DEFENSE MINERALS EXPLORATION ADMINISTRATION
CONTRACT ADMINISTRATION AND AUDIT DIVISION

REPORT OF REVIEW

I have reviewed the Monthly Reports of

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

pertaining to Exploration Project Contract No. Idm-E1110, DMEA No. 4675, including Amendments Nos. 1, 2, 3, and 4, for January 1958 to May 1958, inclusive, covering a zinc, lead, and copper project in the Hunter and Hammer Areas, Louisa County, Virginia.

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 on the attached schedule.

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

Total cost billed by Operator		$16,653.80
Exceptions:		
Prior to this review	$ -0-	
Herewith	-0-	-0-
Accepted cost claimed by Operator		$16,653.80
Acceptable cost not claimed		32.00
Total acceptable cost, if claimed		$16,685.80

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:

On cost claimed	$ 8,326.90
On additional cost, if claimed	16.00
Total payable, if claimed	$ 8,342.90
Payable on audited claim	$ 8,326.90
Paid to date	6,533.27
Balance due Operator	$ 1,793.63
Additional payable, if claimed	$ 16.00

(Signed) E. D. Talbert

E. D. Talbert, Auditor

July 29, 1958

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

(a) the Monthly Reports were supported by documentary proof of that portion ($15,152.50) of the costs covering work performed at unit rates under independent contract;

(b) the balance ($1,533.30) 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.

Additional acceptable costs, if claimed by Operator:

128 core boxes claimed by Operator at actual cost of $2.25/each, whereas contract provides a fixed unit cost of $2.50/each "regardless of costs incurred by the Operator." Additional acceptable cost, if claimed, 128 each @ $0.25.....$32.00

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

Re: Docket No. DMEA-4675
(Zinc-Lead-Copper)
The New Jersey Zinc Company
Contract No. Idm-E1118

Dear Mr. Laurence:

The original and three copies of the Report of Review in lieu of a final audit, as requested by your memorandum of July 22, are enclosed.

If you concur with the facts as stated therein, the original and one copy should be submitted to the regional finance officer, one copy should be forwarded to the Operator, and one copy should be retained in your files. If for any reason you do not concur, please return all copies with your comments to this Division.

The final (May 1958) MF-104 and attachments, together with the drilling invoices supporting prior forms MF-104, are being returned to Mrs. Miller with a copy of this letter.

Sincerely yours,

(Signed) J. L. Chambers

Jay L. Chambers, Director
Contract Administration
and Audit Division

Enclosures

EDTalbert/GMcC
July 29, 1958

cc: Docket
Admr. Reading File
Helen R. Miller w/104 and invoices - via certified mail
Mr. Chambers

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF MINES
REGION V

ELECTROTECHNICAL
EXPERIMENT STATION

P. O. BOX 217
NORRIS, TENNESSEE

July 24, 1958

Memorandum

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

From: Personal Assistant, Norris, Tennessee

Subject: Report of Review in Lieu of Final Audit - Idm-E1110

A Report of Review in Lieu of Final Audit is requested on contract Idm-E1110, Docket No. DMEA-4675, The New Jersey Zinc Company, Commodity: Zinc-lead-copper, Hunter Area, Louisa County, Virginia. The following documents are attached:

1. Original MF-104, MF-104A and attachments

2. Invoices covering previously paid vouchers

3. Executive Officer's letter regarding completion of contract

Helen Miller
Helen R. Miller

OFFICIAL FILE COPY
DMEA
RECEIVED JUL 28 1958

DATE	INITIALS	CODE
7-28	C	220
		800

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

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

July 22, 1958

Memorandum

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

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

Subject: Completion of DMEA-4675, Idm-E1110-zinc. The New Jersey Zinc Co., Hunter Area, Louisa County, Virginia.

Work on the subject contract has been completed as of April 14, 1958. The following units of work have been acceptably performed as verified by our Field Examiners:

1) 1310 feet of overburden drilling was completed.

2) 4205 feet of diamond drilling was completed.

3) 128 core boxes were used.

An adequate final engineering and geological report has been received.

Original copy of final Operator's Monthly Report and Voucher is attached. A report of review is requested.

Robert A. Laurence

Robert A. Laurence

14 (Rev.)
2)

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION

Budget Bureau No. 42-R1036.5

RECEIVED AUG 7

PAID ON VOUCHER & SCHEDULE OF PAYMENTS K- 7

OPERATOR'S MONTHLY REPORT AND VOUCHER

Month of May, 1958 Docket No. DMEA 4675 Contract No. Idm-E-1110
Operator's Name The New Jersey Zinc Company Minerals Zinc-lead-copper
Address 160 Front Street, New York 38, NY
Contract Amount, $18,680.00 Government Participation: 50 % Amount, $9,340.00

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 BAWL (AK)	3042.90	8310.60	11,353.50			
~~xxxxxx~~Overburden	275.50	3523.50	3,799.00			
Crosscutting						
Drifting						
(2) Labor and Supervision:						
Labor						
Supervision						
Technical Services						
(3) Operating Mat'ls. and Supplies:						
Timber						
Explosives						
Pipe						
Track						
Core boxes	-	288.00	288.00			
(4) Operating Equipment:						
Rental						
Purchase						
Depreciation						
(5) Initial Rehabilitation and Repairs						
(6) New Bldgs., Improvements, etc.						
(7) Miscellaneous:						
Repairs to Equipment						
Sampling and Analysis						
Payroll Taxes						
Liability Insurance						
Incidental alws.	268.84	944.46	1,213.30			
(8) Contingencies (specify):						
TOTALS	3,587.24	13,066.56	16,653.80	3587.24	13,066.56	16,653.80

I certify that the above bill is correct and just and that payment therefor has not been received.
Date 5/24/58 *Payee The New Jersey Zinc Co.
Per [signature] Title General 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:
$17936.3
Signature Helen R. Miller
(Authorized Certifying Officer)
Date AUG 5 1958 Vou. No. 15
(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 1110 in accordance with the terms of the contract.

Signature [illegible] Title Mining Engr. Date 6/2/58

APPROVAL BY DMEA EXECUTIVE OFFICER OR ALTERNATE:

Signature [illegible] Title DMEA REGION V EXECUTIVE OFFICER Date AUG 4 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.

IF-104A
(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 1953 Docket No. DMEA 4675 Contract No. Idm-E-1110
Operator's Name The New Jersey Zinc Company Minerals Zinc-lead-copper
Address 100 Front Street, New York 38, NY

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 DWL (AX)	feet	3042.90	1127	11,353.50	4205		4800	2.70
Drilling: ~~xx~~Overburden	feet	275.50	95	3,799.00	1310		1200	2.90
Churn								
Auger								
~~xxxxx~~ Analyses	1	-	-	-	-		200	3.00
~~xxxxx~~ Core boxes	1	-	-	288.00	128		128	2.50
Trenching								
Test Pits								
Roads and Trails								
Incidental alws	feet	268.84		1,213.30	5515		6000	0.22
TOTAL DISTRIBUTED COSTS		3587.24		16,653.80				TOTAL COSTS AUTHORIZED BY CONTRACT
Operating Equipment Purchased								
Initial Rehabilitation and Repairs								
New Buildings, Improvements, etc								
TOTAL COSTS		3587.24		16,653.80				

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 5/29/58 Operator The New Jersey Zinc Co.

Per W. L. Albers Title General Supt.
W. L. Albers

REMARKS: This completes submission of vouchers for costs incurred under this contract. This voucher includes holes 97-HE and 98-HE.

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)

Subject to requested amendment to allow excess overburden drilling
H. J. Burmeister 6/2/58

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

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

Budget Bureau No. 42-R1036.5

RECEIVED JUN 16 1958 D.M.E.A.

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

PAID ON VOUCHER & SCHEDULE OF PAYMENTS K-60

Month of April, 1958 Docket No. DMEA 4675 Contract No. Idm-E-1110
Operator's Name New Jersey Zinc Company Minerals Zinc-lead-copper
Address 160 Front Street, New York 38, New York
Contract Amount, $ 18,680.00 Government Participation: 50% Amount, $ 9,340.00

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 BXWL (AX)	4495.50	3815.10	8310.60			
Bulldozing Overburden	2427.30	1096.20	3523.50			
Crosscutting						
Drifting						
(2) Labor and Supervision:						
Labor						
Supervision						
Technical Services						
(3) Operating Mat'ls. and Supplies:						
Timber						
Explosives						
Pipe						
Track						
Core boxes	---	288.00	288.00			
(4) Operating Equipment:						
Rental						
Purchase						
Depreciation						
(5) Initial Rehabilitation and Repairs						
(6) New Bldgs., Improvements, etc.						
(7) Miscellaneous:						
Repairs to Equipment						
Sampling and Analysis						
Payroll Taxes						
Liability Insurance						
Incidental Alws.	550.44	394.02	944.46			
Analyses	---	---	---			
(8) Contingencies (specify):						
TOTALS	7473.24	5593.32	13,066.56	7473.24	5593.32	13,066.56

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

Date April 23, 1958 Payee New Jersey Zinc Company

By [signature] Title General 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:

$ 3736.62

Signature Helen R. Miller
(Authorized Certifying Officer)

Date JUN 12 1958 Vou. No. 178
(See other side)

3736.62

(For Government use only)

CERTIFICATION BY GOVERNMENT REPRESENTATIVE:

I certify that to the best of my knowledge and belief the contractor submitting this voucher is operating a Defense Minerals Exploration Administration project under Contract No. E 1110 in accordance with the terms of the contract.

