OFFICE OF MINERALS EXPLORATION
CONTRACT ADMINISTRATION AND AUDIT DIVISION

REPORT OF ROYALTY REVIEW

I have reviewed the files of the Washington office pertaining to Contract Idm-81071, Docket DMEA-4586 (zinc), dated March 29, 1957, with

The New Jersey Zinc Company
Jefferson City, Tennessee
and
160 Front Street
New York 38, New York

for the purpose of determining the amount of royalty payable to the U. S. Government on sales of minerals from property referred to as the Cedar Springs and Idol Areas located in Grainger County, Tennessee, during the period March 29, 1957, through July 1, 1960.

A certification of discovery or development was issued on December 11, 1959, and, in accordance with Articles 8, Annexes 1 and 2, and Amendment No. 6 of the contract, royalty is payable on all minerals produced from the land described in Article 2, as amended, of the contract for a period of 32 years from the date of the contract or until the total net amount contributed by the Government without interest is fully repaid, whichever occurs first. A Report of Review dated December 7, 1959, indicated accepted costs under the exploration contract amounting to $105,855.00 with the Government's contribution on a 50 percent basis being $52,927.50.

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 for the period covered. Accordingly, as of July 1, 1960, the royalty account of this project was found to be:

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

E. D. Talbert, OME Auditor

May 9, 1962

STATUS OF PROJECT, SCOPE OF REVIEW
AND REASONS THEREFOR

This contract provides that the Operator, as principal if the producer and as surety if not the producer, shall pay to the Government a percentage royalty on all minerals produced for a maximum of 32 years from (1) the lands thereunder, (2) any contiguous lands in which the Operator or any subsidiary acquires any interest before March 29, 1967, and (3) any lands deleted by Amendments Nos. 2, 5, and 7, if the Operator or any subsidiary acquires any interest in such lands or the production therefrom. The term "minerals" includes limestone and dolomite products derived from processing ores.

At the time this contract was executed, the land thereunder consisted of numerous tracts aggregating 699.62 acres, more or less, from which an area of approximately 11.4 acres was specifically excluded because of prior exploration drilling. Amendments to the contract added about 905.18 acres and deleted about 661 acres. Consents to Lien were waived.

According to the Operator's final report the 943.8 acres, more or less, remaining under the contract were held by virtue of purchase of the mineral and mining rights. A map attached to the report indicates that the Operator held, either by mineral rights in the entirety, a two-thirds mineral interest, or in fee simple, a considerable acreage contiguous to the land under the contract.

Exploration work under the contract was completed on July 14, 1959. No minerals were produced from the property during the exploration period. Examinations of the property and conferences with the Operator's officials have disclosed no production through the period covered by this review.

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

(1) No minerals have been produced during the period covered by this review; and

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

800

MAY 1 1 1962

Memorandum

To: Chief, Fiscal Section, Division of Administrative Services, Office of the Secretary

From: Chief, Division of Field Operations, OMS

Subject: DMRA-4586 (Zinc)
The New Jersey Zinc Company
Cedar Springs Area
Grainger County, Tennessee
Contract Ldn-21871

Enclosed for your files is the original of a Report of Royalty Review on the subject contract.

George C. Selfridge

Enclosure

GCSelfridge/hb (5/10/62)
cc to: Docket DMRA-4586
Director's Reading File
CA&A Division
GCSelfridge
R. A. Laurence, USGS, Reg. IV, w/cy of Report of Royalty Review dtd 5/9/62 & orig. cy of memo dtd 5/9/62 to Chf., Div. of Field Operations from CA&A Division.
Avery Reed, USBM, Reg. IV, w/cy of ex. item sent to Mr. Laurence.

MAY 9 1962

Memorandum

To: Chief, Division of Field Operations

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

Subject: OMRA-4586 (Zinc)
The New Jersey Zinc Company
Cedar Springs Area
Grainger County, Tennessee
Contract Ida-81071

Enclosed are the original and two copies of a Report of Royalty Review covering the subject Region IV contract. 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; and

(b) Two copies to Region IV files.

This report is for OMS record purposes only; therefore, no copy has been provided for the Operator.

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

Enclosures

EDTalbert/ama 5-9-62

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

REPORT
OF REVIEW

OFFICE OF MINERALS EXPLORATION
CONTRACT ADMINISTRATION AND AUDIT DIVISION

REPORT OF REVIEW

I have reviewed the Monthly Reports of:

The New Jersey Zinc Company
Jefferson City, Tennessee

pertaining to Exploration Project Contract No. Idm-81071, OMEA No. 4586, including Amendments Nos. 1 through 7, for May 1957 to July 1959, inclusive, covering a zinc project in the Cedar Springs Area, Grainger County, Tennessee.

My review included an examination of the Monthly Reports (Forms MF-104) and supporting documents, comparison of the claimed costs with the contract and pertinent schedules, verification of work performed by reference to Field Team reports and correspondence, 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 in the attached schedule.

The findings of this review are stated in the following summary and the attached schedule:

Total cost billed by Operator		$105,855.00
Exceptions:		
Prior to this review	$ -0-	
Herewith	-0-	-0-
Total acceptable cost		$105,855.00

The contract calls for a 50 percent contribution of the allowable costs by the Government. Therefore, if the project is otherwise accepted as having met the terms of the contract, payments as follows are valid and proper:

Payable on audited claim	$ 52,927.50
Paid to date	52,470.91
Balance due Operator	$ 456.59

E. D. Talbert, OME Auditor

December 7, 1959

Reasons for Report of Review in lieu of a final audit:

(a) the Monthly Reports were supported by documentary proof of that portion ($97,500.00) of the costs covering work performed at unit rates under independent contract;
(b) the balance ($8,355.00) of the costs was under a contract provision for payment by the Government at fixed unit costs for work performed; and
(c) the administrative cost to the Government of an audit would be excessive in relation to the estimated amount of possible disallowances.

Acceptable Costs:

Independent Contracts - Drilling:	@ $2.65/ft.	@ $2.75/ft.	@ $3.00/ft.	Amount
Holes CS-17 through 42	140'	20,010'	1,176'	$ 58,926.50
Holes I-53 through 68	-	13,238'	1,434'	40,706.50
Totals	140'	33,248'	2,610'	99,633.00*
Less: Excess over allowable maximum				2,133.00
Net acceptable drilling costs				97,500.00
Fixed Unit Costs -				
Incidental Allowance	35,000' @ $ .21/ft.			7,350.00
Assays	105 @ $1.00/sample			105.00
Core Boxes	500 @ $1.80/ea.			900.00
Total Acceptable Costs				$105,855.00

* Actual costs invoiced by drilling contractor (E. J. Longyear Company) aggregated:

Drilling - Overburden	809'	@ $2.75		$ 2,224.75
NX diamond	95'	@ 3.05		289.75
BX "	891'	@ 3.05		2,717.55
AX "	31,453'	@ 2.75		86,495.75
AX "	2,610'	@ 3.00		7,830.00
EX "	140'	@ 2.65		371.00
	35,998'			99,928.80
Hauling cores	85 hrs.	@ $3.25		276.25
Capping holes	41 hrs.	@ 3.25		133.25
Surveying holes	6 hrs.	@ 5.00		30.00
Tro-Pari surveys	5 hrs.	@ 12.50		62.50
Total				$100,450.80

DEC 7 1959

Memorandum

To: Executive Officer, OME Field Team, Region V

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

Subject: Docket No. DMEA-4586 (Zinc)
The New Jersey Zinc Company
Cedar Springs Area
Grainger County, Tennessee
Contract No. Idm-E1071

As requested by your November 30 memorandum a review in lieu of a final audit has been made of the subject project. The original and three copies of the Report of Review are attached.

If you concur with the facts as stated in this Report of Review, please forward the original and one copy to Mrs. Miller, submit one copy to the Operator, and retain the remaining copy in your files. If for any reason you do not concur, please return the original and all copies to this Division with your comments.

In connection with your concurrence, it should be noted that the amount shown on the Report of Review as having been heretofore paid the Operator is $52,470.91, rather than $52,470.95 as stated in your memorandum. If a recheck indicates the latter amount to be correct, please return the original and all copies of the Report of Review with a listing of the individual monthly payments.

The original of the final (July 1959) MF-104, MF-104A, and attachments, together with the 41 drilling invoices supporting prior forms MF-104, are being returned by certified mail to Mrs. Miller with a copy of this memorandum.

Attachments

EDTalbert/ama
December 7, 1959

Copy to: Docket
Director's Reading File
CA & A Division
Mrs. Helen R. Miller (via Certified Mail)

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF MINES
REGION V

ELECTROTECHNICAL EXPERIMENT STATION

CERTIFIED MAIL

P. O. BOX 217
NORRIS, TENNESSEE

December 1, 1959

Memorandum

To: E. D. Talbert, Office of Minerals Exploration, Interior Building, Washington 25, D. C.

From: Administrative Assistant, Norris, Tennessee

Subject: Report of Review in Lieu of Final Audit - Contract Idm-E1071, Docket No. DMEA-4586, The New Jersey Zinc Company, Cedar Spring Area, Grainger County, Tennessee

A Report of Review in Lieu of Final Audit is requested on the subject contract. The following documents are attached hereto:

1. Original MF-104, MF-104a, and attachments covering final voucher

2. Memorandum from Executive Officer, Region V, Knoxville, Tennessee, regarding completion of work

3. Invoices covering previously paid documents (total of 41 invoices)

Helen R. Miller
Helen R. Miller

Attachments
/hbm
Copies to R. A. Laurence
V. J. Lynch
Norris files
Day files

OFFICIAL FILE COPY
O. M. E.
RECEIVED DEC 4 1959

DATE	INITIALS	CODE
12-4	gad	VVO
		800

UNITED STATES
DEPARTMENT OF THE INTERIOR
OFFICE OF MINERALS EXPLORATION
ROOM 2-B POST OFFICE BLDG.
KNOXVILLE 2, TENN.

OFFICIAL FILE COPY
O. M. E.
RECEIVED DEC 4 1959

DATE	INITIALS	CODE

November 30, 1959

Memorandum

To; E. D. Talbert - Contract Admin. & Audit Division

From: R. A. Laurence, Executive Officer, OME Region V

Subject: Completion of DMEA-4586, Idm-E1071-zinc
The New Jersey Zinc Co., Cedar Spring Area,
Grainger County, Tennessee

Work on the subject contract was completed July 14, 1959.

The units of work completed by the Operator and verified by the Field Team are as follows:

Diamond drilling.....	35,998 feet
Assays.....	105
Core boxes	500

The total amount of drilling exceeds that authorized by the contract, but the Operator has claimed only $97,500 for 35,231 feet of drilling.

An acceptable final engineering and geologic report has been received, and copies were forwarded to the Operating Committee on November 27, 1959.

A total of $52,470.95 has been paid to date to the Operator, $456.56 having been withheld pending final audit and review.

This request is being forwarded through Mrs. Helen R. Miller, who is attaching the necessary reports and documents from her files.

A Report of Review in Lieu of final audit is requested.

Original of form MF-104 for the month of July, 1959 is attached.

Robert A. Laurence

Robert A. Laurence

Form MF-104 (Rev.)
(April 1952)

Budget Bureau No. 42-R1036.5

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

DEC 14 1959 O.M.E.

VOUCHER & SCHEDULE
18

Month of July 1959 Docket No. DMEA 4586 Contract No. Idm E 1071
Operator's Name THE NEW JERSEY ZINC COMPANY Minerals Zinc
Address JEFFERSON CITY, TENNESSEE
Contract Amount, $ 109,950.00 Government Participation: 50 % Amount, $ 52,975.00

ITEMS OF COSTS	FOR OPERATOR'S USE: Monthly Total	Totals Previously Reported	Totals To Date	FOR GOVERNMENT USE ONLY: Approved Monthly Total	Approved Totals Previously Reported	Approved Totals To Date
(1) Independent Short Form Contracts:						
Drilling	890.00	96,610.00	97,500.00			
Bulldozing						
Crosscutting						
Drifting						
(2) Labor and Supervision:						
Labor						
Supervision	19.53	7,330.47	7,350.00			
Technical Services						
(3) Operating Mat'ls. and Supplies:						
Timber						
Explosives						
Pipe						
Track						
Core Boxes	3.60	896.40	900.00			
(4) Operating Equipment:						
Rental						
Purchase						
Depreciation						
(5) Initial Rehabilitation and Repairs						
(6) New Bldgs., Improvements, etc.						
(7) Miscellaneous:						
Repairs to Equipment						
Sampling and Analysis	-	105.00	105.00			
Payroll Taxes						
Liability Insurance						
(8) Contingencies (specify):						
TOTALS	913.13	104,941.87	105,855.00			

NOTE: FINAL PAYMENT ADJUSTED IN AMOUNT OF $0.03 in ACCORDANCE WITH REPORT OF REVIEW DATED 12/7/59

(50% of Monthly Total $913.13 = $456.56 plus $0.03 = $456.59)

I certify that the above bill is correct and just and that payment therefor has not been received.
Date 8/1/59 *Payee The New Jersey Zinc Company
Per [signature] Title Chief Geologist

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

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

(Instructions on reverse)

Pursuant to authority vested in me, I certify that this account is correct and proper for payment in the amount of:
$ 456.59
Signature Helen R. Melin
(Authorized Certifying Officer)
Date DEC 11 1959 Vou. No. 29
(See other side)

19th) C 7/14/59

(For Government use only)

CERTIFICATION BY GOVERNMENT REPRESENTATIVE:

I certify that to the best of my knowledge and belief the contractor submitting this voucher is operating a Defense Minerals Exploration Administration project under Contract No. E1071 in accordance with the terms of the contract.

Signature [illegible] Title MINING ENGINEER GEOLOGIST, U. S. G. S. U. S. BUREAU OF MINES Date DEC 10 1959

APPROVAL BY DMEA EXECUTIVE OFFICER OR ALTERNATE:

Signature V. J. Lynch Title ACTING EXECUTIVE OFFICER DME - REGION V Date DEC 10 1959

MONTHLY REPORT OF OPERATOR

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

Form MF-10A
(April 1962)

Budget Bureau No. 42-R1151.2

DEC 14 1959 M.E.

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

Month of July 1959 Docket No. DMEA 4536 Contract No. Idm E 1071

Operator's Name The New Jersey Zinc Company Minerals Zinc

Address Jefferson City, Tennessee

OPERATION	UNIT	COSTS THIS MONTH	UNITS THIS MONTH	COSTS TO DATE	UNITS TO DATE	UNIT COSTS TO DATE	AUTHORIZED BY CONTRACT Units	AUTHORIZED BY CONTRACT Unit Costs
Drifting								
Crosscutting								
Raising								
Shafts								
Winzes	Ft.	-	-	371.00	140	2.65		2.65
Drilling: Core 0-1000	"	890.00	324	89,572.00	32,572	2.75	30,000	2.75
Core 1000-1500	"	-	-	7,557.00	2,519	3.00	5,000	3.00
Auger Assays	Ea.	-	-	105.00	105	1.00	200	1.00
Stripping Core Boxes	"	360	2	900.00	500	1.80	500	1.80
Trenching								
Test Pits								
Roads and Trails								
Tech. Serv.		19.55	93	7,350.00	35,000	0.21	35,000	0.21
TOTAL DISTRIBUTED COSTS		913.13		105,855.00				TOTAL COSTS AUTHORIZED BY CONTRACT
Operating Equipment Purchased								
Initial Rehabilitation and Repairs								
New Buildings, Improvements, etc.								
TOTAL COSTS		913.13		105,855.00				

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

Date 8/1/59 Operator The New Jersey Zinc Co.

Per [signature] Title Chief Geologist

REMARKS: This report is for hole I-68

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

(Instructions on reverse)

(For Government use only)

[signature]

GEOLOGIST, U. S. G. S.

AUG 20 '59

INSTRUCTIONS

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

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

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

GPO 872894

Report for June 1959

Cedar Springs Area DMSA 4506

Contract Idn B 1071 (Zinc)

One drill operated on this project during the month. One hole was completed for a total of 1091 feet. This hole is shown in green on the accompanying map, AX-TEN-B-106.

Funds allocated for this contract by the government have been expended and, with the completion of hole I-68, drilling under the contract is completed.

<u>Hole I-68</u> - N.J.Z. M & N - Stapleton surface

Coordinates: 730,153.55 N; 762,669.55 E
Elevation: 1462.25

Results:

0- 1	- - Clay
1- 57	- - Chickamauga limestone
57- 771	- - Mascot dolomite. Traces of sphalerite 643-646
771- 928	- - Upper Kingsport dolomite
928	- - TD
928-1091	- - (Bottom) Lower Kingsport dolomite and limestone

Form MF-104 (Rev.)
(April 1952)

Budget Bureau No. 42-R1036.5

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION

PAID ON VOUCHER & SCHEDULE OF PAYMENTS K- 3

OPERATOR'S MONTHLY REPORT AND VOUCHER

Month of June 9 Docket No. DMEA 4566 Idm E 1071

Operator's Name The New Jersey Zinc Company O.M.E. Contract No. Zinc

Address Jefferson City, Tennessee Minerals

Contract Amount, $ 105,950.00 Government Participation: 50 % Amount, $ 52,975.00

ITEMS OF COSTS	FOR OPERATOR'S USE: Monthly Total	Totals Previously Reported	Totals To Date	FOR GOVERNMENT USE ONLY: Approved Monthly Total	Approved Totals Previously Reported	Approved Totals To Date
(1) Independent Short Form Contracts:	6922.00	89,688.00	96,610.00			
Drilling						
Bulldozing						
Crosscutting						
Drifting						
(2) Labor and Supervision:						
Labor						
Supervision	519.54	6,810.93	7,330.47			
Technical Services						
(3) Operating Mat'ls. and Supplies:						
Timber						
Explosives						
Pipe						
Core Boxes	63.00	833.40	896.40			
(4) Operating Equipment:						
Rental						
Purchase						
Depreciation						
(5) Initial Rehabilitation and Repairs						
(6) New Bldgs., Improvements, etc.						
(7) Miscellaneous:						
Repairs to Equipment	12.00	93.00	105.00			
Sampling and Analysis						
Payroll Taxes						
Liability Insurance						
(8) Contingencies (specify):						
TOTALS	7516.54	97,425.33	104,941.87	7516.54	97425.33	104,941.87

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

Date 7/8/59 *Payee The New Jersey Zinc Company

Per [signature] Title Chief Geologist-Tenn.

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

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

(Instructions on reverse)

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

$ 3758.27

Signature [signature] (Authorized Certifying Officer)

Date JUL 24 1959 Vou. No. 4

(See other side)

3758.27

(For Government use only)

CERTIFICATION BY GOVERNMENT REPRESENTATIVE:

I certify that to the best of my knowledge and belief the contractor submitting this voucher is operating a Defense Minerals Exploration Administration project under Contract No. E 1071 in accordance with the terms of the contract.

Signature V. J. Lynch Title MINING ENGINEER U. S. BUREAU OF MINES Date JUL 20 1959

APPROVAL BY DMEA EXECUTIVE OFFICER OR ALTERNATE:

Signature ..... Title EXECUTIVE OFFICER OME FIELD TEAM REGION V Date JUL 20 1959

MONTHLY REPORT OF OPERATOR

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

Form MF-104A
(April 1952)

Budget Bureau No. 42-R1151.2

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION

JUL 22 1959
O.M.E.

OPERATOR'S UNIT COST AND PROGRESS REPORT

Month of June 9 1959 4586 Idm E 1071
Operator's Name The New Jersey Zinc Company Contract No. Zinc
Address Jefferson City, Tennessee Minerals

OPERATION	Unit	Costs This Month	Units This Month	Costs to Date	Units to Date	Unit Costs to Date	Authorized by Contract: Units	Authorized by Contract: Unit Costs
Drifting								
Crosscutting								
Raising								
Shafts RX	Ft.	-	-	371.00	140	2.65		2.65
Winzes 0-1000	"	5500.00	2000	88,682.00	32,248	2.75	30,000	2.75
Drilling: Cor 1000-1500	"	1422.00	474	7,557.00	2,519	3.00	5,000	3.00
Churn Assays	Ea.	12.00	12	105.00	105	1.00	200	1.00
Core Boxes	"	63.00	35	896.40	498	1.80	500	1.80
Stripping								
Trenching								
Test Pits								
Hoist Serv.	Ft.	519.54	2474	7,330.47	34,907	0.21	35,000	0.21
Total Distributed Costs		7516.54		104,941.07				Total Costs Authorized by Contract
Operating Equipment Purchased								
Initial Rehabilitation and Repairs								
New Buildings, Improvements, etc.								
Total Costs		7516.54		104,941.07				

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

Date 7/1/59 Operator The New Jersey Zinc Co.

Per [signature] Title Chief Geologist-Tenn.

Remarks This report includes I-66 I-67

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

(Instructions on reverse)

(For Government use only)

[signature]
GEOLOGIST, U. S. G. S.
JUL 20 '59

INSTRUCTIONS

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

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

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

GPO 872894

Report for June, 1959

Cedar Springs Area DMEA 4580

Contract Idm E 1071 (Zinc)

O. M. E.
RECEIVED JUL 27 1959
DATE | INITIALS | CODE

One drill operated on this project during the month. Two holes were completed for a total of 2474' of drilling. These holes are shown in green on the accompanying map, AX-TENN-B 106.

Hole I-66 - NJZ M&M - Stapleton surface

Coordinates: 730,282.99 N; 763,114.72 E
Elevation: 1468.87'

Results:

0- 8 - - Clay
8- 186 - - Chickamauga limestone and dolomite
186- 873 - - Mascot dolomite
873 - - Chert Matrix
873- 916 - - Upper Kingsport dolomite
916- 920 - - 4' - 2.48% zinc
920- 924 - - 4' - 5.33% zinc
924- 928 - - 4' - Trace of zinc
928- 932 - - 4' - 0.98% zinc
932- 936 - - 4' - 1.15% zinc
936- 940 - - 4' - 10.10% zinc
940- 948 - - 8' - 0.52% zinc
948- 954 - - 6' - 5.50% zinc (5' core)
954- 959 - - 5' - 2.93% zinc
959- 966 - - 7' - 0.50% zinc
966- 971 - - 5' - 3.14% zinc
971- 978 - - 7' - 6.43% zinc (5' core)

916-978 - 62' - 3.16% zinc

978-1053 - - Upper Kingsport dolomite
Scattered traces of sphalerite
995-1022
1053 - - TR
1053-1219 - - (Bottom) Lower Kingsport dolomite
and limestone
R & S Beds 97% dolomite

Hole I-67 - NJZ M&M - Stapleton surface

Approx. Coordinates: 729,965 N; 762,850 E
Approx. Elevation: 1460

Results:

0- 10	- -	Clay
10- 242	- -	Chickamauga limestone and dolomite
242- 935	- -	Mascot dolomite. Shine of sphalerite in chert 743'
935	- -	Chert Matrix
935-1102	- -	Upper Kingsport dolomite. Scattered traces of sphalerite 1015-1081
1102	- -	TR
1102-1255	- -	(Bottom) Lower Kingsport dolomite and limestone

Form MF-104 (Rev.)
(April 1952)

Budget Bureau No. 42-R1036.5

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

JUN 18 1959
PAID ON VOUCHER & SCHEDULE OF PAYMENTS K-66

Month of May, 1959 Docket No. DMEA 4586 Contract No. Idm E 1071
Operator's Name The New Jersey Zinc Company Minerals Zinc
Address Jefferson City, Tennessee
Contract Amount, $105,950.00 Government Participation: 50 % Amount, $ 52,975.00

ITEMS OF COSTS	FOR OPERATOR'S USE: Monthly Total	Totals Previously Reported	Totals To Date	FOR GOVERNMENT USE ONLY: Approved Monthly Total	Approved Totals Previously Reported	Approved Totals To Date
(1) Independent Short Form Contracts:						
Drilling	3701.00	85,987.00	89,688.00			
Bulldozing						
Crosscutting						
Drifting						
(2) Labor and Supervision:						
Labor						
Supervision						
Technical Services	276.57	6,534.36	6,810.93			
(3) Operating Mat'ls. and Supplies:						
Timber						
Explosives						
Pipe						
Track						
Core Boxes	32.40	801.00	833.40			
(4) Operating Equipment:						
Rental						
Purchase						
Depreciation						
(5) Initial Rehabilitation and Repairs						
(6) New Bldgs., Improvements, etc.						
(7) Miscellaneous:						
Repairs to Equipment						
Sampling and Analysis	-	93.00	93.00			
Payroll Taxes						
Liability Insurance						
(8) Contingencies (specify):						
				4009.97	93,415.36	97,425.33
TOTALS	4009.97	93,415.36	97,425.33			

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

Date 6/1/59 *Payee The New Jersey Zinc Company

Per [signature] Title Asst. to Gen. Supt.

