E-255

For Certificate of Deposit No. 46, dated January 12, 1959, giving royalty payments of $2,703.55 and $659.10, see E-98.

TRIPLICATE

STANDARD FORM 201 (Formerly Cert. of Deposit, Form 1)
Promulgated Oct. 1949 by Treasury Dept., Fiscal Service

THIS DEPOSIT IS NOT SUBJECT TO CHECK

Oak Ridge, Tennessee

DEPOSIT NO. 14-23-070-40

For credit of 5369 Dr. Trsy. Regional Office, Oak Ridge, Tenn. 11/25/50
(Name, title, and disbursing or[redacted] identification symbol of accountable officer) [redacted]te sent)

deposited with Hamilton National Bank, Knoxville, Tennessee
(Name and location of depositary)

$ 1,991.04

for accounts listed below. SCHEDULE NOS.

ACCOUNT SYMBOL	TITLE OF ACCOUNT TO BE CREDITED	AMOUNT
14X1401	Idm-E636 Byrd Mica Mine (Royalty Payment)	048.39
	Idm-E255 Ozark-Mahoning Co. (Royalty Payment)	1,942.65

(Depositor will insert below his name, title, Department or Agency concerned, and his address)

Defense Minerals Exploration Administration
Bureau of Mines, Dept. of Interior
Helen R. Miller, Adm. Asst.
P. O. Box 217
Norris, Tennessee

SPACE BELOW TO BE USED BY DEPOSITARY ONLY

I certify that the above amount has been received for credit in the account of the Treasurer of the United States on the date shown, subject to adjustment for uncollectible items included therein.

(Authorized signature)

(Date of credit in Treasurer's account)

DEPOSITARY WILL DATE, SIGN, AND RETURN THIS TO DEPOSITOR FOR HIS RETAINED COPY

16—59686b-1 GPO

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O. M. E.
RECEIVED DEC 3 1958

DATE	INITIALS	CODE

TRIPLICATE

STANDARD FORM 201 (Formerly Cert. of Deposit, Form 1)
Promulgated Oct. 1949 by Treasury Dept., Fiscal Service

THIS DEPOSIT IS NOT SUBJECT TO CHECK

Oak Ridge, Tennessee

DEPOSIT NO. 14-23-070-31

For credit of 5369 Br. Trsy. Regional Office, Oak Ridge, Tenn. [redacted] 10/20/58
(Name, title, and disbursing or [redacted] identification symbol of accountable officer) [redacted] date sent)

deposited with Hamilton National Bank, Knoxville, Tennessee
(Name and location of depositary)

$ 4,054.81

for accounts listed below. SCHEDULE NOS.

ACCOUNT SYMBOL	TITLE OF ACCOUNT TO BE CREDITED	AMOUNT
14X4401	Idm-E255 Ozark-Mahoning Co.(Royalty Payment)	1,923.41
	Idm-E255 Ozark-Mahoning Co. (Royalty Paym nt)	2,131.40

(Depositor will insert below his name, title, Department or Agency concerned, and his address)

Defense Minerals Exploration Administration
Bureau of Mines, Dept. of Interior
Helen R. Miller, Personal Assistant
P. O. Box 217
Norris, Tennessee

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OCT 20 1958

(Date of credit in Treasurer's account)

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THIS DEPOSIT IS NOT SUBJECT TO CHECK

Oak Ridge, Tennessee

DEPOSIT NO. 14-23-070-14

For credit of 5369 Br. Trsy. Regional Office, Oak Ridge, Tenn. 8/25/58
(Name, title, and disbursing or [redacted] identification symbol of accountable officer) [redacted]te sent)

deposited with Hamilton National Bank, Knoxville, Tennessee
(Name and location of depositary)

$ 1392.77

for accounts listed below. SCHEDULE NOS.

ACCOUNT SYMBOL	TITLE OF ACCOUNT TO BE CREDITED	AMOUNT
14X4401	Idm-E255 Ozark-Mahoning (Royalty Payment)	1392.77

(Depositor will insert below his name, title, Department or Agency concerned, and his address)

Defense Minerals Exploration Administration
Bureau of Mines, Dept. of Interior
Helen R. Miller, Personal Assistant
P. O. Box 217
Norris, Tennessee

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(Authorized signature)

AUG 25 1958

(Date of credit in Treasurer's account)

DEPOSITARY WILL DATE, SIGN, AND RETURN THIS TO DEPOSITOR FOR HIS RETAINED COPY

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STANDARD FORM 201 (Formerly Cert. of Deposit, Form 1)
Promulgated Oct. 1949 by Treasury Dept., Fiscal Service

THIS DEPOSIT IS NOT SUBJECT TO CHECK Oak Ridge, Tennessee

DEPOSIT NO. 14-23-070-6

$ 1,705.02

For credit of 5369 Br. Trsy. Regional Office, Oak Ridge, Tenn. 7/25/58
(Name, title, and disbursing or [redacted] identification symbol of accountable officer) [redacted]te sent)

deposited with Hamilton National Bank, Knoxville, Tennessee
(Name and location of depositary)

for accounts listed below. SCHEDULE NOS.

ACCOUNT SYMBOL	TITLE OF ACCOUNT TO BE CREDITED	AMOUNT
14X4401	Idm-E255 Ozark-Mahoning Co. (Royelty Payment)	1,705.02

(Depositor will insert below his name, title, Department or Agency concerned, and his address)

Defense Minerals Exploration Administration
Bureau of Mines, Dept. of Interior
Helen R. Miller, Personal Assistant
P. O. Box 217
Norris, Tennessee

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I certify that the above amount has been received for credit in the account of the Treasurer of the United States on the date shown, subject to adjustment for uncollectible items included therein.

(Authorized signature)

(Date of credit in Treasurer's account)

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D M E A
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DATE	INITIALS	[illegible]
7/28	[illegible]	225 800

TRIPLICATE

STANDARD FORM 201 (Formerly Cert. of Deposit, Form 1)
Promulgated Oct. 1949 by Treasury Dept., Fiscal Service

THIS DEPOSIT IS NOT SUBJECT TO CHECK

Oak Ridge, Tennessee

DEPOSIT NO. 14-23-070-91

For credit of 5369 Br. Trsy. Regional Office, Oak Ridge, Tenn. 6/24/58
(Name, title, and disbursing or [redacted] identification symbol of accountable officer) [redacted]te sent)

deposited with Hamilton National Bank, Knoxville, Tennessee
(Name and location of depositary)

$ 1,732.77

for accounts listed below. SCHEDULE NOS.

ACCOUNT SYMBOL	TITLE OF ACCOUNT TO BE CREDITED	AMOUNT
14X4401	Idm-E255 Ozark-Mahoning Co. (Royalty Payment)	$1,732.77

(Depositor will insert below his name, title, Department or Agency concerned, and his address)

Defense Minerals Exploration Administration
Bureau of Mines, Dept. of Interior
Helen R. Miller, Personal Assistant
P. O. Box 217
Norris, Tennessee

SPACE BELOW TO BE USED BY DEPOSITARY ONLY

I certify that the above amount has been received for credit in the account of the Treasurer of the United States on the date shown, subject to adjustment for uncollectible items included therein.

T. Hugh Butler
(Authorized signature)

JUN 24 1958
(Date of credit in Treasurer's account)

DEPOSITARY WILL DATE, SIGN, AND RETURN THIS TO DEPOSITOR FOR HIS RETAINED COPY

16—59686b-1 GPO

OFFICIAL FILE COPY
DMEA
RECEIVED JUN 30 1958

DATE	[illegible]	[illegible]
6-30	H.g.	225
		800

For Certificate of Deposit No. 84, dated May 27, 1958, giving royalty payment of $1,841.15, see E-98.

TRIPLICATE

STANDARD FORM 201 (Formerly Cert. of Deposit, Form 1)
Promulgated Oct. 1949 by Treasury Dept., Fiscal Service

THIS DEPOSIT IS NOT SUBJECT TO CHECK

Oak Ridge, Tennessee

DEPOSIT NO. 14-23-070-80

For credit of 5369 Br. Trsy. Regional Office, Oak Ridge, Tenn. 4/22/58
(Name, title, and disbursing o[illegible]r identification symbol of accountable officer) [illegible]ate sent)

deposited with Hamilton National Bank, Knoxville, Tennessee
(Name and location of depositary)

$ 4,416.07

for accounts listed below. SCHEDULE NOS.

ACCOUNT SYMBOL	TITLE OF ACCOUNT TO BE CREDITED	AMOUNT
14X4401	Idm-E255 Ozark-Mahoning Co. (Royalty Payment)	4,149.39
	Idm-E1106 Taylor Prospect (Royalty Payment)	12.38
	Idm-E977 Hawk Mining Co. (Royalty Payment)	254.30

(Depositor will insert below his name, title, Department or Agency concerned, and his address)

Defense Minerals Exploration Administration
Bureau of Mines, Dept. of Interior
Helen R. Miller, Personal Assistant
P. O. Box 217
Norris, Tennessee

SPACE BELOW TO BE USED BY DEPOSITARY ONLY

I certify that the above amount has been received for credit in the account of the Treasurer of the United States on the date shown, subject to adjustment for uncollectible items included therein.

(Authorized signature)

(Date of credit in Treasurer's account)

DEPOSITARY WILL DATE, SIGN, AND RETURN THIS TO DEPOSITOR FOR HIS RETAINED COPY

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DMEA
RECEIVED APR 24 1958

DATE	INITIALS	CODE
4/24/	H.S.	225-800

TRIPLICATE

STANDARD FORM 201 (Formerly Cert. of Deposit, Form 1)
Promulgated Oct. 1949 by Treasury Dept., Fiscal Service

THIS DEPOSIT IS NOT SUBJECT TO CHECK

Oak Ridge, Tennessee

DEPOSIT NO. 14-23-070-79

For credit of 5369 Br. Tray. Regional Office, Oak Ridge, Tenn. 4/18/58
(Name, title, and disbursing o[illegible]r identification symbol of accountable officer) [illegible]ate sent)

deposited with Hamilton National Bank, Knoxville, Tennessee
(Name and location of depositary)

$ 2,455.41

for accounts listed below. SCHEDULE NOS.

ACCOUNT SYMBOL	TITLE OF ACCOUNT TO BE CREDITED	AMOUNT
14X4401	Idm-E255 Ozark-Mahoning (Royalty Payment)	2,434.41
	Idm-E679 Ruby Mine (Royalty Payment)	21.00

(Depositor will insert below his name, title, Department or Agency concerned, and his address)

Defense Minerals Exploration Administration
Bureau of Mines, Dept. of Interior
Helen R. Miller, Personal Assistant
P. O. Box 217
Norris, Tennessee

SPACE BELOW TO BE USED BY DEPOSITARY ONLY

I certify that the above amount has been received for credit in the account of the Treasurer of the United States on the date shown, subject to adjustment for uncollectible items included therein.

[illegible]
(Authorized signature)

APR 18 1958
(Date of credit in Treasurer's account)

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DMEA
RECEIVED APR 21 1958

DATE	INITIALS	CODE
4/21	J.H.	225 800

For Certificate of Deposit No. 70, dated February 25, 1958, giving royalty payment of $1547.47, see E-57.

Oak Ridge, Tennessee

THIS DEPOSIT IS NOT SUBJECT TO CHECK

DEPOSIT NO. 14-23-070-61

For credit of 5369 Br. Trsyl Regional Office, Oak Ridge, Tenn. 1/17/58
(Name, title, and disbursing or ot[illegible] identification symbol of accountable officer) [illegible] sent)

deposited with Hamilton National Bank, Knoxville, Tennessee
(Name and location of depositary)

$ 1,797.00

for accounts listed below. SCHEDULE NOS.

ACCOUNT SYMBOL	TITLE OF ACCOUNT TO BE CREDITED	AMOUNT
14X1401	Idm-E255 Ozark-Mahoning (Royalty Payment)	$1,797.00

(Depositor will insert below his name, title, Department or Agency concerned, and his address)

Defense Minerals Exploration Administration
Bureau of Mines, Dept. of Interior
Helen R. Miller, Personal Assistant
P. O. Box 217
Norris, Tennessee

SPACE BELOW TO BE USED BY DEPOSITARY ONLY

I certify that the above amount has been received for credit in the account of the Treasurer of the United States on the date shown, subject to adjustment for uncollectible items included therein.

(Authorized signature)

(Date of credit in Treasurer's account)

DEPOSITARY WILL DATE, SIGN, AND RETURN THIS TO DEPOSITOR FOR HIS RETAINED COPY

16—59686b-1 GPO

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STANDARD FORM 201 (Formerly Cert. of Deposit, Form 1)
Promulgated Oct. 1949 by Treasury Dept., Fiscal Service

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1/20/58	Z.H.	226
		800

TRIPLICATE

STANDARD FORM 201 (Formerly Cert. of Deposit, Form 1)
Promulgated Oct. 1949 by Treasury Dept., Fiscal Service

THIS DEPOSIT IS NOT SUBJECT TO CHECK

Oak Ridge, Tennessee

DEPOSIT NO. 14-23-070-54

For credit of 5369 Br. Trsy. Regional Office, Oak Ridge, Tenn. 12/23/57
(Name, title, and disbursing or identification symbol of accountable officer) (Date sent)

deposited with Hamilton National Bank, Knoxville, Tennessee
(Name and location of depositary)

$ 1,633.27

for accounts listed below. SCHEDULE NOS.

ACCOUNT SYMBOL	TITLE OF ACCOUNT TO BE CREDITED	AMOUNT
14X4401	Idm-E255 Ozark-Mahoning Company (Royalty Payment)	$1,633.27

(Depositor will insert below his name, title, Department or Agency concerned, and his address)

Defense Minerals Exploration Administration
Bureau of Mines, Dept. of Interior
Helen R. Miller, Personal Assistant
P. O. Box 217
Norris, Tennessee

SPACE BELOW TO BE USED BY DEPOSITARY ONLY

I certify that the above amount has been received for credit in the account of the Treasurer of the United States on the date shown, subject to adjustment for uncollectible items included therein.

(Authorized signature)

DEC 23 1957
(Date of credit in Treasurer's account)

DEPOSITARY WILL DATE, SIGN, AND RETURN THIS TO DEPOSITOR FOR HIS RETAINED COPY

16—59686b-1 GPO

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RECEIVED DEC 26 1957

DATE	INITIALS	CODE
12/26/	[illegible]	225
		800

TRIPLICATE

STANDARD FORM 201 (Formerly Cert. of Deposit, Form 1)
Promulgated Oct. 1949 by Treasury Dept., Fiscal Service

THIS DEPOSIT IS NOT SUBJECT TO CHECK

Oak Ridge, Tennessee

DEPOSIT NO. 14323-070-44

For credit of 5369 Br. Tray Regional Office, Oak Ridge, Tenn 11/21/57
(Name, title, and disbursing or identification symbol of accountable officer) (Date sent)

deposited with Hamilton National Bank, Knoxville, Tennessee
(Name and location of depositary)

$ 2,086.90

for accounts listed below. SCHEDULE NOS.

ACCOUNT SYMBOL	TITLE OF ACCOUNT TO BE CREDITED	AMOUNT
14X4401	Idm-E255 Ozark-Mahoning Co. (Royalty Payment)	$2,086.90

(Depositor will insert below his name, title, Department or Agency concerned, and his address)

Defense Minerals Exploration Administration
Bureau of Mines, Dept. of Interior
Helen R. Miller, Personal Assistant
P. O. Box 217
Norris, Tennessee

SPACE BELOW TO BE USED BY DEPOSITARY ONLY

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(Authorized signature)

(Date of credit in Treasurer's account)

DEPOSITARY WILL DATE, SIGN, AND RETURN THIS TO DEPOSITOR FOR HIS RETAINED COPY

16—59686b-1 GPO

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OKEO
RECEIVED NOV 25 1967

DATE	[illegible]	[illegible]
11/25	J.J.	225 800

For Certificate of Deposit No. 33, dated October 15, 1957, giving royalty payment of $2,974.75, see E-57.

For Certificate of Deposit No. 27, dated September 23, 1957, giving royalty payments of $2,780.29 and $2,777.22, see E-98.

TRIPLICATE

STANDARD FORM 201 (Formerly Cert. of Deposit, Form 1)
Promulgated Oct. 1949 by Treasury Dept., Fiscal Service

THIS DEPOSIT IS NOT SUBJECT TO CHECK Oak Ridge, Tennessee

DEPOSIT NO. 14-23-070-17

For credit of 5369 Br. Trey. [redacted]tional Office, Oak Ridge, Tenn. [redacted] 8-23-57
(Name, title, and disbursing or d[redacted]identification symbol of accountable officer) [redacted]te sent)

deposited with Hamilton National Bank, Knoxville, Tennessee
(Name and location of depositary)

$ 1,737.47

for accounts listed below. SCHEDULE NOS.

ACCOUNT SYMBOL	TITLE OF ACCOUNT TO BE CREDITED	AMOUNT
14X4401	Idm-E255 Ozark-Mahoning (Royalty payment)	$1,737.47

(Depositor will insert below his name, title, Department or Agency concerned, and his address)

Defense Minerals Exploration Administration
Bureau of Mines, Dept. of Interior
Helen R. Miller, Personal Assistant
P. O. Box 217
Norris, Tennessee

SPACE BELOW TO BE USED BY DEPOSITARY ONLY

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(Authorized signature)

AUG 23 1957
(Date of credit in Treasurer's account)

DEPOSITARY WILL DATE, SIGN, AND RETURN THIS TO DEPOSITOR FOR HIS RETAINED COPY

16—59686b-1 GPO

RECEIVED
AUG 28 1957
D.M.E.A.

For Certificate of Deposit No. 6, dated July 25, 1957, giving royalty payment of $1,642.72, see E-98.

JUL 24 1957

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

Re: Docket No. DGSA-2818 (Fluorspar)
Consolidating Company
Hill-Indford Farm
Hardin County, Illinois
Assisted Contract No. [illegible]

Dear Mr. Lawrence:

The Semi-Annual Report of Certified Project for the period ended June 30, 1957, indicated royalty due and unpaid on production from the land subject to this exploration project to June 1, 1957, amounted to $3,[illegible].[illegible]. Mr. Burnsister was contacted by telephone with regard to this amount due. He advised that the information was received in a letter dated June 17, 1957, from the Operator and has now furnished this office a copy of the letter. It is understood that you have also been furnished a copy.

Presumably the royalty due has been computed in the manner outlined in the Operator's letter dated February 14, 1957. Monthly payments of royalty should be made by the company to DGSA on such basis, subject to audit as and when determined to be necessary.

Will you please request the Operator to pay the royalty now due and to arrange to make prompt monthly settlements of the royalty amount in the future.

Sincerely yours,

W. S. Martin

ACTING Chairman, Operating Committee

APPROVED:

Horace T. Reno

Member, Bureau of Mines

Thor H. Kiilsgaard

Member, Geological Survey

CRFisher/ab
July 22, 1957

Copy to: Docket
Admr. Reading File
Operating Committee
Mr. Kiilsgaard, USGS
Mr. Dietrich, BOM
Mr. Chambers
Mr. Hank

CHEMICALS OZARK MAHONING

Ozark-Mahoning Company

Mahoning Mining Division
Rosiclare, Illinois

Fisher
Audit Dept

June 17, 1957

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DMEA
RECEIVED JUL 19 1957

DATE	INITIALS	CODE
7/19	P.K.	220
		800

Mr. H. L. Burmeister
Mine Examination & Exploration Engineer
Defense Minerals Exploration Administration
U. S. Department of the Interior
College Park, Maryland

Dear Mr. Burmeister:

Re: DMEA-2248, Idm-E255-Fluorspar
Ozark-Mahoning Company
Hill-Ledford Tract
Hardin County, Illinois

I wish to acknowledge your telegram of June 14th requesting operating data on the Hill-Ledford Tract, as outlined in your letter of June 3rd, reference the Loyd-Gibson Tract. Below is tabulated the data in the order outlined by you:

(1)	Royalty payments - this period	$ 375.24
(2)	Previous royalty payments	773.34
(3)	Total royalty payments	1,148.58
(4)	Royalty due on production to June 1, 1957	3,383.05
(5)	Increase of reserves by work performed subsequent to D.M.E.A. work	484,418 Tons
(6)	Production D.M.E.A. ore, this period	4,695 "
	Assay 34.36% CaF_2 - 0.76% Zn	
	Production - previous period	808 "
	Assay 41.37% CaF_2 - 0.65% Zn - 0.18% Pb	
	Production to June 1, 1957	5,773 "
	Assay 35.34% CaF_2 - 0.74% Zn	
(7)	Production operator's ore	None

(8) The final report sent you on February 4, 1953 at the time the original project was concluded showed the following tonnages of ore:

Block A	254,600 Tons	- Assay 37.40% CaF_2 - 3.46% Zn - 0.20% Pb
	209,222 "	- Assay 33.40% CaF_2 - 1.54% Zn
Total	463,822 Tons	

Our tonnage estimate as of December 31, 1956 shows the following tonnages of ore, including ore developed by D. M. E. A. project:

Block A	374,695 Tons	- Assay 35.26% CaF_2 - 3.35% Zn - 0.82% Pb
Block B, C, & D	497,420 Tons	- Assay 33.20% CaF_2 - 1.30% Zn
Bethel Ore	76,125 Tons	- Assay 29.00% CaF_2 - 1.00% Zn
Total	948,240 Tons	

The development program at the mine includes the sinking of a 14' x 6' shaft to a depth of 809 ft. The shaft is bottomed in the white lime formation which occurs immediately below the Sub-Rosiclare sand formation. A crosscut was driven from the shaft in a northwesterly direction about 50 ft. immediately below the Rosiclare contact. The floor of the crosscut is at an approximate elevation of -312 ft. Ore was cut about 20 ft. from the shaft. Consequently, there was no appreciable amount of drifting necessary to start mining operations. Approximately $350,000.00 was spent in shaft sinking, cross-cutting, underground crushing plant and the surface plant. This is a nice layout. Our books will show a total expenditure of $128,629.55 for churn drilling as well as diamond drilling.

Attached hereto is an up-to-date 50 ft. scale map of the property showing all holes drilled to date as well as the underground workings.

I hope you can find time to visit the property on your next trip to Hardin County. The mine is opening up nicely.

With kind personal regards, I am

Very truly yours,

OZARK-MAHONING COMPANY
Mahoning Mining Division

A. G. Johnson

A. G. Johnson

AGJ/blc

Enclosure

cc: Mr. C. W. Sohosky

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

February 27, 1957

Memorandum

To: Operating Committee, DMEA - Washington

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

Subject: DMEA-2248, Idm-E255-Fluorspar. Ozark-Mahoning Co. Rosiclare, Ill. Hill-Ledford Tract, Hardin County, Illinois.

Reference is made to your letter of January 28.

Enclosed are three copies of a letter from the Operator, and three copies of our reply. It will be noted that all crude ores are sampled before co-mingling with ores from other properties.

Robert A. Laurence
Executive Officer, DMEA, Reg.V

V. J. Lynch, Member
Bureau of Mines

RAL/sm

Millar
Lynhh
Files
Opr. Com.

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DMEA
RECEIVED MAR 1 1957

DATE	INITIALS	COPY

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION
ROOM 1 POST OFFICE BLDG.
KNOXVILLE 2, TENN.

February 27, 1957

RAL/zm
cc:
Operating Committee-3
Millar
Lynch
Files

Mr. A. G. Johnson
Ozark-Mahoning Company
Mahoning Mining Division
Rosiclare, Illinois

Re: DMEA-2248 (fluorspar)
Hill-Ledford Tract
Hardin County, Illinois
Amended Contract-Idm-E255

Dear Mr. Johnson:

Thank you for your letter of February 14 relative to the computation of royalties on ore produced from the subject property. My reply is late because I have been out of town.

Because ores are sampled before co-mingling, it probably will not be necessary to work out a royalty agreement as was suggested in my letter of February 8. However, it would be better to wait until final settlements have been received before computing royalties instead of estimating the selling price, as has been done until now.

The type of statement which you are furnishing to the Bureau of Land Management will provide the type of information we need. It will be appreciated if you can send such a statement, as well as copies of the settlement sheets for lead and zinc concentrates, when the royalty payments are made. Please send these statements for all sales since the date of the DMEA contract.

Your letter is being forwarded to the Washington office for the attention of our Contract Administration and Audit Division, and any comments or suggestions they may have will be passed along to you.

I appreciate your suggestion that I visit with your Mr. Sohosky, to work out an arrangement for reporting the data to us, but I do not think this will be necessary, and I have no plans to be in your area in the near future. Mr. Harry Burmeister, of the U. S. Bureau of Mines, has been handling the field end of this contract for us, and he will probably call on you when he is next in the district.

Very truly yours,

Robert A. Laurence, Executive Officer
DMEA-Region V

Ozark-Mahoning Company

Mahoning Mining Division
Rosiclare, Illinois

February 14, 1957

RECEIVED
FEB 18 1957

Mr. Robert A. Laurence
Executive Officer, DMEA
Region V
United States Department of the Interior
Defense Minerals Exploration Administration
Room 1, Post Office Bldg.
Knoxville 2, Tennessee

EXTRA COPY
DMEA
RECEIVED MAR 1 1957

DATE	INITIALS	CODE
		80

Re: DMEA-2248 (Fluorspar)
Contract-Idm-E255
Ozark-Mahoning Company
Hill-Ledford Tract
Hardin County, Illinois

Dear Mr. Laurence:

I wish to acknowledge your letter of February 8 relative to the data to be furnished in connection with royalty to be paid on the above captioned property.

The Rosiclare flotation plant processes ores from a number of properties. Before the crude ore from any one property loses its identity it is segregated in a separate hopper, crushed and sampled prior to co-mingling with other ores. The sampled portion is then assayed to determine the lead, zinc, fluorspar content. Mill extractions and values are determined on a monthly basis. From this data we determine the number of tons of zinc, lead and fluorspar concentrates produced from the various ores over a monthly period, as well as the values thereof based on prices actually received over a monthly period.

We do not receive settlement sheets covering fluorspar shipments, as we invoice the customer at the end of the month and receive payment on that basis. We do, however, receive settlements covering lead and zinc concentrates which can be furnished.

Attached hereto is a copy of statements we furnish the Bureau of Land Management on land leased from the government located in Hardin Co., Illinois. If this type of information provides the kind of information you need for your records, we will be glad to furnish same on a monthly basis. If not, we will be glad to make any cahnges you feel are necessary. If you happen to be in the Rosiclare area in the near future, Mr. Carroll Sohosky, the local works accountant, will be happy to work out with you satisfactory arrangements.

The property should be in steady production on April 1, 1957. So far what little production there has been has come from development drifts.

Very truly yours,

OZARK-MAHONING COMPANY
Mahoning Mining Division

A. G. Johnson

A. G. Johnson

AGJ/phs
cc: Mr. Carroll Sohosky
Attached

GOVERNMENT ROYALTY STATEMENT FOR PERIOD ENDING MARCH 31, 1956

BLM-A-01150--III.	January	February	March	Totals
1. Ore on Hand - Start of Month	11640	17306	21620	
2. Total Tons Hoisted	10498	9144	10864	30506
3. Deduct Waste Discarded	-	-	-	-
4. Ore Hoisted	10493	9144	10864	30506
5. Total Ore on Hand	22138	26450	32484	
6. Deduct Ore Processed	4832	4830	5014	14676
7. Ore on Hand End of Month	17306	21620	27470	
8. Head Feed Assay				
(a) % CaF_2	30.87	28.05	29.00	
Tons CaF_2	1491.64	1354.82	1454.06	4300.52
(b) % Zn	5.89	5.98	5.98	
Tons Zn	284.60	288.84	299.84	873.28
9. Average Price Per Ton				
(a) CaF_2 Metallurgical	34.87	35.01	35.30	
CaF_2 Other	4[illegible].69	48.64	48.60	
(b) Zn	165.88	167.99	166.37	
10. % Recovery on Ore Milled				
(a) CaF_2 Metallurgical	7.20	13.17	13.75	
Tons	107.40	178.42	199.94	485.76
CaF_2 Others	77.42	80.66	85.34	
Tons	1154.82	1092.80	1240.90	3488.52
(b) Zn %	93.57	92.04	92.82	
Tons	266.30	265.84	278.32	810.46
11. Value of Minerals Recovered				
(a) CaF_2 Metallurgical	3745.04	6246.48	7057.88	17049.40
CaF_2 Others	56228.18	53153.80	60307.74	169689.72
(b) Zinc	44173.84	44658.46	46304.10	135136.40
Totals	104147.06	104058.74	113669.72	321875.52
12. Amount of Allowable Deductions	29571.84	29559.60	30685.68	89817.12
13. Amount to Which Royalty is Applied	74575.22	74499.14	82984.04	232058.40
14. Royalty Payment 2%	1491.50	1489.98	1659.68	4641.16

EXTRA COPY
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DATE | INITIALS | CODE

TRIPLICATE

STANDARD FORM 201 (Formerly Cert. of Deposit, Form 1)
Promulgated Oct. 1949 by Treasury Dept., Fiscal Service

THIS DEPOSIT IS NOT SUBJECT TO CHECK

Oak Ridge, Tennessee

DEPOSIT NO. 14-23-070-108

For credit of 5369 Br. Trey. [redacted]ional Office, Oak Ridge, Tenn. [redacted]/4/57
(Name, title, and disbursing o[redacted]r identification symbol of accountable officer) (Date sent)

deposited with Hamilton National Bank, Knoxville, Tennessee
(Name and location of depositary)

$ 391.24

for accounts listed below. SCHEDULE NOS.

ACCOUNT SYMBOL	TITLE OF ACCOUNT TO BE CREDITED	AMOUNT
14X4401	Idm-E255 Ozark-Mahoning (Royalty Payment)	375.24
	Idm-E519 Twigg & Glenn (Royalty Payment)	16.00

(Depositor will insert below his name, title, Department or Agency concerned, and his address)

Defense Minerals Exploration Administration
Bureau of Mines, Dept. of Interior
Helen R. Miller, Adm. Asst.
P. O. Box 217
Norris, Tennessee

SPACE BELOW TO BE USED BY DEPOSITARY ONLY

I certify that the above amount has been received for credit in the account of the Treasurer of the United States on the date shown, subject to adjustment for uncollectible items included therein.

(Authorized signature)

(Date of credit in Treasurer's account)

DEPOSITARY WILL DATE, SIGN, AND RETURN THIS TO DEPOSITOR FOR HIS RETAINED COPY

16—59686b-1 GPO

Oak Ridge, Tennessee

THIS DEPOSIT IS NOT SUBJECT TO CHECK

DEPOSIT NO. 14-23-070-58

For credit of 1428 Br. Trsy. Regional Office, Oak Ridge, Tenn. 10/17/56
(Name, title, and disbursing or other identification symbol of accountable officer) (Date sent)

deposited with Hamilton National Bank, Knoxville, Tennessee
(Name and location of depositary)

$ 1,243.62

for accounts listed below. SCHEDULE NOS.

ACCOUNT SYMBOL	TITLE OF ACCOUNT TO BE CREDITED	AMOUNT
14X4401	Idm-E863 A. Ward (Royalty Payment)	698.32
	Idm-E255 Ozark-Mahoning Co. (Royalty Payment)	545.30

(Depositor will insert below his name, title, Department or Agency concerned, and his address)

Defense Minerals Exploration Administration
Bureau of Mines, Dept. of Interior
Helen R. Miller, Adm. Asst.
P. O. Box 217
Norris, Tennessee

SPACE BELOW TO BE USED BY DEPOSITARY ONLY

I certify that the above amount has been received for credit in the account of the Treasurer of the United States on the date shown, subject to adjustment for uncollectible items included therein.

(Authorized signature)

OCT 22 1956

(Date of credit in Treasurer's account)

DEPOSITARY WILL DATE, SIGN, AND RETURN THIS TO DEPOSITOR FOR HIS RETAINED COPY

16—59686b-1 GPO

TRIPLICATE

STANDARD FORM 201 (Formerly Cert. of Deposit, Form 1) Promulgated Oct. 1949 by Treasury Dept., Fiscal Service

TRIPLICATE

STANDARD FORM 201 (Formerly Cert. of Deposit, Form 1)
Promulgated Oct. 1949 by Treasury Dept., Fiscal Service

THIS DEPOSIT IS NOT SUBJECT TO CHECK

Oak Ridge, Tennessee

For credit of 428 Br. Trsy. Regional Office, Oak Ridge, Tenn. 2-16-56
(Name, title, and disbursing or other identification symbol of accountable officer) (Date sent)

14-23-070-77

deposited with Hamilton National Bank, Knoxville, Tennessee
(Name and location of depositary)

$ 43.12

for accounts listed below. SCHEDULE NOS.

ACCOUNT SYMBOL	TITLE OF ACCOUNT TO BE CREDITED	AMOUNT
14X4401	Idm-E-255 Ozark-Mahoning (Royalty Check)	43.12

(Depositor will insert below his name, title, Department or Agency concerned, and his address)

Defense Minerals Exploration Administration
Bureau of Mines, Dept. of Interior
Helen R. Miller, Adm. Asst.
P. O. Box 217
Norris, Tennessee

SPACE BELOW TO BE USED BY DEPOSITARY ONLY

I certify that the above amount has been received for credit in the account of the Treasurer of the United States on the date shown, subject to adjustment for uncollectible items included therein.

(Authorized signature)

(Date of credit in Treasurer's account)

DEPOSITARY WILL DATE, SIGN, AND RETURN THIS TO DEPOSITOR FOR HIS RETAINED COPY

16—59686b-1 GPO

Oak Ridge, Tennessee

THIS DEPOSIT IS NOT SUBJECT TO CHECK

DEPOSIT NO. 14-23-070-61

For credit of 428 BR. TRSY. Regional Office, Oak Ridge, Tenn. 1-26-56
(Name, title, and disbursing or other identification symbol of accountable officer) (Date of deposit)

deposited with Hamilton National Bank, Knoxville, Tennessee
(Name and location of depositary)

$ 184.92

for accounts listed below. SCHEDULE NOS.

ACCOUNT SYMBOL	TITLE OF ACCOUNT TO BE CREDITED	AMOUNT
14X4401	Idm-E-255 Ozark-Mahoning (Royalty Payment)	$ 184.92

(Depositor will insert below his name, title, Department or Agency concerned, and his address)

Defense Minerals Exploration Administration
Dept. of Interior, Bureau of Mines
Helen R. Miller, Adm. Asst.
P. O. Box 217
Norris, Tennessee

SPACE BELOW TO BE USED BY DEPOSITARY ONLY

I certify that the above amount has been received for credit in the account of the Treasurer of the United States on the date shown, subject to adjustment for uncollectible items included therein.

JAN 10 1956 (Authorized signature)

(Date of credit in Treasurer's account)

DEPOSITARY WILL DATE, SIGN, AND RETURN THIS TO DEPOSITOR FOR HIS RETAINED COPY

16—59686b-1 GPO

TRIPLICATE

STANDARD FORM 201 (Formerly Cert. of Deposit, Form 1)
Promulgated Oct. 1949 by Treasury Dept., Fiscal Service

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

JAN 31 1955

Mrs. Helen Miller
Authorized Certifying Officer
Bureau of Mines
P. O. Box 1909
Knoxville 1, Tennessee

Subj.: Idm-E255, DMEA-2248
Ozark-Mahoning Company

Dear Mrs. Miller:

Reference is made to your memorandum of January 20, 1955, addressed to F. R. Kantner, Administrative Assistant, Eastern Experiment Station, College Park, Maryland, relative to a deficit of $0.02 on the ledger sheet for the subject contract.

This $0.02 was due to an accumulative "breakage" in the monthly payments of the Government's 50 percent contribution. Had this difference been noted at the time the Report of Review was prepared, the amount certified would have been stated as $41,741.31 instead of $42,741.29.

You may consider this letter your authority to disregard this deficit of $0.02.

Sincerely yours,

(Signed) J. L. Chambers

Jay L. Chambers, Chief
Contract Administration
and Audit Division

EDTalbert/wb
January 31, 1955

Copy to: Docket
Admr. Reading File
Mr. Kantner
Mr. Bailey, Bu Mines
Mr. Chambers

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF MINES
COLLEGE PARK, MARYLAND

January 31, 1955

Memorandum

To: Miss Helen R. Miller, P. O. Box 1909, Knoxville, Tenn.

From: Administrative Assistant, Eastern Experiment Station, College Park, Md.

Subject: DMEA Contract Idm-E-255.

Reference is made to your memorandum of January 20, 1955, acknowledging receipt of DMEA records transferred from this office and calling attention to overpayment of $0.02 to the Ozark-Mahoning Company under Contract Idm-E-255, Docket 2248.

The matter was discussed with Mr. Talbert at the time of his audit and while he thought a refund should be obtained, it was my own personal feeling that the amount of $0.02 was much too small to warrant the time and expense involved in obtaining a refund and making the necessary deposit with the Regional Disbursing Officer. The item was again noted several months later by the General Accounting Office during their annual audit and they concurred with my thoughts on the matter.

Mr. Jay L. Chambers, Chief, Contract Administration and Audit Division, DMEA, informed me today by telephone that he would address a memorandum to your office regarding the contract. Presumably, the total payment considered valid and proper for payment by the Government, per Mr. Talbert's audit report of June 4, 1954, will be amended to include the overpayment of $0.02.

F. R. Kantner

FRKantner/lsm

Copy to: Regional Director, Pgh.
Chief, Branch of Accounting, Pgh.
Mr. Chambers, DMEA, Washington
Mr. Selfridge, DMEA, Washington
Mr. Millar
F. Kantner
1. Mr. Allsman - 2. Mr. Ambrose - 3. C. P. Files

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF MINES
SOUTHEASTERN REGION
REGION VII
HAMILTON BANK BUILDING

OFFICE OF
REGIONAL DIRECTOR

POST OFFICE BOX 1909
KNOXVILLE, TENNESSEE

January 20, 1955

Memorandum

To: F. R. Kantner, Administrative Assistant, Eastern Experiment Station, College Park, Maryland

From: Helen Miller, Knoxville Office, Knoxville, Tennessee

Subject: DMEA Records

We are in receipt of the DMEA records shipped from your office under Government Bill of Lading IN-25,333.

In transferring the DMEA figures over to the Knoxville Ledger, it was found that a deficit in the amount of $0.02 exists under contract Idm-E-255, Docket No. 2248, Ozark-Mahoning Company.

According to Mr. E. D. Talbert's audit report dated June 4, 1954, the total of $42,741.29, payment to the Company by the Government, is considered valid and proper - but actual vouchers paid are in the amount of $41,741.31. Please advise what action will be taken to cover this overpayment.

Helen R. Miller

/hbm
Copies to: Mr. Millar
Mr. George C. Selfridge
Chief, Branch of Accounting, Pittsburgh
Region Files
Day Files

DEFENSE MINERALS EXPLORATION ADMINISTRATION
CONTRACT ADMINISTRATION AND AUDIT DIVISION

REPORT OF REVIEW

I have reviewed the Monthly Reports of:

Ozark-Mahoning Company
Rosiclare, Illinois

pertaining to Exploration Project Contract No. Idm-E255, Docket No. DMEA-2248, including Amendment No. 1, an Amended Contract, and Amendments Nos. 1 and 2, thereto, for the months of February, 1952, to March, 1954, inclusive, covering a project for the exploration of fluorspar on property known as Hill-Ledford Tract, located in Hardin County, Illinois.

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

This review was made in lieu of a final audit of the Operator's accounts and records for the following reason:

all of the costs incurred were under a contract provision for payment by the Government on the basis of agreed estimated costs of units of work actually performed.

The review disclosed the following facts in regard to the amount paid or to be paid the contractor:

Total cost as billed by Contractor		$85,482.54
Exceptions:		
By DMEA Finance Officer	$ - 0 -	
Herewith	- 0 -	- 0 -
Total Accepted Cost		$85,482.54

The contract calls for a 50 percent participation of exploration expenses by the United States Government. Therefore, payment to the contractor by the Government in the amount of Forty-two thousand seven hundred forty-one and 29/100 Dollars,

$42,741.29

is considered valid and proper, provided that the Regional Executive Officer, the Administrator, or other competent official has accepted or will accept the project as having otherwise met the terms of the contract.

E. D. Talbert

E. D. Talbert, Auditor

June 4, 1954

JUN 4 1954

Mr. W. T. Millar
Executive Officer
DMEA Field Team, Region VIII
Eastern Experiment Station
College Park, Maryland

Re: Ozark-Mahoning Company
Idm-E255
Docket No. DMEA-2248

Dear Mr. Millar:

Enclosed are the original and two copies of the Report of Review covering the referenced Exploration Project Contract.

Distribution should be effected in accordance with Section 3 of DMEA Circular 19, Supplement 4, dated October 9, 1952.

Sincerely yours,

E. D. Talbert, Acting Chief
Contract Administration
and Audit Division

Enclosures

AMAlley/ama
June 4, 1954

Copy to: Docket
Admr. Reading File
Mr. Chambers

Form MF-104 (Rev.)
(April 1[illegible])

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION

Budget Bureau No. 42-R1036.4
Approval Expires 6-30-53.

