JUL 13 1960
O.M.E.

OFFICIAL FILE COPY
O. M. E.
RECEIVED JUL 13 1960

DATE	INITIALS	CODE
7-13	gad	110
"	JE	110
7/13	[illegible]	800
7/13	Murphy	500

FINAL INSPECTION REPORT

DMEA-4850, Idm-E1174 (Zinc)

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

Location: Little War Creek area, Hancock County, Tennessee

Summary of drilling completed

	Since last inspection	Total
Number of holes	1	53
Footage	600	35,375*

Number of holes showing:

a) Commercial-grade zinc ore	6
b) Non-commercial zinc mineralization	42
c) No zinc mineralization	5

*375 feet drilled by Operator at own expense.

Data on the one hole completed since the last inspection are summarized as follows:

Hole LW-106: Located on the W. M. Brewer tract (NJZ Mining and Mineral Rights) at coordinates: 746,256-N; 2,795,161-E (approximately 100 feet down dip from Hole LW-80). Collar elevation: 1,667 feet AT. Drilling started: 5-12-60; completed: 5-20-60. Total depth: 600 feet. Summary log: 0-14 overburden; 14-284 Mascot dolomite; 284-586 Kingsport formation (TR @ 440); 586-600 Longview dolomite. Mineralization: Shine hole---shines of ZnS @ 390, 390½; trace @ 399; 403-404 (1'), 1% est; traces of ZnS @ 407, 412-413, 414; shines @ 418, 419-421, 422-424, and 451.

With the bottoming of Hole LW-106 the Little War Creek DMEA contract was completed and the drill moved out of the area. As far as is known the Operator has no immediate plans to resume operations in the area.

Inspected: July 8, 1960

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

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DATE	INITIALS	CODE
5-26	gad	VVO
		~~VVO~~
		800
5/31	Murphy	500

INTERIM REPORT

DMEA-4850, Idm-E1174-Zinc.

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

Location: Little War Creek area, Hancock County, Tennessee

Summary of drilling completed

	Since last inspection	To date
Number of holes.....	7 ✓	52 ✓
Footage.....	4,247 ✓	34,775 ✓

Number of holes showing:

a) Commercial-grade zinc ore.....	6
b) Non-commercial zinc mineralization....	41
c) No zinc mineralization.....	5

This project was visited on April 19, 1960 accompanied by L. G. Houk, Acting Field Officer, Region IV, OME and V. J. Lynch, U. S. Bureau of Mines. A report of this visit was not prepared because data on the holes completed to that date were not available. Data on the seven holes completed since the inspection made on March 1, 1960 are summarized below.

Hole LW-99: Located on the M. C. Tunmire tract at coordinates: N-746,318; E-2,799,692. Collar elevation: 1588 feet. Drilling started: 2/23/60; completed 3/1/60. Total depth: 500 feet. Summary log: 0-36 overburden; 36-194 Mascot dolomite; 194-500 Kingsport formation (T-bed probably not reached; TR @ 385). Mineralization: Shine hole; shines of ZnS @ 138-140 and traces at 235 and 268.

Hole LW-100: Located on the Lewis Turnmire (NJZ M&M) tract at coordinates: N-745,753; E-2,793,971. Collar elevation: 1622 feet. Drilling started: (dates not available). Total depth: 726 feet. Summary log: 0-60 overburden; 60-400 Mascot dolomite; 400-706 Kingsport formation (TR @ 584); 706-726 Longview dolomite. Mineralization: Shine hole; teaces of ZnS @ 483,493, 644 and 658; weighted averages of assay runs as follows: 662-672 (10') 2.42%; 672-701 (29') 0.99%; 662-701 (39')1.36%; also ZnS shine@ 703.

Hole LW-101: Located on Lewis Turnmire tract. Angle hole with collar coordinates: N745,384; E-2,794,746. Inclined minus 50° with a bearing of N.1°W. Collar elevation: 1568 feet. Drilling started: 3/23/60; completed: 4/8/60. Total depth: 850 feet.

MAY 26 1960
O.M.E.

Hole LW-101 con'td: Summary log: 0-18 overburden; 18-557 Mascot dolomite; 557-850 Kingsport formation and Longview dolomite (T-bed not recognized; TR @ 722). Mineralization: Shine hole; shines ZnS @ 724 and a run of 4' (729-733) estimated at 1½% zinc.

Hole LW-102: Located on Lewis Turnmire tract at coordinates: N-745,853; E-2,793,970. Collar elevation: 1629 feet. Drilling started: 4/9/60; completed: 4/19/60. Total depth: 650 feet. Summary log: 0-90 overburden; 90-320 Mascot dolomite. 320-610 Kingsport formation (TR @ 490); 610-650 Longview dolomite. Mineralization: Shine hole. Shines of ZnS @ 449 and 548; 564-583 (19') 2% est; 586-599(13') 1/4% est; 599½-609 (9½') ½% est.

Hole LW-103: Located on Lewis Turnmire tract 125 ft. down-dip from Hole LW-100. Coordinates and collar elevation not yet available. Drilling started: 4/20/60; completed: date not available. Total depth: 805 ft. Summary log: 0-30 overburden: 30-495 Mascot dolomite; 495-793(?) Kingsport formation (TR @ 663); 793(?)-805 Longview dolomite. Mineralization: Shine hole; 684-685 (1') 2% Zn est; also traces of ZnS @ 715,718,719, and 736-738.

Hole LW-104: Located on W. M. Brewer tract 200 feet up-dip from Hole LW-80. Collar coordinates and elevation not yet available. Drilling started: (date not available); completed 5/5/60. Total depth: 306 ft. Summary log: 0-122 overburden; 122-282 Kingsport formation (TR not recognized); 282-306 Longview dolomite: Mineralization: None- barren hole.

Hole LW-105: Located on W. M. Brewer tdact 100 ft. up-dip from Hole LW-80. Collar coordinates and elevation not yet available. Drilling started: 5/6/60; completed: 5/12/60. Total depth 410 ft. Summary log: 0-40 overburden; 40-60 Mascot dolomite; 60-375 Kingsport formation (TR @ 249); 375-410 Longview dolomite. Mineralization: None--barren hole.

Drilling in progress

Drilling is in progress on Hole LW-106 at a site 100 ft. down dip from Hole LW-80. This hole will be the last under the DMEA contract. As the hole is expected to be about 600 ft. deep, only part of the hole will be completed under the DMEA contract and the remainder at the Operator's own expense. It is doubtful whether the Operator will continue drilling in the Little War Creek area on the completion of Hole LW-106 as the results have been generally disappointing.

Inspected: May 12, 1960

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

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

FINAL

Budget Bureau No. 42-R1036.5

Sch. 779

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION

OPERATOR'S MONTHLY REPORT AND VOUCHER

Month of May, 1960 Docket No. DMEA 4830 Contract No. Ida E 1174
Operator's Name The New Jersey Zinc Company Minerals Zinc
Address Jefferson City, Tennessee
Contract Amount, $108,780.00 Government Participation: 50 % Amount, $ 53,390.00

ITEMS OF COSTS	FOR OPERATOR'S USE: Monthly Total	Totals Previously Reported	Totals To Date	FOR GOVERNMENT USE ONLY: Approved Monthly Total	Approved Totals Previously Reported	Approved Totals To Date
(1) Independent Short Form Contracts:						
Drilling	3,650.20	94,125.00	97,775.60			
Bulldozing						
Crosscutting						
Drifting						
(2) Labor and Supervision:						
Labor						
Supervision	207.02	7,492.98	7,700.00			
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	-	97.00	97.00			
Sampling and Analysis						
Payroll Taxes						
Credit Insurance	88.20	991.80	1,080.00			
(8) Contingencies (specify):						
				2808.52		
TOTALS	3,945.42	102,697.78	106,652.60		102,691.98	105,505.50

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O. M. E.
RECEIVED DEC 6 1960

DATE	INITIAL	
12-6	gab	110
"		110
		170
12/7	Murphy	500

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

Date ..... *Payee The New Jersey Zinc Company

Per ..... Title Chief Geologist

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

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

(Instructions on reverse)

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

$ 1404.26

Per Report & Review 11/16/60

Signature ..... (Authorized Certifying Officer)

Date 12/6/60 Vou. No. 2257

(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-1174 in accordance with the terms of the contract.

Signature R. J. Lynch Title MINING ENGINEER U. S. BUREAU OF MINES Date JUN 22 1960

APPROVAL BY DMEA EXECUTIVE OFFICER OR ALTERNATE:

Signature ..... Title ..... Date .....

MONTHLY REPORT OF OPERATOR

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

Form MF-104A
(April 1962)

Budget Bureau No. 42-R1151.2

UNITED STATES
DEPARTMENT OF THE INTERIOR

DEFENSE MINERALS EXPLORATION ADMINISTRATION

OPERATOR'S UNIT COST AND PROGRESS REPORT

Month of May 1960 Docket No. DMEA 4830 Contract No. Idm R 1174
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 BX	Ft.	317.30	104	4,809.85	1,577	3.05	1,000	3.05
Drilling: Core 0-1000 AX	"	3,333.00	1,212	92,556.75	33,657	2.75	29,000	2.75
Drilling: Churn 0-1000 BX	"		-	70.00	28	2.50		2.50
Drilling: Auger 1000 + AX	"			339.00	113	3.00	5,000	3.00
Stripping 1000 + BX	"		-					
Trenching								
Test Pits Assays	Ea.			97.00	97	1.00	200	1.00
Roads and Trails Core Bxs.	"	88.30	49	1,080.00	600	1.80	600	1.80
Sup. & Tech. Ser.	Ft.	207.02	941	7,700.00	35,000	0.22	35,000	0.22
Total Distributed Costs		3,945.42		106,652.60				Total Costs Authorized by Contract
Operating Equipment Purchased								
Initial Rehabilitation and Repairs								
New Buildings, Improvements, etc.								
Total Costs		3,945.42		106,652.60				

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 6-8-60 Operator The New Jersey Zinc Co.

Per [signature] Title Chief Geologist

Remarks: Includes holes LW-104, LW-105 and LW-106

→ 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.

JUN 21 1960

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, 1960

Little War Creek Area DMSA 4850

Contract Idm S 1174 (Zinc)

During the month of May, three holes were drilled on the Little War Creek Project. All of these holes are located on the W. M. Brewer property. The footage authorized under the terms of the DMSA contract was used up in Hole LW-106.

Hole LW-104 (W. M. Brewer property)

Hole LW-104 was drilled at a location 200 feet updip from LW-80 in an attempt to intersect the indicated eastward trend of mineralization encountered in holes LW-75 and LW-85. This hole collared in the Kingsport formation and was drilled to a depth of 306 feet.

Coordinates: N 746,357.72; 795,159.43
Elevation: 1661.44

Results:

0-122 - - Overburden
122-282 - - Lower Kingsport dolomite
282-306 - - (Bottom) Longview dolomite

Hole LW-105 (W. M. Brewer property)

Hole LW-105 was drilled half-way between LW-104 and LW-80 in a further attempt to intersect the indicated eastward trend of mineralization encountered in holes LW-75 and LW-85. This hole collared in the Mascot formation and was drilled to a depth of 410 feet.

Coordinates: N 746,056.12; E 795,157.95
Elevation: 1674.80

Results:

0- 40 - - Overburden
40- 60 - - Mascot dolomite
60-249 - - Upper Kingsport dolomite
249 - - TM
249-375 - - Lower Kingsport dolomite
375-410 - - (Bottom) Longview dolomite

Hole LW-106 (W. M. Brewer property)

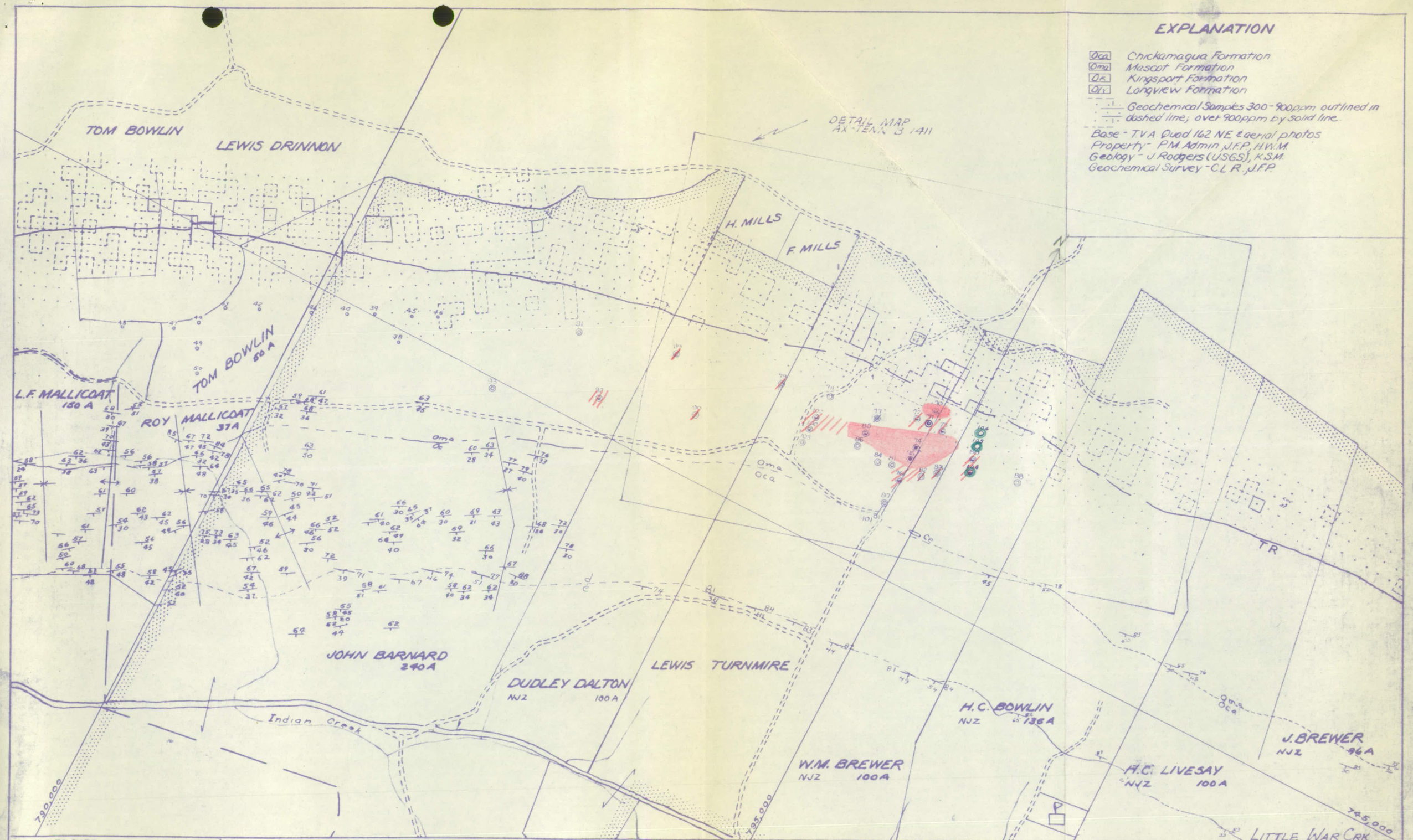
This hole was drilled 100 feet south of hole LW-80 in order to test for the eastward extension in this area of the mineralization

encountered in holes LW-75 and LW-85. The hole collared in the Mascot formation and was drilled to a depth of 600 feet.

Coordinates: N 746,255.58; E 795,161.21
Elevation: 1667.40

Results:

0- 14	- -	Overburden
14-284	- -	Mascot dolomite
284-440	- -	Upper Kingsport dolomite Sphalerite shines 390-390½, 399 403-404, 1' @ 1% Zn Estimated Traces of sphalerite @ 407,412-413,414,418, 419-421 and 422-424
440	- -	TR
440-586	- -	Lower Kingsport dolomite
586-600	- -	(Bottom) Longview dolomite



POSTED TO DATE	THE NEW JERSEY ZINC COMPANY	DRAWN JFP DATE 4-25-53	COPPER RIDGE BELT	HANCOCK CO., TENN
6-9-53 4-56 TEN	ROGERSVILLE TENNESSEE	TRACED SJL, JFP SCALE 1"=660'	SECTOR II SHEET 1SW	FILE NO. AX-TENN 103

LW-104
LW-105
LW-80
LW-106
RC
CEMTX
RC
RC
RC
1500
CEMTX
TR
LS
T
306
CEMTX
12'
1%
Shi
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Form MF-104 (Rev.)
(April 1952)

Sch 1813

Budget Bureau No. 42-R1036.5

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

MAY 27 1960 DMEA

Month of April, 1960 Docket No. DMEA 4850 Contract No. Idm E 1147
Operator's Name The New Jersey Zinc Company Minerals Zinc
Address Jefferson City, Tennessee
Contract Amount, $106,780.00 Government Participation: 50 % Amount, $53,390.00

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	6358.55	87,757.45	94,116.00			
Bulldozing						
Crosscutting						
Drifting						
(2) Labor and Supervision:						
Labor	507.10	6,985.88	7,492.98			
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	4.00	93.00	97.00			
Sampling and Analysis						
Payroll Taxes						
Liability Insurance						
Core Boxes	59.40	932.40	991.80			
(8) Contingencies (specify):						
TOTALS	6929.05	95,768.73	102,697.78	6929.05	95,768.73	102,697.78

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

Date 5/4/60 *Payee The New Jersey Zinc Company

Per [signature] Title Chief Geologist

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

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

(Instructions on reverse)

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

$ 3464.52

Signature [signature] (Authorized Certifying Officer)

Date 5/27/60 Vou. No. 4906

(See other side)

3464.53

(For Government use only)

CERTIFICATION BY GOVERNMENT REPRESENTATIVE:

I certify that to the best of my knowledge and belief the contractor submitting this voucher is operating a Defense Minerals Exploration Administration project under Contract No. E-1174 in accordance with the terms of the contract.

Signature D. J. Lynch Title MINING ENGINEER U. S. BUREAU OF MINES Date MAY 18 1960

APPROVAL BY DMEA EXECUTIVE OFFICER OR ALTERNATE:

Signature Lawrence G. Houck Title ACTING FIELD OFFICER, REGION IV OFFICE OF MINERALS EXPLORATION Date 5-23-60

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 27 1960
O.M.E.

UNITED STATES
DEPARTMENT OF THE INTERIOR

DEFENSE MINERALS EXPLORATION ADMINISTRATION

OPERATOR'S UNIT COST AND PROGRESS REPORT

Month of April 1960 Docket No. DMEA 4850 Contract No. Idm E 1174
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 BX	Ft.	201.30	66	4,492.65	1,473	3.05	1,000	3.05
Drilling: Core 0-1000 AX	"	6157.25	2239	89,214.35	32,445	2.75	29,000	2.75
Drilling: Churn 0-1000 EX	"		-	70.00	28	2.50		2.50
Drilling: Auger 1000 + AX	"		-	339.00	113	3.00	5,000	3.00
Stripping 1000 + BX	"		-		-			
Trenching								
Test Pits Assays	Ea.	4.00	4	97.00	97	1.00	200	1.00
Roads and Trails Core Bxs.	"	59.40	33	991.80	551	1.80	600	1.80
Sup.& Tech.Ser.	Ft.	507.10	2305	7,492.98	34,059	0.22	35,000	0.22
TOTAL DISTRIBUTED COSTS		6929.05		102,697.78				TOTAL COSTS AUTHORIZED BY CONTRACT
Operating Equipment Purchased								
Initial Rehabilitation and Repairs								
New Buildings, Improvements, etc.								
TOTAL COSTS		6929.05		102,697.78				

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: Includes holes LW-101, LW-102, and LW-103

Date 5/4/60 Operator The New Jersey Zinc Co.

Per [signature] Title Chief Geologist

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.
MAY 18 1960

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 1960

Little War Creek Area DMEA 4850

Contract Idm E 1174 (Zinc)

During the month of April three holes were completed on the Little War Creek Project.

Hole LW-101 (NJZ Co. M & M rights)

Hole LW-101 was drilled on the Lewis Tunmire farm at a location approximately 150 feet south of LW-87 and on a - 50° angle toward holes LW-87, 76 and 75. The purpose of this hole was to intersect the potential ore zones in the Lower Kingsport between holes LW-76 and LW-75 and to test for the presence of a steeply dipping orebody. This hole collared in the Mascot formation and was drilled to a depth of 850 feet.

Coordinates: N 745,384.03; E 794,745.56
Elevation: 1568.15
Inclination: - 50°; Bearing N 1° W

Results:

0- 18 - - Overburden
18-557 - - Mascot dolomite
557 - - Ce Mtx
557-722 - - Upper Kingsport dolomite
722 - - TR
722-850 - - (Bottom) Lower Kingsport dolomite
Shine ZnS @ 724
729-733, 4' @ 2% Zn Est. ✓

Hole LW-102 (NJZ Co. M & M rights)

Hole LW-102 was drilled on the Lewis Tunmire farm at a location 100 feet north of hole LW-100 in an attempt to intersect the indicated westward trend of the mineralization encountered in holes LW-74, LW-75 and LW-85. This hole collared in the Mascot formation and was drilled to a depth of 650 feet.

Coordinates: N 745,852.67; E 793,969.97
Elevation: 1628.69

Results:

0- 90 - - Overburden
90-320 - - Mascot dolomite
320 - - CeMtx
320-490 - - Upper Kingsport dolomite
490 - - TR
490-650 - - (Bottom) Lower Kingsport dolomite
564-583, 19' @ 2% Zn Est.
586-609, 23' @ 1% Zn Est.

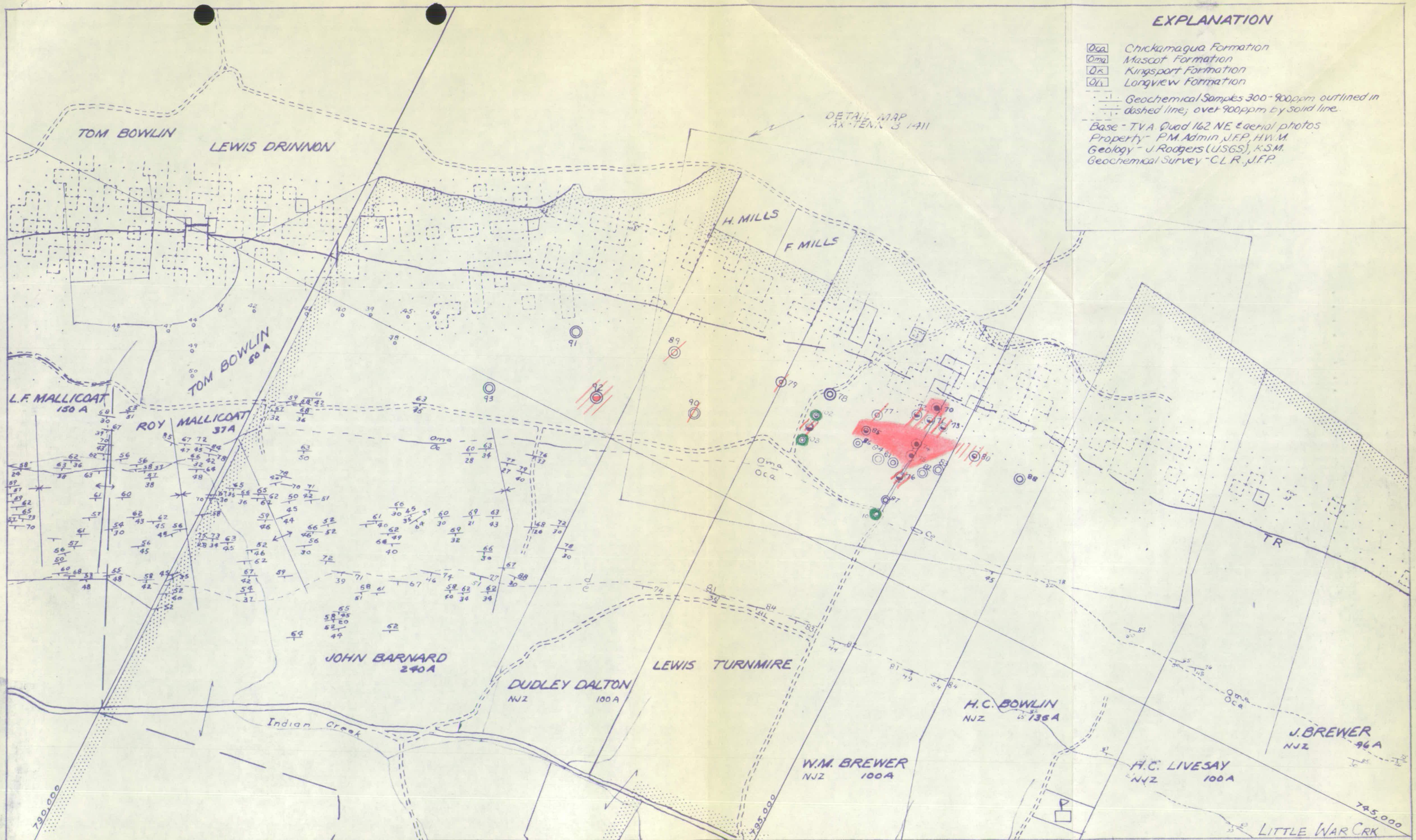
Hole LW-103 (NJZ Co. M & M rights)

Hole LW-103 was drilled on the Lewis Tunmire farm about 130 feet south of hole LW-100 in order to explore for ore adjacent to the mineral occurrence in hole LW-100. Hole LW-103 collared in the Mascot formation and was drilled to a depth of 805 feet.

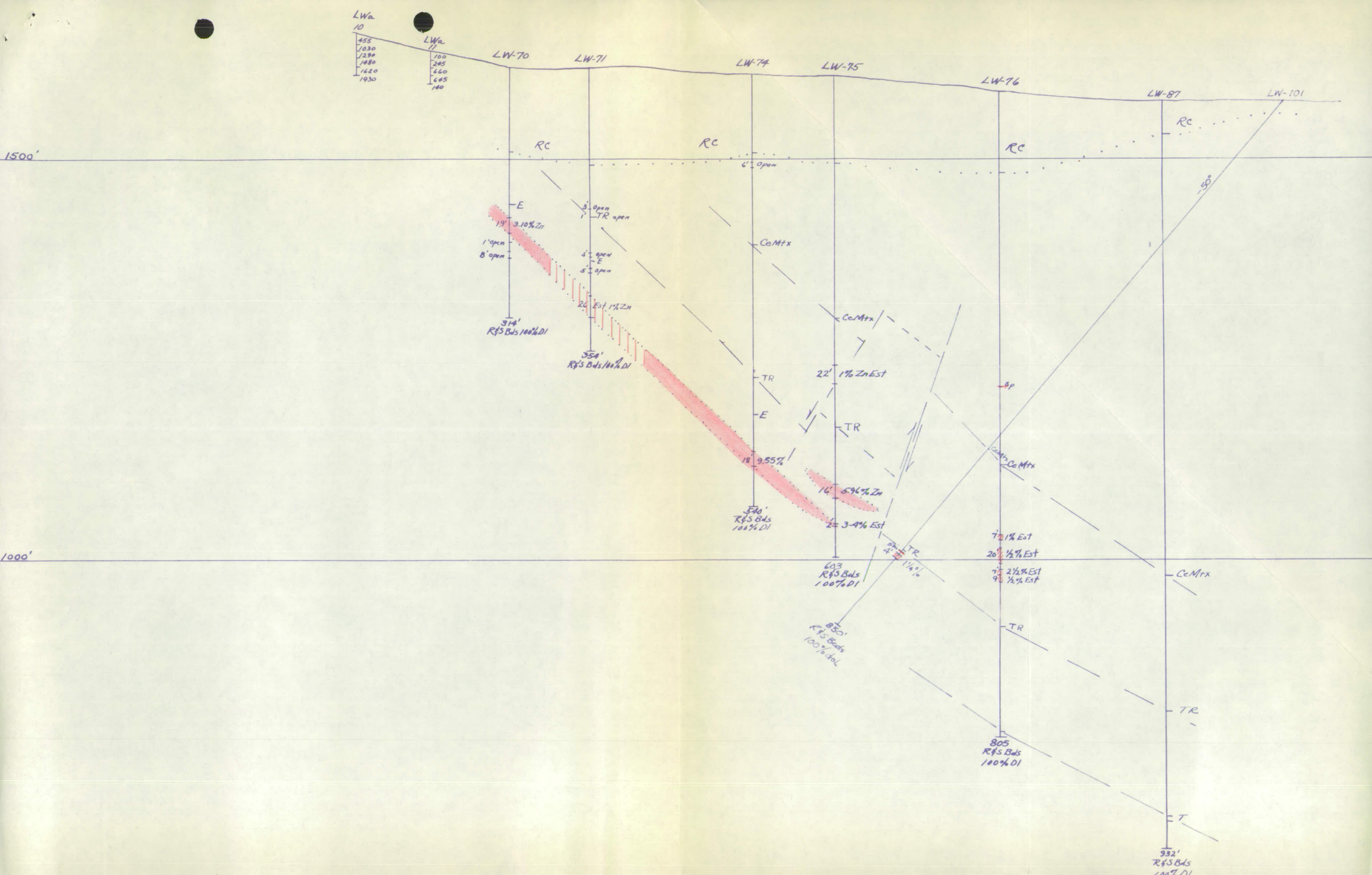
Coordinates: N 745,626.15; E 793,980.76
Elevation: 1621.97

Results:

0- 30	- - Overburden
30-495	- - Mascot dolomite
495	- - CeMtx
495-663	- - Upper Kingsport dolomite
663	- - TR
663-805	- - (Bottom) Lower Kingsport dolomite 684-685, 1' @ 2% Zn Est. Traces of ZnS at 715,718,719,736-738



POSTED TO DATE 6-9-53 4-56 TEN	THE NEW JERSEY ZINC COMPANY ROGERSVILLE TENNESSEE	DRAWN JFP DATE 4-25-53 TRACED SJL, JFP SCALE 1"=660'	COPPER RIDGE BELT SECTOR II SHEET 1SW	HANCOCK CO., TENN FILE NO. AX-TENN 103


LWa 10
455
1030
1280
1480
1620
1930
LWa 11
100
245
660
645
140
LW-70
LW-71
LW-74
LW-75
LW-76
LW-87
LW-101
1500'
1000'
RC
RC
RC
RC
6' open
E
19' 3.10% Zn
1' open
8' open
314'
R&S Bds 100% DI
3' open
1' TR open
5' open
E
5' open
26' Est 1% Zn
354'
R&S Bds 100% DI
CeMtx
TR
E
18' 9.55%
549'
R&S Bds
100% DI
CeMtx
22' 1% Zn Est
TR
16' 5.96% Zn
2= 3-4% Est
603
R&S Bds
100% DI
8.5°
TR
1¼%
850'
R&S Bds
100% DI
SP
CeMtx
7' 1% Est
20' ½% Est
7' 2½% Est
9' ½% Est
TR
805
R&S Bds
100% DI
CeMtx
TR
T
932'
R&S Bds
100% DI

LW-73
LW-102
LW-100
LW-103
RC
RC
RC
1500
TR
QMAX
4' 2% 22'
22
TR
19' 2%
26' 1.8%
650'
10' 2.42
39' @ 1.36
TR
FG
TR
FG
QMAX
FG
835
775

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

Sch 1813

Budget Bureau No. 42-R1036.5

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION

MAR 28 1960 O.M.E.

OPERATOR'S MONTHLY REPORT AND VOUCHER

Month of March 1960 Docket No. DMEA 4850 Contract No. Idm E 1174
Operator's Name The New Jersey Zinc Company Minerals Zinc
Address Jefferson City, Tennessee
Contract Amount, $106,780.00 Government Participation 50 % Amount, $53,390.00

ITEMS OF COSTS	FOR OPERATOR'S USE			FOR GOVERNMENT USE ONLY		
	Monthly Total	Totals Previously Reported	Totals To Date	Approved Monthly Total	Approved Totals Previously Reported	Approved Totals To Date
(1) Independent Short Form Contracts:						
Drilling	3,386.50	84,370.95	87,757.45			
Bulldozing						
Crosscutting						
Drifting						
(2) Labor and Supervision:						
Labor						
Supervision						
Technical Services	269.72	6,716.16	6,985.88			
(3) Operating Mat'ls. and Supplies:						
Timber						
Explosives						
Pipe						
Track						
(4) Operating Equipment:						
Rental						
Purchase						
Depreciation						
(5) Initial Rehabilitation and Repairs						
(6) New Bldgs., Improvements, etc.						
(7) Miscellaneous:						
Repairs to Equipment						
Sampling and Analysis	8.00	85.00	93.00			
Payroll Taxes						
Liability Insurance						
Core Boxes	32.40	900.00	932.40			
(8) Contingencies (specify):						
TOTALS	3,696.62	92,072.11	95,768.73	3696.62	92,072.11	95,768.73

I certify that the above bill is correct and just and that payment therefor has not been received.
Date 4/1/60 *Payee The New Jersey Zinc Company
Per [signature] Title Chief Geologist

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

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

(Instructions on reverse)

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

$ 1848.31

Signature [signature]
(Authorized Certifying Officer)

Date 5/27/60 Vou. No. 4906
(See other side)

1848.31

(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-1174 in accordance with the terms of the contract.

Signature [illegible] Title MINING ENGINEER U. S. BUREAU OF MINES Date APR 22 1960

APPROVAL BY DMEA EXECUTIVE OFFICER OR ALTERNATE:

Signature Lawrence G. Houk Title Act Field Officer Date 4/25/60

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 cost 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

MAY 27 1960

Month of March 1960 Docket No. DMEA 4850 Contract No. Idm E 1174

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 BX	Ft.	152.50	50	4,291.35	1,407	3.05	1,000	3.05
Ch 0-1000 AX	"	3,234.00	1176	83,057.10	30,206	2.75	29,000	2.75
Au 0-1000 EX	"		-	70.00	28	2.50		2.50
Stripping 1000 + AX	"		-	339.00	113	3.00	5,000	3.00
Trenching 1000 + BX	"		-		-			
Test Pits Assays	Ea.	8.00	8	93.00	93	1.00	200	1.00
Roads and Tr Core Boxes	"	32.40	18	932.40	518	1.80	600	1.80
Sup. & Tech.Ser.	Ft.	869.72	1226	6,985.88	31,734	0.22	35,000	0.22
TOTAL DISTRIBUTED COSTS		3,696.62		95,768.73				TOTAL COSTS AUTHORIZED BY CONTRACT
Operating Equipment Purchased								
Initial Rehabilitation and Repairs								
New Buildings, Improvements, etc								
TOTAL COSTS		3,696.62		95,768.73				

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 4/1/60 Operator The New Jersey Zinc Co.

Per [signature] Title Chief Geologist

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:

(Instructions on reverse)

(For Government use only)

[signature]

Director, U. S. G. S.

APR 2 1 1960

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 1960

Little War Creek Area DMEA 4850

Contract Idm E 1174 (Zinc)

During the month of March, two holes were completed on the Little War Creek Project.

Hole LW-99 - (NJZ Co. M&M rights)

Hole LW-99 was drilled on the M. C. Tunmire farm approximately 200 feet northeast of LW-57. The hole collared in the Mascot formation and was drilled to a depth of 500 feet.

Coordinates: N 746,317.90; E 799,691.86
Elevation: 1587.36

Results:

0- 36 - - Overburden
36-193 - - Mascot dolomite
139-140, shines
193 - - Ce Mtx
193-385 - - Upper Kingsport dolomite
traces @ 235, 269
385 - - TR
385-500 - - (Bottom) Lower Kingsport dolomite

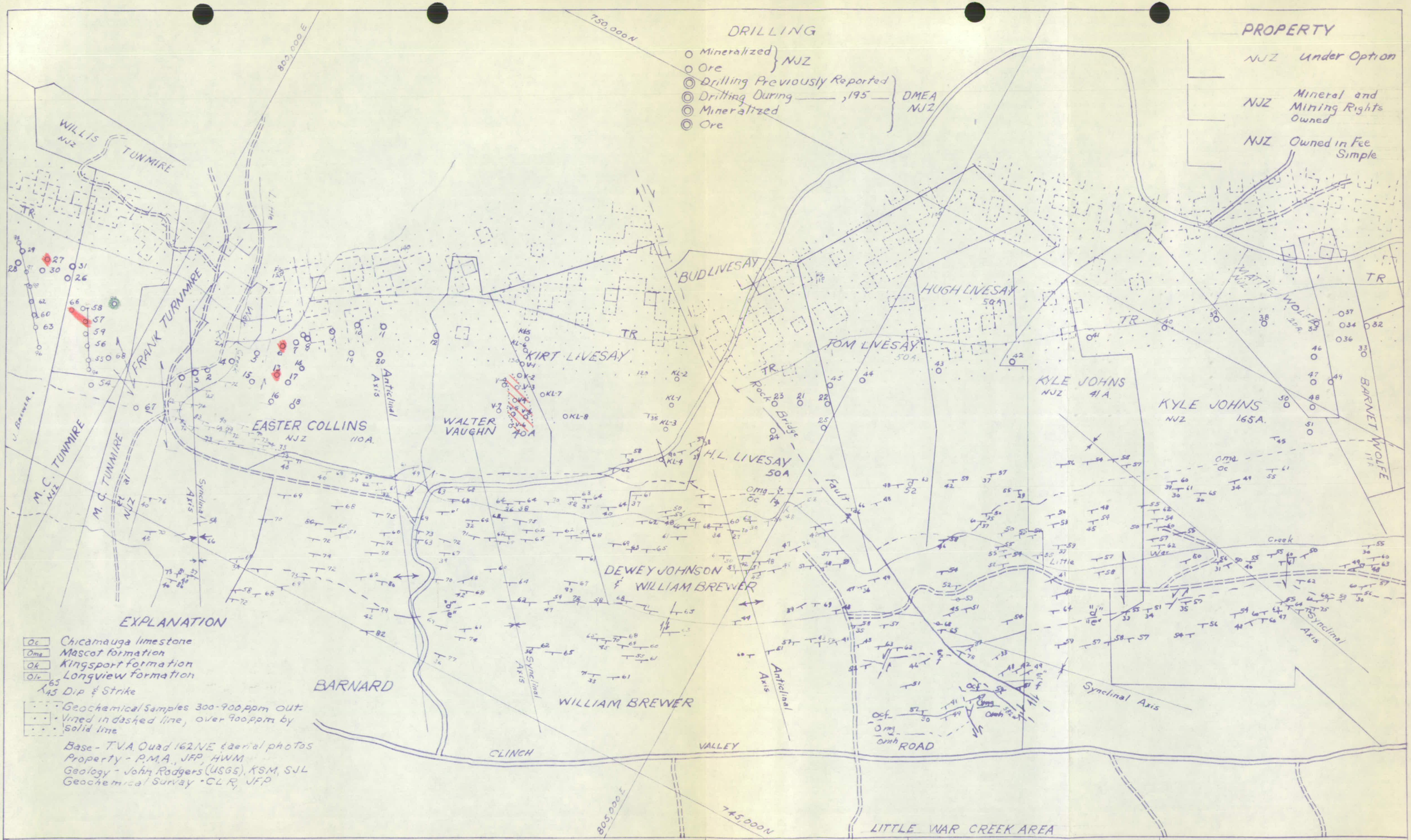
Hole LW-100 - (NJZ Co. M&M rights)

Hole LW-100 was drilled on the Lewis Tunmire farm at a location 300 feet south of LW-78 in an attempt to intersect the indicated westward trend of the mineralization encountered in holes LW-74, LW-75 and LW-85. This hole collared in the Mascot formation and was drilled to a depth of 726 feet.