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

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

(Instructions on reverse)

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

$ 2004.98

Signature Helen R. Miller
(Authorized Certifying Officer)

Date JUN 16 1959 Vou. No. 116

(See other side)

2004.99

(For Government use only)

CERTIFICATION BY GOVERNMENT REPRESENTATIVE:

I certify that to the best of my knowledge and belief the contractor submitting this voucher is operating a Defense Minerals Exploration Administration project under Contract No. E-1071 in accordance with the terms of the contract.

Signature [illegible] Title GEOLOGIST, U. S. G. S. Date JUN 10 1959

APPROVAL BY DMEA EXECUTIVE OFFICER OR ALTERNATE:

Signature [illegible] Title ACTING EXECUTIVE OFFICER DME - REGION V Date JUN 10 1959

MONTHLY REPORT OF OPERATOR

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

Form MF-104A
(April 1952)

Budget Bureau No. 42-R1151.2

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION

JUN 18 1959
O.M.E.

OPERATOR'S UNIT COST AND PROGRESS REPORT

Month of May 1959 Docket No. DMEA 4586 Contract No. Idm E 1071
Operator's Name The New Jersey Zinc Company Minerals Zinc
Address Jefferson City, Tennessee

OPERATION	Unit	Costs This Month	Units This Month	Costs to Date	Units to Date	Unit Costs to Date	Authorized by Contract: Units	Authorized by Contract: Unit Costs
Drifting								
Crosscutting								
Raising								
Shafts								
Winzes EX	Ft.	-	-	371.00		2.65		2.65
Drilling: Core 0-1000	"	2750.00	1000	83,182.00		2.75	30,000	2.75
Churn 1000-1500	"	951.00	317	6,135.00		3.00	5,000	3.00
Auger Assays	Ea.	-		93.00		1.00	200	1.00
Stripping Core Boxes	"	32.40	18	833.40	463	1.80	500	1.80
Trenching								
Test Pits								
Roads and Trails								
Tech. Serv.	Ft.	276.57	1317	6,810.93	32,433	0.21	35,000	0.21
Total Distributed Costs		4009.97		97,425.33				Total Costs Authorized by Contract
Operating Equipment Purchased								
Initial Rehabilitation and Repairs								
New Buildings, Improvements, etc.								
Total Costs		4009.97		97,425.33				

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

Date 6/1/59 Operator The New Jersey Zinc Co.

Per [signature] Title Asst. to Gen. Supt.

Remarks: This report includes I-65

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

(Instructions on reverse)

(For Government use only)

[signature]
GEO. DGIST, U. S. G. S.
JUN 10 1959

INSTRUCTIONS

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

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

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

GPO 872894

Report for May, 1959

Cedar Springs Area DMEA 4586

Contract Idm # 1071 (Zinc)

One drill operated on this project during the month. One hole was completed for a total of 1317' of drilling. This hole is shown in green on the accompanying map, AX-TENN-B-106.

Hole I-65 - N.J.Z. M & M - Stapleton surface

Coordinates: 30,118.55 N; 63,231.80 E
Elevation: 1460.68

Results:

0- 6	Clay
6- 346	Chickamauga limestone and dolomite
346- 998	Mascot dolomite
998-1163	Upper Kingsport dolomite Traces of sphalerite 1074, 1105-1154, 1152
1163	TR
1163-1290	Lower Kingsport dolomite and limestone
1290-1317	(Bottom) Longview dolomite

Form MF-104 (Rev.)
(April 1952)

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION

Budget Bureau No. 42-R1036.5

PAID ON VOUCHER & SCHEDULE OF PAYMENTS K- 63

OPERATOR'S MONTHLY REPORT AND VOUCHER

Month of April, 1959 Docket No. DMEA 4586 Contract No. Idm E 1071
Operator's Name The New Jersey Zinc Company Minerals Zinc
Address Jefferson City, Tennessee
Contract Amount, $ 105,950.00 Government Participation: 50 % Amount, $ 52,975.00

ITEMS OF COSTS	FOR OPERATOR'S USE			FOR GOVERNMENT USE ONLY		
	Monthly Total	Totals Previously Reported	Totals To Date	Approved Monthly Total	Approved Totals Previously Reported	Approved Totals To Date
(1) Independent Short Form Contracts:						
Drilling	6715.00	79,272.00	85,987.00			
Bulldozing						
Crosscutting						
Drifting						
(2) Labor and Supervision:						
Labor						
Supervision						
Technical Services	505.05	6,029.31	6,534.36			
(3) Operating Mat'ls. and Supplies:						
Timber						
Explosives						
Pipe						
Track						
Core Boxes	63.00	738.00	801.00			
(4) Operating Equipment:						
Rental						
Purchase						
Depreciation						
(5) Initial Rehabilitation and Repairs						
(6) New Bldgs., Improvements, etc.						
(7) Miscellaneous:						
Repairs to Equipment						
Sampling and Analysis	20.00	73.00	93.00			
Payroll Taxes						
Liability Insurance						
(8) Contingencies (specify):						
TOTALS	7303.05	86,112.31	93,415.36	7303.05	86,112.31	93,415.36

MAY 21 1959 O.M.E.

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

Date 5/1/59 *Payee The New Jersey Zinc Co.

Per [signature] Title Asst. to Gen. Supt.

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

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

(Instructions on reverse)

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

$ 3651.52

Signature Helen R. Miller
(Authorized Certifying Officer)

Date MAY 19 1959 Vou. No. 112

(See other side)

3651.53

(For Government use only)

CERTIFICATION BY GOVERNMENT REPRESENTATIVE:

I certify that to the best of my knowledge and belief the contractor submitting this voucher is operating a Defense Minerals Exploration Administration project under Contract No. E-1071 in accordance with the terms of the contract.

Signature [illegible] Title GEOLOGIST, U. S. G. S. Date MAY 14 1959

APPROVAL BY DMEA EXECUTIVE OFFICER OR ALTERNATE:

Signature V. J. Lynch Title ACTING EXECUTIVE OFFICER ~~REGION V~~ Date MAY 14 1959

MONTHLY REPORT OF OPERATOR

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

Form MF-101A
(April 1952)

Budget Bureau No. 42-R1151.2

MAY 21 1959
O.M.E.

UNITED STATES
DEPARTMENT OF THE INTERIOR

DEFENSE MINERALS EXPLORATION ADMINISTRATION

OPERATOR'S UNIT COST AND PROGRESS REPORT

Month of April 1959 Docket No. DMEA 4586 Contract No. Idm E 1071
Operator's Name The New Jersey Zinc Company Minerals Zinc
Address Jefferson City, Tennessee

OPERATION	Unit	Costs This Month	Units This Month	Costs to Date	Units to Date	Unit Costs to Date	Authorized by Contract: Units	Authorized by Contract: Unit Costs
Drifting								
Crosscutting								
Raising								
Shafts EX	Ft.	-	-	371.00	140	2.65		2.65
Winzes 0-1000	"	5,500.00	2000	80,432.00	29,248	2.75	30,000	2.75
Drilling: Core 1000-1500	"	1,215.00	405	5,184.00	1,728	3.00	5,000	3.00
Churn Assays	Ea.	20.00	20	93.00	93	1.00	200	1.00
Auger Core Boxes	"	63.00	35	801.00	445	1.80	500	1.80
Stripping								
Trenching								
Test Pits								
Roads and Trails Serv.	Ft.	505.05	2405	6,534.36	31,116	0.21	35,000	0.21
Total Distributed Costs		7,303.05		93,415.36				Total Costs Authorized by Contract
Operating Equipment Purchased								
Initial Rehabilitation and Repairs								
New Buildings, Improvements, etc.								
Total Costs		7,303.05		93,415.36				

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

Date 5/1/59 Operator The New Jersey Zinc Co.

Per [signature] Title Asst. to Gen. Supt.

Remarks: This report includes I-63 and I-68

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

(Instructions on reverse)

(For Government use only)

[signature]
GEOLOGIST, U. S. G. S.

INSTRUCTIONS

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

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

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

GPO 872894

Report for April 1959

Cedar Springs Area DMEA 4586

Contract Idm E 1071 (Zinc)

One drill operated on this project during the month. Two holes were completed for a total of 2405 feet of drilling. These holes are shown in green on the accompanying map, AX-TENN-B-106.

Hole I-63 - N.J.Z. M & M - Stapleton surface

Coordinates: 30,520.48 N; 63,445.33 E
Elevation: 1441.70

Results:

0- 4	- - Clay
4- 163	- - Chickamauga limestone
163- 857	- - Mascot dolomite. Traces and shines of sphalerite 499-500, 565, 637
857	- - Chert Matrix
857- 882	- - Upper Kingsport dolomite. Shine of sphalerite 864-865
882- 888	- - 6' - 4.64% zinc
888- 899	- - Upper Kingsport dolomite. Shine of sphalerite 891'
899- 903	- - 4' - 0.77% zinc
903- 908	- - 5' - 5.42% zinc
908- 913	- - 5' - 0.50% zinc
913- 918	- - 5' - 3.92% zinc
918- 923	- - 5' - 3.27% zinc
923- 928	- - 5' - 11.90% zinc
928- 935	- - 7' - 0.92% zinc
935- 940	- - 5' - 6.32% zinc
940- 945	- - 5' - 5.38% zinc
945- 949	- - 4' - 6.19% zinc
949- 953	- - 4' - 0.98% zinc
953- 956	- - Kingsport dolomite
956- 961	- - 5' - 1.78% zinc
961- 966	- - 5' - 3.09% zinc
966- 970	- - 4' - 4.17% zinc
970- 975	- - 5' - 9.10% zinc
975- 980	- - 5' - 5.71% zinc
980- 984	- - 4' - 4.57% zinc
882- 903	- -21' - 1.47% zinc
903- 949	- -46' - 4.67% zinc
949- 961	- -12' - 1.07% zinc
961- 984	- -23' - 5.41% zinc
903- 984	- -81' - 4.35% zinc
984-1222	- - Kingsport dolomite (No TR recognized) Scattered traces and shines of sphalerite 990-1062
1222-1230	- - (Bottom) Longview dolomite

Hole I-64 - N.J.Z. M & M - Stapleton surface

Coordinates: 30,404.15 N; 63,281.57 E
Elevation: 1445.91'

Results:

0- 2	- -	Clay
2- 164	- -	Chickamauga limestone
164- 815	- -	Mascot dolomite. Traces and shines of sphalerite 482, 528-530, 629-630
815	- -	Chert Matrix
815- 996	- -	Upper Kingsport dolomite. Scattered traces and shines 832-984
996	- -	TR
996-1059	- -	Lower Kingsport dolomite. Scattered traces of sphalerite 1012-1021
1059-1066	- -	7' - 5.70% zinc
1066-1074	- -	Lower Kingsport dolomite
1074-1079	- -	5' - 5.30% zinc
1059-1079	- -	20' - 3.55% zinc
1079-1175	- -	(Bottom) Lower Kingsport dolomite Traces of sphalerite 1079-1085, 1110

Form MF-104 (Rev.)
(April 1952)

APR 22 1959
O.M.E.

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION

Budget Bureau No. 42-R1036.5

PAID ON VOUCHER & SCHEDULE OF PAYMENTS K- 56

OPERATOR'S MONTHLY REPORT AND VOUCHER

Month of March 8, 1959 Docket No. DMEA 4586 Contract No. Idm E 1071

Operator's Name The New Jersey Zinc Company Minerals Zinc

Address Jefferson City, Tennessee

Contract Amount, $105,950.00 Government Participation: 50 % Amount, $52,975.00

ITEMS OF COSTS	FOR OPERATOR'S USE			FOR GOVERNMENT USE ONLY		
	Monthly Total	Totals Previously Reported	Totals To Date	Approved Monthly Total	Approved Totals Previously Reported	Approved Totals To Date
(1) Independent Short Form Contracts:						
Drilling	3083.00	76,189.00	79,272.00			
Bulldozing						
Crosscutting						
Drifting						
(2) Labor and Supervision:						
Labor						
Supervision						
Technical Services	233.31	5,796.00	6,029.31			
(3) Operating Mat'ls. and Supplies:						
Timber						
Explosives						
Pipe						
Track						
Core Boxes	28.80	709.20	738.00			
(4) Operating Equipment:						
Rental						
Purchase						
Depreciation						
(5) Initial Rehabilitation and Repairs						
(6) New Bldgs., Improvements, etc.						
(7) Miscellaneous:						
Repairs to Equipment						
Sampling and Analysis	20.00	53.00	73.00			
Payroll Taxes						
Liability Insurance						
(8) Contingencies (specify):						
TOTALS	3365.11	82,747.20	86,112.31	3365.11	82,747.20	86,112.31

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

Date 4/1/59 *Payee The New Jersey Zinc Company

Per [signature] Title Asst. to Gen. Supt.

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

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

(Instructions on reverse)

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

$ 1682.56

Signature [signature]
(Authorized Certifying Officer)

Date APR 20 1959 Vou. No. 103

(See other side)

16

1682 55

(For Government use only)

CERTIFICATION BY GOVERNMENT REPRESENTATIVE:

I certify that to the best of my knowledge and belief the contractor submitting this voucher is operating a Defense Minerals Exploration Administration project under Contract No. E-1071 in accordance with the terms of the contract.

Signature [signature] Title GEOLOGIST, U. S. G. S. Date APR 16 1959

APPROVAL BY DMEA EXECUTIVE OFFICER OR ALTERNATE:

Signature [signature] Title ACTING EXECUTIVE OFFICER OME - REGION V Date APR 16 1959

MONTHLY REPORT OF OPERATOR

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

Form MF-104A
(April 1952)

Budget Bureau No. 42-R1151.2

UNITED STATES
DEPARTMENT OF THE INTERIOR

DEFENSE MINERALS EXPLORATION ADMINISTRATION

OPERATOR'S UNIT COST AND PROGRESS REPORT

Month of March 1959 Docket No. DMEA 4586 Contract No. Idm E 1071

Operator's Name The New Jersey Zinc Company Minerals Zinc

Address Jefferson City, Tennessee

OPERATION	UNIT	COSTS THIS MONTH	UNITS THIS MONTH	COSTS TO DATE	UNITS TO DATE	UNIT COSTS TO DATE	AUTHORIZED BY CONTRACT Units	AUTHORIZED BY CONTRACT Unit Costs
Drifting								
Crosscutting								
Raising								
Shafts								
Winzes EX	Ft.			371.00	140	2.65		2.65
Drilling: Core 0-1000	"	2750.00	1000	74,932.00	27,248	2.75	30,000	2.75
Chun 1000-1500	"	333.00	111	3,969.00	1,323	3.00	5,000	3.00
Auger Assays	Ea.	20.00	20	73.00	73	1.00	200	1.00
Stripping Core Boxes	"	28.80	16	738.00	410	1.80	500	1.80
Trenching								
Test Pits								
Roads and Trails								
Tech. Serv.	Ft.	233.31	1111	6,029.31	28,711	0.21	35,000	0.21
TOTAL DISTRIBUTED COSTS		3365.11		86,112.31				TOTAL COSTS AUTHORIZED BY CONTRACT
Operating Equipment Purchased								
Initial Rehabilitation and Repairs								
New Buildings, Improvements, etc.								
TOTAL COSTS		3365.11		86,112.31				

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

Date 4/1/59 Operator The New Jersey Zinc Co.

Per [signature] Title Asst. to Gen. Supt.

REMARKS: This report includes hole I-62

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

(Instructions on reverse)

(For Government use only)

[signature]
GEOLOGIST, U. S. G. S.

INSTRUCTIONS

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

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

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

GPO 872894

Report for March 1959

Cedar Springs Area DMEA 4586

Contract Idm E 1071 (Zinc)

One drill operated on this project during the month. One hole was completed for a total of 1111' of drilling. This hole is shown in green on the accompanying map, AX-TENN-B-106. Also included is a dip section AX-TENN-C-1423 showing holes I-60, I-61 and I-62.

Hole I-62 - N.J.Z. M & M - Stapleton surface

Coordinates: 30,598.03 N; 63,383.31 E
Elevation: 1449.68'

Results:

0- 10	Clay
10- 91	Chickamauga limestone and dolomite
91- 793	Mascot dolomite. Trace of sphalerite 406, 686
793- 798	5' - 3.98% zinc
798- 807	9' - 1.05% zinc
807- 810	3' - 5.20% zinc
810- 816	6' - Nil zinc
816- 820	4' - 3.85% zinc
820- 825	5' - 0.30% zinc
825- 830	5' - 1.17% zinc
830- 835	5' - 9.12% zinc
835- 840	5' - 6.08% zinc
	Chert Matrix at 837'
840- 845	5' - 6.62% zinc
845- 852	7' - 4.82% zinc
852- 860	8' - 15.75% zinc
860- 865	5' - 9.17% zinc
865- 870	5' - 10.90% zinc
870- 875	5' - 8.40% zinc
875- 880	5' - 3.80% zinc
880- 885	5' - 2.90% zinc
885- 890	5' - 3.15% zinc
890- 893	3' - 4.25% zinc
893- 926	Upper Kingsport dolomite
926- 930	4' - 6.53% zinc
930- 957	Upper Kingsport dolomite. Scattered shines of sphalerite
957	TR
957-1093	Lower Kingpport dolomite and limestone
1093-1111	(Bottom) Longview dolomite

Form MF-104 (Rev.)
(April 1952)

Budget Bureau No. 42-R1036.5

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION

PAID ON VOUCHER & SCHEDULE OF PAYMENTS K- 53

OPERATOR'S MONTHLY REPORT AND VOUCHER

Month of February, 1959 Docket No. DMEA 4536 Contract No. 14-C 1071
Operator's Name The New Jersey Zinc Company Minerals Zinc
Address Jefferson City, Tennessee
Contract Amount, $ 105,950.00 Government Participation: 50 % Amount, $ 52,975.00

ITEMS OF COSTS	FOR OPERATOR'S USE			FOR GOVERNMENT USE ONLY		
	Monthly Total	Totals Previously Reported	Totals To Date	Approved Monthly Total	Approved Totals Previously Reported	Approved Totals To Date
(1) Independent Short Form Contracts:						
Drilling	2359.00	73,334.00	76,169.00			
Bulldozing						
Crosscutting						
Drifting						
(2) Labor and Supervision:						
Labor	217.35	5,578.65	5,796.00			
Supervision						
Technical Services						
(3) Operating Mat'ls. and Supplies:						
Timber						
Explosives						
Pipe						
Track						
Core Boxes	23.20	676.00	699.20			
(4) Operating Equipment:						
Rental						
Purchase						
Depreciation						
(5) Initial Rehabilitation and Repairs						
(6) New Bldgs., Improvements, etc.						
(7) Miscellaneous:						
Repairs to Equipment						
Sampling and Analysis	13.00	40.00	53.00			
Payroll Taxes						
Liability Insurance						
(8) Contingencies (specify):						
TOTALS	3110.55	79,636.65	82,747.20	3110.55	79,636.65	82,747.20

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

Date 3/1/59 *Payee The New Jersey Zinc Company

Per [signature] Title Asst. to Gen. Supt.

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

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

(Instructions on reverse)

1555.28

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

$ 1555.27

Signature Peter R. Mulis
(Authorized Certifying Officer)

Date MAR 20 1959 Vou. No. 98

(See other side)

(For Government use only)

CERTIFICATION BY GOVERNMENT REPRESENTATIVE:

I certify that to the best of my knowledge and belief the contractor submitting this voucher is operating a Defense Minerals Exploration Administration project under Contract No. E-1071 in accordance with the terms of the contract.

Signature [illegible] Title U. S. BUREAU OF MINES Date MAR 19 1959

APPROVAL BY DMEA EXECUTIVE OFFICER OR ALTERNATE:

Signature Robert F. Lawrence Title EXECUTIVE OFFICER OME FIELD TEAM REGION V Date MAR 19 1959

MONTHLY REPORT OF OPERATOR

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

Form MF-104A
(April 1952)

Budget Bureau No. 42-R1151.2

UNITED STATES
DEPARTMENT OF THE INTERIOR

DEFENSE MINERALS EXPLORATION ADMINISTRATION

OPERATOR'S UNIT COST AND PROGRESS REPORT

Month of February 1950 Docket No. DMEA 4000 Contract No. 1071

Operator's Name The New Jersey Zinc Company Minerals Zinc

Address Jefferson City, Tennessee

OPERATION	Unit	Costs This Month	Units This Month	Costs to Date	Units to Date	Unit Costs to Date	Authorized by Contract: Units	Authorized by Contract: Unit Costs
Drifting								
Crosscutting								
Raising								
Shafts								
Winzes	Lf.			371.00	140	2.65		
Drilling: Core 0-1000	ft	2750.00	1000	72,152.00	26,243	2.75	30,000	2.75
Churn 1000-1500	ft	105.00	35	3,030.00	1,212	3.00	5,000	3.00
Auger Assays	La	15.00	15	50.00	50	1.00	200	1.00
Stripping Core Boxes		25.20	18	207.20	208	1.00	500	1.00
Trenching								
Test Pits								
Roads and Trails								
		217.00	1035	1,700.00	27,000	0.21	99,000	0.21
Total Distributed Costs		3110.00		82,747.20				Total Costs Authorized by Contract
Operating Equipment Purchased								
Initial Rehabilitation and Repairs								
New Buildings, Improvements, etc.								
Total Costs		3110.00		82,747.20				

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

Remarks: This report includes data 1-31

Date 3/1/50 Operator The New Jersey Zinc Co.

Per [signature] Title Asst. to Gen. Supt.

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

(Instructions on reverse)

(For Government use only)

MINING ENGINEER
U. S. BUREAU OF MINES
[signature]

INSTRUCTIONS

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

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

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

GPO 872894

Report for February 1959

Cedar Springs Area OMEA 4586

Contract Ido E 1071 (Zinc)

One drill operated on this project during the month. One hole was completed for a total of 1035' of drilling. This hole is shown in green on AM-Tenn-8-106.

