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-E936, Docket DMEA-4119 (zinc), dated March 30, 1956, with

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

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 Morristown Sector-Talbott Area located in Jefferson and Hamblen Counties, Tennessee, during the period March 30, 1956, through June 30, 1959.

In accordance with paragraph 4 of a Termination Agreement dated April 19, 1957, royalty is payable on all minerals produced from the land described in Article 2 of the contract, should the Operator or any affiliate or subsidiary hold or reacquire an interest in any of such land or production therefrom, for a period of 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. A Report of Review dated May 13, 1957, indicated accepted costs under the exploration contract amounting to $71,331.62 with the Government's contribution on a 50 percent basis being $35,665.81.

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. Accordingly, as of June 30, 1959, 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

March 20, 1962

E. D. Talbert, OME Auditor

Idm-8936 The New Jersey Zinc Company DMRA-4119

STATUS OF PROJECT, SCOPE OF REVIEW
AND REASONS THEREFOR

Paragraph 4 of the Termination Agreement provides that, should the Operator or an affiliate or subsidiary hold or reacquire an interest in any of the land under the contract or any production of minerals therefrom, the Operator shall pay, as principal if the producer or as surety if not the producer, a percentage royalty on all minerals mined therefrom. The minerals specifically include limestone and dolomite products resulting from the processing of ore.

At the time the contract was executed the Operator was in possession of the mineral rights in the land thereunder by virtue of options to purchase such rights in 21 tracts aggregating 2,244 acres. Amendments Nos. 1 and 3 added 21 tracts aggregating 1,185.6 acres. Generally, such options were for a period of one year with extension privileges. The usual requirement for execution of Consents to Lien was waived.

Exploration work under the contract was terminated on February 28, 1957, and the Operator allowed its options to expire. No ores were produced during the period of the exploration work and examinations of the property by field representatives through the period covered by this review disclosed no further activity on the property.

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

(1) No ores were produced during the period covered by this review;

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

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

80 d

APR 9 1962

Memorandum

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

From: Chief, Division of Field Operations, OME

Subject: MMA-4119 (Zinc)
The New Jersey Zinc Company
Morristown Baxter-Talbott Area
Jefferson and Hamblen Counties, Tennessee
Contract Ldm-2936

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

George C. Selfridge

Enclosure

GCSelfridge/hb (4/9/62)
cc to: Docket MMA-4119
Director's Reading File
CA&A Division
G. C. Selfridge
R. A. Laurence, Reg. IV, w/cy of Report of Royalty Review dtd 3/20/62 & orig. cy of memo dtd 4/9/62 to Chf., Div. of Field Operations from CA&A Division.
Avery Reed, UERM, Reg. IV, w/cy of en. item sent to Mr. Laurence.

APR 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: DMEA-4119 (Zinc)
The New Jersey Zinc Company
Morristown Sector-Talbott Area
Jefferson and Hamblen Counties, Tennessee
Contract Idm-8956

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 OME 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 4-9-62

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

DEFENSE MINERALS EXPLORATION ADMINISTRATION
CONTRACT ADMINISTRATION AND AUDIT DIVISION

REPORT OF REVIEW

I have reviewed the Monthly Reports of:

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

pertaining to Exploration Project Contract No. Lim-[illegible], DMEA No. 4119, including Amendment Nos. 1, 2, and 3, and a Termination Agreement dated April 19, 1957, for the months of May 1956 to February 1957, inclusive, covering a project for the exploration of zinc on property, known as the Morristown Sector, Talbott Area, located in Jefferson and Hamblen Counties, Tennessee.

My review included an examination of the Monthly Reports (Form MF-104) and supporting documents attached thereto, comparison of the costs claimed 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 following reasons:

(a) the Monthly Reports were supported by documentary proof of that portion ($61,945.70) of the costs which covered work performed at unit rates under independent contract (per summary attached);
(b) the balance ($9,385.92) of the costs incurred were under a contract provision for payment by the Government on the basis of fixed unit costs of work actually performed; and
(c) the administrative cost to the Government of an audit would be excessive in relation to the estimated amount of possible disallowances thereunder.

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

Total cost as billed by Contractor		$71,331.62
Exceptions:		
Prior to this review	$ -0-	
Herewith	-0-	-0-
Total Accepted Cost		$71,331.62

The contract calls for a 50 percent participation of exploration expenses by the United States Government. Therefore, payment to the contractor by the Government in the amount of Thirty-five thousand six hundred sixty-five and 81/100 Dollars

"$35,665.81"

is considered valid and proper, provided that the Regional Executive Officer, the Administrator, or other competent official has accepted or will accept the project as having otherwise met the terms of the contract.

E. B. Talbert

May 13, 1957 — E. B. Talbert, Auditor

Summary of N. J. Zinc Company's Incidens

[illegible]

Idn-2926 | **The New Jersey Zinc Company** | **DSSA-4119**

	Drilling Feet	Drilling Rate	Water Supply Feet	Water Supply Rate	Total Costs
Overburden	425	$2.00	251	$.05	
			10	.10	$ 863.55
NX to 1000'	95	2.00	41	.05	
			10	.10	293.05
BX to 1000'	231	2.00	117	.05	
			14	.10	469.25
BXWL to 1000'	20,287	2.00	10,121	.05	
			847	.10	41,164.75
AXWL to 1000'	950	2.00	-	-	1,900.00
NX 1000' - 1500'	58	2.50	58	.05	147.90
BXWL 1000' - 1500'	5,168	2.25	2,893	.05	11,637.45
AX 1000' - 1500'	88	2.25	-	-	198.00
	379	2.50	379	.05	966.45
AXWL 1000' - 1500'	119	2.25	-	-	267.75
BXWL over 1500'	1,269	2.50	1,180	.05	3,231.50
AX over 1500'	297	3.00	297	.05	905.85
Sub-totals*	29,306		16,218		$61,945.70
Hauling and Capping					152.75
Hole Survey					5.00
Total					$62,103.45

*Claimed by Operator and accepted by this review.

Mr. Robert A. Lawrence
Executive Officer
DMEA Field Team, Region V
Room 14, Post Office Building
Knoxville 2, Tennessee

14 MAY 1957

Re: Docket No. DMEA-4119 (Zinc)
The New Jersey Zinc Company
Jefferson and Hamblen Counties,
Tennessee
Contract No. IAm-2936

Dear Mr. Lawrence:

Enclosed are the original and two copies of a Report of Review, in lieu of a final audit, covering the referenced project. If you concur with the facts stated therein, the original and one copy of the report should be forwarded to the Certifying Officer and one copy should be retained in your files. If, for any reason, the report does not have your concurrence please return all copies to this Division.

The regional finance officer's file on this project, which was submitted to this Division by memorandum dated May 6, 1957, is being returned by registered mail with copy of this letter to Mrs. Helen R. Miller, Administrative Assistant, Electrotechnical Equipment Station, Norris, Tennessee.

Sincerely yours,

(Signed) E. D. Talbert

E. D. Talbert, Acting Chief
Contract Administration
and Audit Division

Enclosure

EDTalbert/wb
May 13, 1957

Copy to: Docket
Admr. Reading File
Helen R. Miller
Mr. Chambers

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF MINES
REGION V

ELECTROTECHNICAL
EXPERIMENT STATION

P. O. BOX 217
NORRIS, TENNESSEE

May 6, 1957

Memorandum

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

From: Administrative Assistant, Electrotechnical Experiment Station, Norris, Tennessee

Subject: Report of Review in Lieu of Final Audit

Reference is made to your recent letter to Mr. R. A. Laurence, Executive Officer, DMEA, Region V, Knoxville, Tennessee, requesting invoices of independent contracts attached to the Operator's Monthly Reports and Vouchers, Forms MF-104 and 104A, covering Contract Idm-E936, Docket No. DMEA-4119, The New Jersey Zinc Company.

We are enclosing herewith the complete file on the subject contract, requesting a report of review in lieu of final audit.

Helen R. Miller

Helen R. Miller

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

OFFICIAL FILE COPY
D M E A
RECEIVED MAY 8 1957

DATE	INITIALS	CODE
5-8	C	220
		800

REGISTERED MAIL

MAY - 3 1957

Mr. Robert A. Lawrence
Executive Officer
NOLA Field Area, Region V
Room 13 Post Office Building
Knoxville 2, Tennessee

Re: Docket No. DOLA-4129 (Xlum)
The New Jersey Zinc Co.
Talbot Area - Tennessee
Contract No. [illegible]

Dear Mr. Lawrence:

By memorandum dated May 1, 1957, you have confirmed the work performed under the subjected contract and advised that a Report of Review in lieu of a final audit is in order.

As this contract provides, in part, for Government contribution on the basis of actual costs incurred, the audit review must include an consideration of the documents substantiating such costs. Therefore, it will be appreciated if arrangements are made with the regional finance officer to forward to this Division the copies of the Subcontract contractor's invoices, as attached to the originals of Form AC-361 submitted by the Operator. No other documents will be necessary as the copies of Form AC-361 submitted to the Washington office were accompanied by other required supporting data.

The copies of the invoices will be returned promptly after consideration.

Sincerely yours,

(Signed) J. L. Chambers

Jay L. Chambers, Chief
Contract Administration
and Audit Division

KDTalbert/vb
May 3, 1957

Copy to: Docket
Adm. Reading File
Helen R. Miller
Mr. Chambers
Mr. Talbert

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION
ROOM 13 POST OFFICE BLDG.
KNOXVILLE 2, TENN.

May 1, 1957

OFFICIAL FILE COPY
DMEA
RECEIVED MAY 3 1957

DATE	INITIALS	CODE
		220
		800

Memorandum

To: Jay L. Chambers, Chief Contract Administration and Audit Division - DMEA

From: Executive Officer, DMEA - Region V - Knoxville, Tenn.

Subject: Termination of DMEA-4119, Idm-E936 (zinc)
The New Jersey Zinc Co., Talbot Area - Tennessee

Work under the subject contract was terminated February 28, 1957. The termination agreement has been fully executed, and an acceptable Operator's final report has been received.

The following units of work have been acceptably performed, as verified by our field examiners:

Drilling, 0 to 1000 ft depth,.....21,988 ft.
Drilling, 1001 to 1500 ft ",..... 5,752 ft.
Drilling, over 1500 ft ",..... 1,566 ft.

Incidental services to drilling 29,306 ft
Samples assayed ..... 8 samples

Therefore, a Report of Review is now in order.

Robert A. Laurence

Robert A. Laurence

500

APR 26 1957

Mr. Robert A. Laurence
Executive Officer
DMEA Field Team, Region V
Room 13, Post Office Bldg.
Knoxville 2, Tennessee

Re: Docket No. DMEA-4119 (Zinc)
The New Jersey Zinc Company
Talbot Area
Jefferson and Hamblen Counties,
Tennessee
Contract No. Idn-5936

Dear Mr. Laurence:

It is noted that final payment on the cited project was made prematurely.

Final payments, or reasonable portions thereof, should be retained until receipt of the Operator's Final Report and the release of the Government's Final Audit or Report of Review. This should apply to all contracts.

Sincerely yours,

George C. Selfridge

Chairman, Operating Committee

WRGriswold/er 4/24/57
Copy to: Docket
Admr & File
Op. Committee
Mr. Bishop, USBM
Mr. Kiilsgaard, USGS
Mr. Jay Chambers, DMEA
Chron.

APPROVED:

Frank D. Lamb
Director, Bureau of Mines

W. P. Williams
Director, Geological Survey

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- 58

OPERATOR'S MONTHLY REPORT AND VOUCHER

Month of February 195 7 Docket No. DMEA 4119 Contract No. E 936

Operator's Name The New Jersey Zinc Company Minerals Zinc

Address Jefferson City, Tennessee

Contract Amount, $ 156,250.00 Government Participation: 50% Amount, $ 78,125.00

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	4,411.50	57,534.20	61,945.70			
Bulldozing						
Crosscutting						
Drifting						
(2) Labor and Supervision:						
Labor, Supervision	692.16	8,685.76	9,377.92			
Technical Services						
(3) Operating Mat'ls. and Supplies:						
Timber						
Explosives						
Pipe						
Track						
(4) Operating Equipment:						
Rental						
Purchase						
Depreciation						
(5) Initial Rehabilitation and Repairs						
(6) New Bldgs., Improvements, etc.						
(7) Miscellaneous:						
Repairs to Equipment						
Sampling and Analysis	-	8.00	8.00			
Payroll Taxes						
Liability Insurance						
(8) Contingencies (specify):						
TOTALS	5103.66	66,227.96	71,331.62	5103.66	66,227.96	71,331.62

RECEIVED MAR 29 1957 D.M.E.A.

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

Date 3/1/57 *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:

$ 2551.83

Signature Helen R. Miller (Authorized Certifying Officer)

Date MAR 27 1957 Vou. No. 155

(See other side)

10

2551.83

(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-936 in accordance with the terms of the contract.

Signature W. J. Lynch Title MINING ENGINEER U. S. BUREAU OF MINES Date MAR 26 1957

APPROVAL BY DMEA EXECUTIVE OFFICER OR ALTERNATE:

Signature Robert A. Lawrence Title EXECUTIVE OFFICER DMEA REGION V Date MAR 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

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION

RECEIVED MAR 29 1957 D.M.E.A.

OPERATOR'S UNIT COST AND PROGRESS REPORT

Month of February 195 7 Docket No. DMEA 4119 Contract No. E 936

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.	3642.00	1821	44,590.60	21,988	2.0279	48,000	2.16
Core 1000-1500	"	769.50	342	13,217.75	5,752	2.2979	10,000	2.66
Churn 1500-2000	"		-	4,137.35	1,566	2.642	2,000	3.16
Auger								
Stripping								
Assays	Ea.	- -	-	8.00	8	1.00	450	1.00
Trenching								
Test Pits								
Roads and Trails								
Supervisory & Tech. Services	Ft.	692.16	2163	9,377.92	29,306	0.32	60,000	0.32
TOTAL DISTRIBUTED COSTS		5103.66		71,331.62				TOTAL COSTS AUTHORIZED BY CONTRACT
Operating Equipment Purchased								
Initial Rehabilitation and Repairs								
New Buildings, Improvements, etc.								
TOTAL COSTS		5103.66		71,331.62				

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 Mar. 1, 1957 Operator The New Jersey Zinc Co.

Per [signature] Title Asst. to the Supt.

REMARKS: This report includes drill holes T-57 and T-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)

Helmuth Loeser Jr.
GEOLOGIST, USGS
MARCH 26, 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

Morristown Sector - Talbott Area

DMEA Docket No. 4119

Contract No. E 936

Drilling in the subject area was terminated on February 22, 1957 upon the completion of holes T-57 and T-58.

Details of Drilling

Hole T-57 - C. E. Goodman property

Objective: Eleventh hole on the 1/2 mile face centered grid, testing the area downdip from known mineralization.

Results:

0- 3	- - - Overburden
3-465	- - - Mascot fm.
465-676	- - - Upper Kingsport
676	- - - 28 Bed
676-782	- - - Lower Kingsport
782-821	- - - (Bottom) Longview fm.

Comments: The section below the 28 bed was 27% dolomitized. No mineralization was encountered.

Hole T-58 - L. B. Dearing property

Objective: Twelfth hole on the 1/2 mile face centered grid.

Results:

0- 8	- - - Overburden
8-974	- - - Mascot fm.
974-1202	- - Upper Kingsport
1202	- - 28 Bed
1202-1300	- -- Lower Kingsport
1216-1218	- - 2' - Estimated 2% Zn
1300-1342	- - (Bottom) Longview fm.

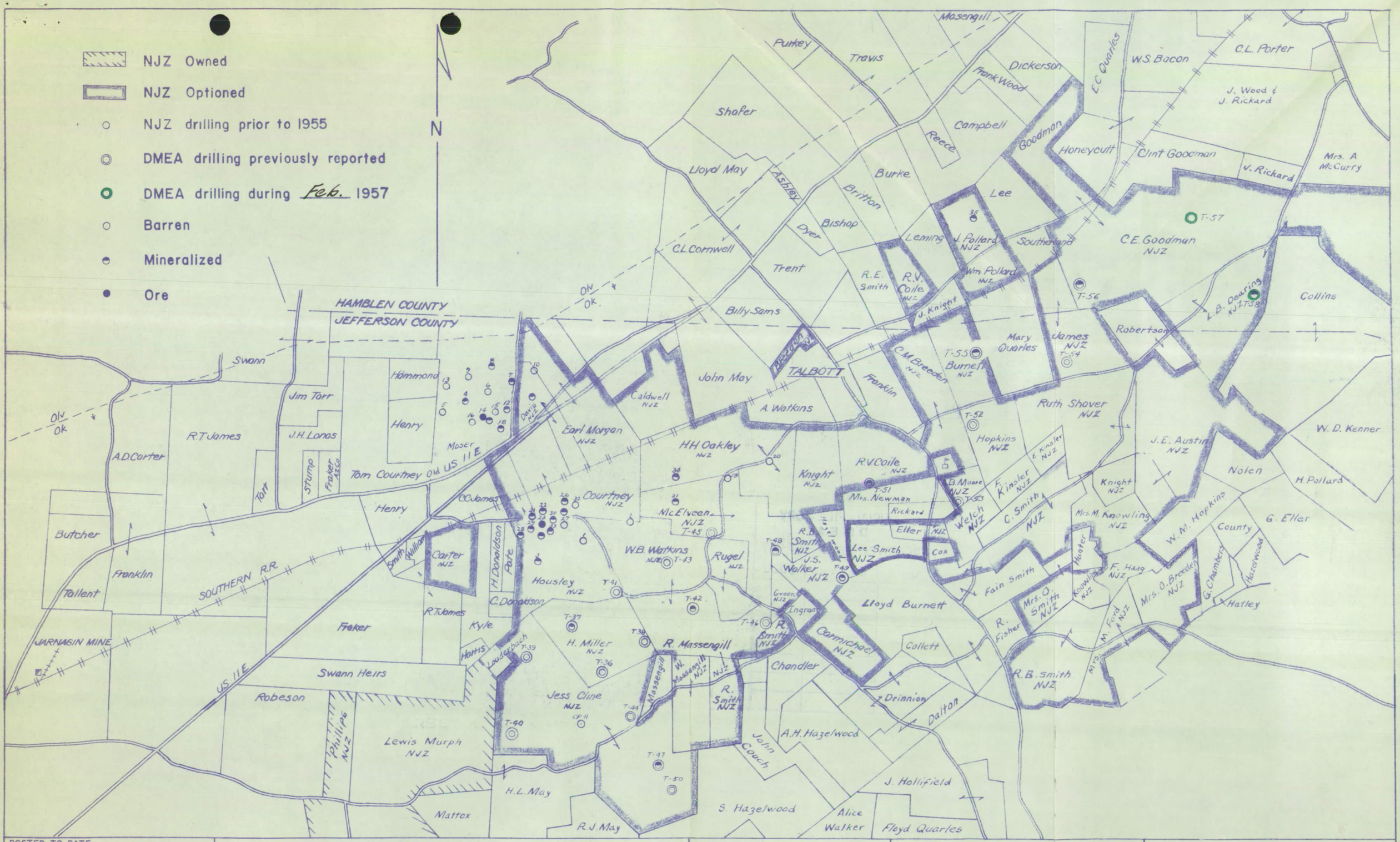
Comments: The section below the 28 bed was 100% dolomitized. The dolomitization and brecciation in the lower Kingsport is similar to that encountered in hole T-56. Ground preparation in this hole appeared good, but only one strong shine of sphalerite was cut.

OFFICIAL FILE COPY
DMEA
RECEIVED MAR 29 1957

DATE	INITIALS	CODE

The regional office of the DMEA has been advised of our desire to terminate the subject contract. A report on the Talbott project is in preparation.

J.W.P.
J. W. Phillips/jf



POSTED TO DATE 11-1-56	THE NEW JERSEY ZINC COMPANY JEFFERSON CITY TENNESSEE	DRAWN NJZ DATE 6/56 TRACED JWP SCALE 1"=2000'	PROPERTY MAP MORRISTOWN SECTOR - TALBOTT AREA
			JEFFERSON & HAMBLEN Cos., TENN FILE NO. AX - TENN - B 247a

OFFICIAL FILE COPY
DMEA
RECEIVED MAR 29 1957

DATE	INITIALS	CODE

Form M1-104 (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- 49

OPERATOR'S MONTHLY REPORT AND VOUCHER

Month of January, 1957 Docket No. DMEA 4119 Contract No. E 936

Operator's Name The New Jersey Zinc Company Minerals Zinc

Address Jefferson City, Tennessee

Contract Amount, $ 156,250.00 Government Participation: 50 % Amount, $ 78,125.00

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	7236.70	50,297.50	57,534.20			
Bulldozing						
Crosscutting						
Drifting						
(2) Labor and Supervision:						
Labor						
Supervision	1132.16	7,553.60	8,685.76			
Technical Services						
(3) Operating Mat'ls. and Supplies:						
Timber						
Explosives						
Pipe						
Track						
(4) Operating Equipment:						
Rental						
Purchase						
Depreciation						
(5) Initial Rehabilitation and Repairs						
(6) New Bldgs., Improvements, etc.						
(7) Miscellaneous:						
Repairs to Equipment						
Sampling and Analysis	-	8.00	8.00			
Payroll Taxes						
Liability Insurance						
(8) Contingencies (specify):						
TOTALS	8,368.86	57,859.10	66,227.96	8,368.86	57,859.10	66,227.96

RECEIVED FEB 21 1957 D.M.E.A.