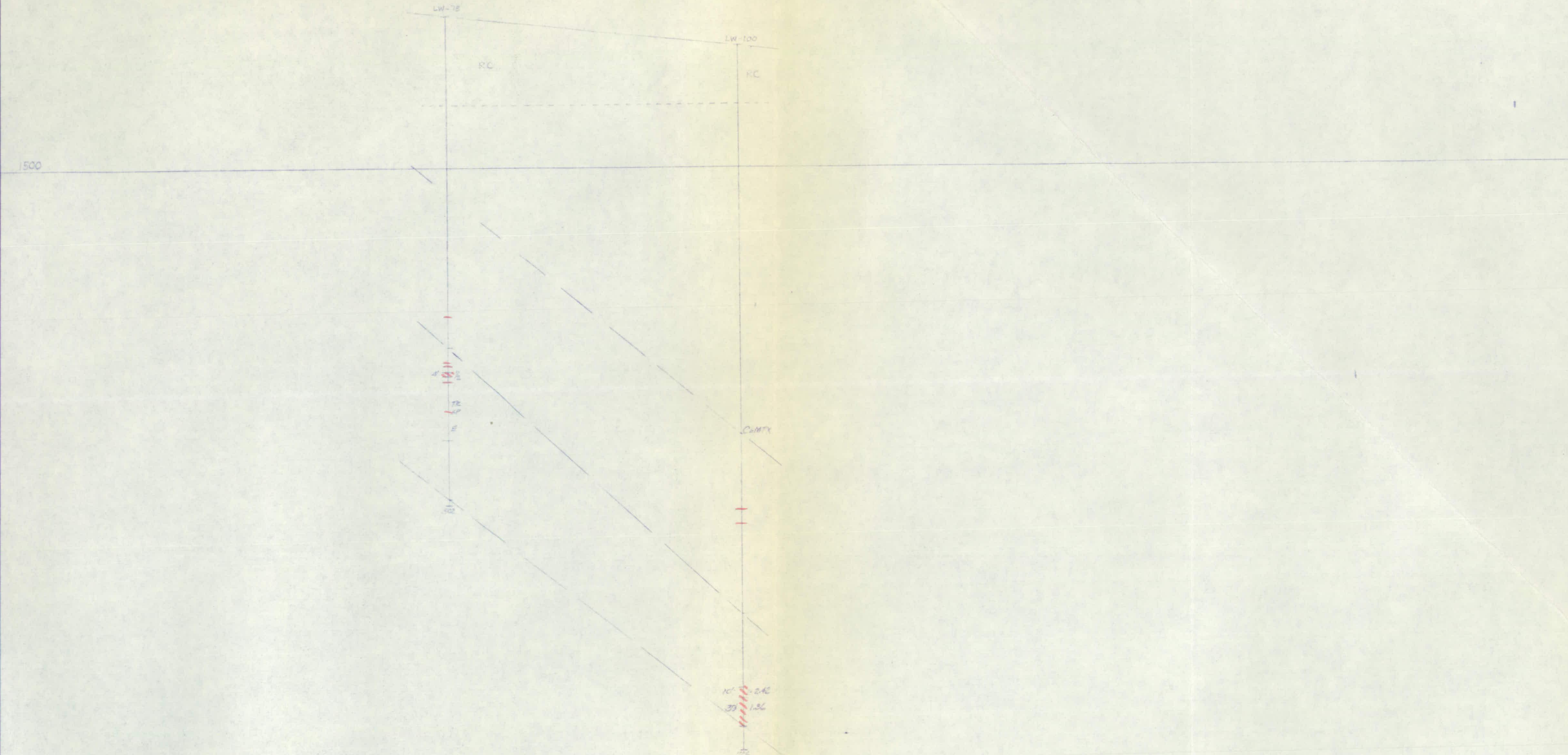
Coordinates: N 745,752.65; E 793,971.09
Elevation: 1621.74

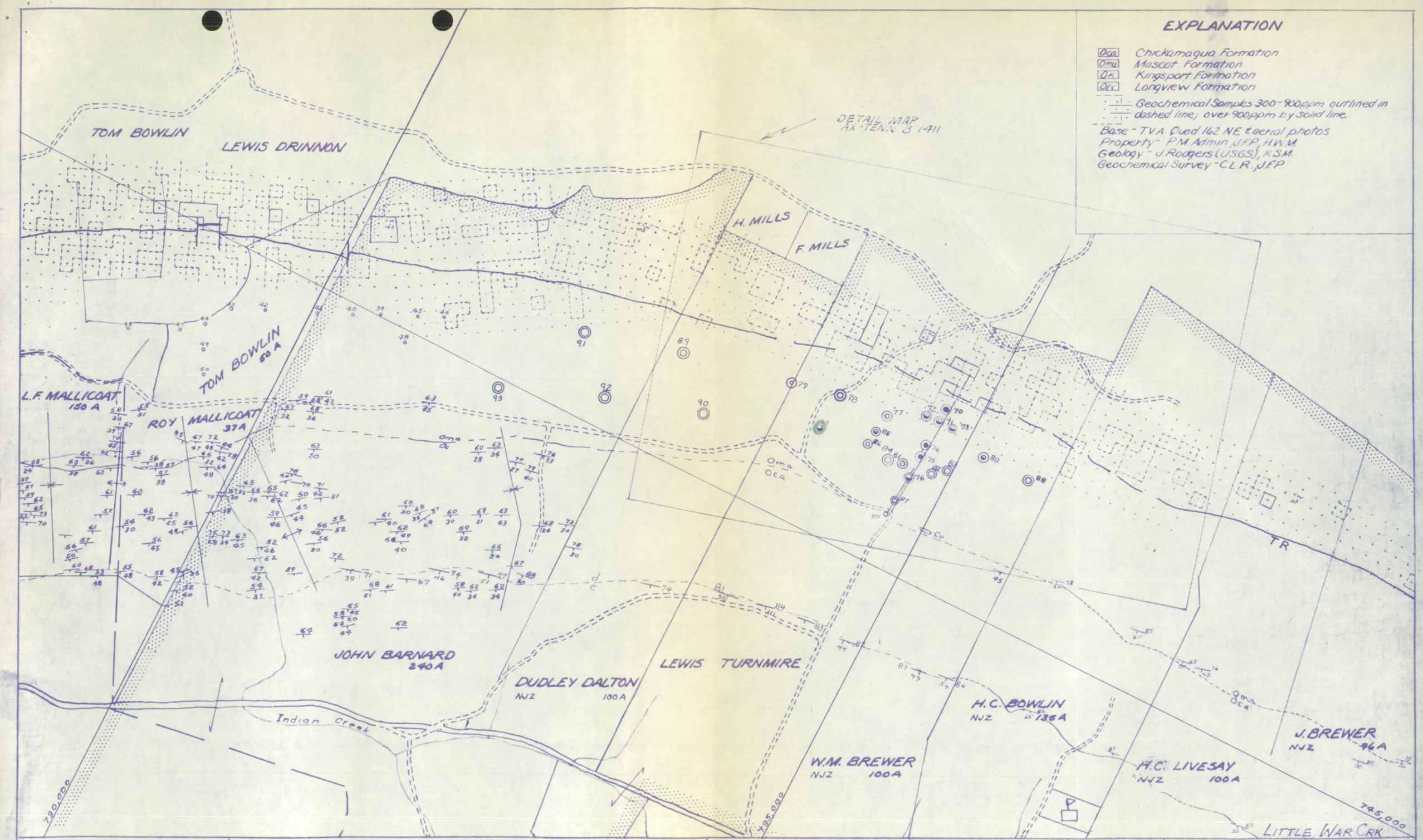
Results:

0- 60 - - Overburden
60-400 - - Mascot dolomite
400 - - Ce Mtx
400-584 - - Upper Kingsport dolomite
Trace sphalerite 483, 493
584 - - TR
584-726 - - (Bottom) Lower Kingsport dolomite
Trace sphalerite 644, 648, 658
662-701, 39' @ 1.36% Zn
662-672, 10' @ 2.42% Zn



ROGERSVILLE	TENNESSEE	SJL, JFP	2-11-53 1"=660'	COPPER RIDGE BELT SECTOR II SHEET I NE	HANCOCK COUNTY, TENN AX-TENN 95


LW-78
LW-100
RC
RC
1500
Cumtx
10'
2.42
.39
1.36



POSTED TO DATE 6-9-53 4-56 TEN	THE NEW JERSEY ZINC COMPANY ROGERSVILLE TENNESSEE	DRAWN JFP DATE 4-25-53 TRACED SJL, JFP SCALE 1" = 660'	COPPER RIDGE BELT SECTOR II SHEET ISW	HANCOCK CO., TENN FILE NO. AX-TENN 103

3/28/60 - Monthly - 3.00

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

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION

Budget Bureau No. 42-R1036.5

MAR 25 1960 O.M.E.

1438

OPERATOR'S MONTHLY REPORT AND VOUCHER

Month of February, 1960 Docket No. DMEA 4850 Contract No. Idm E 1174

Operator's Name The New Jersey Zinc Company Minerals Zinc

Address Jefferson City, Tennessee

Contract Amount, $106,780.00 Government Participation: 50 % Amount, $ 53,390.00

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	3094.35	81,276.60	84,370.95	3,093.55	81,276.60	84,370.15
Bulldozing						
Crosscutting						
Drifting						
(2) Labor and Supervision:						
Labor						
Supervision						
Technical Services	245.30	6,470.86	6,716.16	245.30	6,470.86	6,716.16
(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	-	85.00	85.00	—	85.00	85.00
Payroll Taxes						
Liability Insurance						
Core Boxes	28.80	871.20	900.00	28.80	871.20	900.00
(8) Contingencies (specify):						
				3,367.65 *		92,071.31
TOTALS	3368.45	88,703.66	92,072.11	3368.45	88,703.66	92,072.11

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

Date 3/1/60 *Payee The New Jersey Zinc Company

Per [signature] Title Chief Geologist

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

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

(Instructions on reverse)

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

$ 1683 83

Signature [signature]
(Authorized Certifying Officer)

Date Vou. No. 3827
(See other side)

* See Suspension attached

(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-1174 in accordance with the terms of the contract.

Signature [illegible] Title GEOLOGIST, U. S. G. S. Date MAR 22 1960

APPROVAL BY DMEA EXECUTIVE OFFICER OR ALTERNATE:

Signature [illegible] Title ACTING EXECUTIVE OFFICER DMEA - REGION V Date MAR 22 1960

MONTHLY REPORT OF OPERATOR

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

Form MF-104A
(April 1952)

Budget Bureau No. 42-R1151.2

UNITED STATES
DEPARTMENT OF THE INTERIOR

DEFENSE MINERALS EXPLORATION ADMINISTRATION

OPERATOR'S UNIT COST AND PROGRESS REPORT

Month of February 195 60 Docket No. DMEA 4850 Contract No. Idm E 1174

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 BX	Ft.	277.55	91	4,138.85	1,351	3.05	1,000	3.05
0-1000 AX	"	2816.80	1024	79,823.10	29,030	2.75	29,000	2.75
Churn 0-1000 EX	"	-	-	70.00	28	2.50		2.50
Auger 1000 + AX	"	-	-	339.00	113	3.00	5,000	3.00
Stripping 1000 + BX	"	-	-	-	-			
Trenching Assays	Ea.	-	-	85.00	85	1.00	200	1.00
Test Pits Core Boxes	"	28.80	16	900.00	500	1.80	600	1.80
Roads and Trails Sup. & Tech. Ser.	Ft.	245.30	1115	6,716.16	30,528	0.22	35,000	0.22
TOTAL DISTRIBUTED COSTS		3368.45		92,072.11				TOTAL COSTS AUTHORIZED BY CONTRACT
Operating Equipment Purchased								
Initial Rehabilitation and Repairs								
New Buildings, Improvements, etc.								
TOTAL COSTS		~~3368.45~~		~~92,072.11~~				

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 3/1/60 Operator The New Jersey Zinc Co.

Per [signature] Title Chief Geologist

REMARKS:

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)

MAR 25 1960 O.M.E.

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, 1960

Little War Creek Area DMEA 4850

Contract Idm E 1174 (Zinc)

During the month of February, two holes were completed on the Little War Creek project.

Hole LW-97 - (N.J.Z. Co. M & M rights)

Hole LW-97 was drilled on the James Brewer farm at a location of 200 feet southeast of LW-29. The hole collared in the Mascot formation and was drilled to a depth of 540 feet.

Coordinates: N 746,253.05; E 798,986.43
Elevation: 1630.83

Results:

0- 63 - - - Overburden
63-195 - - - Mascot dolomite
195 - - - Ce MTX
195-405 - - - Upper Kingsport dolomite
260-261, 1' @ ½% Zn Est.
264-265, 1' @ 15% Zn Est.
271-277, 6' @ 1½% Zn Est.
325-327, 2' shines
329-332, 3' @ 1½% Zn Est.
336-370, 34' of traces
405 - - - TR
405-540 - - - (Bottom) Lower Kingsport dolomite

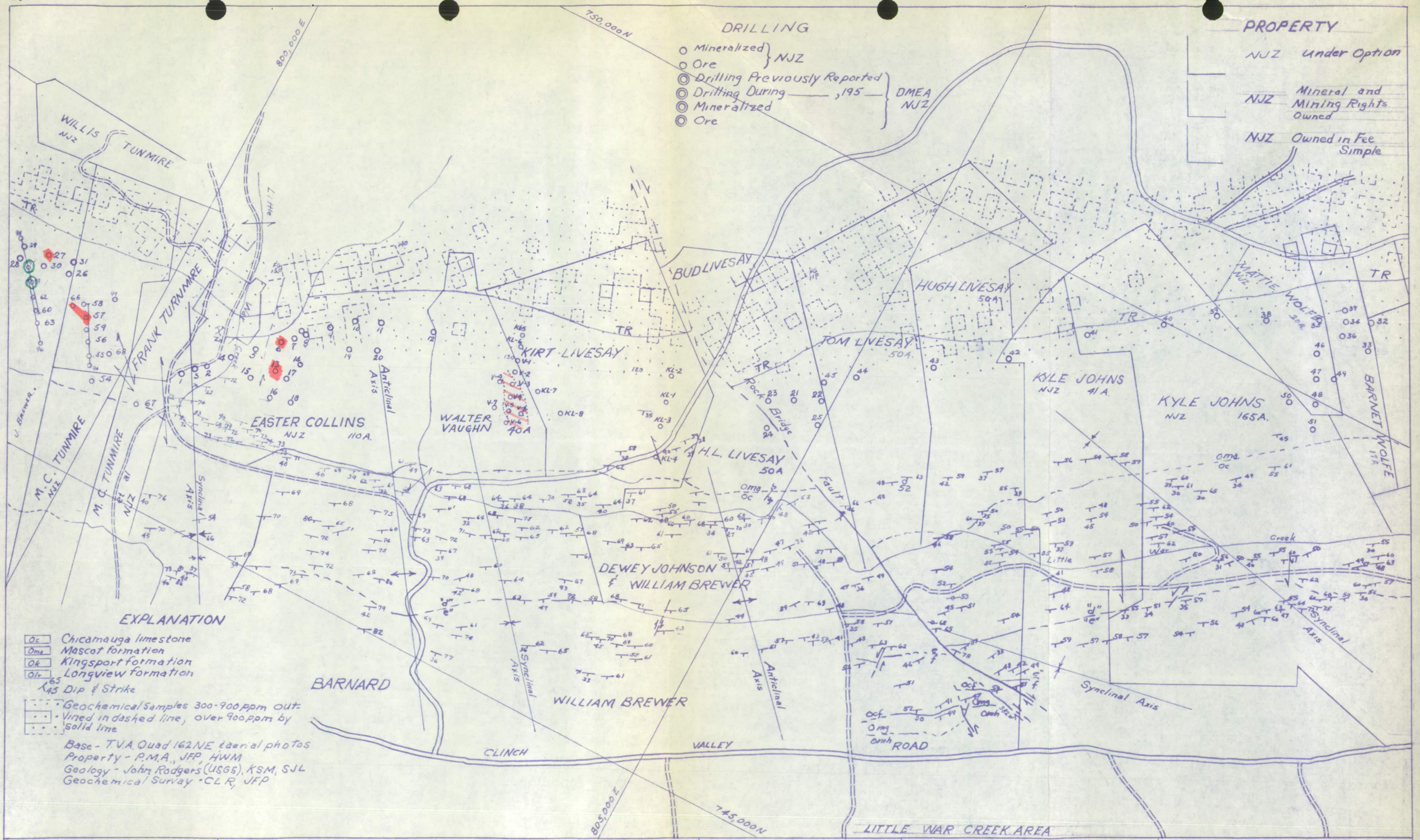
Hole LW-98 - (N.J.Z. Co. M & M Rights)

Hole LW-98 was drilled 100 feet southeast of LW-97. The hole collared in the Mascot formation and was drilled to a depth of 575 feet.

Coordinates: N 746,172.82; E 799,052.25
Elevation: 1617.51

Results:

0-105 - - - RC
105-253 - - - Mascot dolomite
186-189, 3' @ 3/4% Zn Est.
216-219, 3' @ 1½% Zn Est.
253 - - - Ce MTX
253-440 - - - Upper Kingsport dolomite
330-350, 20' @ 2% Zn Est.
363-369, 6' @ 3% Zn Est.
370-374, traces
380-393, 13' @ 1½% Zn Est.
404-410, 6' @ ½% Zn Est.
440 - - - TR
440-575 - - - (Bottom) Lower Kingsport dolomite


DRILLING
Mineralized
Ore
NJZ
Drilling Previously Reported
Drilling During ____ ,195 ___
Mineralized
Ore
DMEA
NJZ
PROPERTY
NJZ Under Option
NJZ Mineral and Mining Rights Owned
NJZ Owned in Fee Simple
750,000 N
800,000 E
WILLIS NJZ
TUNMIRE
TR
FRANK TUNMIRE
M.C. TUNMIRE NJZ
M.C. TUNMIRE et al NJZ
EASTER COLLINS NJZ 110A.
WALTER VAUGHN 40A
KIRT LIVESAY
BUD LIVESAY
TOM LIVESAY 50A.
HUGH LIVESAY 50A
H.L. LIVESAY 50A
Rock Bridge
Fault
KYLE JOHNS NJZ 41A.
KYLE JOHNS NJZ 165A.
WATTLE WOLFE 20A.
BARNET WOLFE 11A
Little War Creek
DEWEY JOHNSON & WILLIAM BREWER
WILLIAM BREWER
BARNARD
Anticlinal Axis
Synclinal Axis
Synclinal Axis
Anticlinal Axis
Synclinal Axis
Synclinal Axis
CLINCH VALLEY ROAD
805,000 E
745,000 N
EXPLANATION
Oc Chicamauga limestone
Omg Mascot formation
Ok Kingsport formation
Olv Longview formation
65 Dip & Strike
Geochemical Samples 300-900 ppm out-lined in dashed line, over 900 ppm by solid line
Base - T.V.A. Quad 162 NE Aerial photos
Property - P.M.A., JFP, HWM
Geology - John Rodgers (USGS), KSM, SJL
Geochemical Survey - CLR, JFP
LITTLE WAR CREEK AREA
ROGERSVILLE
TENNESSEE
SJL, JFP
2-11-53
1"=660'
COPPER RIDGE BELT
SECTOR II
SHEET I NE
HANCOCK COUNTY, TENN
AX-TENN 95

LW-95
LW-29
LW-28
LW-97
LW-98
LW-62
LW-60
LW-63
LW-96

INTERIM REPORT

DMEA-4850, Idm-E1174 - (zinc)

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

Location: Little War Creek area, Hancock County, Tennessee

Summary of drilling completed

	Since last inspection	To date
Number of holes.....	3	45
Footage.....	1,865	30,528
Number of holes showing:		
a) Commercial-grade zinc ore.....		6
b) Non-commercial zinc mineralization....		36
c) No zinc mineralization.....		3

Data on the three holes completed since the last inspection are summarized as follows:

Hole LW-96: Located on Brewer tract with the collar approximately 160 feet down dip from Hole LW-63 and at coordinates: N-745,737; E-2,799,348. Collar elevation: 1,592 feet A.T. Hole is inclined in the plane of the dip fence approximately minus 50° NW. Drilling started: 1/10/60; completed 1/26/60. Total length: 750 feet. Summary log: 0-33 overburden; 33-503 Mascot dolomite; 503-750 (bottom of hole) Kingsport formation (TR @ 654). Mineralization: Shine hole.

Note: all values following are in estimated percent zinc.

2' (381-383) 1% ; 6' (394-400) ½%; traces @ 450-459, 461,495, 508, 510,521; 10' (523-533) ½%; 1' (597-598) 5%; 1' (603-604) ½%.

OFFICIAL FILE COPY
O. M. E.
RECEIVED MAR 7 1960

DATE		
3-7	gad	110
"		11.0
3/8		800
~~3/8~~	~~Murphy~~	~~100~~

Hole LW-97: Located on Brewer tract at coordinates: N-746,253; E-2,798,986 (approximately 100 feet downdip from Hole LW-28). Collar elevation: 1,631 feet A. T. Vertical hole. Drilling started: 1/27/60; completed: 2/8/60. Total depth: 540 ft. Summary log: 0-63 overburden; 63-195 Mascot dolomite; 195-505 Kingsport formation (TR @ 405); 505-540 (bottom of hole) Longview dolomite. Mineralization: Shine hole. (All values in estimated percent zinc). 1' (260-261) ½%; 1'(264-265) 15%; 6' (271-277) 1½%; shines @ 291 and 325-327; 3' (329-332) 1½% shine @ 350.

Hole LW-98: Located on Brewer tract at coordinates: N-746,173; E-2,799,052(approximately 100 ft downdip from Hole-LW-97). Collar elevation: 1,617 feet A.T. Vertical hole. Drilling started: 2/9/60; completed: 2/22/60. Total depth: 575 feet. Summary log: 0-105 overburden; 105-253 Mascot dolomite; 253-575 Kingsport formation and Longview dolomite (TR @ 440; T-bed not recognized but may be at about 561 ?). Mineralization: Presently classified as shine hole on basis of estimates, but may move into ore category on completion of assays. All values following are in estimated percent zinc: 3' (186-189) 3/4 %; traces @ 210-211; 3' (216-219) 1½%; traces @ 299-301,308,309, 325-327,329-330; 5' (330-335) 2% ; 2' (340-342) 10%; 8'(342-350) 1%; traces @ 354, 362; 6' (363-369) 3%; traces @ 370-374; 13' (380-393) 1½%; 1' (404-405) 1%; 2' (408-410) 2%; shines @ 419,420,426, and 434.

Drilling in progress

Drilling on Hole LW-99 is now in progress. This hole is located on the M. C. Tummire property approximately 200 feet northeast of Hole LW-58 on the strike fence consisting of Holes LW-66 and -58. Core was observed to a depth of 424 feet with total drilling depth estimated at 500 feet. The hole is almost completed barren of zinc to the depth seen with shine and traces only being seen at depths of 139-140, 235, and 269 feet. On the completion of Hole LW-99 it is anticipated that the drill will be moved to a site in the southwestern part of the project area somewhere in the vicinity of Holes LW-78 and -86.

Inspected: March 1, 1960

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

z

OFFICIAL FILE COPY
O. M. E.
RECEIVED FEB 29 1960

DATE	INITIALS	CODE
V-29	gad	VVO
"	JEJ	110
3/1	Murphy	500

February 25, 1960

Memorandum

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

From: Administrative Assistant, Norris, Tennessee

Subject: Monthly report and voucher

We are enclosing two copies of the following monthly report and voucher:

Idm-P1174 The New Jersey Zinc Company
Docket No. DMFA-4850
19th payment - month of January
Amount $2504.09

Helen R. Miller

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

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

Budget Bureau No. 42-R1036.5

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION

PAID BY VOUCHER & SCHEDULE OF PAYMENTS K-
FEB 29 1960
O.M.E.

OPERATOR'S MONTHLY REPORT AND VOUCHER

Month of January, 1960 Docket No. DMEA 4850 Contract No. Idm E 1174
Operator's Name The New Jersey Zinc Company Minerals Zinc
Address Jefferson City, Tennessee
Contract Amount, $ 106,780.00 Government Participation: 50 % Amount, $ 53,390.00

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	4603.55	76,673.05	81,276.60			
Bulldozing						
Crosscutting						
Drifting						
(2) Labor and Supervision:						
Labor						
Supervision						
Technical Services	363.22	6,107.64	6,470.86			
(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	*	85.00	85.00			
Payroll Taxes						
Liability Insurance						
Core Boxes	41.40	829.80	871.20			
(8) Contingencies (specify):						
TOTALS	5008.17	83,695.49	88,703.66	5008.17	83,695.49	88,703.66

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

Date 2/1/60 *Payee The New Jersey Zinc Company

Per [signature] Title Chief Geologist

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

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

(Instructions on reverse)

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

$ 2504.09

Signature [signature]
(Authorized Certifying Officer)

Date FEB 25 1960 Vou. No. 42

(See other side)

2504.08

(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-1174 in accordance with the terms of the contract.

Signature T. J. Lynch Title MINE INSPECTOR U. S. BUREAU OF MINES Date FEB 24 1960

APPROVAL BY DMEA EXECUTIVE OFFICER OR ALTERNATE:

Signature Robert A. Lawrence Title EXECUTIVE OFFICER OME FIELD TEAM REGION V Date FEB 24 1960

MONTHLY REPORT OF OPERATOR

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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

FEB 29 1960
G.M.E.

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

Month of January 195 60 Docket No. DMEA 4850 Contract No. Idm E 1174
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 BX	Ft.	643.55	211	3,861.30	1,266	3.05	1,000	3.05
Churn 0-1000 AX	"	3960.00	1440	77,006.30	28,006	2.75	29,000	2.75
Auger 0-1000 EX	"	-	-	70.00	28	2.50		2.50
Stripping 1000 ↓ AX	"	-	-	339.00	113	3.00	5,000	3.00
Trenching 1000 ↓ BX	"	-	-	-	-			
Test Pits Assays	Ea.	-	-	85.00	85	1.00	200	1.00
Roads and Trails Core Bxs.	Ea.	41.40	23	871.20	484	1.80	600	1.80
Sup. & Tech. Ser.	Ft.	363.22	1651	6,470.86	29,413	0.22	35,000	0.22
Total Distributed Costs		5008.17		88,703.66				Total Costs Authorized by Contract
Operating Equipment Purchased								
Initial Rehabilitation and Repairs								
New Buildings, Improvements, etc.								
Total Costs		5008.17		88,703.66				

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 2/1/60 Operator The New Jersey Zinc Co.

Per [signature] Title Chief Geologist

Remarks:

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.
MAR 4 1960

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, 1960

Little War Creek Area DMEA 4850

Contract Idm E 1174 (Zinc)

During the month of January two holes were completed on the Little War Creek project. Hole LW-95, located on the James Brewer farm, was drilled to a depth of 901 feet. The results are as follows:

Hole LW-95 - (NJZ Co. M&M Rights, J. Brewer surface)
Inclined @ -50°, bearing S 37°-23' E

Coordinates: 736,445.21 N; 798,840.62 E
Elevation:, 1651.62

Results:

0-122 - - - Overburden
122-188 - - - Mascot dolomite
188-901 - - - (Bottom) Upper Kingsport dolomite
230-337, 107' of scatt. shines & traces
337-342, 5' of 2½% Est.
357-361, 4' of 2½% Est.
361-523, 162' of ½% Est.
523-532, 9' of 1% Est.
532-545, 13' of traces of ZnS
545-549, 4' of 3% Est.
549-574, 25' - traces of ZnS
622-634, 12' - traces of ZnS
646-689, 43' - traces of ZnS

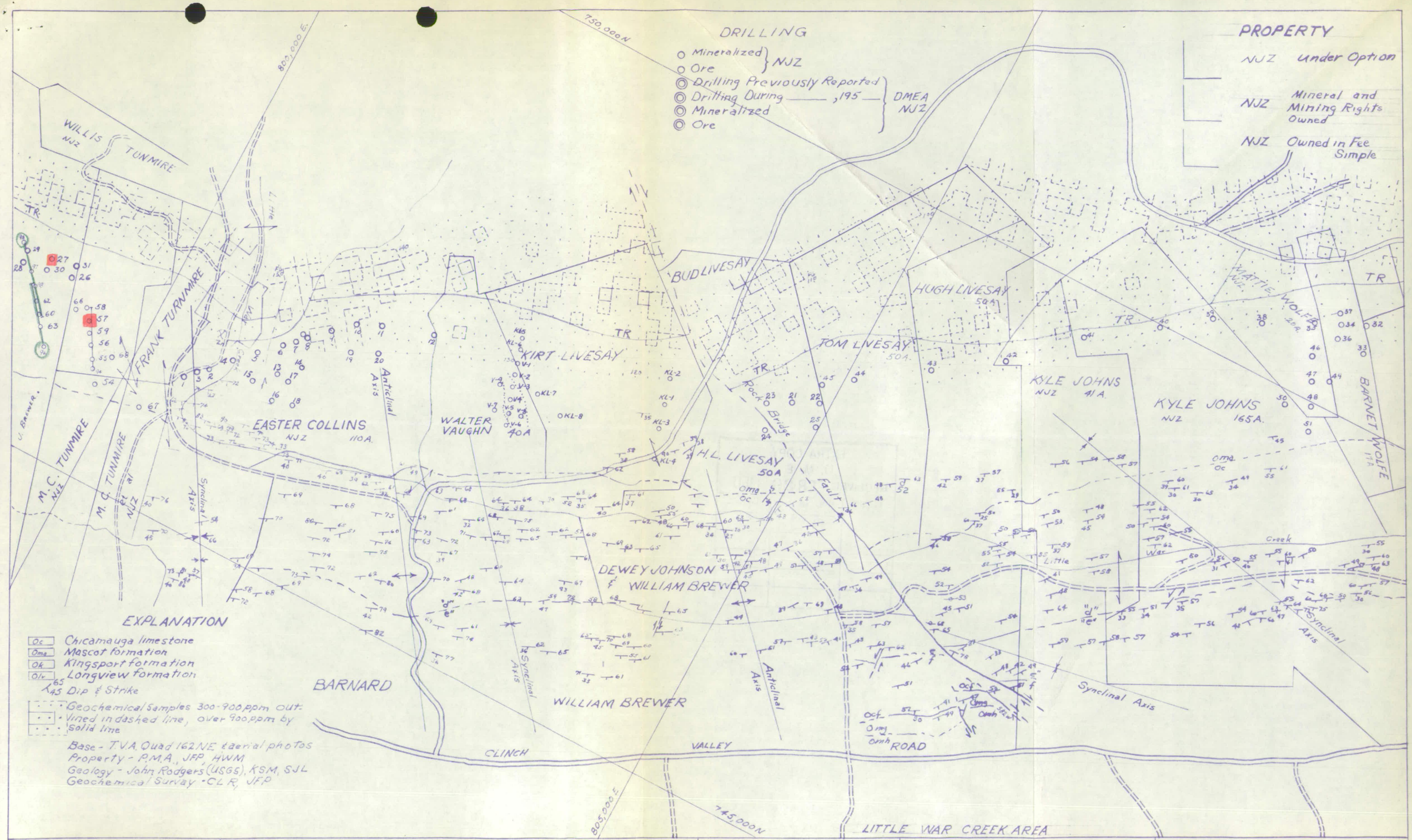
Hole LW-96, located 170 feet southeast of LW-63, was drilled on a -50° angle, N 36°-53' W to a depth of 750 feet. The results areas follows:

Hole LW-96 (NJZ Co. M&M rights - J. Brewer surface)
Inclined @ -50° bearing N 36°-53' W.

Coordinates: 745,737.55 N; 799,348.87 E
Elevation: 1592.20

Results:

0- 33 - - - Overburden
33-503 - - - Mascot dolomite
381-383, 2' @ 1% Est.
394-401, 7' @ 1/2% Est.
454-459, traces of ZnS
503 - - - Ce MTX
503-654 - - - Upper Kingsport dolomite
523-533, 10' @ ½% Est.
597-598, 1' @ 5% Est.
603-614, 11' @ ½% Est.
614-643, traces of ZnS
654 - - - TR
654-750 - - - (Bottom) Lower Kingsport dolomite


DRILLING
Mineralized
Ore
NJZ
Drilling Previously Reported
Drilling During ——— ,195—
Mineralized
Ore
DMEA
NJZ
PROPERTY
NJZ Under Option
NJZ Mineral and Mining Rights Owned
NJZ Owned in Fee Simple
750,000 N
805,000 E
745,000 N
WILLIS
NJZ
TUNMIRE
TR
FRANK TUNMIRE
M. C. TUNMIRE
NJZ
M. C. TUNMIRE
et al
NJZ
EASTER COLLINS
NJZ
110A.
WALTER VAUGHN
40A
KIRT LIVESAY
BUD LIVESAY
TOM LIVESAY
50A.
HUGH LIVESAY
50A
KYLE JOHNS
NJZ
41A.
KYLE JOHNS
NJZ
165A.
WATTIE WOLFE
BARNET WOLFE
H.L. LIVESAY
50A
Rock Bridge
Fault
Anticlinal Axis
Synclinal Axis
DEWEY JOHNSON
&
WILLIAM BREWER
BARNARD
WILLIAM BREWER
Little War Creek
Synclinal Axis
Anticlinal Axis
Synclinal Axis
CLINCH
VALLEY
ROAD
EXPLANATION
Oc Chicamauga limestone
Omg Mascot formation
Ok Kingsport formation
Olv Longview formation
65 Dip & Strike
45
Geochemical Samples 300-900 ppm out-lined in dashed line, over 900 ppm by solid line
Base - T.V.A. Quad 162 NE & aerial photos
Property - P.M.A., JFP, HWM
Geology - John Rodgers (USGS), KSM, SJL
Geochemical Survey - CLR, JFP
LITTLE WAR CREEK AREA
ROGERSVILLE
TENNESSEE
SJL, JFP
2-11-53
1"=660'
COPPER RIDGE BELT
SECTOR II
SHEET I NE
HANCOCK COUNTY, TENN
AX-TENN 95

4850

OFFICIAL FILE COPY
O. M. E.
RECEIVED FEB 11 1960

DATE	INITIALS	CODE
2-11	gad	110
"	JRJ	110
2/12	[illegible]	800

INTERIM REPORT

DMEA-4850, Idm-E1174-zinc

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

Location: Little War Creek area, Hancock County, Tennessee

Summary of drilling completed

	Since last inspection	To date
Number of holes.....	2	42
Footage.....	1,614	28,663

Number of holes showing:

a) Commercial-grade zinc ore.....	6
b) Non-commercial zinc mineralization..	33
c) No zinc mineralization.....	3

Data on the two holes completed since the last interim report are summarized as follows:

Hole LW-94: Located on the M.C. Tunmire tract at coordinates: 745,831-N; 799,770-E. Collar elevation: 1598 feet A.T. Bearing: N 31°W; inclination: minus 51°. Drilling started: 11/10/59; completed: 12/3/59. Total length: 713 ft. Summary log: 0-482 Mascot dolomite (no overburden) 482-713 Kingsport formation (TR @ 633). Mineralization: Ore hole. Traces of ZnS @ 509-512; 102 ft. estimated at 5% Zn @ 512-614; 6 ft. estimated at 1% Zn @ 621-627.

Hole LW-95: Located on Brewer tract in fence consisting of Holes LW-29,-28,-62,-60, and -63. Coordinates: 746,445-N; 798,841-E. Collar elevation: 1652 feet A.T. Bearing: S 38½°E; inclination: minus 51° SE. Drilling started : 12/8/59; completed: 1/9/60. Total length: 901 feet. Summary log: 0-120 overburden; 120-191 Mascot dolomite; 191-901 Upper member of Kingsport formation (hole bottomed approximately 10 ft. above the top of R-bed). Numerous zones of brecciation were encountered, most of which were associated with mineralization. Mineralization: Scattered shines and traces of sphalerite from 234-770 with estimated percentages as follows: 274-300 (26') 1% Zn; 337-342 (5') 2% Zn; 382-387 (5') 1% Zn; 397-403 (6') 1½% Zn; 432-435 (3') 1½% Zn; 505-520 (15') 1%Zn; 545-549 (4') 3% Zn.

Drilling in progress

Drilling is in progress on Hole LW-96 on the Brewer tract. This hole is collared approximately 160 feet down dip from Hole LW-63 and is angled at minus 50° in the plane of the dip fence to a

target zone approximately midway between Holes LW-60 and -62. At the time of the last inspection the hole was at a depth of 110 feet and was drilling in the Mascot dolomite.

Inspected: December 16, 1959
and
January 13, 1960

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

z

MME FORM 6 REFERENCE SLIP

REV. 2-59 OFFICE OF MINERALS EXPLORATION

TO:	DATE	INITIALS
1. 110	1/25	gf
2. ~~Mr. Murphy 500~~	1/25	[illegible]
3.		
4.		
5.		
FROM: VVO	1-25	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:

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF MINES
REGION V

ELECTROTECHNICAL
EXPERIMENT STATION

P. O. BOX 217
NORRIS, TENNESSEE

January 21, 1960

Memorandum

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

From: Administrative Assistant, Norris, Tennessee

Subject: Monthly report and voucher

We are enclosing two copies of the following monthly report and voucher:

Idm-E1174 The New Jersey Zinc Company
Docket No. DMEA-4850
18th payment - month of December 1959
Amount $1070.70

Helen R. Miller
Helen R. Miller

Attachments 2
/hbm
Copies to R. A. Laurence
V. J. Lynch
Norris files
Day files

OFFICIAL FILE COPY
O. M. E.
RECEIVED JAN 25 1960

DATE	INITIALS	CODE
1-25	gad	220
		500

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-

JAN 25 1960

OPERATOR'S MONTHLY REPORT AND VOUCHER

O.M.E.

Month of December, 1959 Docket No. DMEA 4850 Contract No. Idm E 1174
Operator's Name The New Jersey Zinc Company Minerals Zinc
Address Jefferson City, Tennessee
Contract Amount, $ 106,780.00 Government Participation: 50 % Amount, $ 53,390.00

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	1966.55	74,706.50	76,673.05			
Bulldozing						
Crosscutting						
Drifting						
(2) Labor and Supervision:						
Labor						
Supervision						
Technical Services	156.86	5,950.78	6,107.64			
(3) Operating Mat'ls. and Supplies:						
Timber						
Explosives						
Pipe						
Track						
(4) Operating Equipment:						
Rental						
Purchase						
Depreciation						
(5) Initial Rehabilitation and Repairs						
(6) New Bldgs., Improvements, etc.						
(7) Miscellaneous:						
Repairs to Equipment						
Sampling and Analysis	-	85.00	85.00			
Payroll Taxes						
Liability Insurance						
Core Boxes	18.00	811.80	829.80			
(8) Contingencies (specify):						
TOTALS	2141.41	81,554.08	83,695.49	2141.41	81,554.08	83,695.49

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

Date 1-1-60 *Payee The New Jersey Zinc Company

Per [signature] Title Chief Geologist

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

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

(Instructions on reverse)

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

$ 1070.70

Signature Helen R. Miller (Authorized Certifying Officer)

Date JAN 21 1960 Vou. No. 37

(See other side)

1070.71

(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-1174 in accordance with the terms of the contract.

Signature [illegible] Title MINING ENGINEER U. S. BUREAU OF MINES Date JAN 20 1960

APPROVAL BY DMEA EXECUTIVE OFFICER OR ALTERNATE:

Signature Robert A. Lawrence Title EXECUTIVE OFFICER DME FIELD TEAM REGION V Date JAN 20 1960

MONTHLY REPORT OF OPERATOR

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

Form MF-104A
(April 1952)

Budget Bureau No. 42-R1151.2

UNITED STATES
DEPARTMENT OF THE INTERIOR

DEFENSE MINERALS EXPLORATION ADMINISTRATION

OPERATOR'S UNIT COST AND PROGRESS REPORT

Month of December 1959 Docket No. DMEA 4850 Contract No. Idm E 1174

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 BX	Ft.	61.00	20	3,217.75	1,055	3.05	1,000	3.05
Churn 0-1000 AX	"	1905.55	693	73,046.30	26,566	2.75	29,000	2.75
Auger 0-1000 EX	"	-	-	70.00	28	2.50		2.50
Stripping 1000 + AX	"	-	-	339.00	113	3.00	5,000	3.00
Trenching 1000 + EX	"	-	-					
Test Pits Assays	Ea.	-	-	85.00	85	1.00	200	1.00
Roads and Trails Core Boxes	"	18.00	10	829.80	461	1.80	600	1.80
Sup. & Tech. Serv.	Ft.	156.86	713	6,107.64	27,621	0.22	35,000	0.22
TOTAL DISTRIBUTED COSTS		2141.41		83,695.49				TOTAL COSTS AUTHORIZED BY CONTRACT
Operating Equipment Purchased								
Initial Rehabilitation and Repairs								
New Buildings, Improvements, etc.								
TOTAL COSTS		2141.41		83,695.49				

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

REMARKS: This report includes LW-94

Date 1-1-60 Operator The New Jersey Zinc Co.

Per [signature] Title Chief Geologist

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)

JAN 25 1960
O.M.E.

MINING ENGINEER
U. S. BUREAU OF MINES

INSTRUCTIONS

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

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

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

GPO 872894

Report for December 1959

Little War Creek Area DMEA 4850

Contract Idm E 1174 (Zinc)

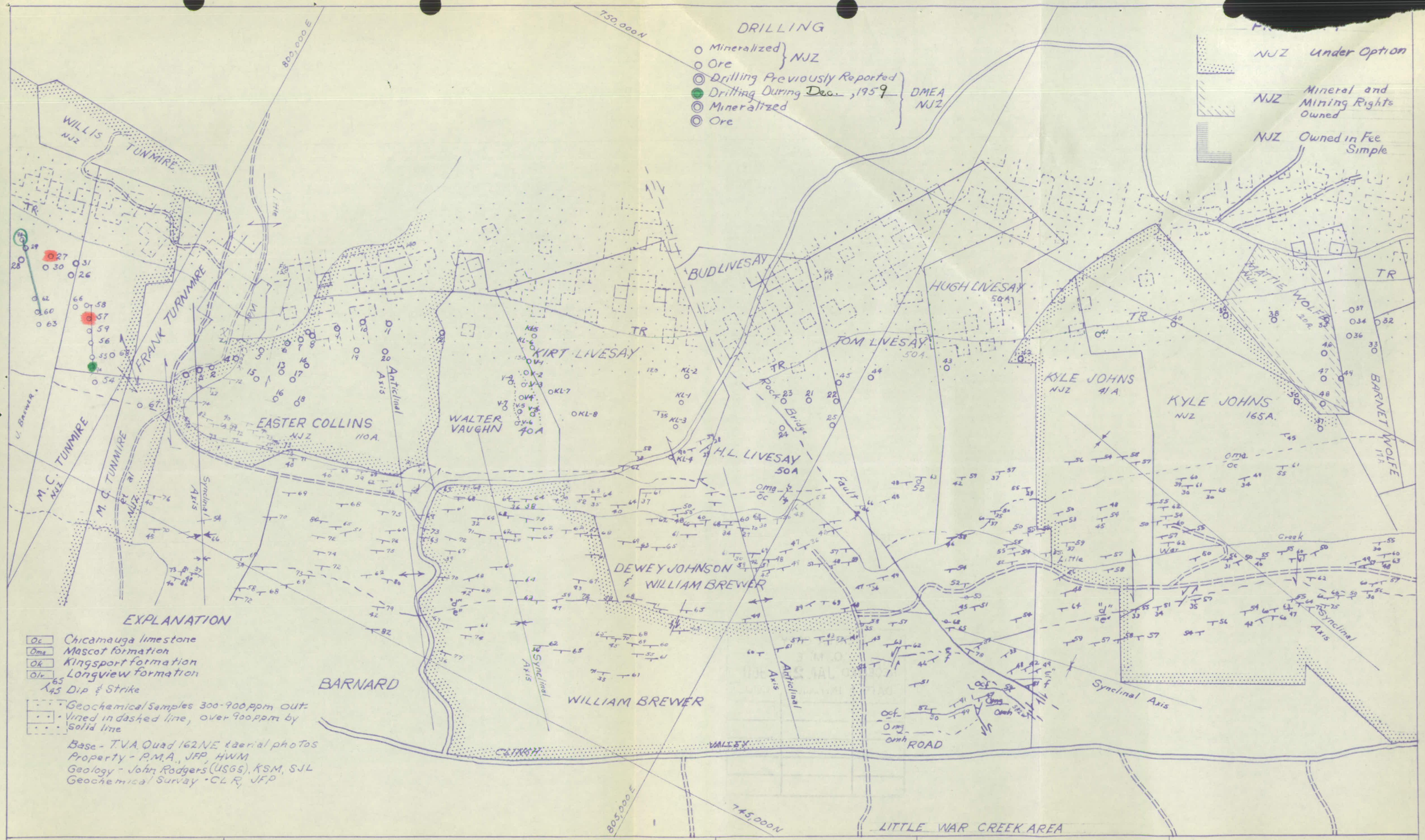
During the month of December, one hole was completed on the Little War Creek project. Hole LW-94, located 90 feet southeast of LW-55, was drilled on a 51° angle, N 31-12 W. The hole was bottomed at a depth of 713 feet.

