DETAIL OF COLLECTION

DT No. 225439

Date: APR 13 1979

Check No.	Remitter	Bill No. or Description	Amount
1826	G&W Natural Resources [redacted]	OME Royalty payment DMEA-4586 Idm-E1071	5,006.37
cc: MS 953			

Appropriation Credited 2 148851

Total: 5,006.37

To: Chief, Branch of Financial Management
U.S. Geological Survey
National Center, Mail Stop 270
12201 Sunrise Valley Drive
Reston, Virginia 22092

From: Chief, Office of Minerals Exploration
U.S. Geological Survey
953 National Center
Reston, Virginia 22092

ABSTRACT OF REMITTANCES

Date	Amount	Bank, City and State	Name of Remitter	Docket & Contract Numbers	Purpos
4/6/79	$5,006.37	Chase Manhattan Bank, New York, NY	New Jersey Zinc Div. G+W Natural Resources Group	DMEA-4586 Idm-E1071	Royalty

Remarks: Royalty payment for production of DMEA ore at Idol Mine for March 1979

April 10, 1979
Date prepared

Harold Kibema
Chief, Office of Minerals Exploration
Person preparing abstract

4-10-79
Date received

Mary Mortellaro
Person receiving remittance
Collection Officer

United States Department of the Interior

GEOLOGICAL SURVEY
RESTON, VA. 22092

In Reply Refer To:
Mail Stop 953

May 18, 1979

Mr. R. E. Thompson
Assistant to Executive
Vice President - Mining
The New Jersey Zinc Company
Jefferson City, Tennessee 37760

Re: DMEA-4586 (Zinc)
The New Jersey Zinc Company
Cedar Springs Area, Sector II
Copper Ridge Belt
Grainger County, Tennessee
Contract Idm-E1071

Dear Mr. Thompson:

We are pleased to report that the royalty payment of $5,006.37, dated April 6, 1979, received from The New Jersey Zinc Company paid in full the balance of the amount contributed by the Government to the contract cited above. In fact, the total amount received in the series of royalty payments exceeded the amount due. A check in the amount of $2.79, payable to the New Jersey Zinc Division G+W Natural Resources Group, will be sent by another office to the company in Jefferson City.

The overpayment apparently resulted when a royalty check issued June 30, 1978, in the amount of $6,559.53, was posted as $6,556.74 on the sheet showing DMEA royalty calculations.

We are glad that the DMEA program contributed to the development of the Idol mine, and gratified that the balance of the account has been paid in full.

Sincerely yours,

Harold Kirkemo

Harold Kirkemo, Chief
Office of Minerals Exploration

One Hundred Years of Earth Science in the Public Service

cc: R. A. Laurence, Residence

United States Department of the Interior

GEOLOGICAL SURVEY
RESTON, VA. 22092

In Reply Refer To:
Mail Stop 953

April 12, 1979

Memorandum

To: Chief, Branch of Financial Management

From: Chief, Office of Minerals Exploration

Subject: Request for refund to DMEA Operator for overpayment of royalty
DMEA-4586 (Zinc)
The New Jersey Zinc Company
Cedar Springs Area, Sector II
Copper Ridge Belt
Grainger County, Tennessee
Contract DMEA Idm-E1071

Our records indicate that the Operator paid $52,930.29 in royalties on this contract whereas only $52,927.50 was the amount contributed by the Government. The amount of overpayment appears to be $2.79. No interest was charged the Operator on DMEA contracts.

We believe the overpayment resulted because a royalty check issued June 30, 1978, in the amount of $6,559.53 was posted as $6,556.74 by the Operator on a sheet titled DMEA royalty calculations. Copies of both papers are enclosed. The difference, $2.79, is the amount of overpayment.

Please verify these figures, and advise this office. If correct as stated, authorize issuance of a check to the Operator for the amount due. Make check payable to:

New Jersey Zinc Division
G+W Natural Resources Group

whose address is:

The New Jersey Zinc Company
Jefferson City, Tennessee 37760.

Harold Kirkemo

Harold Kirkemo

Enclosures

One Hundred Years of Earth Science in the Public Service

To: Chief, Branch of Financial Management
U.S. Geological Survey
National Center, Mail Stop 270
12201 Sunrise Valley Drive
Reston, Virginia 22092

From: Chief, Office of Minerals Exploration
U.S. Geological Survey
953 National Center
Reston, Virginia 22092

ABSTRACT OF REMITTANCES

Date	Amount	Bank, City and State	Name of Remitter	Docket & Contract Numbers	Purpo
6/30/78	$6,559.53	Chase Manhattan Bank, New York, NY	New Jersey Zinc Div. G+W Natural Resources Group	DMEA-4586 Idm-E1071	Royalty

G+W Natural Resources Group
COLE-WESTLAKE INDUSTRIES

NEW JERSEY ZINC DIVISION
JEFFERSON CITY, TENNESSEE 37760

855
1-2
210

June 30, 1978

NEW JERSEY ZINC

PAY TO THE ORDER OF $6,559.53 DOLLARS

U.S. GEOLOGICAL SURVEY

SUPERINTENDENT'S ACCOUNT

Royalty of DMEA ore at Idol for June 1978.

⑆021000021⑆ 009⑈ 1⑈0289280⑈

National Association 40 West 34th Street, New York, N.Y.

mine for June 1978.

July 5, 1978
Date prepared

Harold Kirkemo
Chief, Office of Minerals Exploration
Person preparing abstract

Date received

Person receiving remittance

IDOL MINE
DMEA ROYALTY CALCULATIONS
(ZN. CONC + LIMESTONE)

		1	2	3	4	5	6	7	8	9	10	11	12	13
		TONS MINED	CRUDE GRADE	RECOVERY	TONS CONC - 1 X 2 X 3 / 5	CONCENTRATE GRADE	P.W. ZINC MARKET	DELIVERED VALUE PER LB. ZN	DEL'VD VALUE / TON CONC - 2000# X 5 X 7	TOTAL DEL'VD VALUE TON CONC 8 X 4	ROYALTY 9 X 5%	LIMESTONE ROYALTY (PER ATTACHED)	TOTAL ROYALTY	BALANCE OWED DMEA
1977	—	—	—	—	—	—	—	—	—	—	—	—	—	5292756
	JULY	770	2.1%	96.2%	25.46	61.1%	34.00¢	20.192¢	$246.75	$6282.26	$314.11			5246339
	AUGUST	NONE TO REPORT												
	SEPTEMBER	240	3.0	95.1	11.12	61.6	34.00	20.192	248.77	2766.27	138.31			5247508
	OCTOBER	390	2.5	95.1	15.25	60.8	32.00	18.908	229.92	3506.28	175.31			5229977
	NOVEMBER	2290	6.5	91.3	220.26	61.7	32.00	18.908	233.32	5139106	256955			4973022
	DECEMBER	2640	6.8	91.3	273.17	60.0	30.50	17.946	215.35	5882716	294136			4678886
1978	JANUARY	3740	4.7	96.8	283.59	60.0	30.50	17.946	215.35	6107110	305356			4373530
	FEBRUARY	3890	4.3	96.8	265.87	60.9	30.50	17.946	218.58	5811385	290569			4082961
	MARCH	3030	7.4	97.4	348.31	62.7	29.00	16.983	212.97	7417958	370898			3712063
	APRIL	1280	3.6	96.8	70.69	63.1	29.00	16.983	219.33	1515099	75755			3636308
	MAY	3430	4.9	97.1	234.09	62.6	29.00	16.983	212.63	4977455	248873			3387435
	JUNE	7670	5.2	96.8	627.77	61.5	29.00	16.983	208.89	13113487	655674			2731761
	JULY	1970	3.5	98.0	110.59	61.1	30.50	17.946	219.30	2425238	121262			2610499
	AUGUST	1390	3.5	97.1	77.95	60.6	31.50	18.588	225.29	1756135	87807			2522692
	SEPTEMBER	1890	3.7	96.7	109.78	61.6	32.50	19.229	236.90	2600688	130034			2392658
	OCTOBER	7500	5.6	98.3	670.23	61.6	32.50	19.229	236.90	15877749	793887			1578771
	NOVEMBER	3900	4.3	97.7	264.26	62.0	34.50	20.513	254.36	6721717	336086			1242685
	DECEMBER	5780	3.4	98.2	326.78	61.1	34.50	20.513	250.67	8191394	409570			853115
1979	JANUARY	3620	4.2	97.2	243.87	60.6	34.70	20.641	250.17	6100895	305045			548070
	FEBRUARY	890	2.5	97.8	36.03	60.4	36.50	21.796	263.30	948669	47433			500637
	MARCH	5426	4.2	97.9	362.20	61.6	37.50	22.438	276.44	10012790	500637			— 0 —

IDOL MINE
DMEA ROYALTY CALCULATIONS
(ZN. CONC + LIMESTONE)

		1	2	3	4	5	6	7	8	9	10	11	12	13
		TONS MINED	CRUDE GRADE	RECOVERY	TONS CONC - 1 X 2 X 3 / 5	CONCENTRATE GRADE	P.W. ZINC MARKET	DELIVERED VALUE PER LB. ZN	DEL'VD VALUE / TON CONC - 2000# X 5 X 7	TOTAL DEL'VD VALUE ZN. CONC 8 X 4	ROYALTY 9 X 5%	LIMESTONE ROYALTY (PER ATTACHED)	TOTAL ROYALTY	BALANCE OWED DMEA
1 1977	—	—	—	—	—	—	—	—	—	—	—	—	—	5292750
2	JULY	770	2.1%	96.2%	25.46	61.1%	34.00¢	20.192¢	$246.75	$628226	$31411			5216339
3	AUGUST	NONE TO	REPORT											
4	SEPTEMBER	240	3.0	95.1	1112	61.6	34.00	20.192	248.77	2766.27	138.31			5247508
5	OCTOBER	390	2.5	95.1	1525	60.8	32.00	18.908	229.92	3506.28	175.31			5229977
6	NOVEMBER	2290	6.5	91.3	220.26	61.7	32.00	18.908	233.32	5139.06	256.955			4973022
7	DECEMBER	2640	6.8	91.3	273.17	60.0	30.50	17.946	215.35	5882.16	294.136			4678886
8 1978	JANUARY	3740	4.7	96.8	283.59	60.0	30.50	17.946	215.35	6107.10	305.356			4373530
9	FEBRUARY	3890	4.3	96.8	265.87	60.9	30.50	17.946	218.58	5811.385	290.569			4082961
10	MARCH	3030	7.4	97.4	348.31	62.7	29.00	16.983	212.97	7417.958	370.898			3712063
11	APRIL	1280	3.6	96.8	70.69	63.1	29.00	16.983	219.33	1515.099	75.755			3636308
12	MAY	3430	4.9	97.1	234.09	62.6	29.00	16.983	212.63	4977.455	248.873			3387435
13	JUNE	7670	5.2	96.8	627.77	61.5	29.00	16.983	208.89	13113.487	655.674			2731761
14	JULY	1970	3.5	98.0	110.59	61.1	30.50	17.946	219.30	2425.238	121.262			2610499
15	AUGUST	1390	3.5	97.1	77.95	60.6	31.50	18.588	225.29	1756.135	87.807			2522692
16	SEPTEMBER	1890	3.7	96.7	109.78	61.6	32.50	19.229	236.90	2600.688	130.034			2392658
17	OCTOBER	7500	5.6	98.3	670.23	61.6	32.50	19.229	236.90	15877.749	793.887			1578771
18	NOVEMBER	3900	4.3	97.7	264.26	62.0	34.50	20.513	254.36	6721.717	336.086			1262685
19	DECEMBER	5780	3.4	98.2	326.78	61.1	34.50	20.513	250.67	8191.394	409.570			853115
20 1979	JANUARY	3620	4.2	97.2	243.87	60.6	34.70	20.641	250.17	6100.895	305.045			548070
21	FEBRUARY	890	2.5	97.8	36.03	60.4	36.50	21.792	263.30	948.669	47.433			500637
22	MARCH	5426	4.2	97.9	362.20	61.6	37.50	22.438	276.44	10012.790	500.637			— 0 —

To: Chief, Branch of Financial Management
U.S. Geological Survey
National Center, Mail Stop 270
12201 Sunrise Valley Drive
Reston, Virginia 22092

From: Chief, Office of Minerals Exploration
U.S. Geological Survey
953 National Center
Reston, Virginia 22092

ABSTRACT OF REMITTANCES

Date	Amount	Bank, City and State	Name of Remitter	Docket & Contract Numbers	Purpos
4/6/79	$5,006.37	Chase Manhattan Bank, New York, NY	New Jersey Zinc Div. G+W Natural Resources Group	DMEA-4586 Idm-E1071	Royalty

Remarks: Royalty payment for production of DMEA ore at Idol Mine for March 1979

April 10, 1979
Date prepared

Harold Kirbema
Chief, Office of Minerals Exploration
Person preparing abstract

Date received

Person receiving remittance

The Chase Manhattan Bank, N.A.
40 West 34th Street
New York, N.Y. 10001

CHASE

GW Natural Resources Group
GULF & WESTERN INDUSTRIES

NEW JERSEY ZINC DIVISION
JEFFERSON CITY, TENNESSEE 37760

1826
1-6
310

April 9, 1979

NEW JERSEY ZINC 05,006,374

PAY TO THE ORDER OF

Dollars $5,006.37

U.S. GEOLOGICAL SURVEY
OFFICE OF MINERALS EXPLORATION
NATIONAL CENTER - MAIL STOP 953
RESTON, VA. 22092

SUPERINTENDENT'S ACCOUNT

Royalty of DMEA ore at Idol Mine for
March 1979.

⑈001826⑈ ⑆021000011⑆ 009⑈0289 28⑈

To: Chief, Branch of Financial Management
U.S. Geological Survey
National Center, Mail Stop 270
12201 Sunrise Valley Drive
Reston, Virginia 22092

From: Chief, Office of Minerals Exploration
U.S. Geological Survey
953 National Center
Reston, Virginia 22092

ABSTRACT OF REMITTANCES

Date	Amount	Bank, City and State	Name of Remitter	Docket & Contract Numbers	Purpose
3/7/79	$474.33	Chase Manhattan Bank, New York, NY	New Jersey Zinc Div. G+W Natural Resources Group	DMEA-4586 Idm-E1071	Royalty

Remarks: Royalty payment for production of DMEA ore at Idol

March 13, 1979
Date prepared

Harold Kibamo
Chief, Office of Minerals Exploration
Person preparing abstract

3/22/79
Date received

Mary Mortellaro
Person receiving remittance
Collection Officer

To: Chief, Branch of Financial Management
U.S. Geological Survey
National Center, Mail Stop 270
12201 Sunrise Valley Drive
Reston, Virginia 22092

From: Chief, Office of Minerals Exploration
U.S. Geological Survey
953 National Center
Reston, Virginia 22092

ABSTRACT OF REMITTANCES

Date	Amount	Bank, City and State	Name of Remitter	Docket & Contract Numbers	Purpose
3/7/79	$474.33	Chase Manhattan Bank, New York, NY	New Jersey Zinc Div. G+W Natural Resources Group	DMEA-4586 Idm-E1071	Royalty

The Chase Manhattan Bank, N.A.
40 West 34th Street
New York, N.Y. 10001

CHASE

G+W Natural Resources Group
GULF + WESTERN INDUSTRIES

NEW JERSEY ZINC DIVISION
JEFFERSON CITY, TENNESSEE 37760

1715

1-2
210

March 7, 1979

PAY TO THE ORDER OF

NEW JERSEY ZINC $474.33

DOLLARS $474.33**

U.S. GEOLOGICAL SURVEY
OFFICE OF MINERALS EXPLORATION
NATIONAL CENTER - MAIL STOP 953
RESTON, VIRGINIA 22092

SUPERINTENDENT'S ACCOUNT

DMEA Ore at Idol Mine.

⑈001715⑈ ⑆021000021⑆ 009⑈1⑈028928⑈

DELUXE CHECK PRINTERS, INC.

Remarks: Royalty payment for [illegible]

March 13, 1979
Date prepared

Harold Kirkemo
Chief, Office of Minerals Exploration
Person preparing abstract

Date received

Person receiving remittance

To: Chief, Branch of Financial Management
U.S. Geological Survey
National Center, Mail Stop 270
12201 Sunrise Valley Drive
Reston, Virginia 22092

From: Chief, Office of Minerals Exploration
U.S. Geological Survey
953 National Center
Reston, Virginia 22092

ABSTRACT OF REMITTANCES

Date	Amount	Bank, City and State	Name of Remitter	Docket & Contract Numbers	Purpose
3/7/79	$474.33	Chase Manhattan Bank, New York, NY	New Jersey Zinc Div. G+W Natural Resources Group	DMEA-4586 Idm-E1071	Royalty

Remarks: Royalty payment for production of DMEA ore at Idol

March 13, 1979
Date prepared

Harold Kirkemo
Chief, Office of Minerals Exploration
Person preparing abstract

Date received

Person receiving remittance

IDOL MINE
DMEA ROYALTY CALCULATIONS
(ZN. CONC + LIMESTONE)

			1	2	3	4	5	6	7	8	9	10	11	12	13
			TONS MINED	CRUDE GRADE	RECOVERY	TONS CONC - 1 X 2 X 3 / 5	CONCENTRATE GRADE	P.W. ZINC MARKET	DELIVERED VALUE PER LB. ZN	DEL'VD VALUE / TON CONC - 2000# X 5 X 7	TOTAL DEL'VD VALUE ZN. CONC 8 X 4	ROYALTY 9 X 5%	LIMESTONE ROYALTY (PER ATTACHED)	TOTAL ROYALTY	BALANCE OWED DMEA
1	1977	—	—	—	—	—	—	—	—	—	—	—	—	—	5292750
2		JULY	770	2.1%	96.2%	25.46	61.1%	39.00¢	20.152¢	$246.75	$6282.26	$314.11			5216339
3		AUGUST	NONE TO REPORT												
4		SEPTEMBER	240	3.0	95.1	11.12	61.6	37.00	20.152	248.77	2766.27	138.31			5247508
5		OCTOBER	390	2.5	95.1	15.25	60.8	32.00	18.908	229.92	3506.28	175.31			5229977
6		NOVEMBER	2290	6.5	91.3	220.26	61.7	32.00	18.908	233.32	5139.06	256.955			4973022
7		DECEMBER	2640	6.8	91.3	273.17	60.0	30.50	17.946	215.35	5882.16	294.136			4678886
8	1978	JANUARY	3710	4.7	96.8	283.59	60.0	30.50	17.946	215.35	6107.10	305.356			4373530
9		FEBRUARY	3890	4.3	96.8	265.87	60.9	30.50	17.946	218.58	5811.38	290.569			4082961
10		MARCH	3030	7.4	97.4	348.31	62.7	29.00	16.983	212.97	7417.958	370.898			3712063
11		APRIL	1280	3.6	96.8	70.69	63.1	29.00	16.983	214.33	1515.099	75.755			3636308
12		MAY	3430	4.4	97.1	234.09	62.6	29.00	16.983	212.63	4977.455	248.873			3387435
13		JUNE	7670	5.2	96.8	627.77	61.5	29.00	16.983	208.89	13113.487	655.674			2731761
14		JULY	1970	3.5	98.0	110.59	61.1	30.50	17.946	219.30	2425.238	121.262			2610499
15		AUGUST	1390	3.5	97.1	77.95	60.6	31.50	18.588	225.29	1756.135	87.807			2522692
16		SEPTEMBER	1890	3.7	96.7	109.78	61.6	32.50	19.229	236.90	2600.688	130.034			2392658
17		OCTOBER	7500	5.6	98.3	670.23	61.6	32.50	19.229	236.90	15877.49	793.887			1578771
18		NOVEMBER	3900	4.3	97.7	264.26	62.0	34.50	20.513	254.36	6721.717	336.086			1262685
19		DECEMBER	5780	3.4	98.2	326.78	61.1	34.50	20.513	250.67	8191.394	409.570			853115
20	1979	JANUARY	3620	4.2	97.2	243.87	60.6	34.70	20.641	250.17	6100.895	305.045			548070
21		FEBRUARY	890	2.5	97.8	36.03	60.4	36.50	21.796	263.30	948.669	47.433			500637
22															
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40															

4813 · Buff
5813 · Blue
8813 · Green

DETAIL OF COLLECTION

CD # 225406

Date: FEB 16 1979

Check or MO No.	Remitter	Bill No. or Description	Amount
1642	G&W Natural Resources Group New Jersey Zinc Divison	Royalty Payment for Production of DMEA ore at Idol for Jan 1979 DMEA-4586 Idm-E1071	3,050.45

cc: MS 953 ✓

Appropriation Credited	Div.	TOTAL
142859		3,050.45

To: Chief, Branch of Financial Management
U.S. Geological Survey
National Center, Mail Stop 270
12201 Sunrise Valley Drive
Reston, Virginia 22092

From: Chief, Office of Minerals Exploration
U.S. Geological Survey
953 National Center
Reston, Virginia 22092

ABSTRACT OF REMITTANCES

Date	Amount	Bank, City and State	Name of Remitter	Docket & Contract Numbers	Purpose
2/13/79	$3,050.45	Chase Manhattan Bank, New York, NY	New Jersey Zinc Div. G+W Natural Resources Group	DMEA-4586 Idm-E1071	Royalty

Remarks: Royalty payment for production of DMEA ore at Idol for January 1979.

February 16, 1979
Date prepared

Harold Kirkham
Chief, Office of Minerals Exploration
Person preparing abstract

Date received

Person receiving remittance

To: Chief, Branch of Financial Management
U.S. Geological Survey
National Center, Mail Stop 270
12201 Sunrise Valley Drive
Reston, Virginia 22092

From: Chief, Office of Minerals Exploration
U.S. Geological Survey
953 National Center
Reston, Virginia 22092

ABSTRACT OF REMITTANCES

Date	Amount	Bank, City and State	Name of Remitter	Docket & Contract Numbers	Purp
2/13/79	$3,050.45	Chase Manhattan Bank, New York, NY	New Jersey Zinc Div. G+W Natural Resources Group	DMEA-4586 Idm-E1071	Royal

Remarks: Royalty payment for production of DMEA ore at Idol for January 1979.

February 16, 1979
Date prepared

Harold Kishamo
Chief, Office of Minerals Exploration
Person preparing abstract

2/16/79
Date received

Celeste M. Lovo
Person receiving remittance

To: Chief, Branch of Financial Management
U.S. Geological Survey
National Center, Mail Stop 270
12201 Sunrise Valley Drive
Reston, Virginia 22092

From: Chief, Office of Minerals Exploration
U.S. Geological Survey
953 National Center
Reston, Virginia 22092

ABSTRACT OF REMITTANCES

Date	Amount	Bank, City and State	Name of Remitter	Docket & Contract Numbers	Purpose
2/13/79	$3,050.45	Chase Manhattan Bank, New York, NY	New Jersey Zinc Div. G+W Natural Resources Group	DMEA-4586 Idm-E1071	Royalty

1642

GW Natural Resources Group
GULF + WESTERN INDUSTRIES

NEW JERSEY ZINC DIVISION
JEFFERSON CITY, TENNESSEE 37760

1-2
210

February 13, 1979

NEW JERSEY ZINC

Dollars $3,050.45**

PAY TO THE ORDER OF

U.S. GEOLOGICAL SURVEY
OFFICE OF MINERALS EXPLORATION

SUPERINTENDENT'S ACCOUNT

Jason Miller

Jack Lee

Royalty of DMEA ore at Idol
for January 1979.

⑈001642⑈ ⑆021000021⑆ 009⑈1⑈028928⑈

The Chase Manhattan Bank, N.A.
40 West 34th Street
New York, N.Y. 10001

CHASE

February 16, 1979
Date prepared

Harold Kirkamo
Chief, Office of Minerals Exploration
Person preparing abstract

Date received

Person receiving remittance

IDOL MINE
DMEA ROYALTY CALCULATIONS
(ZN. CONC + LIMESTONE)

		1	2	3	4	5	6	7	8	9	10	11	12	13	
		TONS MINED	CRUDE GRADE	RECOVERY	TONS CONC - 1 X 2 X 3	CONCENTRATE GRADE	P.W. ZINC MARKET	DELIVERED VALUE PER LB. ZN	DEL'VD VALUE / TON CONC - 2000# X 5 X 7	TOTAL DEL'VD VALUE ZN. CONC 8 X 4	ROYALTY 9 X 5%	LIMESTONE ROYALTY (PER ATTACHED)	TOTAL ROYALTY	BALANCE OWED DMEA	
1	1977	—	—	—	—	—	—	—	—	—	—	—	—	5292750	1
2		JULY	770	2.1%	96.2%	2546	61.1%	39.004	20.1724	$246.75	$6282.26	$314.11		5216339	2
3		AUGUST	NONE TO	REPORT											3
4		SEPTEMBER	240	3.0	95.1	1112	61.6	37.00	20.192	248.77	2766.27	138.31		5247508	4
5		OCTOBER	390	2.5	95.1	1525	60.8	32.00	18.708	229.92	3506.28	175.31		5229977	5
6		NOVEMBER	2290	6.5	91.3	220.26	61.7	32.00	18.908	233.32	5139106	256955		4973022	6
7		DECEMBER	2640	6.8	91.3	273.17	60.0	30.50	17.946	215.35	5882716	294136		4678886	7
8	1978	JANUARY	3740	4.7	96.8	283.59	60.0	30.50	17.946	215.35	6107110	305356		4373530	8
9		FEBRUARY	3890	4.3	96.8	265.87	60.9	30.50	17.946	218.58	5811385	290569		4082961	9
10		MARCH	3030	7.4	97.4	348.31	62.7	29.00	16.983	212.97	7417958	370898		3712063	10
11		APRIL	1280	3.6	96.8	70.69	63.1	29.00	16.983	219.33	1515099	75755		3636308	11
12		MAY	3430	4.4	97.1	234.09	62.6	29.00	16.983	212.63	4977455	248873		3387435	12
13		JUNE	7670	5.2	96.8	627.77	61.5	29.00	16.983	208.89	13113487	655674		2731761	13
14		JULY	1970	3.5	98.0	110.59	61.1	30.50	17.946	219.30	2425238	121262		2610499	14
15		AUGUST	1390	3.5	97.1	77.95	60.6	31.50	18.588	225.29	1756135	87807		2522692	15
16		SEPTEMBER	1890	3.7	96.7	109.78	61.6	32.50	19.229	236.90	2600688	130034		2392658	16
17		OCTOBER	7500	5.6	98.3	670.23	61.6	32.50	19.229	236.90	15877749	793887		1598771	17
18		NOVEMBER	3900	4.3	97.7	269.26	62.0	34.50	20.513	254.36	6721717	336086		1262685	18
19		DECEMBER	5980	3.4	98.2	326.78	61.1	34.50	20.513	250.67	8191394	409570		853115	19
20	1979	JANUARY	3620	4.2	97.2	243.87	60.6	34.76	20.641	250.17	6100895	305045		548070	20
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4813 - Buff
5813 - Blue
8813 - Green

To: Chief, Branch of Financial Management
U.S. Geological Survey
National Center, Mail Stop 270
12201 Sunrise Valley Drive
Reston, Virginia 22092

From: Chief, Office of Minerals Exploration
U.S. Geological Survey
953 National Center
Reston, Virginia 22092

ABSTRACT OF REMITTANCES

Date	Amount	Bank, City and State	Name of Remitter	Docket & Contract Numbers	Purpose
1/5/79	$4095.70	Chase Manhattan Bank, New York, NY	New Jersey Zinc Div. G+W Natural Resources Group	DMEA-4586 Idm-E1071	Royalty

Remarks: Royalty of DMEA ore at Idol mine for month of December, 1978.

January 8, 1979
Date prepared

Harold Kirbemo
Chief, Office of Minerals Exploration
Person preparing abstract

1-8-79
Date received

Mary Mortellaro
Person receiving remittance

IDOL MINE
DMEA ROYALTY CALCULATIONS
(ZN. CONC + LIMESTONE)

			1	2	3	4	5	6	7	8	9	10	11	12	13	
			TONS MINED	CRUDE GRADE	RECOVERY	TONS CONC - 1 X 2 X 3 5	CONCENTRATE GRADE	P.W. ZINC MARKET	DELIVERED VALUE PER LB. ZN	DEL'VD VALUE / TON CONC - 2000# X 5 X 7	TOTAL DEL'VD VALUE ZN. CONC 8 X 4	ROYALTY 9 X 5%	LIMESTONE ROYALTY (PER ATTACHED)	TOTAL ROYALTY	BALANCE OWED DMEA	
1	1977	—	—	—	—	—	—	—	—	—	—	—	—	—	$29,27.50	1
2		JULY	770	2.1%	96.2%	25.46	61.1%	34.00¢	20.192¢	$246.75	$6282.26	$314.11			52163.39	2
3		AUGUST	NONE TO REPORT													3
4		SEPTEMBER	240	3.0	95.1	11.12	61.6	34.00	20.192	248.77	2766.27	138.31			5247.508	4
5		OCTOBER	390	2.5	95.1	15.25	60.8	32.00	18.908	229.92	3506.28	175.31			5229.977	5
6		NOVEMBER	2290	6.5	91.3	220.26	61.7	32.00	18.908	233.32	5139.06	256.955			4973.022	6
7		DECEMBER	2640	6.8	91.3	273.17	60.0	30.50	17.946	215.35	5882.16	294.136			4678.886	7
8	1978	JANUARY	3740	4.7	96.8	283.59	60.0	30.50	17.946	215.35	6107.10	305.356			4373.530	8
9		FEBRUARY	3890	4.3	96.8	265.87	60.9	30.50	17.946	218.58	5811.385	290.569			4082.961	9
10		MARCH	3030	7.4	97.4	348.31	62.7	29.00	16.983	212.97	7417.958	370.898			3712.063	10
11		APRIL	1280	3.6	96.8	70.69	63.1	29.00	16.983	214.33	1515.099	75.755			3636.308	11
12		MAY	3430	4.9	97.1	234.09	62.6	29.00	16.983	212.63	4977.455	248.873			3387.435	12
13		JUNE	7670	5.2	96.8	627.77	61.5	29.00	16.983	208.89	13113.487	655.674			2731.761	13
14		JULY	1970	3.5	98.0	110.59	61.1	30.50	17.946	219.30	2425.238	121.262			2610.499	14
15		AUGUST	1390	3.5	97.1	77.95	60.6	31.50	18.588	225.29	1756.135	87.807			2522.692	15
16		SEPTEMBER	1890	3.7	96.7	109.78	61.6	32.50	19.229	236.90	2600.688	130.034			2392.658	16
17		OCTOBER	7500	5.6	98.3	670.23	61.6	32.50	19.229	236.90	15877.749	793.887			1578.771	17
18		NOVEMBER	3900	4.3	97.7	269.26	62.0	34.50	20.513	254.36	6721.717	336.086			1262.685	18
19		DECEMBER	5980	3.4	98.2	326.78	61.1	34.50	20.513	250.67	8191.394	409.570			853.115	19
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IDOL MINE

DMEA ROYALTY CALCULATIONS (LS)

		1	2	3	4	5	6	7	8	9
		TONS MINED (DMEA AREA)	TONS IN CONCEN. PRODUCED	TONS LS PRODUCED (DMEA AREA)	TOTAL LS PRODUCTION (IDOL MINE)	TONS LS SOLD	% OF TOTAL PRODUCTION SOLD	TONS LS SOLD FROM DMEA AREA	F.O.B. VALUE OF LS SOLD DMEA AREA	ROYALTY @ 5%
1	FISCAL JULY, 1977	770	15.56	754	20030	—	-0-	—	—	—
2	August 1977	None to Report								
3	Sept. 1977	240	6.85	233	22406	—	-0-	—	—	—
4	Oct. 1977	390	15.25	375	25721	—	-0-	—	—	—
5	Nov 1977	2290	220.26	2268	24220	—	-0-	—	—	—
6	Dec 1977	2640	273.17	2613	22849	—	-0-	—	—	—
7	Jan 1978	3740	283.59	3712	22027	2	-0-	-0-	-0-	-0-
8	Feb 1978	3890	265.87	3863	25261	—	-0-	-0-	-0-	-0-
9	Mar 1978	3030	348.31	2995	20752	25	-0-	-0-	-0-	-0-
10	Apr 1978	1280	70.69	1209	26134	64	-0-	-0-	-0-	-0-
11	May 1978	3430	234.09	3196	26461	29	-0-	-0-	-0-	-0-
12	June 1978	7670	627.77	7042	24955	131	28.2	36.9	55.35	2.79
13	July 1978	1970	110.59	1859	19821	1	-0-	-0-	-0-	-0-
14	Aug 1978	1390	77.95	1312	22837	92	-0-	-0-	-0-	-0-
15	Sept 1978	1890	109.78	1780	20073	13	-0-	-0-	-0-	-0-
16	Oct 1978	7500	670.23	6830	25088	172	-0-	-0-	-0-	-0-
17	Nov 1978	3900	264.26	3636	21641	121	-0-	-0-	-0-	-0-
18	Dec 1978	5980	216.20	5653	20207	121	-0-	-0-	-0-	-0-

4813 - Huff
8813 - Green

To: Chief, Branch of Financial Management
U.S. Geological Survey
National Center, Mail Stop 270
12201 Sunrise Valley Drive
Reston, Virginia 22092

From: Chief, Office of Minerals Exploration
U.S. Geological Survey
953 National Center
Reston, Virginia 22092

ABSTRACT OF REMITTANCES

Date	Amount	Bank, City and State	Name of Remitter	Docket & Contract Numbers	Purpose
1/5/79	$4095.70	Chase Manhattan Bank, New York, NY	New Jersey Zinc Div. G+W Natural Resources Group	DMEA-4586 Idm-E1071	Royalty

The Chase Manhattan Bank, N.A.
40 West 34th Street
New York, N.Y. 10001
CHASE

G+W Natural Resources Group
GULF + WESTERN INDUSTRIES

NEW JERSEY ZINC DIVISION
JEFFERSON CITY, TENNESSEE 37760

1511
1-2
210

January 5, 1979

PAY TO THE ORDER OF NEW JERSEY ZINC $4,095.70

DOLLARS $4,095.70**

U.S. GEOLOGICAL SURVEY
OFFICE OF MINERALS EXPLORATION

SUPERINTENDENT'S ACCOUNT

Royalty of DMEA Ore at Idol Mine for the month of December 1978.

⑈001511⑈ ⑆021000021⑆ 009⑈10289 28⑈

January 8, 1979
Date prepared

Harold Kisbeno
Chief, Office of Minerals Exploration
Person preparing abstract

Date received

Person receiving remittance

To: Chief, Branch of Financial Management
U.S. Geological Survey
National Center, Mail Stop 270
12201 Sunrise Valley Drive
Reston, Virginia 22092

From: Chief, Office of Minerals Exploration
U.S. Geological Survey
953 National Center
Reston, Virginia 22092

ABSTRACT OF REMITTANCES

Date	Amount	Bank, City and State	Name of Remitter	Docket & Contract Numbers	Purpose
12/27/78	$3,360.86	Chase Manhattan Bank, New York, NY	New Jersey Zinc Div. G+W Natural Resources Group	DMEA-4586 Idm-E1071	Royalty

Remarks: Royalty of DMEA ore at Idol mine for month of November, 1978.

January 2, 1979
Date prepared

Harold Kiff
Chief, Office of Minerals Exploration
Person preparing abstract

1-3-79
Date received

Mary Mortellaro
Person receiving remittance

DETAIL OF COLLECTION

CD # 225222

Date: 01-04-79

Check or MO No.	Remitter	Bill No. or Description	Amount
1460	G & W New Jersey Zinc Div	DMEA-4586 Idm-E1071 Royalt OME for Nov 1978	3,360.86

co MS 953

Appropriation Credited	Div.	TOTAL
142859		3,360.86

To: Chief, Branch of Financial Management
U.S. Geological Survey
National Center, Mail Stop 270
12201 Sunrise Valley Drive
Reston, Virginia 22092

From: Chief, Office of Minerals Exploration
U.S. Geological Survey
953 National Center
Reston, Virginia 22092

ABSTRACT OF REMITTANCES

Date	Amount	Bank, City and State	Name of Remitter	Docket & Contract Numbers	Purpo
12/27/78	$3,360.86	Chase Manhattan Bank, New York, NY	New Jersey Zinc Div. G+W Natural Resources Group	DMEA-4586 Idm-E1071	Royalt

The Chase Manhattan Bank N.A.
40 West 34th Street
New York, N.Y. 10001

G+W Natural Resources Group
GULF + WESTERN INDUSTRIES

NEW JERSEY ZINC DIVISION
JEFFERSON CITY, TENNESSEE 37760

1460
1-2
210

December 27, 1978

NEW JERSEY ZINC 1:0210001:: 009 1:0289 28:

PAY TO THE ORDER OF

DOLLARS $ 3,360.86**

U.S. GEOLOGICAL SURVEY
OFFICE OF MINERALS EXPLORATION

SUPERINTENDENT'S ACCOUNT

Royalty of DEMA ore at Idol for month of November, 1978.

⑈001460⑈ ⑆021000021⑆ 009⑈1⑈028928⑈

CHASE

January 2, 1979
Date prepared

Harold Kirkman
Chief, Office of Minerals Exploration
Person preparing abstract

Date received

Person receiving remittance

IDOL MINE
DMEA ROYALTY CALCULATIONS
(ZN. CONC + LIMESTONE)

			1	2	3	4	5	6	7	8	9	10	11	12	13
			Tons Mined	Crude Grade	Recovery	Tons Conc - 1 x 2 x 3 / 5	Concentrate Grade	P.W. Zinc Market	Delivered Value Per Lb. Zn	Del'vd Value / Ton Conc - 2000# x 5 x 7	Total Del'vd Value Zn. Conc 8 x 4	Royalty 9 x 5%	Limestone Royalty (Per Attached)	Total Royalty	Balance Owed DMEA
1	1977	—	—	—	—	—	—	—	—	—	—	—	—	—	5292750
2		July	770	2.1%	96.2%	25.46	61.1%	34.00¢	20.192¢	$246.75	$6282.26	$314.11			5216639
3		August	None to Report												
4		September	240	3.0	95.1	11.12	61.6	34.00	20.192	248.77	2766.27	138.31			5247508
5		October	390	2.5	95.1	15.25	60.8	32.00	18.908	229.92	3506.28	175.31			5229977
6		November	2290	6.5	91.3	220.26	61.7	32.00	18.908	2333.2	5139106	256955			4973022
7		December	2640	6.8	91.3	273.17	60.0	30.50	17.946	2153.5	5882716	294136			4678886
8	1978	January	3740	4.7	96.8	283.59	60.0	30.50	17.946	2153.5	6107110	305356			4373530
9		February	3890	4.3	96.8	265.87	60.9	30.50	17.946	2185.8	5811385	290569			4082961
10		March	3030	7.4	97.4	348.31	62.7	29.00	16.983	2129.7	7417958	370898			3712063
11		April	1280	3.6	96.8	70.69	63.1	29.00	16.983	2193.3	1515099	75755			3636308
12		May	3430	4.4	97.1	234.09	62.6	29.00	16.983	2126.3	4977455	248873			3387435
13		June	7670	5.2	96.8	627.77	61.5	29.00	16.983	2088.9	13113487	655674			2731761
14		July	1970	3.5	98.0	110.59	61.1	30.50	17.946	2193.0	2425238	121262			2610499
15		August	1390	3.5	97.1	77.95	60.6	31.50	18.588	2252.9	1756135	87807			2522692
16		September	1890	3.7	96.7	109.78	61.6	32.50	19.229	2369.0	2600688	130034			2392658
17		October	7500	5.6	98.3	670.23	61.6	32.50	19.229	2369.0	15877749	793887			1598771
18		November	3900	4.3	97.7	264.26	62.0	34.50	20.513	2543.6	6721717	336086			1262685
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4813 · Buff
5813 · Blue
8813 · Green

IDOL MINE
DMEA ROYALTY CALCULATIONS
(LS)

		1	2	3	4	5	6	7	8	9
		TONS MINED (DMEA AREA)	TONS ZN CONCEN. PRODUCED	TONS LS PRODUCED (DMEA AREA)	TOTAL LS PRODUCTION (IDOL MINE)	TONS LS SOLD	% OF TOTAL PRODUCTION SOLD	TONS LS SOLD FROM DMEA AREA	F.O.B. VALUE OF LS SOLD DMEA AREA	ROYALTY @ 5%
1	FISCAL JULY, 1977	770	15.56	754	20030	—	-0-	—	—	—
2	August 1977	None to Report								
3	Sept. 1977	240	6.85	233	22406	—	-0-	—	—	—
4	Oct. 1977	390	15.25	375	29721	—	-0-	—	—	—
5	Nov 1977	2290	220.26	2268	24220	—	-0-	—	—	—
6	Dec 1977	2640	273.17	2613	22849	—	-0-	—	—	—
7	Jan 1978	3740	283.59	3712	22027	2	-0-	-0-	-0-	-0-
8	Feb 1978	3890	265.87	3863	25261	—	-0-	-0-	-0-	-0-
9	Mar 1978	3030	348.31	2995	20752	25	-0-	-0-	-0-	-0-
10	Apr 1978	1280	70.69	1209	26134	64	-0-	-0-	-0-	-0-
11	May 1978	3430	234.09	3196	26461	29	-0-	-0-	-0-	-0-
12	June 1978	7670	627.77	7042	29955	131	28.2	36.9	55.35	2.79
13	July 1978	1970	110.59	1859	19821	1	-0-	-0-	-0-	-0-
14	Aug 1978	1390	77.95	1312	22837	92	-0-	-0-	-0-	-0-
15	Sept 1978	1890	109.78	1780	20073	13	-0-	-0-	-0-	-0-
16	Oct 1978	7500	670.23	6830	25088	172	-0-	-0-	-0-	-0-
17	Nov 1978	3900	264.26	3636	21641	121	-0-	-0-	-0-	-0-

To: Chief, Branch of Financial Management
U.S. Geological Survey
National Center, Mail Stop 270
12201 Sunrise Valley Drive
Reston, Virginia 22092

From: Chief, Office of Minerals Exploration
U.S. Geological Survey
953 National Center
Reston, Virginia 22092

ABSTRACT OF REMITTANCES

Date	Amount	Bank, City and State	Name of Remitter	Docket & Contract Numbers	Purpose
11/3/78	$9,239.21	Chase Manhattan Bank, New York, NY	New Jersey Zinc Div. G+W Natural Resources Group	DMEA-4586 Idm-E1071	Royalty

Remarks: Royalty of DMEA ore at Idol Mine for September and October 1978.

November 9, 1978
Date prepared

Harold Kirkemo
Chief, Office of Minerals Exploration
Person preparing abstract

Nov 9, 1978
Date received

Mary Mortellaro
Person receiving remittance
Collection Officer

To: Chief, Branch of Financial Management
U.S. Geological Survey
National Center, Mail Stop 270
12201 Sunrise Valley Drive
Reston, Virginia 22092

From: Chief, Office of Minerals Exploration
U.S. Geological Survey
953 National Center
Reston, Virginia 22092

ABSTRACT OF REMITTANCES

Date	Amount	Bank, City and State	Name of Remitter	Docket & Contract Numbers	Purpose
11/3/78	$9,239.21	Chase Manhattan Bank, New York, NY	New Jersey Zinc Div. G+W Natural Resources Group	DMEA-4586 Idm-E1071	Royalty

The Chase Manhattan Bank, N.A.
1 Chase Plaza
20 West 34th Street
New York, NY 10001

G+W Natural Resources Group
GULF + WESTERN INDUSTRIES

NEW JERSEY ZINC DIVISION
JEFFERSON CITY, TENNESSEE 37760

1293
1-2
210

November 3, 1978

NEW JERSEY ZINC

PAY TO THE ORDER OF

DOLLARS $9,239.21

U.S. GEOLOGICAL SURVEY
OFFICE OF MINERALS EXPLORATION

SUPERINTENDENT'S ACCOUNT

Royalty of DMEA ore at Idol Mine for September and October 1978.