Signature [illegible] Title Mining Engr. Date 5/5/58

APPROVAL BY DMEA EXECUTIVE OFFICER OR ALTERNATE:

EXECUTIVE OFFICER
DMEA FIELD TEAM
JUN 9 1958

Signature Robert A. Lawrence Title REGION W Date

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 1957)

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 1958 Docket No. DMEA 4675 Contract No. Idm-E-1110

Operator's Name New Jersey Zinc Company Minerals Zinc-lead-copper

Address 160 Front Street, New York 38, New York

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 BXWL(AX)	feet	4495.50	1665	8310.60	3078		4800	2.70
Ch Overburden	feet	2427.30	837	3523.50	1215		1200	2.90
Auger								
~~Stripping~~ Analyses	1	---	---	---	---		200	3.00
~~Trenching~~ Core boxes	1	---	---	288.00	128		128	2.50
Test Pits								
Roads and Trails								
Incidental Alws.	feet	550.44	2502	944.46	4293		6000	0.22
TOTAL DISTRIBUTED COSTS		7473.24		13,066.56				TOTAL COSTS AUTHORIZED BY CONTRACT
Operating Equipment Purchased								
Initial Rehabilitation and Repairs								
New Buildings, Improvements, etc.								
TOTAL COSTS		7473.24		13,066.56				

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: Costs include invoices for holes 91-H, 92-HE, 93-HE, 94-HE, 95-HE, and 96-H.

Date April 23, 1958 Operator New Jersey Zinc Co.

By W. L. Albers Title General Supt.

W. L. Albers

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)

Subject to amendment to allow overdrilling overburden. 5/5/58

W. Barmeister

amendment No. 3 dated April 16, received.
WK.

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

THE NEW JERSEY ZINC COMPANY
(ESTABLISHED 1848)
CABLE ADDRESS
"JERSEZINC"
160 FRONT STREET
NEW YORK 38, N.Y.

April 23, 1958

PLEASE ADDRESS REPLY TO
P. O. Box 67
Mineral, Virginia

Mr. H. L. Burmeister
U. S. Bureau of Mines
College Park, Maryland

Re: Monthly Report, April, 1958
DMEA 4675, Contract Idm-E-1110
Hunter Area
Louisa County

Dear Mr. Burmeister:

Attached is the April, 1958, report on our DMEA contract for the Hunter area. The drilling was completed and stopped April 14, 1958.

Very truly yours

W. L. Albers,
General Superintendent

CIA EZW.COPY
CLHamilton/clh
in quintuplicate

Hunter Area - Narrative Report

April 1958

During April 1958, a total of 637 feet was drilled in DDH 98-HE, which completed drilling for the Hunter area.

Hole No.	Overburden	BXWL(AX)[x]	Feet in April	Feet to Date
88-H	0-125 (125)	125-983 (858)	-	983
89-H	0-153 (153)	153-404 (251)	-	404
90-H	0-100 (100)	100-404 (304)	-	404
91-H	0-107 (107)	107-444 (337)	-	444
92-HE	0-180 (180)	180-404 (224)	-	404
93-HE	0-135 (135)	135-404 (269)	-	404
94-HE	0-135 (135)	135-394 (259)	-	394
95-HE	0-145 (145)	145-382 (237)	-	382
96-H	0-135 (135)	135-474 (339)	-	474
97-HE	0-55 (55)	55-484 (429)	-	484
98-HE	0-40 (40)	40-738 (698)	637	738
Footage this month:	---	637	637	
Total footage:	1310	4205		5515

[x] includes NX and BX footage necessary to set casing.

Drill hole 98-HE is shown on map AXV-641, which is attached. Formation boundaries correspond to those in the attached log. Abbreviations conform to a standardized list in use at the Mineral office and can be correlated with the log.

Logging of 98-HE showed that the upper two formations of 97-HE should be called andesite rather than schist or gneiss. They will then correlate with the upper two formations in 98-HE. The amphibole-chlorite-carbonate-biotite-quartz gneiss penetrated from 175 to 266 in 97-HE is cut off by the andesite and is not penetrated by 98-HE. Diamond drill hole 98-HE passed from the andesite into the garnet-staurolite formations, apparently just below the gneiss mentioned above.

Diamond drill hole 98-HE penetrated 10 feet of estimated ½% zinc with traces of lead and copper at 454 to 464. This was the best mineralization seen in the hole.

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 March, 1958 Docket No. DMEA 4675 Contract No. Idm-E-1110

Operator's Name The New Jersey Zinc Company Minerals Zinc-lead-copper

Address 160 Front Street, New York 38, NY

Contract Amount, $18,680.00 Government Participation: 50 % Amount, $9,340.00

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 BXWL (AX)	820.80	2994.30	3815.10			
~~xxxxxxx~~ Overburden	290.00	806.20	1096.20			
Crosscutting						
Drifting						
(2) Labor and Supervision:						
Labor						
Supervision						
Technical Services						
(3) Operating Mat'ls. and Supplies:						
Timber						
Explosives						
Pipe						
Track						
Core boxes	--	288.00	288.00			
(4) Operating Equipment:						
Rental						
Purchase						
Depreciation						
(5) Initial Rehabilitation and Repairs						
(6) New Bldgs., Improvements, etc.						
(7) Miscellaneous:						
Repairs to Equipment						
Sampling and Analysis						
Payroll Taxes						
Liability Insurance						
Incidental alws.	88.88	305.14	394.02			
Analyses	--	--	--			
(8) Contingencies (specify):						
TOTALS	1199.68	4393.64	5593.32	1199.68	4393.64	5593.32

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

Date April 4, 1958 Payee The New Jersey Zinc Co.

Per [signature] Title General 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:

$ 599.84

Signature Helen R. Meiler
(Authorized Certifying Officer)

Date APR 18 1958 Vou. No. 159

(See other side)

599.84

(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-1110 in accordance with the terms of the contract.

Signature W. L. Sarmeister Title Mining Engr. Date 4/15/58

APPROVAL BY DMEA EXECUTIVE OFFICER OR ALTERNATE:

Signature V. J. Lynch Title ACTING EXECUTIVE OFFICER DMEA - REGION V Date APR 17 1958

MONTHLY REPORT OF OPERATOR

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

Form MF-104A
(April 1952)

Budget Bureau No. 42-R1151.2

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION

OPERATOR'S UNIT COST AND PROGRESS REPORT

Month of March 1958 Docket No. DMEA 4675 Contract No. Idm-E-1110

Operator's Name The New Jersey Zinc Company Minerals Zinc-lead-copper

Address 160 Front Street, New York 38, NY

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 BXWL(AX)	feet	820.80	304	3815.10	1413		4800	2.70
Over-burden	feet	290.00	100	1096.20	378		1200	2.90
Auger								
Analyses	1	-	-	-	-		200	3.00
Core boxes	1	-	-	288.00	128		128	2.50
Test Pits								
Roads and Trails								
Incidental alws.	feet	88.88	404	394.02	1791		6000	0.22
TOTAL DISTRIBUTED COSTS		1199.68		5,593.32				TOTAL COSTS AUTHORIZED BY CONTRACT
Operating Equipment Purchased								
Initial Rehabilitation and Repairs								
New Buildings, Improvements, etc.								
TOTAL COSTS								

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

REMARKS: Costs for March include the invoice for drill ho hole 90-H only

Date April 4, 1958 Operator The New Jersey Zinc Co.

Per W. L. Albers Title General 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)

H. J. Burmeister 4/15/58

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

Hunter Area - Narrative Report

March 1958

During March 1958, a total of 1835 feet was drilled in holes 94-HE through 98-HE.

Hole No.	Overburden		BXWL (AX)[x]		Feet in March	Feet to Date
88-H	0-125	(125)	125-983	(858)	-	983
89-H	0-153	(153)	153-404	(251)	-	404
90-H	0-100	(100)	100-404	(304)	-	404
91-H	0-107	(107)	107-444	(337)	-	444
92-HE	0-180	(180)	180-404	(224)	-	404
93-HE	0-135	(135)	135-404	(269)	-	404
94-HE	0-135	(135)	135-394	(259)	394	394
95-HE	0-145	(145)	145-382	(237)	382	382
96-H	0-135	(135)	135-474	(339)	474	474
97-HE	0- 55	(55)	55-484	(429)	484	484
98-HE	0- 40	(40)	40-101	(61)	101	101
Footage this month:		510		1325	1835	
Total footage:		1310		3568		4878

[x]includes NX and BX footage necessary to set casing

Drill holes 94-HE, 95-HE, 96-H, and 97-HE are shown on maps AXV-634,637, 638, and 641, respectively, which are attached. Formation boundaries correspond to those in the attached logs. Abbreviations conform to a standardized list in use at the Mineral office and can be correlated with the logs.

