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-8950, Docket DMEA-4153 (zinc), dated May 10, 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 Independence and Lawson Areas located in Hancock and Hawkins Counties, Tennessee, during the period May 10, 1956, through July 1, 1960.

A certification of discovery or development was issued on September 21, 1959, and, in accordance with Articles 8 and 13, Annex I, and Amendment No. 10 of the contract, royalty is payable on all minerals produced from the land described in Article 2, as amended, of the contract for a period of 32 years from the date of the contract or until the total net amount contributed by the Government without interest is fully repaid, whichever occurs first. A Report of Review dated September 1, 1959, indicated accepted costs under the exploration contract amounting to $73,227.18 with the Government's contribution on a 50 percent basis being $36,613.58.

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 July 1, 1960, the royalty account of this project was found to be:

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

March 22, 1962

E. D. Talbert, OME Auditor

Idm-E950 The New Jersey Zinc Company DMEA-4153

STATUS OF PROJECT, SCOPE OF REVIEW
AND REASONS THEREFOR

This contract provides that the Operator, as principal if the producer or as surety if not the producer, shall pay to the Government a percentage royalty on all minerals production until May 10, 1988, from (1) the lands thereunder, (2) any lands deleted by the February 20, 1959, Termination Agreement, if the Operator or any subsidiary acquires any interest in such deleted lands or production therefrom, and (3) any contiguous lands acquired by the Operator within 10 years from the date of the contract. Limestone and dolomite products derived from processing ores are included as minerals.

At the time this contract was executed the land thereunder consisted of 8 privately owned tracts aggregating about 687 acres, held by the Operator pursuant to options to purchase the mineral rights. Approximately 1,162 acres in 12 tracts were added by amendments. Under the provisions of the termination agreement, 8 tracts containing about 624 acres, on which the Operator dropped its options, were deleted. After execution of the termination agreement, 12 tracts aggregating about 1,225 acres remained under the contract. Of this acreage, it appears that 5 tracts totalling 499 acres remained under option and the mineral and mining rights in the balance had been purchased by the Operator. The usual contractual requirement for Consents to Lien was waived.

Exploration work under the contract ceased during July 1958. During the exploration period no minerals were produced from the land under the contract. Subsequent examinations of the property and conferences with the Operator's officials have disclosed no activity on the property from July 1958 through June 1960.

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

(1) No minerals have been produced through the period covered by this review;
(2) The property has been inactive since July 1958; 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.

800

APR 11 1962

Memorandum

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

From: Chief, Division of Field Operations, CMK

Subject: DMRA-4153 (Zinc)
The New Jersey Zinc Company
Independence and Lawson Areas
Hancock and Hawkins Counties, Tennessee
Contract Idm-2950

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

George C. Selfridge

Enclosure

GCSelfridge/hb (4/11/62)
cc to: Docket DMRA-4153
Director's Reading File
G. C. Selfridge
CA&A Division
R. A. Laurence, Region IV, w/cy of Report of Royalty Review dtd 3/22/62 & orig. cy of memo dtd 4/10/62 to Chf., Div. of Field Operations from CA&A Division.
Avery Read, USBM, Reg. IV, w/cy of ea. item sent to Mr. Laurence.

APR 1 0 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-4155 (Zinc)
The New Jersey Zinc Company
Independence and Lawson Areas
Hancock and Hawkins Counties, Tennessee
Contract Idm-8950

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 OMZ 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 4-10-62

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

OFFICE OF MINERALS EXPLORATION
CONTRACT ADMINISTRATION AND AUDIT DIVISION

REPORT OF REVIEW

I have reviewed the Monthly Reports of:

The New Jersey Zinc Company
Jefferson City, Tennessee

pertaining to Exploration Project Contract No. Idm-8950, DMEA No. h153, including Amendments Nos. 1 through 11, and a Termination Agreement dated February 20, 1959, for June 1956 to July 1958, inclusive, covering a zinc project in the Independence Area, Hancock County, Tennessee.

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

This review was made in lieu of a final audit of the Operator's accounts and records for the reasons given in the attached schedule.

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

Total cost billed by Operator		$73,227.18
Exceptions:		
Prior to this review	$ -0-	
Herewith	-0-	-0-
Total acceptable cost		$73,227.18

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

Payable on audited claim	$36,613.58
Paid to date	36,613.58
Balance due Operator	$ -0-

E. D. Talbert

E. D. Talbert, OME Auditor

September 1, 1959

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

(a) the Monthly Reports were supported by documentary proof of that portion ($66,655.00) of the costs covering work performed at unit rates under independent contract;
(b) the balance ($6,572.13) of the costs was under a contract provision for payment by the Government at fixed unit costs for work performed; and
(c) the administrative cost to the Government of an audit would be excessive in relation to the estimated amount of possible disallowances.

Acceptable Costs:

Stage I (23 holes)

Diamond Drilling	17,296'	@ $2.75/ft.	$47,564.00
	895'	@ 3.00/ft.	2,685.00
Incidental Allowance	18,191'	@ .27/ft.	4,911.57
Samples Assayed	51	@ 1.00/ea.	51.00
			$55,211.57

Stage II (10 holes)

Diamond Drilling	5,692'	@ $2.75/ft.	$15,653.00
	251'	@ 3.00/ft.	753.00
Incidental Allowance	5,943'	@ .27/ft.	1,604.61
Samples Assayed	5	@ 1.00/ea.	5.00
			$18,015.61

Total $73,227.18

SEP 1 1959

Memorandum

To: Executive Officer, OME Field Team, Region V

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

Subject: Docket No. DMEA-4153 (Zinc)
The New Jersey Zinc Company
Independence Area
Hancock County, Tennessee
Contract No. Idm-E950

As requested by your August 21 memorandum a Report of Review in lieu of a final audit of the subject contract has been prepared. The original and three copies are enclosed.

If you concur with the facts as stated therein please make the usual distribution. If for any reason you do not concur, please return the original and all copies to this Division with your comments.

The 33 driller's invoices, which are the documentary support of previously paid vouchers and which were submitted for review by Mrs. Miller's August 25 memorandum, are being returned by certified mail with a copy of this memorandum.

Enclosures

EDTalbert/ama
September 1, 1959

Copy to: Docket
Director's Reading File
CA & A Division
Mrs. Helen R. Miller

Operating Committee

EXTRA COPY O. M. E. RECEIVED AUG 28 1959		
DATE	INITIALS	CODE

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

August 21, 1959

Memorandum

To: E. D. Talbert, Acting Chief, Contract Administration and Audit Division, OME - Washington

From: OME Field Team, Region V - Knoxville, Tennessee

Subject: DMEA-4153, Idm-E950(zinc) The New Jersey Zinc Co. Independence Area, Hancock and Hawkins Counties, Tenn.

The subject contract was terminated on February 10, 1959 effective January 15, 1959. However, no work was done after August 1, 1958, when a recess was authorized in Amendment No.10, executed on September 23, 1958.

The July 1958 voucher was forwarded for payment on August 21, 1958; therefore we do not have a final voucher to hold in suspense pending final audit.

The following units of work have been completed and verified by our Field Examiners:

1) A total of 24,134 feet of diamond drilling was completed in 33 drill holes.

2) 56 analyses of core samples were made.

3) A final engineering and geological report has been received.

As this is a "long form" contract, I am requesting Mrs. Helen Miller to send you her file. A report of review is requested.

Note: A mistake of 1-foot was made in the addition of drill footage in our interim reports (see the March 27, 1958 interim report).

Robert A. Laurence, Executive Officer
Field Team, REgion V

V. J. Lynch, Member
Bureau of Mines

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

Budget Bureau No. 42-R1036.5

RECEIVED AUG 27 1958

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION

PAID ON VOUCHER & SCHEDULE OF PAYMENTS K- 11

OPERATOR'S MONTHLY REPORT AND VOUCHER

Month of July, 1958 Docket No. DMEA 4153 Contract No. Idm E 950

Operator's Name The New Jersey Zinc Company Minerals Zinc

Address Jefferson City, Tennessee

Contract Amount, $ 214,300.00 Government Participation: 50 % Amount, $ 107,150.00

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	4,515.75	62,139.25	66,655.00			
Bulldozing						
Crosscutting						
Drifting						
(2) Labor and Supervision:						
Labor / Supervision	437.94	6,078.24	6,516.18			
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	3.00	53.00	56.00			
Payroll Taxes						
Liability Insurance						
(8) Contingencies (specify):						
TOTALS	4,956.69	68,270.49	73,227.18	4956.69	68270.49	73 227.18

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

Date 8-1-58 *Payee The New Jersey Zinc Company

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

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

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

(Instructions on reverse)

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

$ 2478.34

Signature [signature] (Authorized Certifying Officer)

Date AUG 25 1958 Vou. No.

(See other side)

16 cts

2478.35

(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-950 in accordance with the terms of the contract.

Signature V. J. Lynch Title MINING ENGINEER U. S. BUREAU OF MINES Date AUG 21 1958

APPROVAL BY DMEA EXECUTIVE OFFICER OR ALTERNATE:

Signature Robert A. Laurence Title EXECUTIVE OFFICER DMEA FIELD TEAM REGION V Date AUG 21 1958

MONTHLY REPORT OF OPERATOR

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

[redacted]-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 1958 Docket No. DMEA 4153 Contract No. Idm E 950

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.	3,852.75	1401	63,217.00	22,988	2.75	60,000	2.75
Churn 1000-1500	"	663.00	221	3,438.00	1,146	3.00	10,000	3.00
Auger Assays	Ea.	3.00	3	56.00	56	1.00	400	1.00
Stripping								
Trenching								
Test Pits								
Roads and Trails								
Sup. & Tech. Serv.		437.94	1622	6,516.18	24,134	0.27	70,000	0.27
TOTAL DISTRIBUTED COSTS		4,956.69		73,227.18				TOTAL COSTS AUTHORIZED BY CONTRACT
Operating Equipment Purchased								
Initial Rehabilitation and Repairs								
New Buildings, Improvements, etc.								
TOTAL COSTS		4,956.69		73,227.18				

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 covers LA-10 and LA-11

Date 8-1-58 Operator The New Jersey Zinc Co.

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

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

(Instructions on reverse)

(For Government use only)

RECEIVED AU 2 1 D.E.A.

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

INSTRUCTIONS

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

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

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

GPO 872894

Report for July, 1958

Lawson Area DMEA 4153

Contract Idm E 950 (Zinc)

One drill operated on this project in July. Two holes, LA-10 and LA-11, were completed. A total of 1622 feet were drilled. These holes are shown in green on the attached map AX-TENN-B-568.

Hole LA-10 - Kyle Johnson property - 200' downdip from LA-7

Coordinates: 795,529.61 N; 885,459.30 E
Elevation: 1645.25

Results:

0- 18	Clay
18-1028	Mascot dolomite and upper Kingsport dolomite. Shines of sphalerite 1010-1011
1028	TR
1028-1197	Lower Kingsport limestone and dolomite
1179-1221	(Bottom) Longview limestone and dolomite

Hole LA-11 - Kyle Johnson property - 100' SW on strike from LA-4

Coordinates: 795,953.19 N; 885,076.23 E
Elevation: 1803.27

Results:

0- 52	Clay
52-196	Upper Kingsport dolomite
196	TR
196-222	Lower Kingsport dolomite
✓222-229	4' core - assayed trace of zinc.Est. 25% pyrite
229-339	Lower Kingsport dolomite and limestone. Scattered shines sphalerite 256-339
✓339-344	4' core assayed trace of zinc. Estimated 5-7% pyrite
344-364	Upper Kingsport dolomite
✓364-369	4½' core assayed trace of zinc. Estimated 7-9% pyrite
369-401	(Bottom) Lower Kingsport limestone and dolomite. Shine sphalerite 383.

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

Budget Bureau No. 42-R1036.5

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION

RECEIVED JUL 23 1958

OPERATOR'S MONTHLY REPORT AND VOUCHER

Month of June, 1958 Docket No. DMEA 4153 Contract No. Idm F 950
Operator's Name The New Jersey Zinc Company Minerals Zinc
Address Jefferson City, Tennessee
Contract Amount, $ 214,300.00 Government Participation: 50 % Amount, $ 107,150.00

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		62,139.25	62,139.25			
Bulldozing						
Crosscutting						
Drifting						
(2) Labor and Supervision:						
Labor						
Supervision						
Technical Services		6,077.24	6,077.24			
(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		53.00	53.00			
Payroll Taxes						
Liability Insurance						
(8) Contingencies (specify):						
TOTALS		68,270.49	68,270.49	—	68,270.49	68,270.49

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

Date 7/1/58 *Payee The New Jersey Zinc Company

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

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

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

(Instructions on reverse)

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

$ —

Signature
(Authorized Certifying Officer)

Date Vou. No.
(See other side)

(For Government use only)

CERTIFICATION BY GOVERNMENT REPRESENTATIVE:

I certify that to the best of my knowledge and belief the contractor submitting this voucher is operating a Defense Minerals Exploration Administration project under Contract No. E-90 in accordance with the terms of the contract.

Signature H Weaver Title GEOLOGIST, U. S. G. S. Date JUL 14 1958

APPROVAL BY DMEA EXECUTIVE OFFICER OR ALTERNATE:

Signature W. J. Lyons Title ACTING EXECUTIVE OFFICER ~~DMEA - REGION V~~ Date JUL 14 1958

MONTHLY REPORT OF OPERATOR

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

Form MF-104A
(April 1952)

Budget Bureau No. 42-R1151.2

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION

RECEIVED JUL 23 1958

OPERATOR'S UNIT COST AND PROGRESS REPORT

Month of June 1958 Docket No. DMEA 4153 Contract No. Idm E 950
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.	-	-	59,364.25	21,587	2.75	60,000	2.75
Chip 1000-1500	"	-	-	2,775.00	925	3.00	10,000	3.00
Auger Assays	Ea.	-	-	53.00	53	1.00	400	1.00
Stripping								
Trenching								
Test Pits								
Roads and Trails								
Sup. & Tech. Ser.		-	-	6,078.24		0.27	70,000	0.27
TOTAL DISTRIBUTED COSTS				68,270.49				TOTAL COSTS AUTHORIZED BY CONTRACT
Operating Equipment Purchased								
Initial Rehabilitation and Repairs								
New Buildings, Improvements, etc.								
TOTAL COSTS				68,270.49				214,300.00

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 7/1/58 Operator The New Jersey Zinc Co.

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

REMARKS Drill hole LA-9 on the C. C. Lawson property approximately 100' NE of hole LA-6 was completed in June. Reporting of this hole is deferred pending action on our amendment request dated May 28, 1958.

→ 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.
7/14/58

INSTRUCTIONS

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

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

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

GPO 872894

Report for June, 1958

Lawson Area DMEA 4153

Contract Idm E 950 (Zinc)

One drill operated on this project in June. Drill hole LA-9 on the C. C. Lawson property approximately 100 feet northeasterly from hole LA-6 was completed. Reporting of this hole is deferred pending action on our amendment request dated May 28, 1958.

Attached, hereto, are plan map AX-TENN 568, and sections AX-TENN B 1356, B 1354, and C 1365 showing all holes reported to date on the Lawson project.

Form [illegible]-104 (Rev.)
(April 1952)

Budget Bureau No. 42-R1036.5

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION

RECEIVED JUN 26 1958 DMEA

PAID ON VOUCHER & SCHEDULE OF PAYMENTS K-63

OPERATOR'S MONTHLY REPORT AND VOUCHER

Month of May 195 8 Docket No. DMEA 4153 Contract No. Idm E 950

Operator's Name The New Jersey Zinc Company Minerals Zinc

Address Jefferson City, Tennessee

Contract Amount, $ 214,300.00 Government Participation: 50 % Amount, $ 107,150.00

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	3967.50	58,171.75	62,139.25			
Bulldozing						
Crosscutting						
Drifting						
(2) Labor and Supervision:						
Labor / Supervision	388.80	5,689.44	6,077.24			
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		53.00	53.00			
Payroll Taxes						
Liability Insurance						
(8) Contingencies (specify):						
TOTALS	4356.30	63,914.19	68,270.49	4356.30	63,914.19	68,270.49

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

Date 6/1/58 *Payee The New Jersey Zinc Company

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

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

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

(Instructions on reverse)

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

$ 2178.15

Signature Helen R. Miller
(Authorized Certifying Officer)

Date JUN 26 1958 Vou. No. 182
(See other side)

2178.15

(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-950 in accordance with the terms of the contract.

Signature W. J. Lynch Title MINING ENGINEER U. S. BUREAU OF MINES Date JUN 23 1958

APPROVAL BY DMEA EXECUTIVE OFFICER OR ALTERNATE:

Signature Robert A. Lawrence Title EXECUTIVE OFFICER DMEA FIELD TEAM REGION V Date JUN 23 1958

MONTHLY REPORT OF OPERATOR

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

MF-104A
(April 1962)

Budget Bureau No. 42-R1151.2

RECEIVED JUN 30 1958 D.M.E.A.

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

Month of May 1958 Docket No. DMEA 4153 Contract No. Idm E 950

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.	3,877.50	1410	59,364.25	21,587	2.75	60,000	2.75
Churn 1000-1500	"	90.00	30	2,775.00	925	3.00	10,000	3.00
Auger Assays	Ea.	-	-	53.00	53	1.00	400	1.00
Stripping								
Trenching								
Test Pits								
Roads and Trails								
Sup.& Tech.Serv.	Ft.	388.80	1440	6,078.24		0.27	70,000	0.27
Total Distributed Costs		4,356.30		68,270.49				Total Costs Authorized by Contract
Operating Equipment Purchased								
Initial Rehabilitation and Repairs								
New Buildings, Improvements, etc.								
Total Costs		4,356.30		68,270.49				

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

Date 6/1/58 Operator The New Jersey Zinc Co.

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

Remarks This report covers LA-7 8

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

(Instructions on reverse)

(For Government use only)

[signature]
Mining Engineer
U. S. BUREAU OF MINES

INSTRUCTIONS

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

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

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

GPO 872894

Report for May, 1958

Lawson Area DMEA 4153

Contract Idm E 950 (Zinc)

One drill operated on this project during the month of May and completed two holes. These holes are shown on the accompanying map AX-TENN-B-568.

Hole LA-7 - - Kyle Johnson property - 200 feet downdip from LA-6
Coordinates: 795,692.89 N; 885,347.91 E
Elevation: 1713.75

0- 31	- - Clay
31-483	- - Mascot dolomite. Trace sphalerite 424. Shine sphalerite 470
483-550	- - Strong 50° mineralized fault zone. Scattered traces sphalerite 492-504. Apparent reverse movement of 160 feet is estimated
550-690	- - Mascot dolomite
690-866	- - Upper Kingsport dolomite
866	- - TR marker
866-1028	- Lower Kingsport dolomite & limestone. "R" and "S" beds 50% dolomite
1028-1030	- (Bottom) Longview dolomite

Comment: The strong reverse fault found in this hole may have significance in ore control.

Hole LA-8 - C. C. Lawson property - 100' NE of LA-4 on strike

Coordinates: 796,065.58 N; 885,236.17 E
Elevation: 1839.37

0- 46	- - Clay
46-244	- - Upper Kingsport dolomite
244	- - TR marker
244-388	- - Lower Kingsport dolomite & limestone R and S beds 38% dolomite
388-410	- - (Bottom) Longview dolomite and limestone.

IF-104 (Rev.)
(April 1952)

Budget Bureau No. 42-R1036.5

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION

RECEIVED JUL 5 1958 DMEA

PAID ON VOUCHER & SCHEDULE OF PAYMENTS K- 59

OPERATOR'S MONTHLY REPORT AND VOUCHER

Month of April, 1958 Docket No. DMEA 4153 Contract No. Idm E 950
Operator's Name The New Jersey Zinc Company Minerals Zinc
Address Jefferson City, Tennessee
Contract Amount, $ 214,300.00 Government Participation: 50 % Amount, $ 107,150.00

ITEMS OF COSTS	FOR OPERATOR'S USE			FOR GOVERNMENT USE ONLY		
	Monthly Total	Totals Previously Reported	Totals To Date	Approved Monthly Total	Approved Totals Previously Reported	Approved Totals To Date
(1) Independent Short Form Contracts:						
Drilling	3,957.25	54,214.50	58,171.75			
Bulldozing						
Crosscutting						
Drifting						
(2) Labor and Supervision:						
Labor						
Supervision	388.53	5,300.91	5,689.44			
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	2.00	51.00	53.00			
Payroll Taxes						
Liability Insurance						
(8) Contingencies (specify):						
TOTALS	4,347.78	59,566.41	63,914.19	4347.78	59566.41	63914.19

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

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

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

(Instructions on reverse)

Pursuant to authority vested in me, I certify that this account is correct and proper for payment in the amount of:
$ 2173.89
Signature [signature]
(Authorized Certifying Officer)
Date JUN 2 1958 Vou. No. 174
(See other side)

14 K

2173.89

(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-950 in accordance with the terms of the contract.

Signature [illegible] Title MINING ENGINEER U. S. BUREAU OF MINES Date MAY 20 1958

APPROVAL BY DMEA EXECUTIVE OFFICER OR ALTERNATE:

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

MONTHLY REPORT OF OPERATOR

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

F-104A
(April 1952)

Budget Bureau No. 42-R1151.2

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION

RECEIVED JUN 5 1958 D.M.E.A.

OPERATOR'S UNIT COST AND PROGRESS REPORT

Month of April 1958 Docket No. DMEA 4153 Contract No. Tex E950

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.	3,957.25	1439	55,486.75	20,177	2.75	60,000	2.75
Churn 1000-1500	"			2,685.00	895	3.00	10,000	3.00
Auger Assays	Ea.	2.00	2	53.00	53	1.00	400	1.00
Stripping								
Trenching								
Test Pits								
Roads and Trails								
Sup. & Tech. Serv.	Ft.	388.50	1439	5,609.44		0.27	70,000	0.27
Total Distributed Costs		4,347.75		63,914.19				Total Costs Authorized by Contract
Operating Equipment Purchased								
Initial Rehabilitation and Repairs								
New Buildings, Improvements, etc.								
Total Costs		4,347.75		63,914.19				

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

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

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

Remarks: This report covers holes LA-4, LA-5, LA-6

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

(Instructions on reverse)

(For Government use only)

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

INSTRUCTIONS

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

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

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

GPO 872894

Report for April 1958

Lawson Area DMEA 4153

Contract Idm E (Zinc)

One drill operated on this project during the month of April and completed three holes. These holes are shown on the accompanying map AZ-Tenn-D-568.

