E-1068

For royalty payment of $12,429.85, dated May 27, 1965, see transmittal letter file.

c o p y

~~OFFICIAL~~
COPY
O. M. E.
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JUN 4 1965
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800

ST. JOSEPH LEAD COMPANY

Southeast Missouri Mining and Milling Division

Bonne Terre, Mo.

E. A. Jones,
Division Manager.

May 25, 1965

Field Officer
Office of Minerals Exploration
Region IV, Room 11
Post Office Building
Knoxville 2, Tennessee

Dear Sir:

DMEA-4582 (Lead-Zinc-Copper)
St. Joseph Lead Company
Courtois Area
Washington County, Missouri
Contract Idm-E1068

Enclosed is our draft for $12,429.85 covering repayment royalty on DMEA-4582, Contract Idm-E1068, for the month of April, 1965. This amount covers the final payment due for money advanced on this contract which was completed as of January 1, 1959.

Attached are detailed calculation reports, in duplicate, supporting this payment.

Sincerely yours,

/s/ E. A. Jones

Division Manager

cc: Mr. Francis Cameron
Mr. James G. Colvin
Mr. K. R. Baker
Mr. J. A. Thomure

E-1068

For royalty payment of $28,616.38, dated April 28, 1965, see transmittal letter file.

E-1068

For royalty payment of $22,103.71, dated March 1, 1965, see transmittal letter file.

E-1068

For royalty payment of $21,372.31, dated February 1, 1965, see transmittal letter file.

JAN 27 1965

Haskins and Sells
Certified Public Accountants
800 Boatmen's Bank Building
Saint Louis, Mo. 63102

Gentlemen:

As requested in a January 21 letter from its Southeast Missouri Mining and Milling Division, the status of St. Joseph Lead Company's accounts as of December 31, 1964, are confirmed by our records to be as follows:

Contract No.	Docket No.	Government's Contribution	Royalty Repayments	Balance Repayable
Idm-E1064	DMEA-4581	$120,252.54	$120,252.54	$ -0-
Idm-E1068	DMEA-4582	132,596.55	26,286.88	106,309.67
Idm-E1073	DMEA-4583	134,103.50	-0-	134,103.50
Totals		$386,952.59	$146,539.42	$240,413.17

Sincerely yours,

George Fumich, Jr.

Acting Director

cc: Southeast Missouri Mining and Milling Division
St. Joseph Lead Company
Bonne Terre, Missouri

AMAlley/ama 1-26-65

cc:
Docket
Director's Reading File
CA & A Division - Idm-E1068
Region IV (w/cy of inc. ltr.)

ST. JOSEPH LEAD COMPANY

SOUTHEAST MISSOURI MINING AND MILLING DIVISION

BONNE TERRE, MO.

E. A. JONES,
DIVISION MANAGER.

January 21, 1965

Mr. George Fumich, Jr., Director
Office of Minerals Exploration
U. S. Department of the Interior
Washington 25, D. C.

Dear Mr. Fumich:

According to our records, total advances to St. Joseph Lead Company by the Defense Mineral Exploration Administration through the year 1959 for DMEA Projects were, as follows:

Contract No.	Project No.	DMEA No.	County	Amount
Idm-K1064	1	4581	Crawford	$ 120,252.54
Idm-K1068	2	4582	Washington	132,596.55
Idm-K1073	3	4583	Iron	134,103.50
			Total	$ 386,952.59

As of December 31, 1964, $120,252.54 has been repaid on DMEA #4581 and $26,286.88 on DMEA #4582, leaving the balance payable to the Office of Minerals Exploration at December 31, 1964, as follows:

DMEA #4582	-	$ 106,309.67
DMEA #4583	-	134,103.50
Total		$ 240,413.17

Will you please [illegible] 800 Boatmen's Bank Building, St. Louis, Missouri, the above advances and balance as of December 31, 1964.

A stamped, addressed envelope is enclosed for your convenience.

Yours very truly,

Division Manager.

cc - Haskins & Sells

E-1068

For royalty payment of $15,012.93, dated December 22, 1964, see transmittal letter file.

E-1068

For royalty payment of $6,419.66, dated November 23, 1964, see transmittal letter file.

E-1068

For royalty payment of $4,854.29, dated October 28, 1964, see transmittal letter file.

JAN 22 1964

Haskins and Sells
Certified Public Accountants
800 Bostman's Bank Building
Saint Louis 2, Missouri

Gentlemen:

As requested in a January 15 letter from its Southeast Missouri Mining and Milling Division, the status of St. Joseph Lead Company's accounts as of December 31, 1963, are confirmed by our records to be as follows:

Contract No.	Document No.	Government's Contribution	Royalty Repayments	Balance Repayable
Idm-E1064	DMEA-4581	$120,252.54	$120,252.54	$ -0-
Idm-E1064	DMEA-4582	132,596.55	-0-	132,596.55
Idm-E1073	DMEA-4583	134,103.50	-0-	134,103.50
Totals		$386,952.59	$120,252.54	$266,700.05

Sincerely yours,

George Fumich, Jr.

Acting Director

cc: Southeast Missouri Mining and Milling Division
St. Joseph Lead Company
Bonne Terre, Missouri

EDTalbert/ama 1-21-64

cc:
Docket
Director's Reading File
CA & A Division - Idm-E1068
Region IV (w/cy of inc. ltr.)

JAN 21 1963

Haskins and Sells
Certified Public Accountants
800 Boatmen's Bank Building
Saint Louis 2, Missouri

Gentlemen:

As requested in a January 14 letter from its Southeast Missouri Mining and Milling Division, the status of St. Joseph Lead Company's accounts as of December 31, 1962, are confirmed by our records to be as follows:

Contract No.	Docket No.	Government's Contribution	Royalty Repayments	Balance Repayable
Idm-E1064	DMEA-4581	$120,252.54	$80,098.75	$ 40,153.79
Idm-E1068	DMEA-4582	132,596.55	-0-	132,596.55
Idm-E1073	DMEA-4583	134,103.50	-0-	134,103.50
		$386,952.59	$80,098.75	$306,853.84

Sincerely yours,

George Fumich, Jr.

Director

cc: Southeast Missouri Mining and Milling Division
St. Joseph Lead Company
Bonne Terre, Missouri

EDTalbert/ama 1-21-63

cc:
Docket
Director's Reading File
CA & A Division - Idm-E1068
Region IV (w/cy of incoming ltr.)

OFFICE OF MINERALS EXPLORATION
CONTRACT ADMINISTRATION AND AUDIT DIVISION

REPORT OF ROYALTY REVIEW

I have reviewed the files of the Washington office pertaining to Contract Idm-81063, Docket OMEA-4592 (lead-zinc-copper), dated March 18, 1957, with

St. Joseph Lead Company
Bonne Terre, Missouri

for the purpose of determining the amount of royalty payable to the U. S. Government on sales of minerals from property referred to as the Courtois Area located in Washington and Crawford Counties, Missouri, during the period March 18, 1957, through September 20, 1960.

A certification of discovery or development was issued on August 18, 1959, and, in accordance with Articles 6 and 10, Annex I, and Amendment No. 7 of the contract, royalty is payable on all minerals produced from the land described in Article 2, as amended, of the contract for a period of 30 years from the date of the contract or until the total net amount contributed by the Government without interest is fully repaid, whichever occurs first. A Report of Review dated June 5, 1959, indicated accepted costs under the exploration contract amounting to $265,193.10 with the Government's contribution on a 50 percent basis being $132,596.55.

The status of the project, the scope of review, and the reasons therefor are stated on page 2.

This review established no sales subject to the Government's royalty for the period covered. Accordingly, as of September 20, 1960, the royalty account of this project was found to be:

Total Royalty Payable	$ -0-
Total Royalty Paid	-0-
Balance of Royalty Due	$ -0-

May 9, 1962

E. D. Talbert, OME Auditor

Idm-E1068 St. Joseph Lead Company DMEA-4582

STATUS OF PROJECT, SCOPE OF REVIEW
AND REASONS THEREFOR

This contract provides that the Operator, as principal if the producer or as surety if not the producer, shall pay to the Government a percentage royalty on all minerals produced for a maximum of 30 years from (1) the lands thereunder, (2) any contiguous lands in which the Operator or any subsidiary acquires any interest before March 18, 1967, and (3) the parcel of land deleted by Amendment No. 7, if the Operator or any subsidiary acquires any interest in such land or the production therefrom. "Minerals" includes limestone and dolomite products derived from processing ores and excludes any minerals which the Operator is prohibited from mining pursuant to the instruments by which the lands are held.

At the time this contract was executed, the land thereunder consisted of numerous tracts aggregating 4,366.41 acres, more or less. Amendments to the contract added approximately 1,860.09 acres and deleted 320 acres. Of the total of about 5,906.5 acres, the Operator held approximately 1,341.81 acres under Bureau of Land Management prospecting permits and 4,564.69 acres, more or less, under option contracts with private landowners. Consents to Lien and Subordination Agreements were waived.

The tracts under the contract are located in secs. 3, 4, 5, 6, 7, 8, 9, 17, and 18, T. 35 N., R. 1 W., secs. 32, 33, and 34, T. 36 N., R. 1 W., and secs. 1, 2, 11, 12, and 13, T. 35 N., R. 2 W., 5th P.M. All of the acreage, except 390 acres, are located in Washington County. Those 390 acres, located in Crawford County, together with about 8 acres in Washington County, all held under Bureau of Land Management prospecting permit no. 045266, are included also under Contract Idm-E1064, Docket DMEA-4581, with the same Operator.

Exploration work under the contract was completed on December 29, 1958. No minerals were produced from the property during the exploration period. Examinations of the property, conferences with the Operator's officials, and a September 20, 1960, reply to inquiry on MME Form 63 have disclosed no production from the lands under the contract.

If any production subject to royalty under this contract starts, royalty is to be computed and paid in accordance with a proposal set forth in an October 11, 1960, letter from the Operator and accepted by the Acting Director's November 22, 1960, letter.

This review was made in lieu of an on-site audit of the Operator's accounts and records for the following reasons:

(1) No minerals have been produced during the period covered by this review;

(2) The files indicate no activity on the property since completion of the exploration work; and

(3) The administrative cost to the Government of an on-site royalty audit at this time would be excessive in relation to the amount of possible royalty which might be disclosed.

80d

MAY 1 1 1962

Memorandum

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

From: Chief, Division of Field Operations, CME

Subject: DMEA-4582 (Lead-Zinc-Copper)
St. Joseph Lead Company
Courtois Area
Washington and Crawford Counties, Missouri
Contract Idm-K1068

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

George C. Selfridge

Enclosure

GCSelfridge/hb (5/10/62)
cc to: Docket DMEA-4582
Director's Reading File
CA&A Division
G.C.Selfridge
R. A. Laurence, USGS, Region IV, w/cy of Report of Royalty Review dtd 5/9/62 & orig. cy of memo dtd 4/20/62 to Chief, Div. of Field Operations from CA&A Division.
Avery Reed, USBM, Reg. IV, w/cy of ea. item sent to Mr. Laurence.

MAY 9 1962

Memorandum

To: Chief, Division of Field Operations

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

Subject: OMRA-4582 (Lead-Zinc-Copper)
St. Joseph Lead Company
Courtois Area
Washington and Crawford Counties, Missouri
Contract Idm-E1068

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

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

(b) Two copies to Region IV files.

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

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

Enclosures

EDTalbert/ama 5-9-62

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

JAN 29 1962

Hasking and Sells
Certified Public Accountants
800 Boatmen's Bank Building
Saint Louis 2, Missouri

Gentlemen:

As requested in a January 23 letter from its Southeast Missouri Mining and Milling Division, the status of St. Joseph Lead Company's accounts are confirmed by our records to be as follows:

Contract No.	Docket No.	Government's Contribution	Royalty Repayments	Balance Repayable
Idm-E1064	DMEA-4581	$120,292.54	$40,283.38	$ 80,009.16
Idm-E1068	DMEA-4582	132,996.53	-0-	132,996.53
Idm-E1071	DMEA-4583	134,103.90	-0-	134,103.90
		$386,392.97	$40,283.38	$346,709.21

Sincerely yours,

George Fumich, Jr.

Director

cc: Southeast Missouri Mining and Milling Division
St. Joseph Lead Company
Bunker Terre, Missouri

EDTalbert/ama 1-29-62

cc:
Docket
Director's Reading File
CA & A Division - Idm-E1068
Region IV Files

See Contract Idm-E1064 for agreement for monthly calculation and payment of royalty per letters dated October 11, 1960, and November 22, 1960.

OFFICE OF MINERALS EXPLORATION
CONTRACT ADMINISTRATION AND AUDIT DIVISION

REPORT OF REVIEW

I have reviewed the Monthly Reports of:

St. Joseph Lead Company
Bonne Terre, Mo.

pertaining to Exploration Project Contract No. Idm-E1068, DMEA No. 4582, including Amendments Nos. 1 through 8, for May 1957 to December 1958, inclusive, covering a lead, zinc, and copper project in the Courtois Area, Washington County, Missouri.

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

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

All of the costs were under a contract provision for payment by the Government at fixed unit costs for work performed.

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

Total cost billed by Operator		$264,058.90
Exceptions:		
Prior to this review	$ -0-	
Herewith	-0-	-0-
Acceptable cost claimed by Operator		$264,058.90
Acceptable cost not claimed		1,134.20
Total acceptable cost, if claimed		$265,193.10

The contract calls for a 50 percent contribution of the allowable costs by the Government. Therefore, if the project is otherwise accepted as having met the terms of the contract, payments as follows are valid and proper:

On cost claimed	$132,029.45
On additional cost, if claimed	567.10
Total payable, if claimed	$132,596.55
Payable on audited claim	$132,029.45
Paid to date	127,681.62
Balance due Operator	$ 4,347.83
Additional payable, if claimed	$ 567.10

June 5, 1959

E. D. Talbert, OME Auditor

Schedule of Audit Findings

	No. Holes	Drilling Footage Churn	Core	Total	Determinations Pb	Zn	Cu	Total
Work Performed:								
Stage I	84	13,084	42,941	56,025	276	31	19	326
" II	97	13,103	49,959	63,062	425	53	87	565
	181	26,187	92,900	119,087	701	84	106	891
Deducted by Operator:								
Stage I	-	0	0	0	2	0	0	2
" II - Hole 181	part	71	471	542	0	0	0	0
	-	71	471	542	2	0	0	2
Claimed by Operator:								
Stage I	84	13,084	42,941	56,025*	274	31	19	324
" II	97	13,032	49,488	62,520*	425	53	87	565
	181	26,116	92,429	118,545*	699	84	106	889
****Audit Adjustments:**								
Stage I	0	0	0	0	2	0	0	2
" II	part	71	439	510	0	0	0	0
	-	71	439	510	2	0	0	2
Accepted by Audit:								
Stage I	84	13,084	42,941	56,025	276	31	19	326
" II	97	13,103	49,927	63,030	425	53	87	565
	181	26,187	92,868	119,055	701	84	106	891

Acceptable Costs:

119,055' Churn and Diamond Drilling	@ $2.22/ft.	$264,302.10
891 Determinations	@ $1.00/ea.	891.00
Total		$265,193.10

Schedule of Audit Findings

* Footages as per logs attached to monthly reports; however, Operator's final engineering and geological report states total footages as:

Stage	I	56,015
"	II	62,530
	Total	118,545

** The Operator did not claim 542 feet of drilling in the final hole because such footage was in excess of the Stage II contractual maximum of 62,520 feet. The audit has allowed 510 feet of the unclaimed footage on the basis of the increase of the contractual maximum to 63,030 feet by Amendment No. 8. Also, in the May 1957 MF-104 the Operator claimed 16 determinations applicable to Stage I, whereas the monthly narrative and the applicable drill logs indicate 13 determinations were made.

cy to 500 104A

OFFICIAL FILE COPY
O. M. E.
RECEIVED JUN 25 1959

DATE	INITIALS	CODE
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UNITED STATES
DEPARTMENT OF THE INTERIOR
OFFICE OF MINERALS EXPLORATION
Box 431
Joplin, Missouri

June 22, 1959

Memorandum

To: E. D. Talbert, Acting Chief, Contract Administration & Audit Division, Office of Minerals Exploration, Room 4448, Interior Building, Washington 25, D. C.

From: Executive Officer, OME Field Team, Region IV, Joplin, Mo.

Subject: DMEA-4582(lead-zinc-copper), St. Joseph Lead Co., Courtois Project Contract Idm-E1064, Washington County, Mo.

With reference to your June 10 memo with the Report of Review dated June 5, 1959, for final settlement of this account, a revised final (December 1958) MF-104 and MF-104A (copy attached) was received from the Operator today claiming the allowable maximum under the Audit, and this confirms that the units of work listed below were acceptably performed, and that the project otherwise is accepted as having met the terms of the Contract.

Accepted Work	No. Holes	Feet Drilled			Assay Determinations					
		Churn	Core	Total	Pb	Zn	Cu	Ni	Co	Total
Stage I	84	13,084	42,941	56,025	276	31	19	-	-	326
Stage II	97	13,103	49,927	63,031	425	53	87	-	-	565
Total Units acceptably performed	181	26,187	92,868	119,055	701	84	106	-	-	891

I concurred with the facts stated in your Report of Review received here June 12, 1959, forwarded the copy to the Operator then, and upon receiving the Operator revised final MF-104 claim today, have forwarded the original and one copy of the Report of Review with the originals of the Operator's November and December MF-104 Reports to the Bartlesville Finance Office for certification of the final settlement payment due.

Clinton C. Knox

Clinton C. Knox

cc: Op.Com.(2)
Amos,USGS,Knoxville
Finance Office,USBM,Bartlesville
4582 file

UNITED STATES
DEPARTMENT OF THE INTERIOR
OFFICE OF MINERALS EXPLORATION

Box 431
Joplin, Missouri

June 22, 1959

cy to 500

OFFICIAL FILE COPY
O. M. E.
RECEIVED JUN 25 1959

DATE	INITIALS	CODE

Mr. R. E. Wagner, Exploration Superintendent
St. Joseph Lead Company
Bonne Terre, Missouri

Re: DMEA 4582 (lead-zinc-copper)
Courtois Project
Washington County, Mo.
Contract Idm-E1068

Dear Mr. Wagner:

This will acknowledge receiving your June 19 letter with the revised MF-104 and MF-104A Reports for completion of the project last December.

Please be advised that they as well as your reports for November 1958 have been approved as claimed upon my concurrence with the facts in the OME Audit Report of Review as per copy furnished you with my letter on June 12, and the Finance Office, U. S. Bureau of Mines, Bartlesville, Oklahoma, has been authorized to certify payment of the balance found due your company in final settlement by the Government.

Please advise if the check is not received within a reasonable length of time.

Sincerely yours,

CCK/imd

Clinton C. Knox
Executive Officer
OME Field Team, Region IV

Shadow cy-Mr. E.A.Jones

cc: Op.Com.(2)
Amos,USGS,Knoxville
Finance Office,USBM,Bartlesville
4582 file

UNITED STATES
DEPARTMENT OF THE INTERIOR
OFFICE OF MINERALS EXPLORATION
Box 431
Joplin, Missouri

cy to Sackett 104-A

EXTRA COPY
O. M. E.
RECEIVED JUN 25 1959

DATE	INITIALS	CODE

June 22, 1959

Mrs. Cora A. Bailey, Fiscal Officer
U. S. Bureau of Mines, Region IV
206 Federal Building
Bartlesville, Oklahoma

Re: DMEA-4582(lead-zinc-copper)
St. Joseph Lead Co
Courtois Area
Washington County, Missouri
Contract No. Idm-E1068

Dear Mrs. Bailey:

Transmitted herewith are the original and one copy of the final Report of Review on this completed project received June 12 from the OMECContract Administration and Audit Division, Washington, D. C. One copy was furnished the Operator then, and in accordance with the offer therein, the Operator's revised final (December 1958) MF-104 Claim was received today covering all the project work acceptably performed to the extent allowable under Contract Amendment No. 8 enacted as of March 6, 1959. Copies of this letter are being furnished OME and my teammate, Dewey Amos, USGS, Knoxville, Tennessee.

I concurred with the facts in the Audit Report and hereby authorize you to certify payment in the amount of $4,914.93 found due the Operator in final settlement of this account. Therefore, the originals of the Operator's November and December (Revised June 15, 1959) MF-104 Reports pertinent to this final settlement also are enclosed for your file. Approvals on them had been withheld pending receipt of the Operator's final engineering-geologic report(copy sent you June 2), the enclosed Audit Report and Operator's revision of the December 1958 MF-104 Report. The project otherwise also has been accepted as having met the terms of the Contract.

Copies of these monthly reports by the Operator were furnished my teammate on December 17, 1958, January 23, 1959, and today, respectively, after receipt here, and likewise one copy of each (excepting the MF-104 vouchers) were furnished the Washington Office. The second Washington copies with both the MF-104s of each are retained here awaiting your voucher data to be posted thereon.

Sincerely yours,

CCK/ima

Clinton C. Knox
Executive Officer
OME Field Team, Region IV

encl. 5

cc: Op.Com.(2)
Amos, USGS, Knoxville
4582 file

UNITED STATES
DEPARTMENT OF THE INTERIOR
OFFICE OF MINERALS EXPLORATION

Box 431
Joplin, Missouri

June 12, 1959

Mr. R. E. Wagner, Exploration Superintendent
St. Joseph Lead Company
Bonne Terre, Missouri

Re: DMEA-4581(lead-zinc-copper)
Czar Knob project
Crawford County, Mo.
Contract Idm-K1068

Dear Mr. Wagner:

This will acknowledge receiving on June 2, 1959, your final engineering-geologic report and ore reserve estimates for this completed project.

Furnished herewith is your copy of the Report of Review on your project account received this morning from the Contract Administration and Audit Division, Office of Minerals Exploration, Washington, D. C.

I concurred with the facts in this Audit Report and approved certification by the Finance Office, U. S. Bureau of Mines, Bartlesville, for payment of the balance found due you in final settlement by the Government.

Please advise if the check is not received within a reasonable length of time.

With best personal regards, I am,

Sincerely yours,

Clinton C. Knox
Executive Officer
OME Field Team, Region IV

CCK/ima

encl.

EXTRA COPY
O. M. E.
RECEIVED JUN 15 1959

DATE	INITIALS	CODE
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Shadow cy: Mr. Wagner

cc: Op.Com.(2)
Amos, USGS, Carbondale

Finance Off., USBM, Bartlesville
458K file

UNITED STATES
DEPARTMENT OF THE INTERIOR
OFFICE OF MINERALS EXPLORATION
Box 431
Joplin, Missouri

June 12, 1959

EXTRA COPY O. M. E. RECEIVED JUN 15 1959		
DATE	INITIALS	CODE
		800

Mr. R. E. Wagner, Exploration Superintendent
St. Joseph Lead Company
Bonne Terre, Missouri

Re: DMEA-4582(lead-zinc-copper)
Courtois project
Washington County, Mo.
Contract Ide-E1068

Dear Mr. Wagner:

Your final engineering-geologic report and ore reserve estimates on this project completed last December, were received here June 2, 1959. The final audit was made since, and enclosed is your copy of the Report of Review received this morning from the Contract Administration and Audit Division, Office of Minerals Exploration, Washington, D. C.

You will note that under the changed allowable maximum set for Stage II drilling in Amendment No. 8, enacted as of March 6, 1959, an additional 71 feet of churn drilling and 439 feet of diamond drilling in your final hole No. 58VC277, acceptably performed during the last month of the project work, would be allowable if claimed in your report for that month of December 1958. Also found allowable by the audit, if actually claimed by you, would be the cost for two assays made in May 1957 and reported but not included in your claim for that month. Sets of Form MF-104 and MF-104A also are enclosed on which you may want to revise your final cost claims of last December. My approval otherwise for the final settlement on your claims for last November and December will await a revised claim or waiver from you. I concurred with the facts in the Audit Report but cannot authorize Government payments unless formally claimed.

Sincerely yours,

CCK/lmd

Clinton C. Knox
Executive Officer
OME Field Team, Region IV

encls.

Shadow cy: Mr. Wagner

cc: OP.COM.(2)
Ames, USGS, Carbondale

Finance Off., USBM, Bartlesville
4582 file

JUN 10 1959

JUN 10 1959

Memorandum

To: Executive Officer, OAE Field Team, Region IV

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

Subject: Docket No. DMRA-4582 (Lead-Zinc-Copper)
St. Joseph Lead Company
Courtois Area
Washington County, Missouri
Contract No. Idm-81068

As requested in your June 2 letter to the Operating Committee, forwarding copies of the Operator's final report, an audit review of the subject contract has been performed. Enclosed are the original and three copies of a Report of Review in lieu of a final audit.

If you concur with the facts as stated in this report, the original and one copy should be forwarded to the Authorized Certifying Officer in the Bartlesville office, one copy should be sent to the Operator, and one copy should be retained for your file. If for any reason you do not concur, please return the original and all copies with your comments to this Division.

A memorandum dated January 9, 1957, from the Chief, Contract Administration and Audit Division, to all auditors provides that a report of review or final audit certificate will not be issued without the auditor having a communication from the Executive Officer of the region specifically confirming, among other things, the number of units of work acceptably performed. This memorandum was approved and promulgated for compliance by the Operating Committee's letter addressed to you under date of January 17, 1957.

Such a communication has not been furnished in this case. Therefore, this Division would appreciate a memorandum specifically confirming the acceptable performance of the units of work shown as accepted by audit in the Schedule of Audit Findings, attached to the enclosed Report of Review.

Enclosures

EDTalbert/ama
June 9, 1959

Copy to: Docket
Director's Reading File
CA & A Division
Mrs. Cora Bailey

UNITED STATES
DEPARTMENT OF THE INTERIOR
OFFICE OF MINERALS EXPLORATION
Box 431
Joplin, Missouri

June 2, 1959

EXTRA COPY
O. M. E.
RECEIVED JUN 4 1959

DATE	INITIALS	CODE
		800

Operating Committee
Office of Minerals Exploration
Department of the Interior
Room 4457
Washington 25, D. C.

Re: DMEA-4582(Pb-Zn-Cu)
St. Joseph Lead Co.
Courtois Project
Washington County, Mo.
Project Contract Idm-E1068

Dear Sirs:

Forwarded herewith are the original and one copy of the Operator's final report on this project, received and accepted by this Field Team Office today. One copy is sent Amos, USGS, Carbondale, one to Finance Office, USBM, Bartlesville, and one is retained here.

I expect the Field Team's joint final report on this project will be completed for submittal to you in July. It will verify that the items of work acceptably performed under the Contract and the approved unit costs and total project costs are in full agreement with those given in the Operator's last (December 1958) MF-104A (see copy sent you 1-28-59) and in the Operator's Final Report enclosed herewith; of course, the Field Team's final report also will recommend certification, and subject to OME Audit clearance, the project is hereby accepted as otherwise having met the terms of the Contract.

Therefore, I see no need for further delay in final settlement of this account, so the final OME Audit Review is hereby requested.

Please advise if we can do anything further to facilitate the final settlement.

Sincerely yours,

P.S. The key to lithologic zoning and symbols used by the Operator was sent you CCK/imf-5-57.

Clinton C. Knox
Executive Officer
OME Field Team, Region IV

encl. 2

cc: Op.Com.
Amos, USGS, Carbondale
King, USGS, Denver
Finance Office, USBM, Bartlesville
4582 file

3rd Copy - Wash.

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

Budget Bureau No. 42-R1036.5

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

Month of December, 1958 Docket No. DMEA 4582 Contract No. Idm-21068
Operator's Name St. Joseph Lead Company Minerals Pb - Zn - Cu
Address Bonne Terre, Missouri
Contract Amount, $ 298,560.00 Government Participation: 50 % Amount, $ 149,280.00

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	4428.90	259873.20	264302.10	✓	✓	✓
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	7.00	884.00	891.00	✓	✓	✓
Payroll Taxes						
Liability Insurance						
(8) Contingencies (specify):						
TOTALS	4435.90	260757.20	265193.10	✓	✓	✓

RECEIVED
DIVISION OF MINERAL TECHNOLOGY
JUN 22 1959
BUREAU OF MINES
JOPLIN, MO.

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

Date JUNE 15, 1959 *Payee St. Joseph Lead Company

Per L. W. Castel Title

*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:

$ 4,914.93

Signature
(Authorized Certifying Officer)

Date 6/25/59 Vou. No. 4-29

(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. DMM-E1068 in accordance with the terms of the contract.

Signature Clinton C. Knox Title Mining Engineer Date 6-22-59

APPROVAL BY DMEA EXECUTIVE OFFICER OR ALTERNATE:

Signature Clinton C. Knox Title Executive Officer Date 6-22-59

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.

3rd Copy - March

Form MF-104A
(April 1952)

Budget Bureau No. 42-R1151.2

UNITED STATES
DEPARTMENT OF THE INTERIOR

DEFENSE MINERALS EXPLORATION ADMINISTRATION

OPERATOR'S UNIT COST AND PROGRESS REPORT (REVISED FINAL)

Month of December 1958 Revised Docket No. DMEA-4532 Contract No. 1da-21068
Operator's Name St. Joseph Lead Company Minerals Pb-Zn-Cu
Address Leadwood, Missouri

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	ft.	3363.22	1524*	206166.96	92868	$2.22		$2.22
Churn	ft.	1045.62	471*	58135.14	26187	2.22		2.22
Auger								
Stripping								
Trenching								
Test Pits								
Roads and Trails								
Determinations	ea.	7.00	7**	691.00	691	1.00	2370	1.00
Total Distributed Costs		4435.90		265193.10	Stage I - 56,025***/ ; " II - 63,030***/ 119,055			Total Costs Authorized by Contract
Operating Equipment Purchased								
Initial Rehabilitation and Repairs								
New Buildings, Improvements, etc.								
Total Costs		4435.90		265193.10				296,560.00

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 June 15, 1959 Operator St. Joseph Lead Company

Per L. W. Castle Title ASST. DIVISION MANAGER

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:

*Claim revised to include costs of drilling 510' in final hole No. 53V-277 within allowable maximum set by Contract. Amendment No. 2 dated March 6, 1959.

**Revised to include 2 copper determinations not claimed in the May 1957 report.

***Corrected totals to revise those given on page 1 of the final Operator's report of June 1, 1959.

(For Government use only)

C.C.K. 6/22/59

RECEIVED
DIVISION OF MINERAL TECHNOLOGY

JUN 22 1959

BUREAU OF MINES
JOPLIN, MO.

INSTRUCTIONS

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

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

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

GPO 872894

3d cy - OME - Water plan

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

Budget Bureau No. 42-R1036.5

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION

OPERATOR'S MONTHLY REPORT AND VOUCHER (FINAL REPORT)

Month of December 1958 Docket No. DMEA 4582 Contract No. Idm-E 1068

Operator's Name St. Joseph Lead Company Minerals Pb - Zn - Cu

Address Bonne Terre, Missouri

Contract Amount, $ 298,560.00 Government Participation: 50 % Amount, $ 149,280.00

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	3296.70	259873.20	263169.90			
Bulldozing						
Crosscutting						
Drifting						
(2) Labor and Supervision:						
Labor						
Supervision						
Technical Services						
(3) Operating Materials and Supplies:						
Timber						
Explosives						
Pipe						
Track						
(4) Operating Equipment:						
Rental						
Purchase						
Depreciation						
(5) Initial Rehabilitation and Repairs						
(6) New Bldgs., Improvements, etc.						
(7) Miscellaneous:						
Repairs to Equipment						
Sampling and Analysis	5.00	884.00	889.00			
Payroll Taxes						
Liability Insurance						
(8) Contingencies (specify):						
TOTALS	3301.70	260757.20	264058.90			

RECEIVED
DIVISION OF MINERAL TECHNOLOGY
JAN 14 1959
BUREAU OF MINES
JOPLIN, MO.

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

Date 1-13-59 *Payee St. Joseph Lead Company

Per [signature] Title DIVISION MANAGER

*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:

Void - See Revised Invoice dated 6-15-59

$

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

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

APPROVAL BY DMEA EXECUTIVE OFFICER OR ALTERNATE:

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

MONTHLY REPORT OF OPERATOR

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

GPO 872893

3d cy - AME Washington

Form MF-104A
(April 1952)

Budget Bureau No. 42-R1151.2

RECEIVED
DIVISION OF MINERAL TECHNOLOGY
JAN 14 1959
BUREAU OF MINES
JOPLIN, MO.

UNITED STATES
DEPARTMENT OF THE INTERIOR

DEFENSE MINERALS EXPLORATION ADMINISTRATION

See (Revised Final) dated 6/15/59

OPERATOR'S UNIT COST AND PROGRESS REPORT (FINAL REPORT)

Month of December 1958 Docket No. DMEA 4582 Contract No. Idm-E 1068

Operator's Name St. Joseph Lead Company Minerals Pb - Zn - Cu

Address Bonne Terre, Missouri

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	Ft.	2408.70	1085	205192.38	92429	$2.22)		
Churn	Ft.	888.00	400	57977.52	26116	2.22)	133420	$2.22
Auger								
Stripping								
Trenching								
Test Pits								
Roads and Trails								
Analytical Determinations	Ea.	5.00	5	889.00	889	1.00	2370	1.00
TOTAL DISTRIBUTED COSTS		3301.70		264058.90				TOTAL COSTS AUTHORIZED BY CONTRACT
Operating Equipment Purchased								
Initial Rehabilitation and Repairs								
New Buildings, Improvements, etc.								
TOTAL COSTS		3301.70		264058.90				

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

Date 1-13-59 Operator St. Joseph Lead Company

Per [signature] Title DIVISION MANAGER

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.

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GPO 872894

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DIVISION OF MINERAL
TECHNOLOGY

JAN 14 1959

BUREAU OF MINES
JOPLIN, MO.

MONTHLY REPORT FOR MONTH OF DECEMBER, 1958

D.M.E.A. Project #4582 - Contract #IDM-E 1068

No churn drills were operating in the area at the end of the month.

The following churn drill holes were completed through overburden and chert-bearing formations and cased preparatory to diamond drilling during the month:

Stage No.	Stake No.	Feet Depth	Starting Date
II	VC-179	165	11-15-58
II	VC-180	230	11-14-58
II	VC-181	76	11-24-58

No diamond drills were operating in the area at the end of the month.

The following diamond drill holes were completed during the month:

Stage No.	Stake No.	Prospect Hole No.	Bottom Depth	Feet of Dia. Drilling	Date Completed	Class.
II	VC-179	58VC272	715	550	12-18-58	Blank
II	VC-180	58VC275	765	535	12-23-58	Trace
II	VC-181	58VC277	547	471	12-29-58	Pay

Analysis of results gained by drilling is shown in abstracts of our weekly reports to St. Joseph Lead Company, which are enclosed.

5 analytical determinations were made during the month as follows:

58VB277 5 Pb

Government participation in Hole 58VC277, stake VC-181, is limited to five analytical determinations and five feet of the total footage. This completes the allowable footage for the project. Rock classification and mineralization logs for the above hole have been included.

This is the final monthly report for the project in which 56,015 feet of Stage I and 62,530 feet of Stage II drilling was completed.

WASHINGTON COUNTY

Courtois Area - In DMEA Project #4582

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DIVISION OF MINERAL
TECHNOLOGY

JAN 14 1959

BUREAU OF MINES
JOPLIN, MO.

Week Ended December 8, 1958

2 churn drills setting casing.

Week Ended December 15, 1958

1 churn drill setting casing.

Week Ended December 22, 1958

1 diamond drill operating and 1 churn drill setting casing completed 1 blank hole.

58VC272, stake C179, a blank hole, is located about 7,000 feet west-southwest of Courtois and 520 feet southeast of a pay hole. It bottomed at 715 feet depth in Lamotte sand. Bonneterre lithology was normal for the area but the 7 reef rock was bright, fresh, and unaltered appearing.

Week Ended December 29, 1958

1 diamond drill operating completed 1 trace hole.

58VC275, stake C180, a speck trace hole, is located 7,000 feet west of Courtois and 520 feet northeast of a pay hole. It bottomed at 765 feet depth in Lamotte sand. A few scattered speck traces of lead were present in the 1, 5, and 10 zones.

Period Ended January 1, 1959

1 diamond drill operating completed 1 pay hole.

58VC277, stake C181, a pay hole, is located about 4,000 feet west of Courtois and 520 feet west of a pay hole. It bottomed at 547 feet depth in granite which extends up about 55 feet into the Bonneterre horizon. Mineralization in the middle of the 7 zone was estimated as 2.8 feet of 8.0% Pb.

This hole completes the drilling in this DMEA Project.

3d cy. OME Washington

RECEIVED
DIVISION OF MINERAL TECHNOLOGY
DEC 11 1958
BUREAU OF MINES
JOPLIN, MO.

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

Budget Bureau No. 42-R1036.5

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION

OPERATOR'S MONTHLY REPORT AND VOUCHER

Month of November, 1958 Docket No. DMEA 4582 Contract No. Idm-E 1068

Operator's Name St. Joseph Lead Company Minerals Pb - Zn - Cu

Address Bonne Terre, Missouri

Contract Amount, $ 298,560.00 Government Participation 50 % Amount, $ 149,280.00

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	5367.96	254505.24	259873.20	✓	✓	✓
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	26.00	858.00	884.00	✓	✓	✓
Payroll Taxes						
Liability Insurance						
(8) Contingencies (specify):						
TOTALS	5393.96	255363.24	260757.20	✓	✓	✓

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

Date 12-9-58 *Payee St. Joseph Lead Company

Per E. Jones Title DIVISION MANAGER

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

$ See Doc MF-104 Revised 6/15/59

Signature _____ (Authorized Certifying Officer)

Date _____ Vou. No. _____ (See other side)

*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)

(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. Tdm E-1068 in accordance with the terms of the contract.

Signature Henry H. Amos Title Geologist-USGS Date Dec. 17, 1958

APPROVAL BY DMEA EXECUTIVE OFFICER OR ALTERNATE:

Signature Clinton C. Knox Title Executive Officer Date June 22, 1959

MONTHLY REPORT OF OPERATOR

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

Form MF-104A
(April 1952)

Budget Bureau No. 42-R1151.2

RECEIVED
DIVISION OF MINERAL TECHNOLOGY
DEC 11 1958
BUREAU OF MINES
JOPLIN, MO.

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION

OPERATOR'S UNIT COST AND PROGRESS REPORT

Month of November 1958 Docket No. DMEA 4582 Contract No. Idm-E 1068
Operator's Name St. Joseph Lead Company Minerals Pb - Zn - Cu
Address Donne Terre, Missouri

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	Ft.	4946.16	2228	202783.68	91344	$2.22)		
Churn	Ft.	421.80	190	57089.52	25716	2.22)	133420	$2.22
Auger								
Stripping								
Trenching								
Test Pits								
Roads and Trails								
Analytical Determinations	Ea.	26.00	26	884.00	884	1.00	2370	1.00
TOTAL DISTRIBUTED COSTS		5393.96		260757.20				TOTAL COSTS AUTHORIZED BY CONTRACT
Operating Equipment Purchased								
Initial Rehabilitation and Repairs								
New Buildings, Improvements, etc								
TOTAL COSTS		5393.96		260757.20				

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

Date 12-9-58 Operator St. Joseph Lead Company

Per E. A. Jones Title Mgr.

E. A. JONES

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)

CCR. 12/17/58

INSTRUCTIONS

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

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

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

GPO 872894

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TECHNOLOGY

DEC 11 1958

BUREAU OF MINES
JOPLIN, MO.

MONTHLY REPORT FOR MONTH OF NOVEMBER, 1958

D.M.E.A. Project #4582 - Contract #IDM-E 1068

Three Stage II locations, approved by the DMEA field team as of November 11, 1958, have been assigned numbers as shown on the map. The Stage II stake numbers and locations are as follows:

Stake No.	Stage No.	Location
VC179	II	520' N70°E of Stake #VC159
VC180	II	520' S50°E of Stake #VC159
VC181	II	520' S10°W of Stake #VC135

Three churn drills were operating in the area at the end of the month. The holes in progress were as follows:

Stage No.	Stake No.	Feet Depth
II	VC179	150
II	VC180	90
II	VC181	40

The following churn drill hole was completed through overburden and chert-bearing formations and cased preparatory to diamond drilling during the month:

Stage No.	Stake No.	Feet Depth	Starting Date
II	VC175	190	9-23-58

No diamond drills were operating in the area at the end of the month.

The following diamond drill holes were completed during the month:

Stage No.	Stake No.	Prospect Hole No.	Bottom Depth	Feet of Dia. Drilling	Date Completed	Class.
II	VC160	58VC253	770	455	11- 6-58	Trace
II	VC163	58VC251	475	318	11- 5-58	Trace
II	VC165	58VC254	485	370	11-10-58	Sp. Trace
II	VC174	58VC250	665	550	11- 4-58	Pay
II	VC175	58VC256	725	535	11-12-58	Trace

Analysis of results gained by drilling is shown in abstracts of our weekly reports to St. Joseph Lead Company, which are enclosed.

26 analytical determinations were made during the month as follows:

58VC253	7 Pb	7 Cu
58VC250	9 Pb	1 Cu
58VC256	2 Pb	

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DIVISION OF MINERAL
TECHNOLOGY

DEC 11 1958

BUREAU OF MINES
JOPLIN, MO.

WASHINGTON COUNTY

Courtois Area - In DMEA Project #4582

Week Ended November 10, 1958

2 diamond drills operating completed 1 pay and 2 trace holes for a total of 3 holes.

58VC250, stake C174, a pay hole, is located about 2500 feet northeast of Courtois and 520 feet northwest of an indicative hole. It bottomed at 665 feet depth in Lamotte sand. Mineralization in the middle and lower part of the 5 zone was estimated as 11.5 feet of 15.3% Pb at 449 feet depth, 4.2 feet of 2.0% Pb at 465 feet depth, and 12.9 feet of 16.2% Pb at 484 feet depth.

58VC251, stake C163, a speck trace hole, is located about 4500 feet west of Courtois and 520 feet southwest of a pay hole. It bottomed at 475 feet depth in granite which extends up to about the middle of the Bonneterre formation. A few speck traces of lead were present in the 1 zone. This hole is too high up on the flank of the granite ridge for mineralization.

58VC253, stake C160, a trace hole, is located about 8,000 feet west-northwest of Courtois and 1400 feet northwest of a pay hole. It bottomed at 770 feet depth in granite which extends up about 40 feet into the Bonneterre horizon. Mineralization was estimated as 0.2 foot of 2.5% Pb at 633 feet depth and 1.5 feet of 1.0% Pb at 636 feet depth in the brown spotted 5 zone. Several short sections of chalcopyrite were present about 30 feet below this. While not an ore hole, this hole is encouraging as it extends the underlying granite ridge structure another 1/4 mile farther to the west and shows continued mineralization on its flank.

Week Ended November 17, 1958

2 diamond drills operating and 2 churn drills setting casing completed 2 trace holes.