Hole LW-94 - M. C. Tunmire property

Coordinates: 745,830.72 N; 799,770.33 E
Elevation: 1597.69
Bearing: N 31° 12' W
Inclination: - 51°

Results:

0-482 - - - Mascot dolomite
482-663 - - - Upper Kingsport dolomite. Zinc mineralization occurs as follows:
509-512, traces of sphalerite
512-614, 102' @ 5% Estimated
621-627, 6' @ 1% Estimated
633 - - - TR
633-713 - - - (Bottom) Lower Kingsport formation


DRILLING
Mineralized
Ore
NJZ
Drilling Previously Reported
Drilling During Dec., 1959
Mineralized
Ore
DMEA
NJZ
NJZ Under Option
NJZ Mineral and Mining Rights Owned
NJZ Owned in Fee Simple
750,000 N
800,000 E
805,000 E
745,000 N
WILLIS NJZ
TUNNIRE
TR
FRANK TUNNIRE
M. C. TUNNIRE NJZ
M. C. TUNNIRE et al NJZ
EASTER COLLINS NJZ 110A.
Anticlinal Axis
Syncline Axis
WALTER VAUGHN 40A
KIRT LIVESAY
BUD LIVESAY
HUGH LIVESAY 50A
TOM LIVESAY 50A
Rock Bridge
H.L. LIVESAY 50A
Fault
KYLE JOHNS NJZ 41A
KYLE JOHNS NJZ 165A.
MATTIE WOLFE 20A
BARNET WOLFE ITA
DEWEY JOHNSON & WILLIAM BREWER
WILLIAM BREWER
BARNARD
Syncline Axis
Anticlinal Axis
Little War Creek
Syncline Axis
Syncline Axis
Oma
Oc
Ock
Omg
Omh
ROAD
CREEK
VALLEY
EXPLANATION
Oc Chicamauga limestone
Oma Mascot formation
Ok Kingsport formation
Olv Longview formation
65 / 45 Dip & Strike
Geochemical Samples 300-900 ppm out-lined in dashed line, over 900 ppm by solid line
Base - T.V.A. Quad 162 NE & aerial photos
Property - P.M.A., JFP, HWM
Geology - John Rodgers (USGS), KSM, SJL
Geochemical Survey - CLR, JFP
LITTLE WAR CREEK AREA
ROGERSVILLE
TENNESSEE
SJL, JFP
2-11-53
1"=660'
COPPER RIDGE BELT
SECTOR II
SHEET I NE
HANCOCK COUNTY, TENN
AX-TENN 95

DMEA FORM 6 REFERENCE SLIP

REV. 12-56 DEFENSE MINERAL EXPLORATION ADMINISTRATION

TO:	INITIALS	DATE
1. 110	12/10	[illegible]
2. ~~800~~	12/10	[illegible]
3. 500		
4. ~~Mr. Murphy~~	~~12/10~~	~~[illegible]~~
5.		
FROM: NRO	gad	12-9

FOR: Check items for action desired

____ Action ____ Reply for signature of ____

____ Approval ____ Investigate ____ Surname

____ Comment ____ Recommendations ____ Signature

____ Conference ____ Rewrite ____ File

____ Instructions ____ Your information ____

REMARKS:

INTERIM REPORT

DMEA-4850, Idm-E1174--Zinc

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

Location: Little War Creek area, Hancock County, Tennessee

No drill holes have been completed since the last reported inspection on November 13, 1959. Hole LW-94 is still in progress. Core has been examined to a depth of 684 feet. The anticipated bottoming depth of this hole is estimated at 725 feet. This depth, although short of the estimated base of the Kingsport, will put the hole well through the zone of mineralization and into an expected barren limestone section of the lower Kingsport S-bed. Mineralization encountered to date is as follows: 509-512 scattered traces of sphalerite; 512-614 (102') estimated at 5 percent zinc; 621-627 (6') estimated at 1 percent zinc; and 659-661 (2') estimated at 3 to 4 percent zinc. The hole shows excellent ore and on assay will probably be very close in grade to the crossing vertical hole (LW-57). The data thus far obtained shows that the angle hole (LW-94) has penetrated a greater stratigraphic thickness of ore than the crossing vertical hole (LW-57). In all it appears that the ore zone in the plane of the exploration fence is probably no more than 50-60 feet in width but is more than 100-feet in a direction normal to the dip.

The problem of the horizontal extent of the ore shoot in a direction away from the exploration fence thus becomes the search for the vertical or near vertical structure localizing a high narrow shoot in the favorable stratigraphic zone. The next hole to be drilled therefore will be in the dip fence consisting of Hole LW-29, -62, and -63 in order to probe for the westward extension of the shoot. It will be an angle hole collared at a site approximately 60 feet up dip in the plane of the fence from Hole LW-29 that with an inclination and bearing of approximately 150° and S 32°E respectively will penetrate the entire favorable stratigraphic zone from the surface to the vicinity of Holes LW-60 and 63. Approval for this hole has alread been given by the Field Team.

Inspected: November 24 and December 2, 1959.

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

z

December 17, 1959

Memorandum

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

From: Administrative Assistant, Norris, Tennessee

Subject: Monthly reports and vouchers

We are enclosing two copies of the following monthly report and voucher:

Idm-F1174 The New Jersey Zinc Company
Docket No. DMEA-4850
17th payment - month of November
Amount $1203.35

Helen R. Miller

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

EXTRA COPY O. M. E. RECEIVED DEC 21 1959		
DATE	INITIALS	CODE
12/21	JEA	110
12/22	[illegible]	500

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

Budget Bureau No. 42-R1036.5

PAID OR VOUCHER & SCHEDULE
OF PAYMENT K- 20
DEC 21 1959
O.M.E.

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

Month of November, 1959 Docket No. DMEA 4850 Contract No. Idm E 1174
Operator's Name The New Jersey Zinc Co. Minerals Zinc
Address Jefferson City, Tennessee
Contract Amount, $106,780.00 Government Participation: 50 % Amount, $ 53,390.00

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	2,203.50	72,503.00	74,705.50			
Bulldozing						
Crosscutting						
Drifting						
(2) Labor and Supervision:						
Labor						
Supervision						
Technical Services	176.00	5,774.78	5,950.78			
(3) Operating Mat'ls. and Supplies:						
Timber						
Explosives						
Pipe						
Track						
(4) Operating Equipment:						
Rental						
Purchase						
Depreciation						
(5) Initial Rehabilitation and Repairs						
(6) New Bldgs., Improvements, etc.						
(7) Miscellaneous:						
Repairs to Equipment						
Sampling and Analysis	2.00	83.00	85.00			
Payroll Taxes						
Liability Insurance						
Core Boxes	25.20	786.60	811.80			
(8) Contingencies (specify):						
TOTALS	2,406.70	79,147.38	81,554.08	2406.70	79,147.38	81,554.08

I certify that the above bill is correct and just and that payment therefor has not been received.
Date 12/1/59 *Payee The New Jersey Zinc Co.
Per [signature] Title Chief Geologist

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

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

(Instructions on reverse)

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

$ 1203.35

Signature Helen R. Mullins
(Authorized Certifying Officer)
Date DEC 17 1959 Vou. No. 32
(See other side)

1203.35

(For Government use only)

CERTIFICATION BY GOVERNMENT REPRESENTATIVE:

I certify that to the best of my knowledge and belief the contractor submitting this voucher is operating a Defense Minerals Exploration Administration project under Contract No. E-1174 in accordance with the terms of the contract.

Signature W. J. Lynch Title MINING ENGINEER U. S. BUREAU OF MINES Date DEC 16 1959

APPROVAL BY DMEA EXECUTIVE OFFICER OR ALTERNATE:

Signature Robert A. Lawrence Title EXECUTIVE OFFICER OME FIELD TEAM REGION V Date DEC 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 November 1959 Docket No. DMEA 4850 Contract No. Idm E 1174
Operator's Name The New Jersey Zinc Co. Minerals Zinc
Address Jefferson City, Tenn.

OPERATION	UNIT	COSTS THIS MONTH	UNITS THIS MONTH	COSTS TO DATE	UNITS TO DATE	UNIT COSTS TO DATE	AUTHORIZED BY CONTRACT	
							Units	Unit Costs
Drifting								
Crosscutting								
Raising								
Shafts								
Winzes								
Drilling: Core 0-1000 Bx		137.25	45	3,156.75	1,035	3.05	1,000	3.05
Churn 0-1000 AX		$ 2,066.25	755	71,140.75	25,873	2.75	29,000	2.75
Auger 0-1000 EX		-	-	70.00	28	2.50		2.50
Stripping 1000+ AX		-	-	339.00	113	3.00	5,000	3.00
Trenching 1000+ EX		-	-					
Test Pits Assays		2.00	2	85.00	85	1.00	200	1.00
Roads and Trails Core Boxes		25.20	14	811.80	451	1.80	600	1.80
Tech. Serv.		176.00	800	5,950.78	27,049	0.22	35,000	0.22
TOTAL DISTRIBUTED COSTS		2,406.70		81,554.08				TOTAL COSTS AUTHORIZED BY CONTRACT
Operating Equipment Purchased								
Initial Rehabilitation and Repairs								
New Buildings, Improvements, etc.								
TOTAL COSTS		2,406.70		81,554.08				

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.

Date 12/1/59 Operator The New Jersey Zinc Co.

Per [signature] Title Chief Geologist

REMARKS: This report includes LW-93

→ 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)

See error circled above.

Sh. be. $2076.25 instead of $2066.25

DEC 21 1959
O.M.E.

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 1959

Little War Creek Area DMEA 4850

Contract Idm E 1174 (Zinc)

One drill operated on the project during the month and completed one hole for a total of 800 feet. This hole is shown in green on the accompanying map, AX-Tenn-B-1310.

Hole LW-93 - J. Barnard property

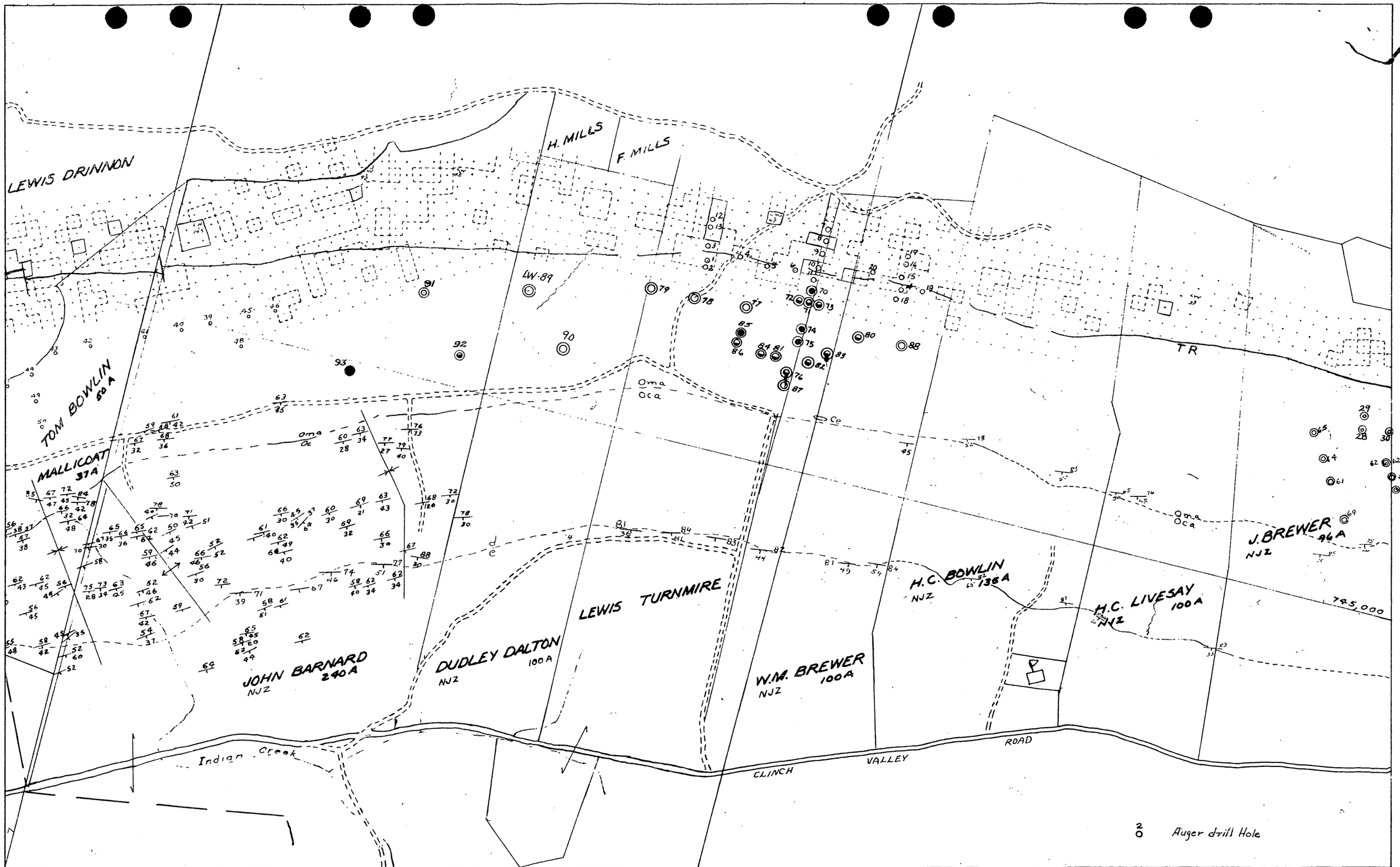
Coordinates: 744,953.12 N; 791,602.24 E
Elevation: 1582.23

Results:

0 - 95	Clay
95 -442	Mascot dolomite
442	Chert Matrix
442 -638	Upper Kingsport dolomite. Trace of sphalerite 626, 636-637
638	TR
638 -800	(Bottom) Lower Kingsport dolomite. Shines of sphalerite 677, 690-691

Also included in this report are two assays from Hole LW-92.

Footage		% Zinc
676-681	5'	of 3.08% Zinc
681-687	6'	of 2.03% Zinc
Weighted Average		
676-687	11'	of 2.51% Zinc



THE NEW JERSEY ZINC COMPANY JEFFERSON CITY, TENNESSEE	DRAWN R.E.F. DATE 9-23-57 TRACED SCALE 1"=660'	COPPER RIDGE BELT SECTOR II AREA F	LITTLE WAR CREEK FILE NO. AX-TENN B-1310

EXTRA COPY
O. M. E
RECEIVED DEC 21 1959

DATE	INITIALS	CODE

OFFICIAL FILE COPY
O. M. E.
RECEIVED NOV 27 1959

DATE	INITIALS	CODE
11-27	gad	220
"	RJ	110
11/30	[illegible]	800
"	[illegible]	~~500~~

OFFICE OF MINERALS EXPLORATION

INTERIM REPORT

DMEA-4850, Idm-E1174 - Zinc

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

Location: Little War Creek area, Hancock County, Tennessee

Summary of drilling completed

	Since last inspection	To date
Number of holes.....	2	40
Footage.....	1,588	27,049

Number of holes showing:

a) Commercial-grade zinc ore.....	5
b) Non-commercial zinc mineralization.....	32
c) No zinc mineralization.....	3

Available data on the two holes completed since the last inspection are summarized as follows:

Hole LW-92: Located on the J. Barndard tract at coordinates: 745,406-N; 792,523-E. Collar elevation: 1,631 feet A.T. Drilling started: 10/12/59; completed: 10/21/59. Total depth: 788 feet. Summary log: 0-62 overburden; 62-397 Mascot dolomite; 397-734 Kingsport formation (TR@ 582) 734-788(bottom of hole) Longview dolomite. Mineralization: Shine hole; traces of ZnS @ 116, 282, 283, and 617; 1' (650-651) with 2% Zn (est); 5' (666-671) with 1% Zn(est); 11'(676-687) with 2½% Zn(est).

Hole LW-93: Located on the J Barnard tract at coordinates: 744,953-N; 791,602-E. Collar elevation: 1,582 feet A.T. Drilling started: 10/23/59; completed 11/4/59. Total depth: 800 feet. Summary log: 0-95 overburden; 95-442 Mascot dolomite; 442-800 Kingsport formation (TR @ 638). Mineralization: Shine hole; traces of ZnS @ 626 and 636-637; shines @ 677 and 690-691.

Drilling in progress

Hole LW-94 is being drilled at the northeastern end of the Little War Creek area on the M. C. Tunmire property. It is an angle hole collared at a point 115 feet up dip from Hole LW-54 and has an inclination of -50° and a bearing of N 32°W. The objective of this hole is to cut the strongly mineralized zone encountered in Hole LW-57 in an attempt to gain further information on the structures controlling the location of this ore run. At the time of inspection it was drilling at a depth of 117 feet.

Inspected: November 13, 1959.

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

z

November 27, 1959

Memorandum

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

From: Administrative Assistant, Morris, Tennessee

Subject: Monthly report and voucher

We are enclosing two copies of the following monthly report and voucher:

Idm-E1174 The New Jersey Zinc Company
Docket No. DMEA-4850
16th payment - month of October
Amount $1880.16

Helen R. Miller

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

EXTRA COPY
O. M. E.
RECEIVED NOV 30 1959

DATE	INITIALS	CODE
11-30	gad	VVO
"	FEJ	110
12/1	[illegible]	500

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

PAID ON VOUCHER & SCHEDULE
TAX ACCTS K- 17
NOV 30 1959
PAID ON VOUCHER & SCHEDULE

Month of October 195 9 Docket No. DMEA 4850 Contract No. O.M.E. Idm E 1174
Operator's Name The New Jersey Zinc Company Minerals Zinc
Address Jefferson City, Tennessee
Contract Amount, $ 106,780.00 Government Participation: 50 % Amount, $ 53,390.00

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:	3450.20	69,052.80	72,503.00			
Drilling						
Bulldozing						
Crosscutting						
Drifting						
(2) Labor and Supervision:						
Labor						
Supervision	274.12	5,500.66	5,774.78			
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	-	83.00	83.00			
Sampling and Analysis						
Payroll Taxes						
Liability Insurance						
Core Boxes	36.00	750.60	786.60			
(8) Contingencies (specify):						
TOTALS	3760.32	75,387.06	79,147.38	3760.32	75,387.06	79,147.38

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

Date 11/1/59 *Payee The New Jersey Zinc Company

Per [signature] Title Chief Geologist

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

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

(Instructions on reverse)

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

$ 1880.16

Signature Helen R. Miller
(Authorized Certifying Officer)

Date NOV 27 1959 Vou. No. 28

(See other side)

1880.16

(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-1174 in accordance with the terms of the contract.

Signature [signature] Title MINING ENGINEER, U. S. BUREAU OF MINES Date NOV 23 1959

APPROVAL BY DMEA EXECUTIVE OFFICER OR ALTERNATE:

Signature [signature] Title EXECUTIVE OFFICER, DME FIELD TEAM, REGION V Date NOV 23 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 30 1959
O.M.E.

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

Month of October 1959 Docket No. DMEA 4850 Contract No. Idm E 1174
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: Co 0-1000 BX	Ft.	240.95	79	3,019.50	990	3.05	1,000	3.05
Ch 0-1000 AX	"	3209.25	1167	69,074.50	25,118	2.75	29,000	2.75
Au 0-1000 EX	"	-	-	70.00	28	2.50		2.50
Stripping 1000 & AX	"	-	-	339.00	113	3.00	5,000	3.00
Trenching 1000 & EX	"	-	-					
Test Pits Assays	Ea.	-	-	83.00	83	1.00	200	1.00
Roads and Trai Coreboxes	"	36.00	20	786.60	437	1.00	600	1.80
Tech. Serv.	Ft.	274.12	1246	5,774.78	26,249	0.22	35,000	0.22
TOTAL DISTRIBUTED COSTS		3760.32		79,147.38				TOTAL COSTS AUTHORIZED BY CONTRACT
Operating Equipment Purchased								
Initial Rehabilitation and Repairs								
New Buildings, Improvements, etc.								
TOTAL COSTS		3760.32		79,147.38				

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

REMARKS: LW-91
LW-92

Date 11/1/59 Operator The New Jersey Zinc Co.
Per [signature] Title Chief Geologist

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 30 '59

INSTRUCTIONS

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

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

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

GPO 872894

Report for October 1959

Little War Creek Area DMEA 4850

Contract Idm E 1174 (Zinc)

One drill operated on the project during the month and completed two holes for a total of 1246 feet of drilling. These holes are shown in green on the accompanying map, AX-TENN-B-1310.

Hole LW-91 - J. Barnard property

Coordinates: 745,610.22 N; 791,982.28 E
Elevation: 1678.52'

Results:

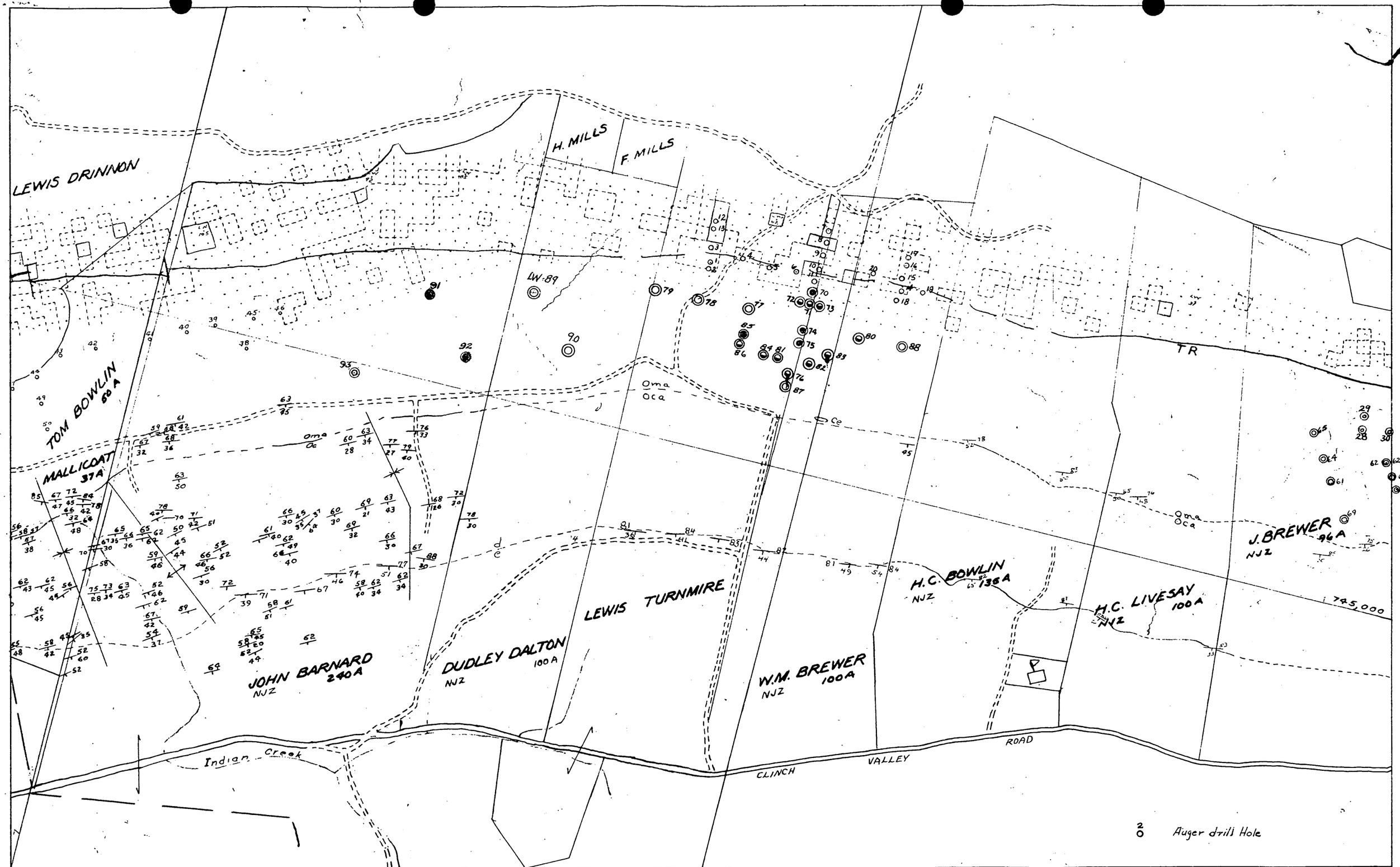
0- 56	Clay
56-143	Mascot dolomite
143	Chert Matrix
143-323	Upper Kingsport dolomite. Trace of sphalerite 218
323	TR ?
323-458	(Bottom) Lower Kingsport dolomite

Hole LW-92 - J. Barnard property

Coordinates: 745,405.77 N; 792,531.91 E
Elevation: 1631.29

Results:

0- 62	Clay
62-397	Mascot dolomite. Traces of sphalerite 116,282,283
397	Chert Matrix
397-582	Upper Kingsport dolomite
582	TR
582-650	Lower Kingsport dolomite Trace of sphalerite 617
650-651	1' - estimated at 2% zinc
651-666	Lower Kingsport dolomite
666-671	5' - estimated at 1% zinc
671-676	Lower Kingsport dolomite
676-687	11' - estimated at 2-3/4% zinc
687-788	(Bottom) Lower Kingsport and Longview dolomite



THE NEW JERSEY ZINC COMPANY JEFFERSON CITY , TENNESSEE	DRAWN R.E.F. DATE 9-23-57 TRACED SCALE 1"=660'	COPPER RIDGE BELT SECTOR II AREA F	LITTLE WAR CREEK FILE NO. AX-TENN B-1310

EXTRA COPY
O. M. E.
RECEIVED NOV 30 1959

DATE	INITIALS	CODE

OFFICIAL FILE COPY
O. M. E.
RECEIVED OCT 26 1959

DATE	INITIALS	CODE
10-26	gad	220
"	JEJ	110
10/27	[illegible]	800
10/28	[illegible]	500

INTERIM REPORT

DMEA-4850, Idm-E1174 (Zinc)

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

Location: Little War Creek area, Hancock County, Tennessee

Summary of drilling completed

	Since last inspection	To date
Number of holes	2	38
Footage	1,330	25,461

Number of holes showing:

a) Commercial-grade zinc ore	5
b) Non-commercial zinc mineralization	30
c) No zinc mineralization	3

Data on the two holes completed since the last inspection (September 16, 1959) are summarized below:

Hole LW-90: Located on the Dudley Dalton property at coordinates 745,462-N; 793,094-E (approximately 500 feet S. 40° E. of Hole LW-89. Collar elevation: 1676 feet A. T. Drilling started: 9/14/59; completed: 9/29/59. Total depth: 872 feet. Summary log: 0-57 overburden; 57-525 Mascot dolomite; 525-802(?) Kingsport formation (TR @ 684); 802(?)-872 (bottom of hole) Longview dolomite. Mineralization: Shine hole; trace of sphalerite @ 727; 2 feet (763-765) with 4 percent zinc (estimated).

Hole LW-91: Located on the John Barnard trace approximately 800 feet S. 79° W. of Hole LW-89 (coordinates and elevation not yet available). Drilling started: 9/30/59; completed: 10/9/59. Total depth: 458 feet. Summary log: 0-56 overburden; 56-143 Mascot dolomite (very cavernous to 112); 143-435 Kingsport formation (TR @ 323 or 330, probably 330); sedimentary or "dry" breccia 404-436) 435-458 (bottom of hole) Longview dolomite. Mineralization: Trace hole; traces of sphalerite @ 218).

Drilling in progress

With the completion of hole LW-91 the drill will move to a site on the Barnard tract approximately 500 feet S. 40° E. of Hole LW-91. Drilling will probably start within the next day or two.

Inspected: October 9, 1959

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

OCT 26 1959 PAID ON VOUCHER & SCHEDULE OF PAYMENTS K-

OPERATOR'S MONTHLY REPORT AND VOUCHER

Month of September, 195 9 Docket No. DMEA-4850 Contract No. Idm E 1174
Operator's Name The New Jersey Zinc Company Minerals Zinc
Address Jefferson City, Tennessee
Contract Amount, $ 106,780.00 Government Participation: 50% Amount, $ 53,390.00

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	3789.00	65,263.80	69,052.80	10/28/59		
Bulldozing						
Crosscutting						
Drifting						
(2) Labor and Supervision:						
Labor						
Supervision						
Technical Services	300.96	5,199.70	5,500.66			
(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	-	83.00	83.00			
Payroll Taxes						
Liability Insurance						
Core Boxes	43.20	707.40	750.60			
(8) Contingencies (specify):						
				4133.16	71,253.90	75,387.06
TOTALS	4133.16	71,253.90	75,387.06			

I certify that the above bill is correct and just and that payment therefor has not been received.
Date 10/1/59 *Payee The New Jersey Zinc Company
Per [signature] Title Chief Geologist

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

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

(Instructions on reverse)

Pursuant to authority vested in me, I certify that this account is correct and proper for payment in the amount of:
$ 2066.58
Signature Helen R. Miller
(Authorized Certifying Officer)
Date OCT 23 1959 Vou. No. 22
(See other side)

2066-58

(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-1174 in accordance with the terms of the contract.

Signature [signature] Title MINING ENGINEER U. S. BUREAU OF MINES Date OCT 20 1959

APPROVAL BY DMEA EXECUTIVE OFFICER OR ALTERNATE:

Signature Robert A. Lawrence Title EXECUTIVE OFFICER DME FIELD TEAM REGION V Date OCT 20 1959

MONTHLY REPORT OF OPERATOR

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

Form MF-104A
(April 1952)

Budget Bureau No. 42-R1151.2

OCT 26 1959
O.M.E.

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

Month of Sept. 1959 Docket No. DMEA 4850 Contract No. Idm E 1174
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 BX	Ft.	274.50	90	2,778.55	911	3.05	1,000	3.05
Churn 0-1000 AX	"	3514.50	1278	65,865.25	23,951	2.75	29,000	2.75
Auger 0-1000 EX	"	-	-	70.00	28	2.50		2.50
Stripping 1000 + AX	"	-	-	339.00	113	3.00	5,000	3.00
Trenching 1000 + EX	"	-	-	-	-	-	-	
Test Pits Assays	Ea.	-	-	83.00	83	1.00	200	1.00
Roads and Trails Core Boxes	"	43.20	24	750.60	417	1.80	600	1.80
Tech. Serv.	Ft.	300.96	1368	5,500.66	25,003	0.22	35,000	0.22
Total Distributed Costs		4133.16		75,387.06				Total Costs Authorized by Contract
Operating Equipment Purchased								
Initial Rehabilitation and Repairs								
New Buildings, Improvements, etc.								
Total Costs		4133.16		75,387.06				

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 LW-89 LW-90

Date 10/1/59 Operator The New Jersey Zinc Co.

Per [signature] Title Chief Geologist

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 September 1959

Little Mac Creek Area DMEA 4850

Contract Idm B 1174 (Zinc)

One drill operated on the project during the month and completed two holes for a total of 1472' of drilling. These holes are shown in green on the accompanying map, AK-TENN-3-1310.

Hole LM-89 - D. Dalton property

Coordinates: 745,889.69 N; 798,746.61 E
Elevation: 1674.93

Results:

0-130 - - Clay
130-320 - - Upper Kingsport dolomite
320 - - TR
320-333 - - 13' - estimated at 2% zinc
333-339 - - Lower Kingsport dolomite
339-354 - - 15' - estimated at 1/2 to 1% zinc
354-440 - - Lower Kingsport dolomite
440-455 - - 15' - estimated at 1/4% zinc
455-456 - - (Bottom) Lower Kingsport dolomite

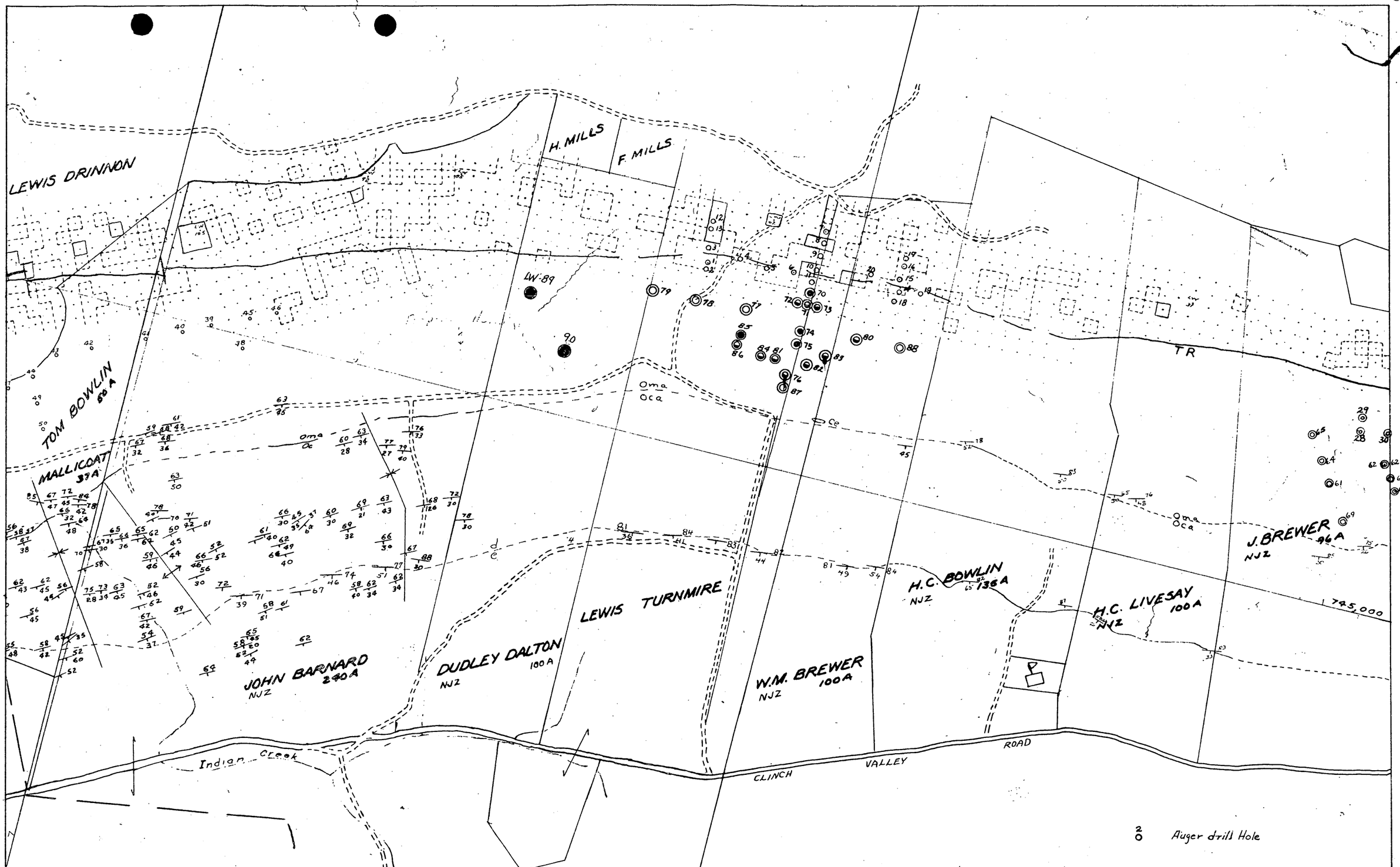
Hole LM-90 - D. Dalton property

Coordinates: 745,462.15 N; 793,094.18 E
Elevation: 1676.46

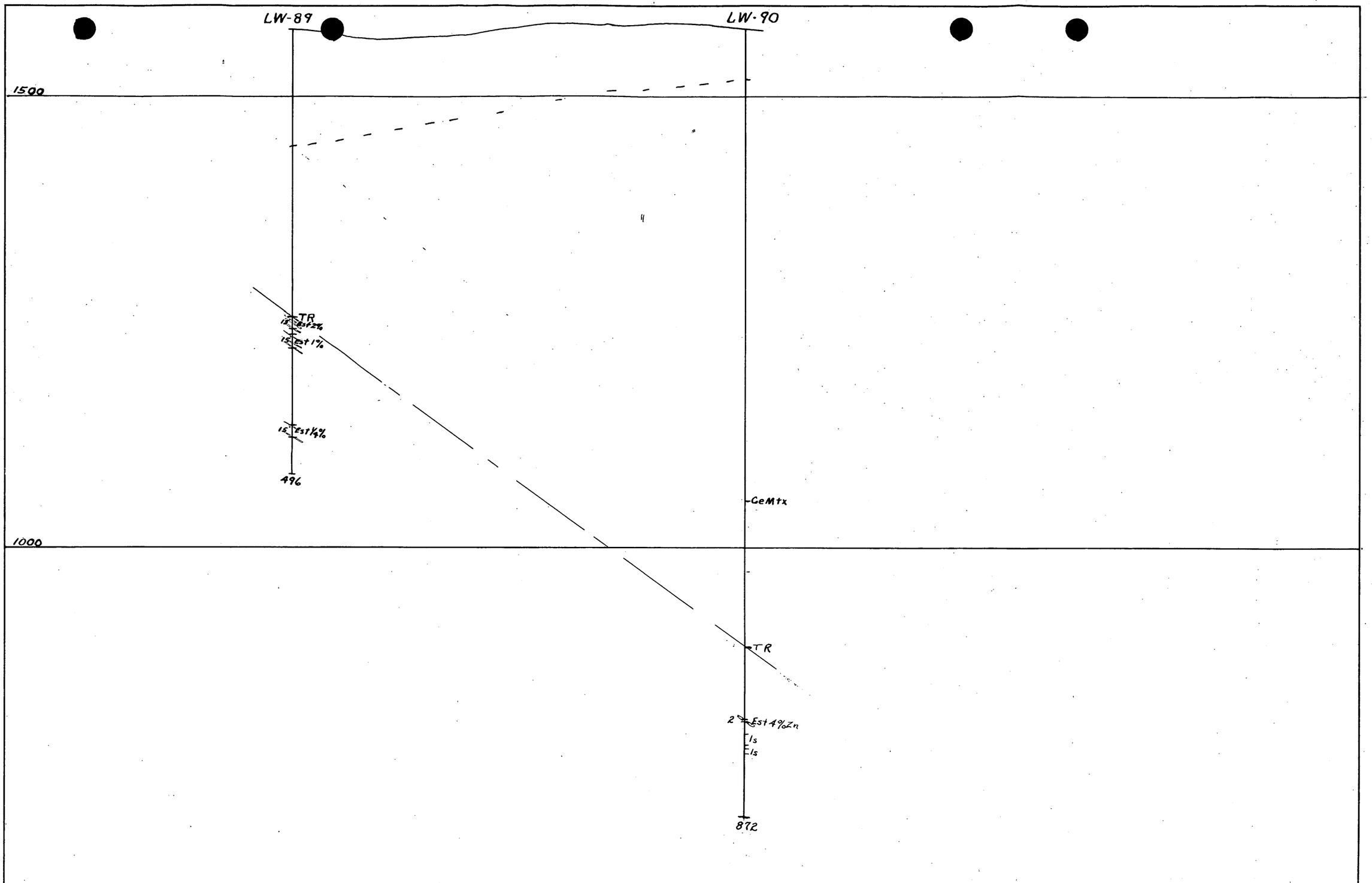
Results:

0- 57 - - Clay
57-525 - - Mascot dolomite
525 - - Chert Matrix
525-654 - - Upper Kingsport dolomite
654 - - TR
654-763 - - Lower Kingsport dolomite. Trace of sphalerite 727'
763-765 - - 2' - estimated at 4% Zn
765-872 - - (Bottom) Lower Kingsport dolomite and limestone

The accompanying section, AK-TENN-3-1466, shows the principal marker beds and the distribution of mineralization in these two holes.



THE NEW JERSEY ZINC COMPANY JEFFERSON CITY, TENNESSEE	DRAWN R.E.F. DATE 9-23-57 TRACED SCALE 1"=660'	COPPER RIDGE BELT SECTOR II AREA F	LITTLE WAR CREEK FILE NO. AX-TENN B-1310



SERIAL NUMBER		DATE ISSUED		REFERENCE DRAWINGS	REVISIONS	THE NEW JERSEY ZINC COMPANY Jefferson City, Tennessee	DRAWN EWR TRACED CHECKED APPROVED	Dip Section LW-89, 90 Sector II Little War Crk Copper Ridge Belt	DATE 9/25/59 SCALE 1" = 100' AX-Tenn B-1466

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.

X5453B 1M 11-54

OFFICIAL FILE COPY
O. M. E.
RECEIVED OCT 1 1959

DATE	INITIALS	CODE
10/1	RCW	225
"	JKJ	110
10/1	[illegible]	800

MINERALS EXPLORATION-REGION V

INTERIM REPORT

DMEA-4850, Idm-E1174 (zinc)

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

Location: Little War Creek area, Hancock County, Tennessee

Summary of drilling completed

	Since last inspection	To date
Number of holes.....	1	36
Footage.....	* 496 ?	24,131 ?

Number of holes showing:

a)	Commercial-grade zinc mineralization....	5
b)	Non-commercial zinc mineralization.....	28
c)	No zinc mineralization.....	3

The data on the one hole completed since the last inspection are summarized as follows:

Hole LW-89- Located on the Dudley Dalton tract approximately 850 feet N 82°30' W. of Hole LW-79 (coordinates and elevation not yet available). Drilling started: 9-1-59 (recess ended about mid-August with location of drill hole site and re-laying of water-line to site); drilling completed: 9-10-59. Total depth * 540 feet. ? Summary log: 0-130 overburden; 130-478 (?) Kingsport formation (chert-matrix sand at 130 ?., TR @ 320); 478(?)-496(bottom of hole) Longview dolomite. Mineralization: Shine hole. 320-333 (13') with 2% Zn (est.); 339-354 (15') with ½-1% Zn (est.); 440-455 (15') with 1/4% Zn (est.).