Hole LA-4 - C. C. Lawson property - 800' SW on strike from LA-2

Coordinates: 796,031.13N; 835,151.37E
Elevation: 1823.75

Results:

0 - 105 - - - Clay
105 - 221 - - - Upper Kingsport dolomite
221 - - - TR marker
221 - 287 - - - Lower Kingsport dolomite and limestone
287 - 292 - 5' of 4.75% Zn) 9' averaging 4.61% zinc
292 - 296 - 4' of 4.43% Zn)
296 - 383 - - - Lower Kingsport dolomite and limestone
383 - 400 - - - (Bottom) Longview dolomite

Hole LA-5 - C. C. Lawson property - 410' NE of LA-4 on strike

Coordinates: 796,278.43N; 835,473.47
Elevation: 1905.37

0 - 24 - - - Clay
24 - 54 - - - Nascot dolomite
54 - 194 - - - Upper Kingsport dolomite
194 - - - TR Marker
194 - 360 - - - Lower Kingsport dolomite and limestone
360 - 389 - - - (Bottom) Longview dolomite

Hole LA-6 - Kyle Johnson - 200' downdip from LA-4

Coordinates: 795,856.65N; 835,248.22E
Elevation: 1781.15

0 - 30 - - - Clay
30 -323 - - - Nascot dolomite
323 -457 - - - Upper Kingsport dolomite,
Trace sphalerite 439
457 - - - TR marker
457 -595 - - - Lower Kingsport dolomite,
Trace sphalerite 458, 512
595 -650 - - - (Bottom) Longview dolomite.

MF-104 (Rev.)
(April 1952)

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION

Budget Bureau No. 42-R1036.5

PAID ON VOUCHER & SCHEDULE OF PAYMENTS K- 54

OPERATOR'S MONTHLY REPORT AND VOUCHER

Month of March 195 8 Docket No. DMEA 4135 3 Contract No. Idm E 950
Operator's Name The New Jersey Zinc Company Minerals Zinc
Address Jefferson City, Tennessee
Contract Amount, $ 214,300.00 Government Participation: 50 % Amount, $ 107,150.00

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:	3965.50	50,249.00	54,214.50			
Drilling						
Bulldozing						
Crosscutting						
Drifting						
(2) Labor and Supervision:						
Labor	389.34	4,911.57	5,300.91			
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	-	51.00	51.00			
Sampling and Analysis						
Payroll Taxes						
Liability Insurance						
(8) Contingencies (specify):						
TOTALS	4354.84	55,211.57	59,566.41	4354.84	55,211.57	59,566.41

I certify that the above bill is correct and just and that payment therefor has not been received.
Date 4/1/58 *Payee The New Jersey Zinc Company
Per [signature] Title Asst. to Gen. Supt.

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

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

(Instructions on reverse)

Pursuant to authority vested in me, I certify that this account is correct and proper for payment in the amount of:
$ 2177.42
Signature [signature]
(Authorized Certifying Officer)
Date APR 24 1958 Vou. No. 163
(See other side)

2177.42

(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. E-950 in accordance with the terms of the contract.

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

APPROVAL BY DMEA EXECUTIVE OFFICER OR ALTERNATE:

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

MONTHLY REPORT OF OPERATOR

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

F104A
(n 1962)

Budget Bureau No. 42-R1151.2

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION

OPERATOR'S UNIT COST AND PROGRESS REPORT

Month of March, 1958 Docket No. DMEA 4153 Contract No. Idm E 950

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.	3965.50	1442	51,529.50	18,738	2.75	60,000	2.75
Drilling: Core 1000-1500	"	-	-	2,685.00	895	3.00	10,000	3.00
Churn Assays	Ea.	-	-	51.00	51	1.00	400	1.00
Auger								
Stripping								
Trenching								
Test Pits								
Supt. & Tech. Ser.	Ft.	389.34	1442	5,300.91		0.27	70,000	0.27
Total Distributed Costs		4354.84		59,566.41				Total Costs Authorized by Contract
Operating Equipment Purchased								
Initial Rehabilitation and Repairs								
New Buildings, Improvements, etc.								
Total Costs		4354.84		59,566.41				

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

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

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

Remarks: This report covers holes: LA-1, LA-2, LA-3

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

(Instructions on reverse)

(For Government use only)

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

INSTRUCTIONS

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

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

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

GPO 872894

Report for March, 1958

Lawson Area DMEA 4153

Contract Idm E 950 (Zinc)

One drill operated on this project during the month of March and completed 3 holes. These holes are shown on the accompanying map AX-TENN-B-568 and sections AX-TENN-B-1354 and B-1356.

Hole LA-1 - - C. C. Lawson property

Coordinates: 796,130.89 N; 885,588.29 E
Elevation: 1865.72

0- 92- - Clay
92-294 - -Mascot dolomite
294-471 - -Upper Kingsport dolomite
471 - -TR Marker
471-621 - -(Bottom) Lower Kingsport dolomite
Shine sphalerite 609. Trace sphalerite 616'

Hole LA-2 - - C. C. Lawson property - 200' updip and 400' NE on strike from LA-1

Coordinates: 796,492.04 N; 885,789.40 E
Elevation: 1930.20

0- 55 - - Clay
55- 92 - - Mascot dolomite
92-237 - - Upper Kingsport dolomite
237 - - TR marker
237-396 - - Lower Kingsport dolomite and limestone
396-421 - - (Bottom) Longview dolomite and limestone

Hole LA-3 - - C. C. Lawson property - 400' NE on strike from LA-2

Coordinates: 796,689.87 N; 886,141.29 E
Elevation: 1879.05

0- 43 - - Clay
43- 66 ? - Mascot dolomite
66-216 - - Upper Kingsport dolomite
216 - - TR marker
216-400 - - (Bottom) Lower Kingsport dolomite and limestone

The top of the Kingsport formation (Chert Matrix) is presumably lost in cavernous ground from 56-66.

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- 79

OPERATOR'S MONTHLY REPORT AND VOUCHER

Month of May, 1957 Docket No. DMEA 4153 Contract No. Idn E-950

Operator's Name The New Jersey Zinc Company Minerals Zinc

Address Jefferson City, Tenn.

Contract Amount, $ 107,150.00 Government Participation: 50 % Amount, $ 53,575.00

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	3,473.00	46,776.00	50,249.00			
Bulldozing						
Crosscutting						
Drifting						
(2) Labor and Supervision:						
Labor						
Supervision						
Technical Services	335.07	4,576.50	4,911.57			
(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	-	51.00	51.00			
Payroll Taxes						
Liability Insurance						
(8) Contingencies (specify):						
TOTALS	3,808.07	51,403.50	55,211.57	3808.07	51,403.50	55,211.57

RECEIVED JUL 1 1957 D.M.E.A.

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

Date 6-1-57 *Payee The New Jersey Zinc Co.

Per [signature] Title Asst. to the Supt.

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

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

(Instructions on reverse)

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

$ 1904.03

Signature [signature]
(Authorized Certifying Officer)

Date JUN 27 1957 Vou. No. 210

(See other side)

1904.03

(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-950 in accordance with the terms of the contract.

Signature W. J. Lynch Title MINING ENGINEER U. S. BUREAU OF MINES Date JUN 24 1957

APPROVAL BY DMEA EXECUTIVE OFFICER OR ALTERNATE:

Signature Robert A. Lawrence Title EXECUTIVE OFFICER DMEA FIELD TEAM REGION V Date JUN 24 1957

MONTHLY REPORT OF OPERATOR

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

Form MF-104A
(April 1952)

Budget Bureau No. 42-R1151.2

UNITED STATES
DEPARTMENT OF THE INTERIOR

DEFENSE MINERALS EXPLORATION ADMINISTRATION

OPERATOR'S UNIT COST AND PROGRESS REPORT

Month of May 1957 Docket No. DMEA 4153 Contract No. Idm E-950

Operator's Name The New Jersey Zinc Co. Minerals Zinc

Address Jefferson City, Tennessee

OPERATION	UNIT	COSTS THIS MONTH	UNITS THIS MONTH	COSTS TO DATE	UNITS TO DATE	UNIT COSTS TO DATE	AUTHORIZED BY CONTRACT	
							Units	Unit Costs
Drifting								
Crosscutting								
Raising								
Shafts								
Winzes								
Drilling: Core 0-1000	Ft.	2,750.00	1,000	47,564.00	17,296	2.75	30,000	2.75
~~Chard~~ 1000-1500	"	723.00	241	2,685.00	895	3.00	5,000	3.00
Auger								
Stripping								
Trenching Assays	Assay	-	-	51.00	51	1.00	200	1.00
Test Pits								
Roads and Trails								
Supervision and Technical Service	Ft.	335.07	1,241	4,911.57	18,191	0.27	35,000	0.27
TOTAL DISTRIBUTED COSTS		3,808.07		55,211.57				TOTAL COSTS AUTHORIZED BY CONTRACT
Operating Equipment Purchased								
Initial Rehabilitation and Repairs								
New Buildings, Improvements, etc.								
TOTAL COSTS		3,808.07		55,211.57				

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

Date 6-1-57 Operator The New Jersey Zinc Co.

Per [signature] Title Asst. to the Supt.

REMARKS: This report covers drill hole IN-70

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

(Instructions on reverse)

(For Government use only)

RECEIVED JUL 1 1957 D.M.E.A.

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

INSTRUCTIONS

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

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

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

GPO 872894

Report for May 1957

Independence Area DMEA 6153

Contract No D-950 (Zinc)

During May one drill operated on the Independence project part of the month. With the completion of hole IN-70 on May 9th, the drill was moved to another project and further work on contract No D-950 is being postponed pending study and re-evaluation of data. A summary log of hole IN-70 follows:

Hole IN-70 - J. H. Norton Property 200' downdip from IN-69

Coordinates: 803,276.53N; 858,026.37 E
Elevation: 1397.56'

0- 5	Clay
5- 62	Chickamauga limestone
62- 800	Rarcot dolomite
800-1002	Upper Kingsport dolomite
1002-1005	1' ortimated @ 25 Zn
1005-1030	Upper Kingsport dolomite
1030	TD Marker
1030-1151	Lower Kingsport limestone and dolomite, trace Zn at 1112'.
1151-1169	18' ortimated to contain 5% pyrite
1169-1211	Lower Kingsport limestone and dolomite
1211-1241	(Cotter) Longview limestone and dolomite.

A. D. Hagland/dm

OFFICIAL FILE COPY
D M E A
RECEIVED JUL 2 1957

DATE	INITIALS	CODE

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

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION

Budget Bureau No. 42-R1036.5
PAID ON VOUCHER & SCHEDULE OF PAYMENTS K- 70

OPERATOR'S MONTHLY REPORT AND VOUCHER

Month of April 1957 Docket No. DMEA 4153 Contract No. Idm B-950
Operator's Name The New Jersey Zinc Company Minerals Zinc
Address Jefferson City, Tennessee
Contract Amount, $107,150.00 Government Participation: 50 % Amount, $ 53,575.00

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	2455.75	44,320.25	46,776.00			
Bulldozing						
Crosscutting						
Drifting						
(2) Labor and Supervision:						
Labor						
Supervision	241.11	4,335.39	4,576.50			
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		51.00	51.00			
Payroll Taxes						
Liability Insurance						
(8) Contingencies (specify):						
TOTALS	2696.86	48,706.64	51,403.50	2696.86	48,706.64	51,403.50

RECEIVED MAY 20 1957 DMEA

I certify that the above bill is correct and just and that payment therefor has not been received.
Date 5/1/57 *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:
$ 1348.43
Signature Helen R. Miller
(Authorized Certifying Officer)
Date MAY 16 1957 Vou. No. 191
(See other side)

1348.43

(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-950 in accordance with the terms of the contract.

Signature [illegible] Title GEOLOGIST, U. S. G. S. Date MAY 15 1957

APPROVAL BY DMEA EXECUTIVE OFFICER OR ALTERNATE:

Signature [illegible] Title ACTING EXECUTIVE OFFICER DMEA - REGION V Date MAY 15 1957

MONTHLY REPORT OF OPERATOR

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

Form MF-104A
(April 1952)

Budget Bureau No. 42-R1151.2

UNITED STATES
DEPARTMENT OF THE INTERIOR

DEFENSE MINERALS EXPLORATION ADMINISTRATION

OPERATOR'S UNIT COST AND PROGRESS REPORT

Month of April 7 195 Docket No. DMEA 4153 Contract No. Idm E-950

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.	2455.75	893	44,014.00	16,296	2.75	30,000	2.75
Churn 1000-1500	"	- -	-	1,962.00	654	3.00	5,000	3.00
Auger								
Stripping								
Trenching Assays	Assays	- -	-	51.00	51	1.00	200	1.00
Test Pits								
Roads and Trails								
Supervision and Technical Services	Ft.	241.11	893	4,576.50	16,950	0.27	35,000	0.27
TOTAL DISTRIBUTED COSTS		2696.86		51,403.50				TOTAL COSTS AUTHORIZED BY CONTRACT
Operating Equipment Purchased								
Initial Rehabilitation and Repairs								
New Buildings, Improvements, etc.								
TOTAL COSTS		2696.86		51,403.50				

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

Date 5-1-57 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 covers drill hole IH-69.

(Instructions on reverse)

(For Government use only)

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

MAY 15 1957

RECEIVED MAY 20 1957 DMEA

INSTRUCTIONS

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

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

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

GPO 872894

Report for April 1957

Independence Area DMEA 4153

Contract Idm E-950

During April one drill operated on the Independence project. Only one hole, IN-69, was completed. A summary log of this hole follows:

Hole IN-69 - W. H. Horton property - 100' downdip from hole IN-68

Coordinates: 803,436,48 N; 897,922.71 E
Elevation: 1350.74'

Depth	Remarks
0- 2'	Clay
2-515'	Mascot dolomite
515-695'	Upper Kingsport dolomite
695'	TR marker
695-891'	Lower Kingsport, 31% dolomite
891-893'	(Bottom) Longview dolomite.

A. D. Hoagland/jf

EXTRA COPY
DMEA
RECEIVED MAY 20 1957

DATE	INITIALS	CODE

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

Budget Bureau No. 42-R1036.5

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION

64

OPERATOR'S MONTHLY REPORT AND VOUCHER

Month of March, 1957 Docket No. DMEA 4153 Contract No. Idm E-950

Operator's Name The New Jersey Zinc Company Minerals Zinc

Address Jefferson City, Tennessee

Contract Amount, $ 107,150.00 Government Participation: 50 % Amount, $ 53,575.00

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:	3643.75	40,676.50	44,320.25			
Drilling						
Bulldozing						
Crosscutting						
Drifting						
(2) Labor and Supervision:						
Labor						
Supervision						
Technical Services	357.75	3977.64	4335.39			
(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	2.00	49.00	51.00			
Payroll Taxes						
Liability Insurance						
(8) Contingencies (specify):						
TOTALS	4003.50	44703.14	48706.64	4003.50	44703.14	48706.64

RECEIVED APR 22 1957 D.M.E.A.

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

Date 4-1-57 *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:

$ 2001.75

Signature Helen R. Miller
(Authorized Certifying Officer)

Date APR 19 1957 Vou. No. 176

(See other side)

10

2001.75

(For Government use only)

CERTIFICATION BY GOVERNMENT REPRESENTATIVE:

I certify that to the best of my knowledge and belief the contractor submitting this voucher is operating a Defense Minerals Exploration Administration project under Contract No. E-950 in accordance with the terms of the contract.

Signature [illegible] Title MINING ENGINEER U. S. BUREAU OF MINES Date APR 18 1957

APPROVAL BY DMEA EXECUTIVE OFFICER OR ALTERNATE:

Signature Robert A. Lawson Title EXECUTIVE OFFICER DMEA REGION V Date APR 18 1957

MONTHLY REPORT OF OPERATOR

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

Form MF-104A
(April 1952)

Budget Bureau No. 42-R1151.2

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

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

Month of March 195 7 Docket No. DMEA 4155 Contract No. Idm E-950

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.	3643.75	1325	42,358.25	15403	2.75	30,000	2.75
Churn 1000-1500	"	-	-	1,962.00	654	3.00	5,000	3.00
Auger								
Stripping								
Trenching								
Test Pits Assays	Assay	2.00	2	51.00	51	1.00	200	1.00
Roads and Trails								
Supervision and Technical Services	Ft.	357.75	1325	4335.39	16057	0.27	35,000	0.27
TOTAL DISTRIBUTED COSTS		4003.50		48,706.64				TOTAL COSTS AUTHORIZED BY CONTRACT
Operating Equipment Purchased								
Initial Rehabilitation and Repairs								
New Buildings, Improvements, etc.								
TOTAL COSTS		4003.50		48,706.64				

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

Date 4-1-57 Operator The New Jersey Zinc Co.

Per [signature] Title Asst. to the Supt.

REMARKS: This report covers Holes: IN-67 IN-68

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

(Instructions on reverse)

(For Government use only)

Kenneth Weaver
GEOLOGIST, USGS
APRIL 18, 1957

INSTRUCTIONS

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

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

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

GPO 872894

OFFICIAL FILE COPY
DMEA
RECEIVED APR 22 1957

DATE	INITIALS	COPY

Report for March, 1957

Independence Area DMEA 4153

Contract Idm E-950

During March, 1 drill operated on the Independence project. Holes IN-67 and 68, totalling 1325' were completed. Log summaries of these holes follow:

Hole IN-67 - W. H. Horton property - 200' downdip from IN-66

Coordinates: 803,607.52 N; 897,797.82 E
Elevation: 1268.93'

Depth	Remarks
0- 1	Red Clay
1-191	Mascot dolomite. Chert matrix marker 191'
191-365	Upper Kingsport dolomite
365	TR marker
365-381	Lower Kingsport limestone. Trace sphalerite 379'
381-384	Lower Kingsport dolomite
384-389	5' - 6.60% Zn
389-545	Interbedded limestone and dolomite of lower Kingsport. Trace sphalerite 397'. E Marker 427'
545-591	(Bottom) Longview dolomite.

Hole IN-68 - W. H. Horton property - 100' downdip from IN-67

Coordinates: 803,513.91 N; 897,866.48 E
Elevation: 1301.93'

Depth	Remarks
0-514	Mascot and upper Kingsport dolomites. Chert Matrix marker not recognized but contact possibly at 336'
514	TR marker
514-522	8' - 3.97% Zn √
522-688	Interbedded limestone and dolomite of lower Kingsport
688-734	(Bottom) Longview dolomite.

T. E. Wayland/jf

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

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION

Budget Bureau No. 42-R1036.5
PAID ON VOUCHER & SCHEDULE OF PAYMENTS K- 58

OPERATOR'S MONTHLY REPORT AND VOUCHER

Month of February 195 7 Docket No. DMEA 4153 Contract No. Idm E-950
Operator's Name The New Jersey Zinc Company Minerals Zinc
Address Jefferson City, Tennessee
Contract Amount, $ 107,150.00 Government Participation: 50 % Amount, $ 53,575.00

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:	3880.75	36,795.75	40,676.50			
Drilling						
Bulldozing						
Crosscutting						
Drifting						
(2) Labor and Supervision:						
Labor, Supervision, Technical Services	379.08	3,598.56	3,977.64			
(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	-	49.00	49.00			
Sampling and Analysis						
Payroll Taxes						
Liability Insurance						
(8) Contingencies (specify):						
TOTALS	4259.83	40,443.31	44,703.14	4259.83	40443.31	44,703.14

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:
$ 2129.92
Signature [signature] (Authorized Certifying Officer)
Date MAR 27 1957 Vou. No. 155
(See other side)

9

2129.91

(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-950 in accordance with the terms of the contract.

MINING ENGINEER
U. S. BUREAU OF MINES

Signature [signature] Title _____ Date MAR 26 1957

APPROVAL BY DMEA EXECUTIVE OFFICER OR ALTERNATE:

Signature [signature] 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

OPERATOR'S UNIT COST AND PROGRESS REPORT

Month of February 1957 Docket No. DMEA 4153 Contract No. Idm E-950

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.	3643.75	1325	38,714.50	14,078	2.75	30,000	2.75
Churn 1000-1500	"	237.00	79	1,962.00	654	3.00	5,000	3.00
Auger								
Assays		- -	--	49.00	49	1.00	200	1.00
Stripping								
Trenching								
Test Pits								
Roads and Trails								
Supervision & Tech. Services	Ft.	379.08	1404	3,977.64	14,732	0.27	35,000	0.27
TOTAL DISTRIBUTED COSTS		4259.83		44,703.14				TOTAL COSTS AUTHORIZED BY CONTRACT
Operating Equipment Purchased								
Initial Rehabilitation and Repairs								
New Buildings, Improvements, etc.								
TOTAL COSTS		4259.83		44,703.14				

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

Date 3-1-57 Operator The New Jersey Zinc Co.

Per [signature] Title Asst. to the Supt.

REMARKS This report covers holes IN-65 and IN-66.

