments.

The contract form itself provides that the monthly salaries, the total amount estimated in Exhibit A for supervisory and technical people are maximums. For this reason a disallowance of $275.00 should be taken on Mr. McIntyre's salary. The asterisk which was placed after the total amount for supervision in this particular contract apparently is misleading, both to you and the Comet Mines, Inc.

It is noted that your audit accepted a 7½% charge on the total project cost for warehousing, accounting and general expense. General expense, of course, is not an allowable item, nor is warehousing within itself an allowable item. A reasonable charge for accounting will be accepted as will also a reasonable handling charge for materials and supplies taken from a warehouse, provided the warehouse inventory items do not contain a mark-up for handling charge in their issue prices.

It is true that the item of $14,145.00 allowed under Miscellaneous is exactly the amount estimated by the Corporation for general overhead services, etc., in the Corporation's application. This amount was placed in the contract to care for legitimate direct costs not otherwise provided for in the contract. We have paid for engineering, assaying, repairs and maintenance as billed by the Operator. We will consider a reclaim by the Company for accounting and handling of supplies, provided, as stated above, the warehouse inventory does not include a mark-up for handling.

The word "services" used under the Miscellaneous item in the contract does not have the same connotation in the contract that the

R.C.J.
9-25-53

applicant had in his application. Judging from the manner in which the Company billed for the services, part of the payment would be for general overhead, which by the terms of the contract (Article 6c) is prohibited as allowable ~~allowable~~ costs in which the Government will participate. In this respect refer to page 10 of your audit where, under the heading of "Casalton Mine's Prorata Share of Plant Overhead", an item of $149,000 is listed.

In taking your exception I think you might explain to the Operator that he may submit a claim for accounting and for handling materials and supplies taken out of the warehouse and other direct costs, but no charge for "servicing" these or other items, as the term is apparently understood by the Operator, can be allowed.

Two other points in the Audit Report need clarification or correction as follows:

(1) The contract provides, under Labor, that a list shown therein "shall constitute the maximum crew for direct labor on the project." Therefore, your report should include a statement to the effect that no jobs other than those provided for in the contract were charged to the project, if such is the case. It is noted, however, that your report mentions a "starting mechanic" which is not in the contract list, and accordingly disallowances may be required unless this is merely another title for one of the listed jobs.

(2) In the status of "allowable maximums" on page 11 you have included the pick-up transportation under Miscellaneous rather than Operating Materials and Supplies, as provided by the contract. Therefore, the table and the asterisked footnote should be corrected to indicate that, for "allowable maximum" purposes, the pick-up transportation of materials and supplies is included under Operating Materials and Supplies.

Sincerely yours,

SIGNED

Jay L. Chambers, Chief
Contract Administration
and Audit Division

Enclosure

JLChambers/wb
September 25, 1953

Copy to: Docket
Admr. Reading File
Mr. Chambers

Docket Copy

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

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
MAY 4 1953

Office of
Executive Officer
DMEA Field Team
Region III

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

April 30, 1953

Memorandum

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

From: Executive Officer, DMEA Field Team, Region III

Subject: Contract Idm-E295 - Docket DMEA-2309 (Lead-Zinc)
Comet Mines, Inc., Comet Mine
Lincoln County, Nevada
Amendment No. 1

Attached are the original and two copies of Amendment No. 1, dated April 21, 1953, made in connection with subject docket.

A justification sheet is attached to each copy of the amendment.

The usual distribution has been made of the remaining copies of the amendment.

cse 5/4

RECEIVED
MAY 11 53
GENERAL COUNSEL
DEFENSE MINERALS
ADMINISTRATION

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

Attachments

Copy to: A. C. Johnson, Reno (With copy of amendment)
Einance Officer, Region III (With copy of amendment)
E. H. Bailey, USGS
George Mavor

FILE COPY
SURNAME:
500

J. W. Alt
Burnett
Selfridge
Hyde

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

April 16, 1953

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

Re: Docket No. DMA-2309 (Lead-Zinc)
Comet Mines, Inc.
Comet Mine
Lincoln County, Nevada
Contract No. Idm-5295

Dear Mr. Miller:

N. S. in R. R.

For your consideration we are enclosing a copy of a letter we have received from Mr. F. S. McIntyre, Superintendent of Comet Mines, Inc., dated April 2, 1953, in which he requests an amendment to the subject contract.

If the proposed amendment should meet with your approval, this will authorize you to execute such amendment and also to extend the time limit, if such should be necessary, up to a maximum of 2 years from the contract date.

We have written to Mr. McIntyre notifying him that we have referred his request to you.

Sincerely yours,

George W. Selfridge (JHB)

Chairman, Operating Committee

Enclosure

JWAlt/hmj
(4/15/53)
CC to: Docket
Admr. R. File
Op. Committee
Base Metals
Mr. Alt
Mr. Bishop
Mr. Kinkel
Chron.

APPROVED:

E. H. Rodgers (JHB)
Member, Bureau of Mines

A. R. Kinkel, Jr. (JHB)
Member, Geological Survey

FILE COPY
SURNAME:

500

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

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

APR 16 1953

Re: Docket No. DMEA-2309 (Lead-Zinc)
Comet Mines, Inc.
Comet Mine
Lincoln County, Nevada
Contract No. Idm-E295

Dear Mr. Miller:

For your consideration we are enclosing a copy of a letter we have received from Mr. E. S. McIntyre, Superintendent of Comet Mines, Inc., dated April 2, 1953, in which he requests an amendment to the subject contract.

We have written to Mr. McIntyre notifying him that we have referred his request to you.

Sincerely yours,

Chairman, Operating Committee

Enclosure

JWAlt/bjl (written 4/15/53)

APPROVED:

Copy to: Docket
Admr. R. File
O p. Committee
Base Metals
Mr. Alt
Mr. Bishop
Mr. Kinkel
Chron.

J. C. 4/16/53

Member, Bureau of Mines

Member, Geological Survey

Rewritten

FILE COPY
SURNAME:

500

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

APR 16 1953

Mr. E. S. McIntyre, Superintendent
Comet Mines, Inc.
Pioche, Nevada

Re: Docket No. DMEA-2309 (Lead-Zinc)
Comet Mines, Inc.
Comet Mine
Lincoln County, Nevada
Contract No. Idm-E295

Dear Mr. McIntyre:

J. C. 4/16/53

Your letter dated April 2, 1953, regarding your request for an amendment to the subject contract, is being referred for consideration to:

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

You should hear shortly from Mr. Miller regarding your proposed change in the work of the project.

Sincerely yours,

W. R. Griswold

W. R. Griswold, Chief
Base Metals Division

JWAlt/bjl (written 4/15/53)

Copy to: Docket
Admr. R. File
Op.Committee
Base Metals
Mr. Alt
Mr. Kinkel
Mr. Bishop
Region III (2)
Chron.

COMET MINES, INC.
PIOCHE, NEVADA
April 22, 1953

REF: DMEA-2309

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
APR 7 1953

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

ATTENTION: Mr. Frank E. Johnson

Dear Sir:

In the contract between the Government and Comet Mines, Incorporated, Pioche, Nevada, agreed on April 13, 1952, Exhibit "A", Item 6, specifies an allowable maximum of 1,100 feet of drifting on the vein at the 385 foot level. After further study and consideration of this proposal it is deemed advisable to reconsider Item 6 and do this exploration work on the 465 level, instead of the 385 level.

Drifting on the vein at the 465 level will furnish the same geological data and develop the fissure vein to the same extent. It will be more advantageous as it will explore the area at a greater distance between the oxidized zone. However, the main advantage is the financial savings to the government and our company that will be received by utilizing the present 465 level station and 189 feet of drift now excavated. The present drift will require widening and rehabilitation to accomodate cars and mucking machine, but this can be accomplished at a reduced cost in time and money compared with driving a new drift.

It is hereby recommended that Item 6 of Exhibit "A" be amended to read, "Drift on vein at 465 level, allowable maximum 1,100 feet and rehabilitation of present 189 feet of drift to be included as part of the 1,100 feet allowed."

Enclosed maps are submitted to show proposed amendment.

Exploration work will have been completed to the start of Item 6 by April 15, 1953, therefore, an early decision on this amendment will be appreciated.

Yours truly,

E. S. McIntyre

E. S. McIntyre
Supt. of Comet Mines, Inc.

ESM/jp
Carbon copies to: USBM, Reno, Nevada (2)

FILE COPY
SURNAME:

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

MAR 23 1953

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

Re: Docket No. Idm-2309 (Lead-Zinc)
Comet Mines, Inc.
Lincoln County, Nevada
Contract No. Idm-2295

Dear Mr. Miller:

We have just received the Interim Report dated February 26, 1953, by Mr. Glenn L. Gentry, Mining Engineer, on the above project and we wish to congratulate him on this very good report. It is a very complete and well-prepared report and supplies us with all the necessary information.

The progress made and quality of work by the Operator apparently is satisfactory, but from Glenn Gentry's comments (last paragraph of his report), it appears that an amendment will be needed to allow the Operator more time to complete the work of this project. Of course, that will not have to be done for some time, as the contract does not expire until December 16, 1953.

In order to expedite the work, is it possible for or has the Operator considered the driving of the drift on the 385-foot level while the shaft raise is being put up from the 550-foot level and while the shaft is being sunk to the 630-foot level?

Sincerely yours,

George C. Selfridge

Chairman, Operating Committee

APPROVED:

W. W. Hedges
Member, Bureau of Mines

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

JWAlt/hmj (3-19-53)
CC to: Docket File
Administrator's R. File
Op. Committee
Base Metals Division
Mr. Alt
Mr. Bishop
Mr. Kinkel

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

Office of
Executive Officer
DMEA Field Team
Region III

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

June 12, 1952

Memorandum

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

From: Executive Officer, DMEA Field Team, Region III

Subject: Docket DMEA-2309--Contract Idm-E295 (Lead-Zinc)
Comet Mines, Inc., Pioche, Nevada

As requested in Mr. Frank E. Johnson's letter of May 29, the original and all copies of subject contract were returned to the Operator for initialing the changes made in Exhibit "A". The Operator has complied accordingly and retained his copy of the contract. We have retained the Field Team's copy, and the original and three remaining copies are returned herewith. We shall expect to receive the Finance Office copy through the regular channels.

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

Attachments

Copy to: E. H. Bailey, USGS
A. C. Johnson, Reno

DEPARTMENT OF THE INTERIOR
Defense Mineral Administration
RECEIVED
JUN 16 1952

500

FILE COPY
SURNAME:

Moulds

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

Mr. H. O. Miller
Executive Officer, Region III
DMEA Field Team
1032 Flood Building
870 Market Street
San Francisco 2, California

MAY 29 1952

Re: Docket No. DMEA 2309
Comet Mines, Inc.
Lead-Zinc

Dear Mr. Miller:

The original and five copies of the subject contract which you transmitted to Washington under date of May 16, 1952 are returned herewith.

In recognition of the necessity for the change from a 2½ compartment to a 1½ compartment shaft, as indicated by Mr. Arents' modification in ink on Exhibit "A" and as presented by your memorandum, the change has been approved. This approval is indicated on the original and all copies by my initialling as Chairman of the Operating Committee.

The original and all copies are to be presented to Mr. Arents for initialling all changes in the same manner. After initialling, the original and all copies are to be distributed in the usual manner.

Sincerely yours,

(signed) FRANK E. JOHNSON (JHB) 5/29

Chairman, Operating Committee
Defense Minerals Exploration
Administration

Enclosures-6
APPROVED:

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

D M Lemmon (JHB)
Member, Geological Survey

DEMoulds/mef 5/27/52
cc to: Adm. R. File
Op. Comm.
Docket
Mr. Moulds
Mr. Bishop
Mr. McKNight
Region III

Don:

5/26/52

I have initialed the 3 changes on all six copies of the contract pursuant to Mr. Hoffland's memo. Please prepare letter to Executive Officer returning all copies of the contract and indicating that I have initialed the changes. The F.T. should be requested to have the Operator initial all changes in same manner & return all copies to Executive Officer for distribution in the usual manner. Letter to Field Team should be for signatures of the Operating Committee.

FEJ

140

FILE COPY
SURNAME:

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

May 26, 1952

Memorandum

To: Acting Administrator

From: Chief Counsel

Subject: Comet Mines, Inc. - Docket No. DMEA-2309, Idm-R295

The correspondence attached to this contract indicates that the Operator, after the contract was signed by the Government, changed the description of the shaft from "2½ compartments" to "1½ compartments". Mr. Moulds advises me that this will not necessitate any change in the estimate of costs.

If the change is satisfactory to the Operating Committee, I see no reason why the contract cannot be accepted as changed by the applicant. In this case, Mr. Johnson should initial the three changes indicated on the first page of Exhibit "A", all six copies. All six copies should then be returned to the field team for delivery to the Operator after the Operator has initialed the changes. The file copies should be returned to Washington as usual with the initialed changes.

J. L. Hofflund

J. L. Hofflund
Chief Counsel

5/26

Attachment
JLHofflund/bjl

Copy to: Mails & Files
C. O. Mittendorf
J. L. Hofflund
D. E. Moulds
Chron.

FILE COPY
SURNAME:
Docket

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

Moulds

Mr. J. L. Hofflund

May 22, 1952

D. E. Moulds

Comet Mines, Inc. - Docket No. DMFA 2309, Idm-E295

All six copies of this contract have been returned after signing by the Operator due to the changing of the size of the proposed shaft from a 2½ compartment to a 1½ compartment. The changes were made in ink by the Operator without prior consultation with the field office. The reasons presented in Mr. Miller's memorandum of May 16 for changing the size of the winze are realistic and have the approval of this Division.

In view of the method of modifying the contract, we are transmitting it to you for recommendation as to any action necessary for approval of this change.

D. E. Moulds (mef)

D. E. Moulds

DEMoulds/mef/hmj
5-22-52
CC to: Adm. Reading File
Docket File Copy
Mr. Moulds

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

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
USGS
MAY 20 1952

Office of
Executive Officer
DMEA Field Team
Region III

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

May 16, 1952

Memorandum

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

From: Executive Officer, DMEA Field Team, Region III

Subject: Docket DMEA-2309X (Lead-Zinc), Comet Mines, Inc., Pioche, Nevada - Exploration project contract Idm-E295

Reference is made to your subject letter dated April 16, 1952, transmitting the original and five copies of the contract covering an exploration program at the Comet mines.

The contracts were submitted to Mr. S. S. Arentz of Comet Mines, Inc. for his signature with a statement that if the contract as prepared does not meet his approval, all six copies should be returned to this office again. Mr. Arentz, however, did not follow instructions as he made changes in the exhibit with ink, indicating that the company now desires to sink only a 1-1/2 compartment shaft instead of a two-compartment shaft, as indicated in the contract. Mr. Arentz also signed all six copies.

I therefore requested return of the operator's copy and am returning it and the original and four other copies to you for initialing the changes, or for drawing up a new contract.

Mr. Arentz writes that his company has recently completed a major development project in the Castleton mine which included a 300-foot raise in massive quartzite, similar to the formation at Comet. Due to the excessive cost experienced in drilling and blasting the hard quartzite, he has decided that his company had better reduce the size of the proposed Comet shaft from 2-1/2 compartments to one hoisting compartment and a large manway to allow room for the installation of a counterweight for hoisting. Mr. Arentz believes that this will reduce the actual cost below the cost estimated in his application, but will avoid an excessive over-expenditure in completing the project. This change was made doubly necessary, he writes, by the arbitrary reduction in the total estimated cost of the project as set out in the contract.

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

Attachment

Copy to E. H. Bailey, USGS

FILE COPY
SURNAME:

Moulds
Bishop
Olund
Lyons

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

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

Re: Docket No. DMEA 2309X (Lead-Zinc)
Comet Mines, Inc.
Pioche, Nevada

Dear Mr. Miller:

We are transmitting herewith the original and five copies of the contract covering an exploration program at the Comet Mine. This contract is on the new form which involves certain minor changes in listing of various classifications of cost.

In view of the indicated benefit of the shaft work to the exploration project and any future production, an agreement has been reached by telephone discussion with Mr. S. S. Arents, under which the Comet Mines, Inc. will perform, at their own expense, all work above the 160' (168' below collar) level. This expense involves the work as shown in Items 1 and 2. The Government will participate in the cost of the work set up in Items 3 - 7, inclusive. Repayment has also been agreed to be due the Government from all production from the property listed in Article 2, in other words, production coming from the first level and above will not be excluded.

If this contract is satisfactory to you, please present it to Mr. Arents for approval and signing. All copies are then to be distributed in the normal manner with the original and three copies returned to this office.

Sincerely yours,

(signed) FRANK E. JOHNSON

Chairman, Operating Committee (JHB)
Defense Minerals Exploration Administration
DEMoulds/meh/hmj 4-10-52
CC to: Adm. R. File
Docket File Copy
Operating Committee
Mr. McKnight
Mr. Bishop
Region III Mr. Moulds

Enclosures - 6
APPROVED:

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

T. P. Thayer
Member, Geological Survey (JHB)

FILE COPY
SURNAME:

Moulds

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

not strongest in Rock Creek

March 28, 1952

Memorandum

To: Mr. J. L. Hofflund, Chief Counsel

From: D. E. Moulds, Base Metals Division

Subject: Proposed contract, Comet Mines, DMEA 2309, Lead-Zinc

With reference to your memorandum of March 26, 1952 returning to this office the proposed contract transmitted to your office on March 17, 1952.

At the time this proposed contract was transmitted, the new contract forms were not available. Therefore, the contract was presented in form and content previously used with the understanding that the proposal would be adapted to the new form, and, if insufficient, the additional requirements informally discussed. The contract had previously been discussed and approved by the accounting division and with Mr. Frank Johnson. However, the first indication of unsatisfactory nature of this proposed contract was the receipt of your memorandum.

This project had previously been discussed with the applicant and a compromise reached on work allowable as exploration. In view of the period of time required in discussions with the applicant to reach this decision, the contract was thought to be worthy of expedious handling to the completed form, and in a manner designed to bring out the proposed program and allowable participation in the various phases of the work. In this regard, the costs were set up on inclusive cost per foot and as formerly used in summary of aggregate costs.

The matter of "sufficient detail" appears to be a concern of accounting and engineering in which the satisfactory detail required, appears to be widely interpreted throughout the field. This detail, however, was reviewed and indicated satisfactory.

In regard to the matter of miscellaneous costs, it is agreed that the terms were not of legal sufficiency but could have been rearranged in a satisfactory manner. It is pointed out that a preferable method would be to use the short form which has not been distributed as yet. As previously discussed, it is believed that the short form, as understood, cannot be adapted to estimated costs furnished in support of applications under the MO-5 without negotiation with the applicant. The time required in this instance is not believed warranted.

It is stated - "It will never be sufficient to describe "unpatented lode mining claims" simply by name, with nothing more". In previous contracts this has sufficed. In this instance the claims are part of a well-recognized mining property with previous production record and shown on a USGS map in relation to roads, topographical features and mining installations.

The project has been redrawn in conformity with the revised contract form. If the proposed contract is not satisfactory in legal sufficiency for your approval, the opportunity to discuss the specific points will be appreciated. It is believed that this is inherent in all matters transmitted to your office by this Division.

D. E. Moulds (meh)

D. E. Moulds

Attachment

DEMoulds/meh
cc to: Adm. R. File
Docket File
Mr. Moulds
Mr.Hofflund

FILE COPY
SURNAME:

UNITED STATES
DEPARTMENT OF THE INTERIOR

140

DEFENSE MINERALS ADMINISTRATION
WASHINGTON 25, D. C.

March 26, 1952

Memorandum

To: Mr. Donald Moulds

From: J. L. Hofflund

Subject: Comet Mines, Inc., DMEA-2309, lead-zinc - draft of contract

The rough draft of a contract furnished to this office is not sufficient to enable us to draft a suitable contract.

Inasmuch as this contract will be drafted on the new contract form, these comments will be related to the new contract form, but they would apply equally in substance to a contract drafted on the old form.

Exhibit "A" is set up under two heads, "Exploration Project Contract" (which should be "Description of the Work") and "Estimated Costs."

The estimated costs are set up under two heads, "Unit Costs" and "Aggregate Costs."