Hole 1-61 - R.J.Z. N & M - Stapleton Surface

Coordinates: 30,675.34 N; 63,320.26 E
Elevation: 1462.79

Results:

0 - 10	- - -	Clay
10 - 27	- - -	Chickamauga limestone
27 - 739	- - -	Nascot dolomite
739	- - -	Chert Matrix
739 - 758	- - -	Upper Kingsport dolomite. Scattered shines of sphalerite 746 - 758
758 - 762	- - -	2.42% Zinc
762 - 766	- - -	2.50% Zinc
766 - 769	- - -	2.42% Zinc
758 - 769	- - -	11' of 2.49% Zinc
769 - 776	- - -	Scattered traces of sphalerite
776 - 780	- - -	4.80% Zinc
780 - 791	- - -	Scattered traces of sphalerite
791 - 795	- - -	1.32% Zinc
795 - 799	- - -	4.40% Zinc
799 - 803	- - -	2.25% Zinc
803 - 808	- - -	1.05% Zinc
791 - 808	- - -	17' of 2.19% Zinc
808 - 824	- - -	Upper Kingsport dolomite. Strong shine of sphalerite 816
824 - 828	- - -	2.45% Zinc
828 - 833	- - -	1.75% Zinc
824 - 833	- - -	9' of 2.06% Zinc
833 - 855	- - -	Scattered shines of sphalerite
855 - 860	- - -	9.60% Zinc
860 - 863	- - -	9.64% Zinc
863 - 874	- - -	Upper Kingsport dolomite
874 - 879	- - -	5.00% Zinc
855 - 879	- - -	24' of 4.43% Zinc
758 - 879	- - -	121' of 1.72% Zinc
879 - 890	- - -	Upper Kingsport dolomite
890	- - -	TD
890 -1029	- - -	Lower Kingsport dolomite. Scattered traces of sphalerite 895-922
1029 -1035	- - -	(Bottom) Longview dolomite 1003 dolomite in R and S Beds.

Form MF-104 (Rev.)
(April 1952)

Budget Bureau No. 42-R1036.5

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION

PAID ON VOUCHER & SCHEDULE OF PAYMENTS K-
FEB 18 1959
O.M.E.

OPERATOR'S MONTHLY REPORT AND VOUCHER

Month of January, 195 9 Docket No. DMEA 4586 Contract No. Idm E 1071
Operator's Name The New Jersey Zinc Company Minerals Zinc
Address Jefferson City, Tennessee
Contract Amount, $ 105,950.00 Government Participation: 50 % Amount, $ 52,975.00

ITEMS OF COSTS	FOR OPERATOR'S USE: Monthly Total	Totals Previously Reported	Totals To Date	FOR GOVERNMENT USE ONLY: Approved Monthly Total	Approved Totals Previously Reported	Approved Totals To Date
(1) Independent Short Form Contracts:						
Drilling	2337.50	70,996.50	73,334.00			
Bulldozing						
Crosscutting						
Drifting						
(2) Labor and Supervision:						
Labor						
Supervision	178.50	5,400.15	5,578.65			
Technical Services						
(3) Operating Mat'ls. and Supplies:						
Timber						
Explosives						
Pipe						
Track						
Core Boxes	23.40	660.60	684.00			
(4) Operating Equipment:						
Rental						
Purchase						
Depreciation						
(5) Initial Rehabilitation and Repairs						
(6) New Bldgs., Improvements, etc.						
(7) Miscellaneous:						
Repairs to Equipment						
Sampling and Analysis	-	40.00	40.00			
Payroll Taxes						
Liability Insurance						
(8) Contingencies (specify):						
TOTALS	2539.~~50~~ 40	77,097.25	79,636.65	2539.40	77,097.25	79,636.65

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

Date 2/1/59 *Payee The New Jersey Zinc Company

Per [signature] Title Asst. to Gen. Supt.

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

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

(Instructions on reverse)

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

$ 1269.70

Signature Helen R. Miller
(Authorized Certifying Officer)

Date FEB 16 1959 Vou. No. 88

(See other side)

1269.70

(For Government use only)

CERTIFICATION BY GOVERNMENT REPRESENTATIVE:

I certify that to the best of my knowledge and belief the contractor submitting this voucher is operating a Defense Minerals Exploration Administration project under Contract No. E-1071 in accordance with the terms of the contract.

Signature H. Weed [illegible] Title MINING ENGINEER GEOLOGIST, U. S. G. S. U. S. BUREAU OF MINES Date FEB 13 1959

APPROVAL BY DMEA EXECUTIVE OFFICER OR ALTERNATE

Signature V. J. Lynch Title ACTING EXECUTIVE OFFICER OVE FIELD TEAM Date FEB 13 1959

MONTHLY REPORT OF OPERATOR

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

Form MF-101A
(April 1952)

Budget Bureau No. 42-R1151.2

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION

FEB 18 1959
U.M.E.

OPERATOR'S UNIT COST AND PROGRESS REPORT

Month of Jan. 195 9 Docket No. DMEA 4586 Contract No. Idm E 1071
Operator's Name The New Jersey Zinc Company Minerals Zinc
Address Jefferson City, Tennessee

OPERATION	UNIT	COSTS THIS MONTH	UNITS THIS MONTH	COSTS TO DATE	UNITS TO DATE	UNIT COSTS TO DATE	AUTHORIZED BY CONTRACT Units	AUTHORIZED BY CONTRACT Unit Costs
Drifting								
Crosscutting								
Raising								
Shafts								
Winzes EX	Ft.		-	371.00	140	2.65		
Drilling: Core 0-1000	"	2337.50	850	69,432.00	25,248	2.75	30,000	2.75
Churn 1000-1500	"	-	-	3,531.00	1,177	3.00	5,000	3.00
Auger Assays	Ea.		-	40.00	40	1.00	200	1.00
Stripping Core Boxes	"	23.40	13	684.00	380	1.80	500	1.80
Trenching								
Test Pits								
Roads and Trails								
Sup. & Tech. Serv.	Ft.	178.50		5,578.65	26,565	0.21	35,000	0.21
TOTAL DISTRIBUTED COSTS		2539.40		79,636.65				TOTAL COSTS AUTHORIZED BY CONTRACT
Operating Equipment Purchased								
Initial Rehabilitation and Repairs								
New Buildings, Improvements, etc.								
TOTAL COSTS		2539.40		79,636.65				

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

Date 2/1/59 Operator The New Jersey Zinc Co.

Per [signature] Title Asst. to Gen. Supt.

REMARKS: This report includes hole I-60

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

(Instructions on reverse)

(For Government use only)

[signature]
MINING ENGINEER
U. S. BUREAU OF MINES

INSTRUCTIONS

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

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

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

GPO 872894

Report for January 1959

Cedar Springs Area DMEA 4586

Contract IdmE 1071 (Zinc)

One drill operated on this project during the month. One hole was completed for a total of 850' of drilling. This hole is shown in green on AX-TENN-B-106.

Hole I-60 - N.J.Z. M & M - Stapleton surface

Coordinates: 30,832.26 N; 63,197.67 E
Elevation: 1495.15

Results:

0- 30	- - Clay
30-700	- - Mascot and Upper Kingsport dolomite. Shine of sphalerite 675'
700	- - TR
700-843	- - Lower Kingsport limestone and dolomite
843-850	- - (Bottom) Longview dolomite R and S beds 42% dolomite

Form MF-104 (Rev.)
(April 1952)

RECEIVED JL 5

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION

Budget Bureau No. 42-R1036.5

PAID ON VOUCHER & SCHEDULE OF PAYMENTS K- 850

OPERATOR'S MONTHLY REPORT AND VOUCHER

Month of April, 1958 Docket No. DMEA 4586 Contract No. Idm E 1071
Operator's Name The New Jersey Zinc Company Minerals Zinc
Address Jefferson City, Tennessee
Contract Amount, $ 105,950.00 Government Participation: 50 % Amount, $ 52,975.00

ITEMS OF COSTS	FOR OPERATOR'S USE			FOR GOVERNMENT USE ONLY		
	Monthly Total	Totals Previously Reported	Totals To Date	Approved Monthly Total	Approved Totals Previously Reported	Approved Totals To Date
(1) Independent Short Form Contracts:						
Drilling	3,227.00	67,769.50	70,996.50			
Bulldozing						
Crosscutting						
Drifting						
(2) Labor and Supervision:						
Labor						
Supervision	243.39	5,156.76	5,400.15			
Technical Services						
(3) Operating Mat'ls. and Supplies:						
Timber						
Explosives						
Pipe						
Track						
Core Boxes	30.60	630.00	660.60			
(4) Operating Equipment:						
Rental						
Purchase						
Depreciation						
(5) Initial Rehabilitation and Repairs						
(6) New Bldgs., Improvements, etc.						
(7) Miscellaneous:						
Repairs to Equipment						
Sampling and Analysis	-	40.00	40.00			
Payroll Taxes						
Liability Insurance						
(8) Contingencies (specify):						
TOTALS	3,500.99	73,596.26	77,097.25	3500.99	73596.26	77,097.25

I certify that the above bill is correct and just and that payment therefor has not been received.
Date 5/1/58 *Payee The New Jersey Zinc Company
Per [signature] Title Asst. to Gen. Supt.

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

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

(Instructions on reverse)

Pursuant to authority vested in me, I certify that this account is correct and proper for payment in the amount of:
$ 1750.50
Signature [signature]
(Authorized Certifying Officer)
Date JUN 2 1958 Vou. No. 174
(See other side)

12

1750.50

(For Government use only)

CERTIFICATION BY GOVERNMENT REPRESENTATIVE:

I certify that to the best of my knowledge and belief the contractor submitting this voucher is operating a Defense Minerals Exploration Administration project under Contract No. F-1071 in accordance with the terms of the contract.

Signature T. J. Lynch Title U. S. BUREAU OF MINES Date MAY 20 1958

APPROVAL BY DMEA EXECUTIVE OFFICER OR ALTERNATE:

Signature Robert A. Laurence Title EXECUTIVE OFFICER DMEA FIELD TEAM REGION V Date MAY 20 1958

MONTHLY REPORT OF OPERATOR

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

Form M[illegible]-104A
(April [illegible]952)

Budget Bureau No. 42-R1151.2

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION

OPERATOR'S UNIT COST AND PROGRESS REPORT

Month of April 195 8 Docket No. DMEA 4586 Contract No. Idm E 1071
Operator's Name The New Jersey Zinc Company Minerals Zinc
Address Jefferson City, Tennessee

OPERATION	Unit	Costs This Month	Units This Month	Costs to Date	Units to Date	Unit Costs to Date	Authorized by Contract: Units	Authorized by Contract: Unit Costs
Drifting								
Crosscutting								
Raising								
Shafts								
Winzes Ex	Ft.	-	-	371.00	140	2.65		
Drilling: Core 0-1000	"	2,750.00	1000	67,094.50	24,398	2.75	30,000	2.75
Churn 1000-1500	"	477.00	159	3,531.00	1,177	3.00	5,000	3.00
Auger Assays	Ea.	-	-	40.00	40	1.00	200	1.00
Stripping Core Boxes	"	30.60	17	660.60	367	1.80		1.80
Trenching								
Test Pits								
Roads and Trails								
Sup. & Tech. Serv.		243.39	1159	5,400.15	25,715	0.21	35,000	0.21
Total Distributed Costs		3,500.99		77,097.25				Total Costs Authorized by Contract
Operating Equipment Purchased								
Initial Rehabilitation and Repairs								
New Buildings, Improvements, etc.								
Total Costs		3,500.99		77,097.25				

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

Date 5/1/58 Operator The New Jersey Zinc Co.

Per [signature] Title Asst. to Gen. Supt.

Remarks: This report covers hole CS-42

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

(Instructions on reverse)

(For Government use only)

[signature]
MINING ENGINEER
U. S. BUREAU OF MINES

INSTRUCTIONS

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

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

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

GPO 872894

Report for April 1958

Cedar Springs Area DMEA 4586

Contract Idm E 1071 (Zinc)

One drill operated on this project during the month, and one hole was completed.

Hole CS-42 - Robert Mallicoat property - 400 feet downdip from CS-35

Coordinates: 734,244.26N; 770,276.85E
Elevation: 1405.63

0 - 161	Chickamauga limestone
161 - 860	Mascot dolomite
860 - 998	Upper Kingsport dolomite
998	TR marker
998 -1151	Lower Kingsport dolomite and limestone. Trace sphalerite 1049, scattered traces sphalerite 1055-1057
1151 -1159	(Bottom) Longview dolomite

The sphalerite mineralization inthis hole is very weak. However there is extensive pyrite mineralization which is encouraging.

With the completion of this hole the drilling under this contract is recessed.

Form MF-104 (Rev.)
(April 1952)

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION

Budget Bureau No. 42-R1036.5

PAID ON VOUCHER & SCHEDULE OF PAYMENTS 1- 54

OPERATOR'S MONTHLY REPORT AND VOUCHER

Month of March 8 Docket No. DMEA 4586 Contract No. Idm E 1071

Operator's Name The New Jersey Zinc Company Minerals Zinc

Address Jefferson City, Tennessee

Contract Amount, $ 105,950.00 Government Participation: 50 % Amount, $ 52,975.00

ITEMS OF COSTS	FOR OPERATOR'S USE: Monthly Total	Totals Previously Reported	Totals To Date	FOR GOVERNMENT USE ONLY: Approved Monthly Total	Approved Totals Previously Reported	Approved Totals To Date
(1) Independent Short Form Contracts:	6187.00	61,582.50	67,769.50			
Drilling						
Bulldozing						
Crosscutting						
Drifting						
(2) Labor and Supervision:	468.09	4,688.67	5,156.76			
Labor						
Supervision						
Technical Services						
(3) Operating Mat'ls. and Supplies:						
Timber						
Explosives						
Pipe						
Core Boxes	55.80	574.20				
(4) Operating Equipment:						
Rental						
Purchase						
Depreciation						
(5) Initial Rehabilitation and Repairs						
(6) New Bldgs., Improvements, etc.						
(7) Miscellaneous:						
Repairs to Equipment	3.00	37.00	40.00			
Sampling and Analysis						
Payroll Taxes						
Liability Insurance						
(8) Contingencies (specify):						
TOTALS	6713.89	66,882.37	73,596.26	6713.89	66,882.37	73,596.26

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

Date 4/24/58 *Payee The New Jersey Zinc Company

Per [signature] Title Asst. to Gen. Supt.

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

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

(Instructions on reverse)

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

$ 3356.94

Signature Helen R. Miller
(Authorized Certifying Officer)

Date APR 24 1958 Vou. No. 163
(See other side)

3356.95

(For Government use only)

CERTIFICATION BY GOVERNMENT REPRESENTATIVE:

I certify that to the best of my knowledge and belief the contractor submitting this voucher is operating a Defense Minerals Exploration Administration project under Contract No. E-1071 in accordance with the terms of the contract.

Signature V. J. Lynch Title MINING ENGINEER U. S. BUREAU OF MINES Date APR 22 1958

APPROVAL BY DMEA EXECUTIVE OFFICER OR ALTERNATE:

Signature Robert A. Lawrence Title EXECUTIVE OFFICER DMEA REGIONAL Date APR 22 1958

MONTHLY REPORT OF OPERATOR

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

Form MF-104A
(April 1952)

Budget Bureau No. 42-R1151.2

UNITED STATES
DEPARTMENT OF THE INTERIOR

DEFENSE MINERALS EXPLORATION ADMINISTRATION

OPERATOR'S UNIT COST AND PROGRESS REPORT

Month of March 1958 Docket No. DMEA 4586 Contract No. Idm E 1071

Operator's Name The New Jersey Zinc Company Minerals Zinc

Address Jefferson City, Tennessee

OPERATION	Unit	Costs This Month	Units This Month	Costs to Date	Units to Date	Unit Costs to Date	Authorized by Contract: Units	Authorized by Contract: Unit Costs
Drifting								
Crosscutting								
Raising								
Shafts								
Winzes								
Drilling: Core EX	Ft.							
Drilling: Core 0-1000	"	5,500.00	2000	64,715.50	23,538	2.75	30,000	2.75
Drilling: Churn 1000-1500	"	687.00	229	3,054.00	1,018	3.00	5,000	3.00
Drilling: Auger Assays	Ea.	3.00	3	40.00	40	1.00	200	1.00
Stripping Core Boxes	"	55.80	31	630.00	350	1.80		
Trenching								
Test Pits								
Roads and Trails								
Sup. & Tech. Ser.	Ft.	468.09	2229	5,156.76	24,556	.21	35,000	.21
Total Distributed Costs		6,713.89		73,596.26				Total Costs Authorized by Contract
Operating Equipment Purchased								
Initial Rehabilitation and Repairs								
New Buildings, Improvements, etc.								
Total Costs		6,713.89		73,596.26				

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

Date 4/1/58 Operator The New Jersey Zinc Co.

Per [signature] Title Asst. to Gen. Supt.

Remarks: This report covers holes CS-39
CS-41

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

(Instructions on reverse)

(For Government use only)

[signature]
MINING ENGINEER
U. S. BUREAU OF MINES

INSTRUCTIONS

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

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

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

GPO 872894

Report for March, 1958

Cedar Springs Area DMEA 4586

Contract Idm E 1071 (Zinc)

One drill operated on this project during the month and two holes were completed.

<u>Hole CS-39</u> - Robert Mallicoat property - 100' downdip from CS-37

Coordinates: 734,439.33 N; 770,861.71 E
Elevation: 1358.98

0- 10	- -	Clay
10- 210	- -	Chickamauga limestone
210- 858	- -	Mascot dolomite. Strong shine sphalerite at 608'
858	- -	Ce Mtx
858- 997	- -	Upper Kingsport dolomite
997	- -	TR marker
997-1120	- -	Lower Kingsport limestone and dolomite Traces Sp 1038, 1048-1049
1120-1159	- -	(Bottom) Longview limestone and dolomite

168

This hole is disappointing because despite its proximity to CS-37 it contains only traces of zinc.

<u>Hole CS-41</u> - Robert Mallicoat property. 100' updip from CS-37.

Approx. Coord: 734,610 N; 770,760 E
Approx. Elev: 1370'

0- 2	- -	Clay
2- 105	- -	Chickamauga limestone
105- 775	- -	Mascot dolomite
775	- -	Ce Mtx
775- 901	- -	Upper Kingsport dolomite
901	- -	TR marker
901- 958	- -	Lower Kingsport dolomite/ Scattered shines Sp 937-938, 940, 941-942, 954-955
958- 962	- -	4' - 2.35% Zn
962- 966	- -	4' - 0.25% Zn
966- 970	- -	4' - 6.80% Zn
970-1070	- -	(Bottom) Lower Kingsport dolomite

The 12 feet from 958 to 970 averages 3.13% Zn. This appears to tie through to the 10' of 5.02% in the "S" bed in hole CS-37.

Attached to this report are map AX-TENN-105 and sections for all holes drilled in the first quarter of 1958, AX-TENN-C-1323, C-1329, C-1350, C-1357 and B-1333.

Form MI-2[illegible] (Rev.)
(April 1952)

Budget Bureau No. 42-R1036.5

PAID ON VOUCHER & SCHEDULE OF PAYMENTS K- 49

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION

OPERATOR'S MONTHLY REPORT AND VOUCHER

Month of February, 1958 Docket No. DMEA 4586 Contract No. Idm E 1071

Operator's Name The New Jersey Zinc Company Minerals Zinc

Address Jefferson City, Tennessee

Contract Amount, $105,950.00 Government Participation 50 % Amount, $52,975.00

ITEMS OF COSTS	FOR OPERATOR'S USE: Monthly Total	Totals Previously Reported	Totals To Date	FOR GOVERNMENT USE ONLY: Approved Monthly Total	Approved Totals Previously Reported	Approved Totals To Date
(1) Independent Short Form Contracts:						
Drilling	4148.75	57,433.75	61,582.50			
Bulldozing		adjusted for				
Crosscutting		$14.00 overclaim				
Drifting		2/1/58				
(2) Labor and Supervision:						
Labor / Supervision	313.95	4,374.72	4,688.67			
Technical Services						
(3) Operating Mat'ls. and Supplies:						
Timber						
Explosives						
Pipe						
Track						
Coreboxes	37.80	536.40	574.20			
(4) Operating Equipment:						
Rental						
Purchase						
Depreciation						
(5) Initial Rehabilitation and Repairs						
(6) New Bldgs., Improvements, etc.						
(7) Miscellaneous:						
Repairs to Equipment						
Sampling and Analysis	13.00	24.00	37.00			
Payroll Taxes						
Liability Insurance						
Less overclaim 2/1/58 hole CS-38	- 14.00					
(8) Contingencies (specify):						
Totals	4499.50	62,368.87	66,882.37	4499.50	62,368.87	66,882.37

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

Date 3/1/58 *Payee The New Jersey Zinc Company

Per [signature] Title Asst. to Gen. Supt.

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

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

(Instructions on reverse)

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

$ 2249.75

Signature Helen R. Muller (Authorized Certifying Officer)

Date MAR 19 1958 Vou. No. 149

(See other side)

2249.75

(For Government use only)

CERTIFICATION BY GOVERNMENT REPRESENTATIVE:

I certify that to the best of my knowledge and belief the contractor submitting this voucher is operating a Defense Minerals Exploration Administration project under Contract No. E-1071 in accordance with the terms of the contract.

Signature [illegible] Title U. S. BUREAU OF MINES Date MAR 18 1958

APPROVAL BY DMEA EXECUTIVE OFFICER OR ALTERNATE:

Signature Robert A. Lawrence Title EXECUTIVE OFFICER DMEA FIELD TEAM Date MAR 18 1958

MONTHLY REPORT OF OPERATOR

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

Form MF-104A
(April 1952)

Budget Bureau No. 42-R1151.2

UNITED STATES
DEPARTMENT OF THE INTERIOR

DEFENSE MINERALS EXPLORATION ADMINISTRATION

OPERATOR'S UNIT COST AND PROGRESS REPORT

Month of February 195 8 Docket No. DMEA 4586 Contract No. Idm E 1071

Operator's Name The New Jersey Zinc Company Minerals Zinc

Address Jefferson City, Tennessee

OPERATION	Unit	Costs This Month	Units This Month	Costs to Date	Units to Date	Unit Costs to Date	Authorized by Contract: Units	Authorized by Contract: Unit Costs
Drifting								
Crosscutting								
Raising								
Shafts								
Winzes								
Drilling: Core 0-1000	Ft.	3698.75	1345	59,215.50	21,538	2,749	30,000	2.75
Drilling: Core 1000 -1500	"	450.00	150	2,367.00	789	3.00	5,000	3.00
Drilling: Churn Assays	Ea.	13.00	13	37.00	37	1.00	200	1.00
Drilling: Auger Core Boxes	Ea.	37.80	21	574.20	319	1.80	500	1.80
Stripping								
Trenching								
Test Pits								
Roads and Trails Super.& Tech Serv.	Ft.	313.95	1495	4,688.67	22,327	.21	35,000	.21
Less Overclaim 2/1/58 - CS-36		- 14.00						
Total Distributed Costs		4499.50		66,882.37				Total Costs Authorized by Contract
Operating Equipment Purchased								
Initial Rehabilitation and Repairs								
New Buildings, Improvements, etc.								
Total Costs		4499.50		66,882.37				105,950.00

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

Date 3/1/58 Operator The New Jersey Zinc Co.