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

Date 2/1/57 *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:

$ 4184.43

Signature Helen R. Mulin
(Authorized Certifying Officer)

Date FEB 19 1957 Vou. No. 134
(See other side)

4184.43

Form MF-104A
(April 1952)

Budget Bureau No. 42-R1151.2

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION

RECEIVED FEB 21 1957 D.M.E.A.

OPERATOR'S UNIT COST AND PROGRESS REPORT

Month of January 195 7 Docket No. DMEA 4119 Contract No. E-936

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	Unit Costs
Drifting								
Crosscutting								
Raising								
Shafts								
Winzes								
Drilling: Core 0-1000	Ft.	6974.50	3,424	40,948.60	20,167	2.030	48,000	2.16
Churn 1000-1500	"	262.20	114	12,448.25	5,410	2.300	10,000	2.66
Auger 1500-2000	"	- -	- -	4,137.35	1,566	2.642	2,000	3.16
Stripping								
Trenching Assays	Ea.	- -	- -	8.00	8	1.00	450	1.00
Test Pits								
Roads and Trails								
Supervisory & Technical Services	Ft.	1132.16	3,538	8,685.76	27,143	0.32	60,000	0.32
TOTAL DISTRIBUTED COSTS		8368.86		66,227.96				TOTAL COSTS AUTHORIZED BY CONTRACT
Operating Equipment Purchased								
Initial Rehabilitation and Repairs								
New Buildings, Improvements, etc.								
TOTAL COSTS		8368.86		66,227.96				

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 2/1/57 Operator The New Jersey Zinc Co.

Per [signature] Title Asst. to the 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.

REMARKS: This report includes drill holes T-53, T-54, T-55 and T-56

(Instructions on reverse)

(For Government use only)

[signature]

GEOLOGIST, U. S. G. S.

FEB 13 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

Morristown Sector - Talbott Area

DMEA Docket No. 4119 - Contract No. E-936

Two Longyear drills operated in the subject area during the month. Holes T-53, T-54, T-55 and T-56 were completed.

Details of Drilling

Hole T-53 - A. B. Moore property

Coordinates: 22,726.18 N; 34,136.13 E
Elevation: 1270.26

Objective: Seventh hole on the 1/2 mile face centered grid, testing the area downdip from known mineralization.

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DMEA
RECEIVED FEB 21 1957

DATE	INITIALS	CODE

Results:

0- 11 - - - Overburden
11-759 - - - Mascot fm.
759-968 - - - Upper Kingsport
968 - - - 28 bed
968-1075 - - Lower Kingsport
1070 - - "S" sandgrains
1075-1114 - - (Bottom) Longview fm.

Comments: The section below the 28 bed was 27% dolomitized. No mineralization was encountered.

Hole T-54 - Sam James property

Coordinates: 25,997.41 N; 36,660.49 E
Elevation: 1325.59

Objective: Eighth hole on the 1/2 mile face centered grid, testing the area down dip from known mineralization.

Results:

0- 9 - - - Overburden
9-534 - - - Mascot fm.
534-739 - - - Upper Kingsport
739 - - - 28 Bed
739-843 - - - Lower Kingsport
838 - - - "S" sandgrains
843-894 - - - (Bottom) Longview fm.

Comments: The section below the 28 bed was 37% dolomitized. No mineralization was encountered.

Hole T-55 - J. Q. Burnett property

Objective: Ninth hole on the 1/2 mile face centered grid, testing the area down dip from known mineralization.

Results:

0- 44	Overburden
44-383	Mascot fm.
383-588	Upper Kingsport
565-566	Shine of sphalerite
588	28 Bed
589-590	Shine of sphalerite
588-681	Lower Kingsport
666-669	Disseminated traces of sphalerite
676	"S" sandgrains
681-731	(Bottom) Longview fm.

Comments: The section below the 28 bed was 60% dolomitized. The mineralization, though weak, is encouraging since this hole is in the vicinity of T-35 which encountered 12' of 2-2.5% zinc.

Hole T-56 - C. E. Goodman property

Objective: Tenth hole on the 1/2 mile face centered grid, testing the area down dip from known mineralization.

Results:

0- 30	Overburden
30-438	Mascot fm.
438-653	Upper Kingsport
653	28 Bed
653-756	Lower Kingsport
754	"S" sandgrains
714-740	Scattered traces of sphalerite
756-799	(Bottom) Longview fm.
795	Trace of sphalerite

Comments: The section below the 28 bed is 97% dolomitized. The strong dolomitization and brecciation in the favorable horizon makes this hole comparable with T-44 and T-47.

Two holes are currently in progress:

Hole No.	Property
T-57	C. E. Goodman
T-58	L. B. Dearing

J. W. Phillips/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- 44

OPERATOR'S MONTHLY REPORT AND VOUCHER

Month of December 6 195 Docket No. DMEA 4119 Contract No. E-936

Operator's Name The New Jersey Zinc Company Minerals Zinc

Address Jefferson City, Tennessee

Contract Amount, $ 156,250.00 Government Participation: 50 % Amount, $ 78,125.00

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	6,173.50	44,124.00	50,297.50			
Bulldozing						
Crosscutting						
Drifting						
(2) Labor and Supervision:						
Labor	912.64	6,640.96	7,553.60			
Supervision						
Technical Services						
(3) Operating Mat'ls. and Supplies:						
Timber						
Explosives						
Pipe						
Track						
(4) Operating Equipment:						
Rental						
Purchase						
Depreciation						
(5) Initial Rehabilitation and Repairs						
(6) New Bldgs., Improvements, etc.						
(7) Miscellaneous:						
Repairs to Equipment	-					
Sampling and Analysis		8.00	8.00			
Payroll Taxes						
Liability Insurance						
(8) Contingencies (specify):						
TOTALS	7,086.14	50,772.96	57,859.10	7086.14	50 772.96	57 859.10

RECEIVED FEB 8 1957 D.M.E.A.

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

Date Jan. 1, 1957 *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:

$ 3543.07

Signature Helen R. Miller
(Authorized Certifying Officer)

Date FEB 6 1957 Vou. No. 117
(See other side)

8

3543.07

(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-936 in accordance with the terms of the contract.

Signature S. C. Bergman Title GEOLOGIST, U. S. G. S. Date JAN 29 1957

APPROVAL BY DMEA EXECUTIVE OFFICER OR ALTERNATE:

Signature [illegible] Title ACTING EXECUTIVE OFFICER DMEA - REGION V Date JAN 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 MF-104A
(April 1952)

Budget Bureau No. 42-R1151.2

RECEIVED JAN 8 1957 D.M.E.A.

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

Month of December 1956 Docket No. DMEA 4119 Contract No. E-936

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.	3,774.00	1862	33,974.10	16,743	2,029	48,000	2.16
Churn 1000-1500	"	1,150.00	500	12,186.05	5,296	2.300	10,000	2.66
Auger 1500-2000	"	1,249.50	490	4,137.35	1,566	2.642	2,000	3.16
Stripping								
Trenching Assays	Ea.	- -	--	8.00	8	1.00	450	1.00
Test Pits								
Roads and Trails								
Supervisory & Technical	Ft.	912.64	2852	7,553.60	23,605	0.32	60,000	0.32
TOTAL DISTRIBUTED COSTS		7,086.14		57,859.10				TOTAL COSTS AUTHORIZED BY CONTRACT
Operating Equipment Purchased								
Initial Rehabilitation and Repairs								
New Buildings, Improvements, etc.								
TOTAL COSTS		7,086.14		57,859.10				

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 Jan 4, 1957 Operator The New Jersey Zinc Co.

Per A. Hoagland Title Asst. to the Supt.

REMARKS: This report includes drill holes T-50 and T-52

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

RECEIVED FEB 8 1957 D.M.E.A.

Morristown Sector - Talbott Area

DMEA Docket No. 4119 - Contract No. E 936

Two Longyear drills operated in the subject area during the month. Holes T-50 and T-52 were completed.

Details of Drilling

Hole T-50 - J. T. Clins property

Coordinates: 16,165.32 N; 27,265.14 E
Elevation: 1,387.77

Results

0- 54	- - - Overburden
54- 264	- - - Kingsport fm.
264- 463	- - - Longview fm.
463-1061	- - - Chepultepec fm.
1061-1072	- - - Koppick Knob Fault zone
1072-1620	- - - Mascot fm.
1620-1849	- - - Upper Kingsport
1849	- - - 28 Bed
1849-1920	- - - Lower Kingsport
1917	- - - "S" sandgrains
1920-1990	(Bottom) Longview fm.

Comments: The section below the 28 bed was 53% dolomitized. No mineralization was encountered.

Hole T-52 - Henry Hopkins property

Coordinates: 24,565.25 N; 34,568.82 E
Elevation: 1,300.86

Results

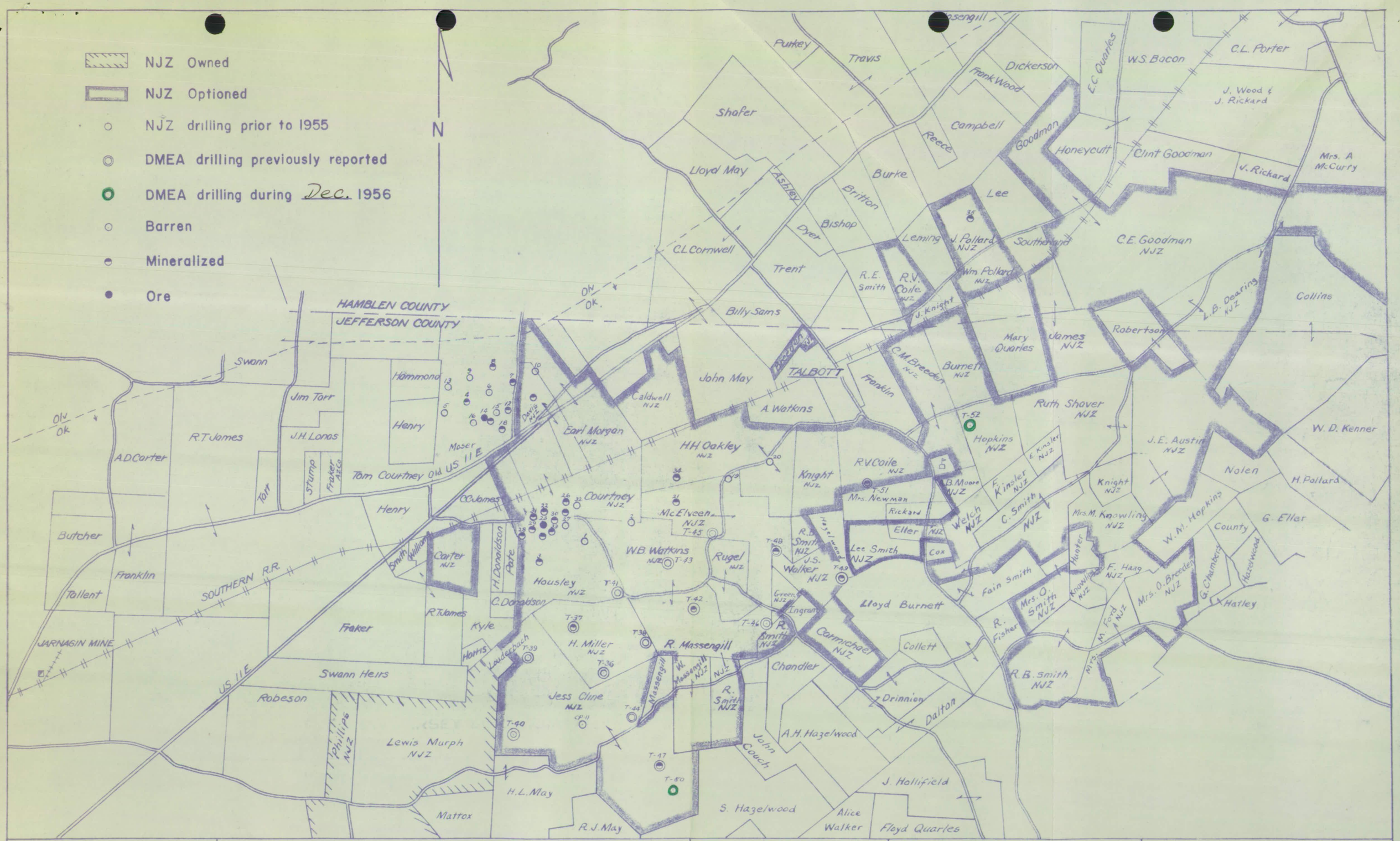
0- 16	- - - Overburden
16-510	- - - Mascot fm.
510-714	- - - Upper Kingsport
714	- - - 28 Bed
714-822	- - - Lower Kingsport
816	- - - "S" sandgrains
822-862	(Bottom) Longview fm.

Comments: The section below the 28 bed was 36% dolomitized. No mineralization was encountered.

Two holes are currently in progress:

Hole No.	Property
T-53	A. B. Moore
T-54	Sam James

J. W. Phillips/jf



POSTED TO DATE 11-1-56	THE NEW JERSEY ZINC COMPANY JEFFERSON CITY TENNESSEE	DRAWN NJZ DATE 6/56 TRACED JWP SCALE 1"=2000'	PROPERTY MAP MORRISTOWN SECTOR - TALBOTT AREA
			JEFFERSON & HAMBLEN Cos., TENN FILE NO. AX - TENN - B 247a

RECEIVED
FEB 8 1957
D.M.E.A.

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-

OPERATOR'S MONTHLY REPORT AND VOUCHER

Month of November, 1956 Docket No. DMEA 4119 Contract No. E 936
Operator's Name The New Jersey Zinc Company Minerals Zinc
Address Jefferson City, Tennessee
Contract Amount, $ 156,250.00 Government Participation: 50 % Amount, $ 78,125.00

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	1,850.10	42,273.90	44,124.00			
Bulldozing						
Crosscutting						
Drifting						
(2) Labor and Supervision:						
Labor						
Supervision	281.92	6,359.04	6,640.96			
Technical Services						
(3) Operating Mat'ls. and Supplies:						
Timber						
Explosives						
Pipe						
Track						
(4) Operating Equipment:						
Rental						
Purchase						
Depreciation						
(5) Initial Rehabilitation and Repairs						
(6) New Bldgs., Improvements, etc.						
(7) Miscellaneous:						
Repairs to Equipment						
Sampling and Analysis	8.00	-	8.00			
Payroll Taxes						
Liability Insurance						
(8) Contingencies (specify):						
TOTALS	2,140.02	48,632.94	50,772.96	2140.02	48632.94	50772.96

RECEIVED JAN 7 1957 D.M.E.A.

I certify that the above bill is correct and just and that payment therefor has not been received.
Date Dec. 1, 1956 *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:
$ 1070.01
Signature Helen R. Mullin
(Authorized Certifying Officer)
Date JAN 4 1957 Vou. No. 98
(See other side)

1070.01

(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-936 in accordance with the terms of the contract.

Signature [illegible] Title GEOLOGIST, U. S. G. S. Date DEC 26 1956

APPROVAL BY DMEA EXECUTIVE OFFICER OR ALTERNATE:

Signature [illegible] Title ACTING EXECUTIVE OFFICER DMEA REGION V Date DEC 27 1956

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 JAN 7 1957 D.M.E.A.

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

Month of November 1956 Docket No. DMEA 4119 Contract No. E 936
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	1,850.10	881	30,200.10	14,881	2,029	48,000	2.16
1000-1500	ft	-	-	11,035.25	4,796	2.300	10,000	2.66
1500-2000	ft	-	-	2,887.85	1,076	2.684	2,000	3.16
Stripping								
Assays	ea	8.00	8	8.00	8	1.00	450	1.00
Test Pits								
Roads and Trails								
Supervisory & Technical	ft	281.92	881	6,640.96	20,753	0.32	60,000	0.32
TOTAL DISTRIBUTED COSTS		2,140.02		50,772.16				TOTAL COSTS AUTHORIZED BY CONTRACT
Operating Equipment Purchased								
Initial Rehabilitation and Repairs								
New Buildings, Improvements, etc.								
TOTAL COSTS		2,140.02		50,772.16				

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. 1, 1956 Operator The New Jersey Zinc Co.

Per [signature] Title Asst. to the Supt.

REMARKS: This report includes drill hole T-51. Assays reported for holes T-47, T-48 and T-51

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

Morristown Sector - Talbott Area

DMEA Docket No. 4119 - Contract No. E-936

RECEIVED JAN 2 1957 DMEA

Two Longyear drills operated in the subject area during the month. Hole T-51 was completed. 2246 feet were drilled.

Details of Drilling

Hole T-51 - R. V. Coile property

Coordinates: 23,204.97 N; 32,210.98 E
Elevation: 1,265.01

Objective: Fifth hole on the 1/2 mile face centered grid testing the area down dip from known mineralization.

Results:

0- 10 - - Overburden
10-595 - - Mascot fm.
595-750 - - Upper Kingsport
750 - - 28 Bed
750-851 - - Lower Kingsport
847 - - "S" sandgrains
851-881 - - (Bottom) Longview fm.

The following mineralization was encountered:

732-735 - 3' - Scattered traces of sphalerite
763-767 - 4' - " " " "
863-867 - 4' - 2.44% Zn

Comments: The section below the 28 bed was 52% dolomitized.

Two holes are currently in progress:

Hole No.	Property
T-50	J. T. Cline
T-52	Henry Hopkins

Assays for holes T-47 and T-48 are as follows:

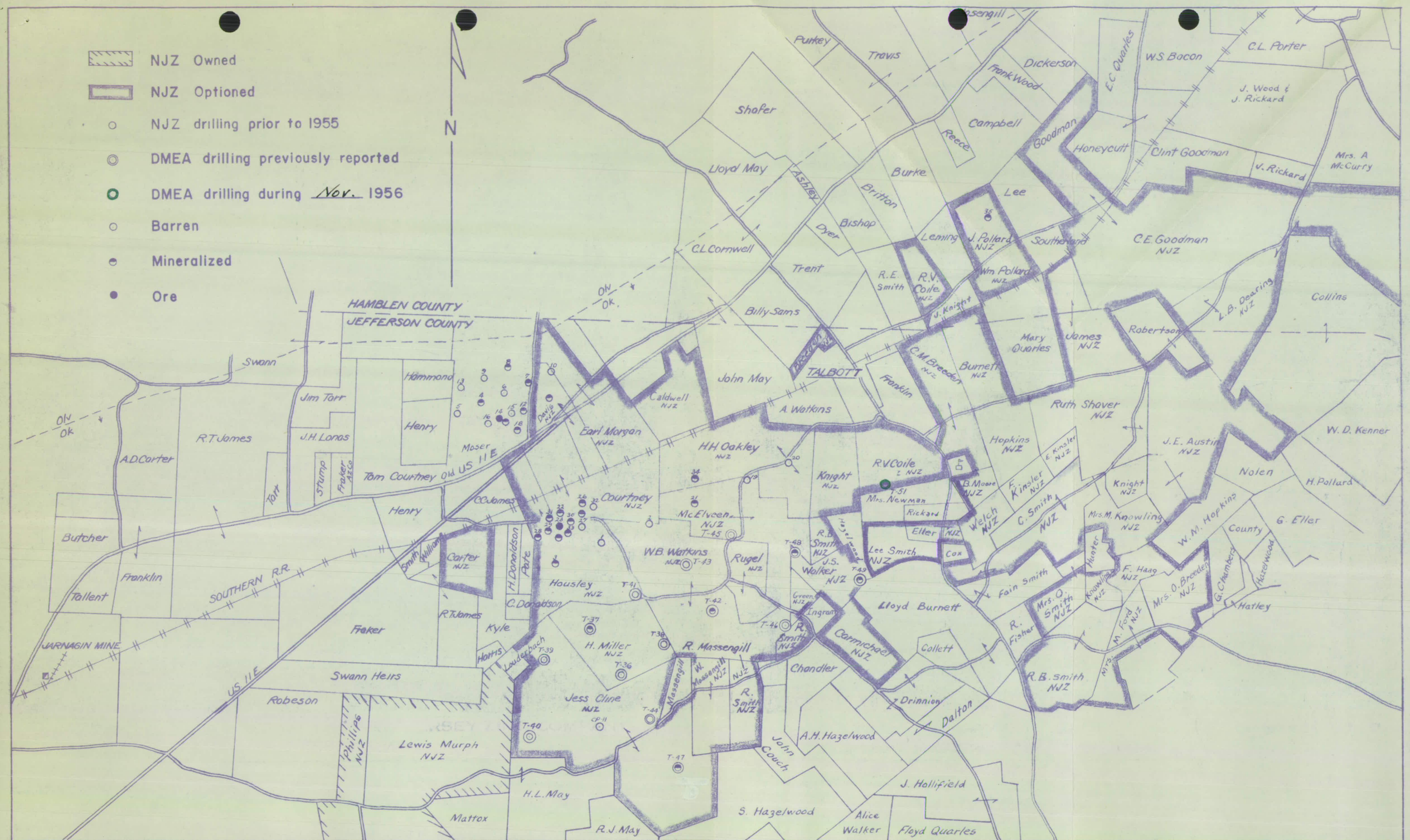
T-47

1778-1782 - 4' - 2.22% Zn)
1782-1787 - 5' - 1.45% Zn) 9' - @ 1.79

T-48

967-968	- 1'	- - 6.72% Zn		
977 -981	- 4'	- - 3.03% Zn)		
981-984	- 3'	- - Nil)	11' @ 2.05% Zn	
984-988	- 4'	- - 2.60% Zn)		
1013-1017	- 4'	- - 3.59% Zn)		
1017-1020	- 3'	- - Nil)	12' @ 1.68% Zn	
1020-1025	- 5'	- - 1.19% Zn)		

J. W. Phillips/jf



POSTED TO DATE 11-1-56	THE NEW JERSEY ZINC COMPANY JEFFERSON CITY TENNESSEE	DRAWN NJZ DATE 6/56 TRACED JWP SCALE 1"=2000'	PROPERTY MAP MORRISTOWN SECTOR - TALBOTT AREA
			JEFFERSON & HAMBLEN Cos., TENN FILE NO. AX - TENN - B 247a

RECEIVED
JAN 7 1957
D.M.E.A.