58VC254, stake C165, a speck trace hole, is located about 4,000 feet west of Courtois and 520 feet southwest of a pay hole. It bottomed at 485 feet depth in 14 feet of granite which extended up to the upper part of the 7 zone. A few speck traces of lead were present near the base of the 1 zone at 386 feet depth. This hole is located too high on the flank of the buried granite ridge which appears to have a steep north flank.

58VC256, stake C175, a trace hole, is located about 3500 feet east of Courtois and 900 feet northeast of a pay hole. It bottomed at 725 feet depth in Lamotte sand. Mineralization in the brown spotted 5 zone was estimated as 1.4 feet of 2.5% Pb at 534 feet depth and 1.4 feet of 1.0% Pb at 541 feet depth.

Week Ended November 24, 1958

2 churn drills setting casing.

Week Ended December 1, 1958

3 churn drills setting casing.

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

Budget Bureau No. 42-R1036.5

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

RECEIVED DEC 12 1958

Month of October, 1958 Docket No. DMEA 4592 Contract No. Idm-B 1068
Operator's Name St. Joseph Lead Company Minerals Pb - Zn - Cu
Address Donne Terre, Missouri
Contract Amount, $ 298,660.00 Government Participation: 50 % Amount, $ 149,280.00

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	17509.14	236996.10	254505.24	✓	✓	✓
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	62.00	796.00	858.00	✓	✓	✓
Payroll Taxes						
Liability Insurance						
(8) Contingencies (specify):						
TOTALS	17571.14	237792.10	255363.24	✓	✓	✓

RECEIVED DIVISION OF MINERAL TECHNOLOGY NOV 17 1958 BUREAU OF MINES JOPLIN, MO.

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

Date 11-14-58 *Payee St. Joseph Lead Company

Per E. J. Jones Title Division Engineer

*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:

CCK 11/24/58

$ 8,785.57

Signature
(Authorized Certifying Officer)

Date 12-3-58 Vou. No. 4-15

(See other side)

(For Government use only)

CERTIFICATION BY GOVERNMENT REPRESENTATIVE:

I certify that to the best of my knowledge and belief the contractor submitting this voucher is operating a Defense Minerals Exploration Administration project under Contract No. Idm-E 1068 in accordance with the terms of the contract.

Signature Henry H. Amos Title Geologist-USGS Date Nov. 18, 1958

APPROVAL BY DMEA EXECUTIVE OFFICER OR ALTERNATE:

Signature Clinton C. Knox Title Executive Officer Date Nov. 24, 1958

MONTHLY REPORT OF OPERATOR

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

Form MF-10-A
(April 1952)

Budget Bureau No. 42-R1151.2

RECEIVED DEC 12 1958 O.M.E.

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

Month of October 195 8 Docket No. DMEA 4502 Contract No. IGm-R 1068
Operator's Name St. Joseph Lead Company Minerals Pb - Zn - Cu
Address Bonne Terre, Missouri

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	Ft.	15306.90	6893	197837.52	89116	02.22		
Churn	Ft.	2202.24	992	56667.72	25526	2.22	138420	02.22
Auger								
Stripping								
Trenching								
Test Pits								
Roads and Trails								
Analytical Determinations	Ea.	62.00	62	058.00	850	1.00	2370	1.00
TOTAL DISTRIBUTED COSTS		17671.14		255303.24				TOTAL COSTS AUTHORIZED BY CONTRACT
Operating Equipment Purchased								
Initial Rehabilitation and Repairs								
New Buildings, Improvements, etc.								
TOTAL COSTS		17571.14		255363.24				

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

Date 11-14-58 Operator St. Joseph Lead Company

Per E. A. Jones Title DIVISION MANAGER

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)

RECEIVED
DIVISION OF MINERAL TECHNOLOGY
NOV 17 1958
BUREAU OF MINES
JOPLIN, MO.

(For Government use only)

C.C.K.
11/24/58

INSTRUCTIONS

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

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

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

GPO 872894

MONTHLY REPORT FOR MONTH OF OCTOBER, 1958

D.M.E.A. Project #4582 - Contract #IDM-E 1068

One churn drill was operating in the area at the end of the month. The hole in progress was Stage II, Stake No. VC-175 at a depth of 140 feet.

The following churn drill holes were completed through overburden and chert-bearing formations and cased preparatory to diamond drilling during the month:

Stage No.	Stake No.	Feet Depth	Starting Date
II	VC-161	160	9-26-58
II	VC-162	100	10- 1-58
II	VC-163	157	9-16-58
II	VC-164	270	9-24-58
II	VC-165	115	9-28-58
II	VC-172	125	9-23-58
II	VC-178	65	9-23-58

Three diamond drills were operating in the area at the end of the month. The holes in progress were as follows:

Stage No.	Stake No.	Feet Depth
II	VC-160	400
II	VC-174	500
II	VC-163	400

The following diamond drill holes were completed during the month:

Stage No.	Stake No.	Prospect Hole No.	Bottom Depth	Feet of Dia. Drilling	Date Completed	Class.
II	VC-159	58VC239	761	546	10-22-58	Pay
II	VC-166	58VC244	745	575	10-27-58	Pay
II	VC-167	58VC238	665	575	10-17-58	Speck Trace
II	VC-173	58VC243	695	520	10-24-58	Trace
II	VC-176	58VC233	665	530	10- 2-58	Trace
II	VC-177	58VC235	705	550	10- 9-58	Trace
II	VC-161	58VC241	650	490	10-22-58	Pay
II	VC-162	58VC240	635	535	10-21-58	Speck Trace
II	VC-164	58VC247	717	447	10-31-58	Pay
II	VC-172	58VC246	645	520	10-31-58	Blank
II	VC-178	58VC248	605	540	10-31-58	Pay
II	VC-169	58VC231	525	525	10- 1-58	Trace
II	VC-168	58VC234	542	542	10- 2-58	Trace

Analysis of results gained by drilling is shown in abstracts of our weekly reports to St. Joseph Lead Company, which are enclosed.

62 analytical determinations were made during the month as follows:

58VC239	159	6 Pb		1 Cu
58VC244	166	9 Pb	1 Zn	3 Cu
58VC233	176	2 Pb		
58VC241	161	11 Pb		1 Cu
58VC247	164	15 Pb		1 Cu
58VC246	174	2 Pb		2 Cu
58VC248	176	6 Pb		
58VC231	169	1 Pb		1Cu

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TECHNOLOGY
NOV 17 1958
BUREAU OF MINES
JOPLIN, MO.

WASHINGTON COUNTY

Courtois Area - In DMEA Project #4582

Week Ended October 6, 1958

3 diamond drills operating and 5 churn drills setting casing completed 3 trace holes.

58VC231, stake C169, a speck trace hole, is located about 700 feet north-northeast of the Courtois post office and 520 feet southwest of a pay hole. It bottomed at 525 feet depth in Lamotte sand. A few speck traces of lead were present in the 1 zone and at the base of the main 7 reef.

58VC234, stake C168, a speck trace hole, is located 520 feet northwest of the above hole. It bottomed at 542 feet depth in Lamotte sand. A few speck traces of lead were present at the top and bottom of the 7 reef.

58VC233, stake C176, a trace hole, is located about 3500 feet northeast of the village of Courtois and 900 feet southeast of an indicative hole. It bottomed at 665 feet depth in Lamotte sand. Trace lead in the lower 5 zone was estimated as 0.7 foot of 1.0% Pb at 496 feet depth and 0.4 foot of 1.0% Pb at 500 feet depth.

Week Ended October 13, 1958

1 diamond drill operating and 1 churn drill setting casing completed 1 trace hole.

58VC235, stake C177, a speck trace hole, is located about 3500 feet northeast of the village of Courtois and 520 feet northwest of a good trace hole. It bottomed at 705 feet depth in Lamotte sand. Speck traces of lead were present in the brown-spotted 5 zone and at the base of the main 7 zone reef.

Week Ended October 20, 1958

1 diamond drill operating completed 1 trace hole.

58VC238, stake C167, a speck trace hole, is located about 1500 feet north-northwest of the village of Courtois and 1100 feet west of an indicative hole. It bottomed at 665 feet depth in Lamotte sand. Speck traces of lead were present at 565 feet depth in the 7/10 zone. A 70-foot reef section is located in the 7 zone.

Week Ended October 27, 1958

3 diamond drills operating and 1 churn drill setting casing completed 2 pay and 2 trace holes for a total of 4 holes.

58VC241, stake C161, a pay hole, is located about 3500 feet west of the village of Courtois and 520 feet southeast of a pay hole. It bottomed at 650 feet depth in granite cobble conglomerate which is located in the 10 zone. Mineralization in the middle of the 7 zone is estimated as 7.8 feet of 3.2% Pb at 580 feet depth.

58VC239, stake C159, a pay hole, is located in the western edge of the project area, about 8,000 feet west of the village of Courtois and 2,000 feet southwest of a pay hole. It bottomed at 761 feet depth in Lamotte sand. Mineralization was estimated as 8.2 feet of 4.1% Pb at 653 feet depth in the middle of the 7 zone reef, 4.8 feet of 3.6% Pb at 707 feet depth at the base of the 7/10 zone, and 1.7 feet of 0.5% Cu at 704 feet depth. This hole extends the mineralization in this area considerable distance westward and apparently it will continue into the eastern part of the Czar Knob DMEA Project area.

WASHINGTON COUNTY - Courtois Area - In DMEA Project #4582 (Continued)

Week Ended October 27, 1958 (Continued)

58VC240, stake C162, a speck trace hole, is located about 1500 feet southeast of the village of Courtois and 520 feet east of a high grade pay hole. It bottomed at 635 feet depth in Lamotte sand. Speck traces of lead were present at 403 feet depth in the 1 zone and at 488 feet depth in the lower 5 zone. Lack of mineralization in this hole points up the necessity for close drilling in this area.

58VC243, stake C173, a speck trace hole, is located about 1500 feet northeast of the village of Courtois and 520 feet east-northeast of a high-grade pay hole. It bottomed at 695 feet depth in Lamotte sand. Speck traces of lead were present in the lower 5 and upper 7 zones.

Week Ended November 3, 1958

3 diamond drills operating and 1 churn drill setting casing completed 3 pay and 1 blank hole for a total of 4 holes.

58VC244, stake C166, a pay hole, is located about 3,000 feet west of Courtois and 520 feet northeast of a pay hole. It bottomed at 745 feet depth in 31 feet of Lamotte sand. Mineralization at the 5/7 contact was estimated as 19.5 feet of 6.1% Pb at 577 feet depth.

58VC247, stake C164, a pay hole, is located about 4500 feet west of Courtois and 520 feet northwest of a pay hole. It bottomed at 717 feet depth in granite which was encountered in the sandy transition zone of the Bonneterre. Mineralization in the middle 7 zone was estimated as 17.1 feet of 2.7% Pb at 598 feet depth.

58VC248, stake C178, a pay hole, is located about 4,000 feet northeast of Courtois and 520 feet southwest of a pay hole. It bottomed at 605 feet depth in Lamotte sand. Mineralization in the lower 5 zone was estimated as 4.7 feet of 10.0% Pb.

58VC246, stake C172, a blank hole, is located about 1500 feet northeast of Courtois and 520 feet north-northeast of a pay hole. It bottomed at 645 feet depth in Lamotte sand. Lower portion of the Bonneterre showed considerable leaching and brecciation.

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BUREAU OF MINES
JOPLIN, MO.

2d cy - OME Op. Com.

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

RECEIVED NOV 14 1958 O.M.E.

Budget Bureau No. 42-R1036.5

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

Month of September, 1958 Docket No. DMEA 4582 Contract No. Idm-E 1068

Operator's Name St. Joseph Lead Company Minerals Pb - Zn - Cu

Address Bonne Terre, Missouri

Contract Amount, $ 298,560.00 Government Participation: 50 % Amount, $ 149,280.00

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	7847.70	229148.40	236996.10	✓	✓	✓
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	36.00	760.00	796.00	✓	✓	✓
Payroll Taxes						
Liability Insurance						
(8) Contingencies (specify):						
TOTALS	7883.70	229908.40	237792.10	✓	✓	✓

RECEIVED DIVISION OF MINERAL TECHNOLOGY OCT 15 1958 BUREAU OF MINES JOPLIN, MO.

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

Date 10-13-58 *Payee St. Joseph Lead Company

Per [signature] Title ASST. DIVISION MANAGER

*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:

$ 3,941.85

Signature (Authorized Certifying Officer)

Date Nov. 6, 1958 Vou. No. 4-14

(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-E1068 in accordance with the terms of the contract.

Signature Henry H. Amos Title Geologist-USGS Date Oct. 31, 1958

APPROVAL BY DMEA EXECUTIVE OFFICER OR ALTERNATE:

Signature Clinton C. Knox Title Executive Officer Date Nov. 3, 1958

MONTHLY REPORT OF OPERATOR

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

Form MF-104A
(April 1962)

2d cy

Budget Bureau No. 42-R1151.2

RECEIVED
NOV 14 1958
O.M.E.

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

Month of September 1958 Docket No. DMEA 4582 Contract No. Idm-E 1068
Operator's Name St. Joseph Lead Company Minerals Pb - Zn - Cu
Address Bonne Terre, Missouri

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	Ft.	4806.30	2165	182530.62	82221	$2.22)		
Churn	Ft.	3041.40	1370	54465.48	24534	2.22)	133420	$2.22
Auger								
Stripping								
Trenching								
Test Pits								
Roads and Trails								
Analytical Determinations	Ea.	36.00	36	796.00	796	1.00	2370	1.00
TOTAL DISTRIBUTED COSTS		7883.70		237792.10				TOTAL COSTS AUTHORIZED BY CONTRACT
Operating Equipment Purchased								
Initial Rehabilitation and Repairs								
New Buildings, Improvements, etc.								
TOTAL COSTS		7883.70		237792.10				

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 10-13-58 Operator St. Joseph Lead Company

Per L. W. Casteel Title ASST. DIVISION MANAGER

L. W. CASTEEL

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)

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DIVISION OF MINERAL TECHNOLOGY
OCT 15 1958
BUREAU OF MINES
JOPLIN, MO.

(For Government use only)

GCH
10/30/58

INSTRUCTIONS

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

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

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

GPO 872894

MONTHLY REPORT FOR MONTH OF SEPTEMBER, 1958

D.M.E.A. Project #4582 - Contract #IDM-E 1068

Twenty Stage II locations, approved by the DMEA field team as of September 4, 1958, have been assigned numbers as shown on the map. The Stage II stake numbers and locations are as follows:

Stake No.	Location	
VC-159	1560' N65°W of VC-142	NW¼ SW¼ NE¼, Sec. 12, T35N, R2W
VC-160	2080' N75°W of VC-144	SW¼ SW¼ SE¼, Sec. 1, T35N, R2W
VC-161	520' S35°E of VC-135	SW¼ NE¼ NW¼, Sec. 7, T35N, R2W
VC-162	520' N80°E of VC-146	NW¼ SE¼ NW¼, Sec. 8, T35N, R2W
VC-163	520' S35°E of 56W158	SW¼ NW¼ NW¼, Sec. 7, T35N, R2W
VC-164	520' N55°W of VC-135	NE¼ NW¼ NW¼, Sec. 7, T35N, R2W
VC-165	520' S65°W of VC-135	SE¼ NW¼ NW¼, Sec. 7, T35N, R2W
VC-166	520' S80°W of VC-133	SE¼ NE¼ NW¼, Sec. 7, T35N, R2W
VC-167	1040' West of VC-150	SE¼ SE¼ SE¼, Sec. 6, T35N, R2W
VC-168	400' N35°E of 56W118	NW¼ NW¼ NW¼, Sec. 8, T35N, R2W
VC-169	520' East of 56W118	NW¼ NW¼ NW¼, Sec. 8, T35N, R2W
VC-170	520' S10°W of VC-147	SE¼ NW¼ NW¼, Sec. 8, T35N, R2W
VC-171	520' West of VC-146	NW¼ SW¼ NW¼, Sec. 8, T35N, R2W
VC-172	520' S50°E of VC-150	SE¼ SW¼ SW¼, Sec. 5, T35N, R2W
VC-173	520' S15°W of VC-44	NW¼ NE¼ NW¼, Sec. 8, T35N, R2W
VC-174	520' S15°W of VC-151	SE¼ SE¼ SW¼, Sec. 5, T35N, R2W
VC-175	900' S75°E of 57VC62	SE¼ NW¼ NE¼, Sec. 8, T35N, R2W
VC-176	900' S75°E of VC-149	NW¼ NW¼ NE¼, Sec. 8, T35N, R2W
VC-177	520' N65°E of VC-151	NW¼ SW¼ SE¼, Sec. 5, T35N, R2W
VC-178	520' N75°E of VC-152	SW¼ NW¼ SE¼, Sec. 5, T35N, R2W

Seven churn drills were operating in the area at the end of the month. The holes in progress were as follows:

Stage No.	Stake No.	Feet Depth
II	VC-164	130
II	VC-175	70
II	VC-163	140
II	VC-172	100
II	VC-165	20
II	VC-178	10
II	VC-161	80

The following churn drill holes were completed through overburden and chert-bearing formations and cased preparatory to diamond drilling during the month:

Stage No.	Stake No.	Feet Depth	Starting Date
II	VC-159	215	9-18-58
II	VC-160	315	9-12-58
II	VC-166	170	9-24-58
II	VC-167	90	9-18-58
II	VC-173	175	9-12-58
II	VC-174	115	9-16-58
II	VC-176	135	9- 8-58
II	VC-177	155	9-18-58

Two diamond drills were operating in the area at the end of the month. The holes in progress were as follows:

Stage No.	Stake No.	Feet Depth
II	VC-169	505
II	VC-176	451

The following diamond drill holes were completed during the month:

Stage No.	Stake No.	Prospect Hole No.	Bottom Depth	Feet of Dia. Drilling	Date Completed	Class.
II	VC-171	58VC227	525	525	9-23-58	Trace
II	VC-170	58VC229	532	532	9-25-58	Pay
II	VC-158	58VC218	791	556	9- 3-58	Trace
II	VC-157	58VC217	655	552	9- 2-58	Pay

Analysis of results gained by drilling is shown in abstracts of our weekly reports to St. Joseph Lead Company, which are enclosed.

36 analytical determinations were made during the month as follows:

58VC217 157	8 Pb	4 Cu
58VC218 158	1 Pb	
58VC229 170	12 Pb	10 Cu
58VC227 171	1 Pb	

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OCT 15 1958

BUREAU OF MINES
JOPLIN, MO.

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DIVISION OF MINERAL TECHNOLOGY
OCT 15 1958
BUREAU OF MINES
JOPLIN, MO.

WASHINGTON COUNTY

Courtois Area - In DMEA Project #4582

Week Ended September 8, 1958

2 diamond drills operating completed 1 pay and 1 trace hole.

58VC217, stake C157, a pay hole, is located about 6500 feet northeast of the village of Courtois and 900 feet east of 57VC157, a pay hole. It bottomed at 655 feet depth in Lamotte sandstone. Mineralization in the lower 5 zone was estimated as 10.3 feet of 5.7% Pb at 490 feet depth and 7.6 feet of 1.3% Pb at 499 feet depth. This is the farthest northeast ore hole in the area and lead is in the same horizon as lead in the pay hole to the west.

58VC218, stake C158, a trace hole, is located 1500 feet northwest of the above hole and 900 feet north of 57VC157, a pay hole. It bottomed at 791 feet depth in Lamotte sand. Mineralization in the upper part of the 7 zone was estimated as 1.0 feet of 1.5% Pb. This hole is on the north or down-dropped side of the fault zone which crosses the north end of the Courtois area in an east-west direction. Formation elevations are about 70 feet lower than in hole 900 feet south.

This completes the number of holes estimated in Stage II of this contract. As there is about 14,000 feet of allowed footage remaining in this stage, the DMEA field team has approved locations for an additional 20 holes to be drilled and work will begin on these in the near future.

Week Ended September 15, 1958

2 churn drills setting casing.

Week Ended September 22, 1958

7 churn drills setting casing.

Week Ended September 29, 1958

2 diamond drills operating and 8 churn drills setting casing completed 1 pay and 1 trace hole.

58VC229, stake C170, a pay hole, is located about 700 feet northeast of the Courtois post office and 520 feet south of a pay hole. It bottomed at 532 feet depth in Lamotte sand. Mineralization in the lower 5 zone was estimated as 17.6 feet of 5.1% Pb at 373 feet depth and 13.8 feet of 2.3% Cu at 377 feet depth.

58VC227, stake C171, a trace hole, is located about 300 feet south of the Courtois post office and 520 feet west of a pay hole. It bottomed at 525 feet depth in Lamotte sand. Trace mineralization was present in the lower 5 zone, best of which was estimated as 1.1 feet of 4.0% Pb at 379 feet depth.

Period Ended September 30, 1958

3 diamond drills operating and 5 churn drills setting casing completed no holes.

3 cy - DMEA Washington

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

Budget Bureau No. 42-R1036.5

RECEIVED OCT 20 1958

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

Month of August 1958 Docket No. DMEA 4582 Contract No. Idm-E 1068

Operator's Name St. Joseph Lead Company Minerals Pb - Zn - Cu

Address Bonne Terre, Missouri

Contract Amount, $ 298,560.00 Government Participation: 50% Amount, $ 149,280.00

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	20721.48	208426.92	220148.40	✓	✓	✓
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	154.00	606.00	760.00	✓	✓	✓
Payroll Taxes						
Liability Insurance						
(8) Contingencies (specify):						
TOTALS	20875.48	209032.92	229908.40	✓	✓	✓

RECEIVED DIVISION OF MINERAL TECHNOLOGY SEP 15 1958 BUREAU OF MINES JOPLIN, MO.

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

Date 9-12-58 *Payee St. Joseph Lead Company

Per C. B. Jones Title MINE MANAGER

*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:

$10,437.74

Signature (Authorized Certifying Officer)

Date Oct. 14, 1958 Vou. No. 4-11

(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-E1068 in accordance with the terms of the contract.

Signature Henry H. Amos Title Geologist-USGS Date Oct. 1, 1958

APPROVAL BY DMEA EXECUTIVE OFFICER OR ALTERNATE:

Signature Clinton C. Knox Title Executive Officer Date Oct. 6, 1958

MONTHLY REPORT OF OPERATOR

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

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

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

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

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

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

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

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

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

Form MF-104A
(April 1952)

Budget Bureau No. 42-R1151.2

UNITED STATES
DEPARTMENT OF THE INTERIOR

DEFENSE MINERALS EXPLORATION ADMINISTRATION

OPERATOR'S UNIT COST AND PROGRESS REPORT

Month of August 195 8 Docket No. DMEA 4582 Contract No. Idm-E 1068

Operator's Name St. Joseph Lead Company Minerals Pb - Zn - Cu

Address Bonne Terre, Missouri

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	Ft.	19660.32	8856	177724.32	80056	$2.22		
Churn	Ft.	1061.16	478	51424.08	23164	2.22	133420	$2.22
Auger								
Stripping								
Trenching								
Test Pits								
Roads and Trails								
Analytical Determinations	Ea.	154.00	154	760.00	760	1.00	2370	1.00
TOTAL DISTRIBUTED COSTS		20875.48		229908.40				TOTAL COSTS AUTHORIZED BY CONTRACT
Operating Equipment Purchased								
Initial Rehabilitation and Repairs								
New Buildings, Improvements, etc.								
TOTAL COSTS		20875.48		229908.40				

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

Date 9-12-58 Operator St. Joseph Lead Company

Per E. Jones 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.

REMARKS:

(Instructions on reverse)

(For Government use only)

RECEIVED
DIVISION OF MINERAL TECHNOLOGY
SEP 15 1958
BUREAU OF MINES
JOPLIN, MO.

CCK 9/30/58

INSTRUCTIONS

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

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

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

GPO 872894

RECEIVED
DIVISION OF MINERAL
TECHNOLOGY
SEP 15 1958
BUREAU OF MINES
JOPLIN, MO.

MONTH[illegible] REPORT FOR MONTH OF AUGUST, 19[illegible]

D.M.E.A. Project #4582 - Contract #IDM-E 1068

[illegible]urn drills were operating in the area at the end of the month.

The following churn drill holes were completed through overburden and chert-bearing formations and cased preparatory to diamond drilling during the month:

Stage No.	Stake No.	Feet Depth	Starting Date
II	VC-153	140	7-28-58
II	VC-157	103	8- 4-58
II	VC-158	235	7-21-58

Two diamond drills were operating in the area at the end of the month. The holes in progress were Stage II, Stake No. VC-158 at a depth of 485 feet and Stage II, Stake No. VC-157 at a depth of 624 feet.

The following diamond drill holes were completed during the month:

Stage No.	Stake No.	Prospect Hole No.	Bottom Depth	Feet of Dia. Drilling	Completed	Class.
II	VC-138	58VC179	595	595	8- 1-58	Blank
II	VC-146	58VC185	525	525	8- 6-58	Pay
II	VC-149	58VC192	675	510	8-11-58	Indicative
II	VC-148	58VC198	715	515	8-15-58	Pay
II	VC-147	58VC203	665	535	8-21-58	Pay
II	VC-151	58VC216	578	578	8-28-58	Blank
II	VC-141	58VC211	755	545	8-26-58	Blank
II	VC-134	58VC180	632	512	8- 1-58	Trace
II	VC-135	58VC187	574	454	8- 6-58	Pay
II	VC-128	58VC193	635	514	8-12-58	Pay
II	VC-150	58VC200	432	432	8-18-58	Indicative
I	VC-103	58VC206	715	590	8-22-58	Indicative
II	VC-155	58VC212	675	483	8-27-58	Speck Trace
II	VC-154	58VC188	703	548	8- 8-58	Indicative
II	VC-152	58VC195	685	510	8-13-58	Indicative
II	VC-153	58VC201	665	525	8-19-58	Pay
II	VC-156	58VC208	640	485	8-25-58	Trace

Analysis of results gained by drilling is shown in abstracts of our weekly reports to St. Joseph Lead Company, which are enclosed.

154 analytical determinations were made during the month as follows:

58VC179	138	1 Pb		1 Cu	58VC200	150	6 Pb			1 Cu
58VC185	146	12 Pb	4 Zn	6 Cu	58VC206	103	4 Pb			
58VC192	149	8 Pb		4 Cu	58VC188	154	7 Pb	1 Zn		
58VC198	148	5 Pb	2 Zn	1 Cu	58VC195	154	2 Pb			
58VC203	147	15 Pb	9 Zn	6 Cu	58VC201	153	10 Pb			
58VC180	134	3 Pb		2 Cu	58VC208	156	3 Pb			
58VC187	135	15 Pb		5 Cu	58VC212	155	1 Pb			1 Cu
58VC193	128	11 Pb		8 Cu						

WASHINGTON COUNTY

Courtois Area - In DMEA Project #4582

Period Ended August 4, 1958

3 diamond drills operating and 2 churn drills setting casing completed 1 trace and 1 blank hole.

58VC180, stake C134, a trace hole, is located 520 feet east of 57VC68. It bottomed at 632 feet depth in 8 feet of granite which extends up about to the top of the sandy transition zone. Good trace mineralization in the middle of the 7 reef zone was estimated as 1.3 feet of 2.0% Pb at 501 feet depth and 2.1 feet of 2.0% Pb at 515 feet depth.

58VC179, stake C138, a blank hole, is located 900 feet southeast of Hole 58VC181. It bottomed at 595 feet depth in Lamotte sand. It showed a good 7 reef section underlain by 12 crepe rock.

Week Ended August 11, 1958

3 diamond drills operating completed 1 pay and 1 indicative hole.

58VC185, stake C146, a pay hole, is located about 700 feet east-southeast of the Courtois post office and, on 520-foot spacing, midway between 2 good trace holes. It bottomed at 525 feet depth in Lamotte sand. Mineralization in the lower 5 zone was estimated as 23.7 feet of 18.1% Pb at 363 feet depth and 9.2 feet of 2.0% Cu at 370 feet depth. This hole is in line with the general trend of ore running through the Courtois area in a northeasterly direction.

58VC188, stake C154, an indicative hole, is located about 5,000 feet northeast of the village of Courtois and 900 feet southeast of a pay hole. It bottomed at 703 feet depth in Lamotte sand. Mineralization in the upper 7 zone was estimated as 6.4 feet of 1.3% Pb.

Week Ended August 18, 1958

3 diamond drills operating completed 3 pay, 1 indicative, and 1 trace hole for a total of 5 holes.

58VC187, stake C135, a pay hole, is located about 4,000 feet west of the village of Courtois and 520 feet west of an indicative hole. It bottomed at 574 feet depth in granite which extends up about 30 feet into the Bonneterre horizon. Mineralization in the 7 and 7/10 zones assayed 0.2 foot of 4.5% Pb at 462 feet depth, 9.6 feet of 3.2% Pb at 483 feet depth, 1.2 feet of 1.4% Pb at 496 feet depth and 4.2 feet of 1.2% Pb at 506 feet depth.

58VC193, stake C128, an indicative hole, is located about 1500 feet northwest of the village of Courtois and 520 feet north-northeast of a pay hole. It bottomed at 635 feet depth in Lamotte sand. Mineralization in the upper part of the 7 reef zone was estimated as 0.8 feet of 1.5% Pb at 495 feet depth, 3.6 feet of 3.3% Pb at 501 feet depth and 0.3 foot of 1.0% Pb at 508 feet depth.

58VC198, stake C148, a pay hole, is located about 1500 feet northeast of the village of Courtois and 900 feet northeast of a trace hole. It bottomed at 715 feet depth in Lamotte sand. Mineralization in the lower 5 zone was estimated as 7.1 feet of 3.3% Pb.

Week Ended August 18, 1958 (Continued)

58VC192, stake C149, a pay hole, is located 900 feet northeast of the above hole. It bottomed at 675 feet depth in Lamotte sand. Mineralization in the lower 5 zone was estimated as 8.0 feet of 2.5% Pb at 512 feet depth, 2.1 feet of 2.5% Pb at 520 feet depth and 1.6 feet of 2.5% Pb at 528 feet depth.

58VC195, stake C152, a trace hole, is located 4,000 feet northeast of the village of Courtois and 900 feet southwest of a pay hole. It bottomed at 685 feet depth in Lamotte sand. Mineralization at the top of the 7 reef zone was estimated as 3.4 feet of 2.1% Pb at 576 feet depth.

Week Ended August 25, 1958

3 diamond drills operating completed 2 pay, 1 indicative, and 1 trace hole for a total of 4 holes.

58VC203, stake C147, a pay hole, is located about 1,000 feet northeast of the village of Courtois and 1200 feet north of a pay hole. It bottomed at 665 feet depth in Lamotte sand. Mineralization in the lower 5 zone was estimated as 20.2 feet of 9.2% Pb at 474 feet depth and 20.4 feet of 3.0% Zn at 489 feet depth.

58VC201, stake C153, a pay hole, is located about 4500 feet northeast of the village of Courtois and 900 feet south of a pay hole. It bottomed at 665 feet depth in Lamotte sand. Considerable scattered mineralization was present in the lower 5 and upper 7 zones, best of which was estimated as 8.3 feet of 1.6% Pb at 471 feet depth, 2.2 feet of 2.0% Pb at 496 feet depth, 0.4 foot of 2.0% Pb at 505 feet depth and 6.4 feet of 3.2% Pb at 535 feet depth.

58VC206, stake C103, an indicative hole, is located about 5,000 feet north-northeast of the village of Courtois and 1500 feet northwest of a pay hole. It bottomed at 715 feet depth in Lamotte sand. Mineralization at the base of the 5 zone was estimated as 5.4 feet of 1.8% Pb. This hole shows a northwest extension of the mineralization along the northeast termination of an underlying granite ridge.

58VC200, stake C150, a trace hole, is located about 2,000 feet north-northeast of the village of Courtois and 900 feet north of 58VC203 described above. It bottomed at 432 feet depth in granite which extends up about 40 feet into the Bonneterre horizon. Considerable trace mineralization was present from 363 to 420 feet depth in the 7 and 7/10 zones, best of which was estimated as 7.2 feet of 1.1% Pb at 370 feet depth.

Period Ended August 31, 1958

4 diamond drills operating completed 2 trace and 2 blank holes for a total of 4 holes.

58VC216, stake C151, a blank hole, is located about 3,000 feet northeast of the village of Courtois and 1800 feet southwest of a pay hole. It bottomed at 578 feet depth in Lamotte sand. Bonneterre lithology was normal for the area.

58VC212, stake C155, a speck trace hole, is located 2400 feet northeast of the above hole and 900 feet southwest of a pay hole. It bottomed at 675 feet depth in Lamotte sand. Speck traces of lead were present in the lower 5 zone.

58VC208, stake C156, a trace hole, is located 900 feet east of the above hole and 900 feet southeast of a pay hole. It bottomed at 640 feet depth in Lamotte sand. Mineralization near the top and bottom of the 7 reef zone was estimated as 4.2 feet of 1.4% Pb at 491 feet depth and 1.3 feet of 2.0% Pb at 525 feet depth.

58VC211, stake C141, a blank hole, is located about 8,000 feet southwest of the village of Courtois and in the western edge of the project area. It bottomed at 755 feet depth in Lamotte sand. Bonneterre section showed a 90-foot 7 reef zone underlain by oolite and 12 crepe rock and with no sign of mineralization.

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

Budget Bureau No. 42-R1036.5

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION

RECEIVED SEP 22 1958 - DMEA Washington

OPERATOR'S MONTHLY REPORT AND VOUCHER

Month of July, 1958 Docket No. DMEA 4582 Contract No. Idm-E 1068
Operator's Name St. Joseph Lead Company Minerals Pb - Zn - Cu
Address Bonne Terre, Missouri
Contract Amount, $ 298,560.00 Government Participation: 50 % Amount, $ 149,280.00

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	21471.84	186955.08	208426.92	✓	✓	✓
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	31.00	575.00	606.00	✓	✓	✓
Payroll Taxes						
Liability Insurance						
(8) Contingencies (specify):						
TOTALS	21502.84	187530.08	209032.92	✓	✓	✓

RECEIVED DIVISION OF MINERAL TECHNOLOGY AUG 18 1958 BUREAU OF MINES JOPLIN, MO.

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

Date 8-14-58 *Payee St. Joseph Lead Company

Per E. B. Jones Title DIVISION MANAGER

*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:

$ 10,751.42

Signature
(Authorized Certifying Officer)

Date Sept. 15, 1958 Vou. No. 4-10

(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. Tdm-E1068 in accordance with the terms of the contract.

Signature Chauncey H. Cannon Title Geologist-USGS Date Sept. 3, 1958

APPROVAL BY DMEA EXECUTIVE OFFICER OR ALTERNATE:

Signature Clinton C. Knox Title Executive Officer Date Sept. 4, 1958

MONTHLY REPORT OF OPERATOR

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

Form MF-104A
(April 1952)

Budget Bureau No. 42-R1151.2

UNITED STATES
DEPARTMENT OF THE INTERIOR

DEFENSE MINERALS EXPLORATION ADMINISTRATION

OPERATOR'S UNIT COST AND PROGRESS REPORT

RECEIVED SEP 22 1958

Month of July 195 8 Docket No. DMEA 4582 Contract No. Id-E 1038
Operator's Name St. Joseph Lead Company Minerals Pb - Zn - Cu
Address Bonne Terre, Missouri

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	Ft.	15808.62	7121	158034.00	71200	$2.22		
Churn	Ft.	5653.22	2551	60332.92	22660	2.22	153420	$2.22
Auger								
Stripping								
Trenching								
Test Pits								
Roads and Trails								
Analytical Determinations	Ea.	31.00	31	606.00	606	1.00	2370	1.00
TOTAL DISTRIBUTED COSTS		21502.64		209032.92				TOTAL COSTS AUTHORIZED BY CONTRACT
Operating Equipment Purchased								
Initial Rehabilitation and Repairs								
New Buildings, Improvements, etc.								
TOTAL COSTS		21502.64		209032.92				

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

Date 8-14-58 Operator St. Joseph Lead Company

Per E. L. Jones Title DIVISION MANAGER

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)

RECEIVED
DIVISION OF MINERAL TECHNOLOGY
AUG 18 1958
BUREAU OF MINES
JOPLIN, MO.

(For Government use only)

C.C.H. 8/28/58

INSTRUCTIONS

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

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

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

GPO 872894

MONTHLY REPORT FOR MONTH OF JULY, 1958

D.M.E.A. Project #4582 - Contract #IDM-E 1068

Two churn drills were operating in the area at the end of the month. The holes in progress were as follows:

Stage No.	Stake No.	Feet Depth
II	158	190
II	153	25

The following churn drill holes were completed through overburden and chert-bearing formations and cased preparatory to diamond drilling during the month.

Stage No.	Stake No.	Feet Depth	Starting Date
I	VC-103	125	7-25-58
II	VC-139	202	6-13-58
II	VC-141	210	7- 8-58
II	VC-142	200	6-23-58
II	VC-144	290	6-11-58
II	VC-145	352	6- 3-58
II	VC-147	130	7-14-58
II	VC-148	200	7- 3-58
II	VC-149	165	7- 1-58
II	VC-152	175	6-28-58
II	VC-154	155	7-10-58
II	VC-155	192	7-10-58
II	VC-156	155	7-14-58

Three diamond drills were operating in the area at the end of the month. The holes in progress were as follows:

Stage No.	Stake No.	Feet Depth
II	VC-138	555
II	VC-134	523
II	VC-154	Setting up

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JOPLIN, MO.

The following diamond drill holes were completed during the month:

Stage No.	Stake No.	Prospect Hole No.	Bottom Depth	Feet of Dia. Drilling	Completed	Class.
II	VC-143	58VC160	475	360	7-10-58	Sp. Trace
II	VC-144	58VC164	751	461	7-15-58	Pay
II	VC-142	58VC169	745	545	7-22-58	Sp. Trace
II	VC-136	58VC177	741	538	7-29-58	Blank
II	VC-130	58VC156	718	493	7- 1-58	Sp. Trace
II	VC-131	58VC159	665	545	7-10-58	" "
II	VC-129	58VC162	665	520	7-14-58	Trace
II	VC-127	58VC166	725	510	7-18-58	"
II	VC-132	58VC171	685	545	7-24-58	"
II	VC-133	58VC176	709	504	7-29-58	"
II	VC-145	58VC165	864	512	7-16-58	"
II	VC-139	58VC168	715	513	7-22-58	Blank
II	VC-140	58VC173	669	519	7-28-58	Trace
II	VC-137	58VC181	691	556	7-29-58	Blank

Analysis of results gained by drilling is shown in abstracts of our weekly reports to St. Joseph Lead Company, which are enclosed.

31 analytical determinations were made during the month as follows:

58VC164 144	15 Pb	8 Cu
58VC162 129	1 Pb	
58VC166 127	1 Pb	
58VC171 134	2 Pb	
58VC165 145	1 Pb	1 Cu
58VC173 140	1 Pb	1 Cu

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BUREAU OF MINES
JOPLIN, MO.

WASHINGTON COUNTY

Courtois Area - Da BMRA Project #4582

Week Ended July 7, 1958

1 diamond drill operating and 6 churn drills setting casing completed 1 trace hole.

58VC156, stake #C130, a speck trace hole, is located about 1300 feet west of the village of Courtois and 520 feet southeast of a pay hole. It bottomed at 718 feet depth in Lamotte sand. Speck traces of lead were present in the lower 5 zone at 524 feet depth.

Week Ended July 14, 1958

2 diamond drills operating and 6 churn drills setting casing completed 2 trace holes.

58VC159, stake #C131, a speck trace hole, is located about 2,000 feet west of the village of Courtois and 520 feet south-southeast of a pay hole. It bottomed at 645 feet depth in Lamotte sand. A few speck traces of lead were present at 546 feet depth in the 7 zone.

58VC160, stake #C143, a speck trace hole, is located about 6,000 feet west of the village of Courtois and 900 feet west of a trace hole. It bottomed at 475 feet depth in red granite which extends up into the lower part of the 5 zone. A few speck traces of lead were present at 353 feet depth, 12 feet below the Davis shale.

Week Ended July 21, 1958

3 diamond drills operating and 6 churn drills setting casing completed 1 pay and 3 trace holes for a total of 4 holes.

58VC164, stake #C144, a pay hole, is located about 6,000 feet west-northwest of the village of Courtois and 1,000 feet west of a trace hole which bottomed in high granite. This week's hole shows good lead and some copper mineralization in the 7 reef zone with estimates of 9.8 feet of 4.6% Pb at 663 feet depth and 2.4 feet of 4.0% Pb at 682 feet depth. It bottomed at 751 feet depth in granite which extends about 15 feet up into the Bonneterre horizon. This hole opens up the possibility of a considerable increase in ore tonnage for this area as it is located about 3,000 feet west of previously known ore and is the first hole drilled on the northwest flank of a granite high.

58VC165, stake #C145, a speck trace hole, is located 900 feet northeast of the above hole. It bottomed at 864 feet depth in Lamotte sand. Considerable reef rock was present in the 7 zone but much mottled crepe rock in and below the reef zone is indicative of basin conditions to the north. Speck traces of seam lead were located in the 1 zone, 30 feet below the Davis shale.

58VC162, stake #C129, a trace hole, is located about 1,000 feet west-northwest of the village of Courtois and 520 feet northeast of a pay hole. It bottomed at 665 feet depth in Lamotte sand. Lead assaying 1.2 feet of 1.1% Pb is located at 551 feet depth in the 7 reef zone.

58VC166, stake #C127, a weak trace hole, is located about 900 feet west of the above hole and 520 feet northwest of a pay hole. It bottomed at 725 feet depth in Lamotte sand. Mineralization in the 7 reef zone was estimated as 0.5 feet of 1.0% Pb.

Week Ended July 28, 1958

3 diamond drills operating and 6 churn drills setting casing completed 2 trace and 1 blank hole for a total of 3 holes.

58VC168, stake #C139, a blank hole, is located about 5500 feet northwest of the village of Courtois and 900 feet northeast of a speck trace hole. It bottomed at 715 feet depth in Lamotte sand. 7 zone showed about 45 feet of reef rock but lower portion of the Bonneterre consisted of much 12 crepe rock and included 46 feet of limestone indicating basin conditions to the north.

58VC169, stake #C142, a speck trace hole, is located about 6500 feet west-southwest of the village of Courtois and 1300 feet west-northwest of a trace hole. It bottomed at 745 feet depth in Lamotte sand. Bonneterre formation showed normal 7-10-12 zones and slight amounts of lead mineralization were present at 505 feet depth in the 1-5 transition zone and at 688 feet depth in the 10-12 zone.

58VC171, stake #C138, a trace hole, is located about 2,000 feet west of the village of Courtois and 520 feet southwest of a pay hole. It bottomed at 685 feet depth in Lamotte sand. Mineralization near the base of the 7 reef was estimated as 0.7 feet of 2.5% Pb at 606 feet depth and 0.6 foot of 1.5% Pb at 610 feet depth.

Period Ended July 31, 1958

3 diamond drills operating and 2 churn drills setting casing completed 3 trace and 3 blank holes.