Per [signature] Title Asst. to Gen. Supt.

Remarks: This report covers holes CS-37 CS-40

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

(Instructions on reverse)

(For Government use only)

[signature]
MINING ENGINEER
U. S. BUREAU OF MINES

INSTRUCTIONS

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

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

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

GPO 872894

Report for February 1958

Cedar Springs Area DMEA 4586

Contract Idm E 1071 (Zinc)

Two drills operated on the project during the month and two holes were completed.

<u>Hole CS-37</u> - Robert Mallicoat property - 600' SW on strike from CS-22

Coordinates: 734,526.55 N; 770,808.53 E
Elevation: 1359.76

Results:

0- 155 - - Chickamauga limestone
155- 815 - - Mascot dolomite
815 - - Ce Mtx
815- 938 - - Upper Kingsport dolomite
938- 973 - - 35' ore averaging 6.24% zinc
938-943 - 5' - 2.68% zinc
943-948 - 5' - 2.66% zinc
948-953 - 5' - 5.31% zinc
953-958 - 5' - 6.92% zinc
958-963 - 5' - 8.85% zinc
963-968 - 5' - 8.97% zinc
968-973 - 5' - 8.32% zinc
973-976 - - Upper Kingsport dolomite
976 - - TR
976- 988 - - Lower Kingsport dolomite
988-1007 - - 19' ore averaging 3.41% zinc
988- 993 - 5' - 3.63% zinc
993- 998 - 5' - 2.40% zinc
998-1003 - 5' - 0.60% zinc
1003-1007 - 4' - 7.90% zinc
1007-1015 - - Lower Kingsport dolomite
1015-1025 - - 10' ore averaging 5.02% zinc
1015-1020 - 5' - 4.58% zinc
1020-1025 - 5' - 5.46% zinc
1025-1115 - - Lower Kingsport dolomite and limestone
1115-1150 - - (Bottom) Longview dolomite & limestone

This hole, with substantial footage of ore, is very promising. The drill has been moved 100' downdip to search for an extension of this ore.

Hole CS-40 - Carl Davidson property - 1250' NE on strike from CS-33

Coordinates: 738,500.82 N; 775,225.41 E
Elevation: 1562.66

Results:

0- 47	Clay
47-169	Upper Kingsport dolomite. Trace sphalerite 91',106',143',166'.
169-345	(Bottom) Lower Kingsport limestone and dolomite

This hole contains a small amount of zinc mineralization and strong pyrite mineralization. The area looks encouraging but no more drilling will be done until additional geochemical information is gathered to aid further drilling. This drill was moved to the Lawson Area to begin drilling on that program.

Form MF-104 (Rev.)
(April 1952)

RECEIVED FEB 28

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION

Budget Bureau No. 42-R1036.5

PAID ON VOUCHER & SCHEDULE OF PAYMENTS K-43

OPERATOR'S MONTHLY REPORT AND VOUCHER

Month of January 1958 Docket No. DMEA 4586 Contract No. Ddm E 1071
Operator's Name The New Jersey Zinc Company Minerals Zinc
Address Jefferson City, Tennessee
Contract Amount, $ 105,950.00 Government Participation: 50% Amount, $ 52,975.00

ITEMS OF COSTS	FOR OPERATOR'S USE			FOR GOVERNMENT USE ONLY		
	Monthly Total	Totals Previously Reported	Totals To Date	Approved Monthly Total	Approved Totals Previously Reported	Approved Totals To Date
(1) Independent Short Form Contracts:						
Drilling	6437.75	51,010.00	57,447.75			
Bulldozing						
Crosscutting						
Drifting						
(2) Labor and Supervision:						
Labor						
Supervision	491.61	3,883.11	4,374.72			
Technical Services						
(3) Operating Mat'ls. and Supplies:						
Timber						
Explosives						
Pipe						
Track						
Core Boxes	61.20	475.20	536.40			
(4) Operating Equipment:						
Rental						
Purchase						
Depreciation						
(5) Initial Rehabilitation and Repairs						
(6) New Bldgs., Improvements, etc.						
(7) Miscellaneous:						
Repairs to Equipment						
Sampling and Analysis	-	24.00	24.00			
Payroll Taxes						
Liability Insurance						
(8) Contingencies (specify):						
TOTALS	6990.56	55,392.31	62,382.87	6990.56	55,392.31	62,382.87

I certify that the above bill is correct and just and that payment therefor has not been received.
Date 2/1/58 *Payee The New Jersey Zinc Company
Per [signature] Title Asst. to Gen. Supt.

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

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

(Instructions on reverse)

Pursuant to authority vested in me, I certify that this account is correct and proper for payment in the amount of:
$ 3495.28
Signature [signature] (Authorized Certifying Officer)
Date FEB 26 1958 Vou. No. 137
(See other side)

9

3495.28

(For Government use only)

CERTIFICATION BY GOVERNMENT REPRESENTATIVE:

I certify that to the best of my knowledge and belief the contractor submitting this voucher is operating a Defense Minerals Exploration Administration project under Contract No. E-1071 in accordance with the terms of the contract.

Signature V. J. Lynch Title MINING ENGINEER, ~~U. S. BUREAU OF MINES~~ Date FEB 25 1958

APPROVAL BY DMEA EXECUTIVE OFFICER OR ALTERNATE:

Signature Robert J. Lawrence Title EXECUTIVE OFFICER DMEA REGION V Date FEB 25 1958

MONTHLY REPORT OF OPERATOR

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

Form MF-104A
(April 1962)

Budget Bureau No. 42-R1151.2

RECEIVED FEB 2

UNITED STATES
DEPARTMENT OF THE INTERIOR

DEFENSE MINERALS EXPLORATION ADMINISTRATION

OPERATOR'S UNIT COST AND PROGRESS REPORT

Month of January 195 8 Docket No. DMEA 4586 Contract No. Idm E 1071

Operator's Name The New Jersey Zinc Company Minerals Zinc

Address Jefferson City, Tennessee

OPERATION	Unit	Costs This Month	Units This Month	Costs to Date	Units to Date	Unit Costs to Date	Authorized by Contract: Units	Authorized by Contract: Unit Costs
Drifting								
Crosscutting								
Raising								
Shafts								
Winzes								
Drilling: Core 0-1000	Ft.	6437.75	2341	55,530.75	20,193	2.75	30,000	2.75
Churn 1000-1500	"	-	-	1,917.00	639	3.00	5,000	3.00
Auger Assays	Ea.	-	-	24.00	24	1.00	200	1.00
Stripping Core Boxes	"	61.20	34	536.40	298	1.80	500	1.80
Trenching								
Test Pits								
Roads and Trails								
Sup. & Tech. Ser.	Ft.	491.61	2341	4,374.72	20,832	.21	35,000	.21
Total Distributed Costs		6990.56		62,382.87				Total Costs Authorized by Contract
Operating Equipment Purchased								
Initial Rehabilitation and Repairs								
New Buildings, Improvements, etc.								
Total Costs		6990.56		62,382.87				105,950.00

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

Date 2/1/58 Operator The New Jersey Zinc Co.

Per [signature] Title Asst. Gen. Supt.

Remarks: This report covers holes CS-35, 36, 38

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

(Instructions on reverse)

(For Government use only)

[signature]
MINING ENGINEER
U. S. BUREAU OF MINES

INSTRUCTIONS

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

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

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

GPO 872894

Report for January 1958

Cedar Springs Area DMEA 4586

Contract Idm E 1071 (Zinc)

Two drills operated on the project during the month and three holes were completed. The locationsof these holes are shown in green on the accompanying map.

Hole CS-35 - Robert Mallicoat property - 300' downdip from CS-32

Coordinates: 734,587.28 N; 770,068.97 E
Elevation: 1451.94

0- 10 - - Clay
10-608 - - Mascot dolomite
608 - - C Matrix
608-755 - - Upper Kingsport dolomite
755 - - TR
755-930 - - (Bottom) Lower Kingsport

Hole CS-36 - J. R. Davidson property - 300' downdip from CS-34

Coordinates: 737,385.86 N; 774,466,68 E
Elevation: 1448.91

0- 21 - - Clay
21-363 - - Mascot dolomite
363 - - Ce Matrix ?
363 -519 - - Upper Kingsport dolomite. Traces of sphalerite 503, 515, 516, 519
519 - - TR
519-524 - - Lower Kingsport dolomite
524-543 - - 19' - mineralization estimated at 1½% Zn
543-701 - - (Bottom) Lower Kingsport-Upper Longview Scattered traces sphalerite 546-549, 563

Hole CS-38 - J. R. Davidson property. 300' downdip from CS-31 Coordinates 737,140.27 N, 774,007.83E Elev. 1439.82'

0- 48 - - Clay
48-528 - - Mascot and upper Kingsport dolomite Traces sphalerite 477, 483-484, 494, 495, 506-508, 527
528 - - TR ?
528-694 - - Lower Kingsport limestone and dolomite. Traces sphalerite 537-543, 545
694-701 - - T Bed
701-710 - - Longview dolomite

This hole is strongly fractured, brecciated, and mylonitized making identification of upper marker horizons uncertain.

Form MF-104 (Rev.)
(April 1952)

RECEIVED JAN 23 1958

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION

Budget Bureau No. 42-R1036.5

PAID ON VOUCHER & SCHEDULE OF PAYMENTS K- 887

OPERATOR'S MONTHLY REPORT AND VOUCHER

Month of December, 1957 Docket No. DMEA 4586 Contract No. Idm E 1071
Operator's Name The New Jersey Zinc Company Minerals Zinc
Address Jefferson City, Tennessee
Contract Amount, $105,950.00 Government Participation: 50 % Amount, $52,975.00

ITEMS OF COSTS	FOR OPERATOR'S USE			FOR GOVERNMENT USE ONLY		
	Monthly Total	Totals Previously Reported	Totals To Date	Approved Monthly Total	Approved Totals Previously Reported	Approved Totals To Date
(1) Independent Short Form Contracts:						
Drilling	8382.00	42,628.00	51,010.00			
Bulldozing						
Crosscutting						
Drifting						
(2) Labor and Supervision:						
Labor						
Supervision						
Technical Services	640.08	3,243.03	3,883.11			
(3) Operating Mat'ls. and Supplies:						
Timber						
Explosives						
Pipe						
Track						
Core Boxes	61.20	414.00	475.20			
(4) Operating Equipment:						
Rental						
Purchase						
Depreciation						
(5) Initial Rehabilitation and Repairs						
(6) New Bldgs., Improvements, etc.						
(7) Miscellaneous:						
Repairs to Equipment						
Sampling and Analysis	-	24.00	24.00			
Payroll Taxes						
Liability Insurance						
(8) Contingencies (specify):						
TOTALS	9083.28	46,309.03	55,392.31	9083.28	46,309.03	55,392.31

I certify that the above bill is correct and just and that payment therefor has not been received.
Date 1/1/58 *Payee The New Jersey Zinc Company
Per [signature] Title Asst. to Gen. Supt.

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

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

(Instructions on reverse)

Pursuant to authority vested in me, I certify that this account is correct and proper for payment in the amount of:
$4541.64
Signature Helen R. Miller (Authorized Certifying Officer)
Date JAN 20 1958 Vou. No. 119
(See other side)

4541.64

(For Government use only)

CERTIFICATION BY GOVERNMENT REPRESENTATIVE:

I certify that to the best of my knowledge and belief the contractor submitting this voucher is operating a Defense Minerals Exploration Administration project under Contract No. E-1071 in accordance with the terms of the contract.

Signature V. J. Lynch Title MINING ENGINEER U. S. BUREAU OF MINES Date JAN 17 1958

APPROVAL BY DMEA EXECUTIVE OFFICER OR ALTERNATE:

Signature Robert A. Lawrence Title EXECUTIVE OFFICER DMEA FIELD TEAM REGION V Date JAN 17 1958

MONTHLY REPORT OF OPERATOR

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

Form MF-104A
(April 1952)

Budget Bureau No. 42-R1151.2

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

Month of December 1957 Docket No. DMEA 4586 Contract No. Iom/E 1071
Operator's Name The New Jersey Zinc Company Minerals Zinc
Address Jefferson City, Tennessee

OPERATION	Unit	Costs This Month	Units This Month	Costs to Date	Units to Date	Unit Costs to Date	Authorized by Contract: Units	Authorized by Contract: Unit Costs
Drifting								
Crosscutting								
Raising								
Shafts								
Winzes								
Drilling: Core 0-1000	Ft.	8382.00	3048	49,093.00	17,852	2.75	30,000	2.75
Ch 1000-1500	"	-	-	1,917.00	639	3.00	5,000	3.00
Auger Assays	Ea.	-	-	24.00	24	1.00	200	1.00
Stripping Core Boxes	Ea.	61.20	34	475.20	264	1.80	500	1.80
Trenching								
Test Pits								
Roads and Trails								
Sup. & Tech. Ser.	Ft.	640.08	3048	3,883.11	18,491	0.21	35,000	.21
Total Distributed Costs		9083.28		55,392.31				Total Costs Authorized by Contract
Operating Equipment Purchased								
Initial Rehabilitation and Repairs								
New Buildings, Improvements, etc.								
Total Costs		9083.28		55,392.31				105,950.00

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

Date 1/1/58 Operator The New Jersey Zinc Co.

Per [signature] Title Asst. to Gen. Supt.

Remarks: This report covers
CS-31
32
33
34
I-59

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

(Instructions on reverse)

(For Government use only)

[signature]

GEOLOGIST, U. S. G. S.
JAN 17 1958

INSTRUCTIONS

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

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

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

GPO 872894

Report for December 1957

Cedar Springs Area DMA 4586

Contract Idm E 1071 (Zinc)

Two drills operated on the project during the month and five holes were completed. The location of these holes are shown in green on the accompanying map. Sections showing all holes drilled during the last quarter are attached.

Hole 68-31 - Carl Holt property - 1800' NE on strike from 68-25 and 300' updip.

Coordinates: 737,670.798; 773,580.24
Elevation: 1542.65

0- 54 - - Clay
54- 75 - - Mascot dolomite
75-262 - - Upper Kingsport dolomite
Shine sphalerite 155. Traces sphalerite 156-174, 183-184, 196, 199, 208. Shine sphalerite 207
262 - - TR marker
262-452 - - (Bottom) Lower Kingsport dolomite and limestone.

Hole 68-32 - Robert Mallicoat property. 300' downdip from 68-28

Coordinates: 734,850.378; 769,987.758
Elevation: 1470.16

0- 30 - - Clay
30-427 - - Mascot dolomite
427-579 - - Upper Kingsport dolomite
579 - - TR marker
579-734 - - Lower Kingsport dolomite and limestone
734-769 - - (Bottom) Longview dolomite and limestone

Hole 68-33 - Carl Holt property, 540' NE of 68-31 on strike

Coordinates: 737,917.257; 774,197.768
Elevation: 1507.38

0- 65 - - Clay
65-150 - - Upper Kingsport dolomite
Traces sphalerite 114, 145-147
150-151 - - 1' mineralization estimated at 7% Zn
151-163 - - Upper Kingsport dolomite. Traces sphalerite 155-156, 160
163-164 - - 1' mineralization estimated at 4% Zn
164-165 - - Upper Kingsport dolomite
165 - - TR marker
165-311 - - Lower Kingsport dolomite and limestone
Traces sphalerite 179, 200. Shine sphalerite 225
311-366 - - (Bottom) Longview dolomite and limestone

Hole 68-24 - Carl Holt property, 300' downdip from 68-33

Approx. Coord: 737,650.00N; 774,355.00E
Approx. Elevation: 1465'

0- 28 - - Clay
28-161 - - Mascot dolomite
161-306 - - Upper Kingsport dolomite
Scattered traces sphalerite 301-306
306-315 - - 9' mineralization estimated @ 3% Zn ✓
315-324 - - Upper Kingsport dolomite
324 - - TH marker
324-350 - - Lower Kingsport limestone and dolomite
Strong shine sphalerite 328. Scattered traces sphalerite 315-335
350-355 - - 5' mineralization estimated @ 3% Zn ✓
355-425 - - Lower Kingsport dolomite & limestone
425-473 - - (Bottom) Longview dolomite and limestone

Hole I-59 - J. R. Davidson property, SW tract 300' downdip from I-56

Coordinates: 733,727.50N; 768,592.59E
Elevation: 1473.30

0- 9 - - Clay
9-678 - - Mascot dolomite
678-825 - - Upper Kingsport dolomite
825 - - TH marker
825-933 - - Lower Kingsport dolomite
933-937 - - 4' mineralization estimated @ 1% Zn ✓
937-976 - - Lower Kingsport dolomite & limestone
976-995 - - (Bottom) Longview dolomite and limestone.

M. J. Colletto/jf

Form MF-104 (Rev.)
(April 1952)

Budget Bureau No. 42-R1036.5

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION

PAID ON VOUCHER & SCHEDULE OF PAYMENTS K- 32

OPERATOR'S MONTHLY REPORT AND VOUCHER

Month of November, 1957 Docket No. DMEA 4586 Contract No. Idm E 1071
Operator's Name The New Jersey Zinc Company Minerals Zinc
Address Jefferson City, Tennessee
Contract Amount, $ 105,950.00 Government Participation: 50 % Amount, $ 52,975.00

ITEMS OF COSTS	FOR OPERATOR'S USE: Monthly Total	Totals Previously Reported	Totals To Date	FOR GOVERNMENT USE ONLY: Approved Monthly Total	Approved Totals Previously Reported	Approved Totals To Date
(1) Independent Short Form Contracts:						
Drilling	8210.25	34,423.25	42,633.50	8204.75		
Bulldozing						
Crosscutting						
Drifting						
(2) Labor and Supervision:						
Labor						
Supervision						
Technical Services	626.64	2,616.81	3,243.45	626.22		
(3) Operating Mat'ls. and Supplies:						
Timber						
Explosives						
Pipe						
Track						
Core Boxes	194.40	219.60	414.00	194.40		
(4) Operating Equipment:						
Rental						
Purchase						
Depreciation						
(5) Initial Rehabilitation and Repairs						
(6) New Bldgs., Improvements, etc.						
(7) Miscellaneous:						
Repairs to Equipment						
Sampling and Analysis	-					
Payroll Taxes		24.00	24.00			
Liability Insurance						
(8) Contingencies (specify):						
		37283.66		902.537		46,309.03
TOTALS	9031.29	39,283.66	46,314.95	~~9031.29~~	37283.66	~~46,314.95~~

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

Date Dec. 19, 1957 *Payee The New Jersey Zinc Company

Per J. Howard Crawford Title Supt. for Tennessee

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

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

(Instructions on reverse)

Pursuant to authority vested in me, I certify that this account is correct and proper for payment in the amount of: $ 4512.68 ~~4515.64~~

Signature Helen R. Mellin
(Authorized Certifying Officer)

Date DEC 24 1957 Vou. No. 105
(See other side)

4515.64

(For Government use only)

CERTIFICATION BY GOVERNMENT REPRESENTATIVE:

I certify that to the best of my knowledge and belief the contractor submitting this voucher is operating a Defense Minerals Exploration Administration project under Contract No. E-1071 in accordance with the terms of the contract.

Signature S. C. Berryman Title GEOLOGIST, U. S. G. S. Date DEC 18 1957

APPROVAL BY DMEA EXECUTIVE OFFICER OR ALTERNATE:

Signature V. J. Lynch Title ACTING EXECUTIVE OFFICER DMEA REGION V Date DEC 18 1957

MONTHLY REPORT OF OPERATOR

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

Form MF-104A
(April 1952)

Budget Bureau No. 42-R1151.2

UNITED STATES
DEPARTMENT OF THE INTERIOR

DEFENSE MINERALS EXPLORATION ADMINISTRATION

OPERATOR'S UNIT COST AND PROGRESS REPORT

Month of November 1957 Docket No. DMEA 4586 Contract No. Idm E 1071

Operator's Name The New Jersey Zinc Company Minerals Zinc

Address Jefferson City, Tennessee

OPERATION	Unit	Costs This Month	Units This Month	Costs to Date	Units to Date	Unit Costs to Date	Authorized by Contract: Units	Authorized by Contract: Unit Costs
Drifting								
Crosscutting								
Raising								
Shafts								
Winzes			2965					
Drilling: Core 0-1000	Ft.	~~3159.25~~	~~2967~~	40,716.50	14806	2.75	30,000	2.75
Chum 1000-1500	"	51.00	17	1,917.00	639	3.00	5,000	3.00
Auger								
Stripping Assays	No.	-	-	24.00	24	1.00	200	1.00
Trenching Core Boxes	"	194.40	108	414.00	230	1.80	500	1.80
Test Pits								
Roads and Trails			2982					
Sup. & Technser.	Ft.	626.64	2984	3,243.45		0.21	35,000	0.21
Total Distributed Costs		~~9031.29~~		46,314.95				Total Costs Authorized by Contract
Operating Equipment Purchased								
Initial Rehabilitation and Repairs								
New Buildings, Improvements, etc.								
Total Costs		9031.29		46,314.95				105,950.00

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

Date Dec. 19, 1957 Operator The New Jersey Zinc Co.

Per Johnson Crawford Title Supt. for Tennessee

Remarks: This report covers drill holes:
CS-29
30
I-57
58

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

(Instructions on reverse)

(For Government use only)

V. J. Lynch
MINING ENGINEER
U. S. BUREAU OF MINES

INSTRUCTIONS

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

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

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

GPO 872894

Report for November 1957

Cedar Springs Area DMEA 4586

Contract Idm E 1071 (Zinc)

Hole CS-29 - J. R. Davidson - NE tract - 200' downdip from CS-27

Coordinates: 736,411.98N; 773,070.40E
Elevation: 1457.09

0- 8 - - Clay
8-617 - - Mascot dolomite
617-759 - - Upper Kingsport dolomite
759 - - TR marker
759-929 - - (Bottom) Lower Kingsport limestone and dolomite

Hole CS-30 - J. R. Davidson - NE tract, 400' downdip from CS-29

Approx. Coordinates: 736,025.00N; 773,240.00E
Approx. Elevation: 1325.00

0- 2 - - Clay
2-692 - - Mascot dolomite
692-841 - - Upper Kingsport dolomite. Trace sphalerite
841 - - @ 768. TR marker @ 841
841-1017 - (Bottom) Lower Kingsport limestone and dolomite

Hole I-57 - J. R. Davidson - SW tract. 500' SW. I-55 on strike

Approx. Coordinates: 734,290.00N; 768,300.00E
Approx. Elevation: 1480'

0- 8 - - Clay
8-282 - - Mascot dolomite
282-425 - - Upper Kingsport dolomite
425 - - Traces sphalerite 337,416,418. TR marker 425
425-431 - - Lower Kingsport dolomite. Traces sphalerite 425, 426
431-437 - - 6' mineralization est. @ 1% Zn
437-632 - - (Bottom) Lower Kingsport limestone and dolomite

Hole I-58 - - J. R. Davidson, SW tract, 300' updip from I-57

Approx. Coordinates: 734,585.00N; 768,220.00E
Approx. Elevation: 1500'

0- 74	- - Clay
74-228	- - Upper Kingsport dolomite
228-229	- - 1' ore estimated @ 35% Zn
229-258	- - Upper Kingsport dolomite. Scattered traces sphalerite 229-231
258--	- TR marker
258-405	- - Lower Kingsport dolomite and limestone
405-406	- - (Bottom) Longview dolomite.