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-

OPERATOR'S MONTHLY REPORT AND VOUCHER

Month of October 1956 Docket No. DMEA 4119 Contract No. E 936
Operator's Name The New Jersey Zinc Company Minerals Zinc
Address Jefferson City, Tennessee
Contract Amount, $ 156,250.00 Government Participation: 50% Amount, $ 78,125.00

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	9,212.95	33,060.95	42,273.90			
Bulldozing						
Crosscutting						
Drifting						
(2) Labor and Supervision:						
Labor / Supervision / Technical Services	1,370.88	4,988.16	6,359.04			
(3) Operating Mat'ls. and Supplies:						
Timber						
Explosives						
Pipe						
Track						
(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						
Liability Insurance						
(8) Contingencies (specify):						
Totals	10,583.83	38,049.11	48,632.94	10583.83	38,049.11	48,632.94

RECEIVED NOV 23 1956 D.M.E.A.

I certify that the above bill is correct and just and that payment therefor has not been received.
Date Nov. 1, 1956 *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:
$ 5291.92
Signature Helen R. Mellen
(Authorized Certifying Officer)
Date NOV 21 1956 Vou. No. 77
(See other side)

5291.91.

(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-936 in accordance with the terms of the contract.

Signature V. J. Lynch Title U. S. BUREAU OF MINES Date NOV 20 1956

APPROVAL BY DMEA EXECUTIVE OFFICER OR ALTERNATE:

Signature Robert A. Lawrence Title EXECUTIVE OFFICER DMEA REGION V Date NOV 20 1956

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 October 1956 Docket No. DMEA 4119 Contract No. E 936

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.	6,150.00	3,000	28,350.00	14,000	2.025	48,000	2.16
Chip 1000-1500	"	1,943.50	845	11,035.25	4,796	2,300	10,000	2.66
Auger 1500-2000	"	1,119.45	439	2,887.85	1,076	2,684	2,000	3.16
Stripping								
Trenching								
Test Pits								
Roads and Trails								
Supervisory and Technical	"	1,370.88	4,284	6,359.04	19,872	0.32	60,000	0.32
TOTAL DISTRIBUTED COSTS		10,583.83		48,632.14				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 Nov. 1, 1956 Operator The New Jersey Zinc Co.

Per [signature] Title Asst. to the 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)

REMARKS: This report includes drill holes T-47, 48, & 49

(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

MORRISTOWN SECTOR - TALBOTT AREA

DMEA Docket No. 4119 - Contract No. E936

Two drills operated in the subject area during the month. Three holes T-47, T-48 and T-49, located on maps AX-TENN-B-247a, were completed. A summary of these holes follows:

Hole T-47

Coordinates: 16,655.03 N; 26,957.20 E
Collar Elevation: 1333.91

Depth	Remarks
0- 33	Overburden
33- 406	Disturbed Lower Mascot and Upper Kingsport
406- 507	Lower Kingsport limestone
507- 788	Longview dolomite
788-1221	Chepultepec formation
1221	Koppick Knob thrust fault
1221-1532	Mascot dolomite
1532-1756	Upper Kingsport
1756	28 Bed
1756-1854	Lower Kingsport "Dry breccia"
1854-1939 (Bottom)	Longview dolomite

The following mineralization was encountered:

1774 - - - - - - - - - - Trace of sphalerite
1778-1787 - 9' - 1.79% Zn
1794,1797,1815,1828,1859,1860 - Traces of sphalerite

The section from 1730-1843 feet consisted of a "dry breccia" identical to that found in hole T-44. The section below the 28 bed was 100% dolomitized.

Hole T-48

Coordinates: 21,720.91 N; 30,050.78 E
Collar Elevation: 1236.29

Depth	Remarks
0- 5	Overburden
5-758	Mascot dolomite
758-966	Upper Kingsport
886	108 Bed
966	28 Bed
966-1047	Lower Kingsport
1047-1110 (Bottom)	Longview dolomite

The section below the 28 bed was 56% dolomitized. The following mineralization was encountered:

967-968	1'	6.72% Zn
977-988	11'	2.05% Zn
1013-1025	12'	1.68% Zn

This is the most encouraging mineralization encountered in the present Talbott area drilling program.

Hole T-49

Coordinates: 21,245.00 N; 31,676.49 E
Collar Elevation: 1253.95

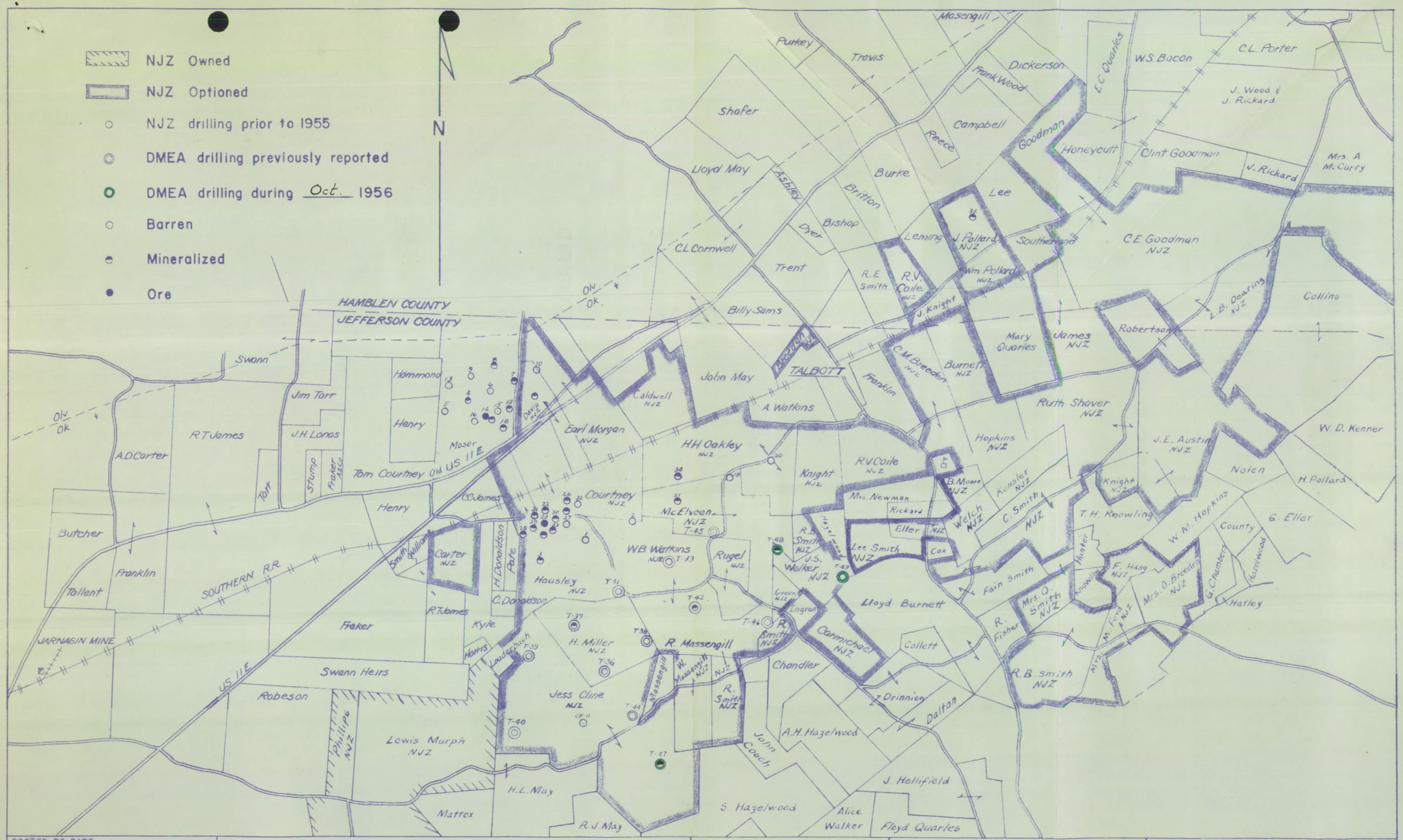
Depth	Remarks
0- 4	Overburden
4-857	Mascot dolomite
857-1054	Upper Kingsport
973	108 Bed
1054	28 Bed
1054-1165	Lower Kingsport
1165-1235 (Bottom)	Longview dolomite

The section below the 28 bed was 22% dolomitized. A strong shine of sphalerite was encountered from 1190 to 1191 feet. No other mineralization was encountered.

Two holes are currently in progress:

Hole No.	Property
T-50	J. T. Cline
T-51	R. V. Coile

J. W. Phillips/jf



POSTED TO DATE	THE NEW JERSEY ZINC COMPANY JEFFERSON CITY TENNESSEE	DRAWN NJZ DATE 6/56 TRACED JWP SCALE 1"=2000'	PROPERTY MAP MORRISTOWN SECTOR - TALBOTT AREA	JEFFERSON & HAMBLEN Cos., TENN FILE NO. AX - TENN - B 247a

RECEIVED
NOV 23 1956
D.M.E.A.

Form MF-10 (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-

OPERATOR'S MONTHLY REPORT AND VOUCHER

Month of September, 1956 Docket No. DMEA 4119 Contract No. E 936
Operator's Name The New Jersey Zinc Company Minerals Zinc
Address Jefferson City, Tennessee
Contract Amount, $ 156,250.00 Government Participation: 50 % Amount, $ 78,125.00

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	7,047.60	26,013.35	33,060.95			
Bulldozing						
Crosscutting						
Drifting						
(2) Labor and Supervision:						
Labor						
Supervision	1,013.44	3,974.72	4,988.16			
Technical Services						
(3) Operating Mat'ls. and Supplies:						
Timber						
Explosives						
Pipe						
Track						
(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						
Liability Insurance						
(8) Contingencies (specify):						
TOTALS	8,061.04	29,988.07	38,049.11	8061.04	29988.07	38049.11

RECEIVED NOV 7 1956 DMEA

I certify that the above bill is correct and just and that payment therefor has not been received.
Date 10/18/56 *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:
$ 4030.52
Signature [signature] (Authorized Certifying Officer)
Date NOV 5 1956 Vou. No. 02
(See other side)

4030.52

(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 936 in accordance with the terms of the contract.

Signature W. J. Lynch Title Mining Eng. Date 10-23-56

APPROVAL BY DMEA EXECUTIVE OFFICER OR ALTERNATE:

Signature Robert A. Lawrence Title EXECUTIVE OFFICER DMEA REGION V Date OCT 24 1956

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 Sept. 195 6 Docket No. DMEA 4119 Contract No. E 936

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.	4,050.00	2,000	22,200.00	11,000	2.018	48,000	2.16
Churn 1000-1500	ft.	2,091.75	870	9,091.75	3,951	2.301	10,000	2.66
Auger 1500-2000	ft.	905.85	297	1,768.40	637	2.776	2,000	3.16
Stripping								
Trenching								
Test Pits								
Roads and Trails								
Supervisory & Technical	ft.	1,013.44	3,167	4,988.16	15,588	0.32	60,000	0.32
TOTAL DISTRIBUTED COSTS		8,061.04		38,048.31				TOTAL COSTS AUTHORIZED BY CONTRACT
Operating Equipment Purchased								
Initial Rehabilitation and Repairs								
New Buildings, Improvements, etc.								
TOTAL COSTS		8,061.04		38,048.31				156,250.00

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 10/18/56 Operator The New Jersey Zinc Co.

Per [signature] Title Asst. to the Supt.

REMARKS: This report includes drill holes T-44 and T-46

→ 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)

W. J. Lynch
Bureau of Mines
10-23-56

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

Morristown Sector - Talbott Area

DMEA Docket No. 4119 - Contract No. E-936

Two drills operated in the subject area during the month. Holes T-44 and T-46, located on map AX-TENN-B-247a, were completed. Longitudinal sections 1, 2 and 3 (AX-TENN-D-1204) and cross section AX-TENN-B-1182 show the DMEA drilling completed to date.

Following is a summary of holes T-44 and T-46:

Hole T-44

Coordinates: 17,746.77 N; 26,335.23 E
Collar Elevation: 1300.73

Depth	Remarks
0- 6	Overburden
6-1427	Mascot dolomite
1427-1771	Kingsport dolomite
1771-1797 (Bottom)	Longview dolomite

No mineralization was encountered. The Kingsport section was 100% dolomitized. The section from 1492 to 1719 was brecciated and all marker beds were unidentifiable.

Hole T-46

Coordinates: 19,900.56 N; 29,646.27 E
Collar Elevation: 1254.66

Depth	Remarks
0- 14	Overburden
14-1020	Mascot dolomite
1020	Chert Matrix
1020-1226	Upper Kingsport
1226	28 Bed
1226-1227	Lower Kingsport limestone
1227-1237	" " fine dolomite
1237-1256	" " limestone
1256-1257	" " fine dolomite
1257-1260	" " limestone
1260-1264	" " fine dolomite
1264-1269	" " limestone
1269-1272	" " fine dolomite
1272-1286	" " limestone

Depth	Remarks
1286-1291	Lower Kingsport fine dolomite
1291-1317	" " limestone
1317-1318	" " fine dolomite
1318-1322	" " limestone
1322-1324	" " fine dolomite
1324	"S" Sandgrains
1324-1329	Lower Kingsport limestone
1329-1365	Longview limestone
1365-1370 (Bottom)	Longview fine dolomite

No mineralization was encountered.

Two holes are currently in progress:

Hole No.	Property
T-47	J. T. Cline
T-48	J. S. Walker

Form MF-194 (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

9

Month of August, 1956 Docket No. DMEA 4119 Contract No. E936
Operator's Name The New Jersey Zinc Company Minerals Zinc
Address Jefferson City, Tennessee
Contract Amount, $ 156,250.00 Government Participation: 50% Amount, $ 78,125.00

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	4,492.75	21,520.60	26,013.35			
Bulldozing						
Crosscutting						
Drifting						
(2) Labor and Supervision:						
Labor						
Supervision	710.08	3,264.64	3,974.72			
Technical Services						
(3) Operating Mat'ls. and Supplies:						
Timber						
Explosives						
Pipe						
Track						
(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						
Liability Insurance						
(8) Contingencies (specify):						
TOTALS	5,202.83	24,785.24	29,988.07	5,202.83	24,785.24	29,988.07

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

Date 9/1/56 *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:

$2,601.41

Signature Helen R. Miller
(Authorized Certifying Officer)

Date SEP 19 1956 Vou. No. 45

(See other side)

4

2,601.42

(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. Jdm E936 in accordance with the terms of the contract.

Signature O. C. A. Beck Title Mining Engineer USBM Date [illegible] 1956

APPROVAL BY DMEA EXECUTIVE OFFICER OR ALTERNATE:

Signature Robert A. Lawrence Title EXECUTIVE OFFICER DMEA REGION V Date [illegible] 1956

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 August 1956 Docket No. DMEA 4119 Contract No. E936

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.	4000.00	2000	18,150.00	9000	2.017	48,000	2.16
Chip 1000-1500	ft.	492.75	219	7,000.80	3081	2.272	10,000	2.66
1500-2000	ft.	--	--	862.55	340	2.537	2,000	3.16
Auger								
Stripping								
Trenching								
Test Pits								
Roads and Trails								
Supervision & Technical	ft.	710.08	2219	3,974.72	12,421	0.32	60,000	0.32
Total Distributed Costs		5,202.83		29,988.07				Total Costs Authorized by Contract
Operating Equipment Purchased								
Initial Rehabilitation and Repairs								
New Buildings, Improvements, etc.								
Total Costs		~~5,202.83~~		~~29,988.07~~				~~156,250.00~~

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 9/1/56 Operator The New Jersey Zinc Co.

Per [signature] Title Asst. to the Supt.

Remarks: This report includes drill holes T-43 and T-45.

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)

W. A. Beck, Mining Engineer
U.S.B.M.

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

Morristown Sector - Talbott Area

DMEA Docket No. 4119 - Contract No. E936

Two drills operated in the subject area during the month. Two holes, T-43 and T-45, located on map AX-TENN-B-247a, were completed. A summary of these holes follows:

Hole T-43

Coordinates - 21,418.41N 27,116.65E
Collar Elevation - 1263.58'

Depth	Remarks
0- 32	Overburden
32-803	Mascot dolomite
803-1013	Upper Kingsport
930	108 Bed
1013	28 Bed
1013-1017	Lower Kingsport limestone
1017-1018	Lower Kingsport fine dolomite
1018-1022	Lower Kingsport limestone
1022-1026	Lower Kingsport fine dolomite
1026-1047	Lower Kingsport limestone
1047-1054	Lower Kingsport fine dolomite
1054-1080	Lower Kingsport limestone
1080-1083	Lower Kingsport fine dolomite
1083-1123	Lower Kingsport limestone
1116	"S" sandgrains
1123-1126	Longview fine dolomite
1126-1153	Longview limestone
1153-1162 (Bottom)	Longview fine dolomite

No mineralization was encountered.

Hole T-45

Coordinates - 22,030.83N 28,230.43E
Collar Elevation - 1263.63'

Depth	Remarks
0- 12	Overburden
12- 700	Mascot dolomite
700- 912	Upper Kingsport
827	108 Bed
912	28 Bed
912- 921	Lower Kingsport limestone
921- 924	Lower Kingsport fine to coarse dolomite

Hole T-45 Cont'd.

Depth	Remarks
924- 934	Lower Kingsport limestone
934- 949	Lower Kingsport fine to coarse dolomite
949- 954	Lower Kingsport limestone
954- 957	Lower Kingsport fine to medium dolomite
957-1009	Lower Kingsport limestone
1009-1011	Lower Kingsport fine dolomite
1011-1018	Lower Kingsport limestone
1011	"S" sandgrains
1018-1033	Longview limestone
1033-1034	Longview fine dolomite
1034-1048	Longview limestone
1048-1057 (Bottom)	Longview fine to medium dolomite

No mineralization was encountered.

Two holes are currently in progress:

Hole No.	Property
T-44	J. T. Cline
T-46	W. B. Watkins

Morristown Sector - Talbott Area

DMEA 4119

Contract Idm E-937 (Zinc)

Coordinates and Elevations of Drill Holes

Hole No.	Coordinates	Collar Elevation
T-36	18,907.72N; 25,580.87E	1269.46
T-37	20,027.65N; 24,900.89E	1247.26
T-38	19,596.73N; 26,715.88E	1288.18
T-39	19,346.78N; 23,743.78E	1290.75
T-40	17,468.37N; 23,372.90E	1270.97
T-41	20,710.11N; 26,003.33E	1237.03
T-42	20,345.52N; 27,837.06E	1245.97
T-44	17,746.77N; 26,335.20E	1300.73

(Note: The above tabulation applies to holes already reported. In the future, coordinates will be reported as the holes are completed.)