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

(Instructions on reverse)

(For Government use only)

RECEIVED MAR 29 DMEA

Vernon Lucas Jr.
GEOLOGIST, USGS
MARCH 26, 1957

INSTRUCTIONS

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

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

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

GPO 872894

Report for February 1957

Independence Area DMEA 4153

Contract Idm E-950

During February, 1 diamond drill operated in the Independence area. Two holes, IN-65 and 66, totaling 1404 feet were completed. Log summaries of these holes follow:

Hole IN-65 - M. B. Horton property - 200' downdip from IN-64

Coordinates: 804,956.75 N; 900,224.84 E
Elevation: 1634.28'

0- 14	Red Clay
43- 642	Mascot dolomite. Chert matrix marker at 642'
642- 865	Upper Kingsport dolomite
865	TR marker
865-1048	Lower Kingsport interbedded limestone and dolomite. Dolomitization 27%
1048-1079	(Bottom) Longview dolomite. Top of T bed 1048

Hole IN-66 - W. H. Horton property

Coordinates: (approx.) 803,760 N; 897,700 E
Elevation: (") 1270'

0- 3	Red Clay
3-103	Upper Kingsport dolomite
103-	TR marker
103-280	Lower Kingsport interbedded limestone and dolomite. Dolomitization 28%
280-325	(Bottom) Longview dolomite. Top of T bed 280'

OFFICIAL FILE COPY
DMEA
RECEIVED MAR 29 1957

DATE	INITIALS	CODE

R. C. Greene/jf

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

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION

Budget Bureau No. 42-R1036.5

PAID ON VOUCHER & SCHEDULE OF PAYMENTS K- 49

OPERATOR'S MONTHLY REPORT AND VOUCHER

Month of January 1957 Docket No. DMEA 4153 Contract No. Idm E-950
Operator's Name The New Jersey Zinc Company Minerals Zinc
Address Jefferson City, Tennessee
Contract Amount, $ 107,150.00 Government Participation: 50 % Amount, $ 53,575.00

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	2310.00	34,485.75	36,795.75			
Bulldozing						
Crosscutting						
Drifting						
(2) Labor and Supervision:						
Labor						
Supervision	226.80	3,371.76	3,598.56			
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	- -	49.00	49.00			
Payroll Taxes						
Liability Insurance						
(8) Contingencies (specify):						
TOTALS	2536.80	37,906.51	40,443.31	2536.80	37,906.51	40,443.31

RECEIVED

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:
$ 1268.40
Signature [signature]
(Authorized Certifying Officer)
Date FEB 19 1957 Vou. No. 134
(See other side)

1268.40

(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-950 in accordance with the terms of the contract.

Signature Kenneth Cream Jr. Title GEOLOGIST, U. S. G. S. Date FEB 13 1957

APPROVAL BY DMEA EXECUTIVE OFFICER OR ALTERNATE:

Signature V. J. Lynch Title ACTING EXECUTIVE OFFICER DMEA - REGION V Date FEB 15 1957

MONTHLY REPORT OF OPERATOR

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

Form MF-104A
(April 1952)

Budget Bureau No. 42-R1151.2

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION

OPERATOR'S UNIT COST AND PROGRESS REPORT

Month of January 1957 Docket No. DMEA 4153 Contract No. Idm E-950

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	Feet	2310.00	840	35,070.75	12,753	2.75	30,000	2.75
Churn 1000-1500	"	- -	--	1,725.00	575	3.00	5,000	3.00
Auger								
Stripping								
Trenching								
Test Pits Assays	Assay	- -	--	49.00	49	1.00	200	1.00
Roads and Trails								
Supervision & Tech. Services	Feet	226.80	840	3598.56	13,328	0.27	35,000	0.27
TOTAL DISTRIBUTED COSTS		2536.80		40,443.31				TOTAL COSTS AUTHORIZED BY CONTRACT
Operating Equipment Purchased								
Initial Rehabilitation and Repairs								
New Buildings, Improvements, etc.								
TOTAL COSTS		2536.80		40,443.31				

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

Date 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.

(Instructions on reverse)

REMARKS: This report covers hole IN-64

(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

Report for January 1957

Independence Area DMEA 4153

Contract Idm E-950

During January, one diamond drill operated in the Independence area. Hole IN-64, totalling 840 feet, was completed. A log summary of this hole follows:

Hole IN-64 - M. B. Horton property - 100' downdip from IN-61

Coordinates: (approx.) 805,130 N; 900,138 E
Elevation: (") 1698'

Depth	Remarks
0- 64	Red Clay
64-402	Mascot dolomite. Chert matrix marker 402'
402-621	Upper Kingsport dolomite
621	TR marker
621-627	Lower Kingsport dolomite
627-654	Lower Kingsport limestone
654-683	Lower Kingsport dolomite
683-703	Lower Kingsport limestone
703-718	Lower Kingsport dolomite
718-731	Lower Kingsport limestone
731-737	Lower Kingsport dolomite
737-776	Lower Kingsport limestone
776-796	Lower Kingsport dolomite
796-802	Lower Kingsport limestone
802-840 * (Bottom)	Lower Kingsport dolomite

* Possibly Longview at bottom, but T bed not recognized.

T. E. Wayland/jf

EXTRA COPY
DMEA
RECEIVED FEB 21 1957
DATE | INITIALS | CODE

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, 1956 Docket No. DMEA 4153 Contract No. Idm E 950
Operator's Name The New Jersey Zinc Company Minerals Zinc
Address Jefferson City, Tennessee
Contract Amount, $ 107,150.00 Government Participation: 50 % Amount, $ 53,575.00

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	3049.75	31,436.00	34,485.75			
Bulldozing						
Crosscutting						
Drifting						
(2) Labor and Supervision:						
Labor						
Supervision	299.48	3,072.33	3,371.70			
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	41.00	49.00			
Payroll Taxes						
Liability Insurance						
(8) Contingencies (specify):						
TOTALS	3357.18	34,549.33	37,906.51	3357.18	34,549.33	37,906.51

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 1-1-57 *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:

$ 1678.59

Signature Helen R. Miller
(Authorized Certifying Officer)

Date FEB 6 1957 Vou. No. 117

(See other side)

7

1678.59

(For Government use only)

CERTIFICATION BY GOVERNMENT REPRESENTATIVE:

I certify that to the best of my knowledge and belief the contractor submitting this voucher is operating a Defense Minerals Exploration Administration project under Contract No. E-950 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 V. J. Zygmunt 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 FEB 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 195 6 Docket No. DMEA 4153 Contract No. Idm E 950

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.	3049.75	1109	32,760.75	11,913	2.75	30,000	2.75
Churn 1000-1500	"	- -	--	1,725.00	575	3.00	5,000	3.00
Auger								
Stripping								
Trenching								
Test Pits Assays	Assay	8.00	8	49.00	49	1.00	200	1.00
Roads and Trails								
Supervision and Technical Services	Ft.	299.43	1109	3,371.76	12,488	0.27	35,000	0.27
TOTAL DISTRIBUTED COSTS		3357.18		37,906.51				TOTAL COSTS AUTHORIZED BY CONTRACT
Operating Equipment Purchased								
Initial Rehabilitation and Repairs								
New Buildings, Improvements, etc.								
TOTAL COSTS		3357.18		37,906.51				

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 covers holes IN-62 63

Date 1-1-57 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.

(Instructions on reverse)

(For Government use only)

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

INSTRUCTIONS

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

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

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

GPO 872894

Report for December 1956

Independence Area - DMEA 4153

Contract Idm E-950

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

One diamond drill operated in the Independence area during December. Holes IN-62 and 63, totalling 1109 feet, were completed (see map AX-TENN-569A). Log summaries of these holes follow:

Hole IN-62 - M. B. Horton property - 100' updip from IN-61

Coordinates: 805,307.68 N; 900,059.09 E
Elevation: 1760.73

Depth		Remarks
0- 70		Red Clay
70-215		Mascot dolomite. Chert matrix marker 215'
215-401		Upper Kingsport dolomite
401		TR marker
401-450		Lower Kingsport dolomite. E marker 450'
450-461		Lower Kingsport limestone
461-476		Lower Kingsport dolomite
476-488	12' - 8.50% Zn of which 3.66% is soluble Zn	
488-509		Lower Kingsport dolomite. Shine sphalerite 497'. Oxidized sulfide 506'
509-519	10' - 3.58% Zn	
519-538		Lower Kingsport dolomite
538-542		Lower Kingsport limestone
542-571		Lower Kingsport dolomite
571-619	(Bottom)	Longview dolomite. T bed 571-587'

Hole IN-63 - M. B. Horton property - 100' updip from IN-62

Coordinates: 805,396.22 N; 900,006.86 E
Elevation: 1785.26

Depth		Remarks
0- 50		Red Clay
50- 56		Mascot dolomite. Chert matrix marker 56'
56-267		Upper Kingsport dolomite. Shines sphalerite 256, 267'
267		TR marker
267-271		Lower Kingsport dolomite
271-288		Lower Kingsport limestone
288-289		Lower Kingsport dolomite
289-294	5' - 2.25% Zn Est.	
294-318		Lower Kingsport dolomite. E marker 318'
318-340		Lower Kingsport limestone
340-368		Lower Kingsport dolomite

Hole IN-63 - Continued

Depth	Remarks
368-374	Lower Kingsport limestone
374-377	Lower Kingsport dolomite
377-384	Lower Kingsport limestone
384-435	Lower Kingsport dolomite. Strong shine sphalerite 421'
435-436 1' - 10% Zn Est.	
436-459	Lower Kingsport dolomite. Shine oxidized sulfide 450'
459-460 1' - 6% Zn Est.	
460-490 (Bottom)	Lower Kingsport and Longview dolomites. Strong shines sphalerite 464, 467'. Contact (T bed) not recognized, but possibly at 467'

DETAIL OF ASSAYS MADE IN DECEMBER

Hole	Depth	Feet	% Zn	% Acetic Acid Sol. Zn
IN-62	476-477	1	14.35	11.30
	480-488	8	10.95	4.07
	509-514	5	5.63	0.62
	514-519	5	1.52	0.13

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 4153 Contract No. Idm-E-950
Operator's Name The New Jersey Zinc Company Minerals Zinc
Address Jefferson City, Tennessee
Contract Amount, $ 107,150.00 Government Participation: 50 % Amount, $ 53,575.00

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:	3,423.75	28,012.25	31,436.00			
Drilling						
Bulldozing						
Crosscutting						
Drifting						
(2) Labor and Supervision:						
Labor	336.15	2,736.18	3,072.33			
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	4.00	37.00	41.00			
Payroll Taxes						
Liability Insurance						
(8) Contingencies (specify):						
TOTALS	3,763.90	30,785.43	34,549.33	3763.90	30785.43	34549.33

RECEIVED JAN 2 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:
$ 1881.95
Signature Helen R. Miller (Authorized Certifying Officer)
Date JAN 4 1957 Vou. No. 98
(See other side)

6

1881.95

(For Government use only)

CERTIFICATION BY GOVERNMENT REPRESENTATIVE:

I certify that to the best of my knowledge and belief the contractor submitting this voucher is operating a Defense Minerals Exploration Administration project under Contract No. E-950 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 V. J. Lyons 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

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION

RECEIVED JAN 2 1957 D.M.E.A.

OPERATOR'S UNIT COST AND PROGRESS REPORT

Month of November 6 1956 Docket No. DMEA 4153 Contract No. Idm-E-950

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	Feet	3,423.75	1245	29,711.00	10,804	2.75	30,000	2.75
Drilling: Core 1000-1500	"	- -	- -	1,725.00	575	3.00	5,000	3.00
Churn								
Auger								
Stripping								
Trenching Assays	Assay	4.00	4	41.00	41	1.00	200	1.00
Test Pits								
Supervision & Technical Services	Ft.	336.15	1245	3,072.33	11,379	0.27	35,000	0.27
TOTAL DISTRIBUTED COSTS		3,763.90		34,549.33				TOTAL COSTS AUTHORIZED BY CONTRACT
Operating Equipment Purchased								
Initial Rehabilitation and Repairs								
New Buildings, Improvements, etc.								
TOTAL COSTS		3,763.90		34,549.33				

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

Date Dec. 1, 1956 Operator The New Jersey Zinc Co.

Per [signature] Title Asst. to the Supt.

REMARKS: This report covers holes IN-60 61

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

X 1086G 24M 1-54

COPY

Jefferson City, Tennessee

THE NEW JERSEY ZINC COMPANY

EXPLORATION DEPARTMENT

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

Report for November, 1956

Independence Area DMEA - 4153

Contract IDM-E-950

One diamond drill operated in the Independence area during November, Holes IN-60 and 61, totalling 1245 feet were completed (see map AX-TENN-569A). Log summaries of these holes follow:

Hole IN-60 - M. B. Horton property - 200 feet updip from IN-59.

Coordinates: 805,808.11 N; 900,913.90 E
Elevation: 1716.55'

Depth	Remarks
0- 31 - - - - -	Red Clay
31- 73 - - - - -	Mascot dolomite. Chert matrix marker 73'
73-316' - - - -	Upper Kingsport dolomite. Trace sphalerite 247'
316' - - - -	TR marker
316-361 - - - - -	Lower Kingsport dolomite
361-417 - - - - -	Lower Kingsport limestone
417-525 - (bottom)	Lower Kingsport and Longview dolomites. Contact (T Bed) not recognized.

Hole IN-61 - M. B. Horton property - approximately 500' S 60° W of IN-52

Coordinates: 805,221.37 N; 900,097.02 E
Elevation: 1730.24

Depth	Remarks
0- 78 - - - - -	Red Clay
78-325 - - - - -	Mascot dolomite. Chert matrix marker 325'
325-486 - - - - -	Upper Kingsport dolomite. Traces sphalerite 409, 484. Shine sphalerite 418'. Trace pyrite 410'.
486-501 - - - - -	15' - 4.79% Zn
495 - - - - -	TR marker
501-528 - - - - -	Lower Kingsport dolomite (R bed) Shine pyrite, trace sphalerite526'.
528-530 - - - - -	2' - 1½% Zn Est.
530-551 - - - - -	Lower Kingsport dolomite. (R Bed) B marker 551'.
551-555 - - - - -	Lower Kingsport dolomite. (S bed)
555-561 - - - - -	6' - 10.75% Zn
561-562 - - - - -	Lower Kingsport dolomite (S bed)
562-609 - - - - -	Lower Kingsport limestone (S bed)
609-644 - - - - -	Lower Kingsport dolomite (S bed)
644-675 - - - - -	Longview dolomite
675-682 - - - - -	Longview limestone
682-720 - (bottom)	Longview dolomite

DETAILS OF ASSAYS MADE IN NOVEMBER

Hole	Depth	Feet	% Zn	Average
IN-61	486-490	4	16.00	
"	490-495	5	0.92	486-501 - 15' - 4.79% Zn
"	500-501	1	3.20	
"	555-561	6	10.75	

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 4153 Contract No. Idm- E950

Operator's Name The New Jersey Zinc Company Minerals Zinc

Address Jefferson City, Tennessee

Contract Amount, $107,150.00 Government Participation: 50 % Amount, $53,575.00

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	8259.25	19,753.00	28,012.25			
Bulldozing						
Crosscutting						
Drifting						
(2) Labor and Supervision:						
Labor						
Supervision	804.87	1,931.31	2,736.18			
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		37.00	37.00			
Payroll Taxes						
Liability Insurance						
(8) Contingencies (specify):						
TOTALS	9064.12	21,721.31	30,785.43	9064.12	21721.31	30 785.43

RECEIVED 1956

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:

$ 4532.06

Signature [signature] (Authorized Certifying Officer)

Date NOV 21 1956 Vou. No. 77

(See other side)

5

4532.06

(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-950 in accordance with the terms of the contract.

Signature T. D. Lynch Title MINING ENGINEER U. S. BUREAU OF MINES Date NOV 20 1956

APPROVAL BY DMEA EXECUTIVE OFFICER OR ALTERNATE:

Signature Robert A. Larsen 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

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

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

Month of October 1956 Docket No. DMEA 4153 Contract No. Idm-E 950
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.	7521.25	2735	26,287.25	9559	2.75	30,000	2.75
Churn 1000-1500	"	738.00	246	1,725.00	575	3.00	5,000	3.00
Auger								
Stripping								
Trenching								
Test Pits Assays	Assay	- -	- -	37.00	37	1.00	200	1.00
Roads and Trails								
Supervision and Technical Services	Ft.	804.87	2981	2,736.18	10,134	0.27	35,000	0.27
TOTAL DISTRIBUTED COSTS		9064.12		30,785.43				TOTAL COSTS AUTHORIZED BY CONTRACT
Operating Equipment Purchased								
Initial Rehabilitation and Repairs								
New Buildings, Improvements, etc.								
TOTAL COSTS		9064.12		30,785.43				

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.

REMARKS: This report covers holes: IN-57
58
59

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

(Instructions on reverse)

(For Government use only)

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

INSTRUCTIONS

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

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

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

GPO 872894

Report for October, 1956

Independence Area - DMEA 4153

Contract Idm - E-950

RECEIVED NOV 23 1956 DMEA

One of the two diamond drills originally assigned to the Independence area was removed during October, 1956. Holes IN-57, 58, and 59, totalling 2981 feet, were completed (see maps AX-TENN-569A, 570A). Log summaries of these holes follow:

Hole IN-57

Coordinates: 806,111.12N; 902,982.43E
Elevation: 1,570.89

Depth	Remarks
0- 22	Red clay
22-857	Mascot dolomite. Chert matrix marker not recognized, but base of dark gray dolomite at 857 believed to be contact.
857-984	Upper Kingsport dolomite. U255 @ 916'
984	TR marker
984-1050	Interbedded limestone and dolomite of lower Kingsport (R bed). E marker 1050'.
1050-1200 (Bottom)	Interbedded limestone and dolomite at lower Kingsport (S bed)

Hole IN-58

Coordinates: 805,095.48 N; 900,690.16 E
Elevation: 1,564.46

Depth	Remarks
0- 48	Red clay
48-710	Mascot dolomite. Chert matrix marker not recognized, but base of dark gray dolomite at 710' believed to be contact.
710-843	Upper Kingsport dolomite. Brown oolitic chert? 782'. Trace pyrite 782'
843	TR marker
843-910	Interbedded limestone and dolomite of lower Kingsport (R bed) E marker 910'
910-933	Interbedded limestone and dolomite of lower Kingsport (S bed)
933-1020	Lower Kingsport limestone (S bed)
1020-1034	Lower Kingsport dolomite (S bed)
1034-1046 (Bottom)	Longview dolomite. T bed? 1034-1036.

Hole IN-59

Coordinates: 805,623.44 N; 900,986.13 E
Elevation: 1,660.44

Depth	Remarks
0- 50	Red clay
50-260	Mascot dolomite. Chert matrix marker 260'
260-533	Upper Kingsport dolomite. Locally strong fracturing, brecciation, and reddish coloration. No Upper Kingsport markers recognized.
533	TR marker ?
533-588	Lower Kingsport dolomite (R bed). E marker ? 566'
588-611	Lower Kingsport limestone (S bed)
611-735 (BoHom)	Lower Kingsport (S bed) and Longview dolomites. T bed ? 643-650'

The stratigraphy of hole IN-59 is obscure. Some of the markers have been obliterated by a strong development of breccia and a reddish coloration which extends from the Mascot into the lower Kingsport.

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 September, 1956 Docket No. DMEA 4153 Contract No. Idm-E-950

Operator's Name The New Jersey Zinc Company Minerals Zinc

Address Jefferson City, Tennessee

Contract Amount, $107,150.00 Government Participation: 50% Amount, $53,575.00

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	4867.50	14,885.50	19,753.00			
Bulldozing						
Crosscutting						
Drifting						
(2) Labor and Supervision:						
Labor						
Supervision	477.90	1,453.41	1,931.31			
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	6.00	31.00	37.00			
Payroll Taxes						
Liability Insurance						
(8) Contingencies (specify):						
TOTALS	5351.40	16,369.91	21,721.31	5351.40	16 369.91	21 721.31

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:

$ 2675.70

Signature [signature]
(Authorized Certifying Officer)

Date NOV 5 1956 Vou. No. 32
(See other side)

2675.70

(For Government use only)

CERTIFICATION BY GOVERNMENT REPRESENTATIVE:

I certify that to the best of my knowledge and belief the contractor submitting this voucher is operating a Defense Minerals Exploration Administration project under Contract No. E-950 in accordance with the terms of the contract.

Signature V. 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

RECEIVED NOV 2 1956

Month of Sept. 1956 Docket No. DMEA 4153 Contract No. Idm-E-950
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	Feet	4867.50	1770	18,766.00	6824	2.75	30,000	2.75
Chip 1000-1500	"	-	-	987.00	329	3.00	5,000	3.00
Auger								
Stripping								
Trenching								
Test Pits Assay	Assay	6.00	6	37.00	37	1.00	200	1.00
Roads and Trails								
Supervision & Technical Services	Feet	477.90	1770	1,931.31	7153	0.27	35,000	0.27
TOTAL DISTRIBUTED COSTS		5,351.40		21,721.31				TOTAL COSTS AUTHORIZED BY CONTRACT
Operating Equipment Purchased								
Initial Rehabilitation and Repairs								
New Buildings, Improvements, etc.								
TOTAL COSTS		5,351.40		21,721.31				

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

Date 10/18/56 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 covers holes: IN-55
56
Also 1 assay of IN-54
(see August, 1956 Report)

(For Government use only)

V. 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

Report for September, 1956

Independence Area [illegible]-4153

Contract [illegible]

Two diamond drills operated in the Independence area during September, 1956. Holes IN-55, and IN-56, totalling 1770 feet were completed (see strip map [illegible]-[illegible]-[illegible] and 5700). Holes IN-40, 50, 52, 53, 54, and 55 are shown on attached section [illegible]-[illegible]-0-1171. Log summaries of holes IN-55 and 56 follow:

Hole IN-55

Coordinates: 816,344.74 N; 902,035.23 E
Elevation: 1630.93

Depth	Remarks
0- 20'	Red clay
20-510'	Pascot dolomite. Chert matrix marker 510'
510-670'	Upper Kingsport dolomite
670'	Top of the M bed
670-694'	Lower Kingsport dolomite
694-701'	" " limestone
701-725'	" " dolomite
725-730'	" " limestone
730-740'	" " dolomite. [illegible]
	marker at 730
740-794'	Lower Kingsport limestone
794-870'	" " dolomite
870-[illegible]' (Bottom)	Longview dolomite. [illegible] bed 870-[illegible]'

This drill has moved 300' downdip to the IN-57 location.

Hole IN-56

Coordinates: 805,192.74 N; 900,650.41 E
Elevation: 1586.98

Depth	Remarks
0- 20'	Red clay
20-570'	Pascot dolomite. Chert matrix marker 570'
570-726'	Upper Kingsport dolomite
726-753	27' - 0.1% Zn

Hole IN-56 (cont'd)

Depth	Remarks
736'	Top of the R bed
753-762'	Lower Kingsport limestone
762-769'	" " dolomite. [illegible]
	marker 766'
769-779'	Lower Kingsport limestone
779-793'	" " dolomite
793-[illegible]'	" " limestone
[illegible]-[illegible]'	" " dolomite
[illegible]-[illegible]'	" " limestone
836-843'	" " dolomite
843-[illegible]' (Bottom)	" " limestone

The drill has moved 100' downdip to the IN-58 location.