Remarks: Royalty of DMEA ore at Idol Mine for September and October 1978.

November 9, 1978
Date prepared

Harold Kirkham
Chief, Office of Minerals Exploration
Person preparing abstract

Date received

Person receiving remittance

IDOL MINE
DMEA ROYALTY CALCULATIONS
(ZN. CONC + LIMESTONE)

			1	2	3	4	5	6	7	8	9	10	11	12	13
			TONS MINED	CRUDE GRADE	RECOVERY	TONS CONC - 1 X 2 X 3 5	CONCENTRATE GRADE	P.W. ZINC MARKET	DELIVERED VALUE PER LB. ZN	DEL'VD VALUE / TON CONC - 2000# X 5 X 7	TOTAL DELV'D VALUE ZN. CONC 8 X 4	ROYALTY 9 X 5%	LIMESTONE ROYALTY (PER ATTACHED)	TOTAL ROYALTY	BALANCE OWED DMEA
1	1977	—	—	—	—	—	—	—	—	—	—	—	—	—	5292750
2		JULY	770	2.1%	96.2%	25.46	61.1%	34.00¢	20.192¢	$246.75	$628226	$31411			5216339
3		AUGUST	NONE TO	REPORT											
4		SEPTEMBER	240	3.0	95.1	11.12	61.6	34.00	20.192	248.77	2766.27	138.31			5247508
5		OCTOBER	390	2.5	95.1	15.25	60.8	32.00	18.908	229.92	350628	17531			5229977
6		NOVEMBER	2290	6.5	91.3	220.26	61.7	32.00	18.908	233.32	5139106	256955			4973022
7		DECEMBER	2640	6.8	91.3	273.17	60.0	30.50	17.946	215.35	5882716	294136			4678886
8	1978	JANUARY	3740	4.7	96.8	283.59	60.0	30.50	17.946	215.35	6107110	305356			4373530
9		FEBRUARY	3890	4.3	96.8	265.87	60.9	30.50	17.946	218.58	5811385	290569			4082961
10		MARCH	3030	7.4	97.4	348.31	62.7	29.00	16.983	212.97	7417958	370898			3712063
11		APRIL	1280	3.6	96.8	70.69	63.1	29.00	16.983	214.33	1515099	75755			3636308
12		MAY	3430	4.4	97.1	234.09	62.6	29.00	16.983	212.63	4977455	248873			3387435
13		JUNE	7670	5.2	96.8	627.77	61.5	29.00	16.983	208.89	13113487	655674			2731761
14		JULY	1970	3.5	98.0	110.59	61.1	30.50	17.946	219.30	2425238	121262			2610499
15		AUGUST	1390	3.5	97.1	77.95	60.6	31.50	18.588	225.29	1756135	87807			2522692
16		SEPTEMBER	1890	3.7	96.7	109.78	61.6	32.50	19.229	236.90	2600688	130034			2392658
17		OCTOBER	7500	5.6	98.3	670.23	61.6	32.50	19.229	236.90	15877749	793887			1598771

4813 - Buff
5813 - Blue
8813 - Green

To: Chief, Branch of Financial Management
U.S. Geological Survey
National Center, Mail Stop 270
12201 Sunrise Valley Drive
Reston, Virginia 22092

From: Chief, Office of Minerals Exploration
U.S. Geological Survey
953 National Center
Reston, Virginia 22092

ABSTRACT OF REMITTANCES

Date	Amount	Bank, City and State	Name of Remitter	Docket & Contract Numbers	Purpose
9/11/78	$878.07	Chase Manhattan Bank, New York, NY	New Jersey Zinc Div. G+W Natural Resources Group	DMEA-4586 Idm-E1071	Royalty

Remarks: Royalty of DMEA ore at Idol Mine for August 1978.

September 13, 1978
Date prepared

Harold Kirkemo
Chief, Office of Minerals Exploration
Person preparing abstract

9-13-78
Date received

Mary Mortellaro
Person receiving remittance

IDOL MINE
DMEA ROYALTY CALCULATIONS
(LS)

		1	2	3	4	5	6	7	8	9
		TONS MINED (DMEA AREA)	TONS ZN CONCEN. PRODUCED	TONS LS PRODUCED (DMEA AREA)	TOTAL LS PRODUCTION (IDOL MINE)	TONS LS SOLD	% OF TOTAL PRODUCTION SOLD	TONS LS SOLD FROM DMEA AREA	F.O.B. VALUE OF LS SOLD DMEA AREA	ROYALTY @ 5%
1	FISCAL JULY, 1977	770	15.56	754	20030	—	—	—	—	—
2	August 1977	None to Report								
3	Sept. 1977	240	6.85	233	22406	—	—	—	—	—
4	Oct. 1977	390	15.25	375	25721	—	—	—	—	—
5	Nov 1977	2290	22.26	2268	24220	—	—	—	—	—
6	Dec 1977	2640	27.17	2613	22849	—	—	—	—	—
7	Jan 1978	3740	28.59	3712	22027	2	—	—	—	—
8	Feb 1978	3890	26.87	3863	25261	—	—	—	—	—
9	Mar 1978	3030	34.81	2995	20752	25	—	—	—	—
10	Apr 1978	1280	70.69	1209	26134	69	—	—	—	—
11	May 1978	3430	234.09	3196	26461	29	—	—	—	—
12	June 1978	7670	627.77	7042	24955	131	28.2	36.9	$55.84	$2.79
13	July 1978	1970	110.59	1859	19821	1	—	—	—	—
14	Aug 1978	1390	77.95	1312	22837	92	—	—	—	—

IDOL MINE
DMEA ROYALTY CALCULATIONS
(ZN. CONC + LIMESTONE)

		1	2	3	4	5	6	7	8	9	10	11	12	13
		TONS MINED	CRUDE GRADE	RECOVERY	TONS CONC - 1 X 2 X 3 5	CONCENTRATE GRADE	P.W. ZINC MARKET	DELIVERED VALUE PER LB. ZN	DEL'VD VALUE / TON CONC - 2000# X 5 X 7	TOTAL DEL'VD VALUE ZN. CONC 8 X 4	ROYALTY 9 X 5%	LIMESTONE ROYALTY (PER ATTACHED)	TOTAL ROYALTY	BALANCE OWED DMEA
1977		—	—	—	—	—	—	—	—	—	—	—	—	
	JULY	770	2.1%	96.2%	25.46	61.1%	34.00¢	20.192¢	$246.75	$628.26	$31.41			5290750
	AUGUST	NONE TO REPORT												5216339
	SEPTEMBER	240	3.0	95.1	11.12	61.6	34.00	20.192	248.77	276.27	13.81			5247508
	OCTOBER	390	2.5	95.1	15.25	60.8	32.00	18.908	229.92	350.28	17.51			5229977
	NOVEMBER	2290	6.5	91.3	220.26	61.7	32.00	18.908	233.32	5139.06	256.95			4973022
	DECEMBER	2640	6.8	91.3	273.17	60.0	30.50	17.946	215.35	5882.16	294.10			4678896
1978	JANUARY	3740	4.7	96.8	283.59	60.0	30.50	17.946	215.35	6107.10	305.36			4373530
	FEBRUARY	3890	4.3	96.8	265.87	60.9	30.50	17.946	218.58	5811.85	290.59			4082961
	MARCH	3030	7.4	97.4	348.31	62.7	29.00	16.983	212.97	7417.58	370.88			3712063
	APRIL	1280	3.6	96.8	70.69	63.1	29.00	16.983	219.33	1515.99	75.75			3636308
	MAY	3430	4.4	97.1	234.09	62.6	29.00	16.983	212.63	4977.45	248.73			3387435
	JUNE	7670	5.2	96.8	627.77	61.5	29.00	16.983	208.89	13113.87	655.74			2731761
	JULY	1970	3.5	98.0	110.59	61.1	30.50	17.946	219.30	2425.38	121.26			2610499
	AUGUST	1390	3.5	97.1	77.95	60.6	31.50	18.588	225.29	1756.35	87.80			2522692

4813 - Buff
5813 - Blue
8813 - Green

To: Chief, Branch of Financial Management
U.S. Geological Survey
National Center, Mail Stop 270
12201 Sunrise Valley Drive
Reston, Virginia 22092

From: Chief, Office of Minerals Exploration
U.S. Geological Survey
953 National Center
Reston, Virginia 22092

ABSTRACT OF REMITTANCES

Date	Amount	Bank, City and State	Name of Remitter	Docket & Contract Numbers	Purpos
8/4/78	$1,212.62	Chase Manhattan Bank, New York, NY	New Jersey Zinc Div. G+W Natural Resources Group	DMEA-4586 Idm-E1071	Royalty

Remarks: Royalty payment for production of DMEA ore at Idol mine for month of July 1978

August 8, 1978
Date prepared

Harold Kirkham
Chief, Office of Minerals Exploration
Person preparing abstract

8-8-78
Date received

Mary Mortellaro
Person receiving remittance
Collection Officer

IDOL MINE
DMEA ROYALTY CALCULATIONS
(ZN. CONC + LIMESTONE)

			1	2	3	4	5	6	7	8	9	10	11	12	13
			TONS MINED	CRUDE GRADE	RECOVERY	TONS CONC - 1 X 2 X 3 / 5	CONCENTRATE GRADE	P.W. ZINC MARKET	DELIVERED VALUE PER LB. ZN	DEL'VD VALUE / TON CONC - 2000# X 5 X 7	TOTAL DEL'VD VALUE ZN. CONC 8 X 4	ROYALTY 9 X 5%	LIMESTONE ROYALTY (PER ATTACHED)	TOTAL ROYALTY	BALANCE OWED DMEA
1	1977	—	—	—	—	—	—	—	—	—	—	—	—	—	5292756
2		JULY	770	2.1%	96.2%	25.46	61.1%	34.00¢	20.192¢	$246.75	$6282.26	$314.11			5216339
3		AUGUST	NONE TO REPORT												
4		SEPTEMBER	240	3.0	95.1	11.12	61.6	34.00	20.192	248.77	2766.27	138.31			5247508
5		OCTOBER	390	2.5	95.1	15.25	60.8	32.00	18.908	229.92	3506.28	175.31			5229977
6		NOVEMBER	2290	6.5	91.3	220.26	61.7	32.00	18.908	233.32	5139.06	256.955			4973022
7		DECEMBER	2640	6.8	91.3	273.17	60.0	30.50	17.946	215.35	5882.16	294.136			4678886
8	1978	JANUARY	3740	4.7	96.8	283.59	60.0	30.50	17.946	215.35	6107.10	305.356			4373530
9		FEBRUARY	3890	4.3	96.8	265.87	60.9	30.50	17.946	218.58	5811.85	290.569			4082961
10		MARCH	3030	7.4	97.4	348.31	62.7	29.00	16.983	212.97	7417.958	370.898			3712063
11		APRIL	1280	3.6	96.8	70.69	63.1	29.00	16.983	214.33	1515.099	75.755			3636308
12		MAY	3430	4.9	97.1	234.09	62.6	29.00	16.983	212.63	4977.455	248.873			3387435
13		JUNE	7670	5.2	96.8	627.77	61.5	29.00	16.983	208.89	13113.487	655.674			2731761
14		JULY	1970	3.5	98.0	110.59	61.1	30.50	17.946	219.30	3531.138	121.262			2610499

4813 - Buff
5813 - Blue
8813 - Green

IDOL MINE
DMEA ROYALTY CALCULATIONS
(LS)

	1	2	3	4	5	6	7	8	9
	TONS MINED (DMEA AREA)	TONS ZN CONCEN. PRODUCED	TONS LS PRODUCED (DMEA AREA)	TOTAL LS PRODUCTION (IDOL MINE)	TONS LS SOLD	% OF TOTAL PRODUCTION SOLD	TONS LS SOLD FROM DMEA AREA	F.O.B. VALUE OF LS SOLD DMEA AREA	ROYALTY @ 5%
FISCAL JULY, 1977	770	15.56	754	20030	—	-0-	—	—	—
August 1977	None to Report								
Sept. 1977	240	6.85	233	22406	—	-0-	—	—	—
Oct. 1977	390	15.25	375	25721	—	-0-	—	—	—
Nov 1977	2290	220.26	2268	24220	—	-0-	—	—	—
Dec 1977	2640	273.17	2613	22849	—	-0-	—	—	—
Jan 1978	3740	283.59	3712	22027	2	-0-	-0-	-0-	-0-
Feb 1978	3890	265.87	3863	25261	—	-0-	-0-	-0-	-0-
Mar 1978	3030	348.31	2995	20752	25	-0-	-0-	-0-	-0-
Apr 1978	1280	70.69	1209	26134	64	-0-	-0-	-0-	-0-
May 1978	3430	234.09	3196	26461	29	-0-	-0-	-0-	-0-
June 1978	7670	627.77	7042	24955	131	28.2	36.9	$55.84	$2.79
July 1978	1970	110.59	1859	19821	1	-0-	-0-	-0-	-0-

9813 - Buff
9811 - Green

To: Chief, Branch of Financial Management
U.S. Geological Survey
National Center, Mail Stop 270
12201 Sunrise Valley Drive
Reston, Virginia 22092

From: Chief, Office of Minerals Exploration
U.S. Geological Survey
953 National Center
Reston, Virginia 22092

ABSTRACT OF REMITTANCES

Date	Amount	Bank, City and State	Name of Remitter	Docket & Contract Numbers	Purpos
6/30/78	$6,559.53	Chase Manhattan Bank, New York, NY	New Jersey Zinc Div. G+W Natural Resources Group	DMEA-4586 Idm-E1071	Royalty

Remarks: Royalty payment for production of DMEA ore at Idol mine for June 1978.

July 5, 1978
Date prepared

Harold Kirkemo
Chief, Office of Minerals Exploration
Person preparing abstract

7/5/78
Date received

Person receiving remittance

RECEIVED
U.S. GEOLOGICAL SURVEY
JUL 5 7 29 PM '78
DIVISION OF
FINANCIAL MANAGEMENT

To: Chief, Branch of Financial Management
U.S. Geological Survey
National Center, Mail Stop 270
12201 Sunrise Valley Drive
Reston, Virginia 22092

From: Chief, Office of Minerals Exploration
U.S. Geological Survey
953 National Center
Reston, Virginia 22092

ABSTRACT OF REMITTANCES

Date	Amount	Bank, City and State	Name of Remitter	Docket & Contract Numbers	Purpos
6/30/78	$6,559.53	Chase Manhattan Bank, New York, NY	New Jersey Zinc Div. G+W Natural Resources Group	DMEA-4586 Idm-E1071	Royalty

THE CHASE MANHATTAN BANK
National Association
40 West 34th Street, New York, N.Y.

G+W Natural Resources Group
GULF + WESTERN INDUSTRIES

NEW JERSEY ZINC DIVISION
JEFFERSON CITY, TENNESSEE 37760

855
1-2
210

June 30, 1978

PAY TO THE ORDER OF

NEW JERSEY ZINC DIVISION

DOLLARS $ 6,559.53 **

U.S. GEOLOGICAL SURVEY

SUPERINTENDENT'S ACCOUNT

Royalty of DMEA ore at Idol
for June 1978.

⑆021000021⑆ 009⑈10289280⑈

mine for June 1978.

July 5, 1978
Date prepared

Harold Kirkemo
Chief, Office of Minerals Exploration
Person preparing abstract

Date received

Person receiving remittance

IDOL MINE
DMEA ROYALTY CALCULATIONS
(ZN. CONC + LIMESTONE)

		1	2	3	4	5	6	7	8	9	10	11	12	13
		TONS MINED	CRUDE GRADE	RECOVERY	TONS CONC - 1 X 2 X 3 / 5	CONCENTRATE GRADE	P.W. ZINC MARKET	DELIVERED VALUE PER LB. ZN	DEL'VD VALUE / TON CONC - 2000# X 5 X 7	TOTAL DEL'VD VALUE ZN. CONC 8 X 4	ROYALTY 9 X 5%	LIMESTONE ROYALTY (PER ATTACHED)	TOTAL ROYALTY	BALANCE OWED DMEA
1	1977	—	—	—	—	—	—	—	—	—	—	—	—	5292750
2		JULY 770	2.1%	96.2%	25.46	61.1%	39.00¢	20.192¢	$246.75	$628226	$31411			5216339
3		AUGUST NONE TO REPORT												
4		SEPTEMBER 240	3.0	95.1	11.12	61.6	34.00	20.192	248.77	2766.27	138.31			5247508
5		OCTOBER 390	2.5	95.1	15.25	60.8	32.00	18.908	229.92	3506.28	175.31			5229977
6		NOVEMBER 2290	6.5	91.3	220.26	61.7	32.00	18.908	233.32	5139106	256955			4973022
7		DECEMBER 2640	6.8	91.3	273.17	60.0	30.50	17.996	215.35	5882716	294136			4678886
8	1978	JANUARY 3740	4.7	96.8	283.59	60.0	30.50	17.996	215.35	6107110	305356			4373530
9		FEBRUARY 3890	4.3	96.8	265.87	60.9	30.50	17.996	218.58	5811385	290569			4082961
10		MARCH 3030	7.4	97.4	348.31	62.7	29.00	16.983	212.97	7417958	370898			3712063
11		APRIL 1280	3.6	96.8	70.69	63.1	29.00	16.983	214.33	1515099	75755			3636308
12		MAY 3430	4.4	97.1	234.09	62.6	29.00	16.983	212.63	4977455	248873			3387435
13		JUNE 7670	5.2	96.8	627.77	61.5	29.00	16.983	208.89	13113487	655674			2731761
14		JULY												
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40														

4813 · Buff
5813 · Blue
8813 · Green

IDOL MINE

DMEA ROYALTY CALCULATIONS (LS)

	1	2	3	4	5	6	7	8	9
	TONS MINED (DMEA AREA)	TONS ZN CONCEN. PRODUCED	TONS LS PRODUCED (DMEA AREA)	TOTAL LS PRODUCTION (IDOL MINE)	TONS LS SOLD	% OF TOTAL PRODUCTION SOLD	TONS LS SOLD FROM DMEA AREA	F.O.B. VALUE OF LS SOLD DMEA AREA	ROYALTY @ 5%
FISCAL JULY, 1977	770	15.56	754	20030	—	-0-	—	—	—
August 1977	None to Report								
Sept. 1977	240	6.85	233	22406	—	-0-	—	—	—
Oct. 1977	390	15.25	375	25721	—	-0-	—	—	—
Nov 1977	2290	220.26	2268	29220	—	-0-	—	—	—
Dec 1977	2640	273.17	2613	22849	—	-0-	—	—	—
Jan 1978	3740	283.59	3712	22027	2	-0-	-0-	-0-	-0-
Feb 1978	3890	265.87	3863	25261	—	-0-	-0-	-0-	-0-
Mar 1978	3030	348.31	2995	20752	25	-0-	-0-	-0-	-0-
Apr 1978	1280	70.69	1209	26134	64	-0-	-0-	-0-	-0-
May 1978	3430	234.09	3196	26961	29	-0-	-0-	-0-	-0-
June 1978	7670	627.77	7042	24955	131	28.2	36.9	$55.84	$2.79

To: Chief, Branch of Financial Management
U.S. Geological Survey
National Center, Mail Stop 270
12201 Sunrise Valley Drive
Reston, Virginia 22092

From: Chief, Office of Minerals Exploration
U.S. Geological Survey
953 National Center
Reston, Virginia 22092

ABSTRACT OF REMITTANCES

Date	Amount	Bank, City and State	Name of Remitter	Docket & Contract Numbers	Purpose
6/8/78	$2,488.73	Chase Manhattan Bank, New York, NY	New Jersey Zinc Div. G+W Natural Resources Group	DMEA-4586 Idm-E1071	Royalty

Remarks: Royalty payment for production of DMEA ore at Idol Mine for May 1978

June 14, 1978
Date prepared

Harold Kirkamo
Chief, Office of Minerals Exploration
Person preparing abstract

6/14/78
Date received

Celeste M. Lowe
Person receiving remittance

RECEIVED
U. S. GEOLOGICAL SURVEY
JUN 14 8 32 AM '78
BRANCH OF
FINANCIAL MANAGMENT

To: Chief, Branch of Financial Management
U.S. Geological Survey
National Center, Mail Stop 270
12201 Sunrise Valley Drive
Reston, Virginia 22092

From: Chief, Office of Minerals Exploration
U.S. Geological Survey
953 National Center
Reston, Virginia 22092

ABSTRACT OF REMITTANCES

Date	Amount	Bank, City and State	Name of Remitter	Docket & Contract Numbers	Purpos
6/8/78	$2,488.73	Chase Manhattan Bank, New York, NY	New Jersey Zinc Div. G+W Natural Resources Group	DMEA-4586 Idm-E1071	Royalty

THE CHASE MANHATTAN BANK
National Association
40 West 34th Street, New York, N.Y.

GW Natural Resources Group
GULF + WESTERN INDUSTRIES

NEW JERSEY ZINC DIVISION
JEFFERSON CITY, TENNESSEE 37760

788
1-2
210

June 8, 1978

NEW JERSEY ZINC

PAY TO THE ORDER OF

U. S. GEOLOGICAL SURVEY
NATIONAL CENTER - MAIL STOP 953
RESTON, VIRGINIA 22092

DOLLARS $ 2,488.73*

SUPERINTENDENT'S ACCOUNT

Royalty of DMEA Ore at Idol
Mine for May 1978

⑆021000021⑆ 009⑈1⑈028928⑈

Mine for May 1978

6/14/78
Date prepared

Chief, Office of Minerals Exploration
Person preparing abstract

Date received

Person receiving remittance

IDOL MINE
DMEA ROYALTY CALCULATIONS
(ZN. CONC + LIMESTONE)

		1	2	3	4	5	6	7	8	9	10	11	12	13
		TONS MINED	CRUDE GRADE	RECOVERY	TONS CONC - 1 X 2 X 3 / 5	CONCENTRATE GRADE	P.W. ZINC MARKET	DELIVERED VALUE PER LB. ZN	DEL'VD VALUE / TON CONC - 2000# X 5 X 7	TOTAL DEL'VD VALUE ZN. CONC 8 X 4	ROYALTY 9 X 5%	LIMESTONE ROYALTY (PER ATTACHED)	TOTAL ROYALTY	BALANCE OWED DMEA
1977		—	—	—	—	—	—	—	—	—	—	—	—	5292750
	JULY	770	2.1%	96.2%	25.46	61.1%	34.00¢	20.192¢	$246.75	$6282.26	$314.11			5216639
	AUGUST	NONE TO REPORT												
	SEPTEMBER	240	3.0	95.1	11.12	61.6	34.00	20.192	248.77	2766.27	138.31			5247508
	OCTOBER	390	2.5	95.1	15.25	60.8	32.00	18.908	229.92	3506.28	175.31			5229977
	NOVEMBER	2290	6.5	91.3	220.26	61.7	32.00	18.908	233.32	5139.06	256.955			4973022
	DECEMBER	2640	6.8	91.3	273.17	60.0	30.50	17.946	215.35	5882.16	294.136			4678886
1978	JANUARY	3740	4.7	96.8	283.59	60.0	30.50	17.946	215.35	6107.10	305.356			4373530
	FEBRUARY	3890	4.3	96.8	265.87	60.9	30.50	17.946	218.58	5811.85	290.569			4082961
	MARCH	3030	7.4	97.4	348.31	62.7	29.00	16.983	212.97	7417.58	370.898			3712063
	APRIL	1280	3.6	96.8	70.69	63.1	29.00	16.983	214.33	1515.99	75.755			3636308
	MAY	3430	4.9	97.1	234.09	62.6	29.00	16.983	212.63	4977.55	248.873			3387435
	JUNE													
	JULY													

4813 - Buff
5813 - Blue
8813 - Green

IDOL MINE

DMEA ROYALTY CALCULATIONS (LS)

		1	2	3	4	5	6	7	8	9
		TONS MINED (DMEA AREA)	TONS ZN CONCEN. PRODUCED	TONS LS PRODUCED (DMEA AREA)	TOTAL LS PRODUCTION (IDOL MINE)	TONS LS SOLD	% OF TOTAL PRODUCTION SOLD	TONS LS SOLD FROM DMEA AREA	F.O.B. VALUE OF LS SOLD DMEA AREA	ROYALTY @ 5%
1	FISCAL JULY, 1977	770	15.56	754	20030	—	-0-	—	—	—
2	August 1977	None to Report								
3	Sept. 1977	240	6.85	233	22406	—	-0-	—	—	—
4	Oct. 1977	390	15.25	375	25721	—	-0-	—	—	—
5	Nov 1977	2290	220.26	2268	24220	—	-0-	—	—	—
6	Dec 1977	2640	27.317	2613	22849	—	-0-	—	—	—
7	Jan 1978	3740	28.359	3712	22027	2	-0-	-0-	-0-	-0-
8	Feb 1978	3890	26.587	3863	25261	—	-0-	-0-	-0-	-0-
9	Mar 1978	3030	34.831	2995	20752	25	-0-	-0-	-0-	-0-
10	Apr 1978	1280	7.069	1209	26134	69	-0-	-0-	-0-	-0-
11	May 1978	3430	23.409	3196	26461	24	-0-	-0-	-0-	-0-

United States Department of the Interior

GEOLOGICAL SURVEY
RESTON, VIRGINIA 22092

In Reply Refer To:
Mail Stop 953

May 25, 1978

Mr. R. E. Thompson
Assistant to Executive
Vice President - Mining
The New Jersey Zinc Company
Jefferson City, Tennessee 37760

Re: DMEA-4586 (Zinc)
The New Jersey Zinc Company
Cedar Springs Area, Sector II
Copper Ridge Belt
Grainger County, Tennessee
Contract Idm-E1071

Dear Mr. Thompson:

This is to acknowledge with thanks receipt of check No. 737, dated May 22, 1978, in the amount of $13,663.13 for balance of royalty on production from the Idol mine, in the period November 1977 - March 1978.

Sincerely yours,

Harold Kirkemo

Harold Kirkemo, Chief
Office of Minerals Exploration

To: Chief, Branch of Financial Management
U.S. Geological Survey
National Center, Mail Stop 270
12201 Sunrise Valley Drive
Reston, Virginia 22092

From: Chief, Office of Minerals Exploration
U.S. Geological Survey
953 National Center
Reston, Virginia 22092

ABSTRACT OF REMITTANCES

Date	Amount	Bank, City and State	Name of Remitter	Docket & Contract Numbers	Purpose
5/22/78	$13,663.13	Chase Manhattan Bank, New York, NY	New Jersey Zinc Div. G+W Natural Resources Group	DMEA-4586 Idm-E1071	Royalty

Remarks: Royalty payment for balance on production from Idol Mine, 11/1977-3/1978.

May 25, 1978
Date prepared

Harold Kirberger
Chief, Office of Minerals Exploration
Person preparing abstract

5/25/78
Date received

Celeste M. Lowe
Person receiving remittance

RECEIVED
U.S. GEOLOGICAL SURVEY
MAY 25 11 01 AM '78
BRANCH OF
FINANCIAL MANAGEMENT

Natural Resources Group
GULF + WESTERN INDUSTRIES
Zinc Division

The New Jersey Zinc Company
Jefferson City, Tennessee 37760
(615) 475-2052

May 22, 1978

Mr. Harold Kirkemo
Office of Minerals Exploration
U. S. Geological Survey
National Center - Mail Stop 953
Reston, Virginia 22092

RE: DMEA -4586
Idol Mine

Dear Mr. Kirkemo:

A review of our royalty payments under DEMA Contract 4586 has disclosed that for the period November 1977 - March 1978 inclusive, a "slipped decimal" resulted in an under-calculation of the tons of concentrates resulting from mining in the DMEA Area of the Idol Mine.

Attached are the following:

(1) A copy of the calculation sheet which is sent to you each month with our royalty payment.

(2) A corrected copy of the above calculation sheet.

(3) A summary sheet showing the royalty payments as made - in accordance with (1) above and what should have been paid in accordance with (2) above.

You will note from the summary sheet attached that the royalty payments November 1977 - March 1978 period were underpaid in the amount of $13,663.13. Our check in this amount is enclosed herewith.

Very truly yours,

R. E. Thompson
Assistant to Executive Vice President - Mining

RET/bk
Attachments
Enclosure - check

DATE	AS CALCULATED AND PAID	CORRECTED CALCULATION	ADDITIONAL DUE D.M.E.A.
1977			
July	$ 314.11	$ 314.11	$ -
August	-	-	-
September	138.31	138.31	-
October	175.31	175.31	-
November	255.20	2,569.55	2,314.35
December	294.17	2,941.36	2,647.19
1978			
January	305.36	3,053.56	2,748.20
February	290.39	2,905.69	2,615.30
March	370.89	3,708.98	3.338.09
April	757.55	757.55	-
Totals	$2,901.29	$16,564.42	$13,663.13

IDOL MINE
DMEA ROYALTY CALCULATIONS
(ZN. CONC & LIMESTONE)

		1	2	3	4	5	6	7	8	9	10	11	12	13
		TONS MINED	CRUDE GRADE	RECOVERY	TONS CONC - 1 X 2 X 3 / 5	CONCENTRATE GRADE	P.W. ZINC MARKET	DELIVERED VALUE PER LB. ZN	DEL'VD VALUE / TON CONC - 2000# X 5 X 7	TOTAL DEL'VD VALUE TON CONC 8 X 4	ROYALTY 9 X 5%	LIMESTONE ROYALTY (PER ATTACHED)	TOTAL ROYALTY	BALANCE OWED DMEA
1977	—	—	—	—	—	—	—	—	—	—	—	—	—	5292750
	JULY	770	2.1%	96.2%	25.46	61.1%	37.004	20.192	$246.75	$6282.26	$314.11			5216339
	AUGUST	NONE TO REPORT												
	SEPTEMBER	240	3.0	95.1	11.12	61.6	37.00	20.192	248.77	2766.27	138.31			5247508
	OCTOBER	390	2.5	95.1	15.25	60.8	32.00	18.768	229.92	3506.28	175.31			5229977
	NOVEMBER	2290	6.5	91.3	220.26	61.7	32.00	18.908	233.32	5139.06	2569.55			4973022
	DECEMBER	2640	6.8	91.3	273.17	60.0	30.50	17.946	215.35	5882.16	2941.36			4678886
1978	JANUARY	3740	4.7	96.8	283.59	60.0	30.50	17.946	215.35	6107.10	3053.56			4373530
	FEBRUARY	3890	4.3	96.8	265.87	60.9	30.50	17.946	218.58	5911.85	2905.69			4082961
	MARCH	3030	7.4	97.4	348.31	62.7	29.00	16.983	212.97	7417.58	3708.98			3712063
	APRIL	1280	3.6	96.8	70.69	63.1	29.00	16.983	214.33	1515.99	757.55			3636308
	MAY													
	JUNE													
	JULY													

4813 - Buff
5813 - Blue
8813 - Green

IDOL MINE

DMEA ROYALTY CALCULATIONS
(ZN CONCEN. + LS)

	1	2	3	4	5	6		7	8	9	10	11	12	
	TONS MINED (DMEA AREA)	CRUDE GRADE (ESTIM.)	MILLING RECOVERY	TONS CONCEN. PRODUCED 1 x 2 x 3 / 5	CONCENTRATE GRADE	P. W. ZINC MARKET	DELIVERED VALUE PER POUND ZN.	DELV'D VALUE PER TON CONCEN 2000# x 5 x 7	TOTAL DELV'D. VALUE ZN CONC. 8 x 4	ROYALTY 9 x 5%	LIMESTONE ROYALTY (PER ATTACHED)	TOTAL ROYALTY	BALANCE OWED TO D.M.E.A.
—	—	—	—	—	—	—	—	—	—	—	—	—	$ 5292750
FISCAL JULY, 1977	770	2.1%	96.2%	25.46	61.1%	34.00¢	20.192¢	$ 246.75	$ 6282.26	$ 314.11	—	$ 314.11	5261339
August 1977	None to Report										—	—	5261339
September 1977	240	3.0%	95.1%	11.12	61.6	34.00¢	20.192¢	$ 248.77	2766.27	$ 138.31	—	138.31	5247508
October 1977	390	2.5%	95.1%	15.35	66.8	32.00¢	18.908¢	$ 229.92	3506.28	175.31	—	175.31	5229977
November 1977	2290	6.5%	91.3%	22.03	61.7	32.00¢	18.908¢	233.32	5140.03	255.20	—	255.20	5204457
December 1977	2640	6.8%	91.3%	25.32	60.0	30.50¢	17.946¢	215.35	5883.36	294.17	—	294.17	5175040
January 1978	3140	4.7%	96.8%	28.36	60.0	30.50¢	17.946¢	215.35	6107.32	305.36	—	305.36	5144505
February 1978	3890	4.3%	96.8%	26.57	60.9	30.50	17.946¢	218.58	5807.73	290.39	—	290.39	5115465
March 1978	3030	7.4%	97.4	34.83	62.7	29.00	16.983¢	212.97	7417.75	370.89	—	370.89	5078376
April 1978	1280	3.6%	96.8	7069	631	29.00	16.983¢	214.33	15150.99	757.55	—	757.55	5002621

To: Chief, Branch of Financial Management
U.S. Geological Survey
National Center, Mail Stop 270
12201 Sunrise Valley Drive
Reston, Virginia 22092

From: Chief, Office of Minerals Exploration
U.S. Geological Survey
953 National Center
Reston, Virginia 22092

ABSTRACT OF REMITTANCES

Date	Amount	Bank, City and State	Name of Remitter	Docket & Contract Numbers	Purpos
5/22/78	$13,663.13	Chase Manhattan Bank, New York, NY	New Jersey Zinc Div. G+W Natural Resources Group	DMEA-4586 Idm-E1071	Royalt

THE CHASE MANHATTAN BANK
National Association
40 West 34th Street, New York (N.Y.)

G+W Natural Resources Group
GULF + WESTERN INDUSTRIES

NEW JERSEY ZINC DIVISION
JEFFERSON CITY, TENNESSEE 37760

737
1-2
210

May 22, 1978

NEW JERSEY ZINC ⑆021000021⑆ 009⑈028928⑈

PAY TO THE ORDER OF — DOLLARS $13,663.13

HAROLD KIRKEMO
OFFICE OF MINERALS EXPLORATION
U. S. GEOLOGICAL SURVEY

SUPERINTENDENT'S ACCOUNT

Royalty of DMEA ore at Idol.

⑆021000021⑆ 009⑈028928⑈

Remarks: Royalty payment for balance on production from Idol Mine, 11/1977-3/1978.

May 25, 1978
Date prepared

Harold Kirkemo
Chief, Office of Minerals Exploration
Person preparing abstract

Date received

Person receiving remittance

United States Department of the Interior

GEOLOGICAL SURVEY
RESTON, VIRGINIA 22092

May 23, 1978

Mr. R. E. Thompson
Assistant to Executive
Vice President - Mining
The New Jersey Zinc Company
Jefferson City, Tennessee 37760

DMEA-4586 (Zinc)
Re: The New Jersey Zinc Company
Cedar Springs Area, Sector II
Copper Ridge Belt
Grainger County, Tennessee
Contract Idm-E1071

Dear Mr. Thompson:

Thank you for your latest royalty check which we received May 19, 1978, in the amount of $757.55 for the month of April, dated May 15, 1978, payable to Harold Kirkemo, Office of Minerals Exploration, U.S. Geological Survey.

In the future, however, we would appreciate it if you would make the check payable to U.S. Geological Survey; this would enable us to process your transaction in case of my absence from the office.

If we may be of any service to you, please let us know.

Sincerely yours,

Harold Kirkemo

Harold Kirkemo, Chief
Office of Minerals Exploration

To: Chief, Branch of Financial Management
U.S. Geological Survey
National Center, Mail Stop 270
12201 Sunrise Valley Drive
Reston, Virginia 22092

From: Chief, Office of Minerals Exploration
U.S. Geological Survey
953 National Center
Reston, Virginia 22092

ABSTRACT OF REMITTANCES

Date	Amount	Bank, City and State	Name of Remitter	Docket & Contract Numbers	Purpose
5/15/78	$757.55	Chase Manhattan Bank, New York, NY	New Jersey Zinc Div. G+W Natural Resources Group	DMEA-4586 Idm-E1071	Royalty

Remarks: Royalty of DMEA ore at Idol - April 1978.

May 19, 1978
Date prepared

Harold Kirkemo
Chief, Office of Minerals Exploration
Person preparing abstract

5/22/78
Date received

Celeste M. Lowe
Person receiving remittance

To: Chief, Branch of Financial Management
U.S. Geological Survey
National Center, Mail Stop 270
12201 Sunrise Valley Drive
Reston, Virginia 22092

From: Chief, Office of Minerals Exploration
U.S. Geological Survey
953 National Center
Reston, Virginia 22092

ABSTRACT OF REMITTANCES

Date	Amount	Bank, City and State	Name of Remitter	Docket & Contract Numbers	Purpos
5/15/78	$757.55	Chase Manhattan Bank, New York, NY	New Jersey Zinc Div. G+W Natural Resources	DMEA-4586 Idm-E1071	Royalty

THE CHASE MANHATTAN BANK
National Association
40 West 34th Street, New York, N.Y.

G+W Natural Resources Group
GULF + WESTERN INDUSTRIES

NEW JERSEY ZINC DIVISION
JEFFERSON CITY, TENNESSEE 37760

705
1-2/210

May 15, 1978

NEW JERSEY ZINC 075755615

PAY TO THE ORDER OF DOLLARS $757.55**

HAROLD KIRKEMO
OFFICE OF MINERALS EXPLORATION
U.S. GEOLOGICAL SURVEY

SUPERINTENDENT'S ACCOUNT

Royalty of DMEA ore at Idol
for April 1978.

⑆021000021⑆ 009⑈1⑈028928⑈

Remarks: Royalty of DMEA ore at Idol - April 1978.

May 19, 1978
Date prepared

Harold Kirkemo
Chief, Office of Minerals Exploration
Person preparing abstract

Date received

Person receiving remittance

IDOL MINE

D.M.E.A. ROYALTY CALCULATIONS
(ZN CONCEN. + LS)

		1	2	3	4	5	6	7	8	9	10	11	12	
		TONS MINED (DMEA AREA)	CRUDE GRADE (ESTIM.)	MILLING RECOVERY	TONS CONCEN. PRODUCED $\frac{1 \times 2 \times 3}{5}$	CONCENTRATE GRADE	P. W. ZINC MARKET	DELIVERED VALUE PER POUND ZN.	DELV'D VALUE PER TON CONCEN 2000# × 5 × 7	TOTAL DELV'D. VALUE ZN CONC. 8 × 4	ROYALTY 9 × 5%	LIMESTONE ROYALTY (PER ATTACHED)	TOTAL ROYALTY	BALANCE OWED TO D.M.E.A.
1	—	—	—	—	—	—	—	—	—	—	—	—	—	$ 5292750
2	FISCAL JULY, 1977	770	2.1%	96.2%	25.46	61.1%	34.00¢	20.192¢	$ 246.75	$ 6282.26	$ 314.11	—	$ 314.11	5261339
3	August 1977	None to Report										—	—	5261339
4	September 1977	240	3.0%	95.1%	11.42	61.6	34.00¢	20.192¢	$ 248.77	2766.27	$ 138.31	—	138.31	5247508
5	October 1977	390	2.5%	95.1%	15.25	60.8	32.00¢	18.908¢	$ 229.92	3506.28	175.31	—	175.31	5229977
6	November 1977	2290	6.5%	91.3%	22.03	61.7	32.00¢	18.908¢	233.32	5140.03	255.20	—	255.20	5204457
7	December 1977	2640	6.8%	91.3%	27.32	60.0	30.50¢	17.946¢	215.35	5883.36	294.17	—	294.17	5175040
8	January 1978	3740	4.7%	96.8%	28.36	60.0	30.50¢	17.946¢	215.35	6107.32	305.36	—	305.36	5145.04
9	February 1978	3890	4.3%	96.8%	26.57	60.9	30.50	17.946¢	218.58	5807.73	290.39	—	290.39	5115465
10	March 1978	3030	7.4%	97.4	34.83	62.7	29.00	16.983¢	212.97	7417.75	370.89	—	370.89	5078376
11	April 1978	1280	3.6%	96.8	70.69	63.1	29.00	16.983¢	214.33	15150.99	757.55	—	757.55	5002621

IDOL MINE

DMEA ROYALTY CALCULATIONS (LS)

	1	2	3	4	5	6	7	8	9
	Tons Mined (DMEA AREA)	Tons Zn Concen. Produced	Tons Ls Produced (DMEA AREA)	Total Ls Production (IDOL MINE)	Tons Ls Sold	% of Total Production Sold	Tons Ls Sold from DMEA AREA	F.O.B. Value of Ls Sold DMEA AREA	Royalty @ 5%
Fiscal July, 1977	770	15.56	754	20030	—	-0-	—	—	—
August 1977	None to Report								
Sept. 1977	240	6.85	233	22406	—	-0-	—	—	—
Oct. 1977	390	15.25	375	25721	—	-0-	—	—	—
Nov 1977	2290	22.03	2268	24220	—	-0-	—	—	—
Dec 1977	2640	27.32	2613	22849	—	-0-	—	—	—
Jan 1978	3740	28.36	3712	22027	2	-0-	-0-	-0-	-0-
Feb 1978	3890	26.57	3863	25261	—	-0-	-0-	-0-	-0-
Mar 1978	3030	34.83	2995	20752	25	-0-	-0-	-0-	-0-
Apr 1978	1280	70.69	1209	26134	69	-0-	-0-	-0-	-0-

To: Chief, Branch of Financial Management
U.S. Geological Survey
National Center, Mail Stop 270
12201 Sunrise Valley Drive
Reston, Virginia 22092

From: Chief, Office of Minerals Exploration
U.S. Geological Survey
953 National Center
Reston, Virginia 22092

ABSTRACT OF REMITTANCES

Date	Amount	Bank, City and State	Name of Remitter	Docket & Contract Numbers	Purpos
April 5,1978	$370.89	Chase Manhattan Bank, New York, NY	New Jersey Zinc Div. G+W Natural Resources Group	DMEA-4586 Idm-E1071	Royalty

Remarks: Royalty of DMEA ore at Idol - March 1978

April 11, 1978
Date prepared

Harold Kirkham
Chief, Office of Minerals Exploration
Person preparing abstract

4/11/78
Date received

Sherry Moore
Person receiving remittance

RECEIVED
U. S. GEOLOGICAL SURVEY
APR 11 8 43 AM '78
BRANCH OF
FINANCIAL MANAGMENT

To: Chief, Branch of Financial Management
U.S. Geological Survey
National Center, Mail Stop 270
12201 Sunrise Valley Drive
Reston, Virginia 22092

From: Chief, Office of Minerals Exploration
U.S. Geological Survey
953 National Center
Reston, Virginia 22092

ABSTRACT OF REMITTANCES

Date	Amount	Bank, City and State	Name of Remitter	Docket & Contract Numbers	Purpo
April 5,1978	$370.89	Chase Manhattan Bank, New York, NY	New Jersey Zinc Div. G+W Natural Resources Group	DMEA-4586 Idm-E1071	Royalty

THE CHASE MANHATTAN BANK National Association 40 West 34th Street, New York, N.Y.

