OFFICIAL FILE COPY
O. M. E.
RECEIVED JUN 15 1959

DATE	INITIALS	CODE
6/15	G	220
6/16	[illegible]	110
6/18	[illegible]	800
6/18	[illegible]	500
	Tennessee	

MONTHLY REPORT

DMMA-4286, Idn-13982 (Zinc)

Operator: The New Jersey Zinc Company, Jefferson City, Tennessee

Location: Big War Creek area, Hancock and Hawkins Counties, Tennessee

Summary of drilling completed

	Since last inspection	To date
Number of holes	1	34
Footage	661	29,956

Number of holes showing:

a)	Commercial-grade zinc ore	5
b)	Non-commercial zinc mineralization . . .	20
c)	No zinc mineralization	9

The results obtained from the one hole completed since the last inspection are summarized as follows:

Hole BW-57: Located on the Bloomer property about 200 feet southwest of Hole BW-56. Coordinates: 61,999-N; 31,232-E. Collar elevation 1,713 feet. Drilling started on 5/5/59 and was completed on 5/17/59(?) at a depth of 661 feet. Summary log: 0-54 clay overburden; 54-299 Mascot dolomite; 299-484 (TR) upper member of Kingsport formation; 484-661 (bottom of hole) lower member of Kingsport formation and Longview dolomite (T-bed not recognized). Mineralization: Ore(?) hole. 529-540, 11' with 2.25 % Zn. Classed as ore hole because the grade meets the minimum used in the East Tennessee zinc district; however, not classed as ore by New Jersey Zinc Company, as it does not contain at least 50 feet-percent units (contains only 24.75 units).

With the completion of Hole BW-57 the Big War Creek project was recessed temporarily pending the Government's consideration of a request from the Operator to terminate the project.

Inspected: June 2, 1959

Helmuth Wedow, Jr., Geologist
U. S. Geological Survey

MME FORM 6 REFERENCE SLIP

REV. 2-59 OFFICE OF MINERALS E[illegible]ORAT[illegible]N

TO:	DATE	INITIALS
1. 110	11/19	[illegible]
2. 500		
3. Mr. Bresivel	"	
4.		
5.		
FROM: 700	11-19	gad

FOR: Check items for action desired

____ Action ____ Reply for signature of ____

____ Approval ____ Investigate ____ Surname

____ Comment ____ Recommendations ____ Signature

____ Conference ____ Rewrite ____ File

____ Instructions ____ Your information

REMARKS:

INT.-DUP. SEC., WASH., D.C. M50943

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

Budget Bureau No. 42-R1036.5

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION

PAYMENT VOUCHER & SCHEDULE OF PAYMENTS K- 15

NOV 19 1959

OPERATOR'S MONTHLY REPORT AND VOUCHER

Month of May 195 9 Docket No. DMEA 4286 Contract No. Idm E 982

Operator's Name The New Jersey Zinc Company Minerals Zinc

Address Jefferson City, Tennessee

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

ITEMS OF COSTS	FOR OPERATOR'S USE: Monthly Total	Totals Previously Reported	Totals To Date	FOR GOVERNMENT USE ONLY: Approved Monthly Total	Approved Totals Previously Reported	Approved Totals To Date
(1) Independent Short Form Contracts:	3738.60	79,459.30	83,197.90			
Drilling						
Bulldozing						
Crosscutting						
Drifting						
(2) Labor and Supervision:						
Labor						
Supervision	368.82	7,717.95	8,086.77			
Technical Services						
(3) Operating Mat'ls. and Supplies:						
Timber						
Explosives						
Pipe						
Track						
(4) Operating Equipment:						
Rental						
Purchase						
Depreciation						
(5) Initial Rehabilitation and Repairs						
(6) New Bldgs., Improvements, etc.						
(7) Miscellaneous:						
Repairs to Equipment						
Sampling and Analysis	3.00	87.00	90.00			
Payroll Taxes						
Liability Insurance						
(8) Contingencies (specify):						
TOTALS	4110.42	87,264.25	91,374.67	4110.42	87,264.25	91,374.67

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

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

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

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

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

(Instructions on reverse)

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

$ 2055.21

Signature Helen R. Miller (Authorized Certifying Officer)

Date NOV 17 1959 Vou. No. 24

(See other side)

2055.21

(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-982 in accordance with the terms of the contract.

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

APPROVAL BY DMEA EXECUTIVE OFFICER OR ALTERNATE:

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

MONTHLY REPORT OF OPERATOR

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

Form MF-104A
(April 1952)

Budget Bureau No. 42-R1151.2

NOV 19 1959
O.M.E.

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

Month of May 9 1959 Docket No. DMEA 4286 Contract No. Idm E 982

Operator's Name The New Jersey Zinc Company Minerals

Address Jefferson City, Tennessee

OPERATION	Unit	Costs This Month	Units This Month	Costs to Date	Units to Date	Unit Costs to Date	Authorized by Contract: Units	Authorized by Contract: Unit Costs
Drifting								
Crosscutting								
Raising								
Shafts EX	Ft.	474.35	179	2,546.65	961	2.65		2.65
Winzes 0-1000	"	3264.25	1187	69,506.25	25,275	2.75	30,000	2.75
Drilling: Co 1000-1500	"	-	-	11,145.00	3,715	3.00	5,000	3.00
Churn Assays	Ea.	3.00	3	90.00	90	1.00	200	1.00
Auger								
Stripping								
Trenching								
Test Pits								
Roads and Trails Tran. Serv.	Ft.	368.82	1366	8,086.77	29,951	0.27	35,000	0.27
Total Distributed Costs		4110.42		91,374.67				Total Costs Authorized by Contract
Operating Equipment Purchased								
Initial Rehabilitation and Repairs								
New Buildings, Improvements, etc.								
Total Costs		4110.42		91,374.67				

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

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

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

Remarks: This report includes BW-56 BW-57

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

(Instructions on reverse)

(For Government use only)

[signature]
[illegible], U. S. G. S.
JUN 10 1959

INSTRUCTIONS

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

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

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

GPO 872894

Report for May, 1959

Big War Creek Area DMEA 4286

Contract Idm E 982 (Zinc)

One drill operated on this project this month and completed two holes for a total of 1366' of drilling. These holes are shown in green on the accompanying map, AX-TENN-B-100.

Hole BW-56 - N.J.Z. M & M - Price Surface

Coordinates: 62,107.50 N; 31,398.16 E
Elevation: 1728.10

Results:

0- 51	Clay
51-315	Mascot dolomite
315-526	Upper Kingsport dolomite
526	TR
526-617	Lower Kingsport dolomite Scattered traces of sphalerite 599-607
617-618	1' - estimated at 4% zinc
618-639	Lower Kingsport dolomite
639-641	2' - estimated at 2% zinc
641-695	Lower Kingsport limestone and dolomite
695-705	(Bottom) Longview dolomite

Hole BW-57 - N.J.Z. M & M - Bloomer surface

Coordinates: 61,999.35 N; 31,232.30 E
Elevation: 1713.57

Results:

0- 54	Clay
54-299	Mascot dolomite
299-484	Upper Kingsport dolomite
484	TR
484-529	Lower Kingsport dolomite Traces of sphalerite 492,519-525
529-533	4' - 3.63% zinc
533-535	2' - 3.18% zinc
535-538	Lower Kingsport dolomite
538-540	2' - 1.96% zinc
529-540	11' - 2.25% zinc
540-661	(Bottom) Lower Kingsport limestone and dolomite

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O. M. E.
RECEIVED JUN 3 1959

DATE	INITIALS	CODE
6/3	G	220
"		110
6/8		800
		500

INTERIM REPORT

DMEA-4286, Idm-E982 (Zinc)

Operator: The New Jersey Zinc Company, Jefferson City, Tennessee

Location: Big War Creek area, Hancock and Hawkins Counties, Tennessee

Summary of drilling completed

	Since last inspection	To date
Number of holes	1	33
Footage	710	29,295

Number of holes showing:

a) Commercial-grade zinc ore	4
b) Non-commercial zinc mineralization	20
c) No mineralization	9

A brief summary of the data from the one hole completed since the last inspection follows:

Hole BW-56: Located on the E. Bloomer (NJZ M & M) property approximately 200 feet southwest of Hole BW-47. Coordinates 762,108-N; 831,398-E; elevation 1728 feet. Drilling started on 3/16/59 and was completed on 5/2/59 at a total depth of 710 feet. Summary log: 0-51 residual clay; 51-315 Mascot dolomite; 315-525(?) upper member of Kingsport formation (TR probably in cavity @ 524-526); 525(?)-695 lower member of Kingsport formation; 695-710 (bottom of hole) Longview dolomite. Note: Numerous cavities 491-526 (reduced to EX-size core @ 526); poor core recovery 526-572 (13 feet recovered). Mineralization: None. Barren hole.

Drilling in progress

Drilling is now in progress on Hole BW-57 at a site 200 feet southwest on strike from Hole BW-56. Drilling started on 5/5/59 on the day of inspection and was still in the residual clay overburden.

Inspected: May 5, 1959

Helmuth Wedow, Jr., Geologist
U. S. Geological Survey

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

Budget Bureau No. 42-R1036.5

MAY 21 1959 O.M.E.

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

Month of April, 1959 Docket No. DMEA 4286 Contract No. Idm E 982
Operator's Name The New Jersey Zinc Company Minerals Zinc
Address Jefferson City, Tennessee
Contract Amount, $ 107,150.00 Government Participation: 50% Amount, $ 53,575.00

ITEMS OF COSTS	FOR OPERATOR'S USE			FOR GOVERNMENT USE ONLY		
	Monthly Total	Totals Previously Reported	Totals To Date	Approved Monthly Total	Approved Totals Previously Reported	Approved Totals To Date
(1) Independent Short Form Contracts:						
Drilling	-	79,459.30	79,459.30	9/11/59		
Bulldozing						
Crosscutting						
Drifting						
(2) Labor and Supervision:						
Labor						
Supervision						
Technical Services	-	7,717.95	7,717.95			
(3) Operating Mat'ls. and Supplies:						
Timber						
Explosives						
Pipe						
Track						
(4) Operating Equipment:						
Rental						
Purchase						
Depreciation						
(5) Initial Rehabilitation and Repairs						
(6) New Bldgs., Improvements, etc.						
(7) Miscellaneous:						
Repairs to Equipment						
Sampling and Analysis	-	87.00	87.00			
Payroll Taxes						
Liability Insurance						
(8) Contingencies (specify):						
TOTALS	-	87,264.25	87,264.25		87,264.25	87,265.25

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

Date 5/1/59 *Payee The New Jersey Zinc Company

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

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

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

(Instructions on reverse)

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

$ —

Signature
(Authorized Certifying Officer)

Date Vou. No.
(See other side)

(For Government use only)

CERTIFICATION BY GOVERNMENT REPRESENTATIVE:

I certify that to the best of my knowledge and belief the contractor submitting this voucher is operating a Defense Minerals Exploration Administration project under Contract No. E-982 in accordance with the terms of the contract.

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

APPROVAL BY DMEA EXECUTIVE OFFICER OR ALTERNATE: ACTING EXECUTIVE OFFICER

Signature ..... Title OME - REGION V Date MAY 14 1959

MONTHLY REPORT OF OPERATOR

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

Form MF-104A
(April 1952)

Budget Bureau No. 42-R1151.2

MAY 21 1959
O.M.E.

UNITED STATES
DEPARTMENT OF THE INTERIOR

DEFENSE MINERALS EXPLORATION ADMINISTRATION

OPERATOR'S UNIT COST AND PROGRESS REPORT

Month of April 1959 Docket No. DMEA 4286 Contract No. Idm E 982

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

Address Jefferson City, Tennessee

OPERATION	Unit	Costs This Month	Units This Month	Costs to Date	Units to Date	Unit Costs to Date	Authorized by Contract: Units	Authorized by Contract: Unit Costs
Drifting								
Crosscutting								
Raising								
Shafts								
Winzes Ex	ft.	-	-	2,072.30	782	2.65		2.65
Drilling: Core 0 - 1000	ft.	-	-	66,242.00	24,088	2.75	30,000	2.75
Churn 1000-1500	ft.	-	-	11,145.00	3,715	3.00	5,000	3.00
Auger Assays	ea.	-	-	87.00	87	1.00	200	1.00
Stripping								
Trenching								
Test Pits								
Roads and Trails								
Tech. Serv.	ft.	-	-	7,717.95	28,585	0.27		0.27
Total Distributed Costs				87,264.25				Total Costs Authorized by Contract
Operating Equipment Purchased								
Initial Rehabilitation and Repairs								
New Buildings, Improvements, etc.								
Total Costs				87,264.25				

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.

Remarks: No Holes reported this month.

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

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

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

(Instructions on reverse)

(For Government use only)

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

INSTRUCTIONS

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

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

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

GPO 872894

Report for April 1959

Big War Creek Area DMEA 4286

Contract Idm E 982 (Zinc)

One drill operated on this project during the month. Due to operating difficulties and cavernous ground no holes were completed. The totals reported this month are the same as those reported last month.

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O. M. E.
RECEIVED APR 20 1959

DATE	INITIALS	CODE
4/20	a	220
4/21	[illegible]	110
4/21	[illegible]	800
4/24	[illegible]	500

DMEA EXPLORATION PROJECT

INTERIM REPORT

DMEA-4286, Idm-E982 (Zinc)

Operator: The New Jersey Zinc Company, Jefferson City, Tennessee

Location: Big War Creek area, Hancock and Hawkins Counties, Tennessee

Summary of drilling completed

	Since last inspection	To date
Number of holes	1	32
Footage	1,580	28,585

Holes showing:

a)	Commercial zinc ore	4
b)	Non-commercial zinc mineralization	20
c)	No zinc mineralization	8

A brief summary of the data from the one hole completed since the last inspection is given below:

Hole BW-55: Located on the Amyx property about 200 feet down dip from Hole BW-54 (data on coordinates and elevation not yet available). Drilling started on 2/6/59 and completed on 3/13/59 at a depth of 1,580 feet. Summary log: 0-517 Chickamauga ls; 517-1230 Mascot dolomite; 1230-1580 Kingsport and Longview formations (TR? at 1440?, T-bed not recognized). Mineralization: (assays) 1362-1367 (5') 4.00 % Zn; 1367-1372 (5') 2.18 % Zn; 1372-1378 (6') 3.10 % Zn; 1378-1382 (4') 1.63 % Zn; 1382-1387 (5') 1.50 % Zn; (weighted averages) 1362-1378 (15') 3.1 % Zn; 1362-1387 (25') 2.48 % Zn; this hole is considered a near miss as the grade is barely under the minimum (50 percent-feet) generally used as the cut-off---it is temporarily classed as an ore hole until final analysis of the drilling data.

Drilling in progress

Drilling is in progress on Hole BW-56 located 200 feet southwest of Hole BW-47 (on strike). Numerous cavities and poor core recovery to a depth of 526 feet required reduction to EX-size at that depth. Core was observed to a depth of 572 feet where drilling was

currently in the lower member of the Kingsport formation.

Inspected: April 7, 1959

Helmuth Wedow, Jr., Geologist
U. S. Geological Survey

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

Budget Bureau No. 42-R1036.5

PAID ON VOUCHER & SCHEDULE OF PAYMENTS K-

APR 22 1959

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

Month of March 1959 Docket No. DMEA 4286 Contract No. Idm E 982

Operator's Name The New Jersey Zinc Company Minerals Zinc

Address Jefferson City, Tennessee

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

ITEMS OF COSTS	FOR OPERATOR'S USE			FOR GOVERNMENT USE ONLY		
	Monthly Total	Totals Previously Reported	Totals To Date	Approved Monthly Total	Approved Totals Previously Reported	Approved Totals To Date
(1) Independent Short Form Contracts:						
Drilling	4490.00	74,969.30	79,459.30	6/23/59 W.R.K.		
Bulldozing						
Crosscutting						
Drifting						
(2) Labor and Supervision:						
Labor						
Supervision						
Technical Services	426.60	7,291.35	7,717.95			
(3) Operating Mat'ls. and Supplies:						
Timber						
Explosives						
Pipe						
Track						
(4) Operating Equipment:						
Rental						
Purchase						
Depreciation						
(5) Initial Rehabilitation and Repairs						
(6) New Bldgs., Improvements, etc.						
(7) Miscellaneous:						
Repairs to Equipment						
Sampling and Analysis	5.00	82.00	87.00			
Payroll Taxes						
Liability Insurance						
(8) Contingencies (specify):						
TOTALS	4921.60	82,342.65	87,264.25	4921.60	82,342.65	87,264.25

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

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

Per _____ Title Asst. to Gen. Supt.

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

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

(Instructions on reverse)

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

$ 2460.80

Signature Helen R. Miller
(Authorized Certifying Officer)

Date APR 20 1959 Vou. No. 103

(See other side)

2460.80

(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-982 in accordance with the terms of the contract.

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

APPROVAL BY DMEA EXECUTIVE OFFICER OR ALTERNATE:

Signature V. J. Lynch Title ACTING EXECUTIVE OFFICER OMF REGION V Date APR 16 1959

MONTHLY REPORT OF OPERATOR

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

Form MF-104A
(April 1952)

Budget Bureau No. 42-R1151.2

UNITED STATES
DEPARTMENT OF THE INTERIOR

DEFENSE MINERALS EXPLORATION ADMINISTRATION

OPERATOR'S UNIT COST AND PROGRESS REPORT

Month of March 1959 Docket No. DMEA 4286 Contract No. Idm E 982

Operator's Name The New Jersey Zinc Company Minerals Zinc

Address Jefferson City, Tennessee

OPERATION	UNIT	COSTS THIS MONTH	UNITS THIS MONTH	COSTS TO DATE	UNITS TO DATE	UNIT COSTS TO DATE	AUTHORIZED BY CONTRACT Units	AUTHORIZED BY CONTRACT Unit Costs
Drifting								
Crosscutting								
Raising								
Shafts								
Winzes								
Drilling: Core EX	Ft.			2,072.30	782	2.65		2.65
Churn 0-1000	"	2750.00	1000	66,242.00	24,088	2.75	30,000	2.75
Auger 1000-1500	"	1740.00	580	11,145.00	3,715	3.00	5,000	3.00
Stripping Assays	Ea.	5.00	5	87.00	87	1.00	200	1.00
Trenching								
Test Pits								
Roads and Trails								
Tech. Serv.	Ft.	426.60	1580	7,717.95	28,585	0.27		0.27
TOTAL DISTRIBUTED COSTS		4921.60		87,264.25				TOTAL COSTS AUTHORIZED BY CONTRACT
Operating Equipment Purchased								
Initial Rehabilitation and Repairs								
New Buildings, Improvements, etc.								
TOTAL COSTS		4921.60		87,264.25				

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.

REMARKS: This report includes Hole BW-55

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

Per _____ Title Asst. to Gen. Supt.

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

(Instructions on reverse)

(For Government use only)

GEOLOGIST, U. S. G. S.

INSTRUCTIONS

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

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

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

GPO 872894

Report for March 1959

Big War Creek Area DMEA 4286

Contract Idm E 982 (Zinc)

One drill operated on this project during the month and completed one hole for a total of 1580' of drilling. The accompanying map, AX-TENN-B-100 shows this hole in green. Also included is a dip section showing holes BW-53, BW-54, and BW-55.

Hole BW-55 - N.J.Z. M & M - Amyx surface

Coordinates: 60,779.88 N; 31,146.49
Elevation: 1585.12

Results:

0- 547	- - Chickamauga limestone
547-1230	- - Mascot dolomite
1230	- - Chert Matrix
1230-1362	- - Upper Kingsport dolomite. Scattered traces of sphalerite 1355-1362
1362-1367	- - 5' - 4.00% Zinc
1367-1372	- - 5' - 2.18% zinc
1372-1378	- - 6' - 3.10% zinc (5' core recovered)
1378-1382	- - 4' - 1.63% zinc
1382-1387	- - 5' - 1.50% zinc
1362-1387	- 25' - 2.48% zinc
1387-1404	- - Upper Kingsport dolomite
1404	- - TR
1404-1580	- - (Bottom) Lower Kingsport dolomite and limestone

OFFICIAL FILE COPY
O. M. E.
RECEIVED MAR 20 1959

DATE	INITIALS	CODE
3 20	C	220
"		110
3/20		800
3/23		500

DMEA EXPLORATION PROJECT

INTERIM REPORT

DMEA-4286, Idm-E982 - Zinc

Operator: The New Jersey Zinc Company, Jefferson City, Tenn.

Location: Big War Creek area, Hancock and Hawkins Counties, Tenn.

No holes have been completed on this contract during the interim. Drilling continues on Hole No. BW-55, located 200 feet downdip from BW-54. Core was observed to a depth of 1451 feet. The estimated total depth of the hole has been revised and is now expected to bottom at 1580 feet. Mineralization has been encountered as follows: 5'(1362-1367) of est. 5-6% Zn; 5'(1367-1372) of est. 3% Zn; 6' (1372-1378) of est. 4% Zn; 4' (1378-1382) of est. 2% Zn; 5'(1382-1387 of est. 1½% Zn.

Inspected: March 10, 1959

L. E. Shirley, Mining Engineer
Bureau of Mines (OME)

Helmuth Wedow, Jr. Geologist
Geological Survey

z

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- 883

OPERATOR'S MONTHLY REPORT AND VOUCHER

O.M.E. MAR 23 1959

Month of February, 1959 Docket No. DMEA 4286 Contract No. Idm E-982

Operator's Name The New Jersey Zinc Company Minerals Zinc

Address Jefferson City, Tennessee

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

ITEMS OF COSTS	FOR OPERATOR'S USE: Monthly Total	Totals Previously Reported	Totals To Date	FOR GOVERNMENT USE ONLY: Approved Monthly Total	Approved Totals Previously Reported	Approved Totals To Date
(1) Independent Contractors: Short Form						
Drilling	3890.00	71,079.30	74,969.30	4/23/59		
Bulldozing						
Crosscutting						
Drifting						
(2) Labor and Supervision:						
Labor						
Supervision						
Technical Services	372.60	6,918.75	7,291.35			
(3) Operating Mat'ls. and Supplies:						
Timber						
Explosives						
Pipe						
Track						
(4) Operating Equipment:						
Rental						
Purchase						
Depreciation						
(5) Initial Rehabilitation and Repairs						
(6) New Bldgs., Improvements, etc.						
(7) Miscellaneous:						
Repairs to Equipment						
Sampling and Analysis	-	82.00	82.00			
Payroll Taxes						
Liability Insurance						
(8) Contingencies (specify):						
TOTALS	4262.60	78,080.05	82,342.65	4262.60	78,080.05	82,342.65

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

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

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

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

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

(Instructions on reverse)

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

$ 2131.30

Signature Helen R. Miller
(Authorized Certifying Officer)

Date MAR 20 1959 Vou. No. 98
(See other side)

2131.30

(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-982 in accordance with the terms of the contract.

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

APPROVAL BY DMEA EXECUTIVE OFFICER OR ALTERNATE:

Signature [illegible] Title EXECUTIVE OFFICER OME FIELD TEAM REGION V Date MAR 19 1959

MONTHLY REPORT OF OPERATOR

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

GPO 872893

Form MF-104A
(April 1952)

Budget Bureau No. 42-R1151.2

UNITED STATES
DEPARTMENT OF THE INTERIOR

DEFENSE MINERALS EXPLORATION ADMINISTRATION

OPERATOR'S UNIT COST AND PROGRESS REPORT

Month of February 1959 Docket No. DMEA 4286 Contract No. Idm E 982

Operator's Name The New Jersey Zinc Company Minerals Zinc

Address Jefferson City, Tennessee

OPERATION	Unit	Costs This Month	Units This Month	Costs to Date	Units to Date	Unit Costs to Date	Authorized by Contract: Units	Authorized by Contract: Unit Costs
Drifting								
Crosscutting								
Raising								
Shafts								
Winzes EX	Ft.	-	-	2,072.30	782	2.65	30,000	2.65
Drilling: Core 0-1000	"	2750.00	1000	63,492.00	23,088	2.75	5,000	2.75
Churn 1000-1500	"	1140.00	380	9,405.00	3,135	3.00	200	3.00
Auger Assays	Ea	-	-	82.00	82	1.00		1.00
Stripping								
Trenching								
Test Pits								
Roads and Trails								
Svp. & Tech. Serv.	Ft.	372.60	1380	7,291.35	27,005	0.27		0.27
Total Distributed Costs		4262.60		82,342.65				Total Costs Authorized by Contract
Operating Equipment Purchased								
Initial Rehabilitation and Repairs								
New Buildings, Improvements, etc.								
Total Costs		4262.60		82,342.65				

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

Date 3/1/59 Operator The New Jersey Zinc Co.

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

Remarks: This report includes Hole BW-54

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

(Instructions on reverse)

(For Government use only)

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

INSTRUCTIONS

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

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

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

GPO 872894

Report for February 1959

Big War Creek Area DMEA 4286

Contract Idm E 982 (Zinc)

One drill operated on this project during the month and completed one hold for a total of 1380' of drilling. The accompanying map, AX-Tenn-B-100 shows this hole in green.

Hole BW-54 - N.J.Z. M & M - Amyx Surface

Coordinates: 60,950.34 N; 31,046.59 E
Elevation: 1607.23

Results:

0 - 2	Clay
2 - 346	Chickamauga limestone
346 - 1023	Mascot dolomite
1023	Chert Matrix
1023 - 1206	Upper Kingsport dolomite
1206	TR
1206 - 1365	Lower Kingsport dolomite and limestone. Scattered traces and shines 1235-1238, 1260-1283, 1343-1356
1365 - 1380	(Bottom) Longview dolomite 83% dolomite in R & S Beds.

OFFICIAL FILE COPY
O. M. E.
RECEIVED FEB 20 1959

DATE	INITIALS	CODE
2-20	C	220
"		110
2/24		800
3/4		500

DMEA EXPLORATION PROJECT

INTERIM REPORT

DMEA-4286, Idm-E982 - Zinc

Operator: The New Jersey Zinc Co., Jefferson City, Tennessee

Location: Big War Creek area, Hancock and Hawkins Counties, Tenn.

Summary of Drilling Completed

	Since last inspection	To date
Number of holes	1	31
Footage	1380	27,005

Holes showing:

a) Commercial zinc ore----------	3
b) Non-commercial zinc mineralization-	20
c) No zinc mineralization----------	8

Additional data on the one hole completed during the interim follows:

Hole No. BW-54, located 200 feet down-dip from BW-53 on Amyx property. Coordinates N60950.34, E31046.59; collar elevation 607.23 feet. Total depth 1380 feet. Drilling began 1/8/59 and was completed on 2/5/59. Brief log of hole: 0-2 feet overburden, collared in Chickamauga ls; top of Mascot at 346; Chert matrix at 1023; "U-255" bed at 1102; top of "R" at 1194 or 1206; "T" bed (?) from 1365 to 1372; hole bottomed at 1380 feet. Mineralization: 3' (1280-1283) of est. 3% Zn; weak traces of zinc from 1235 to 1238; scattered traces of zinc from 1260 to 1280; shines and traces of zinc from 1343 to 1356.

Current drilling is in progress on Hole BW-55, located 200 feet downdip from BW-54. Core was observed to a depth of 380 feet. The estimated total depth of this hole is 1550 feet. No mineralization has been encountered to date.

Inspected: Feb. 10, 1959.

L. E. Shirley, Mining Engineer
Bureau of Mines - OME

Helmuth Wedow, Jr., Geologist
Geological Survey-OME

z

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

Budget Bureau No. 42-R1036.5

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

FEB 18 1959
PAID ON VOUCHER & SCHEDULE
OF PAYMENTS K-

Month of January, 1959 Docket No. DMEA 4286 Contract No. Idm E 982
Operator's Name The New Jersey Zinc Company Minerals Zinc
Address Jefferson City, Tennessee
Contract Amount, $ 107,150.00 Government Participation: 50% Amount, $ 53,575.00

ITEMS OF COSTS	FOR OPERATOR'S USE			FOR GOVERNMENT USE ONLY		
	Monthly Total	Totals Previously Reported	Totals To Date	Approved Monthly Total	Approved Totals Previously Reported	Approved Totals To Date
(1) Independent Short Form Contracts:						
Drilling	3383.00	67,696.30	71,079.30	3/9/59		
Bulldozing						
Crosscutting						
Drifting						
(2) Labor and Supervision:						
Labor						
Supervision						
Technical Services	326.97	6,591.78	6,918.75			
(3) Operating Mat'ls. and Supplies:						
Timber						
Explosives						
Pipe						
Track						
(4) Operating Equipment:						
Rental						
Purchase						
Depreciation						
(5) Initial Rehabilitation and Repairs						
(6) New Bldgs., Improvements, etc.						
(7) Miscellaneous:						
Repairs to Equipment						
Sampling and Analysis	-	82.00	82.00			
Payroll Taxes						
Liability Insurance						
(8) Contingencies (specify):						
TOTALS	3709.97	74,370.08	78,080.05	3709.97	74,370.08	78,080.05

I certify that the above bill is correct and just and that payment therefor has not been received.
Date 2/1/59 *Payee The New Jersey Zinc Company
Per [signature] Title Asst. to Gen. Supt.

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

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

(Instructions on reverse)

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

$ 1854.99

Signature Helen R. Miller
(Authorized Certifying Officer)

Date FEB 16 1959 Vou. No. 38
(See other side)

18d)

1854.98

(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-982 in accordance with the terms of the contract.

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

APPROVAL BY DMEA EXECUTIVE OFFICER OR ALTERNATE: ACTING EXECUTIVE OFFICER

Signature V. J. Lynch Title OME FIELD TEAM REGION V Date FEB 13 1959

MONTHLY REPORT OF OPERATOR

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

Form MF-104A
(April 1962)

Budget Bureau No. 42-R1151.2

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION

FEB 18 1959
C.M.E.

OPERATOR'S UNIT COST AND PROGRESS REPORT

Month of Jan. 1959 Docket No. DMEA 4286 Contract No. Idm E 982

Operator's Name The New Jersey Zinc Company Minerals Zinc

Address Jefferson City, Tennessee

OPERATION	Unit	Costs This Month	Units This Month	Costs to Date	Units to Date	Unit Costs to Date	Authorized by Contract: Units	Authorized by Contract: Unit Costs
Drifting								
Crosscutting								
Raising								
Shafts EX	Ft.			2,072.30	782	2.65		2.65
Winzes 0-1000	"	2750.00	1000	60,742.00	22,088	2.75	30,000	2.75
Drilling: Core 1000-1500	"	633.00	211	8,265.00	2,755	3.00	5,000	3.00
Churn Assays	Ea.	-	-	82.00	82	1.00	200	1.00
Auger								
Stripping								
Trenching								
Test Pits								
Roads and Trails Sup. & Tech. Serv.	Ft.	326.97	1211	6,918.75	25,625	0.27		0.27
Total Distributed Costs		3709.97		78,080.05				Total Costs Authorized by Contract
Operating Equipment Purchased								
Initial Rehabilitation and Repairs								
New Buildings, Improvements, etc.								
Total Costs		3709.97		78,080.05				

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

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

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

Remarks: This report includes hole BW-53

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

(Instructions on reverse)

(For Government use only)

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

INSTRUCTIONS

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

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

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

GPO 872894

Report for January 1959

Big War Creek Area DMEA 4286

Contract Idm E 982 (Zinc)

One drill operated on this project during the month and completed one hole for a total of 1211 feet. The accompanying map AX-TENN-B-100 shows this hole in green.

Hole BW-53 - N.J.Z. M & M - Amyx Surface

Coordinates: 61,125.80 N; 30,435.00 E
Elevation: 1659.13

Results:

0- 41	- - Clay
41- 171	- - Chickamauga belt
171- 898	- - Mascot dolomite
898	- - Chert Matrix
898-1052	- - Upper Kingsport dolomite. Trace of sphalerite 1011
1052	- - TR
1052-1209	- - Lower Kingsport dolomite Traces of sphalerite 1067, 1173-1183
1209-1211	- - (Bottom) Longview dolomite R and S beds 100% dolomite

ORIGINAL FILE COPY
O. M. E.
RECEIVED JAN 26 1959

DATE	INITIALS	CODE
1/26	C	220
"	[illegible]	110
[illegible]	[illegible]	800
[illegible]	[illegible]	500

DMEA EXPLORATION PROJECT

INTERIM REPORT

DMEA-4286, Idm-E982 - Zinc

Operator: The New Jersey Zinc Company, Jefferson City, Tenn.

Location: Big War Creek area, Hancock and Hawkins Counties, Tennessee.

Summary of Drilling Completed

	Since last inspection	To date
Number of Holes	1	30
Footage	1211	25,625

Holes showing:

a) Commercial zinc ore..... 3
b) Non-commercial zinc mineralization.. 19
c) No zinc mineralization..... 8

Additional data on the one hole completed during the interim follows:

Hole No. BW-53..Located 400 feet N54°E from BW-29. Total depth 1211 feet. Coordinates N62,130, E32,940; elevation at collar 1590 ft. Drilling began 12/9/58 and was completed 1/8/59. Brief log of hole: 0-40 overburden, collared in Chickamauga ls; top of Mascot fm at 171; top of Kingsport (chert matrix) at 898; "U"-255"bed at981; top of "R" bed at 1052; top of Longview fm at 1209, hole bottomed at 1211 feet. No mineralization.

Current drilling is in progress on Hole No. BW-54, located 200 ft downdip from BW-53 on Amyx property. Core was examined to a depth of 479 feet. The estimated total depth of the hole is 1400 feet.

Mr. V. J. Lynch, Member OME Field Team accompanied the Field Examiners on this inspection made January 13, 1959.

Helmuth Wedow, Jr.
Geologist
Geological Survey

L. E. Shirley, Mining Engineer
Bureau of Mines, OME

MF-104 (Rev.)
(April 1952)

JAN 23 1959 O.M.E.

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION

Budget Bureau No. 42-R1036.5

PAID ON TOUCHER & SUBSCRIBED OF PAYMENTS

OPERATOR'S MONTHLY REPORT AND VOUCHER

Month of December, 1958 Docket No. DMEA 4286 Contract No. Idm E 982

Operator's Name The New Jersey Zinc Company Minerals Zinc

Address Jefferson City, Tennessee

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

ITEMS OF COSTS	FOR OPERATOR'S USE: Monthly Total	Totals Previously Reported	Totals To Date	FOR GOVERNMENT USE ONLY: Approved Monthly Total	Approved Totals Previously Reported	Approved Totals To Date
(1) Independent Short Form Contracts:						
Drilling	2332.00	65,364.30	67,696.30	1/29/59		
Bulldozing						
Crosscutting						
Drifting						
(2) Labor and Supervision:						
Labor	228.96	6,362.82	6,591.78			
Supervision						
Technical Services						
(3) Operating Mat'ls. and Supplies:						
Timber						
Explosives						
Pipe						
Track						
(4) Operating Equipment:						
Rental						
Purchase						
Depreciation						
(5) Initial Rehabilitation and Repairs						
(6) New Bldgs., Improvements, etc.						
(7) Miscellaneous:						
Repairs to Equipment						
Sampling and Analysis		82.00	82.00			
Payroll Taxes						
Liability Insurance						
(8) Contingencies (specify):						
TOTALS	2560.96	71,809.12	74,370.08	$2560.96	$71,809.12	$74,370.08

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

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

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

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

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

(Instructions on reverse)

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

$ 1,280.48

Signature Helen R. Mellin (Authorized Certifying Officer)

Date JAN 19 1959 Vou. No. 78

(See other side)

17

1280.48

(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. JdmE982 in accordance with the terms of the contract.

Signature [illegible] Title U. S. BUREAU OF MINES MINING ENGINEER Date JAN 16 1959

APPROVAL BY DMEA EXECUTIVE OFFICER OR ALTERNATE:

Signature Robert A. Lawrence Title EXECUTIVE OFFICER DMEA FIELD TEAM REGION V Date JAN 16 1959

MONTHLY REPORT OF OPERATOR

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

Form MF-161A
(April 1952)

Budget Bureau No. 42-R1151.2

UNITED STATES
DEPARTMENT OF THE INTERIOR

DEFENSE MINERALS EXPLORATION ADMINISTRATION

OPERATOR'S UNIT COST AND PROGRESS REPORT

Month of December 195 8 Docket No. DMEA 4286 Contract No. Idm E 982

Operator's Name The New Jersey Zinc Company Minerals Zinc

Address Jefferson City, Tennessee

OPERATION	Unit	Costs This Month	Units This Month	Costs to Date	Units to Date	Unit Costs to Date	Authorized by Contract: Units	Authorized by Contract: Unit Costs
Drifting								
Crosscutting								
Raising								
Shafts								
Winzes EX	Ft.			2,072.30	782 ~~658~~	2.65		
Drilling: Core 0-1000	"	2,332.00	848	57,992.00	21,088	2.75		
Churn 1000-1500	"			7,632.00	2,544	3.00		
Auger Assays	Ea.			82.00	82	1.00		
Stripping								
Trenching								
Test Pits								
Roads and Trails								
Sup. & Tech. Serv.	Ft.	228.96	848	6,591.78	24414	0.27		
Total Distributed Costs		2,560.96		74,370.08				Total Costs Authorized by Contract
Operating Equipment Purchased								
Initial Rehabilitation and Repairs								
New Buildings, Improvements, etc.								
Total Costs		2,560.96		74,370.08				

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

Remarks: This report includes hole BW-52

Date Jan. 1, 1959 Operator The New Jersey Zinc Co.

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

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

(Instructions on reverse)

(For Government use only)

W. A. Beck

MINING ENGINEER
U. S. BUREAU OF MINES

JAN 16 1959

INSTRUCTIONS

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

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

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

GPO 872894

Report for December 1958

Big War Creek Area DMEA 4286

Contract Idm E 982 (Zinc)

One drill operated on this project during the month and completed one hole for a total of 848 feet. The accompanying map AX-TENN-B 100 shows this hole in green. Sections AX-TENN-C 1395 and C-1412 show all holes drilled on project during October, November and December.

Hole BW-52 - N.J.Z. Mineral and mining rights - A. Helton surface

Coordinates: 60,902.89 N; 30,159.46

Elevation: 1487.17'

Results:

0- 2	- -	Clay
2-509	- -	Mascot dolomite
509	- -	Chert Matrix marker
509-689	- -	Upper Kingsport dolomite
689	- -	TR marker
689-848	- -	(Bottom) Lower Kingsport limestone and dolomite 44% dolomite in R & S beds

OFFICIAL FILE COPY
O. M. E.
RECEIVED DEC 30 1958

DATE	INITIALS	CODE
12/30	J. J.	555
		~~440~~
12/30	[illegible]	800
12/31	WPS	500

DMEA EXPLORATION PROJECT

INTERIM REPORT

DMEA-4286, Idm-E982 - Zinc

Operator: The New Jersey Zinc Company, Jefferson City, Tennessee

Location: Big War Creek Area, Hancock and Hawkins Counties, Tennessee

Summary of Drilling Completed

	Since last inspection	To Date
Number of holes	1	29
Footage	848	24,414

Holes showing:

a)	Commercial zinc ore	3
b)	Non-commercial zinc mineralization	19
c)	No zinc mineralization	7

Additional data on the one hole completed during the interim follows:

Hole No. BW-52.--Located 100 feet downdip from BW-50. Annis Helton property. Depth 848 feet. Coordinates N 60,903, E 30,159; elevation at collar 1,487 feet. Drilling began on November 18, 1958 and was completed December 5, 1958. Brief log of hole: 0-2 feet overburden, collared in Mascot formation; top of Kingsport formation (chert matrix at 509; top of "R" bed at 689; "E" bed from 739 to 743 feet; hole bottomed at 848 feet.