Drill holes 94-HE, 95-HE, and 96-H correlate well with holes 91-H, 92-HE, and 93-HE. A thin chlorite-quartz schist marker bed is penetrated by all six holes less than 50 feet above the mineralization. Hole 97-HE, 876 feet northeast of 94-HE, penetrates the garnet-staurolite gneisses as do holes 91 through 96 but at greater depth. Above the garnet-staurolite gneiss, hole 97-HE shows a sequence quite different from the other holes.

Hole 97-HE penetrated two feldspathic formations below the overburden which may correlate with feldspathic gneiss encountered just below the overburden in both 94 and 95.

The geochemical anomaly west of 97 swings westward. Assuming that the bedrock does the same, then 97-H would penetrate the garnet-staurolite gneiss at greater depths than originally predicted, which it did, The fact that the strike apparently swings westward, coupled with the shallow overburden of 55 feet would explain the penetration of a greater thickness of feldspathic gneiss and schist in the upper third of the hole.

Holes 94 through 97 penetrated zinc mineralization just above or below the upper contact of the garnet-staurolite gneiss, as did holes 91 through 93. The best penetration was six inches of an estimated 3% zinc with traces of lead and copper in 96. Hole 97 also penetrated five feet containing traces of zinc 120 feet above (329-334) the garnet-staurolite gneiss.

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-51

RECEIVED MAR 27 1958 D.M.E.A.

OPERATOR'S MONTHLY REPORT AND VOUCHER

Month of February, 1958 Docket No. DMEA 4675 Contract No. Idm-E-1110

Operator's Name The New Jersey Zinc Company Minerals Zinc-lead-copper

Address 160 Front Street, New York 38, NY

Contract Amount, $ 18,680.00 Government Participation: 50% Amount, $ 9,340.00

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 BXWL(AX)	2994.30	-	2994.30			
~~xxxxxx~~Overburden	806.20	-	806.20			
Crosscutting						
Drifting						
(2) Labor and Supervision:						
Labor						
Supervision						
Technical Services						
(3) Operating Mat'ls. and Supplies:						
Timber						
Explosives						
Pipe						
Track						
Core boxes	196.75	191.25	288.00			
(4) Operating Equipment:						
Rental						
Purchase						
Depreciation						
(5) Initial Rehabilitation and Repairs						
(6) New Bldgs., Improvements, etc.						
(7) Miscellaneous:						
Repairs to Equipment						
Sampling and Analysis						
Payroll Taxes						
Liability Insurance						
Incidental allowance	305.14	-	305.14			
Analyses	-	-	-			
(8) Contingencies (specify):						
TOTALS	4202.39	191.25	4393.64	4202.39	191.25	4393.64

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

Date _____ *Payee The New Jersey Zinc Company

By [signature] Title General 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:

$ 2101.19

Signature Helen R. Miller (Authorized Certifying Officer)

Date MAR 25 1958 Vou. No. 152

(See other side)

2101.19

(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 1110 in accordance with the terms of the contract.

Signature T. L. Burmeister Title Mining Engr. Date 3/18/58

APPROVAL BY DMEA EXECUTIVE OFFICER OR ALTERNATE:

EXECUTIVE OFFICER
DMEA FIELD TEAM

Signature Robert A. Lawrence Title REGION V Date MAR 20 1958

MONTHLY REPORT OF OPERATOR

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

Form MF-104A
(April 1952)

Budget Bureau No. 42-R1151.2

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION

RECEIVED MAR 27 1958 D.M.E.A.

OPERATOR'S UNIT COST AND PROGRESS REPORT

Month of February 1958 Docket No. DMEA 4675 Contract No. Idm-E-1110

Operator's Name The New Jersey Zinc Company Minerals Zinc-lead-copper

Address 160 Front Street, New York 38, NY

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 BXWL(AX)	feet	2994.30	1109	2994.30	1109		4800	2.70
Overburden	feet	806.20	278	806.20	278		1200	2.90
Auger								
Analyses	1	-	-	-	-		200	3.00
Core boxes	1	96.75	43	288.00	128		128	2.50
Test Pits								
Roads and Trails								
Incidental allowance	feet	305.14	1387	305.14	1387		6000	0.22
TOTAL DISTRIBUTED COSTS		4202.39		4394.64				TOTAL COSTS AUTHORIZED BY CONTRACT
Operating Equipment Purchased								
Initial Rehabilitation and Repairs								
New Buildings, Improvements, etc.								
TOTAL COSTS								

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

Date _____ Operator The New Jersey Zinc Co.

Per W. L. Albers Title General Supt.

W. L. Albers

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: Costs reported for February include invoices for drill holes 88-H and 89-H and for 43 core boxes.

(Instructions on reverse)

(For Government use only)

H. B. Burmester 3/18/58

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

Hunter Area - Narrative Report

February 1958

During February, 1958, a total of 1543 feet was drilled in holes 90-H through 93-H.

The drilling thus far on the Hunter can be summarized as follows:

Hole No.	Overburden		BXWL (AX)[x]		Feet in February	Feet to date
88-H	0-125	(125)	125-983	(858)	-	983
89-H	0-153	(153)	153-404	(251)	-	404
90-H	0-100	(100)	100-404	(304)	291	404
91-H	0-107	(107)	107-444	(337)	444	444
92-H	0-180	(180)	180-404	(224)	404	404
93-H	0-135	(135)	135-404	(269)	404	404
Footage this month		422		1121	1543	
Total footage		800		2243		3043

[x]includes NX and BX footage necessary to set casing

Drill holes 90-H, 91-H, 92-H, and 93-H are shown on maps AXV-613, 620, 630, and 631-B, respectively, which are attached. Formation boundaries correspond to those in the attached logs. Abbreviations conform to a standardized list in use at the Mineral office and can be correlated with the logs.

DDH 90-H correlates well with 88-H and 89-H. The possible marker bed, amphibole-sericite-quartz schist, mentioned last month, is present in 90-H at 373-404. Another marker bed, a chlorite-quartz schist, also is penetrated by holes 88, 89, and 90.

Drill holes 91, 92, and 93-H are located at the northern end of the geochemical anomaly. Although they penetrate the same general sequence as holes 88, 89, and 90, exact correlation is uncertain. Correlation between 91, 92, and 93-H indicates the strike may not be constant. The fact that 92-H collars in a staurolite gneiss which is the second formation encountered in both 91-H and 93-H indicates the strike may bend eastward between 91 and 92 and bend back northward between 92 and 93.

Small amounts of mineralization were encountered in holes 91, 92, and 93-H, with the best penetration being 6 inches of estimated 4½% zinc and 3½% lead at 177 to 177½ feet in 92-H. Zinc mineralization was penetrated at 234 in 91-H and 285 in 93-H. The variation in depth of the penetrations among the holes may be caused by variation in strike of the same zone, or existence of separate, small zones.

Hunter

DDH 90-H

Started: January 31, 1958
Bottomed: February 5, 1958
Location: 408 feet S31°W of 89-H
Coordinates: 22,978.32N
34,146.17E
Elevation: 405
Bearings: N59°W @ collar,
N66°W @ 300'
Inclinations: -45° @ collar,
-43½° @ 300'
Objective: Test geochemical and self-potential anomalies

0	-	100	Overburden
100	-	373	Epidote-carbonate-amphibole-chlorite quartz gneiss
373	-	404	Amphibole-sericite-quartz schist (Marker)
	404		Bottom

DDH 91-H

Started: February 10, 1958
Bottomed: February 13, 1958
Location: 1000 feet N04°E of 88-H
Coordinates: 24,316.86N
35,025.45E
Elevation: 446
Bearing: N56°W @ collar
N65°W @ 300'
Inclination: -45° @ collar
and @ 300'
Objective: Test geochemical and self potential anomalies

0	-	107	Overburden
107	-	227	Carbonate-amphibole-epidote-chlorite-quartz gneiss
227	-	310	Staurolite-chlorite-amphibole-sericite-quartz gneiss and schist 234-234½ Estimated 50% sulfides, including 4% zinc, trace lead
310	-	444	Garnet-staurolite-amphibole-chlorite-sericite-quartz gneiss
	444		Bottom

DDH 92-H

Started: February 15, 1958
Bottomed: February 21, 1958
Location: 385 feet N34°E of 91-H
Coordinates: 24,647.83N
35,257.31E
Elevation: 455
Bearing: N60°W @ collar
N66°W @ 300'
Inclination: -45° @ collar
-48½° @ 300'
Objective: Test geochemical and self-potential anomalies

0 - 180		Overburden
180 - 358		Chlorite-biotite-amphibole-sericite-quartz gneiss 177-177½ Estimated 4½% Zn, 3½% Pb
358 - 404		Garnet-staurolite-amphibole-chlorite-sericite-quartz gneiss
404		Bottom

DDH 93-H

Started: February 25, 1958
Bottomed: February 27, 1958
Location: 408 feet N34°E of 92-H
Coordinates: 24,974.11N
35,470.03E
Elevation: 447
Bearings: N60°W @ collar
N74°W @ 300'
Inclinations: -60° @ collar
-56° @ 300'
Objective: Test geochemical and self-potential anomalies

0 -	130	Overburden
130 -	265½	Biotite-epidote-carbonate-chlorite-quartz gneiss
265½ -	404	Garnet-staurolite-amphibole-sericite-quartz gneiss, with traces of zinc, lead, and copper
404		Bottom

Form ME-164 (Rev.)
(April 1952)

RECEIVED FEB 28 1958 D.M.E.A.