Drilling in progress

Hole LW-90 was drilling at the time of inspection. It is located about 500 feet S 41°E of Hole LW-89. It collared in

* Which is correct ?
Talbert

the Mascot dolomite and had reached a depth of 186 feet.

Inspected: September 16, 1959

Helmuth Wedow, Jr., Geologist
U. S. 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

PAID ON VOUCHER & SCHEDULE OF PAYMENTS K- 8

OPERATOR'S MONTHLY REPORT AND VOUCHER

Month of May, 1959 Docket No. DMEA 4850 Contract No. Idm E 1174

Operator's Name The New Jersey Zinc Company Minerals Zinc

Address Jefferson City, Tennessee

Contract Amount, $ 106,780.00 Government Participation: 50 % Amount, $ 53,390.00

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	4061.20	61,202.60	65,263.80	9/17/59	aw RK	
Bulldozing						
Crosscutting						
Drifting						
(2) Labor and Supervision:						
Labor						
Supervision						
Technical Services	323.84	4,875.86	5,199.70			
(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	-	83.00	83.00			
Payroll Taxes						
Liability Insurance						
Core Boxes	43.20	664.20	707.40			
(8) Contingencies (specify):						
TOTALS	4428.24	66,825.66	71,253.90	4428.24	66,825.66	71,253.90

SEP 11 1959 O.M.E.

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:

$ 2214.12

Signature Helen R. Miller
(Authorized Certifying Officer)

Date SEP 9 1959 Vou. No. 12

(See other side)

2214.12

(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. E-1174 in accordance with the terms of the contract.

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

APPROVAL BY DMEA EXECUTIVE OFFICER OR ALTERNATE:

Signature [illegible] Title ACTING EXECUTIVE OFFICER OME 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 1962)

Budget Bureau No. 42-R1151.2

UNITED STATES
DEPARTMENT OF THE INTERIOR

DEFENSE MINERALS EXPLORATION ADMINISTRATION

OPERATOR'S UNIT COST AND PROGRESS REPORT

Month of May 1959 Docket No. DMEA 4850 Contract No. Idm E 1174

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 BX		134.20	44	2,504.05	821	3.05	1,000	3.05
Drilling: Core 0-1000 AX		3927.00	1428	62,350.75	22,673	2.75	29,000	2.75
Core 0-1000 EX		-	-	70.00	28	2.50		2.50
Churn 1000 + AX		-	-	339.00	113	3.00	5,000	3.00
Auger 1000 + EX		-	-	-	-			
Stripping Assays		-	-	83.00	83	1.00	200	1.00
Trenching Core Boxes		43.20	24	707.40	393	1.80	600	1.80
Test Pits								
Roads and Trails								
Tech. Serv.		323.84	1472	5,199.70	23,635	0.22	35,000	0.22
Total Distributed Costs		4428.24		71,253.90				Total Costs Authorized by Contract
Operating Equipment Purchased								
Initial Rehabilitation and Repairs								
New Buildings, Improvements, etc.								
Total Costs		4428.24		71,253.90				

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 LW-87 LW-88

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.

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

Little War Creek ARea DMEA 4850

Contract Idm E 1174 (Zinc)

One drill operated on this project during the month and completed two holes for a total of 1472' of drilling. These holes are shown in green on the accompanying map, AX-TENN-B-103.

Hole LW-87 - Lewis Tunmire property

Coordinates: 745,528.69 N; 794,757.64 E
Elevation: 1572.52

Results:

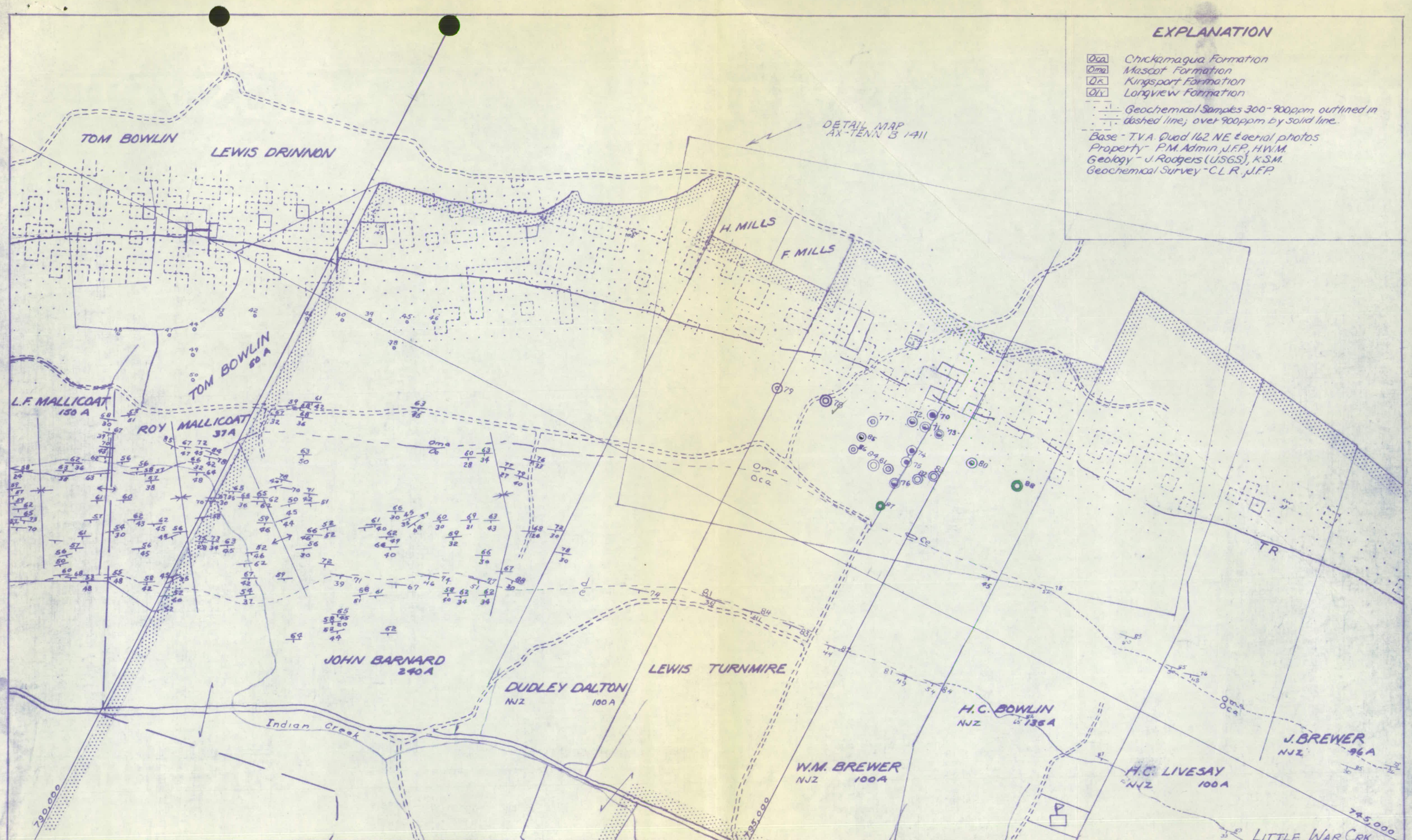
0- 40 - - Clay
40-595 - - Mascot dolomite
595-763 - - Upper Kingsport dolomite
763 - - TR
763-897 - - Lower Kingsport dolomite
897-932 - - (Bottom) Longview dolomite

Hole LW-88 - W. M. Brewer property

Coordinates: 746,184.47 N; 795,554.56 E
Elevation: 1732.35

Results:

0-116 - - Clay
116-181 - - Mascot dolomite
181-371 - - Upper Kingsport dolomite
371 - - TR ?
371-540 - - (Bottom) Lower Kingsport dolomite



POSTED TO DATE 6-9-53 4-56 TEN	THE NEW JERSEY ZINC COMPANY ROGERSVILLE TENNESSEE	DRAWN JFP DATE 4-25-53 TRACED SJL, JFP SCALE 1"=660'	COPPER RIDGE BELT SECTOR II SHEET 1SW HANCOCK CO., TENN FILE NO. AX-TENN 103

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

DATE	INITIALS	CODE
6/15	a	220
6/16		110
6/18		800
6/18		500

INTERIM REPORT

DMEA-4850, Idm-E1174 (Zinc)

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

Location: Little War Creek area, Hancock County, Tennessee

Summary of drilling completed

	Since last inspection	To date
Number of holes	2	35
Footage	1,472	23,635

Number of holes showing:

a)	Commercial-grade zinc ore	5
b)	Non-commercial zinc mineralization . . .	27
c)	No zinc mineralization	3

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

Hole LW-87: Located on the Lewis Tunmire property approximately 200 feet down-dip from Hole LW-76. Coordinates: N-745,529; E-794,758. Collar elevation: 1,573 feet A. T. Drilling started: 4/24/59; completed: 5/7/59. Total depth: 932 feet. Summary log: 0-40 residual clay overburden; 40-595 (CM ss) Mascot dolomite; 595-763(TR) upper Kingsport dolomite member; 763-897 (T bed) lower Kingsport limestone member; 897-932 (bottom of hole) Longview dolomite. Mineralization: Barren hole.

Hole LW-88: Located on the Lewis Tunmire property approximately 400 feet east (on strike) from Hole LW-80. Coordinates: N-746,184; E-795,555. Collar elevation: 1,732 feet A. T. Drilling started: 5/8/59; completed: 5/15/59. Total depth: 540 feet. Summary log: 0-116 residual clay overburden; 116-181(CM ss) Mascot dolomote; 181-371(TR?) upper Kingsport dolomite member; 371-540 (bottom of hole) lower Kingsport limestone member and Longview dolomite (T-bed not recognized). Mineralization: Barren hole.

With the completion of Hole LW-88 drilling on the Little War Creek project was recessed pending consideration by the Government of the Operator's request for a formal recess or termination.

Inspected: June 2, 1959

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-

OPERATOR'S MONTHLY REPORT AND VOUCHER

Month of April, 1959 Docket No. DMEA 4850 Contract No. Idm E 1174
Operator's Name The New Jersey Zinc Company Minerals Zinc
Address Jefferson City, Tennessee
Contract Amount, $ 106,780.00 Government Participation: 50 % Amount, $ 53,390.00

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	5500.30	55,702.30	61,203.60	6/22/59		
Bulldozing						
Crosscutting						
Drifting						
(2) Labor and Supervision:						
Labor						
Supervision						
Technical Services	438.68	4,437.18	4,875.86			
(3) Operating Mat'ls. and Supplies:						
Timber						
Explosives						
Pipe						
Track						
(4) Operating Equipment:						
Rental						
Purchase						
Depreciation						
(5) Initial Rehabilitation and Repairs						
(6) New Bldgs., Improvements, etc.						
(7) Miscellaneous:						
Repairs to Equipment						
Sampling and Analysis	4.00	79.00	83.00			
Payroll Taxes						
Liability Insurance						
Core Boxes	59.40	604.80	664.20			
(8) Contingencies (specify):						
TOTALS	6002.38	60,823.28	66,825.66	6002.38	60,823.28	66,825.66

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:

$ 3001.19

Signature Helen R. Miller (Authorized Certifying Officer)

Date MAY 19 1959 Vou. No. 112

(See other side)

13

3001.19

(For Government use only)

CERTIFICATION BY GOVERNMENT REPRESENTATIVE:

I certify that to the best of my knowledge and belief the contractor submitting this voucher is operating a Defense Minerals Exploration Administration project under Contract No. E 1174 in accordance with the terms of the contract.

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

APPROVAL BY DMEA EXECUTIVE OFFICER OR ALTERNATE:

Signature [signature] Title ACTING EXECUTIVE OFFICER 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 4850 Contract No. Idm E 1174
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 BX	Ft.	170.80	56	2,369.85	777	3.05	1,000	3.05
Drilling: Core 0-1000 AX	"	5329.50	1938	58,423.75	21,245	2.75	29,000	2.75
Chum 0-1000 EX	"	-	-	70.00	28	2.50		2.50
Aug 1000 ↓ AX	"	-	-	339.00	113	3.00	5,000	3.00
Stripping 1000 ↓ BX	"	-	-	-	-			2.75
Trenching Assays	Ea.	4.00	4	83.00	83	1.00	200	1.00
Test Pits Core Boxes	"	59.40	33	664.20	369	1.80	600	1.80
Roads and Trails								
Tech. Serv.	Ft.	438.68	1994	4,875.86	22,163	0.22	35,000	0.22
Total Distributed Costs		6002.38		66,825.66				Total Costs Authorized by Contract
Operating Equipment Purchased								
Initial Rehabilitation and Repairs								
New Buildings, Improvements, etc.								
Total Costs		6002.38		66,825.66				

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

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

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

Remarks: This report covers holes LW-84
LW-85
LW-86

→ 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 ME-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

Little War Creek Area DMEA 4850

Contract Idm E 1174 (Zinc)

One drill operated on this project during the month and completed three holes for a total of 1994' of drilling. These holes are shown in green on the accompanying map, AX-TENN-B-103.

Hole LW-84 - Lewis Tunmire property

Coordinates: 745,821.33 N; 794,548.46 E
Elevation: 1577.10

Results:

0- 84	Clay
84-352	Mascot dolomite. Scattered traces of sphalerite 234-240, 262-266
352	Chert Matrix
352-558	Upper Kingsport dolomite
558-724	(Bottom) Lower Kingsport dolomite

Hole LW-85 - Lewis Tunmire property

Coordinates: 745,946.14 N; 794,348.99 E
Elevation: 1594.19'

Results:

0- 90	Clay
90-265	Mascot dolomite
265	Chert Matrix
265-438	Upper Kingsport dolomite
438	TR
438-515	Lower Kingsport dolomite Trace of sphalerite 486, 506
515-523	8' - 4.19% zinc
523-541	Lower Kingsport dolomite. Weak traces of sphalerite 523-533
541-551	10' - 2.34% zinc
551-610	(Bottom) Lower Kingsport dolomite. Traces of sphalerite 551-557

Hole LW-86 - Lewis Tunmire property

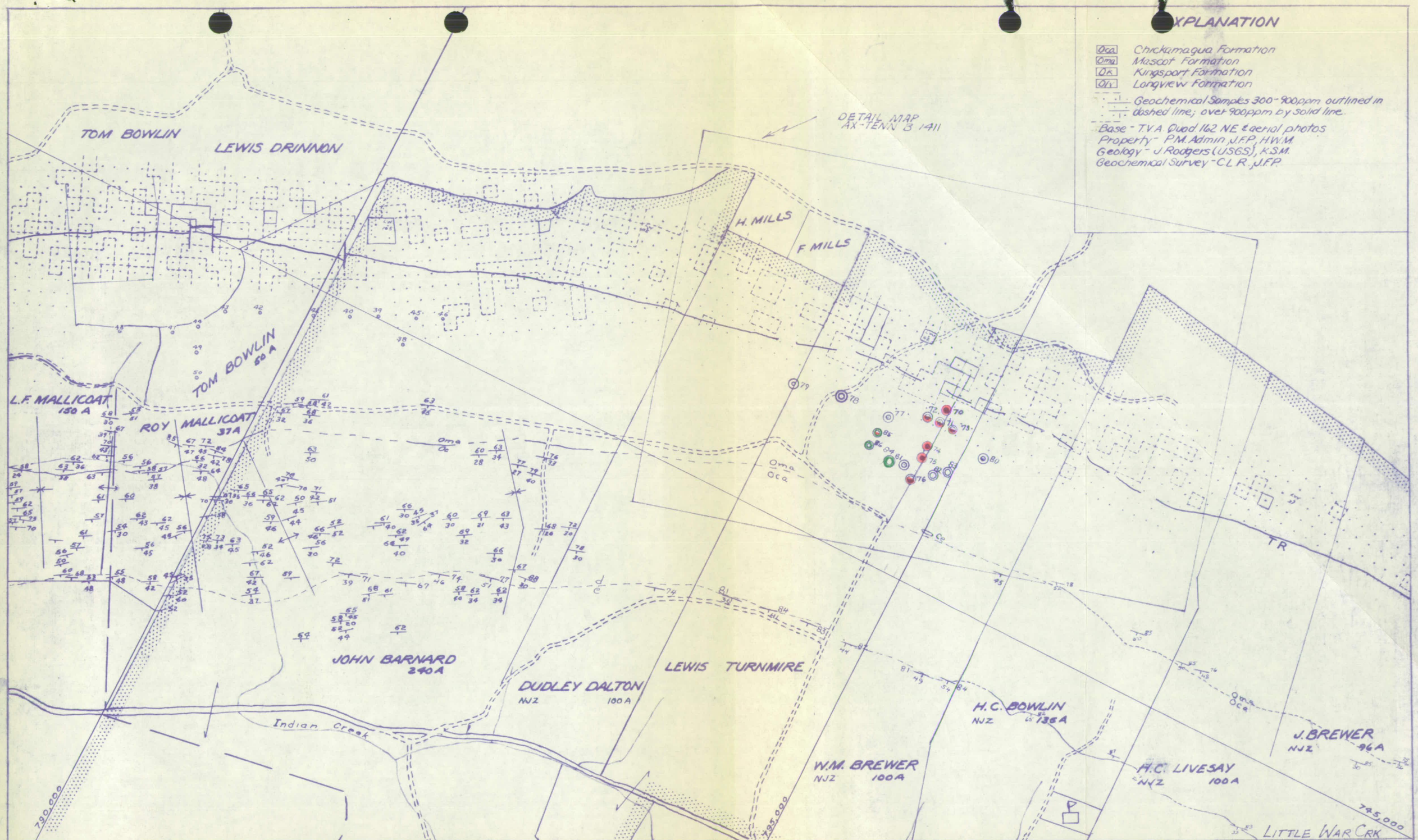
Coordinates: 745,834.51 N; 794,348.93 E
Elevation: 1574.58

Results:

0- 51	- -	Clay
51-364	- -	Mascot dolomite. Shine of sphalerite in chert 240
364	- -	Chert Matrix ?
364-500	- -	Upper Kingsport dolomite
500	- -	TR
500-651	- -	Lower Kingsport dolomite. Scattered traces of sphalerite 581-620
651-660	- -	(Bottom) Longview dolomite

Note: Listed below is a tabulation of samples assayed in LW-85:

515-519 - 4' - 1.30% zinc
519-523 - 5' - 7.08% zinc
541-546 - 5' - 3.23% zinc
546-551 - 5' - 1.45% zinc



POSTED TO DATE 6-9-53 4-56 TEN	THE NEW JERSEY ZINC COMPANY ROGERSVILLE TENNESSEE	DRAWN JFP DATE 4-25-53 TRACED SJL, JFP SCALE 1" = 660'	COPPER RIDGE BELT SECTOR II SHEET ISW HANCOCK CO., TENN FILE NO. AX-TENN 103

MAY 21 1959
O.M.E.

INTERIM REPORT

DMEA-4850, Idm-E1174 (Zinc)

OFFICIAL FILE COPY
O. M. E.
RECEIVED JUN 3 1959

DATE	INITIALS	CODE
6/3	G	220
	HJ	110
6/4	[illegible]	800
		500
	To date	

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

Location: Little War Creek area, Hancock County, Tennessee

Summary of drilling completed

	Since last inspection	To date
Number of holes	2	33
Footage	1,270	22,163

Number of holes showing:

a) Commercial-grade zinc ore	5
b) Non-commercial zinc mineralization	27
c) No mineralization	1

Brief summaries of the two holes completed in the interim follow:

Hole LW-85: Located on the Lewis Tunmire property at coordinates 745,946-N; 794,349-E. Elevation: 1,594 feet. Drilling started on 4/2/59 and was completed on 4/13/59 at a depth of 610 feet. Summary log: 0-90 Clay; 90-265 Mascot dolomite; 265-610 Kingsport formation (TR @ 438, E-marker and T-bed not recognized). Mineralization: Traces of ZnS @ 486 and 506; 515-523, 8 feet with 4.19 % Zn; traces of ZnS @ 523-533; 541-551, 10 feet with 2.34 % Zn; traces of ZnS @ 551-557. Shine hole---not classed as ore by Operator as no single run contains as much as 50 feet-percent units.

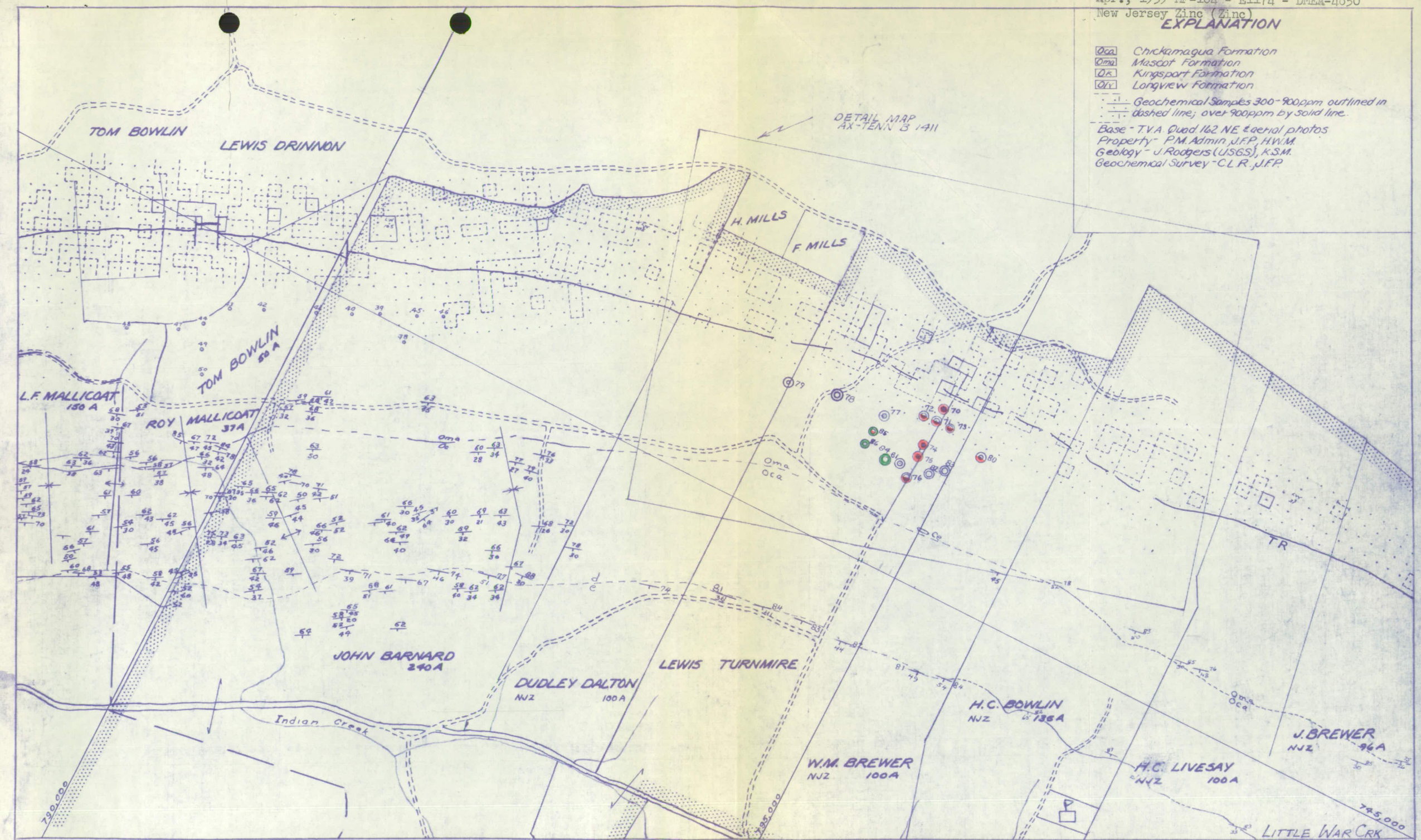
Hole LW-86: Located on Lewis Tunmire property at coordinates 745,835-N; 794,349-E (100 feet down dip from Hole LW-85). Elevation: 1,575 feet. Drilling started on 4/14/59 and was completed on 4/23/59 at a depth of 660 feet. Summary log: 0-51 Clay; 51-364 Mascot dolomite; 364-651 Kingsport formation (TR @ 500); 651-660 Longview dolomite. Mineralization: Shine of ZnS in chert @ 240; scattered traces of ZnS @ 581-620. Shine hole.

Drilling in progress

Drilling in currently in progress on Hole LW-87. This hole is located approximately 200 feet up dip from Hole LW-76. Core was observed to a depth of 763 feet, at which depth the hole was drilling in the lower part of the Kingsport formation. Estimated bottoming depth will be about 900 feet.

Inspected: May 5, 1959

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



POSTED TO DATE	THE NEW JERSEY ZINC COMPANY	DRAWN JFP DATE 4-25-53	COPPER RIDGE BELT	HANCOCK CO., TENN
6-9-53	ROGERSVILLE TENNESSEE	TRACED SJL, JFP SCALE 1" = 660'	SECTOR II SHEET 1SW	FILE NO. AX-TENN 103
4-56 TEN				

O.M.E.
MAY 21 1959

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

DATE	INITIALS	CODE
4/20	G	220
4/21	FB	110
4/21	[illegible]	800
~~4/24~~	~~[illegible]~~	~~500~~

DMEA EXPLORATION PROJECT

INTERIM REPORT

DMEA-4850, Idm-E1174 (Zinc)

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

Location: Little War Creek area, Hancock County, Tennessee

Summary of drilling completed

	Since last inspection	To date
Number of holes	3	31
Footage	2,095	20,893

Holes showing:

a)	Commercial-grade zinc ore	5
b)	Non-commercial zinc mineralization	25
c)	No zinc mineralization	1

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

Hole LW-82: Located on the Brewer property approximately 200 feet east of Hole LW-81. Coordinates: 745,835-N; 794,852-E. Collar elevation: 1593 feet. Drilling started on 3/3/59 and was completed on 3/12/59 at a depth of 731 feet. Summary log: Thickness of overburden not recorded; collared in Mascot dolomite--base of Mascot at 358; 358-731 Kingsport and Longview formations (U-255 bed at 446, TR at 547?, E-bed not recognized, T-bed at 705-712?). Mineralization: Traces of sphalerite at 500, 575; shine at 561; 590-595 (5') estimated at 2 % Zn; rare scattered traces 608-622. Shine hole.

Hole LW-83: Located on Brewer property 100 feet up-dip and 100 feet east of Hole LW-82. Coordinates: 745,934-N; 794-951-E. Collar elevation: 1617 feet. Drilling started on 3/13/59 and completed on 3/21/59 at a depth of 640 feet. Summary log: 0-19 overburden; 19-257 Mascot dolomite; 257-640 Kingsport formation (U-255 bed at 362, TR at 476, E-bed not recognized, T-bed probably not reached). Mineralization: 477-480 (3') estimated at 3 % Zn; scattered traces and shines of sphalerite 485-494, and traces at 502 and 523. Shine hole.

Hole LW-84: Located on Lewis Turnmire property approximately 100 feet west of Hole LW-81. Coordinates: 745,821-N; 794,548-E. Collar elevation: 1577 feet. Drilling started on 3/24/59 and was completed on 4/1/59 at a depth of 724 feet. Summary log: 0-84 overburden; 84-352 Mascot dolomite; 352-724 Kingsport and Longview formations (U-255 bed at 440, TR at 559, E-bed at 603, T-bed not recognized due to brecciation in bottom part of hole). Mineralization: Traces of sphalerite 234-240 and scattered shines 262-266. Shine hole.

Drilling in progress

Drilling is now in progress on Hole LW-85 located at a site 400 feet west of Hole LW-75. The hole was collared in the Mascot dolomite and is now drilling in the upper part of the Kingsport formation (Chert-matrix sandstone was penetrated at depth of 265 feet). Core was observed to a depth of 356 feet but no mineralization was seen.

Inspected: April 7, 1959

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

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

APR 22 1959
OME

Budget Bureau No. 42-R1036.5

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION

PAID ON VOUCHER & SCHEDULE OF PAYMENTS K- 58

OPERATOR'S MONTHLY REPORT AND VOUCHER

Month of March, 1959 Docket No. DMEA 4850 Contract No. Idm E 1174
Operator's Name The New Jersey Zinc Company Minerals Zinc
Address Jefferson City, Tennessee
Contract Amount, $ 106,780.00 Government Participation: 50 % Amount, $ 53,390.00

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	5816.95	49,885.35	55,702.30	4/27/59.		
Bulldozing						
Crosscutting						
Drifting						
(2) Labor and Supervision:						
Labor						
Supervision						
Technical Services	464.42	3,972.76	4,437.18			
(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	-	79.00	79.00			
Payroll Taxes						
Liability Insurance						
Core Boxes	64.80	540.00	604.80			
(8) Contingencies (specify):						
TOTALS	6346.17	54,477.11	60,823.28	6346.17	54,477.11	60,823.28

I certify that the above bill is correct and just and that payment therefor has not been received.
Date 4/1/59 *Payee The New Jersey Zinc Company
Per [signature] Title Asst. to Gen. Supt.

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

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

(Instructions on reverse)

Pursuant to authority vested in me, I certify that this account is correct and proper for payment in the amount of:
$ 3173.09
Signature [signature]
(Authorized Certifying Officer)
Date APR 20 1959 Vou. No. 103
(See other side)

3173.08

(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-1174 in accordance with the terms of the contract.

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

APPROVAL BY DMEA EXECUTIVE OFFICER OR ALTERNATE:

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

MONTHLY REPORT OF OPERATOR

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

[redacted]-IF-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 195 9 Docket No. DMEA 4850 Contract No. Idm E 1174
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: 0-1000 BX	Ft.	118.95	39	2,199.05	721	3.05	1,000	3.05
Churn 0-1000 AX	"	5698.00	2072	53,094.25	19,307	2.75	29,000	2.75
Auger 0-1000 EX	"	-	-	70.00	28	2.50		2.50
Stripping 1000 ↓ AX	"	-	-	339.00	113	3.00	5,000	3.00
Trenching 1000 ↓ EX	"	-	-	-		-	-	2.75
Test Pit Assays	Ea.	-	-	79.00	79	1.00	200	1.00
Roads and Trails Core Boxes	"	64.80	36	604.80	336	1.80	600	1.80
Tech. Serv.	Ft.	464.42	2111	4,437.18	20,169	0.22	35,000	0.22
Total Distributed Costs		6346.17		60,823.28				Total Costs Authorized by Contract
Operating Equipment Purchased								
Initial Rehabilitation and Repairs								
New Buildings, Improvements, etc.								
Total Costs		6346.17		60,823.28				

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

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

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

Remarks This report covers holes LW-81
LW-82
LW-83

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

(Instructions on reverse)

(For Government use only)

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

INSTRUCTIONS

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

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

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

GPO 872894

Report for March 1959

Little War Creek Area DMEA 4850

Contract Idm-1174 (Zinc)

One drill operated on this project during the month and completed three holes for a total of 2111' of drilling. These holes are shown in green on the accompanying map, AX-TENN-B-103. Also included are strike and rake sections showing these holes.

Hole LW-81 - Lewis Tunmire property

Coordinates: 745,824.61 N; 794,648.79 E
Elevation: 1587.22

Results:

0-100	Clay
100-362	Mascot dolomite. Shine of sphalerite at 264
362	Chert Matrix
362-546	Upper Kingsport dolomite
546	TR ?
546-715	Lower Kingsport dolomite and limestone
715-740	(Bottom) Longview dolomite

Hole LW-82 - W. M. Brewer property

Coordinates: 745,834.77 N; 794,852.00 E
Elevation: 1592.63

Results:

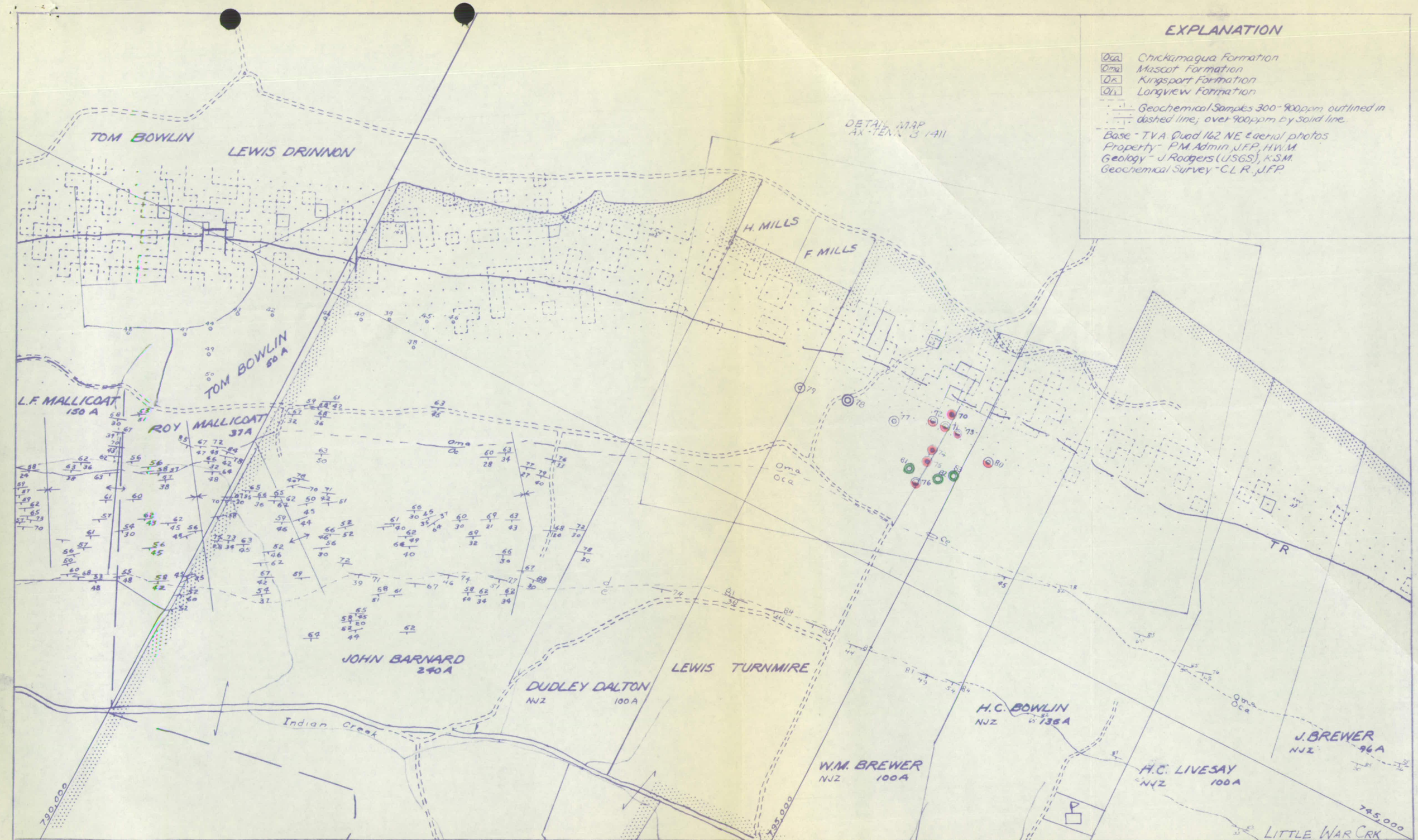
0- 94	Clay
94-358	Mascot dolomite
358	Chert Matrix
358-547	Upper Kingsport. Trace of sphalerite 500'
547	TR ?
547-590	Lower Kingsport dolomite
590-595	5' - estimated at 2% zinc
595-705	Lower Kingsport dolomite Traces of sphalerite 608-662
705-731	(Bottom) Longview dolomite

Hole LW-83 - W. M. Brewer property

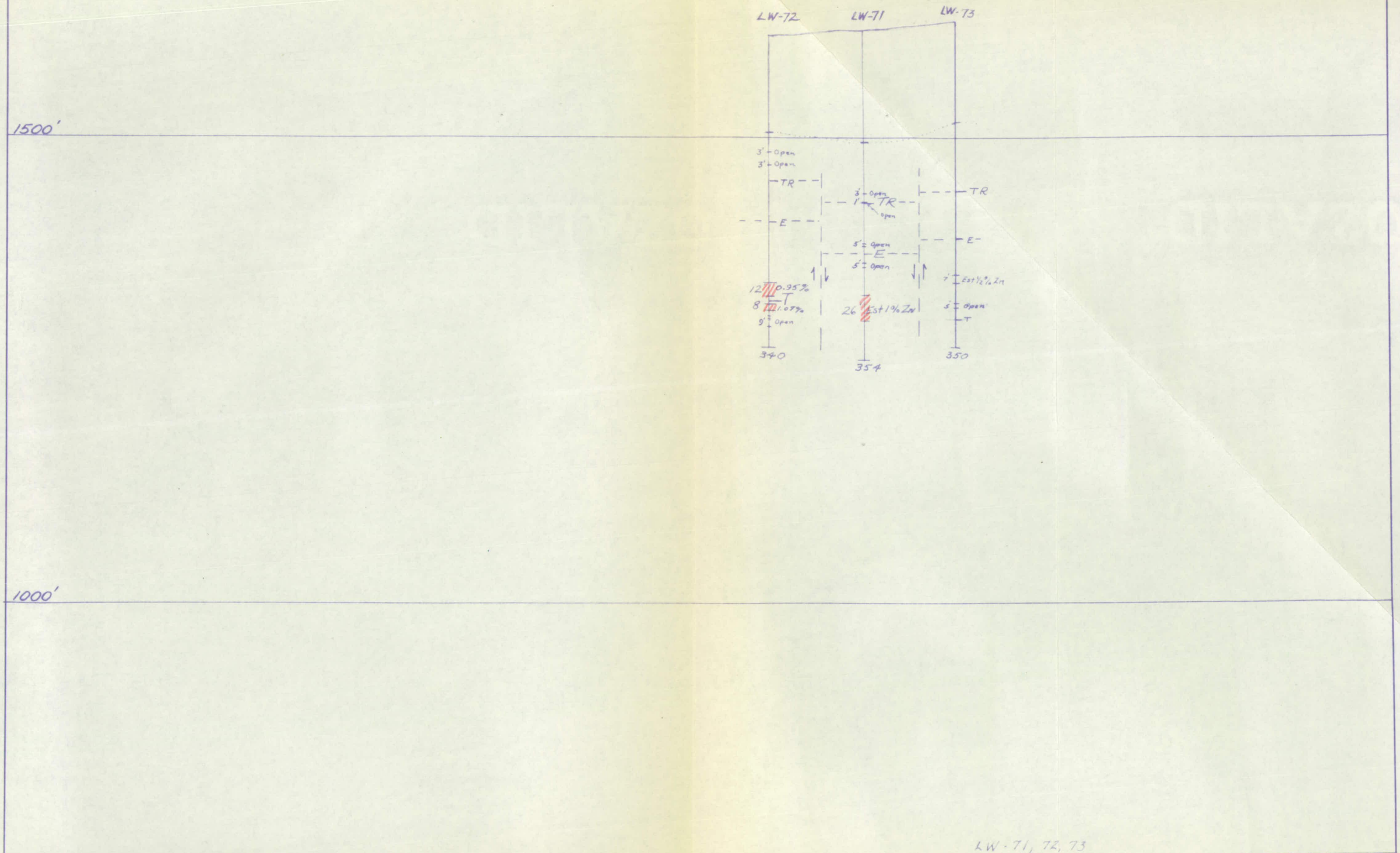
Coordinates: 745,934.81 N; 794,950.60
Elevation: 1616.62'

Results:

0- 19	- -	Clay
19-257	- -	Mascot dolomite
257	- -	Chert Matrix
257-476	- -	Upper Kingsport dolomite
476	- -	TR
476-477	- -	Lower Kingsport dolomite
477-480	- -	3' - estimated at 3% zinc
480-640	- -	(Bottom) Lower Kingsport dolomite. Scattered traces and shines of sphalerite 485-494.