Form MF-104 (Rev.)
(April 1952)

Budget Bureau No. 42-R1036.5

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION

PAID ON VOUCHER & SCHEDULE OF PAYMENTS K- 28

RECEIVED OCT 6 1957 D.M.E.A.

OPERATOR'S MONTHLY REPORT AND VOUCHER

Month of October, 1957 Docket No. DMEA 4586 Contract No. Idm E 1071

Operator's Name The New Jersey Zinc Company Minerals Zinc

Address Jefferson City, Tennessee

Contract Amount, $ 105,950.00 Government Participation: 50% Amount, $ 52,975.00

ITEMS OF COSTS	FOR OPERATOR'S USE: Monthly Total	Totals Previously Reported	Totals To Date	FOR GOVERNMENT USE ONLY: Approved Monthly Total	Approved Totals Previously Reported	Approved Totals To Date
(1) Independent Short Form Contracts:						
Drilling	10,831.25	23,592.00	34,423.25			
Bulldozing						
Crosscutting						
Drifting						
(2) Labor and Supervision:						
Labor						
Supervision	821.52	1,795.29	2,616.81			
Technical Services						
(3) Operating Mat'ls. and Supplies:						
Timber						
Explosives						
Pipe						
Track						
Core Boxes	-	219.60	219.60			
(4) Operating Equipment:						
Rental						
Purchase						
Depreciation						
(5) Initial Rehabilitation and Repairs						
(6) New Bldgs., Improvements, etc.						
(7) Miscellaneous:						
Repairs to Equipment						
Sampling and Analysis	10.00	14.00	24.00			
Payroll Taxes						
Liability Insurance						
(8) Contingencies (specify):						
TOTALS	11,662.77	25,620.89	37,283.66	11,662.77	25,620.89	37,283.66

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

Date 11-15-57 *Payee The New Jersey Zinc Company

Per [signature] Title Asst. to the Supt.

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

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

(Instructions on reverse)

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

$ 5831.38

Signature Helen R. Meier
(Authorized Certifying Officer)

Date DEC 4 1957 Vou. No. 90
(See other side)

5831.39

(For Government use only)

CERTIFICATION BY GOVERNMENT REPRESENTATIVE:

I certify that to the best of my knowledge and belief the contractor submitting this voucher is operating a Defense Minerals Exploration Administration project under Contract No. E 1071 in accordance with the terms of the contract.

Signature [illegible] Title GEOLOGIST, U. S. G. S. Date NOV 26 1957

APPROVAL BY DMEA EXECUTIVE OFFICER OR ALTERNATE:

Signature V. J. Lynch Title ACTING EXECUTIVE OFFICER DMEA - REGION V Date NOV 26 1957

MONTHLY REPORT OF OPERATOR

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

Form MF-104A
(April 1952)

Budget Bureau No. 42-R1151.2

RECEIVED DEC. 6 1957 D.M.E.A.

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

Month of October 1957 Docket No. DMEA 4586 Contract No. Idm E 1071
Operator's Name The New Jersey Zinc Company Minerals Zinc
Address Jefferson City, Tennessee

OPERATION	UNIT	COSTS THIS MONTH	UNITS THIS MONTH	COSTS TO DATE	UNITS TO DATE	UNIT COSTS TO DATE	AUTHORIZED BY CONTRACT Units	AUTHORIZED BY CONTRACT Unit Costs
Drifting								
Crosscutting								
Raising								
Shafts								
Winzes								
Drilling: Core 0-1000	Ft.	9952.25	3619	32,557.25	11,839	2.75	30,000	2.75
Churn 1000-1500	"	879.00	293	1,866.00	622	3.00	5,000	3.00
Auger								
Stripping Assays	Ea.	10.00	10	24.00	24	1.00	200	1.00
Trenching Core Boxes	"	-	-	219.60	122	1.80	500	1.80
Test Pits								
Roads and Trails								
Sup. & Tech. Ser.	Ft.	821.52	3912	2,616.81	12,461	0.21	35,000	0.21
TOTAL DISTRIBUTED COSTS		11,662.77		37,283.66				TOTAL COSTS AUTHORIZED BY CONTRACT
Operating Equipment Purchased								
Initial Rehabilitation and Repairs								
New Buildings, Improvements, etc.								
TOTAL COSTS		11,662.77		37,283.66				105,950.00

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

Date 11-15-57 Operator The New Jersey Zinc Co.

Per [signature] Title Asst. to the Supt.

REMARKS: This report covers drill holes:
CS-26
CS-27
CS-28
I-55
I-56

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

(Instructions on reverse)

(For Government use only)

NOTE: OPERATOR'S NARRATIVE SHOWS A DEPTH OF 783 FEET FOR HOLE I-56; 773 FEET IS CORRECT AND WAS SO BILLED BY THE OPERATOR.

[signature]
GEOLOGIST, U. S. G. S.
NOV 26 1957

INSTRUCTIONS

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

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

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

GPO 872894

Report for October 1957

Cedar Springs Area DMEA 4586

Contract Idm E 1071 (Zinc)

Hole CS-26 - Woodrow Davidson - NJZ Company mining and mineral rights - 100' downdip from CS-24

Coordinates: 734,635.14 N; 771,432.67 E
Elevation: 1382.88

0- 10	RC
10- 319	Chickamauga limestone
319- 974	Mascot dolomite Shine sphalerite 927
974-1049	Upper Kingsport dolomite
✓1049-1074	25' mineralization estimated @ 1½% Zn
1074-1121	Upper Kingsport dolomite Traces & shines sphalerite 1077-1103
✓1121-1129	8' one estimated @ 3½% Zn
1129-1154	Upper Kingsport dolomite Shines sphalerite 1131, 1143, 1148. TR at 1154
1154-1172	Lower Kingsport dolomite Traces sphalerite 1168, 1170
✓1172-1183	11' mineralization estimated @ 1½% Zn
1183-1202	Lower Kingsport dolomite Traces sphalerite 1188-1190, 1191
✓1202-1205	3' mineralization estimated @ 1½% Zn
1205-1245	Lower Kingsport dolomite & limestone
1245-1293	(Bottom) Longview dolomite & limestone

R and S Beds 89% dolomite

Hole CS-27 - J. R. Davidson - NE tract - 300' downdip from CS-25

Coordinates: 736,546.21 N; 772,957.03 E
Elevation: 1495.66

0- 20	Clay
20-491	Mascot dolomite
491-644	Upper Kingsport dolomite
644-800	(Bottom)Dower Kingsport dolomite

Hole CS-28 - Robert Mallicoat property - NJZ mining and mineral rights - 600' NE on strike from I-53

Coordinates: 735,089.99 N; 769,794.39 E
Elevation: 1476.60

0- 24	Clay
24-212	Mascot dolomite
212-339	Upper Kingsport dolomite Traces sphalerite @ 324
339-500	Lower Kingsport limestone & dolomite

R and S beds 41% dolomite

Hole I-55 - J. R. Davidson - SW tract - 600' SW of I-53 - on strike

Coordinates: 734,529.96 N; 768,743.30 E
Elevation: 1501.45

0- 47 - - Clay
47-252 - - Mascot dolomite
252-386 - - Upper Kingsport dolomite
386-546 - - Lower Kingsport dolomite & limestone

R and S Bed 47% dolomite

Hole I-56 - J. R. Davidson - SW tract

Coordinates: 733,999.10 N; 768,454.94 E
Elevation: 1499.11

0- 4 - - Clay
4-479 - - Mascot dolomite
479-587 - - Upper Kingsport dolomite
587-588 - - 1' ore estimated @ 15% Zn
588-613 - - Upper Kingsport dolomite
613-768 - - Lower Kingsport dolomite & limestone
768-783 - - Longview limestone & dolomite
773

R and S beds 29% dolomite.

Form MF-104 (Rev.)
(April 1952)

Budget Bureau No. 42-R1036.5

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

RECEIVED 25 PAID VOUCHER & SCHEDULE 21

Month of September, 195 7 Docket No. DMEA 4586 Contract No. Idm E 1071

Operator's Name The New Jersey Zinc Company Minerals Zinc

Address Jefferson City, Tennessee

Contract Amount, $105,950.00 Government Participation: 50 % Amount, $ 52,975.00

ITEMS OF COSTS	FOR OPERATOR'S USE: Monthly Total	Totals Previously Reported	Totals To Date	FOR GOVERNMENT USE ONLY: Approved Monthly Total	Approved Totals Previously Reported	Approved Totals To Date
(1) Independent Short Form Contracts:						
Drilling	7948.00	15,644.00	23,592.00			
Bulldozing						
Crosscutting						
Drifting						
(2) Labor and Supervision:						
Labor						
Supervision	603.12	1,192.17	1,795.29			
Technical Services						
(3) Operating Mat'ls. and Supplies:						
Timber						
Explosives						
Pipe						
Track						
Core Boxes	82.80	136.80	219.60			
(4) Operating Equipment:						
Rental						
Purchase						
Depreciation						
(5) Initial Rehabilitation and Repairs						
(6) New Bldgs., Improvements, etc.						
(7) Miscellaneous:						
Repairs to Equipment						
Sampling and Analysis	7.00	7.00	14.00			
Payroll Taxes						
Liability Insurance						
(8) Contingencies (specify):						
TOTALS	8640.92	16,979.97	25,620.89	8640.92	16979.97	25620.89

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

Date 10-1-57 *Payee The New Jersey Zinc Company

Per [signature] Title Asst. to the Supt.

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

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

(Instructions on reverse)

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

$ 4320.46

Signature [signature]
(Authorized Certifying Officer)

Date OCT 23 1957 Vou. No. 72
(See other side)

4320.46

(For Government use only)

CERTIFICATION BY GOVERNMENT REPRESENTATIVE:

I certify that to the best of my knowledge and belief the contractor submitting this voucher is operating a Defense Minerals Exploration Administration project under Contract No. E-1071 in accordance with the terms of the contract.

Signature P. J. Lynch Title MINING ENGINEER U. S. BUREAU OF MINES Date OCT 18 1957

APPROVAL BY DMEA EXECUTIVE OFFICER OR ALTERNATE:

Signature Robert A. Lawrence Title EXECUTIVE OFFICER DMEA FIELD TEAM REGION V Date OCT 18 1957

MONTHLY REPORT OF OPERATOR

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

GPO 872893

Form MF-104A
(April 1952)

Budget Bureau No. 42-R1151.2

RECEIVED
OCT 25 1957
DMEA

UNITED STATES
DEPARTMENT OF THE INTERIOR

DEFENSE MINERALS EXPLORATION ADMINISTRATION

OPERATOR'S UNIT COST AND PROGRESS REPORT

Month of [illegible] 195[illegible] Docket No. DMEA [illegible] Contract No. [illegible]
Operator's Name [illegible] Minerals [illegible]
Address [illegible]

OPERATION	UNIT	COSTS THIS MONTH	UNITS THIS MONTH	COSTS TO DATE	UNITS TO DATE	UNIT COSTS TO DATE	AUTHORIZED BY CONTRACT	
							Units	Unit Costs
Drifting								
Crosscutting								
Raising								
Shafts								
Winzes	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Drilling: Core	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Churn								
Auger	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Stripping	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Trenching								
Test Pits								
Roads and Trails	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]		[illegible]	[illegible]
TOTAL DISTRIBUTED COSTS		[illegible]		[illegible]				TOTAL COSTS AUTHORIZED BY CONTRACT
Operating Equipment Purchased								
Initial Rehabilitation and Repairs								
New Buildings, Improvements, etc.								
TOTAL COSTS		8640.92		25,620.89				[illegible]

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

Date 10-1-57 Operator [illegible]

Per [signature] Title [illegible]

REMARKS [illegible]

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

(Instructions on reverse)

(For Government use only)

[signature]

GEOLOGIST, U. S. G. S.

OCT 18 1957

INSTRUCTIONS

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

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

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

GPO 872894

Report for September 1957

Cedar Springs Area D.M.E.A. 4586

Contract Idm E 1071 (Zinc)

Two drills operated on the Cedar Springs project during the first part of the month and a third drill was placed in operation during the latter part of the month. Four holes were completed, summary logs of which follow:

Hole CS-24 - Woodrow Davidson - New Jersey Zinc Company mineral and mining rights, 100' downdip from CS-22

Coordinates: 734,724.69; 771,381.48
Elevation: 1393.14

0 - 5 - - - Clay
5 - 243 - - - Chickamauga limestone
243 - 895 - - - Mascot dolomite, shines sphalerite at 644', 785'
895 -1019 - - - Upper Kingsport dolomite, traces sphalerite 992', 1008', 1014', 1016'
1019 -1030 - - - 11' mineralization averaging 0.78% Zn
1019 - 1025 - - - 1.10% Zn (5' core)
1025 - 1030 - - - 0.40% Zn
1030 -1062 - - - Upper Kingsport dolomite, TR at 1062'. Local shines sphalerite 1036', 1047', 1054'
1062 -1066 - - - Lower Kingsport dolomite
1066 -1088 - - - 22' mineralization averaging 1.04% An
1066 - 1072 - - - 0.88% Zn (5' core)
1072 - 1078 - - - 1.26% Zn (5' core)
1078 - 1083 - - - 0.98% Zn
1083 - 1088 - - - 1.03% Zn
1088 -1099 - - - Lower Kingsport dolomite
1099 -1105 - - - 6' mineralization assaying 1.03% Zn (5' core)
1105 -1166 - - - Lower Kingsport dolomite
1166 -1200 - - - (Bottom) Longview dolomite & limestone

DMEA
RECEIVED OCT 25 1957
CODE

Hole CS-25 - J. R. Davidson property - NE tract

Coordinates: 736,923.01; 772,814.18
Elevation: 1671.00

0 - 70 - - - Clay
70 - 290 - - - Mascot dolomite
290 - 468 - - - Upper Kingsport dolomite, traces sphalerite 411-426'. Tr at 468'
468 - 577 - - - Lower Kingsport dolomite, traces sphalerite 472-478'
577 - 636 - - - (Bottom) Longview dolomite and limestone.

Hole I-53 - J. R. Davidson property - SW tract

Coordinates: 734,788.39; 769,279.88
Elevation: 1491.42

0 - 13 - - - Clay
13 - 256 - - - Mascot dolomite
256 - 373 - - - Upper Kingsport dolomite
373 - 375 - - - 2' mineralization estimated at 25% Zn
375 - 404 - - - Upper Kingsport dolomite, shines sphalerite 377'. TR at 404'
404 - 511 - - - Lower Kingsport dolomite
511 - 543 - - - (Bottom) Longview dolomite and limestone

Hole I-54 - J. R. Davidson property - SW tract, 100' updip from I-53

Coordinates: 734,872.38; 769,223.00
Elevation: 1490.50

0 - 19 - - - Clay
19 - 180 - - - Mascot dolomite
180 - 300 - - - Upper Kingsport dolomite
300 - 301 - - - 1' mineralization estimated at 25% Zn
301 - 315 - - - Upper Kingsport dolomite, TR at 315'
315 - 435 - - - Lower Kingsport dolomite
435 - 493 - - - (Bottom) Longview dolomite and limestone.

Form MF-104 (Rev.)
(April 1952)

Budget Bureau No. 22-R1036.5

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION

PAID ON VOUCHER & SCHEDULE OF PAYMENTS

RECEIVED SEP 19 1957 DMEA

OPERATOR'S MONTHLY REPORT AND VOUCHER

Month of August, 1957 Docket No. DMEA 4586 Contract No. DMEA E 1071
Operator's Name The New Jersey Zinc Company Minerals Zinc
Address Jefferson City, Tennessee
Contract Amount, $105,950.00 Government Participation: 50 % Amount, $52,975.00

ITEMS OF COSTS	FOR OPERATOR'S USE: Monthly Total	Totals Previously Reported	Totals To Date	FOR GOVERNMENT USE ONLY: Approved Monthly Total	Approved Totals Previously Reported	Approved Totals To Date
(1) Independent Short Form Contracts:						
Drilling	2825.00	12,819.00	15,644.00			
Bulldozing						
Crosscutting						
Drifting						
(2) Labor and Supervision:						
Labor						
Supervision	215.25	976.92	1,192.17			
Technical Services						
(3) Operating Mat'ls. and Supplies:						
Timber						
Explosives						
Pipe						
Track						
Core Boxes	18.00	118.80	136.80			
(4) Operating Equipment:						
Rental						
Purchase						
Depreciation						
(5) Initial Rehabilitation and Repairs						
(6) New Bldgs., Improvements, etc.						
(7) Miscellaneous:						
Repairs to Equipment						
Sampling and Analysis	-	7.00	7.00			
Payroll Taxes						
Liability Insurance						
(8) Contingencies (specify):						
TOTALS	3058.25	13,921.72	16,979.97	3,058.25	13,921.72	16,979.97

I certify that the above bill is correct and just and that payment therefor has not been received.
Date 9/1/57 *Payee The New Jersey Zinc Company
Per [signature] Title Asst. to the Supt.

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

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

(Instructions on reverse)

Pursuant to authority vested in me, I certify that this account is correct and proper for payment in the amount of:
$1,529.12
Signature [signature] (Authorized Certifying Officer)
Date SEP 17 1957 Vou. No. 54
(See other side)

4

1529.13

(For Government use only)

CERTIFICATION BY GOVERNMENT REPRESENTATIVE:

I certify that to the best of my knowledge and belief the contractor submitting this voucher is operating a Defense Minerals Exploration Administration project under Contract No. TdmE1071 in accordance with the terms of the contract.

Signature [illegible] Title MINING ENGINEER U. S. BUREAU OF MINES Date SEP 16 1957

APPROVAL BY DMEA EXECUTIVE OFFICER OR ALTERNATE:

Signature Robert A. Lawrence Title EXECUTIVE OFFICER DMEA FIELD TEAM REGION V Date SEP 16 1957

MONTHLY REPORT OF OPERATOR

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

Form MF-104A
(April 1952)

Budget Bureau No. 42-R1151.2

RECEIVED SEP 19 1957 DMEA

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

Month of August 195 7 Docket No. DMEA 4586 Contract No. Tdm E 1071

Operator's Name The New Jersey Zinc Company Minerals Zinc

Address Jefferson City, Tennessee

OPERATION	UNIT	COSTS THIS MONTH	UNITS THIS MONTH	COSTS TO DATE	UNITS TO DATE	UNIT COSTS TO DATE	AUTHORIZED BY CONTRACT Units	AUTHORIZED BY CONTRACT Unit Costs
Drifting								
Crosscutting								
Raising								
Shafts								
Winzes								
Drilling: Core 0-1000	Ft.	2750.00	1000	15,257.00	5548	2.75	30,000	2.75
Drilling: Core 1000-1500	"	75.00	25	387.00	129	3.00	5,000	3.00
Churn								
Auger								
Stripping Assay	Ea.	-	-	7.00	7	1.00	200	1.00
Trenching Core Boxes	"	18.00	10	136.80	76	1.80	500	1.80
Test Pits								
Roads and Trails								
Super. & Tech.Ser.	Ft.	215.25	1025	1,192.17	5677	0.21	35,000	0.21
TOTAL DISTRIBUTED COSTS		3058.25		16,979.97				TOTAL COSTS AUTHORIZED BY CONTRACT
Operating Equipment Purchased								
Initial Rehabilitation and Repairs								
New Buildings, Improvements, etc.								
TOTAL COSTS		3058.25		16,979.97				

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

Date 9/1/57 Operator The New Jersey Zinc Co.

Per [signature] Title Asst. to the Supt.

REMARKS: This report covers drill hole CS-23

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

(Instructions on reverse)

(For Government use only)

[signature]
GEOLOGIST, U. S. G. S.
SEP 16 1957

INSTRUCTIONS

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

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

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

GPO 872894

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DMEA
RECEIVED SEP 19 1957
DATE | INITIALS | CODE

Report for August 1957

Cedar Springs Area DMEA 4586

Contract Idm E 1071 (Zinc)

During August, 1 drill operated in the Cedar Springs area. One hole, with a depth of 1025' was completed. A log summary follows:

Hole CS-23 - (Woodrow Davidson) New Jersey Zinc Mineral Rights

Coordinates: 734,899.95 N; 771,281.62 E
Elevation: 1348.48'

0- 9	- Clay
9- 57	- Chicamauga limestone
57-710	- Mascot dolomite
710-875	- Upper Kingsport dolomite
875	- TR
875-1002	- Lower Kingsport, 96% dolomite
1002-1025	- (Bottom) Longview dolomite.

Form M-R-4 (Rev.)
(April 1952)

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION

Budget Bureau No. 42-R1036.5

PAID ON VOUCHER & SCHEDULE OF PAYMENTS K- 9

OPERATOR'S MONTHLY REPORT AND VOUCHER

Month of July, 1957 Docket No. DMEA 4586 Contract No. E 1071
Operator's Name The New Jersey Zinc Company Minerals Zinc
Address Jefferson City, Tennessee
Contract Amount, $ 105,950.00 Government Participation: 50 % Amount, $ 52,975.00

ITEMS OF COSTS	FOR OPERATOR'S USE			FOR GOVERNMENT USE ONLY		
	Monthly Total	Totals Previously Reported	Totals To Date	Approved Monthly Total	Approved Totals Previously Reported	Approved Totals To Date
(1) Independent Short Form Contracts:						
Drilling	5575.50	7243.50	12,819.00			
Bulldozing						
Crosscutting						
Drifting						
(2) Labor and Supervision:						
Labor						
Supervision	423.78	553.14	976.92			
Technical Services						
(3) Operating Mat'ls. and Supplies:						
Timber						
Explosives						
Pipe						
Track						
Core Boxes	50.40	68.40	118.80			
(4) Operating Equipment:						
Rental						
Purchase						
Depreciation						
(5) Initial Rehabilitation and Repairs						
(6) New Bldgs., Improvements, etc.						
(7) Miscellaneous:						
Repairs to Equipment						
Sampling and Analysis	5.00	2.00	7.00			
Payroll Taxes						
Liability Insurance						
(8) Contingencies (specify):						
TOTALS	6054.68	7867.04	13,921.72	6054.68	7867.04	13921.72

I certify that the above bill is correct and just and that payment therefor has not been received.
Date 8-1-57 *Payee The New Jersey Zinc Company
Per [signature] Title Asst. to the Supt.

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

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

(Instructions on reverse)

Pursuant to authority vested in me, I certify that this account is correct and proper for payment in the amount of:
$ 3027.34
Signature Helen R. Meier
(Authorized Certifying Officer)
Date AUG 29 1957 Vou. No.
(See other side)

3027.34

(For Government use only)

CERTIFICATION BY GOVERNMENT REPRESENTATIVE:

I certify that to the best of my knowledge and belief the contractor submitting this voucher is operating a Defense Minerals Exploration Administration project under Contract No. E-1071 in accordance with the terms of the contract.

