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RECEIVED
DIVISION OF MINERAL TECHNOLOGY
JAN 21 1959
BUREAU OF MINES
JOPLIN, MO.

INTERIM REPORT

DMEA-4582 ~~Idm-E1068~~

Operator: St. Joseph Lead Company, Bonne Terre, Missouri

Location: Courtois Area, Washington County, Missouri

The exploratory work provided for in the subject contract has been completed since the previous project inspection on December 18, 1958. The final Field Team inspection of the project was made on January 15, 1959 and work is to start on preparing the Field Team joint final report. Results obtained by the work completed under this contract and preparation of the Operator's final report were discussed with Mr. R. E. Wagner, Head of Exploration, and Mr. G. Klostermann, Geologist.

The drilling completed on the Courtois project is summarized as follows:

Footage in holes completed since last inspection	2,027
Total footage in holes completed	119,037 *
Number of holes completed since last inspection	3
Total number of holes completed	181
Number of holes showing commercial ore	42
Number of holes showing submarginal ore	23
Number of holes showing trace mineralization	75
Number of holes showing speck trace mineralization	22
Number of barren holes	19

A summary of the three holes completed since the last inspection is as follows:

Hole No.	Location	Depth	Remarks
VC-179	SE¼, SE¼, SE¼, sec. 1	715 ft.	Blank hole.
VC-180	NE¼, NE¼, NE¼, sec. 12	765 ft.	Trace hole.
VC-181	520 ft. S.10°W. of Hole VC-135	547 ft.	Ore hole.
		2027	

Significant assay results of Hole VC-181 are as follows:

Depth	Thickness	%Pb
487.1-489.9 ft.	2.8 ft.	14.1
501.1-502.6 ft.	1.5 ft.	1.4

* 116,995' Prev inspection report
+ 2,027
119,022
+ 15' difference between reports & logs on holes 106 + 149
119,037'
Talbot 2/9/59

Drilling done under this contract indicated considerable reserves of lead ore in certain areas and supplied geological information on which additional large reserves may be inferred. The objectives of the contract were not fulfilled, however, because sufficient drilling footage was not provided to reasonably delineate and sample many of the discoveries in the project area. Because of this deficiency many favorable areas were not explored and the preliminary widely-spaced holes drilled in several areas fail to give adequate data on which to base any responsible ore reserve calculations.

Dewey H. Amos
Geologist
U.S.Geological Survey

Clinton C. Knox
Mining Engineer
U.S.Bureau of Mines

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

July 2, 1959

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RECEIVED JUL 6 1959

DATE	INITIALS	CODE
7-6	gad	vvo
"	[illegible]	[illegible]
7-7	[illegible]	[illegible]
Nov + Dec '58		
	104's	

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

Re: DMEA-4582(lead-zinc-copper)
Courtois Project
Washington County, Mo.
Contract Idm-E1064

Dear Sirs:

Forwarded herewith is copy of the November and December (Final) Monthly Report covering the work done by the cited Operator for these two months. Also enclosed is the MF-104 Voucher to be attached to your other copy of each of these reports mailed to you December 24, 1958 and January 28, 1959, respectively.

The voucher data received on the final settlement which was made, is posted on the December (Final) MF-104.

Sincerely yours,

Clinton C. Knox

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

encl. 4

cc: OME Op.Com.
Amos,USGS,Knoxville
4582 file

2nd Copy - Wash

Form MF-104A
(April 1952)

Budget Bureau No. 42-R1151.2

JUN 25 1959 O.M.E.

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-4582 Contract No. Idm-E1068

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

Address Donna Terra, 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.	3383.28	1524*	206166.96	92268	$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				292,560.00

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. 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.

(Instructions on reverse)

REMARKS:

*Claim revised to include costs of drilling 510' in final hole no. 58YC277 within allowable maximum set by Contract. Amendment No.8 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)

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

Last Copy - Wards

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

JUL 6 1959 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 (REVISED FINAL)

Month of December, 1958 Docket No. DMEA 4582 Contract No. Idm-E1068

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 MIN' RA. 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 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:

$ 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. Idm-E1068 in accordance with the terms of the contract.

Signature Clinton C. Knox Title Mining Engineer Date June 22, 1959

APPROVAL BY DMEA EXECUTIVE OFFICER OR ALTERNATE:

Signature Clinton C. Knox Title Executive Officer Date June 29, 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-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 Mat'ls. and Supplies:						
Timber						
Explosives						
Pipe						
Track						
(4) Operating Equipment:						
Rental						
Purchase						
Depreciation						
(5) Initial Rehabilitation and Repairs						
(6) New Bldgs., Improvements, etc.						
(7) Miscellaneous:						
Repairs to Equipment	5.00	884.00	889.00			
Sampling and Analysis						
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 1-12-59 *Payee St. Joseph Lead Company
Per E. J. James 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:
Voucher Dated $4,914.93 6-15-59
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. ..... 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".

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-104 (Rev.)
(April 1952)

JUL 6 1959
O.M.E.

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

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			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	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 Dec 9 58 *Payee St. Joseph Lead Company

Per E. A. Jones 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:

$ See Rec. MF-104 Revised 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. Jdm 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-1
(April 1952)

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JAN 14 1959
BUREAU OF MINES
JOPLIN, MO.

Budget Bureau No. 42-R1151.2

FEB 2 1959 O.M.

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

Month of December 195 8 Docket No. DMEA 4582 Contract No. Idm-B 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				2/10/59				
Crosscutting								
Raising								
Shafts								
Winzes								
Drilling: Core	Ft.	2408.70	1085	205192.38	92429	62.22)		
Churn	Ft.	888.00	400	57977.52	26116	2.22)	133420	62.22
Auger					118,545			
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	Stage I - 56,025' II - 62,520 118,545		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 E. J. 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:

		no claimed
Actual total cored. (84 Stage I + 97 Stage II holes)	= 92,900	471
Actual total drilled. (in these 181 holes)	= 26,187	71
Total project drilling	119,087	
claimed	118,545	
not claimed	542	542

(on hole VC-181 for which only 5' and 5 assays are claimed & furnished w/rep. (15' could have been claimed)

(For Government use only)

	Stage I	Stage II	
claimed on completions	(84 holes) 56,025'	(97 holes) 62,520	= 118,545'
Contract Maximums	(" ") 70,980	— 62530	
yet allowable	none none	10	= 10'

CCK 1/26/59

INSTRUCTIONS

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

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

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

GPO 872894

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BUREAU OF MINES
JOPLIN, MO.

MONTHLY REPORT FOR MONTH OF DECEMBER, 1958

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

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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 181 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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BUREAU OF MINES
ROLLA, 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.

FORM 1173 1-57 DATE STARTED 12-12-58

DATE BOTTOMED 12-17-58	ST. NO. VC 179	ST. ELEV.	CLASS BLANK HOLE NO. 58VC 273
DESCRIBED BY	AREA Courtois		ELEVATION COLLAR 1079.30
DATE ESTIMATED	OPTION NO. OAA.857		COORDINATES: N 116644.25 E 82106.44
BY	TRACT U. S. FOREST LAND		200 FT. MAP NO. 45 50 FT. MAP NO. 658
			SW 1/4 - NE 1/4 SEC. 12

GENERAL HOLE DATA

HT. SLEEVE ABOVE GR 24" FT.

FORM BOTT. SL.

	DEPTH	ELEV.
DRILLED WITH:		
CHURN DRILL TO	170.	909.3
SLEEVE BIT TO		
BEGAN CORING AT	385	694.3
SAVED CORES FROM	410	693
FORMATIONS:		
SOIL TO		
EMINENCE "		
POTOSI "		
POTOSI-DERBY "		
DERBY DOE RUN "		
DAVIS (C.B.-S.B.) "	421	658.3
BONNE TERRE "	689	390.3
B. T. TRANS. "	701	378.3
CONGLOMERATE "	—	
LA MOTTE "	715	364.3
GRAN. OR POR. "	—	
PICTURES: FROM	507	572.3
TO	655	424.3
CHAR. SAMPLES: FROM		
TO		
INSOL. RES.: FROM		
TO		
OPENINGS AT		

MINERALIZATION RECORD 2190'S - 2000'W T35N-R1W

ROCK TYPE	DEPTH FROM	DEPTH TO	ELEV. BOTT.	THICKNESS	% LEAD ASSAY	% LEAD EST.	FT. %	% ASSAY	% EST.	FT. %	REMARKS
			Blank								

CORE REC.

TO	CORES LOST
410	—
651	—
661	1.2
681	—
686	1.0
715	—
715	
410	
305	

BL

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BUREAU OF MINES
JOPLIN, MO.