Under the heading "Unit Costs" are set forth the estimated actual costs under the various categories specified in the old contract form. Under only one of these categories are the estimated unit costs for the category extended into a total estimate for the category to form a part of the computation of the total estimated costs for the project: i.e., "Supervision . . . $15,300." Inasmuch as the estimated total amount of the contract is $190,000, the estimate of costs will afford little help in administering the contract. The estimate is stated almost exclusively in terms of units of work rather than in categories of requirements.

BL

This office will not object to stating the estimate of costs in terms of units of work, if the items of requirement referred to in Article 6 of the contract form, in the cost of which the Government will participate, are also specified in sufficient detail.

Another defect in the subject contract is that there is an item of "Supervision" at $15,300. There is also an item "Miscellaneous Expense" at $14,145. This latter item is said to: "include engineering, assaying, accounting, warehouse, boarding house, bunkhouse, safety, watchmen, and general supervision." Thus there is a duplicate allowance for supervision or else it refers to corporate expense which is not allowable. Moreover, one cannot tell whether the warehouse, boarding house, bunkhouse, are to be erected, rented, or what form the expense will take. The contract would afford certifying officers no basis for making any payments on account of this item. If the exploration is to be carried out in conjunction with mining operations, it might be better to allow some fixed percentage of the actual direct costs on exploration to cover these indefinite expenses. A simpler and perhaps preferable method would be to put the whole contract on the short form at agreed unit prices for the Government's contribution.

The land description is insufficient. It will never be sufficient to describe "unpatented lode mining claims" simply by name, with nothing more. The minimum requirement is a recital that the location notices are recorded in the records of the named county, and the book and page of recordation should be given.

J. L. Hofflund

N. S
R+R

J. L. Hofflund
Chief Counsel

Attachment

JLHofflund/ema
Copy to: Mails & Files
J. L. Hofflund
Chron.

FILE COPY
SURNAME:

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

March 19, 1952

Memorandum

To: Acting Administrator

From: Chief Counsel

Subject: Comet Mines, Inc., DMEA-2309, draft of contract

The rough draft of a contract furnished to this office is not sufficient to enable us to draft a suitable contract. Inasmuch as a matter of principle is involved that will arise in other contracts, the contract is returned herewith and the following comments supplied for purposes of future information.

Inasmuch as this contract will be drafted on the new contract form, these comments will be related to the new contract form, but they would apply equally in substance to a contract drafted on the old form.

Exhibit "A" is set up under two heads, "Exploration Project Contract" (which should be "Description of the Work") and "Estimated Costs."

The estimated costs are set up under two heads, "Unit Costs" and "Aggregate Costs."

Under the heading "Unit Costs" are set forth the estimated actual costs under the various categories specified in the old contract form. Under only one of these categories are the estimated unit costs for the category extended into a total estimate for the category to form a part of the computation of the total estimated costs for the project: i.e., "Supervision . . . $15,300." Inasmuch as the estimated total amount of the contract is $190,000, one has no notion of how the estimated total is arrived at in terms of estimated actual costs. I am not suggesting that it is necessary that the estimates of the various categories must be in detail. I am pointing out that without at least an estimate in gross for each of the broad categories set forth under "Unit Costs," and these

estimated totals adding to a grand total of $190,000, Exhibit "A" does not mean much nor does it afford the Government any protection in controlling allowable costs within the various categories.

It is only under the title "Aggregate Costs" that one finds the total, $190,000. But these "Aggregate Costs" are stated in terms of units of work (per foot of advance) and serve no useful purpose in determining how the actual costs were estimated--not even in the broad categories of actual costs.

This office has no objection to stating the estimate of costs in terms of units of work, and some of the engineers apparently prefer to estimate the costs in those terms. However, it will be necessary in all cases where this is done to state the same estimate of costs in terms of actual expenditures, at least in the broad categories laid down in the new contract form. (The same was true under the old contract form.) In the instant case, referring to Articles 5 and 6 of the new contract form, the statement could be as follows:

(1) Independent contracts	$ 00000.00
(2) Labor, supervision, consultants	100,000.00
(3) Operating materials and supplies	20,000.00
(4) Operating equipment	30,000.00
(5) Rehabilitation and repairs	10,000.00
(6) New buildings, improvements, installations	20,000.00
(7) Repairs and maintenance	5,000.00
(8) Unforeseen (contingencies)	5,000.00
	$190,000.00

Of course, the above suggested broad categories could hand in some cases should be broken down to some extent, but not in any greater detail than the drafter of the contract deems desirable or necessary.

To summarize: In the case of any contract in which the Government's contribution is to be based on actual costs, it will be necessary to state in Exhibit "A" an estimate of the actual cost of the project broken down at least into the broad categories stated in Article 6 of the new contract form. The estimate may also be stated in terms of estimated unit costs, this estimate to balance with the estimate stated in terms of actual costs.

The foregoing has nothing to do with the statement of a contract on the short form under which the Government pays agreed estimated unit costs instead of actual costs.

These principles will be stated shortly in circulars, but this will serve for present purposes and for the information of the local staff which is drafting contracts.

* * * * *

Another defect in the subject contract is that there is an item of "Supervision" at $15,300. There is also an item "Miscellaneous Expense" at $14,145. This latter item is said to: "include engineering, assaying, accounting, warehouse, boarding house, bunkhouse, safety, watchman, and general supervision." Thus there is a duplicate allowance for supervision or else, the operator wants to work in corporate expense which is not allowable. Moreover, one cannot tell whether the warehouse, boarding house, bunkhouse, are to be erected, rented, or what form the expense will take. The contract would afford certifying officers no basis for making any payments on account of this item. If the exploration is to be carried out in conjunction with mining operations, it might be better to allow some fixed percentage of the actual direct costs on exploration to cover these indefinite expenses. A simpler and perhaps preferable method would be to put the whole contract on the short form at agreed unit prices for the Government's contribution.

* * * * *

The land description is insufficient. It will never be sufficient to describe "unpatented lode mining claims" simply by name, with nothing more. The minimum

requirement is a recital that the location notices are recorded in the records of the named county, and the book and page of recordation should be given.

J. L. Hofflund

J. L. Hofflund
Chief Counsel

Attachment

JLHofflund/em

Copy to: Mails and Files
J. L. Hofflund

2309

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

March 18, 1952

Memorandum

To: Mr. George Holderer, DMPA
Mr. G. C. Selfridge, DMEA

From: Mr. R. W. Geehan, Ferrous Metals & Alloys Branch

Subject: Comet Mines Inc. tungsten mine, Pioche, Nevada.

The Comet Mines Inc. report on the annual tungsten production canvas contained the following request for Government assistance:

"The mine is potentially a substantial tungsten producer in addition to lead and zinc. The company is ready to spend in excess of $100,000 on exploration and development on a matching fund basis and has had an exploration project application pending approval by DMEA for over six months. Men and equipment are available for carrying out the proposed work as soon as approval is received."

This portion of his report is forwarded to you for any action you think desirable. The Comet Mines Inc. has not been notified of this referral.

Robert W. Geehan
Robert W. Geehan

500 FILE COPY
Surname:

UNITED STATES
DEPARTMENT OF THE INTERIOR
OFFICE OF THE SECRETARY
WASHINGTON 25, D. C.

March 13, 1952

Memorandum

To: Mr. C. O. Mittendorf, Acting Administrator

From: D. E. Moulds, Base Metals Division

Subject: Docket No. DMEA 2309, Comet Mines, Inc.

In reply to DMEA letter of February 15, 1952 advising that the proposed Comet Shaft appeared to be primarily beneficial to mining of ore and, therefore, for the account of the Company, Mr. S. S. Arents, General Superintendent, presented additional corts relative to alternative methods of accomplishing the exploration.

The estimated cost of placing the present winze-shaft combination in shape to meet the approval of the State Mine Inspector, plus cost of additional sinking and drifting is as follows:

Placing winze in operation condition to 550 level, including headframe, hoist, pockets @ 385 and 640 levels	$ 40,405.00
Additional cost of drifting, using rehabilitated winze	27,040.00
Sinking from 550	11,000.00
Drifting	112,700.00
	$191,145.00

The additional cost of drifting necessary to use hand methods of drifting and the winze in its present condition plus the additional sinking and initial cost of drifting is estimated to be:

Using winze in present condition, additional cost for hand mucking, tramming, etc, on drifting and replacing hoist on winze	$ 80,960.00
Sinking from 550	11,000.00
Drifting	112,700.00
	$204,660.00

The cost of the shaft rehabilitation, to the 168 level, driving new shaft to the 640 level, plus the drifting as initially proposed, is estimated as follows:

Rehabilitating present shaft to 168'	$ 8,400.00
Move headframe and install hoist, ore bin, etc.	11,480.00
Total rehabilitation	19,880.00
Drive new shaft 168 - 550	31,875.00
Drive crosscuts, winze to shaft, (3)	4,080.00
Total new shaft	$ 35,955.00
Drive shaft 550 - 640 level	11,000.00
Drive drifts	112,700.00
Total	$123,700.00
	179,535.00

The proposed new shaft, therefore, indicates a saving of $11,610 in comparison to the rehabilitation of the winze to permit mechanized operations. In comparison to using the winze in its present condition for the drifting, the indicated saving would be $25,125. The benefits for production after exploration and development, of course, would continue to demonstrate a saving in costs and considerable increase in efficiency.

The cost of the proposed work as presented on Form MF-103 of October 24, 1951 was as follows:

Labor cost	$ 99,761.00
Supervision	16,500.00
Repairs to existing facilities	2,100.00
Installation and construction of additional facilities	9,080.00
Equipment to be purchased	2,400.00
Rental of equipment	3,870.00
Rental value of equipment owned by Operator and used on project	2,725.00
Materials and supplies	60,140.00
Power, transportation and haulage	9,900.00

General expense	$ 14,858.00
	$ 221,334.00

(Total figure $212,963. presented by applicant in error)

On the premise that the new shaft will be beneficial to both the exploration and later development both in costs and labor usage, it is believed that a compromise in participation on the new shaft may be adopted. In that the map depicting the exploration indicated the proposed work as starting from the 160 level (168') and, further, work on the above level has been extensive from the standpoint of production; the line of compromise has been taken at the 160 level. This basis assumes that the Government will participate 50 - 50 in all work below the 160 (or with sump 168' below the surface) and that the company will assume the entire cost of equipping the new shaft and reaming out the present vertical shaft to that depth.

On this basis the estimated cost of the project would be:

Drive - 425 feet of raise to provide 2½ compartment shaft from 550 level to 168 level including cost of pockets at 385' and 640' levels - 425' @ $75.00 per foot	$ 31,875.00
Drive 3 crosscuts 40' each from winze to points under present vertical shaft for raise stations - 120' @ $34.00 per foot	4,080.00
Drive 110 feet of shaft from 550' to 660' level - 110' @ $100 per foot	11,000.00
Drive 1100 feet of drift on 385' level 1100 feet @ $36.00	39,600.00
Drive 2000 feet of drift on 640 level 2000 feet @ $37.00 per foot	74,000.00
Total	$ 160,555.00
Use allowance for equipment	2,725.00
Superintendence	16,500.00
Miscellaneous expense 7½%	13,483.00
	$ 193,263.00

If this participation is agreeable to the Combined Metals Reduction Company when discussed with Mr. Arentz as planned, a contract will be prepared along the lines suggested or according to any modifications which may be mutually satisfactory.

DEMoulds/hmj
3-13-52

D. E. Moulds

CC to: Adm. R. File
Op. Committee
Docket Mr. Moulds

FILE COPY
SURNAME:

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

Memorandum March 12, 1952

To: Mr. D. E. Moulds
Chief, Base Metals Division

From: C. O. Mittendorf
Acting Administrator

Subject: DMEA-2309 - Comet Mines

I phoned Arents today and discussed with him the conclusions you, Frank, and I had reached, which are set forth in your memorandum dated March 11.

Arents was quite agreeable to proceeding on the basis of our proposal. He cited an arithmetical error in his original application, stating that the total costs of the project as originally submitted at $212,963 should be $221,334. He said the individual items in his application total the latter figures. I told Arents we would proceed with the drafting of the contract, eliminating the cost of reaming the present shaft and the surface installations plus the adjustment in the miscellaneous expenses, which has been expressed as a percentage of the total cost of the project, and that we would stipulate that repayment will be due the Government from all production from the property. In other words, that we would not exclude production coming from the first level and above. Mr. Arents was quite agreeable to that proposal. He inquired if I thought he would be safe in commencing the surface installations and making other expenditures which would not be included in the exploration contract. I side-stepped the issue by stating that we, in our own shop, were prepared to draft a contract along the terms discussed, but that any contract so drafted would require the approval of Counsel and the Operating Committee. I promised him that we would prepare the contract as quickly as we could.

The docket is returned herewith.

C. O. Mittendorf (fw)

Attachment (Docket)

COMittendorf/fw
cc: Admr. Reading File
Docket file

COMBINED METALS REDUCTION COMPANY

CASELTON PLANT PIOCHE, NEVADA

February 27, 1952

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
FEB 29 1952

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

Re-Docket No. DMEA 2309
Comet Mines Inc.

Dear Mr. Mittendorf:

In reply to your recent letter to Mr. E. H. Snyder on the above subject, and as was discussed with you by phone this afternoon, we still believe that the proposed shaft work at Comet is a necessary and integral part of the proposed exploration project. Our reasons for this belief are outlined in our letter of September 5, 1951, which is included in the file on this project. The following supplemental information is offered to clarify our position.

1. The present winze and shaft combination cannot be used for gaining access to the proposed 385 and 640 level exploration drifts without very considerable improvement because the Nevada State Mine Inspector has given written instructions that he will not permit operations to be carried on through the winze as a matter of safety to the men employed.

The estimated cost of putting the present winze-shaft combination in shape to remove this objection of the State Mine Inspector is as follows:

(a)	Replacing headframe on shaft	$ 1,000.00
(b)	Reaming out and retimbering shaft to minimum size to provide legal manway and to meet Nevada requirements for landings and staggered ladders in manway - 168' @ $25.00	4,200.00
(c)	Replace hoist on winze. Present hoist is unsafe for transportation of men or supplies required for working through winze	2,500.00
(d)	Replace present timbering and dump over top of winze to allow operations through winze	1,500.00
(e)	Ream out, straighten and retimber present winze from collar at 168' level to bottom at 550 level to meet safety objections of Mine Inspector and to allow operations to be carried on lower levels - 382' @ $75.00	28,650.00
(f)	Cut pockets in winze at 385 and 640 levels for handling rock from levels	2,555.00

Total estimated cost of putting the present winze-shaft combination in shape to 550 level including cost of pockets at 640 level. (The cost of sinking the winze from the 550 level to 20' below the proposed 640 level would be the same as sinking the proposed shaft the same distance). $40,405.00

2. Even after repairs and rehabilitation the shaft and winze combination would require an additional hoistman and trammer on each shift to transfer rock from the winze to the shaft as compared with operating through the proposed vertical shaft.

On the basis of an employment cost of approximately $20.00 per man per day, including fringe payments, payroll taxes, insurance, etc., these four men would cost $2,080.00 per month of 26 working days. The proposed drifting is estimated to require 13 months. This total additional cost for drifting would be 13 months @ $2,080.00 per month - $ 27,040.00

This additional cost would not only apply to the proposed drifting, but would continue as long as the mine is in operation or until a vertical shaft was completed to the bottom level. Any work done in fixing up or extending the winze would be wasted if and when the shaft job was done.

For the purposes of the proposed project the total estimated cost of fixing up and using the present shaft-winze combination is estimated at $67,405.00

As a comparison, the costs of making the shaft improvements contemplated in our application are listed as follows:

(a) Driving 3 40-ft. crosscuts from the present winze at intervals of 130' to points under the present vertical shaft from the surface to the 160 level (Note: A small tugger hoist on the winze and a 5HP air slusher would be used in driving these crosscuts and permission will be granted by the State Mine Inspector for using the winze for the sole purpose of raising a shaft). 120' of drift @ $34.00 $4,080.00

(b) Driving 425' of raise from crosscuts to connect with bottom of present shaft thus providing a vertical 2½ compartment shaft from the surface to the 550 level. Raising includes cost of shaft pockets at 385' and 640' levels as equivalent to 35' of raise (same as estimated above)
425' @ $75.00 $31,875.00

(c) Ream out and retimber the present single compartment shaft from the surface to the 168' level to provide a 2½ compartment shaft. 168' @ $50.00 $8,400.00

(d) Move steel headframe and set it up at Comet shaft including double drum hoist, skips, ropes, ore bin, etc., all as listed under items (d) and (e) on page 12 of our application.
Total estimated cost $11,480.00

Total estimated cost of proposed shaft work (Cost of sinking from 550 level to bottom of sump below the 640 level is not included here as it was not included under the winze estimate above. It will be roughly the same under either proposal). $55,755.00

Our proposal to provide a new vertical shaft as compared with fixing up and operating through the present shaft-winze combination indicates a saving to the exploration project of an estimated $11,650.00

The long range saving will be considerably more than this amount for the reasons given above.

From our point of view the winze should be regarded in the nature of a drill hole. It proves the continuity of the fissure to the 550 level and indicates mineralization, but in its present condition it does not constitute an entry to the 550 level.

Assuming that the winze could be used in its present condition, which is apparently the assumption under which the DMEA is basing its opinion as expressed in your letter to Mr. Snyder, disparity of costs for the proposed project would be even greater than is indicated above. This would be true for the following reasons:

(a) It would be impossible to get a mucking machine, trammer, or similar equipment to the drift headings. This would require additional men for hand mucking and tramming in the drifts and would result in slower progress in the drift headings. In addition to the hoistman and trammer on each shift on the winze, it is estimated that it will require two additional men for mucking and tramming on each shift on each level after the headings had advanced to 500' from the winze. It would also require an additional man on each shift to get supplies, rail, pipe, timber, etc. to the working places. On the basis of an employment cost of $20.00 per man per day, including fringe payments, regular weekly overtime, payroll taxes, insurance, etc. (this cost is actually closer to $25.00 per day) this would add to the cost of the project as follows:

2 hoistmen and 2 trammers at top of winze - 26 days per month-16 months	$33,280.00
2 men extra to get supplies to headings - 26 days per month - 10 months	10,400.00
8 men extra for mucking and tramming as headings become distant from winze - 26 days per month - 8 months	33,280.00

(b) It would still be necessary to replace the hoist on the winze and to fix up the dump and chute at the top. This estimated cost is shown above as totalling 4,000.00

Total estimated cost $80,960.00

This compares with an estimated cost for the shaft work of 55,755.00

The indicated saving by putting the shaft in shape would be $25,205.00

I can see that there is always a problem of establishing the salvage value of equipment purchased for a project following the completion of a project. In our application we have included the cost of purchasing ~~a~~ headframe, double drum hoist, skips, and hoisting ropes under item (e) on page 12 at an estimated cost of $7,400.00, and of constructing a bin at the collar of the shaft under item (d) on page 12 at an estimated cost of $780.00 for a total estimated cost of $8,180.00. I suggest that the application be amended to delete these items for a reduction of $8,180.00 in the total estimated cost and that Comet Mines will furnish these items at its own expense.

On the basis of the cost comparisons set out above and with the deletion suggested immediately above, I request your reconsideration and early approval of the application as submitted.

Very truly yours

S. S. Arentz
General Superintendent

SSA:ah
CC: (2)

500
FILE COPY
SURNAME:

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

Moulds
J. E. [illegible]

FEB 15 1952

Mr. Edward Snyder, General Manager
Combined Metals Reduction Company
218 Felt Building
Salt Lake City, Utah

Re: Docket No. DMEA 2309
Comet Mines, Inc.

Dear Mr. Snyder:

We have carefully considered your application for exploration assistance in sinking a vertical shaft and drifting in the Comet Mine, Lincoln County, Nevada.

In our opinion, the work involved in equipping, enlarging, and extending the vertical shaft to the 550 level is work primarily beneficial to mining of ore discovered and partially mined on the 550 level by means of the present winze. Hence, this work should be for the account of the Combined Metals Reduction Company.