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION

Budget Bureau No. 42-R1036.5

PAID ON VOUCHER & SCHEDULE
PAYMENTS K- 43

OPERATOR'S MONTHLY REPORT AND VOUCHER

Month of January, 1958 Docket No. DMEA 4675 Contract No. Idm-E-1110
Operator's Name The New Jersey Zinc Company Minerals Zinc-lead-copper
Address 160 Front Street, New York 38, NY
Contract Amount, $18,680.00 Government Participation: 50 % Amount, $ 9,340.00

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 BXWL(AX)	-	-	-			
Bulldozing Overburden	-	-	-			
Crosscutting						
Drifting						
(2) Labor and Supervision:						
Labor						
Supervision						
Technical Services						
(3) Operating Mat'ls. and Supplies:						
Timber						
Explosives						
Pipe						
Track						
Core boxes	191.25	-	191.25			
(4) Operating Equipment:						
Rental						
Purchase						
Depreciation						
(5) Initial Rehabilitation and Repairs						
(6) New Bldgs., Improvements, etc.						
(7) Miscellaneous:						
Repairs to Equipment						
Sampling and Analysis						
Payroll Taxes						
Liability Insurance						
Incidental allowance	-	-	-			
Analyses	-	-	-			
(8) Contingencies (specify):						
TOTALS	191.25	-	191.25	191.25		191.25

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

Date 2/25/58 *Payee The New Jersey Zinc Company

Per W. L. Allison Title General 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:

$ 95.62

Signature Helen R. Miller
(Authorized Certifying Officer)

Date FEB 26 1958 Vou. No. 138

(See other side)

95.63

(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 1110 in accordance with the terms of the contract.

Signature [illegible] Title Mining Engr. Date 2/20/58

APPROVAL BY DMEA EXECUTIVE OFFICER OR ALTERNATE:

Signature [illegible] Title EXECUTIVE OFFICER DMEA REGION V Date FEB 25 1958

MONTHLY REPORT OF OPERATOR

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

Form ME-104A
(April 1952)

Budget Bureau No. 42-R1151.2

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION

RECEIVED FEB 28 1958

OPERATOR'S UNIT COST AND PROGRESS REPORT

Month of January 1958 Docket No. DMEA 4675 Contract No. Idm-E-1110

Operator's Name The New Jersey Zinc Company Minerals Zinc-lead-copper

Address 160 Front Street, New York 38, NY

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 BXWL(AX)	feet	-	-				4800	2.70
Over burden	feet	-	-				1200	2.90
Auger								
Analyses	1	-	-				200	3.00
Core boxes	1	191.25	85	191.25	85		128	2.50
Test Pits								
Roads and Trails								
Incidental allowance	feet	-	-				6000	0.22
TOTAL DISTRIBUTED COSTS		191.25	85	191.25				TOTAL COSTS AUTHORIZED BY CONTRACT
Operating Equipment Purchased								
Initial Rehabilitation and Repairs								
New Buildings, Improvements, etc.								
TOTAL COSTS		191.25	85	191.25				

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

Date 2/5/58 Operator The New Jersey Zinc Co.

Per W. A. Allsopp Title General Supt.

REMARKS: Costs for January include 85 core boxes only. No invoices for drill holes have been received.

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. Burmeister 2/20/58

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

44251

WALTON & WOOD, INC.

General Merchandise and Building Supplies

To our Cust

Phone Dial MCkerel 2211

PENNINGTON, VA., Nov. 18, 1957

M New Jersey Zinc Company

DELIVERY SERVICE

To	85 core boxes @ 2.25	191	25
	Duplicate		

C-62020

Hunter Area - Narrative Report

January 1958

During January, 1958, a total of 1500 feet was drilled in holes 88-H through 90-H. Drilling in the Hunter area started December 31, 1957, with 20 feet being drilled in 88-H on that day.

The drilling can be summarized as follows:

Hole No.	Overburden	BXWL(AX)[x]	Feet in January	Feet to Date
88-H	0-125 (125)	125-983 (858)	963	983
	(105' drilled in January)			
89-H	0-153 (153)	153-404 (251)	404	404
90-H	0-100 (100)	100-113 (13)	113	113
Footage this month	358	1122	1480	
Total footage	378	1122		1500

[x]includes NX and BX footage necessary to set casing

Drill holes 88-H and 89-H are shown on maps AXV-607 and 612, respectively, which are attached. Formation boundaries correspond to those used in attached logs. Abbreviations conform to a standardized list in use at the Mineral office and can be correlated with the logs.

DDH 89-H penetrates the same sequence of amphibole and chlorite gneisses and schists as the deeper part of 88-H and the two correlate very well. The amphibole-sericite-quartz schist at 858-875 in 88-H and at 335-356 in 89-H is a possible marker bed.

Neither 88-H nor 89-H penetrate any zinc, lead, or copper mineralization. A few traces of pyrite are present.

Audit copy

EXPLORATION PROJECT CONTRACT
THE NEW JERSEY ZINC COMPANY
DOCKET NO. DMEA-4675

AMENDMENT NO. 4

It is agreed this 16th day of May, 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," that Exploration Project Contract No. Idm-E1110 (Docket No. DMEA-4675), dated July 22, 1957, as amended, hereinafter called the "Contract," is further amended effective May 28, 1958, as follows:

1. The land described in paragraph numbered 3 in Annex I, known as the "Hammer" tract and containing approximately 394 acres, is deleted therefrom.

2. 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 of its interest, title, and equity in such land, and any minerals produced therefrom, including any option, lease or permit thereto, without any consideration whatsoever, including future compensation, for such surrender or disposition, other than relief from the cost of maintaining such interest;

(c) agrees that no benefit from such land or any production of minerals therefrom will accrue to the Operator or to any of its subsidiaries, directly or indirectly, during the period expiring thirty years from the date of this Contract; and

(d) agrees that if the Operator or any of its subsidiaries acquires any interest, title, or equity in such land or any minerals produced therefrom, or derives any benefit therefrom, before the expiration of thirty years from the date of this Contract, the land with respect to which such interest, title, or equity is acquired, and any minerals produced therefrom, shall be deemed subject to this Contract and any certification of discovery or development 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 amount contributed by the Government without interest is fully repaid, whichever occurs first.

This amendment shall not be construed to increase the estimated total cost of the project, the aggregate total amount which the Government may be required to contribute, 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 O P Mitteudorf
Administrator, Defense Minerals
Exploration Administration

THE NEW JERSEY ZINC COMPANY

By J J Sodeman

Title VICE PRESIDENT

Audit copy

EXPLORATION PROJECT CONTRACT
THE NEW JERSEY ZINC COMPANY
DOCKET NO. DMEA-[illegible]

AMENDMENT NO. 1

It is agreed this 16th day of April, 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," that Exploration Project Contract No. DMA-[illegible] (Docket No. DMEA-[illegible]), dated July [illegible], 1957, as amended, hereinafter called the "Contract," is further amended effective July [illegible], 1957, as follows:

In Exhibit "A," under the heading Description of the Work, the last sentence of the third paragraph is revised to read as follows:

"The combined total of overburden and diamond drilling shall not exceed 6,[illegible] feet."

In Exhibit "B," under the heading Estimated Cost of the Project, Actual Cost, Category (1) Independent Contracts is revised to read as follows:

"Category (1) Independent Contracts

"Overburden drilling @ $[illegible].90/ft. 1/

"Diamond drilling to depth of approximately 1000 feet @ $[illegible].70/ft. 1/ 2/ $16,440.00

"The above rates include charges for cementing and redrilling, water supply, changing of locations, and all other charges which may be incurred by the diamond drilling contractor.

"Neither the cost nor the value of casing left in drill holes at the option of the operator will be accepted as a charge to the Contract."