FORM 9002-R-5-55

ROCK CLASSIFICATION

DESCRIBED BY [illegible] DATE 12-19-58 MINE Courtois STOPE STAKE NO. [illegible] HOLE NO. 58VC272

COLLAR ELEV. 1078 PITCH BEARING COORD.: N E

BOTTOM DEPTH	BOTTOM ELEV.	ZONE NUMBER	KIND OF ROCK (Depth at Bottom)
385	693	BEGAN CORING	
410	668	Limestone - 385-410	
421	657	Davis Shale - Bonne Terre	(421)
453	625	1	TO faint oolite - thin bedded appearance - few thin Rbs - slightly E 427-433 - >fracturing - >pitting - (453)
481	597	1-5	GTO>E1 irregular bedded - many thin Rbs - >ETs scattered - few thin Rbs - >porous oolitic patches - >pitting - >Ca - (481)
513	565	5	GTOE1>M faint to med oolite - <RTs - >porous oolites - >pitting - Ca Zs - few thin Rbs - 2" slightly M 503-505, 507 to Base - 4" @ Base E - (513)
553	525	5	TO>E1F med to large oolite - mostly E ed - 6" not E ed @ 518, 1" @ 525 - few thin Rbs - >pitting - 1' F 542 - few M patches - >Ca Zs - (553)
571	507	7	IXOE1>E med x - <pitting - good Ca Zs - E top to 567 - few thin Rbs - E" F @ 555 - (571)
636	441	7	F1TOI-G1 mostly F rock - F have bright color - >pitting & small vugs - >Ca Zs - scattered thru matrix - G1 ed & Rbs 595-603 IXG1 617-620, 6" Ca Zs @ Base - 6" ETs @ 615 - >Ca & Zs up to many thin Rbs - (636)
652	422	10-7	IXO>Ca>E med to large oolite - >Ca Zs scattered - slightly crystalline - few thin Rbs - 6" E @ 637, 1" @ 641, 1" @ 649, 1" @ Base - >Alpatches - >Zs up to - (652)
674	404	10	CaTXO>E faint to med oolite - slightly crystalline - Alpatches few thin Rbs - E 655-657, 662-672 - >pitting - 1" ETs @ 661 (674)
689	387	10-12	GTOM faint oolite - few thin Rbs - <Alpatches thru out - >pitting & small vugs - few RTs - >fracturing - (689)
701	377	19	GTIXOM>E slightly sandy increasing toward Base - slightly irregular bed - E 691-694, 697-699, 700 to Base - >Zs (701)
715	363	20	Wh med grain - 3" @ top Ca E stained - >fossils (715)

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JOPLIN, MO.

FORM 1173 1-57

DATE BOTTOMED [illegible] ST. NO. VC-180 ST. ELEV. [illegible] CLASS Trace HOLE NO. [illegible]

DESCRIBED BY [illegible] AREA Courtois ELEVATION COLLAR [illegible]

DATE ESTIMATED [illegible] OPTION NO. [illegible] COORDINATES: N [illegible] E [illegible]

BY [illegible] TRACT [illegible] 200 FT. MAP NO. [illegible] 50 FT. MAP NO. [illegible]

Sec 12

GENERAL HOLE DATA

HT. SLEEVE ABOVE GR 24" FT.

FORM BOTT. SL. [illegible]

	DEPTH	ELEV.
DRILLED WITH:		
CHURN DRILL TO	230.0	[illegible]
SLEEVE BIT TO		
BEGAN CORING AT	435.0	[illegible]
SAVED CORES FROM	455	[illegible]
FORMATIONS:		
SOIL TO		
EMINENCE "		
POTOSI "		
POTOSI-DERBY "		
DERBY DOE RUN "		
DAVIS (C.B.-~~S.B.~~) "	460	[illegible]
BONNE TERRE "	7[illegible]	[illegible]
B. T. TRANS. "	144	[illegible]
CONGLOMERATE "	--	
LA MOTTE "	762	[illegible]
GRAN. OR POR. "	-	

PICTURES: FROM [illegible] TO [illegible]

CHAR. SAMPLES: FROM TO

INSOL. RES.: FROM TO

OPENINGS AT

MINERALIZATION RECORD

ROCK TYPE	DEPTH FROM	DEPTH TO	ELEV. BOTT.	THICKNESS	% LEAD ASSAY	% LEAD EST.	FT. %	% ASSAY	EST.	FT. %	REMARKS	CORE REC. TO	CORES LOST
[illegible]	[illegible]	[illegible]	[illegible]	0.1	[illegible]							455	-
[illegible]	[illegible]	[illegible]	[illegible]	0.1	[illegible]							715	-
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]							[illegible]	1.7
[illegible]	[illegible]	[illegible]	[illegible]	0.3	[illegible]							[illegible]	1.6
												[illegible]	7.5

765

[illegible]

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BUREAU OF MINES
JOPLIN, MO.

FORM 9002-R-5-55

ROCK CLASSIFICATION

DESCRIBED BY JP DATE 12-27-58 MINE Courtois STOPE STAKE NO. VC-180 HOLE NO. 58VC275

COLLAR ELEV. 1148 PITCH BEARING COORD.: N E

BOTTOM DEPTH	BOTTOM ELEV.	ZONE NUMBER	KIND OF ROCK (Depth at Bottom)
435	713	BEGAN CORING	
455	693	Discard 435-455	
465	683	Davis Shale - Tr. Fe=. Bonne Terre	(465)
506	642	1	TOE faint oolite - thin bed to pt to 470 - massive appearance 470 to 480 - slightly irregular bed 480 to Base - & 484 to Base - >pitting - (506)
524	624	1-5	GTO>BFa faint oolite - <BFa scattered - slightly sandy appearance - many thin - >pitting - >2 Mg - tr Pb - (524)
553	595	5	GTOBFa faint to med oolite - <BFa - >pitting - >vugs >2 Mg Fa - few thin Rba - >porous oolitic patches - (553)
606	542	5	TO>M:GBFa med to large oolite - >pitting - few thin Rba - >M to pt to 557 - <GBFa 600 to Base - >Fe patches - 6" F @ 590 (606)
686	462	7	FTOM<GFa fairly fresh appearing Fe - <GFa in matrix 645-647 653-656 - many thin Rba - >Fe= - <M - 1' 676 @ 671 679, 1' @ Base - >2 Mg Fa - (686)
706	442	10-7	TXO=F=M::E faint oolite - small to med X - 1' F @ 687, 704 & 689 1', 691-695, 697-704 - few thin Rba - <M patches - >pitting + small vugs - (706)
728	420	10	GTXO>M faint oolite - slightly crystalline - few thin Rba increasing M toward base - tr Pb @ 718 (728)
738	410	12-10	GTOM slightly crappy - many thin Rba - faint oolite - <M scattered <pitting - (738)
744	404	19	GT=DM fairly sandy increasing toward base - >pitting - few thin Rba - tr Fe @ base - (744)
765	383	20	W. Sand med grain - E stain to pt to 746 - Fe= band @ 745 - >Fe= patches thru out - (765)

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JAN 14 1959

BUREAU OF MINES
JOPLIN, MO.

FORM 1173 1-57

15

DATE BOTTOMED 1Y-30-58
DESCRIBED BY [illegible]
DATE ESTIMATED 12-30-58
BY [illegible]

ST. NO. VC-181 ST. ELEV.
AREA [illegible]
OPTION NO. CZ-67
TRACT G.D. EVANS

CLASS PAY HOLE NO. 58VC 277
ELEVATION COLLAR 1046.27
COORDINATES: N 117342.98 E 85524.79
200 FT. MAP NO. A5 50 FT. MAP NO. 659
SE¼-NW¼ SEC. 7

GENERAL HOLE DATA

HT. SLEEVE ABOVE GR 36" FT.
FORM BOTT. SL.

	DEPTH	ELEV.
DRILLED WITH:		
CHURN DRILL TO	75.0	971.3
SLEEVE BIT TO		
BEGAN CORING AT	305	741.3
SAVED CORES FROM	305	741.3
FORMATIONS:		
SOIL TO		
"		
EMINENCE "		
POTOSI "		
POTOSI-DERBY "		
DERBY DOE RUN "	—	
DAVIS (C.B.-S.B.) "	321	725.3
BONNE TERRE "	534	512.3
B. T. TRANS. "	543	503.3
CONGLOMERATE "		
LA MOTTE "	—	
GRAN. ~~OR POR.~~ "	547	499.3
PICTURES: FROM	407	639.3
TO	520	526.3
CHAR. SAMPLES: FROM		
TO		
INSOL. RES.: FROM		
TO		
OPENINGS AT		

MINERALIZATION RECORD 410'S 1415'E T35N-R1W

ROCK TYPE	DEPTH FROM	DEPTH TO	ELEV. BOTT.	THICKNESS	% LEAD ASSAY	% LEAD EST.	FT. %	% ASSAY	% EST.	FT. %	REMARKS	TO	CORES LOST
TF	474.0	475.7	570.6	1.7		TR					FRACT. SHALE	305	
"	476.8	477.3	569.0	0.5	1.7	1.0	0.8				DISC	315	—
"	487.1	489.9	556.4	2.8	14.1	8.0	39.5				BANDED FRACT.	328	1.0
"	491.9	492.2	554.1	0.3	6.8	1.5	2.0				FRACT. TESS	321	1.0
"	494.3	494.7	551.6	0.4		TR					"	493	—
"	497.5	498.7	547.6	1.2		TR					"	497	1.0
"	498.7	498.9	547.4	0.2	10.5	4.0	2.1				HORZ. & VERT SEAM	547	—
"	501.1	502.6	543.7	1.5	1.4	1.0	2.1				FRACT.		
"	502.6	506.9	539.4	4.3		TR					"		

PAY

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JAN 14 1959

BUREAU OF MINES
JOPLIN, MO.