However, we would give favorable consideration to a project comprising the drifting proposed on the 385 level and 640 level, and sinking of a shaft or winze from the 550 level to the 640 level plus sump.

If you desire the Government participation in such drifting and 110 feet of sinking below the 550 level, a schedule excluding costs relating to the shaft equipment, shaft enlargement above the 160 level, and shaft extension to the 550 level, will be required to permit formulating a contract.

We will appreciate hearing from you at your early convenience.

Sincerely yours,

C. O. Mittendorf (fw)

Acting Administrator
Defense Minerals Exploration
Administration

DEMoulds/meh
2/14/52
cc to: Adm. R. File
Docket File Copy
Mr. Moulds
Mr. Bishop
Mr. McKnight
Region IV

FILE COPY
SURNAME:

Moulle

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

February 8, 1952

Memorandum

To: Acting Administrator

From: Base Metals Division

Subject: Denial of proposed shaft as an allowable exploration project expense. Docket No. DMEA 2309, Combined Metals Reduction Company, Comet Mine.

The Combined Metals Reduction Company filed an application for exploration assistance for the Comet Mine located near Pioche, Nevada. The proposed work, estimated to cost $212,963.00 with 75% Government participation based on tungsten, consisted of the following steps:

(a) Drive three forty-foot crosscuts from the present winze below the 160 level, at intervals of about 130' along the winze, to points vertically under the present vertical shaft from the surface to the 160 level.

(b) Drive vertical raises connecting the crosscuts with the bottom of the vertical shaft. The raises will total approximately 390 feet in length and will be excavated and timbered to provide a 2½ compartment vertical shaft.

(c) Ream out and retimber the present single compartment vertical shaft from the surface to the 160 level to provide a 2½ compartment shaft. This coupled with the raises, will provide a 2½ compartment shaft to the 550 level, and will make the lower levels of the mine accessible.

(d) Sink the completed 2½ compartment shaft from the 550 level 110 feet to provide sump room below the proposed 640 level.

(e) Excavate and construct loading pockets in the shaft at the 385 and 640 levels.

(f) Drive 500 feet west and 600 feet east along the fissure on the 385 level.

(g) Drive 500 feet west and 1500 feet east along the fissure on the 640 level.

(h) Move steel headframe from the Golden Eagle shaft of the Combined Metals Reduction Company, and set it up at the Comet shaft complete with a surface ore bin. Repair spare Prince hoist and set it on the Comet shaft. Make minor repairs to camp buildings and electrical and mechanical equipment.

Under date of August 31, 1951, the applicant was informed that a review of the application indicated that phases a - b - c - d - e (shaft work) could not be considered exploration as defined in Section 8 of MO-5. Also, that the ore appears more valuable for silver-lead-zinc than tungsten and the chances for discovery of a significant amount of tungsten did not appear to justify an expenditure of public funds on a 75-25 basis for the project proposed. The application was denied on the above basis but suggested applying for assistance on a 50-50 basis for lead-zinc exploration. The shaft work, as previously indicated, would not be allowable as exploration.

On September 15, the applicant requested reconsideration of the shaft work and presented the following data:

"(1) The present winze below the 168 level of the Comet Mine is of insufficient crosssection to allow passage of a mucking machine, a trammer locomotive or any but the smallest mine cars. This would require driving the drifts by hand mucking and hand tramming which with present day labor conditions would either make it impossible to obtain a crew or if a crew were obtained, would increase costs to an extent that the drifting cost alone would nearly equal the estimated cost of combined shaft sinking and drifting under our proposal.

(2) The exploration projects are for the purpose of locating ore and getting new production of metal. Even if ore were located by drifting, without the shaft improvement, it would be impossible to mine the ore at a profit due to the limited capacity of the present winze.

(3) The cost of sinking the present winze from the 550 level to the 650 level in order to place the proposed lower level below the oxide zone would be appreciable and would be wasted when it became necessary to sink the shaft in order to obtain production from the level.

(4) The cost of maintaining a hoistman on the winze and of transferring rock on the 168 level while driving the proposed exploration drifts will offset a substantial part of the cost of repairing the shaft.

(5) The Nevada State Mine Inspector has given written instructions that he will not permit operations to be continued through the present crooked winze beyond the operations required to put the shaft in shape as proposed in the application for an exploration project.

For the above reasons it is apparent that the proposed shaft work is essential to the proposed exploration project. It is true that the shaft will be of later aid in mining any ore developed by the proposed exploration, but the shaft is part of the exploration and offers only feasible approach to carrying out the project. It cannot be considered as "work prosecuted primarily for mining or preparation for mining"."

On October 16, Mr. H. C. Miller, Executive Officer, Region III, was advised to check the project under the following instructions:

"The Lead-Zinc Branch recommends that a geologic examination be made of the property and if, on the basis of this examination, further exploration is warranted, and appraisal be made of the mining methods and costs with specific attention being given to the items and suggestions set forth in the following paragraph.

We need to know whether the State Mine Inspector will permit any less expensive shaft than the new two and one-half compartment one proposed; and whether the present one could be made economically usable for exploration if the State Mine Inspector would permit its use. This last involves consideration of whether a mucking machine with bucket removed could pass through the shaft or whether a small tramming motor could be put through. The 1100 feet of drifting now embraced in their plan on the 385-foot level and the 2000 feet of drifting plan for the 640-foot level when plotted on a map look very much like blocking out ore. This feature is objectionable. We would be much more favorably inclined to approving some 2000 feet of exploration drift on the 465 foot level with no workings below this level other than a shaft sump."

The Field presented a report under date of November 30, 1951 recommending the project and transmitting a new application for lead-zinc exploration. The following information relative to the project and especially the shaft has been excerpted from the report.

"The application for aid is for an exploration project; searching for additional ore bodies. Exploration must be performed by drifting along the fissure and as the excavated material has to be hauled to surface, the shaft has to be used and should, therefore, be

considered as part of the exploration program, although it is hoped to be used eventually for production.

In 1941 Mr. D. L. Gemmill acquired the major interest in Comet Mines Inc. from the Prince Company, and proceeded to develop the mine and to revamp the mill. Development on the 160 level to the East was successful in opening up a sulphide ore-body having a strike length of nearly 300 feet and a width of up to 12 feet. This ore body was stoped for over 100 feet below the level and produced 13,000 tons of good sulphide lead-zinc ore containing an average of 0.5% WO_3. During the past year development has consisted of retimbering the winze, from the 160 level to the bottom of the 480 level, and sinking the shaft on down to the approximate 550 level. A good showing of sulphide ore is now exposed on the 550 level, but difficulties of mining or developing the lower levels of the mine through the crooked winze are too great to warrant further work until the present vertical shaft to the 160 level is continued to the lower levels.

Figure 2 shows the plan and a longitudinal section of the mine workings. It is accessible through a vertical shaft to the 160 ft. level and a prospect winze from the 160 level to the 550 level. This prospect winze (fig. 3) has been condemned by the State Mine Inspector, Gallagher, but his deputy inspector, Traynor, of Tonopah, Nev., gave S. S. Arentz, General Supt., Combined Metals Reduction Co., written permission to use only 130 feet of winze, at a time, in the operation of crosscutting from the winze to the proposed shaft and raising for the new shaft. There are about 2000 feet of drifts on the Comet fissure and several stopes that extend from the 160 level to the surface.

The Comet fissure appears to be continuous but the mineralization is spotty; the orebodies occurring irregularly along the strike and dip. The most practical method of exploration is drifting along the fissure. The fissure varies in width from one foot to a maximum of 12 feet. To conduct this work efficiently, the prospect winze of various dips (fig. 3) should be abandoned in favor of the proposed shaft. The company completed one crosscut to the new shaft 130 feet below the 160 level and have raised a few sets off the level. The new shaft will have 2½ compartments; 2 hoisting compartments, 4½ x 4½ feet and one manway compartment 2½ x 4½ feet. The old shaft from the 160 level to surface will be enlarged. The shaft is in quartzite which is difficult to drill but requires little timber. The present vertical shaft, 1½ compartments, has not required any lining or lagging to date.

The drifts will be 5 x 7 feet in the clear and should require no timber.

Unit figures used in estimating exploration costs are as follows:

Shaft reaming	160 feet	@ $50 per foot	...	$ 8,000
Shaft raising	425 "	@ $65 " "	...	27,625
Shaft sinking	110 "	@ $100 " "	...	11,000
Drifting (5'x7'.....	3,220 "	@ $35 " "	...	112,700
		Total		$159,325

This total includes labor, supplies and equipment but does not include supervision."

The foregoing information supplied by the applicant and field team has been incorporated into this memorandum in order to permit full consideration of the position of the proposed shaft in the project:

In summary of the field report it is indicated that the 160 level was developed and considerable ore produced by use of the winze. Exploration and partial development was conducted by this shaft to a depth of 575 feet. During the past year (1950) development has consisted of retimbering the winze, from the 160 level to the bottom of the 480 level, and sinking the winze on down to the approximate 550 level. A good showing of sulfide ore was encountered on the 550 level which as indicated on the map appears to have produced considerable tonnage. The winze has now become inadequate for economic production of ore and efficient equipment transportation. It has also been condemned by the State Mine Inspector except insofar as necessary for driving the new shaft.

The necessity for the new shaft is apparent from the standpoint of production of ore previously discovered, and partially developed by means of the old shaft or winze. The cost of the shafts and equipment proposed would, undoubtedly, decrease the cost of producing ore and likewise the cost of the extensive exploration drifting. There are, however, several points for consideration in determination of the status of the shaft and drifting in relation to exploration assistance under the regulations of MO-5.

The winze was retimbered from the 160 to 480 level and extended to a depth of 575 feet during 1950. This retimbering and 100 feet of sinking was done with the intent of exploration and resulted in discovery and production of ore. The winze was evidently placed in such condition as to permit the work of exploration of the 550 level and production of ore.

The proposed shaft, since it will be outside of the fissure zone, will not provide additional exploration data in the area above the bottom of the present winze.

Drifting on the 325 level will open up areas in the oxide zone to the West and in the sulfide zone to the East. The work approached development in that sublevel work on the 160 level has been done to within approximately 90 feet of the 385 level on the East end. The ore, however, has been found to vary widely on the #160 level and evidently cannot be reasonably projected with further drifting, it is believed, therefore, that a reasonable amount of exploratory drifting is warranted on the 385 level.

The drifting proposed on the 640 level is undoubtedly exploration to delineate continuation of discovery made on the 550. The shaft sinking below the present 550 level of the winze is also entirely necessary to reach the 640 level for exploration and is believed allowable as an exploration cost.

In our opinion, the proposed shaft sinking, headframe and hoist installation is work and expense essentially chargeable to development and mining of ore previously delineated in the mine. The winze has formerly served to explore and produce ore on the 160 and 550 levels. The expense of the new shaft to permit greater efficiency in producing ore from previously delineated reserves and from any future discovery resulting from exploration, therefore, does not appear to be an allowable expense under the regulations of MO-5.

In event that the applicant desires to accomplish the work connected with the new shaft above the 550 level without participation by the Government, it is recommended that the drifting on the 385 and 640 levels and the sinking of a shaft or winze from the 550 to the 640 levels plus sump room, be approved as an allowable exploration expense for Government participation. We, therefore, recommend that the applicant be advised of this decision by the attached letter.

D. E. Moulds (mch)

D. E. Moulds 2/15

DEMoulds/mch
cc to: Adm. R. File
Docket File Copy

OFFICE OF THE A[redacted]STRATOR

dmea - 2309

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

Reviewed by
DMEA OPERATING COMMITTEE
1/4/52 HR
(date)

Office of
Executive Officer
DMEA Field Team
Region III

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
JAN 2 · 1952

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

December 26, 1951

Memorandum

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

From: Executive Officer, DMEA Field Team, Region III

Subject: Docket DMA-~~1671~~2309X, Combined Metals Reduction Co., Comet Mine, Lincoln County, Nevada

Reference is to letter dated October 16 to me, signed by Mr. Tom Lyon, requesting additional information on subject property.

Attached are the original and three copies of a report, "DMA-1671X, Comet Mine, (Revised), Lincoln County, Nevada," by Russell R. Trengove, Mining Engineer, U. S. Bureau of Mines, Reno, Nevada, dated November 30, 1951. The examining engineer concludes that the Comet fissure is persistent downward and laterally; the occurrence of ore bodies within the fissure is erratic and the only practical method of exploration is by drifting along the fissure. The shaft work is essential to the exploration program.

The applicant has prepared a revised application. Four copies of the revised application were sent to me by Mr. S.S.Arentz, President, with a covering letter dated December 15. The four copies of this application also are attached.

The docket file is returned herewith.

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

Attachments

Copy to: E. H. Bailey, U.S.G.S.

Dmea-2309

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
JAN 2 - 1952

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

DEFENSE MINERALS ADMINISTRATION

REPORT OF EXAMINATION BY FIELD TEAM
REGION III

2309
DMA-~~1671~~X, Comet Mine
(Revised)

Lincoln County, Nev.

ON-SITE RPT.

Russell R. Trengove, Mining Engineer
U. S. Bureau of Mines

November 30, 1951

COMET MINE
Lincoln County, Nev.

SUMMARY, CONCLUSIONS, and RECOMMENDATIONS

The U. S. Bureau of Mines examined the Comet mine, situated about 19 miles west of Panaca, Nevada in November 1951. The purpose of the examination was to determine the condition of the exploration winze and other factors involved in consideration of the requested Government aid for an exploration program amounting to $212,963 on a 50% participation.

The ensuing report notes the location and physical features, the property and ownership, mine equipment, history, description of the ore and ore deposits, and the geology.

Production to date is as follows:

Date	Remarks	Dry Tons	Ounces Au	Ounces Ag	Percent Pb	Percent Mn	Percent WO_3
1925-44	Concentrates	113.0	1.74	45.00	9.22	4.02	-
1928-50	Concentrates	31.2	-	-	-	-	18.00
1927-50	Crude Oxide Ore	1,497.1	.257	10.35	5.33	-	-
1945-51	Crude Sulphide Ore	13,664.0	.064	7.00	1.96	9.86	0.5

Based on past experience, possible ore resulting from the proposed development and exploration as estimated by the company geologist, Mr. Gemmill, is as follows:

	Tons	Au	Ag	Pb	Zn	WO_3
Oxide Ore	5,000	0.26	10.0	5.3	-	0.3
Sulphide Ore	34,000	0.06	7.0	1.9	9.8	0.3

Metal Content

Gold	2,300 ounces
Silver	289,250 ounces
Lead	933 Tons
Zinc	3,352 Tons
WO_3	10,200 Units

The application for aid is for an exploration project; searching for additional ore bodies. Exploration must be performed by drifting along the fissure and as the excavated material has to be hauled to surface, the shaft has to be used and should therefore be considered as part of the exploration program, although it is hoped to be used eventually for production.

The request for Government aid for an exploration program amounting to ~~$212,963~~ $221,334 (See pg. 3) on a 50% participation is recommended for approval.

INTRODUCTION

An application for Government loan under Sec. 302 of the Defense Production Act of 1950 was made by S. S. Arentz, General Superintendent, Combined Metals Reduction Company, Pioche, Nev., June 5, 1951.

At that time the property was leased from the Comet Mines, Inc., David Gemmill, President. The Application for Aid for an Exploration Project pursuant to Mineral Order 5, under Defense Production Act of 1950 for an estimated cost of $212,963, percentage of Government participation 75%, was given Docket No. DMA-1671X. This request was under name Combined Metals Reduction Co.

Since the original request was made, the Combined Metals Reduction Co. acquired essentially all the stock and proposes to operate the property under Comet Mines Inc., a Nevada corporation. A request will

now be made for Government assistance on an exploration program on a 50% basis; total estimated cost $221,334.

An examination of the Comet mine was made by an engineer[1] of the Bureau of Mines in November 1951.

LOCATION AND PHYSICAL FEATURES

Figure 1 shows the location of the Comet mine. The claims lie on the west flank of the Highland Peak Range in sec. 5, T. 1 S., R. 66 E., M.D.B.&M. The area, ranging from 6,450 to 7,000 feet above sea level, is near the change of slope leading down to Desert Valley. The mountain rises steeply to the east to an altitude of 8,600 feet.

The Highland Peak Range is 8 miles (air line), west of Pioche, Nev., the largest town in the Pioche district. The Comet mine is accessible by 19 miles of gravel road, west of Panaca, Nev., the nearest shipping point on a branch line from the Union Pacific Railroad main line at Caliente, Nev. It is also accessible by the Combined Metals Reduction Co. road from Caselton, Nev.

The climate is semi-arid; annual precipitation averages 11 to 12 inches. There are no surface streams within the area. Water is obtained from a spring about one mile north of the property. It is supplied to the mine through a pipe line to storage tanks on the property. The spring produces from 2 to 20 gallons of water per minute depending on the season.

Transmitted power, 2300 volts, is available on the property. A 22,000 volt transmission line is within one-half mile of the mine.

1/ Russell R. Trengove.

Vegetation consists of sparse growths of juniper toward the base of the mountain, pinon pines on some of the lower hills, and large conifers at higher altitudes. The large conifers are not numerous and cannot be considered a source of mine timber.

HOUSING FACILITIES AND EQUIPMENT

Building structures on the property are as follows:

a. One building which will require considerable repair, houses the hoist engine, air-compressors, blacksmith shop and machine shop.

b. One mill building in almost worthless condition. The crusher, one flotation unit and magnetic separator may be used in a proposed tungsten mill at Caselton.

c. One boarding house with cook's living quarters.

d. Three small cabins and one larger cabin.

e. Three ore bins.