Detail of Assays Made in September, 1956

Hole	Footage		% in	Weighted Averages
IN-54	720-724	4	5.14	
IN-56	726-731	5	8.66	
	731-735	5	14.25	726-753
	735-741	5	3.91	
	741-746	5	2.28	27' - 0.195 in
	746-753	7	15.11	

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- 19

OPERATOR'S MONTHLY REPORT AND VOUCHER

Month of August, 1956 Docket No. DMEA 4153 Contract No. Idm E-950
Operator's Name The New Jersey Zinc Company Minerals Zinc
Address Jefferson City, Tennessee
Contract Amount, $ 107,150.00 Government Participation: 50% Amount, $ 53,575.00

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	6217.50	8668.00	14,885.50			
Bulldozing						
Crosscutting						
Drifting						
(2) Labor and Supervision:						
Labor						
Supervision	602.37	851.04	1,453.41			
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	23.00	31.00			
Payroll Taxes						
Liability Insurance						
(8) Contingencies (specify):						
TOTALS	6827.87	9542.04	16,369.91	6827.87	9542.04	16,369.91

I certify that the above bill is correct and just and that payment therefor has not been received.
Date Sept. 1, 1956 Payee The New Jersey Zinc Company
Per Johnson Crawford Title Supt. for Tenn.

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

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

(Instructions on reverse)

Pursuant to authority vested in me, I certify that this account is correct and proper for payment in the amount of:
$ 34,393
Signature Helen R. Miller
(Authorized Certifying Officer)
Date SEP 19 1956 Vou. No. 15
(See other side)

3 341394

(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. IAm E450 in accordance with the terms of the contract.

Signature W. A. Beck Title Mining Engr. USBM, Date SEP 18 1956

APPROVAL BY DMEA EXECUTIVE OFFICER OR ALTERNATE:

Signature Robert A. Lawrence Title EXECUTIVE OFFICER DMEA REGION V Date SEP 18 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.

GPO 872893

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 4153 Contract No. Idm E-950

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.	5230.50	1902	13,898.50	5054	2.75	30,000	2.75
Churn 1000-1500	ft.	987.00	329	987.00	329	3.00	5,000	3.00
Auger								
Stripping								
Trenching								
Test Pits Assays	Assay	8.00	8	31.00	31	1.00	200	1.00
Roads and Trails								
Supervision and Technical services	Ft.	602.37	2231	1,453.41	5383	0.27	35,000	0.27
TOTAL DISTRIBUTED COSTS		6827.87		16,369.91				TOTAL COSTS AUTHORIZED BY CONTRACT
Operating Equipment Purchased								
Initial Rehabilitation and Repairs								
New Buildings, Improvements, etc.								
TOTAL COSTS		6827.87		16,369.91				

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 9/17/56 Operator The New Jersey Zinc Co.

Per Johnson Crawford Title Supt. for Tenn.

REMARKS: This report covers Holes IN-51 IN-54

Also 3 analyses of IN-53

→ 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. T. Beck, Mining Engineer
U.S.B.M.

SEP 18 1956

INSTRUCTIONS

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

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

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

GPO 872894

Report for August, 1956

Independence Area - DMEA 4153

Contract Idm E-950

Two diamond drills operated in the Independence area during August. Holes IN-51 and IN-54, totalling 2231 feet, were completed (see map AX-TENN-569A). Log summaries of these holes follow:

Hole IN-51

Coordinates: 805,466.06N; 901,732.88E
Elevation: 1568.65'

Depth	Remarks
0- 30'	Red clay
30-899'	Mascot dolomite
899-1120'	Upper Kingsport dolomite Chert Matrix marker 899'.
1120'	Top of the R bed
1120-1290'	Lower Kingsport limestone Shine sphalerite in dolomite fracture 1200'. E marker - 1164'.
1290-1329'	(Bottom) Longview dolomite. T bed (?) 1290-1298

This drill has moved to the IN-55 location, approximately 1300 feet to the northeast on the D. H. Darnell property. (300' downdip from IN-10).

Hole IN-54

Coordinates: 805,228.17N; 900,612.68E
Elevation: 1614.92

½	Depth	Remarks
	0- 105'	Red Clay
	105-502'	Mascot dolomite. Chert matrix marker 502'
	502- 675'	Upper Kingsport dolomite
	675- 697'	22' - 11.13% Zn (Top of the R bed - 696')
	697- 720'	Lower Kingsport dolomite. Scattered traces sphalerite 605-611'.
	720- 724'	4' - 3% Zn Estimated
	724- 747'	Lower Kingsport dolomite. E marker 747
	747- 764'	Lower Kingsport limestone
	764- 780'	Lower Kingsport dolomite
	780- 797'	Lower Kingsport limestone
	797- 806'	Lower Kingsport dolomite

Hole IN-54 Cont'd.

Depth	Remarks
806-853'	Lower Kingsport limestone
853-860'	Lower Kingsport dolomite
860-895'	Lower Kingsport limestone
895-897'	Lower Kingsport dolomite
897-902'	(Bottom) Longview dolomite. T bed 897-900'

This drill has moved 100' down dip to the IN-56 location.

Detail of Assays Made in August, 1956

Hole	Footage		% Zn
IN-53	488-492	4	3.09
	492-500	8	0.80
	509-512	3	5.60
	Weighted Averages		
	488-500	12'	1.56% Zn
	488-512	24'	1.48% Zn
IN-54	675-679	4	0.82
	679-684	5	15.80
	684-687	3	1.88
	687-695	8	19.50
	695-697	2	0.48
	Weighted Averages		
	679-695	16'	15.04% Zn
	675-697	22'	11.15% Zn

Independence Area - DMEA 4153

Contract Idm E-950 (Zinc)

COORDINATES AND ELEVATIONS OF HOLES PREVIOUSLY REPORTED

Hole	Coordinates		Elevation
IN-48	805,644.45N;	900,451.75E	1742.85'
IN-49	805,740.49N;	901,606.04E	1645.07'
IN-50	805,559.06N;	900,498.39E	1709.96'
IN-52	805,456.33N;	900,526.85E	1679.54'
IN-53	805,371.63N;	900,572.84E	1644.11'

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 1956 Docket No. DMEA 4153 Contract No. Idm-E950
Operator's Name The New Jersey Zinc Company Minerals Zinc
Address Jefferson City, Tennessee
Contract Amount, $107,150.00 Government Participation: 50 % Amount, $ 53,575.00

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	3665.75	5002.25	8668.00			
Bulldozing						
Crosscutting						
Drifting						
(2) Labor and Supervision:						
Labor						
Supervision / Technical Services	359.91	491.13	851.04			
(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	13.00	10.00	23.00			
Payroll Taxes						
Liability Insurance						
(8) Contingencies (specify):						
TOTALS	4038.66	5503.38	9542.04	4038.66	$5,503.38	$9,542.04

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 [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)

2,019.33

RECEIVED AUG 24 1956

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

$2,019.33

Signature Helen R. Miller
(Authorized Certifying Officer)

Date AUG 22 1956 Vou. No. 31
(See other side)

(For Government use only)

CERTIFICATION BY GOVERNMENT REPRESENTATIVE:

I certify that to the best of my knowledge and belief the contractor submitting this voucher is operating a Defense Minerals Exploration Administration project under Contract No. Un E950 in accordance with the terms of the contract.

Signature W. M. Beck Title Mng 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 6 195 4153 Contract No. Idm-8950

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.	3665.75	1333	8660.00	3152	2.75	30,000	2.75
Drilling: Core 1000-1500	"	-	-	-	-	-	5,000	3.00
Churn								
Auger								
Stripping								
Trenching								
Test Pits Assays	Assay	13.00	13	23.00	23	1.00	200	1.00
Roads and Trails	ft.	359.91	1333	851.04	3152	0.27	35,000	0.27
Supervision and Technical								
Total Distributed Costs		$4033.66		$9542.04				Total Costs Authorized by Contract
Operating Equipment Purchased								
Initial Rehabilitation and Repairs								
New Buildings, Improvements, etc.								
Total Costs		$4033.66		$9542.04				

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

This report covers Drillholes III-52, III-53. Also 10 analyses of III-40 (See June, '56 Report)

Date 8/17/56 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)

(For Government use only)

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

RECEIVED
AUG 24 1956

INSTRUCTIONS

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

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

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

GPO 872894

Report for July 1956

Independence Area - DMEA 4153

Contract Idm - E950

Two diamond drills operated in the Independence Area during July. One of these drills has had considerable mechanical difficulty and is now being repaired. The other drill completed two holes, IN-52 and IN-53. (See map AX-TENN-569A). Log summaries of these holes follow:

Hole	Depth	Remarks
IN-52	0- 65'	Red clay
	65-194'	Mascot dolomite
	194-423'	Upper Kingsport dolomite. Chert matrix marker 194'. Trace sphalerite 308'
	423'	Top of R bed
	423-428'	Lower Kingsport dolomite
	428-440'	12' 1.97% Zn
	440-444'	Lower Kingsport dolomite
	444-446'	2' 0.50% Zn
	446-467'	Lower Kingsport dolomite. Shine sphalerite 452. E marker 467'.
	467-472'	Lower Kingsport limestone
	472-486'	Lower Kingsport dolomite
	486-574'	Lower Kingsport limestone
	574-587'	Lower Kingsport dolomite
	587-652'	(Bottom) Longview dolomite T Bed 587-590'.
IN-53	0- 90'	Red Clay
	90-291'	Mascot dolomite
	291-481'	Upper Kingsport dolomite. Chert Matrix marker 291'. Traces sphalerite 478-480'
	481'	Top of R Bed
	481-488'	Lower Kingsport dolomite. Trace sphalerite 484'
	488-500'	12' 1½% Zn Estimated
	500-509'	Lower Kingsport dolomite
	509-512'	3' 10% Zn Estimated
	512-546'	Interbedded limestone and dolomite of lower Kingsport. E marker 546'
	546-564'	Lower Kingsport limestone
	564-668'	Lower Kingsport dolomite
	668-681'	(Bottom) Longview dolomite. T bed 668-674'

Detail of Analyses Made in July, 1956

Hole	Footage		% Zn	Remarks
IN-48	180-185	5'	0.26	Ac. Acid Sol. Zinc
	" "		0.63	Total Zinc
(See June 1956 Report)	185-190	5	3.94	Ac. Acid Sol. Zinc
	" "		4.51	Total Zinc
	190-195	5	0.76	Ac. Acid Sol. Zinc
	" "		0.98	Total Zinc
	195-200	5	1.80	Ac. Acid Sol. Zinc
	" "		3.35	Total Zinc
	200-205	5	4.50	Ac. Acid Sol. Zinc
	" "		5.53	Total Zinc

Weighted Averages:

180-205' - 25' - 2.25% Zc Acid Sol. Zinc
180-205' - 25' - 3.00% Total Zinc

This oxidized zone is interpreted to indicate an original zinc sulfide zone grading higher than 3% zinc.

Hole	Footage		% Zn	Remarks
IN-52	428-434	6	2.68	
	434-440	6	1.26	
	444-446	2	0.50	

Weighted Average:

428-440' - 12' - - 1.97% Zn

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 No.
JUL 30 1956

OPERATOR'S MONTHLY REPORT AND VOUCHER

Month of June 195 6 Docket No. DMEA 4153 Contract No. Idm-E950
Operator's Name The New Jersey Zinc Company Minerals Zinc
Address Jefferson City, Tennessee
Contract Amount, $ 107,150.00 Government Participation: 50% Amount, $ 53,575.00

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	5002.25	-	5002.25			
Bulldozing						
Crosscutting						
Drifting						
(2) Labor and Supervision:						
Labor						
Supervision	491.13	-	491.13			
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	10.00	-	10.00			
Sampling and Analysis						
Payroll Taxes						
Liability Insurance						
(8) Contingencies (specify):						
TOTALS	5503.38		5503.38	5503.38		5503.38

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:

$ 2751.69

Signature Helen R. Miller
(Authorized Certifying Officer)

Date JUL 26 1956 Vou. No. 6

(See other side)

2751.69

(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. Idaho E950 in accordance with the terms of the contract.

Signature Henry A. Amos 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 4153 Contract No. Idm-E950
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.		5002.25	1819	5002.25	1819	2.75	30,000	$2.75
Churn 1000-1500 Ft.		-	-	-	-	-	5,000	3.00
Auger								
Stripping								
Trenching								
~~Test Pits~~ Assay	Assay	10.00	10	10.00	10	1.00	200	1.00
Roads and Trails								
Supervision and Technical Services	Feet	491.13	1819	491.13	1819	0.27	35,000	0.27
TOTAL DISTRIBUTED COSTS		$5503.38		$5503.38				TOTAL COSTS AUTHORIZED BY CONTRACT
Operating Equipment Purchased								
Initial Rehabilitation and Repairs								
New Buildings, Improvements, etc.								
TOTAL COSTS		$5503.38		$5503.38				

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 covers drill holes IN-48
IN-49
IN-50

Date July 15, 1956 Operator The New Jersey Zinc Company

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)

(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'1086G 24M 1-54

COPY

THE NEW JERSEY ZINC COMPANY

Jefferson City, Tennessee
EXPLORATION DEPARTMENT

Report for June 1956

Independence Area - DMEA 4153

Contract Idm-E950

Two diamond drills completed three holes in the Independence Area during June, 1956 (see Figure 1). Log summaries of these holes follow:

Hole	Depth	Remarks
IN-48	0- 43'	Red clay
	43-142'	Upper Kingsport dolomite. Local shines sphalerite.
	142-148'	6 feet 2.02% Zn
	148-184'	Upper Kingsport dolomite. Local shines sphalerite and oxidized zinc.
	184'	Top of "R" bed
	184-229'	Lower Kingsport dolomite. Local shines sphalerite and oxidized zinc. From 180-205' - 25 feet oxidized and leached zone which may have been ore grade before leaching.
	229-236'	7 feet 9.79% Zn
	236-310'	Lower Kingsport dolomite. Local shines sphalerite and oxidized zinc.
	310-317'	7 feet 8.75% Zn
	317-369'	Lower Kingsport dolomite
	369-399'	(Bottom) Longview dolomite

Hole	Depth	Remarks
IN-49	0- 27'	Red clay
	27-432'	Mascot dolomite
	432-690'	Upper Kingsport dolomite
	690'	Top of "R" bed
	690-868'	Lower Kingsport dolomite and limestone. Traces of sphalerite from 708-715 feet.
	868-900'	(Bottom) Longview dolomite.

Hole	Depth	Remarks
IN-50	0- 50'	Red clay.
	50-110'	Mascot dolomite
	110-274'	Upper Kingsport dolomite. Local traces sphalerite.
	274-295'	21 feet 2.99% Zn
	295-301'	Upper Kingsport dolomite
	301'	Top of "R" bed
	301-304'	Lower Kingsport dolomite
	304-339'	35 feet 1/2% Zn estimated
	339-506'	Lower Kingsport dolomite. Traces sphalerite 377-379, 466 feet.
	506-520'	(Bottom) Longview dolomite

Detail of Analyses made in June, 1956

D.D.H.	Footage		% Zn	Remarks
IN-48	142-148'	6'	2.02	
	229-233'	4	10.75	Total Zn
	229-233'	4	3.57	Ac.Acid Sol. Zn
	233-236'	3	8.50	Total Zn
	233-236'	3	6.95	Ac.Acid Sol. Zn
	310-317'	7	8.75	
IN-50	274-279'	5	1.33	
	279-284'	5	3.16	
	284-289'	5	4.05	
	289-295'	6	3.34	

United States Department of the Interior

GEOLOGICAL SURVEY
BOX 25046 M.S. 933
DENVER FEDERAL CENTER
DENVER, COLORADO 80225

May 9, 1983

Re: DMEA-4153 (zinc)
The New Jersey Zinc Company
Independence & Lawson Areas
Hancock & Hawkins Counties
Tennessee - Contract Im-E-950

Mr. Frederic H. Main
Vice President, Mining
G & W Natural Resources Group
One Commerce Place
Nashville, Tennessee 37239

Dear Mr. Main:

After the completion of the approved exploration work under the contract identified above, we asked to be informed about changes in the status of the property and production from it during the period of royalty obligation.

To assist you to furnish this information and to assure the accuracy of our records, please answer the questions on the back of this letter and return two copies to this office with copies of any pertinent documents.

Sincerely,

J. William Hasler

J. William Hasler, Chief
Office of Minerals Exploration

Form MME 63
(May 1970)

REQUEST FOR INFORMATION ON CERTIFIED PROJECT OR PROJECT UNDER ROYALTY AGREEMENT

1. Since April 26, 1982, has there been a change in ownership, lease, or sublease? *If yes, please state details of the transaction below and provide a true or signed copy of the pertinent documents, unless they have been provided before.* Yes ☐ No ☒

Since April 26, 1982, has any contiguous land been acquired or any abandoned land been reacquired? If so, please give details.

2. Since April 26, 1982, has there been any production from the land subject to the contract? Yes ☐ No ☒

A. If so and it was shipped, give quantity, value, and name and address of purchaser.

Purchaser (*name and address*)	Quantity	Value

B. If stockpiled awaiting sale, state quantity, grade, and location.

Type	Quantity (*tons*)	Estimated Grade	Location
Ore			
Concentrates			
Other			

3. Since April 26, 1982, has any production been transported through workings (*see* *of contract*)? Yes ☐ No ☐

If so, state quantity, value, and disposition of material.

Disposition of Material	Quantity	Value

Submitted by:

Name William T. Hess	Title VP - Exploration
Address Natural Resources Group, GTE 700 Commerce Place Nashville, Tenn. 37219	Date 5/16/85

CERTIFICATION BY THE UNITED STATES OF AMERICA
OF A DISCOVERY OR DEVELOPMENT UNDER
AN ATOMIC ENERGY PATENT CLAUSE

To: C. S. [illegible], Vice President
The New Jersey Zinc Company
[illegible] Street
New York 22, New York

Pursuant to the provisions of implementing Two-part Contract No. [illegible], dated May 15, 1956, (Docket No. [illegible]), hereinafter called the "contract," between The New Jersey Zinc Company, a New Jersey corporation, and the United States of America, hereinafter called the "Government," it is certified and the Government's knowledge hereby on information and the line thereof and on the land described in the contract, the Government considers and considers conditions that discovery or development from which production may be made has resulted from the exploration work.

The nature of said discovery or development is described hereunto as follows:

Diamond drilling has proved the existence of replacement deposits of zinc ore occurring in the Mississippian (Kinderhook) formation, lying on the plane of the bedding.

Dated: SEP 21 1959

THE UNITED STATES OF AMERICA

George C. Selbledge
Acting Director, Office of
Atomic Energy Legislation

WHGriswold/gla 9-15-59

cc to: Operator (original)
Clarence A. Fredell, Dir., TSCD, [illegible]
Docket
Finance Office
Contract Adm. & Audit Div.
OOE Field Team, Region V (2)
Director's Reading File
Mr. Johnson
Operating Committee
Mr. Lamb, [illegible]
Mr. Kirkham, [illegible]
Mr. Griswold
Chron

SEP 21 1959

Mr. [illegible]
Vice President
The New Jersey Zinc Company
[illegible] Street
New York 20, New York

Re: Contract No. [illegible] (Zinc)
The New Jersey Zinc Company
Exploration Area
Hancock and Hawkins Counties, Tennessee
Contract No. [illegible]

Dear Mr. [illegible]:

Enclosed is a certificate of discovery of uranium that covers all the land described in Article I of the contract.

By the terms of the Exploration Project Contract, as amended, and the certification, all minerals mined or produced from May 15, 1956, to May 15, 1959, are subject to the Government's percentage royalty on net dues in the contract until the sum of $[illegible].00 is repaid to the Government.

Royalty payments should be made to the Executive Officer, Oak Ridge Area, Region V, Box 11, Post Office Building, Knoxville 2, Tennessee, by the producer with checks drawn payable to the Office of Minerals Exploration. The producer should be assigned to defend royalties from the mineral dug on this claim and send the check to the Executive Officer. Each check should be accompanied by reliable sales evidence - such as copies of purchasing checks - showing the name of the producer, the quantity and grade of the products sold, and the price and charges, certified to be correct by the producer.

You are requested to notify the Executive Officer of any change in ownership or production rights that may have any effect on the Government's right to the percentage royalty. Your attention is called particularly to Article 3 (d) of the contract relating to the preservation of the Government's right to a percentage royalty on production. After the production starts, please notify the Executive Officer. Thereafter, if production ceases for any extended period, please notify him accordingly at six-month intervals.

Sincerely yours,

George C. Selfridge

Enclosure

Acting Director

Audit copy

O.M.E. APR 1 1959

TERMINATION AGREEMENT

It is agreed this 20th day of February, 1959, between the United States of America, acting through the Department of Interior, Office of Minerals Exploration, hereinafter called the "Government," and the New Jersey Zinc Company, hereinafter called the "Operator," parties to that certain Exploration Project Contract No. Idm-8950 (Docket No. DMEA-4153), dated May 10, 1956, as amended, hereinafter called the "Contract," that:

1. Pursuant to the provisions of Article 2 of the Special Agreement Concerning Land in Annex I, the following parcels of land are hereby deleted from the land referred to in Article 2 of the Contract and described in Annex I, as amended.

Name of Property Owner	Acres	
M. B. Horton	53	(Amendment No. 5)
H. C. Anderson	100	(Amendment No. 5)
Emma Brickley and L. Brickley	70	(Amendment No. 5)
C. O. Lawson and Claude Lawson	146	(Amendment No. 5)
N. M. Moneyhun	40	(Amendment No.5)
Kyle H. Johnson and wife, Dinah Johnson	50	(Amendment No.8)
Hilton - McMillan	104	(Amendment No. 9)
M. C. Herron *	61	

The Operator:

(a) certifies that 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-two years from the date of this Contract;

* Included in area shown on map, attached to Amendment No. 5, as subject to Contract, but not listed in the body of said Amendment.

(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-two 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-two 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.

2. Effective January 15, 1959, the Contract and all obligations of the parties thereunder, except as otherwise herein expressly provided shall be and are hereby terminated.

3. The Government shall contribute only to the allowable costs of work performed prior to January 15, 1959.

4. 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.

5. All rights of the Government respecting certification of discovery or development, percentage royalty and liens to secure the payment thereof, reports (including perusal of Operator's records), accounts, audits, and the right to recover any overpayment, are hereby preserved.