FORM 9002-A-5-55

ROCK CLASSIFICATION

DESCRIBED BY Q DATE 12-30-58 MINE Courtois STOPE STAKE NO VC-181 HOLE NO. 58VC2T7

COLLAR ELEV. 1044 PITCH BEARING COORD.: N E

BOTTOM DEPTH	BOTTOM ELEV.	ZONE NUMBER	KIND OF ROCK (Depth at Bottom)
305	739	BEGAN CORING	
321	723	DAVIS BONNE TERRE	(321)
373	671	1	LT, b, ~ & GT Dense b - Sl LT, b, stylo - Frac 355 - GT Dense b 373 (373)
412	632	5	GB, B b - <2nd D b - b, stylo - <B b - p - 2' E @ 403 - >K b @ base - (412)
430	614	5	T - b, stylo - med Prom O - >p - >D b - >C b @ base - (430)
440	604	5	F T/GTM - Supply F Reef w/ med M - C b matrix - 2' E @ base - (440)
534	510	7	F T/GTM: E: GT, C b - Granite Pebs @ 440 - F 442 - GT, 444 - F 447 - GT, C b >E 449 - F > m > C b p > Fract > 2nd D & Ca b 449 to base - >Pb 474.0 to 477.3 - Pay Pb 487 to 490 - Tr Pb 494 to 507 - matrix > Xg 507 - (534)
543	501	18	Red Granite w/ LGD, Pty - Closely cemented Red Gran Cobbles w/ LGD w/ Sil Gran GCT - (543) >weathered @ 543 -
547	497	21	Red Granite - >High angle fract - fresh Red - med SiO_2 - (547)

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TECHNOLOGY

JAN 14 1959

BUREAU OF MINES
JOPLIN, MO.

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DATE	INITIALS	CODE

DMEA - 4582
St. Joseph Lead Co.
Courtois Area

Monthly Progress Report
Map for December 1958
transferred to top of right
side of Folder No. 1. colored
to show lands in contract,
with additions and withdrawals.

S. P. Holt
8/22/60

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION

Box 431
Joplin, Missouri
December 24, 1958

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DATE	INITIALS	CODE
1/2/59	C	220
		~~110~~
1/5	BEJ	800
1/8	CWB	500

OME 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:

Submitted herewith are four copies of the Interim Report typed from the draft prepared by Dewey Amos, USGS, Carbondale, and received this morning covering the field inspection he and I made on the subject project December 18 1958.

Also enclosed is one of your copies of the Operator's November Reports(excepting the MF-104 Voucher). One copy was given to the Survey Member of the Field Team on December 17. Approval of this and the Operator's final audit review to be requested when I send you a copy of that final MF-104.

Although we had anticipated this would be the final inspection of the project, we found that the Contract is still incomplete and drilling of the final three holes still in progress.

Sincerely yours,

Clinton C. Knox

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

encls. 5

cc: OME Op.Com.(3)
King, USGS, Denver w/c Interim rpt.
Amos, USGS, Carbondale w/c " "
4582 file

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O. M. E.
RECEIVED JAN 2 1959

DATE	INITIALS	CODE

INTERIM REPORT
DMEA-4582 IDM-E1068

Operator: St. Joseph Lead Company, Bonne Terre, Missouri

Location: Courtois Area, Washington County, Missouri

A project inspection of the subject contract was conducted on December 18, 1958. Results obtained by the work conducted under the contract were discussed with Mr. R. E. Wagner, Head of Exploration, and Mr. G. Klostermann, Geologist

Drilling completed on the Courtois project to date and since our November 18 inspection is summarized as follows:

Footage in holes completed since last inspection..	0
Total footage in holes completed.....	116,995
Number of holes completed since last inspection..	0
Total number of holes completed.....	178
Number of holes showing commercial ore.....	39
Number of holes showing submarginal ore.....	23
Number of holes showing trace mineralization.....	83
Number of holes showing speck trace mineralization	15
Number of barren holes.....	18

Diamond core drilling is in progress in one hole summarized as follows:

Hole No.	Location	Present Depth	Estimated Total Depth
VZ-179	SE¼, SE¼, SE¼, sec. 1	545 ft.	760 ft.

The churn drill portion of two holes has been completed since the previous inspection. A summary of

these holes is as follows:

Hole No.	Location	Depth to Bottom of Churn Drilling
VC-180	NE¼, NE¼, NE¼, sec. 12	230 ft.
VC-179	SE¼, SE¼, SE¼, sec. 1	165 ft.

Churn drilling is in progress in one hole summarized as follows:

Hole No.	Location	Present Depth
VC-181	520 ft. S.10°W. of Hole VC-135	20 ft.

Progress on this contract has been limited in recent weeks because the Operator is using most of the available drills in other work.

Clinton C. Knox
Mining Engineer
U. S. Bureau of Mines

Dewey H. Amos
Geologist
U. S. Geological Survey

cc: OME Op.Com.(4)
Amos,USGS,Carbondale(2)
King,USGS,Denver
4582 file

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 November 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				1/26/59				
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

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)

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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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 160	7 Pb	7 Cu
58VC250 174	9 Pb	1 Cu
58VC256 175	2 Pb	

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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 1173 1-57

DATE BOTTOMED ____ ST. NO. 1766 ST. ELEV. ____ CLASS ____ HOLE NO. ____

DESCRIBED BY ____ AREA ____ ELEVATION COLLAR ____

DATE ESTIMATED ____ OPTION NO. ____ COORDINATES: N ____ E ____

BY ____ TRACT ____ 200 FT. MAP NO. ____ 50 FT. MAP NO. ____

GENERAL HOLE DATA

HT. SLEEVE ABOVE GR ____ FT.

FORM BOTT. SL. ____

	DEPTH	ELEV.
DRILLED WITH:		
CHURN DRILL TO		
SLEEVE BIT TO		
BEGAN CORING AT		
SAVED CORES FROM	345	
FORMATIONS:		
SOIL	TO	
EMINENCE	"	
POTOSI	"	
POTOSI-DERBY	"	
DERBY DOE RUN	"	
DAVIS (C.B.-S.B.)	"	
BONNE TERRE	"	
B. T. TRANS.	"	
CONGLOMERATE	"	
LA MOTTE	"	
GRAN. OR POR.	"	

PICTURES. FROM ____ TO ____

CHAR. SAMPLES: FROM ____ TO ____

INSOL. RES.: FROM ____ TO ____

OPENINGS AT

MINERALIZATION RECORD

ROCK TYPE	DEPTH FROM	DEPTH TO	ELEV. BOTT.	THICKNESS	% LEAD ASSAY	% LEAD EST.	FT. %	% ASSAY	% EST.	FT. %	REMARKS	CORE REC. TO	CORES LOST

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FORM 9002-R-5-55

ROCK CLASSIFICATION

DESCRIBED BY ..... DATE ..... MINE ..... STOPE ..... STAKE NO. ..... HOLE NO. .....

COLLAR ELEV. ..... PITCH ..... BEARING ..... COORD.: N ..... E .....

BOTTOM DEPTH	BOTTOM ELEV.	ZONE NUMBER	KIND OF ROCK (Depth at Bottom)
			[illegible]
342			[illegible]
342			[illegible]
			[illegible]
			[illegible]
			[illegible]
			[illegible]
			[illegible]
			[illegible]
			[illegible]
			[illegible]
			[illegible]
			[illegible]
484		5	[illegible]
495		5	F [illegible]
502		5	[illegible]
503		5	[illegible]
533		7	F [illegible]
			[illegible]
570		7-10	[illegible]
			[illegible]
603		12	GT-1 [illegible]
614		11	GT-[illegible]
626		12	GT-11 - HEAVY CRRB [illegible]
635		17	GO-0-[illegible] - [illegible]
			[illegible] (635)
665		20	W.S. COARSE GRAIN [illegible]
		?	

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FORM [illegible]

DATE BOTTOMED [illegible] | QT NO [illegible] | QT ELEV [illegible] | CLASS [illegible] | HOLE NO [illegible]

DESCRIBED BY [illegible] | AREA [illegible] | ELEVATION COLLAR [illegible]

DATE ESTIMATED [illegible] | OPTION NO [illegible] | COORDINATES: N [illegible] E [illegible]

BY [illegible] | TRACT [illegible] | 200 FT MAP NO [illegible] | 50 FT MAP NO [illegible]

GENERAL HOLE DATA

HT SLEEVE ABOVE [illegible] [illegible] FT

FORM BOTT SL

	DEPTH	ELEV.
DRILLED WITH		
CHURN DRILL TO	159 [illegible]	
SLEEVE BIT TO		
BEGAN CORING AT		
SAVED CORES FROM	314 [illegible]	
FORMATIONS:		
SOIL TO		
"		
EMINENCE "		
POTOSI		
POTOSI DERBY "		
DERBY DOE RUN		
DAVIS (C B ~~50~~)	325 [illegible]	
BONNE TERRE "	424 6 [illegible]	
[illegible] 18	471 [illegible]	
B T TRANS. "		
CONGLOMERATE "		
LA MOTTE "		
GRAN ~~OR POR~~ "	475 [illegible]	
PICTURES. FROM	463 [illegible]	
TO	475 [illegible]	
CHAR SAMPLES: FROM		
TO		
INSOL. RES.: FROM		
TO		
OPENINGS AT		

MINERALIZATION RECORD

ROCK TYPE	DEPTH FROM	DEPTH TO	ELEV BOTT	THICKNESS	% LEAD ASSAY	% LEAD EST.	FT. %	% ASSAY	% EST.	FT. %	REMARKS
1 [illegible]	[illegible]	[illegible]									
	[illegible]	[illegible]		0.3		TR					

CORE REC.