Mineralization:--No zinc; traces of pyrite at 80, 544, 555, 612 and 630.

Current drilling is in progress on Hole No. BW-53, located 400 feet N. 54° E. from BW-29 on Amyx property. Core was examined to a depth of 459 feet with present depth in Mascot formation.

Inspected: December 16, 1958

L. E. Shirley, Mining Engineer
U. S. Bureau of Mines

Helmuth Wedow, Jr., Geologist
U. S. Geological Survey

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

Budget Bureau No. 42-R1036.5

RECEIVED DEC 22 1958 O.M.E.

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

Month of November 195 8 Docket No. DMEA 4138 Contract No. Idm E 982
Operator's Name The New Jersey Zinc Company Minerals Zinc
Address Jefferson City, Tennessee
Contract Amount, $ 107,150.00 Government Participation: 50 % Amount, $ 53,575.00

ITEMS OF COSTS	FOR OPERATOR'S USE: Monthly Total	Totals Previously Reported	Totals To Date	FOR GOVERNMENT USE ONLY: Approved Monthly Total	Approved Totals Previously Reported	Approved Totals To Date
(1) Independent Short Form Contracts:	1,925.00	63,439.30	65,364.30	1/29/59		
Drilling						
Bulldozing						
Crosscutting						
Drifting						
(2) Labor and Supervision:	189.00	6,173.82	6,362.82			
Labor						
Supervision						
Technical Services						
(3) Operating Mat'ls. and Supplies:						
Timber						
Explosives						
Pipe						
Track						
(4) Operating Equipment:						
Rental						
Purchase						
Depreciation						
(5) Initial Rehabilitation and Repairs						
(6) New Bldgs., Improvements, etc.						
(7) Miscellaneous:						
Repairs to Equipment	-	82.00	82.00			
Sampling and Analysis						
Payroll Taxes						
Liability Insurance						
(8) Contingencies (specify):						
TOTALS	2,114.00	69,695.12	71,809.12	2114.00	69,695.12	71,809.12

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

Date 12/1/58 *Payee The New Jersey Zinc Company

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

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

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

(Instructions on reverse)

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

$ 1057.00

Signature [signature] (Authorized Certifying Officer)

Date DEC 17 1958 Vou. No. 71

(See other side)

16

1057.00

(For Government use only)

CERTIFICATION BY GOVERNMENT REPRESENTATIVE:

I certify that to the best of my knowledge and belief the contractor submitting this voucher is operating a Defense Minerals Exploration Administration project under Contract No. E-982 in accordance with the terms of the contract.

Signature W. E. Beck Title MINING ENGINEER U. S. BUREAU OF MINES Date DEC 17 1958

APPROVAL BY DMEA EXECUTIVE OFFICER OR ALTERNATE:

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

RECEIVED DEC 22 1958 D.M.E.

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION

OPERATOR'S UNIT COST AND PROGRESS REPORT

Month of November 1958 Docket No. DMEA 4286 Contract No. Idm E 932

Operator's Name The New Jersey Zinc Company Minerals Zinc

Address Jefferson City, Tennessee

OPERATION	Unit	Costs This Month	Units This Month	Costs to Date	Units to Date	Unit Costs to Date	Authorized by Contract: Units	Authorized by Contract: Unit Costs
Drifting								
Crosscutting								
Raising								
Shafts								
Winzes								
Drilling: Core EX	Ft.	-	-	2,072.30	658	2.65		
Churn 0-1000	"	1,925.00	700	55,660.00	20,240	2.75		
Auger 1000-1500	"	-	-	7,632.00	2,544	3.00		
Assays	Ea.	-	-	82.00	82	1.00		
Stripping								
Trenching								
Test Pits								
Roads and Trails								
Supt. & Tech. Ser.	Ft.	189.00	700	6,362.82	23,566	0.27		
Total Distributed Costs		2,114.00		71,809.12				Total Costs Authorized by Contract
Operating Equipment Purchased								
Initial Rehabilitation and Repairs								
New Buildings, Improvements, etc.								
Total Costs		2,114.00		71,809.12				

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 12/1/58 Operator The New Jersey Zinc Co.

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

Remarks: This report includes hole BW-51

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

(Instructions on reverse)

(For Government use only)

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

INSTRUCTIONS

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

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

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

GPO 872894

Report for November 1958

Big War Creek Area DMEA 4286

Contract Idm E 982 (Zinc)

One drill operated on this project during the month and completed one hole for a total of 700 feet. The accompanying map, AX-TENN-B-100 shows this hole in green.

Hole BW-51 - N.J.Z. Mineral and Mining rights - A. Helton surface

Coordinates: 61,076.53 N; 30,049.64 E
Elevation: 1491.19

Results:

0- 1	- - Clay
1-320	- - Mascot dolomite
320-512	- - Upper Kingsport dolomite Trace sphalerite 509-512
512	- - TR ?
512-700	- - (Bottom) Lower Kingsport dolomite and limestone. Traces of sphalerite 512-525, 539-541, 606-616 93% dolomite in R & S beds.

OFFICIAL FILE COPY
RECEIVED 28 1958
DATE | | CODE
11-28 | C | 220
12/1 | | 110
12/1 | | 800
| | 500

DMEA EXPLORATION PROJECT

INTERIM REPORT

DMEA-4286, Idm-E982 - Zinc

Operator: The New Jersey Zinc Company, Jefferson City, Tennessee

Location: Big War Creek area, Hancock and Hawkins Counties, Tenn.

Summary of Drilling Completed

	Since last inspection	To date
Number of holes	2	28
Footage	1501	23,566

Holes showing:

a) Commercial zinc ore---------- 3
b) Non-commercial zinc mineralization---- 19
c) No zinc mineralization---------- 6

Additional data on the two holes completed during the interim follows:

Hole No. BW-50 - Coordinates N60,988, E30,105; elevation at collar of hole 1489 feet; Annis Helton property. Drilling began 10/18/58 and was completed 10/31/58. Brief log of hole: No overburden, collared in Mascot fm; chert matrix at 411 ft; top of "R" bed indefinite; "T" bed (?) from 778 to 780 ft; hole bottomed at 801 ft; Mineralization: Traces of sphalerite (scattered) from 583 to 659 ft; 10 ft (601-611) of 1.43% zinc.

Hole No. BW-51. Located 100 ft northwest and updip from BW-50. Coordinates N61,077, E30,050; elevation at collar of hole 1491.19 ft. Drilling began 11/3/58 and was completed 11/17/58. Brief log of hole: 0-1 ft overburden, collared in Mascot fm; chert matrix at 320 ft; brown oolite bed at 381 ft; "U"-255" bed at 403 ft; top of "R" bed (?) at 512 ft; "T" bed not recognized; hole bottomed at 700 ft; Mineralization: 16' (509-525) of est. 1/2% Zn; scattered traces of sphalerite from 539 to 541 ft and from 606 to 616 feet.

Current drilling is in progress on BW-25, located 100 feet downdip from BW-50. Only overburden drilling has been accomplished to date;

Inspected: Nov. 18, 1958

L. E. Shirley, Mining Engineer
Bureau of Mines (OME)

Helmuth Wedow, Jr., Geologist
Geological Survey.

z

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

Budget Bureau No. 42-R1036.5

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION

RECEIVED NOV 26 1958 D.M.E.

PAID IN VOUCHER & SCHEDULE OF PAYMENTS K- 30

OPERATOR'S MONTHLY REPORT AND VOUCHER

Month of October, 195 . Docket No. DMEA 64286 Contract No. Idm E 982
Operator's Name The New Jersey Zinc Company Minerals Zinc
Address Jefferson City, Tennessee
Contract Amount, $ 107,150.00 Government Participation: 50 % Amount, $ 53,575.00

ITEMS OF COSTS	FOR OPERATOR'S USE			FOR GOVERNMENT USE ONLY		
	Monthly Total	Totals Previously Reported	Totals To Date	Approved Monthly Total	Approved Totals Previously Reported	Approved Totals To Date
(1) Independent Short Form Contracts:						
Drilling	6,092.75	57,346.55	63,439.30	1/29/59		
Bulldozing						
Crosscutting						
Drifting						
(2) Labor and Supervision:						
Labor						
Supervision	588.87	5,584.95	6,173.82			
Technical Services						
(3) Operating Mat'ls. and Supplies:						
Timber						
Explosives						
Pipe						
Track						
(4) Operating Equipment:						
Rental						
Purchase						
Depreciation						
(5) Initial Rehabilitation and Repairs						
(6) New Bldgs., Improvements, etc.						
(7) Miscellaneous:						
Repairs to Equipment						
Sampling and Analysis	6.00	76.00	82.00			
Payroll Taxes						
Liability Insurance						
(8) Contingencies (specify):						
TOTALS	6,687.62	63,007.50	69,695.12	6,687.62	63,007.50	69,695.12

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

Date 11/1/58 *Payee The New Jersey Zinc Company

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

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

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

(Instructions on reverse)

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

$ 3,343.81

Signature Helen R. Muller
(Authorized Certifying Officer)

Date NOV 24 1958 Vou. No. 59
(See other side)

3,343.81

(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. Idm E982 in accordance with the terms of the contract.

Signature W. A. Beck Title U. S. BUREAU OF MINES Date NOV 21 1958

APPROVAL BY DMEA EXECUTIVE OFFICER OR ALTERNATE:

Signature Robert A. Lauren Title EXECUTIVE OFFICER DME FIELD TEAM REGION V Date NOV 21 1958

MONTHLY REPORT OF OPERATOR

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

Form MF-104A
(April 1952)

Budget Bureau No. 42-R1151.1
Approval expires 6-30-53.

RECEIVED NOV 26 1958 O.M.

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

Month of October 195 8 Docket No. DMEA 4286 Contract No. Idm E 982
Operator's Name The New Jersey Zinc Company Minerals Zinc
Address Jefferson City, Tennessee

OPERATION	Unit	Costs This Month	Units This Month	Costs to Date	Units to Date	Unit Costs to Date	Authorized by Contract: Units	Authorized by Contract: Unit Costs
Drifting								
Crosscutting								
Raising								
Shafts								
Winzes EX	Ft.	-	-	2,072.30	658	2.65		2.65
Drilling: Core 0-1000	"	4952.75	1801	53,735.00	19,540		30,000	2.75
Churn 1000-1500	"	1140.00	380	7,632.00	2,544		5,000	3.00
Auger Assays	Ea.	6.00	6	82.00	82		200	1.00
Stripping								
Trenching								
Test Pits								
Roads and Trails								
Sup.& Tech.Serv.	Ft.	588.87	2,181	6,173.82	22,866			0.27
Total Distributed Costs		6687.62		69,695.12				Total Costs Authorized by Contract
Operating Equipment Purchased								
Initial Rehabilitation and Repairs								
New Buildings, Improvements, etc.								
Total Costs		6687.62		69,695.12				

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

Date 11/1/58 Operator The New Jersey Zinc Co.

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

Remarks: This report covers BW-49 BW-50

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

(Instructions on reverse)

(For Government use only)

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

NOV 21 1958

INSTRUCTIONS

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

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

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

GPO 83-38475

Report for October 1958

Big War Creek Area DMEA 4286

Contract Idm # 982 (Zinc)

One drill operated on this project during the month and completed two holes for a total of 2181'. The accompanying map, AX-TENN-B-100 shows these holes in green.

Hole BW-49 - N.J.Z. Mineral and mining rights
George Amyx surface

Coordinates: 60,840.42 N; 30,860.59 E
Elevation: 1602.11

Results:

0- 3	Clay
3- 184	Chickamauga limestone
184- 258	Transitional zone
258- 980	Mascot dolomite. Abundant faulting and fracturing
980- 997	Fragments of chert matrix in fault zone. Scattered shines sphalerite 983-991
997-1144	Upper Kingsport dolomite. Scattered traces of sphalerite 1008-1113
1144-1154	10' - 1.43% zinc (5' core)
1154-1160	6' - 2.28% zinc (5' core)
1160-1164	4' - 1.80% zinc (4' core)
1164-1170	6' - 1.92% zinc (3' core)

1144-1170 - - 26' - 1.80% zinc

1170-1207	Upper Kingsport dolomite. Scattered traces of sphalerite
1207	TR
1207-1380	(Bottom) Lower Kingsport dolomite. Scattered traces and shines of sphalerite 1207-1259 100% dolomite in R and S beds

Hole BW-50 - N.J.Z. Mineral and Mining Rights
H. Helton surface

Coordinates: 60,987.90 N; 30,104.82 E
Elevation: 1488.75

Results:

0-411	Mascot dolomite
411-573	Upper Kingsport dolomite
573	TR ?

573-601 - - Lower Kingsport dolomite breccia.
Scattered traces of sphalerite 583-598
601-606 - - 5' - 1.43% zinc
606-611 - - 5' - 1.43% zinc
611-778 - - Lower Kingsport dolomite and limestone
778-801 - - (Bottom) Longview dolomite
63% dolomite in R and S beds.

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O. M. E.
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DMEA EXPLORATION PROJECT

INTERIM REPORT

DMEA-4286, Idm-E982 - zinc

Operator: The New Jersey Zinc Co. Jefferson City, Tennessee

Location: Big War Creek Area, Hancock and Hawkins Counties, Tennessee

Summary of Drilling Completed

	Since last inspection	To date
Number of holes	1	26
Footage	1380	22,065

Holes showing:

a)	Commercial zinc ore----------	3
b)	Non-commercial zinc mineralization--------	17
c)	No zinc mineralization----------	6

Additional data on the one hole completed during the interim follows:

Hole No. BW-49 - Located 200 feet southeast of BW-33. Coordinates N60840.24, E30860.59; elevation at collar of hole 1602.11. Drilling began 9/20/58 and was completed 10/16/58. Brief log of hole: 0-3 overburden; collared in Chickamauga fm; top of Mascot at 258 ft; Fault zones from 831 to 905 ft, 947 to 1000 ft; scattered local faults and fractures from 1000 to 1117 ft; fault zone from 1117 to 1164 ft; top of "R" bed at 1207 ft; hole bottomed at 1380 ft.

Mineralization: Strong pyrite in mylonite from 970 to 975 ft; 7 ft (983-990) est. 1/2% Zn; traces of sphalerite at 1008, 1024, 1047, 1048, 1049; 5 ft (1042-1047) est. 3% Zn; Shines at 1052, 1054, 1061 to 1062 ft; traces at 1063, 1064 and 1065.

Shines at 1105, pyrite and sphalerite at 1107 ft; pyrite at 1110 ft; trace at 1112 ft; 26 ft (1144-1170) est. 2.5% Zn; 15' (1224-1239) scattered traces and shines; 7 ft (1239-1246) est. 2% Zn; 11 ft (1248-1259) scattered traces. The New Jersey Zinc Company does not consider this hole to be an ore hole under present economic conditions.

Current drilling is in progress on BW-50 located on Annis Helton property. Core was examined to a depth of 585 feet. The estimated total depth of this hole is 800 feet.

Inspected: October 28, 1958

L. E. Shirley, Mining Engineer
Bureau of Mines (OME)

Helmuth Wedow, Jr., Geologist
Geological Survey (OME)

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DATE	INITIALS	CODE
10/20	C	220
"		110
10/24		800
11/21		500

DMEA EXPLORATION PROJECT

INTERIM REPORT

DMEA-4286, Idm-E982 - Zinc

Operator: The New Jersey Zinc Company, Jefferson City, Tennessee

Location: Big War Creek Area, Hancock & Hawkins Counties, Tenn.

Summary of Drilling Completed

	Since last inspection	To date
Number of Holes	1	25
Footage	1179	20,685

Holes showing:

a) Commercial zinc ore---------- 3
b) Non-commercial zinc mineralization-------- 16
c) No zinc mineralization---------- 6

Additional data on the one hole completed during the interim:

Hole No. BW-48 - Located 200 feet S54°W from BW-49 on Annis Helton property. Depth 1179 feet. Coordinates N60,774.65, E30,460.91E; Collar elevation 1581.15 feet. Drilling began August 28, 1958 and was completed September 19, 1958. Brief log of Hole: 0-5 ft overburden; collared in Chickamauga; top of Mascot at 112 ft; quartzite from 697 to 705 ft; top of Kingsport (CM) at 827 ft; brown oolite marker at 879 ft; top of "R" bed at 1013 ft; "T" bed from 1174 to 1179 ft; hole bottomed at 1179 ft.

Mineralization: Shines of sphalerite at 90 and 100 ft; traces at 945 ft; shines from 965 to 966; scattered shines from 990 to 998 ft.

Current drilling is in progress on BW-49, located 200 ft southeast of BW-33. Core was observed to a depth of 1113 ft. Total estimated depth is 1320 ft. Considerable traces, shines and one

short run of zinc mineralization hasbeen encountered to the present depth.

Mr. V. J. Lynch, Member OME Field Team accompanied the Examiners on this inspection.

Inspected: October 8, 1958

L. E. Shirley, Mining Engineer
Bureau of Mines (OME)

Helmuth Wedow, Jr., Geologist
Geological Survey (OME)

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

Budget Bureau No. 42-R1036.5

RECEIVED OCT 20 1958 O.M.E.

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION

PAID ON VOUCHER & SCHEDULE OF PAYMENTS K- [illegible]

OPERATOR'S MONTHLY REPORT AND VOUCHER

Month of September, 1958 Docket No. DMEA 4286 Contract No. Idm E 982
Operator's Name The New Jersey Zinc Company Minerals Zinc
Address Jefferson City, Tennessee
Contract Amount, $ 107,150.00 Government Participation: 50 % Amount, $ 53,575.00

ITEMS OF COSTS	FOR OPERATOR'S USE			FOR GOVERNMENT USE ONLY		
	Monthly Total	Totals Previously Reported	Totals To Date	Approved Monthly Total	Approved Totals Previously Reported	Approved Totals To Date
(1) Independent Short Form Contracts:						
Drilling	3287.00	54,059.55	57,346.55			
Bulldozing						
Crosscutting						
Drifting						
(2) Labor and Supervision:						
Labor						
Supervision	318.33	5,266.62	5,584.95			
Technical Services						
(3) Operating Mat'ls. and Supplies:						
Timber						
Explosives						
Pipe						
Track						
(4) Operating Equipment:						
Rental						
Purchase						
Depreciation						
(5) Initial Rehabilitation and Repairs						
(6) New Bldgs., Improvements, etc.						
(7) Miscellaneous:						
Repairs to Equipment						
Sampling and Analysis	-	76.00	76.00			
Payroll Taxes						
Liability Insurance						
(8) Contingencies (specify):						
TOTALS	3,605.33	59,402.17	63,007.50	3605.33	59402.17	63,007.50

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

Date 10/1/58 *Payee The New Jersey Zinc Company

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

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

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

(Instructions on reverse)

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

$ 1802.66

Signature [signature] (Authorized Certifying Officer)

Date OCT 17 1958 Vou. No. 49

(See other side)

14

1802.67

(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. Idm-E 982 in accordance with the terms of the contract.

Signature Lawrence E. Shirley Title MINING ENGINEER U. S. BUREAU OF MINES Date OCT 16 1958

APPROVAL BY DMEA EXECUTIVE OFFICER OR ALTERNATE:

Signature Robert A. Lawrence Title EXECUTIVE OFFICER OME FIELD TEAM REGION V Date OCT 16 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 Sept. 195 8 Docket No. DMEA 4286 Contract No. Idm E 982

Operator's Name The New Jersey Zinc Company Minerals Zinc

Address Jefferson City, Tennessee

OPERATION	Unit	Costs This Month	Units This Month	Costs to Date	Units to Date	Unit Costs to Date	Authorized by Contract: Units	Authorized by Contract: Unit Costs
Drifting								
Crosscutting								
Raising								
Shafts								
Winzes								
Drilling: Core EX	Ft.	-	-	2,072.30	658	2.65		2.65
Churn 0-1000	"	2750.00	1000	48,782.25	17,739	2.75	30,000	2.75
Auger 1000-1500	"	537.00	179	6,492.00	2,164	3.00	5,000	3.00
Stripping Assays	Ea.	-	-	76.00	76	1.00	200	1.00
Trenching								
Test Pits								
Roads and Trails								
Sup. & Tech. Ser.	Ft.	318.33	1179	5,584.95	20,685	0.27	35,000	0.27
Total Distributed Costs		3605.33		63,007.50				Total Costs Authorized by Contract
Operating Equipment Purchased								
Initial Rehabilitation and Repairs								
New Buildings, Improvements, etc.								
Total Costs		3605.33		63,007.50				

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

Date 10/1/58 Operator The New Jersey Zinc Co.

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

Remarks: This report covers BW-48

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

(Instructions on reverse)

(For Government use only)

INSTRUCTIONS

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

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

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

GPO 872894

Report for September 1958

Big War Creek Area DMEA 4286

Contract Idm E 982 (Zinc)

One drill operated on this project during the month and completed one hole for a total of 1179'. The accompanying map, AX-TENN-B-100, shows this hole in green.

Hole BW-48 - Annis Helton property

Coordinates: 60,774.65 N; 30,460.91 E
Elevation: 1581.15

Results:

0- 5	Clay
5- 112	Chickamauga limestone. Blebs sphalerite in fractures 90,100
112- 827	Mascot dolomite
827	Chert Matrix
827-1013	Upper Kingsport dolomite Rare traces sphalerite 945, 966 Shines sphalerite 990-998
1013	TR
1013-1174	Lower Kingsport limestone and dolomite
1174-1179	(Bottom) Longview dolomite R and S beds 42% dolomite

Note:

A surveying error was discovered affecting six previously drilled holes. Corrected coordinates and elevations are:

BW-29	60,893.47 N	30,619.85 E	1610.36'
BW-30	60,983.99 N	30,563.95 E	1637.39'
BW-32	61,076.65 N	30,512.52 E	1656.99'
BW-33	60,805.18 N	30,670.07 E	1590.20'
BW-36	60,762.08 N	30,662.39 E	1585.56'
BW-39	60,626.07 N	30,799.84 E	1560.00'

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DATE	INITIALS	CODE
9-19	C	220
19	[illegible]	100
22	[illegible]	110
9/22	[illegible]	800
9/24	[illegible]	500

DMEA EXPLORATION PROJECT

INTERIM REPORT

DMEA-4286, Idm-E982 (zinc)

Operator: The New Jersey Zinc Co., Jefferson City, Tennessee

Location: Big War Creek Area, Hancock and Hawkins Counties, Tenn.

Drilling has resumed on this contract after a formal recess provided by Amendment No.8 of the contract. The amendment provided for work to be suspended during the period beginning May 1, 1958, and ending not later than November 1, 1958.

Diamond drill hole BW-48, located 200 feet S54°W from BW-29 on the Annis Helton property, was begun August 28, 1958. Core was examined to a depth of 736 feet; anticipated total depth is 1200 feet.

Inspected: Sept. 8, 1958

L. E. Shirley, Mining Engineer
Bureau of Mines

Helmuth Wedow, Jr. Geologist
Geological Survey.

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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 April, 1958 Docket No. DMEA 4286 Contract No. Idm E 982
Operator's Name The New Jersey Zinc Company Minerals Zinc
Address Jefferson City, Tennessee
Contract Amount, $ 107,150.00 Government Participation 50 % Amount, $ 53,575.00

ITEMS OF COSTS	FOR OPERATOR'S USE: Monthly Total	Totals Previously Reported	Totals To Date	FOR GOVERNMENT USE ONLY: Approved Monthly Total	Approved Totals Previously Reported	Approved Totals To Date
(1) Independent Short Form Contracts:						
Drilling	5,694.15	48,365.40	54,059.55	7/15/58		
Bulldozing						
Crosscutting						
Drifting						
(2) Labor and Supervision:						
Labor						
Supervision	554.85	4,711.77	5,266.62			
Technical Services						
(3) Operating Mat'ls. and Supplies:						
Timber						
Explosives						
Pipe						
Track						
(4) Operating Equipment:						
Rental						
Purchase						
Depreciation						
(5) Initial Rehabilitation and Repairs						
(6) New Bldgs., Improvements, etc.						
(7) Miscellaneous:						
Repairs to Equipment						
Sampling and Analysis	1.00	75.00	76.00			
Payroll Taxes						
Liability Insurance						
(8) Contingencies (specify):						
TOTALS	6,250.00	53,152.17	59,402.17	6250.00	53152.17	59402.17

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

Date 5/1/58 *Payee The New Jersey Zinc Company

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

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

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

(Instructions on reverse)

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

$ 3125.00

Signature Helen R. Miller
(Authorized Certifying Officer)

Date JUN 2 1958 Vou. No. 174
(See other side)

3125.00

(For Government use only)

CERTIFICATION BY GOVERNMENT REPRESENTATIVE:

I certify that to the best of my knowledge and belief the contractor submitting this voucher is operating a Defense Minerals Exploration Administration project under Contract No. E-982 in accordance with the terms of the contract.

Signature W. Lynch Title MINING ENGINEER U. S. BUREAU OF MINES Date MAY 20 1958

APPROVAL BY DMEA EXECUTIVE OFFICER OR ALTERNATE:

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

MONTHLY REPORT OF OPERATOR

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

Form MF-104A
(April 1952)

Budget Bureau No. 42-R1151.2

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

RECEIVED JU 5

Month of April 1958 Docket No. DMEA 4286 Contract No. Idm E 982
Operator's Name The New Jersey Zinc Company Minerals Zinc
Address Jefferson City, Tennessee

OPERATION	UNIT	COSTS THIS MONTH	UNITS THIS MONTH	COSTS TO DATE	UNITS TO DATE	UNIT COSTS TO DATE	AUTHORIZED BY CONTRACT Units	AUTHORIZED BY CONTRACT Unit Costs
Drifting								
Crosscutting								
Raising								
Shafts								
Winzes								
Drilling: Core Ex	Ft.	1,049.40	396	2,072.30	658 982	2.65		2.65
Churn 0-1000	"	3,654.75	1329	46,032.25	16,739	2.75	30,000	2.75
Auger 1000-1500	"	990.00	330	5,955.00	1,985	3.00	5,000	3.00
Stripping Assays	Ea.	1.00	1	76.00	76	1.00	200	1.00
Trenching								
Test Pits								
Roads and Trails								
Sup. & Tech. Serv.	Ft.	554.85	2055	5,266.62	19,506	0.27	35,000	0.27
TOTAL DISTRIBUTED COSTS		6,250.00		59,402.17				TOTAL COSTS AUTHORIZED BY CONTRACT
Operating Equipment Purchased								
Initial Rehabilitation and Repairs								
New Buildings, Improvements, etc.								
TOTAL COSTS		6,250.00		59,402.17				

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

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

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

REMARKS: This report covers BW-46 and BW-47

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

(Instructions on reverse)

(For Government use only)

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

INSTRUCTIONS

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

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

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

GPO 872894

Report for April 1953

Big War Creek Area [illegible] 4235

Contract Ids B 902 (Zinc)

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

Hole BW-46 - Cameron Short property - 950 feet northeast of BW-39 on strike

Coordinates: 61,221.311; 31,439.993
Elevation: 1636.21

0 - 13 - - - Clay
13 -276 - - - Chickamauga limestone
276 -975 - - - Fascot dolomite
975 -1153 - - Upper Kingsport dolomite. Trace sphalerite 1121
1153 -1155 - - 2' mineralization estimated at 3% Zinc
1155 -1159 - - Upper Kingsport dolomite
1159 - - TB marker
1159 -1303 - - Lower Kingsport dolomite and limestone
1303 -1330 - - (Bottom) Longview dolomite

Hole BW-47 - Guy Seals property - New Jersey Zinc Company mineral and mining rights - 100' SW of BW-45 on strike

Coordinates: 62,211.[illegible]; 31,559.069
Elevation: 1710.15

0 - 37 - - Clay
37 - 400* - - Fascot dolomite
400 - 551 - - Upper Kingsport dolomite, scattered traces sphalerite 521-525
551 - - TB marker
551 - 656 - - Lower Kingsport dolomite. Trace sphalerite at 655
656 - 661 - - 5' assaying at 4.47% Zinc
661 - 607 - - Lower Kingsport dolomite, scattered traces sphalerite 661-667
607 - 725 - - (Bottom) Longview dolomite

* The chert matrix (top of Kingsport formation) was not developed in this hole.

DMEA EXPLORATION PROJECT

INTERIM REPORT

DMEA-4286, Idm-E982 - Zinc

Operator: The New Jersey Zinc Company, Jefferson City, Tennessee

Location: Big War Creek Area, Hancock & Hawkins Counties, Tenn.

This contract is temporarily recessed pending approval of the Operator's request for a formal recess. Drilling completed since the last inspection of March 27, 1958 to the date of recess is reported below. A summary of all drilling completed to date follows:

Drilling Completed

Number of holes completed since last inspection....	2
Footage in holes completed since last inspection...	2,055
Total number of holes completed to date.....	24
Total footage in holes completed to date.....	19,506
Number of holes showing commercial zinc ore.....	3
Number of holes showing non-commercial zinc mineralization.....	15
Number of barren holes.....	6

Additional data on the two holes completed during the interim follows:

Hole No.	Property	Total depth	Remarks
BW-46	Cameron Short	1330	Location: 900' NE along strike from BW-36. Coordinates: N61,228.31, E31439.99; collar elev. 1636.28. Drilling began 1/29/58 and was completed 4/4/58. Brief log of hole: 0-13 overburden, collared in Chickamauga; top of Mascot (?) @ 166, chert matrix @ 975; "U"-255" @ 1055, top of "R" @ 1159; "T" bed from 1303 to 1309, bottom @ 1330. Mineralization: Traces of sphalerite @ 1121; 2' (1153-1155) of est. 3% Zn.

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"		110
5/20		800
5/22	copy	500

Hole No.	Property	Total depth	Remarks
BW-47	Guy Seals	725	Coordinates: N62,211.82, E31,558.06-collar elevation 1718'. Brief log of hole: 0-37 overburden; collared in Mascot fm; chert matrix @ 317; top of "R" @ 551; "T" bed from 687 to 697; bottom @ 725. Mineralization: Scattered traces of sphalerite from 524 to 525, @ 655 and from 661 to 667. 5' (656-661) of 4.47% Zn. Pyrite-scattered traces @ 614, 702,703, from 706 to 708,714, from 717 to 719, @ 722 and @ 725.

Core from both of these holes were examined at the core storage shed at the Company's Flat Gap Mine.

Inspected: May 8, 1958

V. J. Lynch and L. E. Shirley,
Mining Engineers, Bureau of Mines
DMEA

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

Budget Bureau No. 42-R1036.5

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

Guaranteed

PAID ON VOUCHER & SCHEDULE OF PAYMENTS K- 58

Month of March 8 1958 Docket No. DMEA 4286

Operator's Name The New Jersey Zinc Company

Address Jefferson City, Tennessee

Contract No. Idm E 982

Minerals Zinc

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

ITEMS OF COSTS	FOR OPERATOR'S USE: Monthly Total	Totals Previously Reported	Totals To Date	FOR GOVERNMENT USE ONLY: Approved Monthly Total	Approved Totals Previously Reported	Approved Totals To Date
(1) Independent Short Form Contracts:	2063.80	46,301.60	48,365.40	7/15/58		
Drilling						
Bulldozing						
Crosscutting						
Drifting						
(2) Labor and Supervision:	205.20	4,506.57	4,711.77			
Labor						
Supervision						
Technical Services						
(3) Operating Mat'ls. and Supplies:						
Timber						
Explosives						
Pipe						
Track						
(4) Operating Equipment:						
Rental						
Purchase						
Depreciation						
(5) Initial Rehabilitation and Repairs						
(6) New Bldgs., Improvements, etc.						
(7) Miscellaneous:						
Repairs to Equipment	-	75.00	75.00			
Sampling and Analysis						
Payroll Taxes						
Liability Insurance						
(8) Contingencies (specify):						
TOTALS	2269.00	50,883.17	53,152.17	2269.00	50,883.17	53,152.17

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

Date 4/1/58 *Payee The New Jersey Zinc Company

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

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

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

(Instructions on reverse)

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

$ 1134.50

Signature [signature] (Authorized Certifying Officer)

Date APR 24 1958 Vou. No. 163

(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-982 in accordance with the terms of the contract.

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

APPROVAL BY DMEA EXECUTIVE OFFICER OR ALTERNATE:

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

MONTHLY REPORT OF OPERATOR

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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 4286 Contract No. Idm E 982

Operator's Name The New Jersey Zinc Company Minerals Zinc

Address Jefferson City, Tennessee

OPERATION	Unit	Costs This Month	Units This Month	Costs to Date	Units to Date	Unit Costs to Date	Authorized by Contract: Units	Authorized by Contract: Unit Costs
Drifting								
Crosscutting								
Raising								
Shafts EX	Ft.	694.30	262	1,022.90	386	2.65		2.65
Winzes 0-1000	"	1369.50	498	42,377.50	15,410	2.75	30,000	2.75
Drilling: Core 1000-1500	"	-	-	4,965.00	1,655	3.00	5,000	3.00
Churn Assays	Ea.	-	-	75.00	75	1.00	200	1.00
Auger								
Stripping								
Trenching								
Test Pits								
Roads and Trails Sup. & Tech. Ser.	Ft.	205.20	760	4,711.77	17,457	0.27	35,000	0.27
Total Distributed Costs		2269.00		53,152.17				Total Costs Authorized by Contract
Operating Equipment Purchased								
Initial Rehabilitation and Repairs								
New Buildings, Improvements, etc.								
Total Costs		2269.00		53,152.17				

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

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

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

Remarks: This report covers BW-45

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

(Instructions on reverse)

(For Government use only)

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

INSTRUCTIONS

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

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

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

GPO 872894

Report for March, 1958

Big War Creek Area DMEA 4286

Contract Idm E 982 (Zinc)

Two drills operated on this project during the month and one hole was completed.

<u>Hole BW-45</u> - Guy Seals property. NJZ mineral and mining rights. 100' SW of BW-41 on strike

Coordinates: 62,259.37 N; 31,653.19 E
Elevation: 1752.26

0- 40	- - Clay
40-420	- - Mascot dolomite
420-564	- - Upper Kingsport dolomite. Shine sphalerite 515. Trace sphalerite 547
564-572	- - 8' mineralization estimated @ 1% zinc
572-585	- - Upper Kingsport dolomite. Trace sphalerite 584
585	- - TR marker
585-589	- - Lower Kingsport dolomite
589-592	- - 4' mineralization estimated @ 1/2% zinc
593-754	- - Lower Kingsport dolomite
754-760	- - (Bottom) Longview dolomite

Map AX-TENN-100 showing the location of drill holes and the general geologic relations is attached to this report. Also included are sections AX-TENN-C-1269, B-1338, and B-1358 showing details of all holes drilled during the first quarter of 1958.

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DMEA EXPLORATION PROJECT

INTERIM REPORT

DMEA-4286, Idm-E982- Zinc

Operator: The New Jersey Zinc Company, Jefferson City, Tennessee

Location: Big War Creek Area, Hancock and Hawkins Counties, Tenn.

Diamond drilling data on the above project to date and progress made since the last inspection of March 4, 1958 is summarized as follows:

Drilling Completed

Number of holes completed since last inspection....	1 ✓
Footage completed since last inspection.....	760 ✓
Total number of holes completed to date.....	22 ✓
Total footage in holes completed to date.....	17,451 ✓
Number of holes showing commerical zinc ore.....	3 ✓
Number of holes showing non-commercial zinc mineralization.....	13
Number of barren holes.....	6

Available data on the one hole completed during the interim follows:

Hole No.	Property	Total depth	Remarks
BW-45	Guy Seals	760	Brief log of the hole: 0-40 overburden; Collared in Mascot fm; Top of "R" bed @ 583; bottom of "E" bed @ 644; top of "T" bed @ 754; bottomed @ 760. Mineralization: Shines @ 515; traces @ 547 and 584; 8' (564-572) of est. 1% Zn and 4' (589-593) of est. 1/2% Zn.

In Progress

Number of holes in progress.....	2 ✓
Footage drilled in incompleted holes at time of inspection.....	1,412

Additional data on the two holes in progress follows:

Hole No.	Property	Present depth	Estimated Tot.depth	Remarks
BW-46	Cameron Short	1083	1300	Continued log: Chert matrix @ 975; "U"-255" @ 1055'. No mineralization to date.
BW-47	Guy Seals	329	615	Drilling began 3-11-58. Brief log of the hole to date: 0-37 overburden; collared in Mascot fm., chert matrix @ 317; presently drilling in Kingsport fm. No mineralization.

Inspected: March 27, 1958

L. E. Shirley, Mining Engineer
Bureau of Mines

Helmuth Wedow, Jr., Geologist
Geological Survey

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Report for February 1958

Big War Creek Area DMEA 4286

Contract Idm E 982 (Zinc)

Two drills operated on the project during the month. Due to mechanical difficulties and unusually adverse weather, no holes were completed.

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DATE	INITIAL	CODE
3/13	C	220
/13	[illegible]	100
"	[illegible]	110
3/14	[illegible]	800
3/14	[illegible]	500

DMEA EXPLORATION PROJECT

INTERIM REPORT

DMEA-4286, Idm-E982-zinc

Operator: The New Jersey Zinc Company, Jefferson City, Tennessee

Location: Big War Creek Area, Hancock and Hawkins Counties, Tenn.

Diamond drilling data on the above project to date and progress made since the last inspection of February 6, 1958 is summarized as follows:

Drilling completed

Number of holes completed since last inspection..... 0
Footage in holes completed since last inspection.... 0
Total number of holes completed todate..... 21
Total footage in holes completed todate 16,691*
Number of holes showing commercial zinc ore.... 3
Number of holes showing non-commercial zinc mineralization..... 12
Number of barren holes..... 6

* footage in holes BW-39 and BW-40 totals 1,859 feet instead of 1,839 feet as reported December 5, 1957.

Drilling in Progress

Number of holes in progress..... 2
Footage drilled in incompleted holes at time of inspection..... 1,327

Additional data on the two holes in progress at this time is as follows:

Hole No.	Property	Present depth	Estimated total depth	Remarks
BW-45	Guy Seals	649	750'	Coordinates: 62,259.37 N, 31,653.19 East. Collar elevation 1752.26. A brief log todate is as follows: 0-40 overburden, top of "TR"(?) bed @ 585, bottom of "E" bed @ 644.

Hole No.	Property	Present depth	Estimated total depth	Remarks
BW-45	Guy Seals	649	750'	cont'd Mineralization: Shine of sphalerite @ 515, traces of sphalerite @ 547 and 584. 8' (564-572) of est. 1% Zn; 4' (589-593) of est. 1/2%Zn. EX drilling from 498 to present depth.
BW-46	Cameron Short	678	1300'	Presently drilling in Mascot @ 678 - No additional data available.