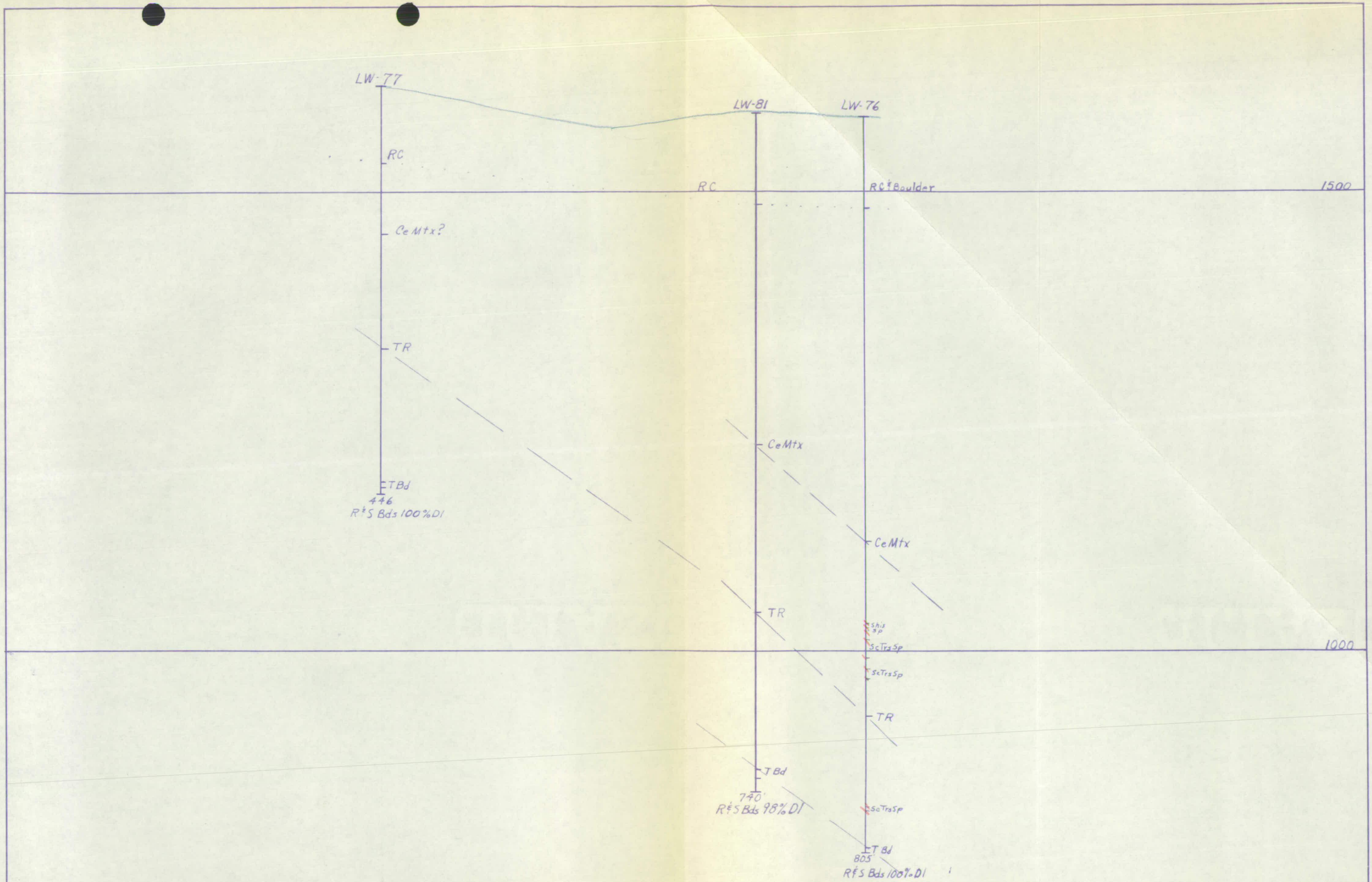


POSTED TO DATE	THE NEW JERSEY ZINC COMPANY	DRAWN JFP DATE 4-25-53	COPPER RIDGE BELT	HANCOCK CO., TENN
6-9-53	ROGERSVILLE TENNESSEE	TRACED SJL, JFP SCALE 1" = 660'	SECTOR II SHEET 1SW	FILE NO. AX-TENN 103
4-56 TEN				

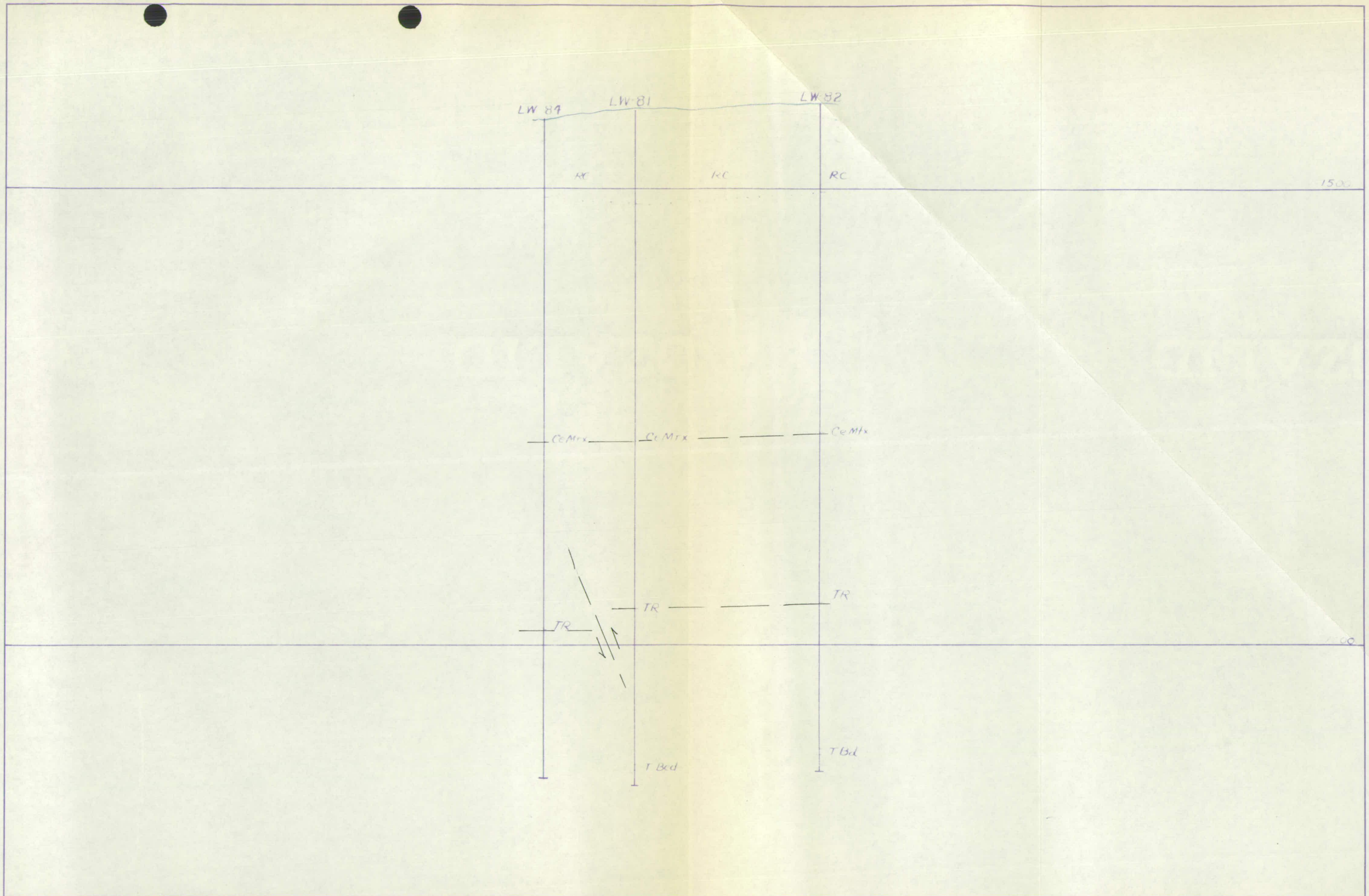


LW-71, 72, 73

SERIAL NUMBER		DATE ISSUED		REFERENCE DRAWINGS	REVISIONS	THE NEW JERSEY ZINC COMPANY	DRAWN WJC	LONGITUDINAL SECTION	DATE 11-24-58
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	LITTLE WAR CRK. SECTOR II	SCALE 1" = 100'
							CHECKED	COPPER RIDGE REIT	AX TENN
							APPROVED		



SERIAL NUMBER		DATE ISSUED		REFERENCE DRAWINGS	REVISIONS	THE NEW JERSEY ZINC COMPANY	DRAWN EWR	Rake Section LW-77,81,76	DATE 3/19/59
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 F	SCALE 1" = 100'
							CHECKED	Copper Ridge Belt	AX-Tenn B-1433
							APPROVED		



SERIAL NUMBER		DATE ISSUED		REFERENCE DRAWINGS	REVISIONS	THE NEW JERSEY ZINC COMPANY	DRAWN EWR, RLC	LONGITUDINAL SECTION LW84, 81, 82	DATE 4-2-59
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	SECTION I LITTLE WAR CRK AREA	SCALE 1" = 100'
							CHECKED	COPPER RIDGE BELT	AX TENN B-1435
							APPROVED		

X5453B 1M 11-54

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O. M. E.
RECEIVED MAR 19 1959

DATE	INITIALS	CODE
3-19		220
		110
3/19		800
3/23		500

INTERIM REPORT

DMEA-4850, Idm-E1174-zinc

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

Location: Little War Creek Area, Hancock County, Tennessee

Summary of Drilling Completed

	Since last inspection	To date
Number of holes	3	28
Footage	1764	18,798

Holes showing:

a)	Commercial zinc ore----------	5
b)	Non-commercial zinc mineralization--	22
c)	No zinc mineralization----------	1

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

Hole No. LW-79.- Located 400 feet southwest of LW-78 on D. Dalton property. Coordinates N746,002.03, E793,614.92; Collar elevation 1635.20. Total depth 500 feet. Drilling began 2-3-59 and was completed 2-10-59. Brief log of hole: 0-131 ft overburden including some cored boulder material, collared in Mascot fm; top of Kingsport (chert matrix) at 179; top of "R" bed at 347; hole bottomed at 500 feet.

Mineralization: Traces of sphalerite at 175; scattered traces and shines from 366 to 395; 4' (384-388) of est. ½ to 1% Zn; shines from 391 to 392 and at 395; weak traces from 402 to 417, from 422 to 432 and from 442 to 458. The core from this hole was 93% dolomite.

Hole No. LW-80. Coordinates N746,147.63, E795,163.91; collar

elevation 1671.17. Total depth 524 feet. Drilling began 2-12-59 and was completed 2-19-59. Brief log of hole: 0-62 feet overburden, collared in Mascot fm; boulder material from 62-131; top of Kingsport (chert matrix) at 200; top of "R" bed at 358; top of "T" bed (?) at 507; hole bottomed at 524 feet.

Mineralization: Scattered traces and shines of sphalerite from 320 to 322; scattered traces from 324 to 331 and from 331 to 332; traces at 356 and 387; shine at 440; abundant pyrite from 432 to 436; scattered traces of sphalerite from 458 to 465, and scattered traces of pyrite at 495.

Hole No. LW-81. Lewis Turnmire property. Coordinates N745,824.61, E794,648.79; collar elevation 1587.22 feet. Total depth 740 ft. Drilling began 2-20-59 and was completed 3-2-59. Brief log of hole: 0-100 feet overburden, collared in Mascot fm; top of Kingsport (chert-matrix) at 362; top of "R" bed at 546; "E" bed from 588 to 595; top of "T" at 715; hole bottomed at 740 feet.

Mineralization: shine of sphalerite at 264; trace at 707.

Current drilling is in progress on hole No. LW-82, located 200 feet east of LW-81. Core was observed to a depth of 575 feet. The estimated total depth is 740 feet. Mineralization encountered consists of shines and traces between 500 and 575 feet.

Inspected: March 10, 1959

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

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Helmuth Wedow, Jr. Geologist
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-

OPERATOR'S MONTHLY REPORT AND VOUCHER

Month of February, 1959 Docket No. DMEA 4850 Contract No. Idm E 1174

Operator's Name The New Jersey Zinc Company Minerals Zinc

Address Jefferson City, Tennessee

Contract Amount, $106,780.00 Government Participation: 50 % Amount, $ 53,390.00

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	2831.90	47,053.45	49,885.35	3/30/59 WPK		
Bulldozing						
Crosscutting						
Drifting						
(2) Labor and Supervision:						
Labor						
Supervision						
Technical Services	225.28	3,747.48	3,972.76			
(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	-	79.00	79.00			
Payroll Taxes						
Liability Insurance						
Core Boxes	30.60	509.40	540.00			
(8) Contingencies (specify):						
TOTALS	3087.78	51,389.33	54,477.11	3087.78	51,389.33	54477.11

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:

$ 1543.89

Signature [signature] (Authorized Certifying Officer)

Date MAR 20 1959 Vou. No. 98

(See other side)

11th

1543.89

(For Government use only)

CERTIFICATION BY GOVERNMENT REPRESENTATIVE:

I certify that to the best of my knowledge and belief the contractor submitting this voucher is operating a Defense Minerals Exploration Administration project under Contract No. E-1174 in accordance with the terms of the contract.

Signature W. J. Lynch Title MINING ENGINEER U. S. BUREAU OF MINES Date MAR 19 1959

APPROVAL BY DMEA EXECUTIVE OFFICER OR ALTERNATE:

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

MONTHLY REPORT OF OPERATOR

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

Form MF-104A
(April 1952)

Budget Bureau No. 42-R1151.2

UNITED STATES
DEPARTMENT OF THE INTERIOR

DEFENSE MINERALS EXPLORATION ADMINISTRATION

OPERATOR'S UNIT COST AND PROGRESS REPORT

Month of February 1959 Docket No. DMEA 4850 Contract No. Idm E 1174
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 -1000 BX	Ft	161.65	53	2,080.10	682	3.05	1,000	3.05
Drilling: Core -1000 AX	"	2670.25	971	47,396.25	17235	2.75	29,000	2.75
Churn -1000 EX	"		-	70.00	28	2.50		2.50
Auger 1000 +AX	"		-	339.00	113	3.00	5,000	3.00
1000 +EX	"		-	-	-	-		2.75
Stripping Assays	Ea		-	79.00	79	1.00	200	1.00
Trenching Core Boxes	"	30.60	17	540.00	300		600	1.80
Test Pits								
Roads and Trails								
Sup. & Tech.Serv.	Ft.	225.28	1024	3,972.76	18058	0.22	35,000	0.22
Total Distributed Costs		3087.78		54,477.11				Total Costs Authorized by Contract
Operating Equipment Purchased								
Initial Rehabilitation and Repairs								
New Buildings, Improvements, etc.								
Total Costs		3087.78		54,477.11				

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 Holes LW-79 & LW-80.

Date 3/1/59 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]
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

Little War Creek Area DMEA 4850

Contract Idm 1174 (Zinc)

One drill operated on this project during the month and completed two holes for a total of 1024' of drilling. The accompanying map, AX-Tenn-B-103 shows these holes in green.

Hole LW-79 - D. Dalton property

Coordinates: 746,002.03 N; 793,614.92 E
Elevation: 1635.20

Results:

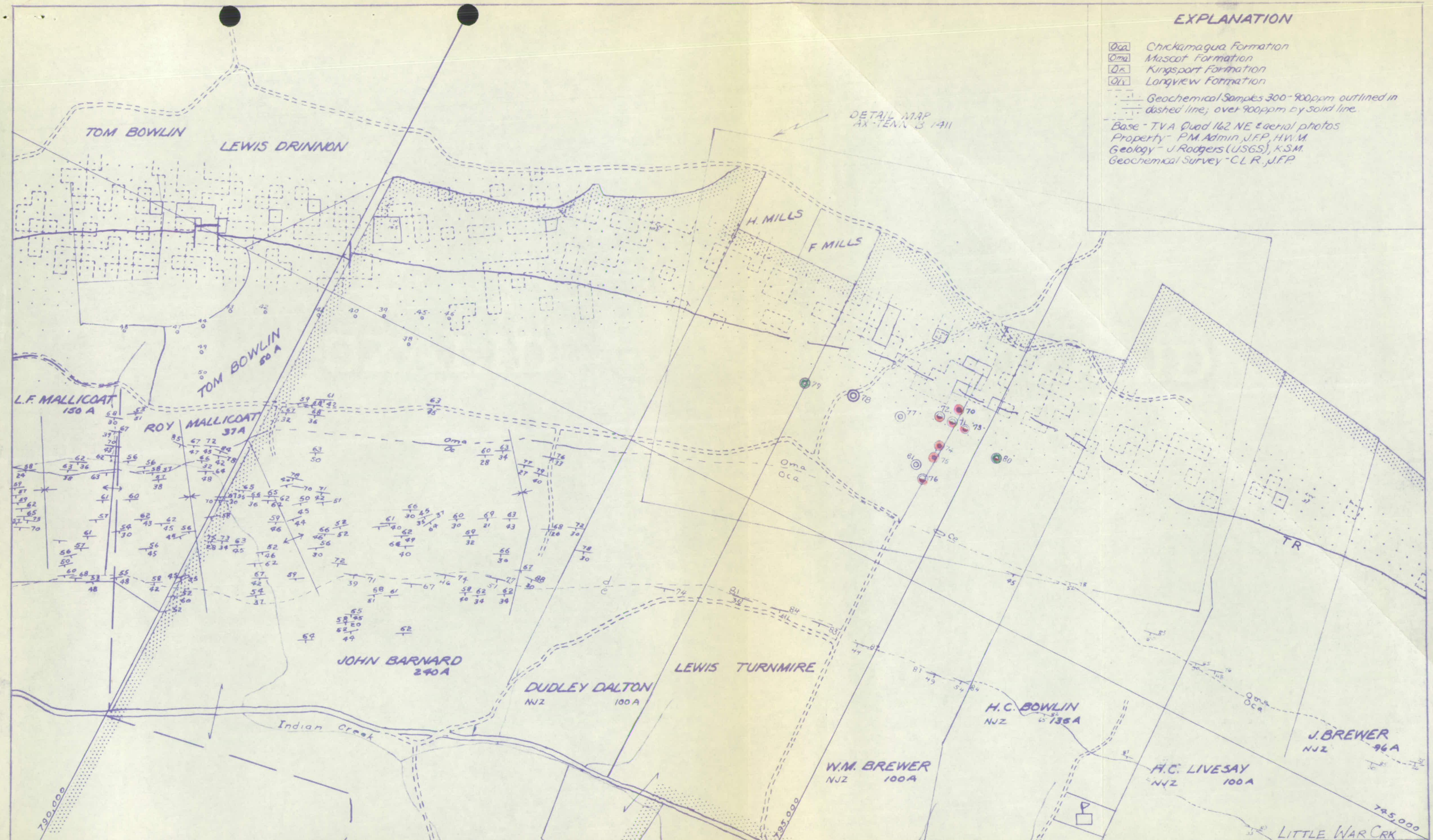
0 - 131	Clay and boulders
131 - 179	Mascot dolomite. Trace of sphalerite 175
179	Chert Matrix
179 - 347	Upper Kingsport dolomite
347	TR
347 - 500	(Bottom) Lower Kingsport dolomite and limestone. Scattered traces and shines of sphalerite 366 - 458 93% dolomite in R & S Beds

Hole LW-80 - W. M. Brewer property

Coordinates: 746,147.63N; 795,163.91 E
Elevation: 1671.17

Results:

0 - 131	Clay and boulders
131 - 201	Mascot dolomite
201	Chert Matrix
201 - 358	Upper Kingsport dolomite. Scattered traces and shines of sphalerite 320 - 356
358	TR
358 - 507	Lower Kingsport dolomite. Scattered traces of sphalerite 356, 387, 458-465
507 - 524	(Bottom) Longview dolomite 100% dolomite in R & S Beds



POSTED TO DATE 6-9-53 4-56 TEN	THE NEW JERSEY ZINC COMPANY ROGERSVILLE TENNESSEE	DRAWN JFP DATE 4-25-53 TRACED SJL, JFP SCALE 1" = 660'	COPPER RIDGE BELT SECTOR II SHEET ISW
			HANCOCK CO., TENN FILE NO. AX-TENN 103

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

DATE	INITIALS	CODE
2-20	C	220
"	JKJ	110
3/4	[illegible]	800
3/4	Rec	500

DMEA EXPLORATION PROJECT

INTERIM REPORT

DMEA-4850, Idm-E1174 - Zinc

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

Location: Little War Creek area, Hancock County, Tennessee

Summary of Drilling Completed

	Since last inspection	To date
Number of Holes	3	25
Footage	1,753	17,034

Holes showing:

a) Commercial Zinc ore----------	5
b) Non-Commercial zinc mineralization----	19
c) No zinc mineralization----------	1

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

Hole No. LW-76, Located 200 feet downdip from LW-75 on Lewis Turnmire property. Coordinates N745, 734.30, E794,742.82, elevation at collar of hole 1582.88 feet. Total depth 805 feet. Drilling began on 12/29/58 and was completed 1/14/59. Brief log of hole: 0-100 feet overburden, collared in Mascot fm; Chert matrix at 466 feet; brown oolite marker bed at 529 ft; "U"-255" bed at 561; top of "R" bed at 657 feet; top of "E" bed at 706 feet; "T" bed from 800 to 805 feet; hole bottomed at 805 feet. Mineralization:

4'	(553-557)	of est.	1% Zn
1'	(560-561)	" "	3% Zn
20'	(570-590)	" "	0.5% Zn
9'	(603-612)	" "	0.5% Zn
4'	(764-768)	" "	0.5 to 1% Zn.

Hole No. LW-77 , located 400 feet on strike from LW-74 on Lewis Turnmire property. Coordinates N746,099.42, E794,350.87;

elevation at collar of hole 1615.94 feet. Total depth 446 feet. Drilling began 1/15/59 and was completed 1/23/59. Brief log of hole: 0-83 overburden; collared in Mascot fm; chert matrix at 124 feet; top of "R" bed at 286 feet; "E" bed from 334 to 336 feet; "T" bed from 430 to 438 feet; hole bottomed at 446 ft; Mineralization: Traces of Zinc at 388; scattered traces of zinc from 400 to 420 feet, of estimated 0.5% Zn.

Hole No. LW-78, located 400 feet southwest from LW-77 on Lewis Turnmire property. Coordinates and collar elevation not available to date. Total depth 502 feet. Drilling began 1/24/59 and was completed 1/31/59. Brief log of hole: 0-92 ft; overburden, collared in Mascot fm; No chert matrix was selected from 3 sandy matrixes found at 126 , 144 and 181 feet; top of "R" bed at 341; "E" bed from 423 to 429; "T" bed at 498; hole bottomed at 502 feet. Mineralization: Shines of zinc at 309; scattered shines and traces of zinc from 355 to 437 feet.

Current drilling is in progress on LW-79, located 400 feet southwest of LW-78 on D. Dalton property. Core was observed to a depth of 400 feet. The estimated total depth of the hole is 510 feet. Mineralization encountered consists of: traces of zinc at 175 ft; scattered traces and shines of zinc from 366 to 395 and 4' (384-388) of est. 1% Zn.

Inspected: Feb. 10, 1959.

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

Helmuth Wedow, Jr., Geologist
Geological Survey

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-
M.E.

Month of January 195 9 Docket No. DMEA 4850 Contract No. Idm E 1174
Operator's Name The New Jersey Zinc Company Minerals Zinc
Address Jefferson City, Tennessee
Contract Amount, $106,780.00 Government Participation: 50 % Amount, $ 53,390.00

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	4854.05	42,199.40	47,053.45	2/25/59		
Bulldozing						
Crosscutting						
Drifting						
(2) Labor and Supervision:						
Labor						
Supervision						
Technical Services	385.06	3,361.82	3,747.48			
(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	-	79.00	79.00			
Payroll Taxes						
Liability Insurance						
Core Boxes	52.20	457.20	509.40			
(8) Contingencies (specify):						
TOTALS	5291.91	46,097.42	51,389.33	5291.91	46,097.42	51,389.33

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:
$ 2645.95
Signature Helen R. Melin
(Authorized Certifying Officer)
Date FEB 16 1959 Vou. No. 88
(See other side)

10

2645.96

(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-1174 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 1 2 1959

APPROVAL BY DMEA EXECUTIVE OFFICER OR ALTERNATE:

Signature [illegible] Title ACTING EXECUTIVE OFFICER DME 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 1952)

Budget Bureau No. 42-R1151.2

FEB 18 1959
O.M.E.

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

Month of January 1959 Docket No. DMEA 4850 Contract No. Idm E 1174
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 -1000 BX	Ft.	338.55	111	1,918.45	629	3.05	1,000	3.05
Drilling: Core -1000 AX	@	4515.50	1642	44,726.00	16,264	2.75	29,000	2.75
Churn -1000 EX	"	-	-	70.00	28	2.50		2.50
Auger 1000+AX	"	-	-	339.00	113	3.00	5,000	3.00
Stripping 1000+EX	"	-	-	-	-			2.75
Trenching Assays	Ea.	-	-	79.00	79	1.00	200	1.00
Test Pits Coreboxes	"	52.20	29	509.40	283		600	1.80
Roads and Trails								
Sup.& Tech.Serv.	Ft.	385.66	1753	3,747.48	17,034	0.22	35,000	0.22
Total Distributed Costs		5291.91		51,389.33				Total Costs Authorized by Contract
Operating Equipment Purchased								
Initial Rehabilitation and Repairs								
New Buildings, Improvements, etc.								
Total Costs		5291.91		51,389.33				

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

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

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

Remarks: This report includes LW-76, LW-77, LW-78

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

Little War Creek Area DMEA 4850

Contract Idm E 1174 (Zinc)

One drill operated on this project during the month and completed three holes for a total of 1753 feet. The accompanying map, AX-TENN B 103 shows these holes in green.

Hole LW-76 - Lewis Tunmire property

Coordinates: 745,734.30 E; 794,742.82 E
Elevation: 1582.88'

Results:

0-100	Clay
100-466	Mascot dolomite. Shine of sphalerite and pyrite 367
466	Chert Matrix
466-596	Upper Kingsport dolomite Scattered shines and traces of sphalerite 553-590
596-612	16' - estimated at 1-2% zinc
612-657	Upper Kingsport dolomite
657	TR
657-800	Lower Kingsport dolomite. Shines of sphalerite 764-768
800-805	(Bottom) Longview dolomite R and S beds 100% dolomite

Hole LW-77 - Lewis Tunmire property

Coordinates: 746,099.42 N; 794,350.87 E
Elevation: 1615.94'

Results:

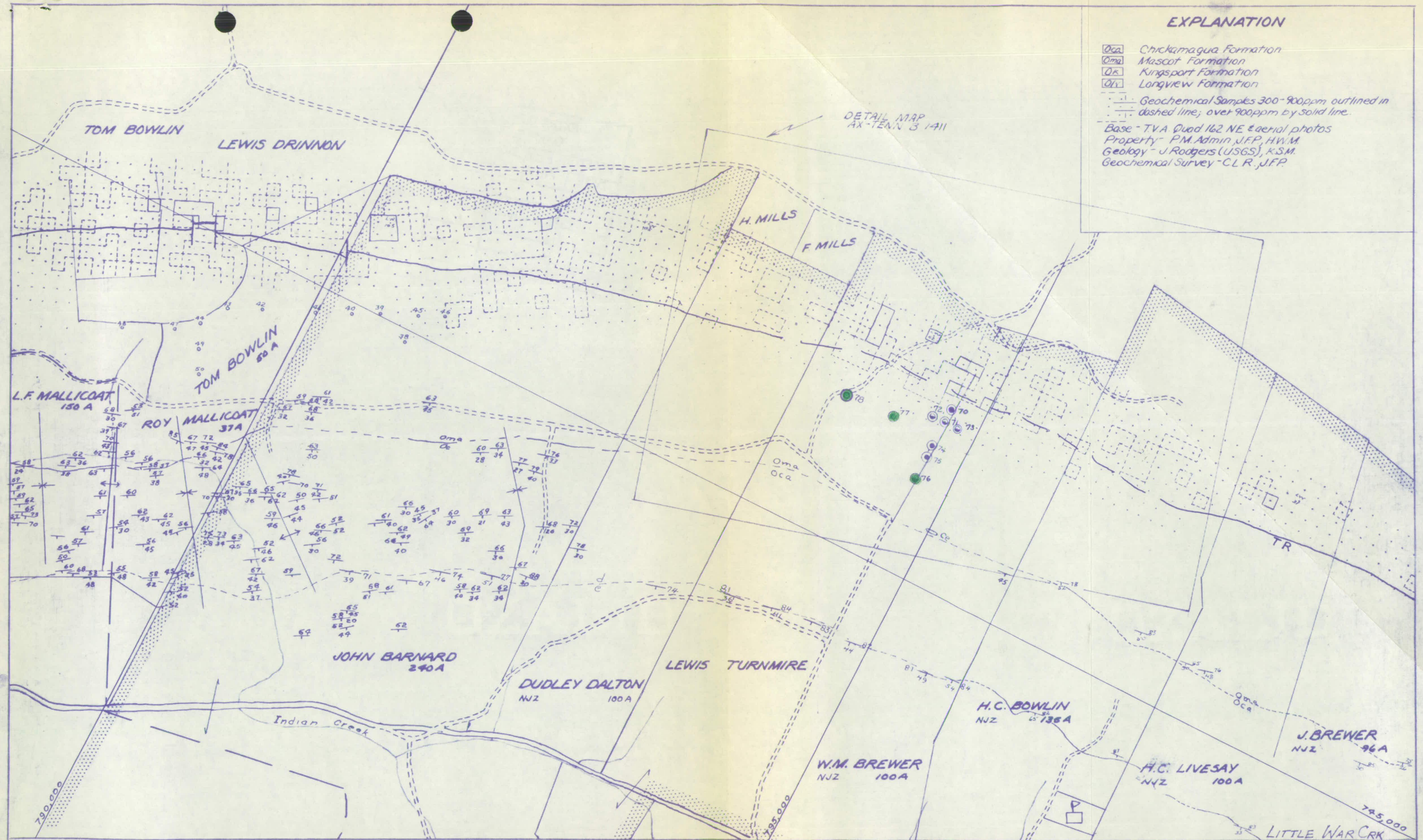
0- 83	Clay
83-160	Mascot dolomite
160	Chert Matrix ?
160-286	Upper Kingsport dolomite
286	TR
286-400	Lower Kingsport dolomite
400-420	20' - estimated at 1/2% zinc
420-430	Lower Kingsport dolomite
430-446	(Bottom) Longview dolomite R and S beds 100% dolomite

Hole LW-78 - Lewis Tunmire property

Approx. Coord: 746,057 N; 793,961 E
Approx. Elev: 1635'

Results:

0- 92	Clay
92-341	Mascot and Upper Kingsport dolomite Shine of sphalerite 309'
341	TR
341-498	Lower Kingsport dolomite. Scattered shines and traces 355-437
498-502	(Bottom) Longview dolomite R and S beds 100% dolomite



POSTED TO DATE 6-9-53 4-56 TEN	THE NEW JERSEY ZINC COMPANY ROGERSVILLE TENNESSEE	DRAWN JFP DATE 4-25-53 TRACED SJL, JFP SCALE 1"=660'	COPPER RIDGE BELT SECTOR II SHEET ISW	HANCOCK CO., TENN FILE NO. AX-TENN 103

EXTRA COPY
O. M. E.
RECEIVED FEB 18 1999
CODE
INITIALS
DATE

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

DATE	INITIALS	CODE
1-26	C	220
"		110
1/27		800
1/27		500

DMEA EXPLORATION PROJECT

INTERIM REPORT

DMEA-4850, Idm-E1174-Zinc

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

Location: Little War Creek area, Hancock County, Tennessee

Summary of Drilling Completed

	Since last inspection	To date
Number of holes	1	22
Footage	603	15,281

Holes showing:

a) Commercial zinc ore.....	5
b) Non-commercial zinc mineralization...	16
c) No zinc mineralization.....	1

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

Hole No. LW-75- Located 100 feet south of LW-74. Coordinates N745,933, E794,749; elevation at collar 1600 feet. Total depth 603 feet. Drilling began 12/11/58 and was completed 12/29/58. Brief log of hole: 0-110 ft. overburden, collared in Mascot fm; top of Kingsport fm (chert matrix) at 304 ft; top of "R" bed at 448 ft; "T" bed estimated between 600 and 610 ft; hole bottomed at 603 feet.

Mineralization: Shines sphalerite at 164 ft; trace at 447 ft; shine at 502 ft, traces at 506 and 510 ft; 16 ft. (513-529) of 5.96% Zn; trace of sphalerite from 542 to 543 ft; 2 ft (560-562) of 2.16% Zn.

Current drilling is in progress on LW-76, located 200 ft. downdip from LW-75 on Lewis Turnmire Property. Core was

observed to a depth of 749 feet. The estimated total depth of this hole is 805 feet. Approximately 35 feet of mineralized ground has been encountered between 553 and 612 feet.

The location of LW-77 was made at the time of this inspection.

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

Inspected: January 13, 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

PAID ON VOUCHER & SCHEDULE OF PAYMENTS K-39

OPERATOR'S MONTHLY REPORT AND VOUCHER

Month of December, 1958 Docket No. DMEA 4850 Contract No. Idm E 1174
Operator's Name The New Jersey Zinc Company Minerals Zinc
Address Jefferson City, Tennessee
Contract Amount, $106,780.00 Government Participation: 50 % Amount, $ 53,390.00

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	3159.15	39,040.25	42,199.40	1/27/59	OWPK	
Bulldozing						
Crosscutting						
Drifting						
(2) Labor and Supervision:						
Labor	251.46	3,110.36	3,361.82			
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	9.00	70.00	79.00			
Payroll Taxes						
Liability Insurance						
Core Boxes	34/20	423.00	457.20			
(8) Contingencies (specify):						
TOTALS	3453.81	42,643.61	46,097.42	$3,453.81	$42,643.61	$46,097.42

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

Date Jan. 1, 1959 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:

$1,726.91

Signature Peter R. Miller
(Authorized Certifying Officer)

Date JAN 19 1959 Vou. No. 78
(See other side)

1726.90

Form MF-104A
(April 1962)

Budget Bureau No. 42-R1151.2

UNITED STATES
DEPARTMENT OF THE INTERIOR

DEFENSE MINERALS EXPLORATION ADMINISTRATION

OPERATOR'S UNIT COST AND PROGRESS REPORT

Month of December 1958 Docket No. DMEA 4850 Contract No. Idm E 1174

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		-	-	70.00	28	2.50		
Winzes								
Drilling: Core 0-1000 BX	Ft.	161.65	53	1,579.90	518	3.05		
Core 0-1000 AX	"	2997.50	1090	40,210.50	14,622	2.75		
Churn -1000 BX	"							
Auger 1000 + AX	"		-	339.00	113	3.00		
Stripping								
Trenching Assays	Ea.	9.00	9	79.00	79	1.00		
Test Pits Core Boxes	"	34.20	19	457.20	254	1.80		
Roads and Trails								
Sup. & Tech. Serv.	Ft.	251.46	1143	3,361.82		0.22		
Total Distributed Costs		3453.81		46,097.42				Total Costs Authorized by Contract
Operating Equipment Purchased								
Initial Rehabilitation and Repairs								
New Buildings, Improvements, etc.								
Total Costs		~~3453.81~~		~~46,097.42~~				

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

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

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

Remarks: This report includes holes LW-74 LW-75

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

JAN 16 1959

Report for December 1958

Little War Creek Area DMEA 4850

Contract Idm E 1174 (Zinc)

One drill operated on this project during the month and completed two holes for a total of 1143 feet. The accompanying map, AX-TENN-B-1310 shows these holes in green. Sections AX-TENN C 1387, B-1407 and B-1415 show all holes drilled on the project during the last quarter.

Hole LW-74 - Lewis Tunmire property

Coordinates: 746,032.50 N; 794,746.21 E
Elevation: 1605.75

Results:

0- 99 - - Clay
99-215 - - Mascot dolomite
215 - - Chert matrix marker
215-371 - - Upper Kingsport dolomite
371 - - TR marker
371-474 - - Lower Kingsport dolomite
474-492 - - 18' ore averaging 9.55% zinc
474-478 - 4' @ 4.60% zinc
478-483 - 5' @ 7.22% zinc
483-487 - 4' @ 11.18% zinc
487-492 - 5' @ 14.52% zinc
492-519 - - Lower Kingsport dolomite
Scattered traces sphalerite 492-504
519-540 - - (Bottom) Longview dolomite
100% dolomite in the R & S beds

Hole LW-75 - Lewis Tunmire property

Coordinates: 745,932.52 N; 794,748.84 E
Elevation: 1599.51

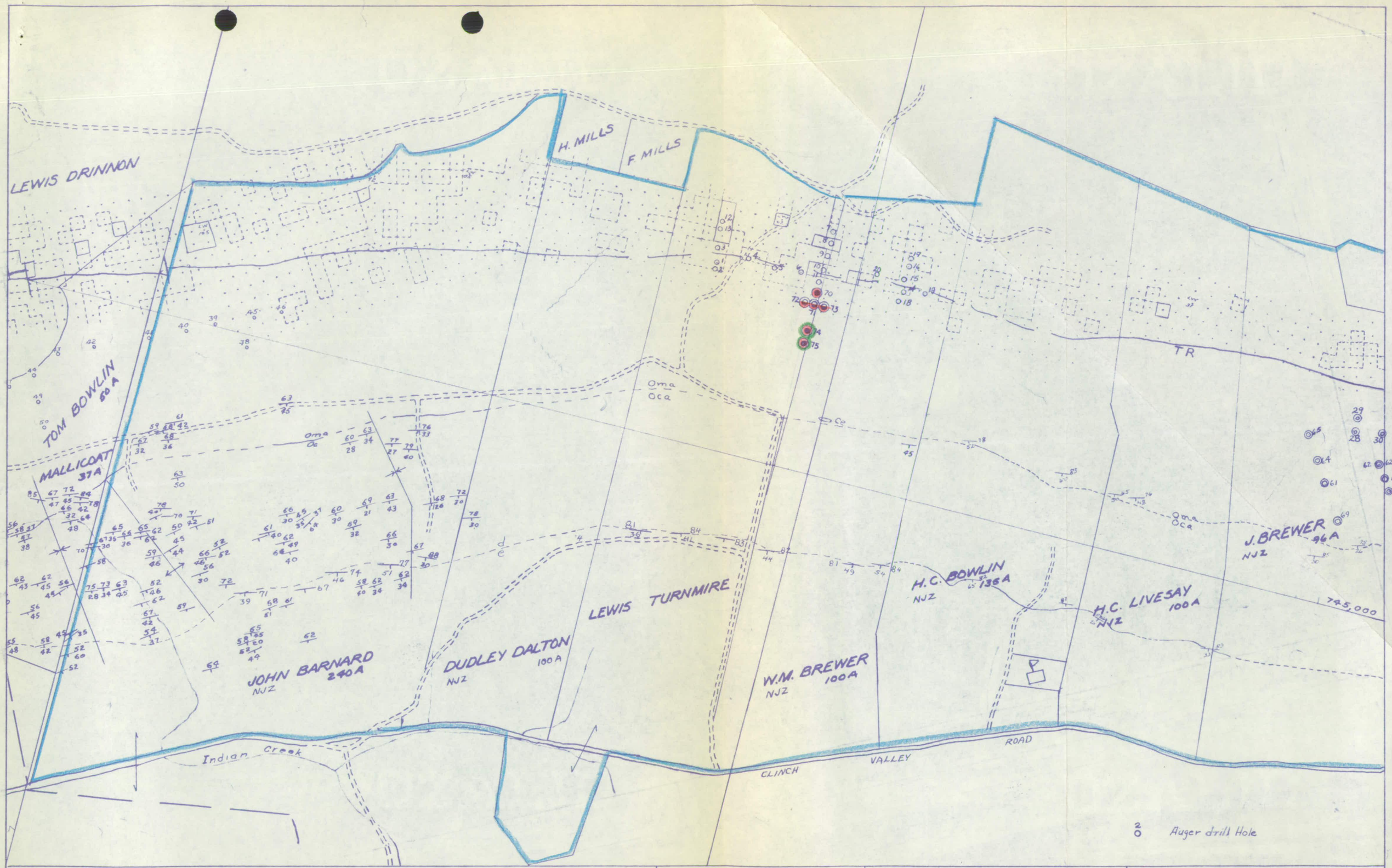
Results:

0-110 - - Clay
110-304 --- Mascot dolomite. Shine sphalerite @ 164
304 - - Chert matrix marker
304-363 - - Upper Kingsport dolomite
363-385 - - 22' mineralization estimated @ 1% zinc
385-448 - - Upper Kingsport dolomite. Trace sphalerite @ 447'
448 - - TR marker
448-513 - - Lower Kingsport dolomite
Traces & shines sphalerite @ 502-506,510
513-529 - - 16' ore averaging 5.96% zinc
513-517 - 4' @ 3.76% zinc
517-520 - 3' @ 0.10% zinc
520-525 - 5' @ 15.10% zinc
525-529 - 4' @ 1.13% zinc

529-560 - - Lower Kingsport dolomite. Traces sphalerite 542,544,549, Shine sphalerite 553

560-562 - - 2' mineralization averaging 2.16% zinc

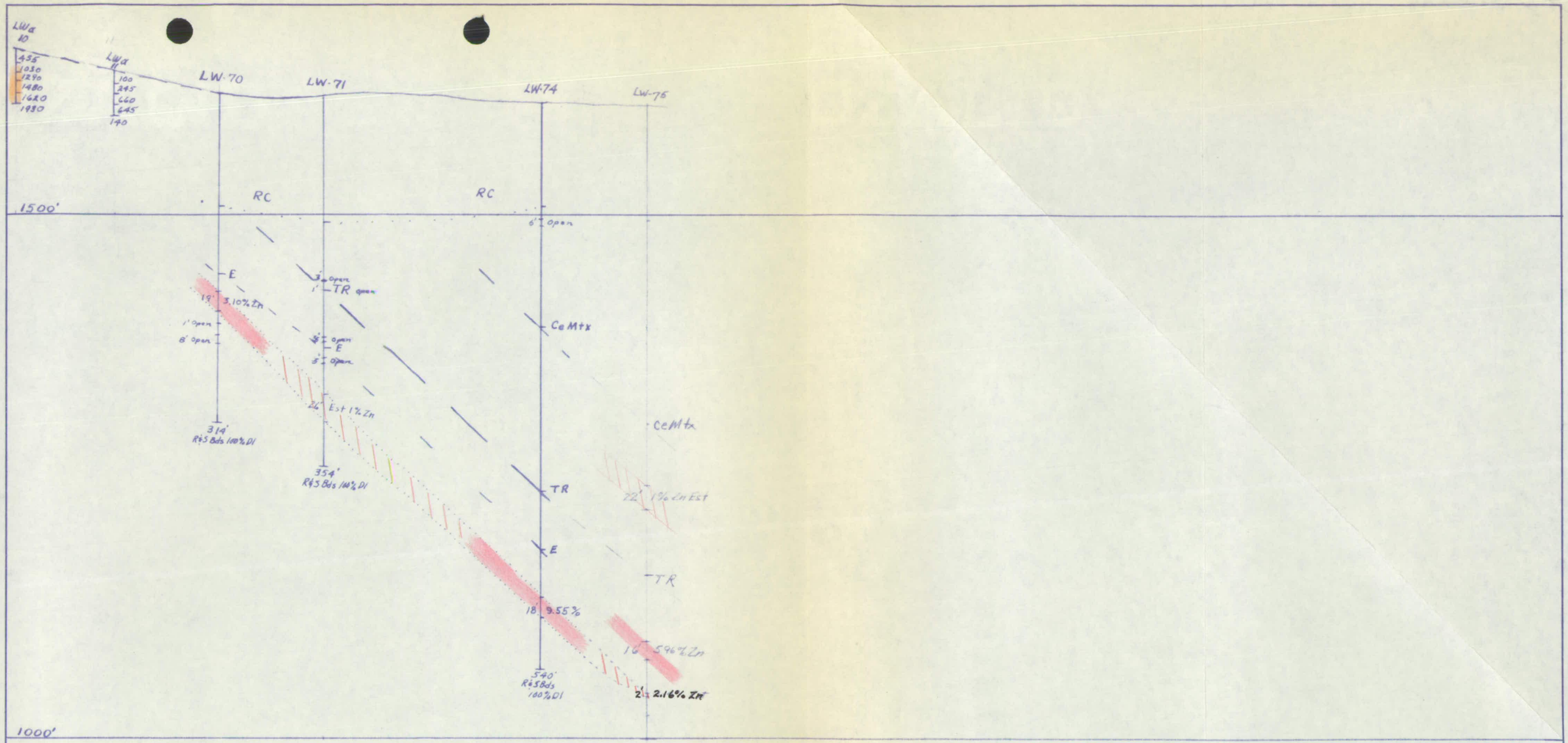
562-603 - - (Bottom) Lower Kingsport dolomite 100% dolomite in R & S beds