TO	CORES LOST
314	
334	—
345	2.2
365	—
383	—
403	—
423	—
443	—
463	5.6
475	3.5

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BUREAU OF MINES
JOPLIN, MO.

Drill #20

FORM 9002-R-5-55

ROCK CLASSIFICATION

DESCRIBED BY LJH DATE 11-7-58 MINE COURTOIS STOPE STAKE NO. VC 163 HOLE NO. 58VC-251

COLLAR ELEV. 1089 PITCH BEARING COORD.: N E

BOTTOM DEPTH	BOTTOM ELEV.	ZONE NUMBER	KIND OF ROCK (Depth at Bottom)
159	930	BEGAN CORING	
314	775	SAVED CORES AFTER (314)	
325	764	DAVIS - (325)	
		Bannerence	
363	726	1	Dense TB - considerable fracturing - T cubitis 325-340 TR Seam Pb @ 341, Y 352. (363)
407	682	5	BXOM porous BX - fractured mostly E 363-385 - ; GBXOM BX from 398-407 (407)
415	674	Pz ?	GTO >M, few KB's, irregular to ; crepe b. (415)
424	665	5	TO pi massive to irregular stylolitic banded. (424)
471	638	7-18	Basically, F BXOM N Reef - very fresh bright fingering interbedding of Red Granite Conglomerate as follows 426-426.5, 428-432, 434-439, 441-448, 452-464, 466-469. (471) Calcite Seams ; Talc, TR FeS2 452-456
475	614	21 ?	Fresh Red Granite - less than 4' of core, not positive as to whether it is solid (Precambrian), or large slab, or boulder. (475)

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FORM 1173 1-57

DATE BOTTOMED _____ ST NO. _____ ST. ELEV. _____ CLASS _____ HOLE NO. _____

DESCRIBED BY _____ AREA _____ ELEVATION COLLAR _____

DATE ESTIMATED _____ OPTION NO. _____ COORDINATES: N _____ E _____

BY _____ TRACT _____ 200 FT. MAP NO. _____ 50 FT. MAP NO. _____

GENERAL HOLE DATA

HT. SLEEVE ABOVE GR _____ FT.

FORM BOTT. SL. _____

	DEPTH	ELEV.
DRILLED WITH:		
CHURN DRILL TO		
SLEEVE BIT TO		
BEGAN CORING AT		
SAVED CORES FROM		
FORMATIONS:		
SOIL TO		
EMINENCE "		
POTOSI "		
POTOSI-DERBY "		
DERBY DOE RUN "		
DAVIS (C.B. ~~S.B.~~) "		
BONNE TERRE "		
B. T. TRANS. "		
CONGLOMERATE "		
LA MOTTE "		
GRAN. OR POR. "		

PICTURES FROM
TO

CHAR SAMPLES: FROM
TO

INSOL. RES: FROM
TO

OPENINGS AT

MINERALIZATION RECORD

ROCK TYPE	DEPTH FROM	DEPTH TO	ELEV. BOTT.	THICKNESS	% LEAD ASSAY	% LEAD EST.	FT. %	% Cu ASSAY	% Cu EST.	FT. %	REMARKS

CORE REC.

TO	CORES LOST
505	
525	—
529	1
535	1.3
542	2.1
554	3.2
554	4.4
551	4.5
	2.2
574	3.1
576	1.6
594	2.5

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JOPLIN, MO.

Form 9202-R-5-55

[illegible]

DESCRIBED BY _____ DATE _____ MINE _____ STOPE _____ STAKE NO. _____ HOLE NO. _____

COLLAR ELEV. _____ PITCH _____ BEARING _____ COORD.: N _____ E _____

BOTTOM DEPTH	BOTTOM ELEV.	ZONE NUMBER	KIND OF ROCK (Depth at Bottom)
		PLAN STRING	
[illegible]		[illegible]	[illegible]
[illegible]		[illegible]	[illegible]
[illegible]		[illegible]	[illegible]
[illegible]		[illegible]	[illegible]
[illegible]		[illegible]	[illegible]
[illegible]		[illegible]	[illegible]

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BUREAU OF MINES
JOPLIN, MO.

FORM 1173 1-57 DATE STARTED - 11-6-58

DATE BOTTOMED 11/14/58
DESCRIBED BY A
DATE ESTIMATED 11/13/58
BY A

ST. NO. V-3165 ST. ELEV.
AREA Courtois
OPTION NO. CZ-67
TRACT G. D. EVANS

CLASS SPECK TRACE HOLE NO. 58VC254
ELEVATION COLLAR 1090.7A
COORDINATES: N 117672.67 E 85138.37
200 FT. MAP NO. 35 50 FT. MAP NO. 619
NW¼-NW¼ SEC. 7 T35N-R1W

GENERAL HOLE DATA

HT. SLEEVE ABOVE GR 30" FT.
FORM BOTT. SL.

	DEPTH	ELEV.
DRILLED WITH:		
CHURN DRILL TO	117.	973.7
SLEEVE BIT TO		
BEGAN CORING AT	337	753.7
SAVED CORES FROM	337	753.7
FORMATIONS:		
SOIL TO		
"		
EMINENCE "		
POTOSI "		
POTOSI-DERBY "	—	
DERBY DOE RUN "	—	
DAVIS (C.B.-S.B.) "	339	751.7
BONNE TERRE "	459	631.7
B. T. TRANS. "	—	
CONGLOMERATE "	471	619.7
LA MOTTE "	—	
GRAN. ~~OR POR.~~ "	485	605.7
PICTURES: FROM	411	689.7
TO	485	605.7
CHAR. SAMPLES: FROM		
TO		
INSOL. RES.: FROM		
TO		
OPENINGS AT		

MINERALIZATION RECORD

ROCK TYPE	DEPTH FROM	DEPTH TO	ELEV. BOTT.	THICKNESS	% LEAD ASSAY	% LEAD EST.	FT. %	% ASSAY	% EST.	FT. %	REMARKS
1 zone	325.0	325.6		0.6		TR	—				FRACT

CORE REG.

TO	CORES LOST
337	
357	—
367	1.0
376	1.0
425	—
438	6.0
441	—
451	3.0
465	6.0
485	—

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BUREAU OF MINES
JOPLIN, MO.

FORM 3002-A-5-55

ROCK CLASSIFICATION

DESCRIBED BY G DATE 11-13-58 MINE COURTMIS STOPE STAKE NO. VC 165 HOLE NO. 58VC254

COLLAR ELEV. 1089 PITCH BEARING COORD.: N E

BOTTOM DEPTH	BOTTOM ELEV.	ZONE NUMBER	KIND OF ROCK (Depth at Bottom)
337	752	BEGAN CORING	
339	750	DAVIS BANK TERRE	(339)
390	699	1	LT b1 & GT b2 DENSE b1 - LT b1 > FRACT 367 - GT b2 DENSE b1 > ≤ 367 TO BASE - (390)
425	664	5	≤ LT b1 B1 - FAINTLY B1 - > POROUS - > ≤ FRIABLE - Ca ↓ - b1 STYLO - 1" > MED BASE - (425)
442	647	5	T0 - ≤ b1 STYLO - MED O - FRACT 4 ≤ LT - 1' GT0 > C1 @ BASE - (442)
459	630	7	F1/Gm & GT0 C1 b1 - 5' > ≤ F > FRACT 447 - GT0 C1 b1 > FRACT 451 - F1 FRACT 453 - GT0 C1 b1 459 - > GRAN GRIT - (459)
465	618	18-16	GRANITE COBS W/ N REEF MATRIX - GRAN PEBS & GRIT W/ GT0 C1 MATRIX 466 - 6' GROUND 454 TO 465 - GRAN 467 - N REEF 468 - CLOSELY CEMENTED COBS & PEBS W/ LGD MATRIX (465)
485	602	21	RED GRANITE - FRESH RED GRAN - MED SiO2 - > DARK DISS MINERALS - 1' VERT FRACT W/ > DOLM FILLING @ 476 - 1" HIGH ANGLE D VEIN @ 476.5 - (485)

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BUREAU OF MINES
JOPLIN, MO.

7

FORM 1173 1-57 DATE STARTED 11-10-58

DATE BOTTOMED 11/13/58	ST. NO. K 175 ST. ELEV.	CLASS TRACE HOLE NO. SVC 256
DESCRIBED BY G	AREA COURTOIS	ELEVATION COLLAR 1081.74
DATE ESTIMATED 11/14/58	OPTION NO. CZ-85	COORDINATES: N 117687.44 E 92751.17
BY G	TRACT CURTISS HENSLEE	200 FT. MAP NO. 36 50 FT. MAP NO.

NW¼-NE¼ SEC. 8

GENERAL HOLE DATA

HT. SLEEVE ABOVE GR 20" FT.

FORM BOTT. SL.