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
APR 16 1954

OPERATOR'S MONTHLY REPORT AND VOUCHER

Amended Stage II

Month of March, 1954 Docket No. DMEA 2240 Contract No. IMM 1255
Operator's Name Ozark-Mahoning Company Minerals Fluorspar
Address Rosiclare, Illinois
Contract Amount, $60,750.00 Government Participation: 50 % Amount, $ 30,375.00

ITEMS OF COSTS	FOR OPERATOR'S USE			FOR GOVERNMENT USE ONLY		
	Monthly Total	Totals Previously Reported	Totals To Date	Approved Monthly Total	Approved Totals Previously Reported	Approved Totals To Date
(1) Independent Short Form Contracts:						
Drilling Churn	510.30	23007.24	23517.54			
Bulldozing						
Crosscutting						
Drifting						
(2) Labor and Supervision:						
Labor						
Supervision						
Technical Services						
(3) Operating Mat'ls. and Supplies:						
Timber						
Explosives						
Pipe						
Track						
(4) Operating Equipment:						
Rental						
Purchase						
Depreciation						
(5) Initial Rehabilitation and Repairs						
(6) New Bldgs., Improvements, etc.						
(7) Miscellaneous:						
Repairs to Equipment						
Sampling and Analysis						
Payroll Taxes						
Liability Insurance						
(8) Contingencies (specify):						
TOTALS	510.30	23007.24	23517.54			

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

Date Apr. 6, 1954 *Payee OZARK-MAHONING COMPANY

Per A M Speeberg Title Works Accountant

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

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

(Instructions on reverse)

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

$ 255.15

Signature F. R. Kantner, Adm. Asst.
(Authorized Certifying Officer)

Date 4/15/54 Vou. No. DMEA-60

(See other side)

(For Government use only)

CERTIFICATION BY GOVERNMENT REPRESENTATIVE:

I certify that to the best of my knowledge and belief the contractor submitting this voucher is operating a Defense Minerals Exploration Administration project under Contract No. DmE 255 in accordance with the terms of the contract.

Signature [illegible] Title Mining Eng. Date 4-9-54

APPROVAL BY DMEA EXECUTIVE OFFICER OR ALTERNATE:

Signature W. T. Miller Title Executive Officer Date 4/9/54

MONTHLY REPORT OF OPERATOR

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

GPO 83-38476

Form MF-104A
(April 1952)

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

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
APR 16 1954

OPERATOR'S UNIT COST AND PROGRESS REPORT

Amended Stage II

Month of March 1954 Docket No. DMEA 2248 Contract No. IIW-F255
Operator's Name Ozark-Mahoning Company Minerals Fluorspar
Address Rosiclare, Illinois

OPERATION	UNIT	COSTS THIS MONTH	UNITS THIS MONTH	COSTS TO DATE	UNITS TO DATE	UNIT COSTS TO DATE	AUTHORIZED BY CONTRACT	
							Units	Unit Costs
Drifting								
Crosscutting								
Raising								
Shafts								
Winzes								
Drilling: Core								
Churn	2.43	510.30	210	23517.54	9678		25000	2.43
Auger								
Stripping								
Trenching								
Test Pits								
Roads and Trails								
TOTAL DISTRIBUTED COSTS		510.30	210	23517.54				TOTAL COSTS AUTHORIZED BY CONTRACT
Operating Equipment Purchased								
Initial Rehabilitation and Repairs								
New Buildings, Improvements, etc.								
TOTAL COSTS								60,750.00

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

Date April 6, 1954 Operator OZARK-MAHONING COMPANY

Per A M Apenberg Title Works Accountant

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

REMARKS:

(Instructions on reverse)

(For Government use only)

INSTRUCTIONS

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

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

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

GPO 83-38475

April 6, 1954

Mr. W. T. Millar
Executive Officer
Bureau-Survey Field Team
Defense Minerals Exploration Administration
Region VIII
U. S. Department of the Interior
Defense Minerals Administration
College Park, Maryland

Dear Mr. Millar:

Enclosed herewith you will find five copies of Form MF-104, Operator's Monthly Report and Voucher, as well as five copies of Form MF-104A, Operator's Unit Cost and Progress Report for the month of March, 1954.

These forms are in connection with Stage II, amended Exploration Project Contract, Docket No. DMEA 2246, Contract #IDM-8255, dated June 2, 1953 and covers the prospecting which we are now doing on the Hill-Ledford Tract in Hardin County, Illinois.

Very truly yours,

OZARK-MAHONING COMPANY
Mahoning Mining Division

E. A. Brecke

E. A. Brecke

EAB:bls

Enclosures

April 6, 1954

SUPPLEMENTAL SHEET
HILL-LEDFORD TRACT

STATUS OF HOLES - COMPLETED AND DRILLING

M-53 Completed	Previously Reported	640	Balance	210 ft.
			Total	850 ft.

Remarks:

Attached are copies of the log of churn drill hole No. 53-M and copies of 400 foot scale map showing all holes completed under this project. Drilling east of the highway has been discontinued because of the discouraging results. 54-M is drilling west of the highway as shown on the maps; however, an amendment to include this work under this contract has not been approved to date.

1

OZARK-MAID WINE COMPANY

MID-Ledford Tract
Drill Hole: 53-M
Elevation: 419.5
Location: 779' north and 2036' east of the SW corner of NW¼ of Sec. 24 T 21 S R 9 E or 48' north and 383' east of No. 52-M
Drilled by: Moreland and Hobler
Examined by: L. A. Brooks
Casing: 32 feet

Started: 1-19-54
Finished: 3-20-54

Water:
80-85 Fairly strong
175-180 " "
360-385 " "
Stands @ 70'

0-30	Surface
30-55	Gray shale, sand streaks
55-90	Gray shale calcareous
90-100	Gray sand
100-135	Gray shale calcareous
135-150	Gray sand Tar Springs
150-180	Gray shale sand streaks
180-230	Light gray crinoidal lime Glen Dean
230-250	Gray and brown lime, shaly
250-265	Gray shale sandy
265-295	Gray sand. Hardinsburg
295-305	Dark gray sand
305-370	Gray and brown lime, shale streaks
370-380	Gray shale
380-385	Gray and maroon shale
385-455	Gray calcareous shale
455-485	Shaly gray sand
485-515	Gray sand
515-580	White sand
580-645	Gray shelly sand
645-675	White sand
675-680	Gray shaly sand. Base of Bethel 660
680-700	Light gray lime
700-725	Brown lime, little green selvage
725-725	" " , gen. selvage
725-750	Dark brown lime, little shale
750-760	Brown lime, sandy
760-782	Rosiclaire sand
782-795	White oolitic lime
795-820	Light brown oolitic lime
820-840	Dark brown lime
840-845	" " " , little oily white oolitic lime
845-850	Oily white oolitic lime

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

Budget Bureau No. 41-R036.4
Approval expires 6-30-53.

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
APR - 1 1954

OPERATOR'S MONTHLY REPORT AND VOUCHER

Amended Stage II

Month of February, 1954 Docket No. DMEA 2248 Contract No. [illegible]-8255
Operator's Name Clark-Fabening Company Minerals Fluorspar
Address Rosiclare, Illinois
Contract Amount, $ 60,750.00 Government Participation: 50 % Amount, $ 30,375.00

ITEMS OF COSTS	FOR OPERATOR'S USE			FOR GOVERNMENT USE ONLY		
	Monthly Total	Totals Previously Reported	Totals To Date	Approved Monthly Total	Approved Totals Previously Reported	Approved Totals To Date
(1) Independent Short Form Contracts:						
Drilling Churn	1312.20	21,695.04	23,007.24			
Bulldozing						
Crosscutting						
Drifting						
(2) Labor and Supervision:						
Labor						
Supervision						
Technical Services						
(3) Operating Mat'ls. and Supplies:						
Timber						
Explosives						
Pipe						
Track						
(4) Operating Equipment:						
Rental						
Purchase						
Depreciation						
(5) Initial Rehabilitation and Repairs						
(6) New Bldgs., Improvements, etc.						
(7) Miscellaneous:						
Repairs to Equipment						
Sampling and Analysis						
Payroll Taxes						
Liability Insurance						
(8) Contingencies (specify):						
TOTALS	1312.20	21,695.04	23,007.24			

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

Date Mar. 27, 1954 Payee CLARK-FABENING COMPANY

Per A. M. Spesberg Title Works Accountant

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

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

(Instructions on reverse)

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

$ 656.10

Signature F. R. Kantner, Adm. Asst.
(Authorized Certifying Officer)

Date 3/30/54 Vou. No. DMEA-59
(See other side)

(For Government use only)

CERTIFICATION BY GOVERNMENT REPRESENTATIVE:

I certify that to the best of my knowledge and belief the contractor submitting this voucher is operating a Defense Minerals Exploration Administration project under Contract No. Idm-E255 (Stage II) in accordance with the terms of the contract.

Signature R. W. Arthur Title Secretary Date 3/29/54

APPROVAL BY DMEA EXECUTIVE OFFICER OR ALTERNATE:

Signature W. F. Miller Title Executive Officer Date 3/29/54

MONTHLY REPORT OF OPERATOR

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

GPO 83-38476

Form MF-104A
(April 1952)

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

DEPARTMENT OF THE INTERIOR
Defense M...

APR - 1 1954

UNITED STATES
DEPARTMENT OF THE INTERIOR

DEFENSE MINERALS EXPLORATION ADMINISTRATION

OPERATOR'S UNIT COST AND PROGRESS REPORT

Amended Stage II

Month of February 1954 Docket No. DMEA 2240 Contract No. [illegible]-255
Operator's Name Ozark-Mahoning Company Minerals Fluorspar
Address Rosiclare, Illinois

OPERATION	UNIT	COSTS THIS MONTH	UNITS THIS MONTH	COSTS TO DATE	UNITS TO DATE	UNIT COSTS TO DATE	AUTHORIZED BY CONTRACT Units	AUTHORIZED BY CONTRACT Unit Costs
Drifting								
Crosscutting								
Raising								
Shafts								
Winzes								
Drilling: Core								
Churn	2.43	1312.20	540	23,007.24	9468		25000	2.43
Auger								
Stripping								
Trenching								
Test Pits								
Roads and Trails								
TOTAL DISTRIBUTED COSTS		1312.20	540	23,007.24				TOTAL COSTS AUTHORIZED BY CONTRACT
Operating Equipment Purchased								
Initial Rehabilitation and Repairs								
New Buildings, Improvements, etc.								
TOTAL COSTS								$60,750.00

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

Date March 27, 1954 Operator OZARK-MAHONING COMPANY

Per A M Speeberg Title Works Accountant

REMARKS:

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

(Instructions on reverse)

(For Government use only)

INSTRUCTIONS

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

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

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

GPO 83-38475

March 27, 1954

SUPPLEMENTAL SHEET

HILL-LEDFORD TRACT

Status of Holes - Completed and Drilling

M-53	Drilling (Previously reported 100)	Balance	540 feet
		Total	540 feet

Remarks:

Attached to this report is a 400 foot scale map showing location of all holes completed under this project including M-53 now drilling. Drilling progress has been slow by reason of repair work on the rigs.

Form MF-104 (Rev.)
(April 1953)

Budget Bureau No. 42-R1036.4
Approval expires 6-30-53.

RECEIVED
FEB 15 1954

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

Amended

Month of January, 1954 Docket No. DMEA 2248 Contract No. IM-1255 Stage II
Operator's Name Ozark-Mahoning Company Minerals Fluorspar
Address Rosiclare, Illinois
Contract Amount, $60,750.00 Government Participation: 50 % Amount, $30,375.00

ITEMS OF COSTS	FOR OPERATOR'S USE			FOR GOVERNMENT USE ONLY		
	Monthly Total	Totals Previously Reported	Totals To Date	Approved Monthly Total	Approved Totals Previously Reported	Approved Totals To Date
(1) Independent Short Form Contracts:						
Drilling Churn	1044.90	20,650.14	21,695.04			
Bulldozing						
Crosscutting						
Drifting						
(2) Labor and Supervision:						
Labor						
Supervision						
Technical Services						
(3) Operating Mat'ls. and Supplies:						
Timber						
Explosives						
Pipe						
Track						
(4) Operating Equipment:						
Rental						
Purchase						
Depreciation						
(5) Initial Rehabilitation and Repairs						
(6) New Bldgs., Improvements, etc.						
(7) Miscellaneous:						
Repairs to Equipment						
Sampling and Analysis						
Payroll Taxes						
Liability Insurance						
(8) Contingencies (specify):						
TOTALS	1044.90	20,650.14	21,695.04			

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

Date Feb. 2, 1954 *Payee OZARK-MAHONING COMPANY

Per R. Bradden Title Ass't. Sec.-Treas.

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

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

(Instructions on reverse)

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

$ 522.45

Signature F. R. Kantner, Adm. Asst.
(Authorized Certifying Officer)

Date 2/12/54 Vou. No. DMEA-57

(See other side)

(For Government use only)

CERTIFICATION BY GOVERNMENT REPRESENTATIVE:

I certify that to the best of my knowledge and belief the contractor submitting this voucher is operating a Defense Minerals Exploration Administration project under Contract No. IdmE 255(A) in accordance with the terms of the contract.

Signature [illegible] Title Mining Eng. Date 2-4-54

APPROVAL BY DMEA EXECUTIVE OFFICER OR ALTERNATE:

Signature W. T. Miller Title Executive Officer Date 2/5/54

MONTHLY REPORT OF OPERATOR

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

GPO 83-38476

Form MF-104A
(April 1952)

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

UNITED STATES
DEPARTMENT OF THE INTERIOR

DEFENSE MINERALS EXPLORATION ADMINISTRATION

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
FEB 15 1954

OPERATOR'S UNIT COST AND PROGRESS REPORT

Amended Stage II

Month of January 1954 Docket No. DMEA 2248 Contract No. III-F255
Operator's Name Ozark-Mahoning Company Minerals Fluorspar
Address Rosiclare, Illinois

OPERATION	UNIT	COSTS THIS MONTH	UNITS THIS MONTH	COSTS TO DATE	UNITS TO DATE	UNIT COSTS TO DATE	AUTHORIZED BY CONTRACT	
							Units	Unit Costs
Drifting								
Crosscutting								
Raising								
Shafts								
Winzes								
Drilling: Core								
Churn	2.43	1044.90	430	21,695.04	8928		25000	2.43
Auger								
Stripping								
Trenching								
Test Pits								
Roads and Trails								
TOTAL DISTRIBUTED COSTS		1044.90	430	21,695.04				TOTAL COSTS AUTHORIZED BY CONTRACT
Operating Equipment Purchased								
Initial Rehabilitation and Repairs								
New Buildings, Improvements, etc.								
TOTAL COSTS								

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

Date Feb. 2, 1954 Operator OZARK-MAHONING COMPANY

Per [signature] Title Ass't. Sec.-Treas.

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

REMARKS:

(Instructions on reverse)

(For Government use only)

INSTRUCTIONS

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

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

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

GPO 83-38475

February 2, 1954

SUPPLEMENTAL SHEET

HILL-LEDFORD TRACT

Status of Holes - Completed and Drilling.

M-52	Completed (Previously Reported 485	Bal.	330 ft.
M-53	Drilling (Depth 1-31-54)		100 ft.
			430 ft.

Remarks: Attached to this report is the log of M-52 and a 400 ft. scale map showing location of all holes completed under this project including M-53 which is new drilling.

Drill Hole M-52 showed higher contacts than drill holes M-44 and M-48 which we feel is an unfavorable structural condition.

CLARK-HARDING COMPANY

Hill-Ledford Tract
Drill Hole No. 52-H
Elevation: 387.8
Location: 758' north and 145' east of S.W. Corner of S.E. ¼ of N.W. of Sec. 24 or 57' south and 267' east of No. 48-H.

Started 12-9-53
Finished 1-19-54
Water 35 - 40
Stands at 23 ft.
No lower water apparent.

Drilled by: Moreland and Bohler
Examined by: E. A. Brooks
Casing: 20 feet

0 - 18	Surface
18 - 45	Gray sandy shale
45 - 55	Gray shale
55 - 70	Gray and brown lime, shaly
70 - 95	Gray shale sandy
95 - 125	White sand
125 - 140	Gray sandy shale
140 - 185	Gray crinoidal lime
185 - 210	Brown lime shaly
210 - 220	Gray shaly sand
220 - 280	Gray sand, few shale partings, Hardinsburg
280 - 305	Gray and brown lime shale streaks
305 - 330	Gray shale, lime streaks
330 - 350	Gray lime, little maroon shale
350 - 375	Gray lime, shaly
375 - 425	Gray calcareous shale
425 - 440	Gray sandy shale
440 - 500	Cypress sand
500 - 530	Gray sand, little shale
530 - 600	Gray shally sand
600 - 635	White sand
635 - 640	" " , little gray lime. Base of Bethel 637.
640 - 665	Gray and brown lime
665 - 685	Gray lime, con. selvage
685 - 705	Brown lime
705 - 715	Lower O'Hara lime
715 - 739	Rosiclare sand
739 - 760	Light gray oolitic lime
760 - 780	Light brown lime
780 - 800	Dark brown lime
800 - 815	Light gray oolitic lime

Form M[illegible] (Rev.)
(April 1952)

Budget Bureau No. 42-R1036.4
Approval expires 6-30-53.

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

Amended Stage II

Month of December, 1953 Docket No. DMEA 2248 Contract No. IT[illegible]-E255
Operator's Name Ozark-Mahoning Company Minerals Fluorspar
Address Rosiclare, Illinois
Contract Amount, $ 60,750.00 Government Participation: 50 % Amount, $ 30,375.00

ITEMS OF COSTS	FOR OPERATOR'S USE			FOR GOVERNMENT USE ONLY		
	Monthly Total	Totals Previously Reported	Totals To Date	Approved Monthly Total	Approved Totals Previously Reported	Approved Totals To Date
(1) Independent Short Form Contracts:						
Drilling - Churn	2029.05	18621.09	20650.14			
Bulldozing						
Crosscutting						
Drifting						
(2) Labor and Supervision:						
Labor						
Supervision						
Technical Services						
(3) Operating Mat'ls. and Supplies:						
Timber						
Explosives						
Pipe						
Track						
(4) Operating Equipment:						
Rental						
Purchase						
Depreciation						
(5) Initial Rehabilitation and Repairs						
(6) New Bldgs., Improvements, etc.						
(7) Miscellaneous:						
Repairs to Equipment						
Sampling and Analysis						
Payroll Taxes						
Liability Insurance						
(8) Contingencies (specify):						
TOTALS	2029.05	18621.09	20650.14			

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

Date Jan. 4, 1954 *Payee OZARK-MAHONING COMPANY

Per F. L. Dadden Title Ass't. Sec.-Treas.

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

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

(Instructions on reverse)

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

$ 1,014.53

Signature F. R. Kantner, Adm. Asst.
(Authorized Certifying Officer)

Date 1/27/54 Vou. No. DMEA-56
(See other side)

(For Government use only)

CERTIFICATION BY GOVERNMENT REPRESENTATIVE:

I certify that to the best of my knowledge and belief the contractor submitting this voucher is operating a Defense Minerals Exploration Administration project under Contract No. Idmk 256 in accordance with the terms of the contract.

Signature [illegible] Title Mining Eng. Date 1-7-54

APPROVAL BY DMEA EXECUTIVE OFFICER OR ALTERNATE:

Signature W. D. Mills Title Executive Officer Date 1/7/54

MONTHLY REPORT OF OPERATOR

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

GPO 83-38476

Form MF-104A
(April 1952)

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

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
JAN 29 1954

UNITED STATES
DEPARTMENT OF THE INTERIOR

DEFENSE MINERALS EXPLORATION ADMINISTRATION

OPERATOR'S UNIT COST AND PROGRESS REPORT

Amended Stage II

Month of December 195 3 Docket No. DMEA 2240 Contract No. IMA-0255
Operator's Name Ozark-Mahoning Company Minerals Fluorspar
Address Rosiclare, Illinois

OPERATION	Unit Cost	Costs This Month	Units This Month	Costs to Date	Units to Date	Unit Costs to Date	Authorized by Contract Units	Authorized by Contract Unit Costs
Drifting								
Crosscutting								
Raising								
Shafts								
Winzes								
Drilling: Core								
Churn	2.43	2029.05	835	20650.14	8498		25000	2.43
Auger								
Stripping								
Trenching								
Test Pits								
Roads and Trails								
Total Distributed Costs		2029.05	835	20650.14				Total Costs Authorized by Contract
Operating Equipment Purchased								
Initial Rehabilitation and Repairs								
New Buildings, Improvements, etc.								
Total Costs								

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

Date Jan. 4, 1954 Operator OZARK-MAHONING COMPANY

Per J. R. Radden Title Ass't. Sec.-Treas.

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

Remarks:

(Instructions on reverse)

(For Government use only)

INSTRUCTIONS

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

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

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

GPO 83-38475

January 4, 1954

SUPPLEMENTAL SHEET

HILL-LEDFORD TRACT

Status of Holes - Completed and Drilling

M-50	Completed (Previously Reported 740')	Bal.	155 Ft.
M-51	Completed (Previously Reported 690')	Bal.	195 "
M-52	Drilling (Depth 12-31-53)		485 "
		TOTAL	835 Ft.

REMARKS:

Attached hereto are copies of logs of churn drill holes No. 50 and 51. The drilling continues discouraging as both holes are blank with no indications of structure or open ground.

A 400 ft. scale map is enclosed showing the location of all holes completed under this project, including M-52, now drilling. We have cut down to one rig.

OZARK-MAHONING CO.

Hill-Ledford Tract
Drill Hole: 50-W
Elevation: 398.0
Location: 1708' north and 910' east of the S.W. Corner of N.W. ¼ of Sec. 24, Twp. 11 S., Range 9 E., Hardin County, Illinois or 12 ft. south and 300 ft. west of 49-W.

Started 11-6-53
Finished 12-5-53

Water: 37 ft. Fair
Stands at 21 ft.
No lower water apparent

Drilled by: B. W. Hales
Examined by: E. A. Brooks
Casing: 32 ft.

0 - 30	Surface
30 - 60	Gray shale, streak brown lime
60 - 80	Black shale, few lime streaks
80 - 115	Gray shale sand streaks
115 - 135	Gray shale, sandy
135 - 165	Gray sand
165 - 180	Gray sand, shale streaks
180 - 205	White sand
205 - 220	Gray shale, sandy
220 - 280	Light gray crinoidal lime, Glen Dean
280 - 290	Gray shale sandy
290 - 350	Gray sand, shaly streaks. Hardinsburg
350 - 385	Gray and brown lime, shale streaks
385 - 415	Gray shale, lime streaks
415 - 435	Gray and maroon shale
435 - 505	Gray calcareous shale
505 - 520	Gray shale sandy
520 - 625	White sand
625 - 685	Gray shelly sand
685 - 700	White sand
700 - 710	Gray sand, few shaly partings
710 - 715	" " and gray lime. Base of Bethel 712
715 - 730	Brown lime
730 - 735	" " , little green shale
735 - 770	Shale and salvage, com. brown lime
770 - 785	Dark brown shaly lime
785 - 790	Lower O'Hara lime
790 - 815	Kosciusko sand, com. brown lime
815 - 845	Light gray oolitic lime
845 - 870	Light brown lime
870 - 880	Dark brown lime
880 - 885	" " " , com. Sub Kosciusko sand
885 - 890	Some green shale, little light gray lime
890 - 895	Light gray oolitic lime

OGARE-DRILLING COMPANY

Hill-Lafford Tract
Drill Hole No. 51
Elevation: 387
Location: 1907' north and 611' east of the SW corner of NW¼ of Sec. 24, T 13 S, R 9 E, Marion County, Illinois or 899' west of SD-4

Drilled by: Moreland and Kohler
Examined by: E. A. Brophy
Casing: 24'

Started: 11-5-53
Finished: 12-9-53

Water: 10-15 Fair
Stands @ 25'

Crevice 790 - 793
No lower water apparent

0-20	Surface
20-30	Dark brown lime, shaly and oolitical
30-55	" " " "
55-75	Dark gray shale, sand streaks
75-110	Gray shale, lime streaks
110-205	Gray sand, shale streaks
205-210	Gray shale, lime streaks
210-260	Gray crystalline lime - Glen Dean
260-300	Gray sand
300-320	Gray shaly sand
320-370	Gray and brown lime, shale streaks
370-390	Gray calcareous shale
390-410	Gray lime, shaly
410-415	Gray and maroon shale
415-425	Gray calcareous shale
425-430	Gray shale, sandy
430-435	White sand
435-470	Gray shaly sand
470-700	White sand
700-720	Gray lime. Base of Bethel 700
720-730	Brown lime
730-735	" " little green selenite
735-760	" " dam. selenite
760-775	Brown lime
775-780	Lower O'Hara lime
780-800	Residuary sand
800-820	Light gray oolitic lime
820-855	Light brown lime
855-870	Dark brown lime
870-875	" " " dam. Sub-Residuary sand
875-880	Dam. Sub-Residuary sand, little light gray lime
880-885	Light gray oolitic lime

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

Budget Bureau No. 42-R396.4
Approval expires 6-30-53

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
DEC 31 1953

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

Month of November, 1953 Docket No. DMEA 2248 Amended Contract No. Stage II IDM-E255
Operator's Name Ozark-Mahoning Company Minerals Fluorspar
Address Rosiclare, Illinois
Contract Amount, $ 60,750.00 Government Participation: 50% Amount, $ 30,375.00

ITEMS OF COSTS	FOR OPERATOR'S USE: Monthly Total	Totals Previously Reported	Totals To Date	FOR GOVERNMENT USE ONLY: Approved Monthly Total	Approved Totals Previously Reported	Approved Totals To Date
(1) Independent Short Form Contracts:						
Drilling - Churn	4247.64	14373.45	18621.09			
Bulldozing						
Crosscutting						
Drifting						
(2) Labor and Supervision:						
Labor						
Supervision						
Technical Services						
(3) Operating Mat'ls. and Supplies:						
Timber						
Explosives						
Pipe						
Track						
(4) Operating Equipment:						
Rental						
Purchase						
Depreciation						
(5) Initial Rehabilitation and Repairs						
(6) New Bldgs., Improvements, etc.						
(7) Miscellaneous:						
Repairs to Equipment						
Sampling and Analysis						
Payroll Taxes						
Liability Insurance						
(8) Contingencies (specify):						
TOTALS	4247.64	14373.45	18621.09			

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

Date Dec. 1, 1953 *Payee OZARK-MAHONING COMPANY

Per [signature] Title Asst. Sec.-Treas.

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

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

(Instructions on reverse)

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

$ 2,123.82

Signature F. R. Kantner, Adm. Asst.
(Authorized Certifying Officer)

Date 12/30/53 Vou. No. DMEA-55
(See other side)

(For Government use only)

CERTIFICATION BY GOVERNMENT REPRESENTATIVE:

I certify that to the best of my knowledge and belief the contractor submitting this voucher is operating a Defense Minerals Exploration Administration project under Contract No. Idm.E.255 in accordance with the terms of the contract.

Signature E. Beumann Title Mining Eng. Date 12-7-53

APPROVAL BY DMEA EXECUTIVE OFFICER OR ALTERNATE:

Signature W. T. Miller Title Executive Officer Date 12/9/53

MONTHLY REPORT OF OPERATOR

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

GPO 83-38476

Form MF-104A
(April 1952)

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

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
DEC 31 1953

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION

OPERATOR'S UNIT COST AND PROGRESS REPORT

Amended

Month of November 1953 Docket No. DMEA 2248 Contract No. Stage II IDM-E255
Operator's Name Ozark-Mahoning Company Minerals Fluorspar
Address Rosiclare, Illinois

OPERATION	Unit Cost	Costs This Month	Units This Month	Costs to Date	Units to Date	Unit Costs to Date	Authorized by Contract: Units	Authorized by Contract: Unit Costs
Drifting								
Crosscutting								
Raising								
Shafts								
Winzes								
Drilling: Core	2.43	4247.64	1748	18621.09	7663		25000	2.43
Churn								
Auger								
Stripping								
Trenching								
Test Pits								
Roads and Trails								
Total Distributed Costs		4247.64	1748	18621.09				Total Costs Authorized by Contract
Operating Equipment Purchased								
Initial Rehabilitation and Repairs								
New Buildings, Improvements, etc.								
Total Costs								

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

Date December 1, 1953 Operator OZARK-MAHONING COMPANY

Per [signature] Title Ass't. Sec.-Treas.

Remarks:

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

(Instructions on reverse)

(For Government use only)

INSTRUCTIONS

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

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

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

GPO 83-38475

DEC 1 1953

December 1, 1953

SUPPLEMENTAL SHEET
HILL-LEDFORD TRACT

Status of Holes - Completed and Drilling

M-47	Completed (Prev. reported 790') Bal.	145 ft.
M-49	Completed (Prev. reported 750') Bal.	173 ft.
M-50	Drilling (Depth 11-30-53)	760 ft.
M-51	Drilling (Depth 11-30-53)	690 ft.
	Total - - -	1768 ft.

Remarks:

Attached hereto are copies of logs of churn drill holes No. 47-M and 49-M. Both holes are blank with no indications of fracturing or open ground.

A 400 foot scale map is also attached showing the location of completed holes as well as those now drilling. As soon as holes No. 50 and 51 are completed, it is our intention to cut down to one drill rig.

CHARE-MERGENS COMPANY

Mill-Ledford Trash
Hole No. 49-N
Elevation: 427.2
Location: 1755' N. 120' W. of SW Cor. of SE¼ of NW¼ of Sec. 24, Twp. 11 S, R 9 E, Hardin County, Illinois
or
300' W. 13' N. of 16-N

Started: 10-6-53
Completed: 11-6-53

Water: 85 - 90 ft.
No lower water noticeable
Stands 81 ft.

Drilled by: B. W. Bales
Examined by: A. G. Johnson
Casing: 36' - 6¼"

0-25	Soil, clay and boulders
25-65	Shale and selvage - lime streaks
65-110	Dark colored shaly lime. Base of Menard 110 ft.
110-165	Sandy shale - shaly sand
165-180	Vienna lime - light gray and shaly
180-185	Dark colored shaly lime
185-250	Gray sand - shale streaks
250-255	Dark colored sandy shale - some lime. Base Tar Springs 255'
255-300	White and light gray lime
300-325	Shaly lime - shale seams. Base of Glen Dean - 325 ft.
325-355	Sandy shale - shaly sand
355-380	Gray sand - shaly at base. Hardinsburg base @ 380 ft.
380-420	Gray to light gray lime
420-430	Gray lime, sem. selvage
430-450	Gray lime - shale and selvage
450-460	Chocolate colored shale
460-555	Gray and dark colored lime - shale and selvage. Base of Golconda 555'
555-595	Gray sand - shale seams
595-640	White sand. Hard and tight.
640-655	Shally gray sand
655-767	White sand. Base of Bethel 547 ft.
767-770	Gray lime
770-790	Gray lime - selvage
790-815	Dark colored shaly lime
815-825	Lighter colored lime
825-848	Sandstone sand
848-865	Light gray lime
865-900	Gray lime
900-915	Brown lime
915-983	White lime

CLARK-MAHONING COMPANY

Hill-Ledford Tract
Hole No. 47-M
Elevation: 467.7
Location: 1346' N. 684' E. of S.W. Cor. of S.E. ¼ of S.W. ¼ of Sec. 28, Twp. 11 S., R. 9 E., Hardin County, Illinois

or

296' E. 4' S. of 43-M

Started 9-30-53
Completed 11-5-53

Water: 175 - 180' light
625 - 630' Light
Shaft: 400 ft.

Drilled by - Moreland & Hohler
Examined by: A. G. Johnson
Casing - 28 ft. 6¼"

0 - 28	Soil, clay and boulders
28 - 70	Dark colored lime
70 - 80	do do do , salvage
80 - 130	Dark colored shaly lime. B. Menard 130 ft.
130 - 180	Shaly sand - shale and salvage streaks
180 - 195	Vienna lime
195 - 210	Shaly sandstone
210 - 225	Salvage
225 - 250	White and gray sand - shale seams
250 - 265	Gray sand - shale. Base of Tar Springs 265 ft.
265 - 310	White and gray lime
310 - 330	Gray and dark colored shaly lime
330 - 345	Sandy shale - some sand and dark colored shaly lime. Base of Glen Dean 345 ft.
345 - 395	Hardinburg S.S. Some shale near base
395 - 440	Gray and dark colored shaly lime
440 - 460	Black shaly lime
460 - 465	Shale - some lime
465 - 475	Chocolate colored shale
475 - 535	Shale
535 - 545	Shale - some dark colored lime and sand Base of Golconda 545 or possibly 575 ft.
545 - 575	Mostly sandy shale
575 - 585	Gray sand - shale
585 - 685	Hard white sand
685 - 763	White sand. B. H. 763'
763 - 790	Gray lime
790 - 810	Gray lime - salvage
810 - 838	Dark colored lime - very little shale
838 - 860	Rosiclare sand - Greenish & reddish looking
860 - 875	Gray lime
875 - 885	do do, trace of salvage
885 - 895	do do
895 - 923	Gray to brown lime
923 - 935	White lime

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

Budget Bureau No. 42-R1036.4
Approval expires 6-30-53.

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

DEPARTMENT OF THE INTERIOR
Defense Minerals Exploration Administration
RECEIVED
NOV 30 1953

Month of October, 1953 Docket No. DMEA 2248 Contract No. IIM-E255-Stage II
Operator's Name Ozark-Mahoning Company Minerals Fluorspar
Address Rosiclare, Illinois
Contract Amount, $ 60,750.00 Government Participation: 50 % Amount, $ 30,375.00

ITEMS OF COSTS	FOR OPERATOR'S USE			FOR GOVERNMENT USE ONLY		
	Monthly Total	Totals Previously Reported	Totals To Date	Approved Monthly Total	Approved Totals Previously Reported	Approved Totals To Date
(1) Independent Short Form Contracts:						
Drilling - Churn	6062.85	8310.60	14373.45			
Bulldozing						
Crosscutting						
Drifting						
(2) Labor and Supervision:						
Labor						
Supervision						
Technical Services						
(3) Operating Mat'ls. and Supplies:						
Timber						
Explosives						
Pipe						
Track						
(4) Operating Equipment:						
Rental						
Purchase						
Depreciation						
(5) Initial Rehabilitation and Repairs						
(6) New Bldgs., Improvements, etc.						
(7) Miscellaneous:						
Repairs to Equipment						
Sampling and Analysis						
Payroll Taxes						
Liability Insurance						
(8) Contingencies (specify):						
TOTALS	6062.85	8310.60	14373.45			

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

Date Nov. 6, 1953 *Payee OZARK-MAHONING COMPANY

Per [signature] Title Ass't. Sec.-Treas.

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

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

(Instructions on reverse)

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

$ 3,031.43

Signature F. R. Kantner, Adm. Asst.
(Authorized Certifying Officer)

Date 11/25/53 Vou. No. DMEA-54
(See other side)

(For Government use only)

CERTIFICATION BY GOVERNMENT REPRESENTATIVE:

I certify that to the best of my knowledge and belief the contractor submitting this voucher is operating a Defense Minerals Exploration Administration project under Contract No. Idm E255 in accordance with the terms of the contract.

Signature [illegible] Title Mining Eng. Date 11-9-53

APPROVAL BY DMEA EXECUTIVE OFFICER OR ALTERNATE:

Signature W. T. Mullen Title Executive Officer Date 11/9/53

MONTHLY REPORT OF OPERATOR

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

GPO 83-38476

Form MF-104A
(April 1952)

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

UNITED STATES
DEPARTMENT OF THE INTERIOR

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
NOV 30 1953

DEFENSE MINERALS EXPLORATION ADMINISTRATION

OPERATOR'S UNIT COST AND PROGRESS REPORT

Amended Stage II

Month of October 1953 Docket No. DMEA 2248 Contract No. IDM-E255

Operator's Name Ozark-Mahoning Company Minerals Fluorspar

Address Rosiclare, Illinois

OPERATION	Unit Cost	Costs This Month	Units This Month	Costs to Date	Units to Date	Unit Costs to Date	Authorized by Contract: Units	Authorized by Contract: Unit Costs
Drifting								
Crosscutting								
Raising								
Shafts								
Winzes								
Drilling: Core								
Churn	2.43	6062.85	2495	14373.45	5915		25000	2.43
Auger								
Stripping								
Trenching								
Test Pits								
Roads and Trails								
Total Distributed Costs		6062.85	2495	14373.45				Total Costs Authorized by Contract
Operating Equipment Purchased								
Initial Rehabilitation and Repairs								
New Buildings, Improvements, etc.								
Total Costs								

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

Date Nov. 6, 1953 Operator OZARK-MAHONING COMPANY

Per J. R. Bradley Title Ass't. Sec. - Treas.

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

(Instructions on reverse)

Remarks:

(For Government use only)

INSTRUCTIONS

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

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

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

GPO 83-38475

November 6, 1953

SUPPLEMENTAL SHEET

HILL-LEDFORD TRACT

Status of Holes - Completed and Drilling

M-46	Completed 940 ft. (Previously reported 800')	Bal.	140'
M-47	Drilling - Depth 10-31-53		790'
M-48	Completed 815 ft. (Previously reported None)	Bal.	815'
M-49	Drilling - Depth 10-31-53		750'
	Total		2495'

Remarks:

Attached hereto are copies of logs of churn drill holes No. 46-M and 48-M. Both holes are blank. Results continue discouraging. There is little or no fracturing on open ground which would result in dropping the water level of the holes. On the west side of the highway pumping has now dewatered the orebody so that the pump is idle about sixteen hours per day.

A 400 ft. scale map of the property is also attached showing the up-to-date location of the holes.

OZARK-MAHONING COMPANY

Hill-Ledford Tract
Hole No. 46-N

Started: 8-28-53
Completed: 10-6-53

Elevation: 439.00

Water: 70 - 75 ft.
220 - 225 ft.
Stands 80 ft.

Location: 1748 ft. N. 180 ft. E. of S.W. Corner of S.E. ¼ of N.W. ¼ of Sec. 24, Twp. 11 S., Range 9 E., Hardin County, Illinois

or

196 ft. N. 24 ft. W. of 45-N

Drilled by - B. W. Sales
Examined by: A. C. Johnson
Casing: 44 ft. - 6⅝"

0 - 25	Soil, clay and lime boulders
25 - 60	Dark colored shaly lime
60 - 75	Shale and salvage - lime streaks
75 - 120	Dark colored lime - shaly streaks - Base of Renard 120 ft.
120 - 175	Shaly sand - shale
175 - 190	Light gray lime - some shale. Vienna Ls.
190 - 200	Sandy shale
200 - 250	Gray sand - few shale partings
250 - 265	do , more shale
265 - 270	Gray sand - lt. white lime. Base Ter Springs 270 ft.
270 - 285	White lime
285 - 327	Gray to dark gray lime, shale and gouge streaks. Base of Glenn Dean 327 ft.
327 - 345	Shaly gray sand
345 - 360	Shale, salvage and mud, gray sand
360 - 395	Gray sand. Base of Hardinburg 395 ft.
395 - 430	Light gray and some dark colored shaly lime.
430 - 445	Dark colored shaly lime
445 - 465	Light gray and dark colored shaly lime
465 - 480	Chocolate colored shale
480 - 500	Sandy shale
500 - 520	Shale salvage and mud, some dark colored shaly lime
520 - 565	Dark colored shaly lime, some shale and salvage
565 - 570	Sandy shale, heavy pyrite. Base of Golconda 570 ft.
570 - 610	Gray sand - shale seams
610 - 655	White sand
655 - 710	Shaly white and gray sand
710 - 759	White sand. Base of Bethel 759 ft.
759 - 785	Gray lime
785 - 820	do , some salvage
820 - 830	Dark colored shaly lime
830 - 860	Light gray lime
860 - 868	Sandstone sand
868 - 875	Light gray lime
875 - 905	Gray lime
905 - 925	Brown oolitic lime
925 - 960	Light colored lime

OZARK-MARINO COMPANY

Mill-Ledford Tract
Hole No. 48-M
Elevation 383.8
Location: 835' N., 102' E., of S.W. Cor., of S.E. ¼ of N.W. ¼ of Sec. 24, Twp. 11, R. 9, Hardin County, Illinois
or
202' E. 5' S. of 44-M

Started 10-1-53
Completed 11-2-53
Water 55' light
75
195
345
410
485
590
665
Settled outgs.

Drilled by: Moreland and Mohler
Examined by A. S. Johnson
Casing - 40'- 6-1/4"

Stands 50 feet

0 - 20	Soil, clay and boulders
20 - 45	Selvage, shale and sandstone
45 - 55	Sandy shale, some dark colored lime
55 - 65	Hard gray and brown lime. Vienna
65 - 100	Gray sand - sandy shale
100 - 125	White sand
125 - 140	Sandy shale. Base of Tar Spgs. @ 140 ft.
140 - 175	White and light gray lime
175 - 200	Gray lime - shale seams. Base Glenn Dean 200 ft.
200 - 205	Sandy shale
205 - 270	Hardinsburg s.s.
270 - 305	Gray to light gray lime
305 - 320	Black sandy and shaly lime
320 - 345	Gray to shaly looking lime
345 - 355	Chocolate colored shale
355 - 395	Black sandy shale
395 - 450	Shale - some gray and dark colored lime - Base of Golconda
450 - 470	Gray sand - shale seams
470 - 525	Hard white sand
525 - 595	Shelly gray sand
595 - 642	White sand. Few Zn shs. Base of Bethel 642
642 - 660	Gray and brown lime
660 - 695	Gray lime - selvage
695 - 720	Gray and dark colored lime
720 - 735	Rosiclare sand - lime inclusions
735 - 740	Rosiclare sand - oily
740 - 745	do do
745 - 755	Light gray lime
755 - 765	Gray lime, trace of selvage
765 - 770	Gray lime. Com. calcite
770 - 790	Gray lime
790 - 800	Brown lime
800 - 815	White lime. Few Zn shs.

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

Budget Bureau No. 40-R1036.4
Approval expires 6-30-53.