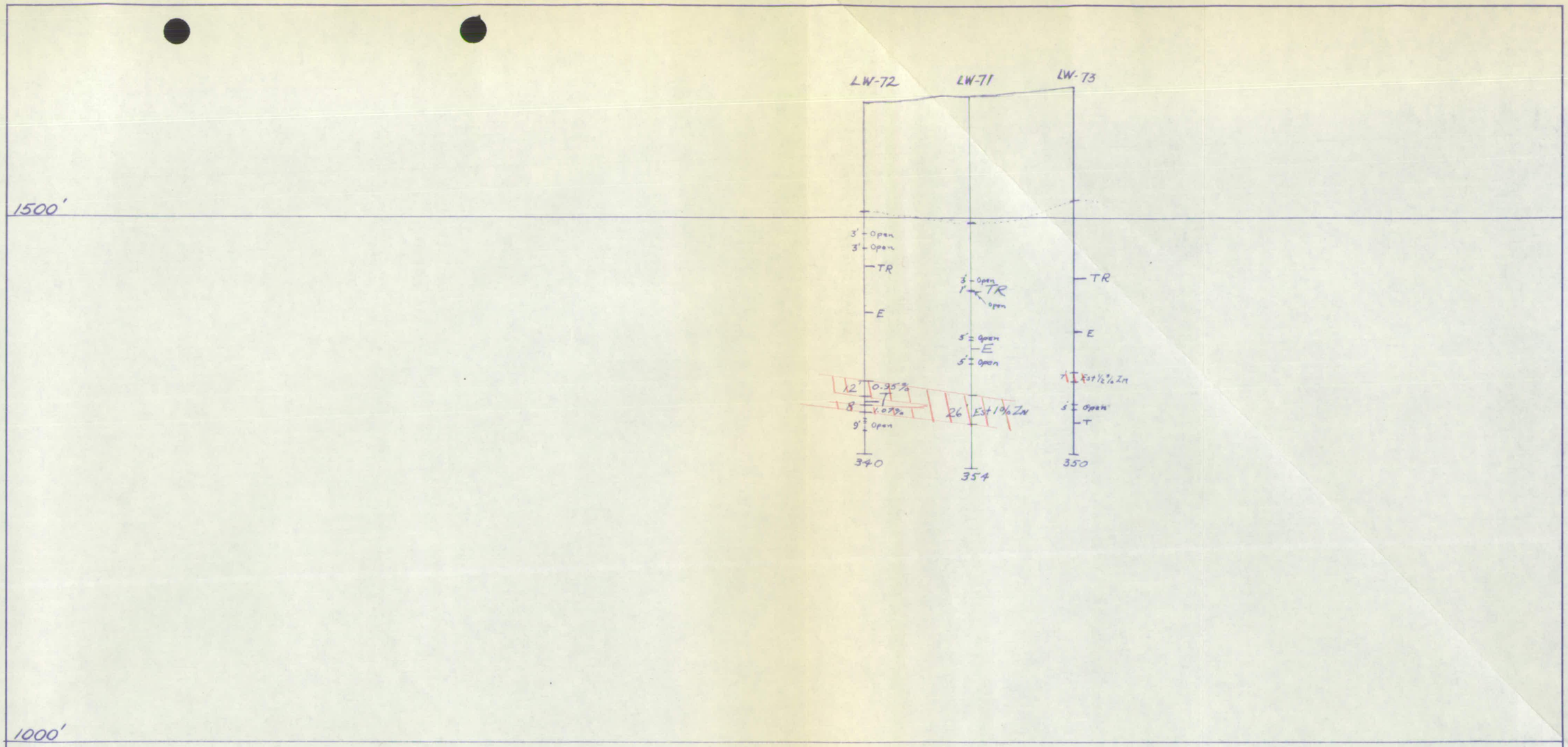
THE NEW JERSEY ZINC COMPANY JEFFERSON CITY , TENNESSEE	DRAWN R.E.F. DATE 9-23-57 TRACED SCALE 1"=660'	COPPER RIDGE BELT SECTOR II AREA F	LITTLE WAR CREEK FILE NO. AX-TENN B-1310

OFFICIAL FILE COPY
O. M. E.
RECEIVED JAN 23 1959

DATE	INITIALS	C



SERIAL NUMBER		DATE ISSUED		REFERENCE DRAWINGS	REVISIONS	THE NEW JERSEY ZINC COMPANY	DRAWN EWR	DIP SECTION LW-70,71	DATE 11-24-58
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	LITTLE WAR CRK SECTOR II	SCALE 1" = 100'
							CHECKED	COPPER RIDGE BELT	AX-TENN-B-1407
							APPROVED		



LW-71, 72, 73

SERIAL NUMBER		DATE ISSUED		REFERENCE DRAWINGS	REVISIONS	THE NEW JERSEY ZINC COMPANY	DRAWN WJC	LONGITUDINAL SECTION	DATE 11-24-58
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	LITTLE WAR CRK. SECTOR II	SCALE 1" = 100'
							CHECKED	COPPER RIDGE BELT	AX-TENN B-1415
							APPROVED		

X5453B 1M 11-54

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

DATE	INITIALS	CODE
12/30	H. G.	325
12/30	EEF	800
12/31		350

DMEA EXPLORATION PROJECT

INTERIM REPORT

DMEA-4850, Idm-E1174 - Zinc

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

Location: Little War Creek Area, Hancock County, Tennessee

Summary of Drilling Completed

	Since last inspection	To Date
Number of holes	3	21
Footage	1230	14,678

Holes showing:

a)	Commercial zinc ore	4
b)	Non-commercial zinc mineralization	16
c)	No zinc mineralization	1

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

Hole No. LW-72.--Located 100 feet west of LW-71 on Lewis Turnmire property. Coordinates N 746,237, E 794,653; elevation at collar 1,609 feet. Depth 340 feet. Drilling began November 11, 1958 and was completed November 22, 1958. Brief log of hole: 0-106 overburden, collared in Kingsport formation; top of "R" bed at 155; "E" bed from 198 to 203; "T" bed from 286 to 292; hole bottomed at 340 feet.

Mineralization:-- 12' (271-283) 0.95 % Zn
Scattered traces of sphalerite from 283 to 292
8' (292-300) 1.07 % Zn

Hole No. LW-73.-- Located 100 feet east of LW-71 on W. M. Brewer property. Coordinates N 746,236, E 794, 848; elevation at collar 1,626 feet. Depth 350 feet. Drilling began November 25, 1958 and was completed November 29, 1958. Brief log of hole: 0-110 overburden, collared in Kingsport formation; top of "R" bed at 183; top of "E" bed at 233; "T" bed from 318 to 325; hole bottomed at 350 feet.

Mineralization: Trace of sphalerite at 139.
7' (273-280) est. 0.5 % zinc (2' core recovery)

Hole No. LW-74.--Located 200 feet south of LW-71 on Lewis Turnmire property. Coordinates N 746,033, E 794,746; elevation at collar 1,606 feet. Depth 540 feet. Drilling began on December 1, 1958 and was completed December 9, 1958. Brief log of hole: 0-99 overburden, collared in Mascot formation; top of Kingsport (chert matrix) at 215; "U-255" bed at 260; top of "R" bed at 371, "E" bed from 424 to 426; "T" bed from 519 to 523; hole bottomed at 540 feet.

Mineralization.--

18' (474-492) of 9.55 % Zn	4' (474-478) of 4.60 % Zn
	5' (478-483) of 7.22 % Zn
	4' (483-487) of 11.18 % Zn
	5' (487-492) of 14.52 % Zn
	12' (492-504) Scattered traces of Zn
	Pyrite above, below and in ore zone.

Current drilling is in progress on Hole No. LW-75, located 100 feet south of LW-74. Overburden drilling extended to 110 feet and no core had been recovered at the time of the inspection.

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-R1036.8

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION

RECEIVED DEC 22 1958 FILE ON VOUCHER & SCHEDULE OF PAYMENTS K-

OPERATOR'S MONTHLY REPORT AND VOUCHER

O.M.E.

Month of November 8 195 Docket No. DMEA 4855 Contract No. Idm E 1174

Operator's Name The New Jersey Zinc Company Minerals Zinc

Address Jefferson City, Tennessee

Contract Amount, $ 106,780.00 Government Participation: 50 % Amount, $ 53,390.00

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:	2,884.40	36,160.05	39,044.45	2880.20		
Drilling				1/21/59		
Bulldozing						
Crosscutting						
Drifting						
(2) Labor and Supervision:						
Labor	229.68	2,880.68	3,110.36			
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	5.00	65.00	70.00			
Sampling and Analysis						
Payroll Taxes						
Liability Insurance						
Core Boxes	30.60	392.40	423.00			
(8) Contingencies (specify):						
						42,647.81
TOTALS	3,149.68	39,498.13	42,647.81	3149.68	39498.13	42647.81

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:

$ 1572.74 ~~1574.84~~

Signature Helen R. Melin (Authorized Certifying Officer)

Date DEC 17 1958 Vou. No. 71

(See other side)

8

1574.84

(For Government use only)

CERTIFICATION BY GOVERNMENT REPRESENTATIVE:

I certify that to the best of my knowledge and belief the contractor submitting this voucher is operating a Defense Minerals Exploration Administration project under Contract No. E-1174 in accordance with the terms of the contract.

Signature [illegible] Title MINING ENGINEER U. S. BUREAU OF MINES Date DEC 17 1958

APPROVAL BY DMEA EXECUTIVE OFFICER OR ALTERNATE:

Signature [illegible] 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 MT-104A
(April 1952)

Budget Bureau No. 42-R1151.2

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION

RECEIVED DEC 22 1958 DMEA

OPERATOR'S UNIT COST AND PROGRESS REPORT

Month of November 195 8 Docket No. DMEA 4850 Contract No. Idm E 1174

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		10.00						
Winzes EX		74.20	28	74.20	28	2.65		
Drilling: Core 0-1000 BX	Ft.	164.70	54	1,418.25	465	3.05		
Churn 0-1000 AX	"	2,645.50	962	37,213.00	13,532	2.75		
Auger 1000 BX	"							
Stripping 1000 + AX	"	-	-	339.00	113	3.00		
Trenching Assays	Ea.	5.00	5	70.00	70	1.00		
Test Pits Core Boxes	"	30.60	17	423.00	235	1.80		
Roads and Trails								
Tech. Serv.	Ft.	229.68	1044	3,110.36	14,138	0.22		
Total Distributed Costs		3,149.68		42,647.81				Total Costs Authorized by Contract
Operating Equipment Purchased		3,145.98						
Initial Rehabilitation and Repairs								
New Buildings, Improvements, etc.								
Total Costs		3,149.68		42,647.81				

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 holes LW-71
LW-72
LW-73

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

Little War Creek Area DMEA 4850

Contract Idm E 1174 (Zinc)

One drill operated on this project during the month and completed three holes for a total of 1044'. The accompanying map, AX-TENN-B-~~1310~~ 103, shows these holes in green.

Hole LW-71 - Lewis Tunmire property

Coordinates: 746,232.71 N; 794,750.50 E
Elevation: 1612.67

Results:

0- 120 - - Clay
120- 184 - - Upper Kingsport dolomite
184 - - TR
184- 284 - - Lower Kingsport dolomite
284- 310 - - 26' - estimated at 1% zinc
310- 354 - - (Bottom) Lower Kingsport dolomite
100% dolomite in R and S beds

Hole LW-72 - Lewis Tunmire property

Coordinates: 746,237.03 N; 794,653.16 E
Elevation: 1609.02

Results:

0-106 - - Clay
106-155 - - Upper Kingsport dolomite
155 - - TR
155-271 - - Lower Kingsport dolomite
271-274 - - 3' - 1.10% zinc
274-279 - - 5' - 1.00% zinc
279-283 - - 4' - 0.78% zinc
271-283 - -12' - 0.95% zinc
283-286 - - Lower Kingsport dolomite
286-292 - - Longview dolomite
292-296 - - 4' - 1.65% zinc
296-300 - - 4' - 0.50% zinc
292-300 - - 8' - 1.07% zinc

300-340 - - (Bottom) Longview dolomite
100% dolomite in R & S beds

Hole LW-73 - W. M. Brewer property

Coordinates: 746,236.15 N; 794,848.40 E
Elevation: 1625.81

Results

0-110	Clay
110-183	Upper Kingsport dolomite
183	TR ?
183-273	Lower Kingsport dolomite
273-280	Estimated 1/2% zinc (2' core recovered)
280-318	Lower Kingsport dolomite
318-350	(Bottom) Longview dolomite 100% dolomite in R & S beds.

General Comment:

The ore horizon in each of the three holes reported above was characterized by considerable leached and weathered ground and an unusual thickness of overburden was found in these holes. Some impoverishment of zinc by leaching has taken place, but the extent of this process here cannot be determined. It is possible that before leaching, some of the ground penetrated by these holes may have been of ore grade. This can best be determined by following this zone down dip into the unweathered zone.

POSTED TO DATE 6-9-53 4-56 TEN	THE NEW JERSEY ZINC COMPANY ROGERSVILLE TENNESSEE	DRAWN JFP DATE 4-25-53 TRACED SJL, JFP SCALE 1" = 660'	COPPER RIDGE BELT SECTOR II SHEET 1SW HANCOCK CO., TENN FILE NO. AX-TENN 103

EXTRA COPY
O. M. E.
RECEIVED DEC 22 1958
DATE

OFFICIAL FILE COPY
O. M. E.
DEC 22 1958

December 17, 1958

The New Jersey Zinc Company

Jefferson City, Tennessee

Attention: Mr. A. G. Hoagland

Gentlemen:

An adjustment has been made on your November voucher covering Contract Idm-K117h, Docket No. DMEA-4850 as follows:

NX Size Drilling 28 feet changed from $74.20 to $70.00

The November voucher claims NX size drilling at $2.65/ft., overburden drilling and diamond drilling to 1,000-foot depth. However, the contract calls for NX size at $2.50/ft.

Please correct your records as follows:

	Monthly Totals	Totals Previously Reported	Totals to Date
Drilling	$ 2,880.20	$ 36,160.05	$ 39,040.25
Tech. Services Supervision	229.68	2,880.68	3,110.36
Samples, Etc.	5.00	65.00	70.00
Core Boxes	30.60	392.40	423.00
Totals	$ 3,145.48	$ 39,498.13	$ 42,643.61

Your voucher is being processed today for payment in the amount of $1,572.74, which is 50% of the $3,145.48 Monthly Total.

Sincerely yours,

Helen R. Miller
Administrative Assistant

/hbm
Copies to R. A. Laurence
V. J. Lynch
J. L. Chambers
Morris files
Day files

OFFICIAL FILE COPY
O. M. E.
RECEIVED DEC 1 1958

DATE	INITIALS	CODE
12/1	C	220
"		110
12/1		800
12/1		500

DMEA EXPLORATION PROJECT

INTERIM REPORT

DMEA-4850, Idm-E1174-Zinc

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

Location: Little War Creek Area, Hancock County, Tennessee

Summary of Drilling Completed

	Since last inspection	To date
Number of holes	2	18
Footage	668	13,448

Holes showing:

a) Commercial zinc ore---------- 3
b) Non-Commercial zinc mineralization--------- 14
c) No zinc mineralization---------- 1

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

Hole No. LW-70 - Coordinates N746,333, E794,752; elevation at collar 1616 feet, Lewis Turnmire property. Drilling began 10/27/58 and was completed 10/31/58. Brief log of hole: 0-108 overburden, collared in "R" bed; top of "E" bed at 172 ft; "T" bed from 294 to 297 ft; hole bottomed at 314 ft; Mineralization: 19'(188-207) of 3.1% Zn.

Hole No. LW-71 - Located 100 ft downdip from LW-70 on Lewis Turnmire property. Coordinates N746,233, E794,751; elevation at collar 1613 ft. Drilling began 11/1/58 and was completed 11/8/58. Brief log of hole: 0-120 ft overburden, collared in Kingsport fm; top of "R" bed at 184 ft;"E" bed at 240 ft; hole bottomed a 354 ft. Mineralization: 26' (284-310) of est. 1% zinc.

At the time of this visit the drill was being moved to the site of LW-72, located 100 feet west of LW-71 on Lewis Turnmire property.

Inspected: November 18, 1958

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

RECEIVED NOV 28 1958 O.M.E.

PAID ON VOUCHER & SCHEDULE OF PAYMENTS K- 30

OPERATOR'S MONTHLY REPORT AND VOUCHER

Month of October 1958 Docket No. DMEA 4850 Contract No. Idm E 1174
Operator's Name The New Jersey Zinc Company Minerals Zinc
Address Jefferson City, Tennessee
Contract Amount, $ 106,780.00 Government Participation: 50% Amount, $ 53,390.00

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	3856.50	32,303.55	36,160.05	12/17/58		
Bulldozing						
Crosscutting						
Drifting						
(2) Labor and Supervision:						
Labor						
Supervision	306.46	2,574.22	2,880.68			
Technical Services						
(3) Operating Mat'ls. and Supplies:						
Timber						
Explosives						
Pipe						
Track						
(4) Operating Equipment:						
Rental						
Purchase						
Depreciation						
(5) Initial Rehabilitation and Repairs						
(6) New Bldgs., Improvements, etc.						
(7) Miscellaneous:						
Repairs to Equipment						
Sampling and Analysis	4.00	61.00	65.00			
Payroll Taxes						
Liability Insurance						
Core Boxes	41.40	351.00	392.40			
(8) Contingencies (specify):						
TOTALS	4208.36	35,289.77	39,498.13	4208.36	35,289.77	39,498.13

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:
$2,104.18
Signature [signature]
(Authorized Certifying Officer)
Date NOV 24 1958 Vou. No. 59
(See other side)

2,104.18

(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. IdmE1174 in accordance with the terms of the contract.

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

APPROVAL BY DMEA EXECUTIVE OFFICER OR ALTERNATE:

Signature Robert A. Lawrence Title EXECUTIVE OFFICER OME 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.

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION

RECEIVED NOV 26 1958 O.M.E.

OPERATOR'S UNIT COST AND PROGRESS REPORT

Month of October 1958 Docket No. DMEA 4850 Contract No. Idm E 1174
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 BX	Ft.	61.00	20	1,253.55	411	3.05	1,000	3.05
Churn 0-1000 AX	"	3,558.50	1294	34,567.50	12,570	2.75	29,000	2.75
Auger 0-1000 EX	"	-	-	-	-			2.50
Stripping 1000 + AX	"	237.00	79	339.00	113	3.00	5,000	3.00
Trenching Assays	Ea.	4.00	4	65.00	65	1.00	200	1.00
Test Pits Core Boxes	"	41.40	23	392.40	218	1.80	600	1.80
Roads and Trails								
Tech. Serv.	Ft.	306.46	1393	2,880.68	13,094	0.22	35,000	0.22
Total Distributed Costs		4,208.36		39,498.13				Total Costs Authorized by Contract
Operating Equipment Purchased								
Initial Rehabilitation and Repairs								
New Buildings, Improvements, etc.								
Total Costs		4,208.36		39,498.13				

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 LW-69 LW-70

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

(Instructions on reverse)

(For Government use only)

[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

Little War Creek Area DMEA 4850

Contract Idm E 1174 (Zinc)

One drill operated on this project during the month and completed two holes for a total of 1393'. The accompanying map, AX-TENN-B-1310 shows these holes in green.

Hole LW-69 - James Brewer property

Coordinates: 745,644.88 N; 798,948.63 E
Elevation: 1605.64

Results:

0- 42 - - Clay
42- 732 - - Mascot dolomite
732 - - Chert Matrix
732- 951 - - Upper Kingsport dolomite
951 - - TR
951-1079 - - (Bottom) Silicified lower Kingsport dolomite
100% dolomite and silica in R & S beds

Hole LW-70 - Lewis Tunmire property

Coordinates: 746,333.29 N; 794,752.17 E
Elevations: 1616.32

Results:

0-108 - - Clay
108-188 - - Lower Kingsport dolomite
188-191 - - 3' - 1.02% zinc 3'
191-196 - - 4' - 3.49% zinc 5'
196-201 - - 5' - 3.35% zinc 5'
201-207 - - 5' - 3.61% zinc 6'

188-207 - 19' - 3.10% zinc

207-294 - - Lower Kingsport dolomite
294-314 - - (Bottom) Longview dolomite
100% dolomite in R & S beds

THE NEW JERSEY ZINC COMPANY JEFFERSON CITY , TENNESSEE	DRAWN R.E.F. DATE 9-23-57 TRACED SCALE 1"=660'	COPPER RIDGE BELT SECTOR II AREA F	LITTLE WAR CREEK FILE NO. AX-TENN B-1310

OFFICIAL FILE COPY
O. M. E.
RECEIVED NOV 26 1958

DATE	INITIALS	CODE

OFFICIAL FILE COPY
O. M. E.
RECEIVED NOV 7 1958
CODE
11-7 C 220
" 110
11/10 800
11/12 500

DMEA EXPLORATION PROJECT

INTERIM REPORT

DMEA-4850, Idm-E1174 - Zinc

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

Location: Little War Creek Area, Hancock County, Tennessee

Summary of Drilling Completed

	Since last inspection	To Date
Number of holes	1	16
Footage	1079	12,780

Holes showing:

a)	Commercial zinc ore	2
b)	Non-commercial mineralization	13
c)	No zinc mineralization	1

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

Hole No. LW-69.--Located 200 feet down dip from LW-61. Coordinates N745,644.88, E798, 948.63, elevation at collar of hole 1605.64. Drilling began September 23, 1958 and was completed October 20, 1958. Brief log of hole: 0-42 feet overburden, collared in Mascot formation; chert matrix at 732; top of "R" bed at 951; hole bottomed at 1079 feet. No mineralization was encountered in this hole and it is the first hole drilled to date that has been completely blank of mineralization.

Current drilling is in progress on LW-70 located on Lewis Turnmire property. The drilling is in overburden at the present depth of 108 feet. The estimated total depth of this hole is 600 feet.

Inspected: October 28, 1958

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

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

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O. M. E.
RECEIVED OCT 20 1958

DATE	INITIALS	CODE
10/20	C	220
		110
10/21		800
		~~500~~

DMEA EXPLORATION PROJECT

INTERIM REPORT

DMEA-4850, Idm-E1174 - Zinc

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

Location: Little War Creek Area, Hancock County, Tennessee

Summary of Drilling Completed

	Since last inspection	To Date
Number of holes	2	15
Footage	1798	11,701

Holes showing:

a)	Commercial zinc ore	2
b)	Non-commercial zinc mineralization	13
c)	No zinc mineralization	0

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

Hole No. LW-67.--M. C. Tummire property. Depth 1028 feet. Located 400 feet east of LW-54. Coordinates N745,681.70, E800,238.75; collar elevation 1509.5 feet. Drilling began August 27, 1958 and was completed September 11, 1958. Brief log of hole: 0-10 feet overburden, collared in Mascot formation; top of Kingsport (CM) at 696; top of "R" bed at 850; "E" bed from 873 to 875; "T" bed from 1006 to 1010; hole bottomed at 1028.

Mineralization.--Scattered shines of sphalerite at 807 feet.

Hole No. LW-68.--Located 200 feet on strike from LW-56. Depth 770 feet. Coordinates N746,035.21, E799,772.17; elevation at collar 1584.87 feet. Drilling started September 12, 1958 and was completed September 22, 1958. Brief log of hole: 0-10 feet overburden, collared in Mascot formation; top of Kingsport (CM) at 420; brown oolitic marker at 470; U-255 bed(?) at 521; top of "R" bed at 602; "T" bed from 762 to 766; hole bottomed at 770 feet. Material is 66 % dolomite from top of "R" bed to supposed position of "S" bed.

Mineralization.--Shine of sphalerite at 453; traces of sphalerite at 464, 469 and 493; scattered traces from 508 to 522; shine at 533; traces at 563, 569 and 622. Runs: 7' (501-508) of estimated 1½% zinc.

Current drilling is in progress on Hole No. LW-69, located 200 feet down dip from LW-61. Core was observed to a depth of 850 feet. No mineralization has been encountered to date.

Mr. V. J. Lynch accompanied the Field Examiners on the field inspection.

Inspected: October 8, 1958

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

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

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

RECEIVED O.M.E.

Budget Bureau No. 40-R1036.5

PAID ON VOUCHER & SCHEDULE OF PAYMENTS K-

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

Month of September, 1958 Docket No. DMEA 4850 Contract No. Idm E 1174
Operator's Name The New Jersey Zinc Company Minerals Zinc
Address Jefferson City, Tennessee
Contract Amount, $ 106,780.00 Government Participation: 50% Amount, $ 53,390.00

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	4967.70	27,335.85	32,303.55	WPK		
Bulldozing						
Crosscutting						
Drifting						
(2) Labor and Supervision:						
Labor						
Supervision	395.56	2,178.66	2,574.22			
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	-	61.00	61.00			
Payroll Taxes						
Liability Insurance						
Core Boxes	54.00	297.00	351.00			
(8) Contingencies (specify):						
TOTALS	5417.26	29,872.51	35,289.77	54172	29,872.51	35,289.77

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:

$ 270863

Signature Peter R. Miller
(Authorized Certifying Officer)

Date OCT 17 1958 Vou. No. 49

(See other side)

6

270863

(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 1174 in accordance with the terms of the contract.

Signature Lawrence E. Shurley 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 September 1958 Docket No. DMEA 4850 Contract No. Idm E 1174

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 BX	Ft.	164.70	54	1,192.55	391	3.05	1,000	3.05
Churn 0-1000 AX	"	4719.00	1716	31,009.00	11,276	2.75	29,000	2.75
Auger 0-1000 EX	"							2.50
Stripping 1000 & AX	"	84.00	28	102.00	34	3.00	5,000	3.00
Trenching Assays	Ea.	-	-	61.00	61	1.00	200	1.00
Test Pit Core Boxes	"	54.00	30	351.00	195	1.80	600	1.80
Roads and Trails								
Tech. Serv.	Ft.	395.56	1798	2,574.22	11,701	0.22	35,000	0.22
TOTAL DISTRIBUTED COSTS		5417.26		35,289.77				TOTAL COSTS AUTHORIZED BY CONTRACT
Operating Equipment Purchased								
Initial Rehabilitation and Repairs								
New Buildings, Improvements, etc.								
TOTAL COSTS		5417.26		35,289.77				

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 LW-67 LW-68

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

(Instructions on reverse)

(For Government use only)

[signature]
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 September 1958

Little War Creek Area DMEA 4850

Contract Idm E 1174 (Zinc)

One drill operated on this project during the month and completed two holes for a total of 1798. The accompanying map, AX-TENN-1309 shows these holes in green.

Hole LW-67 - M. C. Tunmire property

Coordinates: 745,681.70 N; 800,238.75 E
Elevation: 1509.50

Results:

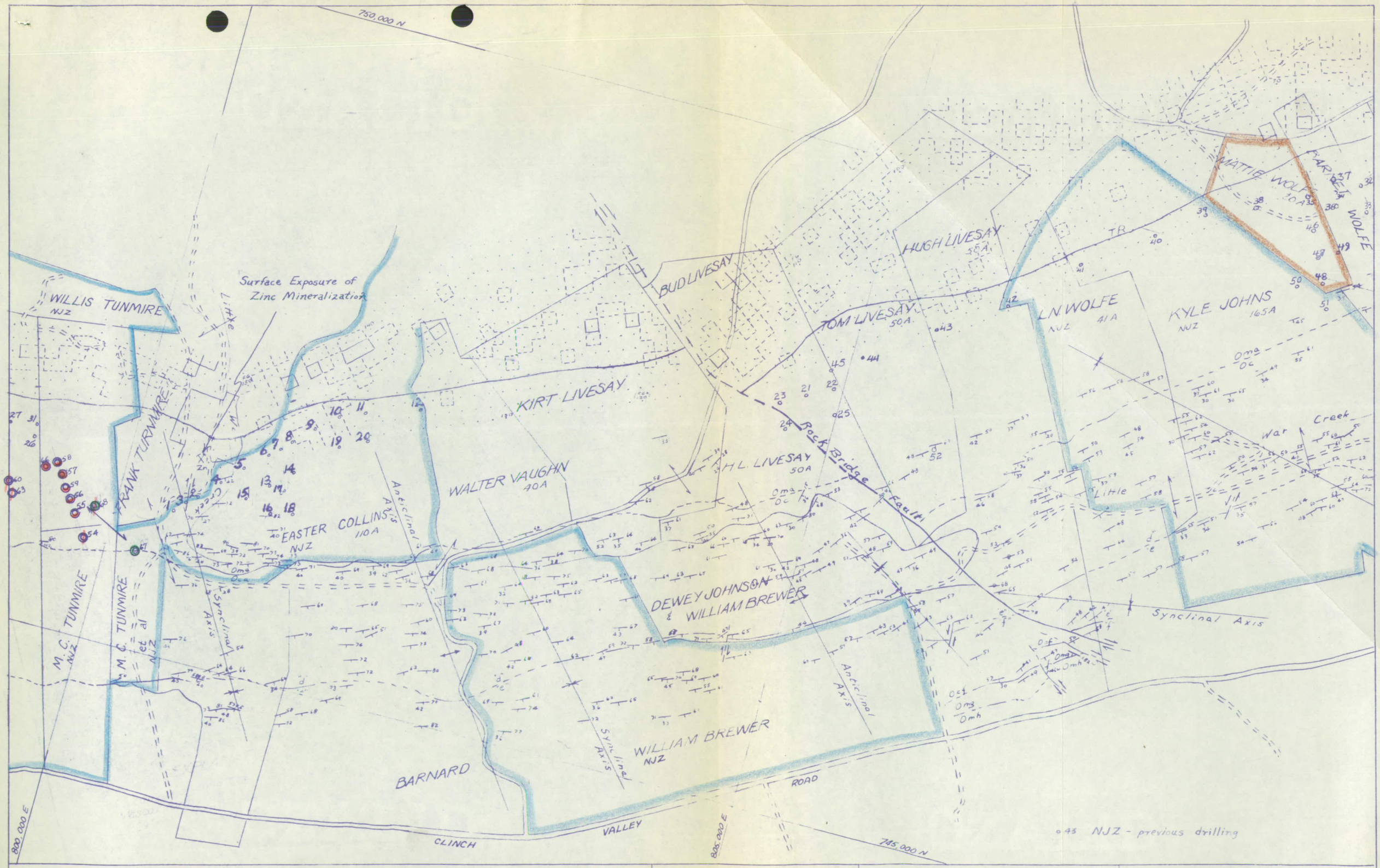
0- 10	- - Clay
10- 696	- - Mascot dolomite
696	- - Chert Matrix
696- 850	- - Upper Kingsport dolomite Trace sphalerite 807
850	- - TR
850-1006	- - Lower Kingsport limestone and dolomite
1006-1028	- - (Bottom) Longview limestone and dolomite R & S beds 45% dolomite

Hole LW-68 - M. C. Tunmire property

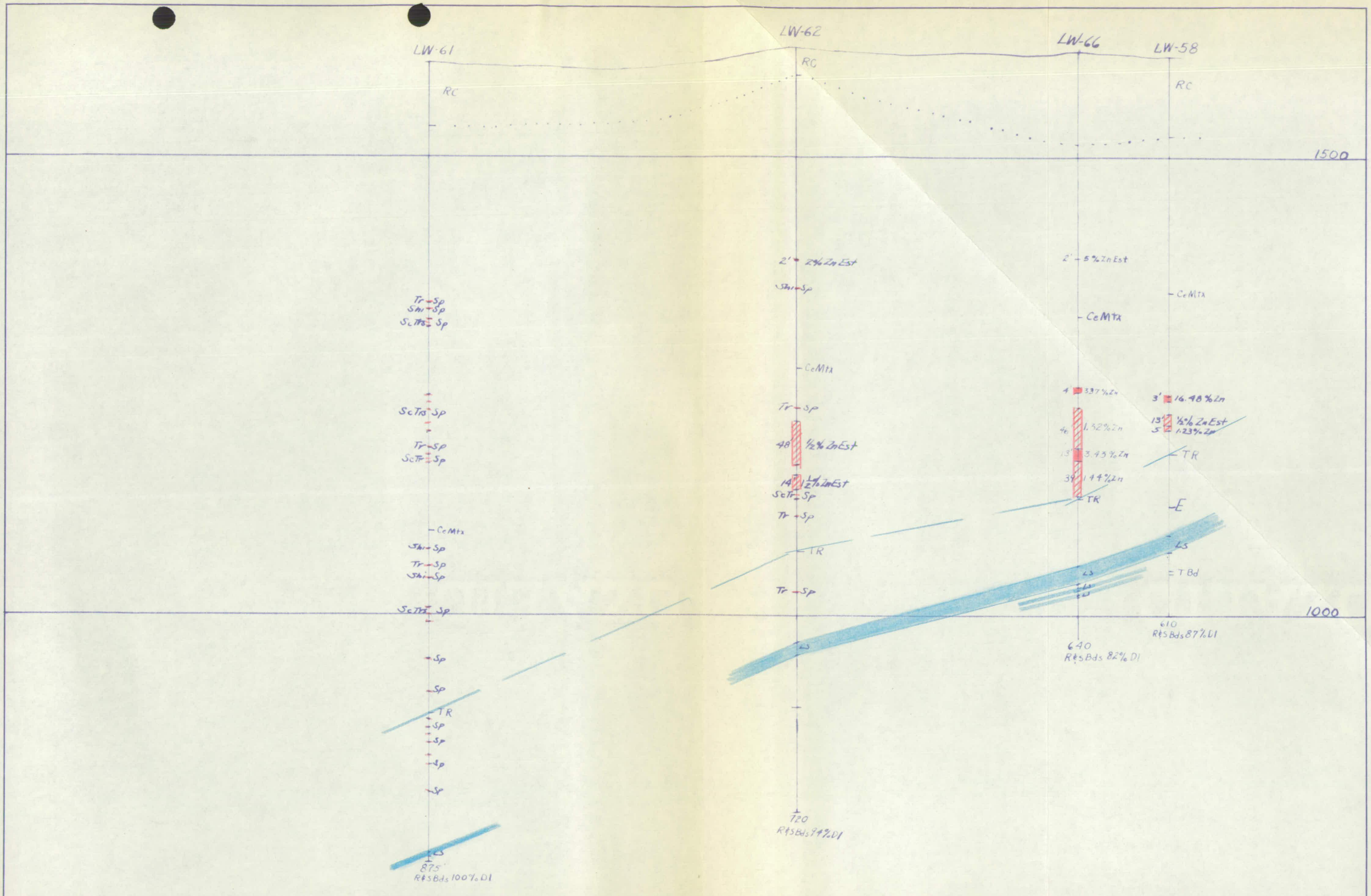
Coordinates: 746,035.21 N; 799,772.17 E
Elevation: 1584.87

Results:

0- 10	- - Clay
10-420	- - Mascot dolomite
420	- - Chert Matrix
420-501	- - Upper Kingsport dolomite Scattered traces of sphalerite 453-493
501-508	- - Estimated 1-1½% zinc
508-602	- - Upper Kingsport dolomite Scattered traces of sphalerite 508-569
602	- - TR
602-762	- - Lower Kingsport limestone and dolomite
762-770	- - (Bottom) Longview dolomite R & S beds 66% dolomite



THE NEW JERSEY ZINC COMPANY JEFFERSON CITY, TENNESSEE	DRAWN R.E.F. DATE 9-23-57 TRACED SCALE 1" = 660'	COPPER RIDGE BELT SECTOR II AREA F	LITTLE WAR CREEK FILE NO. AX-TENN B-1309



SERIAL NUMBER		DATE ISSUED		REFERENCE DRAWINGS	REVISIONS	THE NEW JERSEY ZINC COMPANY JEFFERSON CITY, TENNESSEE	DRAWN EWR TRACED CHECKED APPROVED	LONGITUDINAL SECTION LW58,60,61,66, SECTOR II AREA F COPPER RIDGE BELT	DATE 8-19-58 SCALE 1" = 100' AX TENN B-1390

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.

X5453B 1M 11-54

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

OPERATOR'S MONTHLY REPORT AND VOUCHER

Month of August 8 195 Docket No. DMEA 4850 Contract No. Idm E 1174
Operator's Name The New Jersey Zinc Company Minerals Zinc
Address Jefferson City, Tennessee
Contract Amount, $ 106,780.00 Government Participation: 50 % Amount, $ 53,390.00

ITEMS OF COSTS	FOR OPERATOR'S USE: Monthly Total	Totals Previously Reported	Totals To Date	FOR GOVERNMENT USE ONLY: Approved Monthly Total	Approved Totals Previously Reported	Approved Totals To Date
(1) Independent Short Form Contracts:						
Drilling	10,073.80	17,262.05	27,335.85	10/14/58		
Bulldozing						
Crosscutting						
Drifting						
(2) Labor and Supervision:						
Labor	804.32	1,374.34	2,178.66			
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	23.00	38.00	61.00			
Payroll Taxes						
Liability Insurance						
Core Boxes	109.80	187.20	297.00			
(8) Contingencies (specify):						
TOTALS	11,010.92	18,861.59	29,872.51	11010.92	18861.59	29872.51

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

Date 9-1-58 *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:

$ 5505.46

Signature [signature]
(Authorized Certifying Officer)

Date SEP 26 1958 Vou. No. 37

(See other side)

5

5505.46

(For Government use only)

CERTIFICATION BY GOVERNMENT REPRESENTATIVE:

I certify that to the best of my knowledge and belief the contractor submitting this voucher is operating a Defense Minerals Exploration Administration project under Contract No. E-1174 in accordance with the terms of the contract.

Signature [signature] Title MINING ENGINEER U. S. BUREAU OF MINES Date SEP 25 1958

APPROVAL BY DMEA EXECUTIVE OFFICER OR ALTERNATE:

Signature Robert A. Lawrence Title EXECUTIVE OFFICER OME FIELD TEAM REGION V Date SEP 25 1958

MONTHLY REPORT OF OPERATOR

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

Form MF-104A
(April 1952)

Budget Bureau No. 42-R1151.2

RECEIVED SEP 29 1958 D.M.E.A.

UNITED STATES
DEPARTMENT OF THE INTERIOR

DEFENSE MINERALS EXPLORATION ADMINISTRATION

OPERATOR'S UNIT COST AND PROGRESS REPORT

Month of August 1958 Docket No. DMEA 4850 Contract No. Idm E 1174

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 BX	Ft.	201.30	66	1,027.85	337	3.05	1,000	3.05
Chum 0-1000 AX	"	9,872.50	3590	26,290.00	9560	2.75	29,000	2.75
Auger 0-1000 EX	"							2.50
Stripping 1000 + AX	"	-	-	18.00	6	3.00	5,000	3.00
Trenching Assays	Ea.	23.00	23	61.00	61	1.00	200	1.00
Test Pits Core Boxes	"	109.80	61	297.00	165	1.80	600	1.80
Roads and Trails								
Tech. Serv.	Ft.	804.32	3656	2,178.66	9903	0.22	35,000	0.22
TOTAL DISTRIBUTED COSTS		11,010.92		29,872.51				TOTAL COSTS AUTHORIZED BY CONTRACT
Operating Equipment Purchased								
Initial Rehabilitation and Repairs								
New Buildings, Improvements, etc.								
TOTAL COSTS		11,010.92		29,872.51				

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

Date 9-1-58 Operator The New Jersey Zinc Co.

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

REMARKS: This report covers holes LW-61
63
64
65
66

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

(Instructions on reverse)

(For Government use only)

[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 August 1958

Little War Creek Area DMEA 4350

Contract Idm E 1174 (Zinc)

Two drills operated on this project during the month and completed five holes for a total of 3656'. The accompanying maps AX-TENN-1309 and 1310 show these holes in green.

Hole LW-61 - James Brewer property
430' S 79° W from hole LW-60

Coordinates: 745,889.58 N; 798,781.65 E
Elevation: 1605.29

Results:

0- 69	Clay
69-510	Mascot dolomite. Scattered traces of sphalerite 265-435
510	Chert Matrix
510-709	Upper Kingsport dolomite Scattered traces of sphalerite 531-684
709	TR
709-875	(Bottom) Lower Kingsport dolomite Scattered 715-811. 100% dolomite in R & S beds

Hole LW-63 - James Brewer property

Coordinates: 745,969.77 N; 799,193.03 E
Elevation: 1609.62

0- 51	Clay
51-507	Mascot dolomite. Shines of sphalerite 261,277,301,364
507	Chert Matrix
507-737	Upper Kingsport dolomite
737	TR
737-885	(Bottom) Lower Kingsport limestone and dolomite. 91% dolomite in R & S beds

Hole LW-64 - James Brewer property - 200' updip from LW-61

Coordinates: 746,048.88 N; 798,655.23 E
Elevation: 1618.60

Results:

0- 40	Clay
40-328	Mascot dolomite. Scattered shines and traces of sphalerite 72,106-117, 255-256
328	Chert Matrix
328-534	Upper Kingsport dolomite
534	TR ?