G+W Natural Resources Group GULF + WESTERN INDUSTRIES

NEW JERSEY ZINC DIVISION
JEFFERSON CITY, TENNESSEE 37760

571
1-2/210

April 5, 1978

NEW JERSEY ZINC ⑆370890⑆

PAY TO THE ORDER OF U.S. GEOLOGICAL SURVEY DOLLARS $ 370.89**

SUPERINTENDENT'S ACCOUNT

Royalty of DMEA ore at Idol - March 1978

⑈0210⑈0002⑈ 009⑈ ⑆028928⑈

April 11, 1978
Date prepared

Harold Kirkham
Chief, Office of Minerals Exploration
Person preparing abstract

Date received

Person receiving remittance

IDOL MINE

DMEA ROYALTY CALCULATIONS
(ZN CONCEN. + LS)

	1	2	3	4	5	6	7	8	9	10	11	12	13
	TONS MINED (DMEA AREA)	CRUDE GRADE (ESTIM.)	MILLING RECOVERY	TONS CONCEN. PRODUCED 1 x 2 x 3 / 5	CONCENTRATE GRADE	P. W. ZINC MARKET	DELIVERED VALUE PER POUND ZN.	DELV'D VALUE PER TON CONCEN 2000# x 5 x 7	TOTAL DELV'D. VALUE ZN CONC. 8 x 4	ROYALTY 9 x 5%	LIMESTONE ROYALTY (PER ATTACHED)	TOTAL ROYALTY	BALANCE OWED TO D.M.E.A.
—	—	—	—	—	—	—	—	—	—	—	—	—	$ 5292.50
FISCAL JULY, 1977	770	2.1%	96.2%	25.46	61.1%	34.00¢	20.192¢	$ 246.75	$ 6282.26	$ 314.11	—	$ 314.11	5261.39
August 1977	None to Report							—	—	—	—	—	5261.39
September 1977	240	3.0%	95.1%	11.12	61.6	34.00¢	20.192¢	$ 248.77	2766.27	$ 138.31	—	138.31	5247.08
October 1977	390	2.5%	95.1%	15.25	60.8	32.00¢	18.908¢	$ 229.92	3506.28	175.31	—	175.31	5229.77
November 1977	2290	6.5%	91.3%	22.03	61.7	32.00¢	18.908¢	233.32	5140.03	255.20	—	255.20	5204.57
December 1977	2640	6.8%	91.3%	29.32	60.0	30.50¢	17.946¢	215.35	5883.36	294.17	—	294.17	5175.40
January 1978	3140	4.7%	96.8%	29.36	60.0	30.50¢	17.946¢	215.35	6107.32	305.36	—	305.36	5145.01
February 1978	3890	4.3%	96.8%	26.57	60.9	30.50	17.946¢	218.58	5807.73	290.39	—	290.39	5115.65
March 1978	3030	7.4%	97.4	34.83	62.7	29.00	16.983¢	212.97	7417.75	370.89	—	370.89	5078.76

IDOL MINE

DMEA ROYALTY CALCULATIONS (LS)

	1	2	3	4	5	6	7	8	9
	Tons Mined (DMEA Area)	Tons Zn Concen. Produced	Tons Ls Produced (DMEA Area)	Total Ls Production (IDOL Mine)	Tons Ls Sold	% of Total Production Sold	Tons Ls Sold From DMEA Area	F.O.B. Value of Ls Sold DMEA Area	Royalty @ 5%
Fiscal July, 1977	770	15.56	754	20030	—	-0-	—	—	—
August 1977	None to Report								
Sept. 1977	240	6.85	233	22406	—	-0-	—	—	—
Oct. 1977	390	15.25	375	25721	—	-0-	—	—	—
Nov 1977	2290	22.03	2268	24220	—	-0-	—	—	—
Dec 1977	2640	27.32	2613	22849	—	-0-	—	—	—
Jan 1978	3740	28.36	3712	22027	2	-0-	-0-	-0-	-0-
Feb 1978	3890	26.57	3863	25261	—	-0-	-0-	-0-	-0-
Mar 1978	3030	34.83	2995	20752	25	-0-	-0-	-0-	-0-

To: Chief, Branch of Financial Management
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953 National Center
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Remarks: Royalty of DMEA ore at Idol for Feb. 1978.

March 13, 1978
Date prepared

Harold Kibbens
Chief, Office of Minerals Exploration
Person preparing abstract

3/13/78
Date received

Calvin N. Long
Person receiving remittance

RECEIVED
U.S. GEOLOGICAL SURVEY

MAR 13 1 52 PM '78

BRANCH OF
FINANCIAL MANAGEMENT

To: Chief, Branch of Financial Management
U.S. Geological Survey
National Center, Mail Stop 270
12201 Sunrise Valley Drive
Reston, Virginia 22092

From: Chief, Office of Minerals Exploration
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THE CHASE MANHATTAN BANK
National Association
40 West 34th Street, New York, N.Y.

GW Natural Resources Group
GULF + WESTERN INDUSTRIES

NEW JERSEY ZINC DIVISION
JEFFERSON CITY, TENNESSEE 37760

493

1-2
210

March 8, 1978

PAY TO THE ORDER OF NEW JERSEY ZINC $290.39 cts DOLLARS $290.39**

U. S. GEOLOGICAL SURVEY
NATIONAL CENTER-MAIL STOP 953
RESTON, VIRGINIA 22092

SUPERINTENDENT'S ACCOUNT

DMEA Royalties - Idol Mine.

⑆021000021⑆ 009⑈028928⑈

Remarks: Royalty of DMEA ore at Idol for Feb. 1978.

March 13, 1978
Date prepared

Harold Kirkemo
Chief, Office of Minerals Exploration
Person preparing abstract

Date received

Person receiving remittance

IDOL MINE

DMEA ROYALTY CALCULATIONS
(ZN CONCEN. + LS.)

	1	2	3	4	5	6	7	8	9	10	11	12	13
	TONS MINED (DMEA AREA)	CRUDE GRADE (ESTIM.)	MILLING RECOVERY	TONS CONCEN. PRODUCED 1 x 2 x 3 / 5	CONCENTRATE GRADE	P. W. ZINC MARKET	DELIVERED VALUE PER POUND ZN.	DELV'D VALUE PER TON CONCEN 2000# x 5 x 7	TOTAL DELV'D. VALUE ZN CONC. 8 x 4	ROYALTY 9 x 5%	LIMESTONE ROYALTY (PER ATTACHED)	TOTAL ROYALTY	BALANCE OWED TO D.M.E.A.
—	—	—	—	—	—	—	—	—	—	—	—	—	$ 5292750
FISCAL JULY, 1977	770	2.1%	96.2%	25.46	61.1%	34.00¢	20.192¢	$ 246.75	$ 6282.26	$ 314.11	—	$ 314.11	5261339
August 1977	None to Report								—	—	—	—	5261339
September 1977	240	3.0%	95.1%	11.12	61.6	34.00¢	20.192¢	$ 248.77	2766.27	$ 138.31	—	138.31	5247508
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November 1977	2290	6.5%	91.3%	22.03	61.7	32.00¢	18.908¢	233.32	5140.03	255.20	—	255.20	5204457
December 1977	2640	6.8%	91.3%	27.32	60.0	30.50¢	17.946¢	215.35	5883.36	294.17	—	294.17	5175040
January 1978	3740	4.7%	96.8%	28.36	60.0	30.50¢	17.946¢	215.35	6107.32	305.36	—	305.36	5145.07
February 1978	3890	4.3%	96.8%	26.57	60.9	30.50	17.946¢	218.58	5807.73	290.39	—	290.39	5115465

IDOL MINE

DMEA ROYALTY CALCULATIONS (LS)

		1	2	3	4	5	6	7	8	9
		TONS MINED (DMEA AREA)	TONS ZN CONCEN. PRODUCED	TONS LS PRODUCED (DMEA AREA)	TOTAL LS PRODUCTION (IDOL MINE)	TONS LS SOLD	% OF TOTAL PRODUCTION SOLD	TONS LS SOLD FROM DMEA AREA	F.O.B. VALUE OF LS SOLD DMEA AREA	ROYALTY @ 5%
1	FISCAL JULY, 1977	770	15.56	754	20030	—	-0-	—	—	—
2	August 1977	None to Report								
3	Sept. 1977	240	6.85	233	22406	—	-0-	—	—	—
4	Oct. 1977	390	15.25	375	25721	—	-0-	—	—	—
5	Nov 1977	2290	22.03	2268	29220	—	-0-	—	—	—
6	Dec 1977	2640	27.32	2613	22849	—	-0-	—	—	—
7	Jan 1978	3740	28.36	3712	22027	2	-0-	-0-	-0-	-0-
8	Feb 1978	3890	26.57	3863	25261	—	-0-	-0-	-0-	-0-

To: Chief, Branch of Financial Management
U.S. Geological Survey
National Center, Mail Stop 270
12201 Sunrise Valley Drive
Reston, Virginia 22092

From: Chief, Office of Minerals Exploration
U.S. Geological Survey
953 National Center
Reston, Virginia 22092

ABSTRACT OF REMITTANCES

Date	Amount	Bank, City and State	Name of Remitter	Docket & Contract Numbers	Purpose
2/17/78	$305.36	Chase Manhattan Bank, New York, NY	New Jersey Zinc Div. G+W Natural Resources Group	DMEA-4586 Idm-E1071	Royalty

Remarks:
Royalty of DMEA ore at Idol for January 1978

February 22, 1978
Date prepared

Harold Kirkemo
Chief, Office of Minerals Exploration
Person preparing abstract

2/22/78
Date received

Person receiving remittance

Return copy to MS 953

U.S. GEOLOGICAL SURVEY
FEB 22 1 58 PM '78
FINANCIAL MANAGEMENT

rec'd 2/22/78

To: Chief, Branch of Financial Management
U.S. Geological Survey
National Center, Mail Stop 270
12201 Sunrise Valley Drive
Reston, Virginia 22092

From: Chief, Office of Minerals Exploration
U.S. Geological Survey
953 National Center
Reston, Virginia 22092

ABSTRACT OF REMITTANCES

Date	Amount	Bank, City and State	Name of Remitter	Docket & Contract Numbers	Purpos
2/17/78	$305.36	Chase Manhattan Bank, New York, NY	New Jersey Zinc Div. G+W Natural Resources Group	DMEA-4586 Idm-E1071	Royalt

THE CHASE MANHATTAN BANK
National Association
40 West 34th Street, New York, N.Y.

G+W Natural Resources Group
GULF + WESTERN INDUSTRIES

NEW JERSEY ZINC DIVISION
JEFFERSON CITY, TENNESSEE 37760

428
1-2
210

February 17, 1978

NEW JERSEY ZINC 0305 3201

PAY TO THE ORDER OF DOLLARS $ 305.36**

U. S. GEOLOGICAL SURVEY

SUPERINTENDENT'S ACCOUNT

Royalty of DMEA ore at Idol for January 1978

⑆0210⑈0002⑆ 009⑈1⑈028928⑈

Remarks:

Royalty of DMEA ore at Idol for January 1978

February 22, 1978
Date prepared

Chief, Office of Minerals Exploration
Person preparing abstract

Date received

Person receiving remittance

IDOL MINE

DMEA Royalty Calculations
(Zn Concen. + Ls)

	Tons Mined (DMEA Area)	Crude Grade (Estim.)	Milling Recovery	Tons Concen. Produced 1 x 2 x 3	Concentrate Grade	P. W. Zinc Market	Delivered Value Per Pound Zn.	Delv'd Value Per Ton Concen 2000# x 5 x 7	Total Delv'd. Value Zn Conc. 8 x 4	Royalty 9 x 5%	Limestone Royalty (Per Attached)	Total Royalty	Balance Owed to D.M.E.A.
—	—	—	—	—	—	—	—	—	—	—	—	—	$ 5242750
Fiscal July, 1977	770	2.1%	96.2%	25.46	61.1%	34.00¢	20.192¢	$ 346.75	$ 6282.26	$ 314.11	—	$ 314.11	5261337
August 1977	Note the Report							—	—	—	—	—	5261337
September 1977	240	3.0%	95.1%	11.12	61.6	34.00¢	20.192¢	$ 248.77	2766.27	$ 138.31	—	138.31	5247508
October 1977	390	2.5%	93.1%	17.75	62.8	34.00¢	18.908¢	$ 229.92	3506.26	175.31	—	175.31	5229977
November 1977	790	6.5%	91.3%	22.03	61.7	34.00¢	18.908¢	233.32	5140.03	255.20	—	255.20	5204457
December 1977	260	6.8%	91.3%	19.82	60.0	30.504¢	17.946¢	215.35	5883.36	294.17	—	294.17	5175040
January 1977	340	4.7%	96.8%	28.36	60.0	30.504¢	17.946¢	215.35	6107.32	305.36	—	305.36	5144501

✓ HK 2/22/78

IDOL MINE
OMEGA ROYALTY CALCULATIONS
(LS)

	Tons Mined (Omega Area)	Tons Zn Concen. Produced	Tons Ls Produced (Omega Area)	Total Ls Production (Idol Mine)	Tons Ls Sold	% of Total Production Sold	Tons Ls Sold From Omega Area	F.O.B. Value of Ls Sold. Omega Area	Royalty @ 5%
Fiscal July, 1977	770	15.56	754	20030	—	-0-	—	—	—
August 1977	None to Report								
Sept. 1977	240	6.85	233	22406	—	-0-	—	—	—
Oct. 1977	390	15.25	375	25721	—		—	—	—
Nov 1977	2290	22.03	2268	29220	—	-0-	—	—	—
Dec 1977	2640	27.32	2613	22849	—	-0-	—	—	—
Jan 1977	3740	28.36	3712	22027	2	-0-	-0-	-0-	-0-

To: Chief, Branch of Financial Management
U.S. Geological Survey
National Center, Mail Stop 270
12201 Sunrise Valley Drive
Reston, Virginia 22092

From: Chief, Office of Minerals Exploration
U.S. Geological Survey
953 National Center
Reston, Virginia 22092

ABSTRACT OF REMITTANCES

Date	Amount	Bank, City and State	Name of Remitter	Docket & Contract Numbers	Purpose
1/23/78	$294.17	Chase Manhattan Bank, New York, NY	New Jersey Zinc Div. G+W Natural Resources Group	DMEA-4586 Idm E1071	Royalty

Remarks: Royalty of DMEA at Idol Mine for December 1977

January 25, 1978
Date prepared

Harold Kirkham
Chief, Office of Minerals Exploration
Person preparing abstract

Date received

Person receiving remittance

RECEIVED
U.S. GEOLOGICAL SURVEY
JAN 26 8 15 AM '78
BUREAU OF
FINANCIAL MANAGEMENT

206183

DETAIL OF COLLECTION

CD # 65

Date: 1/26/78

Check or MO No.	Remitter	Bill No. or Description	Amount
356	New Jersey Zinc Div	Royalties on Natural Resources Zinc	294.17
Appropriation Credited	142039	Div. TOTAL	294.17

To: Chief, Branch of Financial Management
U.S. Geological Survey
National Center, Mail Stop 270
12201 Sunrise Valley Drive
Reston, Virginia 22092

From: Chief, Office of Minerals Exploration
U.S. Geological Survey
953 National Center
Reston, Virginia 22092

ABSTRACT OF REMITTANCES

Date	Amount	Bank, City and State	Name of Remitter	Docket & Contract Numbers	Purpos
1/23/78	$294.17	Chase Manhattan Bank, New York, NY	New Jersey Zinc Div. G+W Natural Resources Group	DMEA-4586 Idm E1071	Royalty

THE CHASE MANHATTAN BANK
National Association
40 West 34th Street, New York, N.Y.

G+W Natural Resources Group
GULF + WESTERN INDUSTRIES

NEW JERSEY ZINC DIVISION
JEFFERSON CITY, TENNESSEE 37760

35
1-2
210

January 23, 1978

PAY TO THE ORDER OF U.S. GEOLOGICAL SURVEY — DOLLARS $294.17**

SUPERINTENDENT'S ACCOUNT

Royalty of DMEA at Idol Mine
for December 1977.

⑆021000021⑆ 009⑈ 1⑈028928⑈

January 25, 1978
Date prepared

Harold Kirkham
Chief, Office of Minerals Exploration
Person preparing abstract

Date received

Person receiving remittance

IDOL MINE

DMEA ROYALTY CALCULATIONS (LS)

	1	2	3	4	5	6	7	8	9
	TONS MINED (DMEA AREA)	TONS ZN CONCEN. PRODUCED	TONS LS PRODUCED (DMEA AREA)	TOTAL LS PRODUCTION (IDOL MINE)	TONS LS SOLD	% OF TOTAL PRODUCTION SOLD	TONS LS SOLD FROM DMEA AREA	F.O.B. VALUE OF LS SOLD DMEA AREA	ROYALTY @ 5%
FISCAL JULY, 1977	770	15.56	754	20030	—	-0-	—	—	—
August 1977	None to Report								
Sept. 1977	240	6.85	233	22406	—	-0-	—	—	—
Oct. 1977	390	15.25	375	25721	—	-0-	—	—	—
Nov 1977	2290	22.03	2268	29220	—	-0-	—	—	—
Dec 1977	2640	27.32	2613	22849	—	-0-	—	—	—

IDOL MINE

DMEA ROYALTY CALCULATIONS
(ZN CONCEN. + LS)

	1	2	3	4	5	6	7	8	9	10	11	12	13
	TONS MINED (DMEA AREA)	CRUDE GRADE (ESTIM.)	MILLING RECOVERY	TONS CONCEN. PRODUCED 1 x 2 x 3 / 5	CONCENTRATE GRADE	P. W. ZINC MARKET	DELIVERED VALUE PER POUND ZN.	DELV'D VALUE PER TON CONCEN 2000# x 5 x 7	TOTAL DELV'D. VALUE ZN CONC. 8 x 4	ROYALTY 9 x 5%	LIMESTONE ROYALTY (PER ATTACHED)	TOTAL ROYALTY	BALANCE OWED TO D.M.E.A.
1 —	—	—	—	—	—	—	—	—	—	—	—	—	$ 5292.50
2 FISCAL JULY, 1977	770	2.1%	96.2%	25.46	61.1%	34.00¢	20.192¢	$ 246.75	$ 6282.26	$ 314.11	—	$ 314.11	5261.39
3 August 1977	None to Report							—		—	—	—	5261.39
4 September 1977	240	3.0%	95.1%	11.12	61.6	34.00¢	20.192¢	$ 248.77	2766.27	$ 138.31	—	138.31	5247.08
5 October 1977	390	2.5%	95.1%	15.25	60.8	32.00¢	18.908¢	$ 229.92	3506.28	175.31	—	175.31	5229.77
6 November 1977	2290	6.5%	91.3%	22.03	61.7	32.00¢	18.908¢	233.32	5140.03	255.20	—	255.20	5204.57
7 December 1977	2640	6.8%	91.3%	29.32	60.0	30.50¢	17.946¢	215.35	5883.36	294.17	—	294.17	5175.40

OFFICE OF MINERALS EXPLORATION Rec'd 12/9/77

U.S. GEOLOGICAL SURVEY

To: Chief, Branch of Financial Management
U.S. Geological Survey
National Center, Mail Stop 270
12201 Sunrise Valley Drive
Reston, Virginia 22092

From: Field Officer, Region IV, OME
U.S. Geological Survey
301 West Cumberland Avenue
Knoxville, Tennessee 37902

ABSTRACT OF REMITTANCES

Date	Amount	Bank, City and State	Name of Remitter	Docket & Contract Numbers	Purpose
12/5/77	$ 255.20	Chase Manhattan Bank, New York, NY	New Jersey Zinc Div. G+W Natural Resources Group	DMEA5486 IdmE1071	Royalty

GW Natural Resources Group
GULF + WESTERN INDUSTRIES

NEW JERSEY ZINC DIVISION
JEFFERSON CITY, TENNESSEE 37760

215
1-2/210

December 5, 1977

NEW JERSEY 025524075

PAY TO THE ORDER OF U. S. GEOLOGICAL SURVEY
301 W. CUMBERLAND AVE.
KNOXVILLE, TENN. 37902

DOLLARS $ 255.20**

SUPERINTENDENT'S ACCOUNT

Joan Miller
Jack Lee

yalty on DMEA ore at
ol. for November 1977

⑆021000021⑈ 009⑈ 1⑈028928⑈

National Association 40 West 34th Street, New York, N. Y.

December 7, 1977
Date prepared

Robert A. Lawrence
Field Officer, OME, Region IV
Person preparing abstract

12/9/77
Date received

Lorraine E. Edenton
Person receiving remittance
Collection Officer

United States Department of the Interior

GEOLOGICAL SURVEY

301 WEST CUMBERLAND AVE.
KNOXVILLE, TENN. 37902

December 7, 1977
Re: DMEA 4586, Idol Mine

Mr. R. E. Thompson
Asst. to Executive Vice President - Mining
The N ew Jersey Zinc Company
Jefferson City, Tennessee 37760

Dear Mr. Thompson:

Your check for $255.20 royalty on DMEA ore for November 1977, and accompanying data sheets have been sent to our headquarters office in Reston, Virginia. As the Knoxville office will be closed after December 31, 1977, all future payments and correspondence concerning this and other DMEA contracts should be sent to

Harold Kirkemo
Office of Minerals Exploration
U. S. G eological Survey
National Center - M ail Stop 953
Reston, Virginia 22092

Sincerely yours,

Robert A. Laurence

Robert A. Laurence
Geologist

IDOL MINE
DMEA ROYALTY CALCULATIONS
(ZN CONCEN. + LS)

	TONS MINED (DMEA AREA)	CRUDE GRADE (ESTIM.)	MILLING RECOVERY	TONS CONCEN. PRODUCED $\frac{1 \times 2 \times 3}{5}$	CONCENTRATE GRADE
—	—	—	—	—	—
FISCAL JULY, 1977	770	2.1%	96.2%	25.46	61.1%
August 1977	None to Report				
September 1977	240	3.0%	95.1%	11.12	61.6
October 1977	390	2.5%	95.1%	15.25	60.8
November 1977	2290	6.5%	91.3%	22.03	61.7

IDOL MINE
DMEA ROYALTY CALCULATIONS
(LS)

	TONS MINED (DMEA AREA)	TONS ZN CONCEN. PRODUCED	TONS LS PRODUCED (DMEA AREA)	TOTAL LS PRODUCTION (IDOL MINE)	TONS LS SOLD
FISCAL JULY, 1977	770	15.56	754	20030	—
August 1977	None to Report				
Sept. 1977	240	6.85	233	22406	—
Oct. 1977	390	15.25	375	25721	—
Nov 1977	2290	22.03	2268	29220	—

DMEA 4586

P. W. ZINC MARKET	DELIVERED VALUE PER POUND ZN.	DELV'D VALUE PER TON CONCEN 2000# x 5 x 7	TOTAL DELV'D. VALUE ZN CONC. 8 x 4	ROYALTY 9 x 5%	LIMESTONE ROYALTY (PER ATTACHED)	TOTAL ROYALTY	BALANCE OWED TO D.M.E.A.
—	—	—	—	—	—	—	$ 5292750
34.00¢	20.192¢	$ 246.75	$ 6282.26	$ 314.11	—	$ 314.11	5261339
		—	—	—	—	—	5261339
34.00¢	20.192¢	$ 248.77	2766.27	$ 138.31	—	138.31	5247508
32.00¢	18.908¢	$ 229.92	3506.28	175.31	—	175.31	5229977
32.00¢	18.908¢	233.32	5140.03	255.20	—	255.20	5204457

DMEA 4586

% OF TOTAL PRODUCTION SOLD	TONS LS SOLD FROM DMEA AREA	F.O.B. VALUE OF LS SOLD DMEA AREA	ROYALTY @ 5%
—	—	—	—
—	—	—	—
—	—	—	—
—	—	—	—

Rwd 11/4/77
HK 11/7/77

United States Department of the Interior

GEOLOGICAL SURVEY
301 WEST CUMBERLAND AVE.
KNOXVILLE, TENN. 37902

November 2, 1977

Mr. R. E. Thompson
Asst. to Executive Vice President - Mining
The New Jersey Zinc Company
Jefferson City, Tennessee 37760

Re: DMEA-4586
Idol Mine

Dear Mr. Thompson:

Receipt of your check in the amount of $ 175.31, and data sheets for production from the DMEA portion of the Idol Mine is acknowledged.

Sincerely yours

Robert A. Laurence

Robert A. Laurence
Geologist

OFFICE OF MINERALS EXPLORATION

U.S. GEOLOGICAL SURVEY

To: Chief, Branch of Financial Management
U.S. Geological Survey
National Center, Mail Stop 270
12201 Sunrise Valley Drive
Reston, Virginia 22092

From: Field Officer, Region IV, OME
U.S. Geological Survey
301 West Cumberland Avenue
Knoxville, Tennessee 37902

ABSTRACT OF REMITTANCES

Date	Amount	Bank, City and State	Name of Remitter	Docket & Contract Numbers	Purpose
11/2/77	$ 175.31	Chase Manhattan Bank, New York, NY	New Jersey Zinc Div. G+W Industries	DMEA4586 Idm E1071	Royalty

THE CHASE MANHATTAN BANK
National Association
40 West 34th Street, New York, N.Y.

G+W Natural Resources Group
GULF + WESTERN INDUSTRIES

NEW JERSEY ZINC DIVISION
JEFFERSON CITY, TENNESSEE 37760

111
1-2
210

November 1, 1977

PAY TO THE ORDER OF NEW JERSEY ZINC $175.31 DOLLARS $ 175.31

U.S. GEOLOGICAL SURVEY

SUPERINTENDENT'S ACCOUNT

Royalty f/DMEA Ore Mined
at Idol - October 1977

⑆0210⑈0002⑆ 009⑈1⑈028928⑈

Remarks: Royalty on sales of zinc concentrates, October 1977

~~November 2, 1977~~
Date prepared

Robert A Lawrence
Field Officer, OME, Region IV
Person preparing abstract

12/5/77
Date received

Lorraine G. Edenton
Person receiving remittance
Collection Officer

DMEA-4536
IdmE-1071

IDOL MINE

DMEA ROYALTY CALCULATIONS
(Zn Concen. + Ls)

	Tons Mined (DMEA Area)	Crude Grade (Estim.)	Milling Recovery	Tons Concen. Produced 1×2×3 / 4	Concentrate Grade	P. W. Zinc Market	Delivered Value Per Pound Zn.	Delv'd Value Per Ton Concen. 2000#×5×7	Total Delv'd. Value Zn Conc. 8×4	Royalty 9×5%	Limestone Royalty (Per Attached)	Total Royalty	Balance Owed To D.M.E.A.
—	—	—	—	—	—	—	—	—	—	—	—	—	$ 5292.75
Fiscal July, 1977	770	2.1%	96.2%	25.46	61.1%	34.00¢	20.192¢	$ 246.75	$ 628.26	$ 314.11	—	$ 314.11	5261.39
August 1977	None to Report										—	—	5261.39
September 1977	240	3.0%	95.1%	11.12	61.6	34.00¢	20.192¢	$ 248.77	2766.27	$ 138.31	—	138.31	5247.08
October 1977	390	2.5%	95.1%	15.25	60.8	32.00¢	18.908¢	$ 229.92	3506.28	175.31	—	175.31	5229.77

DMEA-4586
Idm E1071

IDOL MINE
DMEA ROYALTY CALCULATIONS (LS)

	Tons Mined (DMEA Area)	Tons Zn Concen. Produced	Tons Ls Produced (DMEA Area)	Total Ls Production (Idol Mine)	Tons Ls Sold	% of Total Production Sold	Tons Ls Sold from DMEA Area	F.O.B. Value of Ls Sold DMEA Area	Royalty @ 5%
Fiscal July, 1977	770	15.56	754	20030	—	-0-	—	—	—
August 1977	None to Report								
Sept. 1977	240	6.85	233	22406	—	-0-	—	—	—
Oct. 1977	390	15.25	375	25721	—	-0-	—	—	—

OFFICE OF MINERALS EXPLORATION

U.S. GEOLOGICAL SURVEY

Recd 10/13/77

HR 10/24/77

To: Chief, Branch of Financial Management
U.S. Geological Survey
National Center, Mail Stop 270
12201 Sunrise Valley Drive
Reston, Virginia 22092

From: Field Officer, Region IV, OME
U.S. Geological Survey
301 West Cumberland Avenue
Knoxville, Tennessee 37902

ABSTRACT OF REMITTANCES

Date	Amount	Bank, City and State	Name of Remitter	Docket & Contract Numbers	Purpose
10/5/77	$260.45	Chase Manhattan Bank, New York	New Jersey Zinc Div. G+W Industries	DMEA4586 IdmE1071	Royalty

Remarks: Royalty on sales of zinc concentrates Sept. 1977

~~October 5, 1977~~
Date prepared

10/11/77
Date received

Robert A. Lawrence
Field Officer, OME, Region IV
Person preparing abstract

Lorraine E. Edwards
Person receiving remittance
Collection Officer

The New Jersey Zinc Company
A DIVISION OF GULF + WESTERN INDUSTRIES, INC.
NJZ
Jefferson City, Tennessee 37760 • (615) 475-2052

October 4, 1977

Mr. Robert A. Laurence, Geologist
Branch of Eastern Mineral Resources
United States Department of the Interior
301 West Cumberland Avenue
Knoxville, Tennessee 37902

Re: DMEA-4576
Idol Mine

Dear Mr. Laurence:

Enclosed is our check in the amount of $260.45 representing royalties due for the month of September, 1977, plus an adjustment on the royalties due for the month of July, 1977. A copy of the royalty calculations is also enclosed.

The adjustment for July, 1977 referred to above, results from an error in column 4 of the royalty calculations sheet previously submitted. The calculation for column 4 in July was not completed and was therefore stated in tons of zn. rather than in tons of concentrates. As a result, our royalty payment of $191.97 was $122.14 less than it should have been and this $122.14, plus the royalty on September production of $138.31, results in the enclosed amount of $260.45.

Very truly yours,

R. E. Thompson
Assistant to Executive Vice President - Mining

RET/vcd
Encl: check
calculations

XC: Messrs. J. E. Nelson
R. G. Morris
J. Love
File

RECEIVED
OCT 5 - 1977
U. S. Geological Survey
Geologic Division
Knoxville, Tenn.

IDOL MINE

DMEA 4586

DMEA ROYALTY CALCULATIONS
(ZN CONCEN. + LS)

	1	2	3	4	5
	TONS MINED (DMEA AREA)	CRUDE GRADE (ESTIM.)	MILLING RECOVERY	TONS CONCEN. PRODUCED 1 x 2 x 3 / 5	CONCENTRATE GRADE
—	—	—	—	—	—
FISCAL JULY 1977	770	2.1%	96.2%	25.46	61.1%
August 1977	None to Report				
September 1977	240	3.0%	95.1%	11.12	61.6

150L

P.W. Zinc Market	Delivered Value Per Pound Zn.	Delvd Value Per Ton Concen 2000# x 5 x 7	Total Delvd. Value Zn Conc. 8 x 4	Royalty 9 x 5%	Limestone Royalty (Per Attached)	Total Royalty	Balance Owed To D.M.E.A.
—	—	—	—	—	—	—	$ 5292750
34.00¢	20.192¢	$ 246.75	$ 6282.26	$ 314.11	—	$ 314.11	5261339
		—	—	—	—	—	5261339
34.00¢	20.192¢	$ 248.77	2766.27	$ 138.31	—	138.31	5247508

100L MINE

DMEA 4586

DMEA ROYALTY CALCULATIONS (LS)

	TONS MINED (DMEA AREA)	TONS ZN CONCEN. PRODUCED	TONS LS PRODUCED (DMEA AREA)	TOTAL LS PRODUCTION (100L MINE)	TONS LS SOLD
FISCAL JULY, 1977	770	15.56	754	20030	—
August 1977	None to	Report			
Sept. 1977	240	6.85	233	22406	—

Id 01 DMEA 4586

% of Total Production Sold	Tons Ls. Sold From DMEA Area	F.O.B. Value of Ls. Sold DMEA Area	Royalty @ 5%				
-0-	—	—	—				
-0-	—	—	—				

AHR 10/12/77

United States Department of the Interior

GEOLOGICAL SURVEY

301 [illegible] AVE.
KNOXVILLE, [illegible] 37902

October 6, 1977

Mr. R.E.Thompson
Assistant to Executive Vice President - Mining
The New Jersey Zinc Company
Jefferson City, Tennessee 37760

Re: DMEA-4586
Idol Mine

Dear Mr. Thompson:

Thank you for your letter of October 4, with your check in the amount of $260.45, and the data sheets relating to production at the Idol M ine for September, 1977. These have been forwarded to our Branch of Financial Management in Reston, Virginia, and we have noted the correction in the calculations for July.

Very truly yours,

Robert A. Laurence

Robert A. Laurence
Geologist

Distribution:

DRF
OMR
EMR
Kirkemo
File

HK 8/10/77

August 8, 1977

Re;DMEA-4586
Idol Mine

Mr. R. E. Thompson
Assistant to Executive Vice President - Mining
The New Jersey Zinc Company
Jefferson City, Tennessee 37760

Dear Mr. Thompson:

Thank you for your letter of August 4, and the forms showing data used in calculating the royalty payment for July, on production from the DMEA portion of the Idol mine. I have forwarded these to our Branch of Financ ial Management, in Reston. These sheets appear to me to contain all pertinent data; if anything else is needed after review in Reston, I will let you know.

Sincerely yours,

Robert A. Laurence
Geologist
Branch of Eastern Mineral Resources

cc: DRF
OMR
EMR
Kirkemo
Br. Fin. Mgt.
Knoxville file

The New Jersey Zinc Company
A DIVISION OF GULF + WESTERN INDUSTRIES, INC.
NJZ
Jefferson City, Tennessee 37760 • (615) 475-2052

August 4, 1977

Mr. Robert A. Laurence, Geologist
Branch of Eastern Mineral Resources
United States Department of the Interior
301 West Cumberland Avenue
Knoxville, Tennessee 37902

Re: DMEA-4576
Idol Mine

Dear Mr. Laurence:

This will acknowledge receipt of your August 2nd communication requesting additional information each month on underlying data used in calculating the royalty payments due under the subject contract.

The concentrate production in July was shipped to our Company smelter at Palmerton, Pennsylvania and it is our current plan to continue such shipments. There are no settlement sheets prepared for such intra-company shipments, but attached is a photocopy of the worksheets which we will be using to calculate the royalty due. Since this format appears to furnish the data you desire, I propose that photocopies be forwarded to you each month. If concentrates are sold to an outside concern or concerns, copies of the settlement sheet will be included. It should be remembered, however, that since only a portion of the Idol Mine production will be obtained from the area covered by DMEA-4576 that the settlement sheets would only be used to establish the per ton value on which royalties are to be paid.

The following is in explanation of the headings on the attached forms:

Column	
1	As determined by survey
2	As estimated by the geologists
3	Current month milling results

RECEIVED
AUG 5 - 1977
U. S. Geological Survey
Geologic Division
Knoxville, Tenn.

5 N.J.Z. Laboratory assay

7 Intra-Company transfer value used for Accounting and Tax purposes. Based on purchases of like material, by the smelter, from outside concerns. If concentrates are sold to outside concerns, this column will reflect the value shown on the settlement sheet which will be attached when applicable.

I believe the other columns are self-explanatory. Will you please let me know if the proposed procedure meets with your approval.

Very truly yours,

R. E. Thompson

R. E. Thompson
Assistant to Executive Vice President - Mining

RET/vcd
Attach: forms

IDOL MINE

DMEA ROYALTY CALCULATIONS
(ZN CONCEN. + LS)

		1	2	3	4	5
		TONS MINED (DMEA AREA)	CRUDE GRADE (ESTIM.)	MILLING RECOVERY	TONS CONCEN. PRODUCED $\frac{1 \times 2 \times 3}{5}$	CONCENTRATE GRADE
1	—	—	—	—	—	—
2	FISCAL JULY, 1977	770	2.1%	96.2%	15.56	61.1
3						

RECEIVED
AUG 5 - 1977
U. S. Geological Survey
Geologic Division
Knoxville, Tenn.

IDOL MINE

DMEA ROYALTY CALCULATIONS
(LS)

		1	2	3	4	5
		TONS MINED (DMEA AREA)	TONS ZN CONCEN. PRODUCED	TONS LS PRODUCED (DMEA AREA)	TOTAL LS PRODUCTION (IDOL MINE)	TONS LS SOLD
1	FISCAL JULY, 1977	770	15.56	754	20030	—
2						
3						
4						
5						
6						
7						
8						
9						
10						
11						
12						
13						

6	7	8	9	10	11	12	13	
P. W. Zinc Market	Delivered Value Per Pound Zn.	Delv'd Value Per Ton Concen 2000# x 5 x 7	Total Delv'd. Value Zn Conc. 8 x 4	Royalty 9 x 5%	Limestone Royalty (Per Attached)	Total Royalty	Balance Owed To D.M.E.A.	
—	—	—	—	—	—	—	$ 52927.50	1
34.00¢	20.192¢	$ 246.75	$ 3839.37	$ 191.97	—	$ 191.97	52735.53	2
								3
								4

6	7	8	9	10	11	12	13	
% of Total Production Sold	Tons Ls Sold From DMEA Area	F.O.B. Value of Ls Sold DMEA Area	Royalty @ 5%					
-0-	—	—	—					1
								2
								3
								4
								5
								6
								7
								8
								9
								10
								11
								12
								13

Rcvd 8/4/77

HK 8/5/77

August 2, 1977

Mr. R. E. Thompson
Assistant to the Executive Vice President - Mining
The New Jersey Zinc Company
Jefferson City, Tennessee 37760

Dear Mr. Thompson:

Re: DMEA-4586
Idol Mine

This will acknowledge the receipt of your check number 8841, in the amount of $ 191.97, as the first royalty payment on production from the DMEA portion of the Idol property. We appreciate your prompt transmittal of this payment.

To complete our records, we need copies of settlement sheets, or other data, showing quantity and grade of the concentrates shipped, price (or value) and charges, etc., as stated in the third paragraph of the letter dated December 11, 1959, transmitting the certification of discovery.

Sincerely yours,

Robert A. Laurence
Geologist
Branch of Eastern Mineral Resources.

cc: DRF
OMR
EMR
Kirkemo
Knoxville file

THE CHASE MANHATTAN BANK
National Association
NEW YORK, N. Y.

THE NEW JERSEY ZINC COMPANY
JEFFERSON CITY, TENNESSEE

8841

1-2
210

AUG 1 77 19

PAY TO THE ORDER OF U. S. GEOLOGICAL SURVEY $191.97**

NINETY-ONE DOLLARS 97 CTS

SUPERINTENDENT'S ACCOUNT

Jason Miller

Jack Lee

FOR Royalty on Zinc Concentrates-
DMEA Contract IDM-E 1071
(DMEA 4586)

⑆021000021⑈ 009⑈ 1⑈028928⑈

OFFICE OF MINERALS EXPLORATION

U.S. GEOLOGICAL SURVEY

To: Chief, Branch of Financial Management
U.S. Geological Survey
National Center, Mail Stop 270
12201 Sunrise Valley Drive
Reston, Virginia 22092

From: Field Officer, Region IV, OME
U.S. Geological Survey
301 West Cumberland Avenue
Knoxville, Tennessee 37902

ABSTRACT OF REMITTANCES

Date	Amount	Bank, City and State	Name of Remitter	Docket & Contract Numbers	Purpose
8/7/77	$ 191.97	Chase Manhattan New York, N.Y.	The New Jersey Zinc Company.	4586 IdmE-1071	Royalty

Remarks: This is first royalty payment on this contract. No supporting data, settlement sheets, etc. were submitted. Operator has been asked to supply this data.

August 2, 1977
Date prepared

Robert A. Laurence
Field Officer, OME, Region IV
Person preparing abstract

August 2, 1977
Date received

Robert A. Laurence
Person receiving remittance

OFFICE OF MINERALS EXPLORATION

U.S. GEOLOGICAL SURVEY

To: Chief, Branch of Financial Management
U.S. Geological Survey
National Center, Mail Stop 270
12201 Sunrise Valley Drive
Reston, Virginia 22092

From: Field Officer, Region IV, OME
U.S. Geological Survey
301 West Cumberland Avenue
Knoxville, Tennessee 37902

ABSTRACT OF REMITTANCES

Date	Amount	Bank, City and State	Name of Remitter	Docket & Contract Numbers	Purpose
8/7/77	$ 191.97	Chase Manhattan New York, N.Y.	The New Jersey Zinc Company.	4586 IdmE-1071	Royalty

Remarks: This is first royalty payment on this contract. No supporting data, settlement sheets, etc. were submitted. Operator has been asked to supply this data.

August 2, 1977
Date prepared

Robert A. Laurence
Robert A. Laurence
Field Officer, OME, Region IV
Person preparing abstract

August 2, 1977
Date received

Robert A. Laurence
Robert A. Laurence
Person receiving remittance

Rec'd 7/5/77

HK 7/6/77

June 30, 1977

Mr. R. E. Thompson
Assistant to the Executive Vice President - Mining
The New Jersey Zinc Company
Jefferson City, Tennessee 37760

Dear Mr. Thompson:

Thank you for your letter of June 28, advising that production has begun from the area included in the DMEA ContractIDM-E 1071 (DMEA 4586).

As we have moved from the Post Office Building, all correspondence, payments and supporting records, should be sent to me, at the address on this letterhead.

A copy of the letter sent to your Company's New York office at the time the discovery was certified is enclosed.

Sincerely yours,

Robert A. Laurence
Geologist
Branch of Eastern Mineral Resources.

I added this P.S. to the original

P. S. Please note that checks should be payable to the U. S. Geological Survey, and not to O.M.E. as stated in the Dec. 11, 1959 letter.

RAL/ral
cc: DRF
OMR
EMR
Kirkemo
Knoxville file.

HA 7/6/77

GW The New Jersey Zinc Company
A DIVISION OF GULF + WESTERN INDUSTRIES, INC.

NJZ

Jefferson City, Tennessee 37760 • (615) 475-2052

June 28, 1977

Executive Office
OME Field Team
Region IV, Room 11
Post Office Building
Knoxville, Tennessee 37901

Dear Sir:

As requested in Mr. Robert A. Laurence's April 6, 1976 communication to the undersigned, this is to notify you that effective today mining has been initiated by our Idol Mine, Thorn Hill, Tennessee, in the area which was included in DMEA Contract No. 4586, IDM-E No. 1071, titled Cedar Springs - Idol.

Very truly yours,

R. E. Thompson
Assistant to Executive Vice President - Mining

RET/vcd

XC: J. E. Nelson
R. G. Morris
R. A. Laurence
File

RECEIVED
JUN 29
Geological Survey
Division
Tenn.

April 6, 1976

$177,000
DMEA
$52,000

Docket No. Contract No.
4126 - 937
4586 - 1071

Mr. Ray Thompson
The New Jersey Zinc Company
Jefferson City, Tennessee 37760

Dear Mr. Thompson:

To confirm items relating to DMEA royalty payments, discussed in your phone call last week:

Royalty payments are due only on production from properties included in the contract. Thus, if your initial production is entirely from excluded properties, no royalty is due until you start production from properties which are included. However, I would suggest that you notify me when production from Idol and Beaver Creek (Strawberry Plains) begins, even if it is from excluded properties, so that I can advise our office in Reston. A second notice can be sent when production from included properties begins.

The royalty percentage will be 5% for zinc concentrates and 1 1/2% for limestone, payable monthly until the amount of the Government's contribution is repaid. If you prefer to make a lump sum payment in advance, that is, of course, acceptable. This has been done, in at least one instance.

If there are any other questions, please call me.

Sincerely,

Robert A. Laurence
Geologist
Branch of Eastern Mineral Resources

cc: Director's Reading File
Mineral Resources
Branch
H. Kirkemo
File

DMEA-4586 12/7/77
Contact 1091

January 25, 1977

Mr. R. E. Thompson
Assistant to Vice President - Mining
The New Jersey Zinc Company
Jefferson City, Tennessee 37760

Dear Mr. Thompson:

Thank you for your letter of January 21 regarding beginning of production from the Idol Mine. I am sending this information to our main office in Reston, Virginia. We are glad to see this significant ore deposit coming into production.