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
OCT 29 1953

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

Amended

Month of September, 1953 Docket No. DMEA 221.8 Contract No. [illegible]-1255 Stage II
Operator's Name Ozark-Mahoning Company Minerals Fluorspar
Address Cave-in-Rock, Illinois
Contract Amount, $ 60,750.00 Government Participation: 50 % Amount, $ 30,375.00

ITEMS OF COSTS	FOR OPERATOR'S USE			FOR GOVERNMENT USE ONLY		
	Monthly Total	Totals Previously Reported	Totals To Date	Approved Monthly Total	Approved Totals Previously Reported	Approved Totals To Date
(1) Independent Short Form Contracts:						
Drilling - Churn	1023.65	3316.95	8310.60			
Bulldozing						
Crosscutting						
Drifting						
(2) Labor and Supervision:						
Labor						
Supervision						
Technical Services						
(3) Operating Mat'ls. and Supplies:						
Timber						
Explosives						
Pipe						
Track						
(4) Operating Equipment:						
Rental						
Purchase						
Depreciation						
(5) Initial Rehabilitation and Repairs						
(6) New Bldgs., Improvements, etc.						
(7) Miscellaneous:						
Repairs to Equipment						
Sampling and Analysis						
Payroll Taxes						
Liability Insurance						
(8) Contingencies (specify):						
TOTALS	1023.65	3316.95	8310.60			

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

Date October 5, 1953 Payee Ozark-Mahoning Company

Per [illegible] Title Ass't. Sec.-Treas.

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

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

(Instructions on reverse)

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

$ 2,496.83

Signature F. R. Kautner, Adm. Asst.
(Authorized Certifying Officer)

Date 10/28/53 Vou. No. DMEA-53

(See other side)

(For Government use only)

CERTIFICATION BY GOVERNMENT REPRESENTATIVE:

I certify that to the best of my knowledge and belief the contractor submitting this voucher is operating a Defense Minerals Exploration Administration project under Contract No. IDM-E255 Stage II in accordance with the terms of the contract.

Signature [illegible] Title Mining Engineer Date Oct 12, 1953

APPROVAL BY DMEA EXECUTIVE OFFICER OR ALTERNATE:

Signature W. F. Millar Title Executive Officer Date 10/12/53

MONTHLY REPORT OF OPERATOR

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

GPO 83-38476

Form MF-104A
(April 1952)

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

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
OCT 29 1953

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION

OPERATOR'S UNIT COST AND PROGRESS REPORT

Stage II

Month of September 1953 Docket No. DMEA 2268 Amended Contract No. [illegible]255
Operator's Name Ozark-Mahoning Company Minerals Fluorspar
Address Fordolare, Illinois

OPERATION	Unit Cost	Costs This Month	Units This Month	Costs to Date	Units to Date	Unit Costs to Date	Authorized by Contract: Units	Authorized by Contract: Unit Costs
Drifting								
Crosscutting								
Raising								
Shafts								
Winzes								
Drilling: Core								
Churn	2.13	1973.65	2055	6310.60	3120		25000	2.13
Auger								
Stripping								
Trenching								
Test Pits								
Roads and Trails								
Total Distributed Costs		1973.65	2055	6310.60				Total Costs Authorized by Contract
Operating Equipment Purchased								
Initial Rehabilitation and Repairs								
New Buildings, Improvements, etc.								
Total Costs								

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

Date October 5, 1953 Operator OZARK-MAHONING COMPANY

Per [signature] Title Asst. Sec.-Treas.

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

Remarks:

(Instructions on reverse)

(For Government use only)

INSTRUCTIONS

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

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

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

GPO 83-38475

October 6, 1953

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
OCT 20 1953

SUPPLEMENTAL SHEET

HILL-LEDFORD TRACT

Status of Holes - Completed and Drilling.

M-44	Completed 815 ft. (Previously reported 220')	595 ft.
M-45	Completed 900 ft. (Previously reported 240')	660 ft.
M-46	Drilling - Depth 9-30-53	800 ft.
	Total Footage	2055 ft.

REMARKS

Attached are copies of logs of churn drill holes M-44 and M-45. Both holes are blank, tight and practically full of water, indicating little or no open ground or connection with the mineralized area to the southwest. The pumping which we are doing west of the highway from drill hole No. 2-M has drained the water on the blocked out orebody to an approximate depth of 700 ft. In drill hole No. 6-M the water is drained to a depth of 720 feet, 19-M to a depth of 679 feet and 28-M to a depth of 710 feet. The drop averages from one to two feet per twenty-four hours.

A four hundred feet scale map of the property is also attached showing the location of the holes which have been drilled and are drilling east of the highway. The map also shows the location of 2-M where the pump is located as well as the location of Holes No. 6-M, 19-M and 28-M which are being gauged daily to show the drop in the water table.

OZARK-MARKWING COMPANY

Hill-Ledford Tract
Hole No. 44-N
Elev. 386.3
Location: 860' N. 100' W., of S.W. Cor. of S.E.¼ N.W.¼ of Sec. 24, Twp., 11, R. 9, Hamilton County, Illinois
or
148' East of 29-N
Drilled by: Moreland and Kohler
Examined by A. G. Johnson
Casing 38 ft. 6¾"

Started 8-24-53
Completed 10-1-53
Water: 30 ft.
90 ft.
215 ft.
310 ft.
345 ft.
415 ft.
425 ft.
455 ft.
560 ft.
720 ft.
Hole full - no open ground

0 - 7	Soil and clay
7 - 25	Quick sand
25 - 35	Shale - sand - creek gravel
35 - 60	Mostly shale
60 - 70	Dark colored lime - shale - com. pyrite
70 - 105	Shaly sandstone
105 - 125	Gray sand
125 - 135	Shaly gray sand
135 - 155	White lime
155 - 210	Dark colored shaly lime, shale streaks. Base of Glenn Dean 210 ft.
210 - 275	Mardinburg sandstone - shaly streaks.
275 - 305	Dark colored shaly lime
305 - 320	Brown sandy shale - some dark colored lime
320 - 340	Dark colored shaly lime - shale streaks
340 - 355	Chocolate colored shale
355 - 390	Mostly sandy shale
390 - 415	Dark colored shaly lime - some shale
415 - 455	Sandy shale - lt. lime
455 - 530	Hard white sand
530 - 605	Shally gray sand
605 - 638	Hard white sand. Few Zn shs. B. B.638 ft.
638 - 650	Gray lime
650 - 670	Gray lime, some calcite
670 - 685	Dark colored lime, some calcite
685 - 705	Dark colored shaly lime
705 - 720	Lighter colored lime
720 - 740	Bonialare sand
740 - 750	Light gray lime
750 - 765	do do , calcite seams
765 - 795	Gray to brown lime
795 - 808	Brown lime
808 - 815	White lime. Few Zn shs.

OZARK MARKNING CO.

Tract

Mill. -K
Hole #9
Elev.
Loc. 1546' N. 204' E. of S.W. Cor., of S.E. ¼ of NW ¼ of Sec. 24, Twp., 11 S., R. 9 E., Hardin County, Illinois
or
196' N. 184' W. of 43-K

Started 8-24-53
Completed 9-30-53
Water 50 - 55 ft.
765 - 770 ft. weak
Stands at 23 ft.

Drilled by: Shreland and Keller
Examined by L. O. Johnson
Casing - 11 ft. 8" size

0 - 15	Soil, clay & lime boulders.
15 - 65	Dark colored shaly lime - shale and salvage seams
65 - 85	Shale - some dark colored lime. Base of Renard 85 ft.
85 - 95	Sandy shale
95 - 135	Shaly gray sand - sandy shale
135 - 150	Sandy shale - gray lime. Vienna Ls.
150 - 170	Shaly sand
170 - 225	White and gray sand
225 - 240	Gray sand - shale seams. Base of Tar Spgs., 240 ft.
240 - 300	White and gray lime - few shale seams
300 - 310	Dark colored sandy lime, some shale. Base Glen Dean 310 ft.
310 - 330	Gray sand - shaly
330 - 360	Gray sand. Base of Hardinsburg 360 ft.
360 - 395	Gray and dark colored shaly lime
395 - 405	Mostly sandy shale
405 - 430	Gray and dark colored shaly lime
430 - 445	Dark colored shaly lime
445 - 485	Mostly sandy shale and salvage
485 - 510	Dark colored shaly lime - shale
510 - 535	Sandy shale
535 - 540	White sand, some shale
540 - 560	White sand
560 - 570	Gray sand - shaly
570 - 660	White sand
660 - 700	Shaly gray sand
700 - 725	Hard white sand. B. R. 725 ft.
725 - 745	Gray lime
745 - 775	Gray lime, lt. salvage. Tight.
775 - 790	Dark colored shaly lime
790 - 805	Gray to tan colored lime
805 - 828	Green and reddish looking Beaucher sand
828 - 840	Light gray lime
840 - 865	Gray lime - few salvage seams
865 - 895	Gray to brown lime
895 - 900	White lime

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

Budget Bureau No. 42-R1036.4
Approval expires 6-30-53

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

SEP 10 1953

Month of August, 1953 Docket No. DMEA 2218 Amended Contract No. III-F255 Stage II
Operator's Name Ozark-Mahoning Company Minerals Fluorspar
Address Rosiclare, Illinois
Contract Amount, $ 60,750.00 Government Participation: 50 % Amount, $ 30,375.00

ITEMS OF COSTS	FOR OPERATOR'S USE			FOR GOVERNMENT USE ONLY		
	Monthly Total	Totals Previously Reported	Totals To Date	Approved Monthly Total	Approved Totals Previously Reported	Approved Totals To Date
(1) Independent Short Form Contracts:						
Drilling - Churn	3316.95	-	3316.95			
Bulldozing						
Crosscutting						
Drifting						
(2) Labor and Supervision:						
Labor						
Supervision						
Technical Services						
(3) Operating Mat'ls. and Supplies:						
Timber						
Explosives						
Pipe						
Track						
(4) Operating Equipment:						
Rental						
Purchase						
Depreciation						
(5) Initial Rehabilitation and Repairs						
(6) New Bldgs., Improvements, etc.						
(7) Miscellaneous:						
Repairs to Equipment						
Sampling and Analysis						
Payroll Taxes						
Liability Insurance						
(8) Contingencies (specify):						
TOTALS	3316.95	-	3316.95			

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

Date Sept. 2, 1953 Payee OZARK-MAHONING COMPANY

Per [signature] Title Ass't. Sec.-Treas.

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

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

(Instructions on reverse)

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

$ 1,658.48

Signature F. R. Kantner, Adm. Asst.
(Authorized Certifying Officer)

Date 9/17/53 Vou. No. DMEA-51
(See other side)

(For Government use only)

CERTIFICATION BY GOVERNMENT REPRESENTATIVE:

I certify that to the best of my knowledge and belief the contractor submitting this voucher is operating a Defense Minerals Exploration Administration project under Contract No. DMEA 255 in accordance with the terms of the contract.

Signature [illegible] Title Mining Eng. Date 9-4-53

APPROVAL BY DMEA EXECUTIVE OFFICER OR ALTERNATE:

Signature [illegible] Title Actng Exec. Officer Date 9/4/53

MONTHLY REPORT OF OPERATOR

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

GPO 83-38476

Form MF-104A
(April 1952)

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

UNITED STATES
DEPARTMENT OF THE INTERIOR

DEFENSE MINERALS EXPLORATION ADMINISTRATION

OPERATOR'S UNIT COST AND PROGRESS REPORT

Month of August 195 3 Docket No. DMEA 2248 Amended Contract No. IM-E255 Stage II
Operator's Name Ozark-Mahoning Company Minerals Fluorspar
Address Rosiclare, Illinois

OPERATION	Unit Cost	Costs This Month	Units This Month	Costs to Date	Units to Date	Unit Costs to Date	Authorized by Contract: Units	Authorized by Contract: Unit Costs
Drifting								
Crosscutting								
Raising								
Shafts								
Winzes								
Drilling: Core								
Churn	2.43	3316.95	1365	3316.95	1365		25000	2.43
Auger								
Stripping								
Trenching								
Test Pits								
Roads and Trails								
Total Distributed Costs		3316.95	1365	3316.95				Total Costs Authorized by Contract
Operating Equipment Purchased								
Initial Rehabilitation and Repairs								
New Buildings, Improvements, etc.								
Total Costs								

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

Date September 2, 1953 Operator OZARK-MAHONING COMPANY

Per [signature] Title Ass't. Sec.-Treas.

Remarks:

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

(Instructions on reverse)

(For Government use only)

INSTRUCTIONS

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

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

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

GPO 83-38475

C
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OZARK-MAHONING COMPANY
Mahoning Mining Division
Rosiclare, Illinois

September 2, 1953

Mr. W. T. Millar
Executive Officer
Bureau-Survey Field Team
Defense Minerals Exploration Administration
Region VIII
U. S. Department of the Interior
Defense Minerals Administration
College Park, Maryland

Dear Mr. Millar:

Enclosed herewith you will find five copies of Form MF-104, Operator's Monthly Report and Voucher, as well as five copies of Form MF-104A, Operator's Unit Cost and Progress Report.

These forms are in connection with Stage II, Amended Exploration Project Contract, Docket #DMEA 2248, Contract #IDM-E255, dated June 2, 1953 and covers the prospecting which we have now started on the Hill-Ledford Tract in Hardin County, Illinois.

Very truly yours,

OZARK-MAHONING COMPANY
Mahoning Mining Division

/s/ A. G. Johnson
A. G. Johnson

AGJ/blc

Enclosures

September 2, 1953

SUPPLEMENTAL SHEET
HILL-LEDFORD TRACT

August 1953

Status of Holes - Completed & Drilling

M-43 - Completed at 905 ft. (Previously reported - None)	905 Ft.
M-44 - Drilling - Depth 8-31-53	220 "
M-45 - Drilling - Depth 8-31-53	240 "
Total Footage	1365 "

Remarks:

This is the start of drilling operations under Stage II, Amended Contract, Docket DMA, Contract No. IDM-E-255 dated June 2, 1953. Attached is copy of log of churn drill hole M-43. This hole was blank. It is located fairly close to the intersection of the NE trend as well as the northwest trending series of sinkholes.

One hundred foot scale map is attached of a portion of the Hill-Ledford property showing the location of M-43, as well as the holes now drilling, M-44, 45 and 46.

We are now operating three drills.

DEFENSE MINERALS EXPLORATION ADMINISTRATION
CONTRACT ADMINISTRATION AND AUDIT DIVISION

REPORT OF REVIEW

I have reviewed the Monthly Reports of:

Ozark-Mahoning Company

Rosiclare, Illinois

pertaining to Exploration Project Contract No. Idm-E255, Docket No. DMA-2248, including Amendment No. 1, for the period of February 18, 1952 to January 31, 1953, inclusive, covering a project for the exploration of fluorspar.

My review included an examination of the Monthly Reports (Forms MF-104) and supporting documents attached thereto, comparison of the costs claimed with the contract and pertinent schedules, consultation with the Regional DMEA Executive Officer, and a determination of the reasonableness and propriety of the costs.

This review was made in lieu of an audit of the Operator's accounts for the reason that:

the contract as amended provides for payment by the Government on the basis of agreed estimated costs of units of work actually performed, i.e., 25,500 feet of drilling at the following costs:

Sub-contract churn drilling @ $2.25/ft.	$57,375.00
Supervision @ $0.15/ft.	3,825.00
Assaying and laboratory @ $0.01/ft.	255.00
Clerical @ $0.02 ft.	510.00

The review disclosed the following facts in regard to the amount paid or to be paid the contractor:

Total cost as billed by Contractor		$61,965.00
Exceptions:		
By DMEA Finance Officer	$ -0-	
Herewith	-0-	-0-
Total Accepted Cost		$61,965.00

The contract calls for a 50 percent participation of exploration expenses by the United States Government. Therefore, payment to the contractor by the Government in the amount of Thirty thousand nine hundred eighty-two and 50/100 Dollars

— $30,982.50 —

is considered valid and proper.

March 9, 1953

E. R. Talbot
Auditor

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

Budget Bureau No. 42-R1036.3.
Approval expires 6-30-53.

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
FEB 25 1953

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

Month of January 1953 Docket No. DMEA 2248 Contract No. E 25853

Operator's Name Ozark-Mahoning Co. Minerals Fluorspar

Address Rosiclare, Illinois

Contract Amount, $ 61,965.00 Government Participation: 50 % Amount, $ 30,982.50

ITEMS OF COSTS	FOR OPERATOR'S USE			FOR GOVERNMENT USE ONLY		
	Monthly Total	Totals Previously Reported	Totals To Date	Approved Monthly Total	Approved Totals Previously Reported	Approved Totals To Date
(1) Independent Short Form Contracts: Churn	882.09	61082.91	61,965.00			
Drilling						
Bulldozing						
Crosscutting						
Drifting						
(2) Labor and Supervision:						
Labor						
Supervision						
Technical Services						
(3) Operating Mat'ls. and Supplies:						
Timber						
Explosives						
Pipe						
Track						
(4) Operating Equipment:						
Rental						
Purchase						
Depreciation						
(5) Initial Rehabilitation and Repairs						
(6) New Bldgs., Improvements, etc.						
(7) Miscellaneous:						
Repairs to Equipment						
Sampling and Analysis						
Payroll Taxes						
Liability Insurance						
(8) Contingencies (specify):						
TOTALS	882.09	61082.91	61965.00			

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

Date Feb. 5, 1953 *Payee OZARK-MAHONING COMPANY

Per [signature] Title Ass't. Sec'y-Treasurer

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

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

(Instructions on reverse)

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

$ 441.09

Signature F. R. Kantner, Adm. Asst.
(Authorized Certifying Officer)

Date 2/24/53 Vou. No. DMEA-28
(See other side)

(For Government use only)

CERTIFICATION BY GOVERNMENT REPRESENTATIVE:

I certify that to the best of my knowledge and belief the contractor submitting this voucher is operating a Defense Minerals Exploration Administration project under Contract No. Wy E-255 in accordance with the terms of the contract.

Signature [illegible] Title Mining Engineer Date Feb. 13, 1953

APPROVAL BY DMEA EXECUTIVE OFFICER OR ALTERNATE:

Signature W. P. Miller Title Acting Exec. Officer Date Feb. 13, 1953

MONTHLY REPORT OF OPERATOR

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

GPO 83-38476

Form MF-104A
(April 1952)

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

UNITED STATES
DEPARTMENT OF THE INTERIOR

DEFENSE MINERALS EXPLORATION ADMINISTRATION

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
FEB 26 1953

OPERATOR'S UNIT COST AND PROGRESS REPORT

Month of January 3 Docket No. DMEA 2248 Contract E-255

Operator's Name Ozark-Mahoning Co. Minerals Fluorspar

Address Rosiclare, Illinois

OPERATION	Cost	Costs This Month	Units This Month	Costs to Date	Units to Date	Unit Costs to Date	Authorized by Contract: Units	Authorized by Contract: Unit Costs
Drifting								
Crosscutting								
Raising								
Shafts								
Winzes								
Drilling: Core	$2.43	882.09	363	61965.00	25500		25500	$ 2.43
Churn								
Auger								
Stripping								
Trenching								
Test Pits								
Roads and Trails								
Total Distributed Costs		882.09	363	61965.00				Total Costs Authorized by Contract
Operating Equipment Purchased								
Initial Rehabilitation and Repairs								
New Buildings, Improvements, etc.								
Total Costs								

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

Date Feb. 5, 1953 Operator OZARK-MAHONING COMPANY

Per J. L. Padden Title Ass't. Sec'y-Treas.

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

(Instructions on reverse)

Remarks: *Includes following:

Drilling	$2.25	per foot
Geologist	0.15	" "
Assaying	0.01	" "
Clerical	0.02	" "
	$ 2.43	

(For Government use only)

INSTRUCTIONS

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

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

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

GPO 83-38475

SUPPLEMENTAL SHEET

January 1953

Geologist	363 Ft. @ 0.15 per foot	=	$ 54.45
Assaying	363 ft. @ 0.01 per foot	=	3.63
Clerical	363 ft. @ 0.02 per foot	=	7.26
			$ 65.34

Status of Holes Drilled for month - Project Completed

M-37	Completed (Previously reported 610')	Balance	155 ft.
M-38	Completed (Previously reported 240')	Balance	208 ft.
	Total		363 ft.

Remarks:

Copies of logs of 37-M and 38-M are attached to this report. There is also included a report addressed to Mr. Millar covering the entire project to which is attached a "Summary of the Drill Hole Data" as well as a 100 foot scale map of the property. There is also included a set of cross sections which have been mailed under separate cover.

CLARK-MARCHING COMPANY

C. W. Hill Tract
Drill Hole No. 37 N
Elevation: 430.5

Started 12-10-52
Finished 1-7-53

Location: 712' north and 694' east of the S.W. corner of the N.E. ¼ of S.E. ¼ of Sec. 23 or 9' south and 290' east of J-H.

Water:
135 - 145 light
Last # 165
650 - 685 strong
Stands at 660'

Drilled by: Moreland and Schler

Examined by: R. A. Brooks
Casing: 20 feet

0 - 19	Surface
19 - 30	Gray sand, shaly partings, some red sand
30 - 55	" " " "
55 - 65	Gray sand
65 - 90	Gray shale, sand streaks
90 - 135	Gray and brown lime, shale streaks Glen Dean
135 - 200	Gray sand
200 - 230	Gray shale, few sand streaks
230 - 235	White sand, shale streaks
235 - 300	Gray and brown lime, shaly
300 - 305	Gray and maroon shale
305 - 380	Gray shale, lime streaks
380 - 405	Black shale, little pyrite at base
405 - 470	White sand, sem. cured shale.
470 - 540	Gray shaily sand
540 - 555	White shaily sand
555 - 585	White sand
585 - 590	White sand, some gray shaly sand
590 - 595	" " , some gray lime. Base of Bethel 592
595 - 615	Gray and brown lime
615 - 625	Gray lime and green salvage
625 - 645	Shale and salvage, lime streaks

645 - 650	Dark brown lime, shaly
650 - 665	Brown lime
665 - 670	Lower O'Hara lime
670 - 692	Residuare sand
692 - 700	Light gray oolitic lime
700 - 720	Gray and brown lime
720 - 735	Brown lime
735 - 759	Dark brown lime
759 - 765	Light gray lime

CLARK-HARTWIG COMPANY

C. H. Hill Trust
Drill Hole No. 38 N
Elevation: 381.7
Location: 398' north and 488' east of the SW Corner of SW¼ of SW¼ of Sec. 34, T 11 S, R 9 E or 5¼' south and 1' west of No. 12-N

Started: 12-8-52
Finished: 1-31-53

Drilled by: Moreland and Bohler
Examined by: E. A. Brooks
Casing: 20'-5" 8¼" Casing
50'- 4½" Casing

Meter: 31-35 Light
165 "
185 "
580 "
605 Fairly Strong
665-675 Fairly Strong
700 Strong
[illegible] "
[illegible]-880 Strong
Water Lost @ 5[illegible]
Plugged 665-670 feet

0-38	Surface gravel and boulders
38-45	Brown lime boulders and sand
45-65	Black shale sand streaks
65-95	Gray sand, little shale
95-105	Gray sandy shale
105-115	Brown lime, shaly
115-125	Light gray calcareous lime
125-155	Gray and brown lime, shale streaks
155-205	Gray sand
205-240	Gray shaly sand
240-300	Gray and brown lime shale streaks
300-335	Gray sand, shaly
335-415	Gray calcareous shale
415-435	Gray shale
435-465	Gray sand, shaly streaks @ 465
465-485	White sand
485-525	Gray shaly sand
525-540	Lost cuttings
540-547½	White quartzite sand very rich acid spar
547½-555	White sand, some spar
555-565	White sand, gravelly, some spar
565-570	Lost cuttings
570-575	Gray to white sand, little spar, few cuttings
575-600	Lost cuttings
600-605	White sand, little spar
605-620	Lost cuttings
620-640	Gray sand, little spar
640-645	Lost cuttings
645-665	Gray sand some gray quartzite and some spar, few cuttings
665-667½	Lost cuttings
667½-667½	White sand and quartzite, little acid spar, few cuttings
667½-672	Gray sand, some spar and Zn, trace Pb, few cuttings
672-682½	Gray sand, spar shines
682½-685	White sand " " , little Zn, trace Pb
685-687½	No cuttings
687½ - 692½	Gray shaly and quartzitic sand, traces spar, Zn and Pb
692½-695	Dark brown quartzitic sand, spar, Zn and Pb shines
695-700	" " " " , little leached buff lime and gray sandy gouge, little low grade spar and Zn
700-735	Con. brown quartzitic sand, some leached buff lime, little spar & Zn
735-755	Shale and sponge, some shaly lime and sandy sand, trace of low grade spar, few Zn shines

755-765	Shale and selvage, some shaly lime, spar shines, trace barite
765-775	Shale and selvage, white oolitic lime, spar shines
775-780	Shale and selvage, some lime and sand, Probably Ronielare, spar shines
780-782	No cuttings
782-795	Shale and selvage, some lime and sand, Probably Ronielare spar shines
795-810	Light colored lime, some selvage, Ore, solid spar
810-815	Grey lime, tighter formation, trace selvage, trace spar
815-822	No cuttings, Ground drilled solid but soft
822-833	Grey lime, trace of selvage, spar shines

Note: This hole either cut a large chimp some or a fault zone as shown by the wide spread mineralization and displacement of formations. The assay results may not be representative and are difficult to correlate with ore zones in adjacent holes.

Ore Zone from 510-675 ft. averages 29.00 Oz/T
" " " 695-785 ft. averages 22.18 Oz/T
2.17 Zn
" " " 795-810 ft. averages 32.18 Oz/T

HOLE - NO. 38

Assays	Oz/T	Oz/T
510-515	11.16	56.05
515-520	13.46	38.12
520-525	3.58	62.22
525-530	2.92	35.16
530-535	2.78	35.70
535-540	1.99	39.04
540-545	2.55	19.29
545-550	2.92	35.77
550-555	3.28	25.77
555-560	No cuttings	
560-565	2.55	36.98
565-570	1.26	37.32
570-575	2.53	30.40
575-580	1.26	4.35
580-585	0.69	15.79
585-590	No cuttings	
590-595	1.79	21.34
595-600	No cuttings	
600-605	1.79	36.57
605-610	2.70	50.45
610-615	No cuttings	
615-620	1.08	28.48
620-625	1.08	32.89
625-630	1.40	34.16
630-635	1.12	28.06
635-640	1.24	23.28
640-645	1.55	15.78
645-650	1.14	38.37
650-655	No cuttings	
655-660	1.25	34.48
660-665	1.35	37.88
665-670	1.79	26.35
670-675	1.97	23.79

	9801	9872		
657½-660	1.12	26.19		
660-662½	1.12	28.48		
662½-665	1.60	22.77		
665-670	2.73	17.27	[illegible]	0.21
670-675	1.[illegible]	11.[illegible]	2.21	0.22
675-677½	22.[illegible]	[illegible]		
677½-680	3.[illegible]	6.19		
680-682½	7.[illegible]	6.13		
682½-685	4.[illegible]	4.[illegible]	2.00	
685-687½	No cuttings			
687½-690	" "			
690-692½	" "			
692½-695	2.[illegible]	2.[illegible]		
695-697½	13.[illegible]	18.[illegible]		
697½-700				
700-702½	7.[illegible]	24.[illegible]	2.00	
702½-705	10.36	25.[illegible]	1.67	
705-707½	10.[illegible]	25.[illegible]	1.71	
707½-710	10.38	32.[illegible]	1.72	
710-712½	10.20	22.[illegible]	1.43	
712½-715	11.[illegible]	23.[illegible]	1.73	
715-717½	10.[illegible]	29.15	1.[illegible]	
717½-720	11.12	29.[illegible]	1.98	
720-725	12.18	13.12	2.00	
725-795	Not assayed			
795-800	7.[illegible]	42.[illegible]		
800-805	9.[illegible]	52.[illegible]		
805-810	7.[illegible]	63.[illegible]		

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

Budget Bureau No. 42-R1036.3
Approval expires 6-30-53.

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
JAN 27 1953

OPERATOR'S MONTHLY REPORT AND VOUCHER

Month of December 1952 Docket No. DMEA 2248 Contract No. E255
Operator's Name Ozark-Mahoning Co. Minerals Fluorspar
Address Rosiclare, Illinois
Contract Amount, $ 61,965.00 Government Participation: 50 % Amount, $ 30,982.50

ITEMS OF COSTS	FOR OPERATOR'S USE			FOR GOVERNMENT USE ONLY		
	Monthly Total	Totals Previously Reported	Totals To Date	Approved Monthly Total	Approved Totals Previously Reported	Approved Totals To Date
(1) Independent Short Form Contracts:						
Drilling - Churn	5333.85	55749.06	61082.91			
Bulldozing						
Crosscutting						
Drifting						
(2) Labor and Supervision:						
Labor						
Supervision						
Technical Services						
(3) Operating Mat'ls. and Supplies:						
Timber						
Explosives						
Pipe						
Track						
(4) Operating Equipment:						
Rental						
Purchase						
Depreciation						
(5) Initial Rehabilitation and Repairs						
(6) New Bldgs., Improvements, etc.						
(7) Miscellaneous:						
Repairs to Equipment						
Sampling and Analysis						
Payroll Taxes						
Liability Insurance						
(8) Contingencies (specify):						
TOTALS	5333.85	55749.06	61082.91			

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

Date 1-1-53 *Payee OZARK-MAHONING COMPANY

Per [signature] Title Ass't. Secy-Treas.

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

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

(Instructions on reverse)

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

$ 2,666.93

Signature F. R. Kantner, Adm. Asst.
(Authorized Certifying Officer)

Date 1/23/53 Vou. No. DMEA-20
(See other side)

(For Government use only)

CERTIFICATION BY GOVERNMENT REPRESENTATIVE:

I certify that to the best of my knowledge and belief the contractor submitting this voucher is operating a Defense Minerals Exploration Administration project under Contract No. 1-24 E-255 in accordance with the terms of the contract.

Signature [illegible] Title Mining Engineer Date Jan. 8, 1953

APPROVAL BY DMEA EXECUTIVE OFFICER OR ALTERNATE:

Signature W. P. Muller Title Acting Exec. Officer Date Jan. 8, 1953

MONTHLY REPORT OF OPERATOR

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

U. S. GOVERNMENT PRINTING OFFICE 205675

Form MF-104A
(April 1952)

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

UNITED STATES
DEPARTMENT OF THE INTERIOR

DEFENSE MINERALS EXPLORATION ADMINISTRATION

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
JAN 27 1953

OPERATOR'S UNIT COST AND PROGRESS REPORT

Month of December 1952 Docket No. DMEA 2248 Contract No. E 255
Operator's Name Ozark-Mahoning Co. Minerals Fluorspar
Address Rosiclare, Illinois

OPERATION	Unit Cost	Costs This Month	Units This Month	Costs to Date	Units to Date	Unit Costs to Date	Authorized by Contract: Units	Authorized by Contract: Unit Costs
Drifting								
Crosscutting								
Raising								
Shafts								
Winzes								
Drilling: Core								
Churn *	2.43	5333.85	2195	61082.91	25137		25500	2.43
Auger								
Stripping								
Trenching								
Test Pits								
Roads and Trails								
Total Distributed Costs		5333.85	2195	61082.91				Total Costs Authorized by Contract
Operating Equipment Purchased								
Initial Rehabilitation and Repairs								
New Buildings, Improvements, etc.								
Total Costs								

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

Date 1-1-53 Operator OZARK-MAHONING COMPANY

Per J. L. Cadden Title Ass't. Sec'y-Treas.

J. L. Cadden

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

(Instructions on reverse)

Remarks:

*Includes Following:

Drilling	$2.25	per foot
Geologist	0.15	" "
Assaying	0.01	" "
Clerical	0.02	" "
Total	$2.43	per foot

(For Government use only)

INSTRUCTIONS

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

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

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

U. S. GOVERNMENT PRINTING OFFICE 205676

SUPPLEMENTAL SHEET

December, 1952

Geologist	2195 ft. @ $0.15 per foot	$ 329.25
Assaying	2195 ft. @ $0.01 per foot	21.95
Clerical	2195 ft. @ $0.02 per foot	43.90
		$ 395.10

Status of Holes Drilling and Completed.

M-33	Completed (Previously reported 680 ft.)	Bal.	155 ft.
M-34	Completed (Previously reported 555')	Bal.	220 ft.
M-35	Completed (Previously reported 610')	Bal.	185 ft.
M-36	Completed	Depth	785 ft.
M-37	Drilling (Depth 12-31-52)		610 ft.
M-38	Drilling (Depth 12-31-52)		240 ft.
		Total	2195 ft.

Remarks:

Copies of logs of Holes Nos. 33, 34, 35 and 36-M are attached to this report. There is also attached a 100 foot scale map showing the location of completed and drilling holes. The total footage under the contract will be used up when Hole No. 37-M is completed and 38-M is partially completed. The balance of 38-M will be Ozark-Mahoning expense. We hope to have 37-M and 38-M completed during the month so that final report on this project can be made February 1, 1953.

Holes Nos. 35 and 36-M, located along the east side of the highway were blank. This was disappointing and indicates the possibility of the ore body pinching out to the northeast. There is, of course, the possibility that we are simply in a lean area and that the ore body will widen out and become richer some further distance to the northeast. Hole No. 33-M cut low grade ore, the best of which appeared to be at the Sub-Roniclare horizon from 777½ - 800 ft. Throughout this section we recovered very few cuttings. Consequently there is a good possibility the ore is better than the assay would indicate. Hole No. 34-M, drilled in about the center of the tract appears to be close to the North edge of the ore body.

CRANE-HARRISON COMPANY

C. W. Hill Trust
Drill Hole No. 13-M
Elevation: 378.3
Location: 360' north and 283' east of SW Corner of NW¼ of Sec. 24 or 195' north and 233' west of 3-M
Drilled by: Moreland and Kohler
Examined by: E. A. Brooks
Casing: 31 feet

Started: 11-8-52
Finished: 12-8-52

Water: 60 Light
200 "
315 "
360 "
560 "
695 Increased water
715 Strong
777½ "
815 "
Stands @ 700

0-30	Surface
30-40	Oxidized calcareous shale
40-45	Black " "
45-50	Grey sand, shale streaks
50-95	Grey shale
95-100	Grey sand, shale streaks
100-110	Dark brown shaly lime
110-120	Light grey crinoidal lime
120-160	Grey and brown lime, shale streaks
160-205	Grey sand
205-235	Dark grey shaly sand
235-320	Grey and brown lime, shale streaks
320-325	Grey and brown shale
325-380	Grey shale, lime streaks
380-425	Grey shale
425-460	Grey sand, some. shale
460-510	White sand
510-565	Grey shaly sand, slide @ 565'
565-610	White sand
610-615	Grey shaly sand
615-620	Grey lime, some sand. Base of Bethel (?)
620-630	Grey and brown lime
630-650	" " " " , little salvage
650-660	Shale and salvage, lime streaks
660-670	Dark brown shaly lime
670-675	" " " " , Zn shines, trace calcite and spar
675-680	" " " " , lit. Zn, spar shines
680-690	" " " " , Some spar, traces of Zn
690-692½	Lower O'Hara lime, little brown lime, spar shines, trace Zn
692½-695	" " " , some Rexisiers sand, trace spar and Zn
695-715	Rexisiers sand
715-717	" " and grey lime spar shines
717-720	Grey calitic lime, spar shines, fair Zn
720-722½	" " " " " , trace Zn
722½-750	Light brown lime
750-775	Dark brown lime
775-777½	Grey lime, little spar, trace Zn
777½-782½	Some acid spar and brown lime, Zn trace
782½-785	Con. shale, probably caved, some spar, some brown silica with free & chatty Zn
785-790	Some spar & brown silica with chatty Zn. Some grey shaly calite and con. grey shale
790-792½	Drilled fine
792½-795	Open
795-805	Chatty Zn on grey calitic lime & brown silica. Little spar, some shale
805-807½	Brown silica on grey lime, spar and Zn shines
807½-820	Grey and brown lime
820-835	Brown lime

Note: Very few cuttings 777½ to 805.

Page Two -

Ore Zone 680 - 690 Averages 11.42 OzPT
.53 In.

Ore Zone 777½ - 800 Averages 17.80 OzPT
2.70 In

Assays	Gold	OzPT	In	Zn
675-677½	45.74	5.83	3.38	
677½-680	72.44	6.78	1.16	
680-682½	49.31	22.38)	3.34	
682½-685	40.37	13.38)	.76	
685-687½	34.90	51.35)		
687½-690	13.30	18.57)		
690-692½	35.44	10.72		
715-717	50.96	9.45		
717-720	48.80	9.73	3.43	
720-722½	63.57	9.59	2.37	
775-777½	72.14	3.96	None	
777½-780	45.37	38.79)	.35	
780-782½	43.24	33.21)	.85	
782½-785	35.46	21.40)	1.81	
785-787½	39.61	8.38)	3.37	
787½-790	37.45	7.90)	2.46	
795-797½	42.67	13.83)	7.20	.24
797½-800	34.02	7.34)	4.68	
800-802½	37.07	5.79	3.43	
802½-805	41.77	5.51	1.44	
805-807½	58.17	4.81	.96	

CLARK-MANCHESTER COMPANY

C. N. Hill Tract

Started 11-18-52
Finished 12-10-52

Drill Hole No. 34 N
Elevation: 423.1
Location: 952 ft. north and 580 ft. east of the S.W. Corner of the N.E. ¼ of Sec. 23 or 3 ft. north and 90 ft. west of 25-N

Water 40 - 45 Light
Stands at 95 ft.
Bails to 800 feet, during shift.

Drilled by: Moreland and Hohler.

Examined by E. A. Brooks

Casing: 20 feet.

0 - 25	Surface.
25 - 35	Gray calcareous shale.
35 - 70	Gray sand, shaly partings.
70 - 75	White sand.
75 - 95	Gray sand shaly.
95 - 105	Gray lime, shale streaks.
105 - 140	Gray and brown lime, shale streaks.
140 - 205	Gray sand, little shale.
205 - 235	Gray shale sandy.
235 - 310	Gray and brown lime, shale streaks.
310 - 380	Gray and maroon shale.
380 - 395	Gray shale, lime streaks.
395 - 420	Gray shale, sandy streaks.
420 - 475	Gray sand, com. carved shale.
475 - 550	Gray sand, slightly shaly.
550 - 595	White sand.
595 - 605	Gray sand, shaly partings.
605 - 618	Gray sand, some gray lime. Base of Bethel 607.
618 - 630	Gray lime.
630 - 640	Gray lime and green salvage.

630 - 640 Gray lime and green selvage.

640 - 655 Shale and selvage, lime streaks.

655 - 675 Dark brown shaly lime.

675 - 690 Lower O'Hara, sandy, barite, calcite and spar shines.

690 - 705 Rosiclare sand.

705 - 707½ Good sand and replacement spar, some Rosiclare sand, chaty Zn shines.
R. R. 706.

707½ - 710 Gray lime and shale, little spar, Zn shines.

710 - 730 Gray oolitic lime.

730 - 740 Brown lime

740 - 745 " " , barite, spar and Zn shines.

745 - 750 Brown lime.

750 - 760 Dark brown lime.

760 - 765 " " " , little sub Rosiclare sand.

765 - 775 Gray oolitic lime.

Ore face 705 - 710 averages 31.10 CaF_2
.40 Zn

Assays	$CaCO_3$	CaF_2	Zn
705 - 707½	4.29	49.66	0.45
707½ - 710	36.17	12.54	0.35

CLARK-SANDERS COMPANY

C. H. Hill Trust
Drill Hole No. 36-E
Elevation: 382.1
Location: 648' north & 697' west of the SE Corner of NW¼ of Sec. 24 or 83' north & 59' west of 36-H
Drilled by: B. H. Bales
Examined by: E. A. Brewin
Casing: 21'-6" 8"

Started: 11-13-52
Finished: 12- 8-52

Water 60-65 Light
110-115 "
260-265 "
Steady 300

0-45	Surface
45-60	Gray & brown shaly lime
60-75	Shale lime streaks
75-85	" sandy streaks
85-120	Gray sand, shaly partings
120-125	Gray shale, sand streaks
125-135	Brown lime, shaly
135-150	Gray Crinoidal lime
150-205	Dark brown shaly lime
205-225	Gray sand, shaly partings
225-265	Gray sand, shale streaks
265-335	Gray and brown lime, shale streaks
335-340	Gray and maroon shale
340-380	Gray shale, lime streaks
380-440	" " , sandy
440-445	Black shale, some pyrite
445-475	Gray sand, shaly
475-575	Gray shelly sand
575-605	White sand
605-630	Gray lime, little sand. base of Bethel 627
630-660	Gray lime
660-675	Gray lime, some green salvage
675-690	Brown lime, occ. shale
690-705	Lower O'Hara lime
705-730	Maquoketa sand
730-760	Light gray lime
760-770	Brown lime
770-785	Dark brown lime
785-790	" " ", little gray sandy oolite
790-795	Gray oily oolitic lime

OZARK-MAHONING COMPANY

C. N. Hill Tract
Drill Hole No. 36-N
Elevation: 381.8

Started 12-8-52
Finished 12-29-52
Water: 70 - 75 Light
490 - 495 Strong
Stands 210 ft.

Location: 523' north & 830' east of the S. W. Corner N.W. ¼ of Sec. 24 or 55' south and 52' east of No. 38-N.

Drilled by: B. W. Bales.

Examined by: R. A. Brooks

Casing: 35½' 8" Pipe

0 - 35	Surface
35 - 55	Gray shale, lime streaks
55 - 65	" "
65 - 90	" " , gray sand streaks
90 - 100	Gray sand, shaly
100 - 115	Gray sand, shale streaks
115 - 120	Brown shaly lime
120 - 130	Light gray crinoidal lime
130 - 185	Gray and brown lime, shale streaks
185 - 225	Dark gray sand, shale streaks
225 - 250	" " "
250 - 320	Gray and brown lime, shale streaks
320 - 335	Brown sand, shale streaks, (maroon?)
335 - 410	Gray shale, lime streaks
410 - 435	Black shale
435 - 470	Gray sand, con. caved shale
470 - 490	Gray shelly sand
490 - 530	White sand
530 - 560	Gray shelly sand
560 - 610	White sand

610 - 615 White sand, little gray lime. Base of Bethel 612

615 - 635 Gray lime

635 - 640 " " , little green selvage

640 - 660 Shale and selvage, lime streaks

660 - 680 Dark brown shaly lime

680 - 690 Lower O'Hara lime

690 - 712 Rosiclare sand

712 - 740 Light gray oolitic lime

740 - 755 Light brown lime, little selvage

755 - 775 Dark brown lime

775 - 785 Gray oolitic lime

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

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION

Budget Bureau No. 42-R1038.3.
Approval expires 6-30-53.