The equipment inventory is as follows:

UNITS	NOMENCLATURE & DESCRIPTION
1	Hoist & Motor, (serial # 1383612 GE 25 HP 440 volts Controller # 560275 type T-52-P)
1	Ingersoll Rand Compressor, Imperial type 10B, Right hand side 30063 PP 15 x 12, Left hand side 30062 PP 9 x 12. Motor GE, serial # 859725, type KP-160 HP-50
1	Fairbanks Morse Compressor (no size or numbers on machine) Motor (no name plate) complete with seitches & compensator
1	Sample crusher, (no number), Motor Fairbanks Morse 3 HP type OZC, serial # 348336
1	Lamp Charger, War Surplus, Carpenter Mfg. Co.
1	Vise 208½ - C Perker
1	Pipe Vise, Primo 40
1	Drill Press, CMR Co. #286, Motor American Laundry Mfg. # MM 24070, 1½ HP
1	Ingersoll Stoper, IR-48, 593412 (Prince)
1	Ingersoll Stoper, Wiggletail
1	Ingersoll Jack Hammer, B10A55, serial # 540790
1	6" Air Cylinder
1	Copper Blower, US Motor 1 HP, serial # 465363, Blower # A5930, type T
1	Pump, Motor 2 HP serial # 19080, Pump Circulating
1	Drifter, DA-30 serial # 11469, Ingersoll
1	Supercharger AC trubo, serial 79768 CH
1	Drill Steel Sharpener (not complete) 1 anvil
2	Jack Hammer Shells

UNITS	NOMENCLATURE & DESCRIPTION
1	GD Stoper A 468
1	Bench Vise
1	Stator for Motor # 99M
1	GE Motor # 287007, 5 HP
1	Bean Pump model 20 serial # J-60061 (Prince)
1	Table Saw, Home Made, Motor WE # 2027356, Type KT 721, 5 HP
1	Motor (Norton & Norton) 5 HP serial # 9042 on cut of Saw
9	Lengths 12" Vent Pipe 12' long
24	pcs 3x12x5' 4" Lagging
60	6x8x8 Ties
3	pcs 4x4 Guides 16' long
1	2x12x18'
1	Roll #8 Electrical Wire (Durowire) approx. 375 ft.
1	Nye Die complete with cutters, serial # 12590
1	No. 7 Little Giant Die complete $\frac{1}{4}$" to 1"
1	Set Allen Screw Wrenches
2	Rifle Nuts for R-48 Ingersoll
1	Rifle Bar for R-48 Ingersoll
1	$\frac{1}{2}$ ton skip
2	Sinking buckets
2	1 ton Mine Cars
1	GE Refrigerator #44938531
1	Stove (coal) cooking, F.A. Klaine Co.
1	Metal Sink
1	Fan-e-fex Cooler, Centery Electric $1\frac{1}{2}$ HP 220/440 volt serial # 5S8026, Compressor Unit (no name plate)
1	Meat Block
1	Slicer
1	Agitator, with Master Gear Head, Motor serial # JA 3785, $1\frac{1}{2}$ HP, motor GE 3 HP type KT 140 serial # 1073482
1	1 ton Mine Car
1	Motor Pump, IR #103362 type RI V-$1\frac{1}{2}$, Motor GE $1\frac{1}{2}$ HP serial # AM 3065 complete with switches
1	Magnetic Separator
1	Cone, Sedling
1	Welfley Table
1	Crocke Wheeler Motor, CMR Co. #781 with small Denver Sludge Pump
1	Large Denver Mud Pump
1	GE Motor # 5576476 with Pump 2 HP
1	Motor with Welfley Pump
2	Sump Pumps complete
1	Norton & Norton Motor #197683, 3 HP
1	Motor Pump # 8209, 30 HP
1	Motor Pump # 79814, GE Motor 10 HP model 5 KF 284C929
1	$7\frac{1}{2}$ HP Sullivan Single Drum Hoist
1	Motor CMR Co. # 279
1	Motor Pump GE Motor 10 HP # 4679523, Pump Bryon Jackson # 108712, type 2STO
1	Cone
1	Pipe Vise

UNITS	NOMENCLATURE & DESCRIPTION
2	Tables complete with motors (Diseter)
1	Suspension Screen
2	Parts of Tables
1	Gear Reduction Motor ½ HP serial FM 1067
1	Ball Mill Motor 40 HP # 15829
1	Ball Mill
1	Classifier Wemco serial # 41-1059 complete
1	Agitator & Motor, motor 5 HP US serial # 166163
1	Bank of (4) Denver Sub A # R19873, motor AC 5 HP # 710-N11309958
1	Reagent Feeder complete with Motor, US Motor 3/4 HP 235723
1	Denver Cell Sub A Motor AC 2 HP serial # 709E M5085A-300
1	Conveyor
1	Transformer (Norton & Norton) 1726 - 3KVA
1	4" Pipe Die (old)
1	Set Rolls, GE Motor 15 HP # 73-102, FM Motor 10 Hp # 178538
1	Jaw Crusher, Motor GE 15 HP # 192242
1	Conveyor, Motor GE 1½ HP # 4141338
1	Stator for Motor in Hoist House
3	Transformer 35 KVA # 2229, #2230, None
1	Copper Blower, GE Motor # 7X17983, 5 HP (underground)
1	Hoist, GE Motor 25 HP # 5653641
1	Single Drum IR-HY size, serial # A12380 Piston Air
1	Sinking Bucket
1	Slusher 15 HP GE Motor, WE 2287, Ingersoll Rand (Prince)
1	Jackhammer Ingersoll A-55
1	Stoper Ingersoll Rand -48, 521090 (Prince)
1	Drifter DA-30 serial # 562222, Arm & Bar (Prince)
1	Scraper 30"
1	Sump Pump IR 25
1	Jackhammer IR 55
1	Cage
1	Assay Furnace
2	Assay Balances

PROPERTY AND OWNERSHIP

The property is owned by the Comet Mines, Incorporated. Recently, the Combined Metals Reduction Company acquired essentially all the stock and propose to operate the property under Comet Mines, Inc., a Nevada corporation.

The company's holdings comprise 17 mining unpatented claims; namely, Jackson, Jackson #1, #2, and #3, Minerva, Burnitt, Greenback #1, #2, #3, #4, and #5, Elmer #1, Tungsten, Sparton, Viking, Gladiator, and Trojan. The Comet mine workings are located on the Elmer #1 claim.

HISTORY[2]

The Elmer #1 Claim was located in 1906 and the Greenback #1 Claim was located in 1913. They were originally owned by the Frudenthal brothers, who were early Pioche mine operators. In 1913 E. D. Smiley purchased the claims and organized the Tungsten Comet Mining Company. In excess of $150,000 was spent on developing the property and on constructing a small mill designed to treat tungsten ores exposed by surface workings.

Lack of water and metallurgical difficulties forced a shut down of operations.

In 1924 the property was sold to Squires and Gemmill operators of the Prince Mine at Pioche. They organized the Comet Mines Company. Development was continued and the mill was revised to make recoveries of the lead, silver and gold in the oxide ores. Lack of water and metallurgical difficulties incident to treating oxide ores, plus a drop in price of metals, again forced a shut-down of operations.

In 1930 the property was taken over by the Prince Consolidated Mining Company and the Comet Mines Company was reorganized as Comet Mines Inc. Some production was had from both company and lease operations during the following years.

In 1941 Mr. D. L. Gemmill acquired the major interest in Comet Mines Inc. from the Prince Company, and proceeded to develop the mine and to revamp the mill. Development on the 160 level to the last was successful in opening up a sulphide ore-body having a strike length of nearly 300 feet and a width of up to 12 feet. This ore body was

2/ From report prepared by S.S. Arentz, General Superintendent, Combined Metals Reduction Co.

stoped for over 100 feet below the level and produced 13,000 tons of good sulphide lead-zinc ore containing an average of 0.5% WO_3. During the past year development has consisted of retimbering the winze, from the 160 level to the bottom of the 480 level, and sinking the shaft on down to the approximate 550 level. A good showing of sulphide ore is now exposed on the 550 level, but difficulties of mining or developing the lower levels of the mine through the crooked winze are too great to warrant further work until the present vertical shaft to the 160 level is continued to the lower levels.

In 1951 the Combined Metals Reduction Company purchased Mr. Gemmill's interest in Comet Mines Inc. and is prepared to advance the necessary funds to match Government aid for an exploration project on the property.

PROCUCTION[3/]

Prior to the time sulphide ore production started, the mine was started several times and closed down. There is no record of production by E. D. Smiley prior to 1923, but it is known that some lead-silver ore was shipped and the mill was operated for a short while producing tungsten concentrates.

Since 1925 fairly complete records have been kept and the following tabulation shows a summary of the record of production:

3/ Paul Gemmill, Geologist, Combined Metals Reduction Co.

Summary of Production

Date	Remarks	Dry Tons	Oz Au	Oz Ag	% Pb	% Zn	% WO_3
1925-44	Concentrates	113.0	1.74	45.0	9.22	4.02	
1928-50	Concentrates	31.2					18.0
1927	Crude Ore (Oxide)	29.6	0.47	21.4	14.7	0.5	
1933-34	Crude Ore (Oxide)	285.4	0.247	13.2	12.9	0.5	
1940-41	Crude Ore (Oxide)	971.2	0.251	7.3	1.8		
1944-50	Crude Ore (Oxide)	211.0	0.268	19.1	9.8		
1945	Crude Ore (Sulphide)	269.5	0.04	7.01	3.53	15.92	
1946	Crude Ore (Sulphide)	1,671.0	0.059	7.42	2.59	20.71	
1947	Crude Ore (Sulphide)	1,986.3	0.111	10.01	2.95	6.01	
1948	Crude Ore (Sulphide)	5,040.0	0.052	7.48	1.87	9.79	
1949	Crude Ore (Sulphide)	3,596.5	0.058	5.72	1.10	7.00	
1950	Crude Ore (Sulphide)	608.4	0.075	3.45	2.43	10.02	
1951 Thru March	Crude Ore (Sulphide)	492.4	0.050	2.26	1.60	6.33	

Lead concentrates carried between 5% and 10% WO_3 but were not assayed for tungsten, as at the time these concentrates were made there was no attempt to save tungsten. Likewise the tungsten concentrates were high in lead-silver values. The crude ore shipments also carried tungsten but were not assayed for tungsten except that occasional pulps of sulphide shipments to the Caselton mill were assayed and found to average about 0.5% WO_3.

Since concentrates, oxide ore and sulphide ore would not average together to show a typical type of ore, the following condensed summary is presented:

Condensed Summary of Production

Date	Remarks	Dry Tons	Oz Au	Oz Ag	% Pb	% Zn	% WO_3
1925-44	Concentrates	113.0	1.74	45.0	9.22	4.02	
1928-50	Concentrates	31.2					18.0
1927-50	Crude Oxide Ore	1,497.1	0.257	10.35	5.33		
1945-51	Crude Sulphide Ore*	13,664.0	0.064	7.00	1.96	9.86	0.5

*Settlement assay on lead and zinc does not include non-sulphide lead and zinc contained. Tungsten values estimated from occasional pulp assays but tungsten was not paid for.

GEOLOGY[4]

The Comet mine is briefly described in U. S. G. S. Professional Paper #171 to which reference is made for the geology of the district.

The Surface cropping of the Comet Vein bears N65°E and dips steeply to the north. On downward extension, the dip reverses for some distance and becomes almost vertical. The vein is a quartz-filled fissure outcropping in Prospect Mountain (Cambrian) quartzite for about 700 feet. The eastward extension of the fissure in Pioche Shale, which overlies the quartzite, can be traced over 1500 feet but contains only a few inches of vein filling and is not visible except in prospect pits. To the west, the fissure-vein is covered by alluvium and is probably cut within 500 feet west of the No. 1 shaft by a major north-south fault dipping west which can be traced several miles along the base of the Highland Range.

The vein varies in width from a mere stringer to over 12 feet. The best ore has occurred where the vein is widest and the average width of sulphide ore stopes is 6.25 feet.

The fissure was caused by nearly horizontal fault movement. This is demonstrated by striations on the fissure walls and by transverse movement along bedding planes. This type movement has caused abrupt steps in the fissure walls with consequent widening or narrowing of the vein. Evidence accumulated here and elsewhere in the Pioche district demonstrates quite conclusively that this type movement was common before the principal periods of normal faulting and took place before the Cambrian sediments had been tilted.

4/ Paul Gemmill, Geologist, Combined Metals Reduction Co.

Weakness of the fissure in Pioche shale is due to the change in wall rock from brittle quartzite to more plastic shale. The vein should maintain its strength east of the mine workings farther than it can be traced on surface as long as exploration is confined to the quartzite.

Some angular fragments of quartzite and shale are noted in the vein filling and show that brecciation accompanied fault movement. All stages of replacement of the breccia fragments may be noted. Shale fragments have been observed to be less amenable to replacement than the glassy quartzite fragments.

A few feet of vertical displacement is noted across the fissure which is interpreted to represent normal faulting that probably occurred during the vein formation, opening the fissure in preparation for quartz filling and replacement.

Introduction of the heavy sulphide mineralization was preceded by brecciation of the earlier vein quartz. This fact, together with other evidence, demonstrates that there have been at least two stages of fissure filling; the first stage being low grade to almost barren quartz; and the second stage being quartz with relatively abundant lead and zinc sulphides. Tungsten and gold-silver values without the heavy sulphide mineralization, as mined in the central stopes above the 160 ft. level, probably occurred as part of the earlier stage vein filling. This type mineralization overlaps into the areas later filled and replaced by the heavier sulphides.

Frequently the vein is "frozen" to the walls and shows replacement of the wall rock by quartz and sulphides. No appreciable brecciation or fracturing, either on the vein or on the minor cross fractures appears to be post mineral.

Primary ore minerals are sphalerite, galena, pyrite, wolframite, argentite and gold in a gangue of quartz. Minor copper values probably occur as chalcopyrite.

In the process of oxidation, zinc has almost wholly dissappeared because of the lack of limestone or other suitable precipitant. Galena remains with oxidized lead minerals anglesite and cerussite in some places where all the sphalerite has been oxidized and leached away. Plumbojarosite (basic sulphate or iron and lead) is common in the oxidized ore, and usually carries good silver values.

The silver has migrated to some extent in the oxidized portion of the vein and some enrichment is usually found where the change from oxidized ore to sulphide ore takes place. Better than average silver assays are common in the upper 5' to 10' sulphide ore just under the zone of oxidation in the east part of the mine where sulphide ore has been stoped above the 160' level. In the central portion of the mine, sulphide ore first shows just above the 465 ft. level.

MINE WORKINGS

Figure 2 shows the plan and a longitudinal section of the mine workings. It is accessible through a vertical shaft to the 160 ft. level and a prospect winze from the 160 level to the 550 level. This prospect winze (fig. 3) has been condemned by the State Mine Inspector, Gallagher, but his deputy inspector, Traynor, of Tonopah, Nev., gave

S. S. Arentz, General Supt., Combined Metals Reduction Co., written permission to use only 130 feet of winze, at a time, in the operation of crosscutting from the winze to the proposed shaft and raising for the new shaft. There are about 2000 feet of drifts on the Comet fissure and several stopes that extend from the 160 level to the surface.

THE PROPOSED EXPLORATION

The Comet fissure appears to be continuous but the mineralization is spotty; the orebodies occurring irregularly along the strike and dip. The most practical method of exploration is drifting along the fissure. The fissure varies in width from one foot to a maximum of 12 feet. To conduct this work efficiently, the prospect winze of various dips (fig. 3) should be abandoned in favor of the proposed shaft. The company completed one crosscut to the new shaft 130 feet below the 160 level and have raised a few sets off the level. The new shaft will have 2½ compartments; 2 hoisting compartments, 4½ x 4½ feet and one manway compartment 2½ x 4½ feet. The old shaft from the 160 level to surface will be enlarged. The shaft is in quartzite which is difficult to drill but requires little timber. The present vertical shaft, 1½ compartments, has not required any lining or lagging to date.

The drifts will be 5 x 7 feet in the clear and should require no timber.

Unit figures used in estimating exploration costs are as follows:

Shaft reaming	160 feet	@ $50 per foot	. . .	$ 8,000
Shaft raising	425 "	@ $65 " "	. . .	27,625
Shaft sinking	110 "	@ $100 " "	. . .	11,000
Drifting (5'x7' . .	3,220 "	@ $35 " "	. . .	112,700
		Total		$159,325

This total includes labor, supplies and equipment but does not include supervision.

Based on the company's experience at Caselton, the general expense is $7\frac{1}{2}$ percent of the direct expense.

The proposed exploration is outlined in red (fig. 2). It consists of the following steps listed in more or less chronological order:

(a) Drive three forty foot crosscuts from the present winze below the 160 level, at intervals of about 130' along the winze, to points vertically under the present vertical shaft from the surface to the 160 level.

(b) Drive vertical raises connecting the crosscuts with the bottom of the vertical shaft. The raises will total approximately 390 feet in length and will be excavated and timbered to provide a $2\frac{1}{2}$ compartment vertical shaft.

(c) Ream out and retimber the present single compartment vertical shaft from the surface to the 160 level to provide a $2\frac{1}{2}$ compartment shaft. This coupled with the raises, will provide a $2\frac{1}{2}$ compartment shaft to the 550 level, and will make the lower levels of the mine accessible.

(d) Sink the completed $2\frac{1}{2}$ compartment shaft from the 550 level 110 feet to provide sump room below the proposed 640 level.

(e) Excavate and construct loading pockets in the shaft at the 385 and 640 levels.

(f) Drive 500 feet west and 600 feet east along the fissure on the 385 level.

(g) Drive 500 feet west and 1500 feet east along the fissure on the 640 level.

(h) Move steel headframe from the Golden Eagle shaft of the Combined Metals Reduction Company, and set it up at the Comet shaft complete with a surface ore bin. Repair spare Prince hoist and set it on the Comet shaft. Make minor repairs to camp buildings and electrical and mechanical equipment.

CONCLUSIONS AND RECOMMENDATIONS

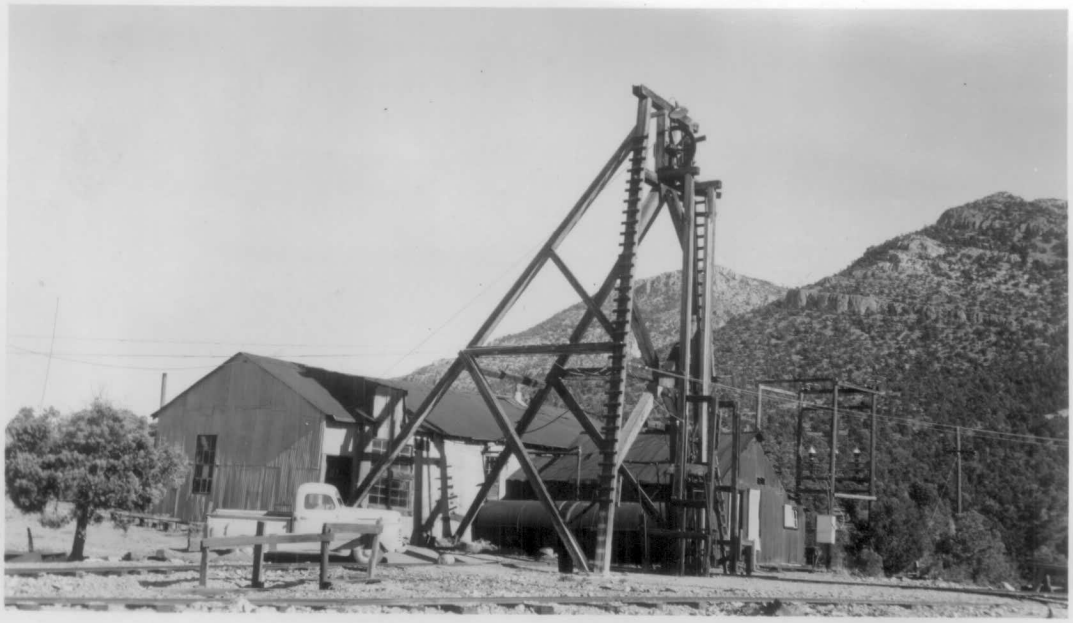
1. The Comet fissure is persistent but the ore bodies in the fissure occur erratically.

2. The only practical method of exploration is by drifting along the fissure.

3. The proposed work program is considered to be entirely exploration, although it is hoped that the shaft will be used for development and eventually used for production.

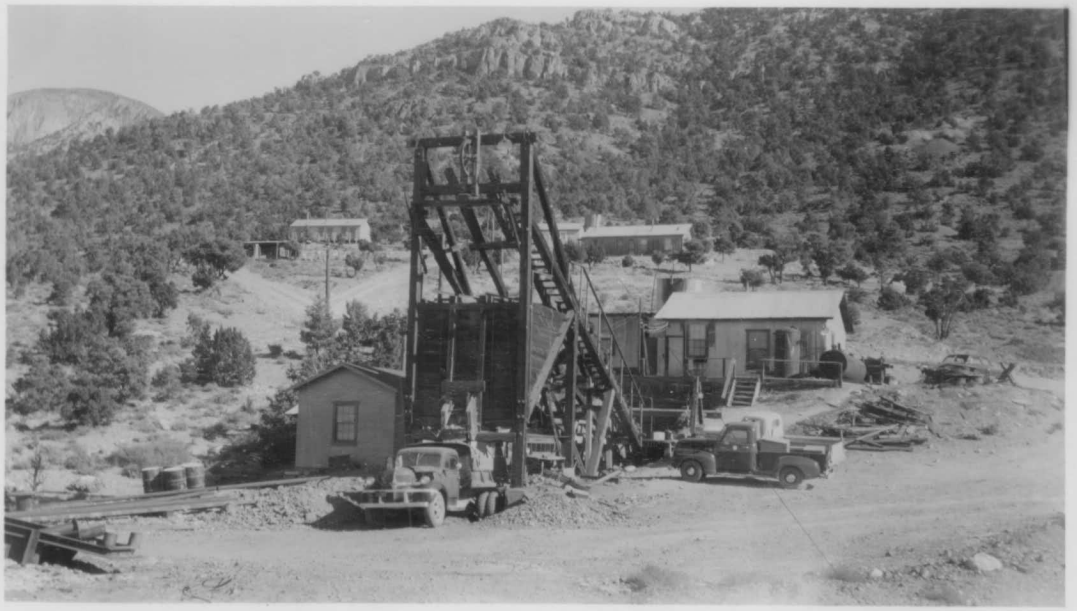
4. Based on past experience in exploring the strong Comet fissure, it appears very likely that additional ore bodies will be discovered.

The request for Government aid for an exploration program amounting to $212,963 on a 50% participation is recommended for approval.



Surface plant (looking northeast).

Mill



Adjoining Pan-American (Comet-Coalition).