Considerable drilling difficulty has been experienced in these two holes due to cavities in BW-45 and hanging of drill rods in BW-46. As soon as a proper jack can be obtained to remove casing, BW-46 will resume drilling.

Inspected: March 4, 1958

L. E. Shirley, Mining Engineer
U. S. Bureau of Mines

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DATE	REMARKS	CODE
2-18	C	220
19	Corr	100
		110
2/20		800
2/21		500

INTERIM REPORT

DMEA-4286, Idm-E982-Zinc

Operator: The New Jersey Zinc Co., Jefferson City, Tennessee

Location: Big War Creek Area, Hancock and Hawkins Counties, Tenn.

Diamond drilling data on the above project todate and progress made since the last inspection of January 14, 1958 is summarized as follows:

Drilling Completed

Number of holes completed since last inspection---	2
Footage in holes completed since last inspection---	1,290
Total number of holes completed to date----------	21
Total footage in holes completed to date----------	16,671*
Number of holes showing commercial zinc core------	3
Number of holes showing non-commercial zinc mineralization----------	12
Number of barren holes----------	6

Additional data on the two holes completed during the Interim is as follows:

Hole No.	Property	Total depth	Remarks
BW-43	Guy Seals	850	Brief log continued from Interim of Jan. 14, 1958 is as follows: top of "T" bed @ 795, bottomed @ 850. Mineralization: Previously reported.
BW-44	Annis Helton	440	Coordinates and Elevation @ collar not available at time of this inspection. Brief log of hole is as follows: 0 - 8' overburden, chert-matrix @ 108, U-225 @ 161, top of "TR" @ 255, no "A" recognizable, top of "E" @ 305, top of "T" @ 410, bottom @ 440. Mineralization: Traces of Zn @ 153 and 281. Trace of pyrite @ 164.

Drilling in Progress

Number of holes in progress----------	2
Footage drilled in incompleted holes at time of inspection----------	790

* Should be 16,691'
Felbert 2/20/58

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-42

OPERATOR'S MONTHLY REPORT AND VOUCHER

Month of January, 1958 Docket No. DMEA 4286 Contract No. Idm E 982
Operator's Name The New Jersey Zinc Company Minerals Zinc
Address Jefferson City, Tennessee
Contract Amount, $ 107,150.00 Government Participation: 50 % Amount, $ 53,575.00

ITEMS OF COSTS	FOR OPERATOR'S USE			FOR GOVERNMENT USE ONLY		
	Monthly Total	Totals Previously Reported	Totals To Date	Approved Monthly Total	Approved Totals Previously Reported	Approved Totals To Date
(1) Independent Short Form Contracts:						
Drilling	5500.00	40,801.60	46,301.60	3/17/58		
Bulldozing						
Crosscutting						
Drifting						
(2) Labor and Supervision:						
Labor						
Supervision	540.00	3,966.57	4,506.57			
Technical Services						
(3) Operating Mat'ls. and Supplies:						
Timber						
Explosives						
Pipe						
Track						
(4) Operating Equipment:						
Rental						
Purchase						
Depreciation						
(5) Initial Rehabilitation and Repairs						
(6) New Bldgs., Improvements, etc.						
(7) Miscellaneous:						
Repairs to Equipment						
Sampling and Analysis		75.00	75.00			
Payroll Taxes						
Liability Insurance						
(8) Contingencies (specify):						
TOTALS	6040.00	44,843.17	50,883.17	6040.00	44 843.17	50 883.17

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

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

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

(Instructions on reverse)

Pursuant to authority vested in me, I certify that this account is correct and proper for payment in the amount of:
$ 3020.00
Signature Helen R. Miller
(Authorized Certifying Officer)
Date FEB 25 1958 Vou. No. 130
(See other side)

3020.00

(For Government use only)

CERTIFICATION BY GOVERNMENT REPRESENTATIVE:

I certify that to the best of my knowledge and belief the contractor submitting this voucher is operating a Defense Minerals Exploration Administration project under Contract No. E-982 in accordance with the terms of the contract.

Signature [illegible] Title MINING ENGINEER U. S. BUREAU OF MINES Date FEB 19 1958

APPROVAL BY DMEA EXECUTIVE OFFICER OR ALTERNATE:

Signature Robert A. Laurence Title EXECUTIVE OFFICER DMEA FIELD TEAM REGION V Date FEB 19 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 FEB 27 1958 D.M.E.A.

OPERATOR'S UNIT COST AND PROGRESS REPORT

Month of January 1958 Docket No. DMEA 4286 Contract No. Idm E 982

Operator's Name The New Jersey Zinc Company Minerals Zinc

Address Jefferson City, Tennessee

OPERATION	UNIT	COSTS THIS MONTH	UNITS THIS MONTH	COSTS TO DATE	UNITS TO DATE	UNIT COSTS TO DATE	AUTHORIZED BY CONTRACT Units	AUTHORIZED BY CONTRACT Unit Costs
Drifting								
Crosscutting								
Raising								
Shafts								
Winzes								
Drilling: Core EX	Ft.			328.60	124	2.65		2.65
Churn 0-1000	"	5500.00	2000	41,008.00	14,912	2.75	30,000	2.75
Auger 1000-1500	"	-	-	4,965.00	1,655	3.00	5,000	3.00
Stripping Assays	Ea.	-	-	75.00	75	1.00	200	1.00
Trenching								
Test Pits								
Roads and Trails								
Sup. & Tech. Ser.		540.00	2000	4506.57	16,691	0.27	35,000	0.27
TOTAL DISTRIBUTED COSTS		6040.00		50,883.17				TOTAL COSTS AUTHORIZED BY CONTRACT
Operating Equipment Purchased								
Initial Rehabilitation and Repairs								
New Buildings, Improvements, etc.								
TOTAL COSTS		6040.00		50,883.17				

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

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

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

REMARKS: This report covers holes BW-42, 43, 44

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

(Instructions on reverse)

(For Government use only)

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

INSTRUCTIONS

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

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

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

GPO 872894

Report for January 1958

Big War Creek Area DMEA 4286

Contract Idm E 982 (Zinc)

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

<u>Hole BW-42</u> - Annis Helton property - NJZ mineral and mining rights - 300 feet updip from BW-32

Coordinates: 61,370.23 N; 30,345.24 E
Elevation: 1642.94

0- 23 - - Clay
23-391 - - Mascot dolomite
391-535 - - Upper Kingsport dolomite & limestone
535 - - TR marker
535-643 - - Lower Kingsport dolomite & limestone
643-710 - -(Bottom) Longview dolomite & limestone

<u>Hole BW-43</u> - Guy Seals property - NJZ mineral and mining rights. 100' NE of BW-41 on strike

Coordinates: 62,364.93 N; 31,827.31 E
Elevation: 1747.33

0- 52 - - Clay
52-403 - - Mascot dolomite
403-654 - - Upper Kingsport dolomite
654 - - TR marker. Scattered traces sphalerite 575-593
654-850 - - (Bottom) Lower Kingsport dolomite and limestone

<u>Hole BW-44</u> - Annis Helton property. NJZ mineral & mining rights. 300 feet updip from BW-42

Coordinates: 61,617.66 N; 30,197.28 E
Elevation: 1642.14

0- 8 - - Clay
8-108 - - Mascot dolomite
108-255 - - Upper Kingsport dolomite
255 - - TR marker. Trace of sphalerite 153
255-410 - - Lower Kingsport dolomite & limestone Trace sphalerite @ 281
410-440 - - (Bottom) Longview dolomite

Additional data on the two holes in progress at this time is as follows:

Hole No.	Property	Present depth	Est.total depth	Remarks
BW-45	Guy Seals	424	800'	Location: 100' southwest of BW-41. Drilling began Jan.18,1958. Presently drilling in Mascot fm. No core recovery from 398 to 405, 409 to 412, 416 to 420-0 to 40' overburden.
BW-46	Cameron Short	366	1300'	Location: 900' northeast along strike from BW-36. Drilling began 1-29-58. 0 to 13' overburden. Coordinates and elevation not available todate.

Inspected: ~~January~~ February 6, 1958

L. E. Shirley, Mining Engineer
U.S. Bureau of Mines

Helmuth Wedow, Jr. Geologist
U. S. Geological Survey

z

INTERIM REPORT

DMEA-4286, Idm-E982-Zinc

Operator: The New Jersey Zinc Co., Jefferson City, Tennessee

Location: Big War Creek Area, Hancock & Hawkins Counties, Tenn.

Diamond drilling data on the above project todate and progress made since the last inspection of December 5, 1957 is summarized as follows:

Drilling Completed:

Number of holes completed since last inspection.....	2
Footage in holes completed since last " ...	1,470
Total number of holes completed todate ...	19
Total footage in holes completed todate.....	15,381
Number of holes showing commercial zinc ore	3
Number of holes showing non-commercial zinc mineralization	10
Number of barren holes.....	6

Additional data on the two holes completed during the Interim is as follows:

Hole No.	Property	Total Depth	Remarks
BW-41	Guy Seals	760	Coordinates: 62,315.25 North - 31,738.23 East Elevation @ Collar 1753.0. Drilling began on Nov.28, 1957 and the hole was completed on Dec. 21, 1957 Continued log is as follows: Chert matrix @ 409, "TR" bed @ 563, "T" bed from 698-709. Mineralization: Trace of sphalerite @ 539, Scattered local traces from 541 to 551, Trace @ 562, from 553 to 558 - 5 ft of Est. 1% Zn and from 742 to 746 - 4 ft of est. 1% Zn.

OFFICIAL FILE COPY
DMEA
RECEIVED JAN 23 1958
CODE
N 23 C 220
23 CCM 100
1/24 WKS 500

Region V

P. O. Box 217
Norris, Tennessee
January 17, 1958

Memorandum

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

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

Subject: Monthly reports and vouchers

We are enclosing two copies each of the following monthly reports and vouchers:

Idm-E937 The New Jersey Zinc Company
Docket No. DMEA-4126
19th payment - month of December
Amount $5314.36

Idm-E982 The New Jersey Zinc Company
Docket No. DMEA-4286
20th payment - month of December
Amount $1147.60

Helen R. Miller

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

RA COPY
DMEA
RECEIVED 1958
DATE | CODE
1/20 | 110
1/20 | 500
Kly

2-104 + 104 as

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

Budget Bureau No. 42-R1036.5

PAID ON VOUCHER & SCHEDULE OF PAYMENTS K36

RECEIVED JAN 20 1958 DMEA

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

Month of December, 1957 Docket No. DMEA 4286 Contract No. Idm E 982
Operator's Name The New Jersey Zinc Company Minerals Zinc
Address Jefferson City, Tennessee
Contract Amount $ 107,150.00 Government Participation: 50 % Amount, $ 53,575.00

ITEMS OF COSTS	FOR OPERATOR'S USE			FOR GOVERNMENT USE ONLY		
	Monthly Total	Totals Previously Reported	Totals To Date	Approved Monthly Total	Approved Totals Previously Reported	Approved Totals To Date
(1) Independent Short Form Contracts:						
Drilling	2090.00	38,711.60	40,801.60	3/17/58		
Bulldozing						
Crosscutting						
Drifting						
(2) Labor and Supervision:						
Labor						
Supervision / Technical Services	205.20	3,761.37	3,966.57			
(3) Operating Mat'ls. and Supplies:						
Timber						
Explosives						
Pipe						
Track						
(4) Operating Equipment:						
Rental						
Purchase						
Depreciation						
(5) Initial Rehabilitation and Repairs						
(6) New Bldgs., Improvements, etc.						
(7) Miscellaneous:						
Repairs to Equipment						
Sampling and Analysis	-	75.00	75.00			
Payroll Taxes						
Liability Insurance						
(8) Contingencies (specify):						
TOTALS	2295.20	42,547.97	44,843.17	2295.20	42,547.97	44,843.17

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

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

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

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

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

(Instructions on reverse)

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

$ 1147.60

Signature Helen R. Miller
(Authorized Certifying Officer)

Date JAN 17 1958 Vou. No. 118

(See other side)

10

1147.60

(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-982 in accordance with the terms of the contract.

Signature N. J. Lynch Title MINING ENGINEER BUREAU OF MINES Date JAN 16 1958

APPROVAL BY DMEA EXECUTIVE OFFICER OR ALTERNATE:

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

RECEIVED JAN 20 1958 D.M.E.A.

Month of December 1957 Docket No. DMEA 4286 Contract No. Idm E 982
Operator's Name The New Jersey Zinc Company Minerals Zinc
Address Jefferson City, Tennessee

OPERATION	UNIT	COSTS THIS MONTH	UNITS THIS MONTH	COSTS TO DATE	UNITS TO DATE	UNIT COSTS TO DATE	AUTHORIZED BY CONTRACT Units	AUTHORIZED BY CONTRACT Unit Costs
Drifting								
Crosscutting								
Raising								
Shafts								
Winzes								
Drilling: Core EX	Ft.	-	-	328.60	124	2.65		2.65
Churn 0-1000	"	2090.00	760	35,508.00	12,912	2.75	30,000	2.75
Auger 1000-1500	"	-	-	4,965.00	1,655	3.00	5,000	3.00
Stripping		-	-	75.00	75	1.00	200	1.00
Trenching								
Test Pits								
Roads and Trails								
Sup. & Tech. Ser.	"	205.20	760	3,966.57	14,691	0.27	35,000	0.27
TOTAL DISTRIBUTED COSTS		2295.20		44,843.17				TOTAL COSTS AUTHORIZED BY CONTRACT
Operating Equipment Purchased								
Initial Rehabilitation and Repairs								
New Buildings, Improvements, etc.								
TOTAL COSTS		2295.20		44,843.17				107,150.00

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

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

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

REMARKS: This report covers Hole DW-41

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

(Instructions on reverse)

(For Government use only)

[signature]
GEOLOGIST, U. S. G. S.
JAN 16 1958

INSTRUCTIONS

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

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

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

GPO 872894

Report for December, 1957

Big Bear Creek Area [illegible]

Contract Ida B 988 (Zinc)

Two drills operated on the project during the month and one hole was completed. The location of this hole is shown in green on the accompanying map. Sections of all holes drilled during the last quarter are attached.

<u>Hole BH-41</u> - Guy Senis property - [illegible] mineral and mining rights - 300' downdip from BH-37

Coordinates: 62,315.25N; 11,738.20E
Elevation: 1753.31

0- 50	- -	Clay
50-409	- -	Fossit dolomite
409-553	- -	Upper Kingsport dolomite. Trace sphalerite 539, 541-551
551-553	- -	2' zinc mineralization estimated @ 15% Zn
553-563	- -	Upper Kingsport dolomite. Trace sphalerite 562
563	- -	CH marker
563-698	- -	Lower Kingsport dolomite Traces sphalerite 565, 566-567, 576
698-742	- -	Longview dolomite
742-746	- -	4' mineralization estimated @ 15% Zn
746-760	- -	(Bottom) Longview dolomite.

The following 19 assays from hole BH-38 were inadvertently omitted from last months report:

Footage	Core Recov.	% Oz. Zn	% Total Zn
262-263	1	1.45	2.90
275-285	1		9.20
285-291	1	0.40	2.61
291-293	1	0.38	1.83
343-352	7	0.45	1.03
352-353	1	1.57	9.05
353-355	1	0.50	0.70
355-372	14	0.15	0.45
372-373	1		0.20
373-375	1		0.10
375-379	4		9.04
379-382	3		5.50
382-384	2		

Weighted Averages of Total Zinc

275-279 - - 15' @ 6.17% Zn
350-384 - - 33' @ 0.73% Zn

INTERIM REPORT

DMEA-4286, Idm-E982 (Zinc)

The New Jersey Zinc Company, Jefferson City, Tennessee

n: Big War Creek Area, Hancock & Hawkins Counties, Tenn.

Diamond drilling data on the above project todate and ogress made since the last inspection of November 7, 1957 is summarized as follows:

Drilling Completed

Footage in holes completed since last inspection.....	1,839 ?
Total footage in holes completed to date.....	13,911 ?
Number of holes oompleted since last inspection.....	2
Total number of holes completed to date.....	17
Number of holes showing commercial zinc ore.....	3
Number of holes showing non-commercial zinc mineralization.	9
Number of barren holes.....	5

Additional data on the two holes completed during the interim is as follows:

Hole No.	Property	Total Depth	Remarks
BW-40	Guy Seals	470	This hole has been redrilled and new location is 20 ft NE of the original hole. Collared in Mascot fm. Chert Matrix (?) @ 104 ft; "J" bed @ 446, "T" bed @ 450 ft.

Mineralization: 262-263, 1 ft of 4% Zn (est). 263-275, open. 275-285, recovery 1 ft 15%Zn(est) 285-291, recovery, 1 ft 6% Zn (est) 291-293, 1 ft recovery of oxidized ore, no est. 294-316, open. 343-352, oxidized mineralization 7 ft of core recovery-no est. 358-363, 3.5 ft recovery of 6% Zn(est), 362-369, 4 ft recovery of 5% Zn(est), 369-371, 2 ft 4.5% Zn (est). 371-379, Trs. of sphalerite, 379-382, 3 ft 6.5% Zn (est). 382-386, 4 ft 6% Zn (est), 433-435, 2 ft 4% Zn (est)

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DATE | CODE
12/13 | 220
1/6 | 100
1/4 | 500.

BW-40 cont'd

Remarks

444-450, 6 ft of 4.5% Zn (est).
@380 trace of lead
@389 " " sphalerite
@410 shine of "

Overall section from 358-386,
28 ft of 4.5% Zn (est).

Hole No.	Property	Total depth	Remarks
BW-39	Annis Helton	1389	Chert Matrix @ 1066 ft. Brown oolite @ 1118 " TR bed @ 1246 ft; buff banded dolomite, "B" bed @ 1261. Hole was completely blank of mineralization.

Drilling in Progress:

Number of holes in progress.....1

Footage drilled in incompleted holes at time of inspection..... 112

Additional data on the one hole in progress at this time is as follows:

Hole No.	Property	Present depth	Esti.total depth	Remarks
BW-41	Guy Seals	112	750	Loc. 300 ft downdip from ~~collared~~ BW-37. Collared in Mascot, presently drilling in Mascot fm, 104-108 cavity.

Inspected: December 5, 1957.

L. E. Shirley, Mining Engineer
Bureau of Mines

Helmuth Wedow, Jr., Geologist
Geological Survey

z

Griswold Klug

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

Budget Bureau No. 42-R1036.5

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION

PAID ON VOUCHER & SCHEDULE OF PAYMENTS K-32

OPERATOR'S MONTHLY REPORT AND VOUCHER

Month of November, 1957 Docket No. DMEA 4286 Contract No. Idm E 982
Operator's Name The New Jersey Zinc Company Minerals Zinc
Address Jefferson City, Tennessee
Contract Amount, $107,150.00 Government Participation: 50 % Amount, $53,575.00

ITEMS OF COSTS	FOR OPERATOR'S USE			FOR GOVERNMENT USE ONLY		
	Monthly Total	Totals Previously Reported	Totals To Date	Approved Monthly Total	Approved Totals Previously Reported	Approved Totals To Date
(1) Independent Short Form Contracts:						
Drilling	5209.50	33,502.10	38,711.60	3/17/58		
Bulldozing						
Crosscutting						
Drifting						
(2) Labor and Supervision:						
Labor						
Supervision	501.93	3,259.44	3,761.37			
Technical Services						
(3) Operating Mat'ls. and Supplies:						
Timber						
Explosives						
Pipe						
Track						
(4) Operating Equipment:						
Rental						
Purchase						
Depreciation						
(5) Initial Rehabilitation and Repairs						
(6) New Bldgs., Improvements, etc.						
(7) Miscellaneous:						
Repairs to Equipment						
Sampling and Analysis	19.00	56.00	75.00			
Payroll Taxes						
Liability Insurance						
(8) Contingencies (specify):						
TOTALS	5730.43	36,817.54	42,547.97	5730.43	36,817.54	42,547.97

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

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

Per Johnson Crawford Title Supt. for Tennessee

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

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

(Instructions on reverse)

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

$ 2865.21

Signature Helen R. Miller
(Authorized Certifying Officer)

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

gbt

2865.22

(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-982 in accordance with the terms of the contract.

Signature S. C. Bergquist Title GEOLOGIST, U. S. G. S. Date DEC 23 1957

APPROVAL BY DMEA EXECUTIVE OFFICER OR ALTERNATE:

Signature V. J. Lynch Title ACTING EXECUTIVE OFFICER DMEA - REGION V Date DEC 23 1957

MONTHLY REPORT OF OPERATOR

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

Budget Bureau No. 42-R1151.2

Form MF-104A
(April 1952)

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION

OPERATOR'S UNIT COST AND PROGRESS REPORT

Month of ...er 195 7 Docket No. DMEA 4286 Contract No. Idm E 982

Operator The New Jersey Zinc Company Minerals Zinc

Address Jefferson City, Tennessee

OPERATION	Unit	Costs This Month	Units This Month	Costs to Date	Units to Date	Unit Costs to Date	Authorized by Contract: Units	Authorized by Contract: Unit Costs
...ifting								
Crosscutting								
Raising								
Shafts								
Winzes								
Drilling: Core BX	Ft.	-	-	328.60	124	2.65		2.65
Churn 0-1000	Ft.	4042.50	1470	33,418.00	12152	2.75	30,000	2.75
Auger 1000-1580	Ft.	1167.00	389	4,965.00	1655	3.00	5,000	3.00
Stripping Assays	Ea.	19.00	19	75.00	75	1.00	200	1.00
Trenching								
Test Pits								
Roads and Trails								
Sup. & Tech. Ser.	Ft.	501.93	1859	3,761.37	13931	0.27	35,000	0.27
Total Distributed Costs		5730.43		42,547.97				Total Costs Authorized by Contract
Operating Equipment Purchased								
Initial Rehabilitation and Repairs								
New Buildings, Improvements, etc.								
Total Costs		5730.43		42,547.97				107,150.00

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

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

Per Johnson Crawford Title Supt. for Tenn.

Remarks: This report covers holes BW-39 40

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

(Instructions on reverse)

(For Government use only)

MINING ENGINEER
U. S. BUREAU OF MINES

INSTRUCTIONS

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

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

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

GPO 872894

Report for November 1957

War Creek Area EMBA 4286

Contract Idm E 982 (Zinc)

Ie BW-39 - Annis Helton property - NJZ mineral and mining rights - 100' downdip from BW-36

Approx. Coordinates: 60,295.00N; 30,660.00 E
Approx. Elevation: 1575.00

0- 8 - - Clay
8- 396 - - Chickamauga limestone
396-1066 - - Mascot dolomite
1066-1246 - - Upper Kingsport dolomite
1246 - - TR marker
1246-1389 - - (Bottom) Lower Kingsport dolomite

Hole BW-40 - Guy Seale property - NJZ mineral and mining rights - 100' SW of BW-37 on strike

Approx. Coordinates: 62,505.00N; 31,495.00E
Approx. Elevation: 1805'

0- 60 - - Clay
60- 238 - - Upper Kingsport dolomite, good core recovery
238- 262 - - Cavernous ground, only 11 feet of core recovered
262- 263 - - 1' ore estimated @ 4% Zn
263- 275 - - Cavernous, no core recovered
275- 285 - - 10' ore estimated @ 15% Zn
Only 1' of core recovered
285- 291 - - 6' ore estimated @ 6% Zn
TR marker is in this zone but was not identified
291- 294 - - Lower Kingsport dolomite
294- 316 - - Cavernous, no core recovery
316- 343 - - Lower Kingsport dolomite. Local cavities
343- 352 - - Oxidized mineralized zone; however, core recovery was 80%
352- 358 - - Cavernous, no core recovery
358- 386 - - 28' ore estimated @ 4% Zn
Trace Galena @ 380
386- 433 - - Lower Kingsport dolomite. Traces sphalerite 389, shine sphalerite 410
433- 435 - - 2' ore estimated @ 4% Zn
435- 444 - - Lower Kingsport dolomite. Local cavities
444- 450 - - 6' ore estimated @ 6% Zn
450- 470 - - (Bottom) Longview dolomite.

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DATE	INITIALS	CODE
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15	[illegible]	100
20	[illegible]	

INTERIM REPORT

DMEA-4286, Idm-E982 (Zinc)

Operator: The New Jersey Zinc Company, Jefferson City, Tennessee

Location: Big War Creek area, Hancock and Hawkins Counties, Tennessee

The diamond drilling program on the Big War Creek project of the New Jersey Zinc Company in the Copper Ridge district to date and since the last inspection on October 17, 1957 is summarized as follows:

Drilling completed:

Footage in holes completed since last inspection . . .	2,276
Total footage in holes completed to date	12,072
Number of holes completed since last inspection . . .	3
Total number of holes completed to date	15
Number of holes showing commercial zinc ore	2
Number of holes showing non-commercial zinc mineralization	9
Number of barren holes	4

Drilling in progress:

Number of holes in progress	2
Footage drilled in incompleted holes at time of inspection	1,151

Brief summaries of the three holes completed since the last inspection are given below:

Hole no.	Property	Total Depth	Remarks
BW-36	Annis Helton	1340	Location: About 100 feet down-dip from Hole BW-33. Abbreviated log: 0-3 residual clay; 3-327 Chickamauga limestone; 327-1012 Mascot dolomite; 1012-1153 upper Kingsport dolomite member; 1153-1323 lower Kingsport limestone member (top of S-bed @ 1198); 1323-1340 Longview dolomite. Mineralization: Ore hole (for mineralization above depth of 952 see last interim report); trace ZnS @ 988; 983-986 (3') w/ 2½% Zn (est); 1006-1011 (5') w/ 0.52% Zn; 1021-1026 (5') w/ 1.57% Zn; scattered shines and traces @ 997, 1001-1006, 1099, and 1146.

Hole no.	Property	Total Depth	Remarks
BW-37	Guy Seals	456	Location: About half-way between Holes BW-31 and -34. Abbreviated log: 0-80 residual clay; 80-296 upper Kingsport dolomite member; 296-441 lower Kingsport limestone member; 441-456 Longview dolomite. Mineralization: Shine hole; 246-257 (11') w/ 1½% Zn (est); 299-305 (6') w/ ½% Zn (est); 305-330 (25') w/ 2.28% Zn.
BW-38	Guy Seals	480	Location: About 100 feet northeast (on strike) from Hole BW-37. Abbreviated log: 0-94 residual clay; 94-307 upper Kingsport dolomite; 307-458 lower Kingsport limestone member (top of S-bed @ 365); 458-480 Longview dolomite Mineralization: Shines of ZnS @ 262, 263, 285, 287; 303-305 (2') w/ 2% Zn (est).

Data on the two holes in progress are summarized as follows:

Hole no.	Property	Present depth	Estimated total depth	Remarks
BW-39	Annis Helton	833	1400	Located about 100 feet down-dip from Hole BW-36; collared in Chickamauga limestone; top of Mascot dolomite @ 396; currently drilling in Mascot dolomite; zone of mineralization found in Holes BW-36 and BW-33 (up-dip) apparently has already been penetrated with no evidence of mineralization
BW-40	Guy Seals	318	480	Located about 100 feet southwest (on strike) of Hole BW-37; collared in upper Kingsport dolomite member; currently drilling in lower Kingsport; mineralization as follows: 243-248 (5') w/ 2½% Zn (est); 248-256 (8') w/ ½% Zn (est); trace ZnS @ 273.

On the completion of Hole BW-40 this drill will move to a hole in another strike fence 300 feet down-dip from Hole BW-37. Approval for this hole and the new strike fence has been given by the Field Team.

Inspected: November 7, 1957

Helmuth Wedow, Jr., Geologist
U. S. Geological Survey

V. J. Lynch and L. E. Shirley
Mining Engineers
U. S. Bureau of Mines

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

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

Budget Bureau No. 42-R1036.5

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

PAID ON VOUCHER & SCHEDULE OF PAYMENTS K- 28

Month of October, 1957 Docket No. DMEA 4286 Contract No. Idm E 982

Operator's Name The New Jersey Zinc Company Minerals Zinc

Address Jefferson City, Tennessee

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

ITEMS OF COSTS	FOR OPERATOR'S USE: Monthly Total	Totals Previously Reported	Totals To Date	FOR GOVERNMENT USE ONLY: Approved Monthly Total	Approved Totals Previously Reported	Approved Totals To Date
(1) Independent Short Form Contracts:						
Drilling	6344.00	27,158.10	33,502.10	3/17/58	Grinwald	
Bulldozing						
Crosscutting						
Drifting						
(2) Labor and Supervision:						
Labor						
Supervision	614.52	2,644.92	3,259.44			
Technical Services						
(3) Operating Mat'ls. and Supplies:						
Timber						
Explosives						
Pipe						
Track						
(4) Operating Equipment:						
Rental						
Purchase						
Depreciation						
(5) Initial Rehabilitation and Repairs						
(6) New Bldgs., Improvements, etc.						
(7) Miscellaneous:						
Repairs to Equipment						
Sampling and Analysis	35.00	21.00	56.00			
Payroll Taxes						
Liability Insurance						
Plus error from Sept., 1957	5.50		5.50			
(8) Contingencies (specify):						
TOTALS	6999.02	29,824.02	36,823.04	6999.02	29 824.02	36 823.04

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

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

Per [signature] Title Asst. to the Supt.

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

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

(Instructions on reverse)

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

$ 3499.51

Signature Helen R. Mellin
(Authorized Certifying Officer)

Date DEC 4 1957 Vou. No. 90

(See other side)

3499.51

(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 982 in accordance with the terms of the contract.

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

APPROVAL BY DMEA EXECUTIVE OFFICER OR ALTERNATE:

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

MONTHLY REPORT OF OPERATOR

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

Form MF-104A
(April 1952)

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

Budget Bureau No. 42-R1151.2

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

Month of October 1957 Docket No. DMEA 4286 Contract No. Idm E 982
Operator's Name The New Jersey Zinc Company Minerals Zinc
Address Jefferson City, Tennessee

OPERATION	UNIT	COSTS THIS MONTH	UNITS THIS MONTH	COSTS TO DATE	UNITS TO DATE	UNIT COSTS TO DATE	AUTHORIZED BY CONTRACT Units	AUTHORIZED BY CONTRACT Unit Costs
Drifting								
Crosscutting								
Raising								
Shafts								
Winzes								
Drilling: Core		-	-	328.60	124	2.65		2.65
Churn 0-1000	Ft.	5324.00	1936	29,375.50	10,682	2.75	30,000	2.75
Auger 1000-1500	"	1020.00	340	3,798.00	1,266	3.00	5,000	3.00
Stripping Assays	Ea.	35.00	35	56.00	56	1.00	200	1.00
Trenching								
Test Pits								
Roads and Trails								
Sup.& Tech.Ser.	Ft.	614.52	2276	3,259.44	12,072	0.27	35,000	0.27
TOTAL DISTRIBUTED COSTS		6993.52		36,817.54				TOTAL COSTS AUTHORIZED BY CONTRACT
Operating Equipment Purchased								
Initial Rehabilitation and Repairs								
New Buildings, Improvements, etc.								
TOTAL COSTS		6993.52		36,817.54				107,150.00

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

Date Nov. 15, 1957 Operator The New Jersey Zinc Co.

Per [signature] Title Asst. to the Supt.

REMARKS: This report covers drill holes:
BW-36
37
38

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

(Instructions on reverse)

(For Government use only)

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

INSTRUCTIONS

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

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

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

GPO 872894

Report for October, 1957

Big War Creek Area DMEA 4286

Contract Idm E 982 (Zinc)

Hole BW-36 - Annis Helton property - NJZ Company mineral and mining rights - 100' downdip from BW-33

Coordinates: 60,752.08 N; 30,662.39 E
Elevation: 1585.56

0- 3 - - Clay
3-303 - - Chickamauga limestone
303-690 - - Mascot dolomite. Traces & shines sphalerite 679-687
690-695 - - 5' mineralization averaging 1.27% Zn
695-793 - - 98' ore averaging 4.52% Zn
695-701 - - 6.55% Zn (5' core)
701-705 - - 4.12 "
707-712 - - 9.87 "
712-718 - - 0.25 " (5' core)
718-723 - - 1.40 "
723-728 - - 8.87 "
728-733 - - 0.77 "
733-738 - - 5.77 "
738-743 - - 6.05 "
743-748 - - 8.42 "
748-755 - - 2.72 " (4' core)
755-761 - - 1.10 " (5' core)
761-766 - - 6.55 "
766-771 - - 2.35 "
771-776 - - 6.85 "
776-782 - - 6.97 " (5' core)
782-788 - - 4.35 " (5' core)
788-793 - - 1.57 "
793-821 - - 28' mineralization averaging 1.45% Zn
Mineralized Fa 820-821
793-800 - - 0.32% Zn (5' core)
800-807 - - 0.42 " (5' core)
807-812 - - 2.54 "
812-816 - - 4.37 "
816-821 - - 1.07 "
821-833 - - Mascot dolomite
Traces sphalerite 821-823
833-853 - - 20' mineralization averaging 2.18% Zn
833-838 - - 4.05% Zn
838-843 - - 1.07 "
843-848 - - 0.95 "
848-853 - - 2.64 "
853-983 - - Mascot dolomite
Trace sphalerite 952
983-986 - - 3' mineralization estimated @ 2½% Zn
986-1006 - Mascot dolomite
1006-1011 - 5' mineralization averaging 0.52% Zn
1011-1012 -- Mascot dolomite
1012-1021 - Upper Kingsport dolomite

1021-1026 - - 5' mineralization averaging 1.57% Zn
1026-1153 - - Upper Kingsport dolomite
1153-1323 - - Lower Kingsport dolomite & limestone
1323-1340 - - (Bottom) Longview dolomite & limestone

R and S bed 51% dolomite.

Hole BW-37 - Guy Seals property - NJZ Company mining and mineral rights - 200' NE of BW-31 on strike

Coordinates: 62,588.53 N; 31,612.03 E
Elevation: 1806.50

0- 80 - - Clay
80-246 - - Upper Kingsport dolomite
Trace sphalerite 243
246-257 - - 11' mineralization estimated @ 1.50% Zn
257-296 - - Upper Kingsport dolomite
Shines sphalerite 262,267,271,276
296-299 - - Lower Kingsport dolomite
299-305 - - 6' mineralization estimated @ 0.50% Zn
305-330 - - 25' mineralization averaging 2.28% Zn
305-311 - - 1.32% Zn (5' core)
311-316 - - 3.87 "
316-321 - - 0.92 "
321-325 - - 2.45 "
325-330 - - 3.10 "
330-441 - - Lower Kingsport dolomite & limestone
Shine sphalerite 333
441-456 - - (Bottom) Longview limestone & dolomite

R and S Bed 96% dolomite

Hole BW-38 - Guy Seals property - NJZ Company mining and mineral rights - 100' NE of BW-37 on strike

Coordinates: 62,585.00 N; 31,618.00 E)Approx.
Elevation: 1805

0- 94 - - Clay
94-303 - - Upper Kingsport dolomite
Shine sphalerite 262-263, 285, 287
303-305 - - 2' mineralization estimated @ 2% Zn
305-307 - - Upper Kingsport dolomite
307-458 - - Lower Kingsport limestone & dolomite
458-480 - - (Bottom) Longview limestone & dolomite

R and S beds - 53% dolomite.

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INTERIM REPORT

DMEA-4286, Idm-E982 (Zinc)

Operator: The New Jersey Zinc Company, Jefferson City, Tennessee

Location: Big War Creek area, Hancock and Hawkins Counties, Tennessee

Diamond drilling on the Big War Creek project of the New Jersey Zinc Company in the Copper Ridge district to date and since the last inspection on September 19, 1957 is summarized as follows:

Drilling completed:

Footage in holes completed since last inspection	1,320
Total footage in holes completed to date	9,796
Number of holes completed since last inspection	1
Total number of holes completed to date	12
Number of holes showing commercial zinc ore	1
Number of holes showing non-commercial zinc mineralization	7
Number of barren holes	4

Drilling in progress:

Number of holes in progress	2
Footage drilled in incompleted holes	1,209

One hole was completed since the last inspection, this hole being the first hole on the project classed as showing ore of commercial grade and thickness. A brief summary of this hole follows:

Hole No.	Property	Total Depth	Remarks
BW-33	Annis Helton	1320	Location: 100 feet down-dip from Hole BW-29 in Fence about 200 feet northeast of excluded area. Abbreviated log: 0-23 residual clay; 23-209 Chickamauga ls; 209-938 Mascot dolomite; 938-1062 upper Kingsport dolomite member; 1062-1311(?) lower Kingsport limestone member; 1311(?)-1320 Longview dolomite. Mineralization: Weighted averages of assay runs as follows: 873-881(8') w/ 1.21 % Zn; 881-913(32') w/ 6.68% Zn; 946-974 (28') w/ 1.38% Zn; 1099-1105 (6') w/ 1.53% Zn.

Two holes are in progress on the Big War project. One drill has been shifted back to the project from the Cedar Springs area (DMEA-4586) since the last inspection. Available pertinent data on these two holes are given below:

Hole No.	Property	Depth	Est. Total Depth	Remarks
BW-36	Annis Helton	1052	1400	Located 100 feet down-dip from Hole BW-33; collared in Chickamauga ls (3' overburden); top of Mascot dolomite @ 327; chert-matrix ss @ 1012; drilling now in upper Kingsport dolomite member; mineralization as follows: 679-690 scattered traces and shines of ZnS; 690-695 (5') w/ $\frac{1}{2}$ % Zn (est); 695-793 (98') w/ $3\frac{1}{2}$-$4\frac{1}{2}$ % Zn (est); 793-820 (27') w/ $1\frac{1}{2}$ % Zn (est): 820-821 (1') mineralized fault zone; 821-823 shines of ZnS; 833-853 (20') w/ $2\frac{1}{2}$ % Zn (est); 952 trace of ZnS.
BW-37	Guy Seals	157	450	Located about one-half way between Holes BW-31 and BW-34 in the strike fence straddling the Seals and Clonce tracts; collared and drilling in Kingsport formation (80' overburden).

The most significant item of note in the recent drilling on the Big War Creek project is that the ore penetrated in the two holes on the Helton property occurs well up in the Mascot dolomite rather than in the more common ore zone of the lower Kingsport.