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
DEC 18 1952

OPERATOR'S MONTHLY REPORT AND VOUCHER

Month of November, 1952, Docket No. DMEA 2248 — Contract No. E-255

Operator's Name Ozark-Mahoning Company — Minerals Fluorspar

Address Rosiclare, Illinois

Contract Amount, $61,965.00 — Government Participation: 50 % — Amount, $30,982.50

ITEMS OF COSTS	FOR OPERATOR'S USE: Monthly Total	Totals Previously Reported	Totals To Date	FOR GOVERNMENT USE ONLY: Approved Monthly Total	Approved Totals Previously Reported	Approved Totals To Date
(1) Independent Short Form Contracts:						
Drilling - Churn	6675.21	49073.85	55749.06			
Bulldozing						
Crosscutting						
Drifting						
(2) Labor and Supervision:						
Labor						
Supervision						
Technical Services						
(3) Operating Mat'ls. and Supplies:						
Timber						
Explosives						
Pipe						
Track						
(4) Operating Equipment:						
Rental						
Purchase						
Depreciation						
(5) Initial Rehabilitation and Repairs						
(6) New Bldgs., Improvements, etc.						
(7) Miscellaneous:						
Repairs to Equipment						
Sampling and Analysis						
Payroll Taxes						
Liability Insurance						
(8) Contingencies (specify):						
TOTALS	6675.21	49073.85	55749.06			

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

Date 12-2-52 *Payee Ozark-Mahoning Company

Per J. L. Cadden Title Ass't. Secy.-Treas.

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

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

(Instructions on reverse)

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

$ 3337.61

Signature
(Authorized Certifying Officer)

Date 12/15/52 Vou. No. DMEA-17

(See other side)

(For Government use only)

CERTIFICATION BY GOVERNMENT REPRESENTATIVE:

I certify that to the best of my knowledge and belief the contractor submitting this voucher is operating a Defense Minerals Exploration Administration project under Contract No. Idm E-265 in accordance with the terms of the contract.

Signature [illegible] Title Mining Eng. Date 12-4-52

APPROVAL BY DMEA EXECUTIVE OFFICER OR ALTERNATE:

Signature W. T. Miller Title Acting Exec. Officer Date 12/4/52

MONTHLY REPORT OF OPERATOR

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

U. S. GOVERNMENT PRINTING OFFICE 205675

Form MF-194A
(April 1952)

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

UNITED STATES
DEPARTMENT OF THE INTERIOR

DEFENSE MINERALS EXPLORATION ADMINISTRATION

OPERATOR'S UNIT COST AND PROGRESS REPORT

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
DEC 18 1952

Month of November 1952 Docket No. DMEA 2248 Contract No. E-255
Operator's Name Ozark-Mahoning Company Minerals Fluorspar
Address Rosiclare, Illinois

OPERATION	Unit Cost	Costs This Month	Units This Month	Costs to Date	Units to Date	Unit Costs to Date	Authorized by Contract: Units	Authorized by Contract: Unit Costs
Drifting								
Crosscutting								
Raising								
Shafts								
Winzes								
Drilling: Core								
Churn *	$2.43	6675.21	2747	55749.06	22942		25500	$2.43
Auger								
Stripping								
Trenching								
Test Pits								
Roads and Trails								
Total Distributed Costs								Total Costs Authorized by Contract
Operating Equipment Purchased								
Initial Rehabilitation and Repairs								
New Buildings, Improvements, etc.								
Total Costs								

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

Date Dec. 2, 1952 Operator Ozark-Mahoning Company

Per J. L. Cadden Title Ass't. Secy.-Treas.

J. L. Cadden

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

(Instructions on reverse)

Remarks:

*Includes following:

Drilling	2.25
Geologist	0.15
Assaying	0.01
Clerical	0.02
Total	$2.43

(For Government use only)

INSTRUCTIONS

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

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

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

GPO 83-38475

SUPPLEMENTAL SHEET
November 1952

Geologist	2747 ft. @ $0.15 per foot	412.05
Assaying	2747 ft. @ $0.01 " "	27.47
Clerical	2747 ft. @ $0.02 " "	54.94
		494.46

Status of Holes Drilling and Completed

M-30	Completed	(Previously Reported 550)	Bal.	182 feet
M-31	"	(" " 400)	"	320 feet
M-32	"	(" " 400)	"	400 feet
M-33	Drilling	(Depth 11-30-52)		680 feet
M-34	"	(" 10-30-52)		555 feet
M-35	"	(" 10-30-52)		610 feet
			Total	2747

Remarks:

Copies of logs of drill holes No. 30-M and 31-M and 32-M are attached to this report. Also a map on a one hundred feet to the inch scale is attached showing the locations of completed and drilling holes.

Drill hole No. 30-M showed ore at the base of the Resielare sand; however, we were forced to abandon before the Sub-Resielare zone was cut by caving ground. Drill Hole 31-M showed good ore at both the Resielare sand and Sub-Resielare horizons. M-32 cut some ore at the Sub-Resielare horizon but it was not comparable to the material cut in holes to the west which ore we are trying to extend to the east.

CHANE-MARCHING COMPANY

C. N. Hill Tract

Drill Hole No. 30-M

Elevation: 412.3

Location: 378' south and 534' west of the N. E. corner of N. E. 1/4 of S. E. 1/4 of Sec. 23 or 93' east of 28-M.

Drilled by: Moreland and Hehler

Examined by: E. A. Brecke

Casing: 20 feet.

Started 10-16-52

Finished 11-8-52

Water: 85 Light
310 Fair
600 Light
700 Fairly strong sulfur
717-720 Strong
Stands at 670'

0 - 17	Surface
17 - 25	Sandy shale, little lime
25 - 50	Gray shaly sand
50 - 60	Gray sand
60 - 80	Gray shaly sand
80 - 110	Gray lime, shale streaks Glen Dean
110 - 165	Gray shale, lime streaks.
165 - 215	White sand
215 - 300	Gray and brown lime, shale streaks
300 - 305	Gray and maroon shale
305 - 375	Gray shale, lime streaks
375 - 405	Gray shale, sandy
405 - 465	White sand
465 - 485	" " , shaly partings
485 - 565	Gray shally sand
565 - 590	White sand
590 - 600	Dark gray sandy shale
600 - 602½	" " " " , some gray lime, Base of Bethel 602.
602½ - 685	Gray and brown lime

625 - 655 Gray lime and green selvage

655 - 675 Brown shaly lime

675 - 680 Lower O'Hara

680 - 695 Rosiclare sand, some gray lime, trace calcite

695 - 710 " " " " " , broken and loose cased from 668 -

710 - 714 Rosiclare sand, some good acid spar, traces Pb and Zn

714 - 717 Rosiclare sand, some brown siliceous material, little spar, Pb and Zn.

717 - 725 Gray leached lime, little calcite, little brown siliceous material, some spar, Pb and Zn.

725 - 727½ Opening, few nuggets of spar and sand recovered.

727½ - 732 Brown siliceous material, spar, Pb and Zn shines.

Note: This hole was abandoned at 732 feet because of caving from the section from 725 - 727½. We were unable to drive the sleeve set from 668 to 713 to include the section from 725 - 727½.

Hole No. 30-M
Hill-Ledford

	$CaCO_3$	CaF_2	Zn	Pb
710 - 711	12.40	13.81	1.35	0.59
711 - 714	6.87	30.68	2.87	1.88
714 - 717	0.50	24.21	2.27	1.14
717 - 720	42.67	13.24	1.86	0.52
720 - 722½	41.23	14.96	1.36	0.14
722½ - 725	34.56	21.40	1.36	1.24
725 - 727½	No cuttings			
727½ - 730	14.74	8.04	2.37	0.07
730 - 732	10.78	14.23	3.38	0.31

Ore face from 710 - 717 ft. averages 25.50 CaF_2

2.10 Zn

1.40 Pb

OZARK-MAHONING COMPANY

C. N. Hill Tract
Drill Hole No. 31
Elevation: 401.9
Location: 126' north and 177' east of the S.W. Corner of NE-1/4 of SE-1/4 of Sec. 23 or 100' south and 6' west of No. 27
Drilled by: Moreland & Mahler
Examined by: R. A. Brooks
Casing: 20 feet

Started 10-18-52
Finished 11-18-52

Water: 200 - 205
Lost @ 608-1/2
Steel @ 500
612 strong stands @ 612'

0 - 3	Surface
3 - 18	Oxidized sand gravel
18 - 60	Gray and brown lime shale streaks
60 - 125	Gray sand, shaly partings
125 - 160	Gray shale, sandy
160 - 235	Gray and brown lime, shale streaks
235 - 240	Gray and maroon shale
240 - 310	Gray shale, calcareous
310 - 335	Black shale sandy streaks
335 - 385	White sand
385 - 495	Gray shally sand, some hard streaks
495 - 520	White sand
520 - 530	Gray shaly sand
530 - 535	Gray lime, little shaly sand Base of Bethel 531
535 - 550	Gray and brown lime
550 - 560	Gray and brown lime, little green selvage
560 - 580	Brown lime and green selvage
580 - 600	Brown shaly lime
600 - 610	Lower O'Hara lime
610 - 627-1/2	Rosiclare sand
627-1/2 - 630	Rosiclare sand, Con. sand and replacement spar
630 - 635	Gray lime some spar
635 - 645	Gray lime spar shiner

645 - 650 Gray lime, little spar, little Pb and Zn

650 - 655 Gray lime, some acid spar, little Pb and Zn

655 - 665 Gray lime, few cuttings traces spar Pb and Zn

665 - 670 Gray lime

670 - 680 Brown lime

680 - 685 Very rich acid spar, little Pb and Zn

685 - 690 Mostly brown quartz, good Zn, trace Pb little spar.

690 - 695 Light gray and brown quartz, trace Zn Pb and spar

695 - 700 Mostly light brown quartz, good chatty Zn, Pb shines, trace spar

700 - 705 Mostly light brown quartz, Con. Zn, spar and Pb shines

705 - 710 Light gray sandy lime, trace Zn,spar & Pb shines

710 - 720 Light gray sandy lime, spar,Zn and Pb shines

Base of Sub Rosiclare Indef. 690 or 705 feet

Hill Ledford

Hole No. 31-H

	CaCO3	CaF2	Zn	Pb
627-1/2 - 630	9.52	29.84		
630 - 635	17.26	38.97		
645 - 650	47.54	14.23	1.26	2.83
650 - 652-1/2	39.07	24.63	2.77	0.77
652-1/2 - 655	36.00	28.29	2.97	1.24
680 - 682-1/2	16.72	70.05	3.17	0.80
682-1/2 - 685	20.69	57.25	4.38	0.46
685 - 690	5.01	63.02	8.11	1.29
690 - 692-1/2	38.35	14.51	2.32	0.34
692-1/2 - 695	37.27	14.79	2.02	0.28
695 - 697-1/2	23.21	20.98	7.40	1.81
697-1/2 - 700	25.55	8.04	9.27	1.90
700 - 702-1/2	28.52	15.92	5.04	0.73
702-1/2 - 705	15.28	13.10	4.23	0.58
705 - 710	59.43	8.32	6.14	0.88

Ore face from 627-1/2 - 635 ft. averages 35.90 CaF2

Ore face from 645 - 655 ft. averages 20.35 CaF2
2.06 Zn
1.90 Pb

Ore face from 680 - 700 ft. averages 39.00 CaF2
5.40 Zn
1.00 Pb

Ore face from 700 - 710 ft. averages 11.10 CaF2
4.90 Zn
0.75 Pb

OZARK-MAHONING COMPANY

C. N. Hill Tract
Hole No. 38-M
Elev. 381.3
Loc. 580' N 777' East of SW Cor.
of NW¼ of Sec. 24 or 100' N.
80' E. of 21-M
Drilled by: B. W. Bales
Examined by: A. G. Johnson & E. A. Brooks
Casing: 31 ft. - 8"

St. 10-22-52
Comp. 11-13-52

Water: 85-90 Light
205-210 Strong
Lost @ 731
Water stood at 160'
until opening at 731
was cut
Stands @ 600'

0-19	Soil and clay
19-28	Mud and gravel
28-42	Shale
42-59	Gray shaly lime. Base of Vienna 59'
59-85	Gray and shaly sand
85-110	Gray sand
110-121	Shaly gray sand. B. of Tar Spgs. 121 ft.
121-150	Gray and dark colored shaly lime - shale streaks
150-178	Dark gray lime - few shale seams. B. of Glen Dean 178'
178-215	Gray sand
215-230	Shaly sand
230-253	Gray sand. B. of Hardinsburg 253 ft.
253-265	Gray and shaly looking lime
265-280	Gray lime - shale seams
280-290	Gray lime
290-315	Shale - lime streaks
315-325	Gray lime
325-330	Sandy shale
330-340	Chocolate colored shale
340-431	Shale - lime and sand streaks. B. of Golconda 431 ft.
431-575	White and gray sand
575-621	White sand. B.B. 621 ft.
621-640	Gray lime
640-680	do , salvage seams
680-690	Dark colored shaly lime
690-703	Lighter colored lime. Lower O'Hara
703-725	Residlare sand - some lime, salvage and mud streaks
725-730	Few cutgs. Residlare sand, some green salvage. Some soft leached lime and brown secondary calcite. Lt. low grade purple and acid spar. Tr. Zn. Pb shs.
730-732½	V. F. cutgs. Mud pocket from 731-732 ft. Light gray sandy lime - spar-Zn-Pb shs. Lost water @ 731 ft. Dropped from 160 ft. to 600 ft. Base of Residlare 732 ft.
732½-735	Light gray sandy lime - V. F. cutgs. Few spar shs.
735-737½	Light gray sandy lime. Few spar shs.
737½-755	Light gray sandy lime, Occ. green salvage traces spar
755-760	Gray lime and green salvage
760-765	Dark brown lime
765-775	Brown lime, little brown silica, some spar and Zn
775-777½	Gray calitic lime, some spar and Zn
777½-800	Light gray calitic lime traces spar and Zn

Ore face from 765-777½ Averages 23.68 CaFt
2.75 Zn

Assay	CaCO3	CaF2	Zn	Pb
725-730 ft.	27.17	20.42	0.56	0.15
730-732½ ft.	24.11	7.62	0.35	0.10
765-770	43.03	25.80	1.56	
770-772½	70.06	9.59	1.01	
772½-775	44.47	14.65	3.58	
775-777½	18.34	43.75	6.04	

Form MF-194 (Rev.)
(April 1952)

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION

Budget Bureau No. 42-R1036.3.
Approval expires 6-30-53.

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
NOV 14 1952

OPERATOR'S MONTHLY REPORT AND VOUCHER

Month of October, 1952 Docket No. DMEA 2248 Contract No. E-255
Operator's Name Ozark-Mahoning Company Minerals Fluorspar
Address Rosiclare, Illinois
Contract Amount, $61,965.00 Government Participation: 50 % Amount, $ 30,982.50

ITEMS OF COSTS	FOR OPERATOR'S USE			FOR GOVERNMENT USE ONLY		
	Monthly Total	Totals Previously Reported	Totals To Date	Approved Monthly Total	Approved Totals Previously Reported	Approved Totals To Date
(1) Independent Short Form Contracts:						
Drilling - Churn	7406.64	41667.21	49073.85			
Bulldozing						
Crosscutting						
Drifting						
(2) Labor and Supervision:						
Labor						
Supervision						
Technical Services						
(3) Operating Mat'ls. and Supplies:						
Timber						
Explosives						
Pipe						
Track						
(4) Operating Equipment:						
Rental						
Purchase						
Depreciation						
(5) Initial Rehabilitation and Repairs						
(6) New Bldgs., Improvements, etc.						
(7) Miscellaneous:						
Repairs to Equipment						
Sampling and Analysis						
Payroll Taxes						
Liability Insurance						
(8) Contingencies (specify):						
TOTALS	7406.64	41667.21	49073.85			

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

Date 10-1-52 *Payee Ozark-Mahoning Company

Per J. L. Cadden Title Ass't. Secy-Treas.

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

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

(Instructions on reverse)

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

$ 3703.32

Signature /s/ W. F. Owen, Jr.
(Authorized Certifying Officer)

Date 11/10/52 Vou. No. DMEA-13

(See other side)

(For Government use only)

CERTIFICATION BY GOVERNMENT REPRESENTATIVE:

I certify that to the best of my knowledge and belief the contractor submitting this voucher is operating a Defense Minerals Exploration Administration project under Contract No. DMA-E-257 in accordance with the terms of the contract.

Signature J. H. Eikenberry Title Mining Engineer Date Nov. 5, 1952

APPROVAL BY DMEA EXECUTIVE OFFICER OR ALTERNATE:

Signature W. P. Miller Title Acting Exec. Officer Date Nov. 5, 1952

MONTHLY REPORT OF OPERATOR

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

U. S. GOVERNMENT PRINTING OFFICE 205675

Form MF-204A
(April 1952)

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

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
NOV 14 1952

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

Month of October 195 2 Docket No. DMEA 2248 Contract No. E-255
Operator's Name Ozark-Mahoning Company Minerals Fluorspar
Address Rosiclare, Illinois

OPERATION	UNIT	COSTS THIS MONTH	UNITS THIS MONTH	COSTS TO DATE	UNITS TO DATE	UNIT COSTS TO DATE	AUTHORIZED BY CONTRACT Units	AUTHORIZED BY CONTRACT Unit Costs
Drifting								
Crosscutting	Cost							
Raising								
Shafts								
Winzes								
Drilling: Core								
Churn								
Auger	* $2.43	7406.64	3048	49073.85	20195		25500	$2.43
Stripping								
Trenching								
Test Pits								
Roads and Trails								
TOTAL DISTRIBUTED COSTS		7406.64	3048	49073.85				TOTAL COSTS AUTHORIZED BY CONTRACT
Operating Equipment Purchased								
Initial Rehabilitation and Repairs								
New Buildings, Improvements, etc.								
TOTAL COSTS								

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

Date 10-1-52 Operator Ozark-Mahoning Company

Per J. L. Cadden Title Ass't. Secy-Treas.

J. L. Cadden

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

(Instructions on reverse)

REMARKS:

*Includes following:

Drilling @	2.25	per foot
Geologist @	0.15	" "
Assaying @	0.01	" "
Clerical @	0.02	" "
Total	$2.43	" "

(For Government use only)

INSTRUCTIONS

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

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

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

U. S. GOVERNMENT PRINTING OFFICE 205676

OZARK-MAHONING COMPANY
ROSICLARE, ILLINOIS

SUPPLEMENTAL SHEET

OCTOBER 1952

Geologist	3048 ft. @ $0.15 per foot	457.20
Assaying	ft. @ $0.01 " "	30.48
Clerical	ft. @ $0.02 " "	60.96
		$548.64

Status of Holes Drilling & Completed

M-27	Completed	10-18-52	(Previously reported 385')	Bal.	355 ft.
M-28	"	10-16-52	(" " 250')	"	538 ft.
M-29	"	10-22-52	(" " None)	"	805 ft.
M-30	Drilling	(Depth 10-31-52)			550 ft.
M-31	"	(" 10-31-52)			400 ft.
M-32	"	(" 10-31-52)			400 ft.
			Total		3048 ft.

Remarks:

Copies of logs of Drill Holes No. 27, 28 and 29-M are attached to this report. One hundred foot scale map is also attached showing location of all holes which have been completed as well as those now drilling.

You will note that 29-M is blank. This is disappointing. In order to determine whether the ore continues to the northeast, we decided to back-up and drill close to known ore. Hence the location of 32-M.

OZARK-MAHONING COMPANY

Hill-Ledford Tract

Hole No. 27-M

Elevation: 400.3

Location: 225' N. - 172' East of S.W. Corner of N.E. ¼ of S.E. ¼ of Sec. 23
or
100' South of 24-M

Started 9-18-52

Completed 10-18-52

Water 50'
110'
330'
653'
Stands at 609'

Drilled by: Moreland and Mehler

Examined by: A. G. Johnson

Casing - 20 ft.

0 - 4 Soil and clay

4 - 10 Creek gravel

10 - 25 Mud - oxidized sand

25 - 70 Gray lime - shale and mud seams

70 - 135 Gray sand

135 - 175 Gray sand - shale streaks

175 - 205 Gray and dark-colored shaly lime

205 - 240 Dark colored shaly lime - shale streaks

240 - 255 Chocolate colored shale

255 - 320 Shale - lime and sand streaks. Base of Golconda 320 ft.

320 - 360 Gray sand - shale streaks.

360 - 547½ White and gray sand. B. B. 547.5

547½ - 550 Hard gray lime

550 - 560 Gray lime

560 - 575 Light gray lime

575 - 605 Dark colored lime - shale and selvage.

605 - 615 Dark colored shaly lime

615 - 630 Light gray oolitic lime.

630 - 647½ Residlare sand

647½ - 650 Rosiclare sand, spar shs.

650 - 652½ " " Trace spar.

652½ - 655 V.F. Cuttings, Rosiclare sand, Trace spar - Zn shs. Crevice at 653 ft. Lost water. Stands at 609 ft.

655 - 660 V. F. cuttings, Rosiclare sand, trace spar and Zn.

660 - 665 Rosiclare sand, few cuttings, trace calcite. Lt. acid spar. B. R. 665 ft.

665 - 667½ Light gray sandy ls. - some sand.

667½ - 670 Light gray sandy lime, com. gouge. Lt. spar Zn shs.

670 - 672½ Light gray oolitic lime. Trace spar.

672½ - 675 " " " " , some calcite. Lt. purple spar.

675 - 677½ Gray lime. Tr. Zn - spar shs.

677½ - 680 Gray lime. Zn Shs.

680 - 690 Buff leached lime, little replacement spar.

690 - 692½ Leached brown lime, little acid spar, trace Zn.

692½ - 695 Some brown siliceous lime and black salvage, some purple acid spar.

695 - 697½ Good acid spar; some brown silica, Zn shines, chatty.

697½ - 700 Good spar, com. brown silica, Zn shines, little gray lime.

700 - 705 Gray and brown lime, little spar, Zn shines.

705 - 715 Com white calcite, little brown lime, little Zn, spar shines.

715 - 725 Brown lime, little white calcite, spar and Zn shines.

725 - 730 Brown lime, little calcite, fair Zn, spar shines, trace Pb.

730 - 740 Gray sandy lime, traces spar and Zn.

Ore face from	652½ - 665 ft.	averages	28.30 CaF_2
" " "	665 - 692½ ft.	"	18.90 CaF_2
" " "	692½ - 700 ft.	"	51.90 CaF_2
			0.90 Zn
" " "	700 - 730 ft.	"	14.00 CaF_2
			2.28 Zn

Assays:

	CaCO3	CaF2	Zn
650 - 652½	9.82	27.02	
652½ - 655	9.50	32.86	
655 - 660	12.31	24.84	
660 - 662½	8.19	29.21	
662½ - 665	8.30	30.09	
665 - 667½	38.31	14.62	
667½ - 670	38.31	15.64	
670 - 672½	38.68	24.11	
672½ - 675	36.25	26.88	
675 - 677½	40.36	13.89	1.84
680 - 685	27.46	18.27	
685 - 690	10.25	27.75	
690 - 692½	11.18	28.78	
692½ - 695	5.95	47.89	
695 - 697½	2.02	67.74	0.80
697½ - 700	13.43	40.16	1.95
700 - 702½	44.67	29.80	1.10
702½ - 705	39.05	15.79	0.48
705 - 710	65.80	10.68	2.89
710 - 715	72.53	9.81	2.05
715 - 720	65.99	13.75	2.58
720 - 725	43.54	10.54	0.80
725 - 730	46.54	16.23	4.57

OGARE-MARONING COMPANY

Hill-Ledford Tract
Hole No. 28-M
Elev. 413.1
Loc: 945' N - 774' E of SW Cor.
of NE¼ of SE¼ of Sec. 23 or
104' N - 5' S of 25-M
Drilled by: Moreland & Bohler
Examined by: A. G. Johnson
Casing: 30 ft.

Started: 9-20-52
Completed: 10-16-52

Water: 26 ft.)
60 ")
160 ")
300 ") Light
420 ")
490 ")
665 ")
775 ")
Lost water @ 740'
Stands @ 700 ft.

0-18	Soil & clay
18-25	Shale - lime boulders
25-90	Gray sand - shale streaks
90-130	Gray and dark colored shaly lime. Glen Dean
130-190	Gray sand
190-220	Sandy shale
220-260	Light gray to dark gray shaly lime
260-300	Shale - lime & sand streaks
300-310	Chocolate colored shale
310-380	Shale - lime & sand streaks - Base of Caseyville
380-410	Gray sand - shale streaks
410-510	Gray sand
510-595	White sand
595-602	Gray sand. B. B. 602 ft.
602-625	Gray lime
625-660	Dark colored shaly lime - shale & selvage
660-680	Light gray oolitic lime. Lower O'Hara
680-702½	Rosiclare sand
702½-705	Good acid spar - Rosiclare sand. Base of Rosiclare 703 ft.
705-707½	Light gr. ls. Lt. acid spar
707½-710	Gray lime - Spar and Zn shs.
710-715	Gray lime, calcite, some barite. Lt. spar, Zn shs.
715-720	Gray lime, cons. calcite, some barite. Lt. spar. Pb & Zn shs.
720-725	Dark gray lime, trace of calcite. Spar & Zn shs.
725-730	Dark gray lime
730-745	Gray to brown lime - spar - Zn - Pb shs.
745-750	Light gray oolitic lime. Zn shs.
750-775	do Spar - Zn - Pb shs.
775-788	Darker colored lime

Ore face from 702½ - 715 ft. averages 42.60 CaF2

Assays	CaCO3	CaF2	SiO2	BaSO4
702½-705	7.02	67.88	20.76)	
705-707½	36.62	46.14	13.35)	
707½-710	60.75	24.11	9.95)	
710-712½	48.98	35.93	14.57)	3.61
712½-715	41.30	38.99	13.51)	
715-717½	54.39	22.21	11.34)	
717½-720	52.71	21.92	10.97)	

OZARK-MAHONING COMPANY

Hill-Ledford Tract
Hole No. 29-M
Elev. 383.9
Loc: 1060' E - 790' N of SW Cor. of NW¼ of Sec. 24 or 150' E of 26-M
Drilled by: B. W. Bales
Examined by: A. G. Johnson
Casing: Pulled

Started: 9-30-52
Completed: 10-22-52

Water: 90'
125' Strong
230' "
550' "
Stands 150 ft.

0-20	Soil and clay
20-40	Mud & gravel
40-55	Sandy shale
55-73	Gray and dark col. shaly lime
73-105	Sandy shale
105-138	Gray sand - shale streaks
138-197	Light gray to dark col. shaly lime. Glen Dean
197-261	Gray sand - shale seams. Hardinsburg
261-290	Gray lime - shale seams
290-340	Dark colored shaly lime, many shale streaks
340-355	Chocolate colored shale
355-440	Shale - lime and sand streaks. Base of Golconda
440-465	Gray sand - shale streaks
465-540	White sand
540-600	Shally wh. & gray sand
600-636	Hard white sand. B. B. 636'
636-655	Gray lime, trace of calcite
655-685	Gray lime, salvage seams
685-695	Dark colored shaly lime
695-710	Dark colored shaly lime, shale & sand slips
710-715	Gray lime
715-737	Rosiclare sand
737-775	Gray lime
775-800	Gr. to brown lime. Base Sub-Rosiclare 800 ft.
800-802½	Light gr. col. ls., trace calc. Contact at 808' shaly. Few Zn shs.
802½-805	Light gray oolitic lime

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

Budget Bureau No. 42-R1036.3.
Expires April 30, 1953.

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
OCT 29 1952

OPERATOR'S MONTHLY REPORT AND VOUCHER

Month of September, 1952 Docket No. DMEA 2248 Contract No. E-255
Operator's Name Ozark-Mahoning Company Minerals Fluorspar
Address Rosiclare, Illinois
Contract Amount, $61,965.00 Government Participation: 50 % Amount, $30,982.50

ITEMS OF COSTS	FOR OPERATOR'S USE			FOR GOVERNMENT USE ONLY		
	Monthly Total	Totals Previously Reported	Totals To Date	Approved Monthly Total	Approved Totals Previously Reported	Approved Totals To Date
(1) Independent Short Form Contracts:						
Drilling Churn	6658.20	35009.01	41667.21			
Bulldozing						
Crosscutting						
Drifting						
(2) Labor and Supervision:						
Labor						
Supervision						
Technical Services						
(3) Operating Mat'ls. and Supplies:						
Timber						
Explosives						
Pipe						
Track						
(4) Operating Equipment:						
Rental						
Purchase						
Depreciation						
(5) Initial Rehabilitation and Repairs						
(6) New Bldgs., Improvements, etc.						
(7) Miscellaneous:						
Repairs to Equipment						
Sampling and Analysis						
Payroll Taxes						
Liability Insurance						
(8) Contingencies (specify):						
TOTALS	6658.20	35009.01	41667.21	6,658.20	35,009.01	41,667.21

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

Date 10/1/52 *Payee Ozark-Mahoning Company

Per L. J. Cadden Title Ass't. Secy-Treas.

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

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

(Instructions on reverse)

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

$ 3329.10

Signature L. Neumann
(~~Authorized Certifying Officer~~)

Date 10-23-52 Vou. No. DMEA-11

(See other side)

(For Government use only)

CERTIFICATION BY GOVERNMENT REPRESENTATIVE:

I certify that to the best of my knowledge and belief the contractor submitting this voucher is operating a Defense Minerals Exploration Administration project under Contract No. Idm-5255 in accordance with the terms of the contract.

Signature G. L. Meierhans Title Mining Eng. Date 10-9-52

APPROVAL BY DMEA EXECUTIVE OFFICER OR ALTERNATE:

Signature McKenny Mosier Title Executive Officer Date October 10, 1952

MONTHLY REPORT OF OPERATOR

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

U. S. GOVERNMENT PRINTING OFFICE 205675

Form MF-104A
(April 1952)

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

UNITED STATES
DEPARTMENT OF THE INTERIOR

DEFENSE MINERALS EXPLORATION ADMINISTRATION

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
OCT 29 1952

OPERATOR'S UNIT COST AND PROGRESS REPORT

Month of Sept. 1952 Docket No. DMEA 2248 Contract No. E-255
Operator's Name Ozark-Mahoning Company Minerals Fluorspar
Address Rosiclare, Illinois

OPERATION	Unit Cost	Costs This Month	Units This Month	Costs to Date	Units to Date Feet	Unit Costs to Date	Authorized by Contract Units	Authorized by Contract Unit Costs
Drifting								
Crosscutting								
Raising								
Shafts								
Winzes								
Drilling: Core								
Churn *	2.43	6658.20	2740	41667.21	17147		25500	$2.43
Auger								
Stripping								
Trenching								
Test Pits								
Roads and Trails								
Total Distributed Costs		6658.20	2740	41667.21				Total Costs Authorized by Contract
Operating Equipment Purchased								
Initial Rehabilitation and Repairs								
New Buildings, Improvements, etc.								
Total Costs								$61,965.00

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

Date 10/1/52 Operator OZARK-MAHONING COMPANY

Per J. L. Cadden Title Ass't. Secy-Treasurer

J. L. Cadden

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

Remarks:
*Includes following:

Drilling @	$2.25	per	foot
Geologist @	0.15	"	"
Assaying @	0.01	"	"
Clerical @	0.02	"	"
Total	$2.43	"	"

(Instructions on reverse)

(For Government use only)

INSTRUCTIONS

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

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

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

U. S. GOVERNMENT PRINTING OFFICE 205676

College Park, Maryland

October 1?, 1952

Mr. A. G. Johnson, Geologist
Ozark-Mahoning Company
Rosiclare, Illinois

Dear Mr. Johnson:

Your recommendation of modification of original contract fdm-255 as set forth in Monthly Progress Report for September 1952, is hereby approved as follows:

(1) Along N-S x-section drill southward from 27-M at 100 foot intervals so long as in the ore.

(2) Along northernmost E-W x-section on side of No. 1 Highway drill 150 feet E of 26-M.

We are elated over showings of the September drilling. Mr. Neumann will be in Rosiclare early next week and you can take up anything further with him then.

The sections give a very complete picture of the results accomplished and justification for future program.

Very truly yours,

McHenry Mosier, Executive Officer
Bureau-Survey Field Team
Defense Minerals Exploration
Administration, Region VIII

McHM:GLNeumann:rwa

copies for DMEA Files 2
CPSta. Files
~~FEJohnson~~ Comittendorf
DNAnderson

OZARK-MAHONING COMPANY
ROSICLARE, ILLINOIS

SUPPLEMENTAL SHEET

September 1952

Geologist	2740 ft. @ $0.15 per foot	$ 411.00
Assaying	2740 ft. @ 0.01 per foot	27.40
Clerical	2740 ft. @ 0.02 per foot	54.80
		$ 493.20

Status of Holes - Completed and Drilling

M-23	Completed 9-9-52	(Previously reported 525')	Bal.	252'
M-24	" 9-18-52	(" " 360')	"	370'
M-25	" 9-20-52	(" " 115')	"	675'
M-26	" 9-30-52	(" " None)	"	808'
M-27	Drilling (Depth 9-30-52)		"	385'
M-28	" (" " " ")		"	250'
		Total Footage for Month		2740'

Remarks:

Copies of churn drill holes No. 23, 24, 25 and 26-M are attached to this report. One hundred foot scale map is also attached showing location of all holes completed and drilling. Attached hereto is set of cross sections.

Please note the location of 24-M along the N-S crosscut. This hole cut 7½ ft. of good ore from 655-662½ ft. which assayed 43.13 CaF2 and 2.9% Zn. We are now drilling 27-M which is 100 ft. south and represents the 5th hole along the North-South crosscut. If 27-M cuts good ore we may wish to drill another location 100 feet farther south. Kindly advise whether contract can be amended to cover this situation.

Hole No. 25-M was encouraging inasmuch as we cut good ore from 710-750 ft. which averaged 52.00 CaF2.

We were surprised when 26-M along the northeast extension failed to cut any ore. Apparently there is a change of strike and the orebody can be picked up farther east. We are now drilling 29-M 150 ft. east of 26-M. This hole takes us out of the block designated by the contract. We assume, therefore, that the contract can be modified so that we can continue with the crosscut to the east until the structure has been crossed.

A. G. Johnson
A. G. JOHNSON

bla

OZ-RK-MAHONING COMPANY

Hill-Ledford Tract
Hole No. 23-H
Elevation: 380.3
Location: 434' N. 754' E. of S.W. Corner
of N.W. ¼ of Sec. 24
or
44' S. 58' E. of 21-H.
Drilled by: B. W. Bales
Examined by: A. G. Johnson
Casing - None

Started 8-16-52
Completed 9-9-52

Water: 95 - 100 ft.
200 - 205 ft.
215 - 220 ft.
581 ft.
Stands 250 ft.

0 - 20	Soil, clay and gravel
20 - 29	Shale
29 - 47	Dark grey shaly lime
47 - 113	Gray sand - shale seams
113 - 167	White & gray lime - shale seams. Glen Dean
167 - 239	Gray sand - shale seams. Hardinsburg
239 - 410	Shale - lime and sand streaks. Galesana
410 - 445	Gray sand - shale
445 - 480	Gray sand
480 - 530	White and grey sand
530 - 585	No cuttings - crevice from 581 to 582½ ft. Difficult to drillthrough.
585 - 607	White sand. Few In shs.
607 - 615	Gray lime. Za shs.
615 - 625	Gray lime.
625 - 660	Gray to dark gray lime - selvage
660 - 680	Shally gray and dark colored lime
680 - 690	Rosiclare sand, lime streaks
690 - 700	Rosiclare sand
700 - 705	Light grey oily oolitic lime - some sand. Base of Rosiclare 703 ft.
705 - 720	Light grey oolitic lime
720 - 740	Gray lime
740 - 755	Gray to brown lime
755 - 765	Brown, slightly sandy ls. Sub Rosiclare
765 - 777	Light grey oily oolitic lime

OZARK-MAHONING COMPANY

Hill-Ledford Tract
Hole No. 2h-4
Elev. 398.5
Loc. 178' east, 328' north of SW Cor.
of NE¼ of SE¼ of Sec. 23 or
100' S - 10' E of 22-4
Drilled by Moreland and Kohler
Examined by: A. G. Johnson

Started: 8-19-52
Completed: 9-18-52

Water: 60'
190'
655
685
Stands at 610 ft.

0-4	Soil & clay
4-10	Oxidized sand
10-40	Sandy shale
40-85	Gray and dark colored shaly lime
85-150	Gray sand - shaly near base. Hardinsburg
150-185	Gray shale - lime and sand streaks
185-220	Light gray to gray lime - very few shale seams
220-255	Gray lime - shale streaks
255-270	Mostly chocolate colored shale
270-330	Shale - lime streaks
330-340	Gray lime - shale - Base of Golconda
340-365	Shale - sand streaks
365-400	Sand - shale streaks
400-460	Hard white sand
460-515	Shelly white and gray sand
515-555	White sand
555-560	Shelly gray sand. B. B. - 560 ft.
560-580	Gray lime
580-595	" " some selvage
595-620	Dark colored shaly lime, trace of selvage
620-638	Lower O'Hara - Light gray oolitic lime
638-650	Residlare sand
650-655	Residlare sand, spar shs.
655-657½	do Lt. spar
657½-660	Residlare sand, trace of lime Few outgs. Con. acid spar. Lt. Zn. Base of Residlare 659.5
660-662½	Purple acid and replacement spar, some light colored lime, trace of selvage G. Zn.
662½-665	Light gray oolitic lime. Tr. Zn and spar
665-670	do Spar & Zn shs.
670-685	Tan colored lime. Spar & Zn. shs.
685-705	Mostly brown quartz, some lime - spar - Zn - Pb shs. Base of Sub-Residlare 705 ft.
705-730	Light gray oolitic lime. Few Pb & Zn shs.

Ore face from 655-662½ ft. averages 43.13 CaF2 - 2.94 Zn

Assays	CaCO3	CaF2	Zn	Pb
~~650-655~~	~~5.25~~	~~8.88~~		
655-657½	6.20	28.93		
657½-660	10.17	37.92	3.52	
660-662½	10.73	62.54	5.30	
662½-665	39.46	17.87	1.53	
685-705	34.55	11.23	2.05	0.18

OKANE - MARKHEIM COMPANY

Hill Ledford Trust
Hole No. 25-X
Elevation: 417.1
Location: 950' N 670' E of SW Corner of NW-1/4 of SW-1/4 of Sec. 23
Drilled by: Haveland & Hobler
Examined by: A. G. Johnson
Casing: 22"%.

Started 8-23-52
Completed 9-20-52

Water: 50 ft.
170 ft.
295 ft.
500 ft.
560 ft.
712 ft.
Stands 650 ft.

0 - 20 Soil & clay

20 - 28 Weathered gray lime

28 - 60 Gray sand - shale seams

60 - 75 White sand

75 - 95 Gray sand - shale streaks

95 - 135 Light gray lime - shale seams

135 - 195 Gray sand

195 - 235 Shale - sand

235 - 305 Light & dark colored lime - shale seams

305 - 315 Chocolate colored shale

315 - 370 Shale - lime streaks

370 - 405 Dark colored shaly lime

405 - 420 Heavily shale

420 - 470 Sand - shale seams

470 - 495 White sand

495 - 580 Shaly white and gray sand

580 - 600 White sand

600 - 608 White sand - shale streaks B. B. 608'

608 - 630 Gray lime

630 - 695 Gray lime - green selvage - Lower O'Hara - Hobby

695 - 710 Rosiclare sand - spar cha.

710 - 712-1/2 Rosiclare sand - brown lime. Gen. solid spar

712-1/2 - 715 Rosiclare sand - brown lime. O. spar - 7% & 2% cha.

715 - 717-1/2 Residiare sand, trace of gray & black silicified lime. Copper, Pb & Zn sho
Base of Residiare 717 ft.

717-1/2 - 720 Light gray lime, some sand, Lt. spar

720 - 722-1/2 Light gray lime, trace of shale and selvage
Light purple low grade spar, some acid

722-1/2 - 735 Light gray oolitic lime, some purple low grade spar - Con. acid

735 - 737-1/2 Gray sandy lime. Con. acid spar

737-1/2 - 747-1/2 Gray sandy lm., some calcite. G. spar, Pb sho.
Trace of Barite

747-1/2 - 750 Gray sandy lime, trace of selvage Con. spar

750 - 755 Gray sandy lime - Lt. spar. Few cuttings Base of Sub Residiare

755 - 765 Light gray oolitic lime

765 - 790 Gray lime

Ore face from 710 - 750 ft. averages 52.00 CaF2

Hole No. 25-N
Mill Lefford

	CaCO3	CaF2	Zinc	Batch
710 - 712-1/2	9.22	55.17		
712-1/2 - 715	7.71	78.62	0.69	
715 - 717-1/2	9.22	68.29	0.59	
717-1/2 - 720	19.62	38.07		
720 - 722-1/2	34.95	41.61		
722-1/2 - 725	43.05	37.63		
725 - 727-1/2	23.40	52.29		
727-1/2 - 730	25.10	52.22		
730 - 732-1/2	19.62	54.06		
732-1/2 - 735	23.58	49.13		
735 - 737-1/2	19.85	47.85		
737-1/2 - 740	19.81	48.34		
740 - 742-1/2	16.78	62.69		0.93
742-1/2 - 745	17.16	65.95		
745 - 747-1/2	25.47	43.03		

	CaCO3	CaF2	Zinc	SnCl4
747-1/2 - 750	21.69	41.61		
750 - 755	34.73	33.35		

OZARK-MAHONING COMPA

Hill-Ledford Tract
Hole No. 26-M
Elev. 383.2
Loc. 790' N 908' E of SW Corner
of NW¼ of Sec. 24 or
312' N 213' E of 21-M
Drilled by: B. W. Bales
Examined by: A. O. Johnson
Casing: 29 ft.