Sincerely yours,

Robert A. Laurence
Geologist
Branch of Eastern Mineral Resources

cc: Director's Reading File
Mineral Resources
Branch
H. Kirkemo
File

GW The New Jersey Zinc Company
A DIVISION OF GULF + WESTERN INDUSTRIES, INC.
NJZ

Jefferson City, Tennessee 37760 • (615) 475-2052

January 21, 1977

Mr. Robert A. Laurence
U. S. Department of the Interior
Geological Survey
301 West Cumberland Avenue
Knoxville, Tennessee 37902

Dear Mr. Laurence:

As requested in your April 6, 1976 communication, this is to notify you that we anticipate production will begin at the Idol Mine, Thorn Hill, Tennessee in February 1977. We anticipate that the initial production will be from property excluded from the DMEA contract and, as you requested, a second notice will be sent when production from included properties begins.

Very truly yours,

R. E. Thompson
Assistant to Vice President - Mining

RET/vcd

cc: J. E. Nelson
R. G. Morris
File

RECEIVED
JAN 24 1977
U. S. Geological Survey
Geologic Division
Knoxville, Tenn.

United States Department of the Interior

GEOLOGICAL SURVEY
RESTON, VIRGINIA 22092

IN REPLY REFER TO: Office of Minerals Exploration March 26, 1975

Re: DMEA-4586 (Zinc)
The New Jersey Zinc Company
Cedar Springs Area, Sector II
Copper Ridge Belt
Grainger County, Tennessee
Contract Idm-E1071

Mr. K. R. Winslow
Manager of Mines
The New Jersey Zinc Company
Jefferson City, Tennessee 37760

Dear Mr. Winslow:

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

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

Sincerely yours,

Harold Kirkemo

Harold Kirkemo, Chief
Office of Minerals Exploration

OFFICIAL
COPY
O. M. E.
RECEIVED
APR 3 1975
INTERNAL CODE
HK

Form MME 63
(May 1970)

REQUEST FOR INFORMATION ON CERTIFIED PROJECT
OR PROJECT UNDER ROYALTY AGREEMENT

1. Since April 4, 1973, has there been a change in ownership, lease, or sublease? *If yes, please state details of the transaction below and provide a true or signed copy of the pertinent documents, unless they have been provided before.* Yes ☐ No ☒

Has any land contiguous to the lands covered by this contract, as amended, been acquired since April 4, 1973? (Please see Item 1, Special Agreement Concerning Land on Page 3 of Annex I of the contract, and Amendment No. 8.) Yes ☐ No ☒

2. Since April 4, 1973, has there been any production from the land subject to the contract? Yes ☐ No ☒

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

Purchaser *(name and address)*	Quantity	Value

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

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

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

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

Disposition of Material	Quantity	Value

Submitted by:

Name K R Cunningham	*Title* VICE PRESIDENT & GEN'L MGR - MINING
Address JEFFERSON CITY, TENN	*Date* 3/28/75

United States Department of the Interior

GEOLOGICAL SURVEY
WASHINGTON, D.C. 20242

IN REPLY REFER TO: Office of Minerals Exploration

March 30, 1973

Re: DMEA-4586 (Zinc)
The New Jersey Zinc Company
Cedar Springs Area, Sector II
Copper Ridge Belt
Grainger County, Tennessee
Contract Idm-EI071

Mr. K. R. Winslow
Divisional Manager of Mines
The New Jersey Zinc Company
Jefferson City, Tennessee 37760

Dear Mr. Winslow:

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

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

Sincerely yours,

Harold Kirkemo

Harold Kirkemo
Chief, Office of
Minerals Exploration

COPY TO R-IV

AL
Y
E.
ED
APR 13 1973
MIALS CODE
Cal 120
HK 120

Form MME 63
(May 1970)

REQUEST FOR INFORMATION ON CERTIFIED PROJECT
OR PROJECT UNDER ROYALTY AGREEMENT

1. Since April 7, 1972, has there been a change in ownership, lease, or sublease? *If yes, please state details of the transaction below and provide a true or signed copy of the pertinent documents, unless they have been provided before.* Yes ☐ No ☑

Has any land contiguous to the lands covered by this contract, as amended, been acquired since April 7, 1972? (Please see Item 1, Special Agreement Concerning Land on Page 3 of Annex I of the contract, and amendment.) Yes / / No /✓/

2. Since April 7, 1972, has there been any production from the land subject to the contract? Yes ☐ No ☑

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

Purchaser *(name and address)*	Quantity	Value

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

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

3. Since [illegible] has any production been transported through workings *(see [illegible] of contract)*? Yes ☐ No ☐

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

Disposition of Material	Quantity	Value

Submitted by:

Name K. R. Winslow K R Winslow	*Title* Manager of Mines
Address Jefferson City, Tennessee 37760	*Date* April 4, 1973

United States Department of the Interior

GEOLOGICAL SURVEY
WASHINGTON, D.C. 20242

IN REPLY REFER TO: Office of Minerals Exploration

March 30, 1972

Mr. K. R. Winslow
Divisional Manager of Mines
The New Jersey Zinc Company
Jefferson City, Tennessee 37760

Re: DMEA-4586 (Zinc)
The New Jersey Zinc Company
Cedar Springs Area, Sector II
Copper Ridge Belt
Grainger County, Tennessee

Dear Mr. Winslow:

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

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

Sincerely yours,

Harold Kirkemo

Harold Kirkemo
Chief, Office of
Minerals Exploration

copy sent to R-IV

Form MME 63
(May 1970)

REQUEST FOR INFORMATION ON CERTIFIED PROJECT OR PROJECT UNDER ROYALTY AGREEMENT

1. Since April 6, 1971, has there been a change in ownership, lease, or sublease? *If yes, please state details of the transaction below and provide a true or signed copy of the pertinent documents, unless they have been provided before.* Yes ☐ No ☒

Has any land contiguous to the lands covered by this contract, as amended, been acquired since April 6, 1971? (Please see Item 1, Special Agreement Concerning Land on Page 3 of Annex I of the contract, and amendment.) No

2. Since April 6, 1971, has there been any production from the land subject to the contract? Yes ☐ No ☒

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

Purchaser *(name and address)*	Quantity	Value

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

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

3. Since workings *(see* [illegible] *of contract)*, has any production been transported through Yes ☐ No ☒

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

Disposition of Material	Quantity	Value

Submitted by:

Name	*Title*
K. R. Winslow K R Winslow	Manager of Mines
Address P. O. Box 32 Jefferson City, Tennessee	*Date* April 7, 1972

United States Department of the Interior

GEOLOGICAL SURVEY
WASHINGTON, D.C. 20242

IN REPLY REFER TO: Office of Minerals Exploration

March 30, 1971

Mr. K. R. Winslow
Divisional Manager of Mines
The New Jersey Zinc Company
Jefferson City, Tennessee 37760

Re: DMEA-4586 (Zinc)
The New Jersey Zinc Company
Cedar Springs Area, Sector II
Copper Ridge Belt
Grainger County, Tennessee

APR 12 1971

INITIALS	CODE
gla	120
HK	120
	220

Dear Mr. Winslow:

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

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

Sincerely yours,

Harold Kirkemo

Harold Kirkemo
Chief, Office of
Minerals Exploration

Copy to R-IV

Form MME 63
(May 1970)

REQUEST FOR INFORMATION ON CERTIFIED PROJECT OR PROJECT UNDER ROYALTY AGREEMENT

1. Since April 6, 1970, has there been a change in ownership, lease, or sublease? *If yes, please state details of the transaction below and provide a true or signed copy of the pertinent documents, unless they have been provided before.* Yes ☐ No ☑

Has any land contiguous to the lands covered by this contract, as amended, been acquired since April 6, 1970? (Please see Item 1, Special Agreement Concerning Land on Page 3 of Annex I of the contract, and amendment. Yes / / No /✓/

2. Since April 6, 1970, has there been any production from the land subject to the contract? Yes ☐ No ☑

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

Purchaser *(name and address)*	Quantity	Value

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

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

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

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

Disposition of Material	Quantity	Value

Submitted by:

Name K. R. Winslow	*Title* Manager of Mines
Address Jefferson City, Tennessee	*Date* April 6, 1971

IN REPLY REFER TO:
Office of Minerals Exploration

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY
WASHINGTON, D.C. 20242

March 30, 1970

Mr. K. R. Winslow
Divisional Manager of Mines
The New Jersey Zinc Company
Jefferson City, Tennessee 37760

Re: DMEA-4586 (Zinc)
The New Jersey Zinc Company
Cedar Springs Area, Sector II
Copper Ridge Belt
Grainger County, Tennessee

copy T. R. IV

OFFICIAL COPY
O. M. E.
RECEIVED
APR 10 1970
INITIALS | CODE
gla | 130
HK | 120
| 220

Dear Mr. Winslow:

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

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

Sincerely yours,

Harold Kirkemo

Harold Kirkemo
Chief, Office of
Minerals Exploration

MME Form 63
Revised 7-65

REQUEST FOR INFORMATION ON CERTIFIED PROJECT AND PROJECT UNDER ROYALTY AGREEMENT

1. Since April 9, 1969, has there been a change in ownership, lease, or sublease? If yes, please state details of the transaction below and provide a true or signed copy of the pertinent documents, unless they have been provided before. Yes ☐ No ☑

   Has any land contiguous to the lands covered by this contract, as amended, been acquired since April 9, 1969? (Please see Item 1, Special Agreement Concerning Land on Page 3 of Annex I of the contract, and amendment). Yes / / No / ✓ /

2. Since April 9, 1969, has there been any production from the land subject to the contract? Yes ☐ No ☑

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

	Quantity	Value

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

Type	Quantity		Estimated Grade	Location
Ore		Tons		
Concentrates		Tons		
Other		Tons		

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

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

Disposition of Material	Quantity	Value

Submitted by: K R Winslow

Name K. R. Winslow

Address Jefferson City, Tenn.

Title Divisional Manager of Mines

Date April 6, 1970

IN REPLY REFER TO:

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY
ROOM 11 POST OFFICE BLDG.
KNOXVILLE, TENN. 37902

March

OFFICIAL COPY
O. M. E.
RECEIVED
AUG 8 1969
INITIALS | CODE

August 7, 1969

Memorandum

To: Harold Kirkemo, Chief
Office of Minerals Exploration, U. S. Geological Survey
Washington, D. C. 20242

From: Robert A. Laurence
Branch of Eastern Mineral Resources
U. S. Geological Survey, Knoxville, Tennessee 37902

Subject: DMEA-4286 (Zinc)
The New Jersey Zinc Company
Big War Creek Area
Hawkins and Hancock Counties, Tenn.
Contract Idm-E982

Copy of the Form MME-63, addressed to Johnson Crawford, New Jersey Zinc Company for DMEA-4286 (Idm-E-982) has been received.

Mr. Crawford is retiring in a few months, and is currently convalescing from a severe illness. He has been succeeded at Jefferson City by K. R. Winslow, whose title is Division Manager of Mines. All correspondence concerning DMEA contracts with New Jersey Zinc Company in Tennessee should now be addressed to Mr. Winslow.

DMEA-4586

Robert A. Laurence
Geologist
Branch of Eastern Mineral Resources

IN REPLY REFER TO:
Office of Minerals Exploration

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY
WASHINGTON, D.C. 20242

March 20, 1969

Mr. Johnson Crawford
Manager - Tennessee Operations
The New Jersey Zinc Company
Jefferson City, Tennessee 37760

Re: DMEA-4586 (Zinc)
The New Jersey Zinc Company
Cedar Springs Area, Sector II
Copper Ridge Belt
Grainger County, Tennessee

Dear Mr. Crawford:

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

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

Sincerely yours,

Harold Kirkemo

Harold Kirkemo
ACTING Chief, Office of
Minerals Exploration

OFFICIAL COPY
O. M. E.
RECEIVED
APR 11 1969

INITIALS	CODE
gla	130
HK	~~120~~
	220

copy to R-IV

MME Form 63
Revised 7-65

REQUEST FOR INFORMATION ON CERTIFIED PROJECT AND PROJECT UNDER ROYALTY AGREEMENT

1. Since April 11, 1968, has there been a change in ownership, lease, or sublease? If yes, please state details of the transaction below and provide a true or signed copy of the pertinent documents, unless they have been provided before. Yes [ ] No [✓]

   Has any land contiguous to the lands covered by this contract as amended been acquired since April 1968? (Please see Item 1, Special Agreement Concerning Land on Page 3 of Annex I of the contract, and amendment). Yes [ ] No [✓]

2. Since April 1968, has there been any production from the land subject to the contract? Yes [ ] No [✓]

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

	Quantity	Value

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

Type	Quantity		Estimated Grade	Location
Ore		Tons		
Concentrates		Tons		
Other		Tons		

3. Since , has any production been transported through workings (see of contract)? Yes [ ] No [✓]

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

Disposition of Material	Quantity	Value

Submitted by:

Name Johnson Crawford Title Manager - Tennessee Operations The New Jersey Zinc Company

Address Jefferson City, Tennessee Date April 9, 1969

THE NEW JERSEY ZINC COMPANY
(ESTABLISHED 1848)
160 FRONT STREET
NEW YORK, NEW YORK 10038

NJZ

OFFICIAL COPY
O. M. E.
RECEIVED
MAY 17 1968
INITIALS | CODE
130
110
220

May 15, 1968

Mr. Frank E. Johnson, Chief
Office of Minerals Exploration
Department of the Interior
Geological Survey
Washington, D. C. 20242

Copies to B & F & R-IV

Re: DMEA - 4586 (Zinc)
Cedar Springs Area, Sector II
Copper Ridge Belt
Contract Idm - E1071

Dear Mr. Johnson:

In compliance with your request of May 3, we are enclosing three executed copies of Amendment No. 9 to the subject contract.

Very truly yours,

Arnold Jansons,
For Manager of Exploration

AJ:mel
Enc. (3)

MME Form 7
(2/63)

OFFICIAL FILE COPY

Date	Surname	Code
4/30/68	Johnson	110
4/30	Everett	
5/1	Kepp	220

MAY 3 1968

Mr. Johnson Crawford
Manager - Tennessee Operations
The New Jersey Zinc Company
Jefferson City, Tennessee 37760

Re: DMEA-4586 (Zinc)
The New Jersey Zinc Company
Cedar Springs Area, Sector II
Copper Ridge Belt
Grainger County, Tennessee
Contract Idm-E1071

Dear Mr. Crawford:

Thank you for the return of the two MME Forms 63 reporting on the status of the property under the subject contract.

From the information forwarded, it appears that the land purchased by deed dated June 19, 1967, from Mrs. Forest Davidson, et al., is one of the tracts included in the original contract but subsequently deleted by Amendment No.2. Under Section 2 of the Special Agreement Concerning Land of Annex I of the contract, any such land reacquired by the Operator becomes subject to the Special Agreement. Although not technically necessary, it would appear desirable for the record to amend the contract to include the land in question under the provisions of the contract. Accordingly, we have prepared Amendment No. 9 to the contract.

If the proposed amendment meets with your approval, please have all copies signed by a duly authorized representative of the company, retain the one marked Operator's copy, and return the remaining copies to this office. If it does not meet with your approval, please return all copies to this office with your comments.

Sincerely yours,

FRANK E. JOHNSON (gla)

Frank E. Johnson
Chief, Office of
Minerals Exploration

cc: Director's Reading File
Division File
Economic Geology File
OME Docket
OME Reading File
Robert A. Laurence, w/cy
Asst. Sol. memo 4/24/68
& Extra Copy (of am.) for
Field Office

Enclosures

120-M -- 130
FEJohnson/gla 4-30-68

IN REPLY REFER TO:

D-68-2140.3192

UNITED STATES
DEPARTMENT OF THE INTERIOR
OFFICE OF THE SOLICITOR
WASHINGTON, D.C. 20240

April 24, 1968

Memorandum

To: Chief, Office of Minerals Exploration

From: Assistant Solicitor, Oil and Gas and Minerals Exploration

Subject: DMEA-4586 (Zinc)
The New Jersey Zinc Company
Cedar Springs Area Sector II
Copper Ridge Belt
Grainger County, Tennessee
Contract Idm-E1071

In reply to your inquiry of April 19, 1968, concerning the purchase by the above operator of land contiguous to lands included under the contract, as amended, we feel that this newly acquired land should be subject to the provisions of the contract and, accordingly, we have prepared an appropriate amendment.

It appears from the material submitted on March 28, 1968, by the operator, that the land purchased by deed dated June 19, 1967, from Mrs. Forest Davidson, et al., is one of two tracts leased by the operator from the same parties on February 15, 1956, and included in the original contract under Article 2(b)(2). (See Annex I, C.(2)). This land was subsequently deleted from the contract by Amendment No. 2, on March 6, 1958. However, under section 2 of the Special Agreement Concerning Land (p. 3 of Annex I of the contract), any land originally included under the contract, and subsequently deleted by amendment, and then reacquired by the operator, becomes subject to the provisions of the Special Agreement. These include, inter alia, that should the operator reacquire any interest in such lands at any time within 30 years from the date of the contract (March 29, 1967), that they would again become subject to all of the provisions of the contract.

In addition, Amendment No. 2 itself includes all of the provisions of section 2 of the Special Agreement Concerning Land. Although an amendment is not technically necessary to subject this land to the provisions of the contract, it would be desirable to keep the record straight.

Robert W. Long

Robert W. Long
Assistant Solicitor
Oil and Gas and Minerals Exploration

MME Form 7
(2/63)

OFFICIAL FILE COPY

Date	Surname	Code
4/19/68		110
		220
		140
		110

April 19, 1968

Memorandum

To: Associate Solicitor--Mineral Resources

From: Chief, Office of Minerals Exploration

Subject: DMEA-4586 (Zinc)
The New Jersey Zinc Company
Cedar Springs Area, Sector II
Copper Ridge Belt
Grainger County, Tennessee
Contract Idm-E1071

In reply to our inquiry of March 28, 1968, the Operator under the subject contract reported the purchase by deed dated June 19, 1967, of the mineral and mining rights on land contiguous to lands included in the contract.

Please refer to Item 1 of the Special Agreement Concerning Land, page 3 of Annex I of the contract. Should the property covered by the purchase deed mentioned above be made subject to the provisions of the contract by amendment?

FRANK E. JOHNSON

Frank E. Johnson

cc: Director's Reading File
Division File
Economic Geology File
OME docket
OME Reading File

FEJohnson/gla 4-19-68

IN REPLY REFER TO:
Office of Minerals Exploration

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY
WASHINGTON, D.C. 20242

March 28, 1968

Mr. Johnson Crawford
Manager - Tennessee Operations
The New Jersey Zinc Company
Jefferson City, Tennessee

Re: DMEA-4586 (Zinc)
The New Jersey Zinc Company
Cedar Springs Area, Sector II
Copper Ridge Belt
Grainger County, Tennessee
Contract Idm-E1071

OFFICIAL COPY
O. M. E.
RECEIVED
APR 15 1968

INITIALS	CODE
gla	130
	110
	130
	720

Dear Mr. Crawford:

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

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

Sincerely yours,

Frank E. Johnson

Frank E. Johnson
Chief, Office of
Minerals Exploration

copy + attachments to R-IV

MME Form 63
Revised 7-65

REQUEST FOR INFORMATION ON CERTIFIED PROJECT AND PROJECT UNDER ROYALTY AGREEMENT

1. Since March 1967, has there been a change in ownership, lease, or sublease? If yes, please state details of the transaction below and provide a true or signed copy of the pertinent documents, unless they have been provided before. Yes [X] No [ ]
   Has any land contiguous to the lands covered by this contract as amended been acquired since March 1967? (Please see Item 1, Special Agreement Concerning Land on Page 3 of Annex I of the contract, and amendment). See attached sheet Yes [X] No [ ]

2. Since March 1967, has there been any production from the land subject to the contract? Yes [ ] No [X]

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

	Quantity	Value

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

Type	Quantity		Estimated Grade	Location
Ore		Tons		
Concentrates		Tons		
Other		Tons		

3. Since through workings (see of contract)? Yes [ ] No [X]

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

Disposition of Material	Quantity	Value

Submitted by:

Name Johnson Crawford Title Manager - Tennessee Operations The New Jersey Zinc Company

Address Jefferson City, Tennessee Date April 11, 1968

SEE AMENDMENT NO. 9

Since March 1967, the mineral and mining rights to the following property, which has not been added to the contract by amendment, has been purchased by The New Jersey Zinc Company.

Mrs. Forest Davidson, et. al., 141.93 acres. Mineral and mining rights purchased by deed to The New Jersey Zinc Company dated June 19, 1967, and recorded in Deed Book 99, page 457 of the Register's Office of Grainger County, Tennessee. The general bounds of this property are shown on the accompanying map.

Docket Minerals

PROJECT SUMMARY REPORT

By: F. M. Murphy June 14, 1960

1. Docket No. DMEA-4586 (Zinc)
   Contract No. Idm-E1071

   Operator - The New Jersey Zinc Company
   160 Front Street
   New York 28, New York

   Operator's Property Rights -

   The following lands in the Cedar Spring-Idol areas situated in Grainger County, Tennessee, are subordinated under the terms of the subject contract:

Owner of Property	Acres	Date of Purchase of Mineral and Mining Rights
F. Kincaid and Mrs. C. D. Trobaugh	233.33	4/12/1958
W. C. Stapleton	186.54	9/ 7/1956
L. Wolfenbarger	56.79	6/15/1956
B. J. Jackson	84.11	3/ 2/1956
R. Mallicoat	151.63	1/28/1959
W. Davidson	92.0	8/19/1957
Carlie Lane	139.4	7/ 6/1955
	861	

The following lands were deleted from the contract by mutual agreements wherein the Government retained its royalty rights under certain conditions: 1/

Owner	Acres
B. E. Davidson	166
Zilpha Cabbage	92
Carl Davidson	86
Carl Holt	20
J. R. Davidson (2 tracts)	285
Nelson Dalton	12

2. Contract dated March 29, 1957.

   Amendments -

1/ see property map with this file under Amendment No. 5

No. 1, December 2, 1957, adds B. E. Davidson, Carl Davidson and 2 Cabbage lands to Annex I of the contract.

No. 2, March 6, 1958, deletes J. R. Davidson (2 tracts) from contract.

No. 3, March 24, 1958, extends completion date from July 1, 1958 to March 1, 1959, and the royalty period from 30 to 31 years.

No. 4, May 14, 1958, allows recess period from May 1, 1958 to November 1, 1958, and extends completion date to July 1, 1959.

No. 5, December 24, 1958, revokes Amendment No. 4, and allows recess from May 1, 1958 to January 15, 1959, extends completion date to July 1, 1959; contains a pseudo-certification; revises the distance between holes, and adds (a) B. J. Jackson land, (b) Wolfenbarger land, and (c) W. C. Stapleton land, with some land occupied by the owners in (b) and (c) tracts; and deletes the land added by Amendment No. 1.

No. 6, June 5, 1959, extends completion date to October 1, 1959, revises dates for pseudo-certification, and extends royalty period to 32 years.

No. 7, September 18, 1959, deletes the Nelson Dalton and Carl Holt lands.

Diamond drilling under the contract started on May 14, 1957 and was completed July 14, 1959.

Summary of Costs

	Allowed		Completed	
	Units	Cost	Units	Cost
Drilling @ $2.75/ft.	30,000	$82,500.00	33,248)	Actual $99,633.00
Drilling @ $3.00/ft.	5,000	15,000.00	2,610)	Accepted
Drilling @ $2.65/ft	----	----	140)	97,500.00 1/
Incidental Allowance @ $0.21/ft. drilled	35,000	7,350.00	35,000	7,350.00
Analyses @ $1.00/sample	200	200.00	105	105.00
Core boxes @ $1.80/box	500	900.00	500	900.00
Total		$105,950.00	(Accepted	$105,855.00)

1/ Only the allowed total dollar value of the drilling was the maximum under the terms of the contract.

3. Audit Report of Review, dated December 7, 1959.

Total cost billed by Operator	$105,855.00
Exceptions	----
Total acceptable cost	$105,855.00
Government participation @ 50%	$52,927.00 1/

1/ Final complete reimbursement paid December 11, 1959.

4. Certification of a discovery or development issued December 11, 1959.

5. Final reports received -

Operator's received in Washington December 2, 1959.
Field Team's not received to date.
The Operator's report meets the requirements of Article 7(c) of the contract.

Excerpts from final report -

Operator's -

The project area, referred to as the Cedar Springs and Idol areas in the contract, lies along the southeast slope of Copper Ridge and is underlain in descending order by the Chicamauga, Mascot, Kingsport, and Upper Longview formations of limestone and dolomites.

The Kingsport is the most favorable ore-bearing formation in this district. It is divided geologically into the Upper Kingsport (110' - 120' thick) and the Lower Kingsport (90' - 100' thick). The lower 60' - 80' in the Upper Kingsport is an important ore horizon, the sphalerite occurring in white gangue dolomite between breccia blocks of fine dolomite. The Lower Kingsport consists of limestone with thin interbedded fine and coarse crystalline dolomite. The sphalerite occurs as replacement, and filling openings, in breccias in the coarse dolomite.

Prior to the contract the Operator drilled 16 holes in the Cedar Spring area and 52 holes in the Idol area. Under the contract, 33 holes were drilled in the Cedar Springs area and nine holes in the Idol area. Of these,

seven penetrated commercial grade ore (better than 3% zinc), 22 mineralized material, and 13 were barren. The holes averaged about 850 in depth.

On the W. C. Stapleton tract in the Idol area, holes I-61, 62, 63, 64, and 66, penetrated an ore body ranging from 20 to 100 feet in thickness, estimated to contain 739,474 tons of ore with a grade of 4.3 percent zinc.

On the Robert Malicot tract in the Cedar Springs area, holes CS 37 and 41 penetrated ore. However, holes on adjacent fences found no ore that might be correlated with these findings.

Comments by Division of Minerals -

The Operator's reports indicate the work was performed by personnel experienced in exploration for zinc deposits in the district. The Operator plans to continue drilling in the project area and undoubtedly will find additional ore reserves. The ore discovered on the Stapleton track added to ore discovered just outside of the project area, prior to the contract, constituted a minable ore body.

F. M. Murphy

FMMurphy:kb - June 14, 1960
Copy to: Director's reading file
Mr. Johnson
Mr. Murphy
Chron.

Far Docket

DMEA Form 18
Feb. 58

DEFENSE MINERALS EXPLORATION ADMINISTRATION

ANALYSIS OF ~~SEMIANNUAL~~ FIRST REPORT OF CERTIFIED PROJECT

Prepare in duplicate. File original in Official Docket. Send copy

To: Statistics Branch (Code 210)

From: Division of Minerals

Report Period: 6/15/60

DMEA No.	Operator	Contract No.
4586	The New Jersey Zinc Company	Idm. E1071

ORE ESTIMATES

	Tons	Analysis
DMEA	739,474	4.3% Zn
Operator to date		
Total		
Production to date		
Ore in ground	739,474	

INVESTMENT

Type	Size		Feet	Cost
Shafts				
Winzes				
Drifts and Crosscuts				
Raises				
Drilling	Type			
Rehabilitation	Description			

FACILITIES

Mine Plant		
Mill		
Roads		

REMARKS

The operator plans to continue drilling. Additional ore reserves are likely to be indicated.

Prepared by F M Murphy Date 6/15/60

31398

17

OFFICE OF MINERALS EXPLORATION

WORK COMPLETED ANALYSIS

X Certified — After final audit or review report is received, prepare in duplicate. File original in official docket. Send copy to Code 210.

Operator: The New Jersey Zinc Company

Actual Cost: X

State: Tennessee - Granger County

Agreed Unit Cost:

Final Report of Audit:

Commodity: Zinc

Docket No. DMEA-45-86

Final Report of Review: 12/7/59

Contract No. Idm-E 1071

Type of Work (Use these categories only)	Authorized by Contract and Amendments		Completed and Paid for		Net cost after sale of Gov't. Property
	Units	Cost 1/	Units	Cost 1/	
Drifting & Crosscutting					
Raising					
Shafts					
Winzes					
Drilling (Specify) Diamond AX size	35,000	105,750	35,000	105,750	105,750
Surface Excavation					
Underground Excavation					
Roads and Trails					
Operating Equipment Purchased					
Surface Rehabilitation & Repairs					
Underground Rehabilitation					
New Building, Improvements, etc.					
Other (Specify) Analyses		200		105	105
Totals		105,950		105,855	2/ 105,855

1/ Round off to dollars.
2/ Net cost total must agree with final report of audit or review.

Prepared by F M Murphy Date 12/15/60

52616

OFFICIAL
COPY
O. M. E.
RECEIVED
24 1967
MAY 6 COPY

~~110~~
110
~~120K~~
~~120S~~
~~120P~~
120

The Knoxville News-Sentinel Monday, May 22, 1967

Road To Be Built to ET Zince Mine Site

News-Sentinel Washington Bureau

WASHINGTON, May 22 — A half-mile access road to a projected zinc mine and processing plant in Grainger County is going to be built with Federal and state funds, Rep. James Quillen announced today.

Quillen said the Economic Development Administration had approved a $39,000 grant for the road from State Road S-2349 to the mine site northeast of Thorn Hill. The state will contribute $26,000 for the road project.

The New Jersey Zinc Co. mine expansion will employ 170 people when completed in 1970 and will have an annual payroll of about $800,000, Quillen said.

DMEA 4586

Cedar Springs — Idol.

IN REPLY REFER TO:

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY
ROOM 11 POST OFFICE BLDG.
KNOXVILLE, TENN. 37902

OFFICIAL COPY
G. M. M.
APR 3 1967
CODE
120 M
110
120 K
320

March 29, 1967

Air Mail

Memorandum

To: Frank E. Johnson, Chief
Office of Minerals Exploration, U. S. Geological Survey
Washington, D. C. 20242

From: Helmuth Wedow, Jr.
Branch of Base and Ferrous Metals, USGS
Knoxville, Tennessee 37902

Subject: DMEA-4586, Idm-E1071 (Zinc)
The New Jersey Zinc Company
Cedar Springs-Idol area
Grainger County, Tennessee

Johnson Crawford, Manager-Tennessee Operations, New Jersey Zinc Company, phoned Knoxville today with some questions regarding completion of MME Form 63 for the current year.

The chief question appeared to be in regard to the reporting of stockpiled development ore encountered during the sinking of NJZ's new shaft and other development at Idol in the Copper Ridge zinc district. As we have been informed that all development at Idol to date is on land specifically excluded from the subject contract area, I assured Mr. Crawford that none of such development production need be reported. However, I indicated that a brief statement of what development had been done on the contiguous excluded area would be desirable for the record.

Further information gained from Mr. Crawford indicates that about 700 feet of the new 1400-foot shaft has been sunk; an equipment incline has also been driven and is nearly through to the shaft. He also stated that actual production would be unlikely before the early 1970's and certainly not before 1970. He further remarked that once regular production was under way, his company was seriously considering repayment of the DMEA loan in a lump sum.

Wedow

Helmuth Wedow, Jr.
Geologist
Branch of Base and Ferrous Metals

IN REPLY REFER TO:
Office of Minerals Exploration

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY
WASHINGTON, D.C. 20242

March 20, 1967

The New Jersey Zinc Company

Jefferson City, Tennessee 37760

Re: DMEA-4586 (Zinc)
The New Jersey Zinc Company
Cedar Springs Area, Sector II
Copper Ridge Belt
Grainger County, Tennessee
Contract Idm-E1071

OFFICIAL COPY
O. M. E.
RECEIVED
APR 3 1967

INITIALS	COM.
4/3 JM	120 MC
KL	110
HK	120K
	220
	150

Gentlemen:

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

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

Sincerely yours,

Frank E. Johnson

Frank E. Johnson
Chief, Office of
Minerals Exploration

MME Form 63
Revised 7-65

REQUEST FOR INFORMATION ON CERTIFIED PROJECT AND PROJECT UNDER ROYALTY AGREEMENT

1. Since **April 1966**, has there been a change in ownership, lease, or sublease? If yes, please state details of the transaction below and provide a true or signed copy of the pertinent documents, unless they have been provided before. Yes ☐ No ☑

Has any land contiguous to the lands covered by this contract as amended been acquired since April 3, 1965? (Please see Item 1, Special Agreement Concerning Land on Page 3 of Annex I of the contract, Yes/__/No/✓/ and Amendment).

2. Since **April 1966**, has there been any production **including limestone and dolomite products** from the land subject to the contract? Yes ☐ No ☑

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

	Quantity	Value

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

Type	Quantity		Estimated Grade	Location
Ore		Tons		
Concentrates		Tons		
Other		Tons		

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

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

Disposition of Material	Quantity	Value

Submitted by:

Name Johnson Crawford Title Manager - Tennessee Operations

Address Jefferson City, Tennessee Date March 29, 1967

NOTE:

A hoisting shaft is being sunk at Idol on property contiguous to lands covered by this contract as amended. Its present depth is 779'. Its anticipated depth is 1452'. No definite plans have yet been made as to when the property will be placed on a production basis.

IN REPLY REFER TO:

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

ROOM 11 POST OFFICE BLDG.
KNOXVILLE, TENN. 37902

June 15, 1966

OFFICIAL COPY
O. M. E.
RECEIVED
JUN 17 1966

INITIALS	CODE
	~~120~~ 110
	110

Memorandum

To: Frank E. Johnson, Chief, OME

From: Robert A. Laurence

Subject: DMEA-4586, Idm-E1071 (Zinc)
The New Jersey Zinc Company
Cedar Springs-Idol area
Grainger County, Tenn.

We have been advised informally by The New Jersey Zinc Company that they will soon begin to sink a 1400 foot shaft to develop the Idol ore body, part of which is on lands added to the Cedar Springs contract by amendments.

Robert A. Laurence
Geologist
Branch of Resources Research

IN REPLY REFER TO:

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY
WASHINGTON, D.C. 20242

OFFICIAL COPY

April 1, 1966

Re: DMEA-4586 (Zinc)
The New Jersey Zinc Company
Cedar Springs Area,
Sector II
Copper Ridge Belt
Grainger County, Tennessee
Contract Idm-E1071

4/11/66 m 170 m
HK 120 K
RMD 120 S
220

The New Jersey Zinc Company
Jefferson City, Tennessee

Gentlemen:

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

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

Sincerely yours,

Frank E. Johnson

Frank E. Johnson
Chief, Office of
Minerals Exploration

MME Form 63
Revised 7-65

DMEA-4586
Idm-E1071

REQUEST FOR INFORMATION ON CERTIFIED PROJECT AND PROJECT UNDER ROYALTY AGREEMENT

1. Since June 1965, has there been a change in ownership, lease, or sublease? If yes, please state details of the transaction below and provide a true or signed copy of the pertinent documents, unless they have been provided before. Yes ☐ No ☑
   Has any land contiguous to the lands covered by this contract as amended been acquired since April 3, 1965: (Please see item 1, Special Agreement Concerning Land on page 3 of Annex I of the contract, and amendment 8).

2. Since June, 1965, has there been any production including limestone and dolomite products from the land subject to the contract? Yes ☐ No ☑

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

	Quantity	Value

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

Type	Quantity	Estimated Grade	Location
Ore	Tons		
Concentrates	Tons		
Other	Tons		

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

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

Disposition of Material	Quantity	Value

Submitted by:

Name Johnson Crawford Title Manager - Tennessee Operations
The New Jersey Zinc Company

Address Jefferson City, Tennessee Date April 7, 1966

MME Form 7
(2/63)

OFFICIAL FILE COPY

Date	Surname.	Code
7 '23	Selfridge	120
7/26	Johnson	110
		220
7/26	Kilgoard	
7/27	Pacora	
		110
		220
		120M

JUL 29 1965

The New Jersey Zinc Company

Jefferson City, Tennessee

Re: DMEA-4126 (Zinc)
The New Jersey Zinc Company
Strawberry Plains Area
Knox & Jefferson Counties, Tennessee
Contract Idm-E937
and
DMEA-4586 (Zinc)
The New Jersey Zinc Company
Cedar Springs Area, Sector II
Copper Ridge Belt
Grainger County, Tennessee
Contract Idm-E1071

Gentlemen:

Thank you for the return of the two MME Forms 63 of June 16, 1965, and for the information contained therein.

Enclosed pursuant to the Special Agreements Concerning Land of Annex I are proposed Amendments Nos. 17 and 8 pertaining to the above-referenced contracts, respectively. If the proposed amendments meet with your approval, please sign all copies, retain the ones marked for the Operator, and return the remaining copies to this office. If they do not meet with your approval, please return all copies to this office with your comments.

Sincerely yours,

(signed) FRANK E. JOHNSON gla

Frank E. Johnson
Chief, Office of
Minerals Exploration

Enclosures

GCSelfridge/gla (7-23-65)
cc to: Director's Reading File
Division File
Economic Geology File
OME Files, DMEA-4126 and DMEA-4586
OME Reading File
OME Region IV (2) w 2 MME Forms 63 dtd June 16, 1965 and attachments
George C. Selfridge

23263

IN REPLY REFER TO:

G-65-2057.11

UNITED STATES
DEPARTMENT OF THE INTERIOR
OFFICE OF THE SOLICITOR
WASHINGTON, D.C. 20240

July 9, 1965

Memorandum

To: Chief, Office of Minerals Exploration

From: Assistant Solicitor, Oil and Gas and Minerals Exploration

Subject: DMEA-4586 (Zinc)
The New Jersey Zinc Company
Cedar Springs Area, Sector II
Copper Ridge Belt
Grainger County, Tennessee
Contract Idm-E1071

In reply to your inquiry of July 6, Item 1 of the Special Agreement Concerning Land, page 3 of Annex I of the subject contract provides that if the operator or any subsidiary thereof at any time during the period expiring ten years from the date of the contract acquires any interest, title, or equity in any lands contiguous to the premises described in the contract such contiguous lands shall become subject to the provisions of the contract and the parties shall promptly execute amendments to the contract listing such contiguous lands as lands included in the contract.

Accordingly, the R. G. Stapleton property which was acquired in fee simple by the operator and the Wilkerson and Kincaid properties on which the operator has acquired prospecting options to purchase minerals and mining leases should all be made subject to the provisions of this contract and we have so prepared the enclosed amendment.

Robert W. Long
Robert W. Long
Assistant Solicitor
Oil and Gas and Minerals Exploration

Enclosure

MME Form 7
(2/63)

OFFICIAL FILE COPY

Date	Surname	Code
	Selfridge	

JUL 6 1965

Memorandum

To: Associate Solicitor - Mineral Resources

From: Chief, Office of Minerals Exploration

Subject: IMEA-4386 (Zinc)
The New Jersey Zinc Company
Cedar Springs Area, Sector II
Copper Ridge Belt
Grainger County, Tennessee
Contract Idm-81071

In reply to our inquiry of June 16, 1965, the subject Operator informed us of the acquisition of contiguous property and of certain prospecting options to purchase mineral and mining rights covering other contiguous properties.

Please refer to item 1 of Special Agreement Concerning Land, page 3 of Annex I of the contract. Should an amendment to the contract cover the lands held under the prospecting options?

(signed) FRANK E. JOHNSON (gla)

Frank E. Johnson

GCSelfridge/gla (7-6-65)
cc to: Director's Reading File
Division File
Economic Geology File
OME File
OME Reading File
George C. Selfridge
120M

23263

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

REGISTERED MAIL
RETURN RECEIPT REQUESTED

June 16, 1965

Re: DMEA-4586 (Zinc)
The New Jersey Zinc Company
Cedar Springs Area,
Sector II
Copper Ridge Belt
Grainger County, Tennessee
Contract Idm-E1071

The New Jersey Zinc Company

Jefferson City, Tennessee

Gentlemen:

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

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

Sincerely yours,

George C. Selfridge

George C. Selfridge, Chief
Division of Exploration Operations

OFFICIAL
COPY
O. M. E.
RECEIVED
JUN 23 1965

INITIALS	CODE
	~~100~~
JEJ	~~110~~
6/24 Mm	120 m
	~~120~~

MME Form 63
Revised 3-62

DMEA-4586
Idm-E1071

REQUEST FOR INFORMATION ON CERTIFIED PROJECT AND PROJECT UNDER ROYALTY AGREEMENT

1. Since August 1964, has there been a change in ownership, lease, or sublease? If yes, please state details of the transaction below and provide a true or signed copy of the pertinent documents, unless they have been provided before. Yes [x] No [ ]
   Has any land contiguous to the lands covered by this contract been acquired since March 29, 1957, the date of the contract, which has not been added to the contract by amendment? (Please see Item 1, "Special Agreement Concerning Land" on Page 3 of Annex I of the subject contract.) See attached sheet. Yes [x] No [ ]

2. Since August 1964, has there been any production from the land subject to the contract? Yes [ ] No [x]

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

	Quantity	Value

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

Type	Quantity		Estimated Grade	Location
Ore		Tons		
Concentrates		Tons		
Other		Tons		

3. Since , has any production been transported through workings (see of contract)? Yes [ ] No [x]

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

Disposition of Material	Quantity	Value

Submitted by:

Name Frederick [illegible] Title Resident Exploration Geologist

Address Jefferson City, Tennessee Date June 21, 1965

4511

Since March 29, 1957, the date of the contract, the following contiguous property, which has not been added to the contract by amendment, has been purchased in fee simple:

Mrs. R. G. Stapleton, et al. 81.10 acres. Purchased in fee simple by deed to The New Jersey Zinc Company dated April 3, 1965 and recorded in Deed Book 96, page 250 of the Register's Office of Grainger County, Tennessee. The general bounds of this property are shown on the accompanying map.

Prospecting options to purchase mineral and mining rights have been negotiated with owners covering the following two properties contiguous to the lands covered by the contract:

1. Ora C. Wilkerson, et al. 300 acres
   Contract executed August 22, 1964 for 3-year period.

2. Belle Kincaid (widow) - 125 acres
   Contract executed January 22, 1965 for 3-year period.

The locations of these tracts are shown on the accompanying map.

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

July 27, 1964

Re: DMEA-4586 (Zinc)
The New Jersey Zinc Company
Cedar Springs Area,
Sector II
Copper Ridge Belt
Grainger County, Tennessee
Contract Idm-E1071

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

Dear Sir:

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

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

Sincerely yours,

George C. Selfridge

George C. Selfridge, Chief
Division of Exploration Operations

OFFICIAL FILE COPY
O. M. E.
RECEIVED AUG 3 1964

DATE	INITIALS	CODE
8/3		800
8/3		100
		110
		120 [redacted] M
8/4		120
		120 M
		220

MME Form 63
Revised 3-62

REQUEST FOR INFORMATION ON CERTIFIED PROJECT AND PROJECT UNDER ROYALTY AGREEMENT

1. Since October 1963 , has there been a change in ownership, lease, or sublease? If yes, please state details of the transaction below and provide a true or signed copy of the pertinent documents, unless they have been provided before. Yes ☐ No ☑

2. Since October 1963 , has there been any production from the land subject to the contract? Yes ☐ No ☑

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

	Quantity	Value

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

Type	Quantity		Estimated Grade	Location
Ore		Tons		
Concentrates		Tons		
Other		Tons		

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

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

Disposition of Material	Quantity	Value

Submitted by:

Name A. Hayland Title Chief Geologist

Address The New Jersey Zinc Co., Jefferson City, Tenn. Date July 31, 1964

4511

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

NJZ

October 21, 1963

Mr. F. M. Murphy, Acting Chief
Division of Minerals
U.S. Department of the Interior
Office of Minerals Exploration
Washington 25, D. C.

Re: DMEA-4586
The New Jersey Zinc Company
Cedar Springs Area
Grainger County, Tennessee
Contract Idm-E1071

Dear Mr. Murphy:

Enclosed please find two completed forms of "Request for Information" relating to the subject contract.