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

Month of July 195 6 Docket No. DMEA 4119 Contract No. E936
Operator's Name The New Jersey Zinc Company Minerals Zinc
Address Jefferson City, Tennessee
Contract Amount, $ 156,250.00 Government Participation: 50 % Amount, $ 78,125.00

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	9,017.55	12,503.05	21,520.60			
Bulldozing						
Crosscutting						
Drifting						
(2) Labor and Supervision:						
Labor						
Supervision	1,368.00	1,896.64	3,264.64			
Technical Services						
(3) Operating Mat'ls. and Supplies:						
Timber						
Explosives						
Pipe						
Track						
(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						
Liability Insurance						
(8) Contingencies (specify):						
TOTALS	10,385.55	14,399.69	24,785.24	$10,385.55	$14,399.69	$24,785.24

I certify that the above bill is correct and just and that payment therefor has not been received.
Date 8/17/56 *Payee The New Jersey Zinc Company
Per W. Hoagland 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:
$5,192.78
Signature Helen R. Miller
(Authorized Certifying Officer)
Date AUG 22 1956 Vou. No.
(See other side)

5192.77

(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. Ida E93G in accordance with the terms of the contract.

Signature W. A. Beck Title Min. Engr. USBM Date AUG 20 1956

APPROVAL BY DMEA EXECUTIVE OFFICER OR ALTERNATE:

Signature Robert A. Lawrence Title EXECUTIVE OFFICER DMEA REGION V Date AUG 20 1956

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 July 195 6 Docket No. DMEA 4119 Contract No. E936

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 0-1000	ft.	6,650.00	3000	14,150.00	7000	2,021	48,000	2.16
Drilling: Core 1000-1500	ft.	2,340.25	1029	6,508.05	2862	2,274	10,000	2.66
Churn 1500-2000	ft.	627.30	246	862.55	340	2,537	2,000	3.16
Auger								
Stripping								
Trenching								
Test Pits								
~~Reagent~~ Talon and Technical		1,368.00	4,275	3,264.04	10,202	0.32	00,000	0.32
Total Distributed Costs		$10,385.55		$24,785.24				Total Costs Authorized by Contract
Operating Equipment Purchased								
Initial Rehabilitation and Repairs								
New Buildings, Improvements, etc.								
Total Costs		$10,385.55		$24,785.24				$156,250.00

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 8/17/56 Operator The New Jersey Zinc Co.

Per W. Hoagland Title Asst. to the Supt.

Remarks: This report includes drill holes T-40, T-41 and T-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)

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

Morristown Sector - Talbott Area

DMEA Docket No. 4119 - Contract No. E936

Three drills operated in the subject area until July 14, 1956. As of the 14th drilling is temporarily on a two-drill basis. Three holes, T-40, T-41 and T-42, located as shown on map AX-TEHN-B-247a were completed. A summary of these holes is as follows:

Hole	Depth	Remarks
T-40	0- 5	Overburden
	5-198	Lenoir limestone
	198-231	Mosheim limestone
	231-1418	Mascot dolomite
	1418-1618	Upper Kingsport
	1553	108 Bed
	1618	28 Bed
	1618-1623	Lower Kingsport limestone
	1623-1630	" " fine dolomite
	1630-1648	" " limestone
	1648-1654	" " fine dolomite
	1654-1660	" " limestone
	1660-1667	" " fine dolomite
	1667-1676	" " limestone
	1676-1681	" " fine dolomite
	1681-1713	" " limestone
	1713	"S" sandgrains
	1713-1717	Lower Kingsport limestone
	1717-1722	Longview limestone
	1722-1729	Longview medium dolomite with scattered traces of sphalerite
	1729-1735	Longview limestone with scattered traces of sphalerite
	1735-1740	Longview limestone
	1740-1742	" coarse dolomite
	1742-1746	(Bottom) Longview fine dolomite
T-41		
	0- 36	Overburden
	36-855	Mascot dolomite
	855-1065	Upper Kingsport
	983	108 Bed
	1065	28 Bed
	1065-1073	Lower Kingsport limestone
	1073-1075	" " fine dolomite
	1075-1099	" " limestone

Hole	Depth	Remarks
Hole T-41 cont'd.	1099-1103	Lower Kingsport fine dolomite
	1103-1108	" " limestone
	1108-1111	" " medium dolomite
	1111-1117	" " limestone
	1117-1120	" " fine dolomite
	1120-1126	" " limestone
	1126-1130	" " fine dolomite
	1130-1162	" " limestone
	1162	"S" sandgrains
	1162-1169	Lower Kingsport limestone
	1169-1178	Longview fine dolomite
	1178-1200	" limestone
	1200-1207	(Bottom) Longview fine dolomite

No mineralization was encountered.

T-42		
	0- 13	Overburden
	13- 29	Mosheim limestone
	29-973	Mascot dolomite
	973-1188	Upper Kingsport
	1105	108 Bed
	1188	28 Bed
	1188-1190	Lower Kingsport coarse dolomite estimated 10% Zn
	1190-1193	Lower Kingsport fine dolomite estimated 1% Zn
	1193-1197	Lower Kingsport fine dolomite
	1197-1214	" " limestone
	1214-1215	" " fine dolomite
	1215-1219	" " limestone
	1219-1220	" " fine dolomite
	1220-1238	" " limestone
	1238-1242	" " fine dolomite
	1242-1246	" " coarse dolomite
	1246-1269	" " limestone
	1269-1273	" " "S" sandgrains
	1273-1279	" " limestone
	1279-1282	Longview fine dolomite
	1282-1295	" linestone
	1295-1300	" coarse dolomite
	1300-1322	(Bottom) Longview fine dolomite

Two holes are currently in progress:

Hole No.	Property
T-43	W. B. Watkins
T-44	J. T. Cline

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

Budget Bureau No. 42-R1036.5

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION

FILED ON VOUCHER & SCHEDULE OF PAYMENTS K- 6

OPERATOR'S MONTHLY REPORT AND VOUCHER

Month of June, 1956 Docket No. DMEA 4119 Contract No. E936

Operator's Name The New Jersey Zinc Company Minerals Zinc

Address Jefferson City, Tennessee

RECEIVED JUL 30 1956

Contract Amount, $156,250.00 Government Participation: 50 % Amount, $78,125.00

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 Contractors:						
Drilling	6,252.25	6,250.80	12,503.05			
Bulldozing						
Crosscutting						
Drifting						
(2) Labor and Supervision:						
Labor	949.44	947.20	1,896.64			
Supervision						
Technical Services						
(3) Operating Mat'ls. and Supplies:						
Timber						
Explosives						
Pipe						
Track						
(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						
Liability Insurance						
(8) Contingencies (specify):						
TOTALS	7,201.69	7,198.00	14,399.69	7201.69	7198.00	14,399.69

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

Date July 15, 1956 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:

$ 3600.84

Signature [signature]
(Authorized Certifying Officer)

Date JUL [illegible] Vou. No. 6

(See other side)

3600.85

(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. IdmE 936 in accordance with the terms of the contract.

Signature Kenneth H. Cramer Title Geologist USGS Date July 25, 1956

APPROVAL BY DMEA EXECUTIVE OFFICER OR ALTERNATE:

Signature V. J. Lynch Title ACTING EXECUTIVE OFFICER DMEA REGION V Date JUL 25 1956

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

RECEIVED
JUL 30 1956

OPERATOR'S UNIT COST AND PROGRESS REPORT

Month of June 1956 Docket No. DMEA 4119 Contract No. E936
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	Unit Costs
Drifting								
Crosscutting								
Raising								
Shafts								
Winzes								
Drilling: Core 0-1000	ft	4,050.00	2,000	8,100.00	4,000	2.025	48,000	2.16
~~Core~~ 1000-1500	ft	2,189.50	962	4,167.80	1,833	2.274	10,000	2.66
~~Core~~ 1500-2000	ft	12.75	5	235.25	94	2.503	2,000	3.16
Stripping								
Trenching								
Test Pits								
Roads and Trails								
Supervision & Incidental	ft	949.44	2,967	1,896.64	5,927	0.32	60,000	0.32
TOTAL DISTRIBUTED COSTS		7,201.69		14,399.69				TOTAL COSTS AUTHORIZED BY CONTRACT
Operating Equipment Purchased								
Initial Rehabilitation and Repairs								
New Buildings, Improvements, etc.								
TOTAL COSTS		7,201.69		14,399.69				156,250.00

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 July 15, 1956 Operator The New Jersey Zinc Company

Per [signature] Title Asst. to the Supt.

REMARKS: This report includes drill holes T-38 & T-39

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)

Henry H. Amos
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

X 10866 24M 1-54

COPY

THE NEW JERSEY ZINC COMPANY

EXPLORATION DEPARTMENT

Jefferson City, Tennessee

Report for June 1956

Talbott Area - DMEA 4119

Contract Idm-936

OBTAINED
JUL 1956

Three drills operated in the subject area during the month. Two holes, T-38 and T-39, located as shown on map AX-TENN-B247a were completed. A summary of these holes is as follows:

Hole	Depth	Formation	Remarks
T-38	0 - 9'	Overburden	
	9 - 23'	Lenoir limestone	
	23 - 57'	Mosheim limestone	
	57 -1104'	Mascot dolomite	
	1104 -1315'	Kingsport dolomite	
	1246'	108 Bed	
	1315'	28 Bed	
	1315 -1420'	Kingsport limestone	
	1420'	"S" sandgrains	
	1420 -1462'	(Bottom) Longview dolomite	

No mineralization was encountered.

T-39	0 - 30'	Overburden	
	30 - 173'	Lenoir limestone	
	173 - 281'	Mosheim limestone	
	281 -1151'	Mascot dolomite	
	1151 -1371'	Kingsport dolomite	
	1281'	108 Bed	
	1371'	28 Bed	
	1371 -1467'	Kingsport limestone	
	1467'	"S" sandgrains	
	1467 -1505	(Bottom) Longview dolomite	

The following mineralization was encountered:

342'	Mascot dolomite	Traces of sphalerite
1163 -1164'	Kingsport dolomite	Traces of sphalerite
1348 -1349'	Kingsport dolomite	12% Zinc Estimated

The one foot of 12% Zinc, 22 feet above the 28 marker bed is stratigraphically high for typical mineralization in the Talbott area.

Three holes are currently in progress as follows:

Hole No.	Property
T-40	Jess Cline
T-41	H. Housley
T-42	W. B. Watkins

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
JUN 22 1956

Month of May 1956 Docket No. DMEA 4119 Contract No. E936
Operator's Name The New Jersey Zinc Company Minerals Zinc
Address Jefferson City, Tennessee
Contract Amount, $ 156,250.00 Government Participation: 50% Amount, $ 78,125.00

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 Contracts:						
Drilling	$6,250.80	-	$6,250.80			
Bulldozing						
Crosscutting						
Drifting						
(2) Labor and Supervision:						
Labor						
Supervision	947.20	-	947.20			
Technical Services						
(3) Operating Mat'ls. and Supplies:						
Timber						
Explosives						
Pipe						
Track						
(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						
Liability Insurance						
(8) Contingencies (specify):						
TOTALS	7,198.00	-	7,198.00	7198.00		7198.00

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

Date June 16, 1956 *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:

$ 3599.00

Signature [signature]
(Authorized Certifying Officer)

Date JUN 20 1956 Vou. No.
(See other side)

3599.00

(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 936 in accordance with the terms of the contract. JUN 19 1956

Signature [illegible] Title Mining Engr. USBM Date

APPROVAL BY DMEA EXECUTIVE OFFICER OR ALTERNATE: ACTING EXECUTIVE OFFICER

Signature [illegible] Title DMEA REGION V Date JUN 19 1956

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

RECEIVED
JUN 22 1956

OPERATOR'S UNIT COST AND PROGRESS REPORT

Month of May 1956 Docket No. DMEA 4119 Contract No. E936
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	4,050.00	2000	4,050.00	2000	2.025	48,000	2.16
~~Shot~~ 1000-1500	ft	1,978.30	871	1,978.30	871	2.271	10,000	2.66
~~Auger~~ 1500-2000	ft	222.50	89	222.50	89	2.500	2,000	3.16
Stripping								
Trenching								
Test Pits								
Roads and Trails								
Supervision & Incidental Costs	ft	947.20	2960	947.20	2960	0.32	60,000	0.32
TOTAL DISTRIBUTED COSTS		7,198.00	5920	7,198.00				TOTAL COSTS AUTHORIZED BY CONTRACT
Operating Equipment Purchased								
Initial Rehabilitation and Repairs								
New Buildings, Improvements, etc.								
TOTAL COSTS		7,198.00	5920	7,198.00				

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.

REMARKS: This report includes drill holes T-36 & T-37

Date June 16, 1956 Operator The New Jersey Zinc Co.

Per [signature] Title Ass't. to the 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)

V. J. Lynch
Bureau of Mines
6/19/56

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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JUN 22 1956

Three drills operated in the subject area during the month. Two holes, located as shown on Figure 1 (in green) were completed. Logs of these holes are as follows:

Hole	Depth	Remarks
T-36	0- 8'	Overburden
	8- 94'	Lenoir limestone
	94-263'	Mosheim limestone
	263-1171'	Mascot dolomite and limestone
	1171-1453'	Kingsport dolomite
	1453-1543'	Kingsport limestone
	1543-1589'	Longview dolomite
	Bottom	

No mineralization was encountered.

T-37	0- 29'	Overburden
	29- 55'	Lenoir limestone
	55-157'	Mosheim limestone
	157-1082'	Mascot dolomite and limestone
	1082-1235'	Kingsport dolomite
	1235-1331'	Kingsport limestone
	1331-1371'	Longview dolomite
	Bottom	

This hole encountered the following mineralization:

Depth	Feet	Formation	Remarks
308-314'	6'	Mascot	Traces of sphalerite
584'		"	Trace of sphalerite
624'		"	Trace of sphalerite
1320-1328	8'	Kingsport	Traces of sphalerite
1328-1329	1'	Kingsport	6% Zinc Estimated
1338-1340'	2'	Longview	4% Zinc Estimated

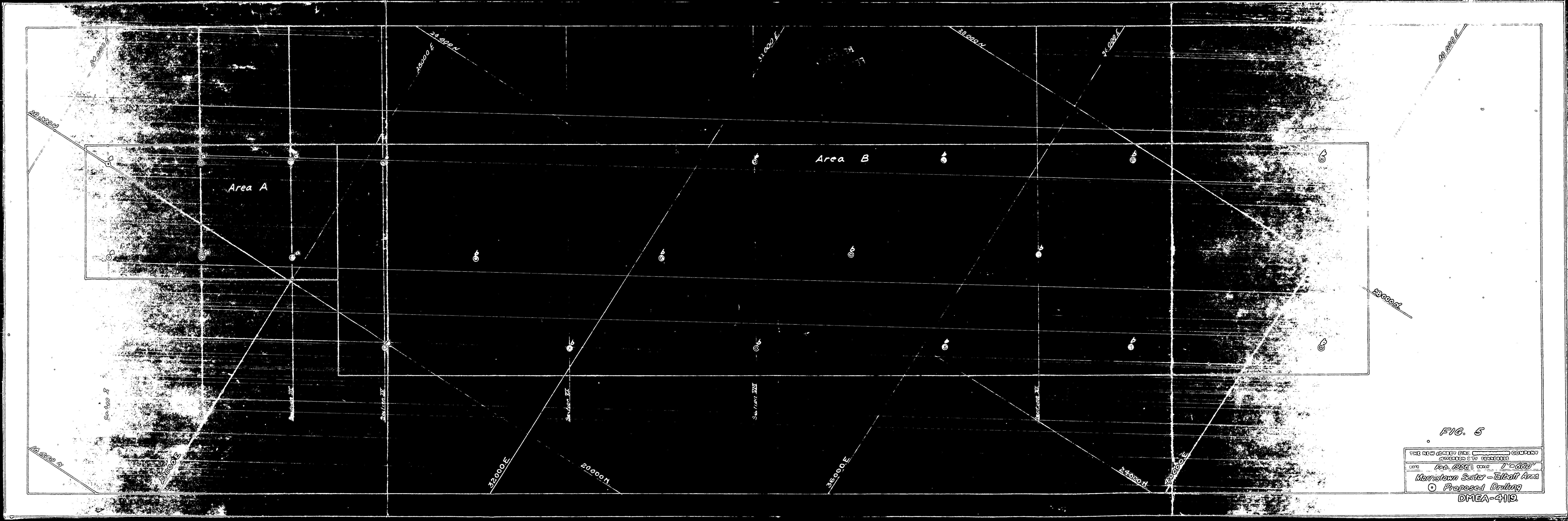

FIG. 5

THE NEW JERSEY ZINC [redacted] COMPANY
JEFFERSON CITY TENNESSEE
DATE Feb. 1956 SCALE 1" = 660'
Morristown Sector – Talbott Area
⊙ Proposed Drilling
DMEA-4119.

N
HAMBLEN COUNTY
JEFFERSON COUNTY
Ray Wood
Copeland Airport
ALPHA
Bell
Purkey
Travis
Shofer
Burke
Bishop
Trent
Frank Wood
Campbell
Reece
W.S. Bucon
C.L. Porter
J. Richard
V. Richard
Mrs. A. M. Curry
C.E. Goodman
NJZ
Collins
James
Robertson
Ruth Shover
W.E. Kenner
Nolen
H. Pollard
Hatley
Knight
Hickard
Lloyd Burnett
Drinnion
Swann
A.D. Carter
Butcher
Franklin
Tollent
JARNAGIN MINE
Faker
Swanner
Robeson
Maxsley
I.V.B. Watkins
Hy Oakley
Earl Mahar
TALBOT
Burnett
Rose
R. Russell
Manager
Austin
County
THE NEW JERSEY ZINC COMPANY
JEFFERSON CITY
TENNESSEE
PROPERTY MAP
MORRISTOWN SECTOR-TALBOT AREA
DMEA 4119
JEFFERSON & HAMBLEN CO'S, TENN.
AX-TENN 247

Figure 2

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★ U. S. GOVERNMENT PRINTING OFFICE : 1951 16—38949a-2

U. S. Government Messenger Envelope

Standard Form No. 65 (Rev. 1/46)

1. Use blocks consecutively, one at a time.
2. Void previous block.
3. Write clearly.

NAME OR TITLE OF PERSON, DEPARTMENT, ADDRESS, AND ROOM		NAME OR TITLE OF PERSON, DEPARTMENT, ADDRESS, AND ROOM	
[redacted]	RUN STOP		RUN STOP
Mr. E. W. Ellis, D. M. E. A., Room 4449 Interior	RUN STOP		RUN STOP
	RUN STOP		RUN STOP
	RUN STOP		RUN STOP
	RUN STOP		RUN STOP
	RUN STOP		RUN STOP
	RUN STOP		RUN STOP
	RUN STOP		RUN STOP
	RUN STOP		RUN STOP
	RUN STOP		RUN STOP

Send surplus envelopes to supply room for reissue.

Use other side

10—[illegible]

Use RUN and STOP only when messenger service between Government buildings in Washington is required.
Your mail room has RUN and STOP information.

MAY

Mr. S. S. Goodwin, Vice President
and Manager of Mines
The New Jersey Zinc Company
160 Front Street
New York 38, New York

Re: Docket No. DMEA-4119 (Zinc)
The New Jersey Zinc Company
Talbot Area
Jefferson and Hamblen Counties,
Tennessee
Contract No. Idm-8936

Dear Mr. Goodwin:

Reference is made to your terminated exploration contract with the Government.

We sincerely regret that the work performed did not result in a certification of discovery or development under the provisions of the contract. Your attention is called to item 4 of the Termination Agreement dated April 19, 1957, covering reacquisition of lands covered by the contract. Also to the contract provisions which require the Operator to keep and preserve records for the period indicated.

Your interest in the Defense Minerals Exploration Administration exploration program and participation therein are fully appreciated.

Sincerely yours,

C. O. Mittendorf

Administrator

WRGrimwold/er 5/16/58
Copy to: Docket
Amdr R File
Op. Committee
Mr. Bishop, USBM
Mr. Killegaard, USGS
Mr. Chambers, DMEA
Region V (2)
Chron.

OFFICIAL FILE COPY
DMEA
RECEIVED MAY 3 1957

DATE	INITIALS	CODE
		800

it copy

TERMINATION AGREEMENT

It is agreed this 19th day of April, 1957, between the United States of America, acting through the Department of the Interior, Defense Minerals Exploration Administration, hereinafter called the "Government," and The New Jersey Zinc Company, hereinafter called the "Operator," parties to that certain Exploration Project Contract Ida-1234 (Docket No. DMEA-4119), dated March 30, 1954, as amended, hereinafter called the "Contract," that:

1. Effective February 28, 1957, the Contract and all obligations of the parties thereunder, except as otherwise herein expressly provided, shall be and are hereby terminated.

2. The Government shall contribute only to the allowable costs and fixed unit costs of work performed prior to said effective date.

3. 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, and shall keep and preserve records as required by the Contract.

4. Should the Operator or any affiliate or subsidiary hold or relinquish an interest in any of the land described in Annex 1 of the Contract or any production of minerals therefrom, the Operator shall pay royalty to the Government as set forth in Article 6 of the Contract, as amended by provisions (d) and (h) of Article 11, on any production made from the date such interest is acquired, to the extent of the interest held, the same as though certification of discovery or development had been made by the Government.