6. 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 Frank E. Johnson
Acting Director, Office of
Minerals Exploration

THE NEW JERSEY ZINC COMPANY

By J. Bordwin

Title VICE PRESIDENT

Audit Copy

APR 1 1959
O.M.E

EXPLORATION PROJECT CONTRACT
THE NEW JERSEY ZINC COMPANY
DOCKET NO. DMEA-4153

AMENDMENT No. 11

It is agreed this 14th day of January 1959, between the United States of America, acting through the Department of the Interior, Office of Minerals Exploration, and The New Jersey Zinc Company, that Exploration Project Contract No. Idm-E950 (Docket No. DMEA-4153), dated May 10, 1956, as amended, is further amended as follows:

In Annex I, the following land is added to the description of the land:

Owner	Location	Acreage	Expiration date of option
L. W. Horton & wife	Hancock County, Tennessee	250	6-5-1961

The boundaries of the land are contained in an option agreement, dated June 5, 1956, pursuant to which the land is possessed by the Operator and the descriptions therein are incorporated herein by reference.

This property is contiguous to the land originally described in Annex I of the contract, and is included in accordance with paragraph I of "Special Agreement Concerning Land" (page 2 of Annex I).

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

Executed in quintuplicate the day and year first above written.

THE UNITED STATES OF AMERICA

By: Robert A. Lawrence
Executive Officer, Office of Minerals Exploration, Region V

THE NEW JERSEY ZINC COMPANY

By [signature]

Title VICE PRESIDENT

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

March 30, 1959

COPY
RECEIVED
800

Memorandum

To: Operating Committee, OME -Washington, D. C.

From: OME Field Team, Region V- Knoxville, Tennessee

Subject: Signed Amendment No. 11. DMEA-4153, Idm-E950
The New Jersey Zinc Co.
Independence Area, Hancock and Hawkins Counties
Tennessee.

Attached is the Government Copy of the subject signed amendment No. 11, and a copy of the Contract and Agreement between L. W. Horton and wife and the New Jersey Zinc Company. Also attached is the signed audit copy of the amentment.

Robert A. Laurence
Executive Officer, OM E
Region V

V. J. Lynch, Member
Bureau of Mines

zm.

c
Finance
Lynch
Files

Audit's copy

OFFICIAL FILE COPY
O. M. E.
RECEIVED OCT 15 1958

DATE	INITIALS	CONT

EXPLORATION PROJECT CONTRACT
THE NEW JERSEY ZINC COMPANY
DOCKET NO. DMEA-4153

AMENDMENT NO. 10

It is agreed this 23d day of September, 1958, between the United States of America, acting through the Department of the Interior, Office of Minerals Exploration, and The New Jersey Zinc Company, that Exploration Project Contract No. Idm-E050 (Docket No. DMEA-4153), dated May 10, 1956, as amended, is further amended, as follows:

1. In Article 3 of the Contract, the period for completion of the work is further extended from March 1, 1959, to August 1, 1959.

2. (a) Work under the Contract shall be suspended during the period beginning August 1, 1958, and ending not later than January 1, 1959.

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

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

3. The maximum period for royalty payments and the liens to secure payment thereof, provided for in the Contract, is extended from 30 years to 32 years.

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

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

(i) Effective August 1, 1958, if the work has not been resumed on or before January 1, 1959.

(ii) Effective July 1, 1959, if the work is resumed on or before January 1, 1959, but is not completed on or before August 1, 1959.

(b) The Government will contribute only to the allowable costs of any work performed prior to the relevant effective date set forth under 4(a) above.

(c) The Operator shall promptly perform all winding-up and settlement actions provided for in the Contract, including the rendering of the final report and final account.

(d) All rights of the Government respecting certification of discovery or development, percentage royalty and liens to secure the payment thereof, reports (including preservation of Operator's records), accounts, audits, and the right to recover any overpayment, are hereby preserved.

(e) The Operator hereby releases and agrees to save the Government harmless from all claims or demands under or arising out of said Contract, except as otherwise provided in this Amendment No. 10.

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 unit of work.

Executed in quintuplicate the day and year first above written.

THE UNITED STATES OF AMERICA

By C. O. Mitchenor
Acting Director, Office of Minerals Exploration

THE NEW JERSEY ZINC COMPANY

By J. Boodell

Title VICE PRESIDENT

Audit's copy

OFFICIAL FILE COPY
DMEA
RECEIVED AUG 15 1958

DATE	INITIALS	CODE
8/15	J.G.	226
		800

EXPLORATION PROJECT CONTRACT
THE NEW JERSEY ZINC COMPANY
DOCKET NO. DMEA-4153

AMENDMENT NO. 9

It is agreed this 1st day of August, 1958, between the United States of America, acting through the Department of the Interior, Defense Minerals Exploration Administration, and The New Jersey Zinc Company, that Exploration Project Contract No. Idm-E950 (Docket No. DMEA-4153), dated May 10, 1956, as amended, is further amended as follows:

In Annex I, the following land is added to the description of the land:

> The Helton-McMillan property situate in the Third Civil District of Hawkins County, Tennessee, containing 104 acres, more or less. The land is shown on maps AX-Tenn 568 and AX-Tenn 567. The boundaries of the land are contained in the option agreements pursuant to which the land is possessed by the operator and the descriptions therein are incorporated herein by reference.

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

Executed in quintuplicate the day and year first above written.

THE UNITED STATES OF AMERICA

By C. Mitteldorf
Administrator, Defense Minerals
Exploration Administration

THE NEW JERSEY ZINC COMPANY

By J. Boodwin

Title VICE PRESIDENT

Audit Copy

28

EXPLORATION PROJECT
CONTRACT

THE NEW JERSEY ZINC COMPANY
DOCKET No. DMEA-4153

AMENDMENT No.8

It is agreed this 7th day of May, 1958, between the United States of American, 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 Idm-E950, Docket No. DMEA-4153, dated May 10, 1956, as amended, hereinafter called the "Contract," that the Contract is further amended as follows:

1. In Annex I, land is added to the contract as follows:

Name of Property Owner	Acres
Kyle H. Jonhson and wife Dinah Johnson	50 X

(The added land is shown on Map AX-TENN-B568, entitled "Fig.I,NJZ Co" which is a part of Amendment No.5, as "K. Johnson.")

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

The effective date of this Amendment is February 17, 1958.

Executed in quintuplicate the day and year first above written.

THE UNITED STATES OF AMERICA

By Robert A. Lawrence
Executive Officer, DMEA
Field Team, Region V

THE NEW JERSEY ZINC COMPANY

By J Bordwin

Title VICE PRESIDENT

OFFICIAL FILE COPY
Contract copy

RECEIVED

EXPLORATION PROJECT CONTRACT
THE NEW JERSEY ZINC COMPANY
DOCKET NO. MMA-4195

AMENDMENT NO. 1

It is agreed this 19th day of May, 1958, between the United States of America, acting through the Department of the Interior, Bureau Minerals Exploration Administration, hereinafter called the "Government," and the New Jersey Zinc Company, hereinafter called the "Operator," parties to that certain Exploration Project Contract Ion-[illegible], Docket No. MMA-4153, dated May 19, 1956, as amended, hereinafter called the "Contract," that the Contract is further amended effective May 19, 1956, as follows:

The third paragraph of Exhibit "A" is revised to read as follows:

"Since the ore zones appear to lie parallel to the strike of the lode and, at times, to plunge at high angles to the strike into the dips of the body; the work plan contemplates both a series of wide-spaced dip sections and also wide-spaced strike sections. The section interval may not be less than 500 feet, nor the drill hole spacing in any individual section be less than 100 feet."

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

Executed in quintuplicate the day and year first above written.

THE UNITED STATES OF AMERICA

By C. Mitteisser
Administrator, Bureau Minerals
Exploration Administration

THE NEW JERSEY ZINC COMPANY

By W F Johnson

Title VICE PRESIDENT

DMEA
RECEIVED FEB 19 1958
DATE

Audit Copy

EXPLORATION PROJECT CONTRACT
THE NEW JERSEY ZINC COMPANY
DOCKET NO. DMEA-4153

AMENDMENT NO. 6

It is agreed this 29th day of January, 1958, 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 Idm-E950, Docket No. DMEA-4153, dated May 10, 1956, as amended, hereinafter called the "Contract," that the Contract is further amended as follows:

1. (a) Work under the Contract shall be suspended during the period beginning January 1, 1958, and ending not later than July 1, 1958.

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

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

2. The date fixed in Amendment No. 3 for completion of the work is extended from January 1, 1959, to March 1, 1959.

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

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

(i) Effective May 10, 1957, if the work is not resumed on or before July 1, 1958.

(ii) Effective March 1, 1959, if the work is resumed on or before July 1, 1958, but is not completed by March 1, 1959.

(b) The Government will contribute only to the allowable costs of any work performed prior to the relevant effective date set forth under 3 (a) above.

(c) The Operator shall promptly perform all winding-up and settlement actions provided for in the Contract, including the final report and final account.

(d) All rights of the Government respecting certification of discovery or development, percentage royalty and liens to secure the payment thereof, reports (including preservation of Operator's records), audits, and the right to recover any overpayment, are hereby preserved.

(e) The Operator hereby releases and agrees to save the Government harmless from all claims or demands under or arising out of said Contract, except as otherwise provided in this Amendment No. 6.

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

Executed in quintuplicate the day and year first above written.

THE UNITED STATES OF AMERICA

By C O Mitchenor
Administrator, Defense Minerals
Exploration Administration

THE NEW JERSEY ZINC COMPANY

By S Boardman

Title VICE PRESIDENT

MME Form 14
Sept. 1958

Contract No. Idm-E) ~~950~~
~~14-23)~~

Docket No. DMEA) ~~4153~~
~~MME)~~

Date of Action September 9, 1959
Terminated Contract

DEPARTMENT OF THE INTERIOR
OFFICE OF MINERALS EXPLORATION

OBLIGATION DOCUMENT

To: Chief, Accounts Section, Finance Branch, Bureau of Mines

From: Director, Division of Operations Control and Statistics

Please enter the amounts shown below on the accounts of the Office of Minerals Exploration.

Name and Address of Contractor:

New Jersey Zinc Co.
160 Front Street
New York 38, N. Y.

Date of Contract	Region	State	Commodity
May 10, 1956	V	Tennessee	Zinc

	Reserve	Obligation
Prior Amount	0	$107,150.00
Increase	0	0
Decrease	0	70,536.42
Revised Amount	0	36,613.58

Remarks:

cc: 800
210

43244

DMEA Form 14

Contract No. Idm-E 950

Docket No. 4153

DEPARTMENT OF THE INTERIOR

Executed amendment

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
May 10, 1956	V	Tennessee	Zinc

Name and Address of Operator: The New Jersey Zinc Co.
160 Front Street
New York 38, N. Y.

	Reserve	Obligation
Prior Amount	53,575.00	53,575.00
Increase	0	53,575.00
Decrease	53,575.00	0
Revised Amount	0	107,150.00

Remarks:

(Name)
Allen S. Dakan, Chief
Operations Control and
Statistics Division
(Title)

Date delivered to Bureau of Mines, Washington 11/18/57

22845

Audit Copy

800

EXPLORATION PROJECT CONTRACT
THE NEW JERSEY ZINC COMPANY
DOCKET NO. DMEA-4153

AMENDMENT NO. 5

It is agreed this 25th day of October, 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 Idm-8950, Docket No. DMEA-4153, dated May 10, 1956, as amended, hereinafter called the "Contract," that the Contract is further amended as follows:

1. In Annex I, land is added to the Contract as follows:

Names of property owners	Acres
C. C. Lawson and Claude Lawson	146 acres X
Emma Brickley and L. Brickley	70 acres X
H. C. Anderson	100 acres X
M. B. Horton	53 acres X
W. M. Moneyhun	40 acres X
O. M. Horton	62 acres
R. Williams	187 acres
W. C. Newton	21
Total	~~658~~ 719 acres

See map for Tenn. Acres

(The added land is shown on the attached map entitled "Fig. 1, N.J.Z. Co.")

2. In Exhibit "A", the work set forth under "Description of the Work" through Amendment No. 4 is designated as "Stage I" and a new Stage II is added as follows:

"Stage II

"Drill 35,000 feet of diamond drill hole at the approximate locations indicated on the map attached to this Amendment. The drilling requirements set forth in Exhibit "A", as amended prior hereto, shall apply to this Stage II.

3. In Exhibit "A" the Estimated Costs of the Project are revised to read as follows:

Stage I

*Actual Costs

Category (1) Independent Contract

Overburden drilling and diamond drilling to 1,000-foot depth, estimated 30,000 feet, AX size, @ $2.75/ft. BX size @ $2.65/ft.	$82,500.00	
Diamond drilling 1,000 to 1,500-foot depth, estimated 5,000 feet, AX size @ $3.00/ft. BX size @ $2.90/ft.	15,000.00	$ 97,500.00

*The above rates include charges for reaming, cementing, water supply, casing, changing of locations, and all charges which may be incurred by the diamond drill contractor. Casing left in drill holes at option of Operator will not be accepted as a charge to the Contract.

Categories (2) through (7)

None

Fixed Unit Costs (See Article 13 of the Contract)

Incidental allowance for each foot of drilling completed. (Includes all costs that otherwise would be allowable costs under Categories (1) through (7) except as scheduled in Exhibit "A".) 35,000 feet @ $0.27/ft.	$ 9,450.00	
200 samples to be assayed @ $1.00 each	200.00	9,650.00
Estimated Total Costs of Stage I		$107,150.00

Stage II

"Actual Costs

Category (1) Independent Contract

Overburden drilling and diamond drilling to 1,000-foot depth, estimated 30,000 feet, AX size, @ $2.75/ft. BX size @ $2.65/ft.	$82,500.00	
Diamond drilling 1,000 to 1,500-foot depth, estimated 5,000 feet, AX size @ $3.00/ft. BX size @ $2.90/ft.	15,000.00	$ 97,500.00

"The above rates include charges for reaming, cementing, water supply, casing, changing of locations, and all charges which may be incurred by the diamond drill contractor. Casing left in drill holes at option of Operator will not be accepted as a charge to the Contract.

Categories (2) through (7)

None

Fixed Unit Costs (See Article 13 of the Contract)

Incidental allowance for each foot of drilling completed. (Includes all costs that otherwise would be allowable costs under Categories (1) through (7) except as scheduled in Exhibit "A".) 35,000 feet @ $0.27/ft.	$ 9,450.00	
200 samples to be assayed @ $1.00 each	200.00	9,650.00

Estimated Total Costs of Stage II $107,150.00

S U M M A R Y *

Estimated Costs of Stage I	$107,150.00
Estimated Costs of Stage II	107,150.00
Estimated Total Cost of Project	$214,300.00
Government's participation, 50 percent	$107,150.00

Executed in quintuplicate the day and year first above written.

THE UNITED STATES OF AMERICA

By C Mittendorf
Administrator, Defense Minerals
Exploration Administration

THE NEW JERSEY ZINC COMPANY

By J Bodwin

Title Vice President

* In Article 5 of the Contract, the figures "$214,300.00" and "$107,150.00" are substituted for the figures "$107,150.00" and "$53,575.00", respectively.

DMEA Form 14

Contract No. Idm-E 950

Docket No. 4153

DEPARTMENT OF THE INTERIOR

Approved amendment

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
May 10, 1956	V	Tennessee	Zinc

Name and Address of Operator: The New Jersey Zinc Co.
160 Front Street
New York 38, New York

	Reserve	Obligation
Prior Amount	0	53,575.00
Increase	53,575.00	0
Decrease	0	0
Revised Amount	53,575.00	53,575.00

Remarks:

(Name)
Allen S. Dakan, Chief
Operations Control and
Statistics Division
(Title)

Date delivered to Bureau of Mines, Washington 10/28/57

22845

Audit Copy
Office
DMEA
RECEIVED NOV 1 1957
DATE INITIALS CODE
300

EXPLORATION PROJECT CONTRACT
THE NEW JERSEY ZINC COMPANY
DOCKET NO. DMEA-4153

AMENDMENT NO. 4

It is agreed this 19th day of September, 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 Idm-2950, Docket No. DMEA-4153, dated May 10, 1956, as amended, hereinafter called the "Contract", that the contract is further amended as follows:

1. In Exhibit "A" under Description of the Work, the eighth paragraph is deleted, and the fifth paragraph is revised to read as follows:

"Diamond drilling shall be done with AX size, or larger, coring bits, except when it is not feasible to complete a hole with AX size. With Government approval, the hole may be reduced with EX casing and completed with EX size bits. The Government will not contribute to the cost of drilling any hole which is not completed. All drill holes shall be logged and all drill core shall be made available to the Government for examination. All significantly mineralized core shall be split and one half thereof shall be properly sampled and the samples assayed for zinc; ~~no sample shall be taken representing more than five feet of core length.~~ All assays shall be submitted monthly to the Government, together with the logs of the drill holes and proper plan maps and sections showing the progress of the work and the sample locations. The remaining half of all significantly mineralized core shall be furnished to the Government upon request."

Ed. L.

2. Under Estimated Cost of the Project, Category (1), Independent Contracts is revised to read as follows:

"Overburden drilling and diamond drilling to 1,000-foot depth--Estimated 30,000 ft.

AX size @ $2.75/ft.	$82,500.00
EX size @ $2.65/ft.	

"Diamond drilling from 1,000-foot to
1,500-foot depth--Estimated 5,000 ft.

AX size @ $3.00/ft. EX size @ $2.90/ft.	15,000.00	$97,500.00

"The above rates include charges for reaming, cementing, water supply, casing, changing of locations, and all charges which may be incurred by the diamond drill contractor. Casing left in drill holes at option of the Operator will not be accepted as a charge to the Contract."

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

Executed in quintuplicate the day and year first above written.

THE UNITED STATES OF AMERICA

By Frank E. Johnson
ACTING Administrator, Defense Minerals
Exploration Administration

THE NEW JERSEY ZINC COMPANY

By J. Baldwin

TITLE VICE PRESIDENT

Audit Copy

OFFICIAL FILE COPY
DWEA
RECEIVED AUG 5 1957

DATE	INITIALS	CODE
		800

[illegible] CONTRACT
[illegible] LINE COMPANY
[illegible] NO. [illegible]-[illegible]

AMENDMENT NO. 1

It is agreed this 22nd day of July, 1957, between the United States of America, acting through the Department of the Interior, Bureau of Reclamation, Administration, and the [illegible] Line Company, that Reclamation Contract No. [illegible], Series No. [illegible]-[illegible], dated May 16, 1956, as amended, is further amended, as follows:

1. (a) Work under the contract shall be suspended during the period beginning May 16, 1957, and ending not later than January 1, 1958.

(b) If work started by the Operator during the period of suspension shall be disapproved for construction by the Government, and the Government shall not contribute to any costs of rehabilitation or repair which, in the opinion, would not have occurred if work had been not suspended of the work.

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

2. In Article 3, the date fixed for completion of the work is extended from July 1, 1957, to January 1, 1959.

This Amendment shall not be construed to increase the aggregate cost of any item of work, the total cost of the project, or the total amount which the Government may be required to contribute.

Executed in quadruplicate the day and year first above written.

THE UNITED STATES OF AMERICA

By C. A. Mittenzwei
Lieutenant Colonel, Corps of Engineers,
Executive Administrator

THE NEW JERSEY ZINC COMPANY

By [illegible]

Title VICE PRESIDENT

Government Copy

RECEIVED
NOV 16 1956
D.M.E.A.

EXPLORATION PROJECT CONTRACT
THE NEW JERSEY ZINC COMPANY
DOCKET No. DMEA-4153

AMENDMENT No.2

It is agreed this 5th 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 No. Idm-E950, dated May 10, 1956, and amended August 15, 1956, is further amended as follows:

Under Annex I, the description of the rectangular area which is specifically excluded from the terms of the contract is changed to read:

> "BEGINNING at a point "X" which is 1225 feet generally NW with the War Creek Road, from the intersection of the War Creek Road with the Clinch Valley Road; thence leaving the War Creek Road N. 59°-30' E. for a distance of 1370 feet to a point; thence N. 30°-30' W. for a distance of 780 feet to a point; thence S 59° 30' W. for a distance of 2175 feet to a point; thence S 30° 30' E. for a distance of 780 feet to a point; thence N 59° 30' E. for a distance of 805 feet to the BEGINNING, containing approximately 39 acres."

The net effect of this change is to add a block of ground 200 x 780 feet to the contract area.

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

Executed in sextuplicate the day and year first above written.

THE UNITED STATES OF AMERICA

By Robert A. Laurence
Robert A. Laurence
Executive Officer, DMEA
Field Team, Region V

THE NEW JERSEY ZINC COMPANY

By [signature]

Title: VICE PRESIDENT

z

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION
ROOM 1 PO BOX 25 FED BLDG
KNOXVILLE 2, TENN.

RECEIVED NOV 16 1956 D.M.E.A.

November 14, 1956

Memorandum

To: Operating Committee, DMEA, Washington, D. C.

From: Executive Officer, DMEA Field Team, Region V

Subject: Amendment No. 2, DMEA-4153, Idm-8950 (Zinc)
The New Jersey Zinc Co., New York, N. Y.
Independence area, Hancock County, Tennessee

Enclosed are the original and two copies of Amendment No. 2 to the subject contract. The usual distribution of the other copies has been made.

Justification for this amendment is contained in the Operator's letter of October 30, three copies of which are enclosed. We have discussed this with the Operator's geologists, and the Field Team agrees that this addition of approximately 3½ acres to the contract to permit drilling holes on a fence 200 feet east of hole 47 and 500 feet west of the fence already drilled on the Horton tract will improve the probability of discovering a commercial tonnage of ore in this area.

Robert A. Laurence

RAL/mg
Enclosures 6
cc
Operating Committee (2)
Lynch
Finance Office
File

X 1086G 24M 1-54

COPY

Jefferson City, Tennessee

THE NEW JERSEY ZINC COMPANY

EXPLORATION DEPARTMENT

RECEIVED NOV 16 1956 D.M.E.A.

Jefferson City, Tennessee
October 30, 1956

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

Dear Mr. Laurence:

Re: DMEA-Idm-E-950 (Zinc)
Independence Area
Hancock County, Tennessee

In the subject contract under Annex I, reference is made to a rectangular area excluded from the contract, it being stated that no work will be done within its boundaries. This rectangle roughly defines the area previously drilled by the Zinc Company.