ORIGINAL FILE COPY
DMEA
RECEIVED MAY 7 1958
DATE | INITIAL | CODE

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

Executed in 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 Boodwin

Title VICE PRESIDENT

March 24, 1958

Mr. W. L. Albers, Superintendent
Gertie Mineral Division
The New Jersey Zinc Company
Austinville, Virginia

Attention: Mr. W. G. Brown, Chief Geologist

Re: Docket No. [illegible]-1675
(Zinc-lead-copper)
Center and Hammer Area
Louisa County, Virginia
Contract No. [illegible]-[illegible]

Dear Mr. Albers:

This will confirm our verbal approval given on March 20, 1958 by phone to Mr. Weinberg for hole locations on the subject project as follows:

1) An angle hole with inclination and bearing of about minus 60°, N. 60° W. at a site approximately 800 feet S. 32° E. of Hole 9L-4. The estimated depth of this hole is about 400 feet.

2) A vertical hole with a depth of about 800 feet at the same site as the angle hole mentioned in item 1 above.

Sincerely yours,

W. J. Lynch
Acting Executive Officer
DMA Field Team, Region V

WJL:js/Mr. E. E. Weinberg, P. O. Box 67, Mineral, Va.

Operating Committee (2)
Finance Office
Mr. R. L. Burmeister
Mr. W. J. Lynch
Mr. L. E. Shirley
Mr. Helmuth Wedow, Jr.
WJL

EXTRA COPY
DATE
RECEIVED MAR 10 1958
DATE | INITIALS | CODE
800

March 7, 1958

Mr. W. L. Albers, Superintendent
Martin Mineral Division
The New Jersey Zinc Company
Austinville, Virginia

Re: DMEA-1675 (Zinc-Lead-Copper)
Hunter and Hunter Area
Louisa County, Virginia
Contract No. Ida-21110

Attention: Mr. W. H. Brown, Chief Geologist

Dear Mr. Albers:

This letter will confirm the verbal approval given by Mr. Wedow to Mr. Weinberg by phone on March 5, 1958, to drill as many as three angle holes at points approximately half way between holes 91-H through 94-H inclusive. It is understood that these additional holes, while closing in the exploration fence on approximately 200-foot centers, will be offset about 35 feet to the southeast of the line of holes 91-H through 94-H in order that the mineralized zone so far discovered is penetrated at the most feasible depth.

Sincerely yours,

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

RAL:jr/mg
cc - Mr. E. L. Weinberg, P. O. Box 67, Mineral, Va.
Operating Committee (2)
Mr. Burmeister
Mr. Lynch
Mr. Wedow
Finance Office
File

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

EXTRA COPY
DMEA
RECEIVED FEB 24 1958
DATE

800

February 21, 1958

Mr. W. L. Albers, Superintendent
Bertha Mineral Division
The New Jersey Zinc Co.
Austinville, Virginia

Re: DMEA-4675 - Zinc
The New Jersey Zinc Co.
Hunter Area, Louisa County, Va.
Contract Ids-E1110

Attent: Dr. W. H. Brown, Chief Geologist

Dear Mr. Albers:

This will confirm our verbal approval given to Mr. Weinberg this morning to drill Hole No. 93-H at an angle of -60 degrees instead of -45 degrees.

This change was requested by Mr. Weinberg because in Hole No.92-H the overburden extended to a depth of 180-feet, below which the drill hole encountered a zone of sulphide mineralization. In order to get more depth and be sure that Hole No.93-H does not pass above the mineralization zone the steeper inclination was requested.

Very truly yours,

V. J. Lynch, Acting
Executive Officer, DMEA
Field Team, Region V

VJL/sm
cc:
Burmeister
Finance Officer
Lynch
Laurence
Mr. Weinberg
Wedow

Operating Committee-2

EX[illegible]
OMEA
FEB [illegible]
CODE
800

February 6, 1958

Mr. W. L. Albers, Superintendent
Bertha Mineral Division
The New Jersey Zinc Company
Austinville, Virginia

Attention: Dr. W. H. Brown, Chief Geologist

Re: DMEA-4675 (Zinc-Lead-Copper)
Hunter and Hammer area
Louisa County, Virginia
Contract No. Ida-E1110

Dear Mr. Albers:

This letter will confirm the verbal approval given by phone to Mr. Weinberg yesterday to locate Hole 91-H at a site approximately 1,000 feet N. 5° E. of the collar of Hole 88-H. The bearing of the hole should be approximately minus 45°, N. 60° W.

It is understood that Hole 91-H replaces the vertical hole DDH-1 shown on the contract map.

Sincerely,

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

RAL:jr/mg
cc - Mr. E. L. Weinberg, P. O. Box 67, Mineral, Va.
Operating Committee (2)
Mr. Burmeister
Mr. Lynch
Mr. Wedow
File

Audit's copy

EXPLORATION PROJECT CONTRACT
THE NEW JERSEY ZINC COMPANY
DOCKET NO. DMEA-4675

AMENDMENT NO. 2

It is agreed this 31st day of January, 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-K1110 (Docket No. DMEA-4675), dated July 22, 1957, as amended, is further amended, effective July 22, 1957, as follows:

In Exhibit "A", under Description of the Work, the second sentence of the second paragraph is revised to read as follows:

> "The exact location, direction and inclination of D.D.H. #1 will be determined during the course of the work."

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

Executed in quintuplicate the day and year first above written.

THE UNITED STATES OF AMERICA

By [signature]
Administrator, Defense Minerals
Exploration Administration

THE NEW JERSEY ZINC COMPANY

By [signature]

Title _____

EXTRA COPY
RECEIVED
DATE
800

January 30, 1958

Mr. W. L. Albers, Superintendent
Bertha Mineral Division
The New Jersey Zinc Company
Austinville, Virginia

Attention: Mr. W. E. Brown, Chief Geologist

Re: DMEA-1675 (Zinc-Lead-Copper)
The New Jersey Zinc Company
Auster and Bonner area
Lanisa County, Virginia
Contract No. Idm-F1110

Dear Mr. Albers:

This will confirm the approval given by Mr. Weber to Mr. Weinberg verbally in a phone conversation today to drill hole 90-H of the subject project at a site approximately 400 feet S. 30° W. of Hole 89-H. The bearing and inclination of the hole will be approximately N. 60° W., minus 45°; its depth will be about 400 feet.

For the record we wish to point out here that the southwesternmost hole-site shown on the figure 2 of the contract lies outside of the project area and the Government cannot contribute to the cost of drilling this hole unless the adjoining tract is added to the contract. This has been discussed with Messrs. Brown and Weinberg and they concur.

Sincerely,

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

RA/jr/mg
cc - Mr. R. L. Weinberg, New Jersey Zinc Co., P.O.Box 67, Mineral, Va.
Operating Committee (2)
Mr. Burmeister
Mr. Lynch
Mr. Medow
File

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DATE	INITIALS	CODE
		800

January 21, 1958

Mr. W. L. Albers, Superintendent
Bertha Mineral Division
The New Jersey Zinc Company
Austinville, Virginia

Re: DMEA-1675 (Zinc-Lead-Copper)
The New Jersey Zinc Company
Hunter Area
Louisa County, Virginia
Contract No. Ion-Ellio

Attention: Dr. W. H. Brown, Chief Geologist

Dear Mr. Albers:

This letter will confirm the approval given verbally in a phone conversation on January 16, 1958 between Mr. Wedow of this office and Mr. Weinberg at Mineral to locate Hole 89-H on the subject project at a site about 600 feet due west of Hole 88-H. The new hole is to be inclined minus 45 degrees on a N. 60° W. bearing at the collar and have an approximate depth of 400 feet.

Because Hole 88-H, located to test one of the strongest parts of the geochemical anomaly, was completely devoid of mineralization at the anticipated depth, this letter will also serve as the approval to shift exploration to a new strike-fence line roughly parallel to and near the northwest edge of the major geochemical anomaly with a bearing approximately N. 30° E. Holes in this new fence, of which Hole 89-H is the first, will be inclined minus 45 degrees in a northwesterly direction as per contract. They will test with the remainder of the allotted drilling what now appears on the basis of geology (gossan lead outcrops) and geophysics (self-potential anomaly) to be a more favorable target than the major geochemical anomaly. However, the precise location of each hole in the new fence must have the Government's prior approval.

In planning the location of each hole in the revised fence site we wish to remind you that care must be taken to maintain the 200-foot minimum distance of any part of each hole to the outside boundary of the contract area. In addition, if the results obtained from the drilling of Hole 39-H suggest the need for further revision of the general drilling pattern, such future changes must also have our prior approval.

Sincerely yours,

V. J. Lynch
Acting Executive Officer
DMEA Field Team, Region V

Helmuth Wedow, Jr.,
Geologist, Geological Survey

HWJr/mg
cc - Operating Committee (2)
Mr. Lynch
Mr. Laurance
Mr. Shirley
Mr. E. L. Weinberg, New Jersey Zinc Co., P. O.Box 67, Mineral, Va.