Started 9-8-52
Completed 9-30-52

Water: 75-80 ft.
220-225 ft.
480-485 ft.
No lower water noticeable
Stands @ 220 ft.

0-14	Soil and clay
14-27	Creek gravel - water
27-57	Shale - sand streaks
57-75	Dark colored shaly lime - shale streaks
75-95	Sandy shale
95-145	Tar springs sand - shale seams
145-198	Glen Dean - Light gray and dark colored shaly lime
198-262	Hardinsburg sandstone, shale streaks
262-335	Light gray to dark gray shaly lime shale streaks
335-350	Chocolate colored shale
350-400	Mostly shale
400-440	Mostly dark colored shaly lime. Base of Caseyville 440 ft.
440-480	Gray sand - shale seams
480-530	White sand. Dead oil 520-525'
530-605	Shelly white and gray sand
605-634	White sand. B. Bethel 634'
634-655	Gray lime
655-690	Dark colored shaly lime - some shale and salvage
690-710	Gray to light gray ls. Lower O'Hara
710-736	Renialara sand
736-755	Light gray to gray lime
755-775	Gray lime
775-790	Gray to brown lime, trace of salvage Lt. sand near base. Base of Sub-Renialara 790'
790-808	Light gray oolitic lime

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

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION

Budget Bureau No. 42-R1036.3.
Approval Expires 6-30-53.

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
SEP 16 1952

OPERATOR'S MONTHLY REPORT AND VOUCHER

Month of August, 1952 Docket No. DMEA 2248 Contract No. E-255
Operator's Name Ozark-Mahoning Company Minerals Fluorspar
Address Rosiclare, Illinois
Contract Amount, $61,965.00 Government Participation: 50% Amount, $30,982.50

ITEMS OF COSTS	FOR OPERATOR'S USE: Monthly Total	Totals Previously Reported	Totals To Date	FOR GOVERNMENT USE ONLY: Approved Monthly Total	Approved Totals Previously Reported	Approved Totals To Date
(1) Independent Short Form Contracts:						
Drilling - Churn	7,163.64	27,845.37	35,009.01	7,163.64 ~~3,581.82~~	27,845.37 ~~13,922.69~~	35,009.01 ~~17,504.51~~
Bulldozing						
Crosscutting						
Drifting						
(2) Labor and Supervision:						
Labor						
Supervision						
Technical Services						
(3) Operating Mat'ls. and Supplies:						
Timber						
Explosives						
Pipe						
Track						
(4) Operating Equipment:						
Rental						
Purchase						
Depreciation						
(5) Initial Rehabilitation and Repairs						
(6) New Bldgs., Improvements, etc.						
(7) Miscellaneous:						
Repairs to Equipment						
Sampling and Analysis						
Payroll Taxes						
Liability Insurance						
(8) Contingencies (specify):						
TOTALS	7,163.64	27,845.37	35,009.01	$7,163.64 ~~$3,581.82~~	$27,845.37 ~~13,922.69~~	$35,009.01 ~~17,504.51~~

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

Date Sept. 2, 1952 *Payee Ozark-Mahoning Company

Per J. J. Cadden Title Ass't. Sec.-Treas.
J. J. Cadden

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

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

(Instructions on reverse)

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

$ 7,163.64

Signature
(Authorized Certifying Officer)

Date Vou. No.
(See other side)

(For Government use only)

CERTIFICATION BY GOVERNMENT REPRESENTATIVE:

I certify that to the best of my knowledge and belief the contractor submitting this voucher is operating a Defense Minerals Exploration Administration project under Contract No. E-255 in accordance with the terms of the contract.

Signature W. T. Mullan Title Min. Engr Date 9/4/52

APPROVAL BY DMEA EXECUTIVE OFFICER OR ALTERNATE:

Signature McKenny Ulosin Title Executive Officer Date 9-4-52

MONTHLY REPORT OF OPERATOR

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

U. S. GOVERNMENT PRINTING OFFICE 205675

Form MF-104A
(April 1952)

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

UNITED STATES
DEPARTMENT OF THE INTERIOR

DEFENSE MINERALS EXPLORATION ADMINISTRATION

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
SEP 16 1952

OPERATOR'S UNIT COST AND PROGRESS REPORT

Month of August 1952 Docket No. DMEA 2248 Contract No. E-255
Operator's Name Ozark-Mahoning Company Minerals Fluorspar
Address Rosiclare, Illinois

OPERATION	Unit Cost	Costs This Month	Units This Month Feet	Costs to Date	Units to Date Feet	Unit Costs to Date	Authorized by Contract Units	Authorized by Contract Unit Costs
Drifting								
Crosscutting								
Raising								
Shafts								
Winzes								
Drilling: Core								
Churn	* 2.43	7163.64	2948	35,009.01	14407		25500	$2.43
Auger								
Stripping								
Trenching								
Test Pits								
Roads and Trails								
Total Distributed Costs		7163.64	2948	35,009.01				Total Costs Authorized by Contract
Operating Equipment Purchased								
Initial Rehabilitation and Repairs								
New Buildings, Improvements, etc.								
Total Costs								$61,965.00

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

Date August 2, 1952 Operator Ozark-Mahoning Company

Per J. L. Cadden Title Asst. Sec-Treas.
J. L. Cadden

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

(Instructions on reverse)

Remarks:
*Includes the following:

Drilling @	2.25	per	foot
Geologist @	0.15	"	"
Assaying @	0.01	"	"
Clerical @	0.02	"	"
	$2.43	"	"

(For Government use only)

INSTRUCTIONS

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

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

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

U. S. GOVERNMENT PRINTING OFFICE 205676

OZARK-MAHONING COMPANY
ROSICLARE, ILLINOIS

SUPPLEMENTAL SHEET

AUGUST 1952

Geologist - 2948 ft. @ $0.15 per foot		$ 442.20
Assaying - 2948 ft. @ $0.01 " "		29.48
Clerical - 2948 ft. @ $0.02 " "		58.96
		$ 530.64

Status of holes drilling and completed:

M-18	Completed 8-1-52 (Previously reported 750') Bal.	35 ft.
M-20	Completed 8-19-52 (Previously reported 240') Bal.	535 ft.
M-21	Completed 8-26-52 (Previously reported 225') Bal.	618 ft.
M-22	Completed 8-23-52 (Previously reported - None) Bal.	760 ft.
M-23	Drilling (Depth 8-31-52)	525 ft.
M-24	Drilling (Depth 8-31-52)	360 ft.
M-25	Drilling (Depth 8-31-52)	115 ft.
	Total Footage for Month	2948 ft.

Remarks:

Copies of churn drill holes No. 18-M, 20-M, 21-M and 22-M are attached to this report. Copy of Diamond Drill Hole No. 5 (core) is also attached. This represents the deepening of churn drill hole 5-M which was previously lost at a depth of 720 feet. The cost of this hole was the sole expense of Ozark-Mahoning Company. One hundred foot scale map is also attached showing the location of completed holes as well as holes drilling.

Hole No. 21-M showed 45 ft. of ore from a depth of 735-780 feet which assayed 30.80 CaF_2 and 3.95 Zn. You will note that we are continuing with this crosscut to the southeast.

Hole No. 22-M drilling along a N-S crosscut as represented by Holes No. 17,20 and 22 cut 8 ft. of good ore at the base of the Rosiclare from 662 ft. - 670 ft. which assayed 69.70 CaF_2. Holes No. 17-M and 20-M were blank suggesting the possibility that the ore may be restricted to a narrow width as we continue to the southwest along the principal NE-SW fault structure.

You will note the location of 25-M new drilling. Upon the completion of this hole we expect to drill a hole approximately 100 ft. west of 25-M as well as a hole approximately 100 ft. east of 25-M. Upon the completion of these holes we should be in a much better position to evaluate the orebody as represented by Holes No. 2-M, 3-M, #13, 5-M, 6-M, 7-M and 22-M.

As reported in the June report we expect to drill a crosscut east of the highway, commencing at a point 150 ft. east of Minerva #2. We have decided to change this location to a point 250 ft. east of #2.

A. G. Johnson

A. G. Johnson

bls

OZARK-MAHONING COMPANY

C. N. Hill Tract
Drill Hole No. 16 M
Elevation: 468.7
Location: 108' south and 127' west of the NE corner NE¼ of SE¼ of Sec. 23 or 73' south and 15' west of 15-M
Drilled by: Moreland and Mahler
Examined by: E. A. Brooks
Casing: 20 feet

Started 7-2-52
Finished 8-1-52

Water		
	100'	light
	180	fair
	385	"
	555	"
	660	"
	780	"

0-28	Surface
28-45	Gray calcareous shale
45-75	Gray sand, shaly partings
75-95	Gray sandy shale
95-140	Gray and brown lime, shaly streaks
140-200	Gray sand
200-220	Gray sandy shale
220-225	Gray sand, shaly partings
225-310	Gray and brown lime, shale streaks
310-315	Gray and maroon shale
315-380	Gray shale, lime streaks
380-415	" " , sandy
415-495	White sand
495-565	Gray slightly shelly sand
565-600	White sand
600-607½	Gray shaly sand. Base of Bethel 609
607½-610	" " " , some gray lime
610-635	Gray lime
635-645	Brown lime, little green selvage
645-655	Brown lime, con. selvage
655-675	Dark brown lime, slightly shaly
675-690	Lower O'Hara lime
690-707	Bartlesville sand
707-730	Light gray oolitic lime
730-750	Light brown lime
750-775	Dark brown lime
775-785	Light gray oolitic lime

CLARK-MAHONING COMPANY

C. H. Hill Tract
Drill Hole No. 20-M
Elevation: 416.4
Location: 525' north and 183' east of the SW Corner of the NW-1/4 of the SE-1/4 of Sec. 23 or 99' south and 3' west of No. 17-M
Drilled by: Moreland and Kohler
Examined by: A. G. Johnson
Casing: - 20 ft.

Started 7-24-52
Finished 8-19-52

Water 465 ft
590 - 595 ft

0 - 15	Surface
15 - 40	Gray shaly sand
40 - 50	Gray sand
50 - 65	Gray sandy shale
65 - 110	Gray and brown lime, shaly O.O.
110 - 175	Gray sand
175 - 195	Gray shale, sand streaks
195 - 210	Gray shale
210 - 280	Gray and brown lime, shale streaks
280 - 290	Gray and maroon shale
290 - 385	Gray shale, lime streaks
385 - 425	Gray shale, sandy
425 - 495	White sand
495 - 545	Gray shelly sand
545 - 580	White sand
580 - 585	Gray sand, little gray lime Base of Bethel 584
585 - 600	Gray and brown lime
600 - 620	Light gray lime, trace of selvage
620 - 650	Dark colored lime mud & selvage streaks
650 - 659	Lower O'Hara - Light gray oolitic lime Tr Zn & low grade spar
659 - 685	Rocicloire sand Spar sha. Near base
685 - 690	Light gray oolitic lime Few spar & Mn sha

690 - 710	Gray lime
710 - 737	Gray to dark gray lime
737 - 741	Sub - Rosiclare sand
741 - 750	Light gray oolitic lime, com. calcite
750 - 760	Light gray oolitic lime, Sn shm.
760 - 775	Darker colored lime

There was no water of any kind in this hole to a depth of 465 ft. Stands at 375 ft. The hole was tight but drilled fairly soft.

OZARK-MAHONING COMPANY

G. H. Hill Tract

Drill Hole No. 21-H

Elevation: 361.0

Location: 478' north and 697' east of the S.W. Corner of N.W. ¼ of Sec. 24 or 13' south and 60' east of 19-H.

Drilled by: S. W. Hales

Examined by: A. W. Johnson

Casing: - 30 ft. 8"

Started 7-26-52
Finished 8-16-52

Water: 50 - 55 ft. weak
100 - 105 ft. strong
470 - 475 ft.
580 - 585 ft.
660 - 690 ft.
767 - 770' - black sulphur

0 - 35	Surface
35 - 55	Gray calcareous shale
55 - 105	Gray sand, shale streaks
105 - 115	Gray shale sandy
115 - 175	Gray and brown lime, shaly
175 - 210	Gray sand, shaly partings
210 - 225	" " , shaly
225 - 245	Gray sand, shaly partings
245 - 325	Gray and brown lime, shaly
325 - 335	Gray shale, sand streaks
335 - 405	Gray shale, lime streaks
405 - 430	" " , sandy
430 - 470	Brown sand, con. shale
470 - 525	White sand, slightly shally
525 - 555	" " ,
555 - 580	" " , slightly shally
580 - 680	" " ,
680 - 685	" " and gray lime. Base of Bethel 624
685 - 690	Gray and brown lime
690 - 660	Light gray lime, green salvage
660 - 695	Dark colored lime, s ale and salvage.

695 - 708 Gray and tan colored lime. Lower O'Hara

708 - 728 Rosiclare sand. V. F. spar shiney

728 - 735 Light gray oolitic lime. V. F. spar she.

735 - 737-1/2 Light gray oolitic lime. Good sand spar

737-1/2 - 740 Light gray oolitic lime. Lt. spar

740 - 745 Light gray & silicified lime. G. Zn. Pb she. Lt. spar
opening @ 744 ft. Few cutgs.

745 - 750 Light gray and silicified ls, some sweet sand, G. Zn, Lt. spar,
Few Pb she.

750 - 765 Light gray and sandy looking ls, some gouge. 6" opening @ 757 ft.
G. Zn. Lt. spar

765 - 770 Mostly gray sandy ls. Tr. Zn & spar. Few cutgs.

770 - 775 Dull colored gray sandy ls. some brown and black siliceous material.
Lt. Zn, Tr. spar

775 - 780 Brown & black quartzite, some lime, Sub-Rosiclare horizon. K - chatty Zn
Lt. spar

780 - 800 Light gray oolitic lime. Tight ground, Spar & Zn she.

800 - 830 Gray lime, Tight formation. Few Spar & Zn she.

830 - 840 Brown lime

840 - 843 Gray lime

Ore face from 735 - 780 ft. average 30.80 CaF2

3.95 Zn

Hole No. 21-M

	$CaCO_3$	CaF_2	SiO_2	Zn
735 - 737-1/2	22.07	59.27		None
737-1/2 - 740	41.16	38.29		0.17
740 - 745	20.37	29.93		2.77
745 - 747-1/2	24.53	25.36		5.06
747-1/2 - 750	15.65	38.19		2.04
750 - 752-1/2	12.23	45.71	23.92	2.87
752-1/2 - 755	9.21	40.55	29.08	8.39
755 - 757-1/2	13.74	35.98	31.25	4.43

757-1/2 - 760	25.84	31.70	30.80	5.37
760 - 760-1/2	94.42	37.45	33.74	4.33
760-1/2 - 765	19.42	34.12	35.85	1.00
765 - 767-1/2	26.02	25.80	36.47	1.21
767-1/2 - 770	65.09	8.55	29.55	0.69
770 - 775	10.91	18.87	56.23	2.77
775 - 777-1/2	3.17	16.22	43.82	21.51
777-1/2 - 780	2.79	23.89	44.57	18.97

Ore face from 735 - 780 ft. averages 30.80 CuPT

3.95 Zn

OZARK-MARCHLND COMPANY

Bill Lodford Trust
Hole No. 22-H
Elev. 399.2
Loc. 420' N. 168' E. of SW Cor.
of NE¼ of SE¼ of Sec. 23 or
162' S. 10' W. of 20-H
Drilled by: Moreland and Mahler
Examined by: A. G. Johnson
Casing: 10 ft.

Started: 8-1-52
Completed: 8-23-52

Water: 170' Trace
265' Light
365'
405-410
665 ft.
Stands 250 ft.

0-3	Soil & clay
3-20	Oxidized sand
20-40	Gray sand - shale streaks
40-85	Light gray & brown lime - shale seams. Glen Dean
85-155	White and gray sand
155-190	Gray shale - sand & lime streaks
190-225	Light gray shaly lime
225-260	Gray & brown lime - shale seams
260-265	Chocolate colored shale
265-355	Gray shale - lime streaks
355-410	Gray shale - sand streaks
410-470	White sand
470-530	Shelly white & gray sand
530-555	White sand
555-560	Shelly gray sand
560-566	White sand. B. R. 566 ft.
566-580	Gray lime
580-610	" " , salvage seams
610-625	Dark colored shaly lime
625-640	Light gray to gray oolitic limestone. Impregnated with tar.
640-662	Residlare sand
662-665	Good acid, some replacement spar. Zn shines. Trace of lime, some siliceous material
665-667½	Acid, some replacement spar. Very light lime.
667½-670	Acid, some replacement spar. Con. lime
670-672½	Light gray oolitic ls. Lt. spar
672½-675	" " " " Tr. spar
675-710	Gray lime, fairly soft & loose. Spar & zinc she.
710-720	Light gray somewhat siliceous lime. Lt. Zn.
720-760	Light gray lime, scattered spar & Zn she.

Ore face from 662-670 ft. averages 49.70 CaF_2

Assays	$CaCO_3$	CaF_2	SiO_2	Zn
662-665	3.74	61.34	18.80	0.5%
665-667½	5.44	81.09	9.03	
667½-670	11.30	68.56	6.93	
670-672½	48.15	27.89	11.88	

CLARK-MAHONING COMPANY

G. N. Hill Tract
Drill Hole No. 5 (Core)
Elevation: 425.0
Location: 783' north and 405' east of the SW Corner of NE-1/4 of SE-1/4 of Sec. 23 or 5' north and 60' west of Minerva No. 13
Drilled by: Baldwin
Examined by: E. A. Brooks

Started 7-17-52
Finished 8-12-52
Cable tool work completed 2-5-52

672 - 675	Lower O'Hara lime
675 - 682	Rosiclare sand
682 - 683	Rosiclare sand, lime streaks
683 - 686	Rosiclare sand Dark
686 - 697	Dark brown Rosiclare sand, broken spar stringers
697 - 705	Good acid and replacement spar, little lime
705 - 712	Grey oolitic lime
712 - 733	Grey and brown lime
733 - 748	Brown lime, streaks of black shale, spar stringers at 733 and 736 feet. Scattered traces of spar, Pb and Zn
748 - 750	Green Sub-Rosiclare sand
750 - 755	Rich spar Zn and Pb ore - Brown siliceous lime
755 - 759	Good Zn little spar some grey silicified lime
759 - 763	Leached grey oolitic lime scattered streaks of low grade spar Zn mineralizati
763 - 776	Light brown oolitic lime

Ore face 697 - 705 averages 54.21% CaF_2
Ore face 750 - 759 averages 37.00 CaF_2
13.20 Zn
0.24 Pb

Assays	$CaCO_3$	CaF_2	Zn	Pb	SiO_2
697 - 705	9.63	54.21			26.06
750 - 755	3.61	47.12	13.88	.43	25.62
755 - 759	14.32	24.40	13.07		33.31

Remarks: This hole was deflected out of the cable tool hole to drill past a bit which was lost at 720 feet. The old hole was back filled to 667 feet with crushed lime and cement and a string of 2 inch pipe was set at this point. Deflection was accomplished

by springing the bottom joint about 3/4 in. in ten feet. The cores from 672 - 675 indicate a deflection of about 1/4 inch per foot or a total of ten feet per 100 feet.

The core recovery in the section from 697 to 705 was good and showed good replacement type of ore.

The core recovery from 750 to 755 was only 50%, however the section drilled firm without evidence of open ground. In all probability the lost core was spar in ore which would if recovered improve the assay.

The core recovery from 755 - 759 was 60% and a similar conclusion to the section above it can be drawn, however the cores recovered showed considerable leached and silicified lime.

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

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION

Budget Bureau No. 42-R1036.3.
Approval expires 6-30-53.

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
SEP 16 1952

OPERATOR'S MONTHLY REPORT AND VOUCHER

Month of July 1952 Docket No. DMEA Contract No. 255
Operator's Name Ozark-Mahoning Company Minerals Fluorspar
Address Rosiclare, Illinois
Contract Amount, $ 61965.00 Government Participation: 50 % Amount, $ 30,982.50

ITEMS OF COSTS	FOR OPERATOR'S USE			FOR GOVERNMENT USE ONLY		
	Monthly Total	Totals Previously Reported	Totals To Date	Approved Monthly Total	Approved Totals Previously Reported	Approved Totals To Date
(1) Independent Short Form Contracts:						
Drilling Churn	6901.20	20,944.17	27,845.37	6,901.20 ~~3450.60~~	20,944.17 ~~10,472.09~~	27,845.37 ~~13,922.69~~
Bulldozing						
Crosscutting						
Drifting						
(2) Labor and Supervision:						
Labor						
Supervision						
Technical Services						
(3) Operating Mat'ls. and Supplies:						
Timber						
Explosives						
Pipe						
Track						
(4) Operating Equipment:						
Rental						
Purchase						
Depreciation						
(5) Initial Rehabilitation and Repairs						
(6) New Bldgs., Improvements, etc.						
(7) Miscellaneous:						
Repairs to Equipment						
Sampling and Analysis						
Payroll Taxes						
Liability Insurance						
(8) Contingencies (specify):						
Totals	6901.20	20,944.17	27,845.37	$6,901.20 ~~3450.60~~	$20,944.17 ~~10,472.09~~	$27,845.37 ~~13,922.69~~

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

Date August 2, 1952 *Payee OZARK-MAHONING COMPANY

Per [signature] Title Ass't. Secretary-Treas.

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

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

(Instructions on reverse)

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

$ 6,901.20

Signature
(Authorized Certifying Officer)

Date Vou. No.
(See other side)

(For Government use only)

CERTIFICATION BY GOVERNMENT REPRESENTATIVE:

I certify that to the best of my knowledge and belief the contractor submitting this voucher is operating a Defense Minerals Exploration Administration project under Contract No. E-255 in accordance with the terms of the contract.

Signature W. P. Miller Title Min. Engr. Date 9/4/52

APPROVAL BY DMEA EXECUTIVE OFFICER OR ALTERNATE:

Signature McKenny Moseley Title Executive Officer Date 9-4-52

MONTHLY REPORT OF OPERATOR

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

U. S. GOVERNMENT PRINTING OFFICE 205675

Form MF-104A
(April 1952)

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

UNITED STATES
DEPARTMENT OF THE INTERIOR

DEFENSE MINERALS EXPLORATION ADMINISTRATION

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
SEP 16 1952

OPERATOR'S UNIT COST AND PROGRESS REPORT

Month of July 1952 Docket No. DMEA 2248 Contract No. E-255
Operator's Name Ozark-Mahoning Company Minerals Fluorspar
Address Rosiclare, Illinois

OPERATION	Unit Cost	Costs This Month	Units This Month Feet	Costs to Date	Units to Date Feet	Unit Costs to Date	Authorized by Contract Units	Authorized by Contract Unit Costs
Drifting								
Crosscutting								
Raising								
Shafts								
Winzes								
Drilling: Core								
Churn *	2.43	6901.20	2840	27845.37	11,459	2.43	25,500	$2.43
Auger								
Stripping								
Trenching								
Test Pits								
Roads and Trails								
Total Distributed Costs		6901.20	2840	27845.37				Total Costs Authorized by Contract
Operating Equipment Purchased								$61,965.00
Initial Rehabilitation and Repairs								
New Buildings, Improvements, etc.								
Total Costs								

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

Date August 2, 1952 Operator OZARK-MAHONING COMPANY

Per [signature] Title Ass't. Secretary-Treas.

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

Remarks: *Includes the following:
Drilling at $2.25 per foot.
Geologist at 0.15 per foot.
Assaying at 0.01 per foot.
Clerical at 0.02 per foot.
$ 2.43

(Instructions on reverse)

(For Government use only)

INSTRUCTIONS

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

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

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

U. S. GOVERNMENT PRINTING OFFICE 205676

August 2, 1952

Mr. McHenry Mosier,
Executive Officer
Bureau-Survey Field Team
Defense Minerals Exploration
Administration, Region VIII
U. S. Department of the Interior
Defense Minerals Administration
College Park, Maryland

Dear Mr. Mosier:

Please find enclosed five copies of Operator's Unit Cost and Progress Report, Form No. MF-104 A and five copies of Operator's Monthly Report and Voucher Form No. MF-104. These reports cover the period ending July 31, 1952.

Attached to the reports are a supplemental sheet, logs of holes completed during the period and five copies of the 100 foot scale map showing all locations to date.

Very truly yours,

OZARK-MAHONING COMPANY
Mahoning Mining Division

E. A. Brecke

E. A. Brecke

EAB:fhb

Encls.

OZARK-MAHONING COMPANY
Rosiclare, Illinois

Supplemental Sheet

July, 1952

Geologist -	2840 ft. @ $0.15 per foot =	$426.00
Assaying -	2840 ft. @ $0.01 per foot =	28.40
Clerical -	2840 ft. @ $0.02 per foot =	56.80
		$511.20

Status of Holes Drilling and Completed:

M-15	Completed	810 ft. (Previously Reported 760.	Bal.	50 ft.
M-16	Completed	855 ft. (Previously Reported 750.	Bal.	105 ft.
M-17	Completed	780 ft. (Previously Reported 145.	Bal.	635 ft.
M-18	Drilling	7-31-52	"	750 ft.
M-19	Completed		"	835 ft.
M-20	Drilling	7-31-52	"	240 ft.
M-21	Drilling	7-31-52	"	225 ft.
		Total Footage for Month		2840 ft.

Remarks: Copies of logs of Drill Holes 15-M, 16-M, 17-M and 19-M are enclosed with this report; also, maps showing locations of these holes.

Hole No. 15-M was blank but structurally low which is favorable, and indicated the necessity for drilling 18-M. 18-M has reached a depth of 750 feet and is blank to this depth. It also is structurally high. In view of the disappointing results from Holes Nos. 8-M, 10-M, 13-M, 15-M and 18-M, drilling will be discontinued in this areaand the rig will be moved to a location 100 feet south of 20-M and designated as Hole No. 22-M. It will be necessary, in order to give enough safe working area, to offset this location about 15 feet west from the north-south line of section formed by Holes Nos. 17-M, 20-M and 22-M.

Hole No. 17-M was blank and showed very little water. The absence of water probably indicates that the hole was drilled on a structural rib. This rig has been moved south 100 feet to Hole No. 20-M.

Hole No. 16-M was completed early in July and the log is included with this report. The hole cut several ore sections. No. 19-M was drilled 70 feet east of 16-M and completed during the month. This hole cut extremely rich spar ore at a depth of 715 to 785 feet and a section of 70 feet shows an assay of 52.77% CaF_2. The deeper zinc sections in this hole were somewhat thinner than is indicated in Holes Nos. 12-M and 16-M. This hole showed few openings and cutting recovery was very satisfactory. Drill Hole No. 21-M is drilling 70 feet east of 19-M. It was necessary to offset to the south on this location to give room for the drill set up near the highway and power lines. The map shows the offset to be slight.

E. A. Brecke

R. A. Brecke

EAB:fhb

HILL-LEDFORD TRACT
SUPPLEMENTAL SHEET - Hole No. 12-M

	$CaCO_3$	CaF_2	Zn
787½ - 790	14.51	16.70	1.48
790 - 795	21.16	11.24	1.01
795 - 800	20.26	10.96	1.01
810 - 815	11.10	11.10	0.91
815 - 820	17.74	20.63	1.43
820 - 825	17.03	19.93	1.75
825 - 830	10.56	21.41	4.49
830 - 835	19.56	18.94	4.91
835 - 840	17.56	22.59	4.81
840 - 845	17.98	10.40	1.75
845 - 850	24.93	11.24	2.59

Ore f.ce from 825-840 ft. averages 21.07 CaF_2
4.70 Zn

OZARK-MAHONING COMPANY

Hill Ledford Tract
Hole No. 15-M
Elev. 407.1
Loc. 35' S. 142' W. of NE cor. of the NE¼ of SE¼ of Sec. 23, Twp. 11-S, R. 9-E or 60' S. - 27' E. of 8-M.
Drilled by Moreland and Hohler
Examined by A. G. Johnson
Casing - 20 ft.

St. 6-7-52
Comp. 7-2-52

Water
70' Light
175' Light
200' Medium
280' Settled Cubgs. to 475 ft.
760' Medium
Stands @ 50 ft.

0-27	Soil & clay
27-100	Gray sand - shale streaks
100-155	Light gray and dark colored shaly lime, shale streaks
155-215	Mostly gray sand
215-235	Shale - sand - some lime
235-240	Gray sand - some shale
240-280	Light gray fossiliferous lime - shale seams
280-300	Dark colored shaly lime - shale
300-320	Light gray and dark colored lime - shale seams
320-325	Chocolate colored shale
325-420	Mostly sandy shale
420-505	White and gray sand
505-520	Gray sand - shale streaks. Point Creek
520-545	Hard white sand
545-570	Shelly gray sand
570-617	Hard white sand B. S. 617 ft.
617-640	Light gray lime
640-680	" " ", selvage and shale
680-698	Lower O'Hara - Light gray sandy lime
698-719	Rosiclare sand
719-740	Light gray to gray lime
740-745	Gray lime - selvage streaks
745-760	Gray lime - few Zn and spar shs.
760-780	Dark colored lime, very few Zn shs.
780-810	Gray lime

OZARK-MAHONING COMPANY

Hill Ledford Tract
Hole No. 16-N
Elevation: 381.00
Location: 498' N. 558' E. of NW corner of the NE-1/4 of SE-1/4 of Sec. 23 T 118 R-9W or 71' East of 12-N
Drilled by: B. W. Bales
Examined by: A. G. Johnson
Casing: 27' - 8" pipe

Started 6-9-52
Completed 7-3-52
Water 30'
85'
230-235'
634'
717'
730' Black Sulphur

0-35	Soil, clay & boulders
35-50	Dark colored shaly lime
50-75	Shaly Sand
75-105	Gray and white sand, shale seams
105-115	Sandy shale, some white sand
115-155	Gray and dark colored lime, shale streaks
155-170	Shale & selvage, some lime
170-215	Gray sand shale streaks
215-230	Mostly sandy shale
230-250	White and gray sand, shale streaks
250-280	Gray and dark colored lime shale seams
280-355	Mostly sandy shale
355-430	Shale, some sandy, lime streaks
430-465	Gray sand, some shale & sand Trace pyrite
465-500	White and gray sand
500-540	White sand
540-570	Shally gray sand
570-595	White and gray sand
595-600	Shally white sand, trace of spar
600-634	White sand, Tight Base of Rehel 634'
634-645	Light gray sandy lime
645-665	Light gray to gray sandy lime - Tr. Zn - abs of spar

665-680 Gray lime, some selvage Zn & Spar shs - Few cut'gs

680-700 Shale selvage, gouge and gray lime - Few spar & Zn shs - Few cut'gs

700-705 Rosiclare sand, some black quartz - Tr. Zn - Lt. spar

705-707-1/2 Rosiclare sand, some black quartz - Tr. Zn - Lt. spar Very few cut'gs

707-1/2 - 712-1/2 Rosiclare sand, black quartz - Good acid spar Tr. Zn Few cut'gs

712-1/2 - 715 Same as above Pb shs

715-722-1/2 Rosiclare sand, selvage & gouge V.F. cut'gs Good acid spar Tr. Zn

722-1/2 - 725 Rosiclare sand black quartz R. chatty Zn, Good spar, V.F. cut'gs

725-727-1/2 Rosiclare sand, Tr. ls., some gouge - V. F. cut'gs, Lt. spar & Zn Probable Rosiclare contact 727 ft.

727-1/2 - 730 Light gr. ls., some quartzite & gouge Tr. spar & Zn Few cut'gs.

730-732-1/2 Light gray sandy ls. brown quartzite - Lt. chatty Zn & spar - gouge V. F. cut'gs.

732-1/2 - 735 Light gray sandy lime - Con. caved surface sand. Tr. Zn & Spar V. F. cut'gs.

735 - 760 Mostly caved sand lt. ls. Tr. Zn & spar Few cut'gs.

760-765 Light gray sandy ls. some caved material Good purple acid spar Tr. Zn Few cut'gs.

765 - 767-1/2 Light gray sandy lime. Tr. spar & Zn Few cut'gs.

767-1/2 - 770 Light gray sandy ls. Con. purple acid spar. Tr. Zn Few cut'gs.

770 - 780 Light gray sandy ls. con. caved material - some gouge, Tr. spar & Zn Few Pb shs Few cut'gs.

780 - 790 Light gr. sandy ls. - some caved material - Gouge - Few cut'gs. Lt. spar Tr. Zn

790 - 800 Light gray sandy ls. gouge - caved material. Lt. spar & Zn Few cut'gs

800 - 812-1/2 Gray sandy ls. - selvage & gouge. some caved material. Few cut'gs Lt. spar Tr. Zn

812-1/2 - 820 Gray siliceous ls., some gouge. Few cut'gs - R. Zn Lt. spar

820 - 840 Gray lime, some gouge & selvage - caved material con. Zn Lt. spar Few cut'gs.

840 - 855 Gray ls. some caved material Lt. Zn & spar - more cut'gs.

Note:

From a depth of 700 feet on down to the bottom of hole the recovery of cuttings per screw was anything from a small handful up to a quart. The ground drilled fairly firm but appeared to be full of small vugs. The water from 700' on down was strong and clear with black sulphur water at 730', consequently most of the cuttings were washed away. In addition there was a good deal of caved material in the ore cuttings which came from formations overlying the Rosiclare on to the surface.

Ore face from	700 - 727-1/2 ft.	averaged	40.90	CaF_2
			2.20	Zn
	727-1/2 - 760 ft.	"	16.80	CaF_2
			0.90	Zn
	760 - 770 ft.	"	41.85	CaF_2
			1.22	Zn
	770 - 780 ft.	"	25.30	CaF_2
			0.30	Zn
	780 - 790 ft.	"	33.80	CaF_2
			0.80	Zn
	790 - 812-1/2 ft.	"	21.50	CaF_2
			1.70	Zn
	812-1/2 - 820 ft.	"	22.46	CaF_2
			10.00	Zn
	812-1/2 - 840 ft.	"	28.00	CaF_2
			5.40	Zn

Assays - 16-M
Bill Ledford

	$CaCO_3$	CaF_2	SiO_2	Zn
700 - 705	14.69	32.40	44.18	1.33
705 - 707-1/2	12.36	34.88	44.57	0.28
707-1/2 - 710	4.99	74.29	19.04	1.01
710 - 712-1/2	8.05	54.81	29.72	2.80
712-1/2 - 715	5.53	48.37	39.86	1.86
715 - 717-1/2	8.05	47.95	32.17	1.96
717-1/2 - 720	9.84	59.02	23.25	2.70
720 - 722-1/2	8.94	15.02	57.07	1.12
722-1/2 - 725	6.61	24.27	54.72	7.20
725 - 727-1/2	19.54	27.35	43.92	2.80
727-1/2 - 730	31.57	9.98	40.68	1.12
730 - 732-1/2	5.89	24.55	59.71	2.80

	[illegible]03	CaF2	SiO2	Zn
732-1/2 - 735	3.25	12.69	62.73	1.01
735 - 737-1/2	3.61	22.65	62.06	1.01
737-1/2 - 740	3.98	22.52	63.34	0.80
740 - 742-1/2	4.34	7.57	70.71	0.38
742-1/2 - 745	3.61	7.28	75.23	0.49
745 - 750	3.43	19.24	65.14	0.49
750 - 752-1/2	5.68	29.52	68.89	0.38
752-1/2 - 755	8.72	13.69	64.84	0.70
755 - 760	3.25	19.82	69.62	0.92
760 - 765	4.16	18.97	46.39	1.23
765 - 767-1/2	14.55	15.96	60.54	1.01
767-1/2 - 770	5.43	53.53	41.10	1.43
770 - 772-1/2	23.85	18.67	41.91	0.49
772-1/2 - 775	6.53	37.87	48.59	0.28
775 - 777-1/2	3.79	23.79	61.68	0.28
777-1/2 - 780	4.16	20.80	59.39	0.17
780 - 782-1/2	4.16	41.15	47.38	0.49
782-1/2 - 785	5.98	36.88	48.13	0.07
785 - 787-1/2	18.58	16.68	45.11	0.38
787-1/2 - 790	10.54	40.58	36.70	2.28
790 - 795	11.63	19.52	55.78	1.43
795 - 797-1/2	10.36	22.65	56.72	1.22
797-1/2 - 800	13.64	27.35	46.17	2.38
800 - 802-1/2	14.37	25.50	45.01	3.54
802-1/2 - 805	28.05	22.79	31.89	1.75
805 - 807-1/2	41.54	21.80	28.52	1.96
807-1/2 - 810	42.45	15.39	25.73	1.12
810 - 812-1/2	34.61	19.38	26.02	0.80
812-1/2 - 815	23.31	27.35	22.52	12.81

	$CaCO_3$	CaF_2	SiO_2	Zn
815 - 817-1/2	28.23	20.37	24.89	9.86
817-1/2 - 820	25.68	19.66	35.54	7.23
820 - 825	26.41	23.22	26.67	3.86
825 - 830	30.75	26.21	37.56	2.70
830 - 835	13.28	39.16	33.33	4.17
835 - 840	12.91	31.76	33.76	3.96

OZARK-MAHONING COMPANY

C. N. Hill Tract
Drill Hole 17-M
Elevation: 417.6
Location: 624' north and 186' east of the S.W. Corner of N.E. 1/4 of S.E. 1/4 of Sec. 23 or 87' south and 55' west of 7-M.

Started 6-26-52
Finished 7-24-52

Water: 75' light
375' Fair
585' "
Stands 67'

Drilled by: Moreland and Hehler

Examined by: E. A. Brooks

Casing: 20 feet.

0 - 20 Surface

20 - 35 Oxidized sand and shale

35 - 45 Black shale

45 - 60 Gray sand shaly partings

60 - 75 Dark gray sandy shale

75 - 125 Dark brown lime, shaly

125 - 185 Gray sand

185 - 225 Gray shaly sand

225 - 290 Gray and brown lime, shaly streaks

290 - 295 Gray calcareous shale

295 - 300 Gray and maroon shale

300 - 360 Gray shale, lime streaks

360 - 410 Gray shale sand streaks

410 - 430 Brown sand

430 - 495 White sand

495 - 560 Gray sand, slightly shelly

560 - 585 White sand

585 - 590 Gray and brown lime, little sand. Base of Bethel 585.

590 - 605 Gray and brown lime.

605 - 610 Gray lime, little green selvage

610 - 635 Brown lime, con. selvage

635 - 655 Dark brown shaly lime

655 - 670 Lower O'Hara lime

670 - 690 Rosiclare sand

690 - 720 Light grey oolitic lime

720 - 740 Brown lime

740 - 750 Dark brown lime

750 - 755 " " " , trace zinc.

755 - 760 " " " , little Sub Rosiclare sand.

760 - 780 Grey oolitic lime.

Assay	$CaCO_3$	CaF_2
685 - 690	12.55	2.85

OZARK-MAHONING COMPANY

C. N. Hill Tract

Drill Hole No. 17-H

Elevation: 381.6

Location: 491 ft. north and 626 ft. east of the S.W. corner of N. W. 1/4 of Sec. 24 or 71 ft. east of 16-M.

Drilled by: B. W. Malan

Examined by: E. A. Brooks

Casing: 27 ft. 8"

Started 7-3-52
Finished 7-26-52
Water - 40 - 45 light
80 - 85 "
180 - 185 Strong
600 Sulfur
638 Strong
787 "

0 - 35	Surface
35 - 45	Brown lime and grey shale
45 - 55	Gray shale
55 - 75	Gray sandy shale
75 - 115	White sand, some grey shaly lime
115 - 120	Gray calcareous shale
120 - 170	Gray and brown lime, shale streaks
170 - 185	Gray sand, shaly partings
185 - 210	Gray sand
210 - 230	Gray sandy shale
230 - 245	Gray sand
245 - 325	Gray and brown lime, shale streaks
325 - 330	Gray shale, little maroon shale
330 - 405	Gray shale, lime streaks
405 - 430	Gray shale, sandy streaks
430 - 440	Gray sand
440 - 460	Gray sand, con. shale
460 - 510	White sand
510 - 595	Gray shelly sand

595 - 600 White sand, little spar and brown siliceous material, trace Zn.

600 - 625 White sand

625 - 635 Gray sand

635 - 640 Gray sand, some grey lime, spar shines. Base of Bethel 638.

640 - 650 Grey and brown lime, traces spar, probably caved

650 - 675 Brown lime, some green shale

675 - 695 Dark brown shaly lime, little calcite

695 - 705 Brown dense lime

705 - 715 Lower O'Hara lime

715 - 732½ Very rich acid spar, some Rosiclare sand and little green shale

732½ - 737½ Rosiclare sand, some acid spar, little gray lime and green selvage

737½ - 742½ Good acid spar, some brown silicified lime, little green selvage

742½ - 745 Fair acid spar, some leached buff lime, trace Zn.

745 - 752½ Buff leached lime, little green selvage, little spar, trace Zn.

752½ - 757½ Good acid and low grade spar. Zn shines. Some buff leached lime and green selvage.

757½ - 760 Some acid spar and buff lime, can. caved gray and green shale, trace Zn.

760 - 770 Buff lime, some acid and low grade spar. Zn shines, little shale.

770 - 787½ Buff lime, some purple acid and low grade spar, little Zn.

787½ - 792½ Dark brown lime, little black shale, spar and Zn shines.

792½ - 795 Good free and chatty brown Zn, some brown siliceous material and lime, little spar.