Very truly yours,

William H. Callahan/rms

William H. Callahan
Manager of Exploration

/rms
Encl.-2

OFFICIAL FILE COPY
O. M. E
RECEIVED OCT 22 1963

DATE	INITIALS	CODE
10/22		800
		100
10/27		110
10/23		500
		200

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

September 18, 1963

Re: **DMEA-4586 (Zinc)**
The New Jersey Zinc Co.
Cedar Springs Area
Grainger County, Tennessee
Contract Idm-E1071

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

Gentlemen:

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

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

Sincerely yours,

s/F. M. Murphy

F. M. Murphy, Acting Chief
Division of Minerals

MME Form 63
Revised 3-62

REQUEST FOR INFORMATION ON CERTIFIED PROJECT AND PROJECT UNDER ROYALTY AGREEMENT

1. Since **August 7, 1962**, has there been a change in ownership, lease, or sublease? If yes, please state details of the transaction below and provide a true or signed copy of the pertinent documents, unless they have been provided before. Yes ☐ No ☒

2. Since **August 7, 1962**, has there been any production from the land subject to the contract? Yes ☐ No ☒

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

	Quantity	Value

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

Type	Quantity		Estimated Grade	Location
Ore		Tons		
Concentrates		Tons		
Other		Tons		

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

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

Disposition of Material	Quantity	Value

Submitted by:

Name [signature] Title **Chief Geologist - Tennessee**

Address **Jefferson City, Tennessee** Date **October 9, 1963**

4511

THE NEW JERSEY ZINC COMPANY

(ESTABLISHED 1848)

Telephone
JEFFERSON CITY
475-2052

JEFFERSON CITY, TENNESSEE

HORSE HEAD PRODUCTS ®

August 7, 1962

OFFICIAL FILE COPY
O. M. E.
RECEIVED AUG 9 1962

DATE	INITIALS	CODE
8/10	[illegible]	800
8/10	[illegible]	100
8/15	[illegible]	110
		120
	Griswold	500
8/10	Murphy	300
		220

Mr. W. R. Griswold, Chief
Division of Minerals
Office of Minerals Exploration
United States Department of the Interior
Washington 25, D. C.

Dear Mr. Griswold:

Returned, herewith, are responses to your query of July 24th relative to

DMEA-4586 (Zinc)
Cedar Springs Area
Contract Idm-E-1071

and

DMEA-4850 (Zinc)
Little War Creek Area
Contract Idm-E-1174.

Yours very truly,

THE NEW JERSEY ZINC COMPANY

Johnson Crawford

Assistant Manager of Mines

A.D.Hoagland/jf
In duplicate

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

JUL 24 1962

Re: BMEA-4586 (Zinc)
The New Jersey Zinc Co.
Cedar Springs Area
Grainger County, Tennessee
Contract Idm-81071

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

Gentlemen:

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

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

Sincerely yours,

W. R. Griswold

W. R. Griswold, Chief
Division of Minerals

MME Form 63
Revised 3-62

REQUEST FOR INFORMATION ON CERTIFIED PROJECT AND PROJECT UNDER ROYALTY AGREEMENT

1. Since **July 1, 1960**, has there been a change in ownership, lease, or sublease? If yes, please state details of the transaction below and provide a true or signed copy of the pertinent documents, unless they have been provided before. Yes [x] No [ ]

See attached sheet

2. Since **July 1, 1960**, has there been any production from the land subject to the contract? Yes [ ] No [x]

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

	Quantity	Value

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

Type	Quantity	Estimated Grade	Location
Ore	Tons		
Concentrates	Tons		
Other	Tons		

3. Since , has any production been transported through workings (see of contract)? Yes [ ] No [x]

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

Disposition of Material	Quantity	Value

Submitted by:

Name A. D. Hoagland Title Chief Geologist

Address Jefferson City, Tennessee Date August 7, 1962

4511

The purchase of approximately 100 acres of surface was made July 22, 1960 on a portion of the Frank Kincaid and Mrs. C. D. Trobaugh property. Mineral and mining rights had been purchased April 12, 1958.

The purchase of approximately 184 acres of surface was made May 3, 1960 on a portion of the W. C. Stapleton property. Mineral and mining rights had been purchased September 7, 1956.

MME Form 7
(10-58)

OFFICIAL FILE COPY

Date	Surname	Code
5/11/62	GCS	120
		225

MAY 1 1 1962

Memorandum

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

From: Chief, Division of Field Operations, OME

Subject: DMEA-4586 (Zinc)
The New Jersey Zinc Company
Cedar Springs Area
Grainger County, Tennessee
Contract Idm-E1071

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

George C. Selfridge (2hb)

Enclosure

GCSelfridge/hb (5/10/62)
cc to: Docket DMEA-4586
Director's Reading File
CA&A Division
GCSelfridge
R. A. Laurence, USGS, Reg. IV, w/cy of Report of Royalty Review dtd 5/9/62 & orig. cy of memo dtd 5/9/62 to Chf., Div. of Field Operations from CA&A Division.
Avery Reed, USBM, Reg. IV, w/cy of ea. item sent to Mr. Laurence.

43683

MME Form 7
(10-58)

OFFICIAL FILE COPY

Date	Surname	Code
		220

MAY 9 1962

Memorandum

To: Chief, Division of Field Operations

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

Subject: DMEA-4586 (Zinc)
The New Jersey Zinc Company
Cedar Springs Area
Grainger County, Tennessee
Contract Idm-81071

Enclosed are the original and two copies of a Report of Royalty Review covering the subject Region IV contract. If you concur in the facts stated therein, please make the following distribution:

(a) Original to the Fiscal Section, Division of Administrative Services, Office of the Secretary; and

(b) Two copies to Region IV files.

This report is for OME record purposes only; therefore, no copy has been provided for the Operator.

As evidence of your concurrence, a copy of your memorandum transmitting the original of the report to the Department's Fiscal Section should be furnished this Division. If for any reason you do not concur, the original and both copies should be returned to this Division with your comments.

Enclosures

EDTalbert/ama 5-9-62

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

43683

MME Form 7
(10-58)

OFFICIAL FILE COPY

Date	Surname	Code
11-22	gad	220
		500
		220

NOV 22 1960

Mr. V. J. Lynch
Bureau of Mines
Room 1, Post Office Building
Knoxville 2, Tennessee

Dear Vic:

We have located only three of The New Jersey Zinc Company's final reports which you requested while in my office on November 16. These extra copies are being forwarded to you by parcel post:

DMEA-4153, Idm-E 950 Independence Area

DMEA-4177, Idm-E 956 Eidson Area

DMEA-4586, Idm-E1071 Cedar Springs

Sincerely yours,

W. R. Griswold, Chief
Division of Minerals

GLAult/a
Copies 3 dockets

43683

JUL 6 1960

DATE

[illegible]

Reporting Period: [illegible] to [illegible]

The following projects had no [illegible] during this period. This was determined by conf[illegible] with Company officials and by visits to the proper[illegible]

DMEA	Idm-E	Operator	Area
2546	676	American Zinc Co., of Tenn.	West New [illegible]
4126	937	The New Jersey Zinc Co.	Strawberry [illegible]
4153	950	The New Jersey Zinc Co.	Independence [illegible]
4177	956	The New Jersey Zinc Co.	Eidson
4246	982	The New Jersey Zinc Co.	Big War Creek
4506	1071	The New Jersey Zinc Co.	Cedar Spring [illegible]
[illegible] (Va.)	1204	The American Zinc Co.	Chaffin Estate

? [illegible]

V. J. Lynch
Mining Engineer

OFFICIAL FILE COPY

Date	Surname	Code
12/4	Murphy	500
	[illegible]	500
12/8	J. Lynch	140
	Vernon	140
12/9	Tadlock	800
12/11	Jeffrey	130
12/11	Lamb	130
12/11	Kirkemo	130
		110
12-11	gad	220
		500

DEC 11 1959

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

Re: Docket No. DMEA-4586 (Zinc)
The New Jersey Zinc Company
Cedar Springs Area, Sector II
Copper Ridge Belt
Grainger County, Tennessee
Contract No. Idm-E1071

Dear Mr. Goodwin:

Enclosed is a certification of discovery or development that covers all the land described in Article 2 of the contract.

By the terms of the Exploration Project Contract, as amended, and the certification, all minerals mined or produced from March 29, 1957, to March 29, 1989, are subject to the Government's percentage royalty as set forth in the contract until the amount contributed by the Government is repaid.

Royalty payments should be made to the Executive Officer, OME Field Team, Region V, Room 11, Post Office Building, Knoxville 2, Tennessee, by the purchaser with checks drawn payable to the Office of Minerals Exploration. The purchaser should be advised to deduct royalties from the amount due on each shipment and send the check directly to the Executive Officer. Each check should be accompanied by suitable sales evidence - such as copies of settlement sheets - showing the name of the purchaser, the quantity and grade of the products sold, and the price and charges, certified to be correct by the purchaser.

You are requested to notify the Executive Officer of any changes in ownership or production rights that may have any effect on the Government's right to its percentage royalty. Your attention is called particularly to Article 2(d) of the contract relating to the preservation of the Government's right to a percentage royalty on production. Also when production starts, please notify the Executive Officer. Thereafter, if production ceases for any extended period, please notify him accordingly at six-month intervals.

FMMurphy/gla 12-4-59

Sincerely yours,

Frank E. Johnson

Acting Director

FROM SOLICITOR
DEC 9 1959
FOR SIGNATURE

cc to: Director's Reading File
Mr. Johnson
Operating Committee
Div. of Contract Adm. & Audit
Mr. Lamb, USBM
Mr. Kirkemo, USGS

Enclosure OME Field Team, Region V (2)
Code 500

43683

Form 7
(10-58)

OFFICIAL FILE COPY

Date	Surname	Code
12/4	Murphy	500
	Johnson	500
12/8	J. Lynch	140
	Vernon	140
	App'd. Sol. Off.	
12/9	Talbert	800
12/11	Selfridge	130
12/11	Lamb	130
12/11	Kirkemo	130
		110
12-11	gad	220
		500

DEC 11 1959

Mr. C. A. Fredell, Director
Technical Research and Development Division
Defense Materials Service
General Services Administration
6018 GSA Building
Washington 25, D. C.

Re: Docket No. DMSA-4586 (Zinc)
The New Jersey Zinc Company
Cedar Springs Area, Sector II
Copper Ridge Belt
Grainger County, Tennessee
Contract No. Idm-K1071

Dear Mr. Fredell:

I am enclosing one copy of a certification of discovery or development relating to the subject exploration contract.

The final reports of the Field Team and the final accounting of funds expended on this project have not been completed. Accordingly, we will supply additional information for your records upon receipt of these reports.

Sincerely yours,

Frank E. Johnson

Acting Director (=45)

Enclosure

FMMurphy/gla
12-4-59
cc to: Director's Reading File
Frank E. Johnson
Operating Committee
Frank D. Lamb, USBM
Harold Kirkemo, USGS
Docket
Chron
OME Field Team, Region V (2)

43683

OFFICIAL FILE COPY

Date	Surname	Code
12/7	gad	220
12/8	Murphy	500

DEC 7 1959

Memorandum

To: Executive Officer, OMR Field Team, Region V

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

Subject: Docket No. DMEA-4586 (Zinc)
The New Jersey Zinc Company
Cedar Springs Area
Grainger County, Tennessee
Contract No. Idm-E1071

As requested by your November 30 memorandum a review in lieu of a final audit has been made of the subject project. The original and three copies of the Report of Review are attached.

If you concur with the facts as stated in this Report of Review, please forward the original and one copy to Mrs. Miller, submit one copy to the Operator, and retain the remaining copy in your files. If for any reason you do not concur, please return the original and all copies to this Division with your comments.

In connection with your concurrence, it should be noted that the amount shown on the Report of Review as having been heretofore paid the Operator is $52,470.91, rather than $52,470.95 as stated in your memorandum. If a recheck indicates the latter amount to be correct, please return the original and all copies of the Report of Review with a listing of the individual monthly payments.

The original of the final (July 1959) MF-104, MF-104A, and attachments, together with the 41 drilling invoices supporting prior forms MF-104, are being returned by certified mail to Mrs. Miller with a copy of this memorandum.

Attachments

EDTalbert/ama
December 7, 1959

Copy to: Docket
Director's Reading File
CA & A Division
Mrs. Helen R. Miller (via Certified Mail)

43683

UNITED STATES
DEPARTMENT OF THE INTERIOR
OFFICE OF MINERALS EXPLORATION
ROOM 2-B POST OFFICE BLDG.
KNOXVILLE 2, TENN.
November 30, 1959

OME-Operating Committee

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

DATE	INITIALS	CODE
12-3	gad	VVO
12/3		800
12/4	Murphy	500

Memorandum

To: E. D. Talbert - Contract Admin. & Audit Division

From: R. E. Laurence, Executive Officer, OME Region V

Subject: Completion of DMEA-4586, Idm-E1071-zinc
The New Jersey Zinc Co., Cedar Spring Area,
Grainger County, Tennessee

Work on the subject contract was completed July 14, 1959.

The units of work completed by the Operator and verified by the Field Team are as follows:

Diamond drilling	35,998 feet
Assays	105
Core boxes	500

The total amount of drilling exceeds that authorized by the contract, but the Operator has claimed only $97,500 for 35,231 feet of drilling.

An acceptable final engineering and geologic report has been received, and copies were forwarded to the Operating Committee on November 27, 1959.

A total of $52,470.95 has been paid to date to the Operator, $456.56 having been withheld pending final audit and review.

This request is being forwarded through Mrs. Helen R. Miller, who is attaching the necessary reports and documents from her files.

A Report of Review in Lieu of final audit is requested.

Original of form MF-104 for the month of July, 1959 is attached.

EXECUTIVE OFFICER
OME FIELD TEAM
REGION V

RAL/zm

UNITED STATES
DEPARTMENT OF THE INTERIOR
OFFICE OF MINERALS EXPLORATION
ROOM 11 POST OFFICE BLDG.
KNOXVILLE 2, TENN.

November 27, 1959

OFFICIAL FILE COPY O. M. E. RECEIVED DEC 2 1959		
DATE	INITIALS	CODE
12-2	gad	VVO
12/2	[illegible]	800
"	Murphy	500

Memorandum

To: Operating Committee, OME - Washington

From: Executive Officer, OME - Region V -Knoxville

Subject: Operator's Final Report- DMEA-4586, Idm-E1071-zinc
The New Jersey Zinc Co., New York, N.Y.
Cedar Springs-Idol area, Grainger County, Tenn.

Enclosed are three copies of the Operator's final report which has just been received. Although the Field Team final report is not yet ready, we are of the opinion that the reserves discovered under this project, added to those just outside the project area which were discovered prior to this contract, constitute a mineable ore-body. Certification is therefore recommended.

Robert A. Laurence

Robert A. Laurence

Operator's Final Report

See folder #3 for addl. maps (Appendix) Geologic Cross Sections, and Drill Logs

OFFICIAL FILE COPY
O M E.
RECEIVED DEC 2 1959

DATE	INITIALS	CODE

CEDAR SPRINGS - IDOL AREA

SECTOR II COPPER RIDGE BELT

GRAINGER COUNTY, TENNESSEE

DMEA DOCKET NO. 4586 CONTRACT Idm E 1071

E. W. Renshaw

CEDAR SPRINGS - IDOL AREA

SECTOR II COPPER RIDGE BELT

GRAINGER COUNTY, TENNESSEE

DMEA DOCKET NO. 4586 Contract Idm E 1071

Summary

Exploration for zinc ore in this area has been conducted, at irregular intervals, since about 1920. The New Jersey Zinc Company began an exploration program in this area in 1952. In 1957 the Company entered into a contract with the Defense Minerals Exploration Administration to explore for zinc in the Cedar Springs Area. Between May, 1957 and April, 1958 thirty-three holes were drilled under the DMEA contract. In December of 1958 the Idol Area was included, by amendment, in the project area. Nine holes were drilled at Idol under DMEA during the first seven months of 1959.

The diamond drilling done under DMEA is tabulated as follows:

	No. of Holes	Footage	Costs
Cedar Springs	33	25,697	$77,097.25
Idol	9	9,534	28,757.75
	42	35,231	$105,855.00

Cedar Springs: Ten holes penetrated mineralization in this area. Only two of these penetrated mineralization of ore thickness and grade.

Idol: Five holes penetrated ore grade mineralization and indicate a zone containing about 750,000 tons with a grade of about 4.3% zinc.

Location

The Cedar Springs-Idol project covered by the DMEA contract Idm E 1071 is comprised of 9 properties totalling about 950 acres in Grainger County, Tennessee. These properties extend along Copper Ridge from US 25 E northeast to Cedar Springs Creek, a distance of about 3 miles.

History

There have been several periods of exploration in this area. These resulted from the discovery of zinc mineralization in outcrop in Joe Mill Creek at Idol and near Cedar Springs Creek at Cedar Springs. About 1920 a Mr. C. B. Comstock prospected at Idol with both exploratory diggings and core drill holes. He was not successful in finding a commercial deposit. In the 1930's the Universal Exploration Company dug some test pits at Idol. During World War II the U. S. Bureau of Mines drilled six diamond drill holes at Idol and eight at Cedar Springs.

The New Jersey Zinc Company started a geochemical survey in the area in 1952. A large geochemical anomaly was found at Cedar Springs and another at Idol. Diamond drilling was begun in 1952 at Cedar Springs and early in 1953 at Idol. Sixteen holes totalling 7652' were drilled at Cedar Springs. This drilling encountered enough zinc mineralization to maintain the Company's interest in further exploration.

Fifty-two holes were drilled at Idol. This drilling encountered extensive mineralization in the vicinity of the surface showings.

In May, 1957, DMEA contract Idm E 1071 providing for 35,000 feet of drilling at an estimated cost of $105,950.00 was approved by the government. The purpose of this drilling was to further establish the gross ore potential of the Cedar Springs area. Drilling under this contract was begun immediately. By May, 1958 thirty-three holes totalling 25,697 feet had been drilled.

In December, 1958 an amendment was made to the subject contract providing for the inclusion of four properties in the vicinity of the previously discovered Idol mineralization. By July, 1959, nine additional holes had been completed under the DMEA contract.

Property

The properties included within the Cedar Spring-Idol project area are shown on maps AX-TENN-B-105 and AX-TENN-B-106 and are tabulated below:

I. Properties Covered by Contract Idm E 1071

✓ F. Kincaid & Mrs. C. D. Trobaugh property - Purchase of mineral and mining rights to 233.33 Acres, made 4/12/58

✓ W. C. Stapleton property - Purchase of mineral and mining rights to 186.54 acres, made 9/7/56

✓ L. Wolfenbarger property - Purchase of mineral and mining rights to 56.79 acres, made 6/15/56

✓ B. J. Jackson property - Purchase of mineral and mining rights to 84.1 acres, made 3/2/56

R. Mallicoat property - Purchase of mineral and mining rights to 151 acres, made 1/28/59

W. Davidson property - Purchase of mineral and mining rights to 92 acres, made 8/19/57

C. Lane property - - Purchase of mineral and mining rights to 139 acres, made 7/6/55

II. Properties Dropped from Contract Idm E 1071

B. E. Davidson	- - - 166 Acres	- Option terminated
Zilpha Cabbage	- - - 92 Acres	- Option terminated
Carl Davidson	- - - 86 Acres	- Option terminated
Carl Holt	- - - 20 Acres	- Option terminated
J. R. Davidson (2 tracts)	- - - 285 Acres	- Option terminated
Nelson Dalton	- - - 12 Acres	- Option terminated

Geology

The subject area lies along the southeast slope of Copper Ridge at elevations ranging from about 1300 feet along Joe Mill Creek and Cedar Springs Creek to about 1780 feet along the crest of the ridge. The southeast slope of the ridge is underlain by the Upper Longview, Kingsport, Mascot and Chickamauga formations of Lower and Middle Ordovician age. These formations form a homoclinal structure dipping southeast about 38° to 40°. The steike is quite uniform at about N 60° E.

Stratigraphy

Data from the diamond drill core permitted the compilation of a detailed stratigraphic column of the Mascot and Kingsport formations. Correlation of marker beds can be made from hole to hole within the area and major stratigraphic units can be correlated with other areas on Copper Ridge.

Several holes collared in the Chickamauga formation. These revealed the presence of a basal conglomerate at the disconformity between the Chickamauga (Middle Ordovician) and the Mascot (Lower Ordovician).

Mascot Formation: At Idol the Mascot is about 510'-520' thick. It consists of fine-grained dolomites, dark grey to buff in color and often mottled. There are numerous sandy zones, particularly in the lower one-half of the formation. These zones are usually characterized by a light grey to buff dolomite, often straticulate, containing frosted quartz sand grains and occasionally a thin (1"-4") chert matrix sandstone. These zones are usually a few inches to two feet thick though locally they may be as much as eight feet thick. Most of the chert encountered in the Mascot is associated with these sandy zones.

Kingsport Formation: The Kingsport is about 210' thick at Idol-Cedar Springs. The Upper Kingsport (110'-120') consists of fine light grey to buff dolomites containing numerous sandy straticulate zones and fine dolomite beds containing chert nodules. These light colored dolomite beds are often bleached almost white in and near mineralized areas. The lower 60'-80' is an important ore horizon. The sphalerite occurs in white gangue dolomite between breccia blocks of fine dolomite.

The Lower Kingsport (90'-100') consists mostly of limestone with thin interbedded fine dolomites. In and near the mineralized zones the limestone section is all or partially altered to coarse

crystalline dolomite. Sphalerite in the Lower Kingsport occurs as replacement in the coarse dolomite and filling openings in breccias in the coarse dolomites.

Structure

Diamond drilling at Idol and at Cedar Springs has revealed no large structural anomalies. Geologic cross sections reveal several small structures but their relation, if any, to the mineralization is not understood.

Drilling

The holes drilled in this area are shown on the plan maps and sections accompanying this report (Appendix). Also enclosed are copies of the drill logs (Appendix). Those holes drilled under the DMEA program were on strike and dip fences at least 400 feet apart with holes at least 100 feet apart on the fences.

Cedar Springs: Sixteen holes had been drilled in the vicinity of the Dalton prospect by the Company previous to the DMEA contract. Thirty-three holes were drilled in the Cedar Springs portion of the project area under the DMEA contract (CS-17-42 & I-53-59). One hole (CS-37) penetrated three runs of mineralization classed as ore grade (at least 3% zinc). Another hole (CS-41) had one ore penetration. Ten additional holes penetrated sub-ore grade zinc.

The penetrations of well mineralized ground in holes CS-37 and CS-41 are of interest and may indicate a small ore occurrence. Holes on adjacent fences found no ore that might be correlated with the mineralization in CS-37 and CS-41. A tonnage and grade estimate based on only two drill hole penetrations lacks sufficient statistical foundation to be significant.

Idol: In December of 1958 four properties were included in the subject contract by amendment. These properties at the southwest end of the project area, are in the vicinity of the Idol prospect.

Nine holes were drilled in this portion of the project area; all on the W. C. Stapleton property. Two of these holes were barren, two contained considerable footage of mineralization of less than 3% zinc, the remaining five holes contained significant footage grading more than 3% zinc. pg 8

Using the five most intensely mineralized holes it is estimated that a zone containing 750,000 tons grading 4.3% zinc is present in the area tested at Idol under DMEA contract Idm E 1071.

For purposes of calculation the grade and thickness of a given penetration was extended halfway to adjacent holes and 100 feet along strike and dip if not adjacent to another hole. The

resultant rectangle times the penetration thickness divided by a tonnage factor of 11.4 gives the tonnage calculated for each block. (see Table below).

Hole No.	Thickness	Area	Cu. Feet	Tons	Grade
I-61	24	30,000	720,000	63,158	4.43
I-62	100	20,000	2,000,000	175,439	5.41
I-63	81	30,000	2,430,000	213,158	4.35
I-64	20	40,000	800,000	70,175	3.55
I-66	62	40,000	2,480,000	217,544	3.16
Total				739,474	4.3

The five holes used in the Idol calculation indicate about three-quarters of a million tons grading about 4½ percent zinc.

Conclusions

Drilling done under DMEA contract Idm E 1071 at Idol and Cedar Springs discovered two zones of zinc mineralization grading more than 3% zinc. The zone at Idol has an estimated 750,000 tons. Because of the sparse data no calculation was made for Cedar Springs. But the depth of the Cedar Springs mineralization (940' to 1027' beneath the surface) indicates that this mineralized zone cannot be mined profitably unless it can be proven by future exploration, to be substantially larger.

The work done at Idol disclosed a significant addition to previously known mineralization. The area included in the DMEA contract that lies southwest of outcropping mineralization was only partially prospected before the funds allocated under the contract were expended.

[illegible] --- [illegible] DIAMOND DRILL LOGS

A

Abu --- Abundant
Ae --- Augen
Alt --- Altered
Ang --- Angle, Angular
App --- Apparent
Apr --- Approaching
Argil - Argillaceous
Att --- Attitude
Av --- Average

B

Bd --- Bed, Bedding, Bedded
Bear --- Bearing
Bkn --- Broken
Bl --- Black
Blu --- Blue
Bn --- Band-ed
Bot --- Bottom
Br --- Breccia
Brm --- Mosaic Breccia
Brn --- Brown
Bro --- Rosette Breccia
Brr --- Rubble Breccia
Bt --- Barite
Btwn -- Between
Bu --- Buff
Bl --- Bleached-ing

C

Ch --- Chert
Cr --- Carnenter
Cer --- Cerussite
Calc -- Calcareous
Cg --- Conglomerate
Ch --- Chalcopyrite
Chalced Chalcedony
Cm --- Calamine
Comp -- Composite
Conc -- Concretion
Concr - Concentrated
Cond - Condition
Cons -- Considerable-y
Cont -- Controted
Cr --- Creamy
Crs --- Coarse
Cru --- Crushed
Crypt - Cryptozoon
Ct --- Contact
Curv -- Curved

D & Dk- Dark-Prefix to color
Decalc- Decalcified
Dis --- Disseminated
Disc -- Discontinuous
Displ - Displacement
Dist -- Distance
Dl-z -- Dolomite-zed
Dlic -- Dolomitic
Dlation - Dolomitization
Dn --- Dense
Dol --- Dolomite (Mineral)

Ed --- Edgewise
Eff --- Effervescence
Ellip - Ellipsoidal

Fa-ng - Fault-ing
Fi --- Fine
Fl --- Fluorite
Fm --- Formation
Fn --- Faint
Fos --- Fossil-iferous
Fr-d-ng - Fracture-ed-ing
Frag -- Fragment

Frwk --- Frotwork
Fuz --- Fuzzy Metamorphism
Ft --- Footwall

G --- Ground
Ga --- Galena
Gd --- Gradational
Gg --- Gage
Gm --- Groundmass
Gos --- Gossan
Gran --- Granular, Granule
Grn, Grnsh - Green-ish
Gy --- Grey

Horiz --- Horizon
He --- Hematite
Hly --- Highly
Hv --- Heavy
Hw --- Hanging Wall

I & Inter - Interbedded
Inclin -- Inclination
Incip --- Incipient
Irreg --- Irregular

K --- Kaolin
KKnFa --- Koppick Knob Fault

L --- Light
Le --- Leached
Lgr --- Large-r
Limo --- Limonite-ic
Lo --- Local-ly
Ls --- Limestone

M --- Medium
Mal --- Malachite
Mash --- Meshed
Mass --- Massive
Md --- Moderate
Mf --- Mica Flakes
Min --- Mineralized (O-L, Zn, Pb)
Mr --- Marker
Mt --- Mottled

Mt --- Metamorphism, Metamorphosed
Mtx --- Matrix
Mylon - Mylonite

Nil --- None
Nod --- Nodule-ar
Nu --- Numerous

Oc --- Occasional
Oo --- Oolite-ic
Or --- Orange
Oxid --- Oxidized-ation

Pk --- Pink
P --- Pseudo
Pb, Peb- Pebble
Piso --- Pisolite-ic
Por --- Porphyritic
PSg --- Pseudo Sand Grain
Pt --- Parting
Py-ic - Pyrite-ic

Q --- Quartz
Qt, Qtzt - Quartzite

Rd --- Red
R-y --- Ribbon-y
Rta --- Rare
RC --- Red Clay
Reg --- Regular
Rem --- Remnant
Repl -- Replacement
Rk --- Rock
Rnd --- Round

S --- Siliceous
Sach -- Saccharodial
San --- Sandy
Sc --- Scattered
Sch --- Schard
Sec --- Secondary
Sed --- Sediment-ary
Sg --- Sand Grain
Sh-y --- Shale-y
Shat-rg - Shattered-ing
She --- Shear
Sil --- Sulfide

Si --- Silica
Sk --- Speckled
Sl --- Slight
Sm --- Smithsonite
Sml --- Small
Sp --- Sphalerite
Ss --- Sandstone
St --- Strong
Stn --- Stain
Stp --- Steep
Strat - Straticulate
Sty-ic- Stylolite-ic
Sug --- Suggestive
Sul --- Sulfide

Th --- Thin-bedded
Thk-ness - Thick-ness
Th --- Thin
Tr --- Tra
Tr --- Trace
Trans - Transitional
Text --- Texture

Vn --- Vein
Var --- Varied-ious-ly
Vnl --- Veinlet
Vug --- Vuggy, Vug
Vy --- Very

Wd --- Width, Wide
WB --- Well-bedded
We --- Weathered
Wh --- White
Wk --- Weak

Xl --- Crystal
Xln --- Crystalline

Yel --- Yellow

Zn --- Zinc
Zo --- Zone

Oc --- Chepultepec
Ol --- Lenoir
Olv --- Longview
Ok --- Kingsport
Os --- Rockwin
Oma --- Mascot

AX-Tenn E358

SUMMARY OF DRILLING ON CEDAR SPRINGS AREA--DMEA-4586

Hole	Property	Total Depth	Remarks.
CS-17 M	Woodrow Davidson	520'	375'-379' Assay 4.75% Zn.
CS-18	" "	606'	Barren
CS-19	" "	679'	Barren
CS-20 M	" "	829'	734'-737' 3% Zn.
CS-21	" "	914'	Barren
CS-22 M	" "	1104'	973'-977' 3% Zn.
			999'-1010' 1½% Zn.
	999'-1029' - 30' assayed 1.62% Zn		1010'-1018' 3% Zn.
			1035'-1037' 4% Zn.
CS-23	" "	1025'	Barren
CS-24 M	" "	1200'	1019'-1025' 1.10% Zn.
			1025'-1030' 0.40% Zn.
			1066'-1088' 1.04% Zn.
CS-25	J. R. Davidson	636'	Barren
CS-26 M	Woodrow Davidson	1293'	1049'-1074' 1.50% Zn.
			1121'-1129' 3.50% Zn.
			1172½-1183' 1.50% Zn.
			1202'-1205' 1.50% Zn.
CS-27	J. R. Davidson	800'	Barren
CS-28	Robert Mallicoat	500'	Barren
CS-29	J. R. Davidson	929'	Barren
CS-30	J. R. Davidson	1017'	Barren
CS-31	Carl Holt	452'	Barren
CS-32	Robert Mallicoat	760'	Barren
CS-33 M	Carl Holt	368'	150'-151' 7.0% Zn.
			163'-164' 4.0% Zn.
CS-34 M	Carl Holt	473'	306'-315' 3.0% Zn.
			350'-355' 3.5% Zn.
CS-35	Robert Mallicoat	930'	Barren
CS-36 M	J. R. Davidson	701'	524'-543' 1.5% Zn.
CS-37	Robert Mallicoat	1150'	938'-973' 6.24% Zn.
			988'-1007' 3.41% Zn.
			1015'-1025' 5.02% Zn.
CS-38	J. R. Davidson	710'	Barren
CS-39	Robert Mallicoat	1150'	Barren
CS-40 M	Carl Davidson	345'	Some Mineralization
CS-41	Robert Mallicoat	1070'	958'-962' 2.35% Zn.
	12'-- 3.13% Zn.		962'-966' 0.25% Zn.
			966'-970' 6.80% Zn.
I-53 M	J. R. Davidson	543'	373'-375' 25.0% Zn.
I-54 M	J. R. Davidson	493'	300'-301' 25.0% Zn.
I-55	J. R. Davidson	546'	Barren
I-56 M	J. R. Davidson	783'	587'-588' 15.0% Zn.
I-57 M	J. R. Davidson	632'	431'-437' 1.0% Zn.
I-58 M	J. R. Davidson	406'	228'-229' 35.0% Zn.
I-59 M	J. R. Davidson	995'	833'-837' 1.0% Zn.

Hole.	Property	Total Depth	Remarks.	
I-63	W. C. Stapleton	1,230'	882'-888'	4.64% Zn.
			888'-899'	Shine
			899'-903'	0.77% Zn.
			903'-908'	5.42% Zn.
			908'-913'	0.50% Zn.
			913'-918'	3.92% Zn.
			918'-923'	3.27% Zn.
			923'-928'	11.90% Zn.
			928'-935'	0.92% Zn.
			935'-940'	6.32% Zn.
	ORE HOLE		940'-945'	5.38% Zn.
			945'-949'	6.19% Zn.
			949'-953'	0.98% Zn.
			953'-956'	
			956'-961'	1.78% Zn.
			961'-966'	3.09% Zn.
			966'-970'	4.17% Zn.
			970'-975'	9.10% Zn.
			975'-980'	5.71% Zn.
			980'-984'	4.57% Zn.
			882'-903'	1.47% Zn.
			903'-949'	4.67% Zn.
			949'-961'	1.07% Zn.
			961'-984'	5.41% Zn.
			903'-984'	4.35% Zn.
I-64	W. C. Stapleton	1,175'	1059'-1066'	5.70% Zn.
			1066'-1074'	Lower Kingsport Dol.
			1074'-1079'	5.30% Zn.
	ORE HOLE		1059'-1079'	3.55% Zn.
			1079'-1085'	Traces of Zn.
			1110'	Traces of Zn.
			Shine Hole	
			916'-978'	3.16% Zn.
			1018'-1022'	1.50% Zn. Est.
			1066'-1070'	2.00% Zn Est.
			---	Barren Hole

Assays I-66	916'-920'	2.48% Zn.
	920'-924'	5.33% Zn.
	924'-928'	Trace
	928'-932'	0.98% Zn.
	932'-936'	1.15% Zn.
	936'-940'	10.10% Zn.
	940'-948'	0.52% Zn.
	948'-954'	5.50% Zn.
	954'-959'	2.93% Zn.
	959'-966'	0.50% Zn.
	966'-971'	3.14% Zn.
	971'-978'	6.43% Zn.

Hole	Property	Total Depth	Remarks
C3-42	Robert Mallicoat	1159'	Barren Hole
I-60	W. C. Stapleton	850'	675'-850' Shines of Zn.
I-61	W. C. Stapleton		746'-865' -- Est. 1.5% Zn.
			758'-762' -- Est. 3.5% Zn.
			762'-766' -- Est. 4.0% Zn.
		758'-769' -- 2.45% Zn.	766'-769' -- Est. 3% Zn.
		776'-780' -- 4.80% Zn.	776'-780' -- Est. 5.0% Zn.
		791'-795' -- 1.32% Zn.	791'-795' -- Est. 2.0% Zn.
		795'-799' -- 4.40% Zn.	795'-799' -- Est. 6.0% Zn.
		799'-803' -- 2.25% Zn.	799'-803' -- Est. 2.0% Zn.
		803'-808' -- 1.05% Zn.	803'-808' -- Est. 1.0% Zn.
	ORE HOLE	824'-828' -- 2.45% Zn.	824'-828' -- Est. 3.0% Zn.
		824'-833' -- 1.75% Zn.	828'-835' -- Est. 2.5% Zn.
			850'-855' -- Est. 2.0% Zn.
		855'-860' -- 9.60% Zn.	855'-860' -- Est. 10% Zn.
		860'-863' -- 9.64% Zn.	874'-879' -- Est. 6.0% Zn.
		874'-879' -- 5.90% Zn.	
		855'-879' -- 4.43% Zn.	
I-62	ORE HOLE	1111'	830'-880' -- Est. 5.5% Zn.
			793'-798' -- 3.98% Zn.
	17 feet @ 2.64% Zn.		798'-807' -- 1.05% Zn.
			807'-810' -- 5.20% Zn.
			810'-816' -- Nil Zn.
			816'-820' -- 3.85% Zn.
			820'-825' -- 0.30% Zn.
			825'-830' -- 1.17% Zn.
			830'-835' -- 9.12% Zn.
			835'-840' -- 6.08% Zn.
	77 feet @ 6.44% Zn.		840'-845' -- 6.62% Zn.
	ORE HOLE		845'-852' -- 4.82% Zn.
			852'-860' -- 15.75% Zn.
			860'-865' -- 9.17% Zn.
			865'-870' -- 10.90% Zn.
			870'-875' -- 8.40% Zn.
			875'-880' -- 3.80% Zn.
			880'-885' -- 2.90% Zn.
			885'-890' -- 3.15% Zn.
			890'-893' -- 4.25% Zn.
			926'-930' -- 6.53% Zn.
I-63	ORE HOLE	1230'	903'-984' --- 4.33% Zn.

UNITED STATES
DEPARTMENT OF THE INTERIOR
OFFICE OF MINERALS EXPLORATION
ROOM 11 POST OFFICE BLDG.
KNOXVILLE 2, TENN.

October 8, 1959

OFFICIAL FILE COPY
O. M. E.
RECEIVED OCT 12 1959

DATE	INITIALS	CODE
10/12	RCW	225
10/12	[illegible]	[illegible]

Memorandum

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

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

Subject: Amendment No.7-The New Jersey Zinc Company, Cedar Springs Area, Grainger County, Tennessee DMEA-4586, Idm-E1071(Zn).

Attached are the Government and Audit copies of the subject signed amendment.

The usual distribution of the other copies has been made by this office.

Robert A. Laurence
Robert A. Laurence
EXECUTIVE OFFICER
OME FIELD TEAM
REGION V

DMEA Form 7
(12-56)

OFFICIAL FILE COPY

Date	Surname	Code
	Klugescheid	500
	[illegible]	500
9/17	Talbert	800
	Selfridge	130
		100
9-18	Gad	220
		500

SEP 18 1959

Memorandum

To: Executive Officer, OME Field Team, Region V

From: ACTING Chairman, Operating Committee, OME

Subject: Docket No. DMEA-4586 (Zinc)
The New Jersey Zinc Company
Cedar Springs Area, Sector II
Copper Ridge Belt
Grainger County, Tennessee
Contract No. Idm-E1071

In accordance with your request and that of the Operator, dated August 24, and 20, 1959, respectively, we are enclosing the original and four copies of proposed Amendment No. 7 (2 pages) to the above contract, signed by the Acting Director for the Government. We are also enclosing two extra copies for the use of the Field Team.

If the amendment meets with your approval, kindly present it to the Operator for approval and signature and, when completed, distribute the copies in the usual manner. In the event the amendment is not satisfactory and cannot be amended within your delegated authority, return all copies with your recommendations concerning any modifications.

We wish to call attention to the fact that the Carl Holt tract consists of only 20 acres instead of the 30 which the Operator stated in his request for deletion.

Enclosures

W. R. Griswold

APPROVED:

Frank D. Lamb

Member, Bureau of Mines

Harold Kirkemo

Member, Geological Survey

cc: Docket
Director's Read. File
Operating Committee
O. M. Bishop, USBM
Harold Kirkemo, USGS
Chron.

WPKlugescheid/GMcC
September 17, 1959

8623

DMEA Form 7
(12-56)

OFFICIAL FILE COPY

Date	Surname	Code
	Klugescheid	500
9/9	J. Lynch	140
		220
		500

FROM SOLICITOR
SEP 15 1959
FOR SIGNATURE

INTERIOR DEPT.
SEP 8 - 1959
SOLICITOR

September 4, 1959

Memorandum

To: Associate Solicitor, Division of Minerals Resources

From: W. R. Griswold, Chief, Division of Minerals, OME

Subject: Preparation of Amendment No. 7
Docket No. DMEA-4586 (Zinc)
The New Jersey Zinc Company
Cedar Springs Area, Sector II
Copper Ridge Belt
Grainger County, Tennessee
Contract No. Idm-E1071

FROM SOLICITOR
SEP 11 1959
FOR SIGNATURE

Will you kindly prepare amendment No. 7 in accordance with the following draft:

RECEIVED
SEP 8 1959
ASSOC. SOLICITOR
MINERAL RESOURCES

EXPLORATION PROJECT CONTRACT
THE NEW JERSEY ZINC COMPANY
DOCKET NO. DMEA-4586

AMENDMENT NO. 7

It is agreed this _____ day of _____, 19~~5~~9, between the United States of America, acting through the Department of the Interior, Office of Minerals Exploration, hereinafter called the "Government", and The New Jersey Zinc Company, hereinafter called the "Operator", that Exploration Project Contract No. Idm-E1071 (Docket No. DMEA-4586), dated March 29, 1957, as amended, hereinafter called the "Contract", is further amended, as follows:

1. The following parcels of land, containing 32 acres more or less, are hereby deleted from the land referred to in Article 2 of the Contract and described in Annex I:

8623

Name of Property Owner	Approximate Acreage
Nelson Dalton	12
Carl Holt	20
Total	32 Acres

2. The Operator:

(c) Certifies that the deleted land has no known value for mineral production;

(b) Has, prior to the execution of this amendment, surrendered or otherwise disposed of all its interest, title, and equity in such land, and any minerals produced therefrom, including any option, lease, or permit thereto, without any consideration whatsoever, including future compensation for such surrender or disposition other than relief from the cost of maintaining such interest;

(c) Agrees that no benefit from such lands or any production of minerals therefrom will accrue to the Operator or any of its subsidiaries, directly or indirectly, during the period expiring 32 years from the date of this contract;

(d) Agrees that if the Operator or any of its subsidiaries acquires any interest, title, or equity in such land or any minerals produced therefrom, or derives any benefit therefrom, before the expiration of 32 years from the date of this Contract, the land with respect to which such interest, title, or equity is acquired, and any minerals produced therefrom, shall be deemed subject to this Contract and any certification from the date that the Operator or its subsidiaries acquired such interest, title, or equity, or any benefit therefrom, until the expiration of 32 years from the date of this Contract, or

until the total net amount contributed by the Government without interest is fully repaid, whichever occurs first.

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

Executed in quintuplicate the day and year first above written.

THE NEW JERSEY ZINC COMPANY

By _____

Title _____

THE UNITED STATES OF AMERICA

By _____
Acting Director, Office of Minerals Exploration

WPKlugescheid/GMcC
September 4, 1959

cc: Docket
Chron.

DMEA Form 7
(12-56)

OFFICIAL FILE COPY

Date	Surname	Code

September 4, 1959

Memorandum

To: OME Files

From: W. P. Klugescheid, Mining Engineer, Division of Minerals, OME

Subject: Justification of Amendment No. 7
Docket No. DMEA-4586 (Zinc)
The New Jersey Zinc Company
Cedar Springs Area, Section II
Copper Ridge Belt
Grainger County, Tennessee
Contract No. Idm-E1071

The Operator requested the deletion of the two tracts of land from the contract, stating that there was no known ore on either one of the properties. The Holt tract was drilled (3holes) but the results, although showing some mineralization, were not of commercial value. The Dalton tract was not drilled.

The Operator states that it has terminated its option on these properties.

The request for deletion is in keeping with the "Special Agreement Concerning Land" which forms a part of Annex I.

The contract is completed and there is no reason why the Operator should be burdened with this land. In any case the Government is protected by a clause of the amendment should the Operator ever again acquire an interest in the land within the 32 year period specified as the royalty payment period in Amendment No. 6.

This amendment was also recommended by the Field Team.

W.P.Klugescheid,
W. P. Klugescheid

WPKlugescheid/GMcC

cc: Docket
Chron.

8623

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

August 24, 1959

Memorandum

To: Operating Committee, OME, Washington 25, D. C.

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

Subject: Docket No. DMEA-4586, Contract No. Idm-E1071 (Zinc)
The New Jersey Zinc Company, New York, New York
Cedar Springs area, Grainger County, Tennessee

Enclosed are the original and two copies of a letter from the Operator, requesting deletion of two properties from the Cedar Springs contract, in accordance with the provisions of the "Special agreement concerning land."