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

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RECEIVED
DATE
CODE
800

December 13, 1957

Mr. W. L. Albers, Supt.
The New Jersey Zinc Co.
P.O. Box 67
Mineral, Virginia

Re: DMEA-4675, Idn-E1110
(zinc-lead-copper)
Hunter Area, Lousia County,
Virginia

Dear Mr. Albers:

Permission is hereby granted to start the initial diamond drilling on the subject contract at the fourth hole north of the south end of the anomoly as requested in your letter of December 6, 1957.

It is understood that this in no way changes D.D. Hole No.1, which will be drilled at a later date.

V. J. Lynch, Acting Executive Officer
DMEA Field Team, Region V

Helmuth Wedow, Jr., Geologist
Geological Survey

VJL/zm
cc
Opr. Com-2
Lynch
Files
Finance

THE NEW JERSEY ZINC COMPANY

160 FRONT STREET

NEW YORK 38, N.Y.

December 6, 1957

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DMEA
RECEIVED DEC 1957

DATE	INITIALS	CODE

PLEASE ADDRESS REPLY TO

P. O. Box 67
Mineral, Virginia

Mr. Robert A. Laurence
Regional Executive Officer
Defense Minerals Exploration Administration
Room 13, Post Office Building
Knoxville 2, Tennessee

Subject: Change in initial hole location
Docket DMEA 4675 (Zinc-lead-copper)
The New Jersey Zinc Company
Hunter Area
Louisa County, Virginia

Dear Sir:

This will constitute a request for a change in the location of the initial hole on the Hunter Area in Louisa County as discussed with DMEA representatives Burmeister and Williams on December 6, 1957 at Mineral. We propose that the initial hole be changed from the location shown on contract map AXV-550-D-BD to the location of the hole shown on the contract map as the fourth hole north of the south end of the anomaly. We further propose that the hole be inclined at 45° in a direction N60W and that its length be approximately 800-1000 feet.

This change has been shown to be necessary through analysis of our data subsequent to the application and the examination on this project.

The new hole position would be closer to the center of gravity of the geochemical anomaly and would test the geochemistry, gossan outcrop, self potential and gravity anomalies in an area where they are quite intense.

We would like a decision in this matter as soon as possible since we expect to move to this project within two or three weeks following completion of our Valzinco drilling.

E. L. Weinberg
ELWeinberg/mmk
in quintuplicate

Very truly yours,

W. L. Albers/gm

W. L. Albers,
Superintendent

Audit copy

EXPLORATION PROJECT CONTRACT
THE NEW JERSEY ZINC COMPANY
DOCKET NO. DMEA-4675

AMENDMENT NO. 1

It is agreed this 21st day of November, 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," that Exploration Project Contract No. Idm-E1110 (Docket No. DMEA-4675), dated July 22, 1957, hereinafter called the "Contract," is amended effective July 22, 1957, as follows:

In Annex I, 2 parcels of land are added to the land description as follows:

"4. Agreement dated October 21,1957, with Mary Lou Walton Dickinson and V. Earl Dickinson, her husband, granting to The New Jersey Zinc Company the right to explore for minerals until October 21,1959, and the right to purchase the land by said date. The said parcels are:

"1st. All those two certain adjoining lots or parcels of land fronting, together 250 feet on the Jefferson Highway, being Highway No. 33, and running back a depth of 100-3/4 feet, more or less, and being bounded on the northwest by the CCC Road, being parts of Lots Numbers 26 and 27, as designated on plat of subdivision made by W. H. Boyle, recorded in the Clerk's Office of Louisa County in Deed Book 58, page 28, and being all of the same real estate conveyed to the said Mary Lou Walton Dickinson by deed from Mrs. Elizabeth T. Walton and H. H. Walton, recorded in said office in Deed Book 86, page 188.

"2nd. All those two certain lots designated as Lots numbers 24 and 25 on said plat of subdivision recorded in said office in Deed Book 58, page 28, and being all of the same real estate conveyed to the said Mary Lou Walton Dickinson in the name of Mary Lou Dickinson by deed from Elizabeth Trice Walton recorded in said office in Deed Book 98, page 499."

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DMEA
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DATE | INITIALS | CODE

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 J Mittendorf
Administrator, Defense Minerals
Exploration Administration

THE NEW JERSEY ZINC COMPANY

By J Boodwin

Title VICE PRESIDENT

August 28, 1957

Memorandum

To: Chairman, Operating Committee

From: Jay L. Chambers, Director
Contract Administration and Audit Division

Subject: Docket No. DMEA-4675 (Zinc-Lead-Copper)
The New Jersey Zinc Company
Hunter Area
Louisa County, Virginia
Contract No. Idm-E1110

I am sending you the proposed Amendment No. 1 to the above-cited project without surnaming for the simple reason that I cannot find a proper consideration for the amendment.

Attachment

JLChambers/wb
August 28, 1957

Copy to: Docket
Admr. Reading File
Mr. Chambers

MME Form 14
Sept. 1958

Contract No. Idm-E) 1220
~~14-23)~~

Docket No. DMEA) 4675
~~MME)~~

Date of Action 12/22/58

DEPARTMENT OF THE INTERIOR
OFFICE OF MINERALS EXPLORATION

~~Terminated contract~~
Additional release

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: **The New Jersey Zinc Co.**
160 Front Street
New York 38, New York

Date of Contract	Region	State	Commodity
July 22, 1957	V	Virginia	Lead-Zinc-Copper

	Reserve	Obligation
Prior Amount	0	8,342.90
Increase	0	0
Decrease	0	16.00
Revised Amount	0	8,326.90

Remarks:

cc: 800
210

43244

DMEA Form 14

Contract No. Idm-E 1110

Docket No. 4675

DEPARTMENT OF THE INTERIOR

Terminated contract

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
July 22, 1957	V	Virginia	Lead-Zinc-Copper

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

	Reserve	Obligation
Prior Amount	0	9,340.00
Increase	0	0
Decrease	0	997.10
Revised Amount	0	8,342.90

Remarks:

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

Date delivered to Bureau of Mines, Washington 7/29/58

22845

DMEA Form 14

Contract No. Idm-E 1110

Docket No. 4675

Executed contract

DEPARTMENT OF THE INTERIOR

DEFENSE MINERALS EXPLORATION ADMINISTRATION

Obligation Document

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

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

Date of Contract	Region	State	Commodity
July 22, 1957	V	Virginia	Lead-Zinc-Copper

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

	Reserve	Obligation
Prior Amount	9,340.00	0
Increase	0	9,340.00
Decrease	9,340.00	0
Revised Amount		9,340.00

Remarks:

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

Date delivered to Bureau of Mines, Washington 10/23/57

22845

Audit Cop

RECEIVED
OCT 23 1957
D.M.E.A.

RECEIVED
SEP 23 1957
D.M.E.A.

MF-200
(Revised June 1954)

Docket No. DMEA 4075

Commodity zinc-lead-copper

Contract No. Idm-E 1110

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

EXPLORATION PROJECT CONTRACT[1]

It is agreed this 22 JUL 1957 day of ....., 195..., between the United States of America, acting through the Department of the Interior, Defense Minerals Exploration Administration, hereinafter called the "Government," and [2] THE NEW JERSEY ZINC COMPANY, a New Jersey corporation, whose mailing address is 160 Front Street, New York 38, New York, hereinafter called the "Operator," as follows:

ARTICLE 1. *This contract* is entered into under the authority of the Defense Production Act of 1950, as amended. It consists of this form (MF-200), the attached Exhibit "A," Annex I, and Annex II, and two maps. 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 Virginia, County of Louisa, and is described in Annex I.[3]

(b) The Operator represents and undertakes that:

(1) The Operator is the [4] lessee and optionee 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] See Annex I, [7] ..... recorded in Book ....., page ....., official records of said County; and

(2) The Operator's right, title, or interest (whether as owner, lessee, or otherwise) is subject only to the following claims, liens, or encumbrances: Interests of owners of leased and optioned tracts.

(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: [illegible]

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

ARTICLE 3. *The exploration project.*—The project is a search for indicated or undeveloped deposits of Zinc, Lead and Copper. The work to be performed is described in Exhibit "A." The Operator on or before 6 months from date of Contract shall commence the work, and on or before 12 months from date of Contract (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 under Article 6 in an amount not less than the extended amount of the work for the~~ See Annex II.

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

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

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

ARTICLE 5. *Contribution by the Government.*—The estimated total allowable cost of the project, set forth in Exhibit "A," is the sum of $10,680.00. The Government shall contribute 50 percent of the allowable costs as they are incurred in a total sum not in excess of $5,340.00: *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 [redacted] See Annex II.

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

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

CATEGORY (2)—PERSONAL SERVICES.

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

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

Subcategory (c)—Labor.

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

CATEGORY (4)—OPERATING EQUIPMENT.