Signature T. J. Lynch Title MINING ENGINEER U. S. BUREAU OF MINES Date AUG 28 1957

APPROVAL BY DMEA EXECUTIVE OFFICER OR ALTERNATE:

Signature Robert A. Lawrence Title EXECUTIVE OFFICER DMEA FIELD TEAM REGION V Date AUG 28 1957

MONTHLY REPORT OF OPERATOR

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

Form DMF-104A
(April 1952)

Budget Bureau No. 42-R1151.2

UNITED STATES
DEPARTMENT OF THE INTERIOR

DEFENSE MINERALS EXPLORATION ADMINISTRATION

OPERATOR'S UNIT COST AND PROGRESS REPORT

Month of July 1957 Docket No. DMEA 4586 Contract No. E-1071

Operator's Name The New Jersey Zinc Company Minerals Zinc

Address Jefferson City, Tennessee

OPERATION	UNIT	COSTS THIS MONTH	UNITS THIS MONTH	COSTS TO DATE	UNITS TO DATE	UNIT COSTS TO DATE	AUTHORIZED BY CONTRACT Units	AUTHORIZED BY CONTRACT Unit Costs
Drifting								
Crosscutting								
Raising								
Shafts								
Winzes								
Drilling: Core 0-1000	Ft.	5263.50	1914	12,507.00	4548		30,000	2.75
Drilling: Core 1000-1500	ft	312.00	104	312.00	104		5,000	3.00
Drilling: Churn								
Drilling: Auger								
Assay	Ea.	5.00	5	7.00	7	1.00	200	1.00
Stripping								
Core Boxes	Ea.	50.40	28	118.80	66	1.80	500	1.80
Trenching								
Test Pits								
Roads and Trails								
Supervision and Technical Services	Ft.	423.78	2018	976.92	4652	0.21	35,000	0.21
TOTAL DISTRIBUTED COSTS		6054.68		13,921.72				TOTAL COSTS AUTHORIZED BY CONTRACT
Operating Equipment Purchased								
Initial Rehabilitation and Repairs								
New Buildings, Improvements, etc.								
TOTAL COSTS		6054.68		13,921.72				

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

Date 8-1-57 Operator The New Jersey Zinc Co.

Per [signature] Title Asst. to the Supt.

REMARKS: This report covers holes CS-21 and CS-22

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

(Instructions on reverse)

(For Government use only)

[signature]

GEOLOGIST, U. S. G. S.

AUG 20 1957

INSTRUCTIONS

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

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

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

Report for July 1957

Cedar Springs Area DMEA 4586

Contract Idm E-1071 (Zinc)

In July, one drill operated in the Cedar Springs area and two holes were completed. Summary logs of these holes, CS-21 and CS-22, follow:

Hole CS-21 - Woodrow Davidson property, 200 feet down-dip from CS-20

Approx. Coordinates: 735,080 N; 771,180 E
" Elevation: 1410'

0- 22 - - Clay
22-645 - - Mascot dolomite
645-758 - - Upper Kingsport dolomite
758-880 - - Lower Kingsport, 40% dolomite
880-914 - - (Bottom) Longview formation

Hole CS-22 - Woodrow Davidson property, 300 feet down-dip from hole CS-21

Approx. Coordinates: 734,825 N; 771,330 E
" Elevation: 1425'

0- 2 - - Clay
2-171 - - Chicamauga limestone
171-823 - - Mascot dolomite
823-973 - - Upper Kingsport dolomite
973-999 - - Weakly mineralized, estimated ½% Zn
999-1029 - 30' mineralization averaging 1.62% Zn assays as follows:
5 999-1004 - - 2.03% Zn
5 1004-1009 - - 0.35% "
5 1009-1014 - - 3.30% "
5 1014-1019 - - 1.33% "
1019-1023 - - Nil (not assayed)
6 1023-1029 - - 2.25% Zn
1029-1037 - Weakly mineralized, estimated ½% to 1% Zn
1037-1093 - Lower Kingsport
1093-1104 - (Bottom) Longview dolomite.

Form No. F-104 (Rev.)
(April 1952)

Budget Bureau No. 42-R1036.5

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION

PAID ON VOUCHER & SCHEDULE OF PAYMENTS K- 5

OPERATOR'S MONTHLY REPORT AND VOUCHER

Month of June 1957 Docket No. DMEA 4586 Contract No. E-1071
Operator's Name The New Jersey Zinc Company Minerals Zinc
Address Jefferson City, Tennessee
Contract Amount, $ 105,950.00 Government Participation: 50 % Amount, $ 52,975.00

ITEMS OF COSTS	FOR OPERATOR'S USE: Monthly Total	Totals Previously Reported	Totals To Date	FOR GOVERNMENT USE ONLY: Approved Monthly Total	Approved Totals Previously Reported	Approved Totals To Date
(1) Independent Short Form Contracts:	5813.50	1430.00	7243.50			
Drilling						
Bulldozing						
Crosscutting						
Drifting						
(2) Labor and Supervision:						
Labor / Supervision	443.94	109.20	553.14			
Technical Services						
(3) Operating Mat'ls. and Supplies:						
Timber						
Explosives						
Pipe						
Track						
Core Boxes	55.80	12.60	68.40			
(4) Operating Equipment:						
Rental						
Purchase						
Depreciation						
(5) Initial Rehabilitation and Repairs						
(6) New Bldgs., Improvements, etc.						
(7) Miscellaneous:						
Repairs to Equipment	-	2.00	2.00			
Sampling and Analysis						
Payroll Taxes						
Liability Insurance						
(8) Contingencies (specify):						
TOTALS	~~6313.24~~	~~1553.80~~	~~7867.04~~	6313.24	1553.80	7867.04

RECEIVED AUG 6 1957 D.M.E.A.

I certify that the above bill is correct and just and that payment therefor has not been received.
Date 7-1-57 *Payee The New Jersey Zinc Company
Per [signature] Title Asst. to the Supt.

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

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

(Instructions on reverse)

Pursuant to authority vested in me, I certify that this account is correct and proper for payment in the amount of:
$ 3156.62
Signature Helen R. Mellin (Authorized Certifying Officer)
Date AUG 5 1957 Vou. No. 19
(See other side)

3156.62

(For Government use only)

CERTIFICATION BY GOVERNMENT REPRESENTATIVE:

I certify that to the best of my knowledge and belief the contractor submitting this voucher is operating a Defense Minerals Exploration Administration project under Contract No. E-1071 in accordance with the terms of the contract.

Signature R. J. Lynch Title MINING ENGINEER ~~U. S. BUREAU OF MINES~~ Date AUG 1 1957

APPROVAL BY DMEA EXECUTIVE OFFICER OR ALTERNATE:

Signature Robert A. Lawrence Title EXECUTIVE OFFICER DMEA FIELD TEAM ~~REGION V~~ Date AUG 1 1957

MONTHLY REPORT OF OPERATOR

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

Form MT-104A
(April 1952)

Budget Bureau No. 42-R1151.2

UNITED STATES
DEPARTMENT OF THE INTERIOR

DEFENSE MINERALS EXPLORATION ADMINISTRATION

OPERATOR'S UNIT COST AND PROGRESS REPORT

Month of June 1957 Docket No. DMEA 4586 Contract No. E-1071

Operator's Name The New Jersey Zinc Company Minerals Zinc

Address Jefferson City, Tennessee

OPERATION	UNIT	COSTS THIS MONTH	UNITS THIS MONTH	COSTS TO DATE	UNITS TO DATE	UNIT COSTS TO DATE	AUTHORIZED BY CONTRACT Units	AUTHORIZED BY CONTRACT Unit Costs
Drifting								
Crosscutting								
Raising								
Shafts								
Winzes								
Drilling: Core 0-1000	Ft.	5813.50	2114	7243.50	2634	2.75	30,000	2.75
Churn 1000-1500	"	- -	-	- -	-	-	5,000	3.00
Auger								
Stripping Assay	Ea.	- -	-	2.00	2	1.00	200	1.00
Trenching Core Boxes	"	55.80	31	68.40	38	1.80	500	1.80
Test Pits								
Roads and Trails								
Supervision and Tech. Services	Ft.	443.94	2114	553.14	2634	0.21	35,000	0.21
TOTAL DISTRIBUTED COSTS		6313.24		7867.04				TOTAL COSTS AUTHORIZED BY CONTRACT
Operating Equipment Purchased								
Initial Rehabilitation and Repairs								
New Buildings, Improvements, etc.								
TOTAL COSTS		6313.24		7867.04				

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

Date 7/1/57 Operator The New Jersey Zinc Co.

Per [signature] Title Asst. to the Supt.

REMARKS: This report covers drill holes:
CS-18
CS-19
CS-20

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

(Instructions on reverse)

(For Government use only)

RECEIVED AUG 9 1957 D.M.E.A.

MINING ENGINEER
U. S. BUREAU OF MINES

INSTRUCTIONS

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

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

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

GPO 872894

Report for June 1957

Cedar Springs Area DMEA 4506

Contract Idm E 1071 (Zinc)

During June, one drill operated in the Cedar Springs area and three holes were completed.

Attached, hereto, are a plan map and a section showing the location and structural details of the holes drilled to date on the project. Summary logs of the holes drilled in June follows:

Hole CS-18 - Woodrow Davidson property, 100 feet downdip from hole CS-17

Coordinates: Approximate: 735,515 N; 770,980 E
Elevation: Approximate: 1440'

0- 8 - - Clay
8-289 - - Mascot dolomite
289-437 - - Upper Kingsport dolomite
437 - - TR marker
437-588 - - Lower Kingsport limestone and dolomite. "R" and "S" beds, 36% dolomite
588-606 - - (Bottom) Longview dolomite and limestone.

Hole CS-19 - Woodrow Davidson property, 100 feet downdip from hole CS-18

Coordinates: 735,930.21 N 770,977.36 E
Elevation: 1437.64'

0- 27 - - Clay
27-355 - - Mascot dolomite
355-515 - - Upper Kingsport dolomite
515 - - TR marker
515-666 - - Lower Kingsport limestone and dolomite, "R" and "S" beds 80% dolomite
666-679 - - (Bottom) Longview dolomite

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DMEA
RECEIVED AUG 9 1957
DATE | INITIALS | CODE

Hole CS-20 - Woodrow Davidson property, 200 feet downdip from CS-19

Coordinates: 735,260.56 N 771,077.06 E
Elevation: 1422.65'

0- 16 - - Clay
16-500 - - Mascot dolomite
500-659 - - Upper Kingsport dolomite
659 - - TR marker
659-734 - - Lower Kingsport dolomite, local traces Zn and strong shines of pyrite
734-737 - - 3' estimated 3% Zn
737-780 - - Lower Kingsport dolomite, local traces Zn and shines of pyrite. "R" and "S"

beds 100% dolomite.
780-829 - - (Bottom) Longview dolomite

Form DMF-104 (Rev.)
(April 1952)

Budget Bureau No. 42-R1036.5

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION

PAID ON VOUCHER & SCHEDULE OF PAYMENTS K- 79

OPERATOR'S MONTHLY REPORT AND VOUCHER

Month of May, 1957 Docket No. DMEA 4586 Contract No. Idm E-1071
Operator's Name The New Jersey Zinc Co. Minerals Zinc
Address Jefferson City, Tennessee
Contract Amount, $ 105,950 Government Participation: 50 % Amount, $ 52,975.00

ITEMS OF COSTS	FOR OPERATOR'S USE			FOR GOVERNMENT USE ONLY		
	Monthly Total	Totals Previously Reported	Totals To Date	Approved Monthly Total	Approved Totals Previously Reported	Approved Totals To Date
(1) Independent Short Form Contracts:						
Drilling	1,430.00	-	1,430.00			
Bulldozing						
Crosscutting						
Drifting						
(2) Labor and Supervision:						
Labor						
Supervision	109.20	-	109.20			
Technical Services						
(3) Operating Mat'ls. and Supplies:						
Timber						
Explosives						
Pipe						
Track						
Core Boxes	12.60	-	12.60			
(4) Operating Equipment:						
Rental						
Purchase						
Depreciation						
(5) Initial Rehabilitation and Repairs						
(6) New Bldgs., Improvements, etc.						
(7) Miscellaneous:						
Repairs to Equipment						
Sampling and Analysis	2.00	-	2.00			
Payroll Taxes						
Liability Insurance						
(8) Contingencies (specify):						
TOTALS	1,553.80		1,553.80	1553.80	—	1553.80

RECEIVED JUN 1 1957 D.M.E.A.

I certify that the above bill is correct and just and that payment therefor has not been received.
Date 6-1-57 *Payee The New Jersey Zinc Co.
Per [signature] Title Asst. to the Supt.

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

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

(Instructions on reverse)

Pursuant to authority vested in me, I certify that this account is correct and proper for payment in the amount of:
$ 776.90
Signature Helen R. Miller (Authorized Certifying Officer)
Date JUN 27 1957 Vou. No. 210
(See other side)

S 5/14 776.90

(For Government use only)

CERTIFICATION BY GOVERNMENT REPRESENTATIVE:

I certify that to the best of my knowledge and belief the contractor submitting this voucher is operating a Defense Minerals Exploration Administration project under Contract No. E-1076 in accordance with the terms of the contract.

Signature [illegible] Title U. S. BUREAU OF MINES Date JUN 24 1957

APPROVAL BY DMEA EXECUTIVE OFFICER OR ALTERNATE:

Signature Robert A. Lawrence Title EXECUTIVE OFFICER DMEA FIELD TEAM REGION V Date JUN 24 1957

MONTHLY REPORT OF OPERATOR

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

Form MF-104A
(April 1952)

Budget Bureau No. 42-R1151.2

UNITED STATES
DEPARTMENT OF THE INTERIOR

DEFENSE MINERALS EXPLORATION ADMINISTRATION

OPERATOR'S UNIT COST AND PROGRESS REPORT

Month of May 1957 Docket No. DMEA 4586 Contract No. E-1071

Operator's Name The New Jersey Zinc Co. Minerals Zinc

Address Jefferson City, Tennessee

OPERATION	UNIT	COSTS THIS MONTH	UNITS THIS MONTH	COSTS TO DATE	UNITS TO DATE	UNIT COSTS TO DATE	AUTHORIZED BY CONTRACT	
							Units	Unit Costs
Drifting								
Crosscutting								
Raising								
Shafts								
Winzes								
Drilling: Core 0-1000	Ft.	1,430.00	520	1,430.00	520	2.75	30,000	2.75
~~Chip~~ 1000-1500	"	-	-	-	-	-	5,000	3.00
Auger								
Stripping Assay	ea.	-2.00	-2	-2.00	-2	1.00	200	1.00
Trenching Core Boxes	"	12.60	7	12.60	7	1.80	500	1.80
Test Pits								
Roads and Trails								
Supervision & Tech. Services	Ft.	109.20	520	109.20	520	.21	35,000	.21
TOTAL DISTRIBUTED COSTS		1,553.80		1,553.80				TOTAL COSTS AUTHORIZED BY CONTRACT
Operating Equipment Purchased								
Initial Rehabilitation and Repairs								
New Buildings, Improvements, etc.								
TOTAL COSTS								

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

Date 6-1-57 Operator The New Jersey Zinc Co.

Per [signature] Title Asst. to the Supt.

REMARKS: This report covers drill hole CS-17.

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

(Instructions on reverse)

(For Government use only)

[signature]
MINING ENGINEER
U. S. BUREAU OF MINES

INSTRUCTIONS

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

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

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

GPO 872894

Report for May 1957

Cedar Springs Area NMA 4586

Contract Idn D-1071 (Zinc)

DATE		CODE

Drilling started on the Cedar Springs project on May 14, 1957, and one hole with a depth of 520 feet was completed during the month. A log summary of this hole follows:

<u>Hole CS-17</u> - Woodrow Davidson property, 100' downdip from CS-14

Coordinates: 735,605 N; 770,000 E

Elevation: 1,450'

0 - 17 - - - - - Clay

17 - 217 - - - - - Mascot dolomite

217 - 371 - - - - - Upper Kingsport dolomite

371 - - - - - - Zn Marker

371 - 375 - - - - - Lower Kingsport dolomite

375 - 379 - - 4 - - 4' assay value 4.75% Zn

379 - 385 - - 6 - - 6' assay value 0.16% Zn

385 - 510 - - - - - Lower Kingsport dolomite and limestone, 45% dolomite

510 - 520 - - - - - (Sotton) Longview dolomite.

A. D. Hoagland/dm

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

To: The New Jersey Zinc Company
160 Front Street
New York 38, New York

Pursuant to the provisions of Exploration Project Contract No. Idm-11871, dated March 29, 1957, Docket No. DMA-4506, hereinafter called the "contract," between the New Jersey Zinc Company, a New Jersey corporation, and the United States of America, hereinafter called the "Government"; to establish and fix the Government's percentage royalty on production and its lien therefor and on the land described in the contract, the Government considers and therefore certifies that discovery or development from which production may be made has resulted from the exploration work.

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

Core drilling from the surface performed under the contract resulted in the discovery of significant zinc ore deposits in the Kingsport limestone and dolomite formation of Ordovician age.

Dated: DEC 1 1 1959

THE UNITED STATES OF AMERICA

By Frank E. Johnson
Acting Director, Office of
Minerals Exploration

FEJohnson/gls
12-4-59
cc to:
Operator
Caldwell, MMS, OGA
Docket
Finance Office
Div. of Contract Adm. & Audit
OMX Field Team, Region V (X)
Director's Reading File
Frank E. Johnson
Operating Committee
Mr. Lamb, USGM
Mr. Kirkham, USGS
Chron

DEC 11 1959

Mr. S. S. Goodwin
Vice President
The New Jersey Zinc Company
160 Front Street
New York 38, New York

Re: Contract No. AEC-4566 (Zinc)
The New Jersey Zinc Company
Cedar Springs Area, Sector XX
Copper Ridge Belt
Grainger County, Tennessee
Contract No. Zdn-E1071

Dear Mr. Goodwin:

Enclosed is a certification of discovery or development that covers all the land described in Article 2 of the contract.

By the terms of the Exploration Project Contract, as amended, and the certification, all uranium mined or produced from March 29, 1957, to March 29, 1959, are subject to the Government's percentage royalty as set forth in the contract until the amount contributed by the Government is repaid.

Royalty payments should be made to the Executive Officer, ORE Field Team, Region V, Room 11, Post Office Building, Knoxville 2, Tennessee, by the purchaser with checks drawn payable to the Office of Minerals Exploration. The purchaser should be advised to deduct royalties from the amount due on each shipment and send the check directly to the Executive Officer. Each check should be accompanied by suitable sales evidence - such as copies of settlement sheets - showing the name of the purchaser, the quantity and grade of the products sold, and the price and charges, certified to be correct by the purchaser.

You are requested to notify the Executive Officer of any changes in ownership or production rights that may have any effect on the Government's right to its percentage royalty. Your attention is called particularly to Article 2(d) of the contract relating to the preservation of the Government's right to a percentage royalty on production. Also when production starts, please notify the Executive Officer. Thereafter, if production ceases for any extended period, please notify him monthly at six-month intervals.

Sincerely yours,

Frank E. Johnson

Acting Director

FMurphy/gla 12-4-59
cc to: Director's Reading File
Mr. Johnson
Operating Committee
Div. of Contract Adm. & Audit
Mr. Lamb, WCMM
Mr. Kirkham, WCMS
Enclosure ORE Field Team, Region V (2)
Code 580

cal P.

Audit's Copy

EXPLORATION PROJECT CONTRACT
THE NEW JERSEY ZINC COMPANY
DMEA-4586

AMENDMENT NO. 8

It is agreed this 29th day of July, 1965, between the United States of America, acting through the Department of the Interior, U. S. Geological Survey, hereinafter called the "Government", and The New Jersey Zinc Company, hereinafter called the "Operator", that Exploration Project Contract No. Idm-41071 (Docket No. DMEA-4586), dated March 29, 1957, as amended, hereinafter called the "Contract", is further amended, as follows:

The following parcels of land shown outlined in blue and yellow on the map entitled "The New Jersey Zinc Company, Rogersville, Tennessee, Copper Ridge Belt, Sector III, Sheet 5SW, Grainger Co., Tennessee, File No. AX - TENN 587", attached and made a part hereof are added to the land referred to in Article 2 of the Contract and described in Annex I.

A. Land Held In Fee Simple by Operator. Approximately 81.10 acres described in Deed from Mrs. R. G. Stapleton, et al. to the New Jersey Zinc Company dated April 3, 1965 and recorded in Deed Book 96, page 250, the Registrar's Office, Grainger County, Tennessee.

B. Lands on which the Operator has Right to Prospect for Minerals, Plus Option to Purchase Mineral and Mining Rights (totalling approximately 425 acres).

1. Approximately 300 acres described in contract between Ora C. Wilkerson, et al. and the New Jersey Zinc Company executed August 22, 1964.

2. Approximately 125 acres described in the contract between Bella Kincaid and the New Jersey Zinc Company executed January 22, 1965.

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, the amount of any item designated as "maximum" or the fixed unit cost of any item of work.

Executed in quintuplicate the day and year first above written.

THE UNITED STATES OF AMERICA

By Arthur A. Baker
Acting Director, U. S. Geological Survey

THE NEW JERSEY ZINC COMPANY

By J. Bordeman

Title VICE PRESIDENT

Audit's Copy

EXPLORATION PROJECT CONTRACT
THE NEW JERSEY ZINC COMPANY
DOCKET NO. DMRA-4586

AMENDMENT NO. 7

It is agreed this 18th day of September, 1959 between the United States of America, acting through the Department of the Interior, Office of Minerals Exploration, hereinafter called the "Government", and The New Jersey Zinc Company, hereinafter called the "Operator", that Exploration Project Contract No. IGm-[illegible] (Docket No. DMRA-4586), dated March 29, 1957, as amended, hereinafter called the "Contract", is further amended, as follows:

1. The following parcels of land, containing 32 acres more or less, are hereby deleted from the land referred to in Article 2 of the Contract and described in Annex I:

Name of Property Owner	Approximate Acreage
Nelson Belton	12
Carl Holt	20
Total	32 Acres

2. The Operator:

(a) Certifies that the deleted land has no known value for mineral production;

(b) Certifies that, prior to the execution of this amendment, it has surrendered or otherwise disposed of all its interest, title, and equity in such land, and any minerals produced therefrom, including any option, lease, or permit thereto, without any consideration whatsoever, including future compensation for such surrender or disposition other than relief from the cost of maintaining such interest;

(c) Agrees that no benefit from such lands or any production of minerals therefrom will accrue to the Operator or any of its subsidiaries, directly or indirectly, during the period expiring 32 years from the date of this contract;

(d) Agrees that if the Operator or any of its subsidiaries acquires any interest, title, or equity in such land or any minerals produced therefrom, or derives any benefits therefrom, before the expiration of 32 years from the date of this Contract, the land with respect to which such interest, title, or equity is acquired, and any minerals produced therefrom, shall be deemed subject to this Contract and any certification from the date that the Operator or its subsidiaries acquired such interest, title, or equity, or any benefit therefrom, until the expiration of 32 years from the date of this Contract, or until the total net amount contributed by the Government without interest is fully repaid, whichever occurs first.

3. 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, the amount of any item designated as "maximum" or the fixed unit cost of any item of work.

Executed in quintuplicate the day and year first above written.