795 - 800 Light gray oolitic lime, little Zn, spar shines

800 - 815 Brown oolitic lime, little Zn, spar shines

815 - 820 Gray lime, some red Zn, little spar, drilled soft 815 - 819. Some caved spar.

820 - 835 Light brown lime.

Ore face 715 - 785 averages 52.77% CaF_2
0.72% Zn.

Ore face 792½ - 797½ averages 30.23% CaF_2
4.75% Zn.

Ore face 815 - 820 averages 25.82% CaF_2
3.91% Zn.

or

Ore face 715 - 732½ averages 70.50 CaF_2

Ore face 737½ - 767½ averages 52.00 CaF_2
.71 Zn.

Ore face 767½ - 785 averages 41.80 CaF_2
1.69 Zn.

Ore face 792½ - 797½ averages 30.25 CaF_2
4.75 Zn

Ore face 815 - 820 averages 25.82 CaF_2
3.91 Zn

19-H C. N. Mill Bract

Assay	$CaCO_3$	CaF_2	Zn
635 - 640	23.85	17.64	
640 - 645	27.32	22.76	
645 - 650	42.09	27.89	
650 - 655	45.01	32.30	
715 - 720	20.26	63.60	
720 - 722½	10.36	46.96	
722½ - 725	6.89	78.96	
725 - 727½	2.33	93.34	
727½ - 730	2.70	71.57	
730 - 732½	2.70	83.23	
732½ - 735	6.71	36.42	
735 - 737½	12.45	24.47	
737½ - 740	5.98	67.87	
740 - 742½	6.16	60.04	
742½ - 745	5.43	52.07	.07
745 - 750	3.25	43.82	.70
750 - 752½	3.06	39.84	1.01
752½ - 755	3.43	53.82	1.12
755 - 757½	4.89	51.65	1.22
757½ -760	6.71	59.33	.38
760 - 762½	4.89	50.37	1.43
762½ - 765	5.07	60.47	1.01
765 - 767½	9.63	41.55	1.01
767½ - 770	21.66	31.87	.80
770 - 775	6.89	43.11	2.17
775 - 780	8.90	39.27	1.65

Assay	CaCO3	BaSO4	Zn
780 - 782½	5.68	49.51	1.22
782½ - 785	5.87	46.53	2.17
785 - 787½	46.83	21.63	1.12
787½ - 790	53.03	16.93	3.01
790 - 792½	13.28	16.79	2.07
792½ - 795	11.09	34.72	6.59
795 - 797½	16.56	25.75	2.81
797½ - 800	72.36	11.52	1.65
800 - 805	57.95	7.11	3.94
805 - 810	65.98	7.54	1.86
810 - 815	60.51	9.48	2.36
815 - 817½	24.76	25.18	4.71
817½ - 820	28.78	26.46	3.12

SD

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

DEPARTMENT OF THE INTERIOR
Defense Minerals Exploration Administration
JUL 31 1952

July 30, 1952

Memorandum

To: Jay L. Chambers, Chief, Contract Administration and Audit Division

From: Executive Officer, DMEA Field Team, Region VIII

Subject: Exploration Contract Idm-E255
Docket DMEA-2248 - Fluorspar
Ozark-Mahoning Company
Hardin County, Illinois

Following receipt of your letter of July 16, kindly calling attention to an error in administration in the Operator's Monthly Cost and Progress reports, a request was made to the Operating Committee for an amendment to this contract to authorize payments on the estimated costs as shown in Exhibit "A" of the contract. As soon as this amendment (No. 1), has been signed by the company a copy will be sent to you. In the meantime kindly accept my thanks for your timely letter.

I trust that this amendment will answer satisfactorily the administrative questions that you have properly raised.

McHenry Mosier

McHenry Mosier

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

July 17, 1952

Memorandum

To: Frank E. Johnson, Chairman, Operating Committee, DMEA

From: Executive Officer, DMEA Field Team, Region VIII

Subject: Exploration Contract Idm-2255
Docket DMEA-2248 - Fluorspar
Ozark-Mahoning Company

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
JUL 18 1952

In reference to this contract, Mr. Jay L. Chambers, in his letter dated July 16, calls attention to my error in administration in the Operator's Monthly Cost and Progress Reports for each month since inception of the contract, February 18 (first report dated March 31, 1952), which have been submitted on the basis of the estimated $2.43 total cost per foot instead of the actual cost.

To rectify this error, I propose as an advantage to the Government that the contract be amended retroactive to February 18, 1952, to legalize payments to the operator on the estimated costs shown in Exhibit "A" of the original contract. This is agreeable to the company, which expressed approval at the first visit of the Government Engineer to the project, prior to the submission of any reports. In fact, the estimated total cost of $2.43 per foot for churn drilling is probably slightly below the actual cost. Exhibit "A" breaks down the estimated cost as follows:

Item	Cost per Foot
Sub-contract churn drilling	$2.25
Supervision	.15
Assaying	.01
Clerical	.02
Total	$2.43

The bulk of the cost is the sub-contract for churn drilling, which is the actual cost or $2.25 per foot, this leaves only $.18 additional to be accounted for. The $.15 for supervision which included geological and engineering work is probably below actual cost. The $.01 per foot for assaying, in view of the footage requiring samples and analyses, is apparently below cost. Similarly the $.02 for clerical work

is not excessive and is probably below actual cost. A further advantage to the Government, would be the elimination of the expense of on-site audits. These audits would be complicated by the fact that Ozark-Mahoning Company is operating a large mine adjacent to the project and the accounts for all items except contract-drilling would be overlapping. Difficulties in audit would be increased by the delay in starting. Consequently extra work would be entailed in obtaining documentary evidence.

To legalize the short-form of contract, retroactive to February 18, 1952, the date of original contract would simplify operations, reduce engineering work, eliminate expense of auditing accounts and should result in a saving to the Government in its payments on this contract, because the total cost on the basis of $2.43 a foot is probably less than the actual cost.

McHenry Mosier

McHM:rwa

copy for FEJohnson Orig. & 4
JLChambers 1
DMEA Files 2

JUL 16 1952

Mr. McHenry Mosier
Executive Officer
DMEA Field Team, Region VIII
Bureau of Mines
Eastern Experiment Station
College Park, Maryland

Re: Exploration Contract Idm-E255
Docket DMA-2248
Ozark-Mahoning Company

Dear Mr. Mosier:

The June MF-104 on the referenced contract has recently been received. It is noted that the entire costs of this project are shown under Item (1), Independent Contracts, of the MF-104 (Revised) April, 1952. Previous reports rendered under the old Form MF-104 indicated only part of this cost as being contract work with other items of supervision, assaying, and clerical being listed separately. It appears, therefore, that in the use of the new form the operator should only show that portion of his costs which are under independent contracts in the proper space after Item (1). Supervision should be shown under Item (2) and the other costs should be shown under Item (7). Please arrange to have future MF-104's under this project submitted correctly.

Your attention is called also to the use of the columns headed "For Government Use Only". The gross amount of the costs as approved, rather than the Government's share of such costs, should be inserted therein. The actual amount paid, together with the voucher number and date of payment should be inserted in the block in the lower right-hand portion of the MF-104. It will be necessary, of course, for you to withhold submission of the two copies required by the Administration until you receive this information from the DMEA Finance Officer for your region.

A review of the MF-104's submitted under this project also discloses that the operator is claiming costs at the estimated rates contained in Exhibit A of the contract. It should be noted that this contract is on an actual costs basis and that the items included in Exhibit A are estimates only. Therefore, the operator's monthly reports should be based on actual costs and the original should be supported by proper documentation.

Sincerely yours,

Signed

Jay L. Chambers
Chief, Contract Administration
and Audit Division

NDTalbert/ama
July 16, 1952

Copy to: Admr. Reading File
Mr. Houk
Mails and Files
Mr. Chambers

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

July 7, 1952

Mr. A. G. Johnson
Chief Geologist
Ontario-Shawinigan Company
Rosiclare, Illinois

Subject: ~~Amendment No. 2~~*
Docket No. DMEA-2248
Contract ~~ICDE-855~~

Dear Mr. Johnson:

In reference to your narrative report on the supplemental sheet included in the Operator's Progress Report for June 1952, and to your request for approval of the location of proposed drill holes:

You are authorized to extend the drill-hole cross-section through holes 9, 12 and 16 to the south-eastward for two additional holes, including one hole outside the area specified for prospecting in the original Contract, E-855.

You are also authorized to drill a cross-section on a line through or near hole 2 as shown on the 100-scale map attached to the June 1952 Operator's Progress Report and if desirable, to extend this line south-eastward beyond the limits of the area specified for prospecting in the original Contract, E-855. The total holes in this proposed line are limited to 5, as stated in Contract E-855.

No other changes in Contract E-855, as amended March 27, 1952, are authorized nor inferred.

Your proposal regarding a line of drill holes, southerly from hole M-17 will be discussed with you by our Mr. Neumann on his arrival at the project later this week.

Yours very truly,

JUL 14 1952

Mahlenry Mosier, Executive Officer
Bureau-Survey Field Team
Defense Minerals Exploration
Administration, Region VIII

McRM:rwm

copy for FEJohnson 4
GLNeumann, Rosiclare, Ill.
DMEA Files 2

NOTE: *This is an interpretation of parts of Contract and not consider an amendment. Mr. Houk talked with Mr. Mosier and asked him t remove "Amendment No. 2" from the Field Copy. FEJOHNSON

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

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION

Budget Bureau No. 42-R1036.3.
Approval expires 6-30-53.

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
JUL 16 1952

OPERATOR'S MONTHLY REPORT AND VOUCHER

Month of June, 1952 Docket No. DMEA Contract No. 255
Operator's Name Ozark-Mahoning Company Minerals Fluorspar
Address Rosiclare, Illinois
Contract Amount, $ 61965.00 Government Participation: 50% Amount, $ 30,982.50

ITEMS OF COSTS	FOR OPERATOR'S USE			FOR GOVERNMENT USE ONLY		
	Monthly Total	Totals Previously Reported	Totals To Date	Approved Monthly Total	Approved Totals Previously Reported	Approved Totals To Date
(1) Independent Short Form Contracts:						
Drilling Churn	6721.38	14,222.79	20,944.17	$3,360.69	$ 7,111.40	$ 10,472.09
Bulldozing						
Crosscutting						
Drifting						
(2) Labor and Supervision:						
Labor						
Supervision						
Technical Services						
(3) Operating Mat'ls. and Supplies:						
Timber						
Explosives						
Pipe						
Track						
(4) Operating Equipment:						
Rental						
Purchase						
Depreciation						
(5) Initial Rehabilitation and Repairs						
(6) New Bldgs., Improvements, etc.						
(7) Miscellaneous:						
Repairs to Equipment						
Sampling and Analysis						
Payroll Taxes						
Liability Insurance						
(8) Contingencies (specify):						
TOTALS	6721.38	14,222.79	20,944.17			

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

Date July 3, 1952 *Payee Ozark-Mahoning Company

Per H. L. Badden Title Ass't. Sec.-Treas.

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

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

(Instructions on reverse)

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

$

Signature
(Authorized Certifying Officer)

Date Vou. No.
(See other side)

(For Government use only)

CERTIFICATION BY GOVERNMENT REPRESENTATIVE:

I certify that to the best of my knowledge and belief the contractor submitting this voucher is operating a Defense Minerals Exploration Administration project under Contract No. E 255 in accordance with the terms of the contract.

Signature W. T. Miller Title Mine Engr Date July 14, 1952

APPROVAL BY DMEA EXECUTIVE OFFICER OR ALTERNATE:

Signature McHenry Mosier Title Exec. Officer R-8 Date 7-14-52

MONTHLY REPORT OF OPERATOR

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

U. S. GOVERNMENT PRINTING OFFICE 205675

Form MF-104A
(April 1952)

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

UNITED STATES
DEPARTMENT OF THE INTERIOR

DEFENSE MINERALS EXPLORATION ADMINISTRATION

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
JUL 16 1952

OPERATOR'S UNIT COST AND PROGRESS REPORT

Month of June 195 2 Docket No. DMEA 2248 Contract No. E-255
Operator's Name Ozark-Mahoning Company Minerals Fluorspar
Address Rosiclare, Illinois

OPERATION	Unit Cost	Costs This Month	Units This Month Feet	Costs to Date	Units to Date Feet	Unit Costs to Date	Authorized by Contract Units	Authorized by Contract Unit Costs
Drifting								
Crosscutting								
Raising								
Shafts								
Winzes								
Drilling: Core								
Churn *	2.43	6721.38	2766	20,944.17	8619	2.43	25,500'	$ 61,965.00
Auger								
Stripping								
Trenching								
Test Pits								
Roads and Trails								
Total Distributed Costs		6721.38	2766	20,944.17				Total Costs Authorized by Contract
Operating Equipment Purchased								
Initial Rehabilitation and Repairs								
New Buildings, Improvements, etc.								
Total Costs								$ 61,965.00

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

Date July 3, 1952 Operator Ozark-Mahoning Company

Per J. L. Cadden Title Ass't. Sec.-Treas.

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

(Instructions on reverse)

Remarks:
*Includes the following:
Drilling @ 2.25 per foot
Geologist @ 0.15 per foot
Assaying @ 0.01 per foot
Clerical @ 0.02 per foot
$2.43 per foot

(For Government use only)

INSTRUCTIONS

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

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

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

U. S. GOVERNMENT PRINTING OFFICE 205676

OZARK-MAHONING COMPANY
Rosiclare, Illinois

Supplemental Sheet
June 1952

Geologist	2766' @ $0.15 per foot =	414.90
Assaying	2766' @ $0.01 per foot =	27.66
Clerical	2766' @ $0.02 per foot =	55.32
		$497.88

Status of Holes Drilling and Completed

M - 12	Completed 854' (Previously Reported 670')	Bal. 184'
M - 13	Completed 780' (Previously Reported 580')	Bal. 200'
M - 14	Completed 777' (Previously Reported 50')	Bal. 727'
M - 15	(Drilling 6-30-52)	760'
M - 16	(Drilling 6-30-52)	750'
M - 17	(Drilling 6-30-52)	145'
	Total footage for month	2766'

Remarks

Copies of Holes No. 12-M, 13-M, and 14-M are attached to this report. Map is also attached showing location of completed holes as well as holes now drilling.

Hole No. 12-M showed 10' of good ore at the base of the Rosiclare from 715-725 feet, which assayed 45.92 CaF_2. Scattered ore continued below this showing to a depth of 785 feet. You will note the location of 16-M approximately 70' east of 12-M. This hole has also cut good ore at 700 feet and is still in ore at a depth of 800 feet. As soon as 16-M is completed we expect to move an additional 70' to the east. This location will place us fairly close to the south east boundary of the block delineated by the contract. Consequently we would like to have written approval that the crosscut as outlined by Holes No. 9, 12, & 16 can be continued to the east beyond the line set up by the contract provided we feel same is desireable.

When the above crosscut is completed we may wish to move to the north east about 450' and drill a new cross cut commencing about 150' east of Hole No. 2. Kindly advise whether same is agreeable and will conform to the contract.

Hole No. 13-M is blank. You will note the location of Hole No. 15-M. This also has been completed since the first of July and is blank. The cross cut as represented by 8-M, 10-M, 13-M, and 15-M has been disappointing.

Hole No. 14-M was also blank although there was considerable open ground with a good deal of water. You will note the location of 17-M. From this point we expect to drill a cross section due south spacing the holes at 100' intervals until the mineralized trend has been crossed.

A. G. Johnson

OZARK-MAHONING COMPANY

C. N. Hill Tract
Drill Hole No. 12-M
Elevation: 380.7
Location: 494' north & 487' east of the S.W. Corner of N.W. ¼ of Sec. 24 or 70 feet east of No. 9-M.

Drilled by: N. W. Hales.

Examined by: E. A. Brooks
Casing: 27 ft. of 8" casing.

Started 5-7-52
Finished 6-9-52
Water: 35 light
210 strong
598 "
720 " sulfur
764 } lost cuttings
786 }

0 - 30 Surface

30 - 65 Dark brown lime, shale streaks.

65 - 70 Gray sand, shale streaks.

70 - 100 Gray sand, shaly partings.

100 - 110 Gray shale, lime streaks.

110 - 120 Light gray lime, shale streaks.

120 - 130 Light gray crinoidal lime.

130 - 170 Gray and brown lime, shale streaks.

170 - 195 Gray sand, shaly partings.

195 - 210 Gray sand.

210 - 235 Gray shaly sand.

235 - 250 Gray sand.

250 - 320 Gray and brown lime, shale streaks. Golconda.

320 - 325 Gray shale.

325 - 330 " and maroon shale.

330 - 410 Gray shale, few lime streaks.

410 - 425 " " , sandy.

425 - 455 Brown sand.

455 - 500 White shally sand.

500 - 525 White sand.

525 - 590 White shelly sand.

590 - 625 White sand.

625 - 630 White sand, broken traces of spar.

630 - 635 " " , some flint and lime, spar shines, Base of Bethel 632.

635 - 650 Gray lime, spar shines.

650 - 655 Gray lime.

655 - 685 Shale and selvage, lime streaks.

685 - 690 " " " " " , some leached buff.lime showing Zn. See assay.

690 - 700 Brown shaly lime.

700 - 710 Lower O'Hara lime. Little Zn 705 - 710.

710 - 715 Rosiclare sand.

715 - 720 Rich acid spar and some Rosiclare sand.

720 - 735 Very few cuttings, strong sulfur water. Con. caved sand & shale, little leached lime with spar shines & trace Zn.

735 - 750 Leached buff lime, con. caved shale, some spar, trace Zn.

750 - 755 Buff leached lime.

755 - 762-1/2 Buff leached lime, some brown siliceous material, some acid spar & some free and chatty Zn.

762½ - 770 Very few cuttings, con. caved shale, some buff lime, little spar traces Zn.

770 - 785 Buff lime, little spar, traces Zn, Con. caved material.

785 - 790 Very few cuttings. Buff lime, spar and Zn shines. Con. caved black shale.

790 - 800 Brown lime, con. caved green shale, spar and Zn shines.

800 - 820 Very few cuttings, con. caved green shale, little buff lime, spar & Zn shines.

820 - 845 Buff lime, spar shines, some red Zn, con. caved green & black shale.

845 - 850 Brown and buff lime, little Zn, very fine. Con. green shale, drilled firm.

850 - 854 Dark brown lime, con. caved green shale.

Ore face from 715 - 725 ft. averages 45.92 CaF_2.

" " " 725 - 750 ft. averages 17.08 CaF_2.

" " " 755 - 762½ ft. " 38.06 CaF2 and 1.70 Zn.

" " " 762½ - 775 ft. " 19.30 "

" " " 775 - 785 ft. " 34.50 " and 0.70 Zn

HOLE No. 12 - ASSAYS

	CaCO3	CaF2	Zn
685 - 690	68.39	28.30	2.17
705 - 710	75.58	3.67	1.22
715 - 720	8.94	46.97	0.07

	$CaCO_3$	CaF_2	Zn
720 - 725	11.46	44.87	-
725 - 730	10.38	19.93	-
730 - 735	12.18	17.96	-
735 - 740	30.86	13.90	-
740 - 742½	20.98	18.10	-
742½ - 745	28.52	19.08	-
745 - 750	31.75	15.02	-
755 - 760	10.74	40.35	1.96
760 - 762½	15.59	33.49	1.22
762½ - 765	18.64	19.48	-
765 - 770	8.58	15.13	-
770 - 772½	12.72	22.98	-
772½ - 775	9.48	23.82	-
775 - 780	8.58	33.21	-
780 - 783	11.46	32.09	1.22
783 - 785	10.02	41.34	1.12
785 - 787½	9.84	18.50	0.70
800 - 805	22.59	7.71	0.38
805 - 810	16.85	7.99	0.40

OZARK-MAHONING COMPANY

C. N. Hill Trust
Drill Hole No. 1JM
Elevation: 460.0
Location: 148' north and 284' west of the NE Corner of the NE-1/4 of Sec. 23 or 55' north and 25' west of No. 10-N
Drilled by: Moreland and Kohler
Examined by: E. A. Brooks
Casing: 39 feet

Started 5-11-52
Finished 6-7-52

Water		
	45'	Light
	90'	"
	165'	"
	310'	Fair
	360'	"
	375'	"
	505'	"
	525'	"
	600'	"
	645'	"
	660'	"
	780'	"

0-25	Surface
25-75	Gray shaly sand and shale streaks
75-90	White sand, shaly partings
90-145	Brown lime and black shale
145-160	Gray sand, shale streaks
160-200	Gray sand
200-225	Gray shale, sandy
225-305	Gray and brown lime, shale streaks
305-310	Gray silty shale
310-325	Gray sand
325-400	Gray shale, lime streaks
400-430	White sand
430-500	White sand
500-560	Shaly white sand
560-600	White sand
600-602-1/2	Black shaly sand Base of Bethel 603
602-1/2-605	Black shaly sand, some gray lime
605-625	Gray lime
625-630	Gray lime and green salvage
630-650	Green lime, some salvage
650-675	Dark brown shaly lime
675-680	Lower O'Hara lime
680-706	Rosiclare sand
706-780	Light gray lime

720-735	Light brown lime
735-765	Brown lime, little green selvage
765-770	Brown lime, little grey oolitic lime
770-780	Light grey oolitic lime

CHARM-MARCHING COMPANY

Hill-Ledford Trust
Hole No. 14-M
Elev. 397.6
Location: 693' N. 43' E. of S.W. Cor. or N.E. 1/4 of S.E. 1/4 of Sec. 23, Twp. 11 S., R. 9 E. or 100 ft. N. - 10 ft. S. of 11-M.

Started 5-29-52
Completed 6-26-52
Water: 40 ft.
55 ft.
295 ft.
650 ft.

Drilled by: Moreland & Mahler
Examined by: A. G. Johnson
Casing - 20 ft.

0 - 15	Soil and clay
15 - 35	Gray & oxidized sand - some gravel.
35 - 60	Gray sand - shale seams.
60 - 100	Gray and dark colored lime.
100 - 165	Gray sand
165 - 200	Gray shaly sand.
200 - 265	Gray and dark colored lime, shale streaks.
265 - 415	Gray sandy shale, few lime streaks.
415 - 470	Gray sand - few shale seams.
470 - 566	White sand. B. R. 566 ft.
566 - 585	Light gray to gray lime.
585 - 615	Gray lime, selvage seams.
615 - 640	Dark colored shaly lime.
640 - 650	Light colored oolitic lime.
650 - 672	Rosiclare sand - hard - cuttings very fine.
672 - 710	Hard light gray lime - cuttings very fine.
710 - 715	Gray lime - few spar shs. Softer ground.
715 - 720	No cuttings - crevice at 716 ft. Ground drilled hard & firm. Black sulphur water at 716'.
720 - 735	Gray lime, very few cuttings. Hole drilled hard and firm.
735 - 740	Gray lime, very few cuttings. Formation solid crevice at 739 ft. Few Zn shs.
740 - 750	No cuttings - ground drilled hard and firm.
750 - 755	do do do , crevice at 751 ft.
755 - 765	No cuttings- ground drilled hard and firm, opening at 763 ft.
765 - 775	Very few cuttings - tight & hard formation. 15" opening @ 774'. Light gray oolitic lime.
775 - 777	Very few cuttings - Light gray lime.

July 10, 1952

DMEA Field Examination Report
G. L. Neumann, Engineer

DMEA Docket No. 2248
Contract No. IdmE-255
Ozark-Mahoning Co., Rosiclare, Ill.
Work west of Illinois Highway No. 1 near Lamb, Ill., Hardin Co.
Commodity - Fluorspar, Lead, Zinc
Amount of Contract - $61,965.00
Government Participation - 50 percent - $30,982.50

The property was visited July 10, 1952. Progress Report for June is approved. Holes 15M and 16 M have since been completed. 15M did not show mineralization. 16M cut several bands of good ore very similar to adjacent hole 12M. 19M is drilling 70 feet east of 16M. If 19M has good showing another hole will be drilled next to the highway. 17M is down to 450 feet depth and if showing is cut another line of holes will be drilled to the south in order to determine the position of the east wall. Hole 18M, 70 feet SE of 15M, is now down to a depth of 240 feet, practically at junction of lines 13M - 10M - 8M - 15M - 18M and 4M - 3M - 2M - and Minerva hole 17.

This work is progressing very well and results are very encouraging.

G. L. Neumann

College Park, Md.
July 14, 1952

MF-104
(August 1951)

Budget Bureau No. 42-R1036.2.
Approval Expires 6-30-52.

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS ADMINISTRATION

Contract No. Idm-E 255

Name of Operator Ozark-Mahoning Company
Docket No. DMA 2248
Total Contract Amount $ 61,965.00
Government Participation: 50 % Amount, $ 30,982.50
Distribution of Expenditures for Month of May 1952

STRATEGIC AND CRITICAL MINERAL EXPLORATION PROGRAM
OPERATOR'S MONTHLY PROGRESS REPORT

Operators are to submit monthly reports to the designated field representative of the Defense Minerals Administration. Reports are to be submitted in quadruplicate prior to the 15th day of the month following the reporting period.

Narrative.—A concise narrative description of progress made, results accomplished, and any unusual difficulties encountered is to be furnished.

Maps.—Wherever possible, the narrative is to be illustrated with maps or sketches showing formations penetrated and location and assays of samples taken as well as advances in workings. In the case of diamond drilling or churn drilling, the location and inclination of holes is to be shown on a map; logs and assays also are to be submitted.

Cost Accounts.—All applicable parts of this form are to be filled in. This report will form the basis for payments of the Government's participating share of expenses. Audits of accounts may be made from time to time.

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
JUN 13 1952

CERTIFICATION

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

Ozark-Mahoning Company
(Name of Company)

By [signature]
(Signature of Authorized Official)

June 3, 1952
(Date)

Assistant Secretary-Treasurer
(Title)

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

16—64068-3

MONTHLY SUMMARY COST STATEMENT

List as Shown on Exhibits Attached to Contract

Item	Monthly Total	Totals Previously Reported	Totals to Date	For Government Use Only		
				Approved Monthly Total	Approved Totals Previously Reported	Approved Totals To Date
1. Fixtures and Improvements:						
(*a*) Facilities						
(*b*) Buildings						
(*c*) Fixtures						
2. Operating Equipment:						
(*a*) Purchased[1]						
(*b*) Rented[2]						
(*c*) Furnished by operator						
3. Rehabilitation and Repairs:						
(*a*) Facilities						
(*b*) Buildings						
(*c*) Installations						

DMEA
Field Inspection Report
June 4, 5, 1952
H. L. Burmeister, Engineer

Docket No. DMEA-2248, Ozark-Mahoning Company
Rosiclare, Illinois

(Fluorspar)

On arrival at Rosiclare, it was found that the Monthly Progress Report for May 1952 had been sent to College Park the previous day.

Only the monthly cost, footage drilled in May and total footage drilled was entered on the report. No total to date of cost was shown. This total was added on the Company copy and also penciled on each of the Government copies.

Holes No. 12M, 13M and 14M are now drilling. Hole 12M showed some zinc from 690 to 700 feet, assays of which are not yet available. Five feet of about 50 percent fluorspar was encountered from 715 to 720 feet and a very heavy flow of water from 720 to 725 feet. From 725 to 735 feet spar occurred in decreasing quantities. Assay results will appear in the next report.

The next hole in the same east-west line with hole 12M will be drilled to the east as the trend of the long axis seems to be moving in a clockwise direction. Hole 13M is at the bottom of the Rosiclare sand at 706 feet and shows no mineralization. This hole will be drilled about 100 feet deeper. The next hole in this east-west line will also be located to the east.

No difficulty is being encountered in drilling. The contract is 23 percent complete on a footage and cost basis and 21 percent complete on a time basis.

Statements of fact by the operator in the Monthly Progress Report for May 1952 were corroborated.

H. L. Burmeister
College Park, Md.
June 11, 1952

College Park, Maryland

June 12, 1952

Memorandum

To: D. M. Anderson, Planning Officer, Region VIII

From: Executive Officer, DMEA Field Team, Region VIII

Subject: May 1952 Progress Report, Contract Iam-8255, Double Ma, Dunnigan & Finnegan

Attached is one copy of the Operator's Progress Report from the Contracting Company, Belleville, Illinois, for the month of May 1952. This report has been checked by V. T. Miller and approved by me. You note that the amount approved for payment this month by the Government is $3,287.57.

McEvoy Hunter

Enclosure
Hilbrandsfar's Field Inspection Report

McHM:rwp

copy for C. Mittendorf
DMEA Files 2

OZARK-MAHONING COMPANY
Rosiclare, Illinois

Supplemental Sheet
May 1952

Geologist 2558 ft. @ $0.15 per ft. =		383.70
Assaying 2558 ft. @ $0.01 per ft. =		25.58
Clerical 2558 ft. @ $0.02 per ft. =		51.16
		$460.44

Status of Holes Drilling & Completed

M-9	Completed 850' (Previously reported 710 ft.)	Bal. 140 ft.
M-10	Completed 790' (Previously reported 330 ft.)	Bal. 460 ft.
M-11	Completed 768' (Previously reported 110 ft.)	Bal. 658 ft.
M-12	(Drilling 5-31-52)	670 ft.
M-13	(Drilling 5-31-52)	580 ft.
M-14	(Drilling 5-31-52)	50 ft.
	Total footage for month	2558 ft.

Remarks:

Copies of Holes No. 9-M, 10-M, & 11-M are attached to this report. Map is also attached showing locations of completed holes as well as holes now drilling.

Hole No. 9-M showed low grade fluorspar mineralization at both the Rosiclare contact and the Sub-Rosiclare horizon. Strong water and open ground was encountered in the mineralized sections.

Hole No. 10-M cut low grade ore at the Rosiclare horizon and shines at the Sub-Rosiclare contact.

Hole No. 11-M was blank.

A. G. Johnson

OZARK-MAHONING COMPANY

C. N. Hill Tract
Drill Hole No. 9
Elevation: 380.2
Location: 495' north and 415' east of the SW Corner of NW¼ of Sec. 24 or 93' north and 160' east of No. 8 Minerva
Drilled by: B. W. Bales
Examined by: R. A. Brooks
Casing: 30' of 6-5/8"

Started: 4-7-52
Finished: 5-7-52

Water: Hole Full @ 30'
470-490 Strong
724-726 Live Water
790-800 Live Sulfur Water

Note: Minerva Redds
Pump lowered water 45'

0-30	Surface
30-55	Grey shaly lime
55-95	Grey sand, shaly partings
95-105	Grey sandy shale
105-140	Grey lime, little shale
140-170	Brown lime shale streaks
170-210	Grey sand, shaly partings
210-230	Grey shaly lime
230-245	White sand, shale streaks
245-285	Shaly grey lime
285-320	Grey shale, lime streaks
320-325	Grey shale
325-330	Grey and maroon shale
330-405	Grey shale, few lime streaks
405-420	Sandy grey shale
420-460	Brown sand
460-490	Shelly grey sand
490-510	White sand
510-580	Shelly white sand
580-625	White sand
625-630	" " , little lime trace spar. Base of Bethel 630
630-650	Grey lime, con. eroed sand, trace spar and calcite
650-665	" " some selvage
665-685	Brown lime, con. selvage, little calcite
685-695	Lower O'Hara lime
695-725	Rosiclare sand
725-727½	" " , fair spar trace Zn. B. R. 728
727½-730	" " , some buff leached lime some spar
730-740	Buff leached lime some selvage, little spar, Zn shines
740-750	Brown lime, traces spar and Zn probably eroed
750-775	Brown lime slightly leached
775-780	" " , little buff lime, spar and Zn shines
780-790	Light buff lime, traces Zn and spar
790-800	Buff lime little spar and Zn very few cuttings. See assay
800-806	Buff lime, spar and Zn shines
806-850	Brown and buff lime

Ore face 725-738½ averages 27.65 CaF_2

Assays	$CaCO_3$	CaF_2	Zn
725-727½	20.99	31.84	
727½-730	25.74	28.33	
730-732½	28.12	22.99	
732½-735½	29.77	18.19	
735½-738	36.35	19.14	
775-780	70.91	9.87	1.78
790-792½	66.70	7.45	.97
792½-795	61.30	10.16	1.76
795-797½	39.82	21.41	2.09
797½-800	48.96	16.00	1.58
800-803	57.56	8.87	.67

OZARK-MAHONING COMPANY

C. H. Hill Tract
Drill Hole No. 10
Elevation: 402.6
Location: 85' north and 197' west of the N.E. Corner of the N. E. 1/4 of S.E. 1/4 of Sec. 23 or 60' north and 28' west of No. 8.

Drilled by Moreland and Hohler.
Supervised by: E. A. Strauss
Casing: 20 feet.

Started 4-19-52
Finished 5-14-52

Water:
50'- 90' - 170'
Light
275' - 345 and 425
Medium
705' Light
768' "
Water does not seem to be strong in this hole.

0 - 25 Surface

25 - 50 Gray lime sand

50 - 85 Gray sand, shale streaks

85 - 95 Gray shale, sandy

95 - 145 Gray lime, black shale

145 - 205 Gray sand, shaly partings

205 - 230 Gray shale, sandy

230 - 305 Gray and brown lime shale streaks Oolomanie

305 - 330 Gray sand, few shale streaks

330 - 390 Gray shale, few lime streaks

390 - 440 " " , sandy

440 - 460 Brown sand

460 - 490 White sand

490 - 560 Gray sand, shally

560 - 595 White sand

595 - 602-1/2 Gray sand

602-1/2 - 605 " " and gray lime. Base of Bethel 603

605 - 625 Gray lime

625 - 635 " " and green salvage

635 - 655 Brown lime, sen. salvage

655 - 675 Dark brown shaly lime

675 - 685 Lower O'Hara lime

685 - 700 Rockclare sand

700 - 707-1/2 Rosiclare sand, some purple spar. Base of Rosiclare 708.

707-1/2 - 710 Rosiclare sand shaly, con. gray oolitic lime, spar shines.

710 - 715 Light gray oolitic lime.

715 - 757-1/2 Gray to light brown lime, traces calc. and spar shines, spar probably cored.

757-1/2 - 762-1/2 Gray and brown lime, some quartz and calcite, trace Zn and spar, cuttings fine, some additional water at 762 feet.

762-1/2 - 765 Light gray and some brown lime, some quartz and calcite - traces spar and Zn.

765 - 785 White oolitic lime.

785 - 790 Gray lime.

Assays	$CaCO_3$	CaF_2	SiO_2	Zn
700 - 705	16.24	17.86		
705 - 707-1/2	22.82	20.28		
757-1/2 - 762-1/2	56.28	6.45	26.51	1.28
762-1/2 - 765	59.57	4.17	24.84	.36

OZARK-MARKETING COMPANY

C. N. Hill Tract
Drill Hole No. 11
Elevation: 412.1
Location: 702' north and 141' east of S.W. Corner of N.E. 1/4 of S.E. 1/4 of Sec. 23 or 7' south and 100' east of No. 7.
Drilled by: Moreland and Hehler.
Examined by: E. A. Brooks
Casing: 20 feet.

Started 4-26-52
Finished 5-29-52

Water: 40 strong
586 "
No lower water noticeable.

0 - 15 Surface

15 - 25 Gray shale, sand streaks.

25 - 30 Red clay.

30 - 45 Gray sand, shaly partings.

45 - 55 White sand.

55 - 70 Gray sand shaly.

70 - 120 Gray and brown lime, shale streaks.

120 - 190 White sand.

190 - 195 Gray shaly sand.

195 - 260 Gray and brown lime, shaly streaks.

260 - 300 Gray shale, lime streaks.

300 - 305 Gray and maroon shale.

305 - 370 Gray shale, few lime streaks.

370 - 395 " " , sandy.

395 - 430 Gray sand

430 - 465 White sand.

465 - 470 " " , shaly partings.

470 - 555 White sand slightly shally.

555 - 575 White sand.

575 - 585 Gray sand.

585 - 590 " " , com. gray lime. Base of Bethel 586.

590 - 610 Gray lime.

610 - 615 Gray lime, little green selvage.

615 - 635 Brown lime, com. selvage.

635 - 660 Dark brown shaly lime.

660 - 670 Lower O'Hara lime.

670 - 675 " " ", some Rosiclare sand.

675 - 686 Rosiclare sand.

686 - 720 Light gray oolitic lime.

720 - 745 Light brown lime.

745 - 755 Dark brown lime.

755 - 760 " " ", little light gray oolitic lime.

760 - 768 Brown lime, some gray oolitic lime.

MONTHLY SUMMARY COST STATEMENT—Continued

Item	Monthly Total	Totals Previously Reported	Totals to Date	For Government Use Only: Approved Monthly Total	Approved Totals Previously Reported	Approved Totals To Date
(d) Fixtures						
4. Labor [3]						
5. Supervision						
6. Supplies						
(a) Timber						
(b) Explosives						
(c) Repair Parts						
(d) Other						
7. Power						
8. Transportation						
9. Insurance						
(a) Fire						
(b) Public Liability						
(c) Workmen's Compensation						
10. Contract Work						
11. Other (specify)						
Total	6,215.79					
Deletions						
Adjusted totals	[illegible].85					
Totals previously reported						
Totals to date	14,222.79					

[1] Enter amount paid during month toward total purchase price.
[2] Payments for rental of equipment or prorated depreciation on equipment owned by contractor.
[3] Submit copy of the Social Security form filed under the Old Age Insurance system showing complete wage and salary data or furnish copy of payroll sheet giving same data.

Note.—Indicate that portion of supervisory, office, and engineering salaries that is chargeable to this project.

FOR GOVERNMENT USE ONLY

Checked by W. T. Mullen
Entered by
Approved by McGeary Mosier 6-5-52
Amount approved for payment $ 3107.97
Remarks

16—64068-3

EXPLORATION UNIT COST AND PROGRESS REPORT FOR MONTH OF May 1952

(Supply Data Below Applicable Only to Your Operations)

Item	Costs					Progress [4]				
	Wages [1] and salaries	Equipment [2]	Supplies	Other [3]	Total	Unit	Units this month	Units previously reported	Units to date	Units authorized by contract (Exhibit A)
Drifting										
Crosscutting										
Raising										
Shafts										
Winzes										
Drill holes					6215.94	2.43*	2558	3295	5853	
Overburden										
Rehabilitation and preparation										
Geology and geophysics										
Trenching										
Sampling and assaying										
Roads and trails										
Test pits										
Other (specify)										
Totals					6215.94					

[1] Prorate supervisory, engineering, and office salaries in proportion to man-shifts of direct labor.
[2] Prorate charges for equipment that is not exclusively for one type of job (such as compressors) against authorized units of work in each category.
[3] Where entries in the "Other" column (above) are more than 25 percent of the total expenditures, a breakdown of this item should be made.
[4] Specify whether feet, cubic feet, acres, miles, etc.

16—64068-3 U. S. GOVERNMENT PRINTING OFFICE

* Includes the following:

Drilling	@ $2.25	per	ft.
Geologist	@ 0.15	"	"
Assaying	@ 0.01	"	"
Clerical	@ 0.02	"	"
	$2.43		

MF-104
(August 1951)

Budget Bureau No. 42-R1036.2.
Approval Expires 6-30-52.

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS ADMINISTRATION

Contract No.
Idm-E 255

Name of Operator Ozark-Mahoning Company
Docket No. DMA 2248
Total Contract Amount $ 61,965.00
Government Participation: 50 % Amount, $ 30,982.50
Distribution of Expenditures for Month of April, 1952

STRATEGIC AND CRITICAL MINERAL EXPLORATION PROGRAM
OPERATOR'S MONTHLY PROGRESS REPORT

Operators are to submit monthly reports to the designated field representative of the Defense Minerals Administration. Reports are to be submitted in quadruplicate prior to the 15th day of the month following the reporting period.

Narrative.—A concise narrative description of progress made, results accomplished, and any unusual difficulties encountered is to be furnished.

Maps.—Wherever possible, the narrative is to be illustrated with maps or sketches showing formations penetrated and location and assays of samples taken as well as advances in workings. In the case of diamond drilling or churn drilling, the location and inclination of holes is to be shown on a map; logs and assays also are to be submitted.

Cost Accounts.—All applicable parts of this form are to be filled in. This report will form the basis for payments of the Government's participating share of expenses. Audits of accounts may be made from time to time.

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
MAY 6 1952

CERTIFICATION

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

OZARK-MAHONING COMPANY
(Name of Company)

By [signature]
(Signature of Authorized Official)

May 1, 1952
(Date)

Works Accountant
(Title)

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

16—64068-3

MONTHLY SUMMARY COST STATEMENT

List as Shown on Exhibits Attached to Contract

Item	Monthly Total	Totals Previously Reported	Totals to Date	For Government Use Only		
				Approved Monthly Total	Approved Totals Previously Reported.	Approved Totals To Date
1. Fixtures and Improvements:						
(*a*) Facilities						
(*b*) Buildings						
(*c*) Fixtures						
2. Operating Equipment:						
(*a*) Purchased[1]						
(*b*) Rented[2]						
(*c*) Furnished by operator						
3. Rehabilitation and Repairs:						
(*a*) Facilities						
(*b*) Buildings						
(*c*) Installations						

May 3, 1952

Mr. McHenry Mosier, Executive Officer
Bureau-Survey Field Team
Defense Minerals Exploration
Administration, Region VIII
U. S. Department of the Interior
Defense Minerals Administration
College Park, Maryland

Dear Mr. Mosier:

Enclosed herewith you will find four copies of the Operator's Monthly Progress Report under the terms of Contract No. IDm-E 255, Docket No. DMA 2248. This is for the period April, 1952. Attached to this Progress Report are copies of Drill Holes Nos. 6-M and 7-M, as well as the Supplemental sheet.

I also enclose herewith four copies of a drilling agreement by and between the Ozark-Mahoning Company and B. W. Bales, drilling contractor, dated April 7, 1952. This agreement covers all of the contractors now operating on the property.