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

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

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

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

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

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

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

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

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

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

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

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

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

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

(c) *Reductions in costs.*—The Operator shall account for and give the Government credit for any incidental benefits, credits, or money received in the ordinary course of business in prosecuting the work (as by salvage or sale of materials or equipment, furnishing of room or board, furnishing of power or services to third persons, rebates or discounts on purchases, etc.), in the same ratio in which the Government contributes to costs; and such amounts shall be treated as a reduction in costs incurred so that they are available for use within the limit of the original estimated total cost. This provision does not apply to receipts from production which are subject to the Government's percentage royalty under the provisions of Article 8 See Annex II

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

ARTICLE 13. *Changes and added provisions.*—

See Annex II.

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 S. S. Goodwin

VICE PRESIDENT
Title

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

Samuel Riker Jr

[CORPORATE SEAL]

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

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DMEA
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EXPLORATION PROJECT CONTRACT
THE NEW JERSEY ZINC COMPANY
DOCKET NO. DMEA-4675

ANNEX I

The land referred to in Article 2 of the contract consists of approximately 515 acres in Louisa County, Virginia, virtually within the town limits of Mineral, Virginia. The Operator is in possession as a lessee pursuant to the terms of the leases and agreements hereinafter set forth. Copies of the leases and agreements are contained in Docket No. DMEA-4675, and the land descriptions therein are incorporated herein by reference. All of the tracts of land referred to in this Annex I appear on the attached map entitled "The New Jersey Zinc Company, Hunter & Hammer Area, Figure I, AXV-530-B-B," and are outlined in blue color.

1. Agreement dated September 10, 1955, with Bowles and Spicer Lumber Company granting The New Jersey Zinc Company the exclusive right to explore for minerals for one year and the option to renew for four additional years. The agreement also grants exclusive right to lease the mineral rights for three successive twenty-year periods together with the right to use necessary surface. The tract is known as the "Hunter" tract and contains approximately 118 acres.

2. Agreement, dated January 4, 1957, with Whitlock Construction Company granting The New Jersey Zinc Company the exclusive right to explore for minerals for one year with the option to renew for one year. The lessee also has option to lease the mineral rights for three successive twenty-year periods. There are to be no mining operations conducted on the surface of said premises. The various parcels of land aggregate approximately three acres.

3. Agreement dated May 28, 1956, with the J. S. Purcell Lumber Corporation granting The New Jersey Zinc Company the exclusive right to prospect for and mine

minerals and purchase surface acreage for one year with the option to renew until May 28, 1961. Land is known as the "Hemmer" tract and contains approximately 394 acres.

Special Agreement Concerning Land

1. In the event the Operator or any subsidiary thereof at any time during the period expiring ten years from the date of this contract acquires any interest, title, or equity, in any lands contiguous to the premises described in this contract, it is agreed that such contiguous lands shall thereupon become subject to the provisions of this contract and the parties hereto shall promptly execute amendments to this contract listing such contiguous lands as land 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 agreements 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 of its interest, title, and equity in such land, and any minerals produced therefrom, including any option, lease or permit thereto, without any consideration whatsoever, including future compensation, for such surrender or disposition, other than relief from the cost of maintaining such interest;

(c) agrees that no benefit from such land or any production of minerals therefrom will accrue to the Operator or to any of its subsidiaries, directly or indirectly, during the period expiring thirty years from the date of this contract; and

(d) agrees that if the Operator or any of its subsidiaries acquires any interest, title, or equity in such land or any minerals produced therefrom, or derives any benefit therefrom, before the expiration of thirty years from date of this Contract, the land with respect to which such interest, title, or equity is acquired, and any minerals produced therefrom, shall be deemed subject to this Contract and any certification of discovery or development 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 amount contributed by the Government without interest is fully repaid, whichever occurs first.

3. The following tract of land known as the Julia Tract, owned by Mrs. Elizabeth T. Walton, has been drilled by the Operator and is, therefore, specifically excluded from all provisions of this Contract:

> "Beginning at a stone and pointers, corner of Goodwin, et al., and being the southeast corner of the Julia Mine Property and running thence with the Goodwin line (now Fisher) N. 46-3/8° W., 45.50 poles to a stone, another corner with the Goodwin property; thence N. 61° E., 13.73 poles to a stone; thence N. 46° W., 33.21 poles to a stone, another Goodwin corner; thence N. 41-1/2° E., 22.56 poles to a stone, corner of Goodwin; thence with the Nuckols line S. 88° E., 10.06 poles to a stone in a hollow near a post oak stump; thence N. 66-1/4° E., 28.45 poles to a stone, corner with Hunter, et al.; thence S. 4-1/2° E., 14.37 poles to a white oak, corner with Hunter; thence N. 76° E., 18.50 poles to a stone in the road, another corner with Hunter; thence S. 71° E., 7.05 poles to a stone on the south side of the road in Hunter's line; thence S. 25° W., 9.68 poles to a stone near branch with poplar pointers; thence S. 7-1/2° W., 19.55 poles to a stone, corner with the Davis estate; thence with the Davis estate S. 37° W., 26.18 poles to a stone; thence S. 19° W., 29.25 poles to the point of beginning, containing 352 acres, more or less."

"Included within the above boundaries is a tract of approximately 3.9 acres not presently owned by Mrs. Walton nor under option to the Operator. The description above stated is based on a survey of the premises made in November 1885 by J. B. Madison and is the same premises conveyed to L. C. Spicer and H. H. Walton by deed of February 9, 1944, recorded in the Clerk's Office, Louisa County, Virginia, in Deed Book 64, Page 35, to which reference is here made for a further description of said premises."

EXPLORATION PROJECT CONTRACT
THE NEW JERSEY ZINC COMPANY
DOCKET NO. DMEA-4675

ANNEX II

1. In Article 3, the words following the reference to Article 10 are deleted, and the following words are substituted: "shall have completed the work."

2. In Article 6(a), that part of the last sentence in the first paragraph beginning after the semicolon is deleted.

3. Categories (2) through (7) of Article 6(a) are deleted.

4. In Article 6(c), the words "Article 9" are changed to "Article 8."

5. In Article 8(b), the words "ten years" are changed to "thirty years."

6. The following clause is added to Article 8(c):

"Provided, however, That so long as the Operator operates smelting facilities as an integrated part of its business, the settlement made by the Operator's smelter to its mine or mill on the ore or concentrates subject to the Government's royalty shall be, for the purpose of calculating the royalty payable to the Government under this Contract, on the same settlement basis that the said smelter makes to its independent suppliers under the schedule most favorable to any independent supplier; or, should gross income from mining operations for percentage depletion purposes in Federal income tax determination show a greater value for ore or concentrate sales than that value which would result from applying the smelter schedule most favorable to an independent supplier, the greater value will be used as the basis for calculating royalty payable to the Government."

7. In addition to the costs of work estimated in Exhibit "A" by categories of actual costs, the costs of work requirements specified in Exhibit "A" as "Fixed Unit Costs" are allowable costs of the project. The Government will contribute to the fixed unit costs as work units are performed. A "Fixed Unit Cost" is an agreed price for each unit of work to be performed regardless of costs incurred by the Operator. Costs set forth in Exhibit "A" include all allowable costs of the work to be performed under the Contract.

8. Notwithstanding any other provision of the Contract, the allowable unit cost per foot of a drilling item is the average unit cost per foot computed on the basis of all the actual unit costs of said drilling item incurred by the Operator: Provided, That the Government will not contribute to any portion of an average unit cost of a drilling item that exceeds the estimated unit cost of said item set forth in the Contract.

ORIGINAL FILE COPY
DMEA

EXPLORATION PROJECT CONTRACT
THE NEW JERSEY ZINC COMPANY
DOCKET NO. DMEA-4675

EXHIBIT "A"

Description of the Work

The purpose of the project is to explore for ores of zinc by diamond drilling (and such churn drilling of overburden as may be required). Zinc geochemical anomalies and the few outcrops as occur on the property indicate that the mineralization is in steeply dipping quartz-schists and quartzites. The bedding strikes to the northeast and dips steeply to the southeast.

The locations of the initial drill holes are tentatively shown in red on the attached map entitled "Figure 2--The New Jersey Zinc Company, Hunter & Hemmer Area, AXV-550-D-BD," but the actual locations, directions, inclinations, and depths of all holes are subject to prior Government approval. D. D. H. #1 will be drilled vertically so as to be certain that no part of the hole will be closer than 200 feet to any boundary. The other holes indicated on the map will be drilled on a minus 45° inclination and in a northwesterly direction.

It is estimated that approximately 15 holes will be required having an average depth of 400 feet. With Government consent, after the strike length has been established, a maximum of two vertical holes may be drilled, to an approximate depth of 800 feet each, in order to test for mineralization at depth. Total drilling shall not exceed 6,000 feet.

No drilling shall be performed at locations which are within 200 feet of the outside boundary of the property.

All diamond drilling shall be done with AX size, or larger, coring bits, except where it is necessary to use an EX size bit in order to complete a hole. Drill holes shall be reamed and cased or cemented and redrilled as necessary.