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

IN WITNESS WHEREOF, these parties have executed this agreement as of the day and year first above written.

THE UNITED STATES OF AMERICA

By C. M. Mottinger
Administrator, Defense Minerals Exploration Administration

THE NEW JERSEY ZINC COMPANY

By Lindsay F. Johnson

Title Vice President

Government Copy

EXPLORATION PROJECT CONTRACT
THE NEW JERSEY ZINC COMPANY
DOCKET No. DMEA-4119

AMENDMENT No.3

It is agreed this 15th day of November, 1956, 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 Idm-E936 (Docket No. DMEA-4119), dated March 30, 1956, and amended May 7 and June 1, 1956 is further amended as follows:

Effective as of the date of the original contract, March 30, 1956, there is hereby added to the land referred to in Article 2 of the contract form, and described in Annex I by reference to the property map, Figure 2, the following parcels of land similarly held under option agreement:

Name of Property Owner	Acreage
Greene, Horace	19
Breeden, Mrs. Oma	76
Massengill, W. C.	45
Massengill, Mrs. Roe	9
Haag, Frank	15
Ford, Mrs. Mamie	50
Kinsler, Edward	15
Kinsler, Mrs. Fannie	20
Moore, Austin B.	18
Smith, Lee	30

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 cost of any item of work.

Executed in sextuplicate the day and year first above written.

THE UNITED STATES OF AMERICA

By: _____
Executive Officer, Defense Minerals Exploration Administration, Region V

THE NEW JERSEY ZINC COMPANY

By: _____

Title: VICE PRESIDENT

Government's copy

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JUN - 8 1956

EXPLORATION PROJECT CONTRACT
THE NEW JERSEY ZINC COMPANY
DOCKET NO. DMEA-4119

AMENDMENT NO. 2

It is agreed this 1st day of June, 1956, 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. Idm-E936 (Docket No. DMEA-4119), dated March 30, 1956, as amended, is further amended as follows:

1. In the fourth paragraph of Exhibit "A", the second sentence is revised to read as follows:

> All core containing significant mineralization shall be properly sampled and the samples assayed for zinc.

2. In Exhibit "A", the second item under "Fixed Unit Costs" is revised to read as follows:

> 450 samples to be assayed @ $1.00/sample 450.00

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 cost of any item of work.

Executed in sextuplicate the day and year first above written.

THE UNITED STATES OF AMERICA

By C P Mitchell
Administrator, Defense Minerals
Exploration Administration

THE NEW JERSEY ZINC COMPANY

By J S Bodman

VICE PRESIDENT

Title

Governm[illegible] Copy

EXPLORATION PROJECT CONTRACT
THE NEW JERSEY ZINC COMPANY
DOCKET NO. DMEA-4119

AMENDMENT No. 1

It is agreed this 7th day of May 1956, 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 Idm-E936 (Docket No. DMEA-4119), dated March 30, 1956, be amended as follows:

Effective as of the date of the original contract, March 30, 1956, there is hereby added to the land referred to in Article 2 of the contract form, and described in Annex I by reference to the property map, Figure 2, the following parcels of land similarly held under option agreement:

Name of Property Owner	Acreage
J. T. Cline, Mayme Cline, Jack F. Cline and Agnes Cline	312
Helen Quarles James, Sam H. James	102
Lloyd Welch and Edna Welch	30
J. S. Walker and Myrtle Pearl Walker	45
Robert E. Smith and Willie Mae Smith	43
Charlie J. P. Smith and Lizzie Smith	100
Henry Hopkins and Viola S. Hopkins	52.6
J. A. Eller and Nell Eller	13.5
Nellie Carmichael	40.5
Raymond B. Smith and Farrie Smith	120
Olive Smith	30

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 cost of any item of work.

Executed in sextuplicate the day and year first above written.

THE NEW JERSEY ZINC COMPANY

By [signature]

Title VICE PRESIDENT

THE UNITED STATES OF AMERICA

By Robert A. Lawrence
Executive Officer, Defense Minerals Exploration Administration, Region V

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MAY 17 1956

~~Pocket Copy~~

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION
ROOM ~~WASHINGTON POST OFFICE BLDG.~~
KNOXVILLE 2, TENN.

May 16, 1956

Memorandum

To: Operating Committee, DMEA - Washington

From: Acting Executive Officer, DMEA - Region V - Knoxville

Subject: Amendment No. 1, on DMEA-4119, Idn-2936 (Zinc) The New Jersey Zinc Company, Talbot Area, Jefferson and Hamblen Counties, Tenn.

Transmitted are three signed copies of the subject amendment for additional properties optioned in the subject area which were not included in the original contract.

W. J. Lynch

WJL
cc:
Lynch
Files

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MAY 17 1956

* 1086G 24M 1-54

COPY

THE NEW JERSEY ZINC COMPANY

Jefferson City, Tennessee

EXPLORATION DEPARTMENT

Jefferson City, Tennessee
May 2, 1956

Mr. R. A. Laurence, Executive Officer
DMEA Field Team, Region V
Room 13, Post Office Building
Knoxville, Tennessee

Subject: DOCKET NO. DMEA-4119 (ZINC)
THE NEW JERSEY ZINC COMPANY
TALBOTT AREA
JEFFERSON AND HAMBLEN COUNTIES, TENNESSEE

Dear Mr. Laurence:

We submit, herewith, information pertaining to the subject contract covering the following:

A. Clarification of certain points in the original contract.

B. Additional properties optioned in the subject area to be amended to the original contract.

Concerning the clarification of certain points raised by Mr. C. O. Mittendorf in his letter to Mr. S. S. Goodwin dated March 30, 1956, we, herewith, submit Exhibit "A", a map (Figure 1) and copies of pertinent option contracts.

1. Mr. Roy O. Breeden whose property was not shown on Figure 2 of the original contract is shown (colored red) on the accompanying map, Figure 1.

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THE NEW JERSEY ZINC COMPANY

Jefferson City, Tennessee
EXPLORATION DEPARTMENT

2. The Jess Cline property which was shown on Figure 2 of the original contract but was neither listed in Annex I, nor a copy of option contract included, is herewith listed and copies of the option contract included in Exhibit "A".

   J. T. Cline, Mayme Cline, Jack F. Cline, Agnes Cline - - 312 Acres

3. Copies of the John Carter option contract which was omitted from the original contract is, herewith, included in Exhibit "A".

4. The Helen Q. James property which was not listed in Annex I nor shown on the map (Figure 2) of the original contract is here listed and shown (colored red) on Figure 1.

   Helen Quarles James, Sam H. James - 102 Acres

Concerning part B, we, herewith, submit a list of properties and copies of the option contracts (Exhibit "B").

The locations of these properties are shown, colored brown, on Figure 1.

Name of Property Owner	Acreage
Lloyd Welch and Edna Welch	30
J. S. Walker and Myrtle Pearl Walker	45
Robert E. Smith and Willie Mae Smith	43
Charlie J. P. Smith and Lizzie Smith	100
Henry Hopkins and Viola S. Hopkins	52.6
J. A. Eller and Nell Eller	13.5
Nellie Carmichael	40.5
Raymond B. Smith and Farrie Smith	120
Olive Smith	30

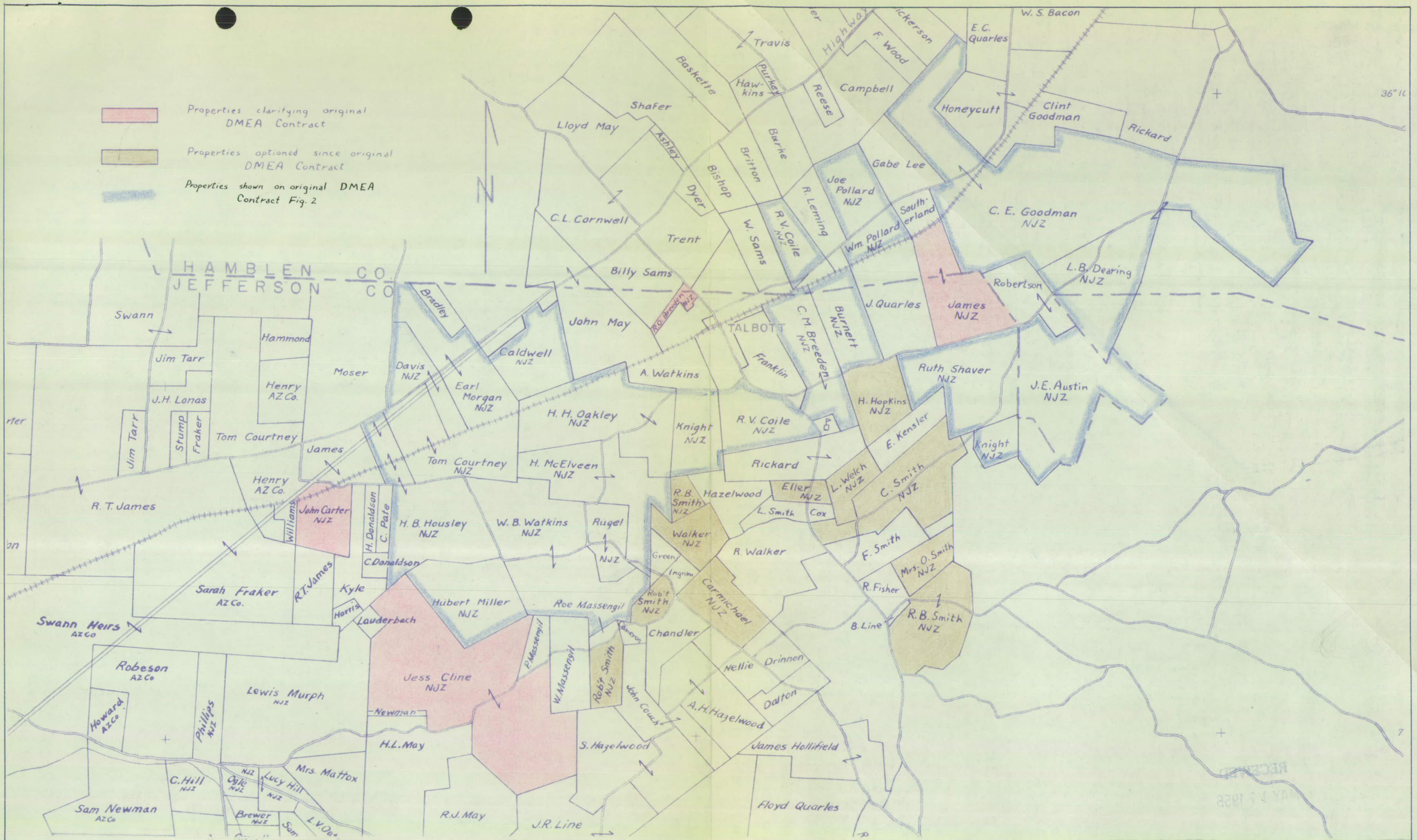
Yours very truly,

THE NEW JERSEY ZINC COMPANY

Johnson Crawford

Superintendent for Tennessee

J.W.P.
J.W.Phillips/jf
In triplicate



POSTED TO DATE

THE NEW JERSEY ZINC COMPANY
JEFFERSON CITY TENNESSEE

DRAWN DATE
TRACED P.H.L. SCALE 1" = 2000'

PROPERTY MAP
MORRISTOWN SECTOR - TALBOTT AREA

JEFFERSON & HAMBLEN CO'S TENN
FILE NO. FROM AX TENN D-472

FIGURE 1

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MAY 17 1956

CONTRACT AND AGREEMENT

THIS CONTRACT AND AGREEMENT made and entered into on this 1st day of June, 1954, by and between J. T. CLINE and wife, MAYME CLINE, JACK F. CLINE and wife, AGNES CLINE of Jefferson County, Tennessee, hereinafter called the Owners, parties of the first part, and THE NEW JERSEY ZINC COMPANY, a New Jersey Corporation, authorized to do business in the State of Tennessee, party of the second part, hereinafter called the Zinc Company:

W I T N E S S E T H

That for and in consideration of the sum of ONE ($1.00) DOLLAR and other good and valuable considerations in hand paid, the receipt of which is hereby acknowledged, the parties of the first part grant unto the party of the second part for a period of one year from the date hereof, with the privilege of extension for a further period not to extend beyond June 1st, 1956, upon payment of sums of money agreed upon, the exclusive right and option to purchase all minerals, metals, ores, ore-bearing materials, and rocks of any kind, including limestone, in, under or on the following described premises:

SITUATE in the Fourth and Ninth Civil Districts of Jefferson County, Tennessee being all the farm lands of the Owners, containing 312 acres, more or less, and bounded generally as follows:

On the North by Swann, Kyle, Underwood and Miller;
On the East by Porter Massengill, Bill Massengill and Shurman Mazelwood;
On the South by J. R. Line, R. J. May, H. L. May and Newman; and
On the West by Lewis Murph and Lauderback.

Owners acquired title to the above described premises by deed of Rufus McElhaney and wife, dated April 24, 1947 and Recorded in Deed Book 94, Page 454-55, Register's Office for Jefferson County, Tennessee.

Together with the right to prospect for, mine, mill and remove the same; water rights, the right of ingress and egress, and the right to purchase surface acreage to the extent of twenty acres, in accordance with the terms of an agreement of even date herewith entered into between the parties hereto. And the parties of the first part also grant to the party of the second part during said period the right to prospect for, explore and examine all minerals, metals, ores, ore-bearing materials, and rocks of any kind, including limestone, in, under or on all of said premises, including the right to enter thereupon, to use available water and to remove samples, in accordance with the terms of the last mentioned agreement. The terms of this option Contract and Agreement are fully set out in the Agreement of even date herewith, which is here referred to and made a part hereof as if fully set out at length.

This Contract and Agreement and each and every provision thereof shall be binding upon and enure to the benefit of the parties hereto, their heirs, executors, administrators, successors and assigns.

IN WITNESS WHEREOF, the Owners and parties of the first part have hereunto set their signatures the day and year first above written.

J. T. Cline.

Mayme Cline.

Jack F. Cline.

Agnes Cline.

STATE OF TENNESSEE

JOHNSON COUNTY

Personally appeared before me, B. J. Kinsley Jr. a Notary Public in and for said County and State, the within named bargainors, J. T. CLINE AND WIFE, MAYME CLINE, with whom I am personally acquainted, and who acknowledged that they executed the foregoing instrument for the purposes therein contained and expressed.

Witness my hand and official seal at office on this 1st day of ~~May~~ JUNE, 1954.

B. J. Kinsley Jr.
Notary Public.

Commission Expires: Apr. 28, 1957

STATE OF MONTANA

COUNTY OF FERGUS

Personally appeared before me, Ruth F. McKinnon a Notary Public in and for said County and State, the within named bargainors, JACK F. CLINE AND WIFE, AGNES CLINE, with whom I am personally acquainted, and who acknowledged that they executed the foregoing instrument for the purposes therein contained and expressed.

Witness my hand and official seal at office on this 5th day of June, 1954.

Ruth F. McKinnon
Notary Public.

Commission Expires: Sept 19, 1954
Residing at Lewistown, Montana

CONTRACT AND AGREEMENT

THIS CONTRACT AND AGREEMENT made and entered into on this 13th day of April, 1956, by and between J. T. CLINE and wife, MAYNE CLINE, JACK F. CLINE and wife, AGNES CLINE, of Jefferson County, Tennessee, hereinafter called the Owners, parties of the first part, and THE NEW JERSEY ZINC COMPANY, a New Jersey Corporation, authorized to do business in the State of Tennessee, party of the second part, hereinafter called the Zinc Company:

W I T N E S S E T H

That for and in consideration of the sum of ONE ($1.00) DOLLAR and other good and valuable considerations in hand paid, the receipt of which is hereby acknowledged, the parties of the first part grant unto the party of the second part for a period of one year from June 1, 1956 with the privilege of extension for a further period not to extend beyond June 1, 1958, upon payment of sums of money agreed upon, the exclusive right and option to purchase all minerals, metals, ores, ore-bearing materials, and rocks of any kind, including limestone, in, under or on the following described premises.

SITUATE in the Fourth and Ninth Civil Districts of Jefferson County, Tennessee being all the farm lands of the Owners, containing 312 acres, more or less, and bounded generally as follows:

On the North by Swann, Kyle, Underwood and Miller;
On the East by Porter Massengill, Bill Massengill and Shurman Hazelwood;
On the South by J. R. Line, R. J. May, H. L. May and Newman; and
On the West by Lewis Murph and Lauderback.

Owners acquired title to the above described premises by Deed of Rufus McElhaney and wife, dated April 24, 1947 and of Record in the Register's Office for Jefferson County, Tennessee in Deed Book 94, Pages 454-55.

Together with the right to prospect for, mine, mill and remove the same; water rights, the right of ingress and egress, and the right to purchase surface acreage to the extent of twenty acres, in accordance with the terms of an agreement of even date herewith entered into between the parties hereto. And the parties of the first part also grant to the party of the second part during said period the right to prospect for, explore and examine all minerals, metals, ores, ore-bearing materials, and rocks of any kind, including limestone, in, under or on all of said premises, including the right to enter thereupon, to use available water and to remove samples, in accordance with the terms of the last mentioned agreement. The terms of this option Contract and Agreement are fully set out in the Agreement of even date herewith, which is here referred to and made a part hereof as if fully set out at length.

This Contract and Agreement and each and every provision thereof shall be binding upon and enure to the benefit of the parties hereto, their heirs, executors, administrators, successors and assigns.

IN WITNESS WHEREOF, the Owners and parties of the first part have hereunto set their signatures the day and year first above written.

J. T. Cline

J. T. Cline

Mayne Cline

Mayne Cline

Jack F. Cline

Jack F. Cline

Agnes Cline

Agnes Cline

STATE OF TENNESSEE

JEFFERSON COUNTY

Personally appeared before me, Ben S. Catlett, a Notary Public in and for said County and State, the within named bargainors, J. T. CLINE AND WIFE, MAYNE CLINE, with whom I am personally acquainted, and who acknowledged that they executed the foregoing Contract and Agreement for the purposes therein contained and expressed.

Witness my hand and official seal at office on this 26th day of April, 1956.

Ben S. Catlett
Notary Public.

Commission Expires: 4-16-58

STATE OF MONTANA

COUNTY OF FERGUS

Personally appeared before me, Charles W. Lulik, a Notary Public in and for said County and State, the within named bargainors, JACK F. CLINE AND WIFE, AGNES CLINE, with whom I am personally acquainted, and who acknowledged that they executed the foregoing Contract and Agreement for the purposes therein contained and expressed.

Witness my hand and official seal at office on this 23rd day of April, 1956.

Charles W. Lulik
Notary Public.

Commission Expires: 10-22-57
Residing at Lewistown, Montana

EXTENSION CONTRACT AND AGREEMENT

THIS EXTENSION CONTRACT AND AGREEMENT made and entered into on this 28th day of May, 1955, by and between JOHN CARTER (WIDOWER), NELLIE CARTER MORRIS, JAMES B. CARTER and wife, ETHEL PATE CARTER and DAVID C. CARTER, of Jefferson County, Tennessee, hereinafter called the Owners, parties of the first part, and THE NEW JERSEY ZINC COMPANY, a New Jersey Zinc Corporation, authorized to do business in the State of Tennessee, party of the second part, hereinafter called the Zinc Company:

W I T N E S S E T H

WHEREAS, the Owners and the Zinc Company entered into a certain Contract and Agreement under date of September 26th, 1952. The short form thereof of even date between the parties appears of Record in the Register's Office for Jefferson County, Tennessee in Misc. Book 6, Page 17. Both are incorporated by reference, and made a part hereof, as fully as if copied verbatim herein, with respect to certain farm lands of the Owners Situate in the Fourth Civil District of Jefferson County, Tennessee and bounded generally as follows:

On the North by the lands of Mrs. C. C. James
and Mrs. D. M. Henry;
On the East by the lands of Kyle Heirs;
On the South by the lands of R. T. James; and
On the West by the lands of Williams, containing
47 acres, more or less.

For title reference see the following deeds of conveyance of record in the Register's Office for Jefferson County, Tennessee: Deed Book 55, Page 505; Deed Book 97, Page 98; Deed Book 97, Page 99.

WHEREAS, said Contract and Agreement expires on September 26th, 1955 and the parties have mutually agreed to an extension of the terms and provisions thereof.

NOW, THEREFORE, in consideration of the sum of ONE ($1.00) DOLLAR cash and other good and valuable considerations, the Owners grant an extension of said Contract and Agreement of September 26th, 1952 for an additional period of two years, expiring on September 26th 1957.

The terms of this Extension Contract and Agreement are fully set out in an agreement of even date herewith, which is here referred to and made a part hereof as if fully set out at length. Otherwise than specified therein all the provisions of the aforesaid Contract and Agreement of September 26, 1952 shall be in full force and effect during said extended period.