Very truly yours,

OZARK-MAHONING COMPANY
Mahoning Mining Division

A. G. Johnson

A. G. Johnson

AGJ:fhb

Enclosures

OZARK-MAHONING COMPANY
Rosiclare, Illinois

SUPPLEMENTAL SHEET
April, 1952

Geologist	2110 ft. @ $0.15 per ft. =	$ 316.50
Assaying	2110 ft. @ 0.01 per ft. =	21.10
Clerical	2110 ft. @ 0.02 per ft. =	42.20
	Total	$ 379.80

Status of Holes Drilling and Completed

M-7	Completed	780 ft. (Previously reported 355 ft.)	Bal.	425 ft.
M-8	"	815 ft. (" " 280 ft.)	Bal.	535 ft.
M-9	(Drilling)	Depth 4-30-52		710 ft.
M-10	(Drilling)	Depth 4-30-52		330 ft.
M-11	(Drilling)	Depth 4-30-52		110 ft.
		Total for month		2110 ft.

Remarks:

Copies of Holes Nos. 7 M and 8 M are attached to this report.

Hole No. 7 cut five feet of ore from 690 - 695 feet which assayed 50.81 CaF_2. A two foot opening and strong water was cut from 697 - 699 feet. Consequently, no cuttings were recovered from 695 - 705 feet. The ground, however, drilled firm from 699 - 705 feet. No Sub Rosiclare ore was cut in No. 7 as was the case in No. 6-M. Hole No. 11 M, elevation 412.1, is now drilling, located 102 ft. west, 7 ft. south of 7-M. This location is outside the area delineated by the contract. However, we are proceeding on the theory that the contract has been modified by Mr. Mosier's letter of March 27, 1952, which permits us to drill three holes outside the northwest side line.

Hole No. 8-M was blank. Hole No. 10-M is now drilling. Elevation 402.6. Location 59 ft. north - 28 ft. west of No. 8.

Hole No. 9-M is down to a depth of 710 feet and should be completed within the next week. The location is shown on the map furnished last month.

A. G. Johnson

A. G. Johnson

AGJ:fhb

OZARK-MAHONING COMPANY

G. N. Hill Tract
Drill Hole No. 7

Started 3-14-52
Finished 4-26-52

Elevation: 416.4
Location: 711' north and 241' east of the S.W. Corner of N.E. 1/4 of S.E. 1/4 of Sec. 23 or 3' north and 66' west of No. 6.

Water:		
	30	Light
	60	"
	290	"
	335	Strong
	697	"

Drilled by: Moreland and Mohler.
Examined by: E. A. Brooks

Casing: 20 feet.

0 - 20	Surface
20 - 60	Gray sand
60 - 80	Gray sand shaly
80 - 125	Brown lime, shaly G. D.
125 - 190	Gray sand
190 - 225	Black shale sandy
225 - 260	Gray and brown lime, shale streaks Golconda
260 - 290	Black shale lime streaks
290 - 295	Gray shale
295 - 300	Gray and Maroon shale
300 - 380	Black shale, lime streaks
380 - 400	" " , sandy
400 - 430	Gray sand
430 - 490	White sand
490 - 545	Gray sand, shelly
545 - 585	White sand
585 - 590	" " , some gray lime, Base of Bethel 588
590 - 605	Gray and brown lime
605 - 635	Brown lime, some shale and selvage
635 - 655	Dark brown shaly lime
655 - 665	Lower O'Hara lime

665 - 687-1/2 Bezielare sand

687-1/2 - 690 Bezielare sand, spar shines; cutting very fine.

690 - 692-1/2 " " , some spar; cutting very fine.

692-1/2 - 695 " " , some gray lime and spar; traces Zn and Pb. B. R. 694.

695 - 697 Drilled firm, cuttings lost.

697 - 699 Last cuttings in cavity.

699 - 705 Last cuttings, strong water

705 - 715 Gray lime

715 - 740 Light brown lime

740 - 760 Dark brown lime

760 - 780 Light buff lime

Ore face 690 - 695 averages 50.81% CaF_2
.63% Zn
.17% Pb

Assays:	$CaCO_3$	CaF_2	Zn	Pb
687-1/2 - 690	12.76	2.17		
690 - 692-1/2	6.37	58.80		
692-1/2 - 695	22.27	42.82	1.27	.34
705 - 710	81.88	4.59	.87	None

OZARK-MAHONING COMPANY

C. N. Hill Tract
Drill Hole No. 8
Elevation: 405.0
Location: 25' north and 170' west of the NE corner of the NE-1/4 of SE-1/4 Sec. 23 or 87' south and 160' west of No. 7 Minerva O. Co.
Drilled by: Moreland and Kohler
Examined by: N. A. Brecke
Casing: 20'

Started 3-20-52
Finished 4-19-52

Water		Light
35'		
95'		
180'		
240'		
290(	Strong	
340'	"	
450'	"	
510-560'	"	
720'	"	
755'	"	
Stands @ 25'		

0-20	Surface
20-35	Gray sand shale streaks oxidized
35-90	Gray sand shale
90-105	Black shale, some dense brown lime
105-150	Black shale, Brown lime streaks G.D.
150-205	Gray sand
205-240	Gray shale, sand streaks
240-275	Gray and brown lime shale streaks
275-315	Black shale, lime streaks
315-320	Gray fine grained sand
320-335	Black shale, some gray sand
335-390	Gray shale, scattered thin lime streaks
390-415	Gray shale sandy
415-460	Gray sand
460-505	White sand
505-570	Gray sand, shelly
570-600	White sand
600-605	Gray sand shaly
615-610	White sand, some gray lime Base of Bethel 607
610-630	Gray and brown lime, some calcite
630-655	Brown lime, con. selvage
655-675	Dark brown shaly lime
675-690	Lower O'Hara lime

690-718 Rosiclare sand

718-720 Gray oolitic lime

720-722-1/2 Light gray oolitic lime, leached, trace spar

722-1/2-725 Light gray oolitic lime, leached

725-740 Brown lime

740-760 Dark brown lime

760-765 Dark brown lime, little oily white oolitic lime

765-775 Light buff oolitic lime

775-815 Light brown oolitic lime

AGREEMENT

THIS AGREEMENT, made and entered into this 7th day of April 1952 by and between the Ranft Refining Company, a Delaware Corporation having its office in the City of Rockdale, Fayette County, Illinois, party of the first part, and B. W. Bales a drilling contractor, of Cave-In-Rock, Illinois, party of the second part,

WITNESSETH: THAT

WHEREAS, the parties hereto have agreed that second party will undertake to carry on drilling operations on the Hill Ledford Tract for a period of 6 months, from the date of this contract, and the party of the first part will pay for said drilling at the rate of $2.25 per foot, all upon the terms and conditions hereinafter stated:

NOW, THEREFORE, It is hereby agreed by and between the parties hereto, as follows:

1. The party of the second part shall drill in an efficient and workmanlike manner and in accordance with recognized round drilling procedure and practice. Second party shall exercise special care to do no more damage to properties upon which drilling operations are being carried on than is absolutely necessary. Second party shall strive to keep the area of drilling clean, neat and safe, and shall dispose of waste and refuse at the drill hole site upon completion of the hole.

2. Second party shall plug or case each drill hole with a cement plug and/or well casing, as may be specified by first party, at the completion of said hole. First party shall furnish such cement plug and/or well casing.

3. First party shall have the privilege of measuring any hole at any time during drilling operations, or after completion thereof. All holes are to be drilled to the depth specified by first party as representing a completed hole. First party shall have the right to order cessation of drilling at any depth less than that originally specified, but under such circumstances shall pay for the drilling of the hole to the depth to which same has been drilled at that time, and providing such drilling has been carried on in accordance with the provisions of this contract.

4. It is understood that said second party is an independent contractor, having full control of the work to be performed; that he will indemnify and save harmless first party from and against all liability for injury to or death of any person or persons and for loss of or damage to property, arising from, growing out of, or connected with the negligence of said second party. Also he will indemnify and save harmless the said first party from and against any and all materialmen's or laborers' liens for material or work furnished and connected with, arising from or growing out of this contract. That he will defend all such claims and liens and will have same cancelled and satisfied; and that he will furnish the said first party satisfactory evidence of such indemnification, defense and cancellation, as provided by the statutes of the State of Illinois.

5. The party of the first part shall have the right to cancel this contract, upon giving fifteen (15) days written notice to second party.

Land

IN WITNESS WHEREOF, the party of the first part has caused this instrument to be executed by J. G. Trewartha its Vice President and the party of the second part has hereunto set his hand and seal, all this 7th day of April, 195 2.

CONTINENTAL COMPANY

BY J. G. Trewartha (SEAL)
PARTY OF THE FIRST PART

BY B. W. Bales (SEAL)

B. W. Bales

PARTY OF THE SECOND PART

MONTHLY SUMMARY COST STATEMENT—Continued

Item	Monthly Total	Totals Previously Reported	Totals to Date	For Government Use Only: Approved Monthly Total	Approved Totals Previously Reported	Approved Totals To Date
(d) Fixtures						
4. Labor[3]						
5. Supervision	316.50	177.75	494.25			
6. Supplies						
(a) Timber						
(b) Explosives						
(c) Repair Parts						
(d) Other						
7. Power						
8. Transportation						
9. Insurance						
(a) Fire						
(b) Public Liability						
(c) Workmen's Compensation						
10. Contract Work	4747.50	2666.25	7413.75			
11. Other (specify)						
Assaying	21.10	11.85	32.95			
Clerical	42.20	23.70	65.90			
Total	5127.30	2879.55	8006.85			
Deletions						
Adjusted totals						
Totals previously reported						
Totals to date						

[1] Enter amount paid during month toward total purchase price.
[2] Payments for rental of equipment or prorated depreciation on equipment owned by contractor.
[3] Submit copy of the Social Security form filed under the Old Age Insurance system showing complete wage and salary data or furnish copy of payroll sheet giving same data.

NOTE.—Indicate that portion of supervisory, office, and engineering salaries that is chargeable to this project.

FOR GOVERNMENT USE ONLY

Checked by W. B. Burmeister
Entered by
Approved by McHenry Ulosier
Amount approved for payment $2563.65
Remarks

16—64068-3

EXPLORATION UNIT COST AND PROGRESS REPORT FOR MONTH OF April, 2020

(Supply Data Below Applicable Only to Your Operations)

Item	Costs					Progress [4]				
	Wages [1] and salaries	Equipment [2]	Supplies	Other [3]	Total	Unit	Units this month	Units previously reported	Units to date	Units authorized by contract (Exhibit A)
Drifting										
Crosscutting										
Raising										
Shafts										
Winzes										
Drill holes					1417.50	2.05	210	1155	1365	
Overburden										
Rehabilitation and preparation										
Geology and geophysics	316.50				316.50					
Trenching										
Sampling and assaying	63.30				63.30					
Roads and trails										
Test pits										
Other (specify): Clerical	12.00				12.00					
Totals	392.80				1807.80					

[1] Prorate supervisory, engineering, and office salaries in proportion to man-shifts of direct labor.
[2] Prorate charges for equipment that is not exclusively for one type of job (such as compressors) against authorized units of work in each category.
[3] Where entries in the "Other" column (above) are more than 25 percent of the total expenditures, a breakdown of this item should be made.
[4] Specify whether feet, cubic feet, acres, miles, etc.

16—64068-3 U. S. GOVERNMENT PRINTING OFFICE

90 per cubic yard
210 × 5.25 = 1417.50

MF-104
(August 1951)

Budget Bureau No. 42-R1036.2.
Approval Expires 6-30-52.

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS ADMINISTRATION

Contract No.
Idm-E 255

Name of Operator Ozark-Mahoning Company
Docket No. DMA 2248
Total Contract Amount $ 61,965.00
Government Participation: 50 % Amount, $ 30,982.50
Distribution of Expenditures for Month of February 18, 1952 - March 31, 1952

STRATEGIC AND CRITICAL MINERAL EXPLORATION PROGRAM
OPERATOR'S MONTHLY PROGRESS REPORT

Operators are to submit monthly reports to the designated field representative of the Defense Minerals Administration. Reports are to be submitted in quadruplicate prior to the 15th day of the month following the reporting period.

Narrative.—A concise narrative description of progress made, results accomplished, and any unusual difficulties encountered is to be furnished.

Maps.—Wherever possible, the narrative is to be illustrated with maps or sketches showing formations penetrated and location and assays of samples taken as well as advances in workings. In the case of diamond drilling or churn drilling, the location and inclination of holes is to be shown on a map; logs and assays also are to be submitted.

Cost Accounts.—All applicable parts of this form are to be filled in. This report will form the basis for payments of the Government's participating share of expenses. Audits of accounts may be made from time to time.

CERTIFICATION

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

OZARK-MAHONING COMPANY
(Name of Company)

By J. L. [illegible]
(Signature of Authorized Official)

April 7, 1952
(Date)

Works Accountant
(Title)

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

16—64068-3

MONTHLY SUMMARY COST STATEMENT

List as Shown on Exhibits Attached to Contract

Item	Monthly Total	Totals Previously Reported	Totals to Date	For Government Use Only		
				Approved Monthly Total	Approved Totals Previously Reported	Approved Totals To Date
1. Fixtures and Improvements:						
(*a*) Facilities						
(*b*) Buildings						
(*c*) Fixtures						
2. Operating Equipment:						
(*a*) Purchased[1]						
(*b*) Rented[2]						
(*c*) Furnished by operator						
3. Rehabilitation and Repairs:						
(*a*) Facilities						
(*b*) Buildings						
(*c*) Installations						

Ozark-Mahoning Company

Mahoning Mining Division
Rosiclare, Illinois

April 8, 1952

Mr. McHenry Mosier, Executive Officer
Bureau-Survey Field Team
Defense Minerals Exploration
Administration, Region VIII
U. S. Department of the Interior
Defense Minerals Administration
College Park, Maryland

Dear Mr. Mosier:

Enclosed herewith you will find four copies of the Operator's Monthly Progress Report under the terms of Contract No. Idm-E 255, Docket No. DMA 2248. Attached to same are copies of Hill-Ledford Drill Hole No. 6, the Supplemental Sheet, as well as one hundred foot scale map of the property showing the location of the holes now drilling and completed. It is not our intention to furnish such a map monthly unless you feel same is desirable.

I wish also to acknowledge your letter of March 27th all in reference to certain modifications of the contract as recommended by Mr. Burmeister.

Very truly yours,

OZARK-MAHONING COMPANY
Mahoning Mining Division

A. G. Johnson

A. G. Johnson

AGJ/blc

Enclosures

BUREAU OF MINES
COLLEGE PARK, MD

1952 APR 10 AM 8 30

OZARK-MAHONING COMPANY

C. N. Hill Tract

Drill Hole No. 6

Elevation: 420.3

Location: 708' north and 311 east of the SW corner, NE 1/4 of SE 1/4 of Sec. 23 or 97' west of No. 5

Drilled by: Moreland and Hohler
Examined by: E. A. Brecke
Casing: 20 feet

Started 2-5-52
Finished 3-14-52

Water: 45' light
105 "
305 "
375 "
700 Live strong
750-790 Live and strong, very few cuttings, stands 20'.

0 - 17	Surface
17 - 55	Shaly gray sand
55 - 65	Gray sand
65 - 85	Gray shaly sand
85 - 125	Brown lime shale streaks
125 - 195	Gray sand
195 - 225	Gray sandy shale
225 - 255	Gray lime
255 - 300	Gray shale, lime streaks
300 - 305	Maroon shale
305 - 380	Gray shale, lime streaks
380 - 405	" " , sandy streaks
405 - 445	Gray sand
445 - 530	" " , slightly shelly
530 - 580	White sand
580 - 595	Gray sand
595 - 597-1/2	Gray sand, con. gray lime. Base of Bethel 596
597-1/2 - 610	Gray lime
610 - 620	" " , little green selvage
620 - 650	Brown lime, selvage streaks
650 - 665	Dark Brown shaly lime
665 - 680	Lower O'Hara lime
680 - 695	Rosiclare sand
695 - 700	Rosiclare sand, spar shines
700 - 702-1/2	Rosiclare sand, little calcite, spar shines
702-1/2 - 705	" " , " " " " , little white oolitic lime
705 - 715	White oolitic lime
715 - 745	Light brown lime
745 - 750	Dark brown lime, traces Zn and spar. Little brown silica
750 - 755	Brown lime, little shale, some Zn spar shines
755 - 760	Rich Zn, some chatty Zn on brown silica spar shines. Little black shale and green sand.
760 - 762-1/2	Green sand, quartzitic, some Zn and black shale
762-1/2 - 767-1/2	Brown silica, some white gouge and black shale. Some Zn spar shines
767-1/2 - 780	Brown silica, some green sand and white gouge, little free Zn
780- 782-1/2	Brown silica, little green sand, little oolitic lime, some free Zn
782-1/2 - 785	Good Zn and brown silica, drilled soft 784 - 785
785 - 790	Some brown silica and gray lime, little free Zn

Ore face 750 - 767-1/2 9.23% CaF_2
11.0 % Zn

Ore face 767-1/2 - 785 2.37% CaF_2
4.35% Zn

Assay	$CaCO_3$	CaF_2	Zn
695 - 700	12.54	13.85	
700 - 702-1/2	21.22	10.12	
702-1/2 - 705	44.25	7.35	
750 - 755	35.04	12.47	7.36
755 - 757-1/2	11.66	9.98	18.05
757-1/2 - 760	7.05	9.43	19.17
760 - 762-1/2	7.05	10.39	15.67
762-1/2 - 765	13.07	5.14	5.02
765 - 767-1/2	11.66	4.73	4.31
767-1/2 - 770	46.55	3.34	2.49
770 - 772-1/2	49.03	2.79	3.00
772-1/2 - 775	18.74	1.96	1.68
775 - 777-1/2	24.06	2.24	1.38
777-1/2 - 780	28.13	2.52	1.17
780 - 782-1/2	49.74	1.55	.77
782-1/2 - 785	12.72	1.20	20.04
785 - 790	52.13	4.66	4.12

A. G. Johnson

OZARK-MAHONING COMPANY
ROSICLARE, ILLINOIS

SUPPLEMENTAL SHEET
PERIOD ENDING 3-31-52

Geologist	1185 ft. @ $0.15 per ft. =	177.75
Assaying	1185 ft. @ $0.01 per ft. =	11.85
Clerical	1185 ft. @ $0.02 per ft. =	23.70
		$213.30

Status of Holes Completed and Drilling.

M-6 was drilled to a depth of 240 feet prior to February 18, 1952. Hole was completed 3-14-52. Total depth 790 feet. Consequently, 550 feet was for the joint account.

M-7. Drilling. Depth 3-31-52 355 ft.

M-8. Drilling. Depth 3-31-52 280 ft.

Remarks:

Copies of Hole No. 6-M are attached to this report. Mineable ore was cut at the Sub-Rosiclare contact. Therefore, the crosscut was continued to the west.

The location of 7-M as well as 8-M is shown on the one hundred foot scale map of the property which is attached. A third drill rig was moved to the property about April 1st. The location of this hole M-9 is also shown on the map.

MONTHLY SUMMARY COST STATEMENT—Continued

Item	Monthly Total	Totals Previously Reported	Totals to Date	For Government Use Only: Approved Monthly Total	Approved Totals Previously Reported	Approved Totals To Date
(d) Fixtures						
4. Labor[3]						
5. Supervision	177.75	0.00	177.75			
6. Supplies						
(a) Timber						
(b) Explosives						
(c) Repair Parts						
(d) Other						
7. Power						
8. Transportation						
9. Insurance						
(a) Fire						
(b) Public Liability						
(c) Workmen's Compensation						
10. Contract Work	2666.25	0.00	2666.25			
11. Other (specify)						
Assaying	11.85	0.00	11.85			
Clerical	23.70	0.00	23.70			
Total	2879.55		2879.55			
Deletions						
Adjusted totals						
Totals previously reported						
Totals to date						

[1] Enter amount paid during month toward total purchase price.
[2] Payments for rental of equipment or prorated depreciation on equipment owned by contractor.
[3] Submit copy of the Social Security form filed under the Old Age Insurance system showing complete wage and salary data or furnish copy of payroll sheet giving same data.

NOTE.—Indicate that portion of supervisory, office, and engineering salaries that is chargeable to this project.

FOR GOVERNMENT USE ONLY

Checked by W. P. Miller
Entered by
Approved by McGregor Mosier
Amount approved for payment ~~$1,333.13~~ 1,439.78
Remarks

10—64068-3

EXPLORATION UNIT COST AND PROGRESS REPORT FOR MONTH OF Feb. 18 - Mar. 31, 1952

(Supply Data Below Applicable Only to Your Operations)

Item	Costs					Progress [4]				
	Wages [1] and salaries	Equipment [2]	Supplies	Other [3]	Total	Unit	Units this month	Units previously reported	Units to date	Units authorized by contract (Exhibit A)
Drifting										
Crosscutting										
Raising										
Shafts										
Winzes										
Drill holes				2666.25	2666.25	*$2.25	1185'	0.0	1185	25,500 ft
Overburden										
Rehabilitation and preparation										
Geology	177.75				177.75					$3825.00
Trenching										
Sampling and assaying	11.85				11.85					$255.00
Roads and trails										
Test pits										
Other (specify) Clerical	23.70				23.70					$510.00
Totals					2879.55		1185	0.0	1185	

[1] Prorate supervisory, engineering, and office salaries in proportion to man-shifts of direct labor.
[2] Prorate charges for equipment that is not exclusively for one type of job (such as compressors) against authorized units of work in each category.
[3] Where entries in the "Other" column (above) are more than 25 percent of the total expenditures, a breakdown of this item should be made.
[4] Specify whether feet, cubic feet, acres, miles, etc.

16—64068-3 U. S. GOVERNMENT PRINTING OFFICE

*As per drilling contract
1185' @ $2.25 $2666.25

FEB 13 1959

[redacted]

Re: [redacted]

Gentlemen:

[redacted]

[redacted]

Sincerely yours,

Acting Director

[redacted]

Copy to: [redacted]

GOVERNMENT COPY

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

140

CERTIFICATION BY THE UNITED STATES OF AMERICA OF A DISCOVERY OR DEVELOPMENT UNDER AN EXPLORATION PROJECT CONTRACT

To: Ozark-Mahoning Company
Rosiclare, Illinois

Pursuant to the provisions of Amended Exploration Project Contract No. Ida-E255, (Docket No. DMEA-2248), dated June 2, 1953, between you and the United States of America, hereinafter called the "Government," to establish and fix the Government's percentage royalty on production and its lien thereon and on the land described in the contract, the Government considers and therefore certifies that discovery or development from which production may be made has resulted from the exploration work.

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

Churn-drilling discovered and partly blocked out two separate fluorite-zinc-lead replacement deposits in limestone of Mississippian age. Sufficient drilling was completed to calculate inferred ore reserves.

THE UNITED STATES OF AMERICA

By O P Mitchell
Administrator, Defense Minerals Exploration Administration

Dated: JUL 7 - 1954

LOHouk:HCRubin:lm - 6-22-54

Copies to:

Irving Gumbel, EPS, GSA
Chas. N. Hill, Elizabethtown, Ill.
Walter Ledford & Blanche H. Ledford
Cave-in-Rock, Ill.
Operating Committee
Mr. Hedges, 4604
Mr. Houk (2)
Mr. Hefflund
Chron.
Field Team, Reg. VIII (2)
Mr. Thayer, 5216 GSA Bldg.
Docket file
Admr. R. File
Finance Office
Mr. Chambers
Mr. Johnson
Mr. Rubin
Pending

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION
WASHINGTON 25, D. C. 600

AUG 9 1954

Mr. Irving Gambel, Acting Director
Materials Division
Emergency Procurement Service
General Services Administration
Washington 25, D. C.

Re: Docket No. DMSA-2248 - Fluorspar
Ozark-Mahoning Company
Hill-Ledford Farm
Hardin County, Illinois
Amended Contract No. Ida-8255

Dear Mr. Gambel:

This letter supplements our letter of May 29, 1953, and sets forth the total liability of the operator for royalty on production from the subject property. The original contract was amended to explore a new target on the land described in the contract after the project was certified as a discovery.

The contract, signed February 18, 1952, was amended and rewritten on the new short form contract (MF-200 A), June 2, 1953, with the Government participating to the extent of 50 percent of $122,715.00 or $61,357.50.

The project work was started February 18, 1952, and terminated by agreement July 7, 1954. In accordance with the report of review, dated June 4, 1954, the accepted cost is $85,482.54.

Under Stage I, 25,500 feet of churn drilling was completed. The amended contract provided for an additional 25,000 feet of churn drilling under Stage II. Eleven holes were drilled totaling 9,678 feet, and the project work under Stage II was suspended by mutual agreement May 24, 1954, as the results indicated that no significant increase to the reserves discovered in Stage I would be found.

The exploration work under Stage II was unsuccessful; however, Stage I was successful and our letter of May 29, 1953, outlines the results achieved.

LGHouk:gad 8/6/54

Sincerely yours,

Administrator

Copy to: Admr. R. File
Operating Committee
Mr. Thayer, 4307 GSA
Mr. Johnson
Mr. Chambers
Docket
Field Team, Region VIII
Mr. Hedges, 4604
Mr. Houk

140

JUL 8 - 1954

Ozark-Mahoning Company

Rosiclare, Illinois

Re: Docket No. DMEA-2248 (Fluorspar)
Hill-Ledford Farm
Hardin County, Illinois
Amended Contract Idm-2255

Gentlemen:

The subject Amended Exploration Contract, dated June 2, 1953, superseded the Prior Contract, dated February 18, 1952, severing the subject project, including the rights and obligations concerning the Government's percentage royalty. Therefore, the Certification of Discovery or Development dated May 29, 1953, and the letter of the same date transmitting it, are superseded by the attached Certificate of Discovery or Development made under the Amended Contract and by this letter, respectively.

By the terms of the Amended Contract and of the Certification, all production from the land described in Article 2 of the Amended Contract from June 2, 1953, is subject to the Government's percentage royalty as set forth in the Amended Contract until the sum of $42,741.29 is paid or until June 2, 1963, whichever occurs first.

Payments should be made to Mr. W. T. Millar, Executive Officer, Defense Minerals Exploration Administration Field Team, Region VIII, Bureau of Mines, Eastern Experiment Station, College Park, Maryland. Checks should be drawn payable to the Treasurer of the United States. The purchaser should be advised to deduct the royalty from the amount due on each shipment and forward a check directly to the Executive Officer.

Royalty payments to the Government should be accompanied by suitable evidence, such as copies of settlement sheets showing quantity and grade of ore sold, the name

of the purchaser, and the price and charges certified to be correct by the purchaser.

You are requested to notify Mr. Millar of any changes in ownership or production rights that may have any effect on the Government's right to its percentage royalty. Also, if production ceases at any time for any extended period, please notify Mr. Millar at six-month intervals that no production has been made.

Also attached are six copies of a Termination Agreement signed by the Administrator in behalf of the Government. If this agreement is satisfactory to your company, please execute and return all copies to us except the one marked "Operator's Copy," which is for your files.

Sincerely yours,

C. O. Mittendorf

Administrator

Enclosures

HCRubin:lm 6-24-54

Copies to: Docket
Admin. Reading File
Operating Committee
Field Team Reg.VIII (2)
Finance Office
Mr. Irving Gumbel, EPS, GSA
Mr. Chas. N. Hill
Elizabethtown, Ill.
Walter Ledford and Blanche
M. Ledford, Cave-In-Rock, Ill.
Mr. Hedges, Rm. 4604
Mr. Thayer, 5216 GSA Bldg.
Mr. Chambers
Mr. Johnson
Mr. Houk (2)
Mr. Hofflund
Mr. Rubin
Chron.
Pending

GOVERNMENT COPY

600

[illegible]

To: [illegible] Mark- [illegible] Company
[illegible]clare, Illinois

Pursuant to the provisions of exploration project contract No. [illegible]-255, dated February 11, 1952, [illegible], hereinafter called the "contract", between you and the United States of America, hereinafter called the "Government", to establish and fix the Government's percentage royalty on production and its lien thereon and on the mineral deposit which is the subject of the exploration project, the Government considers and therefore certifies that a discovery or development has resulted from the work from which commercial production of ore may be made, in or upon that certain property, described as follows:

Leased tract of land known as the Hill-[illegible]ford [illegible] containing 97 acres more or less, as more fully described in Annex [illegible] attached to contract.

The Government's estimate of said discovery or development is particularly described and delineated as follows:

Diamond-drilled holes aggregating 15,500 feet in length discovered and partly blocked out two separate bodies of fluorite-zinc-lead ore occurring as bedded replacement deposits in limestone beds of Mississippian age. Sufficient drilling was done to calculate inferred ore reserves.

[illegible]

By C. Mitteudorf
Administrator, Defense Minerals
Exploration Administration

MAY 29 1953

Dated: _____

JTRobertson/[illegible]Selfridge/eof 5-28-53
Copy to: Mr. Russell Forbes, [illegible]PA
Operating Committee
Admr. R. File
Mr. Hedges, 4604
Mr. Johnson
Field Team, Region VIII
Mr. Thayer, 5216 GSA Bldg.
Mr. Chambers
Docket File
Mr. [illegible]

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

600

MAY 29 1953

Ozark-Mahoning Company

Rosiclare, Illinois

Re: Docket No. DMEA-2248 - Fluorspar
Hill-Ledford Farm
Hardin County, Illinois
Contract No. Idm-1255

Gentlemen:

Transmitted herewith is a Certification of Discovery or Development on Contract No. Idm-1255 on the Hill-Ledford Farm in Hardin County, Illinois.

By the terms of the Exploration Project Contract and of the Certification, all production from the property from the date of the Exploration Project Contract, February 18, 1952, is subject to the Government's percentage royalty as set forth in the contract until the sum of $30,982.50 is paid or until February 18, 1962, whichever occurs first.

Payments should be made to Mr. W. R. Millar, Executive Officer, Defense Minerals Exploration Administration Field Team, Region VIII, Bureau of Mines, Eastern Experiment Station, College Park, Maryland. Checks should be drawn payable to the Treasurer of the United States. The purchaser should be advised to deduct the royalties from the amount due on each shipment and forward check direct to the Executive Officer.

Royalty payments to the Government should be accompanied by suitable evidence, such as copies of settlement sheets showing quality and grade of ore sold, the name of the purchaser, and the price and charges certified to be correct by the purchaser.

You are requested to notify Mr. Millar of any changes in ownership or production rights that might have any effect on the Government's right to its percentage royalty. Also, if production ceases at any time for any extended period, please notify Mr. Millar at six-month intervals that no production has been made.

Sincerely yours,

C. O. Mittendorf

Administrator

Enclosure

JTRobertson:gad 5/26/53

Copy to: Admr. R. File
Mr. Johnson
Mr. Hedges, 4604
Mr. Chambers
Operating Committee
Docket File
Field Team, Region VIII
Mr. Thayer, 5216 GSA Bldg.
Mr. Hook

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION
WASHINGTON 25, D. C. 600

Mr. Russell Forbes,
Acting Administrator, Defense Materials
Procurement Agency
General Services Administration Bldg.
Washington 25, D. C.

MAY 29 1953

Re: Docket No. DMEA-2248 - Fluorspar
Ozark-Mahoning Company
Hill-Ledford Farm
Hardin County, Illinois
Contract No. Idm-E255

Dear Mr. Forbes:

I am enclosing one copy each of a "Certification of Discovery or Development" and a final report by the Field Team, both relating to the subject exploration contract.

The contract was signed February 18, 1952, with the Government participating to the extent of 50% of $61,965.00 or $30,982.50.

The project work was started March 1, 1952, and completed January 15, 1953. In accordance with audit review, the accepted cost is $61,965.00.

The exploration contract provided for a maximum of 25,500 feet of churn-drilling. Thirty-three holes averaging 772 feet in depth were spaced over an area 3,000 feet long and 400 feet wide. The results obtained from the drilling were very satisfactory - two areas, "A" and "B", of commercial fluorite ore with associated zinc and lead minerals were discovered and partly outlined.

Block "A" is 1,500 feet long, 200 feet wide, and averages 13.4 feet thick. It contains 339,466 tons, assaying 37% CaF_2, 3.46% Zn and 0.20% Pb. Block "B" is 800 feet long, 100 feet wide, and averages 41.8 feet thick. It contains 278,666 tons, assaying 33.4% CaF_2, 1.58% Zn, and .00 Pb.

The operator, after allowing for approximately 25% pillars and lean zones, estimated the total minable reserves at 463,600 tons. A separate estimate of inferred ore reserves made by the

Field Team, including low-grade ore, totaled 1,212,000 short tons averaging 27.2% fluorite, 2.22% zinc and 0.09% lead.

Sincerely yours,

C. O. Mittendorf

Administrator

Enclosures 2

JTRobertson/GCSelfridge/esf 5/28/53

Copy to: Admr. R. File
Operating Committee
Mr. Hedges, 4604
Mr. Thayer, 5216 GSA Bldg.
Field Team, Region VIII
Mr. Chambers
Mr. Johnson
Docket File
Mr. Houk

Government copy

TERMINATION AGREEMENT

It is agreed this 7th day of July, 1954, between the United States of America, acting through the Department of the Interior, Defense Minerals Exploration Administration, hereinafter called the "Government," and Ozark-Mahoning Company, hereinafter called the "Operator," parties to that certain Amended Exploration Project Contract Idm-E255 (Docket No. DMEA-2248), dated June 2, 1953, as amended, hereinafter called the "Amended Contract," that:

1. All work and operations provided for in the Amended Contract shall be terminated as of May 24, 1954.

2. The Operator shall promptly render to the Government a full and final report and final accounting of the units of work performed under the Amended Contract up to and including May 24, 1954. Any units of work performed after May 24, 1954, shall be for the sole account of the Operator without contribution by the Government.

3. The Operator hereby releases and agrees to save the Government harmless from all claims or demands under or arising out of the Amended Contract, except as herein otherwise provided.

4. All rights of the Government with respect to Certification of Discovery or Development, percentage royalty, and lien for payment, as provided in the Amended Contract, are preserved.

IN WITNESS WHEREOF, these parties have executed this agreement as of the day and year first above written.

THE UNITED STATES OF AMERICA

By O P Mittendorf
Administrator, Defense Minerals Exploration Administration

OZARK-MAHONING COMPANY

By: J. G. Irwin
Vice President

GOVERNMENT COPY

FEB 23 1954

AMENDMENT NO. II TO ANNEX II OF
AMENDED CONTRACT NO. Idm-E255
OZARK-MAHONING COMPANY
DOCKET NO. DMEA - 2248

Contract Idm-E255 was amended, effective June 2, 1953, authorizing 25,000 feet of additional exploratory drilling as specified in Exhibit "A" Amended.

Due to unavoidable delay in starting the explorations under the Amended Contract and the advisability of reducing the operation from three drilling units to one drilling unit in order to take advantage of information obtained on the geologic structure in locating subsequent drill sites, progress was not maintained at the same rate as the previous exploratory work. As of February 1, 1954 there remains 16,500 feet of drilling to be completed and the expiration date of the Amended Contract is February 18, 1954.

It is considered to the advantage of the Government as well as the Operator to extend the expiration date of Contract Idm-E255 to permit completion of the exploratory drilling as specified in Annex II of the Amended Contract.

This amendment hereby extends the termination date of Contract Idm-E255 from February 18, 1954 to June 30, 1954.

This amendment shall not be construed as authorizing any change in allowable maximum costs or changes other than those specified, nor shall this amendment be construed as authorizing any increase in the total estimated allowable maximum cost of the project or the amount of the Government's participation.

OZARK-MAHONING COMPANY

BY J. G. Trewartha
Vice Pres.

THE UNITED STATES OF AMERICA

BY W. T. Millar
W. T. Millar, Executive Officer
Bureau-Survey Field Team
Defense Minerals Exploration
Administration, Region VIII

Date: February 2, 1954

Government's Copy

Defense Minerals Administration
RECEIVED
NOV 19 1953

AMENDED EXPLORATION PROJECT CONTRACT
OZARK-MAHONING COMPANY
DOCKET NO. DMEA-2248

AMENDMENT NO. 1

It is agreed this 6th day of November, 1953, between the United States of America, acting through the Department of the Interior, Defense Minerals Exploration Administration, and Ozark-Mahoning Company, each acting in consideration of the agreement of the other to the terms hereinafter set forth, that Amended Exploration Project Contract Idm-E255, Docket No. DMEA-2248, dated June 2, 1953, between the parties hereto, be modified and amended as of said date, as follows:

1. In "Exhibit 'A' Amended," Stage II is amended to read as follows:

(a) In the first paragraph, the word "partly" is inserted on the first line before the word "indicated."

(b) The second paragraph is changed to read as follows:

"Three strips of land of a uniform width of 500 feet, located in the NW¼ of Sec. 24, T. 11 S., R. 9 E., are to be tested by a series of churn-drill holes not in excess of 25,000 feet, drilled to depths not in excess of 950 feet in the first and second strips and not in excess of 1100 feet in the third strip."

(c) To the third paragraph, the following is added:

"The third strip is parallel to the southeastern sideline of the first strip and extends from the highway, Illinois Route No. 1, to the east side line of the quarter section."

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

Executed in sextuplicate the day and year first above written.

OZARK-MAHONING COMPANY

By G. Trevor Pres. Vice Pres.

THE UNITED STATES OF AMERICA

By C. O. Mitchendorf
Administrator, Defense Minerals Exploration Administration

Docket No. 2248

Commodity Fluorspar

DEPARTMENT OF THE INTERIOR

DEFENSE MINERALS EXPLORATION ADMINISTRATION

STRATEGIC AND CRITICAL MINERALS EXPLORATION PROGRAM

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

Please enter on the records of the Defense Minerals Exploration Administration under the Strategic and Critical Minerals Exploration Program, the following contract, or amendment to contract.

Contract No. Idm-E 255

Date of Contract or ~~Amendment~~: June 2, 1953

Name and Address of Operator:

Ozark - Mahoning Co.
Rosiclare, Illinois

Amount of Government participation $61,357.50

Percent of Government participation 50 %

Region: V State: Illinois

Note: Please reobligate $ .02. Contract previously terminated.

E. H. Tallant
(Name)

for J. L. Chambers, Chief
Contract Administration and
Audit Division
(Title)

Date Delivered to Bureau of Mines, Washington. 1/13/56

54458

Docket No. DMEA - 2248

Commodity Fluorspar

DEPARTMENT OF THE INTERIOR

DEFENSE MINERALS EXPLORATION ADMINISTRATION

STRATEGIC AND CRITICAL MINERALS EXPLORATION PROGRAM

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

Please enter on the records of the Defense Minerals Exploration Administration under the Strategic and Critical Minerals Exploration Program, the following contract, or amendment to contract.

Contract No. Idm-E 255

Date of Contract ~~or Amendment~~: June 2, 1953

Name and Address of Operator:
Ozark - Mahoning Co.
Rosiclare, Illinois

Amount of Government participation $61,357.50

Percent of Government participation 50 %

Region: VIII State: Illinois

Note: Please release $ 18,616.21; Advice Contract Administration and Audit Division

E. D. Talbert (Name)
E. D. Talbert
Acting Chief, Contract Administration and Audit Div.

(Title)

Date Delivered to Bureau of Mines, Washington. 6/17/54

54458

MF-200 (A)
(February 1952)

DOCKET NO. DMEA 2248

COMMODITY fluorspar

Government's Copy
IDM-E 255

UNITED STATES OF AMERICA
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION
AMENDED
EXPLORATION PROJECT CONTRACT[1]
(Short Form)

IT IS AGREED this 2nd day of June, 1953, between the United States of America, acting through the Department of the Interior, Defense Minerals Exploration Administration, hereinafter called the "Government," and[2] Ozark-Mahoning Company, a corporation duly organized and existing under and by virtue of the laws of the State of Delaware, Rosiclare, Illinois

hereinafter called the "Operator," as follows: and as set forth in Annex II attached hereto

ARTICLE 1. *Authority for contract.*—This agreement is entered into under the authority of the Defense Production Act of 1950, as amended, pursuant to DMEA Order 1 entitled "Government Aid in Defense Exploration Projects."

ARTICLE 2. *Operator's property rights.*—With respect to that certain land situated in the State of Illinois, County of Hardin, described as follows:[3] A leased tract of land known as the Hill-Ledford Farm containing 597 acres more or less, as more fully described in Annex I attached to Prior Contract, and made a part hereof

the Operator represents and undertakes:[4]

(*a*) ~~That the Operator is the owner in possession and entitled to possession and that the property is subject only to the following liens, encumbrances or easements, each of which the subordination agreement of the holder is attached:~~

(*b*) That the Operator is a lessee, in possession and entitled to possession, and the Owner's Consent to Lien is attached.

The Operator shall devote the land and all existing improvements, facilities, buildings, installations, and appurtenances to the purposes of the exploration project without any allowance for the use, rental value, depreciation, depletion, or other cost of acquiring, owning, or holding possession thereof.

ARTICLE 3. *Exploration project.*—The Operator, ~~who~~ shall continue ~~days of work on a project of exploration for~~[5] fluorspar

in or upon the described land; and shall bring the project to completion ~~within the time fixed~~ prior to Feb. 18, 1954. The work to be performed is more fully described in Exhibit "A" attached hereto, which, with any maps or drawings thereto attached, are made a part of this contract. The Government will contribute to the cost of this work as hereafter provided. The work shall be performed by the Operator or by independent contractor or contractors efficiently, expertly, in a workmanlike manner, in accordance with good mining standards and State regulations for health and safety and for workmen's compensation and employers' liability insurance, with suitable and adequate equipment, materials, and labor, to bring the project to completion within the time fixed. The Government shall have the right to enter and observe and inspect the work at all reasonable times, and the Operator shall provide the Government with all available means for doing so. The Government may consult with and advise the Operator on all phases of the work.