Please prepare the amendment authorizing the deletion and send it to us for forwarding to the Operator.

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

DATE	INITIALS	CODE
8-26	gad	220
		130
"	Klugesheid	500

Robert A. Laurence
Robert A. Laurence
Executive Officer

V. J. Lynch
V. J. Lynch
Member, Bureau of Mines

Enclosures 3

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

PLEASE ADDRESS REPLY TO

Jefferson City, Tennessee
August 20, 1959

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

Subject: DMEA 4586 - ZINC - Idm E 1071
THE NEW JERSEY ZINC COMPANY
CEDAR SPRINGS AREA, GRAINGER COUNTY, TENN.

Dear Mr. Laurence:

We hereby request an amendment to the subject contract deleting the following properties from said contract:

Property Owner	Approx. Acreage
Nelson Dalton	12
Carl Holt	20 30 32

No diamond drilling was done on the Nelson Dalton property under the DMEA contract.

Three diamond drill holes were drilled on the Carl Holt property under said contract. All penetrated only non-commercial mineralization. There is no known ore on either of these properties. The New Jersey Zinc Company has terminated its option on these properties and no longer has any interest in them.

Yours very truly,

THE NEW JERSEY ZINC COMPANY

Johnson Crawford
Assistant Manager of Mines

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

DATE	INITIALS	CODE
8-26	gad	E.W. Renshaw
		E.W.Renshaw/jf
		In Quadruplicate
		130
		500

RECEIVED
AUG 24 1959
U. S. Geological Survey
Geologic Division
Knoxville, Tenn.

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

OFFICIAL FILE COPY
O. M. E.
RECEIVED JUL 17 1959

DATE	INITIALS	CODE
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July 15, 1959

Mr. Johnson Crawford
General Superintendent
The New Jersey Zinc Company
Jefferson City, Tennessee

Re: DMEA-4586-Zinc
Cedar Springs Area
Grainger County, Tennessee
Contract Idm-E1071
The New Jersey Zinc Co.

Dear Mr. Crawford:

Approval by the Government is hereby given to perform in excess of 35,000 feet of diamond drilling at the above cited exploration project. This is in accordance with paragraph 5 of Exhibit "A" of the Contract. It is understood that the total cost of all drilling work allowable under the contract shall not be exceeded.

Very truly yours,

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

VJL/zm
cc
Lynch
Finance
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Files

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

June 19, 1959

Memorandum

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

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

Subject: Signed Amendment No.6. DMEA-4586, Idm-E1071-zinc. The New Jersey Zinc Company.

Transmitted are the original and audit copy of the subject amendment.

The usual distribution of the other copies has been made.

OFFICIAL FILE COPY
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Robert A. Laurence
Robert A. Laurence
Executive Officer, OME
Region V

V. J. Lynch, Member
Bureau of Mines

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DMEA Form 7
(12-56)

OFFICIAL FILE COPY

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6/5	Klugescheid	500
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6/5	GCS.	130
"	Johnson	110
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JUN 5 1959

Memorandum

To: Executive Officer, OME Field Team, Region V

From: Chairman, Operating Committee

Subject: Docket No. DMEA-4586 (Zinc)
The New Jersey Zinc Company
Cedar Springs Area, Sector II
Copper Ridge Belt
Grainger County, Tennessee
Contract No. Idm-E1071

We are enclosing the original and four copies of proposed Amendment No. 6 (one page) to the above contract, signed by the Acting Director for the Government. We are also enclosing two extra copies for the use of the Field Team.

The amendment was drawn up in accordance with the request of the Operator and as recommended by the Field Team.

If the amendment meets with your approval, kindly present it to the Operator for approval and signature and, when completed, distribute the copies in the usual manner. In the event that the amendment is not satisfactory and cannot be amended within your delegated authority, return all copies with your recommendations concerning any modifications.

/s/ George C. Selfridge (GCS)

APPROVED:

/s/ O. M. Bishop (GCS)
Member, Bureau of Mines

Thor H. Kiilsgaard (GCS)
Member, Geological Survey

WPKlugescheid/fw-6/5/59
cc: Docket
Dir.Read.File
Op. Committee
Mr. Bishop, USBM
Mr. Kiilsgaard, USGS
Chron.

Enclosures

8623

MME Form 7
(10-58)

OFFICIAL FILE COPY

Date	Surname	Code
	Klugescheid	500

May 29, 1959.

Memorandum

To: Associate Solicitor, Division of Mineral Resources

From: Director, Division of Base Metals, OME

Subject: Preparation of Amendment No. 6, Docket No. DMEA-4586 (Zinc), The New Jersey Zinc Company, Cedar Springs Area, Sector II, Copper Ridge Belt, Grainger County, Tennessee, Contract No. Idm-E1071.

Will you kindly prepare Amendment No. 6 as follows:

1. Item 3 of Amendment No. 5 shall be changed to read:

"3. In Article 3 of the Contract the completion date shall be October 1, 1959"

2. Item 4(a)(ii) shall be changed to read:

"4(a)(ii) Effective July 1, 1959, if the work is resumed on or before January 15, 1959, but is not completed on or before October 1, 1959."

3. Add Item 8 to Amendment No. 5 as follows:

"In Article 8(b) of the Contract as amended by paragraph 5 of Annex II, and Amendment No. 3, item 2, the period of 31 years is changed to 32 years.

WPKlugescheid
Copy to: Docket
Dir. Read. File
Chron.

W. R. Griswold

W. R. Griswold

43683

MME Form 7
(10-58)

OFFICIAL FILE COPY

Date	Surname	Code
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May 29, 1959.

Memorandum for the Files

From: W. P. Klugescheid, Mining Engineer, Division of Base Metals

Subject: Justification for Amendment No. 6, Docket No. DMEA-4586 (Zinc), The New Jersey Zinc Company, Cedar Springs Area, Sector II, Copper Ridge Belt, Grainger County, Tennessee, Contract No. Idm-E1071.

Approximately four holes remain to be drilled. For this small amount of drilling the added expense of moving another drill is hardly warranted. The additional information which can be rerived from the drilling of the additional holes or rather remaining holes could be very valuable. The information at hand gives only a small amount of ore found to date.

The contract is covered by a pseudo-certification in Amendment No. 5 and this is being retained. The further time extension is only three months. For the additional months in this amendment and the former one an additional year has been added to the royalty payment period.

WPKlugescheid
Copy to: Dir. Read. File
Chron.

W. P. Klugescheid

43683

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

May 20, 1959

OFFICIAL FILE COPY
O. M. E.
RECEIVED MAY 22 1959

DATE	INITIALS	CODE
5/26	G	220
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		500

Memorandum

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

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

Subject: DMEA-4586, Idm-E1071(zinc) The New Jersey Zinc Co., New York, N.Y. Cedar Springs-Idol Area, Grainger County, Tennessee

Enclosed are the original and one copy of a request for extension of time on this contract.

Progress has been satisfactory on this contract and results are encouraging. We see no advantage to be gained by termination on July 1 without completion or by speeding up drilling so as to complete the remaining footage by that date. Therefore, we recommend approval of an amendment extending the time for completion to October 1, 1959.

Robert A. Laurence

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

V. J. Lynch

V. J. Lynch, Member
Bureau of Mines

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

HORSE HEAD PRODUCTS ®

PLEASE ADDRESS REPLY TO

Jefferson City, Tennessee
May 14, 1959

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

Subject: DMEA 4586 - (ZINC) Idm E 1071
CEDAR SPRINGS - IDOL AREA
GRAINGER COUNTY, TENNESSEE

Dear Mr. Laurence:

Request is hereby made for an extension of three months to the termination date of the subject contract. This would extend the life of the contract until October 1, 1959.

One drill is in operation on the project and it now is evident that it will not complete the projected work under the contract prior to the termination date now in effect. The three month extension should provide time for the orderly completion of the venture.

Yours very truly,

THE NEW JERSEY ZINC COMPANY

Johnson Crawford

General Superintendent

A. D. Hoagland/jf
In duplicate

OFFICIAL FILE COPY
O. M. E.
RECEIVED MAY 22 1959

DATE	INITIALS	CODE

RECEIVED
MAY 18 1959
U. S. Geological Survey
Geologic Division
Knoxville, Tenn.

UNITED STATES
DEPARTMENT OF THE INTERIOR
OFFICE OF MINERALS EXPLORATION
ROOM 2-8 POST OFFICE BLDG.
KNOXVILLE 2, TENN.

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1-9	C	220
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January 7, 1959

Memorandum

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

From: Executive Officer, OME, Region V, Knoxville, Tennessee

Subject: Signed Amendment No. 5 - DMEA-4586, Idm-E1071 (Zinc)
The New Jersey Zinc Company, 160 Front St., New York, N.Y.
Cedar Springs Area, Grainger County, Tennessee

Enclosed are the Government and Audit copies of the subject signed amendment.

The usual distribution of the other copies has been made by this office.

Robert A. Laurence
Robert A. Laurence

Enclosures 2

DMEA Form 7
(12-56)

OFFICIAL FILE COPY

Date	Surname	Code
12/23	[illegible]	500
	[illegible]	500
12/24	GCS	130
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12/29	C	220
		500
12-23	Chamberlin	800

500

DEC 24 1958

Mr. Robert A. Laurence
Executive Officer
DME Field Team, Region V
Room 2-B, Post Office Bldg.
Knoxville 2, Tennessee

Re: Docket No. DMEA-4586 (Zinc)
The New Jersey Zinc Company
Cedar Springs Area, Sector II
Copper Ridge Belt
Grainger County, Tennessee
Contract No. Idm-E1071

Dear Mr. Laurence:

In accordance with your memorandums, dated November 18 and December 4, 1958, and the requests of the Operator, dated November 17, and December 2, 1958, we are enclosing the original and four copies of the proposed Amendment No. 5 (six pages and accompanying map) to the above contract, signed by the Acting Director, for the Government. We are also enclosing two extra copies for the use of the Field Team.

If the amendment meets with your approval, kindly present it to the Operator for approval and signature and, when completed, distribute the copies in the usual manner. In the event that the amendment is not satisfactory and cannot be amended within your delegated authority, return all copies with your recommendations concerning any modifications.

Sincerely yours,

George C. Selfridge

Chairman, Operating Committee (HB)

Enclosures
APPROVED:

G. T. Baroch
Member, Bureau of Mines

N. E. Nelson (HB)
Member, Geological Survey

WPKlugescheider 12/23/58
CC Docket
Dir Read File
Op. Committee
Mr. Bishop, USBM
Mr. Kiildgaard, USGS
Chron.

8623

Government's copy

EXPLORATION PROJECT CONTRACT
THE NEW JERSEY ZINC COMPANY
DOCKET NO. DMEA-4586

AMENDMENT NO. 5

It is agreed this ____ day of _____, 195__, between the United States of America, acting through the Department of the Interior, Office of Minerals Exploration, hereinafter called the "Government", and The New Jersey Zinc Company, hereinafter called the "Operator", that Exploration Project Contract No. Idm-E1071 (Docket No. DMEA-4586), dated March 29, 1957, as amended, is further amended effective April 1, 1958, as follows:

1. Amendment No. 4, executed on May 14, 1958, is hereby revoked and rescinded.

2. (a) Work under the Contract shall be suspended during the period beginning May 1, 1958, and ending not later than January 15, 1959.

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

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

3. In Article 3 of the Contract the completion date shall ~~remain~~ be July 1, 1959.

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

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

DMEA Form 7
(12-56)

OFFICIAL FILE COPY

Date	Surname	Code

December 15, 1958

Memorandum for the Files

From: W. P. Klugescheid, Mining Engineer,
Division of Base Metals

Subject: Justification for Amendment No. 5, for The New Jersey Zinc Company, Docket No. DMEA-4586, Cedar Springs Area, Sector II, Copper Ridge Belt, Grainger County, Tennessee, Contract No. Idm-E1071, Zinc.

During the recess granted by Amendment No. 4, the Operator carried on extensive geochemical studies in the northeast portion of the Cedar Springs area which indicated a relatively unattractive exploration potential in this territory, and no further drilling is deemed warranted here under the subject contract. On the other hand diamond drilling in the southwest portion of the area has shown considerable amounts of sub-commercial mineralization and further exploration, especially adjacent to the extensive Mineralization of the Idol area as outlined on map AX-TENN-106, offers attractive possibilities of discovering commercial ore, which might constitute a minable deposit.

All ore discoveries to date would hardly constitute a large enough and rich enough deposit to warrant exploitation.

No additional funds have been allocated and the funds remaining in the contract might give the Government a good basis for certification.

W.P. Klugescheid
W. P. Klugescheid

WPK/er
Copy to: Docket
Dir Read File
Chron.

8623

DMEA Form 7
(12-56)

OFFICIAL FILE COPY

Date	Surname	Code
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500

December 10, 1958

Memorandum

To: Associate Solicitor, Division of Minerals Resources
From: Chief, Division of Base Metals
Subject: Preparation of Amendment No. 5 for the The New Jersey Zinc Company, Docket No. DMEA-4586, Cedar Springs Area, Sector II, Copper Ridge Belt, Grainger County, Tennessee, Contract No. Idm-E1071, Zinc.

Will you kindly prepare an amendment for the cited contract as follows:

In Annex I of the contract, there are hereby added the following parcels of land shown outlined in blue color on the map entitled "Copper Ridge Belt, Sector II, Sheet 43 W, File No. AX -TENN 106", attached hereto and made a part hereof, which parcels are further identified as follows:

Property held under Warranty Deeds conveying Mineral and Mining Rights.

Name of Property Owner	Approximate Acreage
B. J. Jackson and wife, Mattie Jackson	84.11 acres
Claude Jackson and wife, Cleo Jackson, and Lon Wolfenbarger and wife, Nervie Wolfenbarger	56.79 acres
W. C. Stapleton and wife, Mayme Stapleton, and ~~XXXXXXXXXXXXXXXXXXXXXXXXXXXXXX~~ Venie McGinnis Gillenwater	185.00 acres
Total held by Warranty Deed	325.90 acres

Property held under Purchase Contracts conveying Mineral & Mining Rights

Name of Property Owner	Approximate Acreage
Frank J. Kincaid and wife, Mae Kincaid, and Mrs. Vara W. Trobaugh, (widow)	233.33 acres
Total acreage to be added to contract	559.23 acres

EXCLUDED LAND

To be excluded from the contract is that portion of the W. C. Stapleton lands given in the Warranty Deed and known as tract #4 described as follows:

"Beginning at a point in the line of tract #3 of W. C. Stapleton and corner to Fields and Collins, thence N 68° 40' E, 391.10'; thence S 58° 52' E, 46.52'; thence S 51° 23' E, 18.05'; thence S 64° 37' E, 29.98'; thence S 70° 40' E, 112.76'; thence S 76° 49' E, 35.15'; thence S 85° 35' E, 26.62'; thence S 65° 17' E, 156.91'; thence S 45° 30' E, 177.46'; thence S 24° 41' E, 405.75'; thence N 52° 49' E, 198.97'; thence N 66° 29' E, 196.71'; thence N 35° 27' E, 163.32'; thence S 49° 01' E, 50.32'; thence S 36° 08' W, 139.35' thence S 66° 10' W, 236.18'; thence S 52° 56' W, 195.48'; thence S 24° 58' E, 77.81'; thence S 43° 10' E, 912.49'; thence S 51° 35' W, 520.62'; thence N 42° 03' W, 1052.50'; thence N 41° 36' W, 922.09', to the BEGINNING, containing approximately 24 acres."

Also to be excluded from the contract is that portion of the Claude Jackson-Lon Wolfenbarger property given in Warranty Deed and described as follows:

"Beginning at an iron pin, corner with the lands of Birdie Lamb and Parkson; thence N 53° 53' E, 482.90 feet with the line of Parkson to an iron pin; thence with the remaining lands of Lon Wolfenbarger as follows: S 20° 15' E, 207.26 feet to an iron pin; thence S 20° 31' E, 76.20 feet to an iron pin; thence S 59° 14' E, 99.63 feet to an iron pin; thence S 45° 13' E, 85.14 feet to an iron pin; thence S 16° 44' E, 176.39 feet to an iron pin; thence S 20° 32' E, 204.73 feet to an iron pin; thence S 43° 40' E, 99.26 feet to an iron pin; thence S 50° 07' E, 227.56 feet to an iron pin; thence S 10° 05' E, 15.19 feet to an iron pin; thence S 32° 45' E, 170.99 feet to an iron pin; thence S 32° 45' E, 243.23 feet to an iron pin; thence S 55° 50' W, 676.41 feet to an iron pin, corner of the line of H. H. Wilmoth; thence with the line of Wilmoth N 27° 11' W, 543.97 feet to an iron pin; thence with the line of Wilmoth N 24° 47' W, 367.72 feet to an iron pin, corner with H. H. Wilmoth and Birdie Lamb; thence with the line of Birdie Lamb N 24° 00' W, 650.90 feet to the BEGINNING, containing 20.0 acres, more or less."

The following parcels of land, containing 344 acres more or less, are hereby deleted from the land referred to and described in Amendment No. 1 and shown on Figure 2 attached hereto and made a part hereof. These parcels of land are further identified as follows:

Name of Property Owner	Approximate Acreage
Carl V. Davidson	86 acres
Zilpha Cabbage	92 acres
B. E. Davidson	166 acres
Total	344 acres

The Operator:

(a) Certifies that the deleted land has no known value for mineral production;

(b) Has, prior to the execution of this amendment, surrendered or otherwise disposed of all its interest, title, and equity in such land, and any minerals produced therefrom, including any option, lease or permit thereto, without any consideration whatsoever, including future compensation, for such surrender or disposition, other than relief from the cost of maintaining such interest;

(c) Agrees that no benefit from such lands or any production of minerals therefrom will accrue to the Operator or any of its subsidiaries, directly or indirectly, during the period expiring 31 years from the date of this Contract;

(d) Agrees that if the Operator or any of its subsidiaries acquires any interest, title, or equity in such land or any minerals produced therefrom, or derives any benefit therefrom, before the expiration of 31 years from the date of this Contract, the land with respect to which such interest, title, or equity is acquired, and any minerals produced therefrom, shall be deemed subject to this Contract and any certification from the date that the Operator or its subsidiaries acquired such interest, title, or equity, or any benefit therefrom, until the expiration of 31 years from the date of this Contract, or until the total net amount contributed by the Government without interest is fully repaid, whichever occurs first.

1. (a) Work under the Contract shall be suspended during the period beginning May 1, 1958, and ending not later than January 15, 1959.

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

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

2. In Article 3 of the Contract the completion date shall remain July 1, 1959.

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

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

(i) Effective May 1, 1958, if the work has not been resumed on or before January 15, 1959;

(ii) Effective July 1, 1959, if the work is resumed on or before January 15, 1959, but is not completed on or before July 1, 1959.

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

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

(d) The Operator, as principal if the Operator is the producer, or as surety if the Operator is not the producer (for example, if the Operator either transfers or fails to retain its interest in the land), shall pay to the Government the royalty on production provided for in the contract, in the same manner and amount and for the full period provided for in the contract, as amended, as if certification of discovery or development, and all rights of the Government as to reports (including preservation of Operator's records), audit, and recovery of any overp payment, are preserved.

(e) The Operator hereby releases and agrees to save the Government harmless from all claims or demands under or arising out of the Contract, except as otherwise provided for in this Amendment No. 5.

(4) <u>In Exhibit "A" -- Description of the Work -- Paragraph (2).</u> "A series of widely spaced dip fences shall be drilled, with holes spaced at between 100-and 300-foot intervals on the fences", shall be changed to read "A series of widely spaced dip and strike fences shall be drilled, with holes spaced at between 100-and 300-foot intervals on the fences."

(5) <u>In Exhibit "A" -- Description of the Work--Paragraph (3).</u>

"The space intervals between the various fences shall not be less than 600 feet, except with prior approval of the Government," shall be changed to read - "The space intervals between the various fences shall not be less than 400 feet."

(6) The locations of the holes in the new areas are tentatively shown on the attached map entitled "Copper Ridge Belt, Sector II, Sheet 43W, File No. AX-TENN-106".

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

Executed in quintuplicate the day and year first above written.

W. R. Griswold

WPKlugescheid/er
Copy to: Docket
Dir Read File
Chron.

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

December 4, 1958

OFFICIAL FILE COPY
O. M. E.
RECEIVED DEC 8 1958

DATE	INITIALS	CODE
12/8	C	220
		1350
12/9	Wtb	500
	J	

Memorandum

To: Operating Committee, OME - Washington

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

Subject: DMEA-4586, Idm-E1071 (zinc) The New Jersey Zinc Co. Cedar Springs area, Grainger County, Tennessee

Enclosed are the original and one copy of a letter from the Operator, requesting deletion from the contract of three properties, totalling 344 acres, at the northeast end of the area, in accordance with paragraph 2 of the "Special Agreement Concerning Land."

While the contract has been recessed, the Operator has done geochemical prospecting on these properties, including deeper overburden sampling by auger drilling. Although we have not seen the results of this work, we understand that they were not favorable, and the Operator will drop its options on these three tracts. This work is referred to in the eighth paragraph of the Operator's letter of November 17, 1958.

Robert A. Laurence

Robert A. Laurence
Executive Officer, OME - Region V

V. J. Lynch

V. J. Lynch, Member
Bureau of Mines

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

OFFICIAL FILE COPY
O. M. E.
RECEIVED DEC 8 1958
DATE | INITIALS | CODE
HORSEHEAD PRODUCTS ®

PLEASE ADDRESS REPLY TO
Jefferson City, Tennessee
December 2, 1958

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

Subject: DMEA 4586 - Zinc - Idm E 1071
THE NEW JERSEY ZINC COMPANY
CEDAR SPRINGS AREA, GRAINGER COUNTY, TENN.

Dear Mr. Laurence:

We hereby request an amendment to the subject contract deleting the following properties from said contract:

Name of Property Owner	Approx. Acreage
Carl V. Davidson	86 Acres
Zilpha Cabbage	92 Acres
B. E. Davidson	166 Acres

These three properties were included in the contract as Amendment No. 1, dated December 2, 1957.

One diamond drill hole was drilled on the Carl Davidson property. This hole penetrated only non-commercial mineralization. No drilling was done on the Cabbage or B. E. Davidson properties. There is no known ore on any of these three properties.

Very truly yours,

THE NEW JERSEY ZINC COMPANY

Johnson Crawford

General Superintendent

EWR

E. W. Renshaw/jf
In Quadruplicate

RECEIVED
DEC - 3 1958
U. S. Geological Survey
Knoxville, Tenn.

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

December 3, 1958

OFFICIAL FILE COPY
O. M. E.
RECEIVED DEC 5 1958

DATE	INITIALS	CODE
12/5	C	220
12/5	Klug.	500

Memorandum

To: Operating Committee, OME - Washington

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

Subject: DMEA-4586, Idm-E1071(zinc) The New Jersey Zinc Co., New York, N.Y. Cedar Springs area, Grainger County, Tennessee

Reference is made to Mr. Klugescheid's telephone call of December 1, 1958, also our memorandum of November 18, and related correspondence.

Enclosed are a letter from the Operator and one copy each of property maps for the Lon Wolfenbarger and W. C. Stapleton tracts, showing in yellow the outline of portions to be excluded from the requested additions to the contract areas. The beginning points indicated on these maps correspond to those in the Operator's letter of November 17, 1958.

The Operator's 1" = 660' map, submitted with the November 17 letter, omitted two important lines, which caused the difficulty in interpreting the description of the excluded areas. One of these was the N68°40'E, 391.10 foot line at the NW corner of Stapleton Tract No.4, and the other was an arrow indicating that "L. Wolfenbarger, NJZ M & M, 56.79" refers to the area north of the purple boundary, rather than the area in which it is written.

The Venie McGinnis Gillenwater deed covers part of the same land as the W.C. Stapleton Tract No.3. When New Jersey Zinc Co., purchased the Stapleton tract, Mrs. Gillenwater still owned 1/5 undivided interest in the mineral rights to this tract, so that it was also necessary to purchase her interest. This deed was included to show that the Operator had acquired those rights. Note, on page 3 of the Stapleton deed, the statement

Stapleton acquired a 4/5 interest in these mineral rights.

It is hoped that these enclosures will clarify the status of these properties, so that the two areas enclosed by the purple line on the Operator's 1" = 660' map can be added to the contract area.

Robert A. Laurence

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

V. J. Lynch

V. J. Lynch, Member
Bureau of Mines

THE NEW JERSEY ZINC COMPANY

(ESTABLISHED 1848)

CABLE ADDRESS
"JERSEZINC"

160 FRONT STREET

NEW YORK 38, N.Y.

HORSE HEAD PRODUCTS ®

PLEASE ADDRESS REPLY TO

Jefferson City, Tennessee
December 2, 1958

OFFICIAL FILE COPY
O. M. E.
RECEIVED DEC 5 1958

DATE	INITIALS	CODE

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

Subject: DMEA 4586 - Zinc - Idm E 1071
Cedar Springs Area
Grainger County, Tennessee

Dear Mr. Laurence:

Enclosed are two copies each of survey plots of the W. C. Stapleton (AX-TENN-1195) and L. N. Wolfenbarger (AX-TENN-B 1176) which will, I believe, answer the questions raised by you in our phone conversation this A. M. Referring first to the Stapleton property:

Tract 4 is to be excluded from the contract. This is outlined in yellow. The point of beginning may be located on the map accompanying the requested amendment (AX-TENN 106) by measuring approximately 790' southeast from the northeast corner to the Stapleton property as outlined in blue. This point is corner to Fields and Collins and the line runs N 68° 40' E, 391.10' to center of road shown on maps.

With respect to the Wolfenbarger property:

The excluded portion is again outlined in yellow on accompanying map. The point of beginning may be identified on map AX-TENN-106 as 482.90', S 53° 53' W of the northwest corner of the area outlined in blue.

Yours very truly,

THE NEW JERSEY ZINC COMPANY

Johnson Crawford

General Superintendent

RECEIVED
DEC - 3 1958
U. S. Geological Survey
Contract Division
Knoxville, Tenn.

A. D. Hoagland/jf
In duplicate

UNITED STATES
DEPARTMENT OF THE INTERIOR
OFFICE OF MINERALS EXPLORATION
ROOM 2-8 POST OFFICE BLDG.
KNOXVILLE 2, TENN.

OFFICIAL FILE COPY
O. M. E.
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DATE	INITIALS	CODE
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1-9	[illegible]	500

January 7, 1959

Memorandum

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

From: Executive Officer, OME, Region V, Knoxville, Tennessee

Subject: Signed Amendment No. 5 - DMEA-4586, Idm-E1071 (Zinc)
The New Jersey Zinc Company, 160 Front St., New York, N.Y.
Cedar Springs Area, Grainger County, Tennessee

Enclosed are the Government and Audit copies of the subject signed amendment.

The usual distribution of the other copies has been made by this office.

Robert A. Laurence
Robert A. Laurence

Enclosures 2

DMEA Form 7
(12-56)

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Date	Surname	Code
12/23	Klugescheid	500
	[illegible]	500
12/24	GCS	130
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12/29	C	220
		500
12-23	Chamberlin	800

500

DEC 24 1958

Mr. Robert A. Laurence
Executive Officer
DME Field Team, Region V
Room 2-B, Post Office Bldg.
Knoxville 2, Tennessee

Re: Docket No. DMEA-4586 (Zinc)
The New Jersey Zinc Company
Cedar Springs Area, Sector II
Copper Ridge Belt
Grainger County, Tennessee
Contract No. Idm-K1071

Dear Mr. Laurence:

In accordance with your memorandums, dated November 18 and December 4, 1958, and the requests of the Operator, dated November 17, and December 2, 1958, we are enclosing the original and four copies of the proposed Amendment No. 5 (six pages and accompanying map) to the above contract, signed by the Acting Director, for the Government. We are also enclosing two extra copies for the use of the Field Team.

If the amendment meets with your approval, kindly present it to the Operator for approval and signature and, when completed, distribute the copies in the usual manner. In the event that the amendment is not satisfactory and cannot be amended within your delegated authority, return all copies with your recommendations concerning any modifications.

Sincerely yours,

George C. Selfridge

Chairman, Operating Committee (HB)

Enclosures
APPROVED:

G. T. Baroch
Member, Bureau of Mines

N. E. Nelson (HB)
Member, Geological Survey

WPKlugescheid/er 12/23/58
CC Docket
Dir Read File
Op. Committee
Mr. Bishop, USBM
Mr. Kiildgaard, USGS
Chron.

8623

Government's copy

EXPLORATION PROJECT CONTRACT
THE NEW JERSEY ZINC COMPANY
DOCKET NO. DMEA-4586

AMENDMENT NO. 5

It is agreed this ____ day of _____, 195__, between the United States of America, acting through the Department of the Interior, Office of Minerals Exploration, hereinafter called the "Government", and The New Jersey Zinc Company, hereinafter called the "Operator", that Exploration Project Contract No. Idm-E1071 (Docket No. DMEA-4586), dated March 29, 1957, as amended, is further amended effective April 1, 1958, as follows:

1. Amendment No. 4, executed on May 14, 1958, is hereby revoked and rescinded.

2. (a) Work under the Contract shall be suspended during the period beginning May 1, 1958, and ending not later than January 15, 1959.

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

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

3. In Article 3 of the Contract the completion date shall ~~remain~~ be July 1, 1959.

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

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

DMEA Form 7
(12-56)

OFFICIAL FILE COPY

Date	Surname	Code

December 1, 1958

Memorandum for the Docket

From: W. P. Klugescheid, Mining Engineer
Division of Base Metals

Subject: Phone Conversation about Docket No. DMEA-4586 (Zinc)
The New Jersey Zinc Company, Cedar Springs Area,
Sector II, Copper Ridge Belt, Grainger County,
Tennessee, Contract No. Idm-E1071.

This afternoon, the undersigned phone Mr. Laurence, Executive Officer, OME Field Team, Region V, in Knoxville, Tennessee, concerning the excluded land which is not clearly shown on the map entitled "Copper Ridge Belt, Sector II, Sheet 43W, File No. AX-TENN 106". This information is necessary for the preparation of a proposed Amendment No. 5 for the cited project.

Mr. Laurence will obtain the necessary information from the New Jersey Zinc Company.

W. P. Klugescheid

W. P. Klugescheid

WPK/er
Copy to: Docket
Dire Read File
Chron.

8623

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

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DATE	INITIALS	CODE
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November 18, 1958

Memorandum

To: Operating Committee, OME - Washington

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

Subject: DMEA-4586, Idm-E1071(zinc) The New Jersey Zinc Co. New York, N.Y. Cedar Springs area, Grainger County, Tennessee

Reference is made to your letter of November 4.

Further discussion with the Operator's geological staff has resulted in the submission of the accompanying three-page letter, with a map and copies of four deeds and two option agreements.

The Operator wishes to add 559.2 acres to the contract area, and to shift the remaining drilling footage to this area, where previous non-DMEA discoveries indicate to their staff that a discovery of mineable tonnage and grade is more likely to occur. The gist of the proposal is that, even if the remaining footage did discover ore in the northeastern part of the original area, it would be insufficient to justify development, whereas a similar amount of ore, if discovered adjacent to the known Idol occurrence, would be a mineable deposit. Further, on the basis of geochemical work done during the recessed period, they consider the northeast area less attractive than the Idol area. It is their present intention to request deletion of several of the northeast tracts, in accordance with item 2 of the "Special Agreement Concerning Land."

The present contract authorizes drilling only on dip fences, spaced at least 600 feet apart. Based upon experience at other Copper Ridge projects, we think this should be amended to provide for both strike and dip fences, at least 400 feet apart. It will be noted that the Operator's

tentative plan, as shown on the map, proposes fences at 330-foot intervals, an extension of the pattern used in their pre-DMEA drilling.

As it now stands, termination of the Cedar Springs project would be, like a tie ball game, unsatisfactory to all parties. It is definitely in the Government's interest to complete the project. Therefore we recommend an amendment which will:

(1) extend the present recess period from November 1, 1958 to a date 20 days after the date of signing the amendment.

(2) add the properties listed in the Operator's letter to the contract area.

(3) provide for drilling holes at 100 to 300-foot intervals on dip and/or strike fences which are at least 400 feet apart.

Robert A. Laurence

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

Wm A Beck

Wm. A. Beck, for V. J. Lynch
Member, Bureau of Mines

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

OFFICIAL FILE COPY
O. M. E.
RECEIVED NOV 20 1958

DATE	INITIALS	CODE

PLEASE ADDRESS REPLY TO

Jefferson City, Tennessee
November 17, 1958

RECEIVED
NOV 18 1958
U. S. Geological Survey
Geologic Division
Knoxville, Tenn.

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

Subject: DMEA 4586 - (ZINC) Idm E 1071
CEDAR SPRINGS AREA
GRAINGER COUNTY, TENNESSEE

Dear Mr. Laurence:

Request is hereby made for the inclusion under the subject contract the following listed properties totalling 559.2 acres, more or less:

The N.J.Z.Co. - Min.& Min. Rights - (B.J.Jackson surface)	-	84.1 A.
" " " - " & " " -(L.N.Wolfenbarger ")	-	56.8 A.
" " " - " & " " -(W.C.Stapleton ")	-	185.0 A.
Frank Kincaid)Purchase contract for Mrs. C. D. Trobaugh)Mineral and Mining Rights)	-	233.3 A.
Total		559.2 A.

Attached hereto are copies of legal instruments showing the status of interest of The New Jersey Zinc Company in these properties. The accompanying map, AX-TENN-105-106 shows the location of the properties and their relationship to the subject contract area.

To be excluded from the contract is that portion of the W. C. Stapleton lands known as tract #4 described as follows:

Beginning at a point in the line of tract # 3 of W. C. Stapleton and corner to Fields and Collins, thence N 68° 40' E, 391.10'; thence S 58° 52' E, 46.52'; thence S 51° 23' E, 18.05'; thence S 64° 37' E, 29.98'; thence S 70° 40' E, 112.76'; thence S 76° 49' E, 35.15'; thence S 85° 35' E, 26.62'; thence S 65° 17' E, 156.91'; thence S 45° 30' E, 177.46'; thence S 24° 41' E, 405.75'; thence N 52° 49' E, 193.97'; thence N 66° 29' E, 196.71; thence N 35° 27' E, 163.32; thence S 49° 01' E, 50.32; thence

S 36° 08' W, 139.35'; thence S 66° 10' W, 236.18'; thence S 52° 56' W, 195.48'; thence S 24° 58' E, 77.81; thence S 43° 10' E, 912.49'; thence S 51° 35' W, 520.62'; thence N 42° 03' W, 1052.50'; thence N 41° 36' W, 922.09, to the BEGINNING, containing approximately 24 acres.

Also to be excluded from the contract is that portion of the Claude Jackson-Lon Wolfenbarger property purchased by The New Jersey Zinc Company in fee containing 20 acres and described as follows:

BEGINNING at an iron pin, corner with the lands of Birdie Lamb and Parkson; thence N 53° 53' E, 482.90 feet with the line of Parkson to an iron pin; thence with the remaining lands of Lon Wolfenbarger as follows: S 20° 15' E, 207.26 feet to an iron pin; thence S 20° 31' E, 76.20 feet to an iron pin; thence S 59° 14' E, 99.63 feet to an iron pin; thence S 45° 13' E, 85.14 feet to an iron pin; thence S 16° 44' E, 176.39 feet to an iron pin; thence S 20° 32' E, 204.73 feet to an iron pin; thence S 43° 40' E, 99.26 feet to an iron pin; thence S 50° 07' E, 227.56 feet to an iron pin; thence S 10° 05' E, 15.19 feet to an iron pin; thence S 32° 45' E, 170.99 feet to an iron pin; thence S 32° 45' E, 243.23 feet to an iron pin; thence S 55° 50' W, 676.41 feet to an iron pin, corner in the line of H. H. Wilmoth; thence with the line of Wilmoth N 27° 11' W, 543.97 feet to an iron pin; thence with the line of Wilmoth N 24° 47' W, 367.72 feet to an iron pin, corner with H. H. Wilmoth and Birdie Lamb; thence with the line of Birdie Lamb N 24° 00' W, 650.90 feet to the BEGINNING, containing 20.0 acres, more or less.

Recent geochemical studies in the northeast portion of the Cedar Springs area are interpreted as indicating a relatively unattractive exploration potential in this territory, and no further drilling is deemed warranted here under the subject contract. On the other hand, diamond drilling in the southwest portion of the area has shown considerable amounts of sub-commercial mineralization and further exploration, especially adjacent to the extensive mineralization of the Idol area as outlined on map AX-TENN-106, offers attractive possibilities of discovering commercial ore. The tentative location of 12 wide spaced holes is shown on this map which is intended as an indication of the type of investigation that is proposed for the completion of the Cedar Springs contract. Modifications of this general program will be necessary as the drilling progresses and additional information is secured.

Within one week of approval of this amendment by DMEA, we will resume drilling on the program as indicated on the attached plan, AX-TENN 105 - 106. It is intended to carry the program to completion on or before July 1, 1959. The drill to be placed on this project would be in addition to those presently employed on Tennessee DMEA projects and would in no way adversely affect the execution of these other projects.

Yours very truly,

THE NEW JERSEY ZINC COMPANY

Johnson Crawford

General Superintendent

A. D. Hoagland/jf
In duplicate

RECEIVED
NOV 18 1958
U. S. Geological Survey
Geologic Division
Knoxville, Tenn.

Form 7
(12-56)

OFFICIAL FILE COPY

Date	Surname	Code
10-31	Klugescheid	500
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11/4	[illegible]	130
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11/4	Johnson	110
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NOV 4 1958

Mr. Robert A. Laurence
Executive Officer
OME Field Team, Region V
Room 2-B, Post Office Bldg.
Knoxville 2, Tennessee

Re: Docket No. DMEA-4586 (Zinc)
The New Jersey Zinc Company
Cedar Springs Area, Sector II
Copper Ridge Belt
Grainger County, Tennessee
Contract No. Idm-E1071

Dear Mr. Laurence:

We have received the request of the Operator, dated October 23, 1958, for a further recess and extension of the completion time for the cited project, and also the recommendations of the Field Team.

Unfortunately there is no evidence, in the request as made, that a further extension would be to the advantage of the Government. The only reason given is; "because of the current adverse economic climate in the zinc industry, a reactivation is not feasible." The total amount still remaining in the contract is $28,850.00 or only a $14,425.00 expenditure on the part of The New Jersey Zinc Company. This is hardly an important enough amount to postpone the work again.

The Government is protected by the conditional pseudo certification in Amendment No. 4 and letting it become operative would be more disadvantageous to the Operator than to the Government.

As you know, DMEA is now in process of liquidation and permitting projects to drag on with no definite promise of completion would only be a possible cause for criticism. The conditions now existing in the zinc market would hardly change very much in a period of four months and another extension would be completely out of the question.

8623

We do not wish to be unreasonable and, if the Operator can submit some definite plan for completing the work, and give some real assurance that the work will commence by a fixed date and be completed by a definite time we would be only too glad to hear further from this company.

The request was received on October 27th and this brings things right up to the deadline.

Sincerely yours,

George C. Selfridge
(esf)
Chairman, Operating Committee

APPROVED:

Richard H. Mots (esf)
Member, Bureau of Mines

N. E. Nelson esf
Member, Geological Survey

WPKlugescheid/er 10-31-58
Copy to: Docket
Dir Read File
Op. Committee
Mr. Bishop, USBM
Mr. Kiilsggard, USGS
Crhon

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

October 24, 1958

Memorandum

To: Operating Committee, OME - Washington

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

Subject: DMEA-4586, Idm-E1071-zinc. The New Jersey Zinc Co. Cedar Springs area, Grainger County, Tennessee

Enclosed are the original and one copy of a letter from The New Jersey Zinc Company requesting an extension of the recess period on the subject contract until March 1, 1959. ?

The Field Team recommends that an amendment to the contract permitting a continuation of the recess be prepared.

OFFICIAL FILE COPY O. M. E. RECEIVED OCT 27 1958		
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Robert A. Laurence
Robert A. Laurence
Executive Officer, OME - Reg. V

V. J. Lynch
V. J. Lynch, Member
Bureau of Mines

105,950.00
77,100.00
28,850.00
2 14,425.00

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

RECEIVED
OCT 24 1958
U. S. Geological Survey
Austin, Texas
Denver, Colo.

HORSE HEAD PRODUCTS ®

PLEASE ADDRESS REPLY TO

Jefferson City, Tennessee
October 23, 1958

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

Subject: DMEA 4586 (ZINC) Idm E 1071
CEDAR SPRINGS AREA
GRAINGER COUNTY, TENNESSEE

Dear Mr. Laurence:

Request is hereby made for extension of the recess period provided in Amendment No. 4 to the subject contract from November 1, 1958 until March 1, 1959 and an extension of the termination date from July 1, 1959 until November 1, 1959. Because of the current adverse economic climate in the zinc industry, a reactivation of work at Cedar Springs under contract Idm E 1071 until early 1959 is not feasible.

During the recess period provided in Amendment No. 4 referred to above, a detailed geochemical survey was completed involving the northeasternmost portion of the contract area including the Carl Davidson, Zilpha Cabbage, B. E. Davidson and Bruce Harrell properties. This survey consisted of the collection and analysis of 230 surface soil samples taken on a rectangular grid pattern with a spacing interval of 200 feet on strike and 100 feet in the direction of dip. Soils overlying the uppermost 1/3 of the Longview formation, all of the Kingsport formation and the lower 1/3 of the Mascot formation were covered by this survey. Subsequently, 21 auger drill holes were put down in selected areas to determine the extent of mineralization of the clays in the sub-soil zones. 821 feet of auger drilling was done and 107 auger samples were collected and analyzed for zinc.

The results of this study showed a low order of soil and clay mineralization which are interpreted as indicating the probable absence of large bodies of sub-outcropping zinc mineralization in the area tested. The ore potential substantially

below the depth of the sub-outcrop is not directly reflected by the geochemical data. Although geochemical studies of this kind cannot be conclusively negative, present available information indicates the northeast Cedar Springs area, as defined above, to be relatively unattractive for further exploration.

In contrast to the generally negative aspects of the northeast area discussed above, drilling under the subject contract in the area to the southwest provides basis for a favorable evaluation of the zinc potential. It appears that additional work to the southwest of Cedar Springs provides the most attractive opportunity of achieving a successful conclusion to this DMEA project.

Yours very truly,

THE NEW JERSEY ZINC COMPANY

Johnson Crawford / aosx
General Superintendent

A. D. Hoagland/jf
In Quadruplicate

RECEIVED
OCT 24 1958

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

October 21, 1958

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O. M. E.
RECEIVED OCT 23 1958
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800
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Mr. Johnson Crawford
The New Jersey Zinc Company
Jefferson City, Tennessee

Re: DMRA-4586 - Zinc
The New Jersey Zinc Co.
Cedar Springs area
Grainger County, Tennessee
Contract Idm-K1071

Dear Mr. Crawford:

This is just to inquire as to your plans for resuming the drilling at Cedar Springs. According to Amendment No.4, the work was to be resumed not later than November 1, 1958, which is a week from next Saturday.

Sincerely yours,

Robert A. Laurence
Executive Officer, OME
Region V

RAL/mm
cc
Opr. Com-2
Lynch
Shirley
Files

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

CENTRAL FILE COPY
DMEA
RECEIVED JUN 18 1958

DATE	INITIAL	CODE
6/18	C	220
6/18	Reg.	500

June 16, 1958

Memorandum

To: Operating Committee, DMEA - Washington

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

Subject: Signed Amendment No.4. The New Jersey Zinc Co. Cedar Springs Area, Sec. II, Grainger County, Tenn.

Transmitted are the Government and Audit copies of the subject signed amendment.

The usual distribution of the other copies has been made by this office.