We now find that a valid exploration target lies within a few feet of the northeast boundary of the excluded rectangle and in order to drill this target area, and remain 200 feet from the boundary it would be necessary to move the excluded boundary 200 feet to the southwest. This will have the effect of reducing the long dimension of the excluded area by that distance. The description of the excluded area would be changed to read as follows:

BEGINNING at a point which is 1225 feet generally NW with the War Creek road from the intersection of the War Creek road with the Clinch Valley road; thence leaving War Creek road N 59° 30' E for a distance of 1370' to a point; thence N 30° 30' W for a distance of 780' to a point; thence S 59° 30' W for a distance of 2175' to a point; thence S 30° 30' E for a distance of 780' to a point; thence N 59° 30' E for a distance of 805' to the BEGINNING, containing approximately 40 acres.

We believe that the drilling in the area adjacent to the area presently excluded is good exploration and will be beneficial to the project. It is requested that the

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COPY

THE NEW JERSEY ZINC COMPANY

Jefferson City, Tennessee
EXPLORATION DEPARTMENT

limit of the excluded area be revised as suggested above to accomplish this purpose.

Yours very truly,

THE NEW JERSEY ZINC COMPANY

Johnson Crawford

Superintendent for Tennessee

A.D.Hoagland/jf
In quadruplicate

Government's copy

EXPLORATION PROJECT CONTRACT
THE NEW JERSEY ZINC COMPANY
DOCKET NO. DMEA-4153

AMENDMENT NO. 1

It is agreed this 15th day of August, 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-E950, dated May 10, 1956, is amended as follows:

On page one of Exhibit "A," the last sentence of the third paragraph which reads as follows:

> "However, the section interval may not be less than 500 feet, nor the drill hole spacing in any individual section be less than 200 feet, except upon written approval by the Government."

is deleted, and the following sentence is substituted:

> "However, the section interval may not be less than 500 feet, nor the drill hole spacing in any individual section be less than 100 feet."

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

Executed in sextuplicate the day and year first above written.

THE UNITED STATES OF AMERICA

By C. C. Mitkenbery
Administrator, Defense Minerals
Exploration Administration

THE NEW JERSEY ZINC COMPANY

By J. Swoodin

Title VICE PRESIDENT

RECEIVED
AUG 3 1

RECEIVED
JUN 21 1956

June 19, 1956

Memorandum

To: Operating Committee, DMEA - Washington

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

Subject: DMEA-4153, Idm-E950 (zinc) The New Jersey Zinc Company, Independence Area, Hancock County, Tennessee

Enclosed are 3 copies of written approval to locate drill hole No. I-52, 100 feet down dip from drill hole No. I-50, in the section of holes on the M. B. Horton Property.

In requesting approval to again space holes less than 200 feet apart, Mr. Hoagland, company geologist, explained that ore has been discovered in Holes I-48 and I-50 in the section of holes now being drilled on the M. B. Horton property and that closer spacing is desired until the basic characteristics of a possible new ore zone can be determined.

V. J. Lynch

VJL/sm
cc:
Lynch
Files
Opr. Com.-3

June 19, 1956

RECEIVED
JUN 21 1956

Mr. A. D. Hoagland
New Jersey Zinc Company
Jefferson City, Tennessee

Re: DMEA-4153, Idm-E950 (Zinc)
Independence Area
Hancock County, Tennessee

Dear Mr. Hoagland:

Approval is hereby granted to drill hole No. I-52, on the M. B. Morton Property, 100 feet (horizontal distance) in a south-east direction from hole No. I-50 as provided in paragraph 3 of Exhibit "A" to the contract.

It is understood that zinc mineralization probably of ore grade, has been encountered in hole No. 48 and hole No. 50 in this section of holes, and closer spacing of the holes is desired at this time in order to determine the basic characteristics of this deposit.

V. J. Lynch, Acting

ZM.

cc:

Opr. Com.-2

Lynch

Files

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION
ROOM 18 POST OFFICE BLDG.
KNOXVILLE 2, TENN.

June 7, 1956

Memorandum

To: Operating Committee, DMEA, Washington, D. C.

From: Field Team, DMEA, Region V, Knoxville, Tennessee

Subject: DMEA-4153, Idn E-950 (Zinc)
The New Jersey Zinc Co., New York, N. Y.
Independence Area, Hancock County, Tennessee

Enclosed are three copies of written approval to locate hole I-50 at a horizontal distance of 100 feet from I-48. This was prepared after a telephone discussion with A. D. Hoagland, company geologist who requested the approval.

According to Mr. Hoagland, hole No. I-48, which was bottomed at 380 feet, cut about 100 feet of scattered mineralization, including 7 feet of estimated 6 to 8 percent Zn at about 225 feet. He interprets this as mineralization which may not be as much as 200 feet wide and stated that, in the case of shallow holes, it has been Company policy in this district to drill 100 feet from such holes. It is understood that ore bodies in this district are apt to be narrow and elongated in a strike or near-strike direction. For this reason, we have given approval to the closer spacing for this hole, which will probably be about 500 feet deep.

It appears probable that similar requests will be made when other holes cut marginal mineralization. We would look much less favorably on the closer spacing for deeper holes and in general it seems better to retain the 200-foot interval and then drill the intermediate holes at 100 feet when conditions warrant it.

Robert A. Laurence
Executive Officer

V. J. Lynch
Member, Bureau of Mines

RAL/mg
cc - Operating Committee (2)
Mr. V. J. Lynch
Files

Government Copy

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION
WASHINGTON 25, D. C.
ROOM 13 POST OFFICE BLDG.
KNOXVILLE 2, TENN.

June 7, 1956

Mr. A. D. Hoagland
New Jersey Zinc Company
Jefferson City, Tennessee

Re: DMEA-4153, Idm-E950 (Zinc)
Independence Area
Hancock County, Tennessee

Dear Mr. Hoagland:

This will constitute approval to drill hole no. I-50 on the M. B. Horton property, 100 feet (horizontal distance) in a southeast (down-dip) direction from hole no. I-48, as provided in paragraph 3 of exhibit "A" to the contract.

As explained in your telephone call, this location is justified on the basis of mineralized core from hole I-48 which you interpret as possibly the "fringe" or "edge" of an ore-shoot which might be missed if a wider spacing is used.

Sincerely yours,

Robert A. Laurence
Executive Officer
DMEA Field Team, Region V

RAL/mg
cc - Operating Committee (3)
Field Team File
Finance Office
Mr. V. J. Lynch

Contract No. Idm-E 950

Docket No. DMEA 4153

DEPARTMENT OF THE INTERIOR **Executed contract**

DEFENSE MINERALS EXPLORATION ADMINISTRATION

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

Please make the following entry on the records of the Defense Minerals Exploration Administration under the Strategic and Critical Minerals Exploration Program.

Date of Contract	Region	State	Commodity
May 10, 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	**$53,575.00**	**-0-**
Increase	**-0-**	**$53,575.00**
Decrease	**$53,575.00**	**-0-**
Revised Amount	**-0-**	**$53,575.00**

Remarks:

(Name)
Robert E. Adams, Chief
Operations Control and
Statistics Division
(Title)

Date Delivered to Bureau of Mines, Washington 5/23/56

98963

Government's copy

RECEIVED

MAY 21 1956

MF-200
(Revised June 1954)

Docket No. DMEA -4153

Commodity Zinc

Contract No. Idm-E 950

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

EXPLORATION PROJECT CONTRACT[1]

It is agreed this MAY 10 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 one map (Figure 2A).

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

ARTICLE 2. *Operator's property rights.*—(a) The land which is the subject of this contract (hereinafter called "the land") is in the State of Tennessee, County of Hancock, 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 July 1, 1956, shall commence the work, and on or before July 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 $107,150.00 The Government shall contribute 50 percent of the allowable costs as they are incurred in a total sum not in excess of $53,575.00: *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 ~~ten~~ 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.*—/6(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 6(c), the reference to Article 9 is changed to Article 8. (e) 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." (f) 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, such greater value will be used as the basis for calculating royalty payable to the Government.

Executed in sextuplicate the day and year first above written.

THE UNITED STATES OF AMERICA

By O Mitterdorf

Administrator, Defense Minerals Exploration Administration

THE NEW JERSEY ZINC COMPANY

(Operator)

By O Bordwein

VICE PRESIDENT

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

.....

[CORPORATE SEAL]

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

RECEIVED
MAY 21 1956

EXPLORATION PROJECT CONTRACT
THE NEW JERSEY ZINC COMPANY
DOCKET NO. DMEA-4153

ANNEX I

The land referred to in Article 2 of the contract consists of certain tracts in Hancock County, Tennessee, in which the Operator has the right to prospect for minerals under option contracts which further provide that the Operator may purchase all mineral and mining rights, plus limited surface privileges.

The respective tracts are shown outlined in blue color on the map entitled "Figure 2A Independence Area - DMEA-4153," attached hereto and made a part hereof, and are described as follows:

Name of Property Owner	Acreage	Expiration Date of Option
Henry L. Gilliam and Clara Dillon Gilliam	100	11-19-57
E. F. Gilliam and Mary Hickman Gilliam	35	8-6-57
D. H. Darnell and Elizabeth H. Darnell	125	5-14-57
Floyd Edens and Martha Edens	30	5-28-57
Ralph Garrett and Sarah Gillam Garrett	30	6-12-57
M. B. Horton	230	4-30-57
W. H. Horton and Elizabeth Moneyhun Horton	75	6-12-57
Flora Williams Horton, Jessie Horton Walker, and Fred Horton	62	5-7-57

Within the general land area which is subject to the contract (outlined in blue color on the attached map entitled "Figure 2A") occurs a smaller rectangular area, outlined in brown color. Such rectangular area has already been drilled by the Operator and no work will be done under this contract within its boundaries, and it is specifically excluded from the terms of this contract. Its boundaries are described as follows:

"X"

BEGINNING at a point which is 1225 feet generally N.W. with the War Creek Road, from the intersection of the War Creek road with the Clinch Valley Road; thence leaving War Creek Road N. 59°-30' E. for a distance of 1570 feet to a point; thence N. 30°-30' W. for a distance of 780 feet to a point; thence S. 59°-30' W. for a distance of 2375 feet to a point; thence S. 30°-30' E. for a distance of 780 feet to a point; thence N. 59°-30' E. for a distance of 805 feet to the BEGINNING, containing approximately 43 acres.

1370

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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 premises described in this Contract, it is agreed that such contiguous lands shall thereupon become subject to the provisions of this Contract, and the parties hereto shall promptly execute amendments to this Contract listing such contiguous lands as lands included in this Contract.

2. It is further agreed that the Operator may, at any time before the expiration of sixty days following the conclusion or termination of exploration work performed pursuant to the terms of this Contract, request the Government to delete from this Contract such lands described in the Option Contracts listed in this Annex I, or in 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.

EXPLORATION PROJECT CONTRACT
THE NEW JERSEY ZINC COMPANY
DOCKET NO. DMEA-4153

RECEIVED
MAY 21 1956

EXHIBIT "A"

Description of the Work

The purpose of the project is to explore for ores of zinc by diamond drilling, using also such churn drilling of overburden as may be required.

Zinc ores in the Copper Ridge Belt are known to occur in the Mascot and Kingsport dolomites and limestones. In the area of the project these beds dip steeply, at an angle of about 55°. This steep dip creates a condition whereby only a relatively narrow area is economically feasible for exploration.

Since the ore zones appear to lie parallel to the strike of the beds, the work plan contemplates a series of wide-spaced dip sections, with drill holes in the individual section about 200 feet apart. Initially the various sections will be on about 1200-foot spacing; in areas where initial work gives favorable results the section interval may be reduced. However, the section interval may not be less than 500 feet, nor the drill hole spacing in any individual section be less than 200 feet, except upon written approval by the Government.

It is estimated that the average depth of the drill holes will be between 700 and 800 feet; that the maximum depth of any hole will be about 1400 feet; that a total of 35,000 feet of drilling will be required; and that approximately 47 holes will be drilled.

All diamond drilling will be done with AX size, or larger, core recovering drills and coring bits.

The preliminary drilling to be performed under the Contract is roughly indicated on the attached map entitled "Figure 2A".

All diamond drilling, including locations 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 significantly mineralized core will be properly sampled and assayed for zinc. Such assays, together with the geological logs of drill holes, will be reported to the Government, together with proper plan maps and sections showing the progress of the work.

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

Estimated Cost of the Project

Actual Costs

Category (1) Independent Contracts

Overburden drilling and diamond drilling to 1,000-foot depth Estimated 30,000 feet @ $2.75/ft.	$ 82,500.00	
Diamond drilling from 1,000-foot to 1,500-foot depth Estimated 5,000 feet @ $3.00/ft.	15,000.00	$ 97,500.00

The above rates include charges for reaming, cementing, water supply, casing, changing of locations, and all charges which may be incurred by the diamond drill contractor. Casing left in drill holes at option of Operator will not be accepted as a charge to the Contract.

Categories (2) through (7)

None

Fixed Unit Costs (see Article 13 of the Contract)

Incidental allowance for each foot of drilling completed 35,000 feet @ $0.27/ft.	9,450.00	
200 samples to be assayed @ $1.00 each	200.00	9,650.00
Estimated Total Cost of Project		$107,150.00
Government Participation @ 50%		$ 53,575.00

Contr[illegible] No. Idm-E -950

Docket No. 4153

DEPARTMENT OF THE INTERIOR

DEFENSE MINERALS EXPLORATION ADMINISTRATION

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

Please make the following entry on the records of the Defense Minerals Exploration Administration under the Strategic and Critical Minerals Exploration Program.

Date of Contract	Region	State	Commodity
May 10, 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	-o-	
Increase	$53,575.00	
Decrease	-o-	
Revised Amount	$53,575.00	-0-

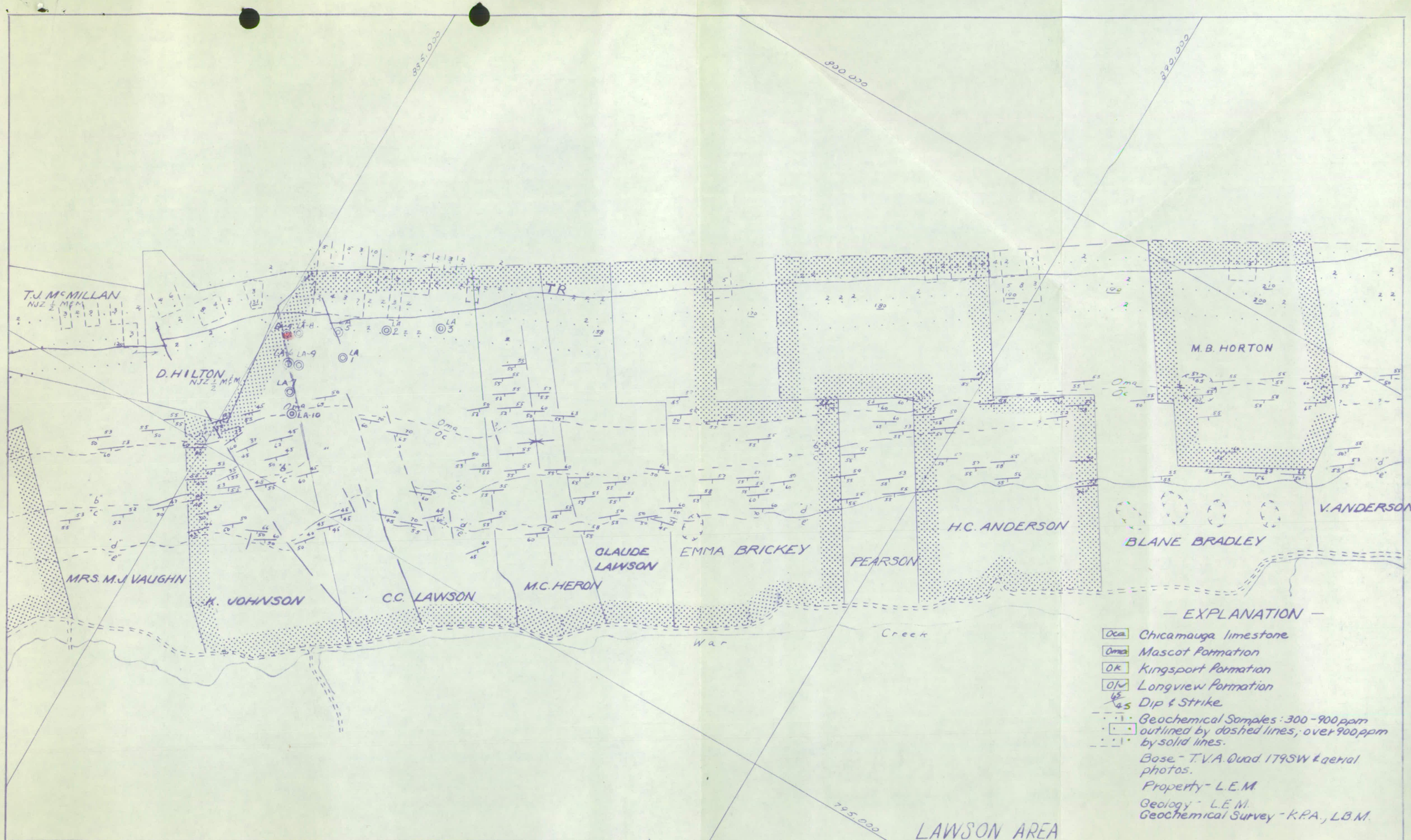
Remarks:

(Name)

Robert E. Adams, Chief
Operations Control and
Statistics Division
(Title)

Date Delivered to Bureau of Mines, Washington 5/10/56

98963



LAWSON AREA

POSTED TO DATE 4-56 TEW	THE NEW JERSEY ZINC COMPANY ROGERSVILLE TENNESSEE	DRAWN SJL, JFP DATE 3-30-53 TRACED SCALE 1"=660'	COPPER RIDGE BELT SECTOR I SHEET ONE
			HAWKINS CO., TENN. FILE NO. AX-TENN 568

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DATE	INITIALS	CODE

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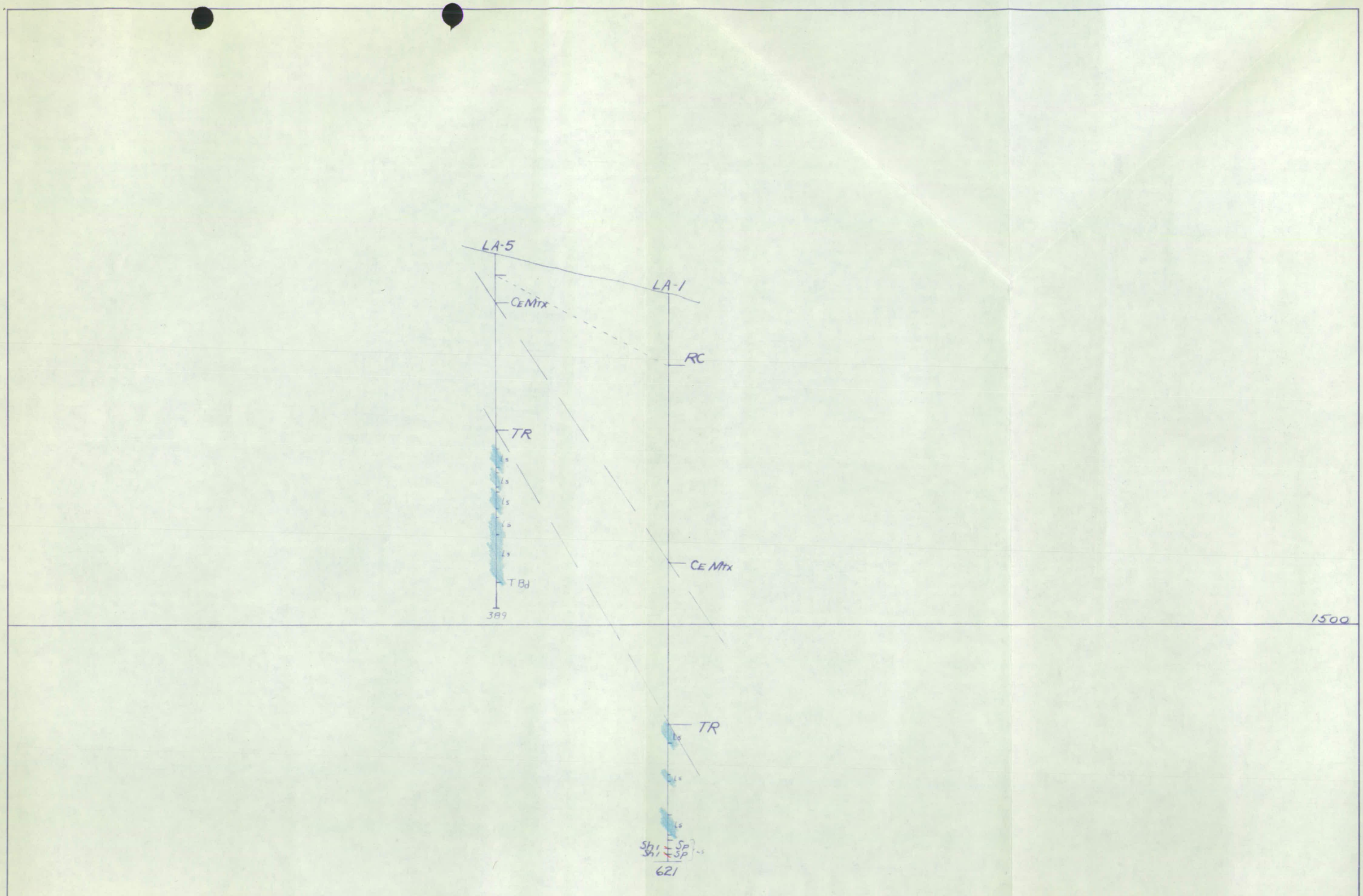
DATE	INITIALS	CODE