58VC176, stake #C133, a speck trace hole, is located about 2500 feet west-northwest of the village of Courtois and 900 feet east-southeast of 57VC68, an indicative hole. It bottomed at 709 feet depth in Lamotte sand. Considerable 12 crepe rock was present in the lower Bonneterre. Speck traces of lead were present at the top of the 5 zone and in the middle of the 7 reef zone.

58VC177, stake #C136, a blank hole, is located 900 feet northwest of 57VC68. It bottomed at 741 feet depth in Lamotte sand. Bonneterre section showed a good 7 reef zone and 12 crepe rock below.

58VC181, stake #C137, a blank hole, is located 1350 feet northeast of 57VC68. It bottomed at 691 feet depth in Lamotte sand. A thick 7 reef section was present and lower portion of Bonneterre consisted of 12 crepe rock.

58VC173, stake #C140, a speck trace hole, is located about 4500 feet northwest of the village of Courtois and 1500 feet northeast of a blank hole. It is the farthest north hole drilled to date in this part of the area. It bottomed at 669 feet depth in Lamotte sand. 70 feet of reef was present in the 7 zone underlain by 60 feet of crepey shaly limestone. Speck traces of lead were present in a short 12 zone below the limestone at the base of the Bonneterre. This hole is a basin type hole and, in conjunction with other recent holes, indicates a rather large basin area lying to the north.

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

Budget Bureau No. 42-R1036.5

DMEA Washington

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

RECEIVED AUG 4 1958 D.M.E.A.

Month of June, 1958 Docket No. DMEA 4566 Contract No. Idm-8 1068
Operator's Name St. Joseph Lead Company Minerals Pb - Zn - Cu
Address Bonne Terre, Missouri
Contract Amount, $ 298,560.00 Government Participation: 50 % Amount, $ 149,280.00

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	8649.12	178305.96	186955.08			
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	32.00	543.00	575.00			
Payroll Taxes						
Liability Insurance						
(8) Contingencies (specify):						
TOTALS	8681.12	178848.96	187530.08			

RECEIVED DIVISION OF MINERAL TECHNOLOGY JUL 16 1958 BUREAU OF MINES JOPLIN, MO.

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

Date 7-15-58 *Payee St. Joseph Lead Company

Per E. Jones Title Personnel Coordinator

*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:

$4,340.56

Signature
(Authorized Certifying Officer)

Date July 28, 1958 Vou. No. 4-05
(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. Idn: E1068 in accordance with the terms of the contract.

Signature John W. Chester Title Mining Engineer Date July 21, 1958

APPROVAL BY DMEA EXECUTIVE OFFICER OR ALTERNATE:

Signature Robert U. King Title Acting Executive Officer Date July 21 1958

MONTHLY REPORT OF OPERATOR

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

Form MF-104A
(April 1952)

Budget Bureau No. 42-R1151.2

RECEIVED AUG 4 1958 D.M.E.A.

UNITED STATES
DEPARTMENT OF THE INTERIOR

DEFENSE MINERALS EXPLORATION ADMINISTRATION

OPERATOR'S UNIT COST AND PROGRESS REPORT

Month of June 1958 Docket No. DMEA 6832 Contract No. Idn-8 1068

Operator's Name St. Joseph Lead Company Minerals Pb - Zn - Cu

Address Bonne Terre, Missouri

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	Ft.	5709.76	2608	142255.35	64079	(2.22)		
Churn	Ft.	2859.36	1288	44699.70	20136	2.22	133420	2.22
Auger								
Stripping								
Trenching								
Test Pits								
Roads and Trails								
Analytical Determinations	Ea.	32.00	32	575.00	575	1.00	2870	1.00
TOTAL DISTRIBUTED COSTS		8681.12		187530.08				TOTAL COSTS AUTHORIZED BY CONTRACT
Operating Equipment Purchased								
Initial Rehabilitation and Repairs								
New Buildings, Improvements, etc.								
TOTAL COSTS		8681.12		187530.08				

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

Date 7-15-58 Operator St. Joseph Lead Company

Per E. L. Jones 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.

(Instructions on reverse)

REMARKS:

(For Government use only)

RECEIVED
DIVISION OF MINERAL TECHNOLOGY

JUL 16 1958

BUREAU OF MINES
JOPLIN, MO.

INSTRUCTIONS

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

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

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

GPO 872894

DIVISION OF MINERAL
TECHNOLOGY

JUL 16 1958

BUREAU OF MINES
JOPLIN, MO.

MONTHLY REPORT FOR MONTH OF JUNE, 1958

D.M.E.A. Project #4582 - Contract #IDM-E 1068

Five churn drills were operating in the area at the end of the month. The holes in progress were as follows:

Stage No.	Stake No.	Feet Depth
II	VC-144	225
II	VC-142	140
II	VC-145	225
II	VC-149	15
II	VC-152	15

The following churn drill holes were completed through overburden and chert-bearing formations and cased preparatory to diamond drilling during the month:

Stage No.	Stake No.	Feet Depth	Starting Date
II	VC-127	215	5-27-58
II	VC-129	145	5-15-58
II	VC-133	205	5-19-58
II	VC-135	120	5-28-58
II	VC-136	203	5-29-58
II	VC-137	135	5-28-58
II	VC-140	150	6-12-58
II	VC-143	115	6-13-58

One diamond drill was operating in the area at the end of the month. The hole in progress was Stage II, Stake No. VC-130 at a depth of 610 feet.

The following diamond drill holes were completed during the month:

Stage No.	Stake No.	Prospect Hole No.	Bottom Depth	Feet of Dia. Drilling	Date Completed	Class.
II	VC-118	58VC128	588	503	6- 4-58	Ind.
II	VC-121	58VC135	694	554	6-10-58	Trace
II	VC-124	58VC141	585	525	6-16-58	Ind.
II	VC-126	58VC146	721	491	6-19-58	Trace
II	VC-93	58VC152	645	535	6-26-58	Trace

Analysis of results gained by drilling is shown in abstracts of our weekly reports to St. Joseph Lead Company which are enclosed.

32 analytical determinations were made during the month as follows:

58VC128	118	6 Pb		
58VC135	121	2 Pb		
58VC141	124	6 Pb	1 Zn	
58VC146	126	4 Pb	1 Zn	
58VC152	93	9 Pb	2 Zn	1 Cu

RECEIVED
DIVISION OF MINERAL
TECHNOLOGY
JUL 18 1958
BUREAU OF MINES
ROLLA, MO.

WASHINGTON COUNTY

Courtois Area - In DMEA Project #4582

Week Ended June 9, 1958

1 diamond drill operating and 5 churn drills setting casing completed 2 trace holes.

58VC123, stake #C105, a trace hole, is located about 7500 feet southwest of the village of Courtois and 520 feet northeast of a pay hole. It bottomed at 595 feet depth in dark rhyolite porphyry which extends up into the base of the 12 zone. Trace lead mineralization was present in the 7 zone at 489 and 506 feet depths and in the 12 zone at 578 feet depth.

58VC128, stake #C118, a strong trace hole, is located 900 feet northeast of the above hole and 520 feet west of a good trace hole. It bottomed at 588 feet depth in dark rhyolite porphyry which extends up into the middle of the 12 zone. Considerable mineralization was present in the lower 5, 7 and 7/10 zones, best of which was estimated as 5.9 feet of 1.0% Pb at 468 feet depth, 0.7 feet of 4.0% Pb at 475 feet depth, 0.2 feet of 2.0% Pb at 503 feet depth, and 0.2 feet of 1.0% Pb at 531 feet depth.

The above holes are located on the northwest flank of a buried porphyry ridge which is quite heavily mineralized on the opposite, or southeast flank.

Week Ended June 16, 1958

1 diamond drill operating and 5 churn drills setting casing completed 1 trace hole.

58VC135, stake #C121, a weak trace hole, is located about 7,000 feet southwest of the village of Courtois and 900 feet northeast of a pay hole. It bottomed at 694 feet depth in dark rhyolite porphyry which extends up to about the top of the Lamotte sand horizon. Traces of lead, estimated as 0.2 foot of 2.0% Pb were located at 435 feet depth, 15 feet below the Davis shale and an estimate of 0.4 feet of 1.5% Pb was made at 593 feet depth in the 7/10 zone.

Week Ended June 23, 1958

1 diamond drill operating and 5 churn drills setting casing completed 1 indicative and 1 trace hole.

58VC141, stake #C124, an indicative hole, is located about 6,000 feet south of the village of Courtois and 520 feet east of an indicative hole. It bottomed at 585 feet depth in Lamotte sand. Mineralization in the lower 5 zone was estimated as 2.2 feet of 4.5% Pb and 1.0% Zn at 429 feet depth.

58VC146, stake #C126, a trace hole, is located 2,000 feet northeast of the above hole and 520 feet east of a pay hole. It bottomed at 721 feet depth in Lamotte sand. Mineralization was estimated as 0.3 feet of 1.0% Pb at 519 feet depth in the 1 zone, 0.6 feet of 1.0% Pb at 566 feet depth and 0.8 feet of 1.0% Pb at 578 feet depth, both in the lower 5 zone. This hole apparently is located in the eastern edge of the main Courtois ore run.

WASHINGTON COUNTY - Courtois Area - In DMEA Project #4582 (Continued)

Week Ended June 30, 1958

1 diamond drill operating and 6 churn drills setting casing completed 1 indicative hole.

58VC152, stake #C93, an indicative hole, is located about 2300 feet south of the village of Courtois and 520 feet north of a pay hole. It bottomed at 645 feet depth in Lamotte sand. Trace lead mineralization was present in the lower 5, 7, and 7/10 zones with an indicative run estimated as 3.0 feet of 3.7% Pb at 482 feet depth in lower 5 zone reef rock.

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

Washington

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION

Budget Bureau No. 42-R1036.5

RECEIVED JUL 18 1958 DMEA

OPERATOR'S MONTHLY REPORT AND VOUCHER

Month of May, 1958 Docket No. DMEA 4582 Contract No. Idm-E 1068
Operator's Name St. Joseph Lead Company Minerals Pb - Zn - Cu
Address Bonne Terre, Missouri
Contract Amount, $ 298,560.00 Government Participation: 50 % Amount, $ 149,280.00

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	16940.82	161365.14	178305.96			
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	82.00	461.00	543.00			
Payroll Taxes						
Liability Insurance						
(8) Contingencies (specify):						
TOTALS	17022.82	161826.14	178848.96			

RECEIVED DIVISION OF MINERAL TECHNOLOGY JUN 16 1958 BUREAU OF MINES JOPLIN, MO.

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

Date 6-13-58 *Payee St. Joseph Lead Company

Per E. Jones Title DIVISION MANAGER

*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:

$ 8,511.41

Signature
(Authorized Certifying Officer)

Date July 10, 1958 Vou. No. 4-03
(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-E1068 in accordance with the terms of the contract.

Signature Henry H. Amos Title Geologist USGS Date June 20, 1958

APPROVAL BY DMEA EXECUTIVE OFFICER OR ALTERNATE:

Signature Clinton C. Knox Title Executive Officer Date July 2, 1958

MONTHLY REPORT OF OPERATOR

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

Form MF-104A
(April 1952)

Budget Bureau No. 42-R1151.2

RECEIVED JUL 18 1958 D.M.E.A.

UNITED STATES
DEPARTMENT OF THE INTERIOR

DEFENSE MINERALS EXPLORATION ADMINISTRATION

OPERATOR'S UNIT COST AND PROGRESS REPORT

Month of May 1958, Docket No. DMEA 4582, Contract No. Idm-E 1068

Operator's Name St. Joseph Lead Company, Minerals Pb - Zn - Cu

Address Bonne Terre, Missouri

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	Ft.	12787.20	5760	136465.62	61471	$2.22		
Churn	Ft.	4153.62	1871	41840.34	18847	2.22	133420	2.22
Auger								
Stripping								
Trenching								
Test Pits								
Roads and Trails								
Analytical Determinations	Ea.	82.00	82	543.00	543	1.00	2370	1.00
TOTAL DISTRIBUTED COSTS		17022.82		178848.96				TOTAL COSTS AUTHORIZED BY CONTRACT
Operating Equipment Purchased								
Initial Rehabilitation and Repairs								
New Buildings, Improvements, etc.								
TOTAL COSTS		17022.82		178848.96				

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

Date 6-13-58 Operator St. Joseph Lead Company

Per E. Jones Title DIVISION MANAGER

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)

RECEIVED DIVISION OF MINERAL TECHNOLOGY JUN 16 1958 BUREAU OF MINES JOPLIN, MO.

INSTRUCTIONS

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

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

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

GPO 872894

RECEIVED
DIVISION OF MINERAL TECHNOLOGY
JUN 16 1958
BUREAU OF MINES
JOPLIN, MO.

MONTHLY REPORT FOR MONTH OF MAY, 1958

D.M.E.A. Project #4582 -- Contract #IDM-E 1068

Eighteen Stage II locations, approved by the D.M.E.A. field team as of May 8, 1958, have been assigned numbers as shown on the map. The Stage II stake numbers and locations are as follows:

Stake	C141 -	1500	feet	S60°W	of 56W160 -	NW¼	SW¼	SE¼ -	Sec.	12 - 35N 2W
"	C142 -	1200	"	N18°W	of 56W160 -	SW¼	SE¼	NE¼ -	"	12 - 35N 2W
"	C143 -	1150	"	S43°W	of 56W158 -	SE¼	NE¼	NE¼ -	"	12 - 35N 2W
"	C144 -	975	"	N85°W	of 56W158 -	NE¼	NE¼	NE¼ -	"	12 - 35N 2W
"	C145 -	850	"	N22°W	of 56W158 -	SW¼	SW¼	SW¼ -	"	6 - 35N 1W
"	C146 -	520	"	N30°E	of VC58 -	NE¼	SW¼	NW¼ -	"	8 - 35N 1W
"	C147 -	900	"	S45°W	of VC44 -	NE¼	NW¼	NW¼ -	"	8 - 35N 1W
"	C148 -	900	"	S15°E	of VC44 -	NW¼	NE¼	NW¼ -	"	8 - 35N 1W
"	C149 -	900	"	S75°E	of VC44 -	SE¼	SE¼	SW¼ -	"	5 - 35N 1W
"	C150 -	900	"	N75°W	of VC44 -	SE¼	SW¼	SW¼ -	"	5 - 35N 1W
"	C151 -	900	"	N45°E	of VC44 -	NE¼	SE¼	SW¼ -	"	5 - 35N 1W
"	C152 -	900	"	S45°W	of VC55 -	SW¼	NW¼	SE¼ -	"	5 - 35N 1W
"	C153 -	900	"	S15°E	of VC55 -	SE¼	NW¼	SE¼ -	"	5 - 35N 1W
"	C154 -	900	"	S75°E	of VC55 -	NW¼	NE¼	SE¼ -	"	5 - 35N 1W
"	C155 -	900	"	N15°W	of VC55 -	SE¼	SW¼	NE¼ -	"	5 - 35N 1W
"	C156 -	900	"	N45°E	of VC55 -	SW¼	SE¼	NE¼ -	"	5 - 35N 1W
"	C157 -	900	"	S75°E	of VC65 -	NE¼	SE¼	NE¼ -	"	5 - 35N 1W
"	C158 -	900	"	N15°W	of VC65 -	NE¼	NW¼	NE¼ -	"	5 - 35N 1W

Five churn drills were operating in the area at the end of the month. The holes in progress were as follows:

Stage No.	Stake No.	Feet Depth
II	VC-127	100
II	VC-129	75
II	VC-137	15
II	VC-135	100
II	VC-136	40

The following churn drill holes were completed through overburden and chert-bearing formations and cased preparatory to diamond drilling during the month:

Stage No.	Stake No.	Feet Depth	Starting Date
II	VC-105	80	4-17-58
II	VC-111	135	5- 2-58
II	VC-113	200	4-11-58
II	VC-115	155	4-25-58
II	VC-118	85	5- 2-58
II	VC-120	120	4-24-58
II	VC-121	140	4-22-58
II	VC-126	230	4-30-58
II	VC-128	121	5-15-58
II	VC-130	225	5- 6-58
II	VC-131	120	5- 9-58
II	VC-132	140	5-15-58
II	VC-134	120	5-21-58

One diamond drill was operating in the area at the end of the month. The hole in progress was Stage II, Stake No. VC-118, at a depth of 100 feet.

The following diamond drill holes were completed during the month:

Stage No.	Stake No.	Prospect Hole No.	Bottom Depth	Feet of Dia. Drilling	Date Completed	Class.
II	VC-116	58VC96	745	545	5-6-58	Trace
II	VC-113	58VC101	697	497	5-8-58	Indicative
II	VC-115	58VC105	695	540	5-14-58	Trace
II	VC-111	58VC109	621	486	5-19-58	Indicative
II	VC-~~128~~ 104	58VC117	755	555	5-27-58	Trace
II	VC-105	58VC123	595	515	5-29-58	Sp. Trace
II	VC-122	58VC95	515	515	5- 5-58	Trace
II	VC-117	58VC99	575	525	5- 7-58	Pay
II	VC-120	58VC102	672	552	5-12-58	Pay
II	VC-125	58VC106	535	535	5-15-58	Pay
II	VC-123	58VC111	505	505	5-20-58	Pay

Analysis of results gained by drilling is shown in abstracts of our weekly reports to St. Joseph Lead Company, which are enclosed.

82 analytical determinations were made during the month as follows:

58VC96	116	1 Pb		
58VC95	122	3 Pb		
58VC99	117	18 Pb	2 Zn	
58VC101	113	12 Pb	2 Zn	
58VC102	120	8 Pb	2 Zn	1 Cu
58VC105	115	2 Pb	1 Zn	
58VC106	125	10 Pb	2 Zn	2 Cu
58VC109	111	8 Pb	1 Zn	
58VC111	123	5 Pb	1 Zn	
58VC123	105	1 Pb		

WASHINGTON COUNTY

Courtois Area - In DMEA Project #4582

Week Ended May 5, 1958

2 diamond drills operating and 5 churn drills setting casing completed no holes.

Week Ended May 12, 1958

2 diamond drills operating and 5 churn drills setting casing completed 1 pay and 3 trace holes.

58VC99, stake #C117, a pay hole, is located 7500 feet southeast of the village of Courtois and is part of an east-west section on 520-foot spacing across a buried Precambrian ridge. It bottomed at 575 feet depth in Lamotte sand. Lead and zinc mineralization, estimated as 12.6 feet of 3.6% Pb at 398 feet depth, is located in the lower 5 zone.

58VC95, stake #C122, a trace hole, is located 1,000 feet north-northeast of the above hole. It bottomed at 515 feet depth in Lamotte sand. Trace lead, assaying 3.9 feet of 1.0% Pb at 383 feet depth, is located in the lower 5 zone. Speck traces of lead are present in the 7 and 7/10 zones.

58VC96, stake #C116, a trace hole, is located near the southern edge of the project area, 10,000 feet southwest of the village of Courtois, and 520 feet west of a pay hole. It bottomed at 745 feet depth in Lamotte sand. Trace mineralization, estimated as 0.5 feet of 2.0% Pb at 566 feet depth, is located in the lower 5 zone.

58VC101, stake #C113, a trace hole, is located 520 feet northwest of the above hole. It bottomed at 697 feet depth in rhyolite porphyry, overlain by 23 feet of sand and porphyry boulders which are located in the 12 zone. Trace mineralization is located in the lower 5 zone, best of which was estimated as 0.9 foot of 4.0% Pb at 590 feet depth and 1.0 foot of 4.0% Pb at 601 feet depth.

Week Ended May 19, 1958

2 diamond drills operating and 5 churn drills setting casing completed 1 pay, 1 indicative, and 1 trace hole for a total of 3 holes.

58VC106, stake #C125, a pay hole, is located about 1 mile southwest of the village of Courtois and 1,000 feet south-southwest of a pay hole. It bottomed at 535 feet depth in Lamotte sand. Mineralization in the lower 5 zone was estimated as 16.5 feet of 16.7% Pb with traces of copper and zinc at 370 feet depth.

58VC102, stake #C120, an indicative hole, is located near the southern edge of the project area, about 8500 feet southwest of the village of Courtois and 520 feet east of a pay hole. It bottomed at 672 feet depth in Lamotte sand. Lead and zinc mineralization is located in the lower 5 zone, best of which was estimated as 1.6 feet of 5.0% Pb at 446 feet depth.

58VC105, stake #C115, a trace hole, is located 2700 feet southwest of the above hole and 520 feet southeast of an indicative hole. It bottomed at 695 feet depth in Lamotte sand. Best of trace lead in the lower 5 zone was estimated as 1.0 foot of 1.0% Pb at 522 feet depth.

WASHINGTON COUNTY - Courtois Area - In DMRA Project #4582 (continued)

Week Ended May 26, 1958

2 diamond drills operating and 5 churn drills setting casing completed 1 pay and 1 indicative hole.

58VC111, stake #C123, a pay hole, is located about 1 mile south of the village of Courtois and 520 feet west of a pay hole. It bottomed at 505 feet depth in basal conglomerate beds located in the transition sand zone. Mineralization in the lower 5 zone was estimated as 5.3 feet of 6.4% Pb.

58VC109, stake #C111, an indicative hole, is located about 9500 feet southwest of the village of Courtois and 520 feet east and west respectively from 2 pay holes. It bottomed at 621 feet depth in 9 feet of dark rhyolite porphyry which extends about 35 feet up into the Bonneterre horizon. Mineralization in the 7 zone was estimated as 4.0 feet of 1.4% Pb at 516 feet depth, 0.6 foot of 2.0% Pb at 523 feet depth, 3.2 feet of 5.0% Pb at 534 feet depth and 1.6 feet of 1.0% Pb at 540 feet depth.

Week Ended June 2, 1958

1 diamond drill operating and 5 churn drills setting casing completed 1 trace hole.

58VC117, stake #C104, a weak trace hole, is located about 5,000 feet southwest of the village of Courtois and 900 feet north of a pay hole. It bottomed at 755 feet depth in Lamotte sand. Speck traces of lead were present in the 1 zone and in the 7/10 zone. This hole is located on the northwest flank of a buried porphyry ridge and on the opposite flank from the main ore trend in this area.

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION
Box 431
Joplin, Missouri
July 16, 1958

RECEIVED COPY
DMEA
JUL 18 1958
DATE
7/17
CODE
100
800

DMEA Operating Committee
Department of the Interior
Washington 25, D. C.

Re: DMEA-4582(lead-zinc-coppe
St. Joseph Lead Co.
Courtois Area
Washington County, Mo.
Contract Idm-E1068

Dear Sirs:

Forwarded herewith are your two copies of the MF-104 Monthly Voucher, MF-104A and the Operator's Monthly Report covering the May work on the cited project. The voucher data received from the Finance Officer is posted on both MF-104s.

Sincerely yours,

:ID

Robert U. King
Acting Executive Officer
DMEA Field Team, Region IV

encls. 6

cc: DMEA Op.Com.
Amos,USGS,Knoxville
King,USGS,Denver
4582 file

3rd Copy - work

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

Budget Bureau No. 42-R1036.5

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

Month of April, 1958 Docket No. DMEA 4562 Contract No. Idm-E 1068
Operator's Name St. Joseph Lead Company Minerals Pb - Zn - Cu
Address Bonne Terre, Missouri
Contract Amount, $ 200,560.00 Government Participation: 50 % Amount, $ 140,200.00

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	10675.98	150689.16	161365.14			
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	55.00	406.00	461.00			
Payroll Taxes						
Liability Insurance						
(8) Contingencies (specify):						
TOTALS	10730.98	151095.16	161826.14	✓	✓	✓

RECEIVED
DIVISION OF MINERAL TECHNOLOGY
MAY 15 1958
BUREAU OF MINES
JOPLIN, MO.

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

Date 5/14/58 *Payee St. Joseph Lead Company

Per [signature] Title ASST. DIVISION MANAGER

*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:

$ 5,365.49

Signature
(Authorized Certifying Officer)

Date 6/20/58 Vou. No. 4-35

(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-E1068 in accordance with the terms of the contract.

Signature Henry H. Ames Title Geologist-USGS Date June 11, 1958

APPROVAL BY DMEA EXECUTIVE OFFICER OR ALTERNATE:

Signature Clinton C. Kinney Title Executive Officer Date June 16, 1958

MONTHLY REPORT OF OPERATOR

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

Form MF-104A
(April 1962)

3rd
Budget Bureau No. 42-R1151.2

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION

RECEIVED MAY 30 1958 D.M.E.A.

OPERATOR'S UNIT COST AND PROGRESS REPORT

Month of April 195 8 Docket No. DMEA 4592 Contract No. Idm-E 1068
Operator's Name St. Joseph Lead Company Minerals Pb - Zn - Cu
Address Bonne Terre, Missouri

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	Ft.	8877.78	3990	123678.42	55711	$2.22		
Churn	Ft.	1798.20	810	57886.72	16976	2.22	133420	$2.22
Auger								
Stripping								
Trenching								
Test Pits								
Roads and Trails								
Analytical Determinations	Ea	55.00	55	461.00	461	1.00	2570	1.00
TOTAL DISTRIBUTED COSTS		10730.98		161826.14				TOTAL COSTS AUTHORIZED BY CONTRACT
Operating Equipment Purchased								
Initial Rehabilitation and Repairs								
New Buildings, Improvements, etc.								
TOTAL COSTS		10730.98		161826.14				

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

Date 5-14-58 Operator St. Joseph Lead Company

Per [signature] Title ASST. DIVISION MANAGER

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)

RECEIVED
DIVISION OF MINERAL TECHNOLOGY
MAY 15 1958
BUREAU OF MINES
JOPLIN, MO.

CCK
6/16/58

INSTRUCTIONS

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

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

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

GPO 872894

RECEIVED
DIVISION OF MINERAL
TECHNOLOGY

MAY 15 1958

BUREAU OF MINES
JOPLIN, MO.

Monthly Report for Month of April, 1958

D.M.E.A. Project #4582 - Contract #IDM-E 1068

Twenty-one Stage II locations, approved by the DMEA field team as of April 10, 1958, have been assigned numbers as shown on the map. The Stage II stake numbers and locations are as follows:

Stake No.	Location	
C-120	500' East of C-112	NW¼ SW¼ SE¼, Sec. 18, T35N, R1W
C-121	500' East of C-104	SE¼ SE¼ NW¼, Sec. 18, T35N, R1W
C-122	500' West of C-119	SE¼ SW¼ NE¼, Sec. 18, T35N, R1W
C-123	500' East of 57VC57	NW¼ SE¼ NE¼, Sec. 18, T35N, R1W
C-124	600' East of C-119	SW¼ SE¼ NE¼, Sec. 18, T35N, R1W
C-125	500' West of C-77	NE¼ SE¼ NE¼, Sec. 18, T35N, R1W
C-126	500' West of C-102	NW¼ NW¼ NW¼, Sec. 17, T35N, R1W
C-127	520' N45°W of VC35	SE¼ NW¼ NE¼, Sec. 7, T35N, R1W
C-128	520' N15°E of VC35	SW¼ NE¼ NE¼, Sec. 7, T35N, R1W
C-129	520' N75°E of VC35	SW¼ NE¼ NE¼, Sec. 7, T35N, R1W
C-130	520' S45°E of VC35	NW¼ SE¼ NE¼, Sec. 7, T35N, R1W
C-131	520' S15°W of VC35	NE¼ SW¼ NE¼, Sec. 7, T35N, R1W
C-132	520' S75°W of VC35	NE¼ SW¼ NE¼, Sec. 7, T35N, R1W
C-133	520' N45°W of C132	SW¼ NW¼ NE¼, Sec. 7, T35N, R1W
C-134	520' N45°W of C133	NW¼ NW¼ NE¼, Sec. 7, T35N, R1W
C-135	520' S75°W ofVC43	SW¼ NE¼ NW¼, Sec. 7, T35N, R1W
C-136	1040' N45°W of VC43	NW¼ NE¼ NW¼, Sec. 7, T35N, R1W
C-137	1560' N75°E of C136	SW¼ SW¼ SE¼, Sec. 6, T35N, R1W
C-138	1040' N15°E of C127	SE¼ SW¼ SE¼, Sec. 6, T35N, R1W
C-139	1380' N25°W of C136	NE¼ SW¼ SW¼, Sec. 6, T35N, R1W
C-140	1560' N75°E of C139	SE¼ NE¼ SW¼, Sec. 6, T35N, R1W

Five churn drills were operating in the area at the end of the month. The holes in progress were as follows:

Stage No.	Stake No.	Feet Depth
II	VC-115	95
II	VC-113	155
II	VC-105	40
II	VC-126	60
II	VC-121	120

The following churn drill holes were completed through overburden and chert-bearing formations and cased preparatory to diamond drilling during the month:

Stage No.	Stake No.	Feet Depth	Starting Date
II	VC-104	200 ✓	3-11-58
II	VC-110	240 ✓	4- 2-58
II	VC-124	60 ✓	4-21-58
II	VC-93	110 ✓	4-15-58
II	VC-116	200 ✓	4-15-58

Two diamond drills were operating in the area at the end of the month. The holes in progress were Stage II, Stake No. VC-122 at a depth of 100 feet and Stage II, Stake No. VC-116 at a depth of 515 feet.

The following diamond drill holes were completed during the month:

Stage No.	Stake No.	Prospect Hole No.	Bottom Depth	Feet of Dia. Drilling	Date Completed	Class.
II	VC-106	58VC63	529	529	4- 2-58	Trace
II	VC-112	58VC69	611	541	4- 9-58	Pay
II	VC-107	58VC75	656	456	4-14-58	Trace
II	VC-109	58VC81	653	473	4-18-58	Pay
II	VC-108	58VC85	583	478	4-23-58	Ind.
II	VC-110	58VC89	747	507	4-28-58	Pay
II	VC-102	58VC65	695	485	4- 3-58	Pay
II	VC-114	58VC86	655	530	4-24-58	Trace

Analysis of results gained by drilling is shown in abstracts of our weekly reports to St. Joseph Lead Company, which are enclosed.

55 analytical determinations were made during the month as follows:

58VC63	106	1 Pb	
58VC69	114	8 Pb	3 Zn
58VC81	109	11 Pb	
58VC85	108	9 Pb	
58VC89	110	10 Pb	1 Zn
58VC65	102	4 Pb	2 Zn
58VC86	114	4 Pb	2 Zn

Pursuant to the provisions contained in Annex I, we are requesting that an amendment be executed to include in the contract the following listed contiguous lands:

Option Contract #CZ-283

John E. Turnbough and Nettie Turnbough (wife), executed 1-15-58. Option to purchase all underground and mining rights on 175 acres, more or less. Option runs for 1 year and is renewable twice. This is a revised option replacing CZ-75 and includes 24 acres omitted in the original 151-acre option.

Option Contract #CZ-288

Marvin G. Turnbough and Loraine Turnbough (wife), executed 3-6-58. Option to purchase entire rights on 60.5 acres, more or less. Option runs for 1 year.

Copies of option contracts are included and location of lands are shown on the report map.

RECEIVED
DIVISION OF NATURAL
RESOURCES
MAY 14 1958
BUREAU OF MINES
IOWA, MO.

WASHINGTON COUNTY

Courtois Area - In DMEA Project #4582

Week Ended April 7, 1958

2 diamond drills operating and 2 churn drills setting casing completed 1 pay and 1 trace hole.

58VC65, stake #C102, a pay hole, is located about 4500 feet south of the village of Courtois and 520 feet southeast and southwest respectively from 2 pay holes. It bottomed at 695 feet depth in Lamotte sand. Good mineralization was present in the mottled zone at the base of the brown spotted section of the 5 zone. Best of this was estimated as 7.2 feet of 28.0% Pb and 2.0% Zn at 533 feet depth.

58VC63, stake #C106, a trace hole, is located about 8,000 feet southwest of the village of Courtois and 520 feet east of a pay hole. It bottomed at 529 feet depth in rhyolite porphyry which extends about 30 feet up into the Bonneterre horizon. Traces of lead were present in the lower 5 and 7 zones, best of which was estimated as 1.4 feet of 2.0% Pb at 383 feet depth above the lower 5 zone reef.

Week Ended April 14, 1958

1 diamond drill operating and 2 churn drills setting casing completed 1 pay hole.

58VC69, stake #C112, a pay hole, is located in the southern part of the project area, about 8500 feet south-southwest of the village of Courtois and 520 feet north-northeast of a pay hole. It bottomed at 611 feet depth in Lamotte sand. Lead and zinc mineralization is located in the lower part of the 5 zone with estimates of 8.5 feet of 1.1% Pb at 395 feet depth, 10.3 feet of 3.4% Pb at 412 feet depth and 14.0 feet of 3.9% Zn at 415 feet depth.

Week Ended April 21, 1958

1 diamond drill operating and 4 churn drills setting casing completed 1 indicative and 1 trace hole.

58VC81, stake #C109, an indicative hole, is located about 9,000 feet southwest of the village of Courtois and 520 feet north-northeast of a pay hole. It bottomed at 653 feet depth in dark rhyolite porphyry which extends about 10 feet up into the Bonneterre horizon. Lead mineralization, matching that in holes to the southwest and northeast, is present in the 7 zone, best of which was estimated as 6.9 feet of 2.8% Pb.

58VC75, stake #C107, a speck trace hole, is located about 8500 feet southwest of the village of Courtois and 520 feet northwest of the above hole. It bottomed at 655 feet depth in dark rhyolite porphyry which extends about 40 feet up into the Bonneterre horizon. Speck traces of lead were present near the top of the Bonneterre and in the 7 zone. This hole is apparently on the northwest slope of the buried porphyry ridge and on the opposite side from known mineralization.

WASHINGTON COUNTY (Continued)

Courtois Area - In DMEA Project #4582 (Continued)

Week Ended April 28, 1958

2 diamond drills operating and 5 churn drills setting casing completed 1 pay and 1 trace hole.

58VC85, stake #C108, a pay hole, is located about 8,000 feet southwest of the village of Courtois and 520 feet west of a pay hole. It bottomed at 583 feet depth in dark rhyolite porphyry which extends about 50 feet up into the Bonneterre horizon. Lead mineralization near the base of the main 7 zone reef at 504 feet depth was estimated as 9.6 feet of 2.6% Pb. This matches lead in the pay hole to the east.

58VC86, stake #C114, a trace hole, is located 1500 feet southeast of the above hole and 520 feet east and southeast respectively from 2 pay holes. It bottomed at 655 feet depth in Lamotte sand. Lead and zinc mineralization in the lower 5 zone was estimated as 2.2 feet of 1.0% Zn at 454 feet depth, 0.3 foot of 1.0% Zn at 463 feet depth, 1.0 foot of 1.0% Pb at 484 feet depth, and 0.4 foot of 1.0% Pb at 494 feet depth. This mineralization matches ore in the pay holes to the west.

Period Ended April 30, 1958 inclusive

2 diamond drills operating and 5 churn drills setting casing completed 1 pay hole.

58VC89, stake #C110, a pay hole, is located about 9800 feet southwest of the village of Courtois and 520 feet north-northeast of an indicative hole. It bottomed at 747 feet depth in dark rhyolite porphyry which was encountered in the sandy transition zone. Good lead and fair zinc mineralization, estimated as 18.2 feet of 6.5% Pb and 1.0% Zn, is located in the lower part of the top reef in the 7 zone at 665 feet depth.

DMEA - Washington

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

Budget Bureau No. 42-R1036.5

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION

RECEIVED MAY 15

OPERATOR'S MONTHLY REPORT AND VOUCHER

Month of March, 1958 Docket No. DMEA 45[illegible] Contract No. Idm-E 1068
Operator's Name St. Joseph Lead Company Minerals Pb - Zn - Cu
Address Bonne Terre, Missouri
Contract Amount, $ 298,560.00 Government Participation: 50 % Amount, $ 149,280.00

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	5001.66	145687.50	150689.16			
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	54.00	352.00	406.00			
Payroll Taxes						
Liability Insurance						
(8) Contingencies (specify):						
TOTALS	5055.66	146039.50	151095.16			

RECEIVED DIVISION OF MINERAL TECHNOLOGY APR 23 1958 BUREAU OF MINES JOPLIN, MO.

RECEIVED DIVISION OF MINERAL TECHNOLOGY APR 16 1958 BUREAU OF MINES JOPLIN, MO.

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

Date 4-15-58 *Payee St. Joseph Lead Company

Per E. L. Jones Title DIVISION MANAGER

*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:

$ 2,527.83

Signature
(Authorized Certifying Officer)

Date 5-8-58 Vou. No. 4-32

(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-E1068 in accordance with the terms of the contract.

Signature Kenneth H. Ramos Title Geologist-USGS Date Apr. 21, 1958

APPROVAL BY DMEA EXECUTIVE OFFICER OR ALTERNATE:

Signature Clinton C. Knox Title Executive Officer Date May 5, 1958

MONTHLY REPORT OF OPERATOR

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

GPO 872893

Form MF-104A
(April 1952)

Budget Bureau No. 42-R1151.2

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

Month of March 1958 Docket No. DMEA 4582 Contract No. Idm-E 1068
Operator's Name St. Joseph Lead Company Minerals Pb - Zn - Cu
Address Bonne Terre, Missouri

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	Ft.	3514.26	1583	114800.64	61712	$2.22		
Churn	Ft.	1487.40	670	35838.52	16166	2.22	135420	$2.22
Auger								
Stripping								
Trenching								
Test Pits								
Roads and Trails								
Analytical Determinations	Ea.	54.00	54	406.00	406	1.00	2370	1.00
TOTAL DISTRIBUTED COSTS		5055.66		151095.16				TOTAL COSTS AUTHORIZED BY CONTRACT
Operating Equipment Purchased								
Initial Rehabilitation and Repairs								
New Buildings, Improvements, etc.								
TOTAL COSTS		5055.66		151095.16				

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

Date 4-15-58 Operator St. Joseph Lead Company

Per E. A. Jones Title DIVISION MANAGER

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)

RECEIVED
DIVISION OF MINERAL TECHNOLOGY
APR 16 1958
BUREAU OF MINES
JOPLIN, MO.

INSTRUCTIONS

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

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

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

GPO 872894

RECEIVED
DIVISION OF MINERAL
TECHNOLOGY
APR 16 1958
BUREAU OF MINES
JOPLIN, MO.

MONTHLY REPORT FOR MONTH OF MARCH, 1958

D.M.E.A. Project #4582 - Contract #IDM-E 1068

Two churn drills were operating in the area at the end of the month. The holes in progress was Stage II, Stake No. C-110 at a depth of 10 feet and Stage II, Stake No. C-104 at a depth of 50 feet.

The following churn drill holes were completed through overburden and chert-bearing formations and cased preparatory to diamond drilling during the month:

Stage No.	Stake No.	Feet Depth	Starting Date
II	VC-107	200	3-12-58
II	VC-108	105	3-24-58
II	VC-109	180	3- 4-58
II	VC-114	125	2-24-58
II	VC-117	60	2-19-58

Two diamond drills were operating in the area at the end of the month. The holes in progress were Stage II, Stake No. C-106 at a depth of 235 feet and Stage II, Stake No. C-102 at a depth of 275 feet.

The following diamond drill holes were completed during the month:

Stage No.	Stake No.	Prospect Hole No.	Bottom Depth	Feet of Diam. Drilling	Date Completed	Class.
II	VC-119	58VC57	538	538	3- 6-58	Indic.
II	VC-94	58VC54	725	540	3- 3-58	Trace
II	VC-92	58VC58	735	505	3- 7-58	Trace

Analysis of results gained by drilling is shown in abstracts of our weekly reports to St. Joseph Lead Company, which are enclosed.

Included in this report are photostats of Rock Classification and Mineralization sheets and the number of analytical determinations omitted in the previous monthly report.

54 analytical determinations were made during the last two months.

Analytical determinations made during February 1958 are as follows:

✓58VC30	- 98	4 Pb	
✓58VC31	- 78	1 Pb	
✓58VC32	- 97	3 Pb	
✓58VC36	- 77	4 Pb	1 Zn
✓58VC39	- 96	6 Pb	4 Zn
✓58VC43	- 101	5 Pb	3 Zn
✓58VC47	- 99	6 Pb	4 Zn
✓58VC48	- 100	3 Pb	
58VC51	- 95	2 Pb	

Analytical determinations made during March 1958 are as follows:

✓58VC54	- 94	2 Pb	
✓58VC57	- 119	3 Pb	
✓58VC58	- 94	2 Pb	1 Zn

WASHINGTON COUNTY

Courtois Area - In DMEA Project #4582

Week Ended March 10, 1958

2 diamond drills operating and 2 churn drills setting casing completed 1 trace hole.

58VC54, stake #VC94, a trace hole, is located 2500 feet south of the village of Courtois and 520 feet northeast of a pay hole. It bottomed at 725 feet depth in Lamotte sand. Trace lead was present in the lower 5 zone, best of which was estimated as 0.7 foot of 2.0% Pb at 559 feet depth and 0.1 foot of 1.5% Pb at 579 feet depth. This hole is apparently on the east edge of the ore trend.

Period Ended March 31, 1958

2 diamond drills operating and 2 churn drills setting casing completed 2 trace holes.

58VC57, stake #C119, a trace hole, is located about 6,000 feet south-southwest of the village of Courtois and in the general Courtois ore trend. It bottomed at 538 feet depth in Lamotte sand. Mineralization was present in the lower 5 zone above the lower 5 reef, best of which was estimated as 0.4 foot of 15.0% Pb at 379 feet depth and 3.6 feet of 1.5% Pb at 390 feet depth.

58VC58, stake #C92, a trace hole, is located about 2,000 feet south of the village of Courtois and 520 feet south-southeast of a pay hole. It bottomed at 735 feet depth in Lamotte sand. Lead and zinc mineralization was present in the 5 zone above the lower 5 reef, best of which was estimated as 0.4 foot of 3.0% Pb at 578 feet depth and 0.7 foot of 1.0% Pb and 1.9% Zn at 579 feet depth.

2d cy - DMEA Washington

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

Budget Bureau No. 42-R1036.5

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

Month of February, 1958 Docket No. DMEA 4582 Contract No. Idm-E 1068
Operator's Name St. Joseph Lead Company Minerals Pb - Zn - Cu
Address Bonne Terre, Missouri
Contract Amount, $ 298,560.00 Government Participation: 50 % Amount, $ 149,280.00

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	10946.82	134740.68	145687.50			
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		352.00	352.00			
Payroll Taxes						
Liability Insurance						
(8) Contingencies (specify):						
TOTALS	10946.82	135092.68	146039.50	✓	✓	✓

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MAR 11 1958
BUREAU OF MINES
JOPLIN, MO.

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

Date 3-10-58 *Payee St. Joseph Lead Company

Per E. Jones Title DIVISION MANAGER

*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:

$ 5,473.41

Signature
(Authorized Certifying Officer)

Date 4-22-58 Vou. No. 4-31

(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. Tdm-E1068 in accordance with the terms of the contract.