	DEPTH	ELEV.
DRILLED WITH:		
CHURN DRILL TO	190.	891.7
SLEEVE BIT TO		
BEGAN CORING AT	435	646.7
SAVED CORES FROM	435	646.7
FORMATIONS:		
SOIL TO		
"		
EMINENCE "		
POTOSI "		
POTOSI-DERBY "	—	
DERBY DOE RUN "	—	
DAVIS (C.B.-S.B.) "	449	632.7
BONNE TERRE "	705	376.7
B. T. TRANS. "	713	368.7
CONGLOMERATE "	—	
LA MOTTE "	725	356.7
GRAN. OR POR. "		
PICTURES: FROM		
TO		
CHAR. SAMPLES: FROM		
TO		
INSOL. RES.: FROM		
TO		
OPENINGS AT		

MINERALIZATION RECORD 990'S 1700'W T35N-R1W

ROCK TYPE	DEPTH FROM	DEPTH TO	ELEV. BOTT.	THICKNESS	% LEAD ASSAY	% LEAD EST.	FT. %	% ASSAY	% EST.	FT. %	REMARKS	TO	CORES LOST
SGB, opq	532.5	533.9	547.8	1.4	2.3	2.5	3.2	—			DISS	435	
"	537.2	539.4	542.3	2.2		TR					SPECKS	715	—
"	539.4	540.8	540.9	1.4	0.3	1.0	0.4				DISS	725	1.0
5 F	572.2	572.3	509.4	0.1		TR					Fine		

CORE REC.

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JOPLIN, MO.

FORM 9002-A-5-55

ROCK CLASSIFICATION

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DESCRIBED BY G. DATE 11/14/58 MR. COURTOIS STOPE STAKE NO. VC 175 HOLE NO. 58VC256

COLLAR ELEV. 1081 PITCH BEARING COORD.: N E

BOTTOM DEPTH	BOTTOM ELEV.	ZONE NUMBER	KIND OF ROCK (Depth at Bottom)
435	646	BEGAN CORING	
449	632	DAVIS BONNETERRE	(449)
509	572	1	LT>ob, ↓GT DENSE b2 – LT>, b, >FRACT 475 – GT DENSE b2 >VUGGY 509 – >Qa d – (509)
552	529	5	GB>p1 b2 – Bf – FAINTLY Bf – <p2 f SMALL VUGS – ↓>cg Gb – (SD>>Pb 533 TO 541) DRAVS MACHES – D↓Ca f – (552)
561	520	R	LGm~ GB>op2 >Bf – LG>m>~G f 555 – GB>op2 Bf b, 558 – GM~>Gf – Df 561 – (561)
575	506	5F	F%GTMC f ↓ GTG/o – DIMLY F<G f p 565 – <G↓GT b 567 – SNURLY p F >E 572 – PROM F <p2 D↓Ca f 575 – TR FRACT Pb @ 572 – (575)
588	493	5?	LG>o DENSE b, ↓GB b2 >F – GB>o FINE GRAIN b 577 – p2 F >Gf SNURLY 579 – LGo DENSE b, 581 – >E DIMLY F >G f 582 – LGo b, DENSE 588 – (588)
623	458	7	F%GTMC f: GT b, – DIMLY F SNURLY p 604 – 1" Pb @ 604 – 3 PROM F 604 TO 609 – GTo b, >VUGGY 614 – BRIGHT F <FRACT 616 – GTo f E f 617 – BRIGHT F < SNURLY 619 – GTo <f b2 Gf b 620 – DIMLY F >E p2 623 – (623)
639	442	7-10	F%GTM f TOb, – TOb, MED >PITTED 633 – F↓Gf SNURLY 635 – GTb TAN >@ >THIN Pb 637 – DIMLY F <SNURLY 639 – (639)
671	410	10-12	GT>m>~m: GTo – GTob, 642 – >~ >m GT>Ca f 662 – GTob, 664 – GT>m>~ 666 – GTob, 668 – GTM~ 670 – TOb, MED 671 – (671)
680	401	12	GTGEM~>Hb – MED HVY M↓~ – >SCATT THIN Pb – >D↓Ca f – >Gf – (680)
696	385	11	GM~G f Ls – 3' Ls @ 683 – Ls 683 TO 693 – Ls 693 TO 696 – >Gf – MED M↓~ – Ca f ↓ VETNLETS – (696)
705	376	12	GTM~>Gf ↓ Bf – MED M f ~ – D↓Ca f – >FINE Gf – FAINTLY Bf – (705)
713	368	19	GSD>m b2 – MED SAND CONTENT – b2 – >m – FAINTLY Gf – 2' b, LGDS @ BASE – (713)
725	356	20	WS – MED FINE GRAIN – CLEAN – >E↓THIN @ TOP – (725)

RECEIVED
DIVISION OF MINERAL
TECHNOLOGY

DEC 11 1958

BUREAU OF MINES
JOPLIN, MO.

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION

Box 431
Joplin, Missouri
November 24, 1958

FILE COPY
O. M. E
RECEIVED NOV 28 1958

DATE	INITIALS	CODE
11-28	C	220
"	[illegible]	110
11/28	[illegible]	800
12/1	[illegible]	500

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:

Submitted herewith are four copies of the Interim Report received today from Dewey Amos, USGS, Carbondale, covering the Field inspection of the subject project which he made on November 18, 1958.

Sincerely yours,

Clinton C. Knox

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

encls.

cc: OME Op.Com.(3)
King,USGS,Denver
Amos,USGS,Carbondale w/cy encl.
4582 file

RECEIVED
DIVISION OF MINERAL
TECHNOLOGY

NOV 24 1958

BUREAU OF MINES
JOPLIN, MO.

INTERIM REPORT

DMEA-4582, Idm E-1068

Operator: St. Joesph Lead Company, Bonne Terre, Missouri

Location: Courtois Area, Washington County, Missouri

OFFICIAL FILE COPY
O. M. E.
RECEIVED NOV 28 1958

DATE	INITIALS	CODE

A project inspection of the subject contract was conducted on November 18, 1958. Results obtained to date and contemplated work were discussed with Mr. R. E. Wagner, Head of Exploration, and Mr. G. Klostermann, Geologist.

Drilling completed on the Courtois project to date and since the inspection on October 2, 1958 is summarized as follows:

Drilling Completed

Footage in holes completed since last inspection	11,625
Footage in holes completed to date	116,995
Number of holes completed since last inspection	18
Total number of holes completed to date	178
Number of holes showing commercial ore	39
Number of holes showing indicative non-commercial mineralization	23
Number of holes showing trace mineralization	83
Number of holes showing speck trace mineralization	15
Number of barren holes	18

A summary of the 18 holes completed since the last inspection is as follows:

Hole No.	Location	Depth	Remarks
VC-169	NW¼, NW¼, NW¼, sec. 8	525 ft.	Trace hole.
VC-176	NW¼, NW¼, NE¼, sec. 8	665 ft.	Trace hole.
VC-168	NW¼, NW¼, NW¼, sec. 8	542 ft.	Trace hole.
VC-177	NW¼, SW¼, SE¼, sec. 5	705 ft.	Trace hole.

Hole No.	Location	Depth	Remarks
VC-167	SE¼, SW¼, SW¼, sec. 6	665 ft.	Speck trace hole.
VC-162	NW¼, SE¼, NW¼, sec. 8	635 ft.	Speck trace hole.
VC-159	NW¼, SW¼, NE¼, sec. 12	761 ft.	Ore hole.
VC-161	SW¼, NE¼, NW¼, sec. 7	650 ft.	Ore hole.
VC-173	NW¼, NE¼, NW¼, sec. 8	695 ft.	Trace hole.
VC-166	SW¼, NE¼, NW¼, sec.7	745 ft.	Ore hole.
VC-164	NE¼, NW¼, NW¼, sec. 7	717 ft.	Ore hole.
VC-178	SE¼, NW¼, SE¼, sec. 5	605 ft.	Ore hole.
VC-172	SE¼, NE¼, NW¼, sec. 5	645 ft.	Blank hole.
VC-174	SE¼, SW¼, NE¼, sec. 5	665 ft.	Ore hole.
VC-160	SW¼, SW¼, SE¼, sec. 1	770 ft.	Trace hole.
VC-163	SE¼, NW¼, NW¼, sec. 7	475 ft.	Trace hole.
VC-165	SE¼, NW¼, NW¼, sec. 7	435 ft.	Trace hole.
VC-175	SE¼, NW¼, NE¼, sec. 8	725 ft.	Trace hole.

No diamond core drilling is in progress under the contract. The churn drill portion of ~~7~~ 6 holes has been completed since the date of the last inspection. A summary of these holes is as follows:

Hole No.	Location	Depth to Bottom of Churn Drilling
VC-164	NE¼, NW¼, NW¼, sec. 7	270 ft.
VC-175 ✓	SE¼, NW¼, NE¼, sec. 8	195 ft.
VC-178	SE¼, NW¼, SE¼, sec. 5	65 ft.
VC-165 ✓	SE¼, NW¼, NW¼, sec. 7	115 ft.
VC-162	NW¼, SE¼, NW¼, sec. 8	100 ft.
VC-161	SW¼, NE¼, NW¼, sec. 7	160 ft.
~~VC-175~~	~~SE¼, NW¼, NE¼, sec. 8~~	~~195 ft.~~

Churn drilling is in progress in two holes summarized as follows:

Hole No.	Location	Present Depth
VC-179	SE¼, SE¼, SE¼, sec. 1	Setting up.
VC-180	NE¼, NE¼, NE¼, sec. 12	Setting up.