This Extension Contract and Agreement and each and every provision thereof shall be binding upon and enure to the benefit of the parties hereto, their heirs, executors, administrators, successors and assigns.

IN WITNESS WHEREOF, the Owners and parties of the first part have hereunto set their signatures the day and year first above written.

Witness Mark:
Ben L. Cattett
Nellie Carter Morris

John Lee Carter
John Carter, Jr.

Nellie Carter Morris
Nellie Carter Morris.

James B. Carter
James B. Carter.

Ethel Pate Carter
Ethel Pate Carter.

David C. Carter
David C. Carter.

STATE OF TENNESSEE

JEFFERSON COUNTY

Personally appeared before me, Ben S. Catlett, a Notary Public in and for said County and State, the within named bargainors, JOHN CARTER (WIDOWER), NELLIE CARTER MORRIS, JAMES B. CARTER AND WIFE, ETHEL PATE CARTER AND DAVID C. CARTER (SINGLE), with whom I am personally acquainted, and who acknowledged that they executed the foregoing instrument for the purposes therein contained and expressed.

Witness my hand and official seal at office on this 28th day of May, 1955.

Ben S. Catlett
Notary Public.

Commission Expires: 4-16-58

EXHIBIT "B"

RECEIVED
MAY 17 1956

CONTRACT AND AGREEMENT

THIS CONTRACT AND AGREEMENT made and entered into on this 21st day of February, 1956, by and between LLOYD WELCH and wife, EDNA WELCH, of Jefferson County, Tennessee, hereinafter called the Owners, parties of the first part, and THE NEW JERSEY ZINC COMPANY, a New Jersey Corporation, authorized to do business in theState of Tennessee, party of the second part, hereinafter called the Zinc Company.

W I T N E S S E T H

That for and in consideration of the sum of ONE ($1.00) DOLLAR and other good and valuable considerations in hand paid, the receipt of which is hereby acknowledged, the parties of the first part grant unto the party of the second part for a period of one year from the date hereof, with the privilege of extension for further periods not to extend beyond February 21, 1959, upon payment of sums of money agreed upon, the exclusive right and option to purchase all minerals, metals, ores, ore-bearing materials, and rocks of any kind, including limestone, in, under or on the following described premises:

SITUATE in the Ninth Civil District of Jefferson County, Tennessee, consisting of two certain tracts of land, adjoining each other and the lands of Mel R ckard, Bert Moore, Henry Hopkins, Cansler and Charlie Smith, more particularly described as follows:

TRACT ONE:

BEGINNING at a black oak in the "Grant Old Line"; thence N. 30 W. 55 poles to a rock in said line Now A. A. Carter's corner; thence W. 21 poles to a rock in Carter's and Julia E. Bacon's line; thence S. 30 E. 7 poles to a rock in J. E. Bacon's line, and in the line of the 159-1/2 acre survey; thence N. 67 deg. E. 16-7/8 poles to the BEGINNING, containing 8 acres more or less.

TRACT TWO:

BEGINNING on a stone, a corner of "First Tract; and in the division line of Abram Watkins and O. R. Watkins; thence S. 45 deg. West with the line of Charlie Smith the distance of 1214 feet to a rock, a corner this day established by the parties hereto; thence in a Northernly direction, a new line this day established by the parties hereto, with the line of A. H. Hazelwood the distance of 750-1/2 feet to a rock; thence N. 45 E. with the old A. G. Watkins or A. J. Duncan and A.P.C. Bettis line, the distance of 1035 feet to a stone in the division line of the old A. G. Watkins and O. R. Watkins line; thence S. 30 E. to a rock, the Northwest corner of "First Tract", thence continuing S. 30 E. with the Eastern boundary of First Tract to the point of BEGINNING, containing 22 acres more or less.

Owners acquired title to the above described premises by Deed of A. H. Hazelwood (widower), dated February 26, 1946, of Record in the Register's Office for Jefferson County, Tennessee in Deed Book 95, Page 442.

Together with the right to prospect for, mine, mill and remove the same; water rights, the free and uninterrupted right of ingress and egress, in accordance with the terms of an Agreement of even date herewith entered into between the parties hereto.

And the parties of the first part also grant to the party of the second part during said periods the right to prospect for, explore and examine all minerals, metals, ores, ore-bearing materials, and rocks of any kind, including limestone, in, under or on all of said premises, including the right to enter thereupon, to use available water and to remove samples, in accordance with the terms of the last mentioned agreement. The terms of this option Contract and Agreement are fully set out in the Agreement of even date herewith, which is here referred to and made a part hereof as if fully set out at length.

This Contract and Agreement and each and every provision thereof shall be binding upon and enure to the benefit of the parties hereto, their heirs, executors, administrators, successors and assigns.

IN WITNESS WHEREOF, the Owners and parties of the first part have hereunto set their signatures the day and date first above written.

Witness Mark:

B J Ramsey Jr.

Elizabeth Moreland

his
Lloyd X Welch
mark
Lloyd Welch

Edna Welch
Edna Welch.

STATE OF TENNESSEE

JEFFERSON COUNTY

Personally appeared before me, ~~[illegible]~~ B J Ramsey Jr., a Notary Public in and for said County and State, the within named bargainors, LLOYD WELCH AND WIFE, EDNA WELCH, with whom I am personally acquainted, and who acknowledged that they executed the foregoing instrument for the purposes therein contained and expressed.

Witness my hand and official seal at office on this 21st day of February, 1956.

B J Ramsey Jr.
Notary Public.

Commission Expires: ~~[illegible]~~ 4-20-57

CONTRACT AND AGREEMENT

THIS CONTRACT AND AGREEMENT made and entered into on this 10th day of February, 1956, by and between J. S. WALKER and wife, MYRTLE PEARL WALKER of Jefferson County, Tennessee, hereinafter called the Owners, parties of the first part, and THE NEW JERSEY ZINC COMPANY, a New Jersey Corporation, authorized to do business in the State of Tennessee, party of the second part, hereinafter called the Zinc Company.

W I T N E S S E T H

That for and in consideration of the sum of ONE ($1.00) DOLLAR and other good and valuable considerations in hand paid, the receipt of which is hereby acknowledged, the parties of the first part grant unto the party of the second part for a period of one year from the date hereof, with the privilege of extension for further periods not to extend beyond February 10, 1959, upon payment of sums of money agreed upon, the exclusive right and option to purchase all minerals, metals, ores, ore-bearing materials, and rocks of any kind, including limestone, in, under or on the following described premises:

SITUATE in the Ninth Civil District of Jefferson County, Tennessee, being the homeplace of the Grantors and where they now reside, containing 45 acres more or less and bounded generally as follows:

On the North by the lands of Raymond Smith;
On the East by the lands of Ray Hazelwood and Lloyd Burnett;
On the South by the lands of Malcom, Roy Walker and Olen Carmichael; and
On the West by the lands of Floyd Ingram and Greene.

Owners acquired title to the above described premises by four certain Deeds of conveyance of Record in the Register's Office for Jefferson County, Tennessee as follows: (1) Deed of G. W. Bacon and wife, dated June 13, 1919, Deed Book 62, Page 64; (2) Deed of G. W. Masengill and wife, dated November 22, 1927, Deed Book 71, Page 71; (3) Deed of Floyd Ingram and wife, dated October 18, 1924, Deed Book 72, Page 218 and (4) Deed of Mrs. Julia E. Bacon, dated September 25, 1925, Deed Book 78, Page 375.

Together with the right to prospect for, mine, mill and remove the same; water rights, the free and uninterrupted right of ingress and egress, in accordance with the terms of an Agreement of even date herewith entered into between the parties hereto.

And the parties of the first part also grant to the party of the second part during said periods the right to prospect for, explore and examine all minerals, metals, ores, ore-bearing materials, and rocks of any kind, including limestone, in, under or on all of said premises, including the right to enter thereupon, to use available water and to remove samples, in accordance with the terms of the last mentioned agreement. The terms of this option Contract and Agreement are fully set out in the Agreement of even date herewith, which is here referred to and made a part hereof as if fully set out at length.

This Contract and Agreement and each and every provision thereof shall be binding upon and enure to the benefit of the parties hereto, their heirs, executors, administrators, successors and assigns.

IN WITNESS WHEREOF, the Owners and parties of the first part have hereunto set their signatures the day and date first above written.

J. S. Walker

J. S. Walker.

Myrtle Pearl Walker

Myrtle Pearl Walker.

STATE OF TENNESSEE

JEFFERSON COUNTY

Personally appeared before me, Ben S. Catlett, a Notary Public in and for said County and State, the within named bargainors, J. S. WALKER AND WIFE, MYRTLE PEARL WALKER, with whom I am personally acquainted, and who acknowledged that they executed the foregoing Contract and Agreement for the purposes therein contained and expressed.

Witness my hand and official seal at office on this 10th day of February, 1956.

Ben S. Catlett
Notary Public.

Commission Expires: 4-16-58

CONTRACT AND AGREEMENT

THIS CONTRACT AND AGREEMENT made and entered into on this 21st day of February, 1956, by and between ROBERT B. SMITH and wife, WILLIE MAE SMITH, OF Jefferson County, Tennessee, hereinafter called the Owners, parties of the first part, and THE NEW JERSEY ZINC COMPANY, a New Jersey Corporation, authorized to do business in the State of Tennessee, party of the second part, hereinafter called the Zinc Company.

W I T N E S S E T H

That for and in consideration of the sum of ONE ($1.00) DOLLAR and other good and valuable considerations in hand paid, the receipt of which is hereby acknowledged, the parties of the first part grant unto the party of the second part for a period of one year from the date hereof, with the privilege of extension for further periods not to extend beyond February 21, 1959, upon payment of sums of money agreed upon, the exclusive right and option to purchase all minerals, metals, ores, ore-bearing materials, and rocks of any kind, including limestone, in, under or on the following described premises:

SITUATE in the Ninth Civil District of Jefferson County, Tennessee, consisting of two separate tracts of land, and bounded and described as follows:

TRACT ONE : Adjoining the lands of Bill Massengill, three acre tract of Mrs. Cameron, Mrs. George Massengill and described as follows:

BEGINNING on a rock, Stevenson's corner, with old line S. 85-3/4 E. 46 poles to a rock; thence S. 9 E. 37-1/2 poles to a rock, a ledge of rock; thence S. 1-1/2 W. 80-1/2 poles to a rock; thence S. 81-1/2 W. 48-1/2 poles to Stevenson's corner; thence N. 1-1/2 E. 129 poles to the BEGINNING, containing 28 acres more or less.

TRACT TWO: BEGINNING on a rock near a cedar, on the Massengill line, corner to Floyd Ingram; thence with the public Road S. 20 deg. 30' E. 30 poles to the intersection of the cross road; thence with the cross Road S. 35 deg. 30' W. 36-1/2 poles to the corner of Lots 3 and 4; thence still with said road S. 63 deg. 15' W. 25-1/2 poles to a stake in the road; thence S. 84 deg. W. 25-2/3 poles with Wm. Massengill line to a stake; thence with Watkins Bros., line N. 16 deg. 40' E. 19-1/3 poles to a stake, corner to Watkins Bros; thence with their line and the line of Massengill N. 48 deg. E. 68.7 poles to the BEGINNING containing 18 acres, more or less.

Owners acquired title to the above described premises by the following Deeds of conveyance of Record in the Register's Office for Jefferson County, Tennessee as follows: Tract One by Deed of E. R. Walker and wife, dated January 12, 1944, Deed Book 93, Page 83, and Tract Two by Deed of J. L. Burchfield and wife, dated December 5, 1944, Deed Book 93, Page 548.

Together with the right to prospect for, mine, mill and remove the same; water rights, the free and uninterrupted right of ingress and egress, in accordance with the terms of an Agreement of even date herewith entered into between the parties hereto.

And the parties of the first part also grant to the party of the second part during said periods the right to prospect for, explore and examine all minerals, metals, ores, ore-bearing materials, and rocks of any kind, including limestone, in, under or on all of said premises, including the right to enter thereupon, to use available water and to remove samples, in accordance with the terms of the last mentioned agreement. The terms of this option Contract and Agreement are fully set out in the Agreement of even date herewith, which is here referred to and made a part hereof as if fully set out at length.

This Contract and Agreement and each and every provision thereof shall be binding upon and enure to the benefit of the parties hereto,

their heirs, executors, administrators, successors and assigns.

IN WITNESS WHEREOF, the Owners and parties of the first part have hereunto set their signatures the day and date first above written.

Robert E. Smith
Robert E. Smith.

Willie Mae Smith
Willie Mae Smith.

STATE OF TENNESSEE

JEFFERSON COUNTY

Personally appeared before me, Ben S. Catlett, a Notary Public in and for said County and State, the within named bargainors, ROBERT E. SMITH AND WIFE, WILLIE MAE SMITH, with whom I am personally acquainted, and who acknowledged, that they executed the foregoing Contract and Agreement for the purposes therein contained and expressed.

Witness my hand and official seal at office on this 21st day of February, 1956.

Ben S. Catlett
Notary Public.

Commission Expires: 4-16-58

CONTRACT AND AGREEMENT

THIS CONTRACT AND AGREEMENT made and entered into on this 13th day of March, 1956, by and between CHARLIE J. F. SMITH and wife, LIZZIE SMITH of Jefferson County, Tennessee, hereinafter called the Owners, parties of the first part, and THE NEW JERSEY ZINC COMPANY, a New Jersey Corporation, authorized to do business in the State of Tennessee, party of the second part, hereinafter called the Zinc Company.

W I T N E S S E T H

That for and in consideration of the sum of ONE ($1.00) DOLLAR and other good and valuable considerations in hand paid, the receipt of which is hereby acknowledged, the parties of the first part grant unto the party of the second part for a period of one year from the date hereof, with the privilege of extension for further periods not to extend beyond March 13, 1959, upon payment of sums of money agreed upon, the exclusive right and option to purchase all minerals, metals, ores, ore-bearing materials, and rocks of any kind, including limestone, in, under or on the following described premises.

SITUATE in the Ninth Civil District of Jefferson County, Tennessee, bounded generally as follows:

On the North by the lands of Welch, Keusler and Cox;
On the East by the lands of Ruth Shaver;
On the South by the lands of Trent and Smith; and
On the West by the lands of Lloyd Burnett, containing 100 acres, more or less.

Owners acquired title to the above described property by the following deeds of conveyance of Record in the Register's Office for Jefferson County, Tennessee as follows: (1) Deed of G. P. Smith and wife, dated December 17, 1931, Deed Book 76, Page 403; (2) Deed of Mrs. G. P. Smith, et al., dated July 3, 1933, Deed Book 77, Page 462 and Deed of J. T. Owen, et al., dated August 10, 1921, Deed Book 63, Page 304.

Together with the right to prospect for, mine, mill and remove the same; water rights, the free and uninterrupted right of ingress and egress, and the right to purchase twenty acres of the surface of the above described premises, in accordance with the terms of an Agreement of even date herewith entered into between the parties hereto.

And the parties of the first part also grant to the party of the second part during said periods the right to prospect for, explore and examine all minerals, metals, ores, ore-bearing materials, and rocks of any kind, including limestone, in, under or on all of said premises, including the right to enter thereupon, to use available water and to remove samples, in accordance with the terms of the last mentioned agreement. The terms of this option Contract and Agreement are fully set out in the Agreement of even date herewith, which is here referred to and made a part hereof as if fully set out at length.

This Contract and Agreement and each and every provision thereof shall be binding upon and enure to the benefit of the parties hereto, their heirs, executors, administrators, successors and assigns.

IN WITNESS WHEREOF, the Owners and parties of the first part have hereunto set their signatures the day and date first above written.

Charlie J. P. Smith

Charlie J. P. Smith.

Lizzie Smith

Lizzie Smith

STATE OF TENNESSEE

JEFFERSON COUNTY

Personally appeared before me, Ben S. Catlett, a Notary Public in and for said County and State, the within named bargainors, CHARLIE J. P. SMITH and wife, LIZZIE SMITH, with whom I am personally acquainted, and who acknowledged that they executed the foregoing Contract and Agreement for the purposes therein contained and expressed.

Witness my hand and official seal at office on this 13th day of March, 1956.

Ben S. Catlett
Notary Public.

Commission Expires: 4-16-58

CONTRACT AND AGREEMENT

THIS CONTRACT AND AGREEMENT made and entered into on, this 2nd day of March, 1956, by and between HENRY HOPKINS and wife, VIOLA S. HOPKINS, of Jefferson County, Tennessee, hereinafter called the Owners, parties of the first part, and THE NEW JERSEY ZINC COMPANY, a New Jersey Corporation, authorized to do business in the State of Tennessee, party of the second part, hereinafter called the Zinc Company:

W I T N E S S E T H

That for and in consideration of the sum of ONE ($1.00) DOLLAR and other good and valuable considerations in hand paid, the receipt of which is hereby acknowledged, the parties of the first part grant unto the party of the second part for a period of two years from the date hereof, with the privilege of extension for a further period not to extend beyond March 2, 1959, upon payment of sums of money agreed upon, the exclusive right and option to purchase the fee simple title to the following described premises:

SITUATE in the Ninth Civil District of Jefferson County, Tennessee, and bounded and described as follows:

> BEGINNING on a stake in the center of the road and the Northern corner of Lot No. 19 in the Subdivision of the J. W. Duncan farm, thence with the road South 62-3/4 West 356 feet, South 80 West 343 feet, South 73-1/2 W. 507 feet South 53-3/4 West 178 feet to a stake in the fork of the road South 20 deg. 20' East 1963 feet, stake at the bend of the road, South 48 deg. 25' East 1428 feet to center of a solid rock in the road, then with the subdivision line, North 19 deg. 05' West 1430 feet to the BEGINNING containing 52.6 acres more or less.

Owners acquired title to the above described premises by Deed of Sherman Hazelwood and wife, dated March 3, 1942 and of Record in the Register's Office for Jefferson County, Tennessee in Deed Book 85, Page 385, to which reference is made.

The parties of the first part also grant to the party of the second part during said periods the right to prospect for, explore and examine all minerals, metals, ores, ore-bearing materials, and rock of any kind, in, under or on all of said premises, including the right to enter thereupon, to use available water and to remove samples, in accordance with the terms of an Agreement of even date herewith entered into between the parties hereto. The terms of this option Contract and Agreement are fully set out in the Agreement of even date herewith, which is here referred to and made a part hereof as if fully set out at length.

This Contract and Agreement and each and every provision thereof shall be binding upon and enure to the benefit of the parties hereto, their heirs, executors, administrators, successors and assigns.

IN WITNESS WHEREOF, the Owners and parties of the first part have hereunto set their signatures the day and year first above written.

Henry Hopkins
Henry Hopkins.

Viola S. Hopkins
Viola S. Hopkins.

STATE OF TENNESSEE

JEFFERSON COUNTY

Personally appeared before me, Ben L. Catlett a Notary Public in and for said County and State, the within named bargainors, HENRY HOPKINS AND WIFE, VIOLA S. HOPKINS, with whom I am personally acquainted, and who acknowledged that they executed the foregoing Contract and Agreement for the purposes therein contained and expressed.

Witness my hand and official seal at office on this 2nd day of March, 1956.

Ben L. Catlett
Notary Public.

Commission Expires: 4-16-58

CONTRACT AND AGREEMENT

THIS CONTRACT AND AGREEMENT made and entered into on this 16th day of February, 1956, by and between J. A. ELLER and wife, NELL ELLER, of Jefferson County, Tennessee, hereinafter called the Owners, parties of the first part, and THE NEW JERSEY ZINC COMPANY, a New Jersey Corporation, authorized to do business in the State of Tennessee, party of the second part, hereinafter called the Zinc Company.

W I T N E S S E T H

That for and in consideration of the sum of ONE ($1.00) DOLLAR and other good and valuable considerations in hand paid, the receipt of which is hereby acknowledged, the parties of the first part grant to the party of the second part for a period of one year from the date hereof, with the privilege of extension for further periods not to extend beyond February 16, 1959, upon payment of sums of money agreed upon, the exclusive right and option to purchase all minerals, metals, ores, ore-bearing materials, and rocks of any kind, including limestone, in, under or on the following described premises:

SITUATE in the Ninth Civil District of Jefferson County, Tennessee, being the homeplace of the Owners, more particularly described as follows:

> BEGINNING on a rock in J. W. Collett's line, a corner to A. H. Hazelwood, formerly C. T. Quarles; thence West 72 poles to a rock near a pine in J. W. Collett's formerly in P. V. Colle's line; thence South 25 East 33 poles and 7 links to a rock in a field, in Lee Smith's line, formerly C. P. Smith; thence North 84-1/2 E. 72 poles to a rock, Lloyd Welch's corner formerly Sam Knight thence North 25-1/2 West 26 poles and 14 links to the BEGINNING corner, containing 13.5 acres more orless.