Signature Kenneth H. Cuenos Title Geologist-USGS Date Apr-10, 1958

APPROVAL BY DMEA EXECUTIVE OFFICER OR ALTERNATE:

Signature Clinton C. Knox Title Executive Officer Date April 17, 1958

MONTHLY REPORT OF OPERATOR

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

Form MF-104A
(April 1952)

Budget Bureau No. 42-R1151.2

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

Month of February 195 8 Docket No. DMEA 4582 Contract No. Idm-E 1068
Operator's Name St. Joseph Lead Company Minerals Pb - Zn - Cu
Address Bonne Terre, Missouri

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	Ft.	10425.12	4696	111286.38	50129	2.22)		
Churn	Ft.	521.70	235	34401.12	15496	2.22)	133420	2.22
Auger								
Stripping								
Trenching								
Test Pits								
Roads and Trails								
Analytical Determinations	Ea			352.00	352	1.00	2370	1.00
TOTAL DISTRIBUTED COSTS		10946.82		146039.50				TOTAL COSTS AUTHORIZED BY CONTRACT
Operating Equipment Purchased								
Initial Rehabilitation and Repairs								
New Buildings, Improvements, etc.								
TOTAL COSTS		10946.82		146039.50				

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

Date 3-10-58 Operator St. Joseph Lead Company

Per [signature] Title DIVISION

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)

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BUREAU OF MINES
JOPLIN, MO.

CAK
4/17/58

INSTRUCTIONS

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

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

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

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BUREAU OF MINES
JOPLIN, MO.

MONTHLY REPORT FOR MONTH OF FEBRUARY, 1958

D.M.E.A. Project #4582 - Contract #IDM-E 1068

This report is complete with the exception of photostats of Rock Classification and Mineralization sheets and number of analytical determinations which will be included in the March 1958 monthly project report. This is due to a three week shut-down of operations by St. Joseph Lead Company beginning March 10, 1958.

Only churn drills will continue to operate in the DMEA Project area during the shut-down period.

Significant mineralized holes with incomplete assays have been estimated in this report.

One Stage I location and sixteen Stage II locations, approved by the DMEA field team as of February 6, 1958, have been assigned numbers as shown on the map. The Stage I and Stage II stake numbers and locations are as follows:

Stage I

C103 - 1560 feet N50°W of C55 - SE¼ SE¼ NW¼ - Sec. 5 - 35 N - 1 W

Stage II

C104 -	900	feet	N5°W of C83 -	SW¼	SE¼	NW¼ -	Sec. 18 -	35 N -	1 W
C105 -	520	"	N25°E of C83 -	NE¼	NE¼	SW¼ -	"	"	"	"
C106 -	520	"	N85°E of C83 -	"	"	"	"	"	"	"
C107 -	520	"	N85°E of C48 -	SE¼	NW¼	SW¼ -	"	"	"	"
C108 -	520	"	S85°W of C83 -	SE¼	NE¼	SW¼ -	"	"	"	"
C109 -	900	"	S55°W of C83 -	"	"	"	"	"	"	"
C110 -	520	"	N25°E of C88 -	NW¼	SW¼	SW¼	"	"	"	"
C111 -	520	"	N35°W of C89 -	"	"	"	"	"	"	"
C112 -	520	"	N25°E of C87 -	NE¼	SE¼	SW¼	"	"	"	"
C113 -	520	"	S85°W of C89 -	SW¼	SW¼	SW¼	"	"	"	"
C114 -	520	"	N85°E of C87 -	SE¼	SE¼	SW¼	"	"	"	"
C115 -	490	"	S35°E of C88 -	SW¼	SW¼	SW¼	"	"	"	"
C116 -	520	"	S25°W of C89 -	SE¼	SW¼	SW¼	"	"	"	"
C117 -	520	"	S85°W of C80 -	NW¼	NW¼	SE¼	"	"	"	"
C118 -	1040	"	N35°W of C80 -	SW¼	SW¼	NE¼	"	"	"	"
C119 -	1040	"	N25°E of C80 -	SW¼	SE¼	NE¼	"	"	"	"

Two churn drills were operating in the area at the end of the month. The holes in progress were Stage II, Stake No. C114 at a depth of 70 feet and Stage II, Stake No. C117 at a depth of 15 feet.

The following churn drill holes were completed through overburden and chert-bearing formations and cased preparatory to diamond drilling during the month.

Stage No.	Stake No.	Feet Depth	Starting Date
II	VC-100	165	1-17-58
II	VC-112	70	2-19-58

Two diamond drills were operating in the area at the end of the month. The holes in progress were Stage II, Stake No. C-95 at a depth of 549 feet and Stage II, Stake No. C-94 at a depth of 240 feet.

The following diamond drill holes were completed during the month.

Stage No.	Stake No.	Prospect Hole No.	Bottom Depth	Feet of Dia. Drilling	Date Completed	Class.
II	98	58VC30	607	517	2- 4-58	Pay
II	97	58VC32	605	525	2-10-58	Ind.
II	96	58VC39	763	543	2-14-58	Pay
II	99	58VC47	747	497	2-21-58	Pay(est.)
I	78	58VC31	759	539	2- 3-58	Trace
I	77	58VC36	675	495	2-12-58	Ind.
II	101	58VC43	755	530	2-19-58	Pay
II	95	58VC51	690	520	2-28-58	Ind.(est.
II	100	58VC48	695	530	2-25-58	Trace

Analysis of results gained by drilling is shown in abstracts of our weekly reports to St. Joseph Lead Company, which are enclosed.

Photocopies of above hole logs and 46 assays (34 Pb, 12 Zn) rec'd 4/16/58 w/ Mar. MF-104

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ROLLA, MO.

WASHINGTON COUNTY

Courtois Area - In DMRA Project #4582

Week Ended February 10, 1958

2 diamond drills operating completed 1 pay and 1 trace hole.

58VC30, stake #C98, a pay hole, is located about 2500 feet south of the village of Courtois and 520 feet northwest of 57VC48, a pay hole. It bottomed at 607 feet depth in Lamotte sand. Lead mineralization was present at the base of the main 7 reef and was estimated as 6.5 feet of 5.4% Pb at 489 feet depth. This lead is at a lower horizon than lead in 57VC48 and matches lead in a hole about 1,000 feet to the north.

58VC31, stake #C78, a trace hole, is located about 6,000 feet south of the village of Courtois and 1560 feet northeast of a speck trace hole. It bottomed at 759 feet depth in Lamotte sand. Traces of lead were present in the brown spotted 5 zone with an estimate of 1.5 feet of 2.0% Pb at 556 feet depth.

Week Ended February 17, 1958

2 diamond drills operating completed 1 pay, 1 indicative, and 1 trace hole for a total of 3 holes.

58VC39, stake #C96, a pay hole, is located about 3500 feet south of the village of Courtois and 520 feet northeast of 57VC50, a pay hole. It bottomed at 763 feet depth in Lamotte sand. Good lead and zinc mineralization is located at 590 feet depth at the top of a lower 5 zone reef and was estimated as 10.1 feet of 9.2% Pb and 5.8% Zn. This matches the lead horizon in 57VC50.

58VC32, stake #C97, an indicative hole, is located 520 feet northwest of the above hole. It bottomed at 605 feet depth in Lamotte sand. Lead assays of best mineralization were: 0.2 foot of 1.8% Pb at 413 feet depth in the middle 5 zone, 0.8 foot of 12.3% Pb at 452 feet depth at the top of the 7 reef and 0.2 foot of 1.3% Pb at 492 feet depth at the base of the main 7 reef.

58VC36, stake #C77, a trace lead and pay zinc hole, is located about 2,000 feet south of the above holes and 900 feet south-southeast of an indicative hole. It bottomed at 675 feet depth in Lamotte sand. Best mineralization is located at the top of the lower 5 reef zone and was estimated as 6.4 feet of 1.1% Pb and 2.6 feet of 20.0% Zn at 518 feet depth. This hole, on 1560-foot spacing, indicates the probability of a continuous mineral trend connecting the ore situated 2,000 feet to the north with the group of ore holes located 3,000 feet to the southwest.

Week Ended February 24, 1958

2 diamond drills operating and 2 churn drills setting casing completed 2 pay holes.

58VC43, stake #C101, a pay hole, is located about 4,000 feet south of the village of Courtois and 520 feet east of a pay hole. It bottomed at 755 feet depth in Lamotte sand. Lead and zinc mineralization was present above the lower 5 zone reef and was estimated as 6.2 feet of 16.2% Pb and 2.9% Zn at 498 feet depth.

WASHINGTON COUNTY

Courtois Area - In DMEA Project #4582 (Continued)

Week Ended February 24, 1958 (Continued)

58VC47, stake #C99, a pay hole, is located 520 feet northwest of the above hole. It bottomed at 747 feet depth in Lamotte sand. Mineralization was present in the same horizon as in above hole and was estimated as 12.9 feet of 3.2% Pb at 600 feet depth and 3.2 feet of 2.0% Zn at 591 feet depth.

Lead in this week's holes matches the horizon of lead in 4 pay holes adjacent to these holes on 520-foot spacing.

Assay returns on 58VC36, reported last week, changes its classification to indicative grade with an assay of 6.4 feet of 1.5% Pb and 5.8% Zn at 518 feet depth.

Week Ended March 3, 1958

2 diamond drills operating and 2 churn drills setting casing completed 1 indicative and 1 trace hole.

58VC51, stake #C95, an indicative hole, is located about 3,000 feet south of the village of Courtois and 520 feet southeast of a pay hole. It bottomed at 690 feet depth in 14 feet of Lamotte sand. Mineralization above the lower 5 zone reef was estimated as 1.9 feet of 6.0% Pb and matches lead in pay holes to the west.

58VC48, stake #C100, a trace hole, is located about 900 feet south of the above hole and 520 feet east of a pay hole. It bottomed at 695 feet depth in 16 feet of Lamotte sand. Trace lead mineralization was present above the lower 5 zone reef, best of which was estimated as 0.1 foot of 2.0% Pb at 510 feet depth, 1.7 feet of 1.5% Pb at 525 feet depth and 0.3 foot of 1.0% Pb at 538 feet depth.

3rd cy - DMEA Washington

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

Budget Bureau No. 42-R1036.5

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION

OPERATOR'S MONTHLY REPORT AND VOUCHER

Month of January, 1958 Docket No. DMEA 4582 Contract No. Idm-E 1068
Operator's Name St. Joseph Lead Company Minerals Pb - Zn - Cu
Address Bonne Terre, Missouri
Contract Amount, $ 298560.00 Government Participation: 50 % Amount, $ 149,280.00

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	10771.44	123969.24	134740.68			
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	82.00	270.00	352.00			
Payroll Taxes						
Liability Insurance						
(8) Contingencies (specify):						
TOTALS	10853.44	124239.24	135092.68			

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FEB 17 1958
BUREAU OF MINES
JOPLIN, MO.

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

Date 2-14-58 *Payee St. Joseph Lead Company

Per E. Jones Title DIVISION MANAGER

*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:

$ 5,426.72

Signature
(Authorized Certifying Officer)

Date 3-18-58 Vou. No. 4-28

(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. Idm-E1068 in accordance with the terms of the contract.

Signature Henry H. Amos Title Geologist-USGS Date Mar. 5, 1958

APPROVAL BY DMEA EXECUTIVE OFFICER OR ALTERNATE:

Signature Clinton C. Kinsey Title Executive Officer Date March 10, 1958

MONTHLY REPORT OF OPERATOR

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

Form MF-104A
(April 1952)

Budget Bureau No. 42-R1151.2

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION

RECEIVED MAR 24 1958 D.M.E.A.

OPERATOR'S UNIT COST AND PROGRESS REPORT

Month of January 1958 Docket No. DMEA 4582 Contract No. Idm-E 1068

Operator's Name St. Joseph Lead Company Minerals Pb - Zn - Cu

Address Bonne Terre, Missouri

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	Ft.	9306.24	4192	100861.26	45433	$2.22		
Churn	Ft.	1465.20	660	33879.42	15261	2.22	133420	$2.22
Auger								
Stripping								
Trenching								
Test Pits								
Roads and Trails								
Analytical Determinations	Ea	82.00	82	352.00	352	1.00	2370	1.00
TOTAL DISTRIBUTED COSTS		10853.44		135092.68				TOTAL COSTS AUTHORIZED BY CONTRACT
Operating Equipment Purchased								
Initial Rehabilitation and Repairs								
New Buildings, Improvements, etc.								
TOTAL COSTS		10853.44		135092.68				

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

Date 2-14-58 Operator St. Joseph Lead Company

Per E. Jones Title DIVISION MANAGER

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)

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BUREAU OF MINES
JOPLIN, MO.

INSTRUCTIONS

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

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

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

GPO 872894

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION
Box 431
Joplin, Missouri
March 20, 1958

3/24 Com 1

DMEA Operating Committee
Department of the Interior
Washington 25, D. C.

Re: DMEA-4582(lead-zinc-copper)
St. Joseph Lead Co.
Courtois Area
Washington County, Mo.
Contract Idm-E1068

Dear Sirs:

Forwarded herewith are your two copies of the MF-104 Monthly Voucher and one copy of the MF-104A and the Monthly Report by the cited Operator covering the January project work. The voucher data received from the Finance Officer today is posted on both copies of the MF-104s.

Your other copy of the MF-104A and the Monthly Report was furnished for your advance information February 18, 1958.

Sincerely yours,

CCK/id

Clinton C. Knox
Executive Officer
DMEA Field Team, Region IV

encl. 4

cc: DMEA Op.Com.
Amos,USGS,Carbondale
4582 file

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TECHNOLOGY
FEB 17 1958
BUREAU OF MINES
JOPLIN, MO.

MONTHLY REPORT FOR MONTH OF JANUARY, 1958

D.M.E.A. Project #4582 - Contract #IDM-E 1068

One churn drill was operating in the area at the end of the month. The hole in progress was Stage II, Stake No. C-100 at a depth of 100 feet.

The following churn drill holes were completed through overburden and chert-bearing formations and cased preparatory to diamond drilling during the month:

Stage No.	Stake No.	Feet Depth	Starting Date
I	VC77	180	1- 1-58
I	VC78	220	12-24-57
I	VC90	90	12-18-57
II	VC95	170	1-10-58

Two diamond drills were operating in the area at the end of the month. The holes in progress were Stage I, Stake No. C-78 at a depth of 300 feet and Stage II, Stake No. C98 at a depth of 195 feet.

The following diamond drill holes were completed during the month:

Stage No.	Stake No.	Prospect Hole No.	Bottom Depth	Feet of Dia. Drilling	Date Completed	Class.
I	VC83	58VC2	563	458	1- 3-58	Pay
I	VC86	58VC7	675	528	1-10-58	Trace
I	VC85	58VC15	645	498	1-17-58	Pay
I	VC90	58VC20	651	561	1-23-58	Pay
I	VC79	58VC13	681	511	1-16-58	Trace
I	VC84	58VC19	689	549	1-22-58	Ind.
I	VC82	58VC25	535	535	1-30-58	Sp. Trace
I	VC80	58VC26	662	552	1-29-58	Ind.

Analysis of results gained by drilling is shown in abstracts of our weekly reports to St. Joseph Lead Company, which are enclosed.

82 analytical determinations were made during the month as follows:

58VC2	83	12 Pb	6 Zn	
58VC15	85	21 Pb	2 Zn	
58VC19	84	6 Pb	1 Zn	
58VC26	80	6 Pb	1 Zn	
58VC25	82	2 Pb		2 Cu
58VC20	90	10 Pb	6 Zn	
58VC13	79	2 Pb		
58VC7	86	5 Pb		

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FEB 17 1958
BUREAU OF MINES
JOPLIN, MO.

WASHINGTON COUNTY

Courtois Area - In DMEA Project #4582

Period Ending January 6, 1958 (2 operating days)

2 diamond drills operating and 2 churn drills setting casing completed 1 pay hole.

58VC2, stake #C83, a pay hole, is located in the southern part of the project area about 8,000 feet southwest of the village of Courtois and 1560 feet north-northeast of 56W73, an indicative hole. It bottomed at 563 feet depth in dark rhyolite porphyry which extends about 35 feet up into the Bonneterre horizon. Heavy lead and zinc mineralization is present in the lower 5 reef and the 7 reef zone. Best of this was estimated as 17.8 feet of 11.1% Pb and 3.0% Zn at 436 feet depth, 1.0 feet of 8.0% Pb and 2.0% Zn at 465 feet depth, 7.0 feet of 4.0% Pb at 475 feet depth, and 2.0 feet of 1.0% Pb at 481 feet depth.

This is the first hole to show an appreciable amount of lead in the 7 horizon between the St. Joe-Conway tract and the vicinity of Courtois and indicates proximity to a center of mineralization which should help the general picture in this area.

Week Ending January 13, 1958

1 diamond drill operating and 2 churn drills setting casing completed 1 trace hole.

58VC7, stake #C86, a trace hole, is located in the southern part of the project area about 9,000 feet southwest of the village of Courtois and 520 feet north-northeast of 56W73, an indicative hole. Small amounts of mineralization were scattered through the 7 and 7/10 zones, best of which was estimated as 0.6 foot of 3.0% Pb at 503 feet depth, 0.8 foot of 1.0% Pb at 557 feet depth, 0.4 foot of 1.0% Pb at 587 feet depth, and 0.2 feet of 2.0% Pb at 601 feet depth.

Week Ending January 20, 1958

2 diamond drills operating and 2 churn drills setting casing completed 1 trace hole.

58VC13, stake #C79, a trace hole, is located 6500 feet south of the village of Courtois and 3,000 feet east of a pay hole. It bottomed at 681 feet depth in 39 feet of Lamotte sand. Weak traces of lead were present high in the 5 zone in brown spotted dolomite, best of which was estimated as 0.3 foot of 1.0% Pb at 478 feet depth and 0.4 foot of 1.0% Pb at 483 feet depth.

Week Ending January 27, 1958

2 diamond drills operating and 1 churn drill setting casing completed 2 pay and 1 trace hole.

58VC15, stake #C85, a pay hole, is located near the southern edge of the project area and 520 feet northwest of 56W73, an indicative hole. It bottomed at 645 feet depth in 9 feet of Lamotte sand. Good lead and zinc mineralization is present in the lower 5 zone and in the 7 zone with estimates of 11.9 feet of 8.4% Pb and 1.9 feet of 2.0% Zn at 489 feet depth, and 2.0 feet of 20.0% Pb at 537 feet depth.

Week Ending January 27, 1958 (Continued)

58VC20, stake #C90, a pay hole, is located 900 feet south of the above hole and 520 feet southwest of 56W73. It bottomed at 651 feet depth in 45 feet of Lamotte sand which was specked with traces of lead. Good lead and zinc mineralization was present in the middle of the 5 zone with an estimate of 13.6 feet of 6.6% Pb at 444 feet depth and 10.6 feet of 4.7% zinc at 450 feet depth.

58VC19, stake #C84, a trace hole, is located about 1800 feet east of the above holes and 1,000 feet east of a pay hole. Considerable lead and zinc mineralization is scattered through the ore horizon of the above holes with estimates of 0.3 foot of 1.0% Pb at 488 feet depth, 0.4 foot of 1.5% Pb at 493 feet depth, 3.9 feet of 1.0% Pb at 507 feet depth, 0.4 foot of 1.0% Pb at 509 feet depth, and 1.0 foot of 1.0% Zn at 504 feet depth.

Week Ending February 3, 1958

2 diamond drills operating and 1 churn drill setting casing completed 2 trace holes.

58VC26, stake #C80, a trace hole, is located near the southern edge of the project area and 1560 feet east of 58VC2, a high grade pay hole. It bottomed at 662 feet depth in Lamotte sand. Trace lead and zinc mineralization was present in the 5 zone, best of which is located just above a lower 5 zone reef and was estimated as 6.3 feet of 1.0% Pb at 505 feet depth and 2.9 feet of 2.5% Zn at 502 feet depth.

58VC25, stake #C82, a speck trace hole, is located in the far southeastern part of the project area. It bottomed at 535 feet depth in 34 feet of Lamotte sand. The Bonneterre section contained about 100 feet of "white rock" in the 5 and 7 zones with a few speck traces of lead at 409 feet depth. Traces of chalcopyrite were present near the top and base of the Bonneterre. General appearance of this hole does not warrant additional drilling in this part of the project area.

DIVISION OF MINERAL TECHNOLOGY

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Form MF-104 (Rev.) (April 1952) JAN 16 1958

Budget Bureau No. 42-R1036.5

BUREAU OF MINES JOPLIN, MO.

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

RECEIVED FEB 10 1958

Month of December, 1957 Docket No. DMEA 4582 Contract No. Idm-E 1068

Operator's Name St. Joseph Lead Company Minerals Pb - Zn - Cu

Address Bonne Terre, Missouri

Contract Amount, $ 298,560.00 Government Participation: 50 % Amount, $ 149,280.00

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	15917.40	108051.84	123969.24			
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	55.00	215.00	270.00			
Payroll Taxes						
Liability Insurance						
(8) Contingencies (specify):						
TOTALS	15972.40	108266.84	124239.24	✓	✓	✓

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

Date 1-14-58 *Payee St. Joseph Lead Company

ASST. DIVISION MANAGER

Per L. W. Castell Title

*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:

$ 7,986.20

Signature (Authorized Certifying Officer)

Date 2/5/57 Vou. No. 4-25

(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. IdmE1068 in accordance with the terms of the contract.

Signature John W. Chester Title Mining Engineer Date Jan. 21, 1958

APPROVAL BY DMEA EXECUTIVE OFFICER OR ALTERNATE:

Signature Clinton C. Knox Title Executive Officer Date January 28, 1958

MONTHLY REPORT OF OPERATOR

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

Form MF-104A
(April 1962)

Budget Bureau No. 42-R1151.2

UNITED STATES
DEPARTMENT OF THE INTERIOR

DEFENSE MINERALS EXPLORATION ADMINISTRATION

OPERATOR'S UNIT COST AND PROGRESS REPORT

RECEIVED FEB 10 1958

Month of December 195 7 Docket No. DMEA 4582 Contract No. Idm-E 1068

Operator's Name St. Joseph Lead Company Minerals Pb - Zn - Cu

Address Bonne Terre, Missouri

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	Ft.	12711.72	5726 ✓	91555.02	41241	$2.22		
Churn	Ft.	3205.68	1444 ✓	32414.22	14601	2.22	133420	$2.22
Auger								
Stripping								
Trenching								
Test Pits								
Roads and Trails								
Analytical Determinations	Ea	55.00	55 ✓	270.00	270	1.00	2370	1.00
TOTAL DISTRIBUTED COSTS		15972.40		124239.24				TOTAL COSTS AUTHORIZED BY CONTRACT
Operating Equipment Purchased								
Initial Rehabilitation and Repairs								
New Buildings, Improvements, etc.								
TOTAL COSTS		15972.40		124239.24				

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 1-14-58 Operator St. Joseph Lead Company

Per L. H. Castel Title ASST. DIVISION MANAGER

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)

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DIVISION OF MINERAL
TECHNOLOGY

JAN 16 1958

BUREAU OF MINES
JOPLIN, MO.

C.C.K.
1/28/58

INSTRUCTIONS

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

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

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

GPO 872894

RECEIVED
DIVISION OF MINERAL
TECHNOLOGY
JAN 16 1958
BUREAU OF MINES
ROLLA, MO.

MONTHLY REPORT FOR MONTH OF DECEMBER, 1957

D.M.E.A. Project #4582 - Contract #IDM-E-1068

Two churn drills were operating in the area at the end of the month. The holes in progress were Stage I, Stake No. C78 at a depth of 100 feet, and Stage I, Stake No. C77 at a depth of 20 feet.

The following churn drill holes were completed through overburden and chert-bearing formations and cased preparatory to diamond drilling during the month:

Stage No.	Stake No.	Feet Depth	Starting Date
I	C85	147	11-13-57
I	C47	245	11-23-57
I	C81	150	11-23-57
I	C88	230	11-26-57
I	C79	170	12- 3-57
I	C86	147	12- 4-57
I	C83	105	12- 5-57
I	C84	140	12-12-57
I	C80	110	12-10-57
		1444	

One diamond drill was operating in the area at the end of the month. The hole in progress was Stage I, Stake No. C83, at a depth of 165 feet.

The following diamond drill holes were completed during the month:

Stage No.	Stake No.	Prospect Hole No.	Bottom Depth	Feet of Dia. Drilling	Completed	Class.
I	91	57VC156	628	568	12- 4-57	Trace
I	87	57VC162	605	550	12-10-57	Pay
I	65	57VC157	725	540	12- 4-57	Pay
I	75	57VC159	599	542	12- 9-57	Sp.Trace
I	76	57VC169	691	561	12-17-57	Sp.Trace
I	54	57VC155	483	450	12- 3-57	Blank
I	48	57VC163	730	485	12-10-57	Ind.
I	47	57VC168	775	530	12-17-57	Sp.Trace
I	81	57VC177	670	520	12-30-57	Trace
I	88	57VC173	695	465	12-26-57	Ind.
I	89	57VC179	725	515	12-31-57	Pay
				5746		

Analysis of results gained by drilling is shown in abstracts of our weekly reports to St. Joseph Lead Company, which are enclosed.

55 analytical determinations were made during the month as follows:

57VC179	89	3 Pb		
57VC173	88	18 Pb	4 Zn	
57VC163	48	3 Pb		
57VC157	65	3 Pb		3 Cu
57VC162	87	12 Pb	5 Zn	
57VC156	91	3 Pb	1 Zn	

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TECHNOLOGY

JAN 16 1958

BUREAU OF MINES
JOPLIN, MO.

WASHINGTON COUNTY

Courtois Area - In DMEA Project #4582

Week Ended December 9, 1957

3 diamond drills operating and 4 churn drills setting casing completed 1 pay, 1 trace and 1 blank hole.

57VC157, stake #C65, a pay hole, is located 6500 feet northeast of the village of Courtois and 1560 feet north-northeast of 57VC143, a pay hole. It bottomed at 725 feet depth in Lamotte sand. Lead and copper mineralization is present in the lower 5 zone in association with a thin algal reef. Estimates are 4.4 feet of 5.0% Pb and 5.0 feet of 1.9% Cu at 541 feet depth, 4.8 feet of 1.5% Cu at 554 feet depth. This hole extends the lower 5 zone mineralization farther to the north.

57VC156, stake #C91, a trace hole, is located at the southern edge of the project area, about 9500 feet southwest of the village of Courtois and 520 feet southeast of an indicative hole. It bottomed at 628 feet depth in Lamotte sand. Lead mineralization, estimated as 1.4 feet of 1.2% Pb, is present in the lower 5 zone at 456 feet depth in the same horizon as lead in the indicative hole.

57VC155, stake #C54, a blank hole, is located about 3500 feet northeast of the village of Courtois and 2700 feet southwest of the above reported pay hole. It bottomed at 483 feet depth in granite, which extends about 25 feet up into the Bonneterre horizon. Traces of copper were present in the conglomerate beds lying on the Precambrian. Presence of this high granite area was not previously known.

Week Ended December 16, 1957

2 diamond drills operating and 3 churn drills setting casing completed 1 pay, 1 indicative, and 1 speck trace hole for a total of 3 holes.

57VC162, stake #C87, a pay hole, is located about 9,000 feet southwest of the village of Courtois, near the southern edge of the project area, and 520 feet east of 56W73, an indicative hole. It bottomed at 605 feet depth in Lamotte sandstone. Pay run, estimated as 5.1 feet of 5.5% Pb and 2.0% Zn is at 422 feet depth in brown spotted oolite above the first 5 zone reef. An indicative run, estimated as 7.6 feet of 2.2% Pb is located at 450 feet depth in the top of the 7 reef.

57VC163, stake #C48, an indicative hole, is located about 1850 feet northwest of the above hole. It bottomed at 730 feet depth in 17 feet of dark rhyolite porphyry which extends up into the sandy transition zone of the Bonneterre formation. Mineralization in the mixed reef and oolite zone below the main 7 reef was estimated as 6.7 feet of 1.3% Pb, barely indicative in grade, at 644 feet depth.

57VC159, stake #C75, a speck trace hole, is located about 8,000 feet east of the village of Courtois and in the eastern edge of the project area. It bottomed at 599 feet depth in Lamotte sand. Bonneterre formations showed thin reefs in the 7 zone and considerable mottled crepe rock in the 12 zone. A few speck traces of lead were present in the 12 zone from 540 to 552 feet depths.

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DIVISION OF MINERAL
TECHNOLOGY

JAN 16 1958

BUREAU OF MINES
JOPLIN, MO.

Week Ended December 23, 1957

WASHINGTON COUNTY (Continued)

Courtois Area - In DMEA Project #4582 (Continued)

2 diamond drills operating and 2 churn drills setting casing completed 2 trace holes.

57VC169, stake #C76, a speck trace hole, is located about 6500 feet east of the village of Courtois, in the eastern edge of the project area, and is the last in a series of wide spaced holes located with the purpose of defining the boundaries of the mineralized area. These holes accomplished their purpose in apparently cutting off any northeast extension of the mineralization. This week's hole bottomed at 691 feet depth in Lamotte sandstone and showed a good 7 reef zone underlain by 12 mottled and crepe rock and the only mineralization present was speck traces of lead at 617 feet depth in the lower 7 horizon.

57VC168, stake #C47, a trace hole, is located about 9500 feet southwest of the village of Courtois and 1300 feet west, northwest of 57VC163, stake #C48, an indicative hole reported last week. It bottomed at 775 feet depth in Lamotte sand. Bonneterre formation was normal for the area but showed only a few speck traces of lead at 726 feet depth in the mixed oolite and 12 mottled zone.

Week Ended December 30, 1957

2 diamond drills operating and 2 churn drills setting casing completed 1 indicative hole.

57VC173, stake #C88, an indicative hole, is located in the southwest part of the project area and 1500 feet west of 56W73, an indicative hole. It bottomed at 695 feet depth in dark rhyolite porphyry, the top of which is located just above the Lamotte sand horizon. Considerable lead mineralization was scattered through the 7 and 10 zones, best of which was estimated as 7.8 feet of 1.7% Pb at 378 feet depth and 6.8 feet of 1.8% Pb at 602 feet depth.

Period December 30 to 31, 1957, inclusive (2 operating days)

2 diamond drills operating and 2 churn drills setting casing completed 1 pay and 1 trace hole.

57VC179, stake #C89, a pay hole, is located near the southern edge of the project area, about 10,000 feet southwest of the village of Courtois and 520 feet west of 56W73, an indicative hole. It bottomed at 725 feet depth in Lamotte sand. Considerable lead and some zinc mineralization was present in the lower 5 zone, best of which was estimated as 5.5 feet of 5.9% Pb at 512 feet depth. This is the same horizon as lead in 2 holes to the east.

57VC177, stake #C81, a speck trace hole, is located in the southeastern part of the project area, about 6500 feet southeast of the village of Courtois. It bottomed at 670 feet depth in 36 feet of Lamotte sand. Complete absence of "white rock" in the Bonneterre section was surprising this far east and speck traces of lead in the 7 reef horizon are of interest.

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION

Box 431
Joplin, Missouri
February 7, 1958

ORIGINAL FILE COPY
DMEA
RECEIVED FEB 10 1958

DATE	INITIALS	CODE
2/10	C	220
/10	Com	100
		800

DMEA Operating Committee
Department of the Interior
Washington 25, D. C.

Re: DMEA 4582(lead-zinc-copper)
St. Joseph Lead Company
Courtois Area
Washington County, Mo.
Contract Idm-E1068

Dear Sirs:

Forwarded herewith are your two copies of the MF-104 Monthly Voucher and one copy of the MF-104A and the Monthly Report by the cited Operator covering the December project work. The voucher data received from the Finance Officer today is posted on both copies of the MF-104s.

Your other copy of the MF-104A and the Monthly Report was furnished for your advance information January 16, 1958.

Sincerely yours,

Clinton C. Knox

Clinton C. Knox
Executive Officer
DMEA Field Team, Region IV

encl. 4

cc: DMEA Op.Com.
Amos,USGS,Carbondale
4582 file

3rd cy - DMEA Wash

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

Budget Bureau No. 42-R1036.5

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

Month of November, 1957 Docket No. DMEA 4582 Contract No. Idm-E 1068
Operator's Name St. Joseph Lead Company Minerals Pb - Zn - Cu
Address Bonne Terre, Missouri
Contract Amount, $ 298,560.00 Government Participation: 50 % Amount, $ 149,280.00

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	15,051.60	93,000.24	108,051.84			
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	10.00	205.00	215.00			
Payroll Taxes						
Liability Insurance						
(8) Contingencies (specify):						
TOTALS	15,061.60	93,205.24	108,266.84			

RECEIVED
MINERALS TECHNOLOGY DIVISION
DEC 16 1957
BUREAU OF MINES
JOPLIN, MO.

I certify that the above bill is correct and just and that payment therefor has not been received.
Date 12-13-57 *Payee St. Joseph Lead Company
Per E. B. Jones Title ~~Asst~~ Division Manager

*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:

$ 7,530.80

Signature
(Authorized Certifying Officer)

Date 1-14-58 Vou. No. 4-22
(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 1068 in accordance with the terms of the contract.

Signature John W. Chester Title Mining Engineer Date Jan. 9, 1958

APPROVAL BY DMEA EXECUTIVE OFFICER OR ALTERNATE:

Signature Clinton C. Knox Title Executive Officer Date Jan. 9, 1958

MONTHLY REPORT OF OPERATOR

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

Form MF-104A
(April 1952)

Budget Bureau No. 42-R1151.2

UNITED STATES
DEPARTMENT OF THE INTERIOR

DEFENSE MINERALS EXPLORATION ADMINISTRATION

OPERATOR'S UNIT COST AND PROGRESS REPORT

Month of November 1957 Docket No. DMEA 4582 Contract No. Idm-E 1068

Operator's Name St. Joseph Lead Company Minerals Pb - Zn - Cu

Address Bonne Terre, Missouri

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	Ft.	10,467.30	4715	78,843.30	30800	$2.22		
Churn	Ft.	4,584.30	2065	29,208.54	11092	2.22	133420	$2.22
Auger								
Stripping								
Trenching								
Test Pits								
Roads and Trails								
Analytical Determinations	Ea	10.00	10	215.00		1.00	2370	1.00
TOTAL DISTRIBUTED COSTS		15,061.60		108,266.84				TOTAL COSTS AUTHORIZED BY CONTRACT
Operating Equipment Purchased								
Initial Rehabilitation and Repairs								
New Buildings, Improvements, etc.								
TOTAL COSTS		15,061.60		108,266.84				

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

Date 12-13-57 Operator St. Joseph Lead Company

Per E. Jones Title ~~Asst~~ Division Manager

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)

RECEIVED
MINERALS TECHNOLOGY
DIVISION

DEC 16 1957

BUREAU OF MINES
JOPLIN, MO.

C.C.K.
1-9-58

INSTRUCTIONS

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

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

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

GPO 872894

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION

Box 431
Joplin, Missouri
January 16, 1958

Offered

1/20 C 220
20 com 100
800

DMEA Operating Committee
Department of the Interior
Washington 25, D. C.

Re: DMEA-4582(lead-zinc-copper)
St. Joseph Lead Company
Courtois Area
Washington County, Mo.
Contract Idm-E1068

Dear Sirs:

Forwarded herewith are your two copies of the MF-104 Monthly Voucher and one copy of the MF-104A and the Monthly Report by the cited Operator covering the November project work. The voucher data received from the Finance Officer today is posted on both copies of the MF-104s.

Your other copy of the MF-104A and the Monthly Report was furnished for your advance information December 16, 1957.

Also forwarded herewith for your advance information is one of your copies of the Operator's December report(excepting the MF-104 Voucher).

Sincerely yours,

CCK/id

Clinton C. Knox
Executive Officer
DMEA Field Team, Region IV

encl. 5

cc: DMEA Op.Com.
Amos,USGS,Carbondale w/cy Dec.MF-104
4582 file

RECEIVED
MINERAL TECHNOLOGY
DIVISION
DEC 16 1957
BUREAU OF MINES
JOPLIN, MO.

MONTHLY REPORT FOR MONTH OF NOVEMBER, 1957

D.M.E.A. Project #4582 - Contract #IDM-E 1068

Four churn drills were operating in the area at the end of the month. The following holes were in progress:

Stage No.	Stake No.	Feet Depth
I	C-88	95
I	C-85	110
I	C-47	185
I	C-81	145

The following churn drill holes were completed through overburden and chert-bearing formations and cased preparatory to diamond drilling during the month:

Stage No.	Stake No.	Feet Depth	Starting Date
I	C-44	143	10-24-57
I	C-48	245	11-13-57
I	C-65	185	11- 1-57
I	C-66	100	11- 1-57
I	C-68	245	9-27-57
I	C-72	255	10-21-57
I	C-73	160	10-25-57
I	C-75	57	11- 4-57
I	C-76	130	11-14-57
I	C-87	55	11- 8-57
I	C-89	210	11-15-57
I	C-91	60	11-13-57
II	C-96	220	11- 6-57
		2065	

Three diamond drills were operating in the area at the end of the month. The holes in progress were Stage I, Stake No. C-91, at a depth of 206 feet, Stage I, Stake No. C-65, at a depth of 375 feet, and Stage I, Stake No. C-54, at a depth of 255 feet.

The following diamond drill holes were completed during the month:

Stage No.	Stake No.	Prospect Hole No.	Bottom Depth	Feet of Diamond Drilling	Date Completed	Class.
I	C-55	57VC143	705	516	10-20-57	Pay
I	C-71	57VC135	930	540	11- 7-57	Blank
I	C-69	57VC125	805	500	11- 1-57	Blank
I	C-74	57VC147	635	525	11-21-57	Blank
I	C-44	57VC149	693	550	11-26-57	Trace
I	C-66	57VC139	625	525	11-13-57	Blank
I	C-68	57VC134	755	510	11- 7-57	Blank
I	C-72	57VC141	759	504	11-14-57	Blank
I	C-73	57VC151	705	545	11-27-57	Blank
				4715		

Analysis of results gained by drilling is shown in abstracts of our weekly reports to St. Joseph Lead Company, which are enclosed.

Ten analytical determinations were made during the month as follows:

57VC143	55	5 Pb	1 Cu
57VC149	44	2 Pb	2 Cu

RECEIVED
MINERALS TECHNOLOGY
DIVISION

DEC 18 1957

BUREAU OF MINES
JOPLIN, MO.

WASHINGTON COUNTY

Courtois Area - In DMEA Project #4582

Period November 1 to 4, 1957

2 diamond drills operating and 4 churn drills setting casing completed 1 trace and 1 blank hole.

57VC127, stake #58, a good trace hole, is located 520 feet north-northeast of 57VC114. It bottomed at 555 feet depth in Lamotte sand. Trace lead was scattered through the top reef of the 7 zone with best parts estimated as 0.5 foot of 3.0% Pb at 418 feet depth, 0.3 foot of 5.0% Pb at 426 feet depth, and 0.9 foot of 3.0% Pb at 449 feet depth. This mineralization is similar in nature to that of ore located 520 feet southwest.

57VC125, stake #69, a blank hole, is located 1700 feet west of the above hole. It bottomed at 805 feet depth in Lamotte sandstone. The Bonneterre formation was badly leached throughout.

Week Ended November 11, 1957

2 diamond drills operating and 4 churn drills setting casing completed 2 blank holes.

57VC134, stake #VC68, a blank hole, is located about 11,500 feet northeast of the village of Courtois. It bottomed at 726 feet depth in Lamotte sandstone.

57VC135, stake #VC71, a blank hole, is located 4,650 feet east of the above hole. It bottomed at 930 feet depth in Lamotte sandstone.

The above holes are the last in an east-west section of 5 holes on 1560-foot spacing designed to intersect any northeast extension of the general Viburnum-Courtois ore zone trend. The Bonneterre formation in these holes was not particularly favorable in appearance, with some basin type lithology mixed with thin reefs and with a great deal of leaching and minor fracturing. The only mineralization encountered consisted of a few speck traces of lead in the farthest west hole.

Week Ended November 18, 1957

2 diamond drills operating and 4 churn drills setting casing completed 2 blank holes.

57VC139, stake #VC66, a blank hole, is located about 9,000 feet northeast of the village of Courtois. It bottomed at 625 feet depth in Lamotte sand. Bonneterre formation was badly leached, showed a fair 7 reef section but no oolite in lower Bonneterre and, in general, was not very favorable appearing.

57VC141, stake #VC72, a blank hole, is located about 4500 feet east-southeast of the above hole. It bottomed at 759 feet depth in Lamotte sandstone. General character of rock was similar to that in above hole.

WASHINGTON COUNTY (Continued)

Courtois Area - In DMEA Project #4582 (Continued)

Week Ended November 25, 1957

2 diamond drills operating and 4 churn drills setting casing completed 1 pay and 1 blank hole.

57VC143, stake #C55, a pay hole, is located about 5,000 feet northeast of the village of Courtois and 1500 feet from the nearest completed hole. It bottomed at 705 feet depth in Lamotte sand. Pay grade mineralization is associated with a thin reef in the lower 5 zone and was estimated as 8.2 feet of 5.8% Pb at 542 feet depth. Some copper is associated with the lead. This mineralization is similar in horizon to that in 3 widely spaced indicative holes extending 4,000 feet to the southeast.

57VC147, stake #C74, a blank hole, is located about 2½ miles northeast of the village of Courtois and 1500 feet southeast of 57VC141, stake #C72, a blank hole. It bottomed at 635 feet depth in Lamotte sand. Bonneterre formation was badly leached and showed no sign of mineralization.

Period Ending November 30, 1957

2 diamond drills operating and 4 churn drills setting casing completed 1 trace and 1 blank hole.

57VC149, stake #VC44, a trace hole, is located about 2,000 feet northeast of the village of Courtois and 2700 feet southwest of last week's pay hole in this area. It bottomed at 693 feet depth in Lamotte sandstone. Lead and trace copper mineralization was present in association with a thin reef in the lower 5 zone, same as in last week's pay hole. Estimate of best part was 0.5 foot of 1.5% Pb at 529 feet depth.

57VC151, stake #VC73, a blank hole, is located about 10,000 feet northeast of the village of Courtois and 2500 feet southwest of VC74, a blank hole. It bottomed at 705 feet depth in Lamotte sand. Bonneterre formation was unfavorable appearing in regard to mineralization. This is the last of a group of 9 holes distributed over a 1½ x 1¼ mile area lying ahead of the general northeast trend of the Courtois-Viburnum ore zone and results seem to cut off any extension in this direction.

3rd Copy - Wash.

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

Budget Bureau No. 42-R1036.5

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

RECEIVED DEC 30 1957 DMEA

Month of October 1957 Docket No. DMEA 4582 Contract No. Idm-E 1068

Operator's Name St. Joseph Lead Company Minerals Pb - Zn - Cu

Address Bonne Terre, Missouri

Contract Amount, $ 290,000.00 Government Participation: 50 % Amount, $ 140,200.00

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	16,356.96	76,643.28	93,000.24			
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	39.00	166.00	205.00			
Payroll Taxes						
Liability Insurance						
(8) Contingencies (specify):						
TOTALS	16,395.96	76,809.28	93,205.24	✓	✓	✓

RECEIVED MINERALS TECHNOLOGY DIVISION NOV 18 1957 BUREAU OF MINES JOPLIN, MO.