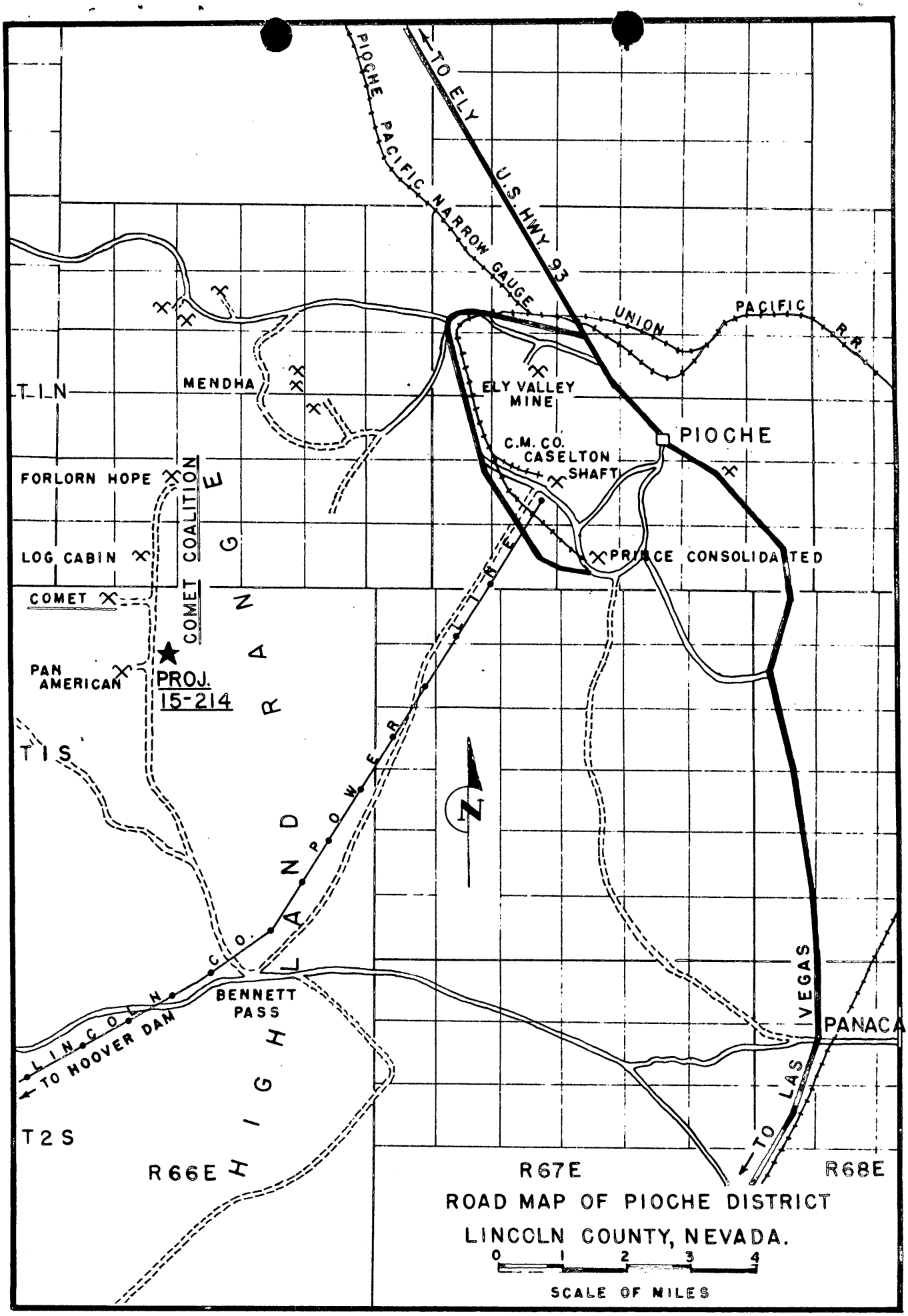


FIG. 1. COMET COALITION (PB,ZN,AG,) PROJECT 15-214.

ANSWERS TO QUESTIONS RAISED BY DMA

1. Letter to Combined Metals Reduction Co. dated Aug. 31, 1951:

> "However, the shaft work, as indicated above, would not be allowable as exploration."

The application for aid is for an exploration project; searching for additional ore bodies. Exploration must be performed by drifting along the fissure and as the excavated material has to be hauled to the surface, the shaft has to be used and should therefore be considered as part of the exploration program, although it is hoped to be used eventually for production.

2. Letter to Mr. Edward Snyder, General Manager, Combined Metals Reduction Co., dated Oct. 16, 1951:

> "We are instructing the field team to investigate the Comet's winze situation to see if it qualifies in their opinion as necessary to exploration."

The winze or shaft should be considered as exploration for the reason expressed in answer to question 1.

3. Letter to Mr. Harold C. Miller, Executive Officer, DMA Field Team, Region III, dated Oct. 16, 1951:

The shaft work is considered essential to the exploration drifts on the 385 and 640 foot levels as the excavated material has to be removed to surface.

Geologic Examination:

Dr. C. F. Park, Dean of the School of Mineral Sciences at Stanford University has been working in the Pioche district for the Geological Survey. In Mr. Edgar H. Bailey's letter to Mr. H. C. Miller, dated Nov. 9, 1951, he stated that, "Dr. Park believes the chances of finding new ore bodies by the proposed exploration are excellent."

The State Mine Inspector was not consulted but he, no doubt, would permit a less expensive shaft, provided, that it was safe. He is not particularly interested in the size of the shaft for economical operation.

The present shaft and prospect winze with the necessary timbering for skip guides and bucket guides, respectively, are not of sufficient size to lower a mucking machine with bucket removed.

> "The 1100 feet of drifting now embraced in their plan on the 385 foot level and the 2000 feet of drifting plan for the 640 foot level when plotted on a map look very much like blocking out ore. This feature is objectionable."

Ore has to be found before it can be blocked out. There is no positive assurance that any ore bodies may be encountered in either of these drifts. The ore bodies to date vary in dimensions and occur erratically along the strike and dip and exploration drifts may encounter some ore bodies and miss others.

This drifting can definitely be called exploration and not development.

> Mr. Arentz reaction to the suggestion that: "We would be much more favorably inclined to approving 2000 feet of exploration drift on the 465 foot level with no workings below this level other than a shaft sump," is as follows:

If any drifting is to be eliminated, he would prefer to eliminate the drifting on the 385 foot level and confine the drifting to the 640 level to explore for richer ore in the sulphide zone. He stated that exploration would be expedited, however, if the original plan was followed, as drifting on the 385 foot level could be done while the shaft is being sunk to the 640 foot level.

COMET MINES, INCORPORATED

Dmea - 2309

MINE OFFICE

PIOCHE, NEVADA

December 15, 1951

Mr. H. C. Miller, Executive Officer, D M E A
Room 1012 Flood Building
870 Market Street
San Francisco, Calif.

Dear Sir:

Enclosed herewith are four copies of a revised application for an exploration project on the Comet Mine. An MF-103 form application was previously filed last April under the name of the Combined Metals Reduction Company and was assigned docket number 1671-X. The Combined Metals Reduction Company has since acquired essentially all the stock of Comet Mines Inc. and this revised application is submitted in the name of Comet Mines Inc., owner of the property.

The revised application takes into account the wage increases granted since the original application was submitted last April.

Mr. Russell Trengrove, engineer for the U. S. Bureau of Mines, has inspected the property since our last correspondence on the exploration application and has no doubt submitted a report as to his findings.

On November 23rd, the State Highway Department of Nevada let a contract for the construction of an access road to replace the present county road between the present terminus of the present Caselton to Comet secondary highway and the Comet Mine. Work will start on this road within a few weeks and its completion will assure economical transportation of ore and supplies between Caselton and Comet.

It would be desireable to start work as soon as possible to allow repairs and improvements to surface facilities to be completed before the start of bad weather in late January.

We shall be pleased to submit any additional information that may be required to reach a decision on the application, and we shall appreciate your consideration in processing the application as rapidly as possible.

Very truly yours

Comet Mines Inc.

S. S. Arentz
President

SSA:ah

CC;(6)

Defense Minerals Administration

Review of Application for Exploration Assistance

Docket No. DMEA-2309

Commodity Lead, zinc

To: Mr. C. O. Mittendorf

Total Amount $221,334

Govt. Participation 50% $110,667

1. Name and Address of Applicant Mr. S. S. Arentz, Comet Mines, Inc., Pioche, Nevada

2. Location of Property Comet mine, Lincoln County, Nevada (Sec. 5, T 1 S., R 66 E.)

3. Mineral or metal Lead, zinc Is it listed in Section 9 of MO-5? Yes

If not, application will be rejected.

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

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

a) Good Yes, see 16 and field team report

b) Poor

c) None

d) Don't know--needs field examination

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

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

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

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

*question numbers are those of MF-103

7. Are subordination agreements necessary? No

a) MF-201? _____

b) MF-202? _____

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

a) Available manpower Yes

b) Equipment and supplies Yes
(question 14 plus general knowledge of availability)*

c) Accessibility (question 12)* Yes

d) Water (question 13)* Yes

e) Power (question 13)* Yes

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

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

_____

Is a field check needed on this point? No

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

a) Is the project adequately described? Yes

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

b) Is there an adequate map or sketch of the proposed work? Yes

_____

c) Is the proposed work "exploration" under the definition of Section 8, MO-5? See Tom Lyon's letter of Oct. 16, 1951 in original application (DMA-1671X) where in the proposed shaft work was considered questionable. If not, what part of it is? The field team, investigating the controversy, expressed the opinion that the shaft work was necessary to the exploration program.

_____

Is this part a worthwhile exploration project?_____

d) Are the cost estimates detailed? Yes, but not as summarized in Procedural Instruction 5-A.

Can they be summarized, as on page 2 of Procedural Instruction 5-A, from the available data? No If so, attach a draft.

e) Are the cost estimates reasonable? Yes

f) Should more information be requested from applicant?_____

g) Is a field examination necessary to complete Exhibit A? No

11. Exhibit B (question 23-d)*

a) Is it applicable? Yes

b) If so, are sufficient data furnished? Yes If so, attach a draft. See MF-103

c) Is a field check needed? No

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

a) Is it applicable? Yes

b) Sufficient data? Yes If so, attach a draft. See MF-103

c) Are rents and charges reasonable? Yes

d) Is a field check needed? No

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

a) Are there sufficient data? Yes

b) Is the schedule adequate for the work proposed? Yes

c) Is the schedule excessive for the work proposed? No

d) Are the proposed wages and salaries reasonable? Yes

e) Is a field check needed? No

14. Exhibit E (question 23-c)*

a) Is it applicable? Yes

b) Sufficient data? Yes

c) Reasonable? Yes

d) Field check needed? No

15. In your judgment, can the proposed work be done in the proposed time? Yes, but it may be necessary to work 2 shifts part of the time.

(All exploration must be completed within two years)

16. If field examination is not needed, attach your recommendation.
See attached recommendation E.L.N. - O. M. B.

17. If field examination is needed, do you have any special instructions for the field team not indicated by your answers to the foregoing question?

Reviewed by: E. L. Newcomb
E.L. Newcomb, GS 1-8-52

O. M. Bishop
O. M. Bishop, BM

L. L. Farnham
L. L. Farnham BM

Date 1-28-52

16. Summary and Recommendations

In June 1951, the Combined Metals Reduction Company submitted an application for an exploration loan (DMA-1671X) covering the Comet mine. Due to the presence of a small amount of tungsten in the lead-zinc ore of the Comet vein, the requested loan, amounting to $212,963, called for a 75 per cent Government participation. This application was disapproved on the grounds that the tungsten content was of minor importance, but it appeared that an exploration project for lead-zinc on a 50-50 basis might be in order. At the same time, the Coordinating Committee questioned whether the proposed shaft program was exploration.

In October 1951, an ammended application (DMEA-2309, made in the name of the Comet Mines, Inc.) was submitted requesting $221.334 on a 50-50 percentage basis. Following this, the field team was instructed, in the event the property was found to warrant further exploration, to particularly investigate the necessity of the proposed shaft program. The resulting report by the field team recommended the approval of the loan and concluded that the shaft work as proposed in the application was necessary in order to properly carry out the exploratory work. Thus, it appears desirable to recommend the approval of the requested loan in the amount of $221,334.00.

E. L. Newcomb
E.L. Newcomb, GS

O M Bishop
O.M. Bishop, BM

L L Farnham
L.L. Farnham, BM

OCT 16 1951

Re: DMA-1671X
Comet Mine

Mr. Edward Snyder, General Manager
Combined Metals Reduction Company
219 Felt Building
Salt Lake City, Utah

Dear Mr. Snyder:

Reference is made to your letter of September 15th in which you urge renewed consideration of your shaft program as outlined in your application for aid on the Comet Mine, Lincoln County, Nevada. You urge reconsideration on the basis of a letter written by Mr. S. S. Arents in which information is given to show the shaft essential to the exploration.

Mr. Arents makes a strong case. I am therefore recommending that our field team examine the property and the records relating to it so that we may have further information for our consideration.

We are instructing the field team to investigate the Comet's water situation to see if it qualifies in their opinion as necessary to exploration. If so, they will go over the matter of an alternate proposal with Mr. Arents on the basis of 50% Government participation.

If the alternative proposal meets with the approval of the field team, it will be necessary for you to submit a new application on form F-103, together with amended costs, maps showing the proposed work, etc. We also would like a map showing the property held under lease from the Comet Mines, Incorporated, in relation to the Comet Coalition property with the location of the principal shafts on the two properties shown.

Very truly yours,

SIGNED
E. J. Lyon, Director
Supply Division

IBishop:EJLyons:emp G 10-10-51

Copies to: R. C. Miller Region III (2)
Chief, Lead-Zinc Br.
E. F. McKnight 4204 GSA
O. M. Bishop
Directors r. files 4214 GSA
Br. r. files 4214 GSA
Administrators r. file
DMA docket files

AUG 31 1951

550

Memorandum

re: [illegible]
Combined Metals Reduction Co.
Comet Mine
Lincoln County, Nevada
Exploration loan $[illegible],000.00
Tungsten-lead-zinc

To: Reports and Records Unit
Administrative Management Div.

From: Chief, Lead-Zinc Branch

Subject: Denial of loan

The subject docket has been reviewed by the Tungsten Branch and the Lead-Zinc Branch, Defense Minerals Administration.

The proposed project is summarized in the attached memorandum from D. M. Lemmon to the Tungsten Branch, DMA.

The Lead-Zinc Branch concurs with the opinion of the Tungsten Branch that the proposed shaft work is not exploration, but is for development.

It is recommended by the Lead-Zinc Branch that the application be denied and that the attached letter be sent to the applicant suggesting an exploration project for lead and zinc on a 50-50 per cent basis would be considered by DMA.

Enclosed herewith are:

5 bound copies of the subject docket.

Gunnard Johnson

F. W. Gillespie, Chief
Lead-Zinc Branch

Approved:

Director, Supply Division

SGildersleeve:cmp
G 8-29-51

Copies to: H. C. Miller (2)
Chief, Lead-Zinc Br.
E. T. McKnight 4204 GSA
R. H. Mote
Reports and Records
Directors r. file 5214 GSA
Br. r. file 4214 GSA
Files

SEP 4 1951

1

AUG 31 1951

Re: DMA-1671X

Combined Metals Reduction Company
218 Felt Building
Salt Lake City, Utah

Gentlemen:

The Defense Minerals Administration has reviewed your application (DMA-1671X) for exploration assistance at the Comet mine.

The review of your application indicates that phases "a", "b", "c", "d", and "e" of your proposed project (concerned with a new 2 1/2 compartment shaft from the surface to the 550 level) cannot be considered exploration as defined in Section 3 of Defense Minerals Administration's Mineral Order No. 5. We believe the ore is more valuable for silver-lead-zinc than it is for tungsten, and that the chances are not promising enough for significant discovery of tungsten to justify an expenditure of public funds on a 75-25 per cent basis for the project you propose. I regret, therefore, that your application must be denied. We shall be glad to consider an alternative project on a 50-50 per cent basis for lead-zinc exploration. However, the shaft work, as indicated above, would not be allowable as exploration.

Very truly yours,

Tom Lyon, Director
Supply Division

BGildersleeve:emp
G 8-29-51
Copies to: M. C. Miller (2)
Chief, Lead-Zinc Br.
E. T. McKnight 4204 GSA
R. H. Mote
Reports & Records
Directors r. file 4214 GSA
Br. r. file 4214 GSA
Files

SEP 4 1951

June 21, 1951

Mr. W. H. Kelsey
Vice President
Combined Metals Reduction Co.
218 Felt Building
Salt Lake City, Utah

Subject: DMA-1671X
Re: Exploration Loan
Comet Mine

My dear Mr. Kelsey:

Receipt is acknowledged of your application and attachments of May 29, 1951 for an exploration loan under the Defense Production Act of 1950.

The application was assigned Docket Number DMA-1671X and was referred to Mr. Otto Herres, Chief, Lead-Zinc Branch on June 14, 1951.

In any future correspondence relating to your application, kindly refer to DMA-1671X.

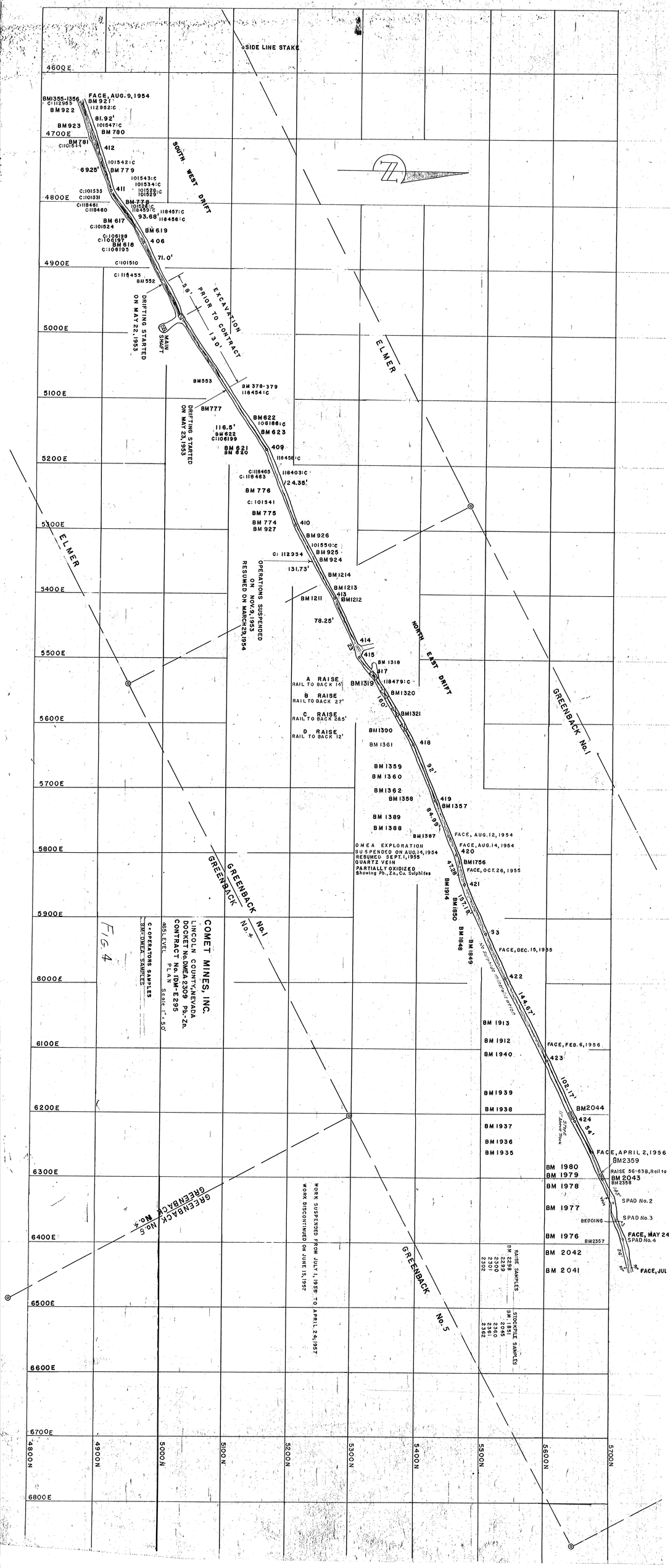
Sincerely yours,

LANDON F. STROBEL

Landon F. Strobel
Executive Secretary

LFSTROBEL:js
cc: Strobel-2
Files
>Herres
Lyon

9.