Significant assay results of recently completed holes are as follows:

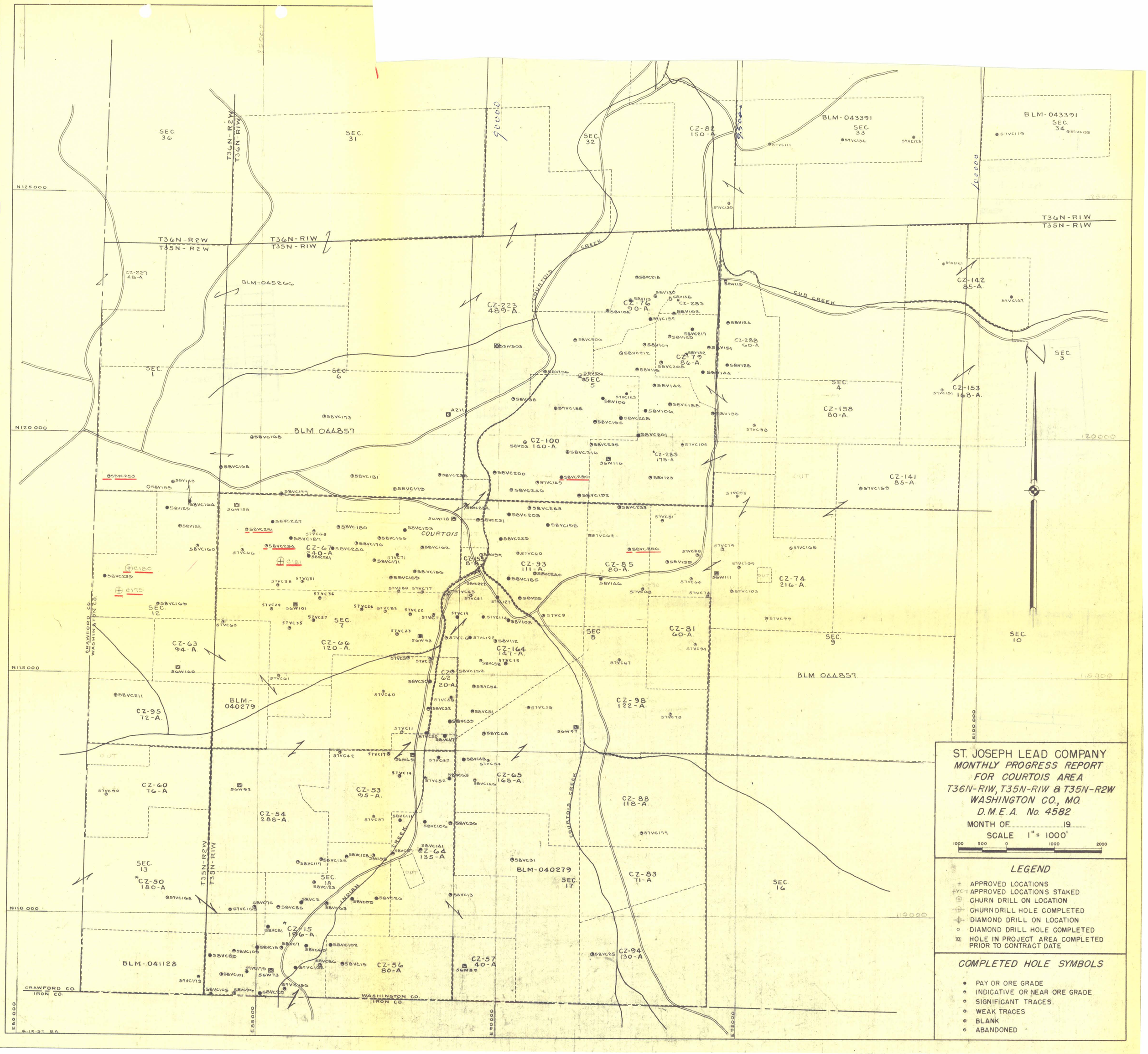
Hole No.	Depth	Thickness	%Pb
VC-178	446.9-451.8 ft.	4.9 ft.	16.0
VC-164	580.5-581.3 ft.	0.8 ft.	4.8
	581.6-583.5 ft.	1.9 ft.	5.5
	591.5-596.0 ft.	4.5 ft.	10.4
	596.5-597.6 ft.	1.1 ft.	8.3
VC-166	558.2-559.8 ft.	1.6 ft.	2.8
	560.6-564.5 ft.	3.9 ft.	3.5
	564.5-569.5 ft.	5.0 ft.	28.1
	569.5-571.1 ft.	1.6 ft.	5.6
VC-161	557.0-560.2 ft.	3.2 ft.	1.5
	561.6-562.9 ft.	1.3 ft.	4.3
	575.1-579.7 ft.	4.6 ft.	4.6
VC-159	645.0-647.0 ft.	2.0 ft.	10.8
	647.0-650.7 ft.	3.7 ft.	1.5
	650.7-653.2 ft.	2.5 ft.	2.0
	702.5-704.2 ft.	1.7 ft.	6.3
	706.4-707.3 ft.	0.9 ft.	4.9

Hole No.	Depth	Thickness	%Pb
VC-174	421.0-422.9 ft.	1.9 ft.	1.4
	437.8-439.3 ft.	1.5 ft.	1.3
	439.3-444.3 ft.	5.0 ft.	7.0
	444.3-449.3 ft.	5.0 ft.	18.6
	460.7-464.9 ft.	4.2 ft.	3.3
	470.9-473.3 ft.	2.3 ft.	1.3
	473.2-478.5 ft.	5.3 ft.	16.8
	478.5-483.8 ft.	5.3 ft.	32.6
	483.8-488.5 ft.	4.7 ft.	2.5