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

Date NOV 15 1957 *Payee St. Joseph Lead Company

Per L. W. Castle Title Asst Division Manager

*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:

$ 8,197.98

Signature
(Authorized Certifying Officer)

Date 12-17-57 Vou. No. 4-20

(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. IdmE1068 in accordance with the terms of the contract.

Signature John W. Chester Title Mining Engineer Date Nov 19, 1957

APPROVAL BY DMEA EXECUTIVE OFFICER OR ALTERNATE:

Signature Clinton C. Knox Title Executive Officer Date Dec. 9, 1957

MONTHLY REPORT OF OPERATOR

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

Form MF-104A
(April 1952)

Budget Bureau No. 42-R1151.2

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

RECEIVED DEC 30 1957

Month of October 1957 Docket No. DMEA 4582 Contract No. Idm-S 1068
Operator's Name St. Joseph Lead Company Minerals Pb - Zn - Cu
Address Bonne Terre, Missouri

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	Ft.	12,405.36	5580	68,376.00	30800	$2.22		
Churn	Ft.	3,951.60	1760	24,624.24	11092	2.22	133420	$2.22
Auger								
Stripping								
Trenching								
Test Pits								
Roads and Trails								
Analytical Determinations	Ea.	39.00	39	205.00	205	1.00	2370	1.00
TOTAL DISTRIBUTED COSTS		16,396.96		93,205.24				TOTAL COSTS AUTHORIZED BY CONTRACT
Operating Equipment Purchased								
Initial Rehabilitation and Repairs								
New Buildings, Improvements, etc.								
TOTAL COSTS		16,396.96		93,205.24				

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

Date NOV 15 1957 Operator St. Joseph Lead Company

Per L. H. Castee Title Asst Division Manager

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)

RECEIVED
MINERALS TECHNOLOGY
DIVISION
NOV 18 1957
BUREAU OF MINES
JOPLIN, MO.

CCK 12/9/57

INSTRUCTIONS

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

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

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

GPO 872894

MONTHLY REPORT FOR MONTH OF OCTOBER, 1957

D.M.E.A. Project #4582 - Contract #IDM- E 1068

Four churn drills were operating in the area at the end of the month. The following holes were in progress:

Stage I	Stake	No.	C-66	at	a	depth	of	20	feet
"	"	"	" C-44	"	"	"	"	85	"
"	"	"	" C-72	"	"	"	"	245	"
"	"	"	" C-73	"	"	"	"	145	"

The following churn drill holes were completed through overburden and chert-bearing formations and cased preparatory to diamond drilling during the month:

Stage I	Stake	No.	C-52	- depth	237	feet	- starting	date	9/9/57
"	"	"	" C-55A-	"	189	"	"	"	10/2/57
"	"	"	" C-54	"	33	"	"	"	10/22/57
"	"	"	" C-70	"	380	"	"	"	9/13/57
"	"	"	" C-71	"	390	"	"	"	10/1/57
"	"	"	" C-49	"	136	"	"	"	9/23/57
"	"	"	" C-69	"	305	"	"	"	10/7/57
"	"	"	" C-74	"	110	"	"	"	10/21/57

Two diamond drills were operating in the area at the end of the month. The holes in progress were Stage I Stake No. C-71 at a depth of 400 feet and Stage I Stake No. C-68 at a depth of 275 feet.

The following diamond drill holes were completed during the month:

Stake No.	Prospect Hole No.	Bottom Depth	Feet of Diamond Drilling	Date Completed	Class
C-64	57VC98	733	523	10/4/57	Sp. Trace
C-52	57VC104	769	532	10/11/57	Indicative
C-67	57VC111	741	551	10/17/57	Sp. Trace
C-41	57VC94	785	480	10/1/57	Sp. Trace
C-42	57VC99	765	490	10/7/57	Trace
C-50	57VC103	641	455	10/10/57	Trace
C-49	57VC109	591	455	10/16/57	Trace
C-70	57VC119	897	517	10/28/57	Blank
C-57	57VC114	655	500	10/22/57	Pay
C-56	57VC122	642	530	10/25/57	Pay
C-58	57VC127	555	555	10/31/57	Trace

Analysis of results gained by drilling is shown in abstracts of our weekly reports to St. Joseph Lead Company, which are enclosed.

39 analytical determinations were made during the month as follows:

57VC127	58	3 Pb		
57VC122	56	11 Pb	1 Zn	2 Cu
57VC114	57	9 Pb		2 Cu
57VC104	52	9 Pb		
57VC103	50	2 Pb		

We plan to continue operating in this area with 2 diamond drills and 4 churn drills until all Stage I holes are completed before drilling additional Stage II holes.

WASHINGTON COUNTY

Courtois Area - In DMRA Project #4582

Week Ended October 7, 1957

2 diamond drills operating and 4 churn drills setting casing completed 1 trace and 1 blank hole.

57VC93, a blank hole, is located about 1 mile east-northeast of the village of Courtois and 1500 feet north-northeast of 56W111, an indicative hole. It bottomed at 721 feet depth in Lamotte sand. Bonneterre formation was normal for the area but showed no sign of mineralization.

57VC94, a trace hole, is located 1560 feet south-southwest of 56W111. It bottomed at 785 feet depth in Lamotte sandstone. Reef development was poor in the 7 horizon and considerable crepe rock was present in the lower horizon. Speck traces of lead were located at 528 feet depth near the top of the Bonneterre, at 707 feet depth near the base of the 7 horizon and at 767 feet depth, just above the transition sand.

Week Ended October 14, 1957

2 diamond drills operating and 4 churn drills setting casing completed 1 indicative and 3 trace holes for a total of 4 holes.

57VC104, an indicative hole, is located 2800 feet north-northwest of 56W111, an indicative hole, and about 5,000 feet northeast of the village of Courtois. It bottomed at 769 feet depth in Lamotte sandstone. Lead mineralization was scattered throughout the upper 5 zone - best of which was estimated as 8.0 feet of 1.5% Pb at 520 feet depth. This is the same horizon as lead in the indicative hole.

57VC98, a speck trace hole, is located 1560 feet east-northeast of the above hole. It bottomed at 733 feet depth in Lamotte sandstone. Speck traces of lead were present in the upper 5 zone at 510 feet and 526 feet depth. Indications are that mineralization is fading out to the eastward in this area.

57VC103, a trace hole, is located 520 feet southeast of 56W111, an indicative hole. It bottomed at 641 feet depth in dark rhyolite porphyry which extends up about 40 feet into the Bonneterre horizon. Lead mineralization, estimated as 1.2 feet of 1.5% Pb, was present in the upper part of the 5 zone at 478 feet depth and another run estimated as 0.6 feet of 2.0% Pb was located at 610 feet depth in reef rock.

57VC99, a speck trace hole, is located 1,020 feet southeast of the above hole. It bottomed at 765 feet depth in Lamotte sandstone. Weak traces of lead were present at 689 feet and 709 feet depths in the lower oolite and reef zone. Results of the drilling to date in this part of the area indicate that the Precambrian high present in 56W111 and 57VC103 is small in dimension and nothing but indicative and trace grade lead has been found in its vicinity.

WASHINGTON COUNTY (Continued)

Courtois Area - In DMEA Project #4582 (Continued)

Week Ended October 21, 1957

2 diamond drills operating and 4 churn drills setting casing completed 2 trace holes.

57VC109, a trace hole, is located about 1 mile east of the village of Courtois and 520 feet east-northeast of 56W111, an indicative hole. It bottomed at 591 feet depth in 8 feet of dark rhyolite porphyry, which extends about 15 feet up into the Bonneterre horizon. Speck traces of lead were present in the 1 zone at 357 feet depth, and in the 7 reef zone at 506 and 524 feet depths. This completes the 520-foot spaced drilling around 56W111 hole. No indicative or pay ore was found at this spacing but the better grade mineralization was found on the north and west sides indicating the need for closer spaced drilling on this flank of the small Precambrian high.

57VC111, a speck trace hole, is located in the far northeast part of the area and is the first and farthest west hole in an east-west section of holes being drilled here. It bottomed at 741 feet depth in Lamotte sandstone. Speck traces of lead were present in the transition sand horizon at 719 feet depth. This hole is located north of and on the down-drop side of a west-southwest trending fault.

Week Ended October 28, 1957

2 diamond drills operating and 4 churn drills setting casing completed 1 pay hole.

57VC114, a pay hole, is located 1500 feet south of the village of Courtois and 520 feet east of 57VC19, a pay hole. It bottomed at 655 feet depth in Lamotte sandstone. Lead mineralization was present throughout the middle of the main 7 reef with a pay run at 522 feet depth estimated as 4.5 feet of 7.3% Pb.

Period Ended October 31, 1957 Inclusive

2 diamond drills operating and 4 churn drills setting casing completed 1 pay and 1 blank hole.

57VC122, stake #56, a pay hole, is located 1500 feet south of the village of Courtois and 520 feet south-southwest of 57VC114, a pay hole reported last week. It bottomed at 642 feet depth in Lamotte sand. Lead and copper mineralization, estimated as 7.2 feet of 1.4% Pb, is located at 484 feet depth on top of the top 7 reef. At 493 feet depth, in the upper part of the 7 reef, a run was estimated as 4.5 feet of 6.1% Pb with some zinc associated. This lead is at somewhat higher horizon than that in holes to the north and west and is nearer in horizon to ore occurring about 1500 feet southwest, with no holes drilled between.

57VC119, stake #70, a blank hole, is located about 2 miles northeast of the village of Courtois. It bottomed at 897 feet depth in Lamotte sand. Bonneterre section shows several good reef sections in the 7 zone but with very little oolite and much mottled crepe rock below.

2nd copy - Washington

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

Budget Bureau No. 42-R1036.5

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

Month of September, 1957 Docket No. DMEA 4582 Contract No. Idm-E 1068

Operator's Name St. Joseph Lead Company Minerals Pb - Zn - Cu

Address Bonne Terre, Missouri

Contract Amount, $ 298,560.00 Government Participation: 50 % Amount, $ 149,280.00

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	13528.68	63114.60	76643.28			
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	32.00	134.00	166.00			
Payroll Taxes						
Liability Insurance						
(8) Contingencies (specify):						
TOTALS	13560.68	63248.60	76809.28	13560.68	✓	✓

RECEIVED MINERALS TECHNOLOGY OCT 15 1957 BUREAU OF MINES JOPLIN, MO.

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

Date 10-14-57 *Payee St. Joseph Lead Company

Per L. W. Coates Title Asst Division Manager

*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:

$ 6,780.34

Signature
(Authorized Certifying Officer)

Date 11-13-57 Vou. No. 4-16

(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. Idaho E 1068 in accordance with the terms of the contract.

Signature John W. Christie Title Mining Engineer Date Oct 16, 1957

APPROVAL BY DMEA EXECUTIVE OFFICER OR ALTERNATE:

Signature Clinton C. Knox Title Executive Officer Date November 7, 1957

MONTHLY REPORT OF OPERATOR

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

GPO 872893

Form MF-104A
(April 1952)

Budget Bureau No. 42-R1151.2

RECEIVED
MINERALS TECHNOLOGY
DIVISION
OCT 15 1957
BUREAU OF MINES
JOPLIN, MO.

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION

OPERATOR'S UNIT COST AND PROGRESS REPORT

Month of September 1957 Docket No. DMEA 4582 Contract No. Idm-E 1068

Operator's Name St. Joseph Lead Company Minerals Pb - Zn - Cu

Address Bonne Terre, Missouri

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	Ft.	10174.26	4583	55970.64	25212	$2.22)		
Churn	Ft.	3354.42	1511	20672.64	9312	2.22)	133420	$2.22
Auger								
Stripping								
Trenching								
Test Pits								
Roads and Trails								
Analytical Determinations	Ea	32.00	32	166.00	166	1.00	2370	1.00
TOTAL DISTRIBUTED COSTS		13560.68		76809.28				TOTAL COSTS AUTHORIZED BY CONTRACT
Operating Equipment Purchased								
Initial Rehabilitation and Repairs								
New Buildings, Improvements, etc.								
TOTAL COSTS		13560.68		76809.28				

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

Date 10-14-57 Operator St. Joseph Lead Company

Per L. H. Castel Title Asst Division Manager

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 872894

MONTHLY REPORT FOR MONTH OF SEPTEMBER, 1957

D.M.E.A. Project #4582 - Contract #IDM-E 1068

4 churn drills were operating in the area at the end of the month. The following holes were in progress:

Stage	I	Stake	No.	C-49	-	at	a	depth	of	0 feet
"	"	"	"	C-52	-	"	"	"	"	225 "
"	"	"	"	C-68	-	"	"	"	"	0 "
"	"	"	"	C-70	-	"	"	"	"	370 "

The following churn drill holes were completed through overburden and chert-bearing formations and cased preparatory to diamond drilling during the month:

Stage	I	Stake	No.	C-41	-	depth	305	feet	-	starting date	8-24-57
"	"	"	"	C-42	-	"	275	"	-	" "	9- 3-57
"	"	"	"	C-50	-	"	186	"	-	" "	9-12-57
"	"	"	"	C-51	-	"	200	"	-	" "	8-26-57
"	"	"	"	C-53	-	"	145	"	-	" "	8-26-57
"	"	"	"	C-64	-	"	210	"	-	" "	9- 5-57
"	"	"	"	C-67	-	"	190	"	-	" "	9- 9-57

2 diamond drills were operating in the area at the end of the month. The holes in progress were Stage I Stake No. C-64 at a depth of 220 feet and Stage I Stake No. C-41 at a depth of 545 feet.

The following diamond drill holes were completed during the month:

Stake No.	Prospect Hole No.	Bottom Depth	Feet of Diamond Drilling	Date Completed	Class.
C-38	57VC88	681	511	9-26-57	Trace
C-39	57VC74	628	483	9- 5-57	Trace
C-40	57VC79	685	500	9-12-57	Trace
C-46	57VC90	765	503	9-24-57	Sp.Trace
C-51	57VC93	721	521	9-30-57	Blank
C-53	57VC81	705	560	9-18-57	Ind.
C-61	57VC77	640	490	9- 9-57	Sp.Trace
C-62	57VC80	625	500	9-12-57	Trace
C-63	57VC83	615	515	9-18-57	Trace

Analysis of results gained by drilling is shown in abstracts of our weekly reports to St. Joseph Lead Company, which are enclosed.

32 analytical determinations were made during the month as follows:

57VC74	39	6 Pb
57VC79	40	14 Pb
57VC81	53	9 Pb
57VC83	62	1 Pb
57VC88	38	2 Pb

Pursuant to the provisions contained in Annex I, we are requesting that an amendment be executed to include in the contract the following listed contiguous lands:

Option Contract #CZ-223

C. A. Crabtree and Emma Crabtree (wife), executed July 12, 1957.

Option to purchase all underground and mining rights on an aggregate of 488.79 acres, more or less, with 7 acres excepted, as indicated.

Option runs for 1 year and is renewable twice.

WASHINGTON COUNTY

Courtois Area - In DMEA Project #4582

Week Ended September 9, 1957

2 diamond drills operating and 4 churn drills setting casing completed 1 trace hole.

57VC74, a trace hole, is located about 1 mile east of the village of Courtois and 520 feet south of an indicative hole. It bottomed at 628 feet depth in 9 feet of dark rhyolite porphyry which extends about 15 feet up into the Bonneterre horizon. Mineralization was present in the brown-spotted 5 zone - same horizon as in the indicative hole - and best parts were estimated as 0.8 foot of 3.0% Pb at 411 feet depth, 5.1 feet of 1.2% Pb at 422 feet depth, 0.2 foot of 1.5% Pb at 427 feet depth, and 0.4 foot of 1.5% Pb at 433 feet depth.

Week Ended September 16, 1957

2 diamond drills operating and 4 churn drills setting casing completed 1 trace hole.

57VC77, a trace hole, is located about 1500 feet southwest of the village of Courtois and 520 feet north-northeast of an indicative hole. It bottomed at 640 feet depth in 5 feet of granite which extends up to about the Bonneterre-Lamotte contact. Speck traces of lead were present in the top of the Bonneterre at 388 feet depth, at the base of the 7 zone at 559 and 564 feet depths. Bonneterre horizon was mostly dense and unaltered appearing and rather unfavorable for mineral possibilities. Presence of this Precambrian high was unsuspected and its relationship to surrounding structural feature and mineralization will have to be determined by additional drilling.

Week Ended September 23, 1957

2 diamond drills operating and 4 churn drills setting casing completed 1 indicative and 3 trace holes.

57VC81, an indicative hole, is located about 4,000 feet east-northeast of the village of Courtois and 1560 feet northwest of 56W111, an indicative hole. It bottomed at 705 feet depth in Lamotte sand. Mineralization in the upper 5 zone was estimated as 7.9 feet of 1.2% Pb at 511 feet depth.

57VC79, a trace hole, is located 520 feet north-northeast of 56W111. It bottomed at 685 feet depth in rhyolite porphyry which extends up about 20 feet into the Bonneterre horizon. Mineralization was estimated as 1.0 foot of 2.5% Pb at 468 feet depth at the top of the 5 zone, 2.6 feet of 1.0% Pb at 599 feet depth in upper part of the 7 horizon, 1.9 feet of 1.5% Pb at 611 feet depth in the 7 horizon and 2.0 feet of 1.0% Pb at 630 feet depth in fingered rock in the lower 7 zone.

57VC80, a speck trace hole, is located about 1700 feet southwest of the village of Courtois and 520 feet northwest of 57VC22, an indicative hole. It bottomed at 625 feet depth in red granite which is overlain by 2 feet of Lamotte sand. Speck traces of lead were present in the top of the Bonneterre, at the top of the 5 zone, and at the base of the 7/10 horizon.

57VC83, a trace hole, is located 520 feet southwest of the above hole. It bottomed at 615 feet depth in Lamotte sand. Trace lead estimated as 0.5 foot of 1.0% Pb was located at 526 feet depth in the lower part of the main 7 reef.

WASHINGTON COUNTY (Continued)

Courtois Area - In BMEA Project #4582 (Continued)

Week Ended September 30, 1957

2 diamond drills operating and 4 churn drills setting casing completed 2 trace holes.

57VC88, a trace hole, is located 520 feet northwest of 56W111, an indicative hole and about 5,000 feet east of the village of Courtois. It bottomed at 681 feet depth in 23 feet of dark rhyolite porphyry which extends up about 20 feet into the Bonneterre horizon. Mineralization, which is on the same horizon as that in the indicative hole, was estimated as 0.2 foot of 2.0% Pb at 467 feet depth and 1.8 feet of 2.0% Pb at 471 feet depth - all in the upper 5 zone.

57VC90, a speck trace hole, is located about 9,000 feet southwest of the village of Courtois and 2800 feet southeast of a trace hole. It bottomed at 765 feet depth in 14 feet of Lamotte sand. Speck traces of lead were present in the upper 5 zone. Mineralization is of little significance but the 7 zone showed a full thickness of fairly well altered reef rock which encourages some additional drilling toward the north where high granite is present.

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

Copy - Wash.

Budget Bureau No. 42-R1036.5

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION

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

OPERATOR'S MONTHLY REPORT AND VOUCHER

Month of August, 1957 Docket No. DMEA 4582 Contract No. Idm-E 1068

Operator's Name St. Joseph Lead Company Minerals Pb - Zn - Cu

Address Bonne Terre, Missouri

Contract Amount, $ 298,560.00 Government Participation: 50 % Amount, $ 149,280.00

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	16232.64	46881.96	63114.60			
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	31.00	103.00	134.00			
Payroll Taxes						
Liability Insurance						
(8) Contingencies (specify):						
TOTALS	16263.64	46984.96	63248.60			

RECEIVED MINERALS TECHNOLOGY DIVISION SEP 16 1957 BUREAU OF MINES ROLLA, MO.

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

Date 9-13-57 *Payee St. Joseph Lead Company

Per E. R. Jones Title Division Manager

*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:

$ 8,131.82

Signature
(Authorized Certifying Officer)

Date 10/18/57 Vou. No. 4e-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. Idm-[illegible] in accordance with the terms of the contract.

Signature John W. Chastain Title Mining Engineer Date Sept. 16, 1957

APPROVAL BY DMEA EXECUTIVE OFFICER OR ALTERNATE:

Signature Clinton C. Knox Title Executive Officer Date October 14, 1957

MONTHLY REPORT OF OPERATOR

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

Form MF-104A
(April 1952)

Budget Bureau No. 42-R1151.2

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

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

Month of August 1957 Docket No. DMEA 4582 Contract No. Idm-E 1068
Operator's Name St. Joseph Lead Company Minerals Pb - Zn - Cu
Address Bonne Terre, Missouri

RECEIVED
MINERALS TECHNOLOGY
OPERATION
DIVISION
SEP 16 1957
BUREAU OF MINES
JOPLIN, MO.

	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	Ft.	11934.72	5376	45796.38	20629	$2.22		
Churn	Ft.	4297.92	1936	17318.22	7801	2.22	133420	$2.22
Auger								
Stripping								
Trenching								
Test Pits								
Roads and Trails								
Analytical Determinations	Ea	31.00	31	134.00		1.00	2370	1.00
Total Distributed Costs		16263.64		63248.60				Total Costs Authorized by Contract
Operating Equipment Purchased								
Initial Rehabilitation and Repairs								
New Buildings, Improvements, etc.								
Total Costs		16263.64		63248.60				

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

Date 9-13-57 Operator St. Joseph Lead Company

Per E. A. Jones Title Division Manager

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 872894

RECEIVED
MINERALS TECHNOLOGY
DIVISION
SEP 16 1957
BUREAU OF MINES
ROLLA, MO.

MONTHLY REPORT FOR MONTH OF AUGUST, 1957

D.M.E.A. Project #4582 - Contract #IDM-E 1068

3 churn drills were operating in the area at the end of the month. The following holes were in progress:

Stage I Stake No. VC-41 at a depth of 270 feet.
" " " " VC-51 " " " " 100 "
" " " " VC-53 " " " " 110 "

The following churn drill holes were completed through overburden and chert-bearing formations and cased preparatory to diamond drilling during the month:

Stage	I	Stake	No.	VC-30	-	depth	137	feet	-	starting date	7-29-57.
"	"	"	"	VC-46	-	"	262	"	-	" "	7-18-57.
"	II	"	"	VC-56	-	"	112	"	-	" "	7-27-57.
"	"	"	"	VC-57	-	"	155	"	-	" "	8- 2-57.
"	"	"	"	VC-92	-	"	230	"	-	" "	8- 7-57.
"	"	"	"	VC-94	-	"	185	"	-	" "	8-15-57.
"	"	"	"	VC-97	-	"	80	"	-	" "	8-13-57.
"	"	"	"	VC-98	-	"	90	"	-	" "	8-19-57.
"	"	"	"	VC-99	-	"	250	"	-	" "	8-20-57.
"	"	"	"	VC-101	-	"	225	"	-	" "	8- 4-57.
"	"	"	"	VC-102	-	"	210	"	-	" "	8-12-57.

2 diamond drills were operating in the area at the end of the month. The holes in progress were Stage I Stake No. VC-39 at a depth of 415 feet and Stage II Stake No. VC-61 at a depth of 170 feet.

The following diamond drill holes were completed during the month:

Stake No.	Prospect Hole No.	Bottom Depth	Feet of Diamond Drilling	Date Completed	Class.
VC-26	57VC67	745	490	8-21-57	Blank
VC-27	57VC60	625	510	8- 1-57	Trace
VC-29	57VC70	785	560	8-29-57	Trace
VC-30	57VC63	644	507	8-12-57	Trace
VC-32	57VC61	635	520	8- 7-57	Speck Trace
VC-33	57VC65	785	530	8-15-57	Trace
VC-34	57VC66	485	359	8-19-57	Trace
VC-35	57VC71	695	495	8-30-57	Pay
VC-37	57VC64	539	409	8-15-57	Trace
VC-43	57VC68	681	516	8-27-57	Indicative
VC-45	57VC62	705	480	8- 7-57	Trace

Analysis of results gained by drilling is shown in abstracts of our weekly reports to St. Joseph Lead Company, which are enclosed.

31 analytical determinations were made during the month as follows:

	Hole		
57VC60	47	4 Pb	1 Cu
57VC62	46	1 Pb	
57VC63	30	1 Pb	
57VC64	50	2 Pb	
57VC65	33	1 Pb	
57VC66	34	2 Pb	
57VC68	42	6 Pb	
57VC71	55	11 Pb	1 Cu

WASHINGTON COUNTY - Courtois Area - DMEA Project #4582

Week Ended 7 a. m., Monday, August 5, 1957

2 diamond drills operating and 4 churn drills setting casing completed 1 trace hole.

57VC60, a trace hole, is located about 1,000 feet east of the village of Courtois. It bottomed at 625 feet depth in Lamotte sand. Lead estimated as 6.5 feet of nearly 1.0% is present at 513 feet depth in the lower part of the main 7 reef. This mineralization is in the same horizon as ore in holes 1500 feet to the southwest.

Week Ended 7 a.m., Monday, August 12, 1957

2 diamond drills operating and 4 churn drills setting casing completed 2 trace holes.

57VC61, a trace hole, is located about 1 mile southwest of the village of Courtois and 1500 feet south of 56W101, an indicative hole. It bottomed at 635 feet depth in Lamotte sand. Speck traces of lead were present at 473 feet depth in the upper 5 zone and at 617 feet depth in the lower 12 zone.

57VC62, a trace hole, is located about 1/2 mile east of the village of Courtois. It bottomed at 705 feet depth in Lamotte sandstone. Trace lead estimated as 0.9 foot of 1.5% Pb is located at 567 feet depth in reef rock in the lower 5 horizon.

Week Ended 7 a. m., Monday, August 19, 1957

2 diamond drills operating and 4 churn drills setting casing completed 3 trace holes.

57VC63, a trace hole, is located about 3200 feet east of the village of Courtois and 1500 feet west-southwest of 56W111, an indicative hole. It bottomed at 644 feet depth in Lamotte sandstone. Traces of lead were present in the 5 zone, best of which was estimated as 1.8 feet of 2.0% Pb at 448 feet depth. This is the same elevation as ore in the indicative hole.

57VC64, a trace hole, is located 520 feet west-southwest of the above mentioned indicative grade hole. It bottomed at 539 feet depth in felsite porphyry. Weak traces of lead were present in the 5 zone, best of which was estimated as 0.8 feet of 1.0% Pb at 420 feet depth and 0.1 feet of 1.5% Pb at 422 feet depth.

57VC65, a trace hole, is located about 1 mile west-southwest of the village of Courtois and 1500 feet west-southwest of 56W101, an indicative grade hole. It bottomed at 785 feet depth in Lamotte sand. Traces of lead, estimated as 0.2 foot of 4.0% Pb, were present at 715 feet depth, at the base of the main 7 zone reef.

WASHINGTON COUNTY - Courtois Area - DMEA Project #4582 (Continued)

Week Ended 7 a. m., Monday, August 26, 1957

2 diamond drills operating and 4 churn drills setting casing completed 1 trace and 1 blank hole.

57VC66, a trace hole, is located about 5,000 feet west of the village of Courtois and 1500 feet northwest of an indicative hole. It bottomed at 485 feet depth in 13 feet of granite which extends about 145 feet up into the Bonneterre horizon. Traces of lead were present high in the Bonneterre about 45 feet below the Davis shale, best of which was estimated as 0.5 foot of 1.0% Pb at 374 feet depth and 0.6 foot of 2.0% Pb at 376 feet depth. Results from this hole tend to enlarge the known area of high granite here and indicate the need for additional drilling in the flank zone.

57VC67, a blank hole, is located in the eastern part of the area and about 3500 feet southeast of the village of Courtois. It bottomed at 745 feet depth in 14 feet of Lamotte sandstone. Most of the Bonneterre section in this hole was badly leached and rock classification is difficult.

Week Ended 7 a. m., Monday, September 2, 1957

2 diamond drills operating and 4 churn drills setting casing completed 1 pay, 1 indicative, and 1 trace hole.

57VC71, a pay hole, is located about 1700 feet west of the village of Courtois and 1400 feet southwest of an old indicative hole. It bottomed at a depth of 695 feet in 6 feet of Lamotte sandstone. The pay run of an estimated 11.9 feet of 3.7% Pb at a 578 feet depth was in the 5 tan oolitic zone; and an indicative run of 23.1 feet of 1.8% Pb at a 603 depth was in the 7 reef zone. The results of this hole indicate a possibility of ore associated with a granite high to the north and west, and further indicate a necessity for prospecting in those directions.

57VC68, an indicative hole, is located 1800 feet west and slightly north of the above pay hole. It bottomed at a depth of 681 feet in 18 feet of granite which is approximately at the base of the Bonneterre horizon. This hole further enlarges known area of high granite and enhances the possibility of associated ore. The mineralized run was estimated at 3.2 feet of 3.0% Pb at a 525 feet depth, and was in the upper 7 reef zone.

57VC70, a trace hole, is located 5,000 feet southeast of the village of Courtois. It bottomed at a depth of 785 feet in 8 feet of Lamotte sandstone. The traces of mineralization were scattered through the lower 5 brown-spotted, oolite zone and the upper 7 reef zone; 0.1 foot of trace lead at 574 feet depth, 0.1 foot of trace lead at 591, 0.2 foot of trace lead at 614 feet depth were the estimates of the best of the mineralization.

2nd Copy - Wash.

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

Budget Bureau No. 42-R1036.5

RECEIVED SEP 18 1957 D.M.E.A.

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

Month of July, 1957 Docket No. DMEA 4582 Contract No. Idm-E 1068

Operator's Name St. Joseph Lead Company Minerals Pb - Zn - Cu

Address Bonne Terre, Missouri

Contract Amount, $ 298,560.00 Government Participation: 50 % Amount, $ 149,280.00

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	17964.24	28917.72	46881.96	✓		
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	49.00	54.00	103.00	✓	–	
Payroll Taxes						
Liability Insurance						
(8) Contingencies (specify):						
TOTALS	18013.24	28971.72	46984.96	✓	✓	✓

RECEIVED MINERALS TECHNOLOGY DIVISION AUG 16 1957 BUREAU OF MINES JOPLIN, MO.

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

Date 8-14-57 *Payee St. Joseph Lead Company

Per L. W. Cole Title Asst. Division Manager

*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:

$ 9,006.62

Signature (Authorized Certifying Officer)

Date 9/11/57 Vou. No. 4-9

(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. Idn-E1068 in accordance with the terms of the contract.

Signature John W. Ohnstad Title Mining Engineer Date Sept 6, 1957

APPROVAL BY DMEA EXECUTIVE OFFICER OR ALTERNATE:

Signature Clinton C. Kinney Title Executive Officer Date September 6, 1957

MONTHLY REPORT OF OPERATOR

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

Form MF-104A
(April 1952)

Budget Bureau No. 40-R1151.2

RECEIVED SEP 18 1957 D.M.E.A.

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

Month of July 195 7 Docket No. DMEA 4582 Contract No. Idm-E 1068

Operator's Name St. Joseph Lead Company Minerals Pb - Zn - Cu

Address Bonne Terre, Missouri

RECEIVED MINERALS TECHNOLOGY DIVISION AUG 16 1957 BUREAU OF MINES JOPLIN, MO.

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	Ft.	13026.96	5868	33861.66	15253	)		
Churn	Ft.	4937.28	2224	13020.30	5865	$2.22)	133420	$2.22
Auger								
Stripping								
Trenching								
Test Pits								
Roads and Trails								
Analytical Determinations	Ea	49.00	49	103.00	103	1.00	2370	1.00
Total Distributed Costs		18013.24		46984.96				Total Costs Authorized by Contract
Operating Equipment Purchased								
Initial Rehabilitation and Repairs								
New Buildings, Improvements, etc.								
Total Costs		18013.24		46984.96				

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

Date 8-14-57 Operator St. Joseph Lead Company

Per L. W. Castle Title Asst. Division Manager

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 872894

RECEIVED
MINERALS TECHNOLOGY
DIVISION
AUG 1 5 1957
BUREAU OF MINES

MONTHLY REPORT FOR MONTH OF JULY, 1957

D.M.E.A. Project #4582 - Contract #IDM-E 1068 :

11 Stage II locations, approved by the DMEA field team as of July 30, 1957, have been assigned numbers as shown on map. The Stage II stake numbers and locations are as follows:

VC-92 -	located	approximately	520	feet	S 30° E	of	Stage	II	Stake	VC-56
VC-93 -	"	"	520	"	N	of	Stage	I	Stake	VC-10
VC-94 -	"	"	520	"	N 60° E	of	"	I	"	VC-10
VC-95 -	"	"	520	"	S 60° E	"	"	I	"	VC-10
VC-96 -	"	"	520	"	S	"	"	I	"	VC-10
VC-97 -	"	"	520	"	S 60° W	"	"	I	"	VC-10
VC-98 -	"	"	520	"	N 60° W	"	"	I	"	VC-10
VC-99 -	"	"	520	"	N 30° E	"	"	I	"	VC-8
VC-100 -	"	"	520	"	N	"	"	I	"	VC-28
VC-101 -	"	"	520	"	W	"	"	I	"	VC-28
VC-102 -	"	"	520	"	S 30° E	"	"	I	"	VC-8

3 churn drills were operating in the area at the end of the month. The holes in progress were Stage I Stake VC-46 at a depth of 125 feet, Stage I Stake VC-30 at a depth of 20 feet, and Stage II Stake VC-56 at a depth of 100 feet.

The following churn drill holes were completed through overburden and chert-bearing formations and cased preparatory to diamond drilling, during the month:

Stage	I -	Stake	No.	VC-28 -	depth	238	feet -	starting	date	6-26-57
"	I -	"	"	VC-29	"	225	"	"	"	6-17-57
"	I	"	"	VC-32	"	115	"	"	"	6-26-57
"	I	"	"	VC-33	"	255	"	"	"	7- 3-57
"	I	"	"	VC-34	"	126	"	"	"	6-28-57
"	I	"	"	VC-35	"	200	"	"	"	7-10-57
"	I	"	"	VC-37	"	130	"	"	"	6-28-57
"	I	"	"	VC-38	"	170	"	"	"	6-25-57
"	I	"	"	VC-43	"	165	"	"	"	7-16-57
"	I	"	"	VC-45	"	225	"	"	"	7-11-57
"	II	"	"	VC-61	"	150	"	"	"	7-24-57
"	II	"	"	VC-62	"	125	"	"	"	7-19-57
"	II	"	"	VC-63	"	100	"	"	"	7-15-57

2 diamond drills were operating in the area at the end of the month. The holes in progress were Stage I Stake No. VC-27 at a depth of 225 feet and Stage I Stake No. VC-32 at a depth of 115 feet.

The following diamond drill holes were completed during the month:

Stake No.	Prospect Hole No.	Bottom Depth	Diamond Drilling	Date Completed	Class.
VC-6	57VC50	584	514	7-19-57	Pay
VC-8	57VC47	625	475	7-16-57	Pay
VC-9	57VC52	547	477	7-24-57	Indicati
VC-10	57VC48	673	493	7-17-57	Pay
VC-18	57VC38	625	490	7- 3-57	Trace

Stake No.	Prospect Hole No.	Bottom Depth	Diamond Drilling	Date Completed	Class.
VC-22	57VC40	685	485	7- 8-57	Sp. Trace
VC-25	57VC55	689	473	7-29-57	Trace
VC-28	57VC54	725	487	7-23-57	Trace
VC-31	57VC42	615	500	7-11-57	Sp. Trace
VC-36	57VC57	628	448	7-30-57	Trace
VC-59	57VC41	528	528	7- 9-57	Trace
VC-60	57VC43	498	498	7-11-57	Trace

Note: VC-59 and VC-60 are Stage II locations.

Analysis of results gained by drilling is shown in abstracts of our weekly reports to St. Joseph Lead Company, which are enclosed.

49 analytical determinations were made during the month, as follows:

Hole 18	57VC38	1 Pb		✓
59	57VC41	1 Pb		1 Cu
60	57VC43	5 Pb		2 Cu
8	57VC47	5 Pb		
10	57VC48	9 Pb	4 Zn	2 Cu ✓
6	57VC50	6 Pb		1 Cu
9	57VC52	5 Pb		
28	57VC54	1 Pb		
36	57VC57	6 Pb		
		39	4	6

WASHINGTON COUNTY

Courtois Area - In DMRA Project #4582 -

Week Ended July 8, 1957

2 Company-owned diamond drills and 5 churn drills setting casing completed 1 trace hole.

57VC38, a trace hole, is located in the northwest part of the area and 520 feet northwest of 56W101, an indicative hole. It bottomed at 625 feet depth in Lamotte sandstone. Trace lead estimated as 1.5 feet of 1.0% Pb is present at the base of the main 7 reef at 525 feet depth. This hole completes a circle of 6 holes on 520-foot spacing around 56W101, all of which show trace lead on about the same horizon but give no clue as to location of possible concentrations. Formation elevations are rising to the north toward a buried knob and considerably closer spaced drilling will be necessary here to determine whether minable concentrations are present in this widespread blanket of mineralization.

Week Ended July 15, 1957

2 Company-owned diamond drills operating and 4 churn drills setting casing completed 4 trace holes.

57VC40, a speck trace hole, is located in the central part of the project area and 1500 feet southwest of 56W93, a pay hole. It bottomed at 685 feet depth in Lamotte sand. Speck traces of lead were present at 553 feet depth in the upper part of the 5 zone.

57VC41, a trace hole, is located in the central part of the area and 520 feet north-northeast of 57VC19, a pay hole. It bottomed at 528 feet depth in Lamotte sand. Weak traces of lead, estimated as 0.3 foot of 1.0% Pb, were present at 426 feet depth near the base of the 7 zone. 11 feet of limestone was present in the 12 zone.

57VC43, a trace hole, is located 520 feet north-northwest of 57VC19. It bottomed at 498 feet depth in Lamotte sand. Traces of lead were present in the 7 zone and were estimated as 0.7 foot of 1.0% at 390 feet depth, 2.0 feet of 1.0% at 397 feet depth, 1.0 foot of 1.0% at 399 feet depth, and 1.4 feet of 1.5% at 403 feet depth. This section is very similar in appearance and at the same horizon as ore in nearby pay hole. 8 feet of limestone is present in the 12 zone.

57VC42, a trace hole, is located in the central part of the area and 1500 feet west of 56W69, an indicative hole. It bottomed at 615 feet depth in Lamotte sand. Weak traces of lead were present at 461 feet depth in the upper part of the 5 zone, at 519 feet depth at the top of the 7 zone, at 535 feet depth in the 7 zone, and at 600 feet depth near the base of the 12 zone.

Week Ended July 22, 1957

2 Company-owned diamond drills operating and 4 churn drills setting casing completed 3 pay holes.

57VC47, a pay hole, is located about 3/4 mile south of the village of Courtois and 520 feet east of 56W69, an old indicative hole. It bottomed at 625 feet depth in Lamotte sandstone. Ore horizon is at 466 feet depth at the 5/7 contact and was estimated as 5.7 feet of 6.4% Pb.

Week Ended July 22, 1957 (Continued)

57VC50, a pay hole, is located 520 feet north-northwest of the above hole. It bottomed at 584 feet depth in Lamotte sandstone. Ore horizon is at 442 feet depth at the 5/7 contact and was estimated as 10.1 feet of 8.2% Pb. A higher run, at 413 feet depth, estimated as 2.5 feet of 5.0%, is associated with fairly heavy zinc mineralization.

57VC48, a pay hole, is located 900 feet north-northeast of the above hole. It bottomed at 673 feet depth in Lamotte sand. Ore horizon is at 529 feet depth at the 5/7 contact and was estimated as 11.6 feet of 5.3% Pb. A higher run, at 499 feet depth, is associated with zinc mineralization and was estimated as 3.8 feet of 3.0% Pb.

Ore in these holes is all of the same nature, in the same horizon, and about the same elevation and promises to develop an ore body of considerable size when additional drilling is done.

Week Ended July 29, 1957

2 Company-owned diamond drills operating and 4 churn drills setting casing completed 1 indicative and 1 trace hole.

57VC54, a trace hole, is located 3/4 mile south of the village of Courtois and 1100 feet east of 57VC47, a pay hole. It bottomed at 725 feet depth in Lamotte sand. Lead estimated as 2.0 feet of 3.5% Pb is located at 567 feet depth at the 5/7 contact and in the same horizon as ore in the pay hole.

57VC52, an indicative hole, is located 520 feet south-southwest of 57VC47. It bottomed at 547 feet depth in Lamotte sand. Lead estimated as 9.3 feet of 1.7% Pb is located at 413 feet depth, near the 5/7 contact and in the same horizon as ore in 57VC47.

For period of July 29-30-31, 1957

2 diamond drills operating and 4 churn drills setting casing completed 2 trace holes.

57VC55, a trace hole, is located about 3,000 feet south of the village of Courtois and 1500 feet east of a group of 3 pay holes recently drilled. It bottomed at 689 feet depth in Lamotte sand. Minor traces of lead were present in the 5 zone and at the top of the 7 zone.

57VC57, a trace hole, is located about 1 mile south-southwest of the village of Courtois and 1400 feet southwest of the above mentioned group of pay and indicative holes. It bottomed at 628 feet depth in 8 feet of rhyolite porphyry which extends about 60 feet up into the Bonneterre horizon. Lead mineralization is present in the 7/10 horizon from 566 to 608 feet depth with estimates of 1.0% Pb at the following depths: 0.5 foot at 566, 0.1 foot at 577, 1.0 foot at 584, 2.5 feet at 590, 4.5 feet at 600, and 0.3 foot at 608. High Precambrian in this hole represents a knob not previously known in this area although the sharp rise in the sand in holes to the northeast indicated its probable presence.

2nd Copy - Work.

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

Budget Bureau No. 42-R1036.5

1 of 2 Work file

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION

OPERATOR'S MONTHLY REPORT AND VOUCHER

Month of June, 1957 Docket No. DMEA 4582 Contract No. Idm-E 1068

Operator's Name St. Joseph Lead Company Minerals Pb - Zn - Cu

Address Bonne Terre, Missouri

Contract Amount, $ 298,560.00 Government Participation: 50 % Amount, $ 149,280.00

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	18743.46	10174.46	28917.72			
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	38.00	16.00	54.00			
Payroll Taxes						
Liability Insurance						
(8) Contingencies (specify):						
TOTALS	18781.46	10190.26	28971.72	✓	✓	✓

RECEIVED MINERALS TECHNOLOGY DIVISION AUG 15 1957 BUREAU OF MINES JOPLIN, MO.

DMEA RECEIVED AUG 15 1957 1 2 3 4 5 6 7 8 9 10 11 12

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

Date 7-12-57 *Payee St. Joseph Lead Company

Per E. B. Jones Title Division Manager

*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:

$ 9,390.73

Signature
(Authorized Certifying Officer)

Date 8/9/57 Vou. No. 4-5

(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. IdaE1018 in accordance with the terms of the contract.