SIDE LINE STAKE
FACE, AUG. 9, 1954
BM1355-1356
C:112953
BM 921
112952:C
BM 922
81.92'
101547:C
BM 923
BM 780
BM 781
C:101514
412
101542:C
6.92'
BM 779
101543:C
101534:C
101528:C
101529:C
C:101533
C:101531
411
BM 778
101526:C
118459:C
118457:C
C:118461
C:118460
93.68'
118456:C
BM 617
C:101524
BM 619
C:106198
C:106197
BM 618
C:106195
406
71.0'
C:101510
C:118455
BM 552
38'
130'
DRIFTING STARTED ON MAY 22, 1953
MAIN SHAFT
EXCAVATION PRIOR TO CONTRACT
SOUTH WEST DRIFT
ELMER
BM 553
BM 378-379
118454:C
BM 777
DRIFTING STARTED ON MAY 23, 1953
BM 622
106186:C
BM 623
116.5'
BM 622
C:106199
BM 621
BM 620
409
118458:C
C:118465
C:118463
118403:C
124.36'
BM 776
C: 101541
BM 775
BM 774
BM 927
410
BM 926
101550:C
BM 925
C: 112954
BM 924
131.73'
BM 1214
BM 1213
413
BM 1212
BM 1211
OPERATIONS SUSPENDED ON NOV. 9, 1953 RESUMED ON MARCH 29, 1954
78.25'
414
415
BM 1318
417
BM 1319
118479:C
BM 1320
160'
BM 1321
NORTH EAST DRIFT
A RAISE
RAIL TO BACK 14'
B RAISE
RAIL TO BACK 27'
C RAISE
RAIL TO BACK 28.5'
D RAISE
RAIL TO BACK 12'
BM 1390
BM 1361
418
92'
BM 1359
BM 1360
BM 1362
BM 1358
419
BM 1357
84.39'
BM 1389
BM 1388
BM 1387
FACE, AUG. 12, 1954
FACE, AUG. 14, 1954
420
BM 1756
FACE, OCT. 26, 1955
OMEA EXPLORATION
SUSPENDED ON AUG. 14, 1954
RESUMED SEPT. 1, 1955
QUARTZ VEIN
PARTIALLY OXIDIZED
Showing Pb., Zn., Cu. Sulphides
47.28'
BM 1914
421
137.18'
BM 1850
BM 1849
BM 1848
33
FACE, DEC. 15, 1955
No Sulphide mineralization
422
144.67'
BM 1913
BM 1912
FACE, FEB. 6, 1956
BM 1940
423
102.17'
BM 1939
BM 1938
BM 2044
424
5.41'
BM 1937
BM 1936
BM 1935
FACE, APRIL 2, 1956
BM 2359
BM 1980
BM 1979
RAISE 56-638, Rail to
BM 2043
BM 2358
BM 1978
SPAD No. 2
BM 1977
SPAD No. 3
BEDDING
BM 1976
FACE, MAY 24
SPAD No. 4
BM 2357
BM 2042
BM 2041
FACE, JUL
GREENBACK No. 1
GREENBACK No. 4
GREENBACK No. 5
COMET MINES, INC.
LINCOLN COUNTY, NEVADA
DOCKET No. DMEA 2309 Pb.-Zn.
CONTRACT No. IDM-E 295
465-LEVEL PLAN Scale 1" = 50'
C = OPERATORS SAMPLES
BM = DMEA SAMPLES
FIG. 4
WORK SUSPENDED FROM JULY 1, 1956 TO APRIL 24, 1957
WORK DISCONTINUED ON JUNE 15, 1957
RAISE SAMPLES
BM 2238
2239
2299
2300
2301
2302
STOCKPILE SAMPLES
BM 2345
2360
2361
2362
4600E
4700E
4800E
4900E
5000E
5100E
5200E
5300E
5400E
5500E
5600E
5700E
5800E
5900E
6000E
6100E
6200E
6300E
6400E
6500E
6600E
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5000N
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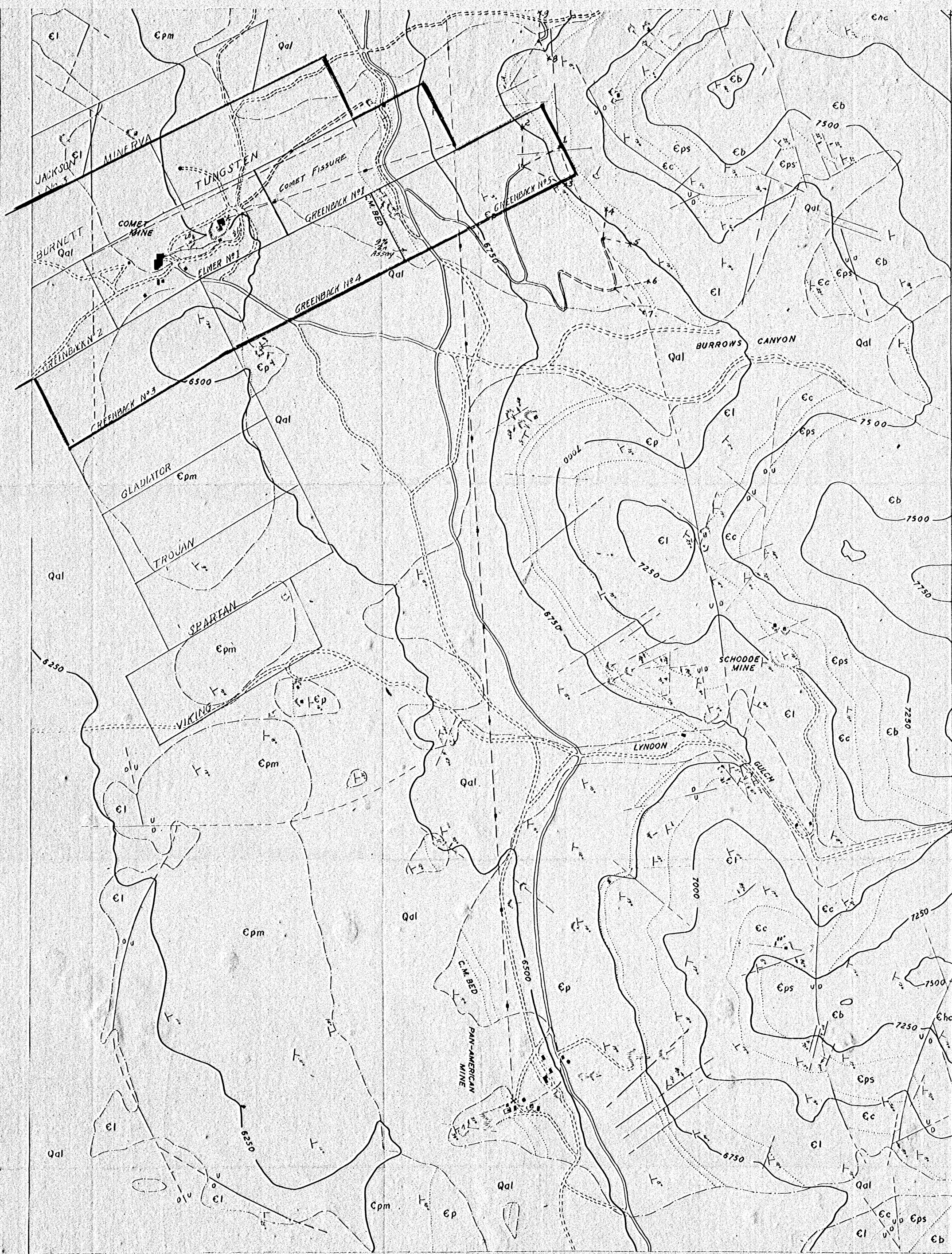
5500N
5600N
5700N



CULTURE

- Shaft
- Pit
- Trench & Dump
- Tunnel
- Power Line & Substation

BEDDING

FAULTS

EDGE OF ALLUVIUM

SEDIMENTARY CONTACT

EXPLANATION

Qal	Alluvium	Ꞓc	Chisholm Shale
Ꞓhc	Highland Peak Lms.	Ꞓl	Lyndon Lms.
Ꞓb	Burrows Dolomite	Ꞓp	Pioche Shale With Lms.
Ꞓps	Peasley Lms.	Ꞓpm	Prospect Mtn. Quartzite

U.S. DEPT OF THE INTERIOR GEOLOGICAL SURVEY

GEOLOGIC MAP OF THE COMET AREA

PIOCHE, NEVADA

FEET 0 500 1000 1500 FEET

Contour interval 50 feet

Topography & Geology by C.D. Campbell and J.A. Reinemund

1943

Property included in project

REVISIONS

REFERENCES

WORK

DRAWN

TRACED

CHECKED

APPD

12-16-46

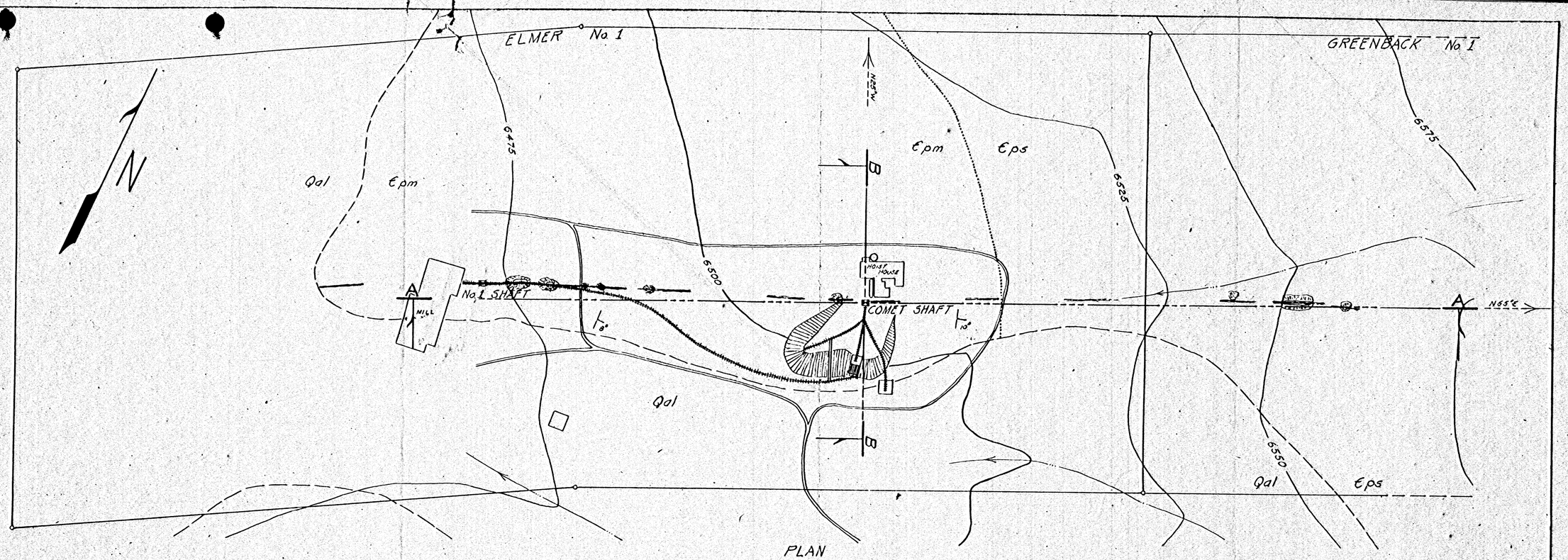
COMBINED METALS REDUCTION CO.

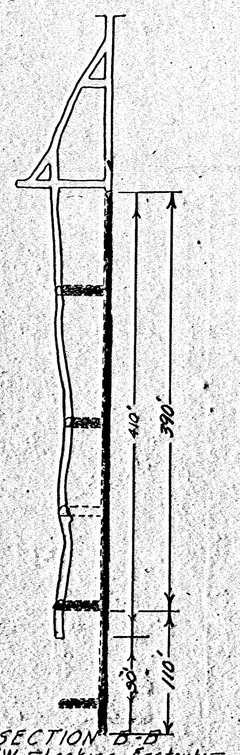
PIOCHE NEVADA

TRACING OF U.S.G.S. MAP

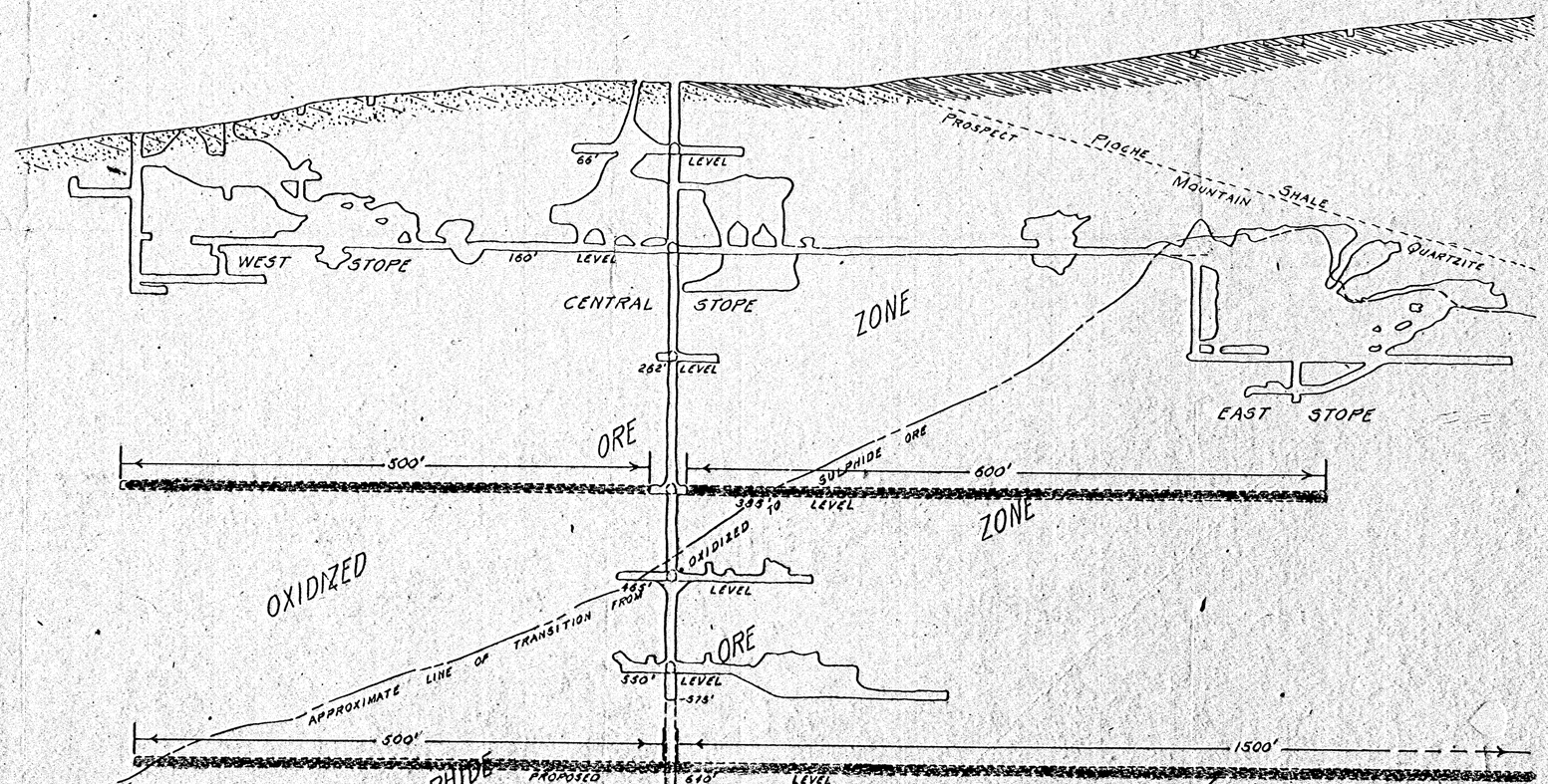
1"=5

10





SECTION B-B
N25°W - Looking Easterly -



LONGITUDINAL SECTION A-A
N65°E - Looking Northerly -

Uncolored Copy
To be attached to Contract

PRESENT WORKINGS PROPOSED EXPLORATION	REVISIONS	REFERENCES	WORK	DRAWN R.H. GOOBE 5-23-51 TRACED CHECKED APPROVED	COMBINED METALS REDUCTION CO. PIOCHE, NEVADA

COMET MINE
PLAN AND SECTIONS
SHOWING
PROPOSED EXPLORATION

SCALE 1" = 100'