Dewey H. Amos

Geologist

U. S. Geological Survey


ST. JOSEPH LEAD COMPANY
MONTHLY PROGRESS REPORT
FOR COURTOIS AREA
T36N-R1W, T35N-R1W & T35N-R2W
WASHINGTON CO., MO.
D.M.E.A. No. 4582
MONTH OF _____ 19____
SCALE 1" = 1000'
1000 500 0 1000 2000
LEGEND
APPROVED LOCATIONS
APPROVED LOCATIONS STAKED
CHURN DRILL ON LOCATION
CHURN DRILL HOLE COMPLETED
DIAMOND DRILL ON LOCATION
DIAMOND DRILL HOLE COMPLETED
HOLE IN PROJECT AREA COMPLETED PRIOR TO CONTRACT DATE
COMPLETED HOLE SYMBOLS
PAY OR ORE GRADE
INDICATIVE OR NEAR ORE GRADE
SIGNIFICANT TRACES
WEAK TRACES
BLANK
ABANDONED
T36N-R2W
T35N-R2W
T36N-R1W
T35N-R1W
SEC. 36
SEC. 31
SEC. 32
SEC. 33
SEC. 34
SEC. 1
SEC. 6
SEC. 5
SEC. 4
SEC. 3
SEC. 12
SEC. 7
SEC. 8
SEC. 9
SEC. 10
SEC. 13
SEC. 18
SEC. 17
SEC. 16
BLM-043391
BLM-045266
BLM 044857
BLM-040279
BLM-041128
CZ-227 48-A
CZ-223 489-A.
CZ-82 150-A
CZ-76 90-A.
CZ-283
CZ-142 85-A.
CZ-288 60-A
CZ-79 86-A.
CZ-153 168-A.
CZ-158 80-A.
CZ-100 140-A.
CZ-283 175-A
CZ-141 85-A
CZ-67 240-A
CZ-155 8
CZ-93 111-A.
CZ-85 80-A.
CZ-74 216-A.
CZ-81 60-A.
CZ-63 94-A.
CZ-66 120-A.
CZ-164 147-A.
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CZ-64 135-A
CZ-50 180-A
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CZ-83 71-A
CZ-94 130-A
CZ-56 80-A
CZ-57 40-A
COURTOIS CREEK
CUB CREEK
INDIAN CREEK
CRAWFORD CO.
WASHINGTON CO.
IRON CO.
N125000
N120000
N115000
N110000
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E95000
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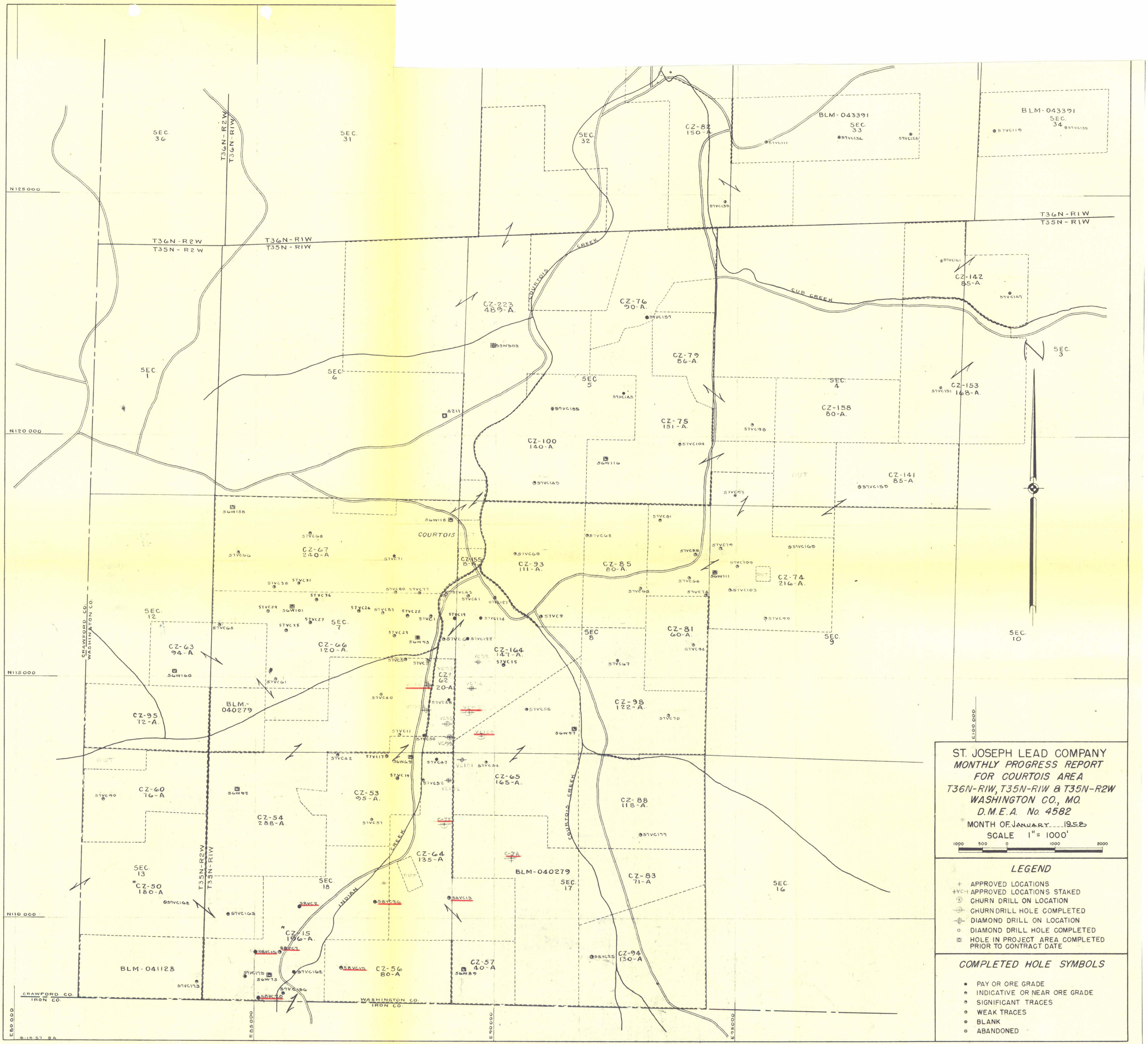
ST. JOSEPH LEAD COMPANY
MONTHLY PROGRESS REPORT
FOR COURTOIS AREA
T36N-R1W, T35N-R1W & T35N-R2W
WASHINGTON CO., MO.
D.M.E.A. No. 4582
MONTH OF JANUARY 1958
SCALE 1" = 1000'
1000 500 0 1000 2000
LEGEND
APPROVED LOCATIONS
APPROVED LOCATIONS STAKED
CHURN DRILL ON LOCATION
CHURN DRILL HOLE COMPLETED
DIAMOND DRILL ON LOCATION
DIAMOND DRILL HOLE COMPLETED
HOLE IN PROJECT AREA COMPLETED PRIOR TO CONTRACT DATE
COMPLETED HOLE SYMBOLS
PAY OR ORE GRADE
INDICATIVE OR NEAR ORE GRADE
SIGNIFICANT TRACES
WEAK TRACES
BLANK
ABANDONED
T36N-R2W
T35N-R2W
T36N-R1W
T35N-R1W
SEC. 36
SEC. 31
SEC. 32
SEC. 33
SEC. 34
SEC. 1
SEC. 6
SEC. 5
SEC. 4
SEC. 3
SEC. 12
SEC. 7
SEC. 8
SEC. 9
SEC. 10
SEC. 13
SEC. 18
SEC. 17
SEC. 16
COURTOIS CREEK
CUB CREEK
INDIAN CREEK
CRAWFORD CO.
WASHINGTON CO.
IRON CO.
CZ-82 150-A
BLM-043391
CZ-223 489-A.
CZ-76 90-A.
CZ-79 86-A.
CZ-142 85-A.
CZ-153 168-A.
CZ-158 80-A.
CZ-75 151-A.
CZ-100 140-A.
CZ-141 85-A.
CZ-67 240-A
CZ-155 8-A
CZ-93 111-A.
CZ-85 80-A.
CZ-74 216-A.
CZ-63 94-A.
CZ-66 120-A.
CZ-164 147-A.