ARTICLE 4. *Costs of the project.*—The agreed, estimated costs of performing the work, expressed in terms of units of work to be performed (per foot of drifting, per foot of drilling, per cubic yard of material to be moved, etc.) are set forth in Exhibit "A," attached hereto. The Government will pay 50 percent of these agreed, estimated costs, as they accrue, for units of work actually performed that conform with the description or specifications for the work set forth in this contract, in an aggregate total amount not in excess of $61,357.50 which is 50 percent of $122,715.00 the agreed, estimated total cost of the project in which the Government will participate: *Provided,* That until the Operator's final report and final accounting have been rendered to the Government and any final check or auditing required by the Government has been made, and a final settlement of the contract has been made, the Government may withhold from the last voucher or vouchers such sums as it sees fit not in excess of ten (10) percent of the maximum total which the Government might have been called upon to pay under the terms of the contract. The Government may, as it sees fit, make payments direct to the Operator's independent contractors, if any, for the account of the Operator, rather than to the Operator.

ARTICLE 5. *Reports, accounts, audits.*—(*a*) *Progress reports.* The Operator shall provide the Government with monthly reports of units of work performed under the contract, in quintuplicate (five copies), upon forms provided by the Government. These progress reports shall be certified by the Operator, and shall constitute both the Operator's invoice of units of work performed on the project during the period covered by the report and his voucher for repayment by the Government, unless the Government requires the use of a standard voucher form with invoice attached. Progress reports shall include surface and/or underground engineering-geological maps or sketches showing the progress of the exploration, with assay-reports on samples taken concurrently with the advance in mineralized ground.

[1] If sufficient space is not provided in any blank, use an extra sheet of paper and refer to it in the blank.
[2] State name, address, and nature of organization if any.
[3] Give legal description or enough to identify the property, particularly excluding any land or interest therein to which the Government's lien is not to attach or the production from which is not to be subject to the Government's percentage royalty.
[4] Strike out the provision not applicable.
[5] Name of mineral or minerals.

(*b*) *Final report.*—Upon completion of the exploration work or termination of the contract the Operator shall provide the Government with an adequate geological and engineering report, in quintuplicate (five copies), including an estimate of ore reserves resulting from the exploration work.

(*c*) *Compliance with requirements.*—If, in the opinion of the Government, any of the Operator's reports are insufficient or incomplete, the Government may procure the making or completion of such reports and attachments as an expense of the exploration work; and the Government may withhold approval and payment of any vouchers depending upon insufficient or incomplete reports.

(*d*) *Accounts and audits.*—The Operator shall keep suitable records and accounts of the units of work performed, which the Government may inspect and audit at any time. The Government may at any time require a check of the work performed and an audit of the Operator's records and accounts, by a certified public accountant or otherwise, the cost thereof to be treated as a cost of the project. The Operator shall keep and preserve said records and accounts for at least 3 years after the completion of the project or the termination of this contract. Upon the completion of the project or termination of the contract the Operator shall render a final account and statement of work performed to accompany his final report.

ARTICLE 6. *Repayment by Operator.*—(*a*) If, at any time, the Government considers that a discovery or a development from which production may be made has resulted from the exploration work, the Government, at any time not later than 6 months after the Operator has rendered the required final report and final account, may so certify in writing to the Operator. The certification shall describe broadly or indicate the nature of the discovery or development. In the event of such certification, any minerals mined or produced from the land described in Article 2 within 10 years from the date of this contract, including any mined or produced before the certification, shall be subject to a percentage royalty which the Operator or his successor in interest shall pay to the Government, upon the net smelter returns, the net concentrator returns, or other net amounts realized from the sale or other disposition of any such production, in whatever form disposed of, including ore, concentrates, or metal, until the total amount contributed by the Government, without interest, is fully repaid, or said 10 years have elapsed, whichever occurs first, as follows:

(1) One and one-half (1½) percent of any such net amounts not in excess of eight dollars ($8.00) per ton.

(2) One and one-half (1½) percent of any such net amounts, plus one-half (½) percent of such net amounts for each additional full fifty cents ($0.50) by which such net amounts exceed eight dollars ($8.00) per ton, but not in excess of five (5) percent of such net amounts.

(For instance: The percentage royalty on a net amount of five dollars ($5.00) per ton, would be one and one-half (1½) percent; on a net amount of ten dollars ($10.00) per ton, three and one-half (3½) percent.)

(*b*) As here used, "net smelter returns," "net concentrator returns," and "other net amounts realized from the sale or other disposition," mean gross revenue from sales, or if not sold, the market value of the material after it is mined in the form in which and the place where it is held. In the case of integrated operations in which the material is not disposed of as such, these terms mean what is or would be the gross income from mining operations for percentage depletion purposes in income-tax determination.

(*c*) To secure the payment of its percentage royalty, the Government shall have and is hereby granted a lien upon the land described in Article 2 and upon any production of minerals therefrom, until the royalty claim is extinguished by lapse of time or is fully paid.

(*d*) This article is not to be construed as imposing any obligation on the Operator or the Operator's successor in interest to engage in any mining or production operations.

ARTICLE 7. *Assignment, transfer, or loss of Operator's interest.*—Without the written consent of the Government, the Operator shall not assign or otherwise transfer or hypothecate this contract or any rights thereunder. The Operator shall not make any voluntary nor permit any involuntary transfer or conveyance of the Operator's rights in the land described in Article 2, without making suitable provision for the preservation of the Government's right to a percentage royalty on production and lien for the payment thereof; *Provided*, that mere failure by the Operator to maintain the Operator's rights in the land, without any consideration running to the Operator other than relief from the cost of maintaining such rights (as by surrender of a leasehold, failure to perform assessment work, or failure to exercise an option), coupled with complete abandonment by the Operator of all interest in or operations on the land for a period of 10 years from the date of this contract, shall not constitute such a transfer or conveyance. Should the Operator make or permit any transfer or conveyance in violation of this provision, the Operator shall be and remain liable for payment to the Government of the same amounts, at the same times, as would have been paid under the terms of the percentage royalty on production. If for any reason the net smelter returns, net concentrator returns, or other net amounts realized from the sale or other disposition of such production are not available as a means of measuring the amount of the Operator's liability, the amount thereof shall be estimated as well as may be, and in the event of dispute as to such estimates, the determination thereof by the Administrator of Defense Minerals Exploration Administration or by his successor shall be final and binding upon the Operator.

ARTICLE 8. *Termination and completion.*—The Government may, at any time, by written notice to the Operator, terminate this contract: (*a*) If the Operator fails to provide his share of the money necessary to prosecute operations pursuant to the terms of the contract; (*b*) if the Operator, in the opinion of the Government, fails to prosecute operations pursuant to the terms of the contract; or (*c*) if, in the opinion of the Government, operations up to the time of the notice have not indicated the probability of making any worth while discovery and in the opinion of the Government further operations are not justified.

ARTICLE 9. *Changes and added provisions* _____

Executed in sextuplicate the day and year first above written.

Ozark-Mahoning Company
(Operator)

By J. G. Trewartha

THE UNITED STATES OF AMERICA

By O. Mitchell Dow
Administrator, Defense Minerals Exploration Administration

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

J. L. Cadden [CORPORATE SEAL]

U. S. GOVERNMENT PRINTING OFFICE 16—66329-1

EXPLORATION PROJECT CONTRACT
OZARK-MAHONING COMPANY
DOCKET NO. DMEA - 2248

ANNEX II

WHEREAS, the parties to this amended agreement are also parties to Contract Idm-E255, dated February 18, 1952, as amended, executed on Form MF-200 (June 1951), hereinafter called the "Prior Contract;" and

WHEREAS, all the exploration work provided for thereunder has been completed but because of the favorable results there indicated, it is desired to explore further the northeasterly extension of the mineralized belt; and

WHEREAS, the parties desire to restate their agreement on the new contract form MF-200A(February 1952);

NOW THEREFORE, it is mutually agreed that:

(1) The Prior Contract is amended and superseded by this amended contract which shall control the Government's claim and lien for percentage royalty and in which all the rights and obligations of both parties are fully merged.

(2) The operator hereby releases and agrees to save harmless the Government from all claims and demands arising out of the Prior Contract.

EXPLORATION PROJECT CONTRACT
OZARK-MAHONING COMPANY
DOCKET NO. DMEA-2248

EXHIBIT "A" AMENDED

Description of the Work

The work shall be conducted in two stages.

Stage I

Stage I consists of the work already performed under the Prior Contract which is set forth in Exhibit "A" thereof and is incorporated herein by reference.

Stage II

The work in Stage II, indicated on the map attached hereto and made a part hereof, and entitled "Plat of NW¼ Sec. 24, T11S., R9E part of Ozark-Mahoning Company Lease of Hill-Ledford Tract," shall be as follows:

Two strips of land of a uniform width of 500 feet, both located in the NW¼ of Sec. 24, T.11S, R9E, are to be tested by series of churn-drill holes, not in excess of 25,000 feet, drilled to depths not in excess of 950 feet.

The first strip bears N.50° E and extends from Hole No. 32 M, to the east sideline of the quarter section. The second strip bears N 65° W and extends from the center of the centerline of the first strip to the west boundary of the quarter section.

Subject to the limitations set forth in items 3, 4, 5, and 6 on page 1 of Exhibit "A" of the Prior Contract, the spotting and spacing of the holes shall be determined by the operator.

Agreed Unit Costs

Stage I

25,500 feet of churn drilling at costs indicated in Amendment No. 1 of the Prior Contract	$61,965.00

Stage II

25,000 feet of churn drilling @ $2.43 per foot	$ 60,750.00	

S U M M A R Y

Cost of Stage I	$ 61,965.00	
Cost of Stage II	60,750.00	
Total Agreed Unit Cost		$122,715.00
Government Participation @ 50%		$ 61,357.50

DMEA-2248
DMEA-2935 - Idm-E255

MF-203

OWNER'S CONSENT TO LIEN

WHEREAS, the undersigned, as owner, co-owner, lessor, or seller has an interest in certain property in the State of Illinois, County of Hardin, described as follows:1/

A leased tract of land known as the Hill-Ledford Farm containing 597 acres more or less, as more fully described in Annex I attached to prior Contract.

which is the subject of a proposed exploration project contract, hereinafter called the "contract", between the United States of America, hereinafter called the "Government", and

2/ Ozark-Mahoning Company, Rosiclare, Illinois, a corporation duly organized and existing under and by virtue of the laws of the State of Delaware.

hereinafter called the "Operator"; and

WHEREAS, under certain provisions of said contract which are set forth on the reverse side hereof, the Government is entitled to a percentage royalty on production and to certain other rights and equities which do or may conflict with or be adverse to the interest of the undersigned in said property;

NOW THEREFORE, the undersigned, in consideration of said contract and as an inducement to the Government to enter into same, undertakes and agrees as follows:

1. The Government's equity in and right to dismantle, sever, take possession of, and remove and dispose of facilities, buildings, fixtures, equipment, or other items as provided in the contract, or any amendment thereof, shall prevail over and be prior and superior to any conflicting or adverse rights of the undersigned, and the Government is authorized to enter upon the land for such purposes.

2. To secure the payment to the Government of the percentage royalty on production3/ provided for under the terms of said exploration project contract, or any amendment thereof which does not increase the maximum amount of the Government's claim here stated or alter the provisions for repayment, there is hereby granted to the Government a lien upon the land herein described and upon any production of minerals therefrom, until the royalty claim is fully paid in the amount of the Government's contribution, not in excess of 4/$ 61,357.50, or ten years have elapsed from the date of the contract.

3. The undersigned shall commit no act nor assert any claim that may contravene or conflict with the lien, claim, or rights of the Government under the provisions of said contract. This agreement shall be binding upon the heirs, executors, administrators, successors, and assigns of the undersigned.

Dated this 9th day of May, 195 3.

Paul H. Ledford [Seal]
Blanche H. Ledford [Seal]
Katherine R. Ledford [Seal]
Walter Ledford [Seal]
Frances P. Wiley [Seal]
Charles N. Hill [Seal]
Victor L. Wiley [Seal]

1/ Either (a) insert the legal description of the land, or (b) strike out the words "as follows" and insert "in a lease [or contract, deed, or other document] dated _____, and recorded in book _____ page _____ official records of said county." If (b) is used, the book and page of recordation cannot be dispensed with. If the space provided is insufficient, use an Annex, and refer to the Annex in the space.

2/ Insert the name of the Operator as it will appear in the exploration project contract.

3/ Mining or production from the land is not required, and in the absence of production there is no obligation to repay the Government.

4/ Insert the maximum amount of the Government's contribution.

RELEVANT CONTRACT PROVISIONS

Repayment by Operator. (a) If, at any time, the Government considers that a discovery or a development from which production may be made has resulted from the exploration work, the Government, at any time not later than six months after the Operator has rendered the required final report and final account, may so certify in writing to the Operator. The certification shall describe broadly or indicate the nature of the discovery or development. In the event of such certification, any minerals mined or produced from the land described in Article 2 within 10 years from the date of this contract, including any mined or produced before the certification, shall be subject to a percentage royalty which the Operator or his successor in interest shall pay to the Government, upon the net smelter returns, the net concentrator returns, or other net amounts realized from the sale or other disposition of any such production, in whatever form disposed of, including ore, concentrates, or metal, until the total amount contributed by the Government, without interest, is fully repaid, or said 10 years have elapsed, whichever occurs first, as follows:

(1) One and one-half (1½) per cent of any such net amounts not in excess of eight dollars ($8.00) per ton.

(2) One and one-half (1½) per cent of any such net amounts, plus one-half (½) per cent such net amounts for each additional full fifty cents ($0.50) by which such net amounts exceed eight dollars ($8.00) per ton, but not in excess of five (5) per cent of such net amounts.

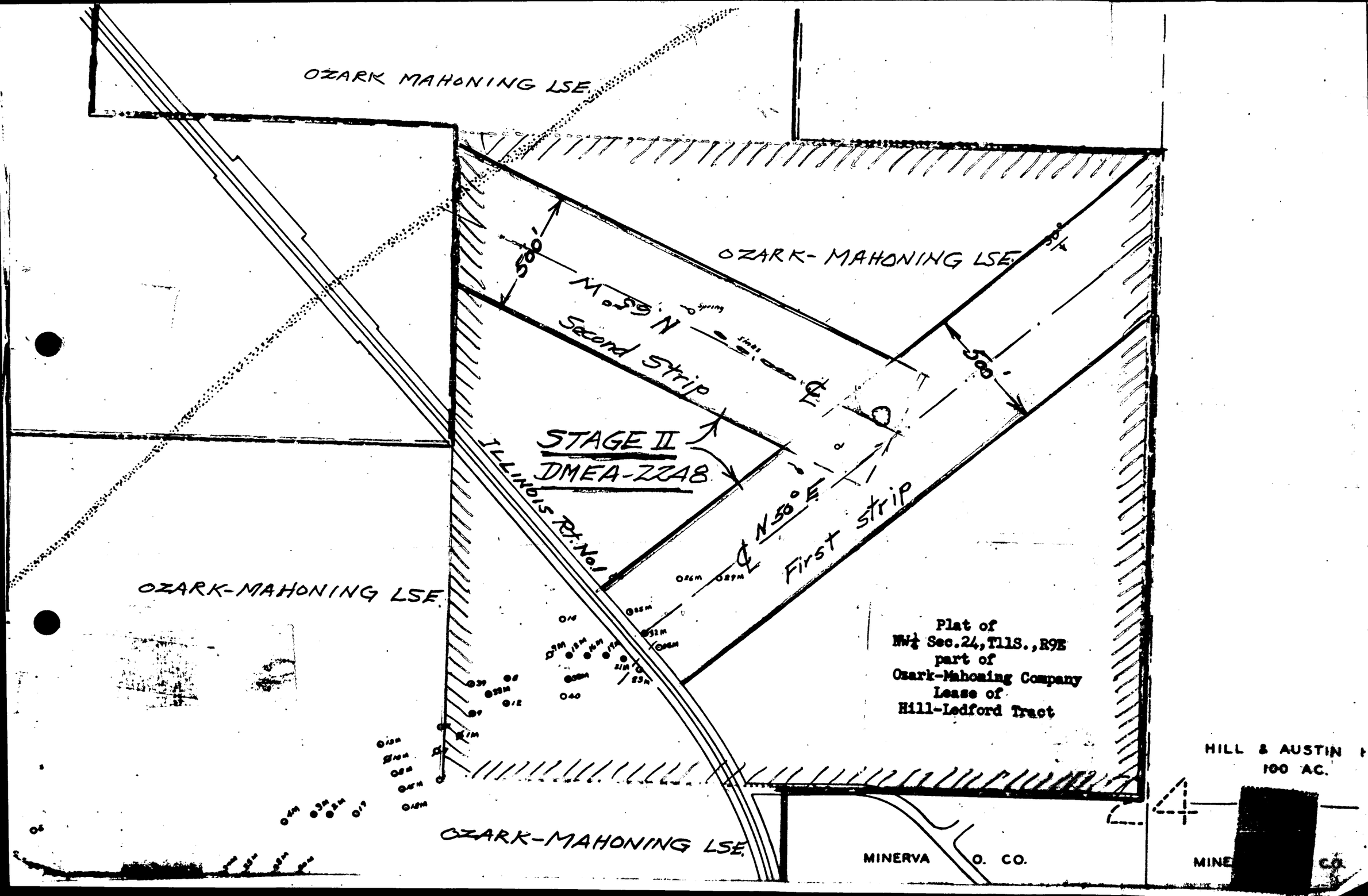
(For instance: the percentage royalty on a net amount of five dollars ($5.00) per ton, would be one and one-half (1½) per cent; on a net amount of ten dollars ($10.00) per ton, three and one-half (3½) per cent.)

(b) As here used, "net smelter returns", "net concentrator returns", and "other net amounts realized from the sale or other disposition", mean gross revenue from sales; or if not sold, the market value, the market value of the material after it is mined in the form in which and the place where it is held. In the case of integrated operations in which the material is not disposed of as such; these terms mean what is or would be gross income from mining operations for percentage depletion purposes in income tax determination.

(c) To secure the payment of its percentage royalty, the Government shall have and is hereby granted a lien upon the land described in Article 2 and upon any production of minerals therefrom, until the royalty claim is extinguished by lapse of time or is fully paid.

(d) This article is not to be construed as imposing any obligation on the Operator or the Operator's successor in interest to engage in any mining or production operations.

Title to and disposition of property. All facilities, buildings, fixtures, equipment, or other items costing more than $50.00 each, paid for or purchased with funds contributed jointly by the Operator and the Government, although title may be taken in the name of the Operator, shall belong to the Operator and the Government jointly, in proportion to their respective contributions, and upon the completion of the work or the termination of the contract shall be disposed of promptly by the Operator for the joint account of the Government and the Operator, either by return to the vendor, by sale to others, or purchase by the Operator at a price at least as high as could otherwise be obtained, as may appear to be for the best interest of the Government, unless the Government, in writing, waives its interest in any such item. If necessary to accomplish such disposition, the Operator shall dismantle, sever from the land, and remove any such item, the cost thereof to be for the joint account of the parties in proportion to their respective interests. If the Operator, within 90 days after the receipt of written notice from the Government, fails, neglects, or refuses to dispose of such property, the Government may itself enter upon the land, take possession of, and remove and dispose of any such property as above provided.


OZARK MAHONING LSE.
OZARK-MAHONING LSE.
500'
N 55° E
Second Strip
STAGE II
DMEA-2248
ILLINOIS Rt. No. 1
N 50° E
First strip
500'
OZARK-MAHONING LSE.
OZARK-MAHONING LSE.
Plat of
NW¼ Sec. 24, T11S., R9E
part of
Ozark-Mahoning Company
Lease of
Hill-Ledford Tract
HILL & AUSTIN
100 AC.
MINERVA
O. CO.
MINE
CO.

GOVERNMENT COPY

Zmi. Fehrenbacher

CONTRACT AMENDMENT
NO. I

DMEA-2248, Idm-E255, Ozark-Mahoning Company

Hill-Ledford Tract

Hardin County, Illinois

Contract Docket No. DMEA-2248, Idm-E255, dated February 18, 1952, between THE UNITED STATES OF AMERICA and OZARK-MAHONING COMPANY, is amended as follows, effective February 18, 1952:

1. Articles 5, 6, 8 and 9 of the contract form are deleted.

2. Article 10 of the contract form is deleted and a new Article 10 is substituted therefore, reading as follows:

"Allowable costs of the project. The costs of the project in which the Government will participate are limited to the agreed, estimated unit costs, including independent contract costs scheduled in Exhibit "A", as amended herein, in lieu of actual costs. No work performed or costs incurred before the date of this contract shall be allowed as costs of the project in which the Government will participate."

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

Independent Contract		
Churn-drilling, 25,500 ft. @ $2.25/ft.	$57,375.00	
Labor and supervision		
Supervision, 25,500 ft. @ $0.15/ft.	3,825.00	
Assaying and laboratory, 25,500 ft. @ $0.01/ft.	255.00	
Clerical, 25,500 ft. @ $0.02/ft.	510.00	
Total estimated cost of project	$61,965.00	$61,965.00
Government participation @ 50%		$30,982.50

The Government shall not be nor be considered to be a party to any independent contract entered into by the operator, and the Government's right to terminate the exploration project contract under any of its provisions shall not in any manner be affected by reason of any such independent contract. Regardless of the provisions of any such independent contract, the Government will participate in the payments to the independent contractor only on account of work actually performed and that conforms with the provisions of the exploration project contract, and only to the extent that the Government deems the cost of the work under the independent contract to be reasonable and necessary. No such independent contract shall have the effect of increasing the estimated total cost of the exploration project contract nor the maximum amount which the Government will pay as provided in the exploration project contract.

This amendment shall not be construed to increase the estimated total cost of the project, the aggregate total amount which the Government may be obligated to pay, or the percentage of the costs which the Government may be obligated to pay, under the provisions of the contract.

Dated: Aug. 11, 1952

THE UNITED STATES OF AMERICA

By McHenry Mosier

McHenry Mosier, Executive Officer
Bureau-Survey Field Team
Defense Minerals Exploration
Administration, Region VIII

OZARK-MAHONING COMPANY

By J. G. Trewartha Vice Pres.

Docket No. DMA 2243

Commodity Fluorspar

DEPARTMENT OF THE INTERIOR

DEFENSE MINERALS EXPLORATION ADMINISTRATION

STRATEGIC AND CRITICAL MINERALS EXPLORATION PROGRAM

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

Please enter on the records of the Defense Minerals Exploration Administration, under the Strategic and Critical Minerals Exploration Program, the following contract, or amendment to contract.

Contract No. Idm-E 255

Date of ~~Contract or~~ Amendment: June 2, 1953

Name and Address of Operator:
Clark Mining Company
Rosiclare, Illinois

Amount of Government participation $61,357.50

Percent of Government participation 50 %

Region: VIII State: Illinois

Note: This document cancels the previous obligation of $30,982.50 and establishes the amount shown above.

J. E. Chambers
(Name)
Chief, Contract Administration and Audit Division
(Title)

June 2, 1953

Date Delivered to Bureau of Mines, Washington.

13908

Docket No. 2218

Commodity Fluorspar

DEPARTMENT OF THE INTERIOR

DEFENSE MINERALS EXPLORATION ADMINISTRATION

STRATEGIC AND CRITICAL MINERALS EXPLORATION PROGRAM

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

Please enter on the records of the Defense Minerals Exploration Administration, under the Strategic and Critical Minerals Exploration Program, the following contract, ~~xxxxxxxxxxxxxxxxxxxxxx~~

Contract No. Idm-E 255

Date of Contract ~~xxxxxxxxxxxx~~: February 18, 1952

Name and Address of Operator:

Ozark-Mahoning Company
Rosiclare, Illinois

Amount of Government participation ____ $ 30,982.50

Percent of Government participation 50 %

Region: VIII State: Illinois

J. L. (Name) Chambers
Chief, Contract, Audit and Administration Division

(Title)

Date Delivered to Bureau of Mines, Washington. February 18, 1952

13908

MF-200
(June 1951)

Docket No. DMA 2248
Commodity Fluorspar
IdmE-255

UNITED STATES OF AMERICA
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS ADMINISTRATION

GOVERNMENT'S COPY

EXPLORATION PROJECT CONTRACT [1]

It is agreed this 18th day of February, 1952, between the United States of America, acting through the Department of the Interior, Defense Minerals Administration, hereinafter called the "Government," and [2] Ozark-Mahoning Company, a corporation organized and existing under the laws of the State of Delaware, Rosiclare, Illinois,

hereinafter called the "Operator," as follows:

1. *Authority for contract.* This agreement is entered into under the authority of the Defense Production Act of 1950, pursuant to Mineral Order 5, entitled "Regulations Governing Government Aid in Defense Exploration Projects."

2. *Operator's property rights.* The exploration project shall be conducted on that certain property situated in the State of Illinois, County of Hardin described as follows: [3] a leased tract of land known as the Hill-Ledford Farm containing 597 acres, more or less; legal description is more fully described in Annex I, attached hereto.

with respect to which the Operator represents and undertakes: [4]

(*a*) ~~That he is the sole owner, in possession and entitled to possession, and that the property is subject only to the following claims, liens, or encumbrances as to each of which the subordination agreement of the holder is attached:~~

(*b*) That he is a lessee, in possession and entitled to possession, and the subordination agreement of the lessor is attached.

3. *Exploration project.* The Operator, within thirty (30) days from the date of this contract shall commence work on a project of exploration for [5] fluorspar; shall prosecute the work efficiently, expertly, in a workmanlike manner, in accordance with good mining standards, with suitable and adequate equipment, materials, and labor, all properly designed to bring the project to completion within a period of [6] one (1) year from the date of this contract. The exploration project and the work to be performed are more fully described on Exhibit "A" attached hereto, which, with any maps or drawings thereto attached, is made a part of this contract.

4. *Performance of the work.* The work shall be performed by the Operator, under his sole direction and control: *Provided,* That with the consent of the Government and its written approval of the contract or contracts, all or any part of the work may be performed by the Operator through contract or contracts with independent contractors. The Government shall have the right to enter and observe and inspect the work at all reasonable times, and the Operator shall provide the Government with all available means for doing so. The Government may consult with and advise the Operator on all phases of the work.

5. *Fixtures and improvements.* The Operator shall devote the land and all existing improvements, facilities, buildings, installations, and appurtenances to the purposes of the exploration project without any allowance for the use, rental value, depreciation, depletion, or other cost of acquiring, owning, or holding possession thereof. Any additional facilities, buildings, and fixtures, to be purchased, installed, or erected by the Operator, with the estimated cost of each, to which the Government will contribute currently its agreed pro rata share, are listed in Exhibit "A" attached hereto. The difference between the cost of such additional facilities, buildings, or fixtures, and the salvage value thereof at the conclusion of the work, shall be charged as a cost of the project to which the Government has contributed its pro rata share.

6. *Operating equipment.* Any operating equipment to be rented, purchased, or furnished by the Operator, with the allowable rental, purchase price, or depreciation, as the case may be, is listed under appropriate headings in Exhibit "A" attached hereto. As to equipment purchased for the project, the Government will contribute its agreed pro rata share of the cost thereof, and the difference between the cost and the salvage value at the conclusion of the work shall be charged as a cost of the project to which the Government has contributed its pro rata share.

[1] If sufficient space is not provided in any blank, use an extra sheet of paper and refer to it in the blank.
[2] State name, address, and nature of organization if any.
[3] Give legal description or enough to identify the property.
[4] Strike out the provision not applicable.
[5] Name of mineral.
[6] Not in excess of 2 years.

7. *Title to and disposition of property.* All facilities, buildings, fixtures, equipment, or other items costing more than $50 each, paid for or purchased with funds contributed jointly by the Operator and the Government, shall belong to the Operator and the Government jointly, in proportion to their respective contributions, and upon the termination of the contract, if they have any salvage value, shall be disposed of for their joint account unless the Government, in writing, waives its interest in any such items. The Government may require the dismantling, severance from land, and removal of any such items in order to realize its interest in the salvage value thereof, and the cost of any such removal and of the disposal of the items shall be for the joint account of the parties in proportion to their respective interests.

8. *Labor and supervision.* An itemized schedule of labor, by numbers and classes (miners, muckers, millmen, etc.), and of supervisors, by numbers and positions, with the maximum wages or salaries that may be paid to each as an allowable cost of the project is set forth in Exhibit "A" attached hereto.

9. *Rehabilitation and repairs.* A statement of the cost of any necessary rehabilitation or repairs to put existing facilities, buildings, installations, and fixtures into useful and operable condition and which are to be allowed as costs of the project is included in Exhibit "A."

10. *Allowable costs of the project.* The costs of the project in which the Government will participate are limited to the necessary, reasonable, direct costs of performing the exploration work, including the costs of materials, supplies, engineering, power, water, analytical work, accounting, and utilities, including items of equipment costing less than $50 each; and the costs referred to in Articles 5, 6, 8, and 9, and the exhibits annexed to and referred to in this contract. Although the Government may pay part of the cost of new or additional facilities, structures, buildings, and equipment, only the depreciation on such items, computed as indicated in Articles 5 and 6, will be charged as a cost of the project. No items of general overhead, corporate management, interest, taxes, or any other indirect costs not expressly allowed by these provisions, or work performed or costs incurred before the date of this contract, shall be allowed as costs of the project in which the Government will participate.

11. *Accounts and audits.* The Operator shall keep suitable records and accounts of operations, which the Government may inspect and audit at any time. The Government may at any time require an audit of the Operator's records and accounts by a certified public accountant, the cost thereof to be treated as a cost of the project. The Operator shall keep and preserve said records and accounts for at least 3 years after the completion of the project or the termination of this contract.

12. *Progress reports.* The Operator shall provide the Government with monthly reports of work performed under the contract upon forms to be provided by the Government. Each monthly progress report shall bear the certification of the Operator and shall constitute the Operator's invoice of costs incurred on the project during the period covered by the report.

13. *Payment to the Operator.* The monthly progress report (invoice), to the extent approved by the Government, shall be processed for payment by the Government. Payment shall be made in the amount of 50 percent of the approved costs incurred; *Provided,* That the aggregate total of all sums paid by the Government under this agreement shall not exceed $30,982.50, which is 50 percent of the agreed estimated total cost of this project, $61,965.00.

14. *Final reports by Operator.* Upon completion of the project or termination of this contract, the Operator shall provide the Government with a comprehensive geologic and engineering report, including an estimate of ore reserves, to the best of his ability. Four copies of all reports shall be furnished to the Government.

15. *Repayment by Operator.* If, upon the completion of the exploration project or termination of the contract, the Government considers that a discovery or development has resulted from the work from which commercial production of ore may be made, the Government, within 6 months thereafter, shall so certify to the Operator, particularly describing and delimiting its estimate of the discovery or the development. Thereafter, if and as ore is produced as a result of such discovery or development, the Operator and his successor in interest shall be and become obligated to pay to the Government a percentage royalty on the net smelter returns or other net proceeds realized from such ore, concentrates, or metal produced within ten (10) years from the date of this contract, until the total amount contributed by the Government, without interest, is fully repaid or said 10 years have elapsed, whichever occurs first, as follows:

Of net smelter returns or other net proceeds not in excess of eight dollars ($8.00) per ton of ore: One and one-half (1½) percent.

Of net smelter returns or other net proceeds in excess of eight dollars ($8.00) per ton of ore: One and one-half (1½) percent, plus one-half (½) percent for each additional full fifty cents ($0.50) in excess of eight dollars ($8.00) per ton of ore, but not in excess of a maximum of five (5) percent.

This obligation to repay from net returns or proceeds shall be and remain a claim and lien upon the mineral deposit which is the subject of the exploration project and upon any production resulting from such discovery or development, in favor of the Government, until fully paid, or until said 10-year period has elapsed; and this claim and lien and the Government's right to repayment shall survive any termination of the contract, whether by completion of the exploration project or otherwise. This article is not to be construed as imposing any obligation on the Operator or his successor in interest to produce ore from any such discovery or development.

16. *No assignment of contract.* Without the written consent of the Government, the Operator shall not assign or otherwise transfer or hypothecate this contract or any rights thereunder.

17. *Termination and completion.* The Government may, at any time, by written notice to the Operator, terminate this contract: (*a*) If the Operator fails to provide his share of the money necessary to prosecute operations pursuant to the terms of the contract; (*b*) if the Operator, in the opinion of the Government, fails to prosecute operations pursuant to the terms of the contract; or (*c*) if in the opinion of the Government, operations up to the time of the notice have not indicated the probability of making any worthwhile discovery and in the opinion of the Government further operations are not justified. Upon the completion of the project or any termination of the contract the Operator shall render to the Government a full and final accounting of his operations under the contract and his expenditures of money; shall dispose of any unused materials, supplies, and equipment for the joint account of the Operator and the Government in the proportion of their respective interests; and shall pay to the Government its pro-rata share of any money remaining.

Executed in sextuplicate the day and year first above written.

THE UNITED STATES OF AMERICA

Ozark-Mahoning Company
(Operator)

By C. Mittendorf
Acting Administrator, Defense Minerals Exploration Administration

By C. O. Anderson Vice-President

ATTEST
M. Schmidt
SECRETARY

U. S. GOVERNMENT PRINTING OFFICE 16—64060-2

ANNEX I

West half of Southwest quarter of Section 13; East half of the Southeast quarter of Section 14, except one acre, more or less, south and west of State Route 1 sold to Kenneth Dutton June 11, 1940 as per Book 27, Page 363, Deed Records of Hardin County, Illinois; South half of Northeast quarter of Section 23; North half of Southeast quarter of Section 23; Southeast quarter of Southeast quarter of Section 23; Northwest quarter (except 2 acres in N. E. corner) of Section 24; West half of Southwest quarter of Section 24, all in Township 11 South, Range 9 East, containing 597 acres, more or less.

EXPLORATION PROJECT CONTRACT
OZARK-MAHONING COMPANY
DOCKET NO. DMEA-2248

EXHIBIT "A"

Statement of the Work

The project shall consist of testing for fluorspar by means of churn-drill holes, a strip of ground, 3,000 feet long by 400 feet wide, situated on a tract of land known as the Hill-Ledford Farm, Cave-In-Rock District, Illinois. It is estimated that 30 holes will be required drilled to depths of approximately 850 feet each or a total of 25,500 feet of holes.

The spotting and spacing of the holes shall be governed by the judgment of the supervising engineers and geologists in the employ of the operator subject to the following limitations:

1. The total footage shall not exceed 25,500 feet.

2. The strip of ground to be drilled shall not exceed a length of 3,000 feet nor a width in excess of 400 feet. The center line of strip is that straight line which would pass through Hill-Ledford Hole No. 8 and Hill-Ledford Hole No. 10.

3. No more than eight sections or rows of holes shall be drilled across the strip.

4. No more than 5 holes shall be drilled across any one section.

5. No holes shall be drilled closer than 60 feet from the nearest completed hole.

6. Deviation from the above five over-all limitations may be made only after approval from the Executive Officer of the Field Team of Region VIII. It is the intent that a reasonable liaison be maintained between the operator and the Field Team to the end that the program may be well planned.

Estimated Costs of the Project

Fixtures and improvements

None

Operating equipment

To be purchased

None

To be rented

None

Contracted work

Churn-drilling 25,500 ft. @ $2.25/ft.		$57,375.00
Labor and supervision		
Supervision, 25,500 ft. @ $.15/ft.	$3,825.00	
Assaying and laboratory, 25,500 ft. @ $.01/ft.	255.00	
Clerical, 25,500 ft. @ $.02/ft.	510.00	4,590.00
Total estimated cost		$61,965.00
Government participation		$30,982.50

The Government shall not be nor be considered to be a party to any independent contract entered into by the operator, and the Government's right to terminate the exploration project contract under any of its provisions shall not in any manner be affected by reason of any such independent contract. Regardless of the provisions of any such independent contract, the Government will participate in the payments to the independent contractor only on account of work actually performed and that conforms with the provisions of the exploration project contract, and only to the extent that the Government deems the cost of the work under the independent contract to be reasonable and necessary. No such independent contract shall have the effect of increasing the estimated total cost of the exploration project contract nor the maximum amount which the Government will pay as provided in the exploration project contract.

MF-202

LANDLORD'S SUBORDINATION AGREEMENT

KNOW ALL MEN BY THESE PRESENTS:

WHEREAS, the undersigned is the owner in fee simple of that certain parcel of ground in the county of Hardin, State of Illinois, described in a certain Exploration Project Contract dated ....., 195..., between Ozark-Mahoning Company - a Corporation of Rosiclare, Illinois, the Lessee of said property, and the United States of America;

NOW, THEREFORE, the undersigned, as Lessor of said property under lease dated July 11, 1951, does by these presents subordinate all of his right, title, and interest under the provisions of said lease to the right, title, and interest of the United States of America under the provisions of said Exploration Project Contract, and agrees that the lien and claim of the United States of America under the provisions of said contract shall be prior to the undersigned's rights to rentals or royalties under the terms of said lease; and

The undersigned further agrees that if said leasehold interest should be surrendered or if said lease should terminate at any time prior to the expiration of the rights of the United States of America under said Exploration Project Contract, the undersigned shall assume and does hereby assume all of the obligations of the Lessee under said Exploration Project Contract to make repayment to the United States of America according to the terms of said contract; and

The undersigned agrees to commit no act, nor assert any claim under judicial process or otherwise that may contravene or conflict with the prior lien and claim of the United States of America under the provisions of said Exploration Project Contract.

This undertaking and covenant shall be binding upon the heirs, successors, and assigns of the undersigned.

Dated this 5th day of November, 195.1

Charles N. Hill

Blanche H. Ledford

Walter Ledford

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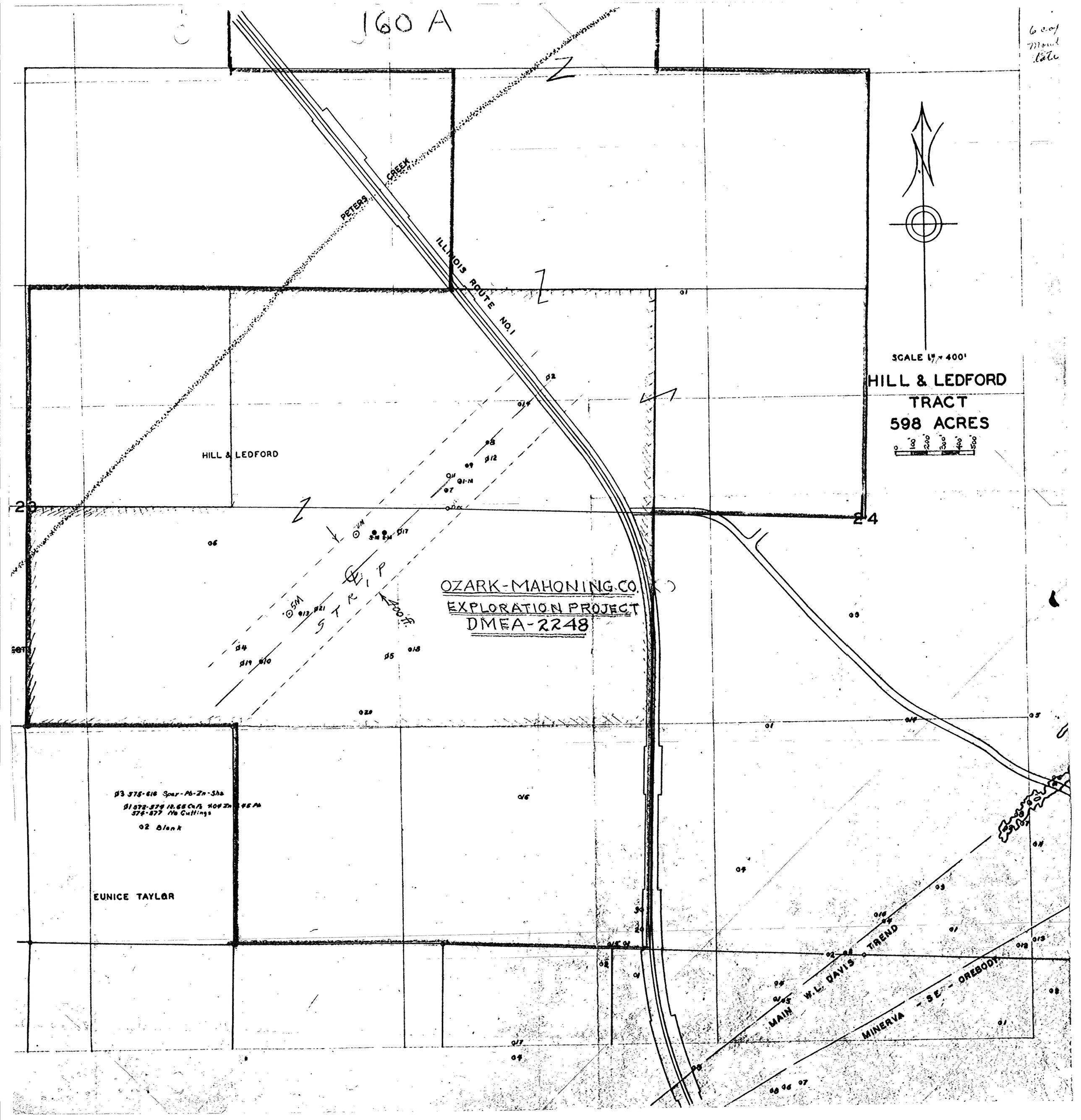
PETERS CREEK
ILLINOIS ROUTE NO. 1
SCALE 1" = 400'
HILL & LEDFORD TRACT
598 ACRES
0 100 200 300 400 500
HILL & LEDFORD
23
24
OZARK-MAHONING CO.
EXPLORATION PROJECT
DMEA-2248
STRIP
200 ft.
EUNICE TAYLOR
MAIN W.L. DAVIS TREND
MINERVA - SE - OREBODY