C-1087

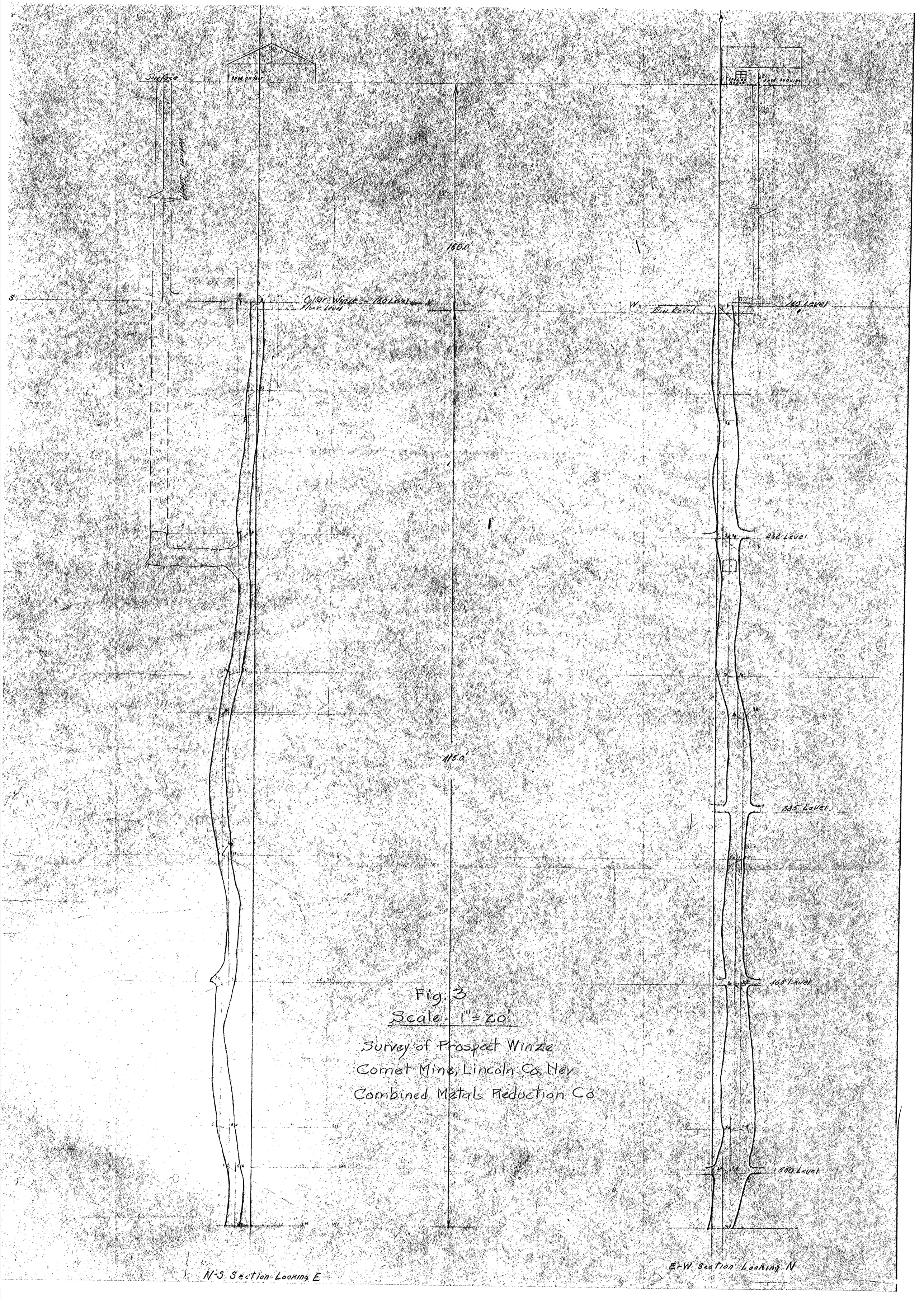
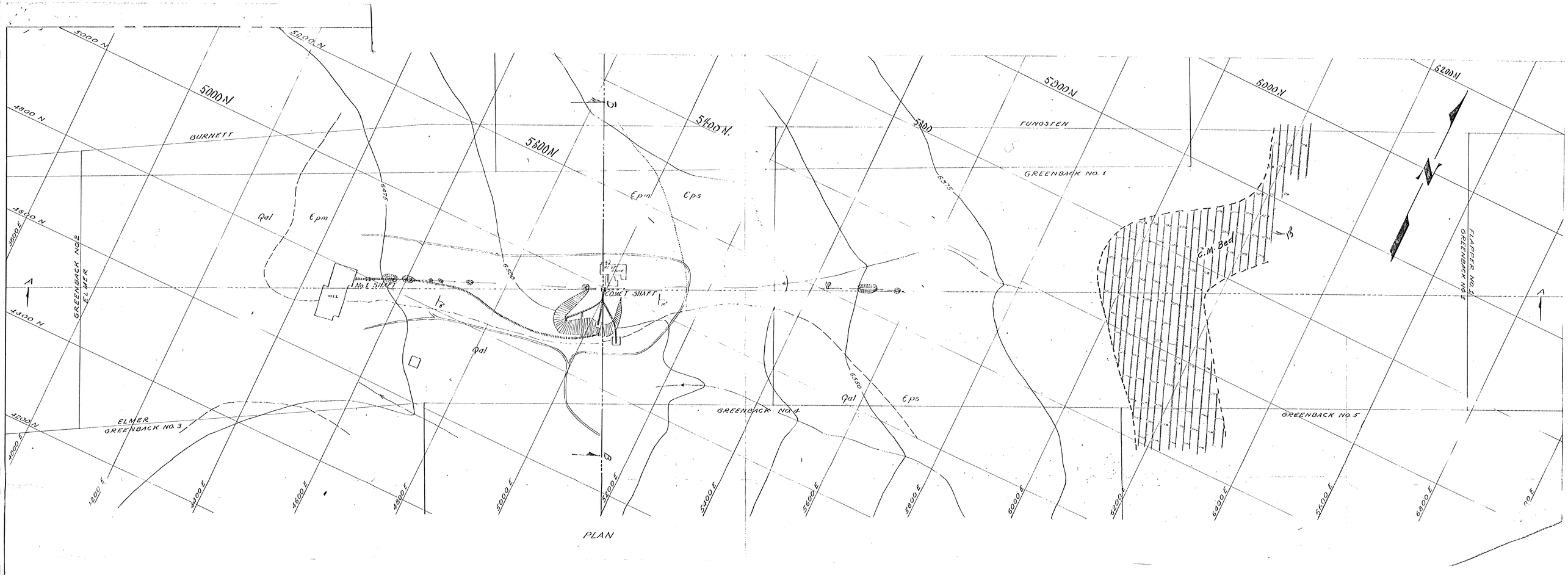
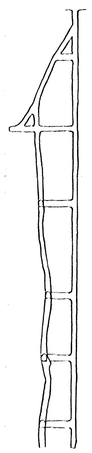


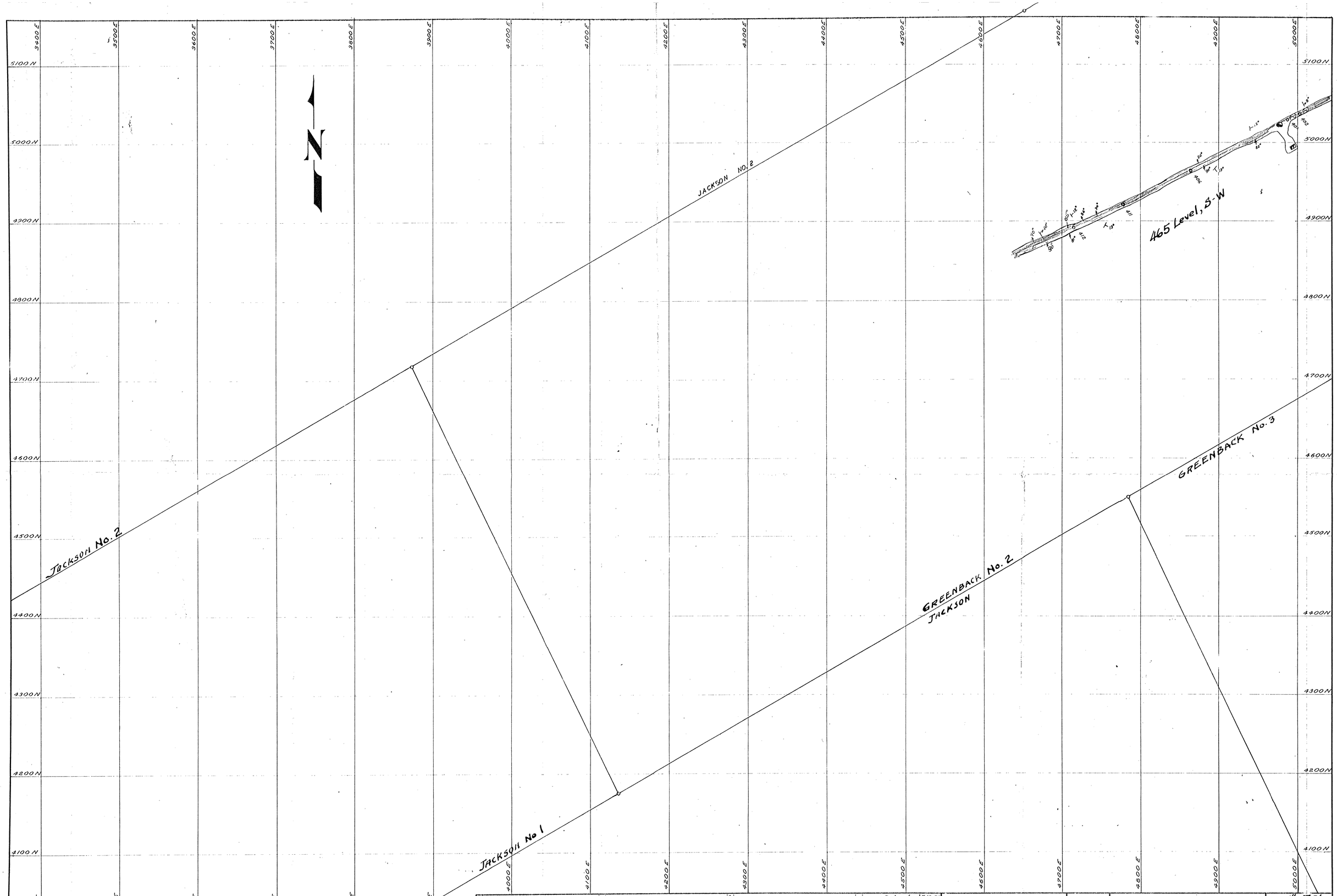
Fig. 3
Scale: 1" = 20'
Survey of Prospect Winze
Comet Mine, Lincoln Co, Nev
Combined Metals Reduction Co



PLAN



SECTION B-B
N25°W --Looking Easterly--

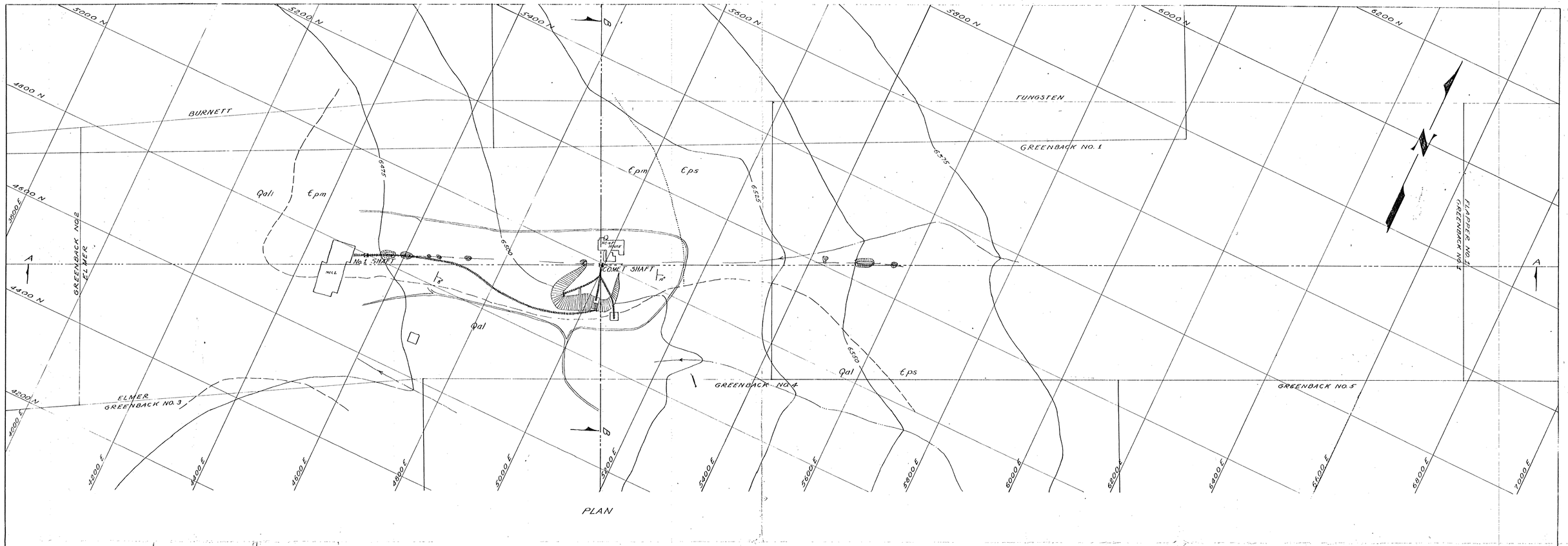


REVISIONS	REVISIONS	REFERENCES	WORK: DRAWN Schrader 3-12-57; TRACED; CHECKED; APPROVED R.G Lee	COMBINED METALS REDUCTION CO. PIOCHE, NEVADA	465 LEVEL S-W COMET MINES INC.

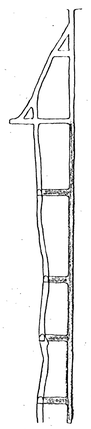
SCALE 1" = 50'

D-1254

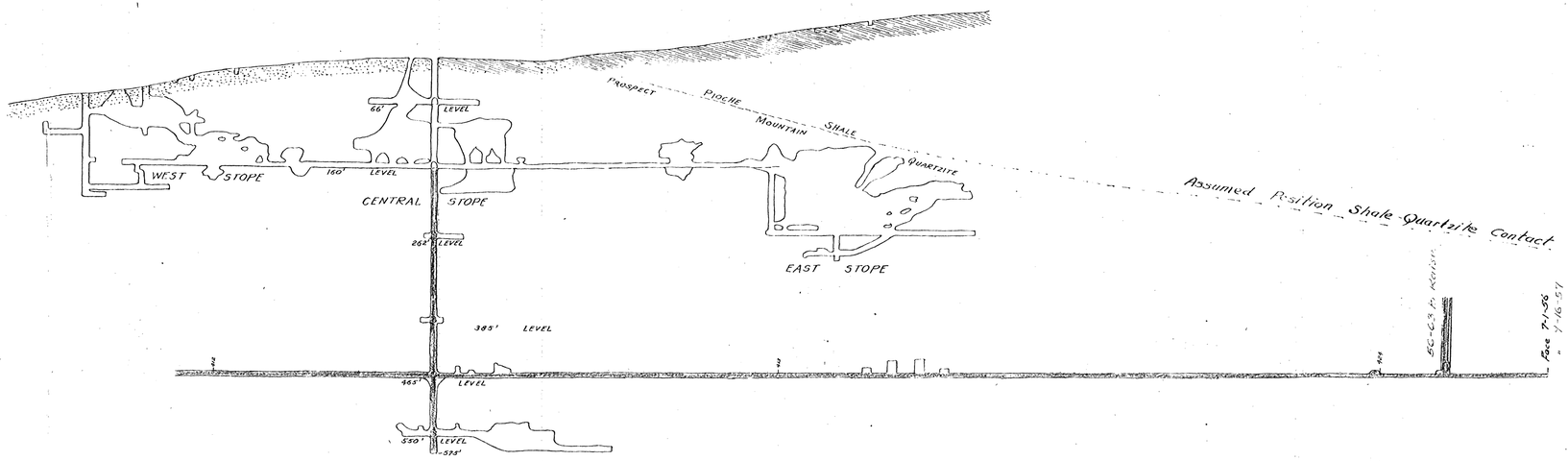
PEMBROKE CO. - 3169 PHOENIX



PLAN



SECTION B-B
N25°W —Looking Easterly—



LONGITUDINAL SECTION A-A
N65°E —Looking Northerly—

Showing Work of Report
DMEA/2307

C-1087

DRAWN Schrader 1-25-55
DATE
CHECKED
APPROVED R.G.L.

COMBINED METALS REDUCTION CO.
PIOCHE, NEV.

COMET MINE
SURFACE PLAN and SECTIONS

SCALE 1"=100'
D-1230

SALT LAKE BLUE

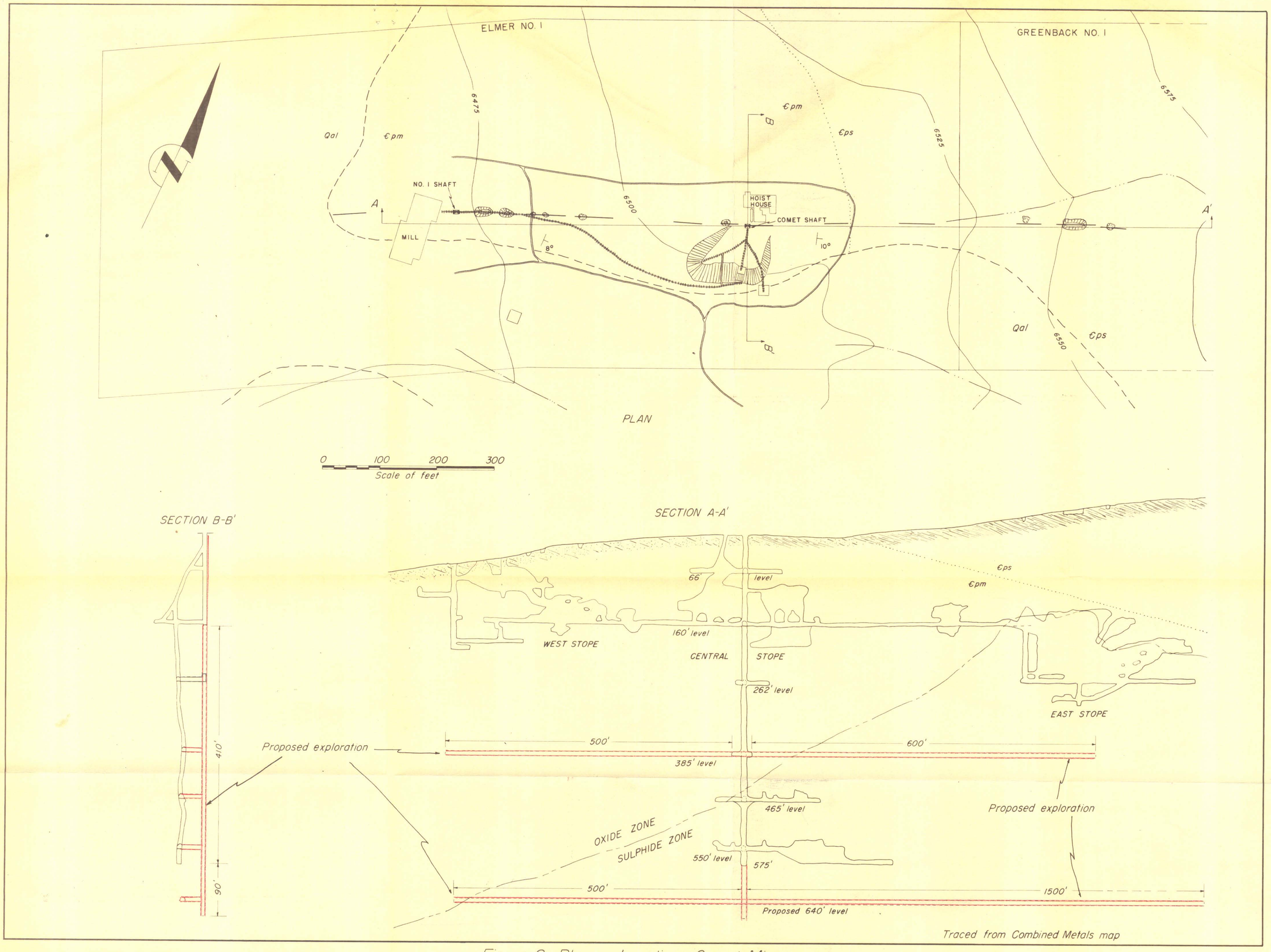
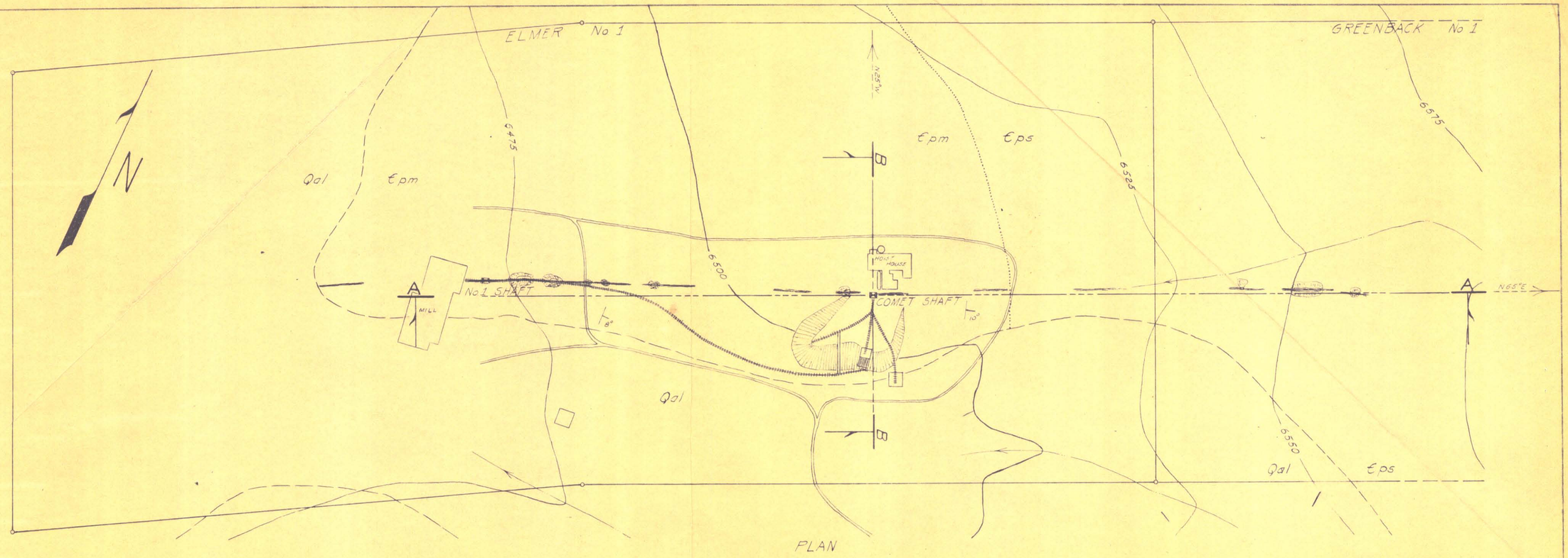
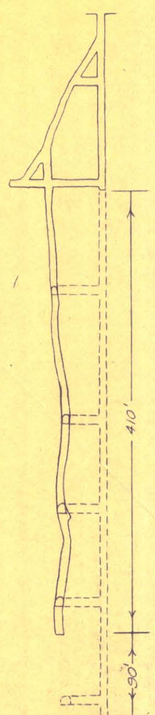