SERIAL NUMBER		DATE ISSUED		REFERENCE DRAWINGS	REVISIONS	THE NEW JERSEY ZINC COMPANY JEFFERSON CITY, TENN	DRAWN WJC	DIP SECTION LA 5,1 SECTOR I LAWSON AREA COPPER RIDGE BELT	DATE 4-16-58
THIS DRAWING IN DESIGN AND DETAIL IS OUR PROPERTY AND MUST NOT BE USED EXCEPT IN CONNECTION WITH OUR WORK. ALL RIGHTS OF DESIGN AND INVENTION ARE RESERVED. THIS DRAWING MUST BE RETURNED TO THE NEW JERSEY ZINC COMPANY.							TRACED		SCALE 1" = 100
							CHECKED		AX-TENN B-1356
							APPROVED		

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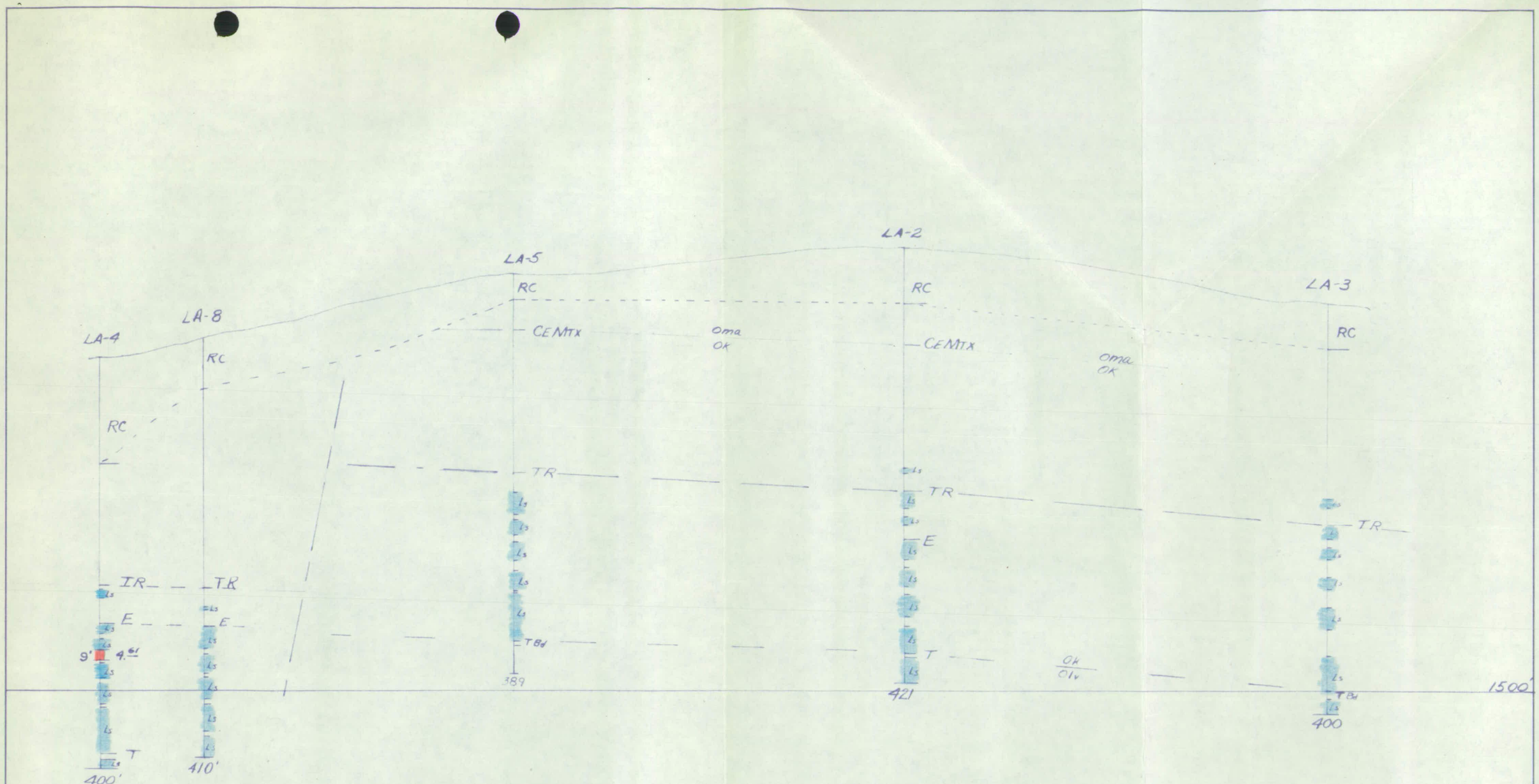

SERIAL NUMBER		DATE ISSUED		REFERENCE DRAWINGS	REVISIONS	THE NEW JERSEY ZINC COMPANY	DRAWN WJC	LONGITUDINAL SECTION LA-4,5,2,3,8	DATE 4-14-58
THIS DRAWING IN DESIGN AND DETAIL IS OUR PROPERTY AND MUST NOT BE USED EXCEPT IN CONNECTION WITH OUR WORK. ALL RIGHTS OF DESIGN AND INVENTION ARE RESERVED. THIS DRAWING MUST BE RETURNED TO THE NEW JERSEY ZINC COMPANY.						JEFFERSON CITY, TENNESSEE	TRACED	SECTOR I LAWSON AREA	SCALE 1" = 100
							CHECKED	COPPER RIDGE BELT	AX TENN B-1354
							APPROVED		

X5453B 1M 11-54

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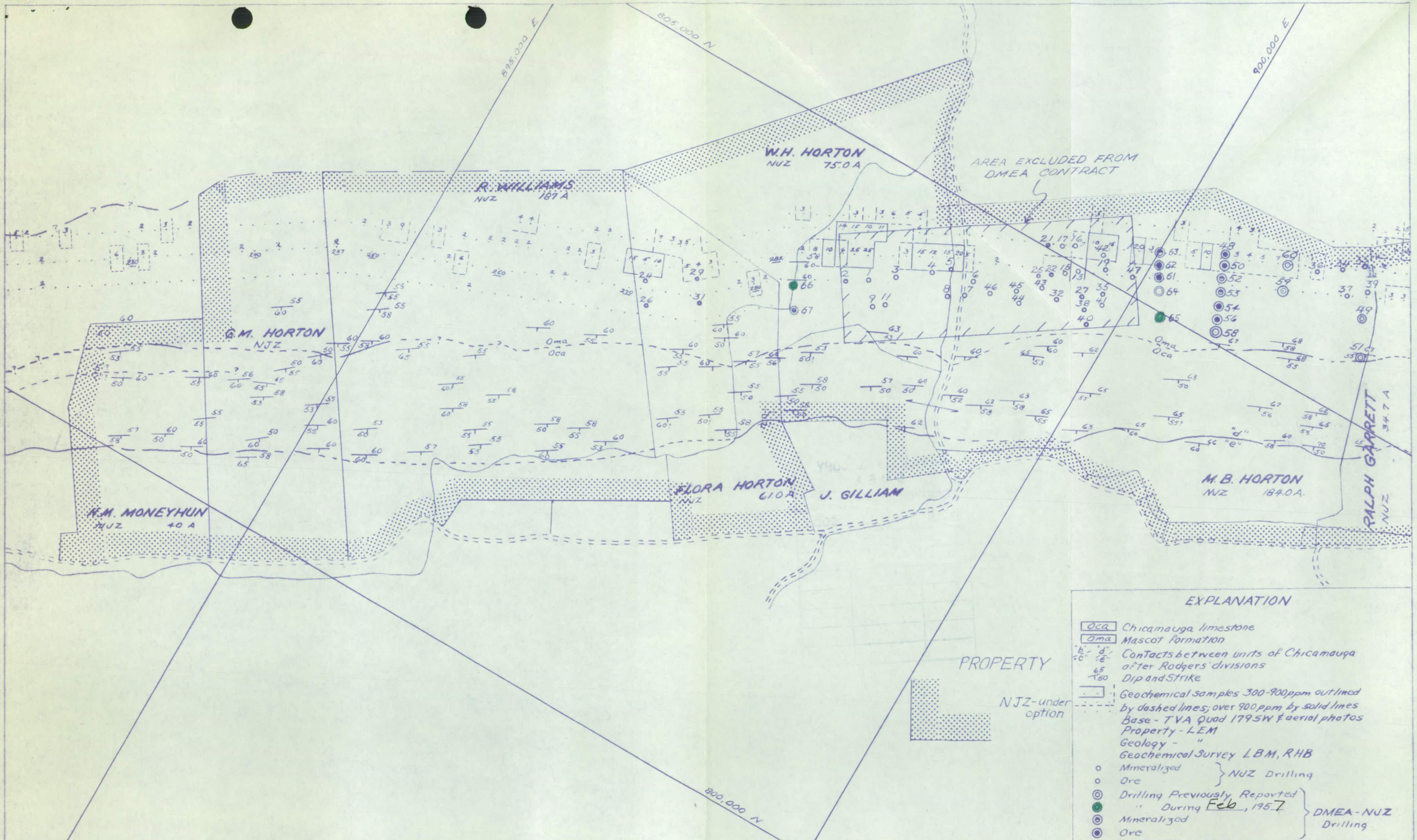
DATE	INITIALS	CODE



THE NEW JERSEY ZINC COMPANY	DRAWN STAFF DATE 7-31-56	COPPER RIDGE BELT	HANCOCK CO., TENN.
JEFFERSON CITY TENNESSEE	TRACED TEW SCALE 1" = 660'	SECTOR I SHEET IINE	FILE NO. AX-TENN 569 A

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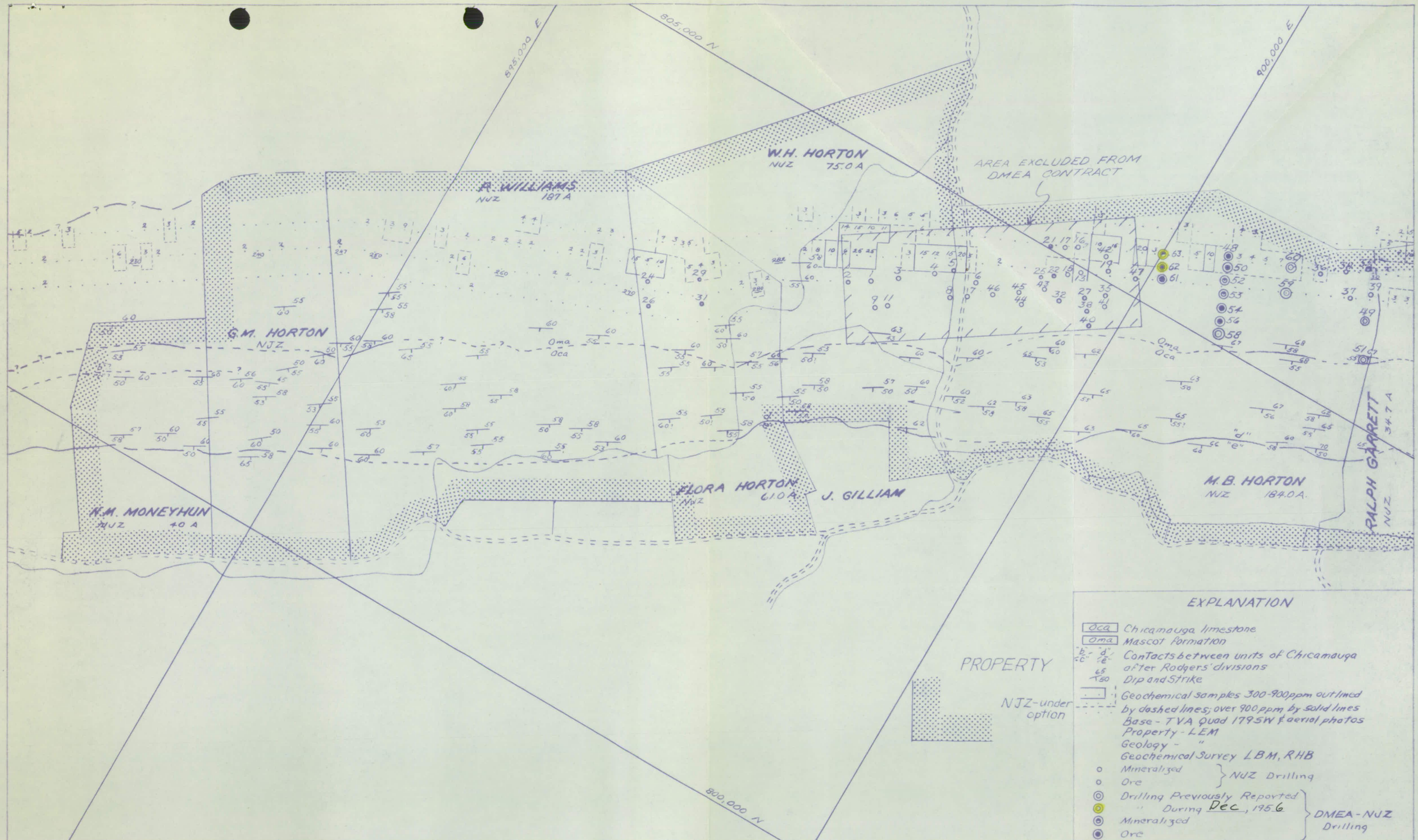
RECEIVED MAR 29 1957

DATE	INITIALS	CODE



THE NEW JERSEY ZINC COMPANY	DRAWN STAFF DATE 7-31-56	COPPER RIDGE BELT	HANCOCK CO., TENN.
JEFFERSON CITY TENNESSEE	TRACED TEW SCALE 1" = 660'	SECTOR I SHEET I INE	FILE NO. AX-TENN 569 A

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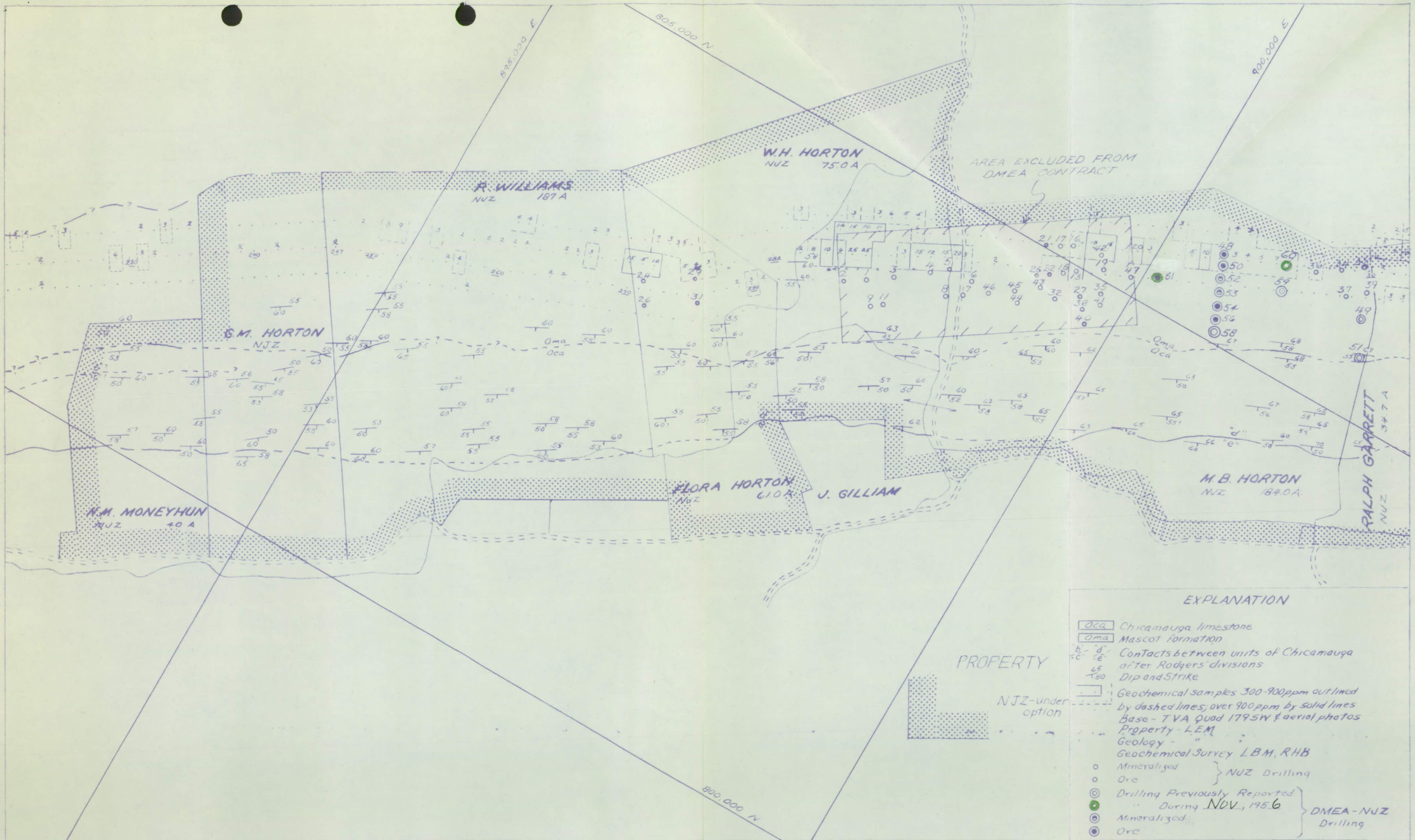

THE NEW JERSEY ZINC COMPANY	DRAWN STAFF DATE 7-31-56	COPPER RIDGE BELT	HANCOCK CO., TENN.	
JEFFERSON CITY TENNESSEE	TRACED TEW SCALE 1" = 660'	SECTOR I SHEET 11NE	FILE NO. AX-TENN 569 A	