All drill holes shall be logged and all drill core shall be made available to the Government for examination. All significantly mineralized core shall be split and one half thereof shall be properly sampled and assayed for zinc, lead, and copper. The remaining half of all significantly mineralized core samples shall be furnished to the Government upon request.

All assays shall be reported monthly to the Government, together with drill logs and proper plan maps and sections, showing the progress of the work and sample locations.

All work of drilling and sample preparation shall be properly supervised by competent engineers and geologists.

Estimated Cost of the Project

Actual Costs

Category (1) Independent Contracts

Overburden drilling to 100-foot depth 1,200 feet, approximately, @ $2.90/ft. 1/	$ 3,480.00	
Diamond drilling to 1,000-foot depth 4,800 feet, approximately, @ $2.70/ft. 1/2/	12,960.00	$16,440.00

The above rates include charges for cementing and redrilling, water supply, changing of locations, and all other charges which may be incurred by the diamond drilling contractor.

1/ See Annex II of the Contract.
2/ Any drilling with EX size bit will be at a maximum rate of $2.60 per foot.

Neither the cost nor the value of casing left in drill holes at the option of the Operator will be accepted as a charge to the Contract.

Categories (2) through (7) None

Fixed Unit Costs (See Annex II of the Contract)

Incidental allowance 3/ for each foot of drilling completed, 6,000 feet @ $0.22/ft.	$1,320.00	
Core boxes--128 @ $2.50 each (wooden)	320.00	
200 samples assayed @ $3.00 each sample	600.00	$ 2,240.00
Estimated Total Cost of the Project		$13,680.00
Government's Participation @ 50%		$ 6,840.00

3/ Includes all costs that might otherwise be allowable costs of the project under categories (1) through (7) of article 6(a), except as otherwise scheduled in Exhibit "A."

D.E. Bumpass

C&O R.R.

E.F. Harper
52.68 Ac.

Lottie May
Spicer
19.42 Ac.

Louisa County
High School
27 Ac.

Lewis Butler

Purcell Lumber Co. *
(Hemmer)
394 Ac.
Opt N.J.Z

Lett *
239 Ac.
Opt N.J.Z.

HALL

Mrs. Wallace Boyle

R.R. Right of Way

W.B. Kennedy

Wm. Butler
Est.

Thomas

C.C. Spicer

SUBDIVIDED

SUBDIVIDED

(Tyree)
19.32 Ac.

Ayrmac
Albizer
L.C. Spicer
Joyce
Woolfolk
Sharp
Bentley
Wilson
Lumsden
Rigsby
Jones
Mrs. Walton
Bowles & Spicer
Opt NJZ
Davis L. Judd

Dr. H.W. Judd
34 Ac.

Bowles & Spicer *
(Hunter)
118 Ac + Lots
Opt. NJZ.

Judd
2.16
Ac.

J.C. Coleman
Mineral Hotel
5.27 Ac.

H.H.
Walton
3.66 Ac.

Farrar

J.W. + R.F.
Glass 3.21 Ac.

Linwood Hicks
10 Ac.

3.9 Ac.
Lucy Nappier

MINERAL

Walton, Est *
(Julia)
348.1 Ac.
Opt. NJZ

24,000 N

21,000 N

30,000 E

33,000 E

Land Included in Contract

INDEX MAP

MINERAL
LOUISA CO.
VA.

LEGEND

N.J.Z. OWNED PROPERTY

N.J.Z. OPTIONED PROPERTY

N.J.Z. PROPOSED OPTION

ISOCHEMICAL CONTOURS
IN PPM ZINC EQUIVALENT
(BASED ON 100' SAMPLING
CENTERS)

250' 0 250' 500' 1000'

GRAPHIC SCALE

N

Corrected FIG-I.

SERIAL NUMBER		DATE ISSUED		REFERENCE DRAWINGS	REVISIONS	THE NEW JERSEY ZINC COMPANY	DRAWN	HUNTER & HEMMER AREA	DATE 1/10/57
						DMEA-4675.	TRACED N.A.K.	LOUISA CO. VA.	SCALE 1" = 660
							CHECKED		AXV-530-B-B
							APPROVED		

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Full

DMEA Form 14

Contract No. Idm-E1110

Docket No. 4675

DEPARTMENT OF THE INTERIOR

XXXXXX Approved contract

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
July 22, 1957	V	Virginia	Zinc-Lead-Copper

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

	Reserve	Obligation
Prior Amount	0	0
Increase	$9,340.00	0
Decrease	0	0
Revised Amount	$9,340.00	0

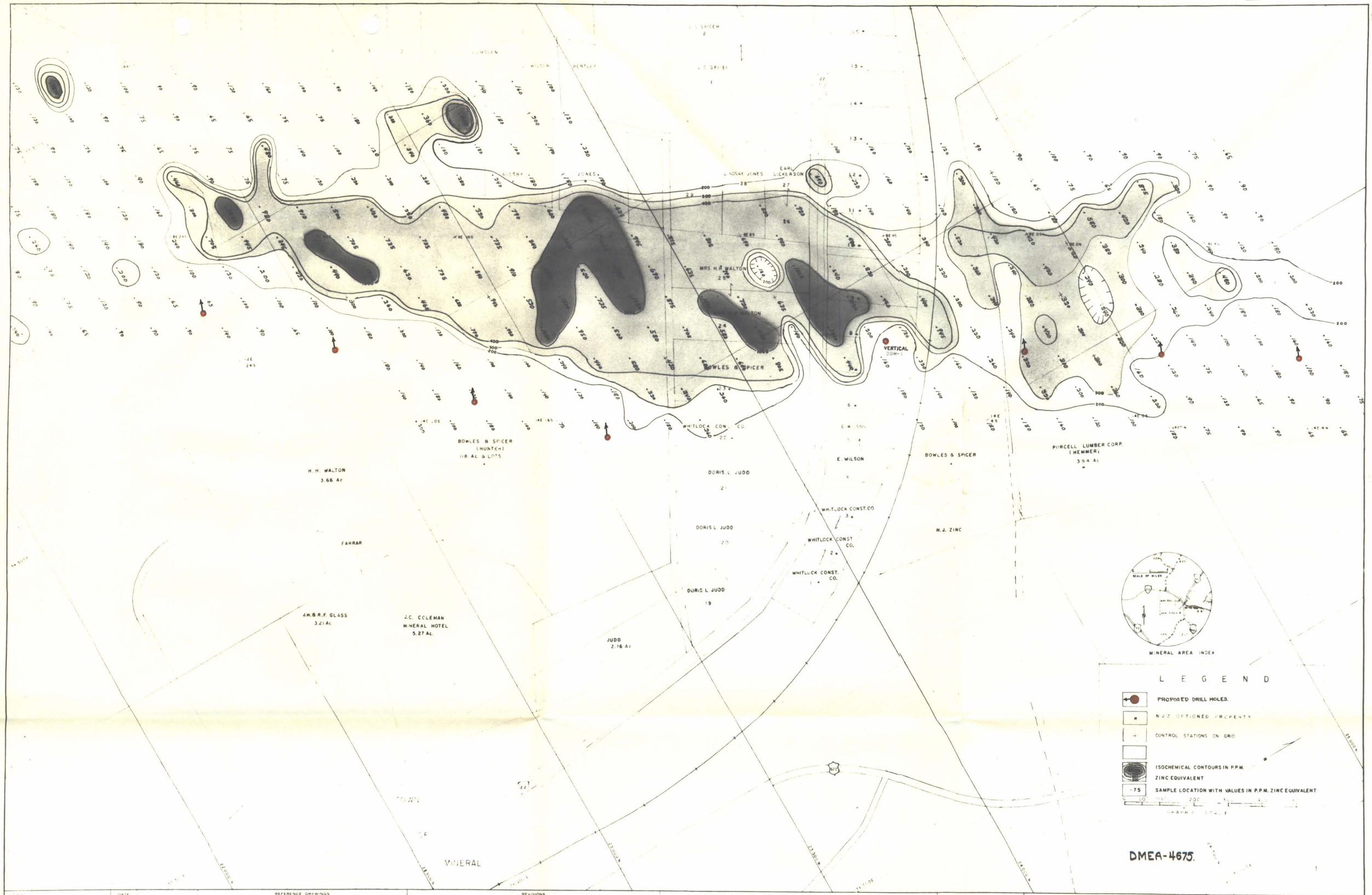
Remarks:

ALLEN S. DAKAN
(Name)

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

Date Delivered to Bureau of Mines, Washington 7/22/57

16416



DRAWING NUMBER	DATE ISSUED	REFERENCE DRAWINGS	REVISIONS
		AXV-530-B-B	

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THE NEW JERSEY ZINC COMPANY
MINERAL, VA.

DRAWN STAFF
TRACED
CHECKED
APPROVED

HUNTER & HEMMER AREA
GEOCHEMISTRY
FIGURE 2

DATE 5/1/57
SCALE 1" = 100'
AXV-550-D-BD