Robert A. Laurence

Robert A. Laurence

DMEA Form 7
(12-56)

OFFICIAL FILE COPY

Date	Surname	Code
4/30	Klugescheid	500
"	Williams	500
"	Chambers	800
5/2	[illegible]	130
"	Johnson	110
"	Weltendorf	100
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MAY 15 1958

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

Re: Docket No. DMEA-4586 (Zinc)
The New Jersey Zinc Company
Cedar Springs Area, Sector II
Copper Ridge Belt
Grainger County, Tennessee
Contract No. Idm-E1071

Dear Mr. Laurence:

In accordance with your memorandum, dated April 18, 1958, and the request of the Operator, dated April 15, 1958, we have prepared a proposed Amendment No. 4 to the cited contract. The original and four copies (two pages) are enclosed, which have been signed by the Administrator for the Government. We are also enclosing two extra copies of the proposed amendment for the use of the Field Team.

If the amendment meets with your approval, kindly present it to the Operator for approval and signature and, when completed, distribute the copies in the usual manner. In the event that the amendment is not satisfactory and cannot be amended within your delegated authority, return all copies with your recommendations concerning any modifications.

Sincerely yours,

George C. Selfridge

Chairman, Operating Committee (JB)

Enclosures
APPROVED:

Frank D. Lamb (JB)
Member, Bureau of Mines

W. P. Williams (JB)
Member, Geological Survey

WPKlugescheid/er 4/30/58
Copy to: Docket
Admr R File
Op. Committee
Mr. Bishop, USBM
Mr. Kiilsgaard, USGS
Chron.

8623

Government's copy

EXPLORATION PROJECT CONTRACT
THE NEW JERSEY ZINC COMPANY
DOCKET NO. DMEA-4586

AMENDMENT NO. 4

It is agreed this ____ day of _____, 1958, between the United States of America, acting through the Department of the Interior, Defense Minerals Exploration Administration, and The New Jersey Zinc Company, that Exploration Project Contract No. Idm-E1071 (Docket No. DMEA-4586), dated March 29, 1957, as amended, is further amended effective April 1, 1958, as follows:

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

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

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

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

This amendment shall not be construed to increase the estimated total cost of the project, the aggregate total amount which the Government may be required to

App'd. Sol. Off.
Klugescheid,
Chandler
Selfridge

contribute, the amount of any item designated as "maximum," or the fixed unit cost of any item of work.

Executed in quintuplicate the day and year first above written.

THE UNITED STATES OF AMERICA

By_____
Administrator, Defense Minerals
Exploration Administration

THE NEW JERSEY ZINC COMPANY

By_____

Title_____

DMEA Form 7
(12-56)

OFFICIAL FILE COPY

Date	Surname	Code
5/8	Hugenheide	500

500

May 8, 1958

Memorandum

To: Associate Solicitor, Division of Minerals Resources

From: Director, Division of Base Metals

Subject: Redrafting of Amendment No. 4 for Docket No. DMEA-4586, The New Jersey Zinc Company, Cedar Springs Area, Sector II, Copper Ridge Belt, Grainger County, Tennessee, Contract No. Idm-E1071, Zinc.

Amendment No. 4 as prepared did not contain clause (3) as given below (as stated it may need correction) and we should have requested the inclusion thereof.

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

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

(i) Effective April 1, 1958, if the work has not been resumed on or before November 1, 1958;

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

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

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

(d) The Operator, as principal if the Operator is the producer, or as surety if the Operator is not the producer, shall pay to the Government the royalty on production provided for in the contract, in the same manner and amount and for the full period provided for in the contract, as amended, as if certification of discovery or development has been made, such certification being hereby waived by the Operator. In addition, all rights of the Government provided for in the contract with respect to a certification of discovery or development, percentage royalty and liens for its payment, and all rights of the Government as to records, audit, and recovery of any overpayment, are preserved.

(e) The Operator hereby releases and agrees to save the Government harmless from all claims or demands under or arising out of the contract, except as otherwise provided for in this Amendment No. 4.

WPKlugescheid/er 5/7/58 W. R. Griswold
Copy to: Docket
Chron.

DMEA Form 7
(12-56)

OFFICIAL FILE COPY

Date	Surname	Code
	Klugescheid	

500

April 24, 1958

Memorandum

To: Associate Solicitor, Division of Minerals Resources

From: Director, Division of Base Metals

Subject: Preparation of Amendment No. 4 for Docket No. DMEA-4586, The New Jersey Zinc Company, Cedar Springs Area, Sector II, Copper Ridge Belt, Grainger County, Tennessee, Contract No. Idm-E1071, Zinc.

Will you kindly prepare Amendment No. 4 for the cited contract.

There is to be a recess from April 1, 1958 to November 1, 1958.

The completion time will be extended from March 1, 1959 (Amendment No. 3) to July 1, 1959. The royalty payment period will remain at 31 years as in Amendment No. 3.

W. R. Griswold

WPKlugescheid/er 4/24/58
Copy to: Docket
Chron.

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

April 18, 1958

Memorandum

To: Operating Committee, DMEA - Washington

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

Subject: DMEA-4286, Idm-E982 and DMEA-4586, Idm-E1071-zinc.
The New Jersey Zinc Company -
Big War Creek and Cedar Springs Areas, Tennessee

Enclosed are two letters from Mr. Johnson Crawford, General Superintendent, The New Jersey Zinc Company, requesting a recess of work in each of the subject contracts.

This matter was discussed with Mr. Griswold by telephone on April 15.

The Field Team recommends granting a recess for each contract until November 1, 1958 and a comparable extension of time for completion of each contract.

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

V. J. Lynch, Member
Bureau of Mines

RAL/zm
cc
Lynch
Files
Shirley

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

HORSE HEAD PRODUCTS ®

PLEASE ADDRESS REPLY TO

Jefferson City, Tennessee
April 15, 1958

OFFICIAL FILE COPY
DMEA
RECEIVED APR 21 1958

DATE	INITIALS	CODE

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

Subject: DMEA 4586 (ZINC) Idm E 1071
CEDAR SPRINGS AREA
GRAINGER COUNTY, TENNESSEE

Dear Mr. Laurence:

Request is hereby made for a recess until November 1, 1958 of operation under the subject contract.

The present adverse conditions in the domestic zinc industry require a temporary curtailment of drilling on the Cedar Springs contract. During the recess period, additional geochemical work including auger drilling is planned. It is anticipated that as a result of this work, information will be acquired which will permit a more effective utilization of the diamond drill and improve the chances of a successful drilling result when operations are resumed.

Yours very truly,

THE NEW JERSEY ZINC COMPANY

Johnson Crawford

General Superintendent

A. D. Hoagland/jf
In quadruplicate

RECEIVED
APR 17 1958
U. S. Geological Survey
Knoxville Office
Knoxville, Tenn.

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

April 3, 1958

DMEA
RECEIVE APR 7 1958
DATE

Memorandum

To: Operating Committee, DMEA - Washington

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

Subject: Signed Amendment No.3. The New Jersey Zinc Company Cedar Springs Area, Sector II. Grainger County, Tennessee - DMEA-4586, Idm-E1071-zinc.

Transmitted is the Government and Audit copy of the subject amendment signed by the Vice President of the Company.

The usual distribution of the other copies has been made.

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

V. J. Lynch
V. J. Lynch, Member
Bureau of Mines

DMEA Form 7
(12-56)

OFFICIAL FILE COPY

Date	Surname	Code
3/24	Klugescheid	500
	[illegible]	500
3-24	Chambley	1800
3/24	[illegible]	130
"	Johnson	700
"	[illegible]	100
3/25	[illegible]	220
		500
		820

MAR 24 1958

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

Re: Docket No. DMEA-4586 (Zinc)
The New Jersey Zinc Company
Cedar Springs Area, Sector II
Copper Ridge Belt
Grainger County, Tennessee

Dear Mr. Laurence:

In accordance with your memorandum, dated March 11, 1958, and the request of The New Jersey Zinc Company, dated March 5, 1958, we are enclosing the original and four copies of proposed Amendment No. 3 (one page) to the cited contract, signed by the Administrator. We are also enclosing two extra copies for the use of the Field Team.

If the amendment meets with your approval, kindly present it to the Operator for approval and signature and, when completed, distribute the copies in the usual manner. In the event that the amendment is not satisfactory and cannot be amended within your delegated authority, return all copies with your recommendations concerning any modifications.

Sincerely yours,

George C. Selfridge

Chairman, Operating Committee (GHB)

Enclosures

APPROVED:

P. F. Yopes (GHB)
Member, Bureau of Mines

Thor H. Kiilsgaard (GHB)
Member, Geological Survey

WPKlugescheid/er 3/24/58
Copy to: Docket
Admr R File
Op. Committee
Mr. Bishop, USBM
Mr. Kiilsgaard, USGS
Chron.

8623

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

March 17, 1958

OFFICE OF THE DIRECTOR
DMEA
RECEIVED MAR 19 1958

DATE	INITIALS	COPY
3/19	C	220
3/19	Orig.	500

Memorandum

To: Operating Committee, DMEA - Washington

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

Subject: DMEA-4586, Idm-E1071 (zinc) The New Jersey Zinc Co. Cedar Springs area, Sector II. Grainger County, Tennessee- Signed Amendment No.2.

Attachedd hereto are the Government and Audit copies of the subject amendment. The usual distribution of the other copies has been made by this office.

V. J. Lynch

V. J. Lynch

DMEA Form 7
(12-56)

OFFICIAL FILE COPY

Date	Surname	Code
3/14	Klugesheid	500

500

March 14, 1958

Memorandum

To: Associate Solicitor, Division of Minerals Resources

From: Director, Division of Base Metals

Subject: Preparation of Amendment No. 3 for Docket No. DMEA-4586, The New Jersey Zinc Company, Cedar Springs Area, Sector II, Copper Ridge Belt, Grainger County, Tennessee, Contract No. Idm-E1071, Zinc.

Will you kindly prepare an Amendment No. 3 for the cited contract. The Operator wishes an extension of the completion date from July 1, 1958 until March 1, 1959. The reasons for the request as stated in the letter to the Field Team, dated March 5, 1958, are considered reasonable.

The royalty payment period should be increased to 31 years.

W. R. Griswold

W. P. Klugesbheid/er
Copy to: Docket
Chron.

8623

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION
ROOM 1050 FEDERAL BLDG.
KNOXVILLE 2, TENN.

WASHINGTON, D.C.

OFFICIAL FILE COPY
DMEA
RECEIVED MAR 13 1958

DATE		CODE
3/15	C	220
		130
		500

March 11, 1958

Memorandum

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

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

Subject: Contract No. Idm-E1071, Docket No. DMEA4586, (Zinc)
The New Jersey Zinc Company, New York, N. Y.
Cedar Springs Area, Grainger County, Tennessee

Enclosed are the original and two copies of a request from the Operator for an extension of the completion date of the Cedar Springs contract work to March 1, 1959. Although this would not exceed the 2-year limit, we are referring it to you for consideration along with the requests from this Operator (as well as other Operators) for extension of other projects.

We consider the Operator's reasons, especially as stated in paragraph 2, to be valid, and therefore we recommend preparation of amendment no. 3, to authorize the additional time.

Robert A. Laurence
Robert A. Laurence
Executive Officer

S A Feitler
S. A. Feitler, for V. J. Lynch
Member, Bureau of Mines

Enclosures 3

THE NEW JERSEY ZINC COMPANY
(ESTABLISHED 1848)

CABLE ADDRESS
"JERSEZINC"

160 FRONT STREET

NEW YORK 38, N.Y.

HORSE HEAD PRODUCTS ®

PLEASE ADDRESS REPLY TO

Jefferson City, Tennessee
March 5, 1958

OFFICIAL FILE COPY
DMEA
RECEIVED MAR 13 1958
DATE | NOTE | CODE

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

Subject: DMEA 4586 (ZINC) E 1071
THE NEW JERSEY ZINC COMPANY
CEDAR SPRINGS AREA
GRAINGER COUNTY, TENNESSEE

Dear Mr. Laurence:

Request is hereby made for an amendment to the cited contract extending the completion date from July 1, 1958 until March 1, 1959. The reasons for this request are outlined below:

(1) On December 2, 1957 three properties with an aggregate of approximately 344 acres were added to the northeast part of the contract area. These properties add about 3200' of strike length to the project area. It has been established by current drilling (particularly with hole CS-40) that the early geochemical work done in the properties was at an unfavorably low stratigraphic position. In order to obtain maximum benefit from further drilling, geochemical sampling over the entire sub-outcrop of the Kingsport and the lower part of the Mascot formations is planned. Following this, auger drilling of the overburden layer is contemplated in such locations as may be indicated by the results of the surface sampling. Additional time will be required to follow this procedure.

(2) A deep ore penetration has been made in hole CS-37. It is planned to follow this ore, if possible, using one drill. Since the number of deep holes that may be drilled in a given length of time is notably less than would be the case with holes of average depth, it is expected that this work will progress slowly. Because hole CS-37 has the only ore penetration made so far on this

project, it is possible that the success or failure of the venture will depend on making further penetrations of ore that can be related to it. Time beyond the July 1, 1958 date may be required to accomplish this purpose.

(3) It now appears that the most efficient way to proceed with this project is to carry on with only one diamond drill. To complete the 35,000 feet of drilling authorized on a one drill basis will require at least until March 1, 1959.

Yours very truly,

THE NEW JERSEY ZINC COMPANY

Johnson Crawford

General Superintendent

A. D. Hoagland/jf
In Quadruplicate

RECEIVED
MAR 11 1958
U.S. Geological Survey
Geologic Branch
Beaverton, Texas

DMEA Form 7
(12-56)

OFFICIAL FILE COPY

Date	Surname	Code
3/5	Klugescheid	500
"	Howard	500
"	Banner	500
3/5	[illegible]	130
3/6	Jones	110
	Whittenden	100
		~~HB~~
3-7	C	220
		500

500

MAR 6 1958

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

Re: Docket No. DMEA-4586 (Zinc)
The New Jersey Zinc Company
Cedar Springs Area, Sector II
Copper Ridge Belt
Grainger County, Tennessee
Contract No. 21071

Dear Mr. Laurence:

In accordance with your memorandum, dated February 19, 1958, and the request of The New Jersey Zinc Company, dated February 14, 1958, we have prepared a proposed Amendment No. 2 to the cited contract. The original and four copies (two pages) are enclosed, which have been signed by the Administrator for the Government. We are also enclosing two extra copies of the amendment for the use of the Field Team.

If the amendment meets with your approval, kindly present it to the Operator for approval and signature and, when completed, distribute the copies in the usual manner. In the event that the amendment is not satisfactory and cannot be amended within your delegated authority, return all copies with your recommendations concerning any modifications.

Sincerely yours,

George C. Selfridge

Chairman, Operating Committee (SHB)

Enclosures
APPROVED:

O. M. Bishop (SHB)
Member, Bureau of Mines

Thor H. Kiilsgaard (SHB)
Member, Geological Survey

WPKlugescheid/er 3/5/58
Copy to: Docket
Admr R File
Op. Committee
Mr. Bishop, USBM
Mr. Kiilsgaard, USGS
Chron.

8623

Memorandum for the Files

From: W. P. Klugescheid, Base Metals Division

Subject: Amendment No. 2 to Docket No. DMEA-4586, Contract No. Idm-E1071.

SUMMARY OF HOLES ON J. R. DAVIDSON TRACTS.

Hole No.	Remarks.
I-53	373'-375' ---- 25% Zn.
I-54	300'-301' ---- 25% Zn.
I-55	Barren
I-56	587'-588' ---- 15% Zn.
I-57	431'-437' ---- 1% Zn.
I-58	228'-229' ---- 35% Zn.
I-59	833'-837' ---- 1% Zn.
CS-25	Nothing over a trace.
CS-27	Barren
CS-29	Barren
CS-30	Nothing over a trace.
CS-31	Barren
CS-36	524'-527' -- 1% Zn. 530'-535' -- 1½% Zn. 541'-543' -- 12% Zn.
CS-38	537'-543' Traces.

Ore intercepts in the drill holes were thin or without continuity. Ore reserves could not be said to exist on the J. R. Davidson tracts which are being dropped in Amendment No. 2.

W. P. Klugescheid

W. P. Klugescheid

DMEA Form 7
(12-56)

OFFICIAL FILE COPY

Date	Surname	Code
2/27	WPKlugescheid	800

500

February 27, 1958

Memorandum

To: Associate Solicitor, Division of Minerals Resources

From: Director, Division of Base Metals

Subject: Preparation of Amendment No. 2 for Docket No. DMEA-4586, The New Jersey Zinc Company, Cedar Springs Area, Sector II, Copper Ridge Belt, Grainger County, Tennessee, Contract No. Idm-81071 (Zinc)

Will you kindly prepare an Amendment No. 2 for the cited contract. The Operator wishes to delete from the contract the J. R. Davidson land, consisting of two tracts containing 285 acres, more or less. No commercial mineralization has been found on this land and the option expired on February 15, 1958.

W. A. Griswold

WPKlugescheid/er
Copy to: Docket
Chron.

8623

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

February 19, 1958

RECEIVED FEB 25 1958

2/21
2/24
2/24

Memorandum

To: Operating Committee, DMEA - Washington

From: DMEA Field Team, Region V - Knoxville, Tenn.

Subject: DMEA-4586, Idm-E1071-zinc. The New Jersey Zinc Co. Cedar Springs area-Grainger County, Tennessee

Enclosed are the original and 2 copies of a request by the Operator for deletion of the J. R. Davidson tract in accordance with the "Special Agreement concerning land."

Please prepare the necessary amendment.

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

V. J. Lynch
V. J. Lynch, Member
Bureau of Mines

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

RECEIVED

12/5	C	220
12/5	Klug	500

December 3, 1957

Memorandum

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

From: Executive Officer, DMEA, Field Team, Region V

Subject: Docket No. DMEA-4586 (Zinc, Contract No. Idm-E1071
The New Jersey Zinc Company
Cedar Springs Area, Grainger County, Tennessee

Enclosed is a letter from the Operator requesting addition of adjoining property to the contract, and one copy of each option. A proposed amendment has been sent to the Operator, and the executed copies will be sent to you when they are received.

W. A. Beck for
Robert A. Laurence

Enclosures 4

X 1086G 24M 12-56

COPY

THE NEW JERSEY ZINC COMPANY

EXPLORATION DEPARTMENT

Jefferson City, Tennessee
November 29, 1957

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

Subject: DOCKET NO. 4586 (ZINC)
CEDAR SPRINGS AREA, TENNESSEE

Dear Mr. Laurence:

Recently, options have been secured to the Carl Davidson property of about 86 acres, the Zilpha Cabbage property of about 92 acres, and the B. E. Davidson property of about 166 acres. The location of these properties is shown on map AX-TENN-105 which is attached to the subject contract, Idm E 1071.

Copies of the short form option contracts covering each of these properties is enclosed herewith. We request that these properties be included within the scope of DMEA contract Idm E 1071.

Yours very truly,

THE NEW JERSEY ZINC COMPANY

Johnson Crawford

Superintendent for Tennessee

A.D.Hoagland/jf
In duplicate

RECEIVED
DEC -2 1957

DMEA Form 7
(12-56)

OFFICIAL FILE COPY

Date	Surname	Code
5/2	Klugescheid	500
	Williams	500
5/3	Selfridge	130
"	Johnson	110
"	Mattendorf	100
5/6	C	220

500

MAY - 3 1957

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

Re: Docket No. DMEA-4586 (Zinc)
The New Jersey Zinc Company
Cedar Springs Area, Sector II
Copper Ridge Belt
Grainger County, Tennessee
Contract No. Idm-E1071

Dear Mr. Laurence:

Enclosed are the Field Team and Finance Office copies of the cited contract, signed by the Operator and the Government.

We are also enclosing an unsigned copy of the contract, and two extra copies of Annex I, Exhibit "A", and the maps for the use of the Field Team.

Sincerely yours,

George C. Selfridge

Chairman, Operating Committee (JHB)

WPKlugescheid/er 5/2/57
Copy to: Docket
Admr R File
Op. Committee
Mr. Bishop, USBM
Mr. Kiilsgaard, USGS
Chron.

Enclosures

APPROVED:

Frank D. Lamb (JHB)
Member, Bureau of Mines

N. E. Nelson (JHB)
Member, Geological Survey

8623

THE NEW JERSEY ZINC COMPANY

(ESTABLISHED 1848)

HORSE HEAD PRODUCTS ®

100 FRONT STREET

NEW YORK 38, N.Y.

OFFICE OF THE
VICE PRESIDENT

April 26, 1957

Mr. C. O. Mittendorf, Administrator
United States Department of the Interior
Defense Minerals Exploration Administration
Washington 25, D. C.

Re: DOCKET #DMEA - 4586 (ZINC)
THE NEW JERSEY ZINC COMPANY
CEDAR SPRINGS AREA, SECTOR II
COPPER RIDGE BELT, GRAINGER CO.,
TENNESSEE

Dear Sir:

We have for acknowledgement your letter of April 25, 1957 on the above named subject and wish to thank you for your prompt attention in this matter. Returned herewith are the original and four copies of Exploration Project Contract #IDM-E 1071 duly signed. We have retained the operator's copy for our files.

Very truly yours,

Lindsay F. Johnson

L. F. Johnson
Vice President

OFFICIAL FILE COPY
D M E A
RECEIVED APR 1957

DATE	INITIAL	CODE
4/29	C	220
4/29	B	215
		500

DMEA Form 7
(12-56)

OFFICIAL FILE COPY

Date	Surname	Code
4/23	Klugescheid	500
4/23	Fraundorf	500
4-23	Chambers	800
4/24	Selfridge	130
"	Johnson	110
		100
4/25	C	220
		500

B

APR 25 1957

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

Lamb
Kiilsgaard

Re: Docket No. DMEA-4586 (Zinc)
The New Jersey Zinc Company
Cedar Springs Area, Sector II
Copper Ridge Belt
Grainger County, Tennessee

Dear Mr. Goodwin:

In reference to your application of December 26, 1956, we are enclosing the original and five copies of a proposed long-form contract signed by the Administrator, Defense Minerals Exploration Administration, for an exploration project on the cited property.

The contract consists of the form, Annex I (four pages), Annex II (one page), Exhibit "A" (2 pages), and one map. The clause to which you objected in your letter, dated April 12, 1957, has been eliminated. If the contract now meets with your approval, will you kindly sign all copies, retain the "Operator's Copy" for your files, and return the others to us.

Sincerely yours,

C. D. Whitmore

Administrator

Enclosures

WPKlugescheid/bjl (4/23/57)
Copy to: Docket
Admr. R. File
Op. Committee
Mr. Bishop
Mr. Kiilsgaard
Region V (2)
Chron.

8623

EXPLORATION PROJECT CONTRACT
THE NEW JERSEY ZINC COMPANY
DOCKET NO. DMEA-4586

EXHIBIT "A"

Description of the Work

1. The purpose of the project is to explore for ores of zinc by diamond drilling (and such churn drilling of overburden as may be required). Zinc ores in the Copper Ridge Belt occur in the Kingsport dolomites and limestones of the Knox group. In the area in which the project work is to be performed, the Kingsport formation outcrops near the crest of Copper Ridge and dips southeasterly at an angle of about 35 degrees. The ore zones seem to trend roughly parallel to the strike of the beds.

2. A series of widely spaced dip fences shall be drilled, with holes spaced at between 100-and 300-foot intervals on the fences.

3. The space intervals between the various fences shall not be less than 600 feet, except with prior approval of the Government.

4. Drilling shall not be done at locations closer than 200 feet from property lines.

5. It is estimated that approximately 50 holes will be required, having an average depth of between 600 and 700 feet, with a maximum depth for any hole of approximately 1300 feet. Not more than 35,000 feet of drilling shall be performed: Provided, however, That the Operator may, upon the written approval of the Government, perform more than 35,000 feet of drilling so long as the total cost of all drilling work allowable under the contract is not exceeded.

6. The locations of the initial holes are tentatively shown on the attached map entitled "The New Jersey Zinc Company, Rogersville, Tennessee, Cedar Springs Area," but the actual locations, directions, inclinations, and depths of all holes are subject to prior Government approval.

7. All diamond drilling shall be done with AX size, or larger, coring bits. Drill holes shall be reamed and cased or cemented and redrilled as necessary.

All drill holes shall be logged and all drill core shall be made available to the Government for examination. All significantly mineralized core, ~~in lengths not to exceed five feet,~~ shall

except where it is necessary to use an EX size bit in order to complete a hole.

be split and one half thereof shall be properly sampled and assayed for zinc. ~~Sludges corresponding to the cores, with intervals not to exceed five feet, shall be retained (if possible) when drilling is being done in significantly mineralized ground and, in the event that core recovery does not exceed 70 per cent, both core and sludge samples will be taken. Both core and sludge shall be split, and one half thereof properly sampled and assayed.~~ The remaining half of all significantly mineralized core samples~~, and sludge samples, where taken,~~ shall be furnished to the Government upon request.

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

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

Estimated Cost of the Project

Actual Costs

Category (1) Independent Contracts

Overburden drilling and diamond drilling to 1000-foot depth, 30,000 feet @ $2.75/ft.	$82,500.00	
Diamond drilling from 1000-foot to 1500-foot depth, 5,000 feet @ $3.00/ft.	15,000.00	
The above rates include charges for reaming, cementing, water supply, casing, changing of locations, and all other charges by the diamond drill contractor.		
Neither the cost nor the value of casing left in drill holes at the option of Operator will be accepted as a charge to the contract.		$97,500.00
Categories (2) through (7)	None	

Fixed Unit Costs (See Article 13 and Annex II of the Contract)

Incidental allowance for each foot of drilling completed, 35,000 feet @ $0.21/ft.	$ 7,350.00	

200 samples assayed @ $1.00/each sample	$ 200.00	
Core boxes - 500 @ $1.80/each box	900.00	$8,450.00
Estimated Total Cost of the Project		$105,950.00
Government Participation @ 50%		$ 52,975.00

THE NEW JERSEY ZINC COMPANY
(ESTABLISHED 1848)
100 FRONT STREET
NEW YORK 38, N.Y.

OFFICE OF THE
VICE PRESIDENT

April 12, 1957

OFFICIAL FILE COPY
DMEA
RECEIVED APR 15 1957

DATE	INITIALS	CODE
4/15	C	220
4/15	WRG	500

Mr. C. O. Mittendorf, Administrator
Defense Minerals Exploration Administration
U. S. Department of the Interior
Washington 25, D. C.

Subject: DOCKET # DMEA 4586 (ZINC)
THE NEW JERSEY ZINC COMPANY
CEDAR SPRINGS AREA
COPPER RIDGE BELT, TENNESSEE

Dear Sir:

We are enclosing, herewith, unsigned, original and five copies of proposed contract for the Cedar Springs area, Copper Ridge Belt, Tennessee. We request that you re-examine this contract with particular reference to the clause pertaining to the collection of sludge under item 7 in Exhibit "A".

The particular part of this clause which we find objectionable is quoted below:

> "..... Sludges corresponding to the cores, with intervals not to exceed five feet, shall be retained (if possible) when drilling is being done in significantly mineralized ground and, in the event that core recovery does not exceed 70 percent, both core and sludge samples will be taken. Both core and sludge shall be split, and one half thereof properly sampled and assayed. The remaining half of all significantly mineralized core samples and sludge samples, where taken, shall be furnished to the Government upon request."

We believe that this clause will make the accomplishment of the exploration objective more costly without adding to the chances for achieving a successful result. We request that the part above quoted be deleted from the contract.

It has been our experience in this district that failure to core in ore zones is very largely a result of oxidized or weathered ground conditions. Where core recovery is poor under these conditions, sludge would be either impossible to collect ? or it would add very little to the picture. To drill in such a way as to collect sludge in the Kingsport formation would increase the cost of drilling by a factor of from two to three times. That the collection of sludge is not consistent with the achievement of maximum exploration efficiency in the East Tennessee Zinc district is testified to by the fact that in many hundreds of thousands of feet of core drilling performed by mining companies in this district which resulted in the discovery of a large number of orebodies, the practice of collecting sludge has not been followed.

The other provisions of the contract are acceptable to us.

Yours very truly,

S. S. Goodwin
Vice President

SSG:ahg

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION

ROOM 13 POST OFFICE BLDG.
KNOXVILLE 2, TENN.

OFFICIAL FILE COPY
DMEA
RECEIVED APR 11 1957

DATE	INITIALS	CODE
4/11	C	220
4/17	WRB.	500

April 9, 1957

Memorandum

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

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

Subject: DMEA-4586 (Zinc), The New Jersey Zinc Company, New York, N. Y.
Cedar Springs Area, Grainger County, Tennessee.

Reference is made to Mr. Mittendorf's letter of March 29, sending the proposed contract to the Operator for execution.

We have reviewed this contract, and have discussed its provisions with Mr. Hoagland (the Company's geologist) and Mr. Wedow of the Geological Survey. It is our understanding that the Company is not satisfied with certain provisions and therefore may request changes before signing the contract. However, Mr. Hoagland stated that all the major provisions of the contract are acceptable to the Company, and that they are anxious to get the job under way with a minimum of delay.

We wish to suggest three revisions to exhibit "A." These are:

1) Item 7, paragraph 1. In exceptional cases, it may be necessary to reduce a hole to EX size in order to complete it. This happens very rarely, but provision for Government approval to do so, when really necessary, should be made.

2) Item 7, paragraph 2. We suggest deletion of the words "in lengths not to exceed five feet" from the second sentence. Although it is the Company's usual practice to sample in lengths of 5 feet or less, there are many occasions when there is no advantage in doing so. Previous contracts with this Company for exploration at other Copper Ridge projects do not contain this provision.

3) Item 7, paragraph 2. We strongly recommend deletion of the requirement for retaining and sampling the sludge. It is not standard practice in this district to save sludge, and we know of no company who does so. Because of the cavernous nature of the limestone formations, especially near the surface, there is usually no return of water and sludge to the surface. The cost of casing, cementing and reaming to insure return of the sludge would far exceed the value of the samples obtained from the sludge, and this cost is not provided in the contract. It would be cheaper to redrill the rare hole in which core recovery in the ore zone falls below 70% than to save sludge on all holes.

If this provision must be retained for some reason, then the Company should be asked to obtain bids from contractors for this item, and the additional cost should be added to the estimated actual costs under category (1) and to the total cost of the contract. We hope this will not be necessary.

The schedule of fixed unit costs is adequate in our opinion. The Company may inquire as to why the incidental allowance was reduced from 27¢ on its previous Copper Ridge contracts to 21¢ on this one. If the core bores are added, the incidental allowance becomes 23.7¢. The reduction from 27¢ to 23.7¢ is justified, as the former figure was based on utilizing full-time services of a geologist for one year, whereas the latter is based on a more realistic estimate of one-third of a geologist's time for a year.

The Company is anxious to get started at an early date and it expects that two drills will be available within a week or ten days. As both Government and Operator are in agreement on the major items, we suggest that the present effective date of the contract, March 29, be retained regardless of any changes which may be made. That would permit starting the project as soon as drills become available.

When the contract is ready for submitting to the Company, we suggest that it be sent to us for review rather than to the New York office of the Company. We will then present it to the Company's Jefferson City staff.

Robert A. Laurence

Robert A. Laurence
Executive Officer, DMEA

V. J. Lynch

V. J. Lynch, Member
Bureau of Mines

RAL/as
cc
Opr. Com. 2
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DMEA Form 7
(12-56)

OFFICIAL FILE COPY

Date	Surname	Code
4/9	Selfridge	120
"	[illegible]	110
"	[illegible]	100
4/9	" Klug	500

April 9, 1957

MEMORANDUM

To: Administrator

From: George C. Selfridge
Special Assistant

Subject: Docket No. DMEA-4586 (Zinc)
The New Jersey Zinc Company
Cedar Springs Area, Sector II
Copper Ridge Belt
Grainger County, Tennessee

Mr. Laurence telephoned today to tell that the company's field men had the proposed contract and that they had some minor objections to it. He explained that he had discussed the contract with Mr. Klugescheid yesterday but was calling today to make sure of one point. He wished to know if the same date would be kept for the contract if the company returned it with proposed minor revisions. The writer informed him that the same date would be kept on the contract.

Mr. Laurence stated that seemingly the contract prices were all right aside from a few minor provisions, chiefly the sampling ones as set forth in the contract.

The company is finishing one of its other contracts and the drilling contractor has two drills available which the company wishes moved on the site of the presently proposed contract. After the writer informed Mr. Laurence that the same date would be kept, Mr. Laurence stated that he would so inform the company's field men, and at the same time caution them that the drilling would be done at the company's own risk, and that there could possibly be some disallowances if all of the proposed changes were not approved by the Government.

George C. Selfridge

George C. Selfridge

GCSelfridge/esf
cc to: Docket
Admr. R. File
Mr. Selfridge

DMEA Form 7
(12-56)

500

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Date	Surname	Code
3/29	Klugescheid	500
	[illegible]	500
3/29	Talbert	800
3/29	Selfridge	130
"	[illegible]	110
"	Stetteudorf	100
4/1		220
		500

Kiilsgaard
Bishop

MAR 29 1957

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

Re: Docket No. DMEA-4586 (Zinc)
The New Jersey Zinc Company
Cedar Springs Area, Sector II
Copper Ridge Belt
Grainger County, Tennessee

Dear Mr. Goodwin:

In reference to your application of December 26, 1956, we are enclosing the original and five copies of a proposed long-form contract signed by the Administrator, Defense Minerals Exploration Administration, for an exploration project on the cited property.

The contract consists of the form, Annex I (four pages), Annex II (one page), Exhibit "A" (three pages), and one map. If it meets with your approval, will you kindly sign all copies, retain the "Operator's Copy" for your files, and return the others to us. In the event that you do not approve of any of the contract provisions, please return all copies to us, with your comments.

The diamond drilling costs are based on the bid submitted by E. J. Longyear Company, for the Copper Ridge Belt.

Sincerely yours,

Administrator

WPKlugescheid/er (3/27 & 29/57)

Enclosures

Copy to: Docket
Admr R File
Op. Committee
Mr. Bishop, USBM
Mr. Kiilsgaard, USGS
Region V (2)
Chron.

8623

DMEA Form 7
(12-56)

OFFICIAL FILE COPY

Date	Surname	Code
3/27	Klugescheid	500
3/27	Hiramel	500
3-28	Chambers	800
		130
		110
		100

225
500.

Mr. S. S. Goodwin, Vice-President
The New Jersey Zinc Company
160 Front Street
New York 38, New York

Re: Docket No. DMEA-4586 (Zinc)
The New Jersey Zinc Company
Cedar Springs Area, Sector II
Copper Ridge Belt
Grainger County, Tennessee

Dear Mr. Goodwin:

In reference to ~~As requested in~~ your application of December 26, 1956, we are enclosing the original and five copies of a proposed long-form contract ~~for the cited project,~~ signed by the Administrator, ~~for the Government~~ an exploration project on the cited property.

The contract consists of the form, Annex I (four pages), Annex II (one page), Exhibit "A" (three pages), and one map. If it meets with your approval, will you kindly sign all copies, retain the "Operator's Copy" for your files, and return the others to us. In the event that you do not approve of any of the contract provisions, please return all copies to us, with your comments.

The diamond drilling costs are based on the bid submitted by E. J. Longyear Company, for the Copper Ridge Belt.

Sincerely yours,

Administrator
WPKlugescheid/er 3/27/57

Enclosures

Copy to: Docket
Admr R File
Op. Committee
Mr. Bishop, USBM
Mr. Kiilsgaard, USGS
Region V (2)
Chron.

8623

DMEA Form 7
(12-56)

OFFICIAL FILE COPY

Date	Surname	Code
3/18		500

500

March 15, 1957

Memorandum

To: Associate Solicitor, Division of Mineral Resourses

From: Chief, Base Metals Division

Subject: Preparation of Contract for The New Jersey Zinc Company, Cedar Springs Area, Docket No. DMEA-4586 (Zinc), Grainger County, Tennessee.

Will you please prepare a contract for the cited application. A draft of the contract, Exhibit "A", and Annex I are attached to this memorandum. Consents to Lien have been waived. The necessary numbers of maps are also attached.

W. R. Griswold

WPKlugescheid/er 3/15/57

Copy to: Docket
Chron.

8623

OFFICIAL FILE COPY
DMEA
RECEIVED FEB 28 1957

DATE	INITIALS	CODE
3/1	C	220
3/1	WPK	500

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF MINES
WASHINGTON 25, D. C.

February 27, 1957

Re: DMEA 4586; $105,880
The New Jersey Zinc Co.
Cedar Springs Area
Grainger County, Tenn.

Memorandum

To: W. R. Griswold, DMEA

From: O. M. Bishop, Branch of Base Metals

Subject: Refiew of field examination report of February 13, 1957 received February 19, 1957.

The field examiners note that geochemical mapping followed by limited diamond drilling has lead to the discovery of several hundred thousand tons of indicated ore assaying 3.5 percent zinc on an adjacent tract. The exploration reviewed is for a series of holes in north-south lines crossing the strike of the Mascot and Kingsport formations to the east and west of the above noted discovery.

The lines or fences of holes at about 1,200 feet apart with holes in the individual fences spaced from 100-300 feet apart, totaling 20,000 feet of drilling constitute the initial stage of drilling. The second stage predicated on the success of stage I and consisting of 15,000 feet of drilling will further delineate any discoveries.

The field team recommends the project as proposed. I concur in this recommendation.

O. M. Bishop

O. M. Bishop

Copy to: Division of Minerals
Mr. Kiilsgaard
Mr. Lamb
Mr. Bishop
Files

IN REPLY REFER TO:

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY
WASHINGTON 25, D. C.

OFFICIAL FILE COPY
DMEA
RECEIVED FEB 27 1957

DATE	INITIALS	CODE
2/27	C	220
2/27	WPK	500

February 26, 1957
Re: DMEA 4586
New Jersey Zinc Co.
Cedar Springs Tract
Grainger Co., Tenn.
Appl. Est. $112,150
Rec'd.Est. $105,880 - Zinc

Memorandum

To: ~~W. R. Griswold, Defense~~ Minerals Exploration Administration

From: N. E. Nelson, U. S. Geological Survey

Subject: Review of Field Team Report

The applicant requested assistance in the further exploration of a tract the most likely appearing part of which has been drilled by the applicant. The drilling already done explored strata down dip of soil zinc anomalies. The applicant estimates reserves totalling 350,000 tons of 3½% zinc material, are indicated by the drilling.

Some holes downdip of the"reserves block" are not ore holes. The proposed drilling will explore downdip of the non-ore holes and on strike extensions of the "reserves block". The "reserves block" is not included in the project area.

The referenced tract is about midway between two "Putnam" tracts, the sites of contracts E-1002, (DMEA 4381) and E-1022 (DMEA 4422).

As of February 6, of 12 holes drilled on Tract E-1002, no hole is classed as an ore hole, and of 6 holes drilled on Tract E-1022, one is an ore hole. The work is not complete. As of February 13, National Lead Company was considering the Putnam Tracts.

The examiners and Field Team recommend a work program essentially as proposed by the applicant, as:

Diamond drilling	35,000 feet	$97,500.00
Incidentals		8,380.00
		$105,880.00

I concur with the recommendation of the examiners and the Field Team.

N. E. Nelson

N. E. Nelson

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION
WASHINGTON 25, D.C.
KNOXVILLE 2, TENN.

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DMEA
RECEIVED FEB 27 1957

DATE	INITIALS	CODE
2/27	C	220
2/27	WRK	500

February 25, 1957

Memorandum

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

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

Subject: Docket No. DMEA-4586 -Zinc
The New Jersey Zinc Company, New York, N. Y.
Cedar Springs Area, Grainger County, Tennessee

Reference is made to the field examination report recently mailed to you from this office.

Attached are the original and two copies of a letter from the Applicant, providing the data requested for several properties included in the subject application.

Robert A. Laurence
Robert A. Laurence
Executive Officer

V. J. Lynch
V. J. Lynch
Member, Bureau of Mines

Enclosures 3

THE NEW JERSEY ZINC COMPANY
(ESTABLISHED 1848)

CABLE ADDRESS
"JERSEZINC"

160 FRONT STREET

NEW YORK 38, N.Y.

HORSE HEAD PRODUCTS ®

PLEASE ADDRESS REPLY TO

Jefferson City, Tennessee
February 21, 1957

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

Dear Mr. Laurence: Re: DMEA-4586
CEDAR SPRINGS, COPPER RIDGE BELT

In accordance with the request of Mr. Weedo, we submit below the title reference and recording data for the properties in the subject area for which this information was requested:

A. Mrs. Forest Davidson et al, two tracts. These parties inherited property from J. R. Davidson who acquired title by the following deeds recorded in the register's office of Grainger County, Tennessee.

1. Deed of William Wolfe et ux dated 12/16/39, Deed Book 66, page 566.

2. Deed of B. E. Davidson et ux, et al, dated 4/19/33, Deed Book 60, page 592.

3. Deed of Cecil Dalton dated 11/4/33, Deed Book 60, page 594.

4. Deed of J. H. Davidson et ux, et al dated 3/21/31, Deed Book 59, page 561.

5. Deed of Lacy E. Dalton et ux, dated 3/10/24, Deed Book 54, page 100.

6. Deed of J. Tandy Dalton et ux, dated 4/4/18, Deed Book 48, page 195.

7. Deed of J. H. Davidson et ux, dated 7/20/10, Deed Book 38, page 573.

B. Woodrow Davidson and Louisiana Davidson acquired property through the will of Colbert Lakins dated

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DMEA
RECEIVED FEB 27 1957

DATE	INITIALS	CODE

5/20/21, probated 8/2/26 and recorded in the County Court Clerk's office, Grainger County, Tennessee, Will Book 5, page 88.

C. Nelson Dalton acquired property from Cornelius Harville et ux, et al, dated 2/11/43, Deed Book 72, page 567, register's office, Grainger County, Tennessee.

The option on the Woodrow Davidson property expires August 27, 1957. The Zinc Company intends to exercise its option to purchase this property.

Yours very truly,

THE NEW JERSEY ZINC COMPANY

Johnson Crawford

Superintendent for Tennessee

A. D. Hoagland/jf
In Quadruplicate

RECEIVED
FEB 25 1957
U. S. Geological Survey
Geologic Division
Knoxville, Tenn.

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

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DMEA
RECEIVED FEB 15 1957

DATE	INITIALS	CODE
2-18	C	220
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February 14, 1957

Memorandum

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

From: Acting Executive Officer, DMEA Field Team, Region V

Subject: Field Examination Report, DMEA-4586 (Zinc)
The New Jersey Zinc Company, Jefferson City, Tennessee
Cedar Springs Area, Grainger County, Tennessee

It has been called to my attention that the DMEA Docket Number used for the above designated field examination report is incorrect due to a transposition. Instead of DMEA-4856, the Docket Number should be DMEA-4586.

V. J. Lynch

V. J. Lynch

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION
~~WASHINGTON 25, D.C.~~
KNOXVILLE 2, TENN.

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RECEIVED FEB 15 1957

DATE	INITIALS	CODE
2-15	C	220
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2-19	C	220
2-19	[illegible]	500
D. C.		

February 13, 1957

Memorandum

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

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

Subject: Field Examination Report, DMEA-~~4856~~ 4584 (Zinc)
The New Jersey Zinc Company, Jefferson City, Tennessee
Cedar Springs Area, Grainger County, Tennessee

Enclosed are the original and three copies of the field examination report on the subject application.

The applicant has been requested to supply the deed book and page data that are lacking for Tracts I and II of Mrs. F. Davidson, et al., and for the Woodrow and Louisiana Davidson, and Nelson and Delta Dalton tracts. These will be forwarded to the Operating Committee as soon as received from the applicant.

The applicant was queried about the early expiration date (8/27/57) on the Woodrow and Louisiana Davidson tract. The examiners were informed that the New Jersey Zinc Company plans to exercise its option to purchase and that the New York office of the company has already authorized the purchase of the mineral rights.