Signature John W. Webster Title Mining Engineer Date Aug 1, 1957

APPROVAL BY DMEA EXECUTIVE OFFICER OR ALTERNATE:

Signature Clinton C. Knox Title Executive Officer Date Aug. 5, 1957

MONTHLY REPORT OF OPERATOR

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

Form MF-104A
(April 1952)

Budget Bureau No. 42-R1151.2

UNITED STATES
DEPARTMENT OF THE INTERIOR

DEFENSE MINERALS EXPLORATION ADMINISTRATION

OPERATOR'S UNIT COST AND PROGRESS REPORT

Month of June 1957 Docket No. DMEA 4582 Contract No. Idm-E 1068

Operator's Name St. Joseph Lead Company Minerals Pb - Zn - Cu

Address Bonne Terre, Missouri

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	Ft.	13502.04	6082	20834.70	9385	$2.22)		
Churn	Ft.	5241.42	2361	8083.02	3641	2.22)	133420	$2.22
Auger								
Stripping								
Trenching								
Test Pits								
Roads and Trails								
Analytical Determinations	Ea.	38.00	38	54.00	54	1.00	2370	1.00
Total Distributed Costs		18781.46		28971.72				Total Costs Authorized by Contract
Operating Equipment Purchased								
Initial Rehabilitation and Repairs								
New Buildings, Improvements, etc.								
Total Costs		18781.46		28971.72				

RECEIVED MINERALS TECHNOLOGY DIVISION JUL 15 1957 BUREAU OF MINES JOPLIN, MO.

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

Date 7-12-57 Operator St. Joseph Lead Company

Per [signature] Title Division Manager

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)

RECEIVED AUG 15 1957

INSTRUCTIONS

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

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

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

GPO 872894

MONTHLY REPORT FOR MONTH OF JUNE, 1957

D.M.E.A. Project #4582 - Contract #IDM-E 1068

All approved Stage I locations have been assigned numbers as shown on map.

8 Stage II locations, approved by the D.M.E.A. field team as of June 28, 1957, have been assigned numbers as also shown on map. The Stage II stake numbers and locations are as follows:

VC-56	-	located	approximately	520	feet	east	of	Stage	I	Stake	VC-2.
57	-	"	"	520	"	"	"	"	"	"	VC-1.
58	-	"	"	900	"	northeast	of	"	"	"	"
59	-	"	"	520	"	north-northeast	of	Stage	I	Stake	VC-1.
60	-	"	"	520	"	north-northwest	"	"	"	"	"
61	-	"	"	520	"	"	"	"	"	"	VC-4.
62	-	"	"	520	"	"	"	"	"	"	VC-13.
63	-	"	"	520	"	west of Stage I Stake VC-13.					

5 churn drills were operating in the area at the end of the month. The holes in progress were as follows:

Stake	VC-28	-	started	6-26-57	-	drilling at	110	feet depth.
"	VC-29	"		6-17-57	"	"	205	" "
"	VC-32	"		6-26-57	"	"	75	" "
"	VC-37	"		6-28-57	-	starting hole.		
"	VC-38	"		6-25-57	-	drilling at	110	feet depth.

The following churn drill holes were completed through overburden and chert-bearing formations, and cased preparatory to diamond drilling.

Stake	VC-6	-	depth	70	feet	-	starting date	6-12-57.
"	VC-8	"		150	"		" "	6-13-57.
"	VC-9	"		70	"		" "	6- 7-57.
"	VC-10	"		180	"		" "	6-18-57.
"	VC-11	"		75	"		" "	5-28-57.
"	VC-13	"		110	"		" "	5-28-57.
"	VC-19	"		120	"		" "	6- 3-57.
"	VC-21	"		175	"		" "	6- 1-57.
"	VC-22	"		200	"		" "	6- 8-57.
"	VC-25	"		216	"		" "	5-14-57.
"	VC-26	"		255	"		" "	6-10-57.
"	VC-27	"		115	"		" "	6- 6-57.
"	VC-31	"		115	"		" "	6-14-57.
"	VC-36	"		180	"		" "	6-20-57.
"	VC-39	"		145	"		" "	6-17-57.
"	VC-40	"		185	"		" "	6-24-57.

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2 diamond drills were operating in the area during the month. At the end of the month they were located on Stakes VC-18 and VC-22.

The following diamond drill holes were completed:

Stake No.	Prospect Hole No.	Bottom Depth	Feet of Diamond Drilling	Date Completed	Class.
VC-1	57VC-19	555	555	6-11-57	Pay
11	57VC-17	575	500	6- 7-57	Sp. Trace
12	57VC-14	615	490	6- 3-57	Trace
13	57VC-22	605	495	6-14-57	Ind.
14	57VC-23	595	473	6-12-57	Trace
15	57VC-27	605	505	6-18-57	Trace
16	57VC-35	727	507	6-27-57	Trace
17	57VC-29	665	480	6-24-57	Sp. Trace
19	57VC-31	635	515	6-25-57	Trace
20	57VC-36	680	512	6-28-57	Trace
21	57VC-26	665	490	6-19-57	Trace
24	57VC-15	685	560	6- 5-57	Trace

Analysis of results gained by drilling is shown in abstracts of our weekly reports to St. Joseph Lead Company, which are enclosed.

38 analytical determinations were made during the month, as follows:

Hole 11	57VC-14	2 Pb	
24	57VC-15	1 Pb	
1	57VC-19	10 Pb	4 Cu
13	57VC-22	3 Pb	
14	57VC-23	2 Pb	
21	57VC-26	5 Pb	
15	57VC-27	3 Pb	
19	57VC-31	4 Pb	
16	57VC-35	1 Pb	
20	57VC-36	3 Pb	
	TOTAL	34 Pb	4 Cu

Abstract of Report for Week Ending 7 a.m., Monday, June 10, 1957:

WASHINGTON COUNTY

Courtois Area - DMEA Project #4582 -

2 Company-owned diamond drills operating and 5 churn drills setting casing completed 1 speck trace hole. 2 other holes have been bottomed, both with trace lead, but were not brought in from the field in time to be included in this week's report.

57VC17, a speck trace hole, is located about 4,000 feet southwest of the village of Courtois and 520 feet west of an indicative hole. It bottomed at 575 feet depth in Lamotte sandstone. Speck traces of lead were present in the same horizon as that of lead in the indicative hole.

Abstract of Report for Week Ending 7 a.m., Monday, June 17, 1957:

WASHINGTON COUNTY

Courtois Area - DMEA Project #4582 -

2 Company-owned diamond drills operating and 5 churn drills setting casing completed 1 pay, 1 indicative, and 3 trace holes.

57VC19, a pay hole, is located south of the village of Courtois and 900 feet northeast of a pay hole. It bottomed at 555 feet depth in Lamotte sand. Ore is located in the lower part of the top 7 reef - the same as in the old pay hole - and is estimated as 7.1 feet of 9.9% Pb at 444 feet depth and 0.8 feet of 4.0% Pb at 447 feet depth. Included is a run of chalcopyrite estimated as 5.8 feet of 1.3% Cu at 442 feet depth.

57VC22, an indicative hole, is located 520 feet northwest of the old pay hole mentioned above. It bottomed at 605 feet depth in Lamotte sandstone. Indicative run is at 511 feet depth, at same horizon as ore in pay holes, and is estimated as 3.9 feet of 2.2% Pb. All holes in this area are on 520 feet spacing and show persistent mineralization in the same horizon and, with 2 pay holes and 1 indicative hole showing, it is evident that much closer spaced drilling will have to be done here.

57VC23, a trace hole, is located 520 feet southwest of the old pay hole mentioned above. It bottomed at 595 feet depth and lead was estimated as 0.3 feet of 3.0% at 508 feet depth and 0.8 foot of 1.0% Pb at 514 feet depth.

57VC15, a trace hole, is located about 1800 feet southeast of the above group of holes. It bottomed at 685 feet depth in Lamotte sandstone. Traces of lead were present in the 5 zone, best of which was estimated as 0.2 foot of 1.0% at 532 feet depth. This hole was in a badly fractured and leached zone and core recovery was very poor.

57VC14, a trace hole, is located about 2500 feet south of the pay hole area and 520 feet southwest of an indicative hole. It bottomed at 615 feet depth in Lamotte sandstone. Lead was estimated as 0.7 foot of 1.0% Pb at 505 feet depth and 1.3 feet of 1.5% Pb at 509 feet depth. This is at the top of the 7 zone at the same horizon as lead in the indicative hole.

Abstract of Report for Week Ending 7 a.m., Monday, June 24, 1957:

WASHINGTON COUNTY

Courtois Area - DMRA Project #4582 -

2 Company-owned diamond drills operating and 5 churn drills setting casing completed 1 indicative and 1 trace hole.

57VC26, an indicative hole, is located about 2500 feet southwest of the village of Courtois and 1,000 feet west of 57VC22, an indicative hole reported last week. It bottomed at 665 feet depth in Lamotte sand. Lead mineralization was present below the main 7 reef zone in the same horizon as that of ore in other pay and indicative holes in this area. Lead estimate was 2.9 feet of 4.7% Pb at 604 feet depth.

57VC27, a trace hole, is located 1,000 feet west-southwest of the above hole and 520 feet southeast of an older indicative hole (56W101). It bottomed at 605 feet depth in Lamotte sand. Good trace lead was located below the main 7 reef and best parts were estimated as 2.2 feet of 2.1% Pb at 530 feet depth and 0.9 foot of 3.5% Pb at 535 feet depth.

Abstract of Report for Week Ending 7 a.m., Monday, July 1, 1957:

Courtois Area - DMRA Project #4582 -

2 Company-owned diamond drills operating and 5 churn drills setting casing completed 4 trace holes.

57VC31, a trace hole, in the northwest part of the project area, is located 520 feet north of 56W101, an old indicative hole. It bottomed at 635 feet depth in Lamotte sand. Trace lead estimated as 3.2 feet of 1.0% Pb was present at 497 feet depth in the 5 zone and, just above the transition sand zone, 0.6 foot of 1.0% Pb at 621 feet depth.

57VC29, a speck trace hole, located 520 feet southwest of 56W101, bottomed at 665 feet depth in Lamotte sand. Speck traces of lead were located at 527 feet depth in the top of the 7 zone.

57VC35, a trace hole, located 520 feet south of 56W101, bottomed at 727 feet depth in Lamotte sand. Weak traces of lead were present at the base of the 7 zone, best of which was estimated as 0.1 foot of 1.0% Pb at 633 feet depth.

57VC36, a trace hole, located 520 feet northeast of 56W101, bottomed at 680 feet depth in Lamotte sand. Traces of lead were present in the lower part of the 7 zone, best of which was estimated as 0.5 foot of 2.0% Pb at 566 feet depth, 0.2 foot of 1.5% Pb at 590 feet depth, and 0.9 foot of 1.0% Pb at 597 feet depth.

Last week's hole (57VC26), estimated as indicative in grade, was found, on assay, to be over-estimated and was reduced in classification from indicative to trace.

3rd copy - Work

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

Budget Bureau No. 42-R1036.5

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

Month of May, 1957 Docket No. DMEA 4582 Contract No. Idm-E 1068
Operator's Name St. Joseph Lead Company Minerals Pb - Zn - Cu
Address Bonne Terre, Missouri
Contract Amount, $ 298,560.00 Government Participation: 50 % Amount, $ 149,280.00

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	10174.26	-	10174.26			
Bulldozing						
Crosscutting						
Drifting						
Analytical Determinations	16.00	-	16.00			
(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	10190.26	-	10190.26			

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DIVISION
JUN 17 1957
BUREAU OF MINES
JOPLIN, MO.

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

Date 6-13-57 *Payee St. Joseph Lead Company

Per E. A. Jones Title Division Manager

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

$ 5,095.13

Signature _____ (Authorized Certifying Officer)

Date 7-11-57 Vou. No. 4-2

(See other side)

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JUL 15 1957
D.M.E.A.

*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)

(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 1068 in accordance with the terms of the contract.

Signature John W. Chester Title Mining Engineer Date July 1, 1957

APPROVAL BY DMEA EXECUTIVE OFFICER OR ALTERNATE:

Signature Clinton C. Knox Title Executive Officer Date July 3, 1957

MONTHLY REPORT OF OPERATOR

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

GPO 872893

Form MF-104A
(April 1952)

Budget Bureau No. 42-R1151.2

UNITED STATES
DEPARTMENT OF THE INTERIOR

DEFENSE MINERALS EXPLORATION ADMINISTRATION

OPERATOR'S UNIT COST AND PROGRESS REPORT

Month of May 195 7 Docket No. DMEA 4582 Contract No. Idm-E 1068

Operator's Name St. Joseph Lead Company Minerals Pb - Zn - Cu

Address Bonne Terre, Missouri

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	Ft.	7332.66	3303	7332.66	3303	$2.22	133420	$2.22
Churn	Ft.	2841.60	1280	2841.60	1280	2.22		
Auger								
Stripping								
Trenching								
Test Pits								
Roads and Trails								
Analytical Determinations	Ea.	16.00	16	16.00			2370	1.00
TOTAL DISTRIBUTED COSTS		10190.26		10190.26				TOTAL COSTS AUTHORIZED BY CONTRACT
Operating Equipment Purchased								
Initial Rehabilitation and Repairs								
New Buildings, Improvements, etc.								
TOTAL COSTS		10190.26		10190.26				

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

Date 6-13-57 Operator St. Joseph Lead Company

Per [signature] Title Division Manager

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)

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RECEIVED MINERALS TECHNOLOGY DIVISION JUN 17 1957 BUREAU OF MINES JOPLIN, MO.

INSTRUCTIONS

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

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

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

GPO 872894

MONTHLY REPORT FOR MONTH OF MAY, 1957

DMEA PROJECT #4582 - CONTRACT #IDM-E 1068

11 additional Stage 1 approved locations have been surveyed, staked and numbered in the field as shown on map.

5 churn drills were operating in the area at the end of the month. The holes in progress were as follows:

Stake #VC11 - started 5-28-57 - drilling at 75 feet depth

Stake #VC13 - started 5-28-57 - drilling at 30 feet depth

Stake #VC19 - started 5-31-57 - starting hole

Stake #VC21 - started 5-31-57 - starting hole

Stake #VC25 - started 5-14-57 - drilling at 140 feet depth

The following churn drill holes were completed through overburden and chert-bearing formations, and cased preparatory to diamond drilling.

Stake #VC12 - depth 125 feet - starting date 5-16-57

Stake #VC14 - depth 122 feet - starting date 5-27-57

Stake #VC15 - depth 100 feet - starting date 4-25-57

Stake #VC16 - depth 220 feet - starting date 5- 2-57

Stake #VC17 - depth 185 feet - starting date 5-16-57

Stake #VC18 - depth 135 feet - starting date 5-27-57

Stake #VC20 - depth 168 feet - starting date 4-26-57

Stake #VC23 - depth 100 feet - starting date 5-11-57

Stake #VC24 - depth 125 feet - starting date 5-16-57

2 diamond drills were moved into the area during the month. At the end of the month one was drilling Stake #VC-12 at a depth of 245 feet, and the other was drilling Stake #VC-24 at a depth of 433 feet.

The following diamond drill holes were completed:

Stake No.	Prospect Hole No.	Bottom Depth	Feet of Diamond Drilling	Date Completed	Class.
VC-23	57VC9	565	465	5-27-57	Trace
VC-2	57VC6	545	545	5-21-57	Trace
VC-3	57VC2	595	595	5-15-57	Trace
VC-4	57VC1	520	520	5-13-57	Trace
VC-5	57VC5	565	565	5-20-57	Trace
VC-7	57VC11	613	613	5-28-57	Trace

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JUN 17 1957
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JOPLIN, MO.

Prospect Holes 57VC1 (Stake VC-4), 57VC6 (Stake VC-2), 57VC2 (Stake VC-3), 57VC5 (Stake VC-5) are located 520 feet northeast, east, southeast and southwest respectively from hole #56W93, a low-grade pay hole. Excepting 57VC6, which was moved 90 feet west because the original location fell on the face of a series of bluffs with Indian Creek lying at the base. All of these holes showed significant amounts of trace lead mineralization in the same horizon as the lead in the pay hole and the lithology of the section is similar. It appears that any possible ore body at this point may be narrow in dimension and may require much closer drilling for its discovery.

57VC9 (Stake VC23), located about 2,000 feet east of the above group of holes, showed normal Bonneterre lithology and contained weak traces of lead in the 5 zone with best run assaying 0.2 feet of 1.1% Pb.

57VC11 (Stake VC7), located about 1500 feet south of the above group of holes and 520 feet northwest of 56W69, an indicative hole, showed significant traces of lead at slightly lower horizon than that of lead in the indicative hole.

18 analytical determinations were made during the month as follows:

Hole 4	57VC1	- 2 Pb		
3	57VC2	- 1 Pb		
5	57VC5	- 1 Pb		
2	57VC6	- 3 Pb	-	1 Cu
23	57VC9	- 4 Pb		
7	57VC11	- 6 Pb		

Pursuant to the provisions contained in Annex I we are requesting that an amendment be executed to include in the contract the following listed contiguous lands:

<u>Option Contract #CZ-158</u>

Ira Turnbaugh and Bertha Turnbaugh (wife), executed 12-24-56. Option to purchase all underground and mining rights excepting coal, oil, and gas on 80 acres, more or less. Option runs for 1 year and is renewable twice.

Copies of option contracts are included and location of lands is shown on the report map.

Division of Administration

206 Federal Building
Bartlesville, Oklahoma

July 12, 1957

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DIVISION
JUL 15 1957
BUREAU OF MINES
JOPLIN, MO.

Memorandum

To: Clinton C. Knox

From: Cora A. Bailey

Subject: Payment MF-104's for Contract IDM-E-1068 and 1073 for May 1957.

Payment was made for the May 1957 MF-104's, Contract IDM-E-1068 and Contract IDM-E-1073, on a joint voucher. The Bureau Voucher No. was 4.-2, paid July 11, 1956 in the total amount of $5,635.13. The amount for Contract IDM-E-1068 was $5,095.13 and for Contract IDM-E-1073, $540.00.

Cora A. Bailey
Fiscal Officer

RECEIVED
JUL 7 1957
D.M.E.A.

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION

~~WASHINGTON 25, D.C.~~
Box 431
Joplin, Missouri

May 13, 1957

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DMEA Operating Committee
Department of the Interior
Washington 25, D. C.

Re: DMEA-4582(lead-zinc-copper)
St. Joseph Lead Co.
Courtois Area
Washington County, Mo.
Contract Idm-E1068

Dear Sirs:

Forwarded herewith for your immediate information are two copies of the first progress report by the cited Operator covering start of the project work in April, with extra maps revised on the basis of project surveying. No claim was made, however, for Government participation in the drilling costs last month.

The fifth copy of this complete report and an extra map is sent for review by the Survey Member of the Field Team.

The Field Team understood when there April 30, that drilling on this project was started April 25, 1957. The Operator's report does not mention the date as it was requested to do. Evidently, surveying, access road building and drilling site ~~operations~~ preparation must have started earlier in April.

Sincerely yours,

Clinton C. Knox

Clinton C. Knox
Executive Officer
DMEA Field Team, Region IV

encl. 2 of report complete
w/2 extra maps

cc: DMEA Op.Com.
Amos,USGS,Carbondale w/cy rpt
Mr. E. A. Jones, St. Joe Lead
4582 file

3rd copy - Work

MONTHLY REPORT FOR MONTH OF APRIL, 1957

D.M.E.A. Project #4582 - Contract #IDM-E1068

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DIVISION
MAY 1957
BUREAU OF MINES
JOPLIN, MO.

16 Stage 1 approved locations have been surveyed, staked and numbered in the field as shown on map.

2 churn drills have been moved into the area to set casing through overburden and chert-bearing formations. Status of churn drill operations is as follows:

Stake #VC-15 - Drilling at 70 feet depth

Stake #VC-20 - Starting hole

No diamond drills have been moved into the area.

It will be noted that the positions of approved locations on the report map are somewhat different than on the map furnished with the original application. This is due to the fact that the original locations were laid out in relationship to approximate locations of drilled holes. Since then a coordinate system has been set up for the area and actual locations of drilled holes have been tied and plotted. The original relationship between drilled holes and approved locations has been maintained but, since map locations of drilled holes has changed, the position of approved locations on the map also is changed. Extra copies of the report map are included to replace the original maps, if desired.

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D.M.E.A.
RECEIVED MAY 15 1957

DATE	INITIALS	CODE

JUN 4 1965

St. Joseph Lead Company
Southeast Missouri Mining and
Milling Division
Bonne Terre, Missouri

Re: DMEA-4582 (Lead-Zinc-Copper)
St. Joseph Lead Company
Courtois Area
Washington County, Missouri
Contract Idm-E1068

Gentlemen:

Thank you for repaying in full the Government's participation of $132,596.55 in the exploration for lead-zinc-copper ore under the subject contract. In view of this repayment, the Government retains no lien or claim against the property described in the contract or on any production therefrom.

Sincerely yours,

George Fumich, Jr.

Acting Director

FEJohnson/bih
6/4/65

cc to: Files (docket)
Dir. reading file
Mr. R. A. Laurence, Knoxville, Tenn.
CA&A Division
120-M
Mr. Johnson

[redacted]

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[redacted]

Frank E. Johnson

[redacted]

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

AUG 18 1959

Mr. Andrew Fletcher, President
St. Joseph Lead Company
250 Park Avenue
New York City, New York

Re: Docket No. DMEA-4582 (Lead-Zinc-Copper)
St. Joseph Lead Company
Courtois Area
Washington County, Missouri
Contract No. Idm-81068

Dear Mr. Fletcher:

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

By the terms of the Exploration Project Contract, as amended, and the certification, all minerals mined or produced from March 18, 1957, to March 18, 1987, are subject to the Government's percentage royalty as set forth in the contract until the sum of $132,596.55 is repaid to the Government.

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

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

Sincerely yours,

Frank E. Johnson

Acting Director

WHGriswold/gla 8-11-59

cc to: Director's Reading File
F. E. Johnson
Operating Committee
Mr. Lamb, USBM
Mr. Kirkemo, USGS
Contract Adm. & Audit Div.
Enclosure OME Field Team, Region V (2)
Docket
Chron
Mr. Griswold

Audit's copy

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DIVISION OF MINERAL
TECHNOLOGY

MAR 13 1959

BUREAU OF MINES
JOPLIN, MO.

MAR 18 1959
O.M.E.

[redacted]

[redacted]

[redacted] 6th [redacted] March [redacted]

[redacted]

[redacted]

[redacted]

[redacted]

[redacted]

[redacted]

[illegible]

[illegible]

[illegible] [illegible]

[illegible] [illegible]

[illegible] [illegible]

[illegible]

[illegible] [illegible]

[illegible] [illegible]

[illegible] [illegible]

[illegible]

[illegible]

[illegible]

Frank E. Johnson

[illegible]

[illegible]

By [illegible]

[illegible] Division Manager

FEB 4 1959

Memorandum

To: V. R. Schmeltz, Base Metals Division

From: Jay L. Chambers, Contract Administration and Audit (Signed) J. L. Chambers
Division

Subject: Shell Trust, Pala-[illegible], Ft. Knight Lead Company

The Field Team's Interim Report of their January 15, 1959, final inspection of the subject project states that the total footage in completed holes amounts to 110,097 feet. However, a preliminary audit review of this project indicates the total (including footage in Field Team reports of inspections subsequent to January 15, 1959, to be covered) should be 118,097 feet. This difference is due to:

(1) Error in addition between Shell and prior reported	65 ft.
(2) Hole 105 logged and billed as 529 ft., but reported as 524 ft.	-5 ft.
(3) Hole 147 logged and billed as 665 ft., but reported as 625 ft.	-40 ft.
Total	20 ft.

The preliminary review also indicates the following particulars should be brought to the drilling (the schedule following was furnished contractor):

	Authorized		Drilled	
	Holes	Footage	Holes	Footage
Phase I	40	70,000	41	71,025
Phase II	35	40,000	37	47,072
Totals	75	110,000	78	118,097

If the 118,097 feet were the contracted footage and the 78 holes (approximately 20% more than the contracted number for Phase I) to be drilled at hourly rates, the contract would be worth approximately $[illegible] more than the contract price of $[illegible].

Attachment/[illegible]
February 4, 1959

cc: Director
Director's Reading File
Mr. Chambers
Mr. Talbert

Audit's copy

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TECHNOLOGY

MAR 13 1959

BUREAU OF MINES
JOPLIN, MO.

MAR 16 1959
O.M.E.

EXPLORATION PROJECT CONTRACT
ST. JOSEPH LEAD COMPANY
DOCKET NO. [illegible]

AMENDMENT NO. 7

It is agreed this 6th day of March, 1959, between the United States of America, acting through the Department of the Interior, Office of Minerals Exploration, hereinafter called the "Government," and St. Joseph Lead Company, hereinafter called the "Operator," that Exploration Project Contract No. [illegible] (Docket No. [illegible]), dated March 15, 1957, as amended, hereinafter called the "Contract," is further amended, as follows:

The following parcel of land is hereby deleted from the land referred to in Article 2 of the Contract and described in Annex II:

That part of U. S. Bureau of Land Management Prospecting Permit, Serial #044857, described as follows:

S½ Section 9, Twp 35N, R1W..... [illegible] acres

The Operator:

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

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

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

(d) Agrees that if the Operator or any of its subsidiaries acquires any interest, title, or equity in such land or any minerals produced therefrom, or derives

any benefit therefrom, before the expiration of thirty years from the date of this Contract, the land with respect to which such interest, title, or equity is acquired, and any minerals produced therefrom, shall be deemed subject to this Contract and any certification from the date that the Operator or its subsidiaries acquired such interest, title, or equity, or any benefit therefrom, until the expiration of thirty years from the date of this Contract, or until the total net amount contributed by the Government without interest is fully repaid, whichever occurs first.

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

Executed in quintuplicate the day and year first above written.

THE UNITED STATES OF AMERICA

By Fred E. Johnson
Acting Director, Office of
Minerals Exploration

ST. JOSEPH LEAD COMPANY

By E. Jones

Title Division Manager

EXTRA COPY
OME
RECEIVED NOV 28 1958

DATE	INITIALS	CODE
		900

Box 431
Joplin, Missouri
November 21, 1958

Mr. R. E. Wagner, Exploration Superintendent
St. Joseph Lead Company
Bonne Terre, Missouri

Re: DMRA-4582(lead-zinc-copper)
Courtois Area
Washington County, Mo.
Contract Idm-E1068

Dear Mr. Wagner:

This will confirm in writing the approval of the Government given for the Field Team by Dewey Amos during telephone conversation with you on November 11, 1958, when he was laid up in Carbondale with pneumonia. As had been requested and geologically justified by you, this approval includes sites of three Stage II holes to be drilled under the subject Contract as follows:

Site No.	VC-179	about	520	feet	N70°E	of	Site No.	VC-159
	VC-180	"	520	"	S50°E	"	" "	VC-159
	VC-181	"	520	"	S10°W	"	" "	VC-135

Of course, the above approvals are not to be construed to commit the Government to any participation in the costs of drilling beyond the allowable maximum footage limitations set in the Contract for Stage II work.

Sincerely yours,

CCK/id

Clinton C. Knox
Executive Officer
OME Field Team, Region IV

cc: OME Op.Com.(2)
King,USGS,Denver
Ames,USGS,Carbondale
4582 file
Shadow cy - Mr. E. A. Jones

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NOV 19 1958

BUREAU OF MINES
JOPLIN, MO.

Audit Copy

EXTRA COPY
O. M. E.
RECEIVED NOV 21 1958

DATE	INITIALS	CODE

EXPLORATION PROJECT CONTRACT IDM-E1068
ST. JOSEPH LEAD COMPANY
DOCKET NO. DMEA-4582 (LEAD-ZINC-COPPER)

AMENDMENT NO. 6

It is agreed this 27th day of October 1958, between the United States of America, acting through the Department of the Interior, Office of Minerals Exploration, and the St. Joseph Lead Company, that Exploration Project Contract Idm-E1068 (Docket No. DMEA-4582) effective as of the date above written is amended pursuant to item 1 of the Special Agreement Concerning Land in Annex I of said Exploration Contract, whereby the additional lands described in United States Bureau of Land Management Prospecting Permit Serial No. 045266, dated April 1, 1958, filed with the Office of Minerals Exploration as of that date, being contiguous to lands previously covered by said Contract become subject to the provisions of said Contract, and hereby are included with the list of properties thereunder in Annex I, particularly identified by the Operator's file number and on the Operator's maps as follows:

045266--Washington County, Missouri
The west 8 acres of NW/4 of the NE/4, sec. 12, T. 35N., R.2W, 8 acres

and

045266--Crawford County, Missouri
The SW/4 of SW/4 and the south 3/4 of SE/4 of SW/4 of sec.1, 40 "
30 "

The E/2 of SE/4 of sec. 2, 80 "

The S/2 of NE/4 of sec. 11, 80 "

and the NW/4 of sec. 12, all in T. 35N, R. 2W. 160

398

This Amendment shall not be construed to increase the estimated cost of the project or the aggregate amount which the Government may be required to contribute.

Executed in quintuplicate the day and year first above written.

THE ST. JOSEPH LEAD COMPANY

By Ed Jones

Title AREA MANAGER

THE UNITED STATES OF AMERICA

By Clinton C. Knox
Executive Officer
OME Field Team, Region IV

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION
Box 431
Joplin, Missouri
November 19, 1958

EXTRA COPY
O. M. E.
RECEIVED NOV 21 1958

DATE	INITIALS	CODE
		80U

OME Operating Committee
Office of Minerals Exploration
Department of the Interior
Washington 25, D. C.

Re: DMEA-4582 (lead-zinc-copper)
St. Joseph Lead Co.
Courtois Area
Washington County, Mo.
Contract Idm-E1068

Dear Sirs:

Furnished herewith are the original and audit copy of Amendment No. 6 to the captioned Contract enacted to add contiguous lands as listed in the enclosed letter of request from the Operator, and photostats of the B.L.M. Prospecting Permit covering 398 acres added to the subject contract in accordance with Annex I.

The Operator has retained its copy of the executed amendment and the Finance Office Copy is being furnished with a copy of this letter.

Sincerely yours,

CCK/id

Clinton C. Knox
Executive Officer
OME Field Team, Region IV

encls.

cc: OME Op.Com.
King, USGS, Denver
Amos, USGS, Carbondale
Finance Officer, USBM, Bartlesville
4582 file

RECEIVED
DIVISION OF MINERAL
TECHNOLOGY

OCT 29 1958

BUREAU OF MINES,
JOPLIN, MO.

Bonne Terre, Missouri
October 27, 1958

Mr. Clinton C. Knox, Executive Officer
DMEA Field Team, Region IV
United States Department of the Interior
Box 431
Joplin, Missouri

Dear Mr. Knox:

Re: DMEA-4582 (lead-zinc-copper), Courtois Area,
Washington County, Mo., Contract Idm-E1068.

Dear Mr. Knox:

Pursuant to the provisions contained in Annex I, we are requesting that an amendment to the above contract be executed to include the following listed contiguous lands:

Part of United States Bureau of Land Management Prospecting Permit, Serial No. 045266, dated April 1, 1958.

Grants exclusive right for two years (with right to a single extension) to prospect for galena and sphalerite and related minerals excluding oil and gas, oil shale, coal, phosphate, sodium, potasium and sulphur on the following described lands:

Township 35 North, Range 2 West, 5th P.M.	Acres
Section 2 - SE¼ - SE¼	40.00
" 12 - E½ - NW¼	80.00
" 12 - SW¼ - NW¼	40.00
" 1 - SW¼ - SW¼	40.00
" 11 - S½ - NE¼	80.00
" 12 - NW¼ - NW¼	40.00
" 1 - S-3/4 - SE¼ - SW¼	30.00
" 12 - W 8 acres of NW¼ - NE¼	8.00
" 2 - NE¼ - SE¼	40.00
TOTAL	398.00

Copies of covering permit are included.

Sincerely yours,

R. E. Wagner

R. E. Wagner,
Geologist.

REW/jcp

Encls.

Box 431
Joplin, Missouri
October 30, 1958

Mr. R. E. Wagner, Exploration Superintendent
Geology Department
St. Joseph Lead Company
Bonne Terre, Missouri

Re: [illegible]A-4582 (lead-zinc-copper)
Courtois Area
Washington County, Mo.
Contract Idm-E10/2

Dear Mr. Wagner:

In response to your letter of request on October 27, enclosed are the original and four copies of the proposed Amendment No. 6 signed for the Government by me, covering the addition under the Contract of the tracts you listed totaling about 398 acres. If this Contract Amendment meets with the approval of your company, please have all copies signed, retain the Operator's Copy for your file, and return the others to me for the usual distribution; otherwise, return all copies with a statement of your objections for the consideration of OME.

Sincerely yours,

Clinton C. Knox
Executive Officer
OME Field Team, Region IV

encls. 5

cc: Op.Com.(2)
Amos,USGS,Carbondale
King,USGS,Denver
4582 file
Shadow cy - Mr. E. A. Jones

Form 4-1099
(Aug. 1955)

UNITED STATES
DEPARTMENT OF THE INTERIOR
Bureau of Land Management

EXTRA COPY OF LEASE ISSUED NOV 21 1958

DATE	INITIALS	CODE

Office Eastern States Land Office

Serial No. ~~[illegible]~~

Missouri
(State)

Copper, Lead, Zinc, Iron
PROSPECTING PERMIT

Pursuant to the authority set out in, and subject to, the regulations 43 CFR 200.31-200.50, the United States of America, through the Bureau of Land Management, hereby grants to St. Joseph Lead Company, 250 Park Avenue, New York 17, New York the exclusive right for a period of two years from date hereof to propsect for copper, lead, zinc, iron and related minerals excluding oil and gas, oil shale, coal, phosphate, sodium, potassium and sulphur on the following described acquired lands of the United States in the State of Missouri, and permission to erect thereon such structures and facilities as are requisite for such purpose:

In the Clark National Forest, a total of 1,069.39 acres, as shown on the attached sheet.

The United States agency having administrative control over the surface use of the land is the United States Forest Service and the authorized representative to whom all inquiries relating thereto should be addressed is G. L. Harrison, Forest Supervisor, Rolla, Missouri

This permit is subject to the following terms and the permittee agrees:

1. To pay in advance an annual rental of 25¢ per acre or fraction thereof, by remittance payable to the Bureau of Land Management.

2. To comply with all regulations of the Secretary of the Interior and the Secretary of Agriculture as to the lands described herein which are under his jurisdicition and to conduct his operations in an orderly manner, and in accordance with the regulations (30 CFR, Part 231) and the applicable Federal and State laws.

3. That the lands herein described shall be subject at all times to any other lawful uses by the United States, its lessees, permittees, licensees, and assigns; PROVIDED, That such uses subsequently granted shall not unduly interfere with the permittee's operations hereunder.

4. To conduct all operations hereunder with due regard for good land management, not to cut or destroy timber without previous permission from the authorized agency representative and to pay for such timber at rates prescribed by him; to avoid damage to improvements, timber, crops, or other cover; unless otherwise authorized by the agency representative, not to drill any well, carry on operations, make excavations, construct tunnels, drill, or otherwise disturb the surface of the lands within 200 feet of any building thereon and whenever required in writing by the authorized agency representative, and upon any partial or total relinquishment, cancellation or termination of this permit as to that portion of the land to which his rights have terminated, to fence or fill all sump holes, ditches, and other excavations, remove or cover all debris, and so far as reasonably possible, reseed or otherwise restore the surface of the lands to their former condition, or to a productive or other condition satisfactory to the authorized agency representative including the removal of structures as and if required, and when required by such representative to bury all pipelines below plow depth. To do all in his power to prevent and suppress fires on the land and vicinity, and to require his employees, contractors, and subcontractors to do likewise. Unless prevented by circumstances over which he has no control, to place his employees, contractors, and subcontractors at the disposal of the authorized agency representative for the purpose of fighting fires on or originating on the land or on adjacent areas or caused by the negligence of the permittee or his employees, contractors, and subcontractors, with the understanding that payment for such services shall be made at rates to be determined by such authorized representative but not less than the current rates of pay prevailing in the vicinity for services of a similar character: PROVIDED, That if the permittee, his employees, contractors, or subcontractors, or employees of contractors or subcontractors, caused or could have prevented the origin or spread of said fire or fires, no payment shall be made for services so rendered. During periods of serious fire danger, as may be specified by the authorized agency representative, the permittee shall prohibit smoking and the building of camp and lunch fires by his employees, contractors, and subcontractors, within the permitted area except at established camps, and shall enforce this prohibition by all means within his power: PROVIDED, That the authorized agency representative may designate safe places where, after all inflammable materials have been cleared away, campfires may be built for the purpose of heating lunches and where, at the option of the permittee, smoking may be permitted: PROVIDED, Further that when in the judgment of the authorized agency representative the fire danger is of such serious nature that fires may result from the operation, the permittee will close down operations upon request of such representative for the period of such emergency. The permittee shall not burn rubbish, trash or other inflammable materials except with the consent of the authorized agency representative and shall not use explosives during the fire season except as authorized to do so or on areas approved by such representative. The permittee shall build or construct such fire lines or do such clearing on the land as the authorized agency representative decides is essential for forest, brush, and grass fire prevention which is or may be necessitated by the exercise of the privileges authorized by this permit, and shall maintain such fire tools at his headquarters or at the appropriate location on the lands as are deemed necessary by such representative.

In the Clark National Forest:

		Acres
T. 36 N., R. 1 W.,	S½ Section 31	320.00
T. 35 N., R. 1 W.,	NE¼NW¼ Section 6	41.70
	NW¼NW¼ Section 6	35.27
T. 35 N., R. 2 W.	SE¼NW¼ Section 1	40.00
	SE¼SE¼ Section 2	40.00
	N½NW¼ Section 12	80.00
	SW¼NW¼ Section 12	40.00
	SW¼SW¼ Section 1	40.00
	S½ NE¼ Section 11	80.00
	NE¼NW¼ Section 12	40.00
	W½ Lot 1 NE¼ less 8 - acre strip off West end Section 1	32.00
	N½NW¼ Section 1	81.90
	SW¼NW¼ Section 1	40.00
	S 3/4NE¼NW¼ Section 1	30.00
	W 8 acres of NW¼NE¼ Section 12	8.00
	NE¼SE¼ Section 2	40.00
	S½ Lot 1 NE¼ Section 1	40.00
	NE¼NE¼ Section 1	40.92
	Total	1069.39

5. Not to clear or use the land for development or for construction purposes of any kind until a plan of construction and development therefor has been approved by the authorized agency representative and that in the location, design, construction, and maintenance of all authorized works, buildings, plants, waterways, roads, telegraph or telephone lines, pipelines, reservoirs, tanks, pumping stations, or other structures or clearance, permittee shall do all things reasonably necessary to prevent or reduce scarring and erosion of the land, pollution of the water resources and any damage to the watershed. That where construction, operation, or maintenance of any of the facilities on or connected with this permit causes damage to the watershed or pollution of the water resources, the permittee agrees to repair such damage and to take such corrective measures as are required by the authorized agency representative, including the reseeding or other restoration of the vegetative cover.

6. To pay the permitter or its tenant or the surface owner or his tenant, as the case may be, for any and all damage to or destruction of property caused by permittee's operations hereunder; to save and hold the permitter or the surface owner or their tenants harmless from all damage or claims for damage to persons or property resulting from permittee's operations hereunder.

7. To install and maintain cattle guards to prevent the passage of livestock in any openings made in fences by the permittee or his contractors to provide access to the lands covered by this permit for automotive and other equipment and that any camps to be constructed on the land will be located at a place approved by the authorized agency representative and that such camps will be kept in a neat and sanitary condition.

8. Unless otherwise authorized, prior to the beginning of operations to appoint and maintain at all times during the term of this permit a local agent upon whom may be served written orders or notices respecting matters contained in this stipulation, and to inform the authorized agency representative in writing, of the name and address of such agent. If a substitute agent is appointed, the permittee shall immediately so inform the said representative.

9. On termination of this permit by surrender, forfeiture, or otherwise, the permittee shall have the privilege at any time within a period of 90 days thereafter of removing from the premises all machinery, equipment, tools, and materials. Any materials, tools, appliances, machinery, structures, and equipment, subject to removal as above provided, which are allowed to remain on the land shall become the property of the United States on expiration of the 90-day period or such extension thereof as may be granted by it but the permittee shall remove any or all of such property when so directed by the authorized agency representative.

10. To permit inspection of the premises and operations by duly authorized representatives of the Departments of the Interior and Agriculture, and shall provide a way across the lands covered by this permit for the free ingress or egress of Government officers and for users of the lands covered by this permit or other lands administered by the agency having control over the surface or the purchasers of the products of any such lands.

11. That this permit shall become null and void if the Bureau of Land Management shall find and determine (a) that the permittee has violated or failed to comply with any of the conditions of said permit, to the detriment of the United States, or (b) that the lands herein described are required by a public agency for a public purpose with which the continuation of mining operations under this permit would be incompatible.

12. The right to mine or remove minerals in merchantable quantities is not granted by this permit except in connection with an application for a preference right lease and only as specified in the cited regulation. This permit does not authorize prospecting or removal of any mineral deposits by stripping, rim cutting or open pit methods, without the prior written approval of the authorized agency representative and on such conditions as he may prescribe. The permittee has a preference right during the term of this permit to secure a mining lease covering any of the lands described in this prospecting permit in accordance with the regulation 43 CFR 200.37.

13. That in connection with the performance of work under this permit, permittee will not discriminate against any employee or applicant for employment because of race, religion, color, or national origin. The aforesaid provision shall include, but not be limited to, the following: employment, upgrading, demotion, or transfer; recruitment or recruitment advertising; layoff or termination; rates of pay or other forms of compensation; and selection for training, including apprenticeship. The permittee agrees to post hereafter in conspicuous places, available for employees and applicants for employment, notices to be provided by the contracting officer setting forth the provisions of the nondiscrimination clause. The permittee further agrees to insert the foregoing provision in all subcontracts hereunder, except subcontracts for standard commercial supplies or raw materials.

14. This permit is subject to a single 2-year extension in accordance with the regulation 43 CFR 200.36.

15. That no Member of, or Delegate to, Congress, or Resident Commissioner, after his election or appointment, or either before or after he has qualified and during his continuance in office, and that no officer, agent, or employee of the Department of the Interior, except as provided in 43 CFR 7.4(a)(1), shall be admitted to any share or part in this permit or derive any benefit that may arise therefrom; and the provisions of Sec. 3741 of the Revised Statutes of the United States, as amended (41 U.S.C. Sec. 22), and Secs. 431, 432, and 433, Title 18 U. S. Code, relating to contracts, enter into and form a part of this permit so far as the same may be applicable.