Inspected: October 17, 1957

Helmuth Wedow, Jr., Geologist
U. S. Geological Survey

L. E. Shirley, Mining Engineer
U. S. Bureau of Mines

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

Budget Bureau No. 42-R1036.5

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION

RECEIVED 25 SALDON VOUCHER & SCHEDULE OF PAYMENTS K- 21

OPERATOR'S MONTHLY REPORT AND VOUCHER

Month of September 1957 Docket No. DMEA 4256 Contract No. Icm E 982
Operator's Name The New Jersey Zinc Company Minerals Zinc
Address Jefferson City, Tennessee
Contract Amount, $107,150.00 Government Participation: 50 % Amount, $53,575.00

ITEMS OF COSTS	FOR OPERATOR'S USE			FOR GOVERNMENT USE ONLY		
	Monthly Total	Totals Previously Reported	Totals To Date	Approved Monthly Total	Approved Totals Previously Reported	Approved Totals To Date
(1) Independent Short Form Contracts:						
Drilling	6130.00	21,040.50	27,150.10	3/17/58		
Bulldozing						
Crosscutting						
Drifting						
(2) Labor and Supervision:						
Labor						
Supervision	594.00	2,050.92	2,644.92			
Technical Services						
(3) Operating Mat'ls. and Supplies:						
Timber						
Explosives						
Pipe						
Track						
(4) Operating Equipment:						
Rental						
Purchase						
Depreciation						
(5) Initial Rehabilitation and Repairs						
(6) New Bldgs., Improvements, etc.						
(7) Miscellaneous:						
Repairs to Equipment						
Sampling and Analysis	15.00	6.00	21.00			
Payroll Taxes						
Liability Insurance						
Total	6739.00					
Less correction for August	12.40					
(8) Contingencies (specify):						
TOTALS	6726.60	23,097.42	29,824.02	6726.60	23,097.42	29,824.02

I certify that the above bill is correct and just and that payment therefor has not been received.
Date 10-1-57 *Payee The New Jersey Zinc Company
Per [signature] Title Asst. to the Supt.

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

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

(Instructions on reverse)

Pursuant to authority vested in me, I certify that this account is correct and proper for payment in the amount of: $ 3860.55 ~~3363.30~~
Signature Helen R. Miller
(Authorized Certifying Officer)
Date OCT 23 1957 Vou. No. 72
(See other side)

3363.30

(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-982 in accordance with the terms of the contract.

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

APPROVAL BY DMEA EXECUTIVE OFFICER OR ALTERNATE:

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

MONTHLY REPORT OF OPERATOR

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

Form MF-104A
(April 1952)

Budget Bureau No. 42-R1151.2

RECEIVED
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D.M.E.A.

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

Month of Sept. 1957 Docket No. DMEA 4206 Contract No. Idm E 982
Operator's Name The New Jersey Zinc Company Minerals Zinc
Address Jefferson City, Tennessee

OPERATION	UNIT	COSTS THIS MONTH	UNITS THIS MONTH	COSTS TO DATE	UNITS TO DATE	UNIT COSTS TO DATE	AUTHORIZED BY CONTRACT Units	AUTHORIZED BY CONTRACT Unit Costs
Drifting								
Crosscutting								
Raising								
Shafts								
Winzes								
Drilling: Core BX	Ft.	-	-	320.60	124	2.65		2.65
Churn 0-1000	"	5170.00	1880	24,051.50	8746	2.75	30,000	2.75
Auger 1000-1500	"	960.00	320	2,778.00	926	3.00	5,000	3.00
Stripping Assays	Ea.	15.00	15	21.00	21	1.00	200	1.00
Trenching								
Test Pits								
Roads and Trails								
Sup.& Tech. Ser.	Ft.	594.00	2200	2,644.92	9796	0.27	35,000	0.27
TOTAL DISTRIBUTED COSTS		6739.00		29,824.02				TOTAL COSTS AUTHORIZED BY CONTRACT
Less correction for Aug.		12.40						
Operating Equipment Purchased								
Initial Rehabilitation and Repairs								
New Buildings, Improvements, etc.								
TOTAL COSTS		6726.60		29,824.02				

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

Date 10-1-57 Operator The New Jersey Zinc Co.

Per [signature] Title Asst. to the Supt.

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

REMARKS: This report covers drill holes BW-33
BW-34
BW-35

Note:
Correction is made for 124' of BX @ 2.65 per foot which was charged at AX rate of 2.75 per foot in August report

(Instructions on reverse)

(For Government use only)

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

OCT 18 1957

INSTRUCTIONS

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

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

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

GPO 872894

Report for September 1957

Big War Creek Area NEA 4206

Contract Idm S 962 (Zinc)

Two drills worked on the Big War project the first part of September and only one operated during the latter part of the month. Three holes were completed, a summary log of which follows:

Hole BW-33 - Mrs. Annie Holton property, N.J.Z. Company mineral and mining rights 100' downdip from BW-27

Coordinates: 60,059.51; 30,598.12
Elevation: 1601.50

0- 23 - - Clay
23- 209 - - Chickamauga limestone
209- 845 - - Mascot dolomite
845- 873 - - 28' - mineralization estimated 0.[illegible]% Zn
873- 881 - - 8' - averaging 1.21% Zn
873- 877 - - 1.3[illegible]% Zn
877- 881 - - 1.11% Zn
881- 913 - - 32' ore averaging 6.60% Zn
881- 886 - - 12.5[illegible]% Zn
886- 891 - - 7.07% Zn
891- 897 - - 2.31% Zn (5' of core)
897- 901 - - 1.5[illegible]% Zn
901- 906 - - 13.[illegible]% Zn
906- 913 - - 4.0[illegible]% Zn (5' of core)
913- 938 - - Mascot dolomite
938- 946 - - Upper Kingsport dolomite
946- 974 - - 28' mineralization averaging 1.38% Zn
946- 951 - - 0.6[illegible]% Zn
951- 956 - - 1.53% Zn
956- 961 - - 2.90% Zn
961- 966 - - 1.7[illegible]% Zn
966- 970 - - 0.03[illegible]% Zn
970- 974 - - 0.00[illegible]% Zn
974- 1099 - - Upper Kingsport dolomite
Shines Sp. 980-999. Local shines sp. 1013, 1016, 1031
1099- 1105 - - 6' mineralization avg. 1.53% Zn (5' core)
1105- 1127 - - Upper Kingsport dolomite
1127 - - TR. Shines sp. 1108-1116
1127- 1320 - - (Bottom) Lower Kingsport dolomite and limestone.

Hole BW-34 - Guy Seals property- N.J.Z.Company mineral and mining rights. 500' NE on strike from BW-31

Coordinates: 62,696.01; 31,902.39
Elevation: 1775.01

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Hole BW-34 - Continued

0- 87 - - Clay
87-227 - - Upper Kingsport dolomite
227 - - SR
227-371 - - Lower Kingsport dolomite
371-410 - - (Bottom) Longview dolomite and limestone

Hole BW-35 - Eugene Clonce property (300' NE on strike from BW-34)

Coordinates: 62,084.54; 32,115.40
Elevation: 1757.95

0- 16 - - Clay
16-273 - - Upper Kingsport dolomite
273 - - SR
273-444 - - Lower Kingsport dolomite & limestone
444-470 - - (Bottom) Longview dolomite and limestone

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DATE | CODE

P. O. Box 217
Norris, Tennessee
October 23, 1957

The New Jersey Zinc Company

Jefferson City, Tennessee

Gentlemen:

Reference is made to your September Voucher covering contract Ida-E982, Docket No. DMSA-4286, in the amount of $6726.60.

An overpayment of $2.75 was made on your August voucher and is therefore being deducted from your September voucher. Your August MF-104A shows the following unit cost:

0-1000 ft. 1465 feet at $2.75/ft. = $4,028.75

However, Longyear's invoices show the following totals:

	$ 151.25
	45.75
	745.25
	328.60
	71.50
	12.20
	12.20
	2,656.50

0-1000 ft. $ 4,023.25 Grand Total (difference of $5.50)

Your September voucher is being processed in the amount of $3360.55, which is 50 percent of the approved monthly total as follows:

	$ 6726.60		
	- 5.50	(above differences)	
50% of	$ 6721.10	=	$3360.55

Very truly yours,

Helen R. Miller
Personnel Assistant

Copies to R. A. Laurenne
V. J. Lynch
Jay L. Chambers

INTERIM REPORT

DMEA-4286, Idm-E982 (Zinc)

Operator: The New Jersey Zinc Company, Jefferson City, Tennessee

Location: Big War Creek area, Hancock and Hawkins Counties, Tennessee

Diamond drilling on the Big War Creek project of the New Jersey Zinc Company in the Copper Ridge district completed to date and since the last inspection on August 29, 1957 is summarized as follows:

Footage in holes completed since last inspection . . .	470
Total footage in holes completed to date	8,476
Number of holes completed since last inspection . . .	1
Total number of holes completed to date	11
Number of holes showing commercial zinc ore	0
Number of holes showing non-commercial zinc mineralization	7
Number of barren holes	4

A summary of the one hole completed since the last inspection is given below:

Hole No.	Property	Total depth	Remarks
BW-35	Clonce	470	Location: 300 feet NE (on strike) from Hole BW-34. Abbreviated log: 0-16 overburden; 16-273(?) upper Kingsport dolomite member; 273(?)-291(?) R-bed of Lower Kingsport; 291(?)-444 S-bed of lower Kingsport; 444-470 Longview dolomite. Mineralization: Barren.

Only one hole was in progress at the time of inspection. The second drill rig that had been operating on the project for the past two months has been moved temporarily to the Cedar Springs project (DMEA-4586) to the southwest along Copper Ridge. The second drill will return to the Big War project probably within 4-6 weeks. A summary of the available data on the one hole currently drilling follows:

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DATE		CODE
9/27	B	220
30	COM	100
10/1/57	WRO	500

Hole No.	Property	Depth	Estimated Total Depth	Remarks
BW-33	Annis Helton	1288	1320	Chert-matrix ss @ 938; TR @ 1062; E-marker not recognized--- currently drilling in S-bed of lower Kingsport; mineralization as follows: Scattered shines of ZnS @ 750-845 845-872; 22 ft w/ $\frac{1}{2}$+% Zn (est) 872-881; 9 ft w/ 1-1$\frac{1}{2}$% Zn (est) 881-913; 32 ft w/ 4-8% Zn (est) Scattered shines of ZnS @ 980-1070 1099-1105; 6 ft w/ 2-3% Zn (est) Scattered shines of ZnS @ 1108-1116

Inspected: September 19, 1957

Helmuth Wedow, Jr., Geologist
U. S. Geological Survey

L. E. Shirley, Mining Engineer
U. S. Bureau of Mines

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 [illegible] SCHEDULE [illegible] OF PAYMENTS K-[illegible]

RECEIVED SEP 19 1957 D.M.E.A.

OPERATOR'S MONTHLY REPORT AND VOUCHER

Month of [illegible], 195[illegible] Docket No. DMEA [illegible] Contract No. [illegible]
Operator's Name [illegible] Minerals [illegible]
Address [illegible]
Contract Amount, $[illegible] Government Participation: [illegible]% Amount, $[illegible]

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	[illegible]	[illegible]	[illegible]	3/17/58	ORK	~~[illegible]~~
Bulldozing						Betty
Crosscutting						
Drifting						
(2) Labor and Supervision:						
Labor						
Supervision						
Technical Services	[illegible]	[illegible]	[illegible]			
(3) Operating Mat'ls. and Supplies:						
Timber						
Explosives						
Pipe						
Track						
(4) Operating Equipment:						
Rental						
Purchase						
Depreciation						
(5) Initial Rehabilitation and Repairs						
(6) New Bldgs., Improvements, etc.						
(7) Miscellaneous:						
Repairs to Equipment						
Sampling and Analysis	[illegible]	-	[illegible]			
Payroll Taxes						
Liability Insurance						
(8) Contingencies (specify):						
TOTALS	[illegible]	[illegible]	[illegible]	4,708.25	18,389.17	23,097.42

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

Date [illegible] *Payee [illegible]

Per [illegible] Title [illegible]

*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:

$2354.13

Signature Helen R. Miller
(Authorized Certifying Officer)

Date SEP 17 1957 Vou. No. 54

(See other side)

2,354.12

(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. DMEE 982 in accordance with the terms of the contract.

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

APPROVAL BY DMEA EXECUTIVE OFFICER OR ALTERNATE:

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

MONTHLY REPORT OF OPERATOR

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

Form MF-104A
(April 1952)

Budget Bureau No. 42-R1151.2

RECEIVED SEP 19 DMEA

UNITED STATES
DEPARTMENT OF THE INTERIOR

DEFENSE MINERALS EXPLORATION ADMINISTRATION

OPERATOR'S UNIT COST AND PROGRESS REPORT

Month of August 195 7 Docket No. DMEA [illegible] Contract No. [illegible]
Operator's Name New Jersey Zinc Company Minerals Zinc
Address Gallatin City, Montana

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	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Drilling: Core	[illegible]	[illegible]	85	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Churn								
Auger	[illegible]	[illegible]		[illegible]		[illegible]		[illegible]
Stripping								
Trenching								
Test Pits								
Roads and Trails	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
TOTAL DISTRIBUTED COSTS		[illegible]		[illegible]				TOTAL COSTS AUTHORIZED BY CONTRACT
Operating Equipment Purchased								
Initial Rehabilitation and Repairs								
New Buildings, Improvements, etc.								
TOTAL COSTS		[illegible]		[illegible]				

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

Date 9/1/57 Operator New Jersey Zinc Co.

Per [signature] Title Supt. to the Supt.

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

REMARKS: This report covers drill holes [illegible]-31 and [illegible]-32

(Instructions on reverse)

(For Government use only)

[signature]
GEOLOGIST, U. S. G. S.
SEP 16 1957

INSTRUCTIONS

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

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

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

GPO 872894

Hole No.	Property	Total Depth	Remarks
BW-42	Annis Helton	710	Location: 300 ft updip from BW-32- Coordinates and collar elevation not available at the time of this inspection. Drilling began on Dec. 4, 1957. A brief log of the hole is as follows: Collared in Mascot dolomite, 0-23 overburden, chert matrix @ 391, U-255 (?) bed @ 468, "TR" bed @ 535, "A" bed @ 542, "B" bed @ 549, "E"(?) @ 565, "T" bed from 673 to 683, scattered san grains @ 702, bottomed @ 710. Hole was completely blank of mineralization.

Drilling in Progress

Number of holes in progress..... 2
Footage drilled in incompleted holes at time of inspection..... 723

Additional data on the two holes in progress at this time is as follows:

Hole No.	Property	Present depth	Est. total depth	Remarks
BW-43	Guy Seals	723	825	Location: 100' northeast of BW-41, Coordinates: 62,364.93 North - 31,827.31 East Elevation @ collar-1747.33 Drilling began Dec. 21,1957 A brief log of the hole to present depth is as follows: Collared in Mascot holomite,0-52 overburden, Chert Matrix (?) @ 403, U-255 @ 529, "TR" bed @ 654, "A" bed @ 696. Mineralization: scattered local traces of sphalerite from 575 to 593.

Hole No.	Property	Total depth	Est. total Depth	Remarks
BW-44	Annis Helton	0	480	Hole is located 300 ft up-dip from BW-42. Drill was being moved to site at time of inspection.

Drilling progress on this contract is satisfactory.

Inspected: January 14, 1958

L. E. Shirley, Mining Engineer
U. S. Bureau of Mines

Helmuth Wedow, Jr. Geologist
Geological Survey

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EXTRA COPY
DMEA
RECEIVED SEP 19 1957

DATE	INITIALS	CODE
Log		

Report for August 1957

Big Mar Creek Area DMEA 4204

Contract 16m B-902 (Zinc)

During August, 2 drills operated in the Big Mar Creek area and 2 holes, totalling 1550' were completed. Log summaries of these holes follow:

Hole BM-31 - Guy Seals property, New Jersey Zinc Company mineral rights
2250' northeast of BM-12

Coordinates: 62,479.34 N; 31,449.50 E
Elevation: 1700.00'

0- 55 - - Clay
55-294 - - Upper Kingsport dolomite
294 - - MR
294-447 - - Lower Kingsport dolomite, local limestone. 348 dolomite
Trace of sphalerite 299
447-465 - - (Bottom) Longview dolomite and limestone

Hole BM-32 - Mrs. Annie Dalton property, New Jersey Zinc Company mineral rights
100' updip from BM-30

Coordinates: 61,133.02 N; 30,429.02 E
Elevation: 1672.56'

0- 26 - - Clay
26- 699 - - Mascot dolomite
699- 905 - - Upper Kingsport dolomite
905 - - MR
905- 975 --- Lower Kingsport dolomite
975-1051 - - Lower Kingsport limestone
1051-1085 - - (Bottom) Longview dolomite

Assay results from BM-29, not previously reported:

986- 990	- - -	4'	- - - 1.18
990- 995	- - -	5'	- - - 1.33
995-1000	- - -	5'	- - - 1.76
1000-1005	- - -	5'	- - - 0.15
1005-1010	- - -	5'	- - - 0.95
1010-1015	- - -	5'	- - - 1.56

Weighted average:

986-1015 - - 29' - - - 1.15% Zn

INTERIM REPORT

DMEA-4286, Idm-E982 (Zinc)

Operator: The New Jersey Zinc Company, Jefferson City, Tennessee

Location: Big War Creek area, Hancock and Hawkins Counties, Tennessee

Diamond drilling on the Big War Creek project in the Copper Ridge district to date and since the last inspection on August 8, 1957 is summarized below:

Drilling completed:

Footage in holes completed since last inspection . . .	1,960
Total footage in holes completed to date	8,006
Number of holes completed since last inspection . . .	3
Total number of holes completed to date	10
Number of holes showing commercial zinc ore	0
Number of holes showing non-commercial zinc mineralization	3
Number of barren holes	7

Drilling in progress:

Number of holes in progress	2
Total footage drilled in incompleted holes	827

Summaries of the pertinent data on the three holes completed since the last inspection are as follows:

Hole No.	Property	Total Depth	Remarks
BW-31	Guy Seals	465	Abbreviated log: 0-294 upper Kingsport dolomite member (depth of overburden not available); 294-447 lower Kingsport limestone member (E-marker at 334); 447-465 Longview dolomite (T-bed at 447-455). Mineralization: Trace of ZnS at 299; strong shines of pyrite at 350-368.
BW-32	Annis Helton	1085	Location: 100 feet up dip from Hole BW-30. Abbreviated log: 0-699 Mascot dolomite (depth of overburden not available); 699-905 upper Kingsport dolomite member; 905-1051(?) lower Kingsport limestone member (E-marker at 962); 1051(?)-1085 Longview dolomite (T-bed not recognized). Mineralization: Barren.

Hole No.	Property	Total Depth	Remarks
BW-34	Guy Seals	410	Location: 500 feet northeast on strike from Hole BW-31. Abbreviated log: 0-87 Overburden; 87-227 upper Kingsport dolomite; 227-410 lower Kingsport limestone member (E-marker not recognized, bottomed in S-bed). Mineralization: Barren

A summary of available in formation on the two holes now in progress is given below:

Hole No.	Property	Depth	Estimated Total Depth	Remarks
BW-33	Annis Helton	723	1300	Located 100 feet down dip from Hole BW-29; collared in Chickamauga ls; top of Mascot dolomite at 209; currently drilling in Mascot.
BW-35	Clonce	104	400	Located 300 feet northeast on strike from Hole BW-34; collared in upper Kingsport dolomite member; large cavity at 51-104; currently reaming to 104.

The discovery of a significantly strong geochemical anomaly (as much as 2-7 percent Zn) by auger drilling at depths of 20-40 feet below the surface in the ground up dip from Holes BW-34 and -35 has led to a consideration for the local modification of the drilling pattern generally in use by the New Jersey Zinc Company on Copper Ridge. The Operator has indicated the need for a strike fence along the line of Holes BW-34 and -35 in order to determine the rake direction of the possible ore body from the position of the amomaly. This appears to be necessary particularly as the rake may have a high dip component similar to that of the ore body discovered on the excluded area to the southwest. The Field Team has given tentative approval for several holes on this fence and anticipates a detailed proposal on the strike fence from the Operator within the next few days.

Inspected: August 29, 1957

Helmuth Wedow, Jr., Geologist
U. S. Geological Survey

MF-194 (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- 9

OPERATOR'S MONTHLY REPORT AND VOUCHER

Month of July 7 195 4286 Docket No. DMEA 1dm E 982 Contract No.

Operator's Name The New Jersey Zinc Company Minerals Zinc

Address Jefferson City, Tennessee

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

ITEMS OF COSTS	FOR OPERATOR'S USE: Monthly Total	Totals Previously Reported	Totals To Date	FOR GOVERNMENT USE ONLY: Approved Monthly Total	Approved Totals Previously Reported	Approved Totals To Date
(1) Independent Short Form Contracts:	3248.00	13,508.75	16,756.75	9/17/58	OPK	Gunwald
Drilling						Betty
Bulldozing						
Crosscutting						
Drifting						
(2) Labor and Supervision:						
Labor	314.82	1,317.60	1,632.42			
Supervision						
Technical Services						
(3) Operating Mat'ls. and Supplies:						
Timber						
Explosives						
Pipe						
Track						
(4) Operating Equipment:						
Rental						
Purchase						
Depreciation						
(5) Initial Rehabilitation and Repairs						
(6) New Bldgs., Improvements, etc.						
(7) Miscellaneous:						
Repairs to Equipment						
Sampling and Analysis						
Payroll Taxes						
Liability Insurance						
(8) Contingencies (specify):						
TOTALS	3562.82	14,826.35	18,389.17	3562.82	14826.35	18389.17

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

Date 8-1-57 *Payee The New Jersey Zinc Company

Per [signature] Title Asst. to the Supt.

When a voucher is signed or receipted in the name of a company or corporation, the name of the person writing company or corporate name, as well as the capacity in which he signs, must appear. For example: "John 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 statement or representation to any department or agency of the United States as to any matter within its diction.

(Instructions on reverse)

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

$ 1781.41

Signature Helen R. Miller
(Authorized Certifying Officer)

Date AUG 29 1957 Vou. No. 39

(See other side)

1781.41

(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-982 in accordance with the terms of the contract.

Signature V. J. Lynch Title MINING ENGINEER U. S. BUREAU OF MINES Date AUG 28 1957

APPROVAL BY DMEA EXECUTIVE OFFICER OR ALTERNATE:

Signature Robert A. Lawrence Title EXECUTIVE OFFICER DMEA FIELD TEAM REGION V Date AUG 28 1957

MONTHLY REPORT OF OPERATOR

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

Form MF-104A
(April 1952)

Budget Bureau No. 42-R1151.2

UNITED STATES
DEPARTMENT OF THE INTERIOR

DEFENSE MINERALS EXPLORATION ADMINISTRATION

OPERATOR'S UNIT COST AND PROGRESS REPORT

Month of July 7 1957 Docket No. DMEA 4286 Contract No. Idm E 982

Operator's Name The New Jersey Zinc Company Minerals Zinc

Address Jefferson City, Tennessee

OPERATION	UNIT	COSTS THIS MONTH	UNITS THIS MONTH	COSTS TO DATE	UNITS TO DATE	UNIT COSTS TO DATE	AUTHORIZED BY CONTRACT Units	AUTHORIZED BY CONTRACT Unit Costs
Drifting								
Crosscutting								
Raising								
Shafts								
Winzes 0-1000	Ft.	2750.00	1000	15,193.75	5525	2.75	30,000	2.75
Drilling: C 1000-1500	"	498.00	166	1,563.00	521	3.00	5,000	3.00
Churn								
Aug Assay	Ea.	-	-	-	-	-	200	1.00
Stripping								
Trenching								
Test Pits								
Roads and Trails								
Supervision and Technical services	Ft.	314.82	1166	1,632.42	6046	0.27	35,000	0.27
TOTAL DISTRIBUTED COSTS		3562.82		18,389.17				TOTAL COSTS AUTHORIZED BY CONTRACT
Operating Equipment Purchased								
Initial Rehabilitation and Repairs								
New Buildings, Improvements, etc.								
TOTAL COSTS		3562.82		18,389.17				

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

Date 8-1-57 Operator The New Jersey Zinc Co.

Per [signature] Title Asst. to the Supt.

REMARKS: This report covers hole BW-30

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

(Instructions on reverse)

(For Government use only)

[signature]

GEOLOGIST, U. S. G. S.
AUG 20 1957

INSTRUCTIONS

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

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

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

GPO 872894

Report for July 1957

Big War Creek Area DMEA 4286

Contract Idm E 982 (Zinc)

In July a second drill was added to the Big War Area. Only one hole, BW-30, was completed during the month. A summary log of this hole follows:

<u>Hole BW-30</u> - Mrs. Annis Helton, New Jersey Zinc Company Mineral and Mining rights, 100 feet updip from hole BW-29.

Approx. Coordinates: 61,030 N; 30,500 E
" Elevation: 1640'

0- 21	- - Clay
21- 58	- - Chicamauga limestone
58- 793	- - Mascot dolomite
793-977	- - Upper Kingsport dolomite, local traces of sphalerite at 935' and 941'. TR at 977'
977-1052	- - Lower Kingsport dolomite
1052-1059	- - 7' - estimated at 1½% Zn
1059-1111	- - Lower Kingsport dolomite
1111-1166	- - (Bottom) Longview formation.

INTERIM REPORT

DMEA-4286, Idm-E982 - Zinc

Operator: The New Jersey Zinc Company, Jefferson City, Tennessee

Location: Big War Creek area, Hancock and Hawkins Counties, Tennessee

No diamond drill-holes were completed on the Big War Creek project in the Copper Ridge district since the last inspection on July 25, 1957.

The two holes in progress at the time of inspection had been started prior to the last inspection. Additional available data on these two holes are given below:

Hole No.	Property	Depth	Est. Total Depth	Remarks
BW-31	Guy Seals	420	465	Reduced from AX to EX @ 341 because of blocking in hole and poor core recovery; with change to smaller size bit core recovery returned to better than 90 percent. TR-marker @ 294; E-marker @ 334; currently drilling in S-bed of Kingsport fm.
BW-32	Annis Helton	901	1080	Currently drillin in R-bed of Kingsport fm; chert-matrix ss @ 699; TR(?) @ 885.

Inspected: August 8, 1957

Helmuth Wedow, Jr.
Geologist
U. S. Geological Survey

OFFICIAL FILE COPY
DMEA
RECEIVED JUL 31 195
DATE | INITIAL | CODE
8/2 | | 500

INTERIM REPORT

DMEA-4286, Idm-E982 - Zinc

Operator: The New Jersey Zinc Company, Jefferson City, Tennessee

Location: Big War Creek area, Hancock and Hawkins Counties, Tennessee

Diamond drilling on the Big War Creek project in the Copper Ridge zinc district completed to date and since the last inspection on July 11, 1957 is summarized as follows:

Drilling completed:

Footage in holes completed since last inspection	1,166
Total footage in holes completed to date	6,046
Number of holes completed since last inspection	1
Total number of holes completed to date	7
Number of holes showing commercial zinc ore	0
Number of holes showing non-commercial zinc mineralization	2
Number of barren holes	5

A summary of the one hole completed since the date of the last inspection is given below:

Hole No.	Property	Total Depth	Remarks
BW-30	A. Helton	1166 ft.	Chert matrix at 793 ft. U-255 bed not recognizable TR-bed at 977 ft. T-bed at 1111-1123 ft. Traces of sphalerite at 935 and 941 ft. 7 ft. of estimated $1\frac{1}{2}$ - 2 % Zn at 1052-1059 ft. Pyrite mineralization at 941, 1000-1005, 1046 and 1051 ft.

Two holes were in progress at the time of the inspection. Available data on these two holes are as follows:

Hole No.	Property	Depth	Est. total depth	Remarks
BW-31	G. Seals	242 ft.	430 ft.	Collared in Kingsport dolomite U-255 bed at 172 ft.
BW-32	A. Helton	187 ft.	1080 ft.	Collared near top of Mascot fm.

Inspected: July 25, 1957

V. J. Lynch, Mining Engineer
U. S. Bureau of Mines

Dewey H. Amos, Geologist
U. S. Geological Survey

ACTION ON INTERIM
OR FINAL FIELD EXAM REPORT

Case _____ Date 9/19

Referred to:

1. ~~Mr. Mittendorf~~
2. ~~Mr. Johnson~~
3. ~~Mr. Chambers~~
4. Docket Control Mails and Files
5. Division
6. ~~Docket Control Mails and Files~~
7. 500

Note comments in report regarding:

1.

2.

3.

4.

and take appropriate action.

- - - - - - - - -

Action taken by Division:

Robert E. Williams

OFFICIAL FILE COPY
DMEA
RECEIVED JUL 19 1957

DATE	REMARKS	CODE
7/22	Corr	100
7/22	WR	500

INTERIM REPORT

DMEA-4286, Idm-E982 - Zinc

Operator: The New Jersey Zinc Company, Jefferson City, Tennessee

Location: Big War Creek area, Hancock and Hawkins Counties, Tennessee

No diamond drill-holes were completed on the Big War Creek project in the Copper Ridge district since the last inspection on June 27, 1957. Available preliminary data on the one hole currently drilling are tabulated below:

Hole no.	Property	Depth	Est. depth	Remarks
BW-30	Annis Helton	727	1100	Collared in Chickamauga ls (21 feet of overburden); top of Mascot dolomite @ 58; currently drilling in Mascot dolomite.

Inspected: July 11, 1957

V. J. Lynch, Mining Engineer
U. S. Bureau of Mines

Helmuth Wedow, Jr., Geologist
U. S. Geological Survey

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

Budget Bureau No. 42-R1036.5

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION

PAID ON VOUCHER & SCHEDULE OF PAYMENTS K- 5

OPERATOR'S MONTHLY REPORT AND VOUCHER

Month of June 195 7 Docket No. DMEA 4206 Contract No. Idm I-982

Operator's Name The New Jersey Zinc Company Minerals Zinc

Address Jefferson City, Tennessee

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

ITEMS OF COSTS	FOR OPERATOR'S USE: Monthly Total	Totals Previously Reported	Totals To Date	FOR GOVERNMENT USE ONLY: Approved Monthly Total	Approved Totals Previously Reported	Approved Totals To Date
(1) Independent Short Form Contracts:						
Drilling	3365.00	10,143.75	13,508.75	8/15/57		Guaranteed
Bulldozing						
Crosscutting						
Drifting						
(2) Labor and Supervision:						
Labor	325.35	992.25	1,317.60			
Supervision						
Technical Services						
(3) Operating Mat'ls. and Supplies:						
Timber						
Explosives						
Pipe						
Track						
(4) Operating Equipment:						
Rental						
Purchase						
Depreciation						
(5) Initial Rehabilitation and Repairs						
(6) New Bldgs., Improvements, etc.						
(7) Miscellaneous:						
Repairs to Equipment	- -	- -	- -			
Sampling and Analysis						
Payroll Taxes						
Liability Insurance						
(8) Contingencies (specify):						
TOTALS	3690.35	11,136.00	14,826.35	3690.35	11136.00	14826.35

RECEIVED AUG 9 1957 D.M.E.A.

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

Date 7-11-57 *Payee The New Jersey Zinc Company

Per [signature] Title Asst. to the Supt.

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

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

(Instructions on reverse)

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

$ 1845.17

Signature Helen R. Meier (Authorized Certifying Officer)

Date AUG 5 1957 Vou. No. 19

(See other side)

1845.18

(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-982 in accordance with the terms of the contract.

Signature [signature] Title MINING ENGINEER U. S. BUREAU OF MINES Date JUL 30 1957

APPROVAL BY DMEA EXECUTIVE OFFICER OR ALTERNATE:

Signature Robert A. Lawrence Title EXECUTIVE OFFICER DMEA FIELD TEAM REGION V Date JUL 30 1957

MONTHLY REPORT OF OPERATOR

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

Form MF-104A
(April 1952)

Budget Bureau No. 42-R1151.2

UNITED STATES
DEPARTMENT OF THE INTERIOR

DEFENSE MINERALS EXPLORATION ADMINISTRATION

OPERATOR'S UNIT COST AND PROGRESS REPORT

Month of June 7 195 Docket No. DMEA 4286 Contract No. Idm E-982

Operator's Name The New Jersey Zinc Company Minerals Zinc

Address Jefferson City, Tennessee

OPERATION	Unit	Costs This Month	Units This Month	Costs to Date	Units to Date	Unit Costs to Date	Authorized by Contract: Units	Authorized by Contract: Unit Costs
Drifting								
Crosscutting								
Raising								
Shafts								
Winzes								
Drilling: Core 0-1000	Ft.	2750.00	1000	12,443.75	4525	2.75	30,000	2.75
Drilling: Core 1000-1500	"	615.00	205	1,065.00	355	3.00	5,000	3.00
Churn								
Auger								
Stripping Assay	Ea.	- -	-	- -	-	-	2.00	1.00
Trenching								
Test Pits								
Roads and Trails								
Supervision & Tech. Services	Ft.	325.35	1205	1,317.60	4080	0.27		0.27
Total Distributed Costs		3690.35		14,826.35				Total Costs Authorized by Contract
Operating Equipment Purchased								
Initial Rehabilitation and Repairs								
New Buildings, Improvements, etc.								
Total Costs		3690.35		14,826.35				

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

Remarks: This report covers hole BW-29

Date 7-1-57 Operator The New Jersey Zinc Co.

Per [signature] Title Asst. to the Supt.

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

(Instructions on reverse)

(For Government use only)

RECEIVED AUG 9 1957 D.M.E.A.

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

INSTRUCTIONS

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

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

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

GPO 872894

Report for June 1957

Big War Creek Area DMEA 4284

Contract Idm B 982 (Zinc)

EXTRA COPY
DMEA
RECEIVED AUG 9 1957

DATE	INITIALS	CODE

During June, one drill operated in the Big War Creek area and only one hole was completed.

Attached, hereto, are a plan map and two sections showing the location and structural details of the drill holes completed on this project to date. A summary log of hole BW-29, completed in June follows:

Hole BW-29 - Mrs. Annis Helton property, New Jersey Zinc Company Mineral rights, 500 feet northeast of BW-19

Coordinates: 60,953.99 N; 30,541.04 E
Elevation: 1625.05'

0- 20 - - Clay
20-118 - - Chickamauga limestone
118-839 - - Mascot dolomite
839-955 - - Upper Kingsport dolomite
955-959 - - 4' - estimated 1% Zn
959-986 - - Upper Kingsport dolomite, local traces of Zn
986-1015 - 29' estimated 1% Zn
1015-1022 - -Upper Kingsport dolomite, local traces of Zn
1022 - -ZR marker
1022-1205 - -(Bottom) Lower Kingsport dolomite and limestone, possibly Longview near bottom. "R" and "S" beds, 93% dolomite.

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RECEIVED JUL 8 1957

DATE	REMARKS	CODE
7/8	C	220
8	Com	100
9	WR/2	500

INTERIM REPORT

DMEA-4286, Idm-E982 - Zinc

Operator: The New Jersey Zinc Company, Jefferson City, Tennessee

Location: Big War Creek area, Hancock and Hawkins Counties, Tennessee

Diamond drilling on the Big War Creek project in the Copper Ridge zinc district completed to date and since the last inspection on June 13, 1957 is summarized as follows:

Footage in holes completed since last inspection . . .	1,205
Total footage in holes completed to date	4,880
Number of holes completed since last inspection . . .	1
Total number of holes completed to date	6
Number of holes showing commercial zinc ore	0
Number of holes showing non-commercial zinc mineralization	1
Number of barren holes	5

The one hole completed since the last inspection is summarized briefly below:

Hole no.	Property	Depth	Remarks
BW-29	Annis Helton	1205	Location: About 500 feet northeast (on strike) from Hole BW-19 (pre-DMEA drilling). Abbreviated log: 0-20 Overburden; 20-118 Chickamauga ls; 118-839 Mascot dolomite; 839-1022 upper Kingsport dolomite; 1022-1205 lower Kingsport limestone and Longview dolomite (E marker and T bed not recognized). Mineralization: 4 ft estimated @ 1 % Zn @ 955-959; traces of sphalerite @ 972 and 973; 29 ft estimated @ 1½ % Zn @ 986-1015; shine of sphalerite @ 1019.

Hole BW-29 was being bottomed at the time of inspection. From the site of this hole the drill rig will move up dip about 100 feet to drill Hole BW-30.

Inspection: June 27, 1957

Helmuth Wedow, Geologist
U. S. Geological Survey

g

ACTION ON INTERIM
OR FINAL FIELD TEAM REPORT

Date 7-8

Referred to:

1. ~~Mr. Mittonderf~~
2. ~~Mr. Johnson~~
3. ~~Mr. Chambers~~
4. Docket Control Mails and Files
5. Division
6. Docket Control Mails and Files
7. 500

Note comments in report regarding:

1.

2.

3.

4.

and take appropriate action.

- - - - - - - - -

Action taken by Division:

Robert E. Adams

INTERIM REPORT

DMEA-4286, Idm-E982 - Zinc

Operator: The New Jersey Zinc Company, Jefferson City, Tennessee

Location: Big War Creek area, Hancock and Hawkins Counties, Tenn.

Diamond drilling on the Big War Creek project of the New Jersey Zinc Company in the Copper Ridge district completed to date and since the last inspection May 27, 1957 is summarized as follows:

Footage in holes completed since last inspection.....	1,150
Total footage in holes completed to date.....	3,675
Number of holes completed since last inspection.....	1
Total number of holes completed to date.....	5
Number of holes showing commercial zinc ore.....	0
Number of holes showing non-commercial zinc mineralization..	0
Number of barren holes.....	5

The one hole completed since the last inspection is summarized briefly as follows:

Hole no.	Property	Depth	Remarks
BW-28	Annis Helton	1150	Location: About 200 ft down dip from Hole BW-27. Abbreviated log: 0-23 Overburden; 23-791 Mascot dolomite; 791-986 upper Kingsport dolomite; 986-1041 lower Kingsport R-bed; 1041-1150 lower Kingsport--S-bed and Longview dolomite (T bed not recognized). Mineralization: Traces and shines of pyrite at 73,351, and 876-880; barren of zinc mineralization.

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DMEA
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DATE | CODE
6/25 | 5-00

With the bottoming of Hole BW-28, drilling on the first fence of the project has been completed and the drill rig has moved to a new fence site approximately 250 ft northeast of the excluded area (see Operator's property map). Hole BW-29, the first hole to be drilled on the second fence, is located on the Annis Helton property about 500 ft northeast (on strike) from Hole BW-19 (pre-DMEA drilling). It was collared in the Chickamauga limestone, entered the Mascot dolomite at a depth of 118 ft, and is currently drilling in the Mascot at a depth of 718 ft. The approximate depth at which this hole will be bottomed is 1200 feet.

Inspected: June 13, 1957

V. J. Lynch, Mining Engineer
Bureau of Mines

Helmuth Wedow, Jr.
Geologist, U.S. Geological Survey

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

Budget Bureau No. 42-R1036.5

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION

PAID ON VOUCHER & SCHEDULE OF PAYMENTS K- 79

OPERATOR'S MONTHLY REPORT AND VOUCHER

Month of May, 1957 Docket No. DMEA 4286 Contract No. Idm E-982
Operator's Name The New Jersey Zinc Co. Minerals Zinc
Address Jefferson City, Tenn.
Contract Amount, $ 107,150.00 Government Participation: 50 % Amount, $ 53,575.00

ITEMS OF COSTS	FOR OPERATOR'S USE			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	5,812.50	4,331.25	10,143.75	8/9/57 O.K.M.		
Bulldozing						
Crosscutting						
Drifting						
(2) Labor and Supervision:						
Labor	567.00	425.25	992.25			
Supervision						
Technical Services						
(3) Operating Mat'ls. and Supplies:						
Timber						
Explosives						
Pipe						
Track						
(4) Operating Equipment:						
Rental						
Purchase						
Depreciation						
(5) Initial Rehabilitation and Repairs						
(6) New Bldgs., Improvements, etc.						
(7) Miscellaneous:						
Repairs to Equipment						
Sampling and Analysis	–	–	–			
Payroll Taxes						
Liability Insurance						
(8) Contingencies (specify):						
TOTALS	6,379.50	4,756.50	11,136.00	6379.50	4756.50	11136.00

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

I certify that the above bill is correct and just and that payment therefor has not been received.
Date 6-1-57 *Payee The New Jersey Zinc Co.
Per [signature] Title Asst. to the Supt.