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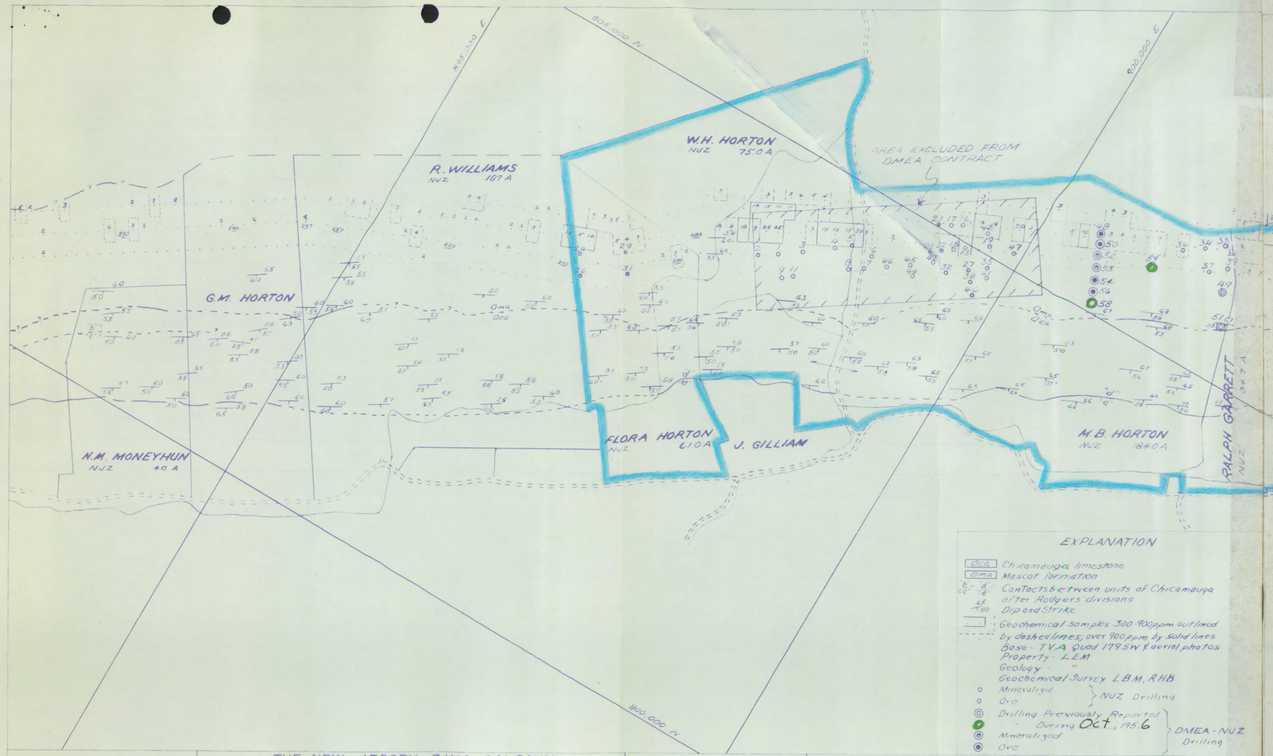
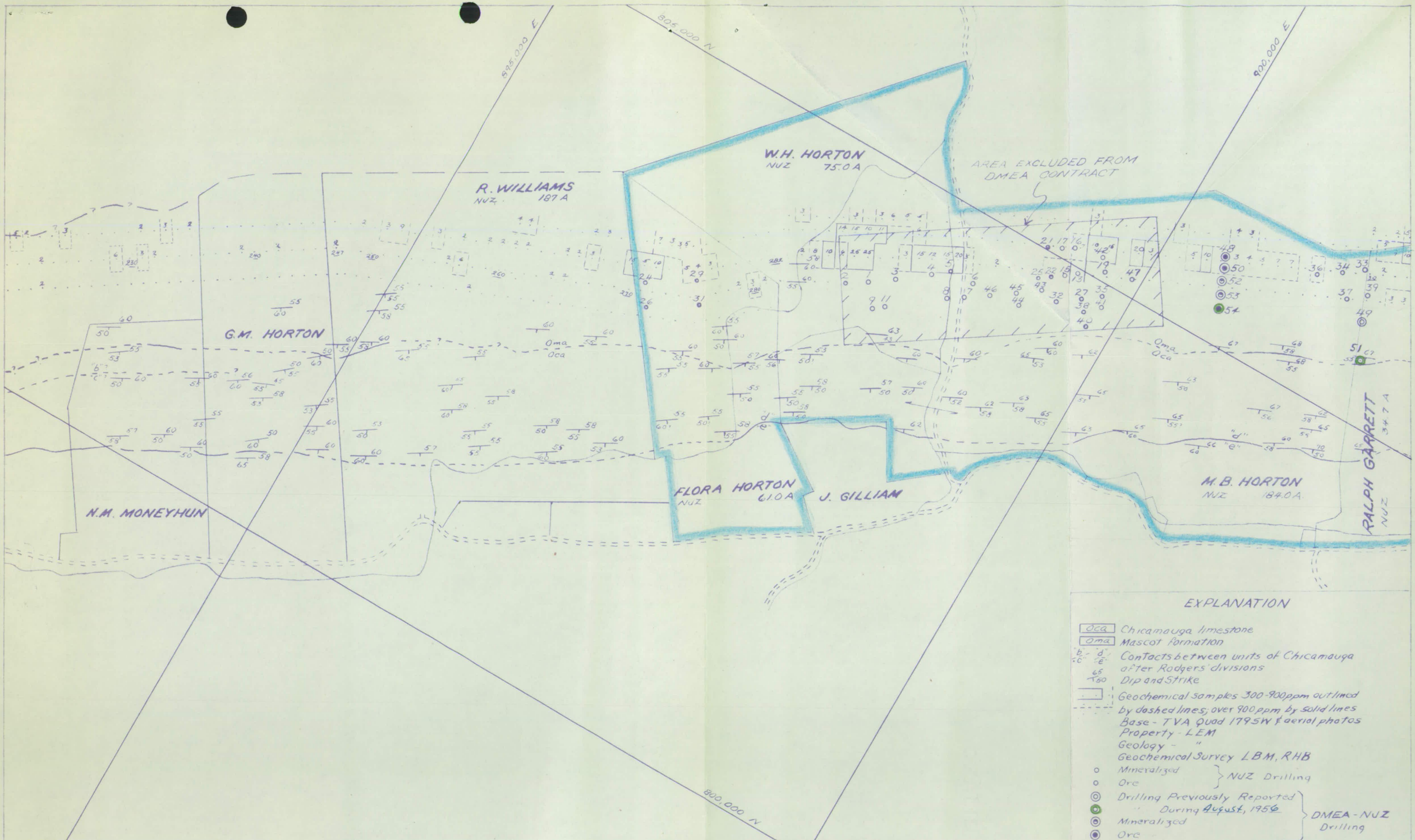
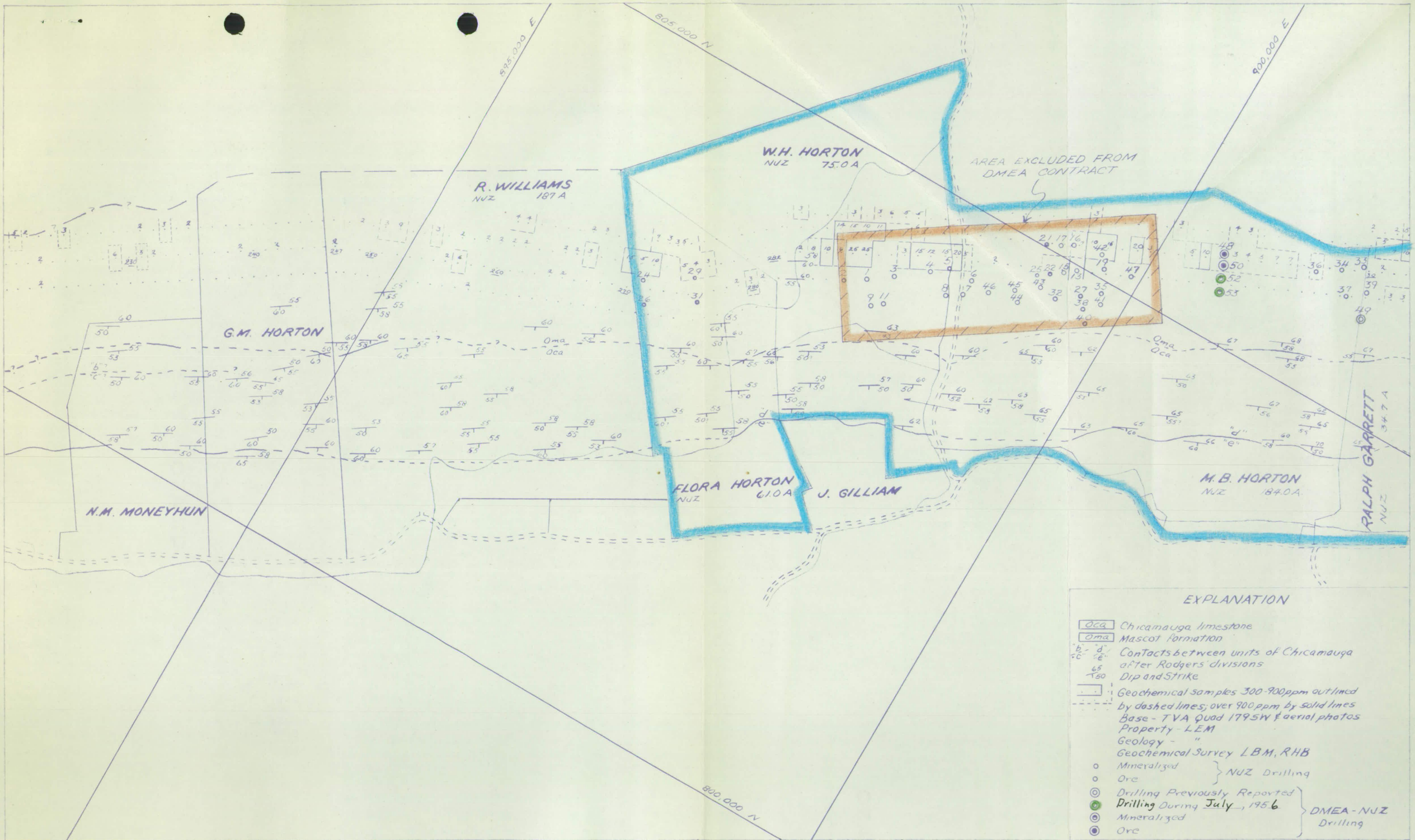


THE NEW JERSEY ZINC COMPANY JEFFERSON CITY TENNESSEE	DRAWN STAFF DATE 7-31-56 TRACED TEW SCALE 1" = 660'	COPPER RIDGE BELT SECTOR I	HANCOCK CO., TENN. SHEET 11 NE FILE NO. AX-TENN 569 A

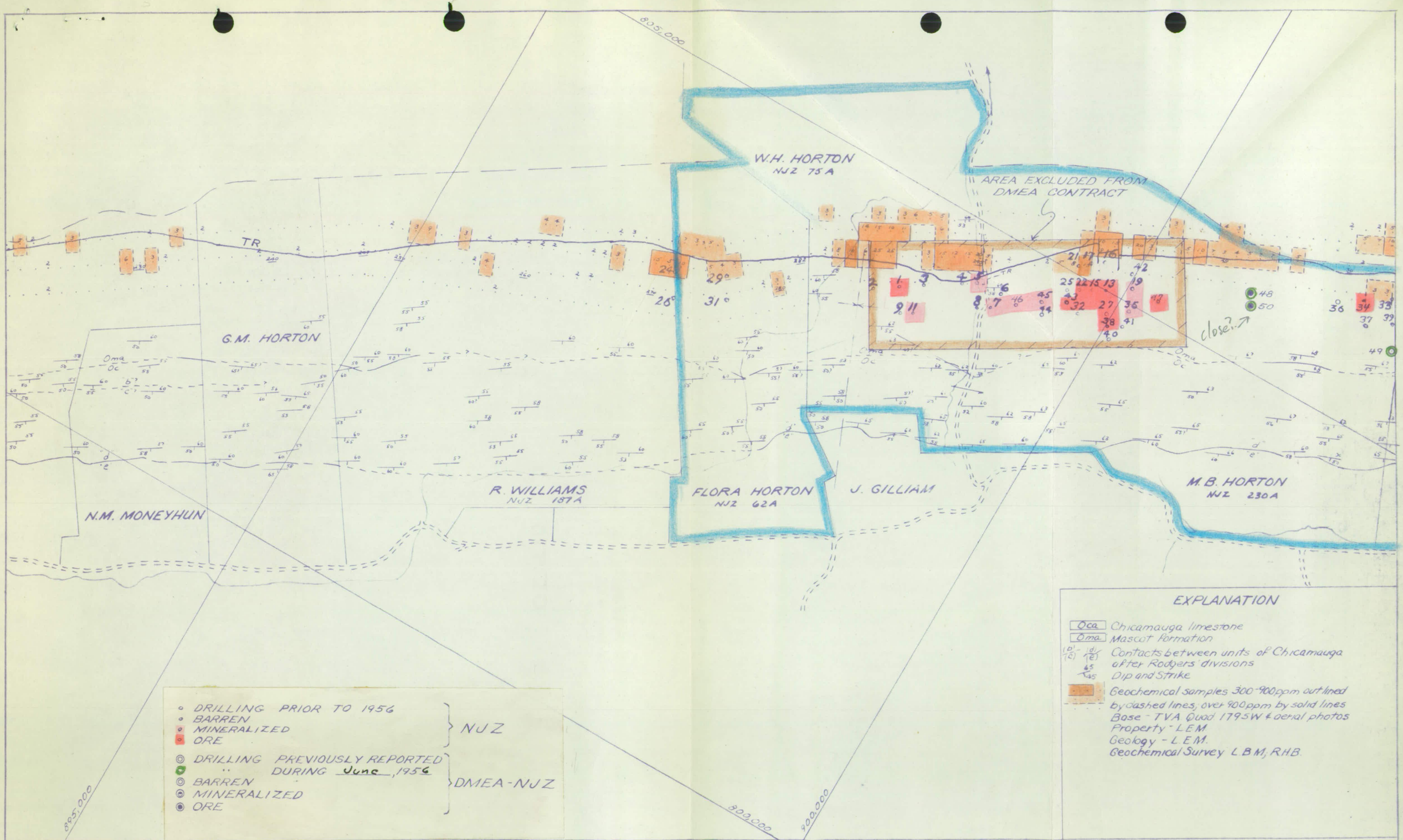
THE NEW JERSEY ZINC COMPANY JEFFERSON CITY TENNESSEE	DRAWN STAFF DATE 8-14-56 TRACED TEW SCALE 1" = 660'	COPPER RIDGE BELT SECTOR I	HANCOCK CO., TENN. SHEET 12 NE FILE NO. AX-TENN 570 A



THE NEW JERSEY ZINC COMPANY	DRAWN STAFF DATE 7-31-56	COPPER RIDGE BELT	HANCOCK CO., TENN.
JEFFERSON CITY TENNESSEE	TRACED TEW SCALE 1" = 660'	SECTOR I SHEET 1 INE	FILE NO. AX-TENN 569 A



THE NEW JERSEY ZINC COMPANY	DRAWN STAFF DATE 7-31-56	COPPER RIDGE BELT	HANCOCK CO., TENN.
JEFFERSON CITY TENNESSEE	TRACED TEW SCALE 1" = 660'	SECTOR I SHEET 11NE	FILE NO. AX-TENN 569 A



POSTED TO DATE			
3/31/53	1/1/54		
3/30/53	7-1-56		

THE NEW JERSEY ZINC COMPANY

ROGERSVILLE TENNESSEE

DRAWN L.E.M. DATE 3-24-53

TRACED S.N.L., J.F.P. SCALE 1" = 660'

COPPER RIDGE BELT

SECTOR I SHEET I INE

HANCOCK CO., TENN

FILE NO. AX-TENN 569

Fig. 1

D. HELTON

J. VAUGHN

K. JOHNSON

C.C. LAWSON

M.C. HERON

CLAUDE LAWSON

EMMA BRICKEY

PEARSON

H.C. ANDERSON

B. HORTON

BLANE BRADLEY

V. ANDERSON

— EXPLANATION —

- Ocm Chickamauga limestone
- Omm Mascot Formation
- Ok Kingsport Formation
- Ol Longview Formation
- 45 Dip & Strike.
- Geochemical Samples: 300-900 ppm outlined by dashed lines, over 900 ppm by solid lines.

Base - T.V.A. Quad 179 SW & aerial photos.
Property - L.E.M.
Geology - L.E.M.
Geochemical Survey - K.P.A., L.B.M.

THE NEW JERSEY ZINC COMPANY ROGERSVILLE TENNESSEE	DRAWN S.J.L., J.F.P. DATE 3-30-53 TRACED SCALE 1" = 660'	COPPER RIDGE BELT SECTOR I SHEET IONE	HAWKINS CO., TENN. FILE NO. AX-TENN 56B	

The New Jersey Zinc Company
160 Front St., New York 38, N. Y.

SOUTHWEST BOUNDARY OF DMEA CONTRACT IDM E-950

AREA EXCLUDED FROM DMEA CONTRACT E-950

W.H. HORTON NJZ 35.0 A

A. WILLIAMS NJZ 169 A

G.M. HORTON NJZ

M.B. HORTON 60 A NJZ MHM

THE NJZ CO. 50.0 A.

FALLIN GARRETT 30.0 A

FLORA HORTON NJZ MHM 6.0 A

J. GILLIAM

M.B. HORTON 112.7 A. NJZ MHM

W.M. MONEYHUN NJZ 40 A

Fig. I
N.J.Z. Co

DMEA 415B

- PROPOSED DRILL HOLES
- PROPERTIES UNDER OPTION IN PROJECT AREA
- ORE BEARING AREAS
- GEOCHEMICAL ANOMALIES

PROPERTY

- NJZ-under option
- NJZ-Mineral and Mining Rights owned
- NJZ-Owned in Fee Simple

EXPLANATION

- Ocm Chickamauga limestone
- Omm Mascot Formation
- Contacts between units of Chickamauga after Rodgers' divisions
- Dip and Strike
- Geochemical samples 300-900 ppm outlined by dashed lines; over 900 ppm by solid lines
- Base - T.V.A. Quad 179 SW & aerial photos
- Property - L.E.M.
- Geology -
- Geochemical Survey L.B.M., R.H.B.
- Mineral spot } NJZ Drilling
- Ore
- Drilling Previously Reported
- During ——, 195—
- Mineral spot } DMEA - NJZ Drilling
- Ore

THE NEW JERSEY ZINC COMPANY JEFFERSON CITY TENNESSEE	DRAWN STAFF DATE 7-31-56 TRACED TEW SCALE 1" = 660'	COPPER RIDGE BELT SECTOR I SHEET IINE	HANCOCK CO., TENN. FILE NO. AX-TENN 56B A	

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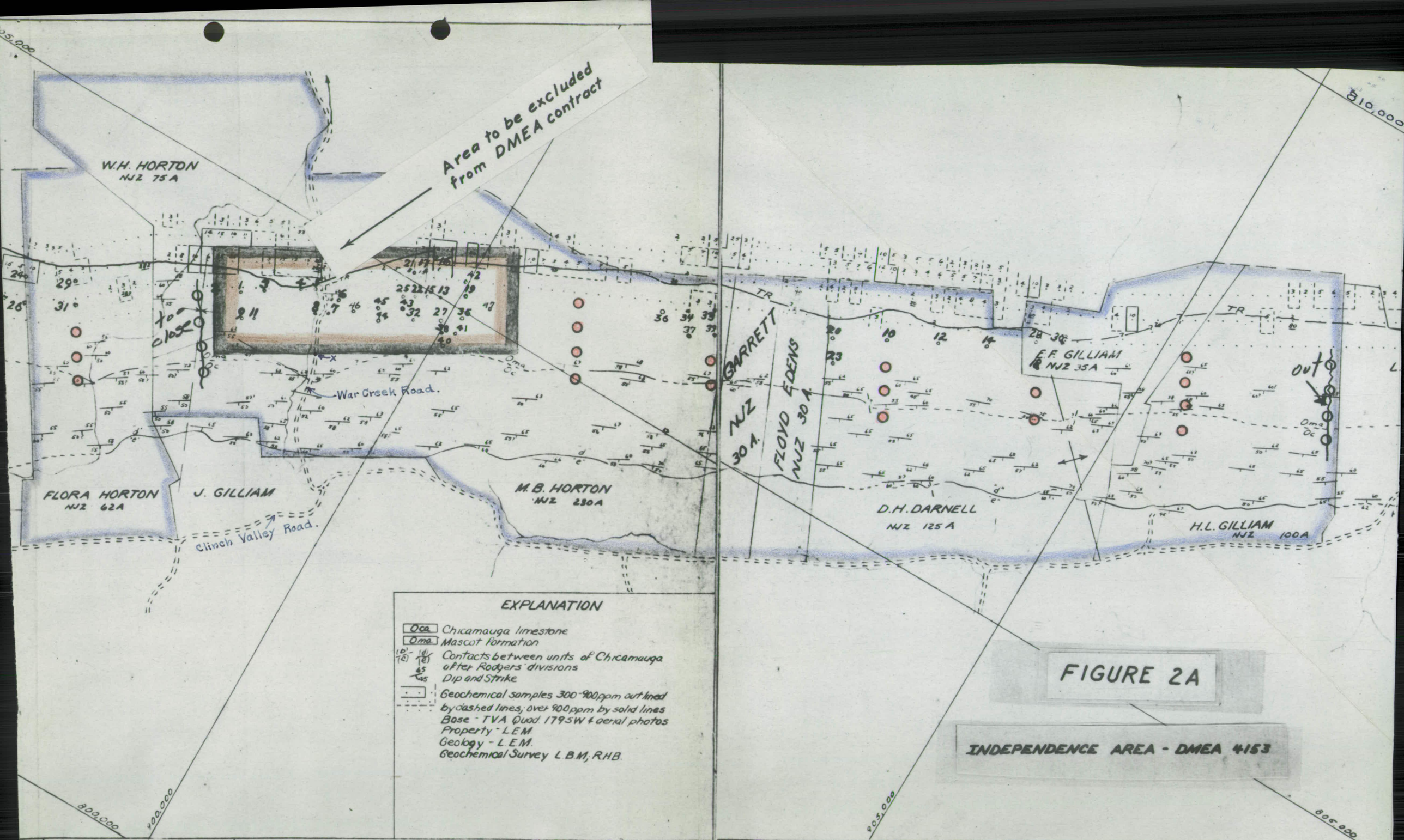

Preliminary Drilling

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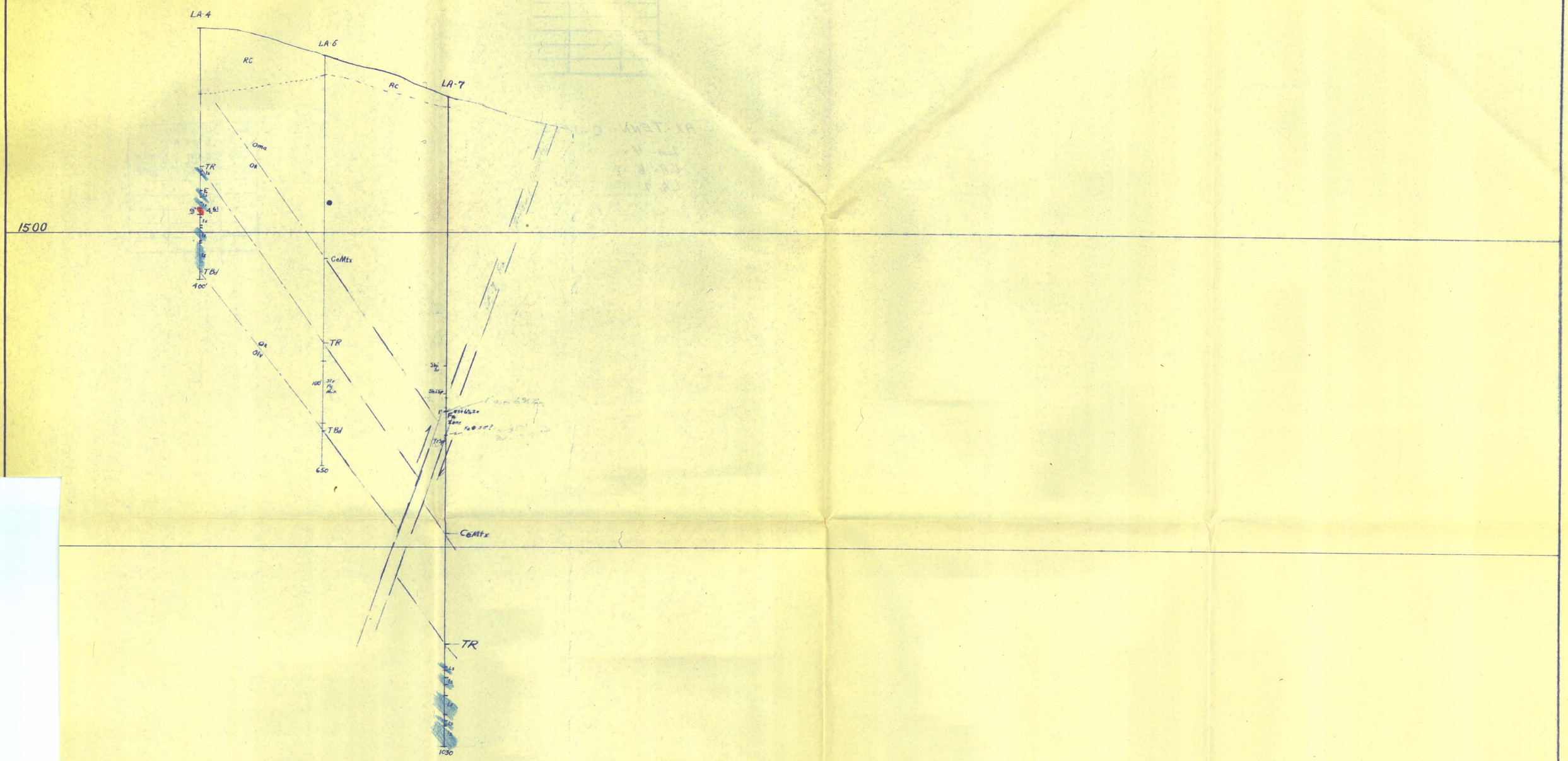
MAY 21 1956



DATE ISSUED	REFERENCE DRAWINGS	REVISIONS	THE NEW JERSEY ZINC COMPANY	DRAWN	Copper Ridge Belt	DATE 5-6-58
			JEFFERSON CITY, TENN	TRACED	Sector I Area C	SCALE 1" = 100'
				CHECKED	Dip Section LA 4,6,7	AX-Tenn C-1365
				APPROVED		

WING IN DESIGN AND DETAIL IS OUR PROPERTY AND MUST NOT BE
EPT IN CONNECTION WITH OUR WORK. ALL RIGHTS OF DESIGN
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JERSEY ZINC COMPANY.

X5463C 1M 11-54