Owners acquired title to the above described premises by Clerk & Master's Deed dated July 23, 1941 and of Record in the Register's Office for Jefferson County, Tennessee in Deed Book 84, Page 440.

Together with the right to prospect for, mine, mill, and remove the same; water rights, the free and uninterrupted right of ingress and egress, in accordance with the terms of an Agreement of even date herewith entered into between the parties hereto.

And the parties of the first part also grant to the party of the second part during said periods the right to prospect for, explore and examine all minerals, metals, ores, ore-bearing materials, and rocks of any kind, including limestone, in, under or on all of said premises, including the right to enter thereupon, to use available water and to remove samples, in accordance with the terms of the last mentioned agreement. The terms of this option Contract and Agreement are fully set out in the Agreement of even date herewith, which is here referred to and made a part hereof as if fully set out at length.

This Contract and Agreement and each and every provision thereof shall be binding upon and enure to the benefit of the parties hereto, their heirs, executors, administrators, successors and assigns.'

IN WITNESS WHEREOF, the Owners and parties of the first part have hereunto set their signatures the day and date first above written.

J. A. Eller

J. A. Eller.

Nell Eller

Nell Eller.

STATE OF TENNESSEE

JEFFERSON COUNTY

Personally appeared before me, Helen Burchfiel a Notary Public in and for said County and State, the within named bargainors, J. A. ELLER AND WIFE, NELL ELLER, with whom I am personally acquainted, and who acknowledged that they executed the foregoing Contract and Agreement for the purposes therein contained and expressed.

Witness my hand and official seal at office on this 16th day of February, 1956.

Com. Expires 7-14-59 Helen Burchfiel

NOTARY PUBLIC

CONTRACT AND AGREEMENT

THIS CONTRACT AND AGREEMENT made and entered into on this 28th day of February, 1956, by and between NELLIE CARMICHAEL (Widow), of Jefferson County, Tennessee, hereinafter called the Owner, party of the first part, and THE NEW JERSEY ZINC COMPANY, a New Jersey Corporation, authorized to do business in the State of Tennessee, party of the second part, hereinafter called the Zinc Company:

W I T N E S S E T H

That for and in consideration of the sum of ONE ($1.00) DOLLAR and other good and valuable considerations in hand paid, the receipt of which is hereby acknowledged, the party of the first part grants unto the party of the second part for a period of one year from the date hereof, with the privilege of extension for further periods not to extend beyond February 28, 1959, upon payment of sums of money agreed upon, the exclusive right and option to purchase all minerals, metals, ores, ore-bearing materials, and rocks of any kind, including limestone, in, under or on the following described premises.

SITUATE in the Ninth Civil District of Jefferson County, Tennessee and bounded and described as follows:

> BEGINNING on a rock in the junction of the Talbotts road, corner with Burnett and Ingram, thence with the road and Ingram's line N. 45-30 E. 1039 feet to a rock in the road, Ingrams corner; thence S. 53 E. with Bacon and G. P. Smith line 647 feet to a rock, G. P. Smiths Corner; thence with Smiths line S. 45-30 W. 183 feet to a rock, corner of a 16 acre tract and corner of a 23 acre tract; thence continued withG. P. Smiths line S. 52-45 E. 1190 feet to a rock in a sink, near old well, corner with said Smith and T. O. Breeding thence with Breedings line S. 39-30 W. 967 feet to a rock in the Talbotts road; thence with the Road N. 49-30 W. passing the corner of the 23 acre tract at 1300 feet, in all 1938 feet to the BEGINNING containing 40.51 acres.

Olen Carmichael and wife, Nellie Carmichael acquired title to the above described property as an estate by the entirety by Deed of the Morristown Trust Company, dated February 1, 1930 and of Record in the Register's Office for Jefferson County, Tennessee in Deed Book 73, Page 162, to which reference is made. The said Olen Carmichael being now deceased, leaving Nellie Carmichael sole owner as surviving tenant of an estate by the entirety.

Together with the right to prospect for, mine, mill and remove the same; water rights, the free and uninterrupted right of ingress and egress, and the right to purchase the entire surface area of the above described premises, in accordance with the terms of an Agreement of even date herewith entered into between the parties hereto.

And the party of the first part also grants to the party of the second part during said periods the right to prospect for, explore and examine all minerals, metals, ores, ore-bearing materials, and rocks of any kind, including limestone, in, under or on all of said premises, including the right to enter thereupon, to use available water and to remove samples, in accordance with the terms of the last mentioned agreement. The terms of this option Contract and Agreement are fully set out in the Agreement of even date herewith, which is here referred to and made a part hereof as if fully set out at length.

This Contract and Agreement and each and every provision thereof shall be binding upon and enure to the benefit of the parties hereto, their heirs, executors, administrators, successors and assigns.

IN WITNESS WHEREOF, the Owner and party of the first part has hereunto set her signature the day and date first above written.

Nellie Carmichael

Nellie Carmichael.

STATE OF TENNESSEE

JEFFERSON COUNTY

Personally appeared before me, Ben S. Catlett, a Notary Public in and for said County and State, the within named bargainor, NELLIE CARMICHAEL (WIDOW), with whom I am personally acquainted, and who acknowledged that she executed the foregoing Contract and Agreement for the purposes therein contained and expressed.

Witness my hand and official seal at office on this 28th day of February, 1956.

Ben S. Catlett
Notary Public

Commission Expires: 4-16-58

CONTRACT AND AGREEMENT

THIS CONTRACT AND AGREEMENT made and entered into on this 17th day of April, 1956, by and between RAYMOND B. SMITH and wife, FARRIE SMITH of Jefferson County, Tennessee, hereinafter called the Owners, parties of the first part, and THE NEW JERSEY ZINC COMPANY, a New Jersey Corporaton, authorized to do business in the State of Tennessee, party of the second part, hereinafter called the Zinc Company.

W I T N E S S E T H

That for and in consideration of the sum of ONE ($1.00) DOLLAR and other good and valuable considerations in hand paid, the receipt of which is hereby acknowledged, the parties of the first part grant unto the party of the second part for a period of one year from the date hereof, with the privilege of extension for further periods not to extend beyond April 17, 1959, upon payment of sums of money agreed upon the exclusive right and option to purchase all minerals, metals, ores, ore-bearing materials, and rocks of any kind, including limestone, in, under or on the following described premises:

SITUATE in the Ninth Civil District of Jefferson County, Tennessee consisting of three tracts of land described as follows:

TRACT ONE : BEGINNING on a post planted, corner to tract of land conveyed to Gertie Collett in the line of Stoke Walker, thence with cross fence and line of tract conveyed to said Collett, to a stake in the line of Knight, corner to said Collett; thence with the line of Knight to the line of Oakley to the line of Walker; thence with the line of Walker to the point of BEGINNING containing 16 acres more or less.

TRACT TWO BEGINNING on a stone in the center of the pike near the pond; N. 3-3/4 W. 30 poles to a stone; thence N. 21-1/2 W. 19 poles to a stone, S. 42 W. 1-1/2 poles to the center of the pike; then S. with the center of the pike 45 poles and 11-1/2 poles to the BEGINNING, 1 acre more or less.

TRACT THREE : BEGINNING at a rock set in the ground on the West edge of the Talbott's road, a short distance Northwest of the widow Line's dwelling; thence with her line S. 88-1/2 E. 24-4/5 poles to a rock, corner with same; thence S. 72 E. 2 poles to a rock; thence along a road and her line S. 52 E. 20 poles to a rock; thence with the same S. 30-1/2 E. 15 poles to a rock, corner of W. F. Breeden; then with his line N. 65 E. 45 poles to a rock; N. 12-4/5 poles to a rock in J. A. Line's line; then with his line West 20 links to a rock; then N. 15-1/2 E. 135 poles and 17 links to a rock, corner to J. F. Knowling; thence with his line N. 77 W. 61 poles to a rock, his corner; thence with same S. 53-3/4 W. 68-1/2 poles to a rock, Collett's corner; thence with his line S. 19 E. 11 poles to a rock, his corner; thence with same S. 48-1/2 W. 44 poles to a rock in center of Dandridge Road, S. 20-1/4 E. 11 poles to a rock; S. 3-3/4 E. 35 poles to a rock; S. 25 E. 27 poles to the BEGINNING, containing 103-1/4 acres.

From tract Two there is excluded 10 acres heretofore sold and conveyed to Bob Haag under date of June 10, 1937, also 3 acres heretofore sold and conveyed to Robert Estes.

Except fro said exclusions being the same property conveyed to the Owners by the following deeds of conveyance of Record in the Register's Office for Jefferson County, Tennessee as follows: (1) Deed of Oma Davis Breeden, et vir, et al., dated October 21, 1944, Deed Book 94, Page 339-40; and (2) Deed of C. C. Line, et ux., dated January 30, 1947, Deed Book 96, Page 410.

Together with the right to prospect for, mine, mill and remove the same; water rights, the right of ingress and egress, and the right to purchase the surface area to Tract One, in accordance with the terms of an Agreement of even date herewith entered into between the parties hereto. And the parties of the first part also grant to the party of the second part during said periods the right to prospect for, explore and examine all minerals, metals, ores, ore-bearing materials and rocks of any kind, including limestone, in, under or on all of said premises.

including the right to enter thereupon, to use available water and to remove samples, in accordance with the terms of the last mentioned agreement. The terms of this option Contract and Agreement are fully set out in the Agreement of even date herewith, which is here referred to and made a part hereof as if fully set out at length.

This Contract and Agreement and each and every provision thereof shall be binding upon and enure to the benefit of the parties hereto, their heirs, executors, administrators, successors and assigns.

IN WITNESS WHEREOF, the Owners and parties of the first part have hereunto set their signatures the day and year first above written.

Raymond B. Smith

Raymond B. Smith.

Farrie Smith

Farrie Smith.

STATE OF TENNESSEE

JEFFERSON COUNTY

Personally appeared before me, Ben S. Catlett, a Notary Public in and for said County and State, the within named bargainors, RAYMOND B. SMITH AND WIFE, FARRIE SMITH, with whom I am personally acquainted, and who acknowledged that they executed the foregoing Contract and Agreement for the purposes therein contained and expressed.

Witness my hand and official seal at office on this 17th day of April, 1956.

Ben S. Catlett

Notary Public.

Commission Expires: 4-16-58

CONTRACT AND AGREEMENT

THIS CONTRACT AND AGREEMENT made and entered into on this 18th day of April, 1956 by and between OLIVE SMITH (one and the same person as Olive Mickliff Smith), of Jefferson County, Tennessee, hereinafter called the Owner, party of the first part, and THE NEW JERSEY ZINC COMPANY, a New Jersey Corporation, authorized to do business in the State of Tennessee, party of the second part, hereinafter called the Zinc Company.

W I T N E S S E T H

That for and in consideration of the sum of ONE ($1.00) DOLLAR and other good and valuable considerations in hand paid, the receipt of which is hereby acknowledged, the party of the first part grants unto the party of the second part for a period of one year from the date hereof, with the privilege of extension for further periods not to extend beyond April 18, 1959, upon payment of sums of money agreed upon, the exclusive right and option to purchase all minerals, metals, ores, ore-bearing materials, and rocks of any kind, including lime stone, in, under or on the following described premises.

SITUATE in the Ninth Civil District of Jefferson County, Tennessee, consisting of two tracts, both adjoining and making up one boundary, described as follows:

TRACT ONE : BEGINNING on a rock, corner with J. B. Line's corner to Collett's line, thence with Collett and J. W. Smith line Easterly course 56 poles to a rock corner in J. W. Smith line, Northerly course 20 poles to J. P. Knowling line with a fence,

Northerly course 70 poles to a rock corner in said line, thence Westerly course with Smith line 53 poles to a rock corner in J. B. Lines line, thence with Line's line Southeasterly course 22 poles to the BEGINNING, containing seven acres, more or less.

TRACT TWO: BEGINNING on a rock J. B. Lines corner, thence Easterly course 104 poles to a rock in G. P. Smith line and Jess Cline line; thence with Cline's and T. H. Knowling's line 34 poles South to a rock Line Brothers corner and T. H. Knowling corner; thence with Line Bros. line 25 poles Westerly course to a rock corner of Sherman Smith's; thence with Sherman Smith's line 20 poles Northerly course with Sherman Smith's line to a rock corner; thence with Sherman Smith's line Westerly course 52 poles to a rock in J. B. Line's line; thence with said Line's line 35 poles to the BEGINNING, containing 23 acres more or less.

Owner acquired title to the above described premises by the following deeds of conveyance of Record in the Register's Office for Jefferson County, Tennessee as follows: (1) Deed of Sherman Smith, dated March 26, 1931, Deed Book 75, Page 394; and (2) Deed of Sherman Smith dated August 11, 1952, Deed Book 76, Page 238.

Together with the right to prospect for, mine, mill and remove the same; water rights, the free and uninterrupted right of ingress and egress, in accordance with the terms of an Agreement of even date herewith entered into between the parties hereto.

And the party of the first part also grants to the party of the second part during said periods the rights to prospect for, explore and examine all minerals, metals, ores, ore-bearing materials, and rocks of any kind, including limestone, in, under or on all of said premises, including the right to enter thereupon, to use available water and to remove samples, in accordance with the terms of the last mentioned agreement. The terms of this option Contract and Agreement are fully set out in the Agreement of even date herewith, which is here referred to and made a part hereof as if fully set out at length.

This Contract and Agreement and each and every provision thereof shall be binding upon and enure to the benefit of the parties hereto, their heirs, executors, administrators, successors and assigns.

IN WITNESS WHEREOF, the Owner and party of the first part has hereunto set her signature the day and date first above written.

Olive Smith

Olive Smith.

STATE OF TENNESSEE

JEFFERSON COUNTY

Personally appeared before me, Ben S. Catlett, a Notary Public in and for said County and State, the within named bargainor, OLIVE SMITH (one and the same person as Olive Middleff Smith) with whom I am personally acquainted, and who acknowledged that she executed the foregoing Contract and Agreement for the purposes therein contained and expressed.

Witness my hand and official seal at office on this 12th day of April, 1956.

Ben S. Catlett

Notary Public.

Commission Expires: 4-16-58

DMEA Form 14

Contract No. Idm-E 936

Docket No. 4119

Terminated contract

DEPARTMENT OF THE INTERIOR

DEFENSE MINERALS EXPLORATION ADMINISTRATION

Obligation Document

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 30, 1956	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	878,125.00
Increase	0	0
Decrease	0	42,459.19
Revised Amount	0	835,665.81

Remarks:

ALLEN S. DAKAN

(Name)

Allen S. Dakan, Chief
Operations Control and
Statistics Division

(Title)

Date Delivered to Bureau of Mines, Washington 6/19/57

16416

Government's copy

RECEIVED

APR 13 1956

MF-200
(Revised June 1954)

Docket No. DMEA - 4119

Commodity Zinc

Contract No. Idm-E 936

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

EXPLORATION PROJECT CONTRACT[1]

It is agreed this MAR 30 1956 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, and 2 maps, Figures 2 and 5.

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, Counties of Jefferson and Hamblen, and is described in Annex I.[3]

(b) The Operator represents and undertakes that:

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

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

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

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

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

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 June 1, 1956, shall commence the work, and on or before September 1, 1957 (unless the Operator's obligation to prosecute the work is terminated—see Article 10) shall either have completed the work or shall have incurred allowable costs (see Article 6) in a sum not less than the estimated total allowable cost set forth in Exhibit "A."

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

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

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

ARTICLE 5. *Contribution by the Government.*—The estimated total allowable cost of the project, set forth in Exhibit "A," is the sum of $156,250.00 The Government shall contribute 50 percent of the allowable costs as they are incurred in a total sum not in excess of $78,125.00: *Provided,* That until the Operator has rendered to the Government his final report, and any final auditing required by the Government has been made, and a final settlement of the contract has been made, the Government may withhold from the last

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

ARTICLE 6. *Estimated costs.*—(a) *Categories of costs.*—The allowable costs of the work to which the Government shall contribute are limited to those that are direct, reasonable, necessary, and that are estimated in Exhibit "A" by categories as specified in this article. If any category or subcategory is omitted from the estimate of costs, or if the word "none" is annexed to the listing thereof, costs under such category or subcategory are not allowable. Any excess over any estimate which is indicated as the maximum of any category, subcategory, or item, either as to requirement or related cost, and any excess over the estimated total allowable cost of the work, shall not be allowable. Any excess over the estimate of any category, subcategory, or item, either as to requirement or related cost, not indicated as a maximum shall be allowable within the limit of the estimated total allowable cost of the work. To the extent that excesses over maximums other than the estimated total allowable cost of the work may be necessary for the performance of the work, the Operator shall incur such excesses for his own account without contribution by the Government; but except for any such necessary excesses in categories, subcategories, or items thereunder the Operator is not obligated to incur more than his agreed percentage of the estimated, total allowable cost of the work. See Article 13

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

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

CATEGORY (2)—PERSONAL SERVICES.

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

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

Subcategory (c)—Labor.

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

CATEGORY (4)—OPERATING EQUIPMENT.

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

See Article 13.

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

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

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

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

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

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

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

(c) *Basis for computation.*—The Government's royalty shall be a percentage of the gross proceeds (including any bonuses, premiums, allowances, or other benefits) from the production sold, in the form sold (ore, concentrates, metal, or equivalent), at the point of delivery (the f. o. b. point); *except,* that charges of *the buyer* arising in the regular course of business, and shown as deductions on the buyer's settlement sheets, on account of the cost of treatment processes performed by *the buyer,* sampling and assaying to determine the value of the production sold, and freight paid by *the buyer* to a carrier (not the Operator), shall be allowed as deductions in arriving at the "gross proceeds" as that term is used herein. Any costs of treatment processes, sampling or assaying, or transportation, performed or paid by the Operator or by anyone other than the buyer, are not deductible in arriving at the "gross proceeds" as that term is here used. The term "treatment processes," as here used, means those processes (such as milling, concentrating, smelting, refining, or equivalent) applied to the crude ore or other production after it is extracted from the ground, to put it into a commercially marketable form; excluding fabricating or manufacturing. **See Article 13.**

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

ARTICLE 13. *Changes and added provisions.*— **(a) Categories (2) through (7) of Article 6(a) are deleted. (b) To the extent that costs are set forth in Exhibit "A" as "Fixed Unit Costs" they are in lieu of the actual costs that otherwise would be allowable costs of the project under Article 6 of the contract. The Government will contribute to the fixed unit costs as they accrue, on the basis of units of work actually performed. The fixed unit costs include all costs of the work necessary to complete the project. (c) That part of the last sentence in the first paragraph of Article 6(a) commencing after the semicolon, is deleted. (d) 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." (e) 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 would be used as the basis for calculating royalty payable to the Government."**

16—70617-1

Executed in sextuplicate the day and year first above written.

THE UNITED STATES OF AMERICA

By C. C. Mitchenor

Administrator, Defense Minerals Exploration Administration

THE NEW JERSEY ZINC COMPANY

(Operator)

By J. Bordwin

Title VICE PRESIDENT

I, *Walter R. Anyan*, certify that I am the secretary of the corporation named as Operator herein; that *S. S. Goodwin* 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.

Walter R. Anyan

[CORPORATE SEAL]

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

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EXPLORATION PROJECT CONTRACT
THE NEW JERSEY ZINC COMPANY
DOCKET NO. DMEA-4119

Annex I

The land referred to in Article 2 of the Contract consists of various privately owned tracts of land which are held by the Operator pursuant to option contracts, which permit it to purchase all mineral and mining rights on such tracts. Such land areas are outlined in blue on the attached map entitled "The New Jersey Zinc Company, Jefferson City, Tennessee, Property Map, Morristown Sector-Talbot Area, Figure 2" which is hereby made a part of this Contract.

The various land parcels are identified as follows:

Name of Property Owner	Acreage
Mitchell Housley, Pearl Housley and Herman Housley	127
Hattie Miller	78
Earl Morgan and Sadie Marie Morgan	76
W. B. Watkins, Wilma B. Watkins and I. R. Watkins	176
Annetta McElveen	135
Miriam M. Caldwell	75
John Carter	47
Joe Pollard and Cordie Pollard	42
Thomas Courtney	90
H. H. Oakley	137
William Pollard and Jessie Pollard	28
C. M. Breeden and Bertha Breeden	81
Roy O. Breeden and Anna Lee Breeden	8
C. E. Goodman and Martha Goodman	400
R. V. Coile and Florence Franklin Coile	109
Elihu Knight and Maude Knight	80
Jake Austin and Jennie Lee Austin	182
Leonard B. Dearing	230
Jessie Q. Burnett	59
Elen Davis, Trula Davis, and Roy F. Davis	42
W. B. Rugel, Earl Rugel and Pauline Rugel	42

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SPECIAL AGREEMENT CONCERNING LAND

1. In the event the Operator should at any time during the period expiring ten years from the date of this Contract acquire any interest, title or equity, in any lands contiguous to the lands covered by 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 under this Contract, request the Government to delete from this Contract such lands described in the Option Contracts listed in this Annex I, or by any amendments thereto, as have no known value for mineral production. The Government will promptly prepare amendments removing the specified lands 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 lands, 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 thirty 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 lands or any minerals produced therefrom, or derives any benefit therefrom, before the expiration of thirty years from the date of this Contract, the lands 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 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.