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

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

(Instructions on reverse)

Pursuant to authority vested in me, I certify that this account is correct and proper for payment in the amount of:
$ 3189.75
Signature Helen R. Miller (Authorized Certifying Officer)
Date JUN 27 1957 Vou. No. 210
(See other side)

3189.75

(For Government use only)

CERTIFICATION BY GOVERNMENT REPRESENTATIVE:

I certify that to the best of my knowledge and belief the contractor submitting this voucher is operating a Defense Minerals Exploration Administration project under Contract No. E-982 in accordance with the terms of the contract.

Signature [illegible] Title MINING ENGINEER U. S. BUREAU OF MINES Date JUN 24 1957

APPROVAL BY DMEA EXECUTIVE OFFICER OR ALTERNATE:

Signature [illegible] Title EXECUTIVE OFFICER DMEA FIELD TEAM REGION V Date JUN 24 1957

MONTHLY REPORT OF OPERATOR

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

Form MF-104A
(April 1952)

Budget Bureau No. 42-R1151.2

UNITED STATES
DEPARTMENT OF THE INTERIOR

DEFENSE MINERALS EXPLORATION ADMINISTRATION

OPERATOR'S UNIT COST AND PROGRESS REPORT

Month of May 1957 Docket No. DMEA 4286 Contract No. Idm E-982

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

Address Jefferson City, Tennessee

OPERATION	UNIT	COSTS THIS MONTH	UNITS THIS MONTH	COSTS TO DATE	UNITS TO DATE	UNIT COSTS TO DATE	AUTHORIZED BY CONTRACT Units	AUTHORIZED BY CONTRACT Unit Costs
Drifting								
Crosscutting								
Raising								
Shafts								
Winzes								
Drilling: Core 0-1000	Ft.	5,362.50	1,950	9,693.75	3,525	2.75	30,000	2.75
Churn 1000-1500	"	450.00	150	450.00	150	3.00	5,000	3.00
Auger								
Stripping Assay	ea.	-	-	-	-	-	200	1.00
Trenching								
Test Pits								
Roads and Trails								
Supervision and Tech. Services	Ft.	567.00	2,100	992.25	3,675	0.27		
TOTAL DISTRIBUTED COSTS		6,379.50		11,136.00				TOTAL COSTS AUTHORIZED BY CONTRACT
Operating Equipment Purchased								
Initial Rehabilitation and Repairs								
New Buildings, Improvements, etc.								
TOTAL COSTS								

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

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

Per [signature] Title Asst. to the Supt.

REMARKS: This report covers drill holes BW-27 BW-28

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

(Instructions on reverse)

(For Government use only)

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

INSTRUCTIONS

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

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

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

GPO 872894

Report for May 1957

Big Bear Creek Area [illegible] 4226

Contract No. D-202 (Zinc)

EXPLORATION DATA		
RECEIVED		1957
DATE	[illegible]	CODE

During May one drill operated on the Big Bear Creek project and two holes totalling 2,100 feet were completed. Log summaries of these holes are given below:

Hole [illegible]-27 - Mrs. Annie Melton property, New Jersey Zinc Co. mineral rights - 200' downhip from [illegible]-26

Coordinates: 60,316.61 N; 23,996.66 E
Elevation: 1674.27'

0 -	23	- - - - Clay
23 -	521	- - - - Hancock dolomite
521 -	779	- - - - Upper Kingsport dolomite
	779	- - - - [illegible] Marker
779 -	935	- - - - Lower Kingsport limestone and dolomite, 50% dolomite. Lines of sphalerite at 842', 863', and 916'
935 -	950	- - - - (Cotton) Longview limestone and dolomite.

Hole [illegible]-28 - Mrs. Annie Melton property, New Jersey Zinc Company mineral rights - 200' downhip from [illegible]-27.

Coordinates: 60,158 N; 23,105 E
Elevation: 1,673'

0 -	23	- - - - Clay
23 -	701	- - - - Hancock dolomite
701 -	936	- - - - Upper Kingsport dolomite
	936	- - - - [illegible] Marker
936 -	1145	- - - - Lower Kingsport limestone and dolomite, 75% dolomite
1145 -	1150	- - - - (Cotton) Longview limestone.

A. D. England/dm

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RECEIVED JUN 12 1957

DATE	[illegible]	CODE
6/12	7009	220
"	[illegible]	100
7/14	[illegible]	500

INTERIM REPORT

DMEA-4286, Idm-E982 - Zinc

Operator: The New Jersey Zinc Company, Jefferson City, Tennessee

Location: Big War Creek area, Hancock and Hawkins Counties, Tennessee

Diamond drilling on the Big War Creek project of the New Jersey Zinc Company in the Copper Ridge district completed to date and since the last inspection on May 2, 1957 is summarized as follows:

Footage in holes completed since last inspection	950
Total footage in holes completed to date	2,525
Number of holes completed since last inspection	1
Total number of holes completed to date	4
Number of holes showing commercial zinc ore	0 ✓
Number of holes showing non-commercial zinc mineralization	0
Number of barren holes	4

Additional pertinent data on the one hole completed since the last inspection are given below:

Hole no.	Property	Depth	Remarks
BW-27	Annis Helton	950	"T" bed @ 935-945; barren hole.

Available data on Hole BW-28, the one hole currently drilling, follow:

Hole no.	Property	Depth	Est. depth	Remarks
BW-28	Annis Helton	1035	1150	Located about 200 feet down dip from Hole BW-27; collared in Mascot dol; chert-matrix ss @ 791; "TR" @ 986; traces and shines of pyrite @ 73, 351, and 876-880.

Unless Hole BW-28 encounters significant occurrences of sphalerite in the 115 feet to be drilled, exploration on the fence consisting of Holes BW-24 through BW-28 will be considered complete and the drill rig will be moved to a new fence site northeast of the excluded area shown on the Operator's property map.

Inspected: May 27, 1957

V. J. Lynch, Mining Engineer
U. S. Bureau of Mines

Helmuth Wedow, Jr., Geologist
U. S. Geological Survey

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RECEIVED MAY 16 1957

DATE	INITIALS	CODE
5/6	JWD	220
5/7	CDW	100
5/7	WRG	500

INTERIM REPORT

DMEA-4286, Idm-E982 - Zinc

Operator: The New Jersey Zinc Company, Jefferson City, Tennessee

Location: Big War Creek area, Hancock and Hawkins Counties, Tennessee

Diamond drilling on the Big War Creek project of the New Jersey Zinc Company completed to date and since the last inspection on April 11, 1957 is summarized as follows:

Footage in holes completed since last inspection	725
Total footage in holes completed to date	1,575
Number of holes completed since last inspection	1
Total number of holes completed to date	3
Number of holes showing commercial zinc ore	0 ✓
Number of holes showing non-commercial zinc mineralization	0
Number of barren holes	3

Additional data on the one hole completed since the last inspection are as follows:

Hole no.	Property	Depth	Remarks
BW-26	Annis Helton	725	Barren hole; "E" marker not recognized; "T" bed @ 708-714.

The hole currently drilling is located 200 feet southeast of Hole B-26. Pertinent available information on Hole B-27 is given below:

Hole no.	Property	Depth	Est. depth	Remarks
BW-27	Annis Helton	923	950	Collared in Mascot dol; chert-matrix ss @ 588; "TR" @ 779; "E" marker @ 830; weak shines or traces of sphalerite @ 842-843 and 846; operator will probably class this as a barren hole unless stronger mineralization shows in remainder of hole.

On the completion of Hole BW-27 the drill rig will move 200 feet southeast (down dip) from Hole BW-27 to drill what will proably be the last hole on the present exploration fence.

Inspected: May 2, 1957

Helmuth Wedow, Jr., Geologist
U. S. Geological Survey

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

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION

Budget Bureau No. 42-R1036.5

PAID ON VOUCHER & SCHEDULE OF PAYMENTS K- 70

OPERATOR'S MONTHLY REPORT AND VOUCHER

Month of April 1957 Docket No. DMEA 4286 Contract No. Idm E 982
Operator's Name The New Jersey Zinc Company Minerals Zinc
Address Jefferson City, Tennessee
Contract Amount, $ 107,150.00 Government Participation: 50 % Amount, $ 53,575.00

ITEMS OF COSTS	FOR OPERATOR'S USE			FOR GOVERNMENT USE ONLY		
	Monthly Total	Totals Previously Reported	Totals To Date	Approved Monthly Total	Approved Totals Previously Reported	Approved Totals To Date
(1) Independent Short Form Contracts:						
Drilling	1993.75	2337.50	4331.25	8/9/57		
Bulldozing						
Crosscutting						
Drifting						
(2) Labor and Supervision:						
Labor						
Supervision	195.75	229.50	425.25			
Technical Services						
(3) Operating Mat'ls. and Supplies:						
Timber						
Explosives						
Pipe						
Track						
(4) Operating Equipment:						
Rental						
Purchase						
Depreciation						
(5) Initial Rehabilitation and Repairs						
(6) New Bldgs., Improvements, etc.						
(7) Miscellaneous:						
Repairs to Equipment						
Sampling and Analysis						
Payroll Taxes						
Liability Insurance						
(8) Contingencies (specify):						
TOTALS	2189.50	2567.00	4756.50	2189.50	2567.00	4756.50

RECEIVED MAY 20 1957 D.M.E.A.

I certify that the above bill is correct and just and that payment therefor has not been received.
Date 5/1/57 *Payee The New Jersey Zinc Co.
Per [signature] Title Asst. to the Supt.

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

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

(Instructions on reverse)

Pursuant to authority vested in me, I certify that this account is correct and proper for payment in the amount of:
$ 1094.75
Signature Helen R. Miller
(Authorized Certifying Officer)
Date MAY 16 1957 Vou. No. 191
(See other side)

1094.75

(For Government use only)

CERTIFICATION BY GOVERNMENT REPRESENTATIVE:

I certify that to the best of my knowledge and belief the contractor submitting this voucher is operating a Defense Minerals Exploration Administration project under Contract No. E-982 in accordance with the terms of the contract.

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

APPROVAL BY DMEA EXECUTIVE OFFICER OR ALTERNATE: ACTING EXECUTIVE OFFICER

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

MONTHLY REPORT OF OPERATOR

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

Form MF-104A
(April 1952)

Budget Bureau No. 42-R1151.2

UNITED STATES
DEPARTMENT OF THE INTERIOR

DEFENSE MINERALS EXPLORATION ADMINISTRATION

OPERATOR'S UNIT COST AND PROGRESS REPORT

Month of April 1957 Docket No. DMEA 4286 Contract No. Idm E-982

Operator's Name The New Jersey Zinc Company Minerals Zinc

Address Jefferson City, Tennessee

OPERATION	UNIT	COSTS THIS MONTH	UNITS THIS MONTH	COSTS TO DATE	UNITS TO DATE	UNIT COSTS TO DATE	AUTHORIZED BY CONTRACT Units	AUTHORIZED BY CONTRACT Unit Costs
Drifting								
Crosscutting								
Raising								
Shafts								
Winzes								
Drilling: Core 0-1000	Ft.	1993.75	✓725	4331.25	✓1575	2.75	30,000	2.75
Churn 1000-1500	"	- -	-	- -	-	-	5,000	3.00
Auger								
Stripping								
Trenching Assay	Ea.	- -	-	- -	-	-	200	1.00
Test Pits								
Roads and Trails								
Supervision and Technical Services	Ft.	195.75	✓725	425.25 ✓	1575	0.27	35,000	0.27
TOTAL DISTRIBUTED COSTS		2189.50	✓	4756.50				TOTAL COSTS AUTHORIZED BY CONTRACT
Operating Equipment Purchased								
Initial Rehabilitation and Repairs								
New Buildings, Improvements, etc.								
TOTAL COSTS		~~2189.50~~		~~4756.50~~ ✓				

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

Date 5/1/57 Operator The New Jersey Zinc Co.

Per [signature] Title Asst. to the Supt.

REMARKS: This report covers drill hole BW-26

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

(Instructions on reverse)

(For Government use only)

RECEIVED MAY 20 1957 U.S.G.S. Denver

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

MAY 15 1957

INSTRUCTIONS

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

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

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

GPO 872894

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DMEA
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DATE | INITIALS | CODE

Report for April, 1957

Big War Creek Area DMEA 4286

Contract Idm E-982

One drill operated on the Big War Creek Project in April and only one hole, BW-26, was completed. A summary of this hole follows:

Hole BW-26 - N.J.Z. Co. property - 200' downdip from BW-24.

Coordinates: 60,485.23 N; 28,887.44 E
Elevation: 1680.21'

Depth		Remarks
0- 64'		Clay
64-283'		Mascot dolomite
283-566'		Upper Kingsport dolomite
566'		TR marker
566-708'		Lower Kingsport, 62% dolomite
708-725'	(Bottom)	Longview dolomite.

A. D. Hoagland/jf

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DMEA
RECEIVED APR 22 1957

DATE	INITIALS	CODE
4/22	C	220
73	Com	100
4/26	[illegible]	500

INTERIM REPORT

DMEA-4286, Idm-E982 - Zinc

Operator: The New Jersey Zinc Company, Jefferson City, Tennessee

Location: Big War Creek area, Hancock and Hawkins Counties, Tennessee

No diamond-drill holes were completed on the Big War Creek project in the Copper Ridge district since the last inspection on March 28, 1957. Hole BW-26, the one hole currently drilling on this project, is summarized as follows:

Hole no.	Property	Depth	Estimated depth	Remarks
BW-26	Annis Helton	648	725	Collared in Mascot dolomite; chert-matrix ss @ 283; U-255 bed @ 460(?); "TR" @ 566; no evidence of zinc mineralization noted to date.

On the completion of Hole BW-26 the drill rig will move to the site of Hole BW-27, 200 feet southwest of Hole BW-26 on the same exploration fence.

Inspected: April 11, 1957

Helmuth Wedow, Jr., Geologist
U. S. Geological Survey

Form M[illegible]-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- 64

OPERATOR'S MONTHLY REPORT AND VOUCHER

Month of March 7 1957 Docket No. DMEA 4286 Contract No. Idm E-982

Operator's Name The New Jersey Zinc Company Minerals Zinc

Address Jefferson City, Tennessee

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

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:	2337.50		2337.50	5/7/56.	W.P.M.	Approved
Drilling						
Bulldozing						
Crosscutting						
Drifting						
(2) Labor and Supervision:						
Labor						
Supervision	229.50	-	229.50			
Technical Services						
(3) Operating Mat'ls. and Supplies:						
Timber						
Explosives						
Pipe						
Track						
(4) Operating Equipment:						
Rental						
Purchase						
Depreciation						
(5) Initial Rehabilitation and Repairs						
(6) New Bldgs., Improvements, etc.						
(7) Miscellaneous:						
Repairs to Equipment	-	-	-			
Sampling and Analysis						
Payroll Taxes						
Liability Insurance						
(8) Contingencies (specify):						
TOTALS	2567.00		2567.00	2567.00	—	2567.00

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

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

Date 4-1-57 *Payee The New Jersey Zinc Company

Per [signature] Title Asst. to the Supt.

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

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

(Instructions on reverse)

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

$ 1283.50

Signature Helen R. Miller (Authorized Certifying Officer)

Date APR 19 1957 Vou. No. 176

(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-982 in accordance with the terms of the contract.

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

APPROVAL BY DMEA EXECUTIVE OFFICER OR ALTERNATE:

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

MONTHLY REPORT OF OPERATOR

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

Form MF-101A
(April 1952)

Budget Bureau No. 42-R1151.2

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

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

Month of March 195 7 Docket No. DMEA 4286 Contract No. Idm E 982

Operator's Name The New Jersey Zinc Company Minerals Zinc

Address Jefferson City, Tennessee

OPERATION	UNIT	COSTS THIS MONTH	UNITS THIS MONTH	COSTS TO DATE	UNITS TO DATE	UNIT COSTS TO DATE	AUTHORIZED BY CONTRACT Units	AUTHORIZED BY CONTRACT Unit Costs
Drifting								
Crosscutting								
Raising								
Shafts								
Winzes 0-1000	Ft.	2337.50	850	2337.50	850	2.75	30,000	2.75
Drilling: 1000-1500	"	-	-	-	-	-	54,000	3.00
Churn								
Auger								
Stripping								
Trenching Assays	Assay	-	-	-	-	-	200	1.00
Test Pits								
Roads and Trails Supervision and Technical service	Ft.	229.50	850	229.50	850	0.27	35,000	0.27
TOTAL DISTRIBUTED COSTS		2567.00		2567.00				TOTAL COSTS AUTHORIZED BY CONTRACT
Operating Equipment Purchased								
Initial Rehabilitation and Repairs								
New Buildings, Improvements, etc.								
TOTAL COSTS		2567.00		2567.00				

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

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

Per [signature] Title Asst. to the Supt.

REMARKS: This report covers Holes: BW-24, BW-25

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

(Instructions on reverse)

(For Government use only)

[signature]
GEOLOGIST, USGS.
APRIL 18, 1957

INSTRUCTIONS

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

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

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

GPO 872894

EXTRA COPY
DMEA
RECEIVED APR 22 1957

DATE	INITIALS	CODE

Report for March, 1957

Big War Creek Area DMEA 4286

Contract Idm E-982

Drilling with one drill began on the Big War Creek project during March. Two holes, totalling 850 feet, were completed. Log summaries of these holes follow:

Hole BW-24 - N.J.Z. Co. property - 600' southwest of BW-4

Coordinates: 60,816.64 N; 28,666.06 E
Elevation: 1639.91

Depth	Remarks
0- 50	Red Clay
50-357	Mascot and Upper Kingsport dolomites. Contact not recognized but possibly at 163'
357	TR marker
357-504	Lower Kingsport dolomite
504-511	Longview dolomite (T bed)
511-515	Longview limestone

Hole BW-25 - N.J.Z. Co. property - 200' updip from BW-24

Coordinates: 60,650.82 N; 28,777.91 E
Elevation: 1662.82'

0- 25	Red Clay
25-178	Upper Kingsport dolomite
178	TR marker
178-247	Lower Kingsport dolomite
247-308	Lower Kingsport limestone
308-335	(Bottom) Interbedded limestone and dolomite of Longview.

T. E. Wayland/jf

OFFICIAL FILE COPY
DMEA
RECEIVED APR 8 1957

DATE	INITIALS	CODE
2/20	C	220
4/8	COM	100
4/8	~~[illegible]~~	500

INTERIM REPORT

DMEA-4286, Idm-E982 - Zinc

Operator: The New Jersey Zinc Company, Jefferson City, Tennessee

Location: Big War Creek area, Hancock and Hawkins Counties, Tennessee

Diamond drilling on the Big War Creek project of the New Jersey Zinc Company was initiated on March 7, 1957. The drilling to date is summarized as follows:

Footage in holes completed to date	850
Number of holes completed to date	2
Number of holes showing commercial zinc ore	0
Number of holes showing non-commercial zinc mineralization	0
Number of barren holes	2

Pertinent data on the two holes completed are given below:

Hole no.	Property	Depth	Remarks
BW-24	N. J. Zinc	515	Located 600 ft SW of Hole BW-4 (see Operator's property map in contract) and about 230 ft down dip from projected position of top of "R" bed; "TR" @ 357; top of Longview dolomite @ 504. Barren hole; shines of pyrite @ 431 and 436.
BW-25	N. J. Zinc	335	Located 200 ft up dip from Hole BW-24; collared in upper Kingsport fm; "TR" @ 178; top of Longview dolomite @ 308. Barren hole.

At the time of the current inspection, the drilling rig was moving to the site of the third hole, approximately 200 feet down dip from Hole BW-24. This third hole will be located on the Annis Helton property and will be bottomed at an estimated depth of 700 feet.

Inspected: March 28, 1957

V. J. Lynch, Mining Engineer
U. S. Bureau of Mines

Helmuth Wedow, Jr., Geologist
U. S. Geological Survey

RECEIVED MAR 20 1957

DATE	INITIALS	CODE
3/20	C	220
3/20	COW	100
3/22	NRA	500

INTERIM REPORT

DMEA-4286, Idm-E982 - Zinc

Operator: The New Jersey Zinc Company, Jefferson City, Tennessee

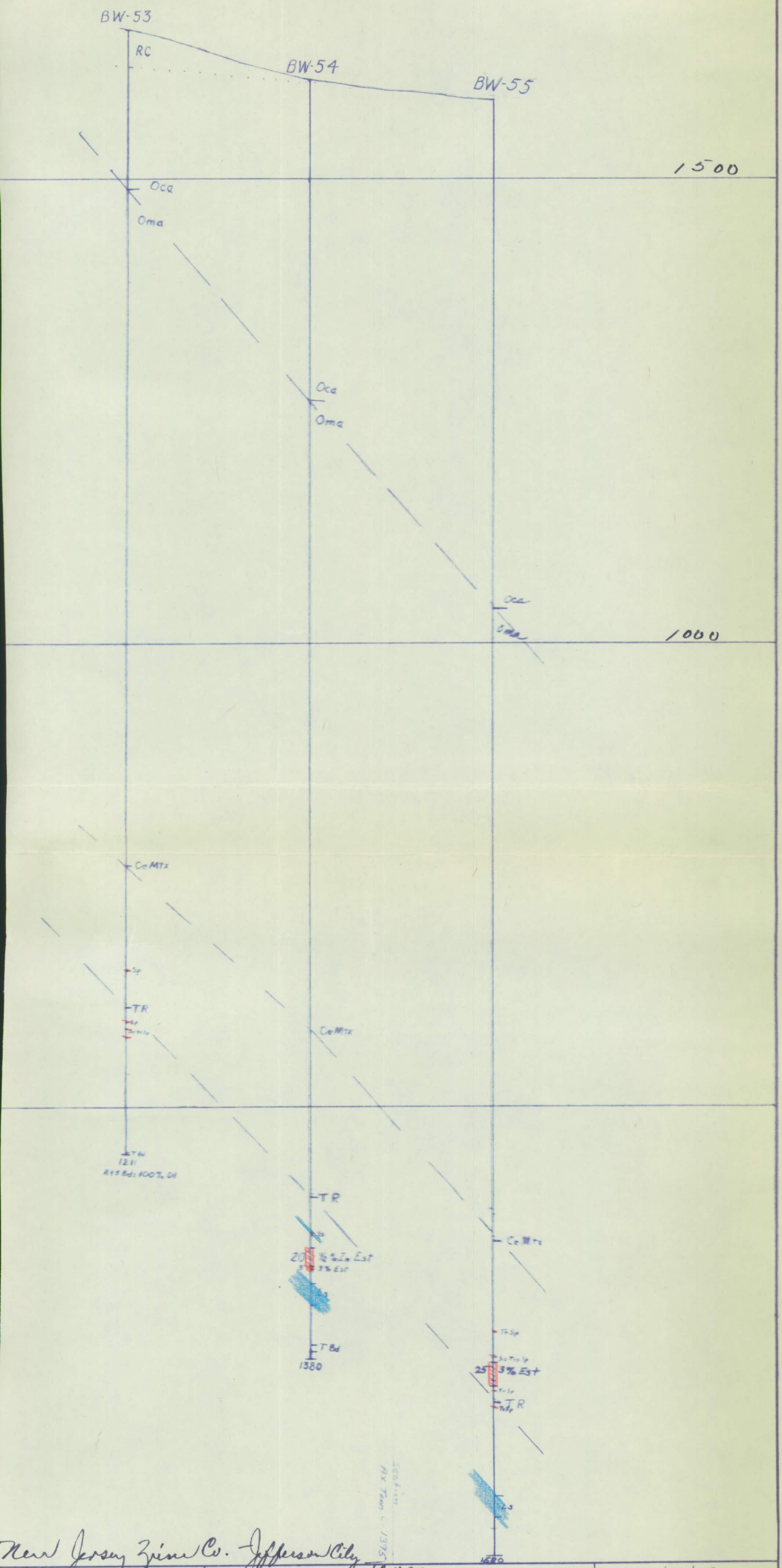
Location: Big War Creek area, Hancock and Hawkins Counties, Tennessee

On March 6, 1957, the Operator moved one diamond-drill rig from the Eidson project (DMEA-4177) to the Big War Creek area. Drilling started on March 7, 1957 in a dip fence 600 feet southwest of Hole BW-4 and 200 feet southwest of the area excluded from the contract (see geologic and property map of Operator's application). The first hole to be drilled in this fence is about 230 feet down dip from the projected position of the top of the "R" bed (TR) and is located on property owned in fee simple by the Operator. At the time of inspection the drill was cutting overburden. This hole will be bottomed at a depth of about 500 feet.

The objective of this first drilling fence is to determine whether the ore found in pre-contract drilling south of the prominent geochemical anomaly in the excluded area lies in a body that plunges southwest.

Inspected: March 7, 1957

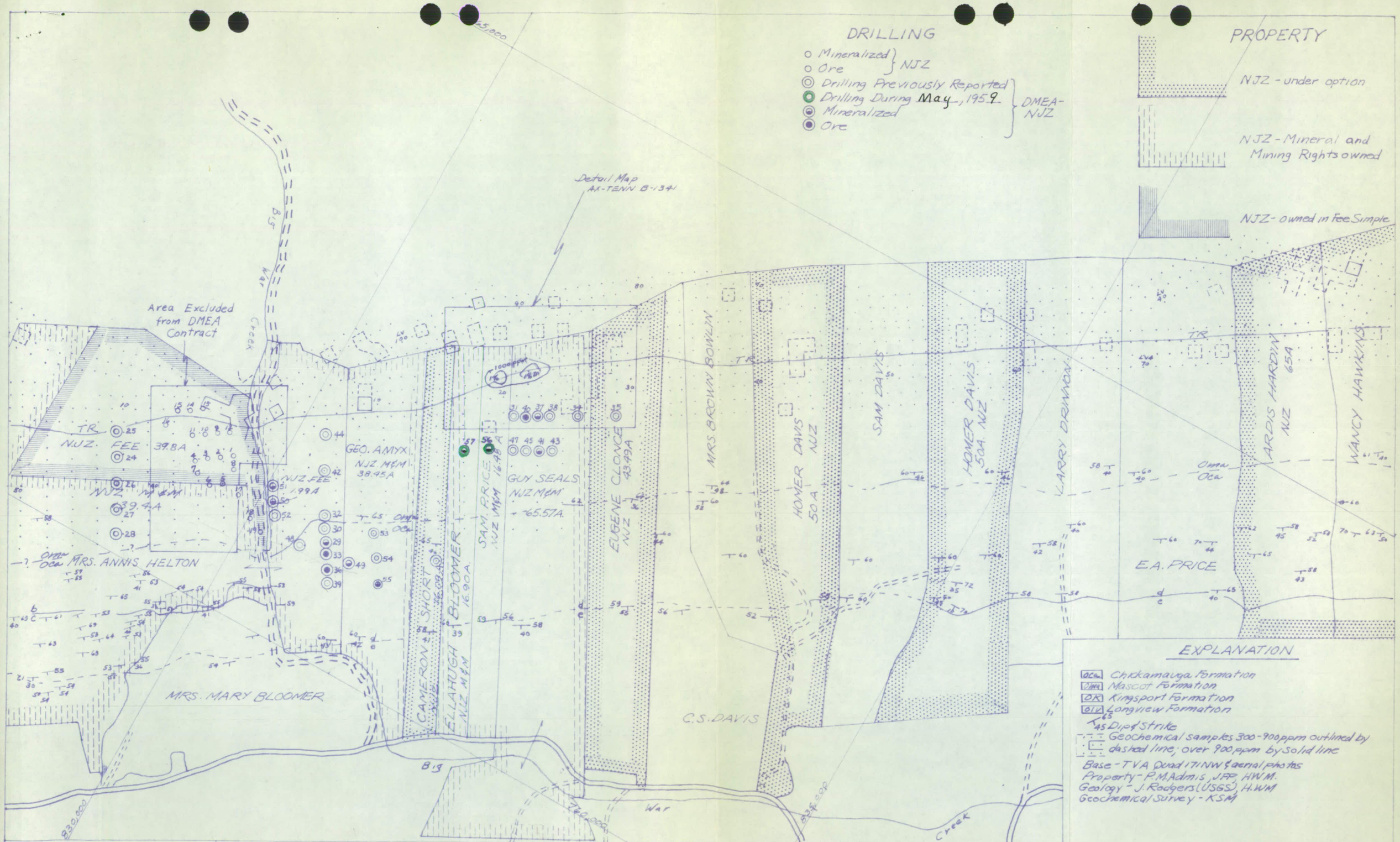
Helmuth Wedow, Jr., Geologist
U. S. Geological Survey



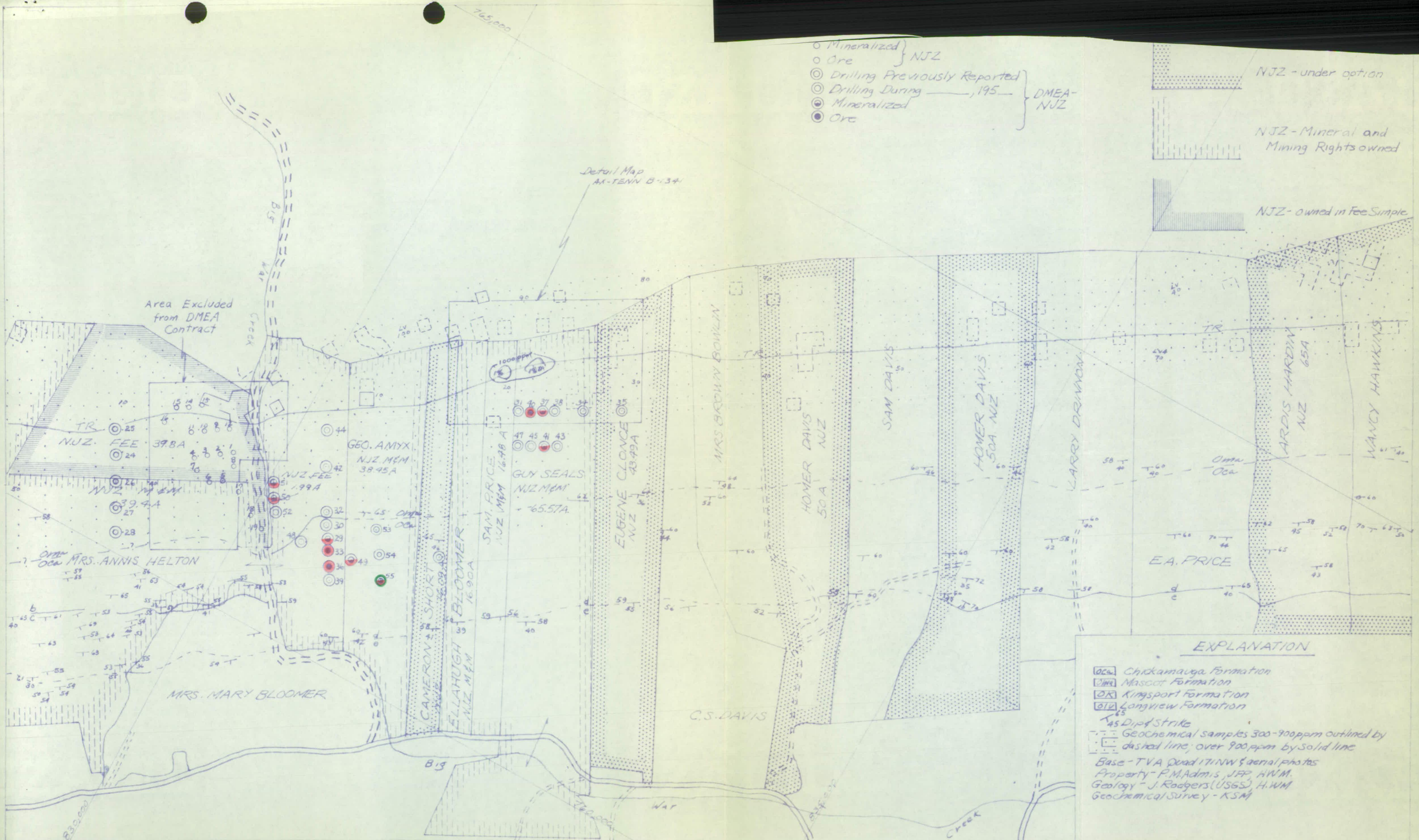
New Jersey Zinc Co. Jefferson City Tenn.

DRAWN CWR	Dip Section	BW-53, 54, 55	DATE 1/29/59
TRACED	Sector II	Area D	SCALE 1" = 100'
CHECKED	Copper Ridge	Belt	AX-Tenn C-1421
APPROVED			

X5453C 1M 11-54



THE NEW JERSEY ZINC COMPANY ROGERSVILLE TENNESSEE	DRAWN J.F.P. DATE 4-25-53 TRACED W.J.C. SCALE 1"=660'	COPPER RIDGE BELT SECTOR II BIG WAR CRK. AREA	HAWKINS, HANCOCK COS, TENN AX-TENN 100

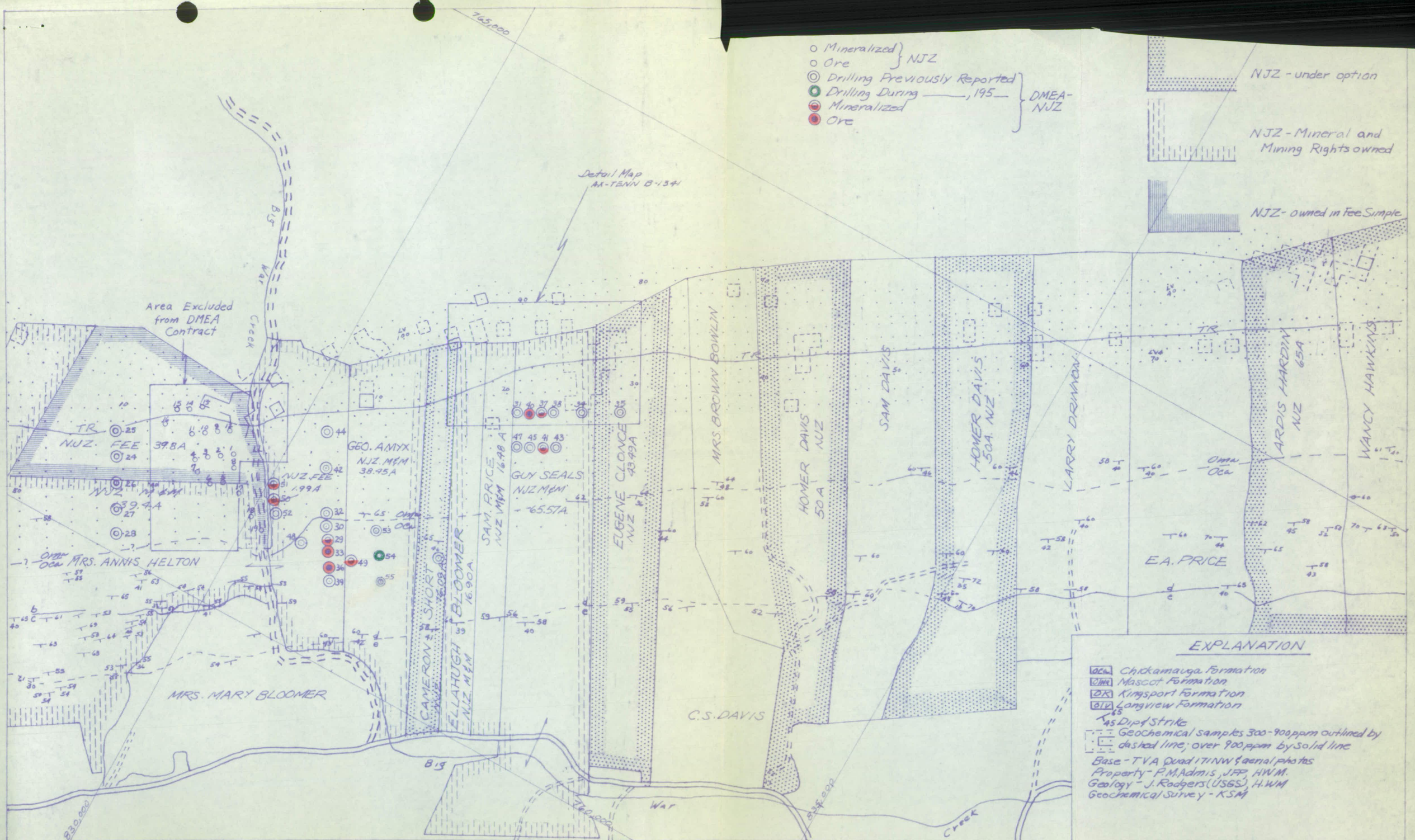


THE NEW JERSEY ZINC COMPANY
ROGERSVILLE TENNESSEE

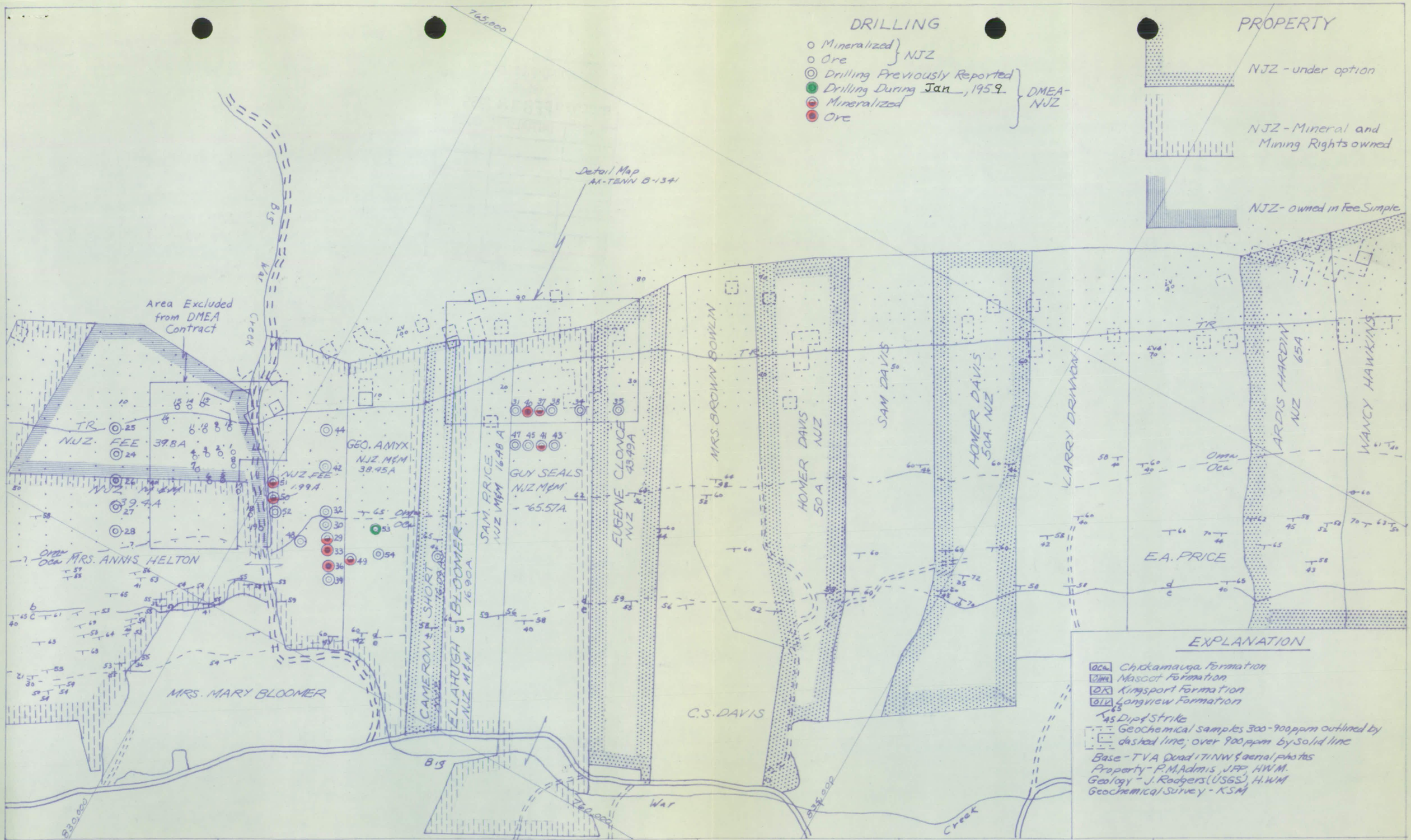
DRAWN J.F.P. DATE 4-25-53
TRACED W.K. SCALE 1"=660'