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

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

Enclosures 4

Reviewed by
DMEA OPERATING COMMITTEE
2-18-57
(date)

UNITED STATES
DEPARTMENT OF THE INTERIOR

DEFENSE MINERALS EXPLORATION ADMINISTRATION

ON-SITE Report.

FIELD EXAMINATION, REGION V

OFFICIAL FILE COPY
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RECEIVED FEB 15 1957

DATE	INITIALS	CODE
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On

DMEA-~~1856~~ 4586 (Zinc) CEDAR SPRINGS AREA
Grainger County, Tennessee

By

V. J. Lynch, Mining Engineer
U. S. Bureau of Mines

and

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

February 12, 1957

Reviewed by
DMEA OPERATING COMMITTEE
2-18-57
(date)

OFFICIAL FILE COPY
DMEA
RECEIVED FEB 15 1957
DATE | INITIALS | CODE

FIELD EXAMINATION REPORT

On

DMEA-4856 (Zinc) CEDAR SPRINGS AREA

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

Location: Cedar Springs Area, Grainger County, Tennessee

Summary and Recommendations

Geochemical soil surveying followed by preliminary diamond drilling has revealed several hundred thousand tons of indicated ore containing 3.5 percent zinc in the Cedar Springs area. Proposed additional drilling is planned to investigate the gross ore potential of the area and may reveal much larger tonnages of similar grade ore. The exploration program, as planned, is excellent, and approval of this application is strongly recommended.

The area proposed for exploration, and referred to in this examination report and by the applicant as the Cedar Springs area, lies in the Copper Ridge zinc district of East Tennessee. The proposed Cedar Springs project of the New Jersey Zinc Company includes what was formerly known as the Tandy Dalton prospect (See Tenn. Div. of Geology Bull. 31, p. 90, and U. S. Bureau of Mines R. I. 4497). The area lies about 3 miles northeast of Thorn Hill, which is located at the junction of U. S. Highway 25-E and the Clinch Valley Road. The project area is between but not adjacent to the Thorn Hill and Indian Creek projects (DMEA-4422 and DMEA-4381, respectively) of B. H. Putnam, although it is reported that the New Jersey Zinc Company holds options on most of the intervening properties not involved in the contract areas. The company has indicated verbally that significant tonnages of commercial zinc ore have been discovered by recent drilling on their Idol properties, which lie between the Thorn Hill properties of Putnam and the company's proposed Cedar Springs project. The geographic relationship of the

Cedar Springs project area to other DMEA zinc projects and applications in East Tennessee is shown in figure 1.

The Cedar Springs area is about 25 miles by good hard-surfaced highway from Morristown, Tennessee, on the main line of the Southern Railway. The nearest railhead to the area is on a branch of the Southern Railway at Washburn Station, about 13 miles southeast of Cedar Springs along the Clinch Valley Road. Access to the immediate area is by hard surface road (Clinch Valley Road) from Thorn Hill or from the company's Flat Gap mine at Treadway (about 10 miles northeast) to a graded dirt road extending northwest along Cedar Springs Creek. A network of dirt roads and farm lanes in the area afford excellent access to most of the proposed drilling sites. There appear to be no problems in obtaining sufficient water for drilling.

The project area was examined on January 24, 1957. A. D.Hoagland, T. E. Wayland, and Robert Greene, geologists of the New Jersey Zinc Company, accompanied the examiners. The field examination required about 2 hours.

The geology of the Cedar Springs area is typical of the Copper Ridge zinc district as a whole (see geologic map of the Copper Ridge district, Hancock and Grainger Counties, Tennessee; U. S. Geological Survey, Strategic Minerals Investigations Preliminary Map, by John Rodgers). The stratigraphic units involved are chiefly the Copper Ridge, Chepultepec, Longview, Kingsport, and Mascot formations of the Knox group, and the basal beds of the Chickamauga limestone. The structure is essentially monoclinal in a thrust plate with local tear faults of relatively minor displacement. The proposed diamond-drill holes will collar chiefly in the Mascot and Kingsport formations and bottom in basal Kingsport or topmost Longview.

The Tandy Dalton is reportedly the discovery location of zinc ore in the Copper Ridge district, but the date of discovery is not known. For many years sporadic prospecting was carried out until in 1944 the Bureau of Mines, in cooperation with the Geological Survey, diamond drilled eight holes and sampled several shallow pits (see U. S. Bureau of Mines, R. I. 4497). In the period 1952-53 the New Jersey Zinc Company explored in the vicinity of the prospect with 16 diamond-drill holes and interpreted their results to indicate about 350,000 tons of ore averaging about 3.5 percent zinc. There is no record of past production from the area.

From available data it has apparently not been possible to make any definite predications about the attitude, size, and shape of possible ore bodies in the Cedar Springs area. However, the mineralized zones discovered by drilling appear to be related to a strong geochemical anomaly in the soil in the central part of the area. In addition, the zones occur at the general zone in the Kingsport formation found to be most favorable for ore in the district as a whole. There is also the suggestion that the mineralized zones or bodies may pitch at a low angle to the strike either to the northeast or southwest, as in other areas that have been drilled in the district.

The plan to explore the gross ore potential of the area by a series of widely spaced dip fences, in which holes will be drilled on not less than 100-foot centers, is designed chiefly to test the hypothesis that the ore bodies pitch either at low angles to the strike or may be essentially parallel to the strike. This exploration plan has been used successfully in other areas explored by the same Company elsewhere in the Copper Ridge district. The

examiners concur in its use in the Cedar Springs area. If a DMEA contract is obtained by the Company for this area, the initial fence to be drilled will be that about 300 feet southwest of the excluded central area (see applicant's property map).

The estimated cost of the project is as follows:

Actual Costs

Category 1, Independent Contracts.

Overburden drilling and diamond drilling to 1,000-foot depth. 30,000 feet @ $2.75/ft.	$82,500.00	
Diamond drilling from 1,000-foot - 1,500-foot depth. 5,000 feet @ $3.00/ft.	15,000.00	
Total Drilling Cost		$97,500.00
Cost of Incidentals		
1 - Geologist (1/3 time)	$2,000.00	
2 - Surveyors (1/3 time each)	3,900.00	
Accounting and clerical help (1 part-time clerk, $30.00/Mo., 10 months)	300.00	
Transportation expense (Auto - 9000 miles @ 8¢ a mile)	720.00	
Core boxes (500 @ $1.80 each)	900.00	
Sample analyses (200 @ $1.00 each)	200.00	
Insurance and Payroll Taxes	360.00	
Total Cost of Incidentals		8,380.00
TOTAL ESTIMATED COST OF PROJECT		$105,880.00

February 12, 1957

V. J. Lynch, Mining Engineer
U. S. Bureau of Mines

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

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DMEA Form 7
(12-56)

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	Klugerkeed	500
	[illegible]	500
1/9	Selbridge	130
1/9	[illegible]	110
1/9		~~200~~
1-10	C	220

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JAN 10 1957

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

Re: Docket No. DMEA-4586 (Zinc)
The New Jersey Zinc Company
Cedar Springs Area, Sector II
Copper Ridge Belt
Grainger County, Tennessee

Dear Mr. Laurence:

The cited application for exploration assistance is being referred to your office for consideration, a field examination of the property if warranted, and recommendations.

No actual bids were submitted with the application, but the drilling costs quoted are in line with bids received under other applications.

The total number, and cost of each one, should be given with the core boxes.

The deed book and page data are lacking for the following tracts:

Mrs. F. Davidson, et al-Tract I	145 acres.
Mrs. F. Davidson, et al-Tract II	140 "
Woodrow & Louisiana Davidson	92 "
Nelson & Delta Dalton	12 "

It should be noted that the contract and agreement with Woodrow and Louisiana Davidson expires on August 27, 1957, and does not contain any clause permitting further extension beyond this date.

Copies of memoranda dated December 31, 1956 and January 3, 1957, by O. M. Bishop, Bureau of Mines, and N. E. Nelson, Geological Survey, respectively, relating to the project, are enclosed for your information.

P.S.R.

8623

We are enclosing a copy of the application for the use of the Field Team.

Sincerely yours,

George C. Selfridge
Chairman, Operating Committee (WB)

Enclosures

APPROVED:

O. M. Bishop (WB)
Member, Bureau of Mines

Thor H. Kiilsgaard (WB)
Member, Geological Survey

WPKlugescheid/er 1/8/57

Copy to: Docket
Admr R File
Op. Committee
Base Metals
Mr. Bishop, USBM
Mr. Kiilsgaard, USGS
Chron.

DMEA Form 7
(12-56)

OFFICIAL FILE COPY

Date	Surname	Code
	Klugescheid	500
	Brunnold	500
1/9	Selfridge	130
1/9	Frank E. Johnson (fw)	110
		100
		225

JAN 10 1957

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

Re: Docket No. DMEA-4586 (Zinc)
The New Jersey Zinc Company
Cedar Springs Area, Sector II
Copper Ridge Belt
Grainger County, Tennessee

Dear Mr. Goodwin:

Your application for Government assistance to explore the cited property has been reviewed by the Base Metals Division of the Defense Minerals Exploration Administration and has been referred to:

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

If the Field Team requires additional information concerning your application, they will contact your Tennessee field office at an early date.

Sincerely yours,

Frank E. Johnson (fw)

ACTING Administrator

WPKlugescheid/er 1/8/57
Copy to: Docket
Admr R File
Op. Committee
Base Metals
Mr. Bishop, USBM
Mr. Kiilsgaard, USGS
Region V (2)
Chron.

R.S.L.

8623

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY
WASHINGTON 25, D. C.

OFFICIAL FILE COPY
IN REPLY REFER TO:
DMEA
RECEIVED JAN 4 1957

DATE	INITIALS	CODE
		500

January 3, 1957
Re: DMEA 4586
New Jersey Zinc Company
Cedar Springs Tract
Grainger County, Tennessee
$112,150.00 - Zinc

Memorandum

To: W. R. Griswold, Defense Minerals Exploration Administration

From: N. E. Nelson, U. S. Geological Survey

Subject: Review of application.

The applicant requests assistance in drilling a second Copper Ridge tract. The project area is north of east of the project area of DMEA 4422 (Benj. H. Putnam, Thornhill). The property maps available indicate that the two project areas do not adjoin, but the properties controlled by the two applicants may abut.

The applicant has prospected geochemically the soil over the outcrop of the Kingsport formation, the usual host rock of the zinc orebodies. The areas down dip of the 'high' soil zinc anomalies have been drilled and according to the application, the exploration drilling is interpreted as indicating approximately 350,000 tons of ore assaying 3.5% zinc.

The area containing the indicated ore is not included in the project area. Instead assistance is requested in drilling deep holes down dip of barren drill holes and holes down dip of the 'low' soil zinc anomalies.

Information now available may be useful in judging the potential of areas down dip of such 'low' soil zinc anomalies.

Referral of the application to the Field Team for appropriate action is recommended.

N. E. Nelson

N. E. Nelson

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF MINES
WASHINGTON 25, D. C.

~~Kleng~~
Bailey

December 31, 1956

Re: DMEA 4586; Zinc; $112,150.00
New Jersey Zinc Co.
716-acre tract,
Cedar Springs Area
Grainger County, Tenn.

Memorandum

To: W. R. Griswold, DMEA

From: O. M. Bishop, Branch of Base Metals

Subject: Application dated December 26, 1956, received December 28, 1956

The New Jersey Zinc Co. proposes to drill north-south sections across the strike of the Knox group of sediments to explore the Kingsport formation. The projected drilling will explore to the west and east and downdip from a 16-hole group of borings which indicate 350,000 tons of 3.5 percent zinc ore. Initial drilling contemplates the hole interval in the sections will vary from 100 to 300 feet, and that sections will be at 1,200 foot intervals. Approximately 20,000 feet of drilling will be employed in the initial drilling phase. The second phase of exploration will consist of about 15,000 feet of diamond-drill hole to delineate discoveries made under the first phase.

The costing analysis appears to be in good order and estimates are about what should be expected.

I recommend that the application be referred to the field team for review and recommendation.

O. M. Bishop

O. M. Bishop

Copy to: Division of Minerals
Mr. Kiilsgaard
Mr. Lamb
Mr. Bishop
Files

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

December 27, 1956

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

Subject: DMEA-4586

Gentlemen

Your application for exploration assistance, dated December 26, 1956 submitted to our office at Knoxville, has been assigned Docket Number DMEA-4586 and referred to the Base Metals Division in the Washington office. Kindly identify all future correspondence relating to your application by this Docket Number.

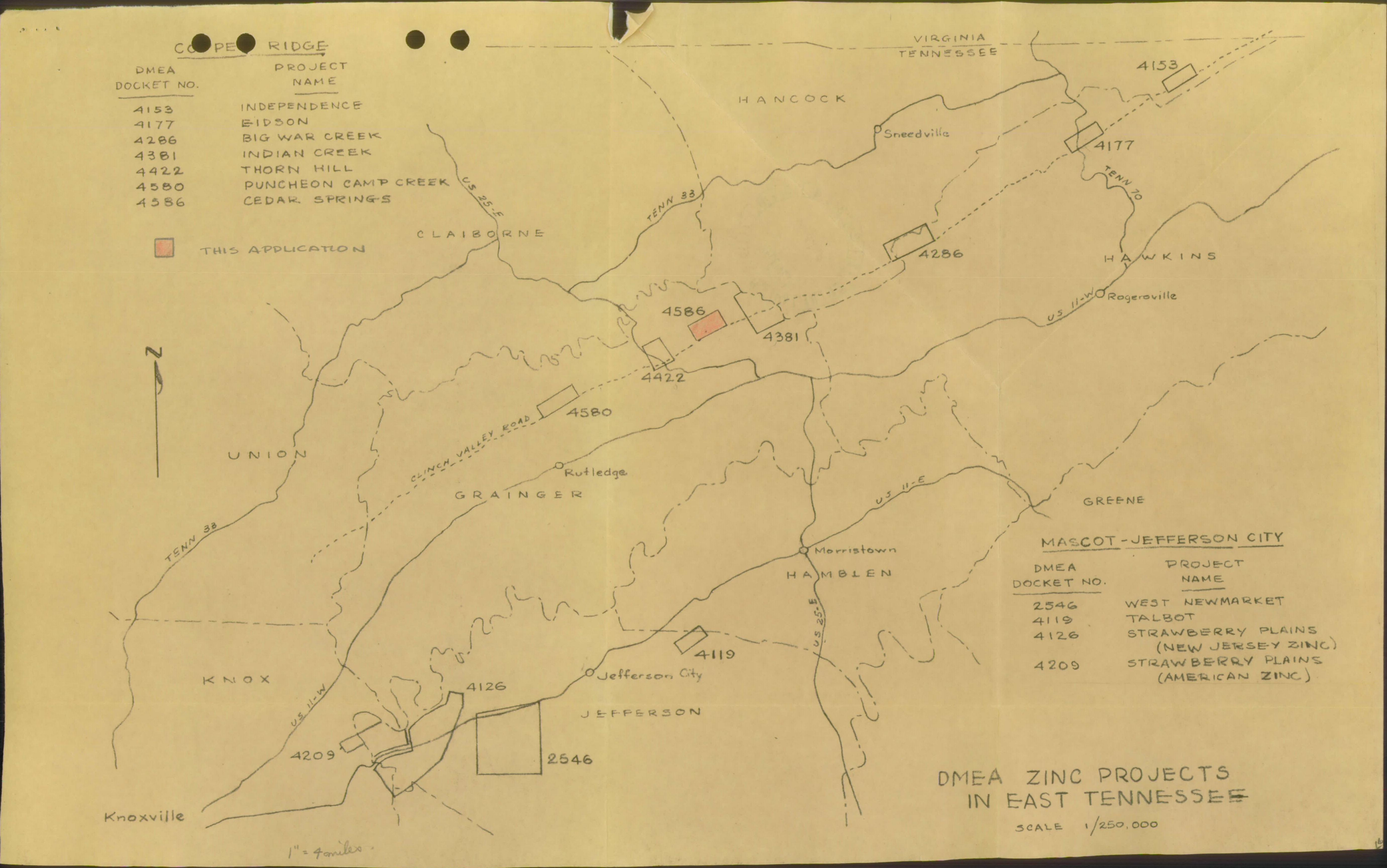
Sincerely yours,

Allen S. Dakan, Director
Operations Control and
Statistics Division

Copy to:

Code 500

6416


COPPER RIDGE
DMEA DOCKET NO.
PROJECT NAME
4153 INDEPENDENCE
4177 EIDSON
4286 BIG WAR CREEK
4381 INDIAN CREEK
4422 THORN HILL
4580 PUNCHEON CAMP CREEK
4586 CEDAR SPRINGS
THIS APPLICATION
VIRGINIA
TENNESSEE
HANCOCK
Sneedville
CLAIBORNE
US 25-E
TENN 33
HAWKINS
TENN 70
Rogersville
US 11-W
UNION
CLINCH VALLEY ROAD
Rutledge
GRAINGER
US 11-E
GREENE
Morristown
HAMBLEN
US 25-E
TENN 33
KNOX
US 11-W
Jefferson City
JEFFERSON
Knoxville
N
MASCOT-JEFFERSON CITY
DMEA DOCKET NO.
PROJECT NAME
2546 WEST NEWMARKET
4119 TALBOT
4126 STRAWBERRY PLAINS (NEW JERSEY ZINC)
4209 STRAWBERRY PLAINS (AMERICAN ZINC)
DMEA ZINC PROJECTS IN EAST TENNESSEE
SCALE 1/250,000
1" = 4 miles

RECEIVED
FEB 15 1957
D.M.E.A.

AREA EXCLUDED FROM DMEA CONTRACT

HARVEL

NELSON DALTON NJZ 12A

Creek

WOODROW DAVIDSON NJZ M&M 92A

CARLIE LANE NJZ M&M 139A

ROBERT MALLICOAT NJZ 151A

CARL HOLT NJZ

ALICE DALTON

R. DAVIDSON 145A

CARL DAVIDSON NJZ

ZILPHA CABBAGE NJZ

B.E DAVIDSON NJZ

TR

Springs

Cedar

DMEA Contract Idm E-1071

740,000

735,000

775,000

Footage Remaining 9,485'
$28,858.75

EXPLANATION

- Oc Chickamauga limestone
- Omc Mascot Formation
- Ok Kingsport Formation
- Ol Longview Formation
- X 65/45 Dip & Strike

Geochemical samples 300-900 ppm outlined by dashed line; over 900 ppm by solid line

Base - TVA Quad 162SW, 171SW & aerial photos
Property - PMA, JFP, HWM
Geology - J. Rodgers (U.S.G.S.)
Geochemical Survey -

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

CEDAR SPRINGS AREA

POSTED TO DATE 3/31/53 1-56 TEW	THE NEW JERSEY ZINC COMPANY ROGERSVILLE TENNESSEE	DRAWN SJL, JFP TRACED	DATE 2-14-52 SCALE 1"=660'	COPPER RIDGE BELT SECTOR II SHEET 3SW	GRAINGER COUNTY, TENN. FILE NO. AX-TENN 105

OFFICIAL FILE COPY
O. M. E.
RECEIVED NOV 20 1958

DATE	INITIALS	CODE

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O. M. E.
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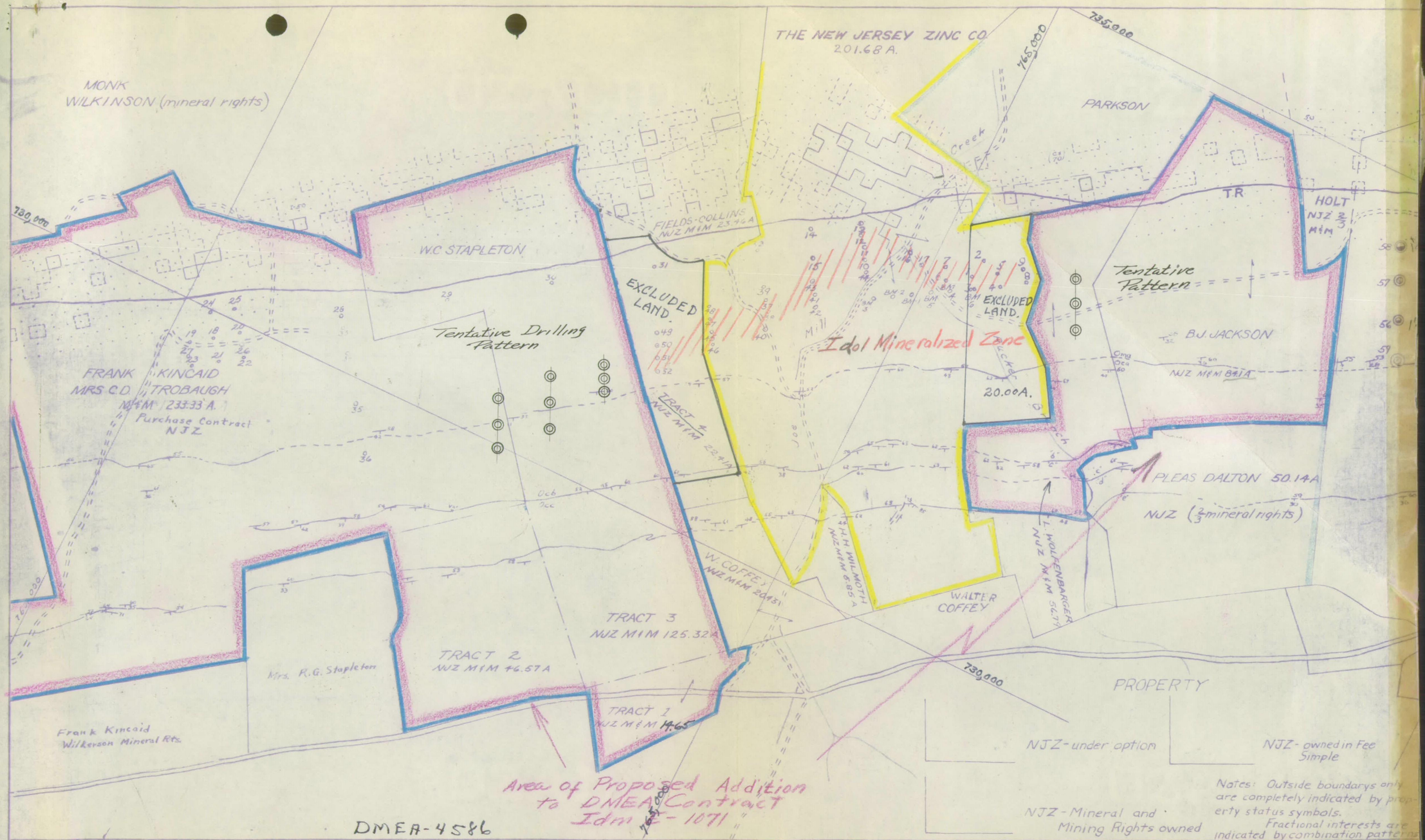
DATE	INITIALS	CODE



POSTED TO DATE	THE NEW JERSEY ZINC COMPANY	DRAWN SJL, JFP DATE 2/17/53	COPPER RIDGE BELT	GRAINGER COUNTY, TENN.
5/30/53	ROGERSVILLE TENNESSEE	TRACED SCALE 1"=660'	SECTOR II SHEET 4SW	FILE NO. AX-TENN 106
1-56 TEW				
10-56 "				

1- negative + 7 copies Full Size

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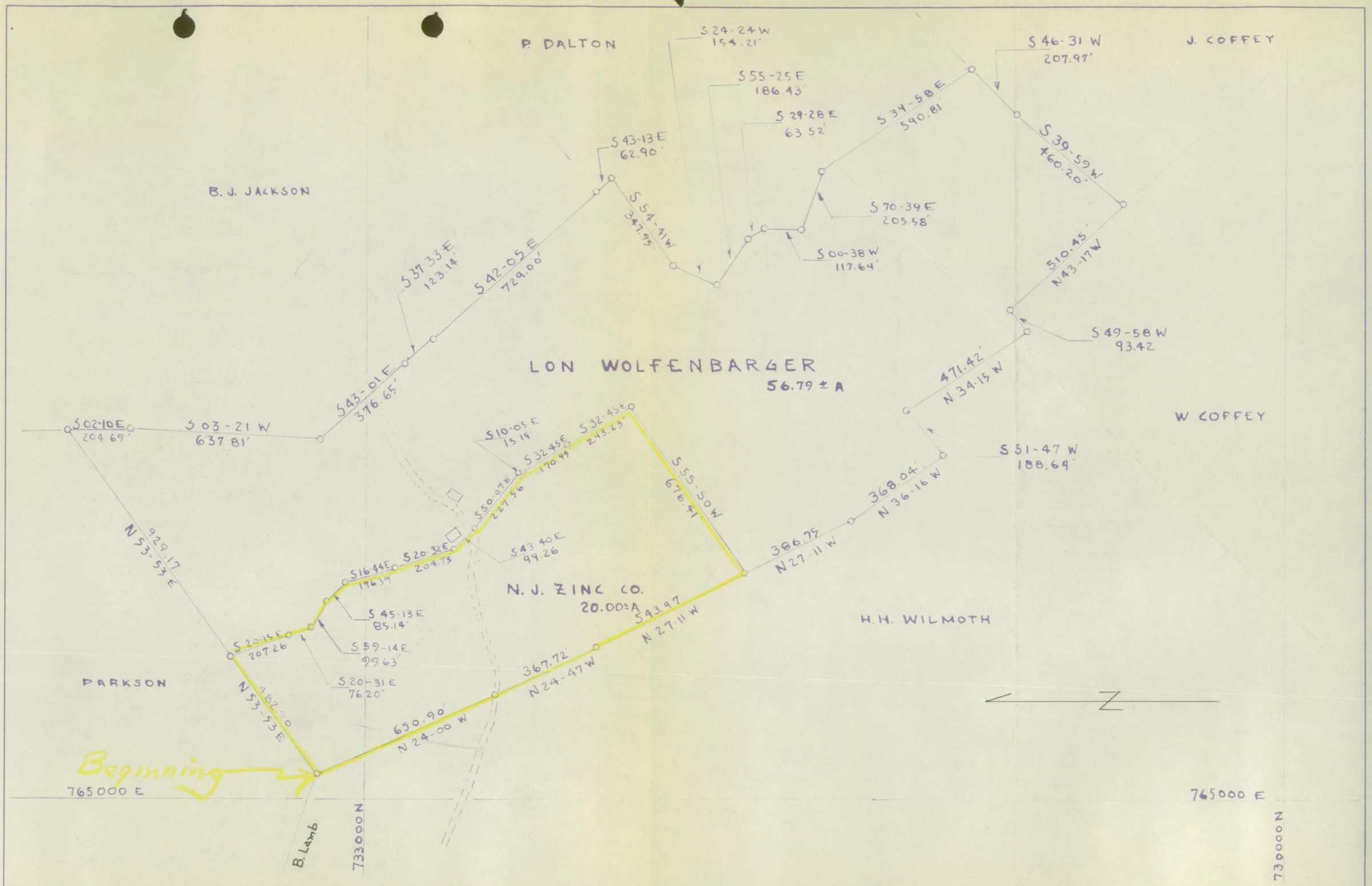

SERIAL NUMBER		DATE ISSUED		REFERENCE DRAWINGS	REVISIONS	THE NEW JERSEY ZINC COMPANY	DRAWN CLR	PROPERTY MAP	DATE 6-13-56
THIS DRAWING IN DESIGN AND DETAIL IS OUR PROPERTY AND MUST NOT BE USED EXCEPT IN CONNECTION WITH OUR WORK. ALL RIGHTS OF DESIGN AND INVENTION ARE RESERVED. THIS DRAWING MUST BE RETURNED TO THE NEW JERSEY ZINC COMPANY.						TREADWAY TENNESSEE	TRACED RWZ		SCALE 1" = 300'
						GRAINGER CO. SECTOR II AREA I	CHECKED	WOLFENBARGER & N.J. ZINC TRACTS	AX-TENN-B-1176
							APPROVED		

X5453B 1M 11-54

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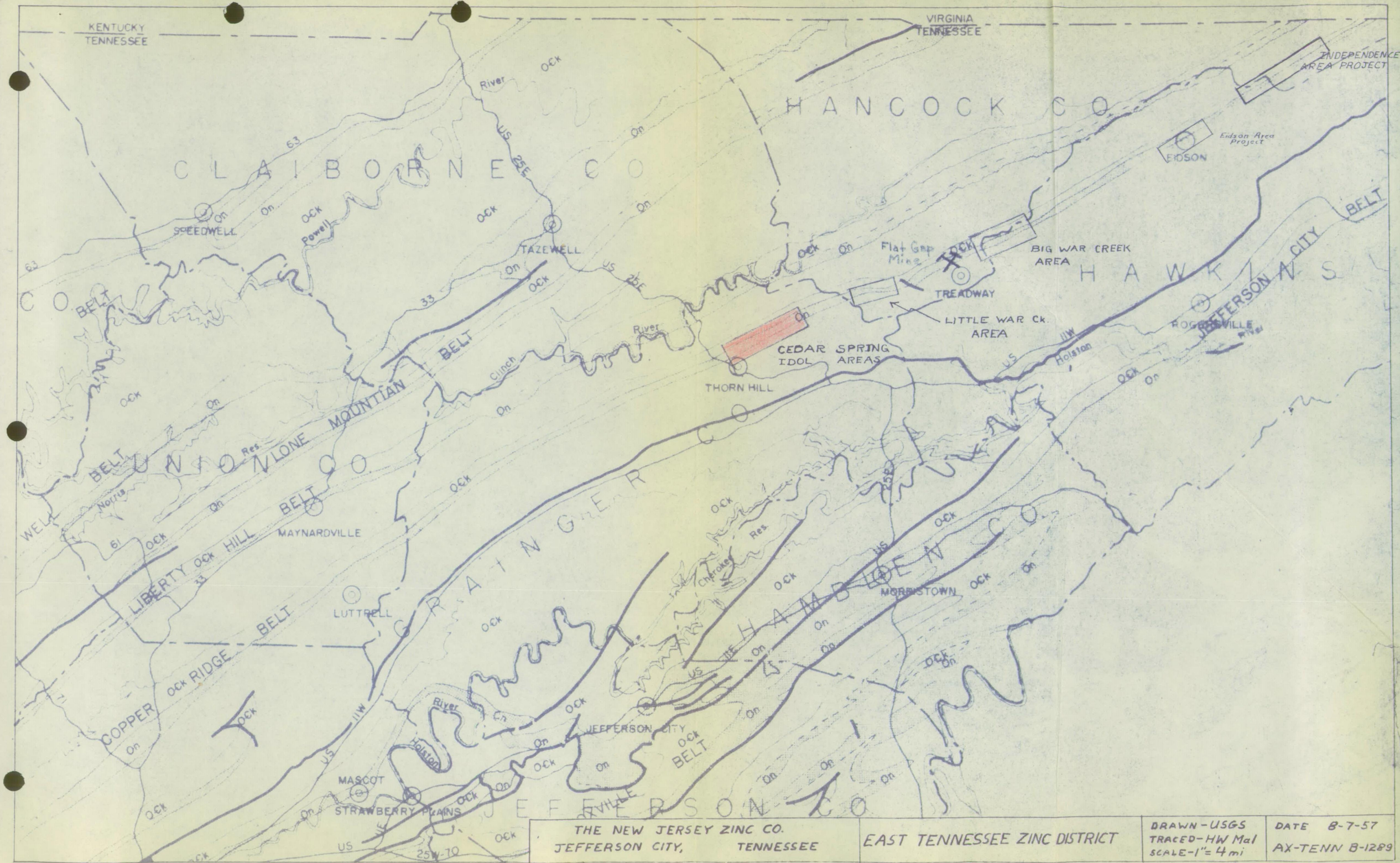
O. M. E.
RECEIVED DEC 5 1958

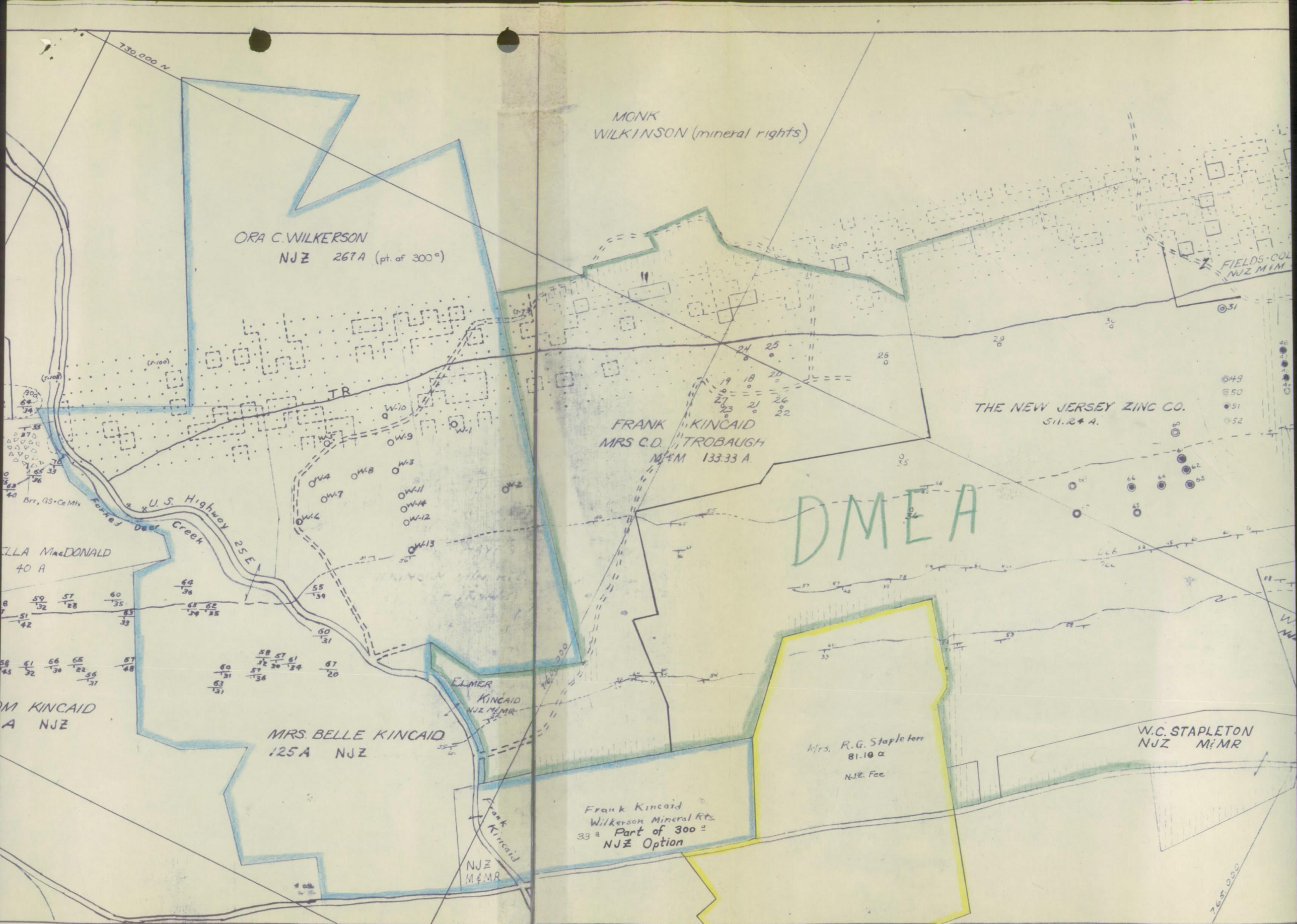
DATE	INITIALS	CODE

OFFICIAL FILE COPY
O. M. E.
RECEIVED DEC 5 1958

DATE	INITIALS	CODE



THE NEW JERSEY ZINC CO. JEFFERSON CITY, TENNESSEE	EAST TENNESSEE ZINC DISTRICT	DRAWN - USGS TRACED - HW Mal SCALE - 1" = 4 mi	DATE 8-7-57 AX-TENN 8-1289

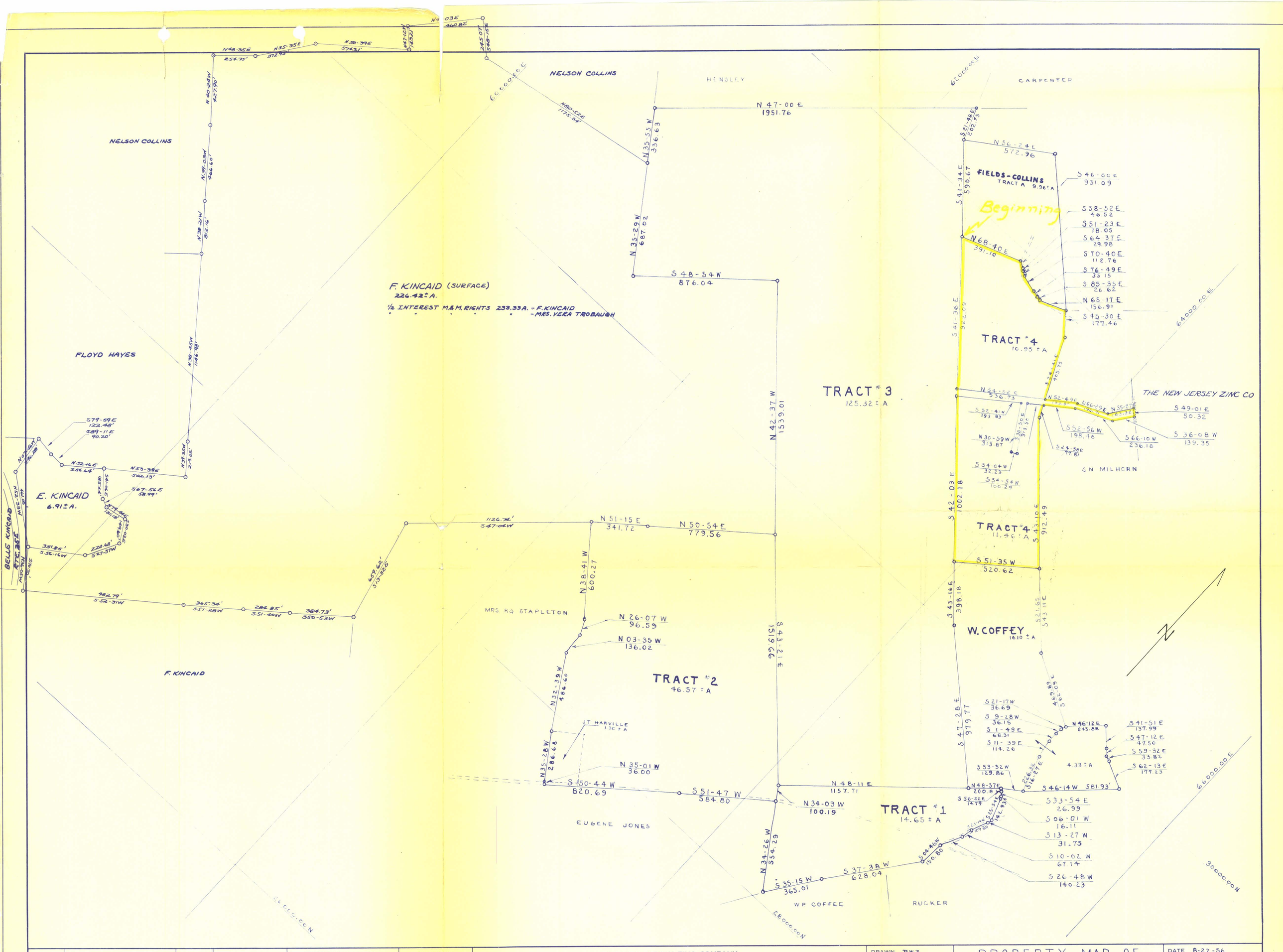


COPPER RIDGE BELT
SECTOR III SHEET 5SW

GRAINGER CO., TENN.
FILE NO. AX-TENN 587

POSTED TO DATE
5/30/55 1/6/61
1-56 TEW
0-56 "

THE NEW JERSEY ZINC COMPANY
ROGERSVILLE TENNESSEE



SERIAL NUMBER		DATE ISSUED	

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REFERENCE DRAWINGS	REVISIONS
AX TENN 220	1-16-58 — K.R.H.
AX TENN B 1168 F-C TRACT B	

THE NEW JERSEY ZINC COMPANY

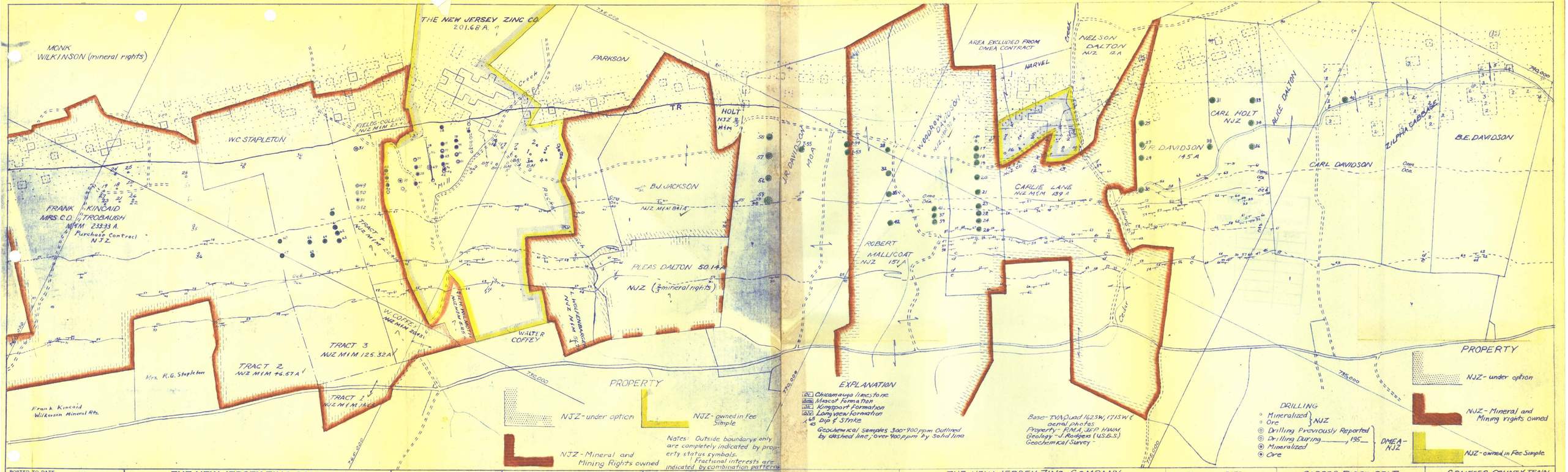
TREADWAY TENNESSEE

DRAWN	R.W.Z.
TRACED	
CHECKED	
APPROVED	

PROPERTY MAP OF
W.C. STAPLETON TRACTS #1, 2, 3, 4
FIELDS-COLLINS TRACT A, W. COFFEY
E. KINCAID & F. KINCAID

DATE	8-22-56
SCALE	1" = 300'
AX TENN C-1195	

X5453C 1M 11-54



POSTED TO DATE	THE NEW JERSEY ZINC COMPANY	DRAWN Sul, JFP DATE 2/17/53	COPPER RIDGE BELT	GRAINGER COUNTY, TENN.
5-26-53	ROGERSVILLE TENNESSEE	TRACED SCALE 1"=660'	SECTOR II SHEET 43W	FILE NO. AX-TENN 106
7-30-53				
10-56				

THE NEW JERSEY ZINC COMPANY	DRAWN DATE	COPPER RIDGE BELT	GRAINGER COUNTY, TENN.
ROGERSVILLE TENNESSEE	TRACED W.J.C. SCALE	SECTOR II CEDAR SPRINGS	AX-TENN 105

HOWARD SUTTON CO., INC., N. Y.