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EXPLORATION PROJECT CONTRACT
THE NEW JERSEY ZINC COMPANY
DOCKET NO. DMEA-4119

EXHIBIT "A"

Description of the Work

The purpose of the project is to explore for ores of zinc by diamond drilling (plus necessary overburden drilling). The preliminary drilling to be done under the Contract is roughly indicated on the attached map entitled "Fig. 5, The New Jersey Zinc Company, Morristown Sector, Talbot Area."

The intent of the work is to investigate the ore potential of the Kingsport limestone and dolomite which is the ore-bearing formation of the district. It is anticipated that drill holes will range from 800 to 1,700 feet in depth, with a probable average depth of 1,250 feet.

The project is not intended to accomplish the detailed outlining of individual ore bodies. Drill holes will not be located on closer spacing than 600 feet, except by special arrangement with the Government. All diamond drilling, including location of holes and depths, will be subject to prior Government approval.

All drill holes shall be logged geologically and all drill core will be made available to the Government for examination. All mineralized core will be properly sampled and assayed for zinc and iron. Such assays, together with proper geological logs of drill holes, will be reported to the Government, together with proper plan maps and sections showing the progress of the work. Diamond drilling will be done with AX size, or larger, core recovery drills and coring bits.

The project work shall be supervised at all times by competent engineers or geologists.

It is estimated that 60,000 feet of drilling will be required to test the gross ore potential of the area.

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Estimated Cost of the Project

Actual Costs

Category (1) Independent Contracts

Overburden drilling and diamond drilling to 1,000 ft. depth 48,000 feet @ $2.16/ft.	$103,680.00	
Diamond drilling 1,000 ft. to 1,500 ft. depth 10,000 feet @ $2.66/ft.	26,600.00	
Diamond drilling over 1,500 ft. depth 2,000 feet @ $3.16/ft.	6,320.00	$136,600.00

The above rates cover charges for reaming, cementing, water supply, casing, changing of locations, and all charges which may be incurred by the diamond drill contractor. 1/

Categories (2) through (7)

None

Fixed Unit Costs (See Article 13)

Incidental allowance for each foot of drilling completed 60,000 feet @ $0.32/ft.	$ 19,200.00	
300 samples to be assayed @ $1.50/ sample	450.00	$ 19,650.00
Estimated Total Cost of Project		$156,250.00
Government Participation @ 50%		$ 78,125.00

1/ Casing left in drill holes at option of Operator will not be accepted as a charge to the Contract.

Area in which [redacted] Z Option negotiations are in progre[redacted]

New Jersey Zinc Option

New Jersey Zinc Owned

N

HAMBLEN COUNTY

JEFFERSON COUNTY

TALBOT

Area A

Area B

SOUTHERN R.R.

US 11E

JARNAGIN MINE

Old US 11E

Miller
Masengill
Punkey
Travis
Dickerson
Frank Wood
E.C. Quarles
W.S. Bacon
R.L. Wood
ALPHA
Bell
C.L. Porter
J. Wood & J. Rickard
Shafer
Campbell
Reece
Goodman
Honeycutt
Clint Goodman
V. Rickard
Mrs. A. M. Curry
Lloyd May
Ashley
Burke
Britton
Lee
J. Pollard N.Z.
Bishop
Dyer
Southerland
C.E. Goodman N.Z.
C.L. Cornwell
Trent
R.E. Smith
R.V. Coile
Wm. Pollard N.Z.
J. Knight
L.B. Dearing N.Z.
Collins
Billy Sems
Mary Quarles
James
Robertson
Swann
Hammond
Jim Tarr
Moser
Henry
Davis N.Z.
Caldwell N.Z.
John May
Breeden
M. Breeden
Burnett N.Z.
Franklin
A. Watkins
Ruth Shover
W. D. Kenner
R.T. James
J.H. Lonas
Earl Morgan N.Z.
H.H. Oakley N.Z.
Hopkins
J.E. Austin N.Z.
A.D. Carter
Tom Courtney
Stump
Fraker A.E.C.
Tom Courtney N.Z.
McElveen N.Z.
Knight N.Z.
R.V. Coile N.Z.
Rickard
Knight
Nolen
H. Pollard
C. James
Henry
E. Bender
C. Smith
T.H. Knowling
W.M. Hopkins
County
G. Elliot
Butcher
Smith
Williams
Carter N.Z.
H. Donaldson
Pate
Housley N.Z.
W.B. Watkins N.Z.
Rugel N.Z.
R.B. Smith
Hazelwood
Eller
Lee Smith
Cox
J.S. Walker
Hunter
Knowling
Fain Smith
Mrs. S. Smith
Mrs. W. Ford
Mrs. B. Breeden
G. Chumbley
Hatley
Franklin
Tallent
C. Donaldson
P. James
Fraker
Kyle
Hubert Miller N.Z.
Green
R. Smith
Ingram
Lloyd Burnett
R. Fisher
Carmichael
Collett
R. Smith
Harris
Lauderbach
R. Massengill
Massengill
W. Massengill
Chandler
Swann Heirs
Robeson
Murph N.Z.
Jess Cline N.Z.
R. Smith
Drinnion

DMEA 4119

POSTED TO DATE 12-55	THE NEW JERSEY ZINC COMPANY JEFFERSON CITY TENNESSEE	DRAWN JFP DATE 9-30-52 TRACED JFP SCALE 1"=2000'	PROPERTY MAP MORRISTOWN SECTOR-TALBOT AREA	JEFFERSON & HAMBLEN CO'S, TENN. FILE NO AX-TENN 247

Figure 2

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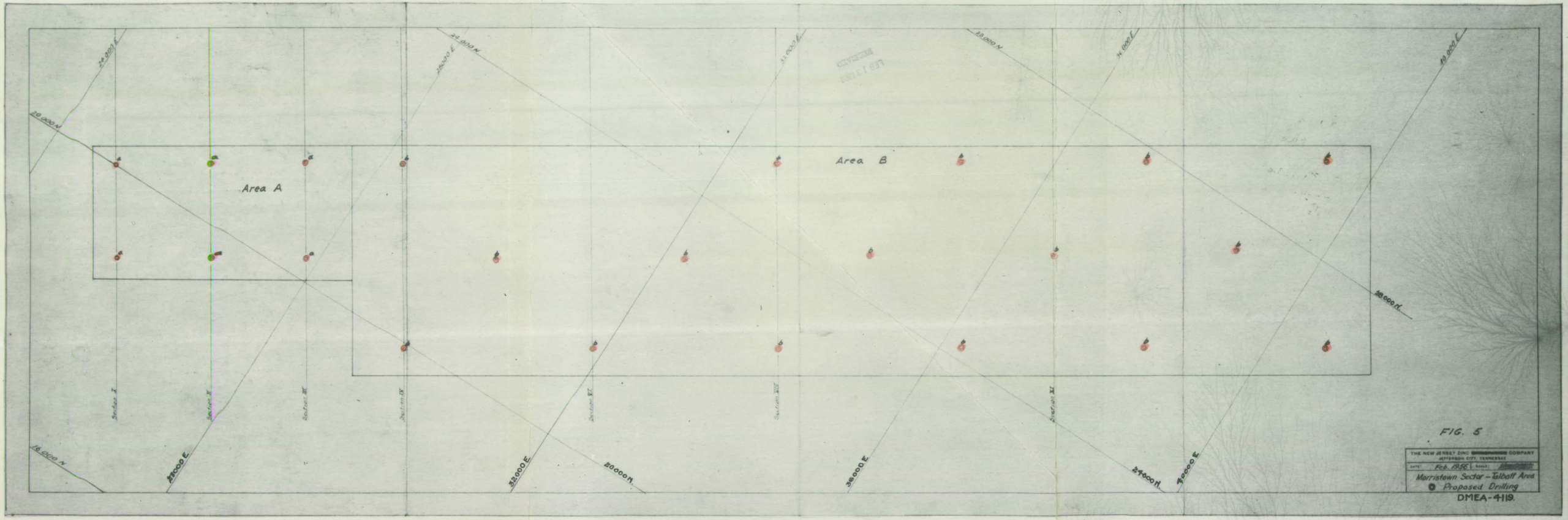
Area A
Area B
24,000 E
26,000 N
28,000 E
30,000 N
32,000 E
34,000 N
36,000 E
38,000 N
40,000 E
42,000 N
44,000 E
46,000 N
48,000 E
50,000 N
Section I
Section II
Section III
Section IV
Section V
Section VI
Section VII
Section VIII
Section XI
THE NEW JERSEY ZINC COMPANY
JEFFERSON CITY, TENNESSEE
DATE: Feb. 1956
Morristown Sector – Talbott Area
Proposed Drilling
DMEA-4119

FIG. 5

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Docket No. 4119

Commodity Zinc

DEPARTMENT OF THE INTERIOR

DEFENSE MINERALS EXPLORATION ADMINISTRATION

STRATEGIC AND CRITICAL MINERALS EXPLORATION PROGRAM

TO: Chief, Finance Section, Budget and Finance Branch, Bureau of Mines

Please enter on the records of the Defense Minerals Exploration Administration under the Strategic and Critical Minerals Exploration Program, the following contract, or amendment to contract.

Contract No. Idm-E 936

Date of Contract ~~[illegible]~~: March 30, 1956

Name and Address of Operator:

The New Jersey Zinc Company
160 Front Street
New York 38, New York

Amount of Government participation $78,125.00

Percent of Government participation 50 %

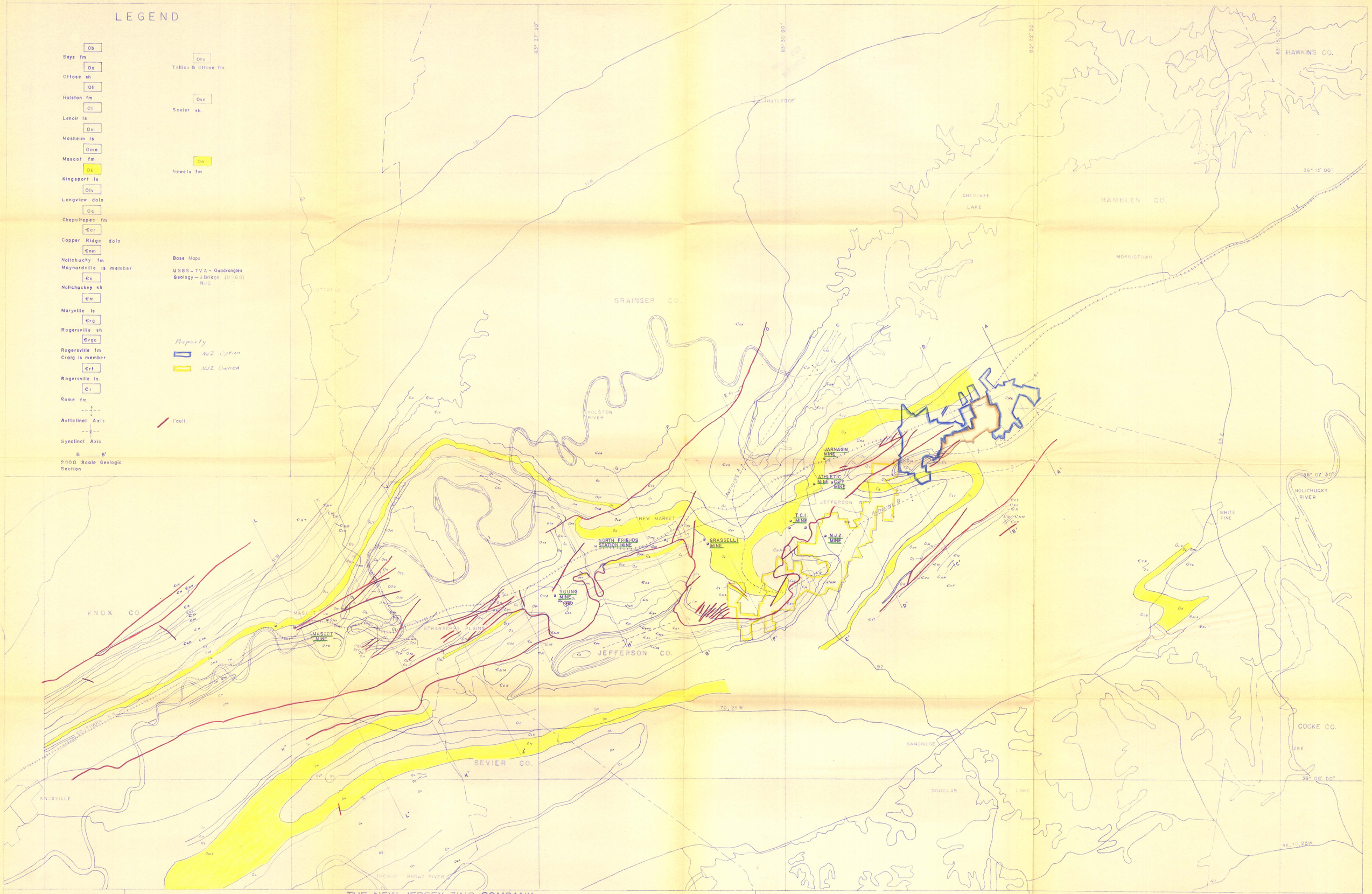
Region: V State: Tennessee

E. R. Talbut
(Name)

for J. L. Chambers, Chief
Contract Administration and
Audit Division
(Title)

Date Delivered to Bureau of Mines, Washington. 4/2/56

54458



THE NEW JERSEY ZINC COMPANY
JEFFERSON CITY, TENNESSEE

DRAWN	DATE
TRACED	SCALE 1" = 1 MILE

EAST TENNESSEE ZINC DISTRICT
Figure 1

DISTRICT	
FILE NO	AX - TENN - D - 998

TEMPLATE FILE NO. AX-TENN D-467 10-21-55 JWP, RCG

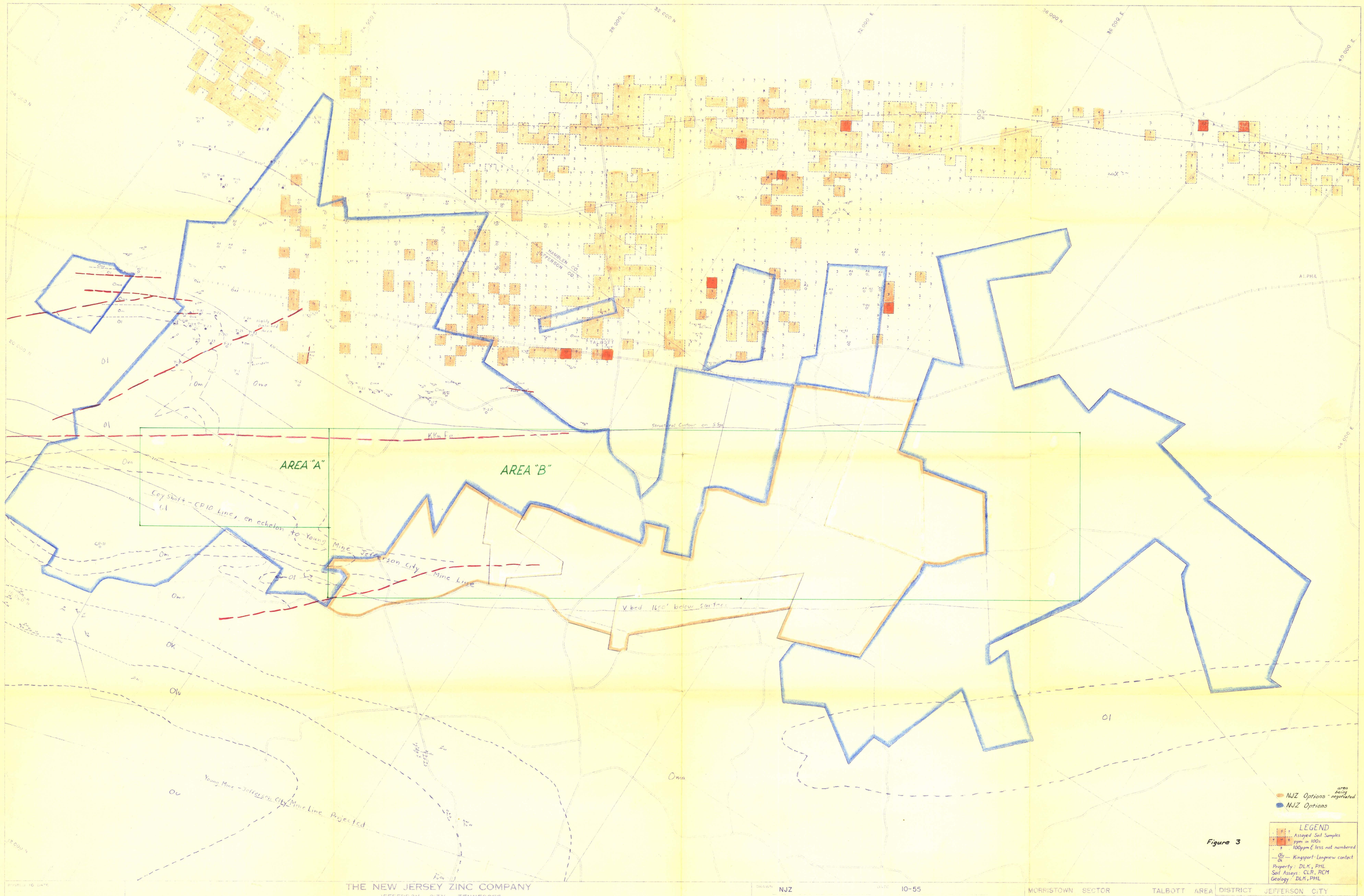
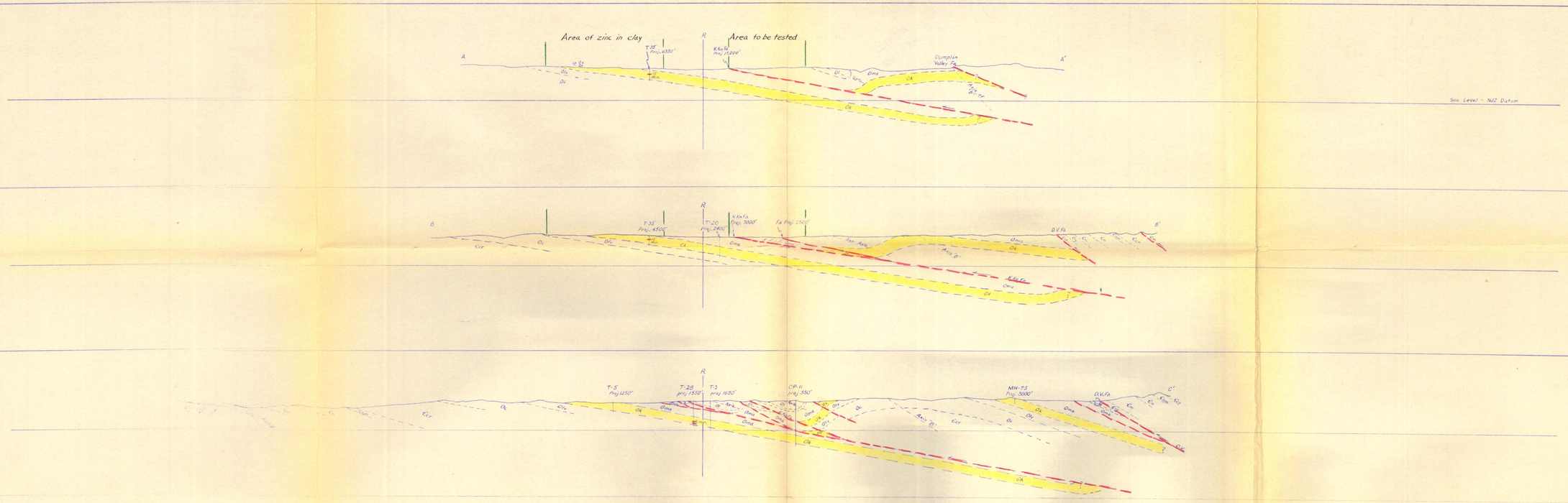


Figure 3

THE NEW JERSEY ZINC COMPANY
JEFFERSON CITY, TENNESSEE

DRAWN NJZ	DATE 10-55	MORRISTOWN SECTOR TALBOTT AREA	DISTRICT JEFFERSON CITY
TRACED RCG	SCALE 1" = 660'	GEOLOGY, GEOCHEMISTRY & DRILL HOLE MAP	FILE NO. AX-TENN D-974

TEMPLATE FILE NO. AX-TENN D-972 10-22-55 PHL, JWF



1" = 2000'

Geologic Sections

Figure 4