COPPER RIDGE BELT
SECTOR II BIG WAR CRK AREA

HAWKINS, HANCOCK CO'S, TENN
AX-TENN 100



THE NEW JERSEY ZINC COMPANY ROGERSVILLE TENNESSEE	DRAWN J.F.P. DATE 4-25-53 TRACED W.W.C. SCALE 1"=660'	COPPER RIDGE BELT SECTOR II BIG WAR CRK. AREA	HAWKINS, HANCOCK CO'S, TENN AX-TENN 100



THE NEW JERSEY ZINC COMPANY ROGERSVILLE TENNESSEE	DRAWN J.F.P. DATE 4-25-53 TRACED W.W.C. SCALE 1"=660'	COPPER RIDGE BELT SECTOR II BIG WAR CRK. AREA	HAWKINS, HANCOCK CO.S, TENN AX-TENN 100	

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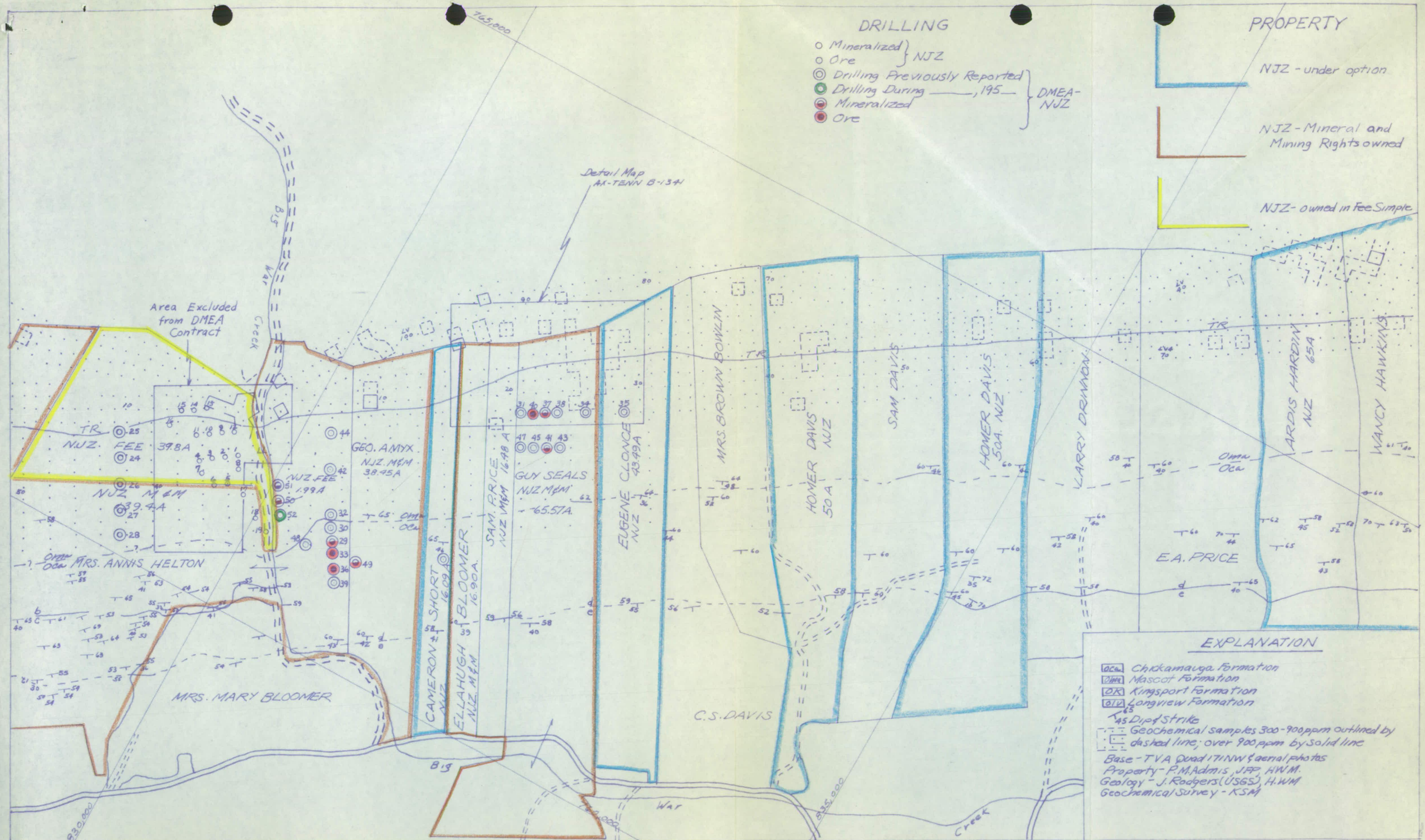
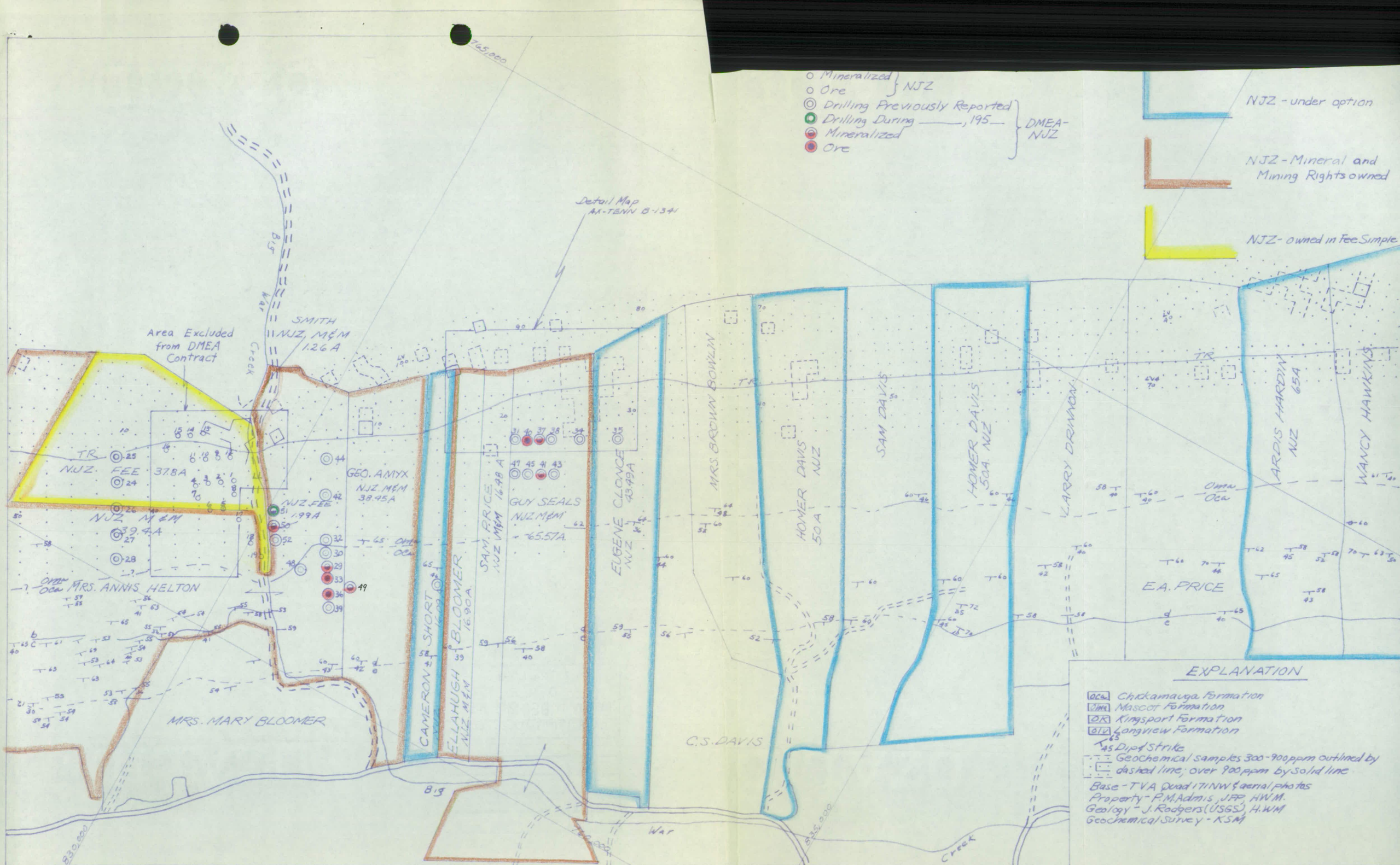


THE NEW JERSEY ZINC COMPANY ROGERSVILLE TENNESSEE	DRAWN J.F.P. DATE 4-25-53 TRACED W.W.C. SCALE 1"=660'	COPPER RIDGE BELT SECTOR II BIG WAR CRK. AREA	HAWKINS, HANCOCK CO.S, TENN AX-TENN 100



THE NEW JERSEY ZINC COMPANY ROGERSVILLE TENNESSEE	DRAWN J.F.P. DATE 4-25-53 TRACED W.W.C. SCALE 1"=660'	COPPER RIDGE BELT SECTOR II BIG WAR CRK. AREA	HAWKINS, HANCOCK COS, TENN AX-TENN 100

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DATE	INITIALS	CODE

DRILLING

- Mineralized } NJZ
- Ore } NJZ
- Drilling Previously Reported } DMEA-NJZ
- Drilling During _____, 195__ } DMEA-NJZ
- Mineralized } DMEA-NJZ
- Ore } DMEA-NJZ

PROPERTY

- NJZ - under option
- NJZ - Mineral and Mining Rights owned
- NJZ - owned in Fee Simple

765,000

Detail Map
AX Tenn 8-1341

Big War Creek

Area Excluded from DMEA Contract

SMITH
NJZ M&M
1.26 A

TR.
NUZ FEE
37.6 A.

NUZ M&M

AMYX
NJZ M&M

MRS. ANNIS HELTON

MRS. MARY BLOOMER

CAMERON SHORT
NJZ
16.09 A.

E.L. HUGH BLOOMER
NJZ
16.90 A.

SAM. PRICE
NUZ M&M
16.46 A.

GUY SEALS
NJZ M&M
65.57 A.

EUGENE CLONCE
NUZ
43.49 A.

MRS. BROWN BOWLIN

HOMER DAVIS
50 A.
NJZ

C.S. DAVIS

SAM DAVIS

HOMER DAVIS
50 A. NJZ

LARRY DRINNON

E.A. PRICE

ARDIS HARDIN
NJZ
65 A.

NANCY HAWKINS
NJZ
65 A.

630,000

635,000

EXPLANATION

- Oca Chickamauga Formation
- Oma Mascot Formation
- Ok Kingsport Formation
- Olv Longview Formation
- 65/43 Dip & Strike
- Geochemical samples 300-900 ppm outlined by dashed line; over 900 ppm by solid line

Base - T.V.A. Quad 171 NW & aerial photos
Property - P.M. Admis, J.F.P., H.W.M.
Geology - J. Rodgers (USGS), H.W.M.
Geochemical Survey - K.S.M.

BIG WAR CREEK AREA

POSTED TO DATE 1-56 TEW	THE NEW JERSEY ZINC COMPANY ROGERSVILLE TENNESSEE	DRAWN J.F.P. DATE 4-25-53 TRACED SJL, JFP SCALE 1"=660'	COPPER RIDGE BELT SECTOR II SHEET 4NE	HAWKINS, HANCOCK CO'S, TENN. FILE NO. AX-TENN 100

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DATE	INITIALS	CODE

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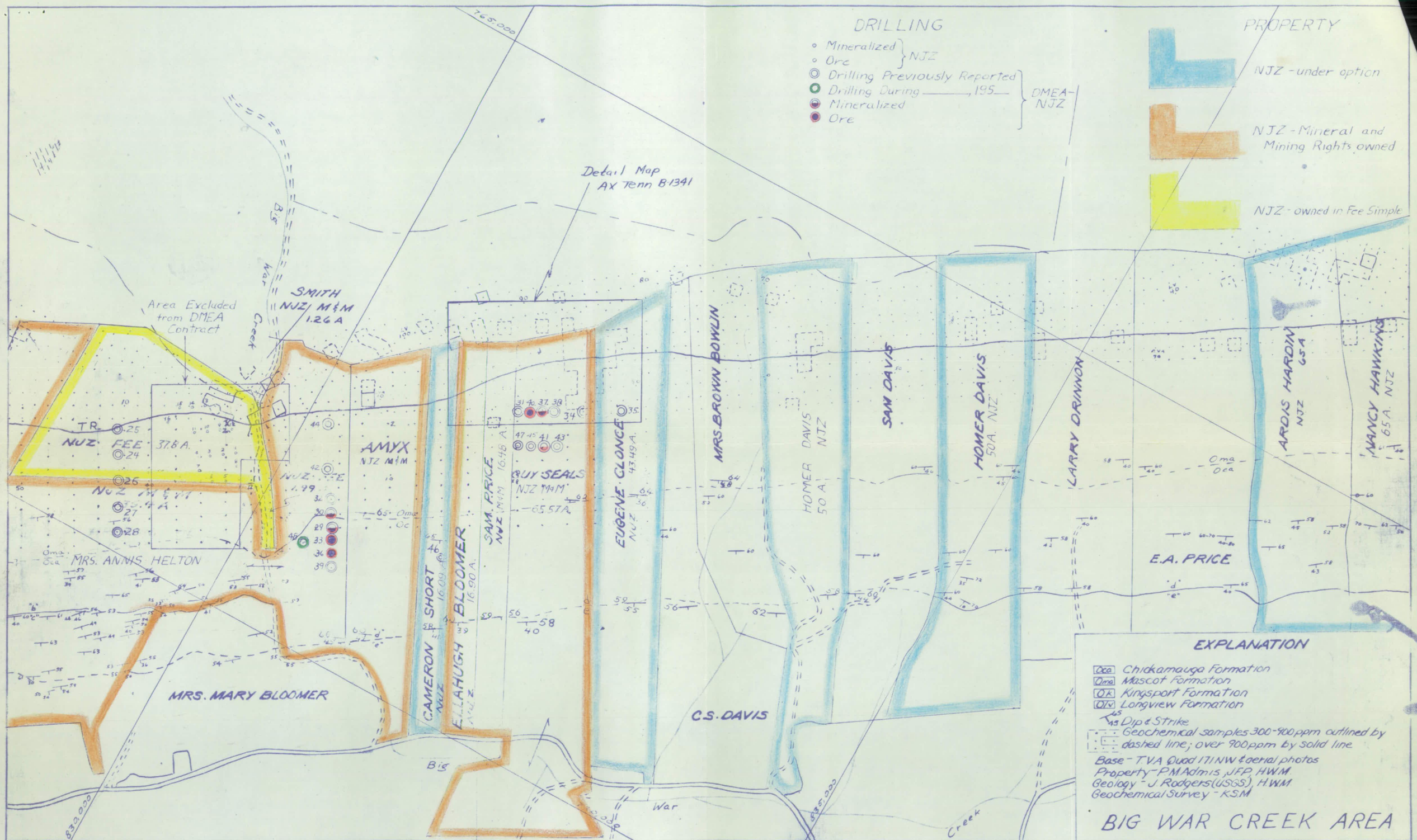
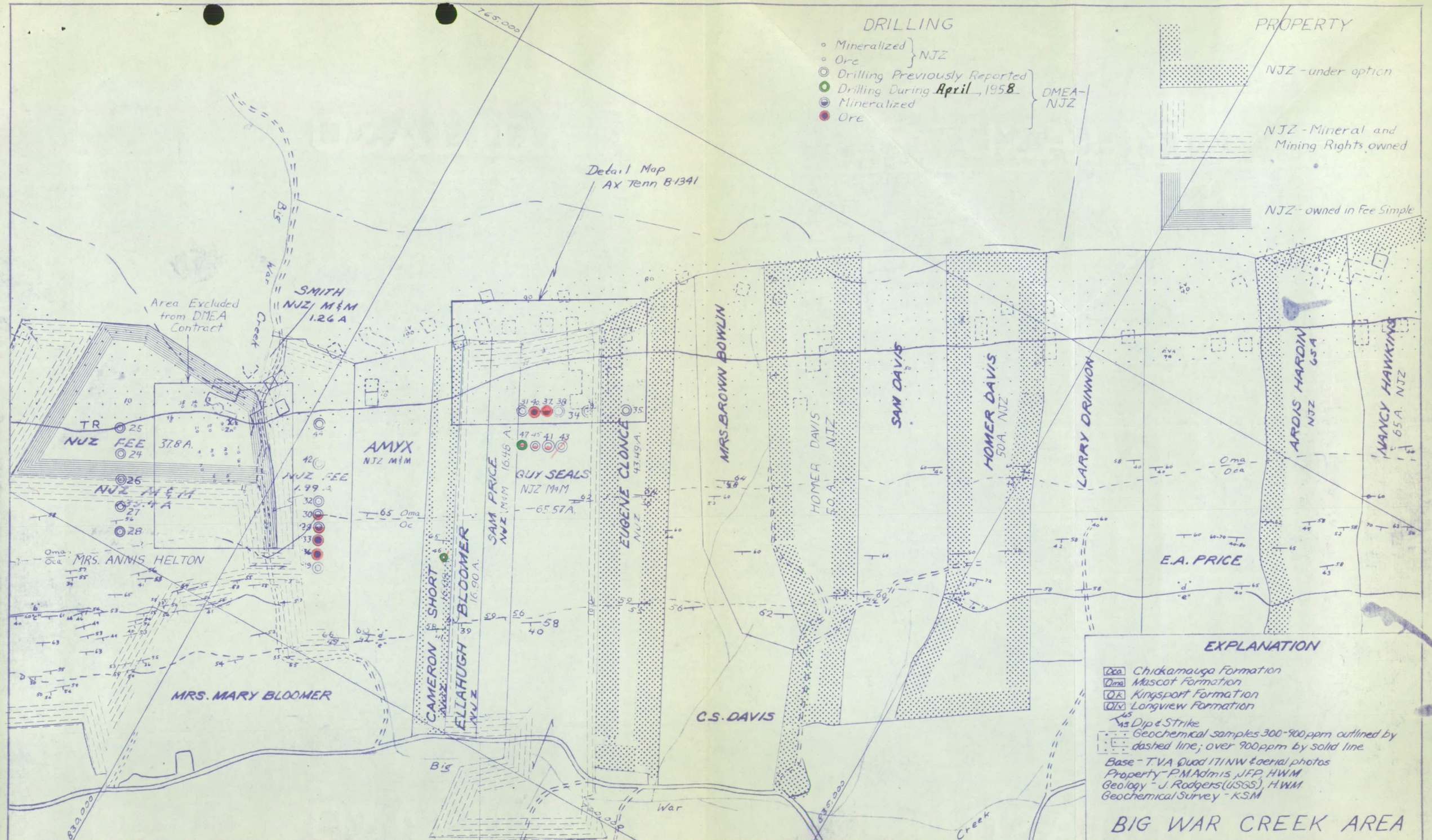
DATE	INITIALS	CODE



POSTED TO DATE 1-56 TEW	THE NEW JERSEY ZINC COMPANY ROGERSVILLE TENNESSEE	DRAWN J.F.P. DATE 4-25-59 TRACED SJL, JFP SCALE 1"=660'	COPPER RIDGE BELT SECTOR II SHEET 4NE	HAWKINS, HANCOCK COS, TENN FILE NO. AX-TENN 100



POSTED TO DATE 1-56 TEW	THE NEW JERSEY ZINC COMPANY ROGERSVILLE TENNESSEE	DRAWN J.F.P. DATE 4-25-53 TRACED SJL, JFP SCALE 1"=660'	COPPER RIDGE BELT SECTOR II SHEET 4NE	HAWKINS, HANCOCK COS, TENN FILE NO. AX-TENN 100

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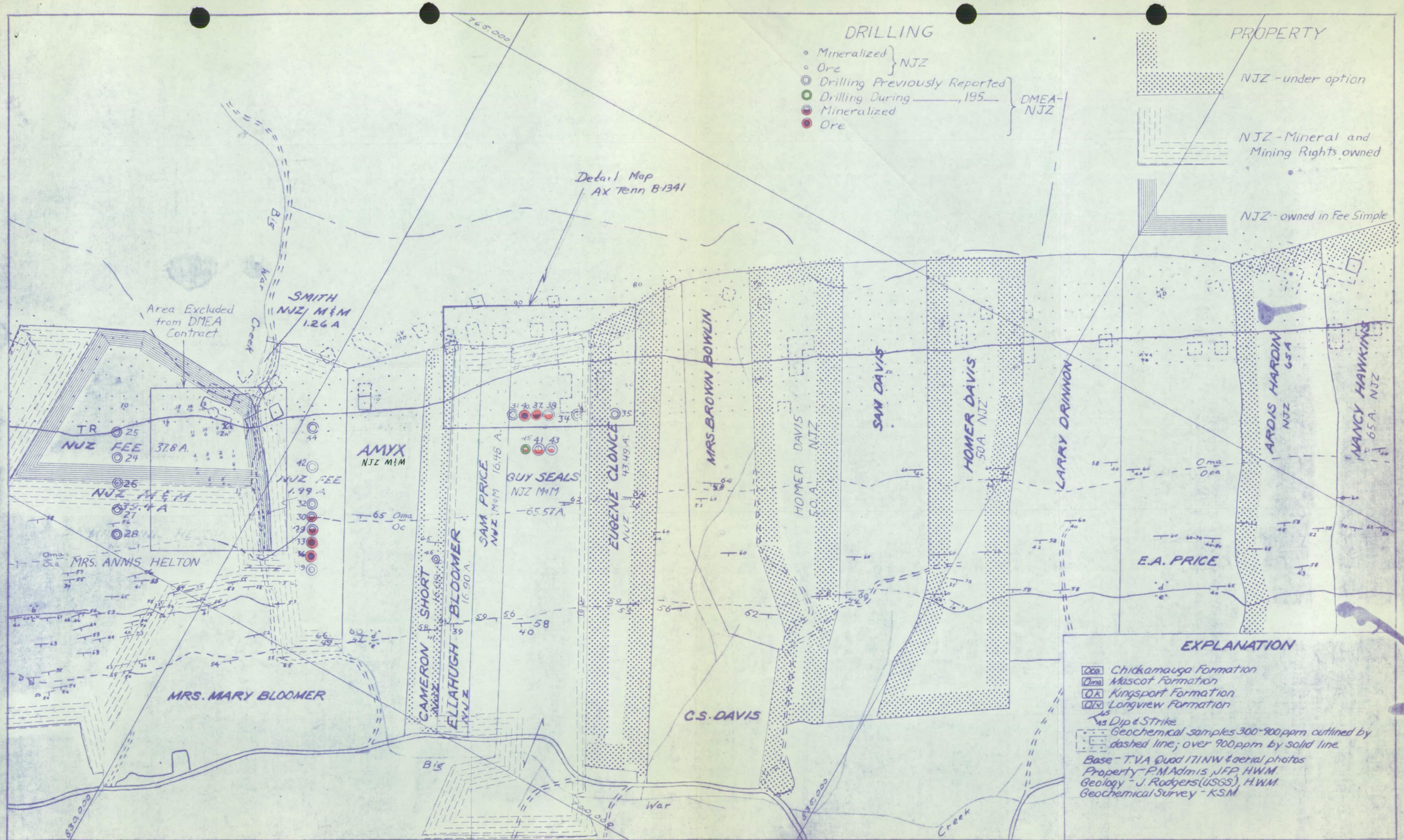

POSTED TO DATE 1-56 TEN	THE NEW JERSEY ZINC COMPANY ROGERSVILLE TENNESSEE	DRAWN J.F.P. DATE 4-25-53 TRACED SJL, JFP SCALE 1"=660'	COPPER RIDGE BELT SECTOR II SHEET 4NE	HAWKINS, HANCOCK CO'S, TENN FILE NO. AX-TENN 100

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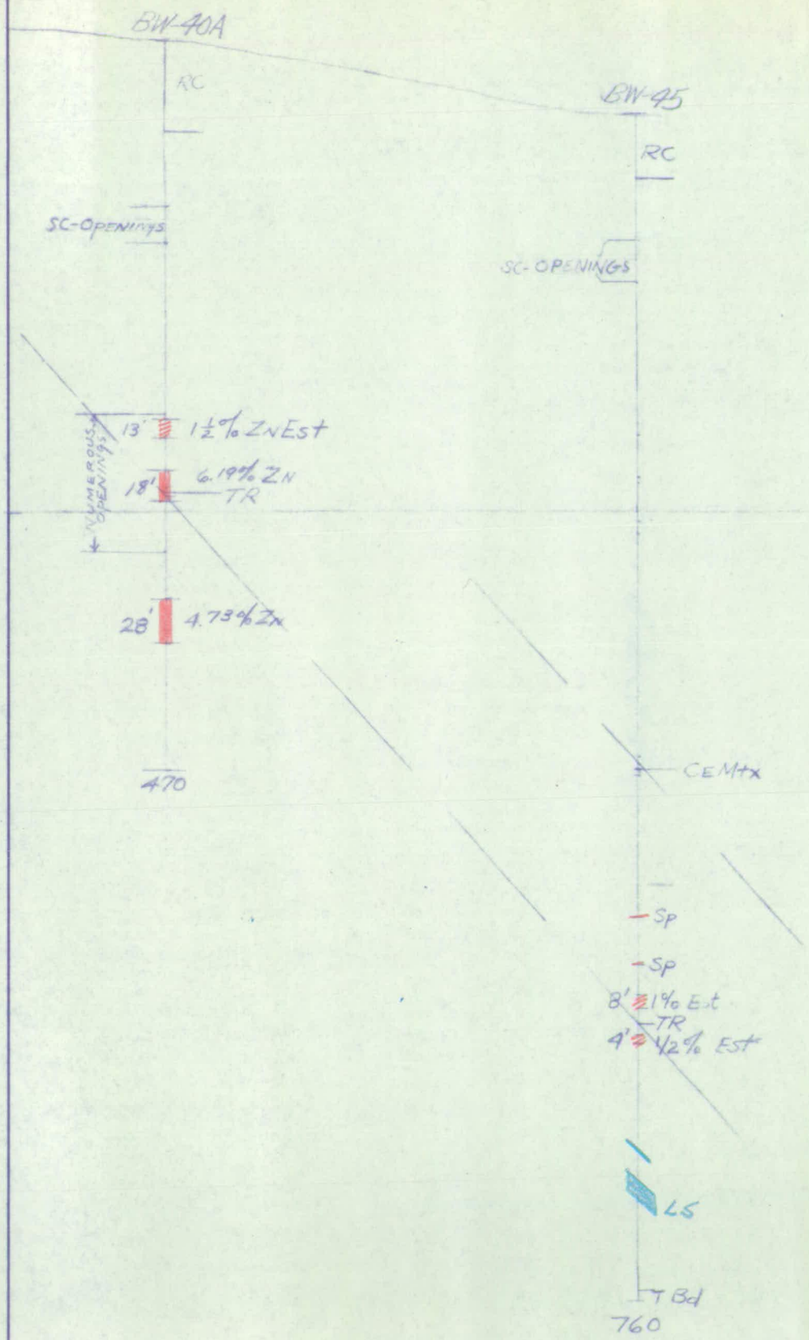
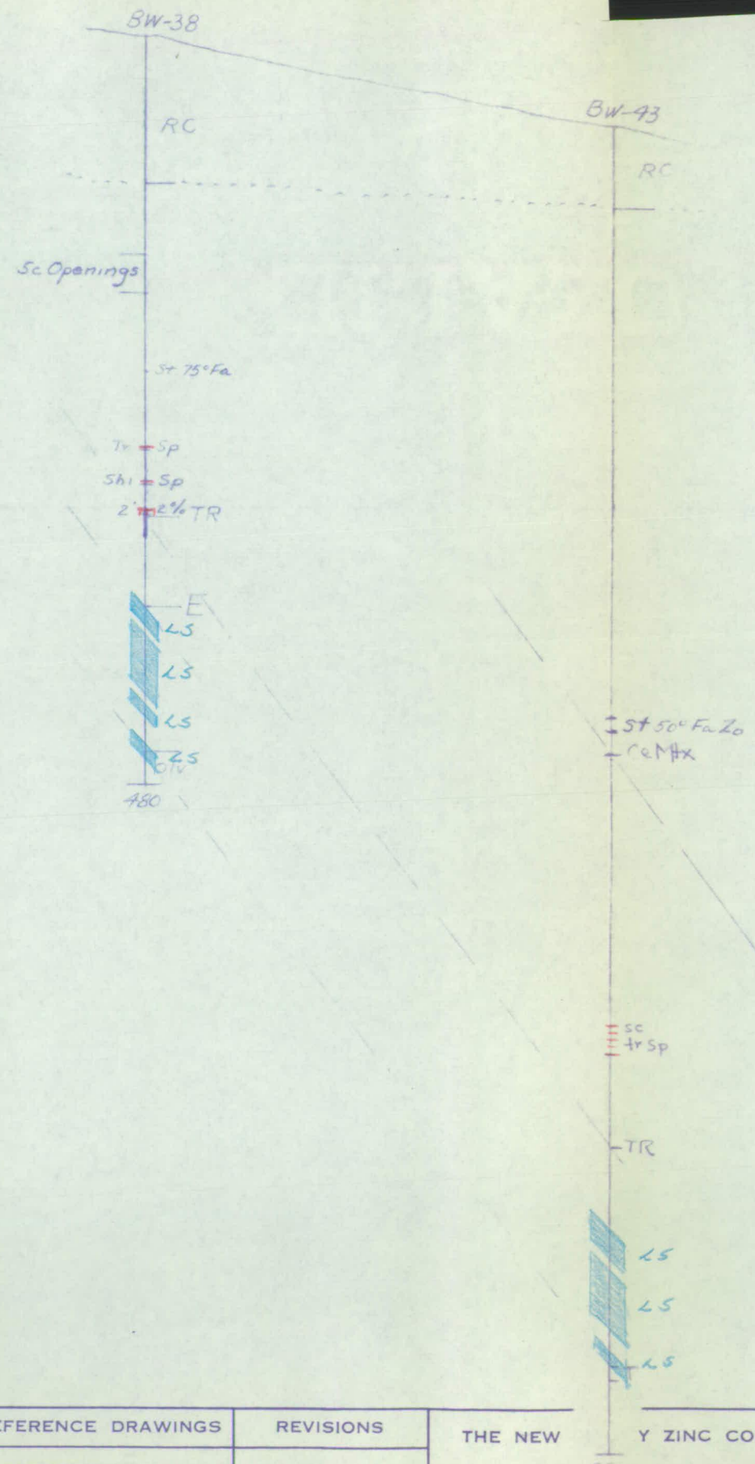
DATE	INITIALS	CODE



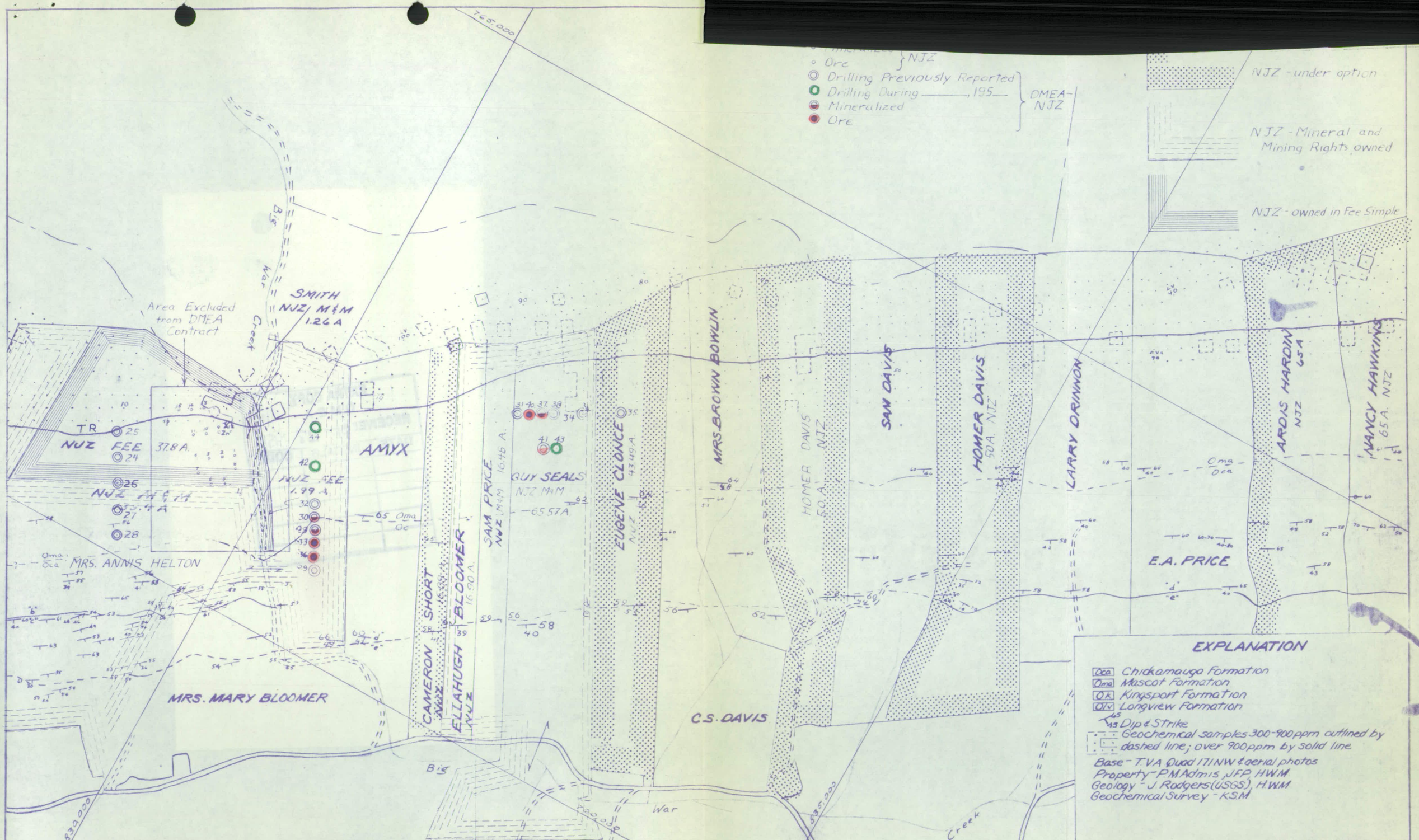
SERIAL NUMBER		DATE ISSUED		REFERENCE DRAWINGS	REVISIONS	THE NEW JERSEY ZINC COMPANY	DRAWN WJC	DIP SECTION BW-40A-45	DATE 2-13-58
THIS DRAWING IN DESIGN AND DETAIL IS OUR PROPERTY AND MUST NOT BE USED EXCEPT IN CONNECTION WITH OUR WORK. ALL RIGHTS OF DESIGN AND INVENTION ARE RESERVED. THIS DRAWING MUST BE RETURNED TO THE NEW JERSEY ZINC COMPANY.						JEFFERSON CITY, TENN	TRACED	SECTOR II AREA D	SCALE 1" = 100'
							CHECKED	COPPER RIDGE BELT	AX-TENN B-1338
							APPROVED		

X5453B 1M 11-54



SERIAL NUMBER		DATE ISSUED		REFERENCE DRAWINGS	REVISIONS	THE NEW Y ZINC COMPANY	DRAWN WJC	DIP SECTION BW-38,43	DATE 4-16-58
THIS DRAWING IN DESIGN AND DETAIL IS OUR PROPERTY AND MUST NOT BE USED EXCEPT IN CONNECTION WITH OUR WORK. ALL RIGHTS OF DESIGN AND INVENTION ARE RESERVED. THIS DRAWING MUST BE RETURNED TO THE NEW JERSEY ZINC COMPANY.							TRACED	SECTOR II BIG WAR CRK AREA	SCALE 1" = 100'
						JEFFERSON CITY, TENN	CHECKED	COPPER RIDGE BELT	AX-TENN 8-1358
							APPROVED		

X5453B 1M 11-54



POSTED TO DATE 1-56 TEN	THE NEW JERSEY ZINC COMPANY ROGERSVILLE TENNESSEE	DRAWN J.F.P. DATE 4-25-53 TRACED SJL, JFP SCALE 1" = 660'	COPPER RIDGE BELT SECTOR II SHEET 4NE	HAWKINS, HANCOCK CO'S, TENN. FILE NO. AX-TENN 100

ACTION ON INTERIM
OR FINAL FIELD TEST REPORT

Date 1-23

Referred to:

1. ~~Mr. Mittendorf~~
2. ~~Mr. Johnson~~
3. ~~Mr. Chambers~~
4. Docket Control Mails and Files
5. Division
6. Docket Control Mails and Files
7. ~~500~~

Note comments in report regarding:

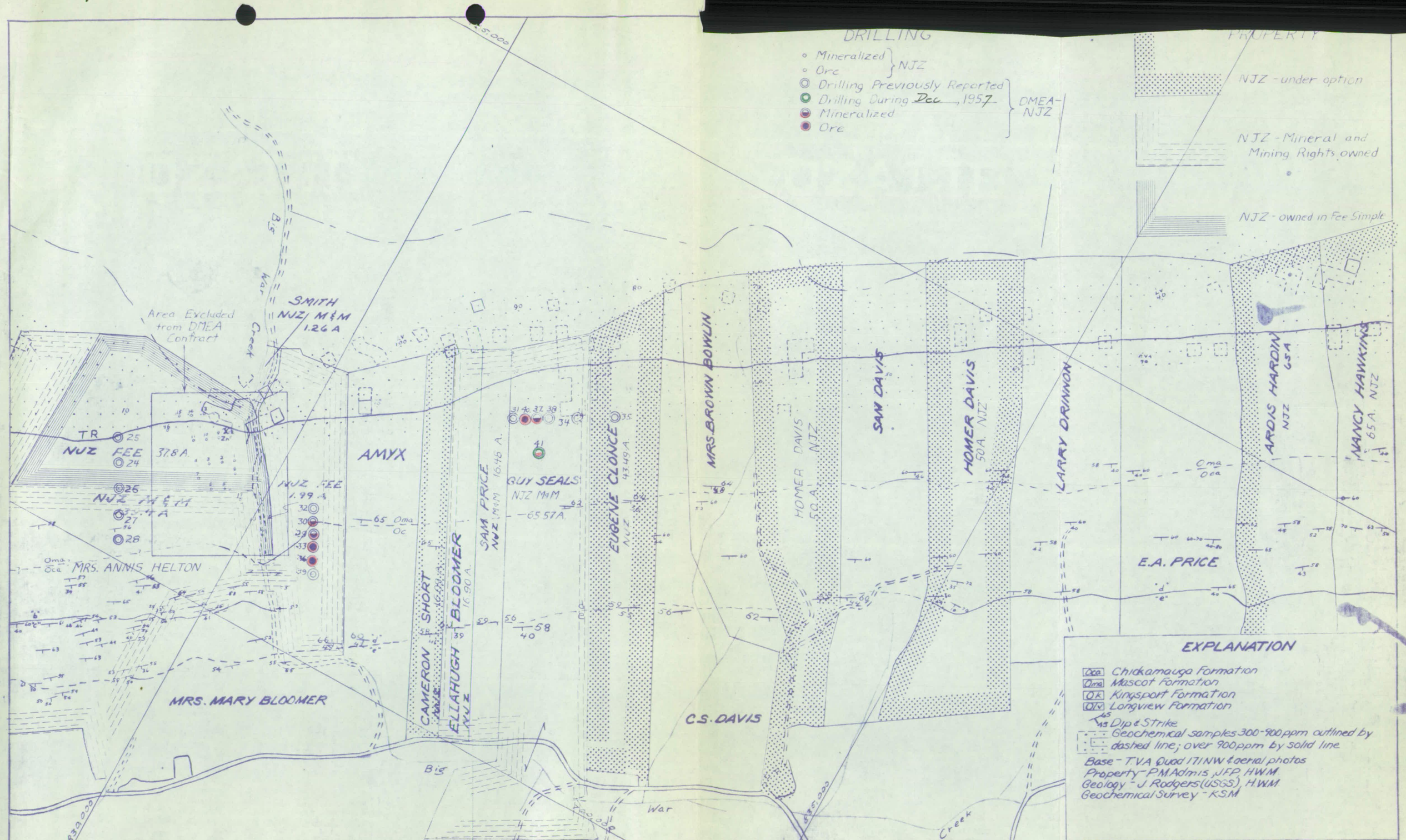
1. Correct footage of completed holes is 15,401'
2. Talbert 1/24/58
3.
4.

and take appropriate action.