THE UNITED STATES OF AMERICA

By George C. Selfridge
Acting Director, Office of
Minerals Exploration

THE NEW JERSEY ZINC COMPANY

By [signature]

Title VICE PRESIDENT

UNITED STATES
DEPARTMENT OF THE INTERIOR
OFFICE OF MINERALS EXPLORATION
ROOM 2-B POST OFFICE BLDG.
KNOXVILLE 2, TENN.

EXTRA COPY O. M. E. RECEIVED JUL 17 1959		
DATE	INITIALS	CODE
		80

July 15, 1959

Mr. Johnson Crawford
General Superintendent
The New Jersey Zinc Company
Jefferson City, Tennessee

Re: DMEA-4586-Zinc
Cedar Springs Area
Grainger County, Tennessee
Contract Ids-E1071
The New Jersey Zinc Co.

Dear Mr. Crawford:

Approval by the Government is hereby given to perform in excess of 35,000 feet of diamond drilling at the above cited exploration project. This is in accordance with paragraph 5 of Exhibit "A" of the Contract. It is understood that the total cost of all drilling work allowable under the contract shall not be exceeded.

Very truly yours,

Robert A. Laurence
Executive Officer, OME
Field Team, Region V

VJL/sm
cc
Lynch
Finance
Opr. Com-2
Files

Audit's copy

EXPLORATION PROJECT CONTRACT
THE NEW JERSEY ZINC COMPANY
DOCKET NO. DMEA-4586

AMENDMENT NO. 6

It is agreed this 5th day of June, 1959, between the United States of America, acting through the Department of the Interior, Office of Minerals Exploration, hereinafter called the "Government", and The New Jersey Zinc Company, hereinafter called the "Operator", that Exploration Project Contract No. Idm-E1071 (Docket No. DMEA-4586), dated March 29, 1957, as amended, hereinafter called the "Contract", is further amended, as follows:

1. Item 3 of Amendment No. 5, is amended to read:

3. In Article 3 of the Contract the completion date shall be October 1, 1959.

2. Item 4(a)(ii) of Amendment No. 5 is changed to read:

(ii) Effective July 1, 1959, if the work is resumed on or before January 15, 1959, but is not completed on or before October 1, 1959.

3. Item 8 is added to Amendment No. 5, as follows:

8. In Article 8(b) of the Contract, as amended by paragraph 5 of Annex II, and by Amendment No. 3, item 2, the period of 31 years is changed to 32 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, the amount of any item designated as "maximum", or the fixed unit cost of any item of work.

Executed in quintuplicate the day and year first above written.

THE UNITED STATES OF AMERICA

By Frank E. Johnson
Acting Director, Office of Minerals Exploration

THE NEW JERSEY ZINC COMPANY

By [signature]
Vice President

Title

EXTRA COPY
O. M. E.
RECEIVED JUN 22 1959

DATE	INITIALS	CODE

Audit's copy

OFFICE OF COPY
C. M. E.
RECEIVED JAN 9 1959

DATE	INITIALS	CODE

EXPLORATION PROJECT CONTRACT
THE NEW JERSEY ZINC COMPANY
DOCKET NO. DMEA-4586

AMENDMENT NO. 5

It is agreed this 24th day of December, 1958, between the United States of America, acting through the Department of the Interior, Office of Minerals Exploration, hereinafter called the "Government", and The New Jersey Zinc Company, hereinafter called the "Operator", that Exploration Project Contract No. Idm-81071 (Docket No. DMEA-4586), dated March 29, 1957, as amended, is further amended effective April 1, 1958, as follows:

1. Amendment No. 4, executed on May 14, 1958, is hereby revoked and rescinded.

2. (a) Work under the Contract shall be suspended during the period beginning May 1, 1958, and ending not later than January 15, 1959.

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

(c) The Operator at its own costs 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.

3. In Article 3 of the Contract the completion date shall be July 1, 1959.

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

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

(i) Effective May 1, 1958, if the work has not been resumed on or before January 15, 1959;

(ii) Effective July 1, 1958, if the work is resumed on or before January 15, 1959, but is not completed on or before July 1, 1959.

(b) The Government will contribute only to the allowable costs of any work performed prior to the relevant effective dates set forth under 4(a) above.

(c) The Operator shall promptly perform all winding-up and settlement actions provided for in the Contract, including the rendering of the final report and final account.

(d) The Operator, as principal if the Operator is the producer, or as surety if the Operator is not the producer (for example, if the Operator either transfers or fails to retain its interest in the land), shall pay to the Government the royalty on production provided for in the Contract, in the same manner and amount and for the full period provided for 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, all rights of the Government as to reports (including preservation of Operator's records), audit, and recovery of any overpayment, are preserved.

(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 for in this Amendment No. 5.

5. In Exhibit "A", under the heading, Description of the Work:

(a) Paragraph No. 2 is revised by read: "A series of slightly sweed dip and string fences shall be drilled, with holes spaced at between 100- and 300-foot intervals on the fences."

(b) Paragraph No. 3 is revised to read: "The space intervals between the various fences shall not be less than 400 feet".

(c) The approximate locations of the holes in the new event, added to the Contract by paragraph 6 of this amendment, are shown on the attached map entitled "The New Jersey Zinc Company, Hogansville, Tennessee, Copper Ridge Mill, Series II, Sheet 434, Hawkins County, Tenn., File No. AA-[illegible]-1[illegible]", but the actual locations, directions, inclinations, and depths of all holes are subject to point Government approval.

6. The following parcels of land shown outlined in blue color on the map entitled "The New Jersey Zinc Company, Hogansville, Tennessee, Copper Ridge Mill, Series II, Sheet 434, Hawkins County, Tenn., File No. AA-[illegible]-1[illegible]" attached and made a part hereof, are added to the land referred to in Article 2 of the Contract and described in Annex I.

Land in which the Ownership and the Mineral and Mining Rights [illegible] 35.[illegible] acres)

(a) All the mineral and mining rights to land described in Warranty Deed dated March 2, 1956, from H. J. Jackson and wife, Martha Jackson.

(b) All the mineral and mining rights to land described in Warranty Deed, dated June 15, 1956, from Glenda Jackson and wife, Olen Jackson and Lee Wolfenbarger and wife, Mavis Wolfenbarger, excepting the following track:

"Beginning at an iron pin, corner with the lands of Birdie Lamb and Parham; thence N 55° 25' E, 458.90 feet with the line of Parham to an iron pin; thence with the remaining lands of Lee Wolfenbarger as follows: S 30° 15' E, 397.[illegible] feet to an iron pin; thence S 30° 31' E, 75.20 feet to an iron pin; thence S 59° 16' E, [illegible].63 feet to an iron pin; thence S 4[illegible]° 15' E, [illegible].14 feet to an iron pin; thence S 15° 41' E, 175.[illegible] feet to an iron pin; thence S 20° 32' E, 206.73 feet to an iron pin; thence S 43° 40' E,

*Figure 2.

[illegible]

(c) All the mineral and mining rights in land situated in Township [illegible] Range [illegible] West of the [illegible] Meridian and [illegible] Range [illegible] West of the [illegible] Meridian, Yukon Territory, excepting the following tracts:

Beginning at a point in the line of tract A of T. [illegible] Exploration and Mining Co. Fields and Quilliam [illegible] [illegible] [illegible]

Property held under purchase contracts pertaining [illegible] and [illegible] Kings

Name of Property Owner	Approximate Acreage
Frank J. Kinsella and wife, Mae Kinsella, and Mrs. Vera E. Trebough (widow)	[illegible].33 acres

Copies of the Warranty Deeds and Purchase Contracts are contained in Docket No. [illegible] and the descriptions therein are incorporated herein by reference.

V. The following parcels of land, containing [illegible] acres more or less, are hereby deleted from the land referred to and described in Amendment No. 1 and shown on Figure 2 attached hereto and made a part hereof. These parcels of land are further identified as follows:

Name of Property Owner	Approximate Acreage
Carl V. Davidson	86 acres
Elipse Cabbage	32 acres
B. E. Davidson	126 acres
Total	[illegible] acres

The Operator:

(a) Certifies that the deleted land has no known value for mineral production;

(b) Has, prior to the execution of this amendment, surrendered or otherwise disposed of all its interest, title, and equity in such land, and any minerals produced therefrom, including any option, lease or permit therein, without any consideration whatsoever, including future compensation, for such surrender or disposition, other than relief from the cost of maintaining such interest;

(c) Agrees that no benefit from such lands or any production of minerals therefrom will accrue to the Operator or any of its subsidiaries, directly or indirectly, during the period expiring 21 years from the date of this Amendment;

(d) Agrees that if the Operator or any of its subsidiaries acquires any interest, title, or equity in such land or any minerals produced therefrom, or derives any benefit therefrom, before the expiration of 31 years from the date of this contract, the land with respect to which such interest, title, or equity is acquired, and any minerals produced therefrom, shall be deemed subject to this contract and any amendments from the date that the Operator or its subsidiaries acquired such interest, title, or equity, or any benefit therefrom, until the expiration of 31 years from the date of the contract, or until the total rent payment prescribed by the Department without interest is fully repaid, whichever occurs first.

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

Executed in quintuplicate the day and year first above written.

THE UNITED STATES OF AMERICA

By George C. Gilmore
ACTING ~~DIRECTOR, OFFICE OF MINERALS~~
Exploration

THE NEW JERSEY ZINC COMPANY

By [signature]
VICE PRESIDENT

Title

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Audit's copy

EXPLORATION PROJECT CONTRACT
THE NEW JERSEY ZINC COMPANY
DOCKET NO. DMEA-4586

AMENDMENT NO. 4

It is agreed this 14th day of May, 1958, between the United States of America, acting through the Department of the Interior, Defense Minerals Exploration Administration, and The New Jersey Zinc Company, that Exploration Project Contract No. 14n-[illegible] (Docket No. DMEA-4586), dated March 29, 1957, as amended, is further amended effective April 1, 1958, as follows:

1. (a) Work under the Contract shall be suspended during the period beginning May 1, 1958, and ending not later than November 1, 1958.

(b) The Government will not contribute to any costs incurred by the Operator during the period of suspension or to any costs of rehabilitation or repair which in its opinion would not have occurred if there had 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 and any property in which the Government has an interest.

2. In Article 3 of the Contract, the period for completion is further extended from March 1, 1959, to July 1, 1959.

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

(a) the contract and all obligations of the parties thereunder, except as hereinafter otherwise

provided, shall be and are hereby terminated, as follows:

(i) Effective May 1, 1958, if the work has not been resumed on or before November 1, 1958;

(ii) Effective July 1, 1959, if the work is resumed on or before November 1, 1958, but is not completed on or before July 1, 1959.

(b) The Government will contribute only to the allowable costs of any work performed prior to the relevant effective date set forth under 3(a) above.

(c) The Operator shall promptly perform all winding-up and settlement actions provided for in the contract, including the rendering of the final report and final account.

(d) The Operator, as principal if the Operator is the producer, or as surety if the Operator is not the producer (for example, if the Operator either transfers or fails to retain its interest in the land), shall pay to the Government the royalty on production provided for in the contract, in the same manner and amount and for the full period provided for 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, and all rights of the Government as to reports (including preservation of Operator's records), audit, and recovery of any overpayment, are preserved.

(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 for in this Amendment No. 4.

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, the amount of any item designated as "maximum", or the fixed unit cost of any item of work.

Executed in quintuplicate the day and year first above written.

THE UNITED STATES OF AMERICA

By C. M. Mitchendorf
ADMINISTRATOR, NATIONAL RESERVE
Exploration Administration

THE NEW JERSEY ZINC COMPANY

By L. F. Johnson

Title VICE PRESIDENT

Auditor's copy

EXPLORATION PROJECT CONTRACT
THE NEW JERSEY ZINC COMPANY
DOCKET NO. DMEA-4306

AMENDMENT NO. 3

It is agreed this 24th day of March, 1958, between the United States of America, acting through the Department of the Interior, Defense Minerals Exploration Administration, and the New Jersey Zinc Company, that Exploration Project Contract No. ldm-8171 (Docket No. DMEA-4306), dated March 29, 1957, as amended, is further amended as follows:

1. In Article 3 of the Contract, the time for completion of the work is extended from July 1, 1958, to March 1, 1959.

2. In Article 8(b) of the Contract, as amended by paragraph 5 of Annex II, the period of 30 years is changed to 31 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, the amount of any item designated as "maximum", or the fixed unit cost of any item of work.

Executed in quintuplicate the day and year first above written.

THE UNITED STATES OF AMERICA

By C. Mitteisers
Contracting Officer, Defense Minerals
Exploration Administration

THE NEW JERSEY ZINC COMPANY

By R. E. Johnson
VICE PRESIDENT
Title

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EXPLORATION PROJECT CONTRACT
THE NEW JERSEY ZINC COMPANY
DOCKET NO. DMEA-4586

AMENDMENT NO. 2

It is agreed this 6th day of March, 1958, between the United States of America, acting through the Department of the Interior, Defense Minerals Exploration Administration, and The New Jersey Zinc Company, that Exploration Project Contract No. [illegible] (Docket No. DMEA-4586), dated March [illegible], 1957, as [illegible], is further amended as follows:

The following parcels of land, containing 285 acres more or less, are hereby deleted from the land referred to in the Contract, described in Image I:

That land described under 02 of Image I being the land described in the Contract and Agreement between Mrs. Forest Davidson, et al., and The New Jersey Zinc Company, dated February 15, 1956, and expiring February 15, 1958.

The Operator:

(a) Certifies that the deleted land has no known value for mineral production;

(b) Has, prior to the execution of this amendment, surrendered or otherwise disposed of all its interest, title, and equity in said land, and any minerals produced therefrom, including any option, lease or permit thereto, without any consideration whatsoever, including future compensation, for such surrender or disposition, other than relief from the cost of maintaining such interest;

(c) Agrees that no benefit from such lands or any production of minerals therefrom will accrue to the Operator or to any of its subsidiaries, directly or indirectly, during the period expiring 30 years from the date of this Contract;

Not to be recorded
see Property
per Mr. Schwab Agreement
6/4/58

(d) Agrees that if the Operator or any of its subsidiaries acquires any interest, title, or equity in and land or any minerals proposed hereunder, or claims any benefit therefrom, before the expiration of 25 years from the date of this Contract, the land with respect to which such interest, title, or equity is acquired, and the minerals pertaining thereto, shall be deemed subject to this Contract and any contribution from the date that the Operator or its subsidiaries acquired such interest, title, or equity, or any benefit therefrom, until the expiration of 25 years from the date of this Contract, or until the total has been contributed by the Government without interest in full repaid, whichever occurs first.

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

Executed in quadruplicate the day and year first above written.

THE UNITED STATES OF AMERICA

By C. M. Mitscher
Administrator, Bureau Reclamation
Reclamation Administration

THE NEW JERSEY ZINC COMPANY

By J. B. Bartlett

Title VICE PRESIDENT

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EXPLORATION PROJECT CONTRACT

THE NEW JERSEY ZINC COMPANY

Docket DMEA-4586

AMENDMENT No. 1

It is agreed this 2nd day of December, 1957, between the United States of American, acting through the Department of the Interior, Defense Minerals Exploration Administration, and The New Jersey Zinc Company, that exploration Contract Idm-E1071, (Docket No. DMEA-4586) dated March 29, 1957, be amended as follows:

In Annex I of the contract, there is added the following parcels of land, designated on Figure 2 of the contract (Map AX-TENN-105) as "Carl Davidson", Zilpha Cabbage" and "B. E. Davidson," and further identified as follows:

Name of Property Owner	Approximate Acreage
Carl V. Davidson	86 acres
Zilpha Cabbage	92 acres
B. E. Davidson	166 acres

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 fixed unit costs or any item designated as "maximum."

Executed in quintuplicate the day and year first above written.

THE NEW JERSEY ZINC COMPANY

By [signature]

Title VICE PRES. DIR.

THE UNITED STATES OF AMERICA

By [signature]
Executive Officer, DMEA
Field Team, Region V

MME Form 14
Sept. 1958

Contract No. Idm-E) 1071
~~xxxx~~ 14-23)

Docket No. DMEA) 4586
~~xxx~~ MME)

Date of Action December 17, 1959
Terminated Contract

DEPARTMENT OF THE INTERIOR
OFFICE OF MINERALS EXPLORATION

OBLIGATION DOCUMENT

To: Chief, Accounts Section, Finance Branch, Bureau of Mines

From: Director, Division of Operations Control and Statistics

Please enter the amounts shown below on the accounts of the Office of Minerals Exploration.

Name and Address of Contractor:

New Jersey Zinc Company
160 Front Street
New York 38, New York

Date of Contract	Region	State	Commodity
March 29, 1957	V	Tennessee	Zinc

	Reserve	Obligation
Prior Amount	0	052,975.00
Increase	0	0
Decrease	0	47.50
Revised Amount	0	52,927.50

Remarks:

cc: 800
210

43244

Contract No. Idm-E 1071

Docket No. 4586

DEPARTMENT OF THE INTERIOR

X Executed contract

DEFENSE MINERALS EXPLORATION ADMINISTRATION

TO: Chief, Finance Section, Budget and Finance Branch, Bureau of Mines

Please make the following entry on the records of the Defense Minerals Exploration Administration under the Strategic and Critical Minerals Exploration Program.

Date of Contract	Region	State	Commodity
March 29, 1957	V	Tennessee	Zinc

Name and Address of Operator: The New Jersey Zinc Company
160 Front Street
New York 38, New York

	Reserve	Obligation
Prior Amount	$52,975	0
Increase	0	$52,975
Decrease	52,975	0
Revised Amount	0	$52,975

Remarks:

ALLEN S. DAKAN

(Name)

Allen S. Dakan, Chief
Operations Control and
Statistics Division

(Title)

Date Delivered to Bureau of Mines, Washington 4/29/57

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MF-200
(Revised June 1954)

Docket No. DMEA 4586

Commodity Zinc

Contract No. Idm-E 1071

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

EXPLORATION PROJECT CONTRACT[1]

It is agreed this 29 MAR 1957 day of ....., 195...., between the United States of America, acting through the Department of the Interior, Defense Minerals Exploration Administration, hereinafter called the "Government," and[2] The New Jersey Zinc Company, a New Jersey Corporation, whose mailing address is 160 Front Street, New York 38, New York, 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 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 Tennessee, County of Grainger, and is described in Annex I.[3]

(b) The Operator represents and undertakes that:

(1) The Operator is the[4] owner and optionee of[5] See Annex I in the land, in possession and entitled to possession for all of the purposes of this contract, under and by virtue of a[6] See Annex I, [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: Interests of owners of tracts listed in Sections B and C of Annex I

(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: Consents to Lien of owners of optioned tracts are waived.

(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). See Annex I

ARTICLE 3. *The exploration project.*—The project is a search for indicated or undeveloped deposits of Zinc. The work to be performed is described in Exhibit "A." The Operator on or before 7-1-57 shall commence the work, and on or before July 1, 1958 (unless the Operator's obligation to prosecute the work is terminated—see Article 10) shall ~~either~~ have completed the work ~~or shall have incurred a sum not less than the estimated total allowable cost set forth in Exhibit "A"~~ See Article 13 and Annex II.

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 $105,950.00. The Government shall contribute 50 percent of the allowable costs as they are incurred in a total sum not in excess of $52,975.00: *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 ~~[illegible]~~ See Article 13 and Annex II

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 ~~X~~ 8. See Article 13 and Annex II.

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~~ 30 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 and Annex II**

(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. **See Article 13 and Annex II**

(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.*—
See Annex II attached hereto as a part hereof.

Executed in sextuplicate the day and year first above written.

THE UNITED STATES OF AMERICA

By C O Mitteudorf
Administrator, Defense Minerals
Exploration Administration

THE NEW JERSEY ZINC COMPANY
(Operator)

By Lindsay F. Johnson.

Title VICE PRESIDENT

I, R. A. Oberfell, certify that I am the Assistant secretary of the corporation named as Operator herein; that Lindsay F. Johnson who signed this contract on behalf of the Operator, was then Vice 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.

R. A. Oberfell

[CORPORATE SEAL]

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

EXPLORATION PROJECT CONTRACT
THE NEW JERSEY ZINC COMPANY
DOCKET NO. DMEA-4586

ANNEX I

The land referred to in Article 2 consists of approximately 716 acres in Grainger County, Tennessee, about 2½ miles northeast of Thorn Hill, Tennessee, which are controlled by the Operator as listed below. The Deed Books cited below are on file in the Register's Office of Grainger County, Tennessee. Copies of the Contracts cited below are contained in Docket No. DMEA-4586, and the land descriptions therein are incorporated herein by reference. All of the tracts of land referred to in this Annex I appear on the attached map entitled "The New Jersey Zinc Company, Cedar Springs Area, Rogersville, Tennessee--Figure 2" which shows the areas and the various types of property rights.

A. Land held in Fee Simple by Operator (totalling approximately 17.2 acres).

1. Approximately 12.9 acres described in Warranty Deed from Elum Coffey and wife, Martha Harville Coffey, to The New Jersey Zinc Company, dated April 23, 1955, and recorded in Deed Book 84, page 455.

2. Approximately 4.3 acres described in Warranty Deed from Carlie Lane and wife, Lois Lane, to The New Jersey Zinc Company, dated July 6, 1955, and recorded in Deed Book 85, page 14.

B. Land in which the Operator owns the Mineral and Mining Rights (totalling approximately 139 acres).

1. All the mineral and mining rights on approximately 139.4 acres described in a Warranty Deed from Carlie Lane and wife, Lois Lane, to The New Jersey Zinc Company, dated July 6, 1955, and recorded in Deed Book 85, page 14.

C. Lands on which the Operator has Right to Prospect for Minerals, plus Option to Purchase Mineral and Mining Rights (totalling approximately 560 acres).

1. Approximately 20 acres described in Contract and Agreement between Carl and Hattie Holt and The New Jersey Zinc Company, dated May 28, 1956, which expires May 28, 1959. The Holts acquired this land by deed from Margaret Shockley, dated March 20, 1934, and recorded in Deed Book 63, page 153.

2. Two tracts containing a total of approximately 285 acres described in Contract and Agreement between Mrs. Forest

Davidson, et al., and The New Jersey Zinc Company, dated February 15, 1956, which expires February 15, 1958. This agreement also grants to the Operator the right to purchase 40 acres of the surface. The present owners inherited this land from the late J. R. Davidson who had acquired title by the following deeds:

Acquired from	Date	Deed Book	Page
William Wolfe, et ux.	December 16, 1939	66	566
B. E. Davidson, et ux., et al.	April 19, 1933	60	592
Cecil Dalton	November 4, 1933	60	594
J. H. Davidson, et ux., et al.	March 21, 1931	59	561
Lacy E. Dalton, et ux.	March 10, 1924	54	100
J. Tandy Dalton, et ux.	April 4, 1918	48	195
J. H. Davidson, et ux.	July 20, 1910	38	573

3. Approximately 92 acres described in Contract and Agreement between Woodrow Davidson (single) and Louisiana Davidson (widow) and The New Jersey Zinc Company, dated August 27, 1952, which expires August 27, 1957. The Davidsons acquired this land under the Will of Colbert Lakins, probated August 2, 1926 and recorded in County Clerk's Office, Grainger County, Tennessee in Will Book 5, page 88.