534-676 - - (Bottom) Lower Kingsport limestone
and dolomite
61% dolomite in R & S beds

Hole LW-65 - James Brewer property - 200' updip from LW-64

Coordinates: 746,215.36 N; 798,549.47 E
Elevation: 1683.85

Results:

0- 91	- -	Clay
91-247	- -	Mascot dolomite. Rare scattered traces of sphalerite 120-157
247-	-	Chert Matrix
247-423	- -	Upper Kingsport dolomite
423	- -	TR ?
423-580	- -	(Bottom) Lower Kingsport dolomite 100% dolomite in R &S beds

Hole LW-66 - M. C. Tunmire property - 100' S 66° W from LW-58

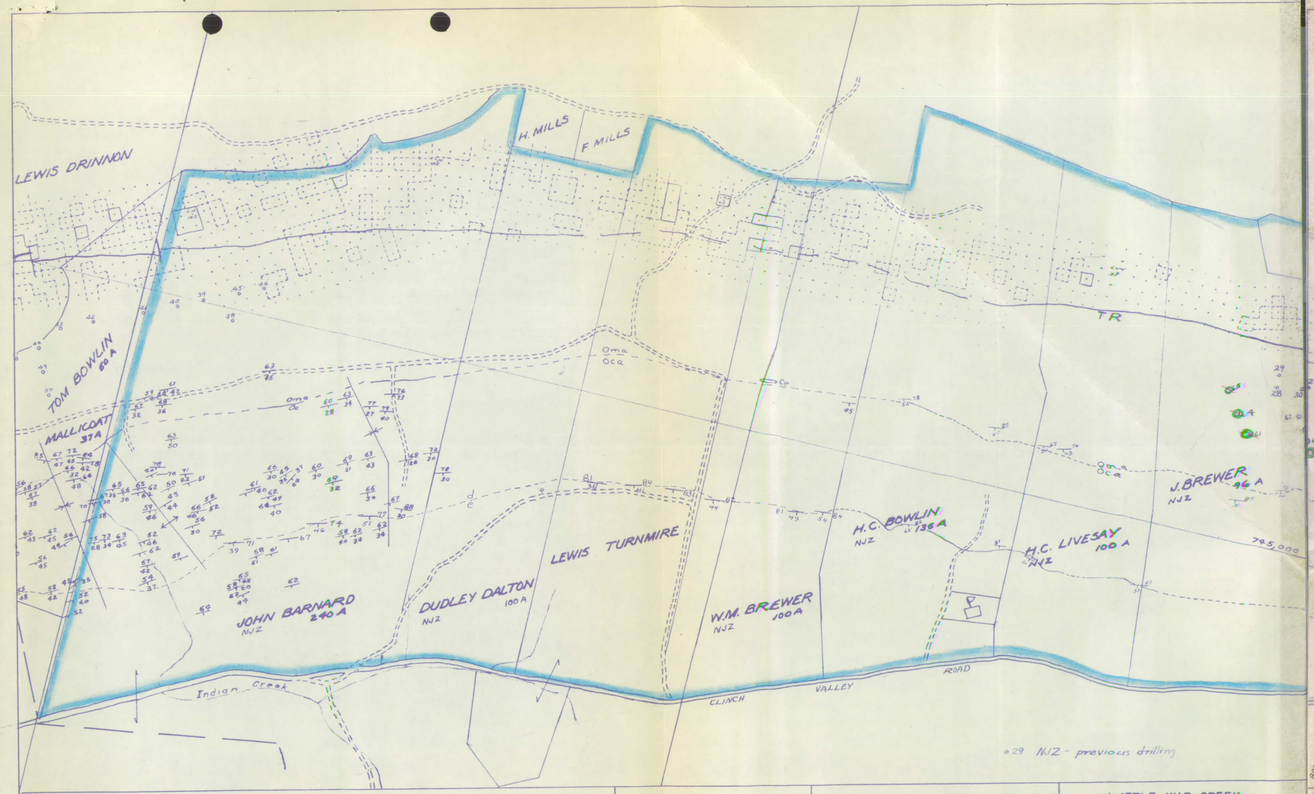
Coordinates: 746,194.53 N; 799,414.89 E
Elevation: 1616.48'

Results:

0- 100	- -	Clay
100- 287	- -	Mascot dolomite 223-225 -2' estimated at 5% zinc
287	- -	Chert Matrix
287- 366	- -	Upper Kingsport dolomite
366- 370	- -	4' - 3.37% zinc
370- 387	- -	Scattered traces of sphalerite
387- 433	- -	46' of 1.32% zinc
433- 446	- -	13' of 3.43% zinc
446- 485	- -	39' of 1.44% zinc
387- 485	- -	98' of 1.65% zinc as detailed below

387-391	- -	2.39
391-397	- -	0.17
397-403	- -	2.31
403-406	- -	0.25
406-411	- -	2.08
411-416	- -	2.50
416-420	- -	0.50
420-425	- -	0.48
425-433	- -	1.00
433-438	- -	4.65
438-443	- -	3.09
443-446	- -	1.98
446-451	- -	0.15
451-454	- -	1.12
454-458	- -	Tr
458-461	- -	2.50

461-464 - - 1.18
464-468 - - Tr
468-473 - - 2.70
473-477 - - 3.20
477-480 - - 0.90
480-485 - - 2.40
485-487 - - - Upper Kingsport dolomite
487 - - - TR
487-640 - - - (Bottom) Lower Kingsport limestone and dolomite.
82% dolomite in R & S beds.



THE NEW JERSEY ZINC COMPANY
JEFFERSON CITY, TENNESSEE

DRAWN R.E.F.	DATE 9-23-57	COPPER RIDGE BELT	LITTLE WAR CREEK
TRACED	SCALE 1"=660'	SECTOR II AREA F	FILE NO. AX-TENN B-1310

THE NEW JERSEY ZINC COMPANY
JEFFERSON CITY, TENNESSEE

DRAWN R.E.F.	DATE 9-23-57	COPPER RIDGE BELT	LITTLE WAR CREEK
TRACED	SCALE 1"=660'	SECTOR II AREA F	FILE NO. AX-TENN B-1309

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DMEA
RECEIVED SEP 29 1958

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DMEA EXPLORATION PROJECT

INTERIM REPORT

DMEA-4850, Idm-E1174-Zinc

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

Location: Little War Creek Area, Hancock County, Tennessee

Summary of Drilling Completed

	Since last inspection	To date
Number of holes	4	13
Footage	2781	9903

Holes showing:

a) Commercial zinc ore	2
b) Non-commercial zinc mineralization	11
c) No zinc mineralization	0

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

Hole No. LW-63- Located approximately 415 feet southwest of LW-59, J. Brewer property. Coordinates N745,887.92, E799,252.38; elevation 1587.00 feet. Drilling began 7/31/58 and was completed 8/15/58. Brief log of hole: 0-51 feet overburden, collared in Mascot fm; top of Kingsport (CM) at 507 feet; top of "R" bed at 737, hole bottomed at 885 ft; Faulting observed at 341, 445(57°) feet; from 551 to 552 ft; and from 580 to 582 (55°). All were high angle faults.

Mineralization: Shines of sphalerite at 261,277, from 301 to 302, and a trace of sphalerite in chert at 364 feet.

Hole No. LW-64- Located 100 feet up-dip from LW-61, J. Brewer property. Coordinates: N746,048.88, E798,655.23; elevation 1619 ft. Drilling began 8/2/58 and was completed 8/14/58. Brief log of hole: 0-40 feet overburden, collared in Mascot fm; top of Kingsport (CM) (?) at 328; top of "R" bed (?) at 534; "T" bed at 674; hole bottomed at 676 ft; faulting observed from 137 to 138, 349 to 350, 365 to 371, 382-385 and from 397 to 417.

Mineralization: Shines of sphalerite at 72 ft; traces of sphalerite at 106, shine at 108, traces at 117, and from 255 to 256 feet.

Hole No. LW-65, Located 200 feet up-dip from LW-64, J. Brewer property. Coordinates and collar elevation not available. Drilling began 8/16/58 and was completed 8/26/58. Brief log of hole: 0-91 ft. overburden, collared in Mascot fm; top of Kingsport fm (CM) at 247; top of "R" bed at 423 ft; hole bottomed at 580 ft. Faulting observed from 330 to 350 and at 540.

Mineralization: Traces of sphalerite at 120, 138, 154 and 157 ft.

Hole No. LW-66. Located 100 ft S66°W from LW-58, M.C. Tunmire property. Coordinates and collar elevation not available. Drilling began 8/18/58 and was completed 8/25/58. Brief log of hole: 0-100 overburden, collared in Mascot fm; top of Kingsport (CM) at 287; top of "R" at 487; hole bottomed at 640 ft. Faulting observed as mylonite from 148 to 154 ft.

Mineralization:

5	ft	(220-225)	Est. 5% Zn.
4	"	(366-370)	3.37% Zn
17	"	(370-387)	Traces of sphalterite
46	"	(387-433)	1.22% Zn
10	"	(433-443)	3.87% Zn
8	"	(443-451)	1.06% Zn
17	"	(451-468)	Est. 2% Zn
9	"	(468-477)	Est. 4% Zn
8	"	(477-485)	Est. 2% Zn

One core drill is now operating on the property. Hole LW-67 is currently being drilled and is located 400 feet east of LW-54 on M. C. Tunmire property. Core from this hole has been examined to a depth of 797 feet; total estimated depth is 1040 feet.

Inspected: Sept. 8, 1958

L. E. Shirley, Mining Engineer
Bureau of Mines

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 AUG 18 1958 D.M.E.A.

PAID ON VOUCHER & SCHEDULE OF PAYMENTS K-10

OPERATOR'S MONTHLY REPORT AND VOUCHER

Month of July 8 195 Docket No. DMEA 4850 Contract No. Idm E 1174
Operator's Name The New Jersey Zinc Company Minerals Zinc
Address Jefferson City, Tennessee
Contract Amount, $ 106,780.00 Government Participation: 50 % Amount, $ 53,390.00

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:	4,264.05	12,998.00	17,262.05	8/26/58		
Drilling						
Bulldozing						
Crosscutting						
Drifting						
(2) Labor and Supervision:						
Labor	339.90	1,034.44	1,374.34			
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	2.00	36.00	38.00			
Payroll Taxes						
Liability Insurance						
Core Boxes	46.80	140.40	187.20			
(8) Contingencies (specify):						
TOTALS	4,652.75	14,208.84	18,861.59	4,652.75	14,208.84	18,861.59

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

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

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

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

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

(Instructions on reverse)

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

$ 2326.37 ~~1,326.37~~

Signature Helen R. Mueller
(Authorized Certifying Officer)

Date AUG 15 1958 Vou. No.
(See other side)

432638

(For Government use only)

CERTIFICATION BY GOVERNMENT REPRESENTATIVE:

I certify that to the best of my knowledge and belief the contractor submitting this voucher is operating a Defense Minerals Exploration Administration project under Contract No. IdmE 1174 in accordance with the terms of the contract.

Signature Sherwood H. Amos Title GEOLOGIST, U. S. G. S. Date AUG 14 1958

APPROVAL BY DMEA EXECUTIVE OFFICER OR ALTERNATE:

Signature Robert A. Lawrence Title EXECUTIVE OFFICER DMEA REGION V Date AUG 14 1958

MONTHLY REPORT OF OPERATOR

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

Form MF-104A
(April 1952)

Budget Bureau No. 42-R1151.2

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION

RECEIVED AUG 18 1958 D.M.E.A.

OPERATOR'S UNIT COST AND PROGRESS REPORT

Month of July 1958 Docket No. DMEA 4850 Contract No. Idm E 1174

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 BX	Ft.	155.55	51	826.55	271	3.05	1,000	3.05
Churn 0-1000 AX	"	4,108.50	1494	16,417.50	5,970	2.75	29,000	2.75
Auger 0-1000-FX	"							2.50
1000 ↓ AX	"			18.00	6	3.00	5,000	3.00
Stripping								
Trenching								
Test Pits Assays	Ea.	2.00	2	38.00	38	1.00	200	1.00
Core Boxes	"	46.80	26	187.20	104	1.80	600	1.80
Roads and Trails								
Sup. & Tech.Serv.	Ft.	339.90	1545	1,374.34	6,247	0.22	35,000	0.22
TOTAL DISTRIBUTED COSTS		4,652.75		18,861.59				TOTAL COSTS AUTHORIZED BY CONTRACT
Operating Equipment Purchased								
Initial Rehabilitation and Repairs								
New Buildings, Improvements, etc.								
TOTAL COSTS		4,652.75		18,861.59				

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

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

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

REMARKS: This report covers holes LW-60 L"-62

2 Assays this month reported late from LW-59

(Instructions on reverse)

(For Government use only)

Henry H. Amos

GEOLOGIST, U. S. G. S.

AUG 14 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 July 1958

Little War Creek Area DMEA 4350

Contract Idm E 1174 (Zinc)

Two drills operated on this project during the month and completed two holes. The accompanying map, AX-TENN-B-95 shows these holes in green.

Hole LW-60 - J. Brewer property - 405' S 71°W from LW-57

Coordinates: 745,969.77 N; 799,193.03 E
Elevation: 1609.62

Results:

0- 55	Clay
55-304	Mascot dolomite
304-312	8' estimated @ 2% zinc
312-445	Mascot dolomite. Scattered traces sphalerite 344-375
445	Chert Matrix
445-653	Upper Kingsport dolomite Scattered shines of sphalerite 450-566
653	TR
653-799	Lower Kingsport
799-825	(Bottom) Longview dolomite 100% dolomite in R & S beds

Hole LW-62 - J. Brewer property - 100' N 33°W from LW-60

Coordinates: 745,054.19 N; 799,134.52 E
Elevation: 1618.57

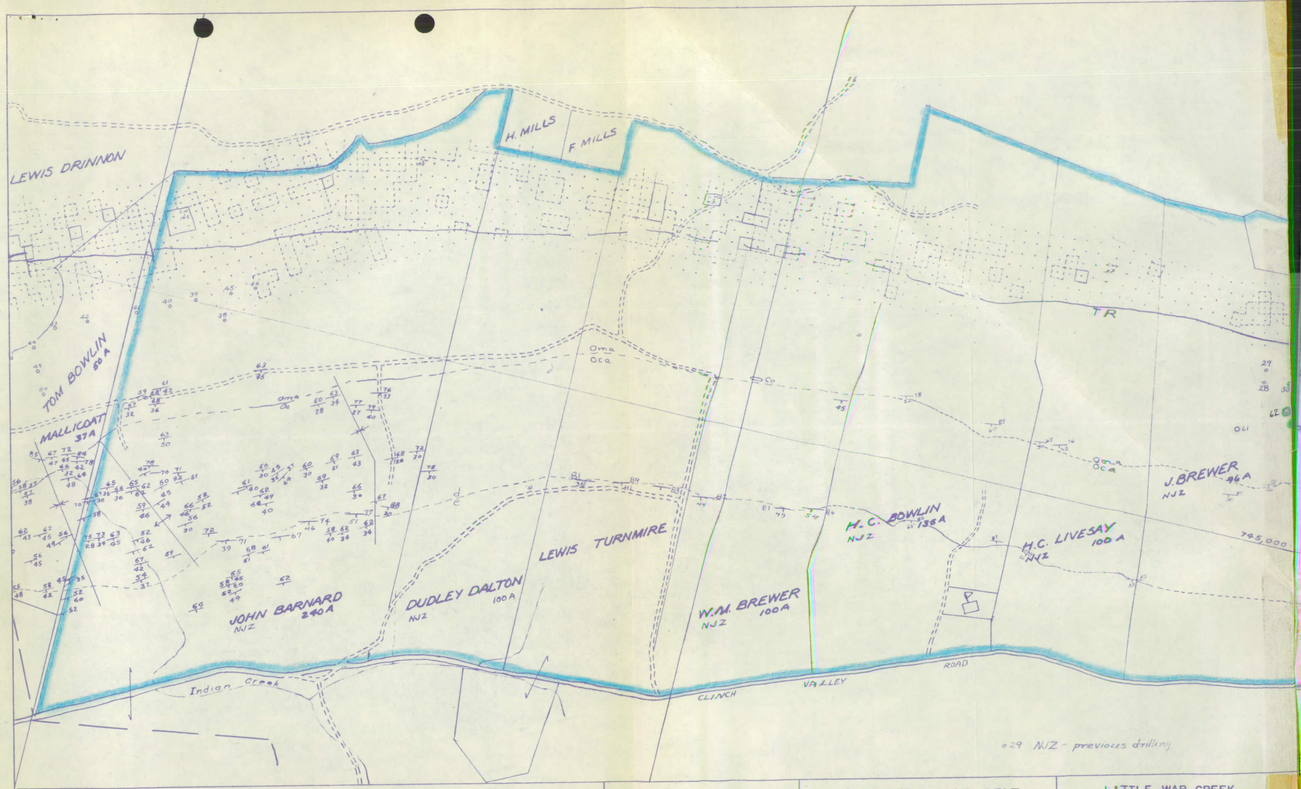
Results:

0- 21	Clay
29-351	Mascot dolomite. Sphalerite estimated at 2% zinc 231-233. Shine sphalerite 264
351	Chert Matrix
351-551	Upper Kingsport dolomite. Scattered traces of sphalerite 393-511
551	TR
551-720	(Bottom) Lower Kingsport dolomite and limestone. 94% dolomite in R & S beds

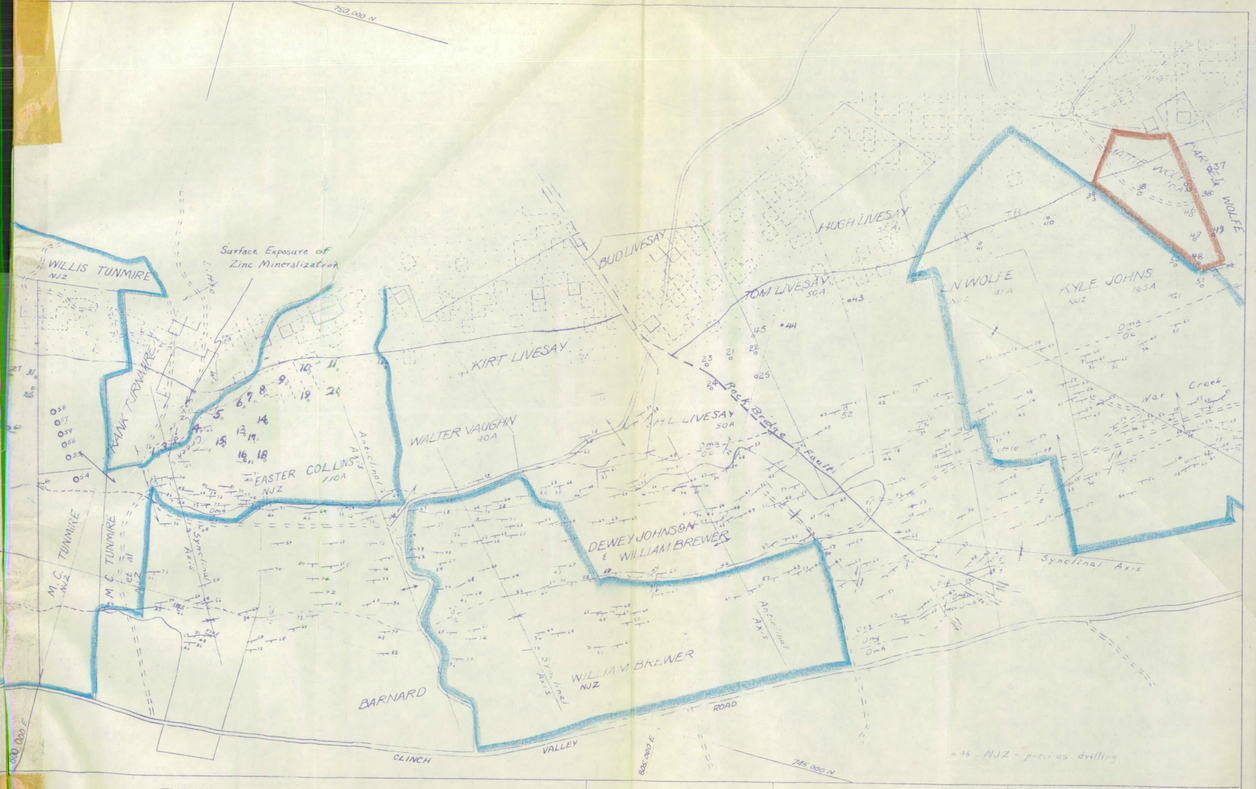
Note: Two samples from LW-59 were split and assayed. They are as follows:

LW-59

543-544 - 1' core - 7.30% zinc
562-567 - 4½' core - 1.93% zinc



THE NEW JERSEY ZINC COMPANY JEFFERSON CITY, TENNESSEE	DRAWN R.E.F. DATE 9-23-57 TRACED SCALE 1"=660'	COPPER RIDGE BELT SECTOR II AREA F	LITTLE WAR CREEK FILE NO. AX-TENN B-1310



THE NEW JERSEY ZINC COMPANY JEFFERSON CITY, TENNESSEE	DRAWN R.E.F. DATE 9-23-57 TRACED SCALE 1"=660'	COPPER RIDGE BELT SECTOR II AREA F	LITTLE WAR CREEK FILE NO. AX-TENN B-1309

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DMEA EXPLORATION PROJECT

INTERIM REPORT

DMEA-4850, Idm-E1174 (zinc)

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

Location: Little War Creek Area, Hancock County, Tennessee

Summary of drilling completed

	Since last inspection	To date
Number of holes	3	9
Footage	2420	7,122

Holes Showing:

(a)	Commercial zinc ore	1
(b)	Non-Commercial zinc ore	8
(c)	No zinc mineralization	0

Additional data on the three holes completed during the Interim follows:

Hole No. LW-60- Located 415 feet S 71°W of LW-57, J. Brewer Property. Depth 825 feet. Coordinates N745,969.77, E 799,193.03; elevation 1609.62 feet. Drilling began 6/28/58 and was completed 7/21/58. Brief log of hole: 0-55 ft overburden; collared in Mascot fm; top of Kingsport (CM) at 445; top of "R" bed at 653; "T" bed from 799-to 803 ft; hole bottomed at 825 ft. Mineralization: 1 ft (304-305 ft.) est. 6% Zn; 4 ft. (308-312 ft.) est. 2½% Zn; scattered traces of sphalterite from 344 to 376 ft; 5 ft (352-357 ft) est. 1 3/4 % Zn; traces of zinc at 450; scattered shines of Zn from 479 to 491, 526 to 533 and 561 to 566 feet.

Hole LW-61 - Located 800 feet west of LW-59, J. Brewer Property. Depth 875 feet. Coordinates N745,889.58, E 798,781.65; Elevation 1605 feet. Drilling began 7/17/58 and was completed 8/2/58. Brief log of hole: 0-69 feet overburden; collared in Mascot fm; top of Kingsport (CM) at 510 feet; top of "R" bed at 709 feet; "T" bed from 848 to 852 feet. Hole bottomed at 875 feet. Mineralization: Traces of sphalerite from 265 to 297, 356 to 373, 403 to 435, at 531, 550, and 563 feet. Scattered traces of sphalerite from 597 to 610 feet; Traces at 651 and 684 feet. Scattered traces at 715 and from 723 to 742 feet; trace at 792 feet. Pyrite is scattered throughout the above mineralized sections.

Hole LW-62 - Located 100 ft. up-dip from LW-60, J. Brewer Property. Depth 720 feet. Coordinates N 746,054.19 E 799,134.52; elevation 1619 feet. Drilling began 7/21/58 and was completed 7/30/58. Brief log of hole: 0-29 feet overburden, collared in Mascot fm; top of Kingsport (CM) at 351 feet; top of "R" bed at 551 feet; no "T" bed recognized; hole bottomed at 720 feet. Mineralization: 2 feet (231-233 feet) est. 2% Zn; 48 feet (408-456 feet) est. ½% Zn; 14 feet (466-480 feet) est. 1½% Zn; Shine of sphalerite at 264 feet; scattered traces of sphalerite from 393 to 405, 480 to 511 and at 595 feet.

Two core drills are presently in use on the J. Brewer property. Hole LW-63 and LW-64 are being drilled and core was examined to 767 feet and 563 feet respectively. Considerable faulting was noted in both holes.

Inspected: August 12, 1958.

L. E. Shirley, Mining Engr.
Bureau of Mines (DMEA)

D. H. Amos, Geologist
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-

OPERATOR'S MONTHLY REPORT AND VOUCHER

Month of June, 1958 Docket No. DMEA 4850 Contract No. Idm E 1174
Operator's Name The New Jersey Zinc Company Minerals Zinc
Address Jefferson City, Tennessee
Contract Amount, $106,780.00 Government Participation 50 % Amount, $53,390.00

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	5,520.50	7,477.50	12,998.00	8/15/58		
Bulldozing						
Crosscutting						
Drifting						
(2) Labor and Supervision:						
Labor						
Supervision	439.12	595.32	1,034.44			
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	30.00	6.00	36.00			
Payroll Taxes						
Liability Insurance						
Core Boxes	59.40	81.00	140.40			
(8) Contingencies (specify):						
TOTALS	6,049.02	8,159.82	14,208.84	6049.02	8159.82	14,208.84

I certify that the above bill is correct and just and that payment therefor has not been received.
Date 7/1/58 *Payee The New Jersey Zinc Company
Per [signature] Title Asst. to Gen. Supt.

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

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

(Instructions on reverse)

Pursuant to authority vested in me, I certify that this account is correct and proper for payment in the amount of: $ 3024.51

Signature [signature]
(Authorized Certifying Officer)

Date JUL 21 1958 Vou. No. 7
(See other side)

3

3024.51

(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-1174 in accordance with the terms of the contract.

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

APPROVAL BY DMEA EXECUTIVE OFFICER OR ALTERNATE:

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

MONTHLY REPORT OF OPERATOR

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

Form MF-104A
(April 1952)

Budget Bureau No. 42-R1151.2

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

Month of June 8 195 Docket No. DMEA 4850 Contract No. Idm E 1174

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 -1000 BX	Ft.	320.25	105	671.00	220	3.05	1,000	3.05
Drilling: Core -1000AX	"	5200.25	1891	12,309.00	4476	2.75	29,000	2.75
Churn -1000 EX	"		-					2.50
Auger 1000+AX	"			18.00	6	3.00	5,000	3.00
Stripping								
Trenching Assays	Ea.	30.00	30	36.00	36	1.00	200	1.00
Test Pits Core Boxes	"	59.40	33	140.40	78	1.80	600	1.80
Roads and Trails Sup.& Tech. Ser.	Ft.	439.12	1996	1,034.44	4702	0.22	35,000	0.22
Total Distributed Costs		6049.02		14,208.84				Total Costs Authorized by Contract
Operating Equipment Purchased								
Initial Rehabilitation and Repairs								
New Buildings, Improvements, etc.								
Total Costs		6049.02		14,208.84				

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

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

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

Remarks: This report covers drill holes LW-57, LW-58, LW-59

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

(Instructions on reverse)

(For Government use only)

[signature]

GEOLOGIST, U. S. G. S.

7/14/58

INSTRUCTIONS

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

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

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

GPO 872894

Repprt for June 1958

Little War Creek Area DMEA 4350

Contract Idm E 1174 (Zinc)

One drill operated on this project during the month and completed three holes. The accompanying map, AX-TENN-B 95, and section, AX-TENN C 1366, show the general detailed geologic relationships of all holes drilled on the project to date.

<u>Hole LW-57</u> - M. C. Tunmire property - 200' updip from LW-56

Coordinates: 746,149.37 N; 799,553.29 E
Elevation: 1600.21'

Results:

0- 76 - - Clay
76-327 - - Mascot dolomite. Shines of sphalerite 303-305
327 - - Chert Matrix
327-369 - - Upper Kingsport dolomite. Scattered shines of sphalerite
369-384 - - 15' mineralization averaging 1.35% Zn
384-422 - - 38' ore averaging 12.25% zinc
422-433 - - 11' - mineralization avg. 1.10% Zn
433-493 - - 60' - ore averaging 4.76% zinc
384-493 - 109' - ore averaging 7.01% zinc
493-505 - - 12' - mineralization avg. 1.14% Zn
369-374 - - 5' @ 3.38% Zn
374-379 - - 5' @ 0.20% Zn
379-384 - - 5' @ 0.50% Zn
384-389 - - 5' @ 3.25% Zn
389-394 - - 5' @ 4.65% Zn
394-399 - - 5' @ 17.50% Zn
38' @ 12.23% Zn 399-406 - - 7' (5' core) @ 15.80% Zn
406-411 - - 5' @ 17.75% Zn
411-416 - - 5' @ 13.40% Zn
416-419 - - 3' @ 10.40% Zn
419-422 - - 3' @ 13.40% Zn
422-427 - - 5' @ 1.05% Zn
11' @ 1.20% Zn 427-433 - - 6' @ 1.33% Zn
433-437 - - 4' @ 16.60% Zn
9' @ 11.71% Zn 437-442 - - 5' @ 7.81% Zn
442-446 - - 4' @ Tr
446-451 - - 5' @ 1.15% Zn
451-457 - - 6' @ 0.38% Zn
457-462 - - 5' @ 4.48% Zn
31' @ 5.09% Zn 462-468 - - 6' @ 7.41% Zn

126.14
15.80
151.94
20) 151.94
7.59 %

468-473 - - 5' @ 4.06% Zn
473-478 - - 5' @ 6.33% Zn
478-483 - - 5' @ 3.28% Zn
483-488 - - 5' @ 4.53% Zn
488-493 - - 5' @ 2.83% Zn
493-497 - - 4' @ 0.85% Zn
497-501 - - 4' @ 0.75% Zn
501-505 - - 4' @ 1.58% Zn
505-510 - - Upper Kingsport dolomite
510 - - TR marker
510-676 - - (Bottom) Lower Kingsport dolomite and limestone
R and S beds 68% dolomite

Comment: Hole LW-57 has made a penetration of ore that may be significant. Holes 100 feet up dip and down dip found non-commercial mineralization, and additional ore penetrations in the area are required to determine the importance of this discovery.

<u>Hole LW-58</u> - - M. C. Tunmire property - 100' updip from LW-57

Coordinates: 746,234.85 N; 799,498.88
Elevation: 1609.86

Results:

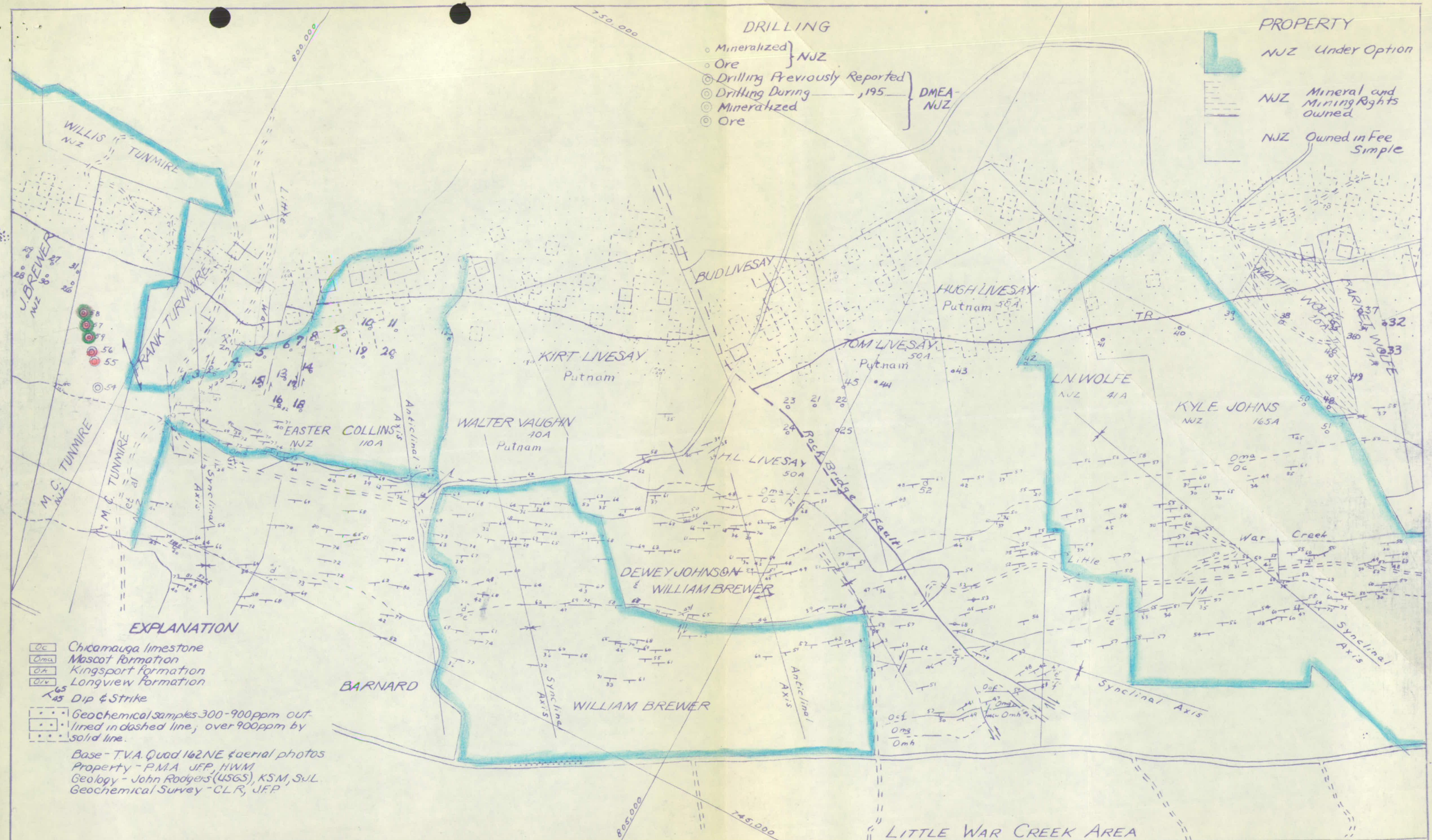
0- 87 - - Clay
87-258 - - Mascot dolomite
258-368 - - Upper Kingsport dolomite.
281-366, Scattered traces and shines sphalerite
368-371 - - 3' mineralization averaging 16.48% Zn
371-401 - - Upper Kingsport dolomite
Scattered shines of sphalerite 380-401
401-406 - - 5' mineralization averaging 1.23% Zn
406-435 - - Upper Kingsport dolomite. Trace sphalerite @ 421
435 - - TR marker
435-562 - - Lower Kingsport dolomite and limestone.
Scattered traces sphalerite 435-475
Trace sphalerite @ 550
562-610 - - (Bottom) Longview dolomite
R and S beds 87% dolomite

Hole LW-59 - M. C. Tunmire property - 100' downdip from LW-57

Coordinates: 746,069.52 N; 799,608.98 E
Elevation: 1588.18

Results:

0- 48	Clay
48-367	Mascot dolomite
367-540	Upper Kingsport dolomite rare scattered traces sphalerite 440-533
540	TR marker
540-543	Lower Kingsport dolomite
543-544	1' mineralization estimated at 15% Zn
544-562	Lower Kingsport dolomite and limestone with scattered traces of sphalerite
562-567	5' mineralization estimated @ 2½% Zn
567-675	Lower Kingsport dolomite and limestone
675-710	(Bottom) Longview dolomite R and S beds 82% dolomite


DRILLING
Mineralized
Ore
NJZ
Drilling Previously Reported
Drilling During ____ ,195__
Mineralized
Ore
DMEA-NJZ
PROPERTY
NJZ Under Option
NJZ Mineral and Mining Rights Owned
NJZ Owned in Fee Simple
WILLIS TUNMIRE NJZ
J. BREWER NJZ
FRANK TURNMIRE
M. C. TUNMIRE NJZ
M. C. TUNMIRE et al NJZ
EASTER COLLINS NJZ 110A
Anticlinal Axis
Synclinal Axis
KIRT LIVESAY Putnam
WALTER VAUGHN 40A Putnam
BUD LIVESAY
HUGH LIVESAY Putnam 56A
TOM LIVESAY 50A Putnam
H.L. LIVESAY 50A
Rock Bridge Fault
DEWEY JOHNSON & WILLIAM BREWER
BARNARD
WILLIAM BREWER
L.N. WOLFE NJZ 41A
KYLE JOHNS NJZ 165A
MATTIE WOLFE 107A
PARDEE WOLFE
Little War Creek
EXPLANATION
Oc Chicamauga limestone
Omc Mascot Formation
Ok Kingsport Formation
Olv Longview Formation
Dip & Strike
Geochemical samples 300-900ppm outlined in dashed line; over 900ppm by solid line.
Base - T.V.A. Quad 162 NE & aerial photos
Property - P.M.A. JFP, HWM
Geology - John Rodgers (USGS), KSM, SJL
Geochemical Survey - CLR, JFP
LITTLE WAR CREEK AREA
POSTED TO DATE
5/30/53 T-1-54 TEW
3/31/54 4-56 TEW
THE NEW JERSEY ZINC COMPANY
ROGERSVILLE TENNESSEE
DRAWN SJL, JFP DATE 2-11-53
TRACED - SCALE 1"=660'
COPPER RIDGE BELT
SECTOR II SHEET INE
HANCOCK COUNTY, TENN.
FILE NO. AX-TENN 95

OFFICIAL FILE COPY
D M E A
RECEIVED JUL 23 1958

DATE	INITIALS	CO

OFFICIAL FILE COPY
D M E A
RECEIVED JUL 23 1958

DATE	INITIALS	CODE

DMEA
RECEIVED
DATE | | |
7/18 | H.g. | 225
21 | Com | 100
" | JEG | 110
7/22 | | 800
Tennessee | | 500

DMEA EXPLORATION PROJECT

INTERIM REPORT

DMEA-4850, Idm-E1174 - Zinc

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

Location: Little War Creek Area, Hancock County, Tennessee

Summary of drilling completed:	Since last Insp.	To date
Number of holes	1	6
Footage	710	4,702
Holes showing:		
(a) Commerical Zn ore		1
(b) Non-commercial Zn mineralization		5
(c) No zinc mineralization		0

Additional data on the one hole completed during interim follows:

Hole No. LW-59 - located 100 ft down dip from LW-57, M. C. Tunmire property. Depth 710 ft. Coordinates N746,070, E799,609; elevation 1592 ft. Drilling began 6/16/58 and was completed 6/26/58.

Brief log of hole: 0-48 ft overburden; collared in Mascot fm; openings or cavities from 50 to 54 ft, 61 to 64 ft, 67-69 ft, 81 to 96 ft and 97 to 103 ft; top of Kingsport (CM) at 367 ft; top of "R" bed at 540 ft; "T" bed from 675 to 677 ft; hole bottomed at 710 ft. Mineralization - scattered traces of sphalerite from 440 to 543 ft., and 567 to 577 ft.

Runs: 1 ft (543-544) Est. 15% Zn.
5 ft (562-567) " 2.5% Zn.

Mineralization in LW-58. This hole was erroneously reported in the last interim report as a blank hole. Widely scattered traces of sphalerite extended from 281 ft to 550 ft.

Runs: 3 ft (368-371) 16.48% Zn
5'" (401-406) 1.23% Zn

Drilling is now in progress on LW-60 located on J. Brewer property 415 ft S71°W from LW-57. Core was examined to a depth of 424 feet.

Inspected:
July 14, 1958

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

D. H. Amos, Geologist
Geological Survey (DMEA)

DATE		
6/30	C	220
30	Com	100
"	JEJ	110
6/30	GMJ	800
~~6/30~~	~~HLG~~	~~500~~

EXPLORATION PROJECT

INTERIM REPORT

DMEA-4850, Idm-E1174 - Zinc

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

Location: Little War Creek Area, Hancock County, Tennessee

SUMMARY OF DRILLING COMPLETED

	Since last inspection	To date
Number of holes	4	5 ✓
Footage	2,986	3,992 ✓

Holes showing:

a) Commercial zinc ore..... 1 ✓ good hole
b) Non-Commercial zinc mineralization ...3
c) No zinc mineralization..... 1

Additional data on the four holes completed during the Interim follows:

Hole # LW-55. Located 200 ft updip from LW-54. M.C. Tunmire Property-

Depth 890 ft; Coordinates N745,907, E799,726; Elevation 1588 ft.

Drilling began April 25, 1958 and was completed May 16, 1958.

Brief log of hole: 0-11 overburden; collared in Mascot fm; top of Kingsport (CM) at 544; top of "R" bed at 722 ft; top of "T" bed at 870 ft; bottomed at 890 ft.

Mineralization: Scattered traces of sphalerite from 662-665 ft, at 787, 791 and 838 ft.

Runs: 11 ft (794-805) 1.86% Zn.

16 ft (818-834) 1.75% Zn.

Hole #LW-56. Located 100 ft updip from LW-55 on M.C. Tunmire Prop.

Depth 810 ft. Coordinates N745,987, E799,670; elevation 1587 ft.

Drilling began May 17, 1958 and was completed May 30, 1958.

Brief log of hole: 0-3 overburden, collared in Mascot; top of Kingsport(chert matrix) at 452 ft; top of "R" at 636 ft; "T" bed at 793 ft; bottomed at 810 ft.

Mineralization: Scattered traces of sphalerite from 515 to 518, 535 to 547, 700 to 708, and 724 to 750.

Hole # LW-57. Located 200 ft updip from LW-56 on M.C.Tunmire Prop. Depth 676 ft. Coordinates N746,149; E799,553; Elevation 1600 ft.

Drilling began May 31, 1958 and was completed June 6, 1958. Brief log of hole: 0-76 overburden, collared in Mascot fm; top of Kingsport (chert matrix) at 276; top of "R" at 510, bottomed at 676 near "T" bed.

Mineralization: Scattered traces of sphalerite from 303 to 369.

Runs: 5 ft (369-374) 3.38% Zn.

10 ft (374-384) Min.
5 ft (384-389) 3.25% Zn.
5 ft (389-394) 4.65% Zn.
5 ft (394-399) 17.5% Zn.
5 ft (399-406) 15.8% Zn.
20' - 10.30%
4 ft core recovery
5 ft (406-411) 17.75% Zn.
5 ft (411-416) 13.40% Zn.
3 ft (416-419) 10.7% Zn.
3 ft (419-422) 13.4% Zn.
16' - 14.25%
36' @ 12.06%
18 ft (433-451) est. 3% Zn.
21 ft (457-478) est. 3% Zn.
27 ft (478-505) est. 0.5% to 1.0% Zn.