- - - - - - - - - -

Action taken by Division:

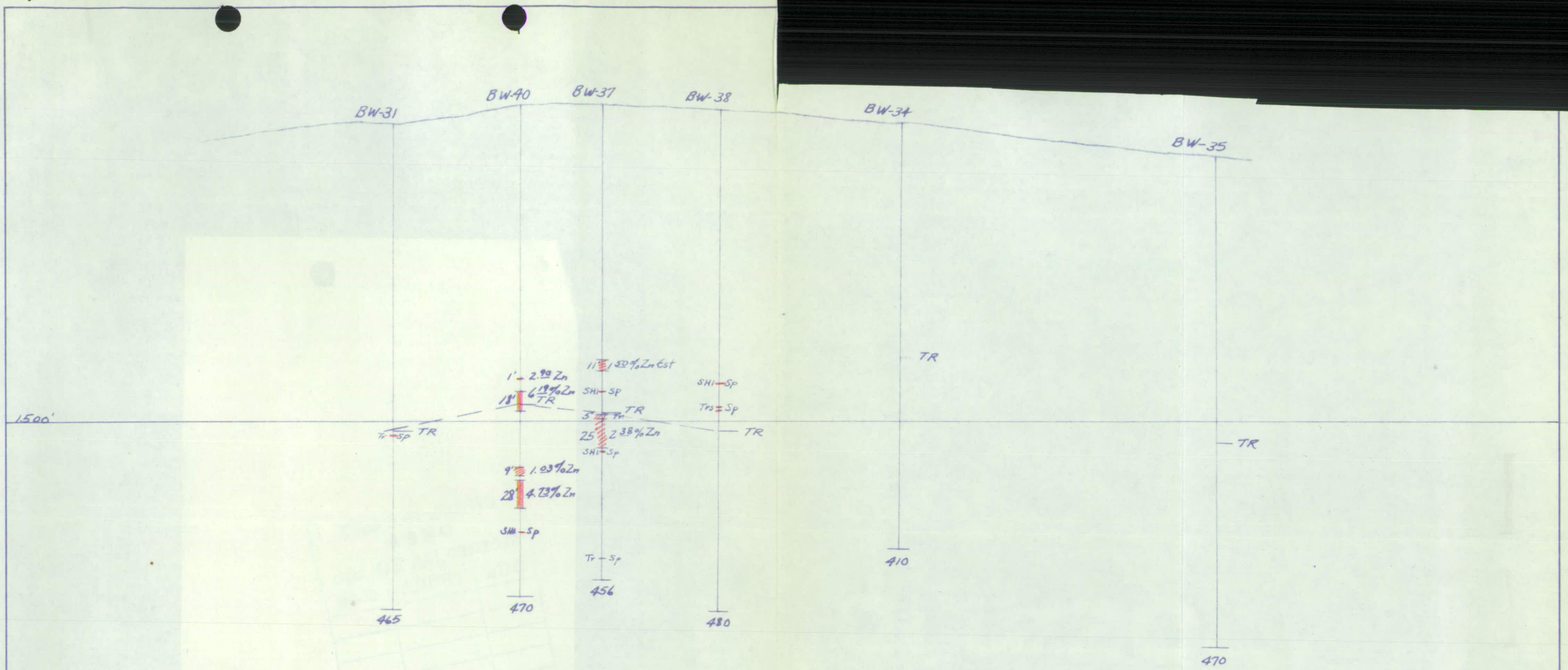
Robert E. Adams



POSTED TO DATE 1-56 TEW	THE NEW JERSEY ZINC COMPANY ROGERSVILLE TENNESSEE	DRAWN J.F.P. DATE 4-25-59 TRACED SJL, JFP SCALE 1"=660'	COPPER RIDGE BELT SECTOR II SHEET 4NE	HAWKINS, HANCOCK COS, TENN FILE NO. AX-TENN 100

OFFICIAL FILE COPY
DMEA
RECEIVED JAN 20 1958

DATE	INITIALS	CODE



SERIAL NUMBER		DATE ISSUED		REFERENCE DRAWINGS	REVISIONS	THE NEW JERSEY ZINC COMPANY JEFFERSON CITY, TENN	DRAWN WJC	STRIKE SECTION: BW31, 40, 37, 38, 34, 35	DATE 8-29-57
THIS DRAWING IN DESIGN AND DETAIL IS OUR PROPERTY AND MUST NOT BE USED EXCEPT IN CONNECTION WITH OUR WORK. ALL RIGHTS OF DESIGN AND INVENTION ARE RESERVED. THIS DRAWING MUST BE RETURNED TO THE NEW JERSEY ZINC COMPANY.							TRACED WJC	SECTOR II AREA D	SCALE 1" = 100
							CHECKED	COPPER RIDGE BELT	AX-TENN B-1296
							APPROVED		

X5453B 1M 11-54

ACTION ON INTERIM
OR FINAL FIELD EXAM REPORT
Date 12/13/57

Referred to:

1. ~~Mr. Mittendorf~~
2. ~~Mr. Johnson~~
3. ~~Mr. Chambers~~
4. Docket Control Mails and Files
5. District
6. Docket Control Mails and Files
7. ~~[illegible]~~

Note comments in report regarding:

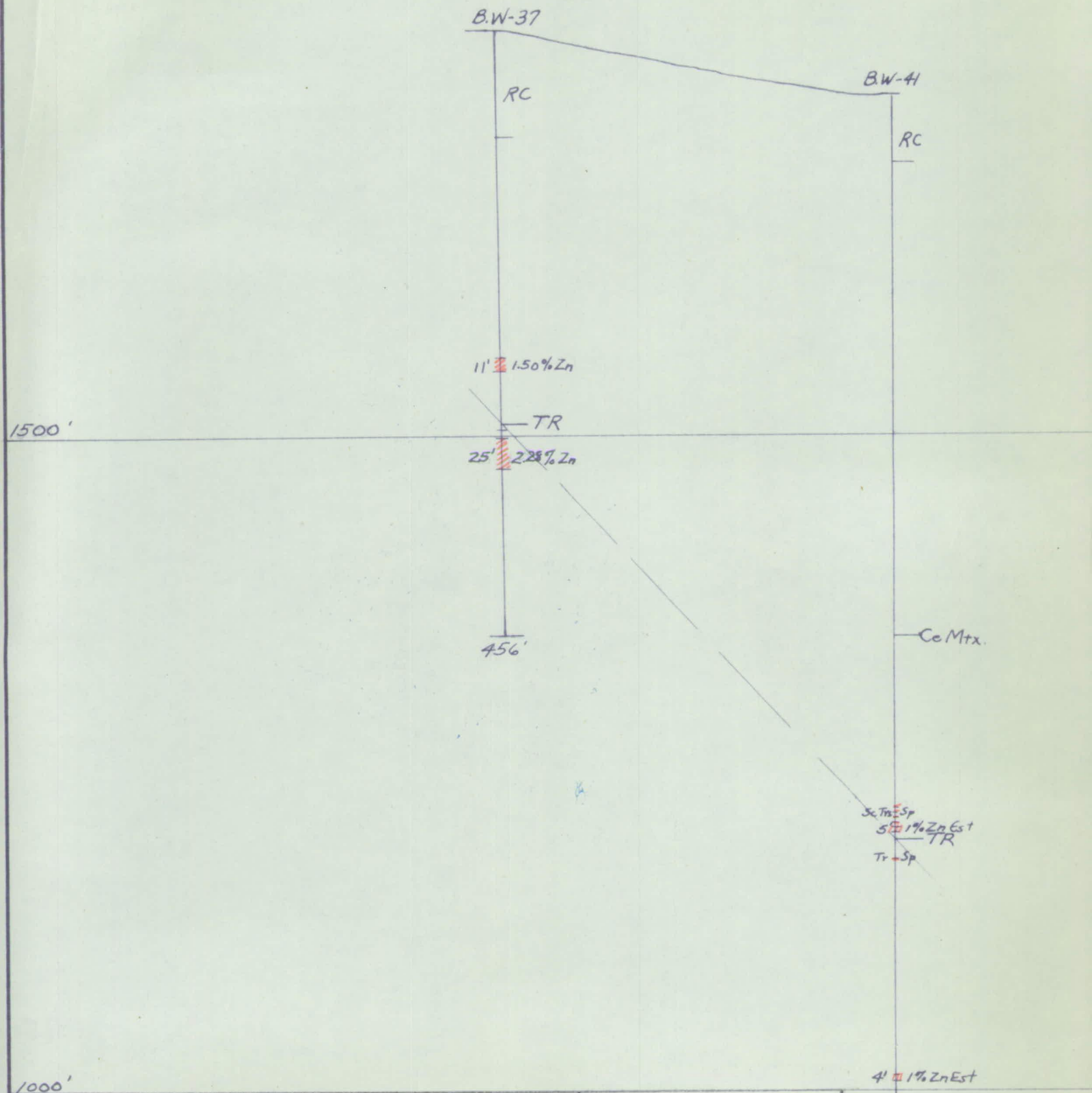
1. Footage of 4 holes completed since last inspection is
2. 1,359'
3. Footage of 17 completed holes is 13,931'
4. Talbert 1/6/58

and take appropriate action.

- - - - - - - -

Action taken by Division:

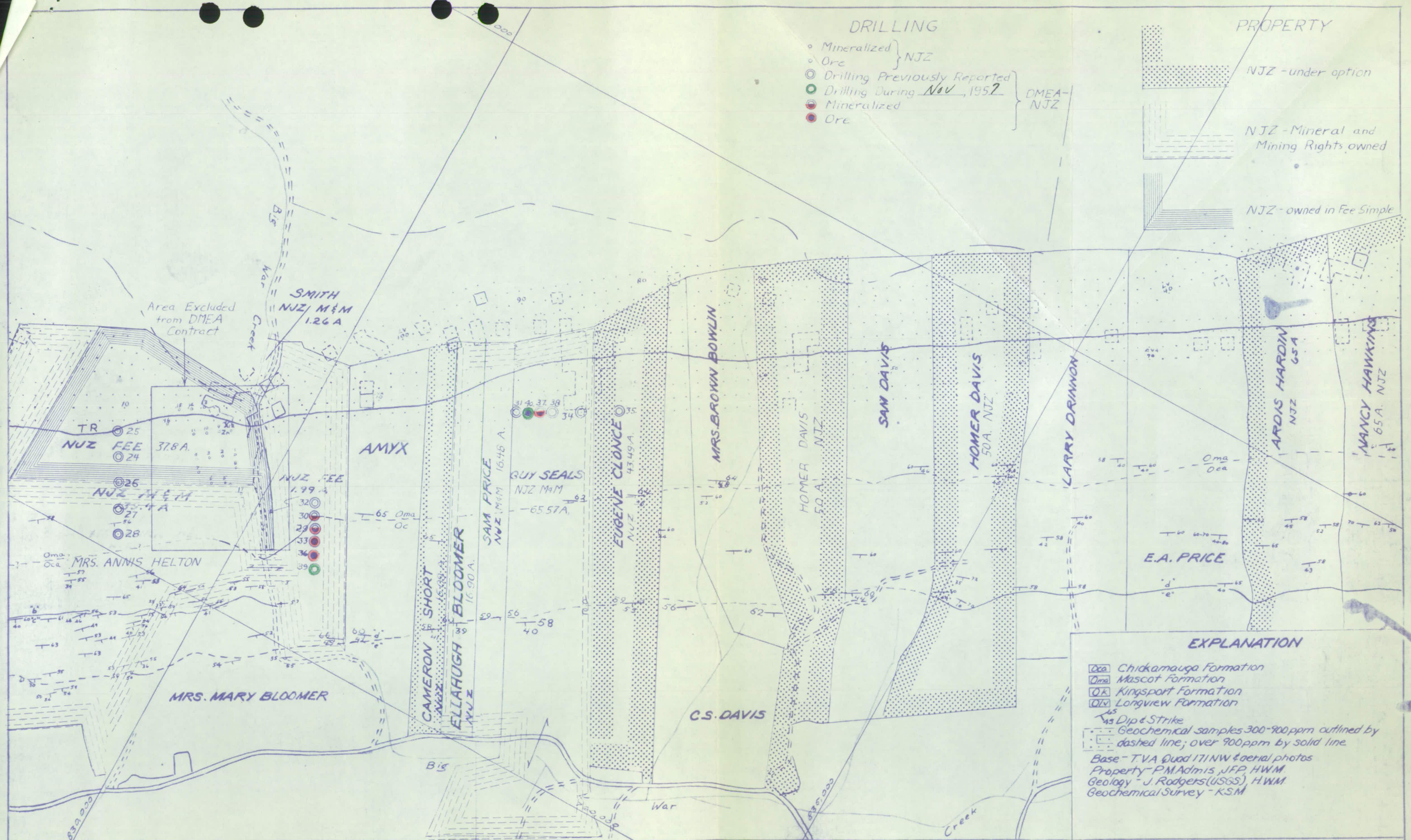
Robert E. Adams
gb



DIP SECTION BW-37, 41, SECTOR II AREA D COPPER RIDGE BELT	DATE 1-9-58
	SCALE 1" = 100'
	AX-TENN C-1328

OFFICIAL FILE COPY
DMEA
RECEIVED JAN 20 1958

DATE	INITIALS	CODE



POSTED TO DATE 1-56 TEN	THE NEW JERSEY ZINC COMPANY ROGERSVILLE TENNESSEE	DRAWN J.F.P. DATE 4-25-53 TRACED SJL, JFP SCALE 1"=660'	COPPER RIDGE BELT SECTOR II SHEET 4NE	HAWKINS, HANCOCK CO'S, TENN FILE NO. AX-TENN 100

POSTED TO DATE	THE NEW JERSEY ZINC COMPANY	DRAWN J.F.P. DATE 4-25-59	COPPER RIDGE BELT	HAWKINS, HANCOCK CO'S, TENN
1-56 TEW	ROGERSVILLE TENNESSEE	TRACED SJL, JFP SCALE 1" = 660'	SECTOR II SHEET 4NE	FILE NO. AX-TENN 100

EXTRA COPY
DMEA
RECEIVED DEC 6 1957

DATE	INITIALS	CODE

[redacted]

Mineralized
Ore } NJZ
Drilling Previously Reported
Drilling During _____, 195__
Mineralized
Ore } DMEA-NJZ

NJZ - under option

NJZ - Mineral and Mining Rights owned

NJZ - owned in Fee Simple

765,000

Area Excluded from DMEA Contract

SMITH NJZ, M&M 1.26 A

Mar Creek

TR NUZ FEE 37.8 A.

NUZ FEE 1.99 A

NUZ M&M 4 A

MRS. ANNIS HELTON

AMYX

CAMERON SHORT NUZ 16.80 A.

ELLAHUGH BLOOMER NUZ 16.90 A.

SAM PRICE NUZ, M&M 16.46 A.

GUY SEALS NJZ M&M 65.57 A.

EUGENE CLONCE NUZ 43.49 A.

MRS. MARY BLOOMER

MRS. BROWN BOWLIN

HOMER DAVIS NJZ 50 A.

SAM DAVIS

HOMER DAVIS 50 A. NJZ

C.S. DAVIS

LARRY DRINNON

ARDIS HARDIN NJZ 65 A

NANCY HAWKINS 65 A. NJZ

E.A. PRICE

Big War Creek

833,000

EXPLANATION

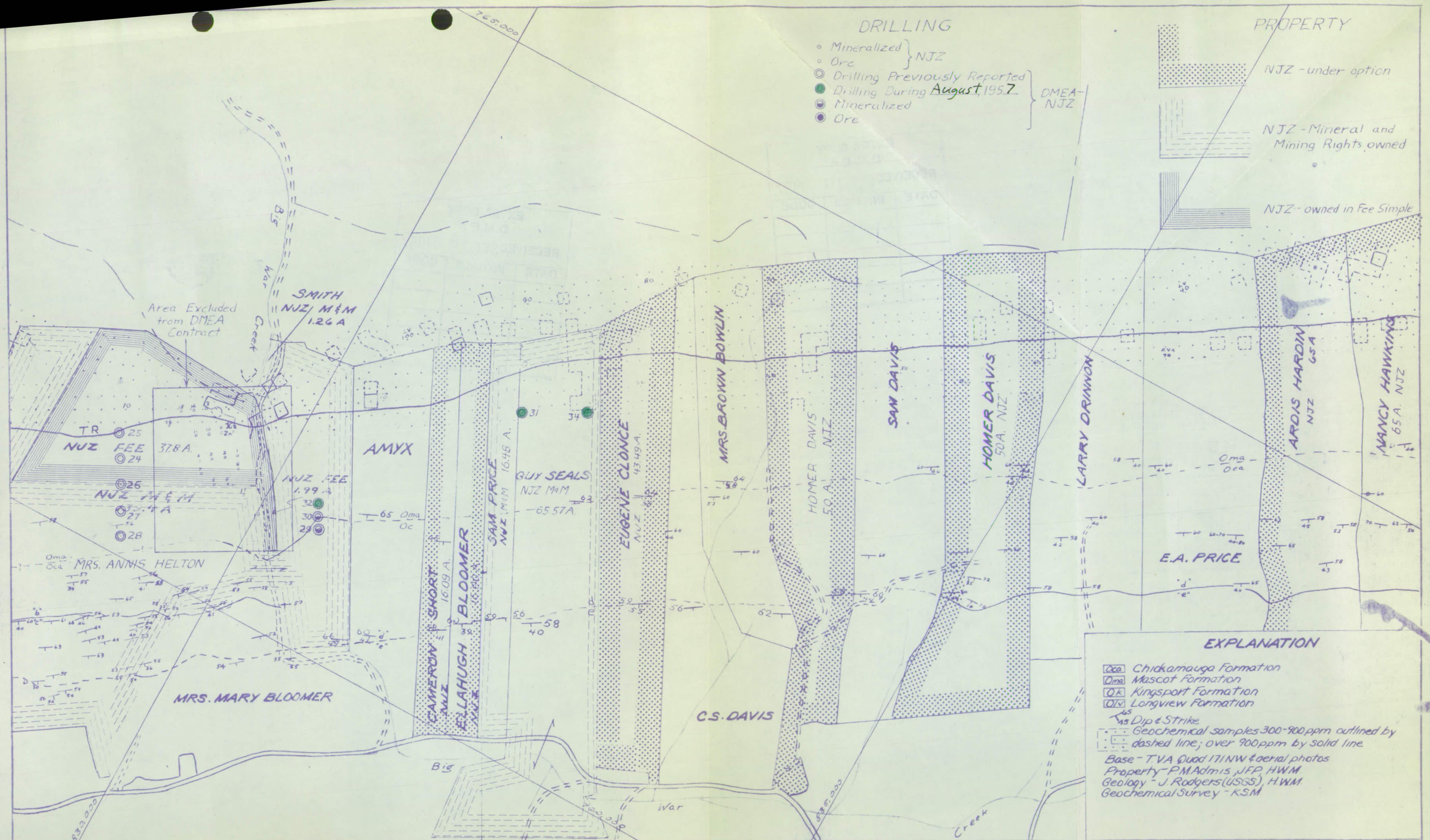
Oca Chickamauga Formation
Oma Mascot Formation
OK Kingsport Formation
Olv Longview Formation
Dip & Strike
Geochemical samples 300-900 ppm outlined by dashed line; over 900 ppm by solid line

Base - T.V.A. Quad 171 NW & aerial photos
Property - P.M. Adams, J.F.P., H.W.M.
Geology - J. Rodgers (USGS), H.W.M.
Geochemical Survey - K.S.M.

POSTED TO DATE	THE NEW JERSEY ZINC COMPANY	DRAWN J.F.P. DATE 4-25-59	COPPER RIDGE BELT	HAWKINS, HANCOCK COS, TENN
1-56 TEW	ROGERSVILLE TENNESSEE	TRACED SJL, JFP SCALE 1" = 660'	SECTOR II SHEET 4NE	FILE NO. AX-TENN 100

EXTRA COPY
D M E A
RECEIVED OCT 25 1957

DATE	INITIALS	CODE



POSTED TO DATE 1-56 TEN	THE NEW JERSEY ZINC COMPANY ROGERSVILLE TENNESSEE	DRAWN J.F.P. DATE 4-25-53 TRACED SJL, JFP SCALE 1"=660'	COPPER RIDGE BELT SECTOR II SHEET 4NE	HAWKINS, HANCOCK CO'S, TENN. FILE NO. AX-TENN 100

EXTRA COPY
D M E A
RECEIVED SEP 19 1957

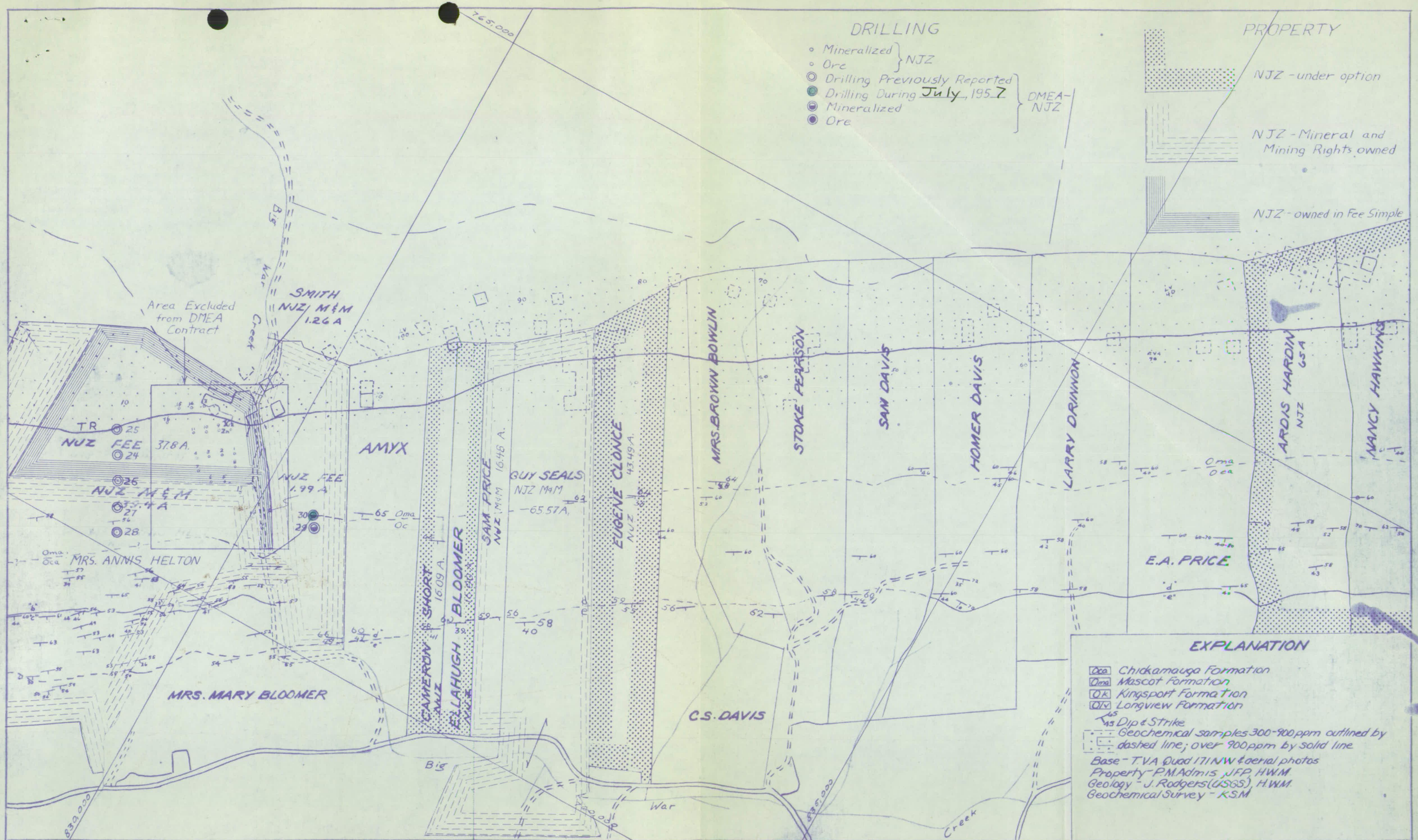
DATE	INITIALS	CODE

EXTRA COPY
D M E A
RECEIVED SEP 19 1957

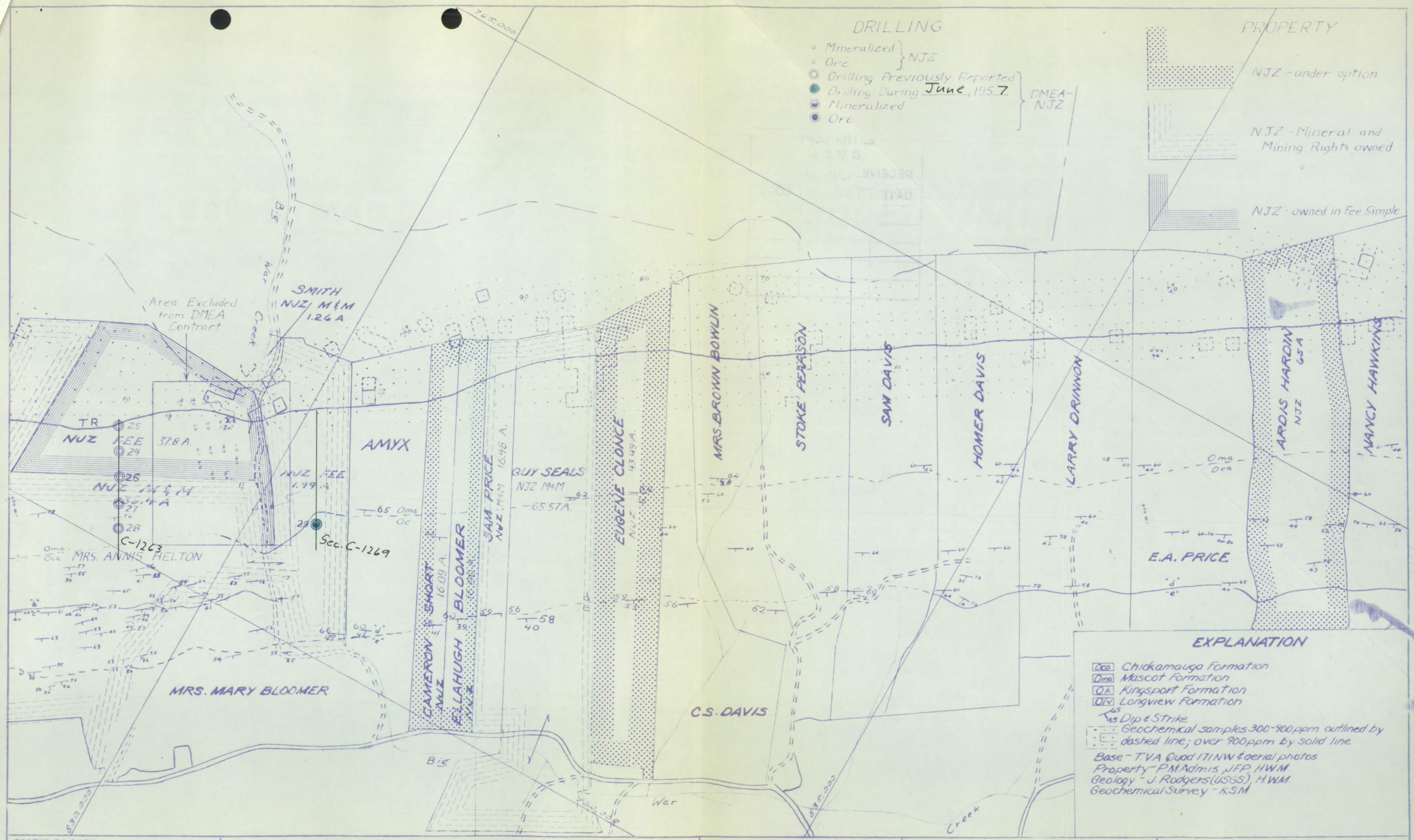
DATE	INITIALS	CODE

EXTRA COPY
D M E A
RECEIVED SEP 19 1957

DATE	INITIALS	CODE



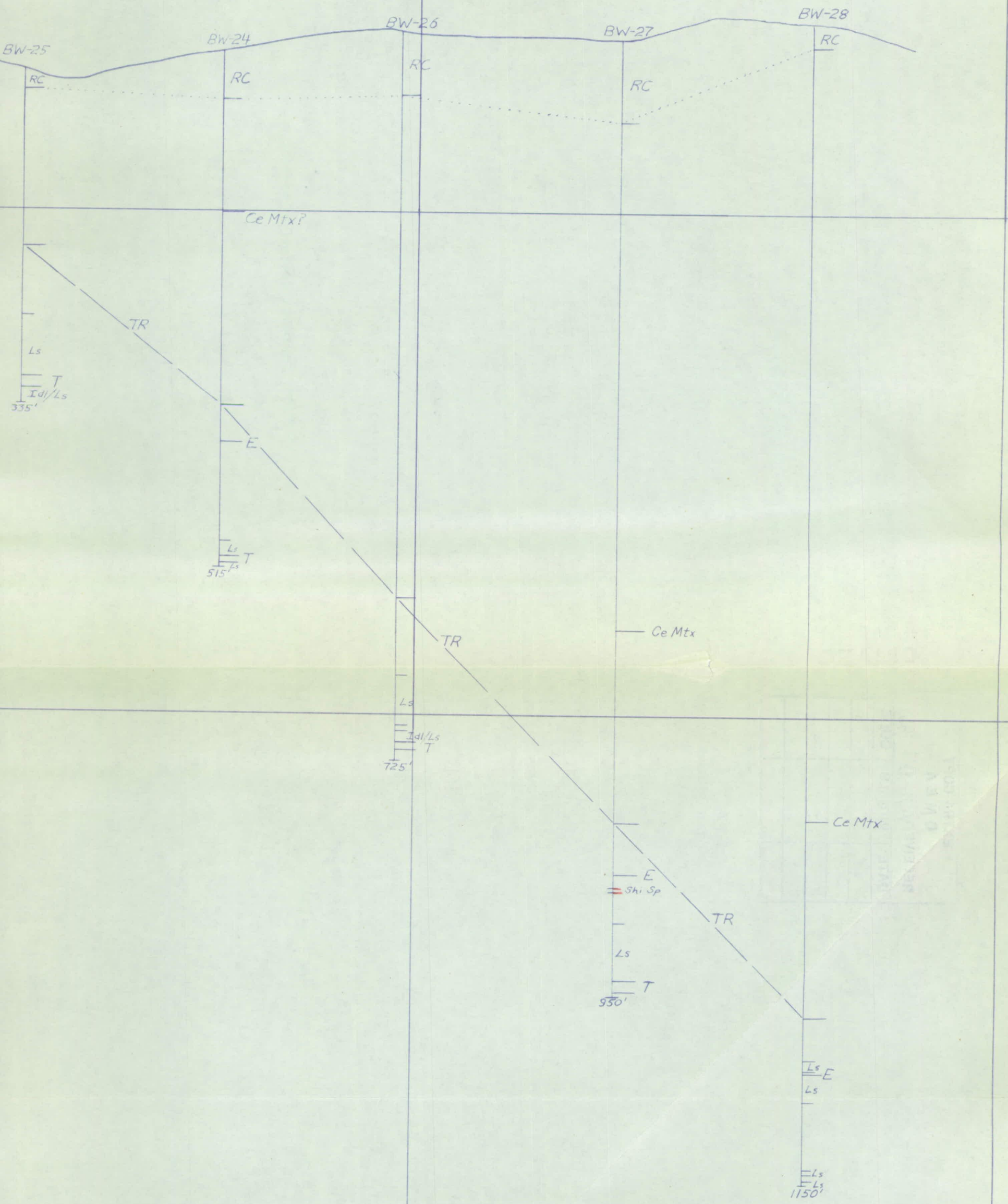
POSTED TO DATE 1-56 TEW	THE NEW JERSEY ZINC COMPANY ROGERSVILLE TENNESSEE	DRAWN J.F.P. DATE 4-25-53 TRACED SJL, JFP SCALE 1" = 660'	COPPER RIDGE BELT SECTOR II SHEET 4NE	HAWKINS, HANCOCK CO'S, TENN FILE NO. AX-TENN 100



POSTED TO DATE 1-56 TEN	THE NEW JERSEY ZINC COMPANY ROGERSVILLE TENNESSEE	DRAWN J.F.P. DATE 4-25-53 TRACED SJL, JFP SCALE 1"=660'	COPPER RIDGE BELT SECTOR II SHEET 4NE	HAWKINS, HANCOCK COS, TENN FILE NO. AX-TENN 100

EXTRA COPY
D M E A
RECEIVED AUG 9 1957

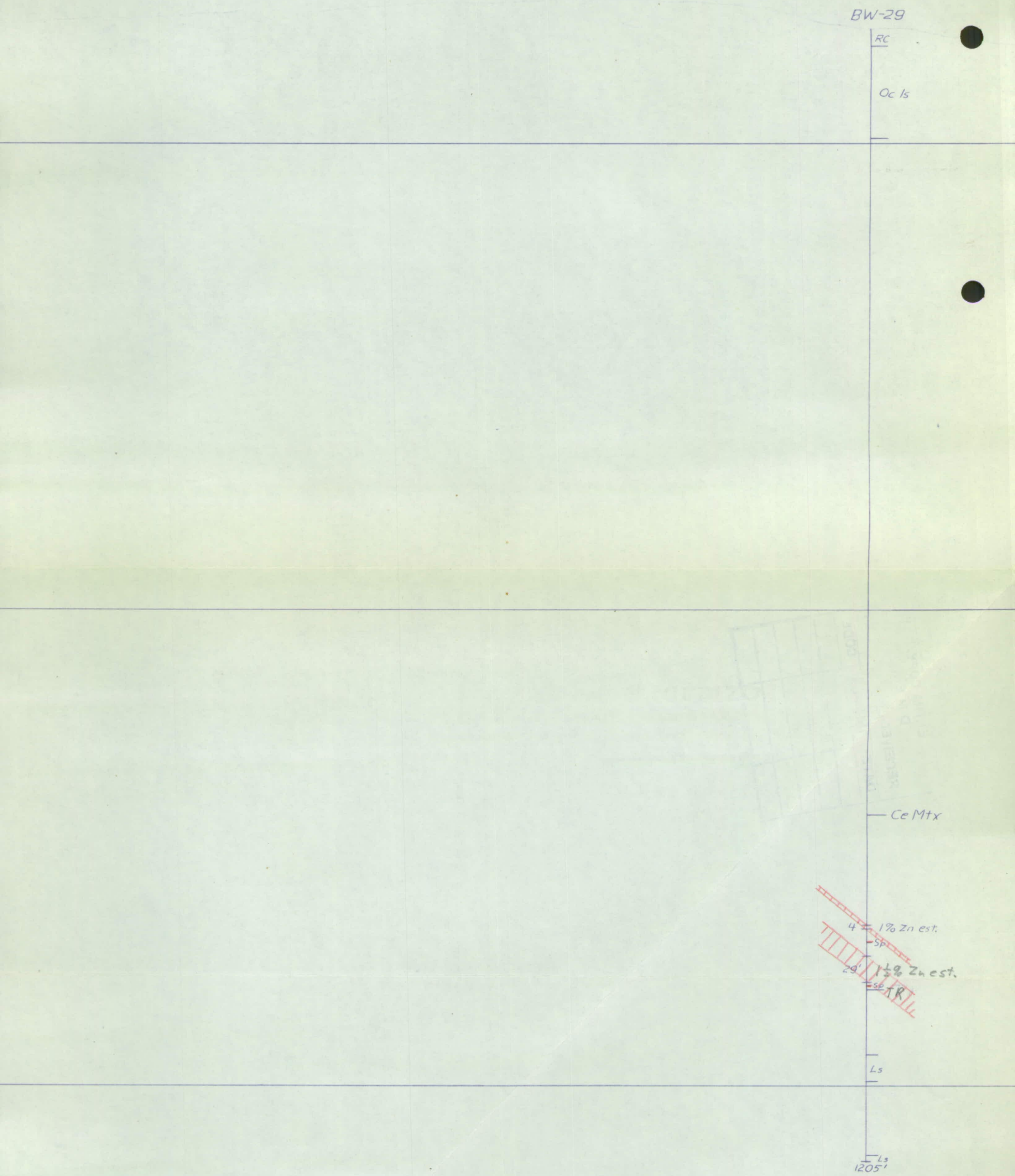
DATE	INITIALS	CODE



DRAWN RCG	DIP SECTION BW-25,24,26,27,28	DATE 4-23-57
TRACED RCG	SECTOR II AREA D	SCALE 1"=100'
CHECKED	COPPER RIDGE BELT	AX-TENN C-1263
APPROVED		