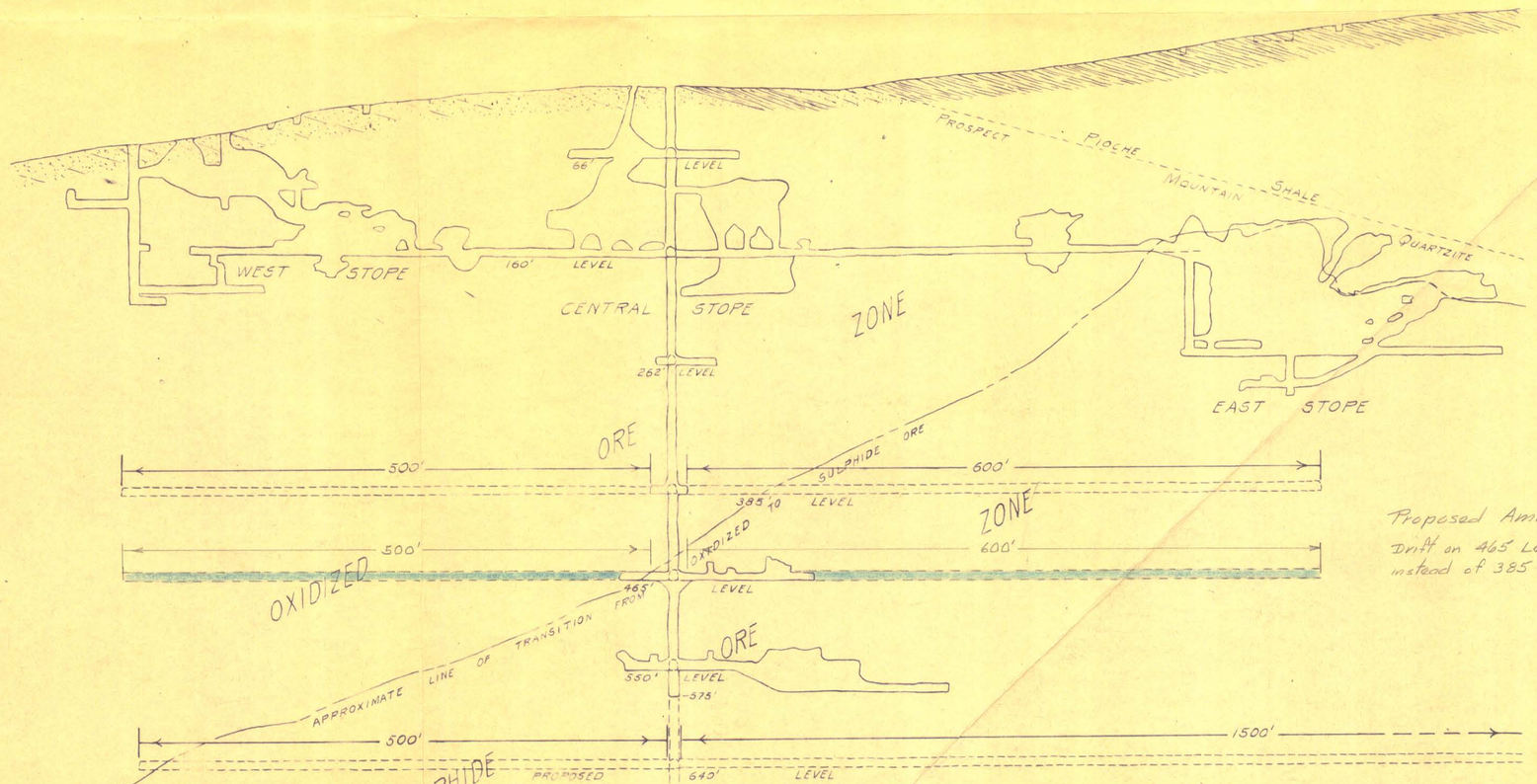
Figure 2- Plan and sections, Comet Mine



PLAN



SECTION B-B
N25°W —Looking Easterly—



LONGITUDINAL SECTION A-A
N65°E —Looking Northerly—

Proposed Amendment:
Drift on 465 Level instead of 385 Level.

PRESENT WORKINGS
PROPOSED EXPLORATION

REVISIONS

REFERENCES

WORK: DRAWN R H GODBE 5-23-51
TRACED
CHECKED
APPROVED

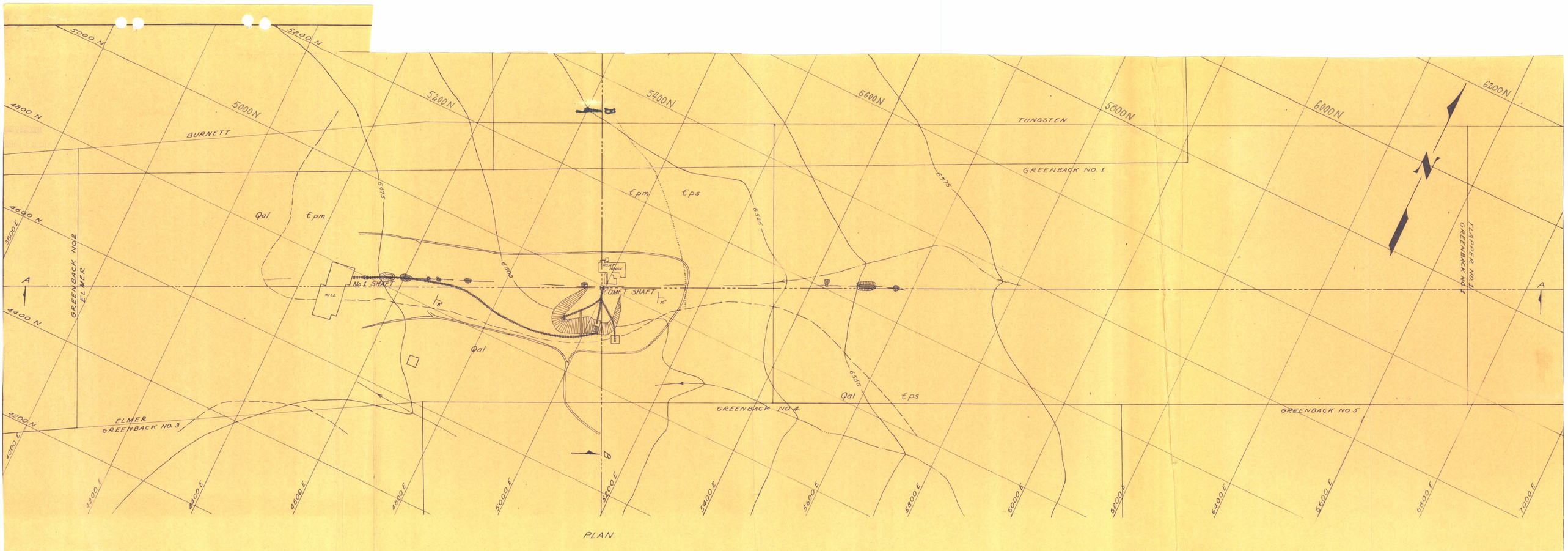
COMBINED METALS REDUCTION CO
PIOCHE, NEVADA

COMET MINE
PLAN AND SECTIONS
SHOWING
PROPOSED EXPLORATION

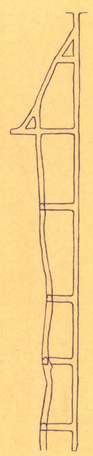
SCALE 1" = 100'

C-1087

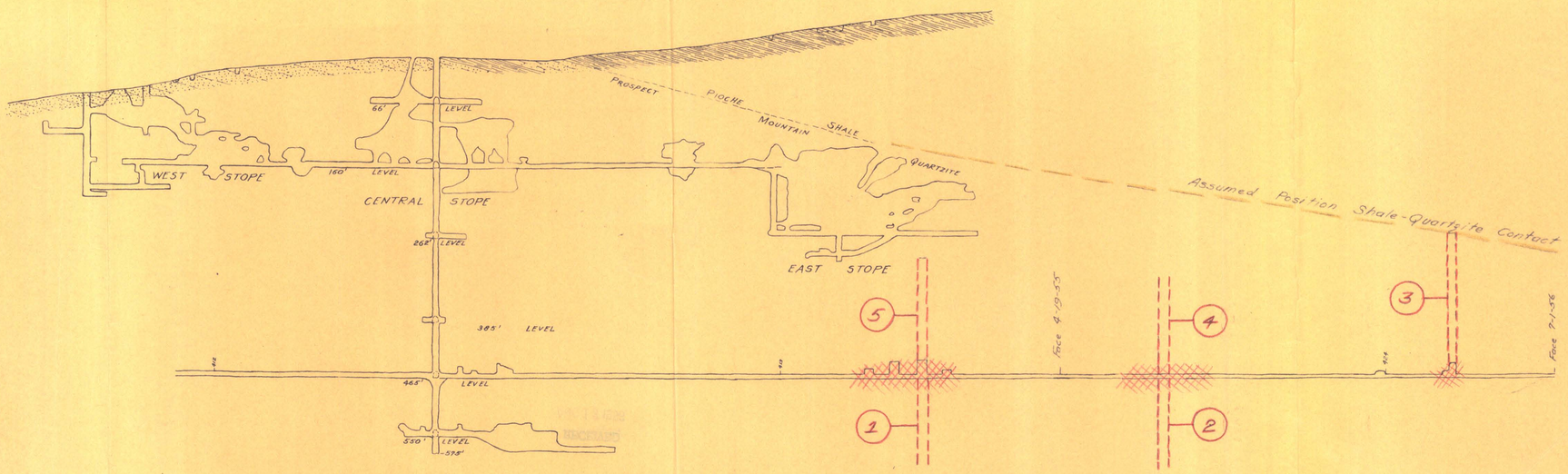
Salt Lake Blue



PLAN



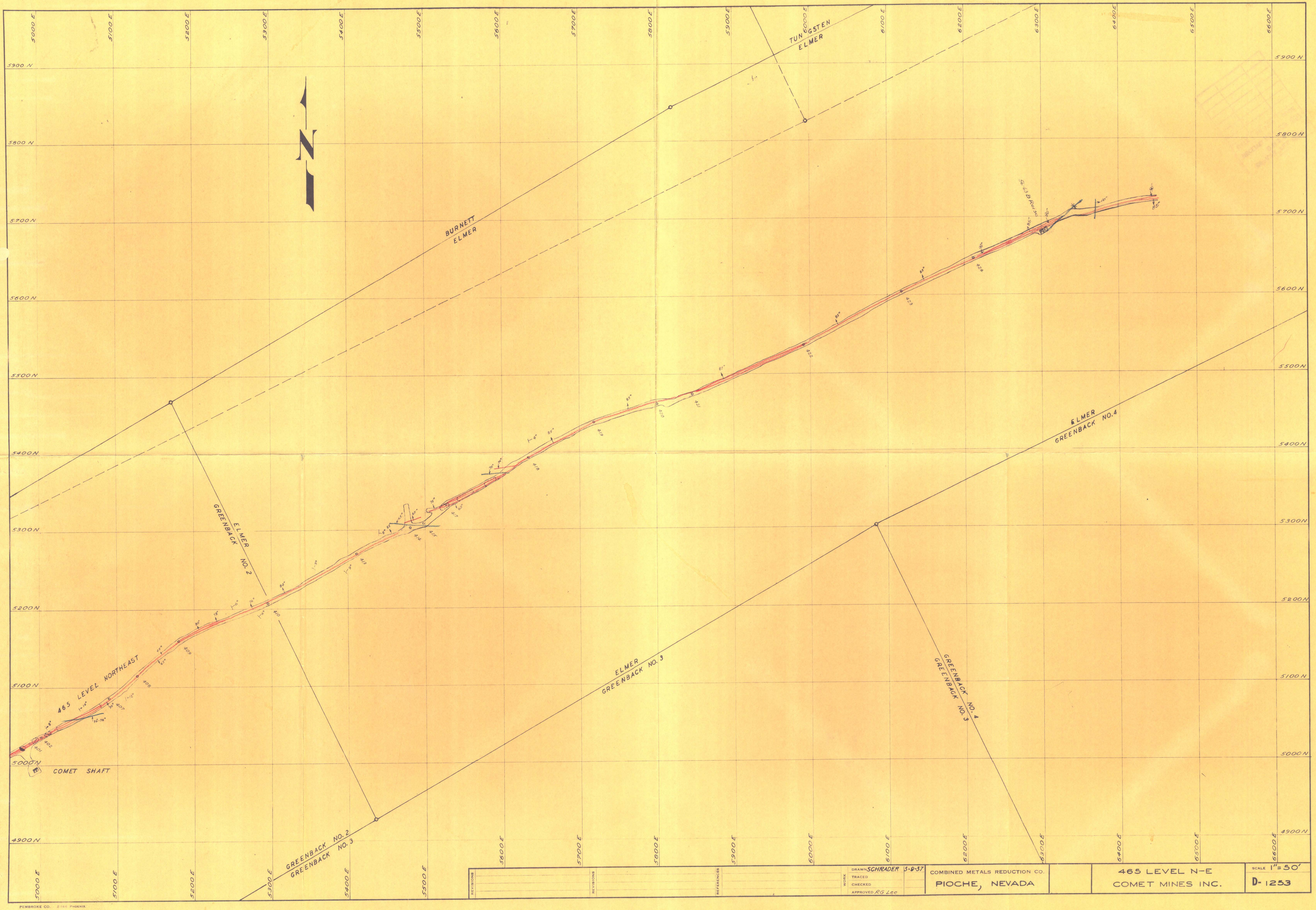
SECTION B-B
N25°W —Looking Easterly—



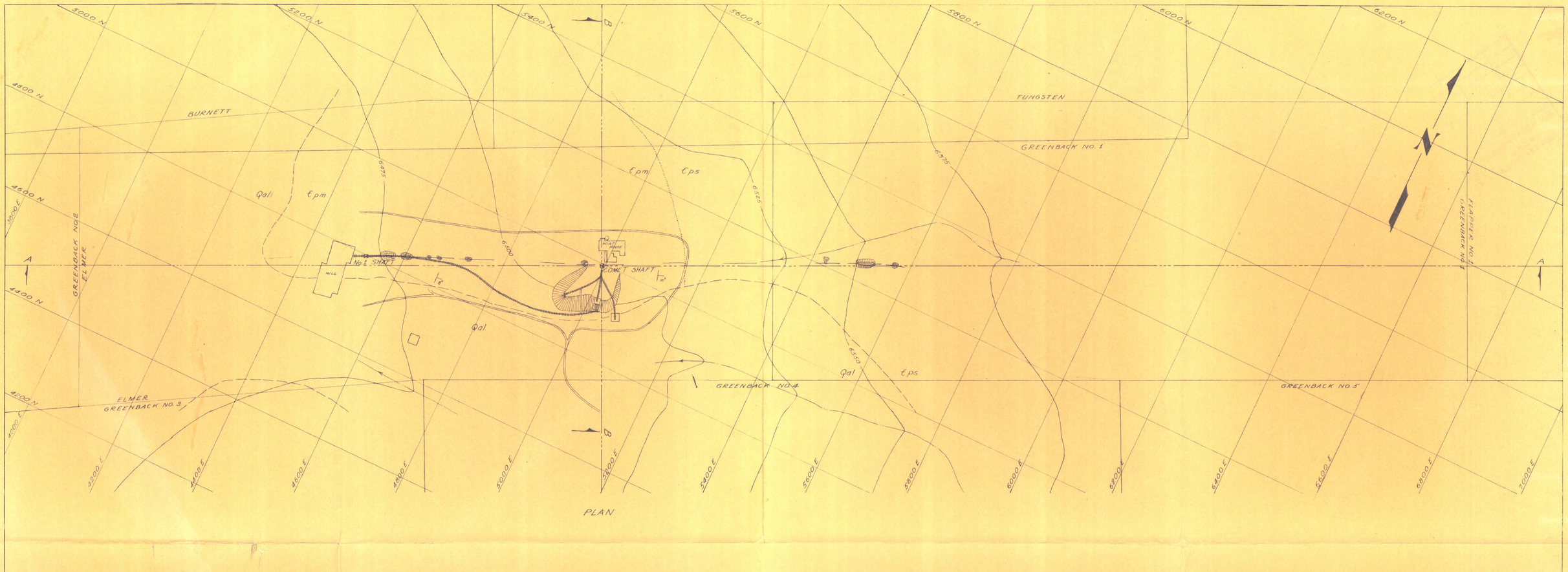
LONGITUDINAL SECTION A-A
N65°E —Looking Northerly—

Docket No. DMEA 2309

REVISIONS	REFERENCES C-1087	WORK: DRAWN Schrader 4-25-56; TRACED; CHECKED; APPROVED	COMBINED METALS REDUCTION CO. PIOCHE, NEV.	COMET MINE SURFACE PLAN and SECTIONS	SCALE 1"=100' D-1230

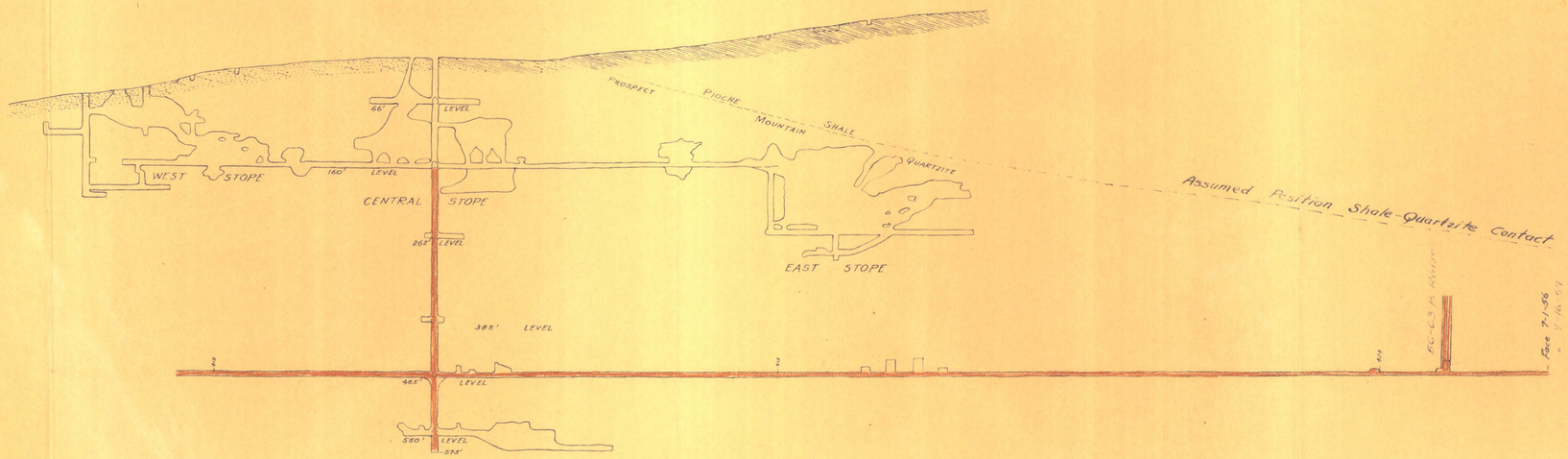


PEMBROKE CO. 2166 PHOENIX



PLAN

SECTION B-B
N25°W — Looking Easterly —



LONGITUDINAL SECTION A-A
N65°E — Looking Northerly —

Showing Work of Property
DMEA/2,309

REVISIONS		REFERENCES	C-1087	WORK	DRAWN Schrader 3-25-58	COMBINED METALS REDUCTION CO. PIOCHE, NEV.	COMET MINE SURFACE PLAN and SECTIONS
					TRACED		SCALE 1"=100'
					CHECKED		D-1230
					APPROVED R.G.L.		

SALT LAKE BLUE