APR 1 1958
Date

Joseph P. Hagan
Signing Officer

Chief, Minerals Adjudication Section
Title

IMT -DUP SEC WASH . D C 85334

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION
Box 431
Joplin, Missouri
September 12, 1958

Mr. R. E. Wagner, Exploration Superintendent
Geology Department
St. Joseph Lead Company
Bonne Terre, Missouri

Re: DMEA-4582(lead-zinc-copper)
Courtois Area
Washington County, Mo.
Contract Idm-31068

Dear Mr. Wagner:

This is written confirmation of approval of the Government given by the Field Team examiners in your office on September 4, 1958, for drilling 20 additional holes under Stage II, Exhibit A of the cited Contract as requested and geologically justified by you and shown on your map in the following areas:

Stake No.	Location
VC-159	T35N - R2W - Sec. 12 - NW¼ SW¼ NE¼
VC-160	" " " 1 - SW¼ SW¼ SE¼
VC-166	" " " 7 - SE¼ NE¼ NW¼
VC-167	" " " 6 - SE¼ SE¼ SE¼
VC-168	" " " 8 - NW¼ NW¼ NW¼
VC-169	" " " 8 - NW¼ NW¼ NW¼
VC-170	" " " 8 - SE¼ NW¼ NW¼
VC-171	" " " 8 - NW¼ SW¼ NW¼
VC-172	" " " 5 - SE¼ SW¼ SW¼
VC-173	" " " 8 - NW¼ NE¼ NW¼
VC-174	" " " 5 - SE¼ SE¼ SW¼
VC-175	" " " 8 - SE¼ NW¼ NE¼
VC-176	" " " 8 - NW¼ NW¼ NE¼
VC-177	" " " 5 - NW¼ SW¼ SE¼
VC-178	" " " 5 - SW¼ NW¼ SE¼
VC-161	" " " 7 - SW¼ NE¼ NW¼
VC-162	" " " 8 - NW¼ SE¼ NW¼
VC-163	" " " 7 - SW¼ NW¼ NW¼
VC-164	" " " 7 - NW¼ NW¼ NW¼
VC-165	" " " 7 - SE¼ NW¼ NW¼

Sincerely yours,

CCK/id

Clinton C. Knox
Executive Officer
DMEA Field Team, Region IV

cc: DMEA Op.Com.(2)
King,USGS,Denver
Amos,USGS,Carbondale
4582 file
Shadow cy - Mr. R. E. Wagner

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MAY 28 1958

BUREAU OF MINES
JOPLIN, MO.

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DMEA
RECEIVED JUN 2 1958
DATE | INITIALS | CODE

EXPLORATION PROJECT CONTRACT IDM-E1068
ST. JOSEPH LEAD COMPANY
DOCKET No. DMEA-4582 (LEAD-ZINC-COPPER)

AMENDMENT NO. 5

It is agreed the 14th day of May, 1958, between the United States of America, acting through the Department of the Interior, Defense Minerals Exploration Administration, and the St. Joseph Lead Company, that Exploration Project Contract Idm-E1068 (Docket No. DMEA-4582) is amended pursuant to item 1 of the Special Agreement Concerning Land in Annex I of said Exploration Contract, whereby the additional lands described in two Option Contracts filed with the Defense Minerals Exploration Administration as of May 14, 1958, being contiguous to lands covered by said Contract, becomes subject to the provisions therein, and hereby are included with the list of properties thereunder in Annex I, particularly identified by the Operator's file numbers and names of owners as follows:

24.* acres CZ-283 John E. and Nettie Turnbough
60.5 " CZ-288 Marvin G. and Loraine Turnbough

This amendment shall be effective as of May 14, 1958.

This amendment shall not be construed to increase the estimated cost of the project or the aggregate amount which the Government may be required to contribute.

Executed in quintuplicate the day and year first above written.

THE ST. JOSEPH LEAD COMPANY

By E. B. Jones

Title [illegible]

THE UNITED STATES OF AMERICA

By Clinton C. Knox
Executive Officer
DMEA Field Team, Region IV

* Total 174.57, but 150.57 under original contract after CZ 98

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION
Box 431
Joplin, Missouri
May 29, 1958

800

DMEA Operating Committee
Department of the Interior
Washington 25, D. C.

Re: DMEA-4582(lead-zinc-copper)
St. Joseph Lead Co.
Courtois Area
Washington County, Mo.
Contract Idm-E1068

Dear Sirs:

Forwarded herewith are the original and one copy of Amendment No. 5 and photostats of two option contracts recently executed by the Operator to add 212 acres for exploration under the cited project Contract.

The Operator and the Field Team retained their respective copies and the proper copy is being furnished to the Finance Officer with a copy of this letter.

Sincerely yours,

CCK/id

Clinton C. Knox
Executive Officer
DMEA Field Team, Region IV

encl. 4

cc: DMEA Op.Com.
Amos,USGS,Carbondale w/cy Option Contracts
King,USGS,Denver
Finance Officer,USBM,Bartlesville
w/cy encls.
4582 file

CZ-283

RECEIVED
DIVISION OF MINERAL
TECHNOLOGY

MAY 15 1958

BUREAU OF MINES
JOPLIN, MO.

OPTION CONTRACT

1. This instrument states the contract made by and between

JOHN E. TURNBOUGH and NETTIE TURNBOUGH, his wife,

parties of the first part, hereinafter designated and referred to as the landowner, and ST. JOSEPH LEAD COMPANY, a corporation of the State of New York, party of the second part, hereinafter designated and referred to as the Company.

2. In consideration of the covenants and agreements hereinafter expressed and of the sum of One Hundred thirty seven - - - - - - - - - - - - - - Dollars ($137.00) paid by the company to the landowner, the receipt of which is hereby acknowledged, the landowner by these presents grants and sells unto the company, the exclusive right and option to buy, upon the terms and conditions and within the time hereinafter set out, the following described real estate, property, rights and interests lying, being and situate in the County of Washington and State of Missouri, described as follows:

All underground and mining rights in and pertaining to and all minerals contained in: The N½ of the SW¼ of the SE¼ of Sec. 4, Twp. 35 N., R. 1 W., making the bottom of a certain hollow the line east and west running where hollow forks right hand, the land containing 20 acres. The SW¼ of the SE¼ of Sec. 5, Twp. 35 N., R. 1 W., containing 40 acres. The E½ of the SE¼ of Sec. 5, Twp. 35 N., R. 1 W. except 5.57 acres in north corner of NE¼ of SE¼ of Sec. 5 and described as follows: Begin at quarter corner between Secs. 4 & 5, gas pipe driven and pile stones, one gov. stone, thence west va. 5° 30' at 3.38 chains stake and stones hickory 4" N. 40° W. 8 links, a gum 20" N. 17° E. 9 links thence S. 13° E. at 2.35 chains stake on S. 80° E. at 5.71 chains stake and stones white oak 6" N. 65° E. 10 links apple tree S. 81° W. 14 links, thence S. 74° E. at 6.32 chains intersecting line between Secs. 4 & 5, thence N. va. 5° at 6.32 chains to beginning.

Also, 10 acres off the East end of NW¼ of SE¼ of Sec. 5, Twp. 35 N., R. 1 W.

Also, that part of SW¼ of NE¼ of Sec. 5, Twp. 35 N., R. 1 W. described as follows: Starting at SW corner of Lot 2 of NE¼, thence south along old line fence at 12.5 chains old road, to beginning point, thence N. 72° E. along old road at 10.16 chains stake; thence N. 54° E. at 4.16 chains stake; thence N. 31° E. 3.75 chains stake; thence N. 63° E. 5.13 chains stake; thence south to SE corner of SW¼ of NE¼; thence west to SW corner of same, thence north to point of beginning.

Also, a part of Lot 2 of Sec. 5, Twp. 35 N., R. 1 W., beginning at a point where the county road crosses the section line between Sections 4 & 5 which point is 17.21 chains south of the NE corner of said Section 5; thence S. 83° W. 12.60 chains, thence S. 29° W. for 7.39 chains, thence S. 19° W. to an intersection with the south line of said Lot 2, thence in an easterly direction to the SE corner of the said Lot 2, thence in a northerly direction to the point of beginning, excepting 2.5 acres in the SE corner of the above mentioned tract, and described on page 102, Book 91, Washington County land records, as belonging to Marvin C. Turnbough and Loraine Turnbough, his wife; the tract hereby conveyed being a total of 10 acres, more or less.

The total aggregate acres contained in this option contract is 174.57 acres, more or less.

This option contract supersedes the option contract dated the 27th day of July, 1956.

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3. The right and privilege is hereby granted the company to go in and upon the surface of the above described land and prospect for lead or other valuable minerals in modern manner and under modern local customs, that is to say with a diamond drill or churn drill or such other implements, tools and machinery as the company may choose, and to dig, drill, bore, blast, tunnel, and sink shafts in and upon said land, and to use from said land without cost, all the water necessary for such drilling and prospecting. It is further understood and agreed that the landowner shall have the right to see and examine any and all drill cores taken from said land, and in case the company shall fail to buy under this option, all such drill cores as shall have been taken from said land and preserved by the company, shall at any time within sixty days after the expiration of this contract, be turned over to the landowner upon his demand.

4. It is further agreed that all diamonds, bits, rods, pipes and other devices, tools, and appliances that may be used by the company in prospecting said land, shall remain and be the absolute property of the company, and the landowner hereby recognizes such continual ownership, and guarantees to the company the right and privilege to go in and upon said land or any part thereof, even after the expiration of this contract, or any extension thereof, for the purpose of searching for and seeking to recover any lost diamonds, bits, rods, pipes and other tools, devices and appliances.

5. It is hereby agreed that the company will be responsible for and pay the reasonable amount of damages done to any fences, fruit trees, or growing crops of the landowner by reason or as the result of the drilling and prospecting of said land, or in the search for lost bits and diamonds, and in case of a disagreement over the amount of any damage, the amount thereof shall be determined by three appraisers, who shall be citizens living in the county where the land herein described is situated, one of which appraisers shall be chosen by each of the parties to this contract and the third by the appraisers thus selected, the expense of such appraisal to be borne equally by the parties hereto.

6. If the company shall, during the life of this contract or any extension thereof, purchase under the terms of this contract, it shall pay for the above described underground mining rights and minerals the sum of Fifty and No/100 - - - - - - - Dollars ($50.00) per acre.

7. For and in consideration of the covenants and agreements herein expressed and of the said sum of One Dollar ($1.00) paid by the company to the landowner, and for other good and valuable considerations, the landowner by these presents grants and sells unto the company, to continue during the life of this contract or any extension thereof, the following additional exclusive right and option:

If the company shall during the life of this contract or any extension thereof buy the above described underground and mining rights and minerals at the price above set out, to wit, Fifty and No/100 - - - - Dollars ($50.00) per acre, then the company shall have the right to purchase and the landowner agrees to sell and convey by general warranty deed, free and clear of all encumbrances, any of the surface of the above described land that is desired by the company for the sum of One Hundred and No/100 - - - - Dollars ($100.00) per acre for such surface so taken, plus the reasonable value of any buildings on the surface of the land so purchased. It is agreed that if the parties hereto are unable to agree upon the

reasonable value of said buildings, then the same shall be determined by three appraisers, one appointed promptly by each of the parties and the third by the two so selected. If the said two appraisers chosen by the parties shall fail to choose a third appraiser within fifteen days after they are chosen, a third appraiser shall be appointed by the Magistrate of the county in which the above described land is located. The decision of such appraisers as to the reasonable value of said buildings shall be final and binding upon the parties, the expense of such appraisal to be borne equally by the two said parties.

8. The landowner hereby covenants and agrees that in the event of any election by the company to purchase under this contract, the landowner will, within 30 days after notice of election to purchase, furnish the company a complete abstract of title to the above described land, rights and property. If the landowner fails to furnish said abstract within the time herein provided, the company shall have the right to procure said abstract and to retain the cost of same out of the purchase price provided for in this contract. If upon examination of said abstract, the title be found not to be merchantable, the company shall have the right to rescind said election to purchase and in the event of such rescission shall be under no further obligation to purchase under this contract or otherwise.

9. If the company elects to purchase the underground, mining rights and minerals as described in paragraph 2 or said underground, mining rights and minerals and the surface or any part thereof as provided in paragraph 7, and fails to exercise the right of rescission above provided, then the landowner will make, execute and deliver to the company on the date specified in said notice of election to purchase, a good and sufficient general warranty deed granting, bargaining and selling to the company in fee simple, free and clear of all encumbrances the interests specified in the notice of election. If by said deed the company does not acquire title to any or all of the surface of the above described land, then said deed shall include a clause with respect to such unacquired surface, as follows:

"It is hereby expressly understood and agreed that the grantee, its successors and assigns, shall have the full, free and exclusive right and privilege of carrying on its business of mining upon and under the premises hereby conveyed and removing the mineral therefrom, including the right to prospect for mineral upon any part of the same, the right to sink shafts and to use so much of the surface of the conveyed premises as may be necessary or convenient for the purpose of connecting by road, railway, conduit or wire any shaft with other shafts, or with the mills or other concentrating works or smelteries, or with the tracks of any railroad and the further right of doing in a proper manner any act upon the surface of the conveyed premises which the grantee or its successors or assigns may deem necessary or desirable to fully enjoy the mining rights in and upon said premises. But it is further understood and agreed that for all damages that may be done to the surface of the conveyed premises or to any building or structure thereon in the carrying out of any or all of the purposes and rights of the grantee, said grantee shall pay the grantor, his heirs and assigns, a reasonable amount to be agreed upon; and in the event they fail to agree then the same shall be determined by three appraisers, one appointed by each party hereto and a third by those two; and their decision as to such damages shall be final, the expense of such appraisal to be borne equally by the grantor and grantee."

10. In any event in which the surface of the above described real estate is referred to in or under this contract, the word "surface" shall be construed to include all right, title and interest in and to the acreage of land specified except the underground, mining rights and minerals described in paragraph 2.

11. For the purpose of this contract the aggregate acreage, as above stated, is taken to be correct and binding upon the parties, but if upon any election to purchase under the terms of this contract or at any time during the life of this contract or any extension thereof, the company shall so desire, the true acreage of said lands or any designated part thereof shall be ascertained by survey by the County Surveyor of the county in which the land lies. And it is agreed that in the event the true acreage be established by said survey to be different from that given above, any payments made or calculated by or upon the acreage as above stated shall be corrected and adjusted to the true acreage so established.

12. Any notice or tender authorized or required to be given or made landowner shall be considered as given or made when deposited in the United States Mail, postage prepaid, addressed to John E. Turnbough, R.#2, Potosi, Missouri. Tender of the company's draft shall be a valid tender under this contract.

13. This contract shall be construed as a covenant running with the land and shall be binding upon the landowner, his heirs, personal representatives and assigns and shall enure to the benefit of the company, its successors and assigns.

14. This contract shall be in force and effect for the term of one year from and after its effective date hereinafter stated. It is further agreed as part of the consideration of this contract that the term of this contract, and all of its provisions, shall, at the option of the company, be renewed or extended for further periods upon the following conditions, that is to say: Upon the tender of One and No/100 Dollars per acre on or before the last day of said first one year term, ~~and upon like tender on or before the last day of any renewed or extended term,~~ this contract will be renewed and extended for an additional term of one year from and after the expiration of the term immediately preceeding; ~~provided, however, that there shall be not more than _____ such renewals or extensions.~~

15. This contract becomes effective on the date hereof.

16. In witness whereof, the said parties of the first part have hereunto set their hands and seals this 15 day of Jan, 1958.

John E. Turnbough (SEAL)

Nellie Turnbough (SEAL)

_____ (SEAL)

_____ (SEAL)

_____ (SEAL)

ACKNOWLEDGMENT

STATE OF MISSOURI)
) SS.
COUNTY OF Crawford)

On this 15th day of June, 195[illegible], before me personally appeared JOHN E. TURNBOUGH and NETTIE TURNBOUGH, his wife, to me known to be the persons described in and who executed the foregoing instrument and acknowledged that they executed the same as their free act and deed.

In testimony whereof, I have hereunto set my hand and affixed my official seal at my office in Dawsell the day and year last above written.

My commission expires Aug. 21-60.

Notary Public.

STATE OF MISSOURI)
) SS.
COUNTY OF _____)

On this _____ day of _____, 195___, before me personally appeared _____, to me known to be the person__ described in and who executed the foregoing instrument and acknowledged that __he__ executed the same as _____ free act and deed. And said _____ further declared _____ to be single and unmarried.

In testimony whereof, I have hereunto set my hand and affixed my official seal at my office in _____ the day and year last above written.

My commission expires _____.

_____
Notary Public.

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DATE	INITIALS	CODE

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION

Box 431
Joplin, Missouri
May 21, 1958

EXTRA COPY
DMEA
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DATE	INITIALS	CODE
		800

Mr. R. E. Wagner, Exploration Superintendent
Geology Department
St. Joseph Lead Company
Bonne Terre, Missouri

Re: DMEA-4582(lead-zinc-copper)
Courtois Area
Washington County, Mo.
Contract Idm-21068

Dear Mr. Wagner:

This will acknowledge receiving on May 15 your Monthly Progress Report for the April project work with your formal request for an amendment to add two newly optioned tracts totaling about 212 acres for exploration under this Contract.

Therefore, enclosed herewith are the original and four copies of proposed Amendment No. 5 signed by me covering addition of those two tracts. If it meets with the approval of your company, please have all copies signed, retain the Operator's Copy for your file and return the others to me for the usual distribution; otherwise, return all copies with a statement of your objections for the consideration of DMEA.

This also is written confirmation of the approval of the Government as of May 8, 1958 verbally given by the Field Team examiners in your office then for drilling 18 additional holes under "Stage II, Exhibit A" of the cited Contract, as requested and geologically justified by you for the following sites:

Site No.							
C-141	about	1500	feet	S60°W	of	Hole	56W160
C-142	"	1200	"	N18°W	"	"	56W160
C-143	"	1150	"	S43°W	"	"	56W158
C-144	"	975	"	N85°W	"	"	"
C-145	"	850	"	N22°W	"	"	"
C-146	"	520	"	N30°E	"	Stake	VC58
C-147	"	900	"	S45°W	"	"	VC44
C-148	"	900	"	S15°E	"	"	"
C-149	"	900	"	S75°E	"	"	"

Stake No.(Cont'd)

C-150	about	900	feet	N75°W	of	Stake	VC44
C-151	"	900	"	N45°E	"	"	VC44
C-152	"	900	"	S45°W	"	"	VC55
C-153	"	900	"	S15°E	"	"	VC55
C-154	"	900	"	S75°E	"	"	"
C-155	"	900	"	N15°W	"	"	"
C-156	"	900	"	N45°E	"	"	"
C-157	"	900	"	S75°E	"	"	VC65
C-158	"	900	"	N15°W	"	"	"

Sincerely yours,

CCK/id

Clinton C. Knox
Executive Officer
DMEA Field Team, Region IV

encls. 5

cc: DMEA Op.Com.(2) w/cy Amend.
King, USGS, Denver " "
Amos, USGS, Carbondale " "
4582 file
Shadow cy-Mr. E. A. Jones

Memo copy

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RECEIVED MAY 23 1958

DATE	INITIALS	CODE

EXPLORATION PROJECT CONTRACT IDA-K1068
ST. JOSEPH LEAD COMPANY
DOCKET No. DMEA-4562 (LEAD-ZINC-COPPER)

AMENDMENT NO. 5

It is agreed the 14th day of May, 1958, between the United States of America, acting through the Department of the Interior, Defense Minerals Exploration Administration, and the St. Joseph Lead Company, that Exploration Project Contract Ida-K1068 (Docket No. DMEA-4562) is amended pursuant to Item 1 of the Special Agreement Concerning Land in Annex I of said Exploration Contract, whereby the additional lands described in two Option Contracts filed with the Defense Minerals Exploration Administration as of May 14, 1958, being contiguous to lands covered by said Contract, becomes subject to the provisions therein, and hereby are included with the list of properties thereunder in Annex I, particularly identified by the Operator's file numbers and names of owners as follows:

G2-203 John E. and Nattie Turnbough
G2-206 Marvin C. and Loraine Turnbough

This amendment shall be effective as of May 14, 1958.

This amendment shall not be construed to increase the estimated cost of the project or the aggregate amount which the Government may be required to contribute.

Executed in quintuplicate the day and year first above written.

THE ST. JOSEPH LEAD COMPANY

By ~~XXXXXXXXXXXXXXXXXXXXXXXX~~

Title ~~XXXXXXXXXXXXXXXXXXXX~~

THE UNITED STATES OF AMERICA

By ~~XXXXXXXXXXXXXXXXXXXX~~
~~Executive Officer~~
DMEA Field Team, Region IV

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION

Box 431
Joplin, Missouri
April 16, 1958

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DATE	INITIALS	CODE
		800

Mr. R. E. Wagner, Exploration Superintendent
St. Joseph Lead Company
Bonne Terre, Missouri

Re: DMEA-4582(lead-zinc-copper)
Courtois Area
Washington County, Mo.
Contract Idm-4106

Dear Mr. Wagner:

This is written confirmation of the approval of the Government as of April 10, 1958 given by the Field Team in your office then for drilling 21 additional holes under "Stage II, Exhibit A" of the cited Contract as requested and geologically justified by you for the following sites:

Site No.						
C-120	about	500	feet	E	of	C-112
C-121	"	"	"	"	"	C-104
C-122	"	"	"	"	"	C-119
C-123	"	"	"	"	"	57VC57
C-124	"	600	"	"	"	C-119
C-125	"	500	"	"	"	C-77
C-126	"	"	"	"	"	C-102
C-127	"	520	"	N45°W	of	VC35
C-128	"	"	"	N15°E	"	"
C-129	"	"	"	N75°E	"	"
C-130	about	520	feet	S45°E	of	VC35
C-131	"	"	"	S15°W	"	"
C-132	"	"	"	S75°W	"	"
C-133	"	"	"	N45°W	"	C132
C-134	"	"	"	N45°W	"	C133
C-135	"	"	"	S75°W	"	VC43
C-136	"	1040	"	N45°W	"	"
C-137	"	1560	"	N75°E	"	C136
C-138	"	1040	"	N15°E	"	C127
C-139	"	1560	"	N25°W	"	C136
C-140	"	1560	"	N75°E	"	C139

Sincerely yours,

CCK/id

Clinton C. Knox
Executive Officer
DMEA Field Team, Region IV

cc: DMEA Op.Com.(2)
King,USGS,Denver
Amos,USGS,Carbondale
4582 file
Shadow - Mr. E. A. Jones

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DIVISION OF MINERAL
TECHNOLOGY

MAR 18 1958

BUREAU OF MINES
JOPLIN, MO.

EXPLORATION PROJECT CONTRACT IDM-E1068
ST. JOSEPH LEAD COMPANY
DOCKET NO. DMEA-4582 (LEAD-ZINC-COPPER)

AMENDMENT NO. 4

It is agreed this 3rd day of March 1958, between the United States of America, acting through the Department of the Interior, Defense Minerals Exploration Administration, and the St. Joseph Lead Company, that Exploration Project Contract Idm-E1068 (Docket No. DMEA-4582) effective as of the date above written is amended pursuant to item 1 of the Special Agreement Concerning Land in Annex I of said Exploration Contract, whereby the additional lands described in United States Bureau of Land Management Prospecting Permit, Serial No. 044857, filed with the Defense Minerals Exploration Administration become subject to the provisions therein, and hereby are included with the list of properties thereunder in Annex I, particularly identified by the Operator's file number as follows:

044857--Washington County

64 That part of SE/4, sec. 1, T. 35 N., R. 2W.
80. The E/2 of NE/4 and that part of the SW/4 of NE/4, sec. 12, T. 35N., R. 2W
32. The S/2, sec. 6, T. 35N., R. 1W.
312.50 The S/2, sec. 9, T. 35N., R. 1W. Deleted by Amend #6
808.80 acres

This Amendment shall not be construed to increase the estimated cost of the project or the aggregate amount which the Government may be required to contribute.

Executed in quintuplicate the day and year first above written.

THE ST. JOSEPH LEAD COMPANY

By E. Jones

Title DIVISION MANAGER

THE UNITED STATES OF AMERICA

By Clinton C. Knox
Executive Officer
DMEA Field Team, Region IV

Form 4-1099
(Aug. 1955)

UNITED STATES
DEPARTMENT OF THE INTERIOR
Bureau of Land Management

FEB 0

Office Eastern States Land Office

Serial No. BLM-A 044857

Missouri
(State)

Lead and Zinc
PROSPECTING PERMIT

Pursuant to the authority set out in, and subject to, the regulations 43 CFR 200.31-200.50, the United States of America, through the Bureau of Land Management, hereby grants to the St. Joseph Lead Company, 250 Park Avenue, New York 17, New York the exclusive right for a period of two years from date hereof to prospect for lead, zinc and related minerals excluding oil and gas, oil shale, coal, phosphate, sodium, potassium and sulphur on the following described acquired lands of the United States in the State of Missouri, and permission to erect thereon such structures and facilities as are requisite for such purpose:

1,174.80 acres as described on the attached sheet

The United States agency having administrative control over the surface use of the land is the United States Forest Service and the authorized representative to whom all inquiries relating thereto should be addressed is C. L. Harrison, Forest Supervisor, Rolla, Missouri

This permit is subject to the following terms and the permittee agrees:

1. To pay in advance an annual rental of 25¢ per acre or fraction thereof, by remittance payable to the Bureau of Land Management.

2. To comply with all regulations of the Secretary of the Interior and the Secretary of Agriculture as to the lands described herein which are under his jurisdiction and to conduct his operations in an orderly manner, and in accordance with the regulations (30 CFR, Part 231) and the applicable Federal and State laws.

3. That the lands herein described shall be subject at all times to any other lawful uses by the United States, its lessees, permittees, licensees, and assigns; PROVIDED, That such uses subsequently granted shall not unduly interfere with the permittee's operations hereunder.

4. To conduct all operations hereunder with due regard for good land management, not to cut or destroy timber without previous permission from the authorized agency representative and to pay for such timber at rates prescribed by him; to avoid damage to improvements, timber, crops, or other cover; unless otherwise authorized by the agency representative, not to drill any well, carry on operations, make excavations, construct tunnels, drill, or otherwise disturb the surface of the lands within 200 feet of any building thereon and whenever required in writing by the authorized agency representative, and upon any partial or total relinquishment, cancellation or termination of this permit as to that portion of the land to which his rights have terminated, to fence or fill all sump holes, ditches, and other excavations, remove or cover all debris, and so far as reasonably possible, reseed or otherwise restore the surface of the lands to their former condition, or to a productive or other condition satisfactory to the authorized agency representative including the removal of structures as and if required, and when required by such representative to bury all pipelines below plow depth. To do all in his power to prevent and suppress fires on the land and vicinity, and to require his employees, contractors, and subcontractors to do likewise. Unless prevented by circumstances over which he has no control, to place his employees, contractors, and subcontractors at the disposal of the authorized agency representative for the purpose of fighting fires on or originating on the land or on adjacent areas or caused by the negligence of the permittee or his employees, contractors, and subcontractors, with the understanding that payment for such services shall be made at rates to be determined by such authorized representative but not less than the current rates of pay prevailing in the vicinity for services of a similar character: PROVIDED, That if the permittee, his employees, contractors, or subcontractors, or employees of contractors or subcontractors, caused or could have prevented the origin or spread of said fire or fires, no payment shall be made for services so rendered. During periods of serious fire danger, as may be specified by the authorized agency representative, the permittee shall prohibit smoking and the building of camp and lunch fires by his employees, contractors, and subcontractors, within the permitted area except at established camps, and shall enforce this prohibition by all means within his power: PROVIDED, That the authorized agency representative may designate safe places where, after all inflammable materials have been cleared away, campfires may be built for the purpose of heating lunches and where, at the option of the permittee, smoking may be permitted: PROVIDED, Further that when in the judgment of the authorized agency representative the fire danger is of such serious nature that fires may result from the operation, the permittee will close down operations upon request of such representative for the period of such emergency. The permittee shall not burn rubbish, trash or other inflammable materials except with the consent of the authorized agency representative and shall not use explosives during the fire season except as authorized to do so or on areas approved by such representative. The permittee shall build or construct such fire lines or do such clearing on the land as the authorized agency representative decides is essential for forest, brush, and grass fire prevention which is or may be necessitated by the exercise of the privileges authorized by this permit, and shall maintain such fire tools at his headquarters or at the appropriate location on the lands as are deemed necessary by such representative.

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MAR 4 1958
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JOPLIN, MO.

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DATE

5. Not to clear or use the land for development or for construction purposes of any kind until a plan of construction and development therefor has been approved by the authorized agency representative and that in the location, design, construction, and maintenance of all authorized works, buildings, plants, waterways, roads, telegraph or telephone lines, pipelines, reservoirs, tanks, pumping stations, or other structures or clearance, permittee shall do all things reasonably necessary to prevent or reduce scarring and erosion of the land, pollution of the water resources and any damage to the watershed. That where construction, operation, or maintenance of any of the facilities on or connected with this permit causes damage to the watershed or pollution of the water resources, the permittee agrees to repair such damage and to take such corrective measures as are required by the authorized agency representative, including the reseeding or other restoration of the vegetative cover.

6. To pay the permitter or its tenant or the surface owner or his tenant, as the case may be, for any and all damage to or destruction of property caused by permittee's operations hereunder; to save and hold the permitter or the surface owner or their tenants harmless from all damage or claims for damage to persons or property resulting from permittee's operations hereunder.

7. To install and maintain cattle guards to prevent the passage of livestock in any openings made in fences by the permittee or his contractors to provide access to the lands covered by this permit for automotive and other equipment and that any camps to be constructed on the land will be located at a place approved by the authorized agency representative and that such camps will be kept in a neat and sanitary condition.

8. Unless otherwise authorized, prior to the beginning of operations to appoint and maintain at all times during the term of this permit a local agent upon whom may be served written orders or notices respecting matters contained in this stipulation, and to inform the authorized agency representative in writing, of the name and address of such agent. If a substitute agent is appointed, the permittee shall immediately so inform the said representative.

9. On termination of this permit by surrender, forfeiture, or otherwise, the permittee shall have the privilege at any time within a period of 90 days thereafter of removing from the premises all machinery, equipment, tools, and materials. Any materials, tools, appliances, machinery, structures, and equipment, subject to removal as above provided, which are allowed to remain on the land shall become the property of the United States on expiration of the 90-day period or such extension thereof as may be granted by it but the permittee shall remove any or all of such property when so directed by the authorized agency representative.

10. To permit inspection of the premises and operations by duly authorized representatives of the Departments of the Interior and Agriculture, and shall provide a way across the lands covered by this permit for the free ingress or egress of Government officers and for users of the lands covered by this permit or other lands administered by the agency having control over the surface or the purchasers of the products of any such lands.

11. That this permit shall become null and void if the Bureau of Land Management shall find and determine (a) that the permittee has violated or failed to comply with any of the conditions of said permit, to the detriment of the United States, or (b) that the lands herein described are required by a public agency for a public purpose with which the continuation of mining operations under this permit would be incompatible.

12. The right to mine or remove minerals in merchantable quantities is not granted by this permit except in connection with an application for a preference right lease and only as specified in the cited regulation. This permit does not authorize prospecting or removal of any mineral deposits by stripping, rim cutting or open pit methods, without the prior written approval of the authorized agency representative and on such conditions as he may prescribe. The permittee has a preference right during the term of this permit to secure a mining lease covering any of the lands described in this prospecting permit in accordance with the regulation 43 CFR 200.37.

13. That in connection with the performance of work under this permit, permittee will not discriminate against any employee or applicant for employment because of race, religion, color, or national origin. The aforesaid provision shall include, but not be limited to, the following: employment, upgrading, demotion, or transfer; recruitment or recruitment advertising; layoff or termination; rates of pay or other forms of compensation; and selection for training, including apprenticeship. The permittee agrees to post hereafter in conspicuous places, available for employees and applicants for employment, notices to be provided by the contracting officer setting forth the provisions of the nondiscrimination clause. The permittee further agrees to insert the foregoing provision in all subcontracts hereunder, except subcontracts for standard commercial supplies or raw materials.

14. This permit is subject to a single 2-year extension in accordance with the regulation 43 CFR 200.36.

15. That no Member of, or Delegate to, Congress, or Resident Commissioner, after his election or appointment, or either before or after he has qualified and during his continuance in office, and that no officer, agent, or employee of the Department of the Interior, except as provided in 43 CFR 7.4(a)(1), shall be admitted to any share or part in this permit or derive any benefit that may arise therefrom; and the provisions of Sec. 3741 of the Revised Statutes of the United States, as amended (41 U.S.C. Sec. 22), and Secs. 431, 432, and 433, Title 18 U. S. Code, relating to contracts, enter into and form a part of this permit so far as the same may be applicable.

MAR 1 1958
Date

Signing Officer

Chief, Minerals Adjudication Section
Title

PHOTOSTAT: J.A.T.
2.17.58
J.S.B.
2.25.58

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DIVISION OF MINERAL
TECHNOLOGY

MAR 4 1958

BUREAU OF MINES
JOPLIN, MO.

OFFICIAL FILE COPY
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BLM-A-044857

Special Conditions

A. The permittee shall fully repair all damage to National Forest roads and trails caused by the permittee in the exercise of the privileges granted by this permit.

B. The permittee shall plug all drill holes with a creosoted plug where the hole enters the solid rock below the overburden of soil and decomposed rock and cover with cement before the casing is pulled so that a permanent water tight plug results.

C. This permit does not grant the right to prospect for or remove any mineral deposits by stripping, rim cutting, contour or open pit methods, or to carry on prospecting or mining by means of mechanical earth moving equipment.

Signed _____

Attest _____

Date Oct 29, 1957

PHOTO STAT: J.A.T.
2-17-58

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DIVISION OF MINERAL
TECHNOLOGY

MAR 4 1958

BUREAU OF MINES
JOPLIN, MO.

In the Clark National Forest, the following

In Township 35 North, Range 2 West:

Tract No.	Description	Acres
11B	E½SE¼ Sec. 1 E½NE¼ Sec. 12	80 80
1194	That part of the W½SE¼ of Sec. 1 east of the Crawford-Washington County line	64
441	S3/4SW¼SE¼ of Sec. 1 west of the Crawford-Washington County line	6
1671	That part of the SW¼NE¼ of Sec. 12 east of the Crawford-Washington County line	32
24B	E½SE¼ of Sec. 11	80
52	W½SE¼ of Sec. 10	80
57	NE¼NW¼ of Sec. 10	40
621	E½NE¼ Sec. 10	80

In Township 35 North, Range 1 West:

791	SW¼ Sec. 6	152.00
3194	SE¼ Sec. 6	160.
822	S½ Sec. 9	320
	Total	1,174.80

PHOTOSTAT: J.A.T.
2-17-58

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21 1958

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DIVISION OF MINERAL
TECHNOLOGY

MAR 4 1958

BUREAU OF MINES
JOPLIN, MO.

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION
Box 431
Joplin, Missouri
March 19, 1958

EXTRA COPY
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DATE
800

DMEA Operating Committee
Defense Minerals Exploration Administration
Room 4457 - Interior Building
Washington 25, D. C.

Re: DMEA-4582(lead-zinc-copper)
St. Joseph Lead Co.
Courtois Area
Washington County, Mo.
Contract Idm-E1068

Dear Sirs:

Forwarded herewith are the original and one copy of Amendment No. 4 and two photostats of Prospecting Permit 044857 to the cited Contract executed by the Operator to add 889 acres thereunder for exploration.

The Operator and the Field Team retained their respective copies, and the proper copy is being furnished to the Finance Office with a copy of this letter.

Sincerely yours,

CCK/id

Clinton C. Knox
Executive Officer
DMEA Field Team, Region IV

encl. 4

cc: DMEA Op.Com.
Amos,USGS,Carbondale w/cy Permit
Finance Officer,USBM,Bartlesville w/cy ea. encl.
4582 file

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UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION

Box 431
Joplin, Missouri
February 12, 1958

Mr. R. E. Wagner, Exploration Superintendent
St. Joseph Lead Company
Bonne Terre, Missouri

Re: DMEA-4582(lead-zinc-copper)
Courtois Area
Washington County, Mo.
Contract Lam-21068

Dear Mr. Wagner:

This is written confirmation of the approval of the Government as of February 6, 1958 given by the Field Team in your office then for drilling 16 additional holes under "Stage II, Exhibit A" of the cited Contract as requested and geologically justified by you for the following sites:

Site No.	C-104	about	900	feet	N5°W	of C-83
	C-105	"	520	"	N25°W	of C-83
	C-106	"	520	"	N85°E	" C-83
	C-107	"	520	"	N65°E	" C-46
	C-108	"	520	"	S85°W	" C-83
	C-109	"	900	"	S35°W	" C-83
	C-110	"	520	"	N25°E	" C-88
	C-111	"	520	"	N35°W	" C-89
	C-112	"	520	"	N25°E	" C-87
	C-113	"	520	"	S85°W	" C-87
	C-114	"	520	"	N85°E	" C-87
	C-115	"	490	"	S35°E	" C-88
	C-116	"	520	"	S25°W	" C-89
	C-117	"	520	"	S85°W	" C-80
	C-118	"	1040	"	N35°W	" C-80
	C-119	"	1040	"	N25°E	" C-80

Also confirmed here is the approval of the Government which the Field Team likewise gave for a changed Stage I Hole Site C-103 about 1,560 feet N50°W of C-55 for a hole to be drilled there instead of at the originally designated Site C2-67 which was eliminated upon completion of land surveying at the beginning of the project work.

Sincerely yours,

CCK/id

Clinton C. Knox
Executive Officer
DMEA Field Team, Region IV

cc: DMEA Op.Com.(2)
Amos, USGS, Carbondale

4582 file
Shadow cy-Mr. E. A. Jones

AUDIT COPY

EXPLORATION PROJECT CONTRACT IDM-E1068
ST. JOSEPH LEAD COMPANY
DOCKET NO. DMEA-4582 (LEAD-ZINC-COPPER)

AMENDMENT NO. 3

It is agreed the 16th day of October, 1957, between the United States of America, acting through the Department of the Interior, Defense Minerals Exploration Administration, and the St. Joseph Lead Company, that Exploration Project Contract Idm-E1068 (Docket No. DMEA-4582) is amended pursuant to item 1 of the Special Agreement Concerning Land in Annex I of said Exploration Contract, whereby the additional lands described in one Option Contract filed with the Defense Minerals Exploration Administration as of October 16, 1957, being contiguous to lands covered by said Contract, becomes subject to the provisions therein, and hereby are included with the list of properties thereunder in Annex I, particularly identified by the Operator's file number and names of owner as follows:

CZ 223 C. A. Crabtree and Emma Crabtree(wife) 488.99 acres

This amendment shall be effective as of October 16, 1957.

This amendment shall not be construed to increase the estimated cost of the project or the aggregate amount which the Government may be required to contribute.

Executed in quintuplicate the day and year first above written.

THE ST. JOSEPH LEAD COMPANY

By E. B. Jones
Title Div. Mgr.

THE UNITED STATES OF AMERICA

By Clinton C. Knox
Executive Officer
DMEA Field Team, Region IV

DMEA
RECEIVED OCT 30 1957

DATE	INITIALS	CODE
		800

RECEIVED
MINERALS TECHNOLOGY
DIVISION
OCT 15 1957
BUREAU OF MINES
JOPLIN, MO.

OPTION CONTRACT

1. This instrument states the contract made by and between

C. A. CRABTREE and ELLA CRABTREE, his wife,

parties of the first part, hereinafter designated and referred to as the landowner and ST. JOSEPH LEAD COMPANY, a corporation of the State of New York, party of the second part, hereinafter designated and referred to as the Company.

2. In consideration of the covenants and agreements hereinafter expressed and of the sum of Four Hundred Eighty-Eight and 79/100 - - - - - - - Dollars ($488.79) paid by the company to the landowner, the receipt of which is hereby acknowledged, the landowner by these presents grants and sells unto the company, the exclusive right and option to buy, upon the terms and conditions and within the time hereinafter set out, the following described real estate, property, rights and interests, lying, being and situate in the County of Washington and State of Missouri, described as follows:

All underground and mining rights, minerals and substances of all the SE¼ of NW¼ excepting 2 acres heretofore sold; all SW¼ of NW¼; all the NW¼ of SW¼ lying on the West side of Courtois Creek. And all the SW¼ of SW¼ lying on West side of Courtois Creek except 5 acres sold--all in Sec. 5, Twp. 35 N., R. 1 W., containing 153 acres, more or less. Also, the NE¼ containing 160 acres, all in Sec. 6, Twp. 35 N., R. 1 W.

The SE¼ of SW¼ Of Sec. 32, Twp. 36 N., R. 1 W.; Also, the NE¼ of SW¼ of Sec. 32, Twp. 36 N., R. 1 W., containing in the aggregate 120 acres, more or less.

Also, all of W½ of Lot 2 of NW¼ of Sec. 5, Twp. 35 N., R. 1 W., containing 46.79 acres, more or less.

The total aggregate acres conveyed by this option contract is 488.79 acres, more or less.

EXTRA COPY
DMEA
RECEIVED OCT 30 1957

DATE	INITIALS	CODE

3. The right and privilege is hereby granted to the company to go in and upon the surface of the above described land and prospect for lead or other valuable minerals in modern manner and under modern local customs, that is to say with a diamond drill or churn drill or such other implements, tools and machinery as the company may choose, and to dig, drill, bore, blast, tunnel, and sink shafts in and upon said land, and to use from said land without cost, all the water necessary for such drilling and prospecting. It is further understood and agreed that the landowner shall have the right to see and examine any and all drill cores taken from said land, and in case the company shall fail to buy under this option, all such drill cores as shall have been taken from said land and preserved by the company, shall at any time within sixty days after the expiration of this contract, be turned over to the landowner upon his demand.

4. It is further agreed that all diamonds, bits, rods, pipes and other devices, tools, and appliances that may be used by the company in prospecting said land, shall remain and be the absolute property of the company, and the landowner hereby recognizes such continual ownership, and guarantees to the company the right and privilege to go in and upon said land or any part thereof, even after the expiration of this contract, or any extension thereof, for the purpose of searching for and seeking to recover any lost diamonds, bits, rods, pipes and other tools, devices and appliances.

5. It is hereby agreed that the company will be responsible for and pay the reasonable amount of damages done to any fences, fruit trees, or growing crops of the landowner by reason or as the result of the drilling and prospecting of said land, or in the search for lost bits and diamonds, and in case of a disagreement over the amount of any damage, the amount thereof shall be determined by three appraisers, who shall be citizens living in the county where the land herein described is situated, one of which appraisers shall be chosen by each of the parties to this contract and the third by the appraisers thus selected, the expense of such appraisal to be borne equally by the parties hereto.

6. If the company shall, during the life of this contract or any extension thereof, purchase under the terms of this contract, it shall pay for the above described underground, mining rights and minerals the sum of Fifty and No/100 - - - - - - - Dollars ($50.00) per acre.