Hole # LW-58. Located 100 ft updip from LW-57 on M.C. Tunmire Prop. Coordinates N746,235, E799,499; Elevation 1610 ft.

Drilling began June 10, 1958 and was completed Junel 17, 1958. Brief log of hole: 0-87 overburden, collared in Mascot ; top of Kingsport (chert matrix) at 258; top of "R" at 435 ft, bottomed at 610 ft. Blank hole - no mineralization.

Present drilling is confined to LW-59, located 100 ft downdip from LW-57. Core has been examined to a depth of 110 ft.

Inspected: June 19, 1958

L. E. Shirley, Mining Engr. USBM

Helmuth Wedow, Jr., Geologist
U. S. 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-

OPERATOR'S MONTHLY REPORT AND VOUCHER

Month of May, 1958 Docket No. DMEA 4850 Contract No. Idm E 1174
Operator's Name The New Jersey Zinc Company Minerals Zinc
Address Jefferson City, Tennessee
Contract Amount, $106,780.00 Government Participation: 50 % Amount, $53,390.00

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	4704.10	2773.40	7477.50	7/7/58		
Bulldozing						
Crosscutting						
Drifting						
(2) Labor and Supervision:						
Labor, Supervision, Technical Services	374.00	221.32	595.32			
(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	-	6.00			
Payroll Taxes						
Liability Insurance						
Core Boxes	50.40	30.60	81.00			
(8) Contingencies (specify):						
TOTALS	5134.50	3025.32	8159.82	5134.50	3025.32	8159.82

I certify that the above bill is correct and just and that payment therefor has not been received.
Date 6/1/58 *Payee The New Jersey Zinc Company
Per [signature] Title Asst. to Gen. Supt.

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

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

(Instructions on reverse)

Pursuant to authority vested in me, I certify that this account is correct and proper for payment in the amount of:
$ 2567.25
Signature [signature] (Authorized Certifying Officer)
Date JUN 26 1958 Vou. No. 182
(See other side)

2567.25

(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-1174 in accordance with the terms of the contract.

Signature R. Lynch Title U. S. BUREAU OF MINES Date JUN 23 1958

APPROVAL BY DMEA EXECUTIVE OFFICER OR ALTERNATE:

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

MONTHLY REPORT OF OPERATOR

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

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

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(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.

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

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

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

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

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

GPO 872893

Form MF-104A
(April 1952)

Budget Bureau No. 42-R1151.2

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

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

Month of May 195 8 Docket No. DMEA 4850 Contract No. Idm E 1174

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								
Winzes								
Drilling: Core -1000 BX	Ft.	295.85	97	350.75	115	3.05	1,000	3.05
Churn -1000 AX	"	4408.25	1603	7108.75	7585	2.75	29,000	2.75
Auger -1000 EX	"							2.50
Stripping 1000↓AX	"	-	-	18.00	6	3.00	5,000	3.00
Trenching 1000↓EX	"							2.75
Test Pits Assays	Ea.	6.00	6	6.00	6	2.00	200	1.00
Roads and Trails Core	Ea.	50.40	28	81.00	45	1.80	600	1.80
Boxes	Ft.	374.00	1700	595.32	2706	0.22	35,000	0.22
Sup.& Tech.Ser.								
Total Distributed Costs		5134.50		8159.82				Total Costs Authorized by Contract
Operating Equipment Purchased								
Initial Rehabilitation and Repairs								
New Buildings, Improvements, etc.								
Total Costs		5134.50		8159.82				

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

Remarks: This report covers drill holes: LW-55, 56

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

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

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

(Instructions on reverse)

(For Government use only)

[signature]
U. S. BUREAU OF MINES

INSTRUCTIONS

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

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

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

GPO 872894

Report for May, 1958

Little War Creek Area DMEA 4350

Contract Idm E 1174 (Zinc)

One drill operated on this project during the month and completed two holes. These holes are shown on the accompanying map, AX-TENN-B-95.

Hole LW-55 - M. C. Tunmire property. 200 feet updip from LW-54

Coordinates: 745,907.05 N; 799,726.45 E
Elevation: 1588.18

0- 11 - - Clay
11-544 - - Mascot dolomite
544-722 - - Upper Kingsport dolomite. Scattered traces sphalerite 662-665
722 - - TR marker
722-794 - - Lower Kingsport dolomite Trace sphalerite 787, 791
794-805 - - 11' mineralization averaging 1.86% Zn
794-798 - 4' - 3.02% Zinc
798-802 - 4' - 1.49% zinc
802-805 - 3' - 0.80% zinc
805-818 - - Lower Kingsport dolomite
818-834 - - 16' mineralization averaging 1.75% Zn
818-823 - 5' - 1.10% zinc
823-828 - 5' - 2.36% zinc
828-834 - 6' (5'core) 1.78% zinc
834-870 - - Lower Kingsport dolomite & limestone Shine sphalerite 838 "R" and "S" beds 90% dolomite
870-890 - - (Bottom) Longview dolomite

Hole LW-56 - M. C. Tunmire property. 100 feet updip from LW-55

Coordinates: 745,987.11 N; 799,669.55 E
Elevation: 1587.32

0- 3 - - Clay
3-452 - - Mascot dolomite
452-636 - - Upper Kingsport dolomite. Traces sphalerite 515-518, 533-538, 538-547
636 - - TR marker

636-724 - - Lower Kingsport dolomite.
Scattered traces sphalerite
700-708

724-725 - - 1' mineralization estimated
@ 3% zinc

725-742 - - Lower Kingsport dolomite.
Scattered traces sphalerite 727-728,
732-736, 737-742

742-750 - - 8' mineralization estimated @
1-3/4% zinc

750-793 - - Lower Kingsport dolomite
R and S beds 98% dolomite

793-810 - - (Bottom) Longview dolomite

Comment: Both holes LW-55 and LW-56 show very favorable rock and mineralization characteristics.

DRILLING

- Mineralized } NJZ
- Ore } NJZ
- Drilling Previously Reported
- Drilling During ——— ,195— } DMEA-NJZ
- Mineralized
- Ore

PROPERTY

- NJZ Under Option
- NJZ Mineral and Mining Rights Owned
- NJZ Owned in Fee Simple

WILLIS TUNMIRE NJZ

J. BREWER NJZ

FRANK TURNMIRE

M.C. TUNMIRE NJZ

M.E. TUNMIRE NJZ

EASTER COLLINS NJZ 110A

Anticlinal Axis

Synclinal Axis

KIRT LIVESAY Putnam

WALTER VAUGHN 40A Putnam

BUD LIVESAY

HUGH LIVESAY Putnam 55A

TOM LIVESAY 50A. Putnam

H.L. LIVESAY 50A

Rock Bridge Fault

L.N. WOLFE NJZ 41A

KYLE JOHNS NJZ 165A

MATTIE WOLFE 30A

FARRET WOLFE

TR

DEWEY JOHNSON & WILLIAM BREWER

BARNARD

WILLIAM BREWER

Synclinal Axis

Anticlinal Axis

Little War Creek

War Creek

Synclinal Axis

Synclinal Axis

EXPLANATION

- Oc Chickamauga limestone
- Oma Mascot Formation
- Ok Kingsport Formation
- Olv Longview Formation
- 65/45 Dip & Strike
- Geochemical samples 300-900ppm outlined in dashed line; over 900ppm by solid line.

Base - T.V.A. Quad 162 NE & aerial photos
Property - P.M.A. JFP, HWM
Geology - John Rodgers (USGS), KSM, SJL
Geochemical Survey - CLR, JFP

LITTLE WAR CREEK AREA

POSTED TO DATE		
6/30/53	T-1-54 TEN	
3/31/54	4-56 TEN	
3/1/54		

THE NEW JERSEY ZINC COMPANY
ROGERSVILLE TENNESSEE

DRAWN SJL, JFP DATE 2-11-53
TRACED - SCALE 1"=660'

COPPER RIDGE BELT
SECTOR II SHEET I NE

HANCOCK CO
FILE NO. A

HOWARD BUTTON CO., INC. N. Y.

OFFICIAL FILE COPY
DMEA
RECEIVED JUN 30 1958

DATE	INITIALS	CODE

OFFICIAL FILE COPY
DMEA
RECEIVED JUN 30 1958

DATE	INITIALS	CODE

OFFICIAL FILE COPY
DMEA
RECEIVED JUN 30 1958

DATE	INITIALS

DMEA EXPLORATION PROJECT

INTERIM REPORT

DMEA-4850, Idm-E1174 - Zinc

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

Location: Little War Creek Area, Hancock County, Tennessee

Drilling is now in progress on this contract. One hole has been completed and one hole is in progress. Drilling data to date is as follows:

Drilling Completed:

Number of holes completed since drilling began.....	1
Footage in holes completed " " "	1,006
Total number of holes completed.....	1
Total footage completed to date.....	1,006
Number of holes showing commercial zinc ore.....	0
Number of holes showing non-commercial zinc mineralization.....	1
Number of barren holes.....	0

Additional data on the one hole completed follows:

Hole No.	Property	Total Depth	Remarks
LW-54	M.C. Tunmire	1006	Drilling began on 4/8/58 and was completed 4/24/58. No coordinates available at time of inspection. Brief log of hole: 0-22 overburden, collared in Mascot; chert matrix @ 713, top of "R" @ 845; "T" bed from 963 to 967; bottomed @ 1006 Mineralization: Traces of sphalerite @ 753,801, 809-scattered shines of sphalerite @ 825 and traces @ 835 and 850.

Drilling In Progress

Available data on the one hole in progress is as follows:

Hole No.	Property	Present depth	Anticipated depth	Remarks
LW-55	M.C. Tunmire	587	850	Location: 200' updip from LW-54; coordinates not available at time of inspection. Drilling began 4/25/58. Brief log of hole; 0-11 overburden; Collared in Mascot; Chert matrix @ 544 and presently drilling in Kingsport fm.

Inspected: May 5, 1958

V. J. Lynch and L. E. Shirley,
Mining Engineers,
U. S. Bureau of Mines (DMEA)

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-

OPERATOR'S MONTHLY REPORT AND VOUCHER

Month of April 1958 Docket No. DMEA 4850 Contract No. Idm E 1174

Operator's Name The New Jersey Zinc Company Minerals Zinc

Address Jefferson City, Tennessee

Contract Amount, $106,780.00 Government Participation 50 % Amount, $53,390.00

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	2773.40	-	2773.40	7/7/58		
Bulldozing						
Crosscutting						
Drifting						
(2) Labor and Supervision:						
Labor						
Supervision	221.32	-	221.32			
Technical Services						
(3) Operating Mat'ls. and Supplies:						
Timber						
Explosives						
Pipe						
Track						
Core Boxes	30.60	-	30.60			
(4) Operating Equipment:						
Rental						
Purchase						
Depreciation						
(5) Initial Rehabilitation and Repairs						
(6) New Bldgs., Improvements, etc.						
(7) Miscellaneous:						
Repairs to Equipment						
Sampling and Analysis	-	-	-			
Payroll Taxes						
Liability Insurance						
(8) Contingencies (specify):						
TOTALS	3025.32		3025.32	3025.32	—	3025.32

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:

$ 1512.66

Signature [signature]
(Authorized Certifying Officer)

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

1512.66

(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-1174 in accordance with the terms of the contract.

Signature [signature] 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

Month of April 8 195 Docket No. DMEA 4850 Contract No. Idm E 1174
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 -1000' BX	Ft.	54.90	18	54.90	18	3.05	1,000	3.05
Winzes -1000' AX	"	2700.50	982	2700.50	982	2.75	29,000	2.75
Drilling: Core -1000' EX	"							2.50
Churn 1000'+AX	"	18.00	6	18.00	6	3.00	5,000	3.00
Auger 1000'+EX	"							2.75
Stripping Assays	Ea.						200	1.00
Trenching Core Boxes		30.60	17	30.60			600	1.80
Test Pits								
Roads and Trails								
Sup. & Tech. Serv.	Ft.	221.32	1006	221.32	1006	0.22	35,000	0.22
Total Distributed Costs		3025.32		3025.32				Total Costs Authorized by Contract
Operating Equipment Purchased								
Initial Rehabilitation and Repairs								
New Buildings, Improvements, etc.								
Total Costs		3025.32		3025.32				106,780.00

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

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

Remarks: This report covers LW-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

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

GPO 872894

Report for April 1958

Little War Creek Area DMEA 4850

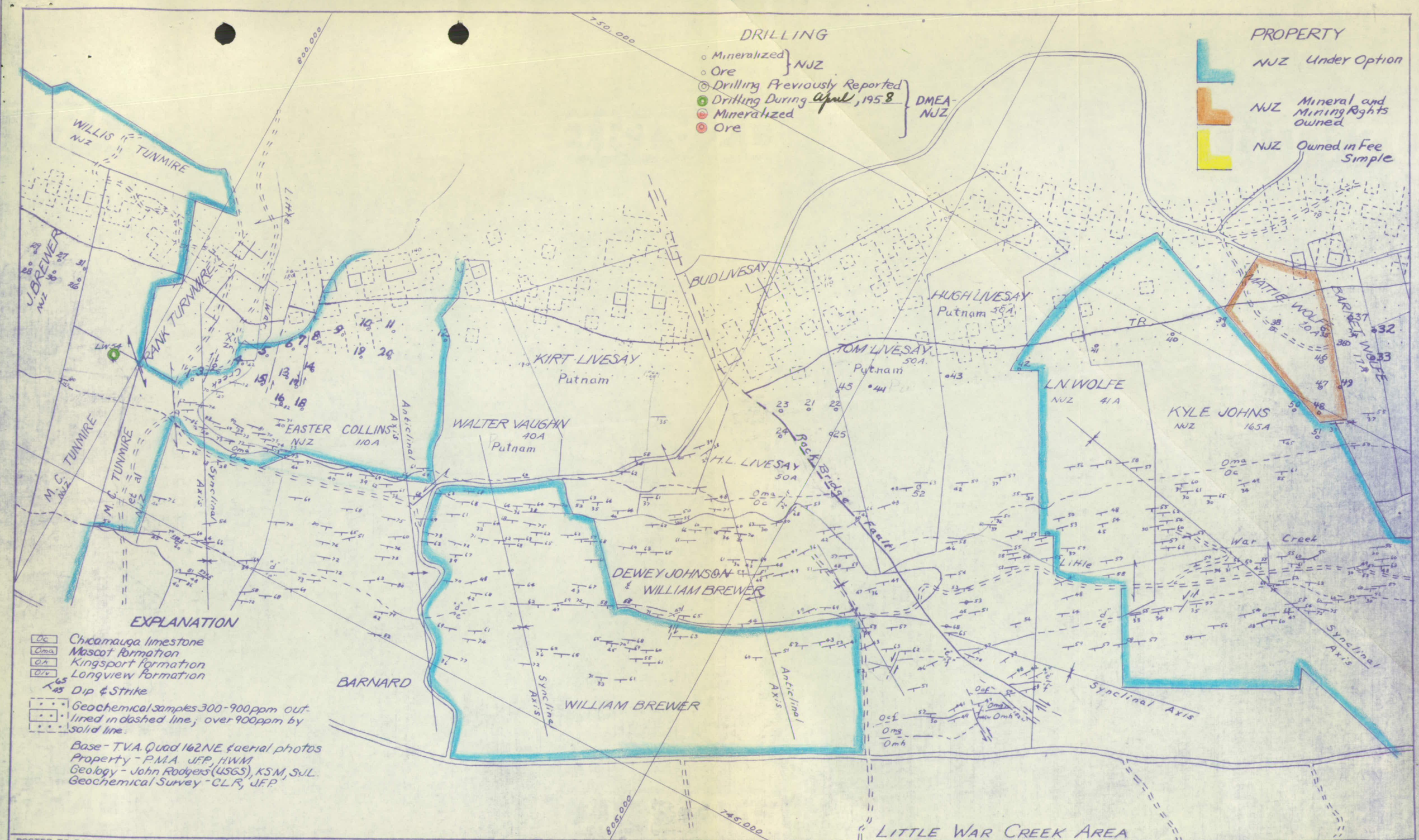
Contract Idm E 1174 (Zinc)

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

LW-54 - M. C. Turmire property

Coordinates: 745,945.46N; 799,789.71E
Elevation: 1550.29

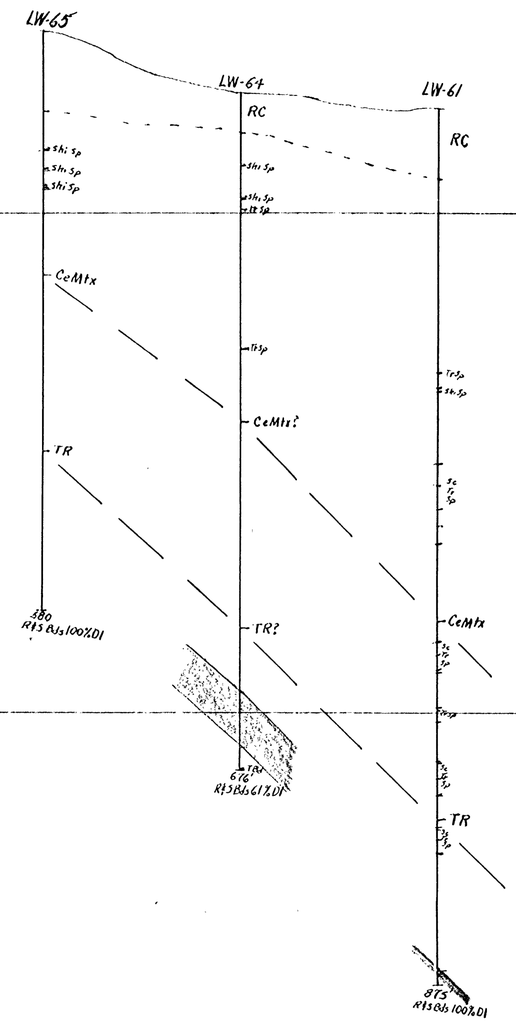
0 - 22	Clay
22 -713	Mascot dolomite
713 -845	Upper Kingsport dolomite. Traces sphalerite 753, 801, 804, 809, 835. Shine sphalerite 825.
845	TR marker
845 -965	Lower Kingsport dolomite and limestone. Trace sphalerite 850.
965 -1006	(Bottom) Longview dolomite and limestone.



HOWARD SUTTON CO., INC. N.Y.

EXTRA COPY
DMEA
RECEIVED JUN 5 1958

DATE	INITIALS	CODE



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

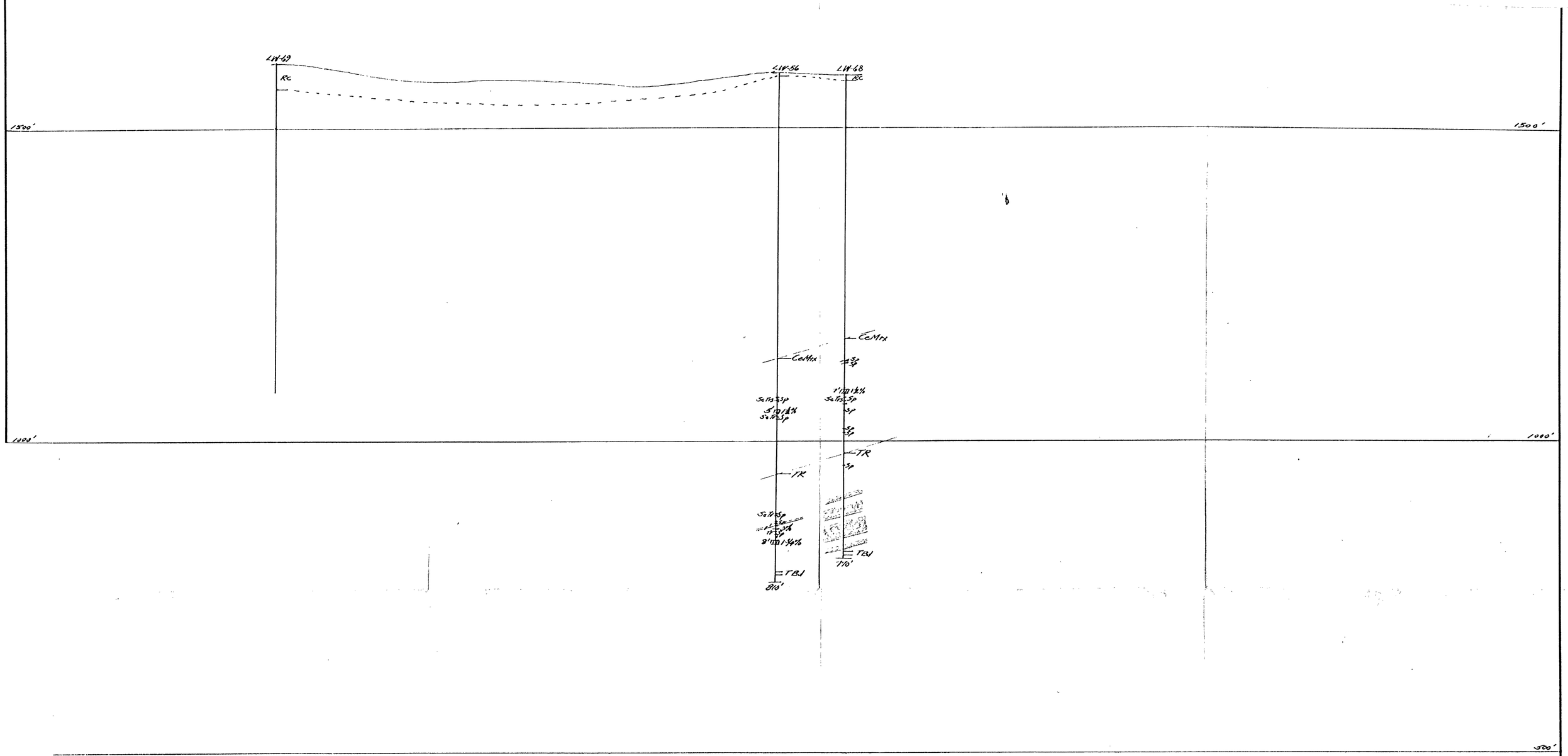
JEFFERSON CITY, TENNESSEE

DRAWN EWR
TRACED
CHECKED
APPROVED

DIP SECTION LW-61,64
SECTOR II AREA-F
COPPER RIDGE BELT

DATE 8-11-58
SCALE 1" = 100'
AX-TENN-C1387

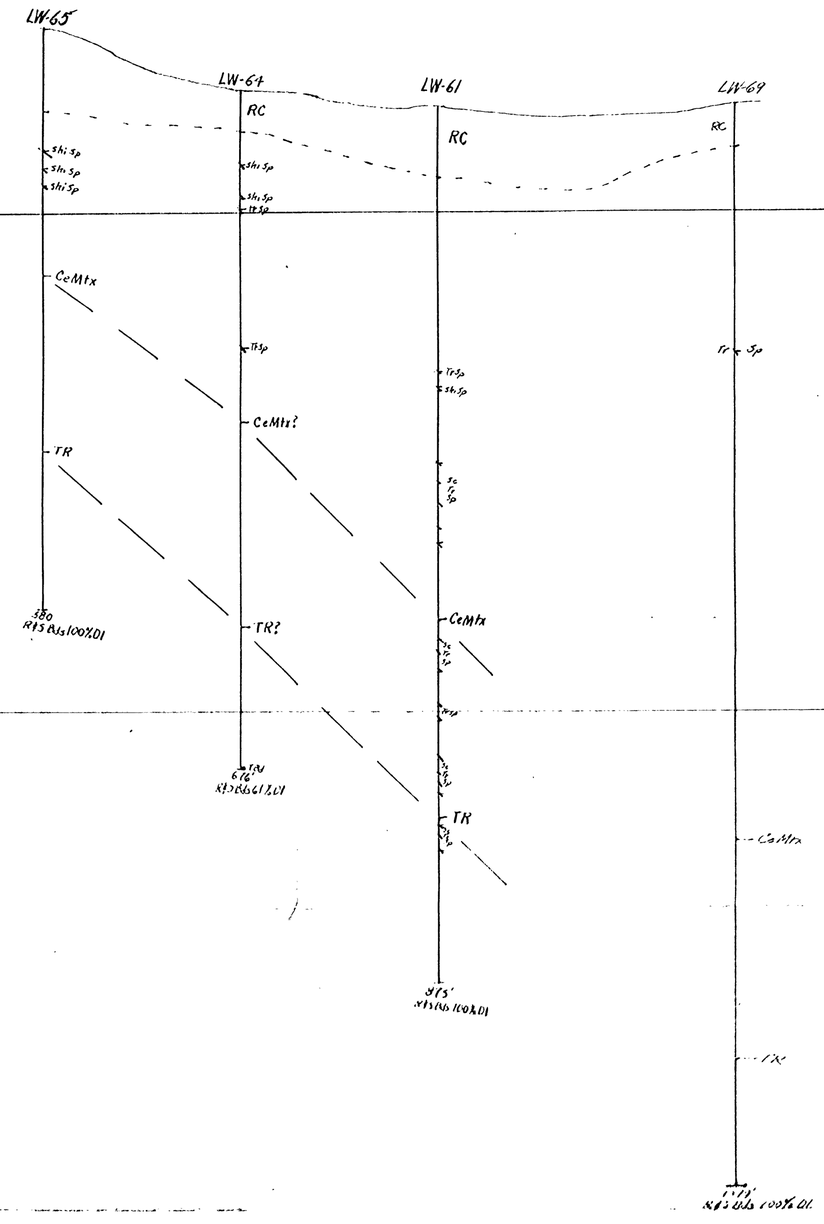
X5453C 1M 11-54



	DATE ISSUED		REFERENCE DRAWINGS	REVISIONS	THE NEW JERSEY ZINC COMPANY JEFFERSON CITY, TENNESSEE	DRAWN WJC TRACED CHECKED APPROVED	LONGITUDINAL SECTION LW-69-68 SECTOR II LITTLE WAR CRK. AREA COPPER RIDGE BELT	DATE 10-1-58 SCALE 1" = 100 AX-TENN. C-1397

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.

X5453C 1M 11-54



	DATE ISSUED		REFERENCE DRAWINGS	REVISIONS	THE NEW JERSEY ZINC COMPANY	DRAWN EWR	DIP SECTION LW-61,64	DATE 8-11-58
					JEFFERSON CITY, TENNESSEE	TRACED	SECTOR II AREA F	SCALE 1" = 100'
						CHECKED	COPPER RIDGE BELT	AX-TENN-C/1387
						APPROVED		

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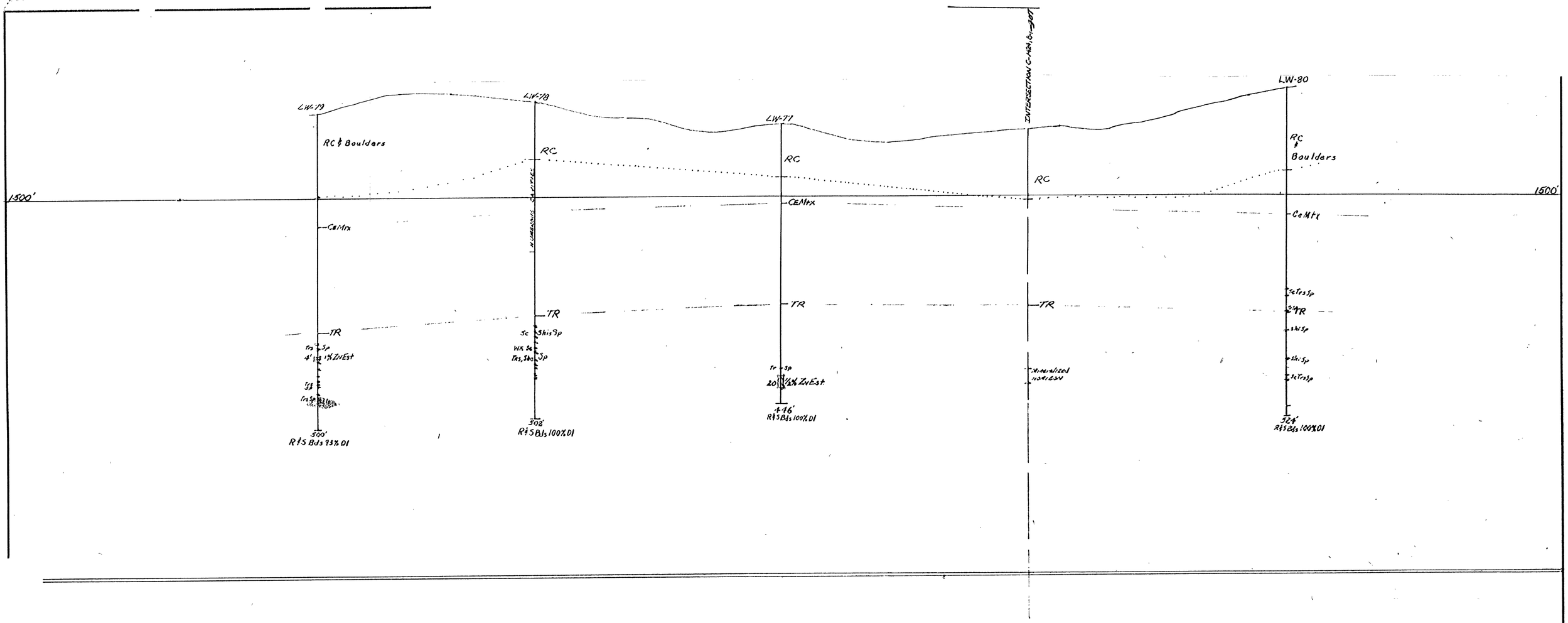
VENTION ARE RESERVED. THIS DRAWING MUST BE RETURNED TO
W JERSEY ZINC COMPANY.

X5453C 1M 11-54



AL BER		DATE ISSUED		REFERENCE DRAWINGS	REVISIONS	THE NEW JERSEY ZINC COMPANY JEFFERSON CITY, TENNESSEE	DRAWN WJC TRACED WJC CHECKED APPROVED	LONGITUDINAL SECTION LW-79,78,77 etc. SECTOR II LITTLE WAR CREEK COPPER RIDGE BELT	DATE 2-13-59 SCALE 1" = 100 AX-TENN C-1424

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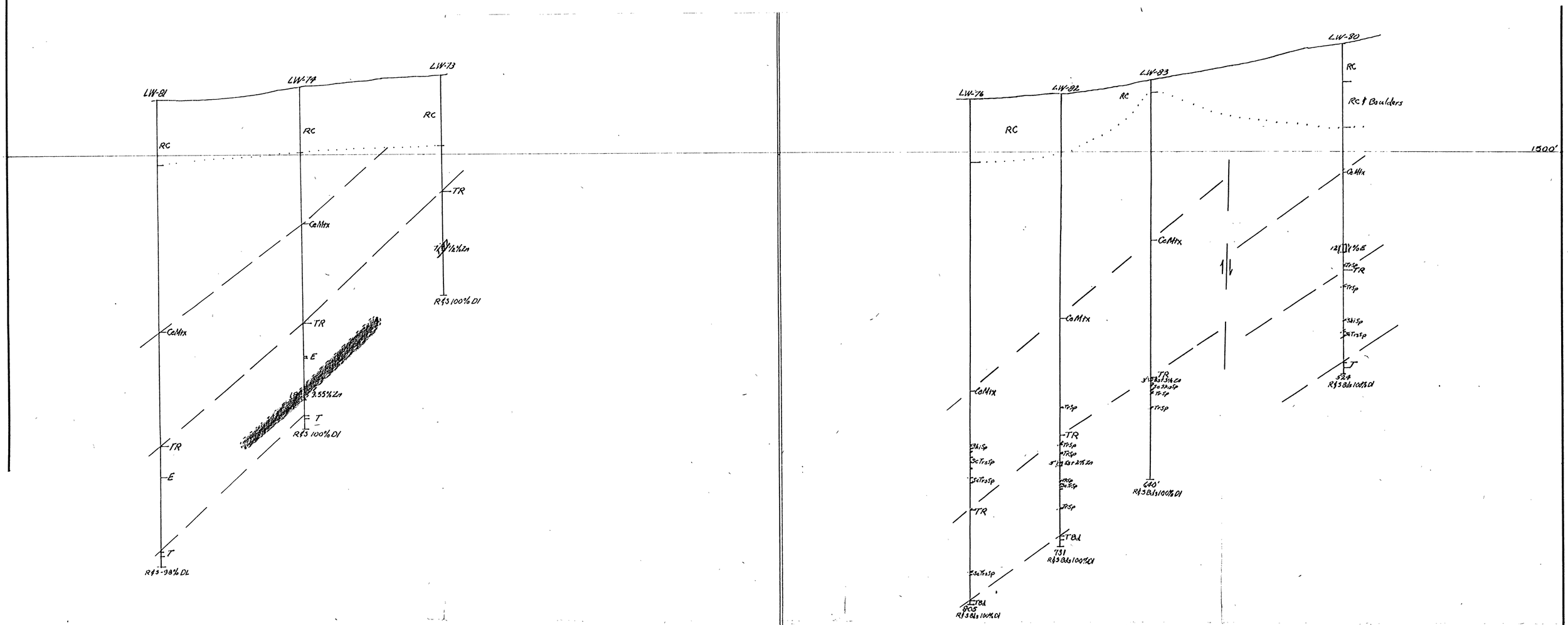
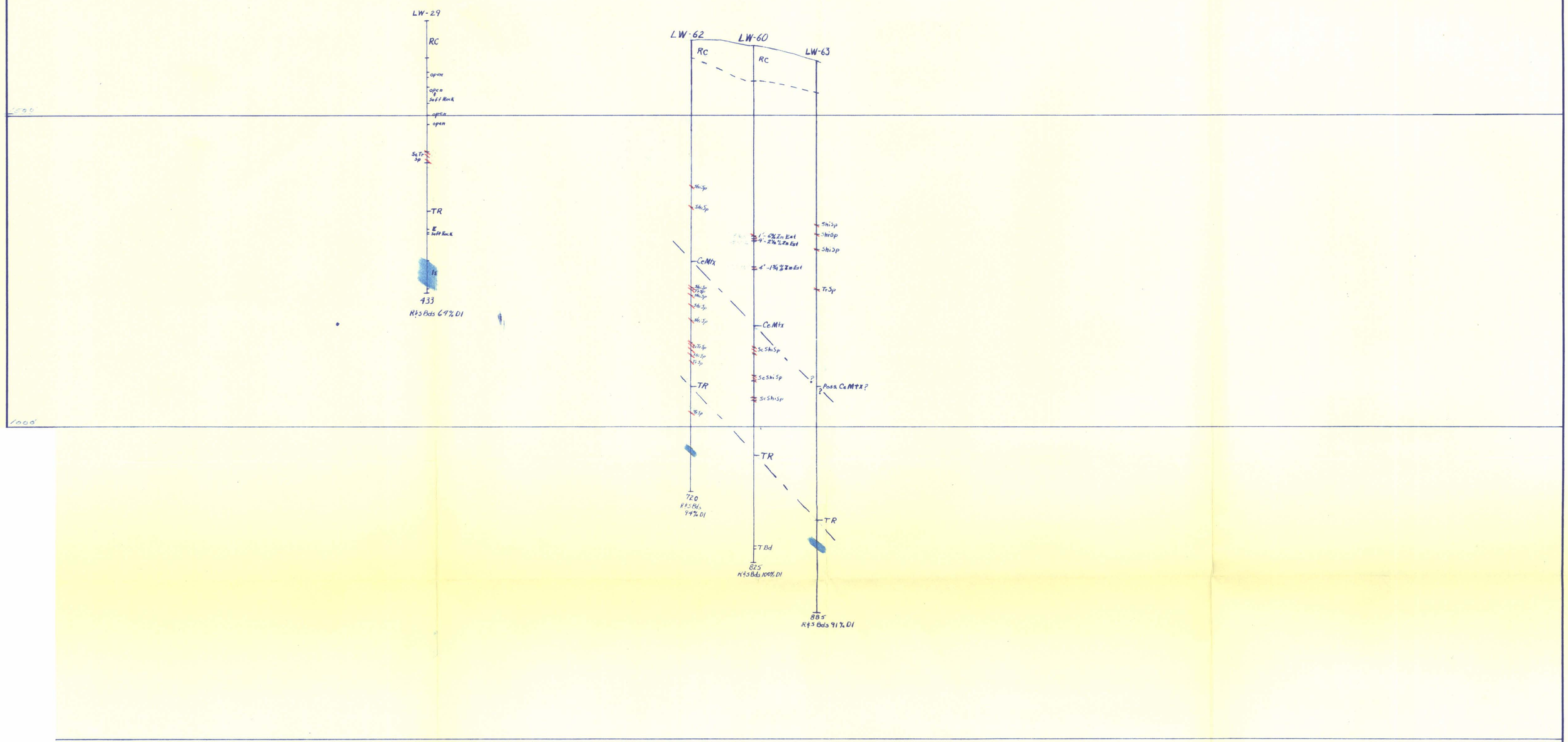


L ER		DATE ISSUED		REFERENCE DRAWINGS	REVISIONS	THE NEW JERSEY ZINC COMPANY JEFFERSON CITY, TENNESSEE	DRAWN WJC TRACED WJC CHECKED APPROVED
RAWING IN DESIGN AND DETAIL IS OUR PROPERTY AND MUST NOT BE EXCEPT IN CONNECTION WITH OUR WORK. ALL RIGHTS OF DESIGN NVENTION ARE RESERVED. THIS DRAWING MUST BE RETURNED TO EW JERSEY ZINC COMPANY.							

RAKE SECTIONS LW81, 74, 73 & LW76, 82, 83, 80
SECTOR II LITTLE WAR CREEK AREA
COPPER RIDGE BELT

DATE 3-18-59
SCALE 1" = 100'
AX-TENN C-1431

X5453C 1M 11-54



	DATE ISSUED		REFERENCE DRAWINGS	REVISIONS	THE NEW JERSEY ZINC COMPANY	DRAWN EWR	DIP SECTION LW60	DATE 7-15-58
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.					JEFFERSON CITY, TENNESSEE	TRACED	SECTOR II AREA F	SCALE 1" = 100'
						CHECKED	COPPER RIDGE BELT	AX TENN C-1377
						APPROVED		

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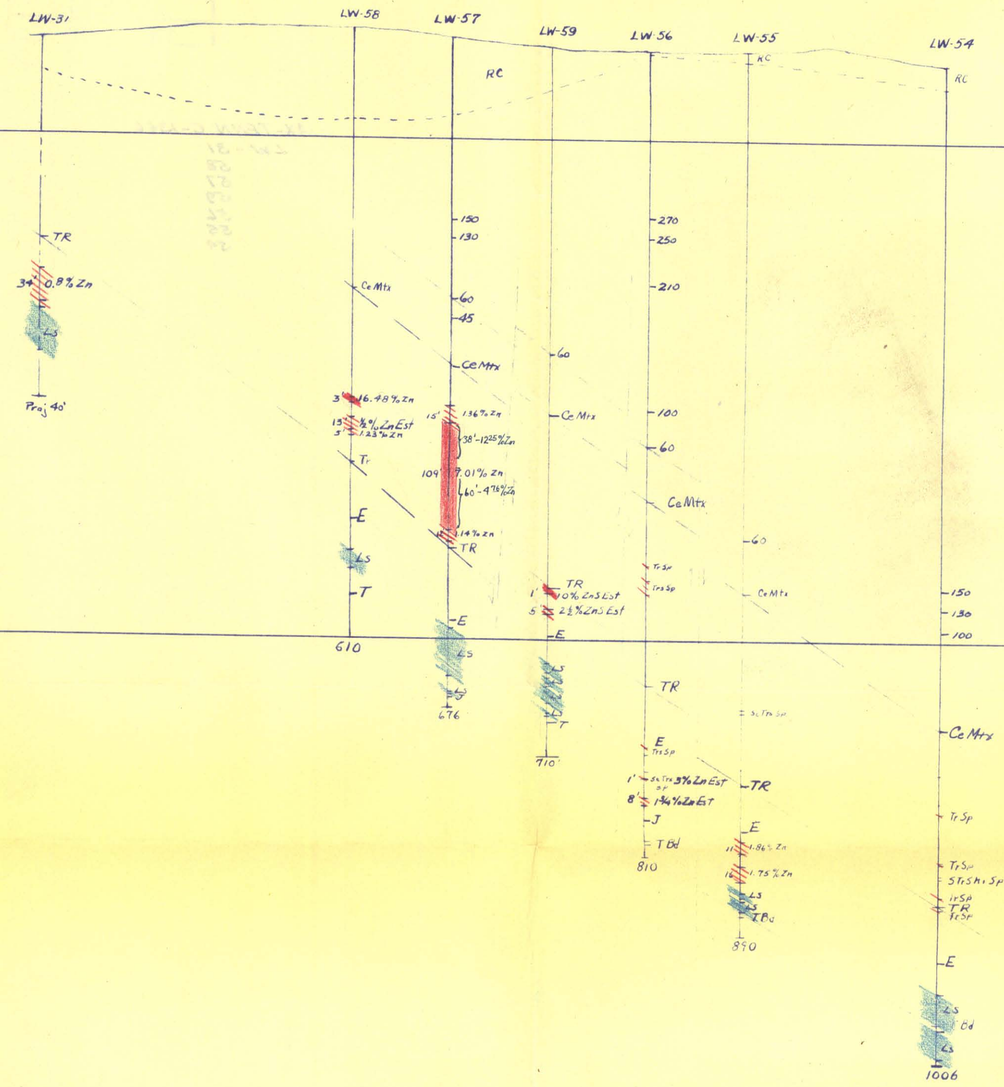

	DATE ISSUED		REFERENCE DRAWINGS	REVISIONS	THE NEW JERSEY ZINC COMPANY	DRAWN EWR	DIP SECTION LW 54, 55, 56, 57, 58, 59	DATE 5-22-58
					JEFFERSON CITY, TENNESSEE	TRACED	SECTOR II AREA F	SCALE 1" = 100'
						CHECKED	COPPER RIDGE BELT	AX TENN C-1366
						APPROVED		

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X6453C 1M 11-54