EXTRA COPY
D M E A
RECEIVED AUG 9 1957

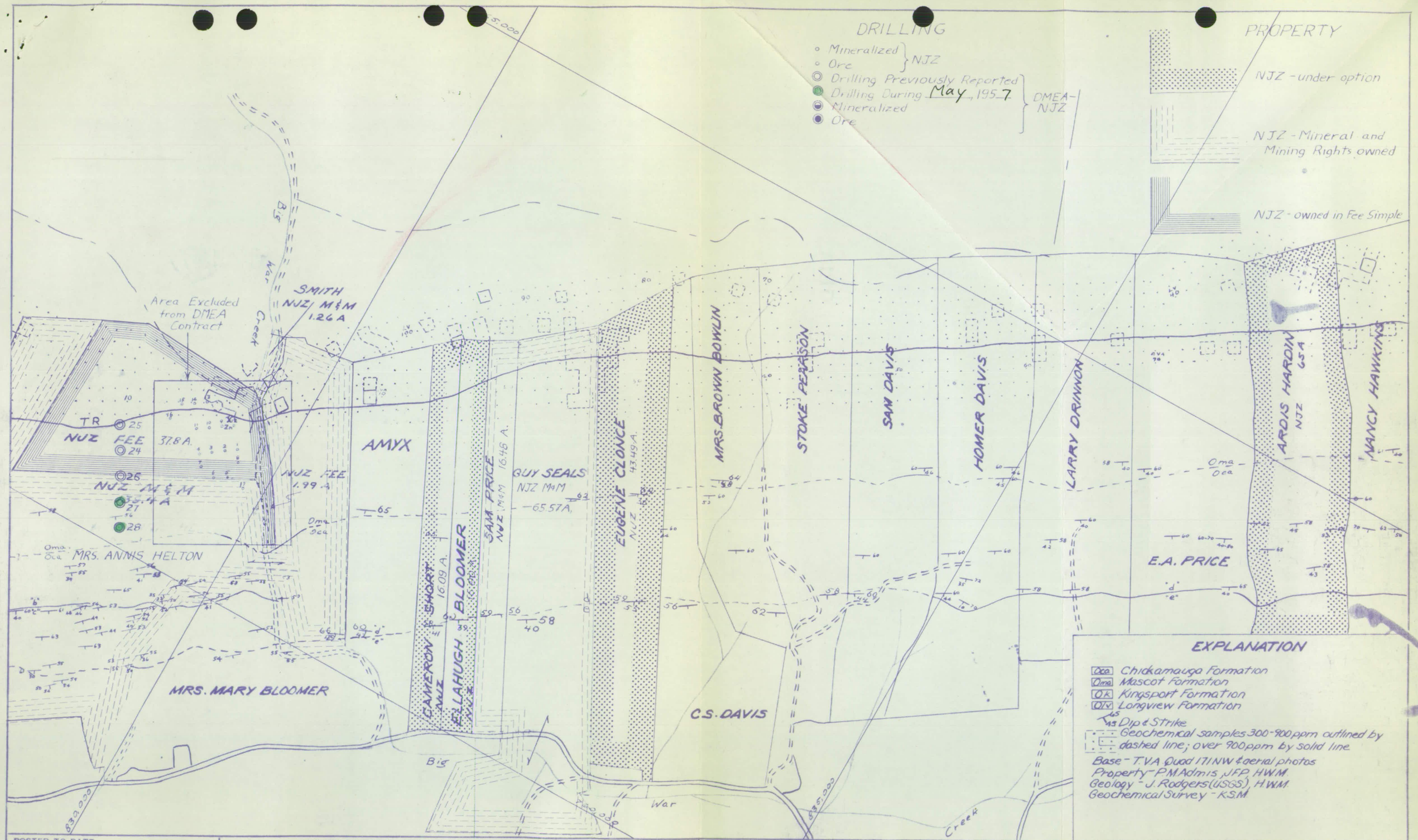
DATE	INITIALS	CODE



DRAWN RCG	DIP SECTION	DATE 6-5-57
TRACED RCG	SECTOR II AREA D	SCALE 1" = 100'
CHECKED	COPPER RIDGE BELT	AX-TENN C-1269
APPROVED		

EXTRA COPY
D M E A
RECEIVED AUG 9 1957

DATE	INITIALS	CODE

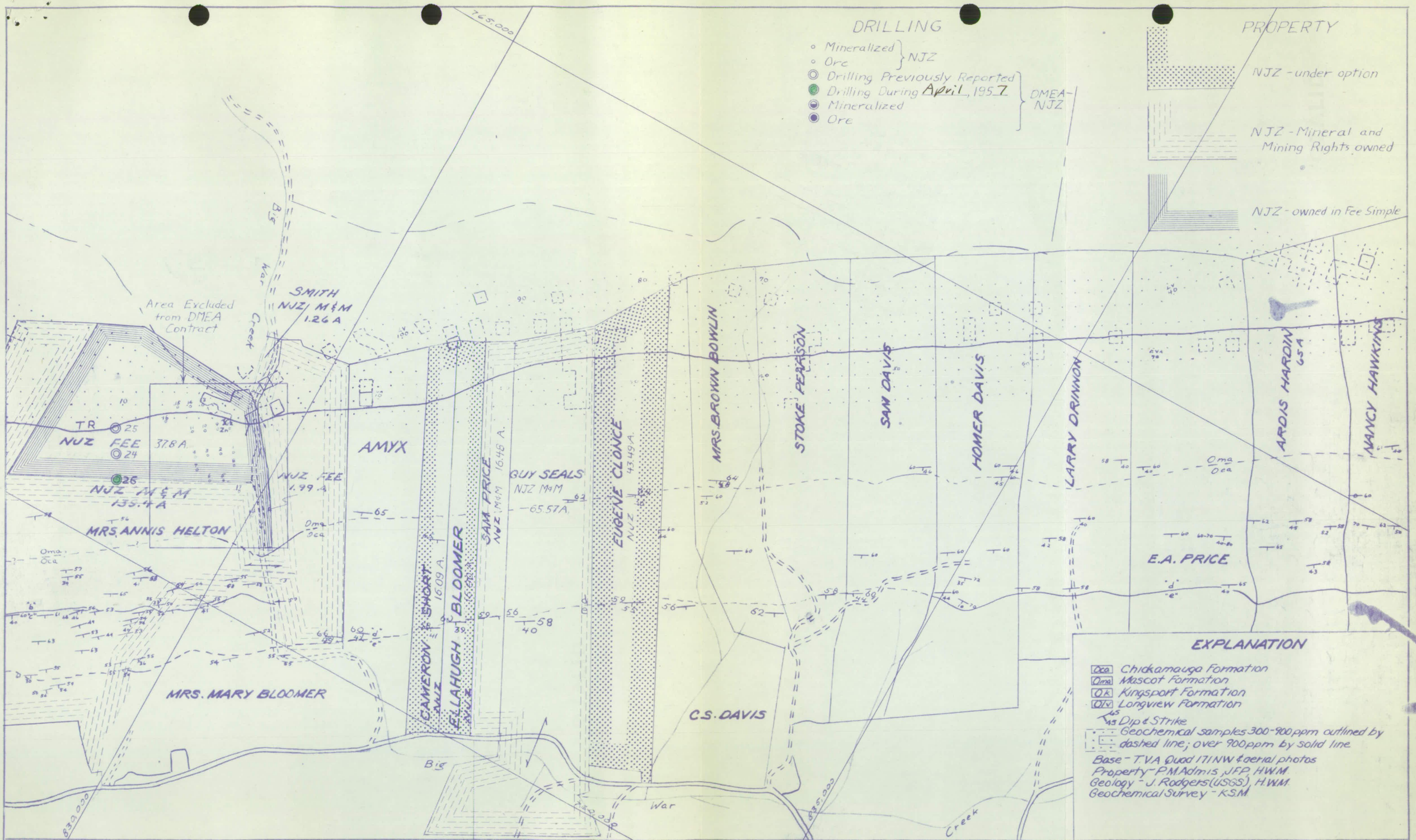


POSTED TO DATE 1-56 TEW	THE NEW JERSEY ZINC COMPANY ROGERSVILLE TENNESSEE	DRAWN J.F.P. DATE 4-25-53 TRACED SJL, JFP SCALE 1"=660'	COPPER RIDGE BELT SECTOR II SHEET 4NE HAWKINS, HANCOCK CO'S, TENN FILE NO. AX-TENN 100

HOWARD SUTTON CO., INC., N. Y.

EXTRA COPY
D M E A
RECEIVED JUL 1 1957

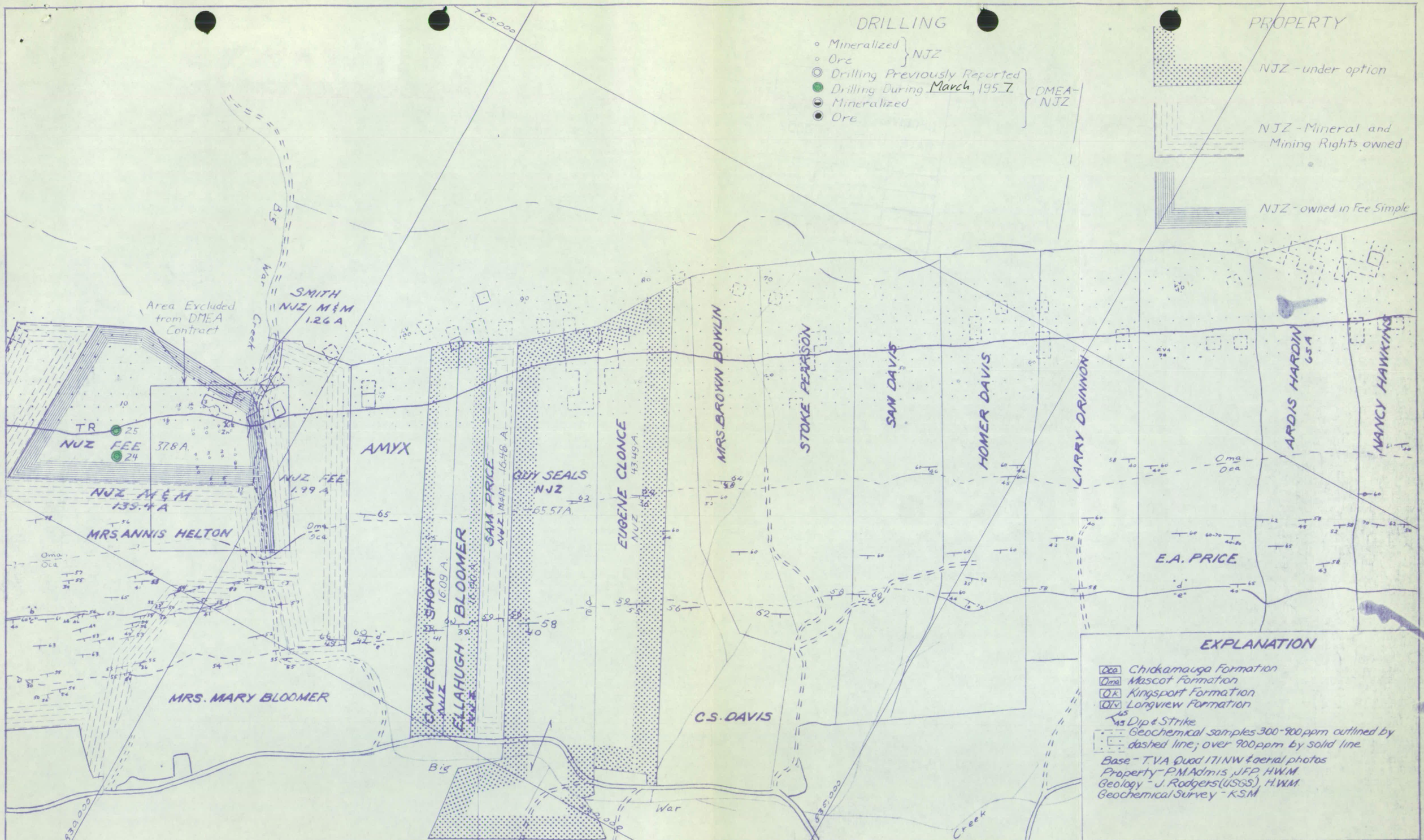
DATE	INITIALS	CODE



POSTED TO DATE 1-56 TEN	THE NEW JERSEY ZINC COMPANY ROGERSVILLE TENNESSEE	DRAWN J.F.P. DATE 4-25-53 TRACED SJL, JFP SCALE 1"=660'	COPPER RIDGE BELT SECTOR II SHEET 4NE	HAWKINS, HANCOCK CO'S, TENN. FILE NO. AX-TENN 100

EXTRA COPY
D M E A
RECEIVED MAY 20 1957

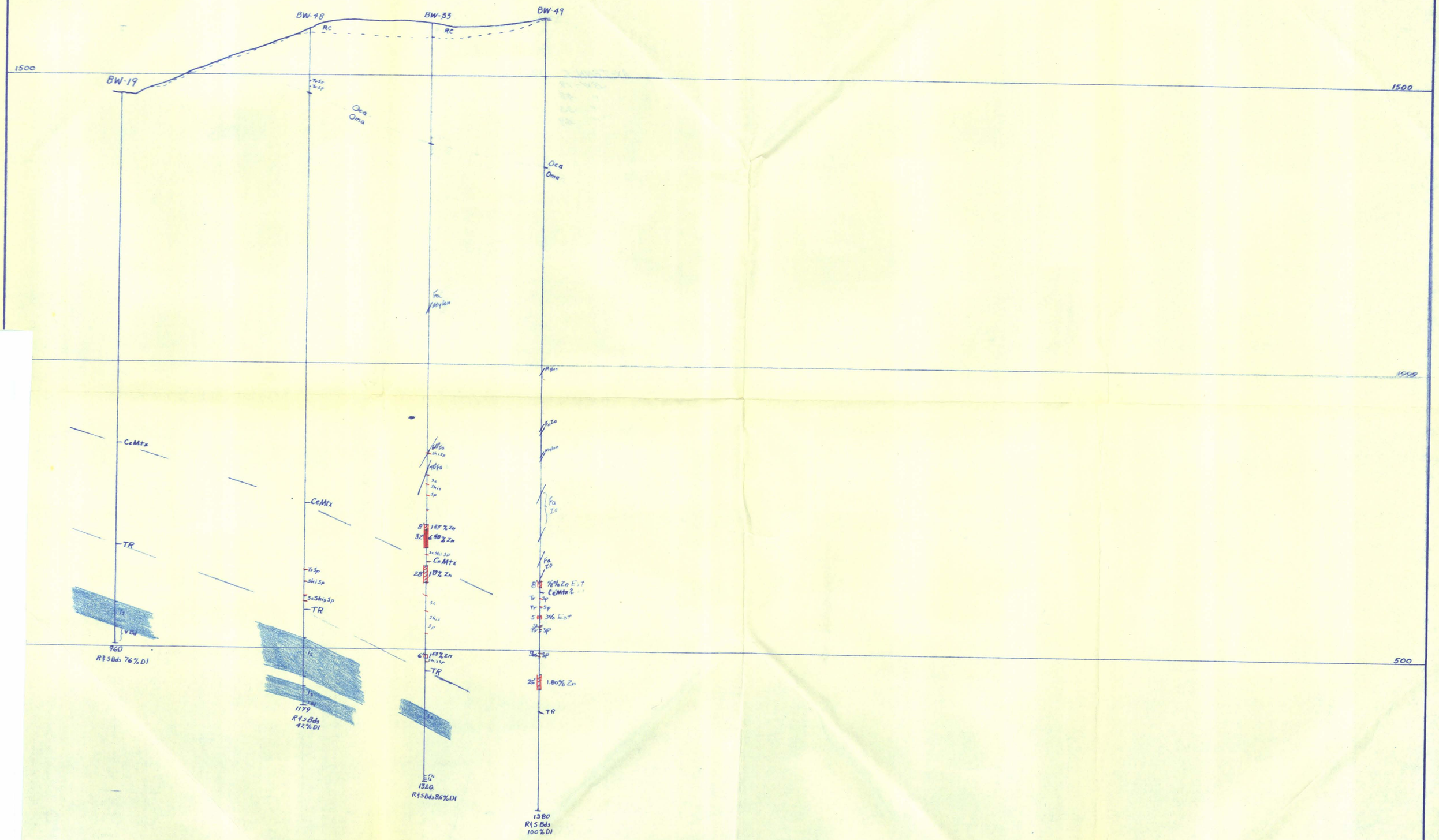
DATE	INITIALS	CODE



POSTED TO DATE 1-56 TEN	THE NEW JERSEY ZINC COMPANY ROGERSVILLE TENNESSEE	DRAWN J.F.P. DATE 4-25-59 TRACED SJL, JFP SCALE 1"=660'	COPPER RIDGE BELT SECTOR II SHEET 4NE	HAWKINS, HANCOCK CO'S, TENN FILE NO. AX-TENN 100

EXTRA COPY
D M E A
RECEIVED APR 22 1957

DATE	INITIALS	CODE



DATE ISSUED	REFERENCE DRAWINGS	REVISIONS

S DRAWING IN DESIGN AND DETAIL IS OUR PROPERTY AND MUST NOT BE D EXCEPT IN CONNECTION WITH OUR WORK. ALL RIGHTS OF DESIGN INVENTION ARE RESERVED. THIS DRAWING MUST BE RETURNED TO NEW JERSEY ZINC COMPANY.

THE NEW JERSEY ZINC COMPANY

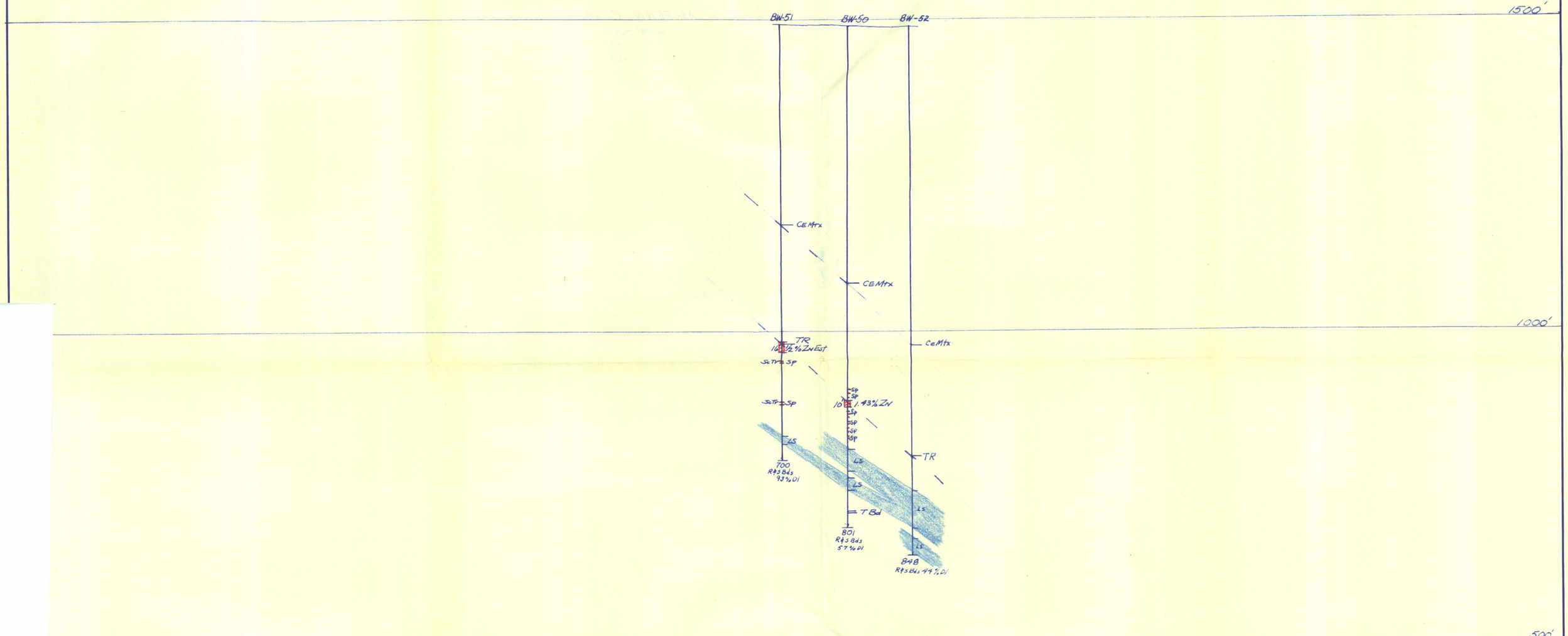
JEFFERSON CITY, TENNESSEE

DRAWN CWR
TRACED
CHECKED
APPROVED

LONGITUDINAL SECTION BW-19, 48, 33, 49
SECTOR II AREA D
COPPER RIDGE BELT

DATE 9-23-58
SCALE 1" = 100'
AX TENN C-1395

XS453C 1M 11-54



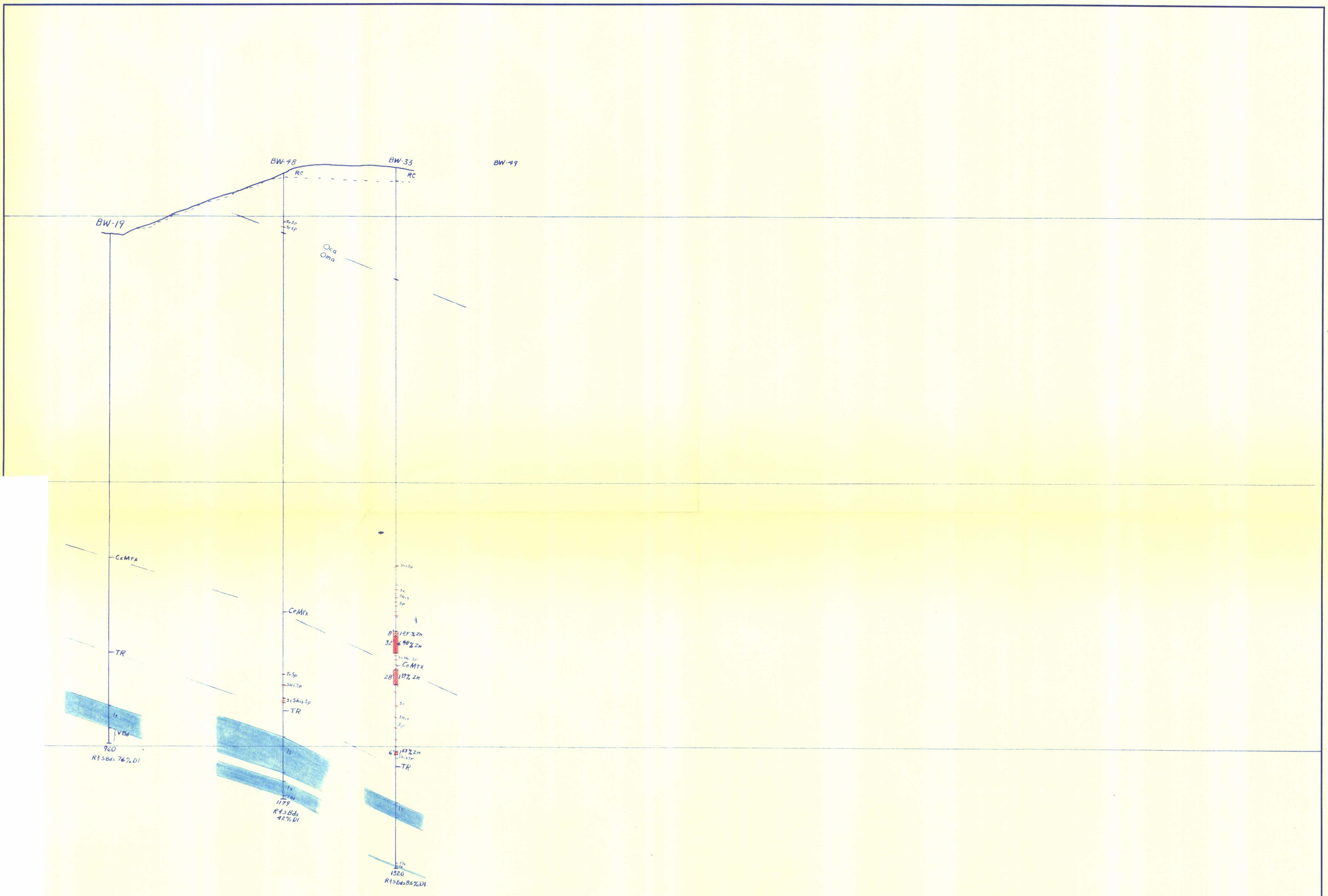
R	DATE ISSUED	REFERENCE DRAWINGS	REVISIONS	THE NEW JERSEY ZINC COMPANY	DRAWN WJC
					TRACED
					CHECKED
					APPROVED

RAWING IN DESIGN AND DETAIL IS OUR PROPERTY AND MUST NOT BE EXCEPT IN CONNECTION WITH OUR WORK. ALL RIGHTS OF DESIGN IVENTION ARE RESERVED. THIS DRAWING MUST BE RETURNED TO EW JERSEY ZINC COMPANY.

DIP SECTION BW-50,51,52
BIG WAR CREEK AREA SECTOR II
COPPER RIDGE BELT

DATE 11-26-58
SCALE 1" = 100'
AX-TENN C-1412

X6453C 1M 11-54



DATE ISSUED	REFERENCE DRAWINGS	REVISIONS

WING IN DESIGN AND DETAIL IS OUR PROPERTY AND MUST NOT BE
CEPT IN CONNECTION WITH OUR WORK. ALL RIGHTS OF DESIGN
NTION ARE RESERVED. THIS DRAWING MUST BE RETURNED TO
JERSEY ZINC COMPANY.

THE NEW JERSEY ZINC COMPANY

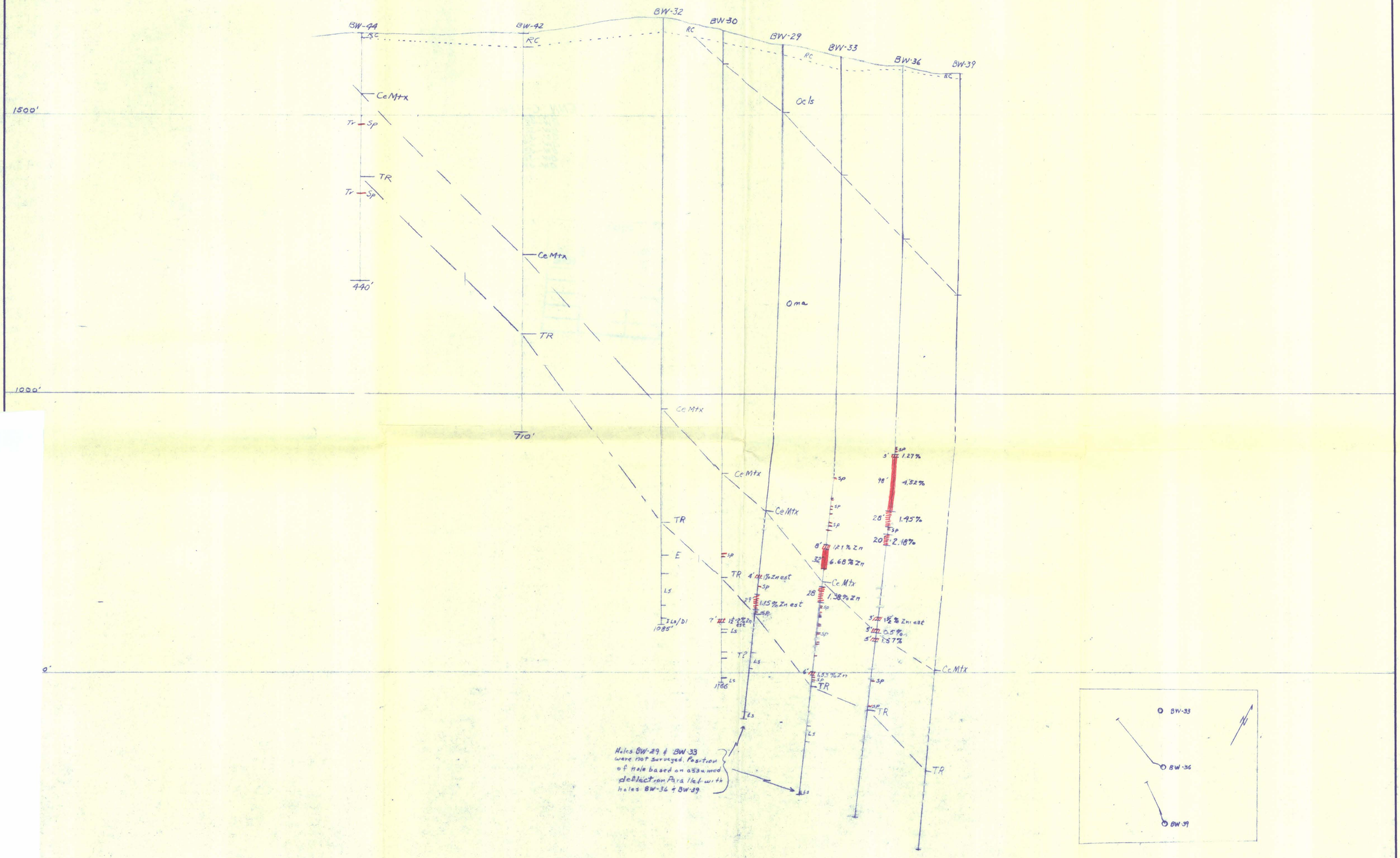
JEFFERSON CITY, TENNESSEE

DRAWN	EWR
TRACED	
CHECKED	
APPROVED	

LONGITUDINAL SECTION BW-19, 48, 33, 49
SECTOR II AREA D
COPPER RIDGE BELT

DATE	9-23-58
SCALE	1" = 100'
	AX TENN C-1395

X5453C 1M 11-54



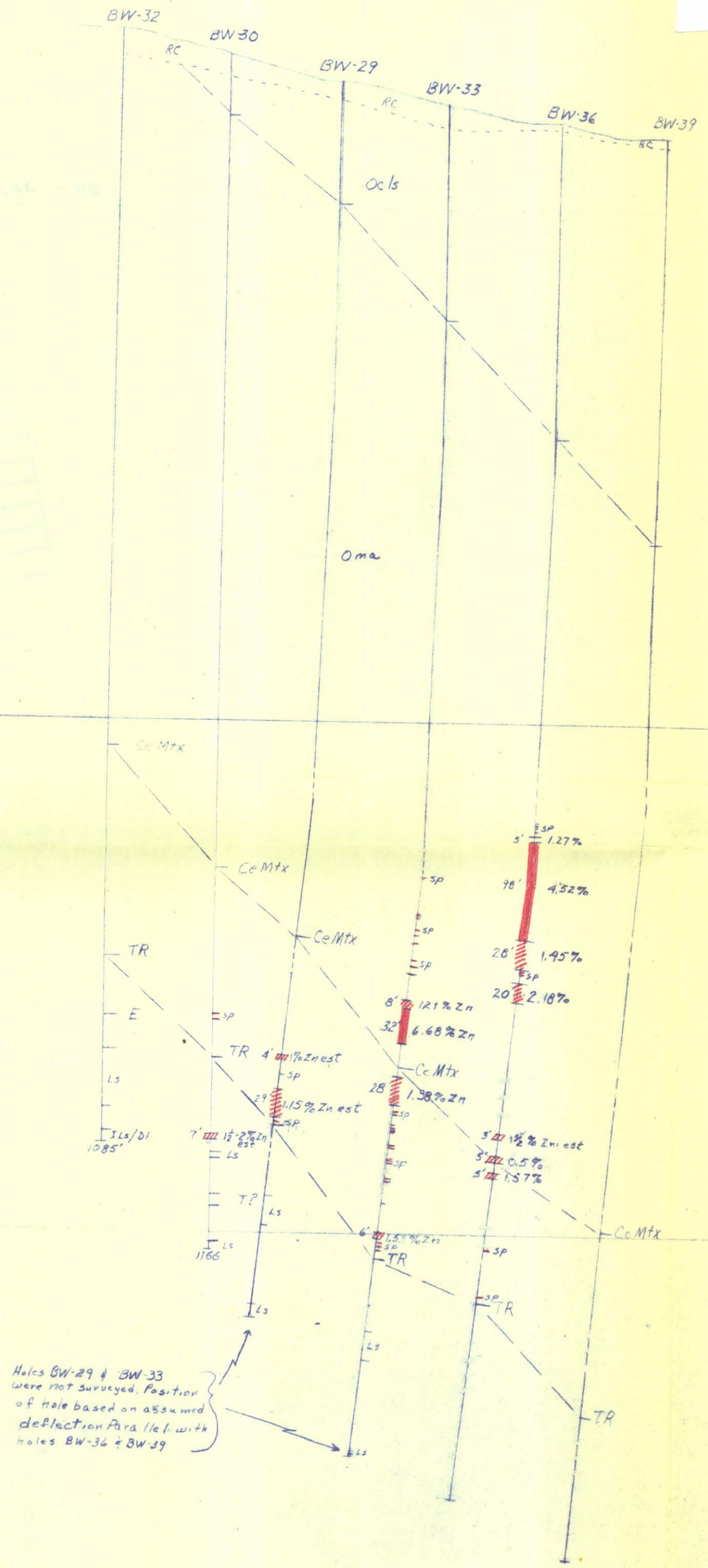
R		DATE ISSUED		REFERENCE DRAWINGS	REVISIONS	THE NEW JERSEY ZINC COMPANY	DRAWN EWR
						JEFFERSON CITY, TENNESSEE	TRACED EWR
							CHECKED
							APPROVED

RAWING IN DESIGN AND DETAIL IS OUR PROPERTY AND MUST NOT BE EXCEPT IN CONNECTION WITH OUR WORK. ALL RIGHTS OF DESIGN IVENTION ARE RESERVED. THIS DRAWING MUST BE RETURNED TO EW JERSEY ZINC COMPANY.

DIP SECTION
SECTOR II AREA D
COPPER RIDGE BELT

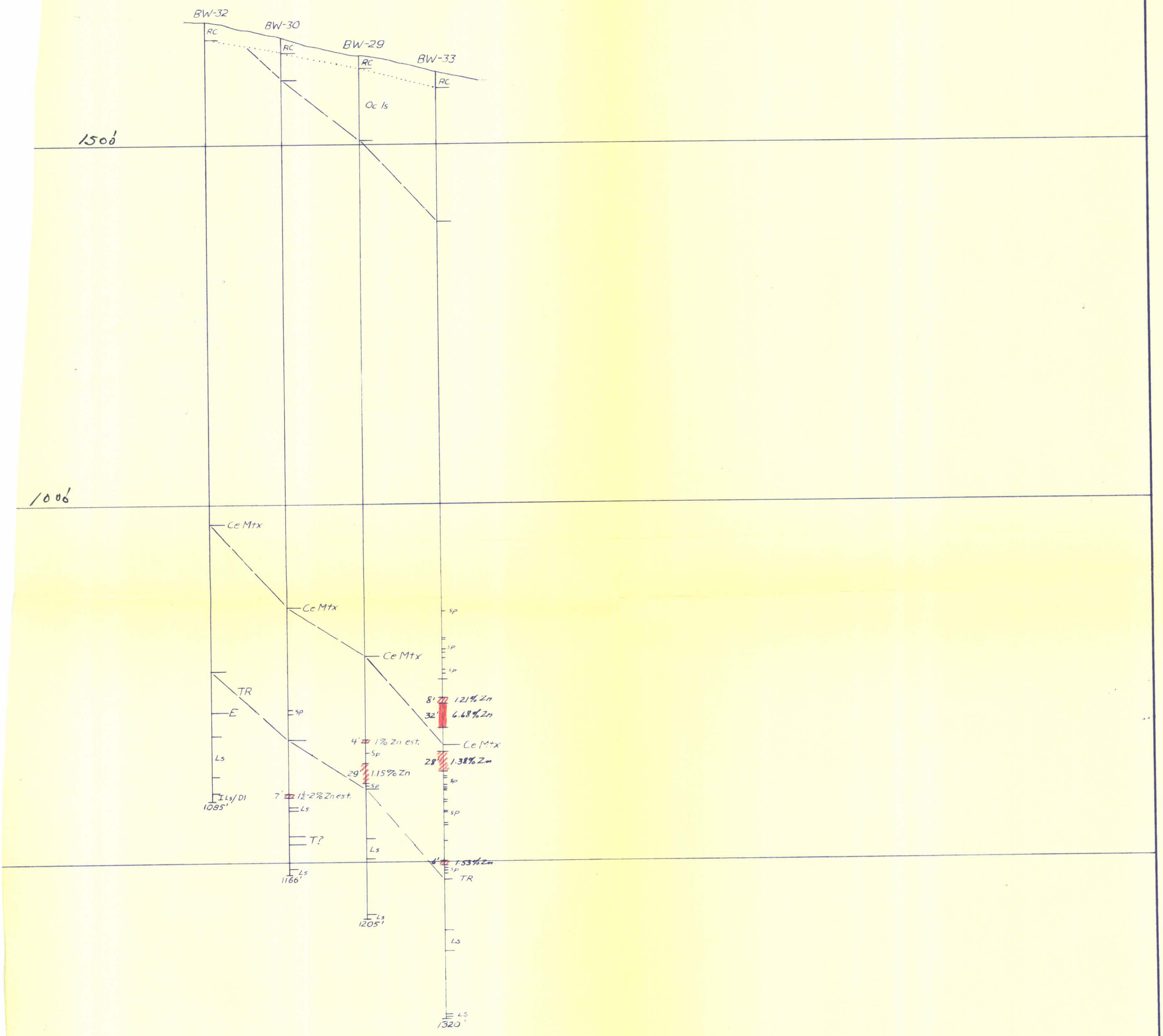
DATE 1-9-58
SCALE 1"=100'
AX-TENN C-1269

X5463C 1M 11-54



THE NEW JERSEY ZINC COMPANY	DRAWN EWR	DIP SECTION	DATE 1-9-58
	TRACED EWR	SECTOR II AREA D	SCALE 1" = 100'
JEFFERSON CITY, TENNESSEE	CHECKED	COPPER RIDGE BELT	AX TENN C-1269
	APPROVED		

X5453C 1M 11-54



THE NEW JERSEY ZINC COMPANY	DRAWN RCG	DIP SECTION	DATE 6-5-57
	TRACED RCG	SECTOR II AREA D	SCALE 1" = 100'
JEFFERSON CITY, TENNESSEE	CHECKED	COPPER RIDGE BELT	AX-TENN C-1269
	APPROVED		

X5453C 1M 11-54