4. Approximately 151.63 acres, more or less, described in Contract and Agreement between Robert and Cora Mallicoat and The New Jersey Zinc Company, dated January 28, 1956, which expires January 28, 1959. This Agreement also grants to the Operator the right to purchase 3½ acres of the surface. The Mallicoats acquired this land from Lacy E. Dalton, et al., by deeds, dated May 25, 1945, and recorded in Deed Book 74, page 213 and in Deed Book 79, page 148.

5. Approximately 12 acres described in Contract and Agreement between Nelson and Delta Dalton and The New Jersey Zinc Company, dated August 15, 1956, which expires August 15, 1959. This agreement also grants to the Operator the right to purchase the entire surface area. The Daltons acquired this land from Cornelius Harville, et ux., et al., by deed dated February 11, 1943, and recorded in Deed Book 72, page 567.

Excluded Land

The map referred to in this Annex I shows a tract outlined in blue color, marked "Area excluded from DMEA contract." This area has already been diamond drilled by the Operator, no work under the contract will be performed within its boundaries, and it is specifically excluded from the "land" referred to in Article 2 of this contract. The boundaries of this excluded tract are as follows:

> "BEGINNING at a point in the centre of the Cedar Springs road approximately 2400 feet northwest of the intersection of the Cedar Springs and Clinch Valley roads; thence N 28° 30' W, 425 feet to a point; thence S 61° 30' W, 1170 feet to a point; thence S 28° 30' E, 425 feet to a point, thence N 61° 30' E, 1170 feet to the BEGINNING, containing 11.4 acres, more or less."

Special Agreement Concerning Land

1. In the event the Operator or any subsidiary thereof at any time during the period expiring ten years from the date of this contract acquires any interest, title, or equity, in any lands contiguous to the premises described in this contract, it is agreed that such contiguous lands shall thereupon become subject to the provisions of this contract, and the parties hereto shall promptly execute amendments to this contract listing such contiguous lands as lands included in this contract.

2. It is further agreed that the Operator may, at any time before the expiration of sixty days following the conclusion or termination of exploration work performed pursuant to the terms of this contract, request the Government to delete from this contract such of the land described in the lease-option contracts listed in this Annex I (Section C above) or in any amendments thereto, as has no known value for mineral production. The Government will promptly prepare amendments removing the specified land from the contract, which amendments shall provide that the Operator:

(a) certifies the lands have no known value for mineral production;

(b) has, prior to the execution of the respective amendment, surrendered or otherwise disposed of all its interest, title, and equity in such land, and any minerals produced therefrom, including any option, lease, or permit thereto, without any consideration whatsoever, including future compensation, for such surrender or disposition, other than relief from the cost of maintaining such interest;

(c) agrees that no benefit from such land or any production of minerals therefrom will accrue to the Operator or to any of its subsidiaries, directly or indirectly, during the period expiring thirty years from the date of this contract; and

(d) agrees that if the Operator or any subsidiary thereof acquires any interest, title, or equity in such land or any minerals produced therefrom, or derives any benefit therefrom, before the expiration of thirty years from the date of this contract, the land with respect to which such interest, title, or equity is acquired, and any minerals produced therefrom, shall be deemed subject to this contract and any certification from the date that the Operator or any subsidiary thereof acquired such interest, title, or equity, or any benefit therefrom, until the expiration of thirty years from the date of this contract, or until the total net amount contributed by the Government without interest is fully repaid, whichever occurs first.

EXPLORATION PROJECT CONTRACT
THE NEW JERSEY ZINC COMPANY
DOCKET NO. DMEA-4586

ANNEX II

1. In Article 3, the words following the reference to Article 10 are deleted, and the following words are substituted: "Shall have completed the work."

2. In Article 6(a), that part of the last sentence in the first paragraph beginning after the semicolon is deleted.

3. Categories (2) through (7) of Article 6(a) are deleted.

4. In Article 6(e), the words "Article 9" are changed to "Article 8."

5. In Article 8(b): (1) the word "minerals" includes limestone and dolomite products produced in processing ore; and (2) the words "ten years" are changed to "thirty years."

6. The following clause is added to Article 8(c): Provided, however, That so long as the Operator operates smelting facilities as an integrated part of its business, the settlement made by the Operator's smelter to its mine or mill on the ore or concentrates subject to the Government's royalty shall be, for the purpose of calculating the royalty payable to the Government under this contract, on the same settlement basis that the said smelter makes to its independent suppliers under the schedule most favorable to any independent supplier, or should gross income from mining operations for percentage depletion purposes in Federal income tax determination show a greater value for ore or concentrate sales than that value which would result from applying the smelter schedule most favorable to an independent supplier, the greater value will be used as the basis for calculating royalty payable to the Government.

7. In addition to the costs of work estimated in Exhibit "A" by categories of actual costs, the costs of work requirements specified in Exhibit "A" as "Fixed Unit Costs" are allowable costs of the project. The Government will contribute to the fixed unit costs as work units are performed. A "Fixed Unit Cost" is an agreed price for each unit of work to be performed regardless of costs incurred by the Operator. Costs set forth in Exhibit "A" include all allowable costs of the work to be performed under the contract.

EXPLORATION PROJECT CONTRACT
THE NEW JERSEY ZINC COMPANY
DOCKET NO. DMEA-4586

EXHIBIT "A"

Description of the Work

1. The purpose of the project is to explore for ores of zinc by diamond drilling (and such churn drilling of overburden as may be required). Zinc ores in the Copper Ridge Belt occur in the Kingsport dolomites and limestones of the Knox group. In the area in which the project work is to be performed, the Kingsport formation outcrops near the crest of the Copper Ridge and dips southeasterly at an angle of about 35 degrees. The ore zones seem to trend roughly parallel to the strike of the beds.

2. A series of widely spaced dip fences shall be drilled, with holes spaced at between 100-and 300-foot intervals on the fences.

3. The space intervals between the various fences shall not be less than 600 feet, except with prior approval of the Government.

4. Drilling shall not be done at locations closer than 200 feet from property lines.

5. It is estimated that approximately 50 holes will be required, having an average depth of between 600 and 700 feet, with a maximum depth for any hole of approximately 1300 feet. Not more than 35,000 feet of drilling shall be performed: Provided, however, That the Operator may, upon the written approval of the Government, perform more than 35,000 feet of drilling so long as the total cost of all drilling work allowable under the contract is not exceeded.

6. The locations of the initial holes are tentatively shown on the attached map entitled "The New Jersey Zinc Company, Rogersville, Tennessee, Cedar Springs Area," but the actual locations, directions, inclinations, and depths of all holes are subject to prior Government approval.

7. All diamond drilling shall be done with AX size, or larger, coring bits, except where it is necessary to use an EX size bit in order to complete a hole. Drill holes shall be reamed and cased or cemented and redrilled as necessary.

All drill holes shall be logged and all drill core shall be made available to the Government for examination. All significantly mineralized core shall be split and one half

thereof shall be properly sampled and assayed for zinc. The remaining half of all significantly mineralized core samples shall be furnished to the Government upon request.

8. All assays shall be reported monthly to the Government, together with drill logs and proper plan maps and sections, showing the progress of the work and sample locations.

9. All work of drilling and sample preparation shall be properly supervised by competent engineers and geologists.

Estimated Cost of the Project

Actual Costs

Category (1) Independent Contracts

Overburden drilling and diamond drilling to 1000-foot depth, 30,000 feet @ $2.75/ft.	$82,500.00	
Diamond drilling from 1000-foot to 1500-foot depth, 5,000 feet @ $3.00/ft.	15,000.00	
The above rates include charges for reaming, cementing, water supply, casing, changing of locations, and all other charges by the diamond drill contractor.		
Neither the cost nor the value of the casing left in drill holes at the option of Operator will be accepted as a charge to the contract.		$97,500.00
Categories (2) through (7)	None	

Fixed Unit Costs (See Article 13 and Annex II of the Contract)

Incidental allowance for each foot of drilling completed, 35,000 feet @ $0.21/ft.	$ 7,350.00	
200 Samples assayed @ $1.00/each sample	200.00	
Core boxes - 500 @ $1.80/each box	900.00	8,450.00
Estimated Total Cost of the Project		$105,950.00
Government Participation @ 50%		$ 52,975.00

Contract No. Idm-E 1071

Docket No. 4586

DEPARTMENT OF THE INTERIOR

Approved contract

DEFENSE MINERALS EXPLORATION ADMINISTRATION

TO: Chief, Finance Section, Budget and Finance Branch, Bureau of Mines

Please make the following entry on the records of the Defense Minerals Exploration Administration under the Strategic and Critical Minerals Exploration Program.

Date of Contract	Region	State	Commodity
March 29, 1957	V	Tennessee	Zinc

Name and Address of Operator: The New Jersey Zinc Company
160 Front Street
New York 38, New York

	Reserve	Obligation
Prior Amount	0	0
Increase	$52,975	0
Decrease	0	0
Revised Amount	$52,975	0

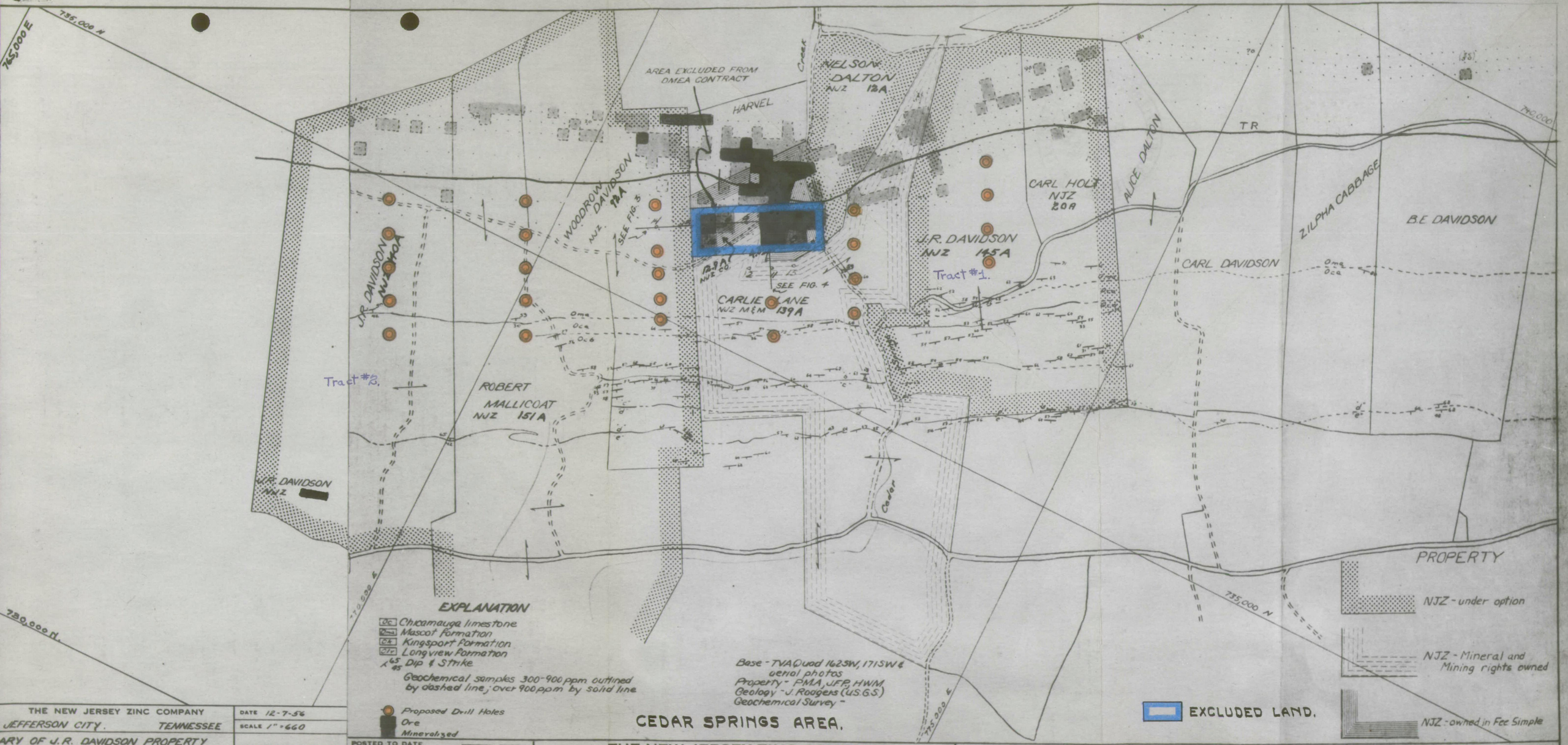
Remarks:

Allen S. Dakan, Chief
(Name)
Operations Control and Statistics Division
(Title)

Date Delivered to Bureau of Mines, Washington 3/29/57

989

FIGURE 8.


745,000 E
735,000 N
740,000
AREA EXCLUDED FROM DMEA CONTRACT
HARVEL
Creek
NELSON DALTON NJZ 12A
TR
ALICE DALTON
CARL HOLT NJZ 20A
ZILPHA CABBAGE
B.E DAVIDSON
WOODROW DAVIDSON NJZ 12A
SEE FIG. 3
J.R. DAVIDSON NJZ 14A
J.R. DAVIDSON NJZ 145A
Tract #1.
CARL DAVIDSON
Omq
Oca
SEE FIG. 4
CARLIE LANE NJZ M&M 139A
Tract #3.
ROBERT MALLICOAT NJZ 151A
J.R. DAVIDSON NJZ
Cedar
730,000 N
735,000 N
PROPERTY
NJZ - under option
NJZ - Mineral and Mining rights owned
NJZ - owned in Fee Simple
EXCLUDED LAND.
EXPLANATION
Oc Chickamauga limestone
Omq Mascot Formation
Ok Kingsport Formation
Ol Longview Formation
65/45 Dip & Strike
Geochemical samples 300-900 ppm outlined by dashed line; over 900 ppm by solid line
Proposed Drill Holes
Ore
Mineralized
Base - TVA Quad 162SW, 171SW & aerial photos
Property - PMA, JFP, HWM
Geology - J. Rodgers (U.S.G.S.)
Geochemical Survey -
CEDAR SPRINGS AREA.
THE NEW JERSEY ZINC COMPANY
JEFFERSON CITY. TENNESSEE
DATE 12-7-56
SCALE 1" = 660
ARY OF J.R. DAVIDSON PROPERTY
IDGE BELT SECTOR II AREA I
AX-TENN A 1227
TY AND MUST NOT BE USED EXCEPT IN CONNECTION WITH OUR WORK. ALL RIGHTS OF DESIGN BE RETURNED TO THE NEW JERSEY ZINC COMPANY.
POSTED TO DATE
3-31-55
1-56 FEW
THE NEW JERSEY ZINC COMPANY
ROGERSVILLE DMEA-4586. TENNESSEE
DRAWN SJL, JFP DATE 2-14-52
TRACED SCALE 1" = 660'
COPPER RIDGE BELT
SECTOR II SHEET 3SW
GRAINGER COUNTY, TENN.
FILE NO. AX-TENN 105

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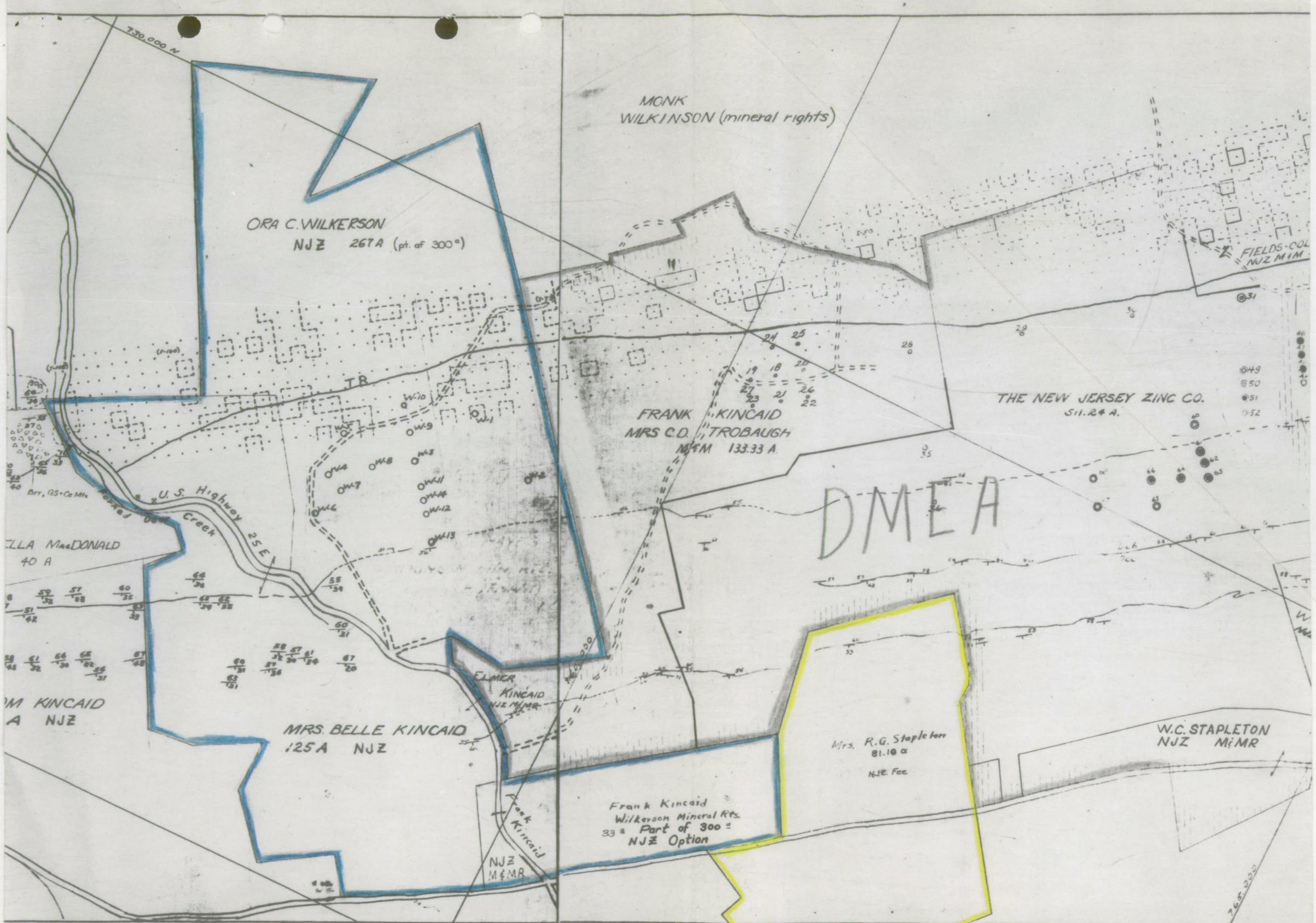
D M E A
RECEIVED APR 29 1957
DATE | INITIALS | CODE

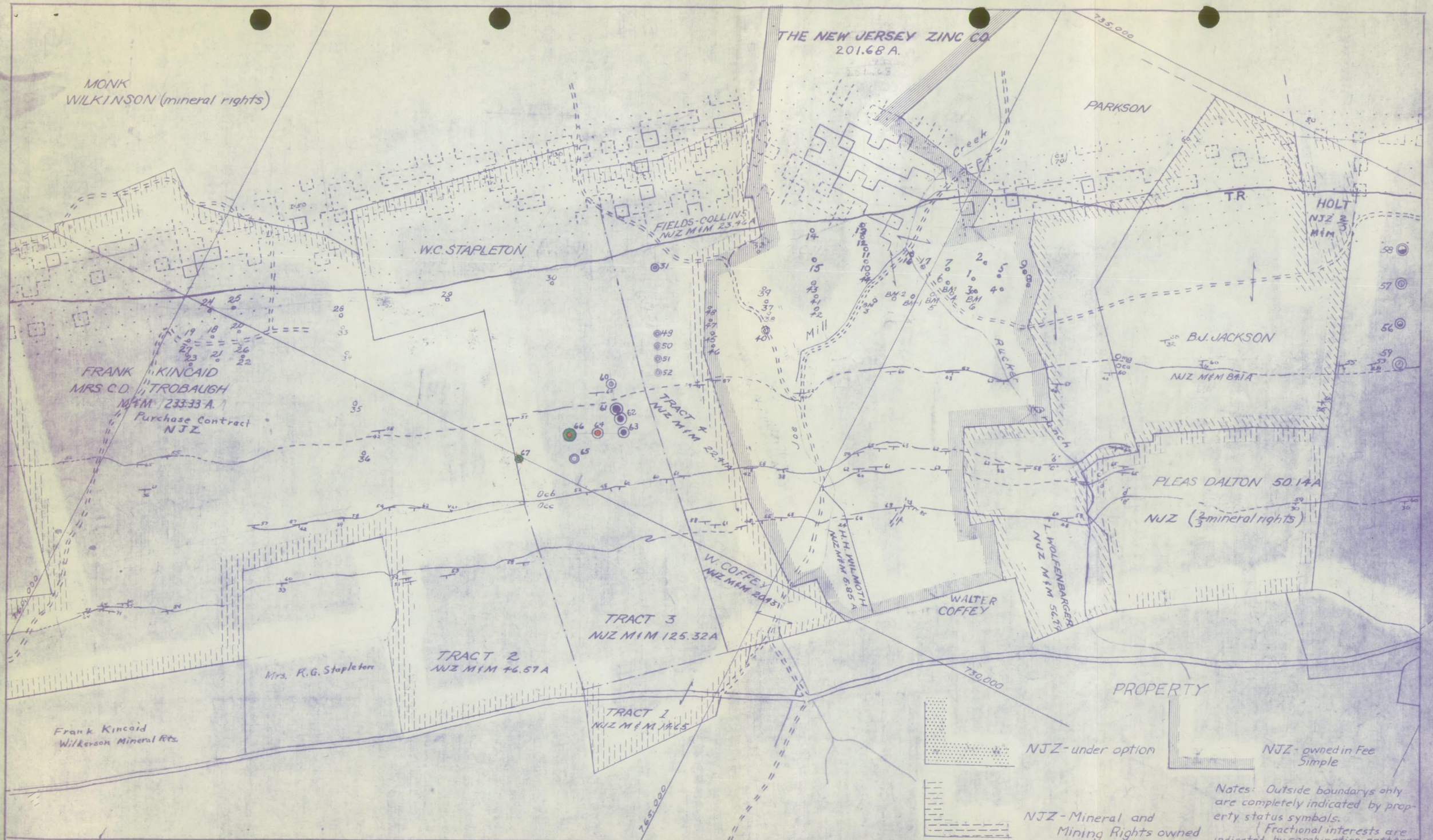


COPPER RIDGE BELT
SECTOR III SHEET 5SW

GRAINGER CO, TENN.
FILE NO. AX-TENN 587

POSTED TO DATE
5/30/53 4/6/61
1-56 TEW
10-56 "

THE NEW JERSEY ZINC COMPANY
ROGERSVILLE TENNESSEE



POSTED TO DATE			
5/30/53			
1-56 TEW			
10-56 "			

THE NEW JERSEY ZINC COMPANY
ROGERSVILLE TENNESSEE

DRAWN SJL, JFP DATE 2/17/53
TRACED SCALE 1" = 660'

COPPER RIDGE BELT
SECTOR II SHEET 4SW

GRAINGER COUNTY, TENN.
FILE NO. AX-TENN 106

EXTRA COPY
O. M. E.
RECEIVED JUL 27 1959

DATE	INITIALS	CODE