7. For and in consideration of the covenants and agreements herein expressed and of the said sum of One Dollar ($1.00) paid by the company to the landowner, and for other good and valuable considerations, the landowner by these presents grants and sells unto the company, to continue during the life of this contract or any extension thereof, the following additional exclusive right and option:

If the company shall during the life of this contract or any extension thereof buy the above described underground and mining rights and minerals at the price above set out, to wit, Fifty and No/100 - - - - Dollars ($50.00) per acre, then the company shall have the right to purchase and the landowner agrees to sell and convey by general warranty deed, free and clear of all encumbrances, any of the surface of the above described land that is desired by the company for the sum of One Hundred and No/100 - - - - - Dollars ($100.00) per acre for such surface so taken, plus the reasonable value of any buildings on the surface of the land so purchased. It is agreed that if the parties hereto are unable to agree upon the

reasonable value of said buildings, then the same shall be determined by three appraisers, one appointed promptly by each of the parties and the third by the two so selected. If the said two appraisers chosen by the parties shall fail to choose a third appraiser within fifteen days after they are chosen, a third appraiser shall be appointed by the Magistrate of the county in which the above described land is located. The decision of such appraisers as to the reasonable value of said buildings shall be final and binding upon the parties, the expense of such appraisal to be borne equally by the two said parties.

8. The landowner hereby covenants and agrees that in the event of any election by the company to purchase under this contract, the landowner will, within 30 days after notice of election to purchase, furnish the company a complete abstract of title to the above described land, rights and property. If the landowner fails to furnish said abstract within the time herein provided, the company shall have the right to procure said abstract and to retain the cost of same out of the purchase price provided for in this contract. If upon examination of said abstract, the title be found not to be merchantable, the company shall have the right to rescind said election to purchase and in the event of such rescission shall be under no further obligation to purchase under this contract or otherwise.

9. If the company elects to purchase the underground, mining rights and minerals as described in paragraph 2 or said underground, mining rights and minerals and the surface or any part thereof as provided in paragraph 7, and fails to exercise the right of rescission above provided, then the landowner will make, execute and deliver to the company on the date specified in said notice of election to purchase, a good and sufficient general warranty deed granting, bargaining and selling to the company in fee simple, free and clear of all encumbrances the interests specified in the notice of election. If by said deed the company does not acquire title to any or all of the surface of the above described land, then said deed shall include a clause with respect to such unacquired surface, as follows:

"It is hereby expressly understood and agreed that the grantee, its successors and assigns, shall have the full, free and exclusive right and privilege of carrying on its business of mining upon and under the premises hereby conveyed and removing the mineral therefrom, including the right to prospect for mineral upon any part of the same, the right to sink shafts and to use so much of the surface of the conveyed premises as may be necessary or convenient for the purpose of connecting by road, railway, conduit or wire any shaft with other shafts, or with the mills or other concentrating works or smelteries, or with the tracks of any railroad and the further right of doing in a proper manner any act upon the surface of the conveyed premises which the grantee or its successors or assigns may deem necessary or desirable to fully enjoy the mining rights in and upon said premises. But it is further understood and agreed that for all damages that may be done to the surface of the conveyed premises or to any building or structure thereon in the carrying out of any or all of the purposes and rights of the grantee, said grantee shall pay the grantor, his heirs and assigns, a reasonable amount to be agreed upon; and in the event they fail to agree then the same shall be determined by three appraisers, one pointed by each party hereto and a third by those two, and their decision as to such damages shall be final, the expense of such appraisal to be borne equally by the grantor and grantee."

10. In any event in which the surface of the above described real estate is referred to in or under this contract, the word "surface" shall be construed to include all right, title and interest in and to the acreage of land specified except the underground, mining rights and minerals described in paragraph 2.

11. For the purpose of this contract the aggregate acreage, as above stated, is taken to be correct and binding upon the parties, but if upon any election to purchase under the terms of this contract or at any time during the life of this contract or any extension thereof, the company shall so desire, the true acreage of said lands or any designated part thereof shall be ascertained by survey by the County Surveyor of the county in which the land lies. And it is agreed that in the event the true acreage be established by said survey to be different from that given above, any payments made or calculated by or upon the acreage as above stated shall be corrected and adjusted to the true acreage so established.

12. Any notice or tender authorized or required to be given or made landowner shall be considered as given or made when deposited in the United States Mail, postage prepaid, addressed to C. A. Crabtree, Courtois, Missouri. Tender of the company's draft shall be a valid tender under this contract.

13. This contract shall be construed as a covenant running with the land and shall be binding upon the landowner, his heirs, personal representatives and assigns and shall enure to the benefit of the company, its successors and assigns.

14. This contract shall be in force and effect for the term of one year from and after its effective date hereinafter stated. It is further agreed as part of the consideration of this contract that the term of this contract, and all of its provisions, shall, at the option of the company, be renewed or extended for further periods upon the following conditions, that is to say: Upon the tender of One and No/100 Dollars per acre on or before the last day of said first one year term, and upon like tender on or before the last day of any renewed or extended term, this contract will be renewed and extended for an additional term of one year from and after the expiration of the term immediately preceeding; provided, however, that there shall be not more than 2 such renewals or extensions.

15. This contract becomes effective on the date hereof.

16. In witness whereof, the said parties of the first part have hereunto set their hands and seals this 12th day of July, 1957.

C. A. Crabtree (SEAL)

Emma Crabtree (SEAL)

_____ (SEAL)

_____ (SEAL)

_____ (SEAL)

ACKNOWLEDGMENT

STATE OF MISSOURI)
) SS.
COUNTY OF Washington)

On this 12th day of July, 1957, before me personally appeared C. A. CRADTREE and EMMA CRADTREE, his wife, to me known to be the persons described in and who executed the foregoing instrument and acknowledged that they executed the same as their free act and deed.

In testimony whereof, I have hereunto set my hand and affixed my official seal at my office in Desloge, Mo. the day and year last above written.

My commission expires March 5th 1958.

Lowell Day
Notary Public

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ACKNOWLEDGMENT

STATE OF MISSOURI)
) SS.
COUNTY OF _____)

On this _____ day of _____, 195__, before me personally appeared _____, to me known to be the person__ described in and who executed the foregoing instrument and acknowledged that __he__ executed the same as _____ free act and deed. And said _____ further declared _____ to be single and unmarried.

In testimony whereof, I have hereunto set my hand and affixed my official seal at my office in _____ the day and year last above written.

My commission expires _____.

_____
Notary Public.

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION

Box 431
Joplin, Missouri
July 3, 1957

EXTRA COPY, DMEA RECEIVED JUL 8 1957		
DATE	INITIALS	CODE
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Mr. R. E. Wagner, Exploration Superintendent
Geology Department
St. Joseph Lead Company
Donne Terre, Missouri

Re: DMEA-4582(lead-zinc-copper)
Courtois Project
Washington County, Mo.
Contract Idm-E1068

Dear Mr. Wagner:

This is the written approval of the Government as of June 28, 1957, confirming the verbal approval given by the DMEA Field Team in your office on that date to start the work under "Stage II, Exhibit A" of the cited Contract by drilling additional holes at the following sites which you justified and showed on your project map, prints of which will be furnished with your forthcoming monthly report for June:

Hole Site Nos.	VC-56	about	520'	E	of	"Stage I" drill Hole Site No. VC-2
" "	VC-57	"	"	"	of	VC-1
	VC-58	"	900'	NE	of	"
	VC-59	"	520'	NNE	"	"
	VC-60	"	"	NNW	"	"
	VC-61	"	"	"	"	VC-4
	VC-62	"	"	"	"	VC-13
	VC-63	"	"	W	"	"

These eight approved "Stage II" drill hole sites located on your optioned tracts on each side of the line between sections 4 and 5, T.35N, R.1W, Washington County, are in accordance with the justifications you gave the Field Team on the basis of "Stage I" drilling results nearing completion on those eight tracts, during the joint DMEA Field Team inspection of your project on June 27 and 28.

Sincerely yours,

CCK/jk

Clinton C. Knox
Executive Officer
DMEA Field Team, Region IV

cc: DMEA Op. Com.(2) Amos, USGS, Knoxville 4582 file

AUDIT COPY

EXPLORATION PROJECT CONTRACT IDM-E1068
ST. JOSEPH LEAD COMPANY
DOCKET NO. DMEA-4582 (LEAD-ZINC-COPPER)

AMENDMENT NO. 2

It is agreed this 19th day of June 1957, between the United States of America, acting through the Department of the Interior, Defense Minerals Exploration Administration, and the St. Joseph Lead Company, that Exploration Project Contract IDM-E1068 (Docket No. DMEA-4582) is amended pursuant to item 1 of the Special Agreement Concerning Land in Annex I of said Exploration Contract, whereby the additional lands described in one Option Contract filed with the Defense Minerals Exploration Administration as of June 19, 1957, being contiguous to lands covered by said Contract, becomes subject to the provisions therein, and hereby are included with the list of properties thereunder in Annex I, particularly identified by the Operator's file number and names of owners as follows:

GZ 158 Ira Turnbaugh and Bertha Turnbaugh (wife) 80 acres

This Amendment shall be effective as of June 19, 1957.

This Amendment shall not be construed to increase the estimated cost of the project or the aggregate amount which the Government may be required to contribute.

Executed in sextuplicate the day and year first above written.

THE ST. JOSEPH LEAD COMPANY

By E. A. Jones

Title Div. Mgr.

THE UNITED STATES OF AMERICA

By Chilton C. Knox
Executive Officer
DMEA Field Team, Region IV

COD.
800

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION

~~XXXXXXXXXXXXXXXXXXXXXXXXXXXX~~
Box 431
Joplin, Mo.

May 8, 1957

Mr. E. A. Jones
District Manager
St. Joseph Lead Company
Bonne Terre, Missouri

Re: DMEA-4582(lead-zinc-copper)
Courtois Area
Washington County, Missouri
Project Contract Idm-E1068

Dear Mr. Jones:

This is written approval of the Government as of April 15, 1957, confirming the verbal approval of the Field Team at that time for delaying start of the project work under the subject contract until April 25, 1957, as requested by your representative.

It was explained that this extension of the time for beginning work on the contract would be necessary because due to the very heavy rains and extremely muddy conditions in your project area your drillers were unable to move from the exploratory holes then in progress on which costs were entirely at your company's expense.

Sincerely yours,

CCK/jc

Clinton C. Knox
Executive Officer
DMEA Field Team, Region IV

cc: DMEA Op.Com.(2)
Amos, USGS, Carbondale
Finance Officer
4582 File

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GOVERNMENT'S COPY
OFFICIAL FILE COPY
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EXPLORATION PROJECT CONTRACT IDM-E1068
ST. JOSEPH LEAD COMPANY
DOCKET NO. DMEA-4582(LEAD-ZINC-COPPER)

AMENDMENT NO. 1

It is agreed this 9th day of April, 1957, between the United States of America, acting through the Department of the Interior, Defense Minerals Exploration Administration, hereinafter called the "Government", and the St. Joseph Lead Company, hereinafter called the "Operator" that Exploration Project Contract Idm-E1068 (Docket No. DMEA-4582) dated March 18, 1957 hereinafter called the "Contract", is hereby amended effective March 18, 1957.

1. In "Exhibit A, Description of the Work" attached as a part of the Contract, the first paragraph is changed to read as follows:

The purpose of the project is to explore for ores of lead, zinc, and copper by diamond drilling, after churn drilling, as necessary, in overburden, weathered strata, and the upper more porous formations that are of no economic significance, in the upper portion of the holes.

2. The first sentence of the fourth paragraph of "Exhibit A, Description of the Work" is hereby changed as follows:

All diamond drilling shall be done with AX-size, or larger, bits, coring all strata below and including the base of the Davis Shale formation, but the use of an EX-size bit is to be permissible, if necessary in order to complete a hole.

3. Paragraph six of "Exhibit A, Description of the Work" is deleted and the following inserted instead:

In the event that the core recovery in a significantly mineralized section of a hole does not exceed 70 percent, the Operator, entirely at its own expense, shall drill another hole at a nearby location and furnish data thereon as required by the contract.

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

Executed in sextuplicate on the day and year first above written.

THE ST. JOSEPH LEAD COMPANY

By _____

Title _____

THE UNITED STATES OF AMERICA

By Robert U. King
Acting Executive Officer
DMEA Field Team, Region IV

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DATE | INITIALS | CODE

JUSTIFICATION FOR AMENDMENT NO. 1
TO PROJECT CONTRACT IDM-E1068
ST. JOSEPH LEAD COMPANY
DOCKET DMEA-4582 (LEAD-ZINC-COPPER)
COURTOIS AREA, WASHINGTON COUNTY, MO.

Upon written requests and explanations by this Operator in letters dated March 29, and April 5, 1957, this Amendment No. 1, as hereby justified, was executed for the most practical implementation of the project objectives.

The following refer to the three items of change by the Amendment:

1. In accordance with the application and recommendations in the Field Team Examination Report dated February 8, 1957, churn drilling of the upper portions of each hole was not intended to be stopped upon merely penetrating the near-surface "overburden and loose and unconsolidated material". On the basis of many years of actual exploratory drilling experience the Contract unit cost was estimated on the use of churn drilling also through the vuggy and cherty formations, generally very costly or impossible to diamond drill and having no exploration potentialities, to the depth of the base of the Davis shale formation wherever most practical.

2. Likewise, there was no intent in the application or in the Field Team Report to imply any valid reason for core drilling above the base of the Davis shale formation which would have necessitated a higher estimate for the Contract unit cost.

3. Because of having been proven impractical and unreliable long ago in this mining district, no sludge sampling was contemplated by this Applicant or the Field Team, and therefore, the added costs for such were not included in the Contract unit cost. The percentage of core recovery is undeterminable until after the core has been pulled. Continuous sludge sampling would increase the costs considerably.

The Operator, consistent with its established exploration practice, agreed however, that holes would be redrilled when justifiable to obtain satisfactory core recovery in significantly mineralized strata.

C
O
P
Y

ST. JOSEPH LEAD COMPANY

Bonne Terre, M o

March 29, 1957

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DATE	INITIALS	CODE

Mr. Clinton C. Knox
Regional Executive Officer
Defense Minerals Exploration Administration
P. O. Box 431
Joplin, Missouri

DMEAZ- 4582
Contract No. Idm-E 1068
Courtois Area
Washington County, Mo.

Dear Mr. Knox:

In view of the results of our discussion with you and Mr. Amos at our Bonne Terre office on March 26th, regarding the provisions of the above contract, we are requesting that the following amendments to the contract be made.

Exhibit "A" - page 1 - paragraph 4 should read -

"All diamond drilling shall be done with AX size, or larger, bits, unless it is necessary to use an EX size bit in order to complete a hole. All of the hole below and including the base of the Davis Shale formation shall be cored. All drill holes----------etc."

It is customary in this district to use a solid bit through the Derby-Doerun and Davis formations, excepting for an occasional hole to determine regional thicknesses and nature of these formations. No information of value is gained by coring this section of all holes. Added cost of coring these formations was not included in our cost estimates.

Exhibit "A" - page 1 - paragraph 6 should be deleted. All attempts to develop practical sludge sampling methods during the last 35 years in this district have been abandoned because the results obtained do not justify the additional cost. Core recovery in the area is adequate to make a satisfactory evaluation of the core in nearly all cases. In extreme cases of grinding loss it is considered to be more practical to redrill the hole, taking special pains to recover the core, than to maintain a system of sludge sampling for all holes. The added cost of sludge sampling has not been included in our cost estimates.

Mr. Clinton C. Knox

Assuming that the contract covering the Viburnum Area (DMEA 4583) will read exactly the same as No. 4582, then we should also like for these same amendments to apply to that project.

Very truly yours,

/s/ E. A. Jones

Division Manager

cc: Mr. Andrew Fletcher
Mr. John Brown
Mr. J. A. Thomure

MME Form 14
Sept. 1958

Contract No. Idm-E) 1068
~~14-23~~)

Docket No. DMEA) 4582
MME)

Date of Action ~~June 17, 1959~~
Terminated Contract

DEPARTMENT OF THE INTERIOR
OFFICE OF MINERALS EXPLORATION

OBLIGATION DOCUMENT

To: Chief, Accounts Section, Finance Branch, Bureau of Mines

From: Director, Division of Operations Control and Statistics

Please enter the amounts shown below on the accounts of the Office of Minerals Exploration.

Name and Address of Contractor:

St. Joseph Lead Company
Bonne Terr,
Missouri

Date of Contract	Region	State	Commodity
March 18, 1957	IV	Missouri	Lead-Zinc-Copper

	Reserve	Obligation
Prior Amount	0	$149,280.00
Increase	0	0
Decrease	0	16,683.45
Revised Amount	0	$132,596.55

Remarks:

cc: 800
210

43244

Contract No. Idm-E 1068

Docket No. 4582

DEPARTMENT OF THE INTERIOR **Executed contract**

DEFENSE MINERALS EXPLORATION ADMINISTRATION

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

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

Date of Contract	Region	State	Commodity
March 18, 1957	**IV**	**Missouri**	**Lead-Zinc-Copper**

Name and Address of Operator: **St. Joseph Lead Company**
Bonne Terre, Missouri

	Reserve	Obligation
Prior Amount	**$149,280.00**	**0**
Increase	**0**	**$149,280.00**
Decrease	**$149,280.00**	**0**
Revised Amount	**0**	**$149,280.00**

Remarks:

ALLEN S. DAKAN
(Name)

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

Date Delivered to Bureau of Mines, Washington 4/4/57

989

Audit copy

MF-200A
(Rev. April 1956)

OFFICIAL FILE COPY
DMEA
RECEIVED APR 3 1957

DATE	INITIALS	CODE
		800

UNITED STATES OF AMERICA
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION
EXPLORATION PROJECT CONTRACT
(Short Form)

DMEA No.	*Commodity*	*Contract No.*	*County*	*State*
4582	Lead-Zinc-Copper	*Idm-E* 1068 / 1068	Washington	Missouri

It is agreed 18 MAR 1957, between the United States of America, acting through the Department of the Interior, Defense Minerals Exploration Administration, hereinafter called the "Government," and ST. JOSEPH LEAD COMPANY, a New York corporation,

whose mailing address is Bonne Terre, Missouri

hereinafter called the "Operator," as follows:

ARTICLE 1. *Authority and project.*—(a) This contract is entered into under the authority of the Defense Production Act of 1950, as amended. It consists of this form (MF–200A), the attached Annex I (land description), Exhibit A (work and costs), and the maps and documents listed therein. The project work is a search for indicated or undeveloped deposits of the commodity designated above. The Operator shall begin the work on or before 30 days after date of this contract, and, subject to the provisions of Article 7 and Exhibit A, shall complete the work within 24 months from the date of the contract.

(b) The description of the work and the fixed cost for each unit of work to be performed (per foot of drilling, per foot of drifting, per hour of operations, etc.) are hereby agreed upon as specified in Exhibit A. The estimated total cost of the project work is $298,560.00. The Government will contribute 50 percent of the fixed unit cost of the work performed, not exceeding $149,280.00, in accordance with the provisions of Articles 4 and 5.

(c) The Operator shall not transfer or assign this contract or any right or obligation thereunder without the written consent of the Government.

ARTICLE 2. *Operator's property rights.*—(a) The Operator represents and undertakes that Annex I correctly describes the land which is the subject of this contract and the nature of the Operator's rights of property and possession therein (whether as owner, lessee, or otherwise), and that such right, title, or interest is subject only to the following claims, liens, or encumbrances: See Annex I.

(b) The Subordination Agreement of the holder of any claim, lien, or encumbrance listed above and (if the Operator does not hold the legal title) the Consent to Lien of any holder of the legal title of the land (lessor, seller, optionor, etc.) are attached, as follows: Consent to Lien and Subordination Agreements are waived.

(c) The Operator shall preserve and maintain his right, title, and interest in the land and his right to the possession thereof for the purposes of this contract, and shall devote the land and all existing improvements, facilities, buildings, installations, and appurtenances to the purposes of this contract. The Operator shall neither transfer, convey, nor surrender the land nor any right, title, or interest therein, nor permit nor suffer any claim, lien, or encumbrance thereon, without expressly referring to and providing

in the instrument of conveyance, lien, or encumbrance for the preservation of the Government's right to a percentage royalty on production and lien for the payment thereof. Two copies of such instrument shall be furnished to the Government. If the Government's rights to royalty as provided in Article 6 have been terminated, the provisions of this paragraph (c) shall become inapplicable. **See Annex I.**

ARTICLE 3. *Performance of the work.*—(a) Operator's responsibility.—The work shall be performed diligently, efficiently, expertly, in a workmanlike manner, and in accordance with good mining standards and State regulations governing health, safety, and liability insurance covering employment. The Operator shall provide suitable and adequate equipment, facilities, materials, supplies, and labor to complete the work, as specified in Article 1 (a).

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

ARTICLE 4. *Contribution by the Government.*—The Government will make its contribution on the basis of the monthly vouchers referred to in Article 5 (b); but all payments by the Government are provisional only, subject to audit, and until the account between the Operator and the Government is finally audited and settled and the Operator's final report has been rendered, the Government may withhold such sums as it sees fit but not in excess of 10 percent of the estimated total cost of the work. To the extent that excesses over fixed unit costs or any excess over the estimated total cost may be necessary for the performance of the work, the Operator shall incur and pay such excesses for his own account without contribution by the Government. The Government will not contribute to the cost of any work performed prior to the date of this contract. The Government may make payments for the account of the Operator directly to independent contractors and suppliers rather than to the Operator.

ARTICLE 5. *Reports, accounts, audits.*—(a) Operator's records.—The Operator shall keep suitable records and accounts of the units of work performed and of any production in which the Government may have an interest; and shall preserve those with respect to work performed for at least three years after final payment by the Government, and those with respect to production for at least three years after any obligation to pay royalties to the Government has terminated. The Government may inspect and audit said records and accounts at any time, either by itself or by a certified public accountant. The Comptroller General of the United States or his representative, until the expiration of said three-year periods, shall have access to and the right to examine all pertinent books, documents, papers, and records of the Operator.

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

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

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

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

ARTICLE 6. *Repayment by Operator.*—(a) *Certification.*—If the Government considers that a discovery or development from which production may be made has resulted from the work, the Government, at any time not later than six months after the Operator has rendered a sufficient final report (see Article 5), may so certify in writing to the Operator. Such certification shall describe broadly or indicate the nature of the discovery or development.

(b) *Royalty on production.*—The Operator, as principal if the Operator is the producer or as surety if the Operator is not the producer (for example, if the Operator either transfers or fails to retain his interest in the land), shall pay to the Government a royalty on all minerals mined or produced from the land, as follows: (1) regardless of any certification of discovery or development, from the date of the contract until the lapse of the time within which the Government may make such certification or until the total net amount contributed by the Government without interest is fully repaid, whichever occurs first; or (2) if the Government makes a certification of discovery or development, for a period of ten years from the date of the contract or until the total net amount contributed by the Government without interest is fully repaid, whichever occurs first. **See Article 10.**

(c) *Basis for computation.*—The Government's royalty shall be a percentage of the gross proceeds (including any bonuses, premiums, allowances, or other benefits) from the production sold, in the form sold (ore, concentrates, metal, or equivalent), at the point of delivery (the f. o. b. point); *except,* that charges of *the buyer* arising in the regular course of business, and shown as deductions on the buyer's settlement sheets, on account of the cost of treatment processes performed by *the buyer,* sampling and assaying to determine the value of the production sold, and freight paid by *the buyer* to a carrier (not the Operator), shall be allowed as deductions in arriving at the "gross proceeds" as that term is used herein. Any costs of treatment processes, sampling, assaying, or transportation performed or paid by the Operator or by anyone other than the buyer are not deductible in arriving at the "gross proceeds" as that term is here used. The term "treatment processes," as here used, means those processes (such as milling, concentrating, smelting, refining, or equivalent, but excluding fabricating or manufacturing) applied to the crude ore or other production after it is extracted from the ground to put it into a commercially marketable form. **See Article 10.**

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

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

One and one-half (1½) percent of amounts ("gross proceeds" or "value") not in excess of eight dollars ($8.00) per ton of production in the form in which sold, held, or used, plus one-half (½) percent for each additional full fifty cents ($0.50) by which such amounts exceed eight dollars ($8.00) per ton, but not in excess of five (5) percent of such amounts.

(For instance: the royalty on an amount of five dollars ($5.00) per ton would be one and one-half (1½) percent; on an amount of ten dollars ($10.00) per ton, three and one-half (3½) percent.)

(f) *Time for computation and payment.*—The Government's royalty shall be computed and paid currently upon each lot sold, held, or used in integrated operations, as the case may be, as above provided in this Article.

(g) *Lien for payment.*—To secure the payment of its percentage royalty, there is hereby granted to the Government a lien upon the land or the Operator's interest in the land and upon any production of minerals therefrom until the royalty claim is extinguished by lapse of time or is fully paid.

(h) *Notice to purchasers.*—The Operator shall give notice of the Government's claim for royalty to any purchaser of the production, and shall authorize and direct such purchaser to pay the royalty directly to the Government and to furnish the Government with copies of the settlement sheets. If the records of any production and sales or other disposition of production, whether the production is by the Operator or by others, are not made available to the Government, the amount of the royalty may be estimated by the Administrator, Defense Minerals Exploration Administration, or his successor, and his estimate thereof shall be final and binding upon the Operator.

(i) *No obligation to produce.*—Nothing in this contract is to be construed as imposing any obligation on the Operator or the Operator's successor in interest to engage in any production operations.

(j) *Government not obligated to buy.*—Nothing in this contract shall be construed as imposing any obligation on the Government to purchase any minerals mined or produced from the land.

ARTICLE 7. *Termination of the Government's obligations.*—(a) If in the opinion of the Government operations at any time have failed to achieve anticipated results that indicate the probability of making a worthwhile discovery and in the opinion of the Government further operations are not justified, the Government may give the Operator written notice thereof, and thereupon the Government shall be free of all obligation to pay on account of units of work not then performed, and the Operator shall be free of all further obligation to prosecute the work other than such as may be necessary and incidental to winding up, reporting, and accounting.

(b) If in the opinion of the Government the Operator is in any manner in default under the terms of the contract, the Government may give the Operator written notice of such default with a specification of reasonable time within which the default must be cured; and if the Operator fails to cure such default as required, thereupon the Government shall be relieved of all obligation to pay on account of units of work not performed when the notice was given, and the Operator shall be free of all obligation to prosecute the work other than such as may be necessary and incidental to winding up, reporting, and accounting. The Government may also avail itself of any other remedy the law may provide for breach of contract, including the right to rescind the contract and to demand repayment of all moneys contributed by the Government under the contract.

(c) The giving of any notice by the Government under the provisions of this Article 7 shall not affect the Government's rights as provided for in the contract with respect to a percentage royalty, and liens to secure the payment thereof, and such rights shall be fully preserved.

ARTICLE 8. *Notices to be given by the Government* may be delivered to the Operator or may be sent by registered mail addressed to the Operator at the mailing address stated in this contract. If mailed, notices are deemed to have been delivered five days after the date of mailing.

ARTICLE 9. *Officials not to benefit.*—No member of or delegate to Congress or resident commissioner shall be admitted to any share or part of this contract or to any benefit that may arise therefrom; but this provision shall not be construed to extend to this contract if made with a corporation for its general benefit.

ARTICLE 10. *Changes and added provisions.*—**(a) In Article 6(b): (1) The word "minerals" includes limestone and dolomite products produced in processing ore, and excludes any mineral which the Operator is prohibited from mining by the terms of the instruments pursuant to which the Operator holds the land listed in Annex I attached to this contract; and (2) the words "ten years" are changed to "thirty years." (b) The following clause is added to Article 6(c): Provided, however, That so long as the Operator operates smelting facilities as an integrated part of its business, the settlement made by the Operator's smelter to its mine or mill on the ore or concentrates subject to the Government's royalty shall be, for the purpose of calculating the royalty payable to the Government under this contract, on the same settlement basis that the said smelter makes to its independent suppliers under the schedule most favorable to any independent supplier; or, should gross income from mining operations for percentage depletion purposes in Federal income tax determination show a greater value for ore or concentrate sales than that value which would result from applying the smelter schedule most favorable to an independent supplier, the greater value will be used as the basis for calculating royalty payable to the Government.**

Executed in sextuplicate the day and year first above written.

THE UNITED STATES OF AMERICA

ST. JOSEPH LEAD COMPANY
(Operator)

By Francis Cameron

Title Vice President

By C. Mittendorf
Administrator, Defense Minerals
Exploration Administration

I, Donold K. Lourie, certify that I am ~~the~~ an Assistant secretary of the corporation named as Operator herein; that Francis Cameron, 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.

Donold K. Lourie

[CORPORATE SEAL]

U. S. GOVERNMENT PRINTING OFFICE: 1956—O-383069

OFFICIAL FILE COPY
DMEA
RECEIVED APR 8 1957

DATE	INITIALS	CODE

EXPLORATION PROJECT CONTRACT
ST. JOSEPH LEAD COMPANY
DOCKET NO. DMEA-4582

ANNEX I

The land referred to in Article 2 of the contract consists of lands in Washington County, Missouri, as follows:

(a) Five tracts totaling approximately 455 acres, held by the Operator under BLM-A Prospecting Permits Nos. 040279, 041128, and 043391 from the United States Bureau of Land Management, each of which grants to the Operator an exclusive right to prospect for two years for galena and sphalerite and related minerals (excluding oil and gas, oil shale, coal, phosphate, sodium, potassium, and sulphur) with right of one extension for an additional two years, as follows:

	Acres
No. 040279, dated December 1, 1956:	
T. 35 N., R. 1 W., 5th P. M., Missouri	
Sec. 7, SW¼SW¼	33.01
Sec. 17, E½SW¼, SW¼NW¼, and SE¼NW¼ except 10 acres off NE part	150.00
No. 041128, dated December 1, 1956:	
T. 35 N., R. 2 W., 5th P. M., Missouri	
Sec. 13, SE¼SE¼ and all of SW¼SE¼ east of Crawford County line	72.00
No. 043391, dated December 1, 1956:	
T. 36 N., R. 1 W., 5th P. M., Missouri	
Sec. 33, NW¼SE¼, N½SW¼	120.00
Sec. 34, N½SW¼	80.00

455.01

(b) Other tracts, totaling approximately 3911.40 acres, held by the Operator under thirty-one (31) option contracts by private landowners, each of which contracts grants to the Operator the right to explore for and to purchase the minerals in the respective tracts described therein, and each of which is incorporated by

reference as a part hereof. The said option contracts are as follows:

Option Number	Landowners	Date of Option Contract	Approximate Acreage
GX15	Lewis J. Merritt and his wife, Nellie E. Merritt	Sept. 29, 1955	195.55
GX50	Edmond Laramore and his wife, Nora Laramore	March 3, 1956	282.65
GX53	E. R. Laramore and his wife, Ollie Laramore	March 15, 1956	95
GX54	Rice Mason and his wife, Bessie Mason	April 6, 1956	288
GX56	Simon Breakfield and his wife, Telitha Breakfield	April 18, 1956	80
GX57	Henry Breakfield and his wife, Lula Breakfield	April 28, 1956	40
GX60	Lottie Bays and Burley Bays; Edmond Laramore and Nora Laramore; Marcus Laramore and Leota Laramore; E. R. Laramore and Ollie Laramore	March 15, 1956	76
GX62	Howard M. Cole and his wife, Daphne Cole	June 8, 1956	20
GX63	C. M. Willhite and his wife, Elizabeth Willhite	June 8, 1956	94.23
GX64	Jesse H. Breakfield and his wife, Nettie Breakfield	June 14, 1956	135
GX65	Kelsey Carl and his wife, Floy Carl	June 9, 1956	165
GX66	Haskel Mason and his wife, Sadie Mason	June 21, 1956	120 plus N½ lot 1
GX67	George D. Evans and his wife, Lillie Evans	June 20, 1956	240.23

Option Number	Landowners	Date of Option Contract	Approximate Acreage
CX74	Paul Thompson and his wife, Hilma Thompson	July 14, 1956	216
CX75	John E. Turnbough and his wife, Nettie Turnbough	July 27, 1956	150.57
CX76	Nallie G. Turner, single	July 27, 1956	90
CX79	W. J. Turnbough and his wife, Zoe Turnbough	August 8, 1956	85.57
CX81	Herbert Gillam, single	August 10, 1956	60
CX82	Mary Alice Moses, single	August 13, 1956	149.6
CX83	Elza Henslee and his wife, Cora Henslee	August 14, 1956	71.40
CX85	Curtis Henslee and his wife, Goldie Henslee	August 15, 1956	80
CX88	Alonzo H. Sellers and his wife, Overa Sellers	August 24, 1956	118
CX93	Emma Payne, single; Glenwood Payne and his wife, Rita Payne; Lucille Crabtree and her husband, Orville Crabtree; Eleanor Crocker and her husband, Harold Crocker; Melba Young and her husband, Everett Young	August 28, 1956	110.50
CX94	Percy Carl and his wife, Lydia Carl	August 25, 1956	129.6
CX95	Lon Laramore and his wife, Esther Laramore	August 31, 1956	72
CX98	Edward B. Heath and his wife, Hazel Heath	Sept. 10, 1956	122
CX100	James E. Sellers and his wife, Maude Sellers	Sept. 18, 1956	140

Option Number		Date of Option Contract	Approximate Acreage
CZ141	Bennie A. Yount and his wife, Essie Yount	November 3, 1956	85
CZ142	Adolph Moses and his wife, Irene Moses	November 3, 1956	85
CZ153	Oma Compton, single	November 16, 1956	167.5
CZ164	Everett N. Wood and his wife, Agnes Wood	January 9, 1957	147

2911.40

All of the tracts referred to in this Annex I are shown on the map entitled "Figure 1 - Courtois Area, Missouri," attached hereto and made a part hereof.

Special Agreement Concerning Land

1. In the event the Operator or any subsidiary thereof at any time during the period expiring ten years from the date of this contract acquires any interest, title, or equity, in any lands contiguous to the premises described in this contract, it is agreed that such contiguous lands shall thereupon become subject to the provisions of this contract, and the parties hereto shall promptly execute amendments to this contract listing such contiguous lands as lands included in this contract.

2. It is further agreed that the Operator may, at any time before the expiration of sixty days following the conclusion or termination of exploration work performed pursuant to the terms of this contract, request the Government to delete from this contract such of the land described in the Prospecting Permit and the lease-option contracts listed in this Annex I, or in any amendments thereto, as has no known value for mineral production. The Government will promptly prepare amendments removing the specified land from the contract, which amendments shall provide that the Operator:

(a) certifies the lands have no known value for mineral production;

(b) has, prior to the execution of the respective amendment, surrendered or otherwise disposed of all its interest, title, and equity in such land, and any minerals produced therefrom, including any option, lease, or permit thereto, without

any consideration whatsoever, including future compensation, for such surrender or disposition, other than relief from the cost of maintaining such interest;

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

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

EXPLORATION PROJECT CONTRACT
ST. JOSEPH LEAD COMPANY
DOCKET NO. DMEA-4582

EXHIBIT A

Description of the Work

1. The purpose of the project is to explore for ores of lead, zinc, and copper by diamond drilling, after churn drilling, as necessary, in overburden and loose and unconsolidated material in the upper portion of the holes.

2. It is estimated that 158 drill holes will be required, having depths ranging from approximately 550 feet to approximately 1,130 feet, with a combined total length not to exceed 133,510 feet. Holes may not be drilled on a spacing of closer than 175 feet.

3. The actual locations, directions, inclinations, and extents of all holes are subject to Government approval.

4. All diamond drilling shall be done with AX size, or larger, coring bits, except that where necessary an EX size bit may be used in order to complete a hole. All drill holes shall be logged and all drill core shall be made available to the Government for examination. All significantly mineralized core, in lengths not to exceed five feet, shall be split, and one half thereof shall be properly sampled and the sample assayed for lead and zinc. Assays also shall be made for copper, nickel, and cobalt when advisable.

5. Drill holes shall be reamed and cased or cemented and redrilled as necessary.

6. Sludges corresponding to the cores shall be retained (if possible) when drilling is being done in significantly mineralized sections and, in the event that core recovery does not exceed seventy per cent, both core and sludge samples shall be taken, at intervals not to exceed five feet. Both the core and the sludge shall be split, and one half thereof properly sampled and assayed.

7. The remaining half of all significantly mineralized core samples, and sludge samples, when taken, shall be furnished to the Government, upon request.

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

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

10. The project work is divided into two stages, as set forth below. The Operator shall complete Stage I, and shall perform as much of the Stage II work as the Government approves in advance.

Stage I

1. Drill eighty-four holes, with a combined total length not to exceed 70,980 feet, at the locations identified by the symbol "+" on the attached map "Figure 1, Courtois Area, Missouri." Any of these locations may be changed if the Government approves the change in advance.

2. Not more than 1,260 determinations may be made for lead and zinc, and/or copper, nickel, or cobalt.

Stage II

1. An estimated seventy-four additional holes, with a combined length not to exceed 62,530 feet, may be drilled from locations approved in advance by the Government on the basis of Stage I drilling.

2. Not more than 1,110 determinations may be made for lead and zinc, and/or copper, nickel, or cobalt.

Estimated Costs of the Project

Fixed Unit Costs

Stage I

70,890 feet of churn drilling and diamond drilling @ $2.22/ft. 1/	$157,375.80	
1,260 determinations @ $1.00/each	1,260.00	
Estimated Total Cost of Stage I		$158,635.80

Stage II

62,530 feet of churn drilling and diamond drilling @ $2.22/ft. 1/	138,816.60	
1,110 determinations @ $1.00/each	1,110.00	
Estimated Total Cost of Stage II		139,926.60

Estimated Total Cost of Project (rounded)	$298,560.00
Government's Participation @ 50%	$149,280.00

1/ The fixed unit cost includes all drilling charges, direct and indirect; supervision and technical services; moving equipment, water supply, lost casing, cementing and redrilling, reaming, casing, and all other costs of the project whatsoever, except assaying.

Contract No. Idm-E 1068

Docket No. 4582

DEPARTMENT OF THE INTERIOR

Approved contract

DEFENSE MINERALS EXPLORATION ADMINISTRATION

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

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

Date of Contract	Region	State	Commodity
March 18, 1957	IV	Missouri	Lead-Zinc- Copper

Name and Address of Operator: St. Joseph Lead Company
Bonne Terre, Missouri

	Reserve	Obligation
Prior Amount	0	0
Increase	$149,280.00	0
Decrease	0	0
Revised Amount	$149,280.00	0

Remarks:

ALLEN S. DAKAN

(Name)

Allen S. Dakan, Chief
Operations Control and
Statistics Division

(Title)

Date Delivered to Bureau of Mines, Washington 3/18/57

989

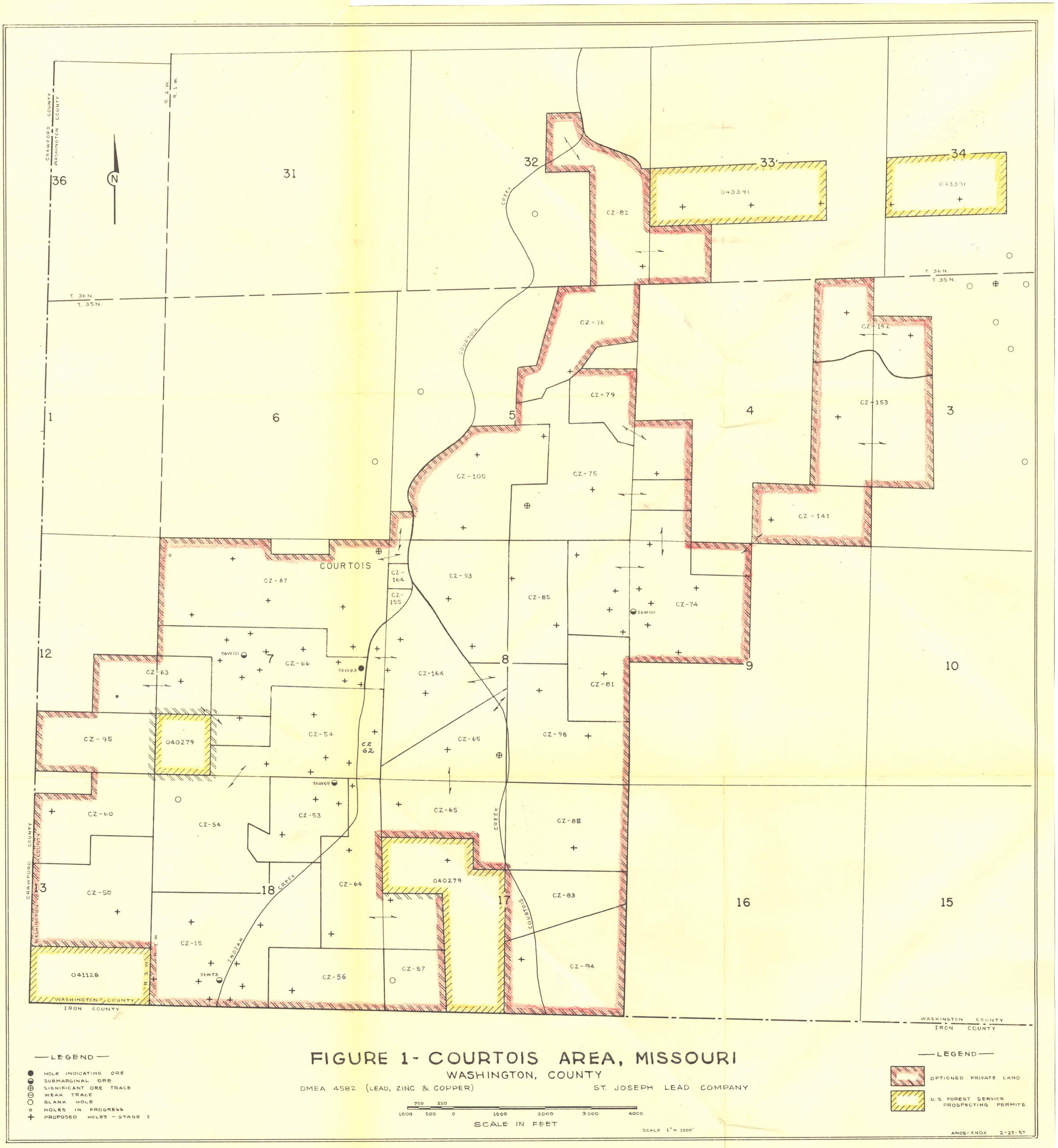

FIGURE 1 - COURTOIS AREA, MISSOURI

WASHINGTON, COUNTY

DMEA 4582 (LEAD, ZINC & COPPER)

ST. JOSEPH LEAD COMPANY

—LEGEND—

- ● HOLE INDICATING ORE
- ◒ SUBMARGINAL ORE
- ⊕ SIGNIFICANT ORE TRACE
- ⊖ WEAK TRACE
- ○ BLANK HOLE
- o HOLES IN PROGRESS
- + PROPOSED HOLES – STAGE I

750 250
1000 500 0 1000 2000 3000 4000
SCALE IN FEET

SCALE 1" = 1000'

—LEGEND—

- OPTIONED PRIVATE LAND
- U. S. FOREST SERVICE PROSPECTING PERMITS

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