CZ-81 60-A.
CZ-62 20-A
BLM-040279
CZ-98 122-A.
CZ-95 72-A.
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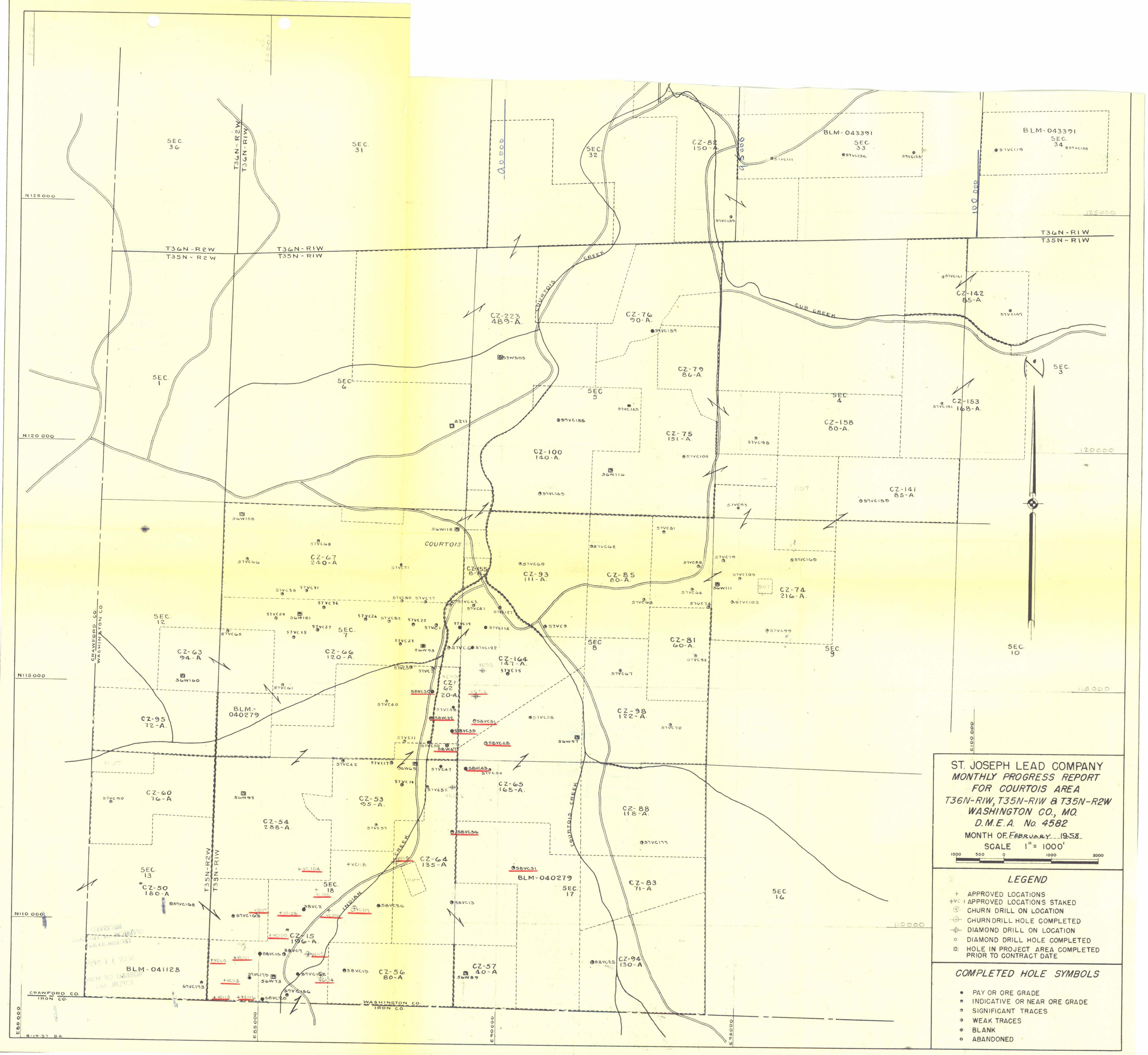
ST. JOSEPH LEAD COMPANY
MONTHLY PROGRESS REPORT
FOR COURTOIS AREA
T36N-R1W, T35N-R1W & T35N-R2W
WASHINGTON CO., MO.
D.M.E.A. No. 4582
MONTH OF FEBRUARY 1958
SCALE 1" = 1000'
1000 500 0 1000 2000
LEGEND
APPROVED LOCATIONS
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T36N-R2W
T35N-R2W
T36N-R1W
T35N-R1W
T35N-R2W
T35N-R1W
CRAWFORD CO.
WASHINGTON CO.
CRAWFORD CO.
IRON CO.
WASHINGTON CO.
IRON CO.
COURTOIS CREEK
CUB CREEK
INDIAN CREEK
SEC. 36
SEC. 31
SEC. 32
SEC. 33
SEC. 34
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BLM-043391
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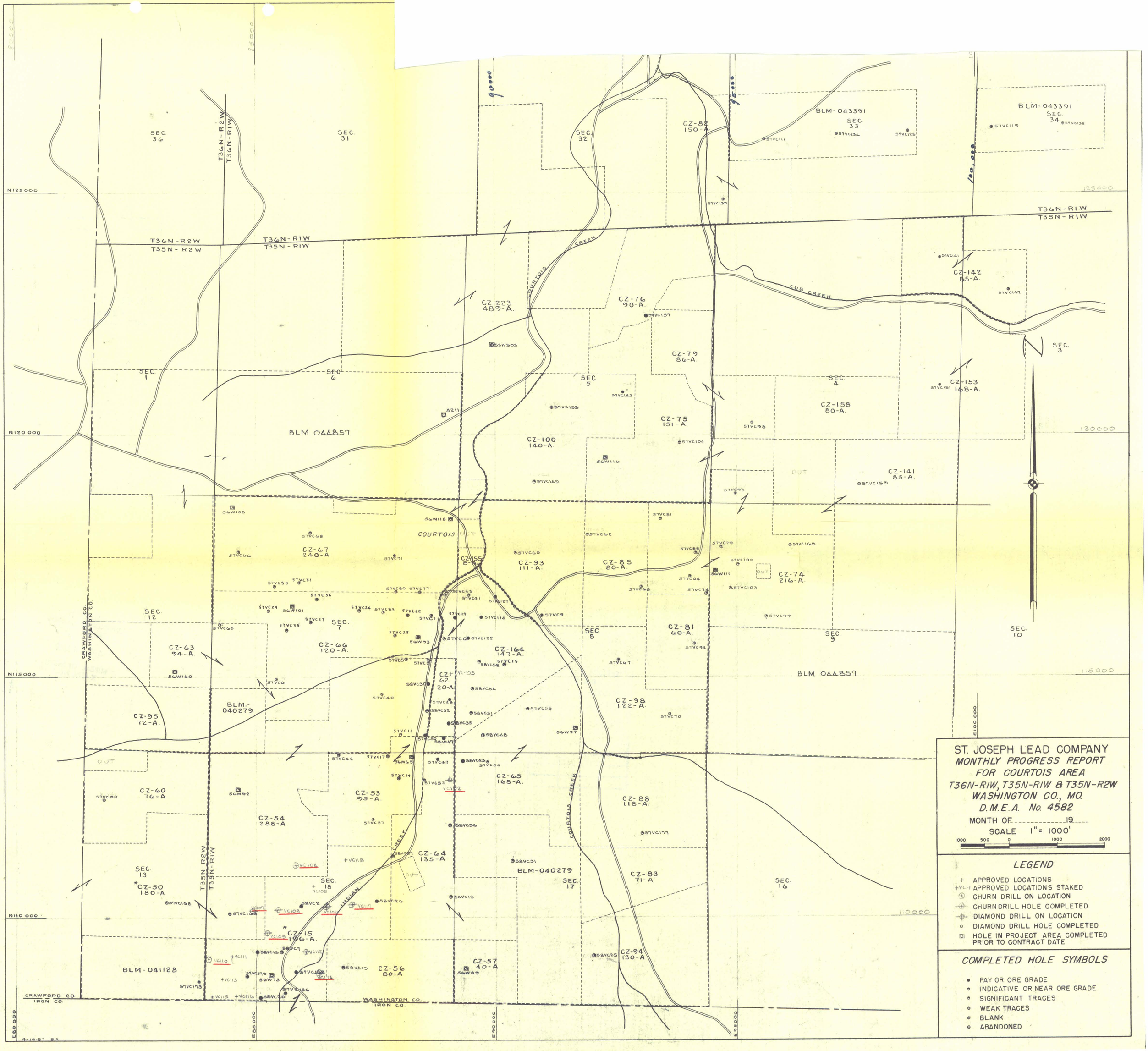
ST. JOSEPH LEAD COMPANY
MONTHLY PROGRESS REPORT
FOR COURTOIS AREA
T36N-R1W, T35N-R1W & T35N-R2W
WASHINGTON CO., MO.
D.M.E.A. No. 4582
MONTH OF _____ 19____
SCALE 1" = 1000'
1000 500 0 1000 2000
LEGEND
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T36N-R2W
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T36N-R1W
T35N-R1W
T35N-R2W
T35N-R1W
SEC. 36
SEC. 31
SEC. 32
SEC. 33
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SEC. 1
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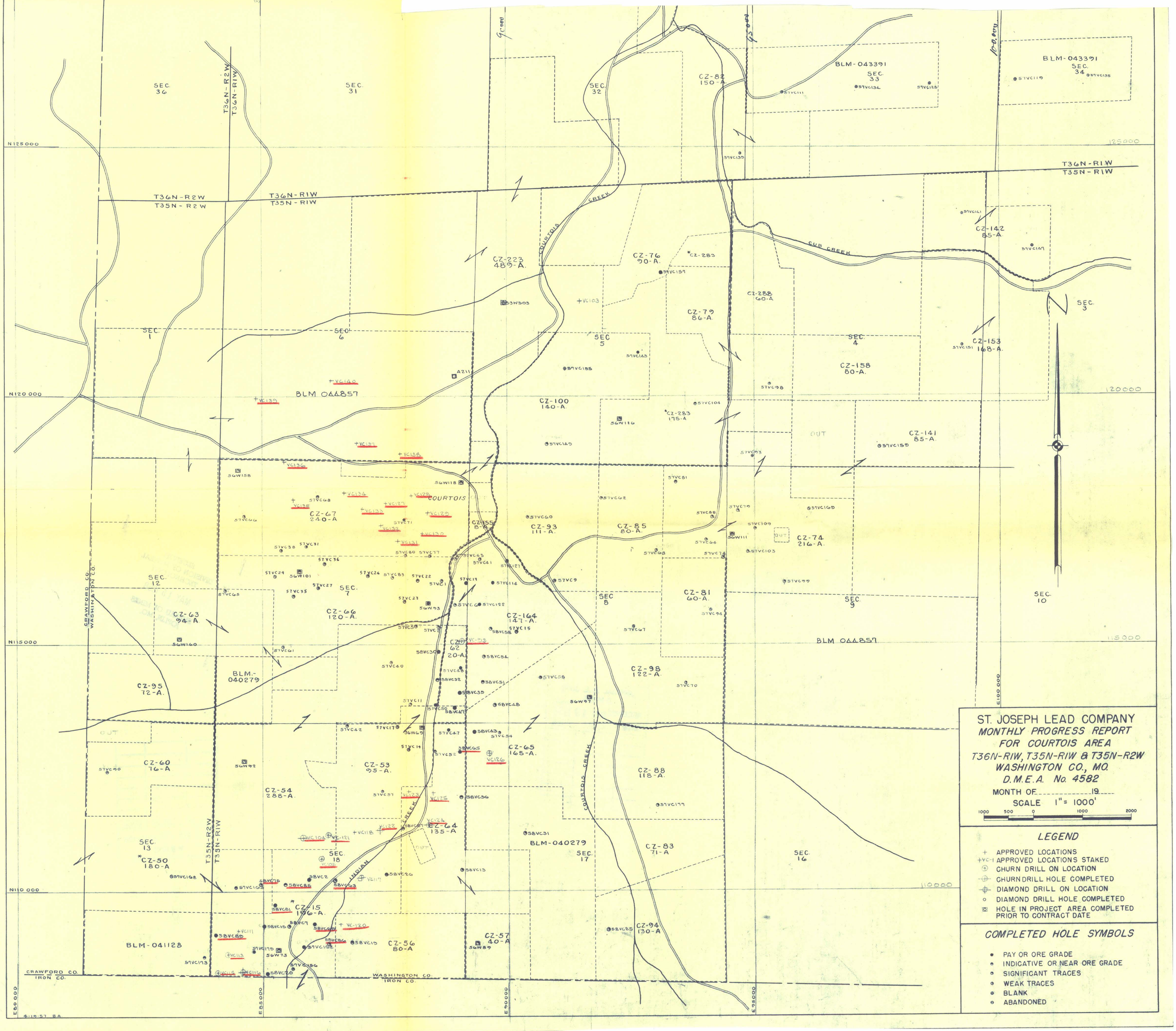
ST. JOSEPH LEAD COMPANY
MONTHLY PROGRESS REPORT
FOR COURTOIS AREA
T36N-R1W, T35N-R1W & T35N-R2W
WASHINGTON CO., MO.
D.M.E.A. No. 4582
MONTH OF _____ 19____
SCALE 1" = 1000'
1000 500 0 1000 2000
LEGEND
+ APPROVED LOCATIONS
+VC-1 APPROVED LOCATIONS STAKED
CHURN DRILL ON LOCATION
CHURN DRILL HOLE COMPLETED
DIAMOND DRILL ON LOCATION
DIAMOND DRILL HOLE COMPLETED
HOLE IN PROJECT AREA COMPLETED PRIOR TO CONTRACT DATE
COMPLETED HOLE SYMBOLS
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INDICATIVE OR NEAR ORE GRADE
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WEAK TRACES
BLANK
ABANDONED
T36N-R2W
T35N-R2W
T36N-R1W
T35N-R1W
T35N-R2W
T35N-R1W
SEC. 36
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SEC. 33
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SEC. 9
SEC. 10
SEC. 13
SEC. 18
SEC. 17
SEC. 16
N125000
N120000
N115000
N110000
E100000
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E90000
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E80000
CRAWFORD CO.
WASHINGTON CO.
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COURTOIS CREEK
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COURTOIS
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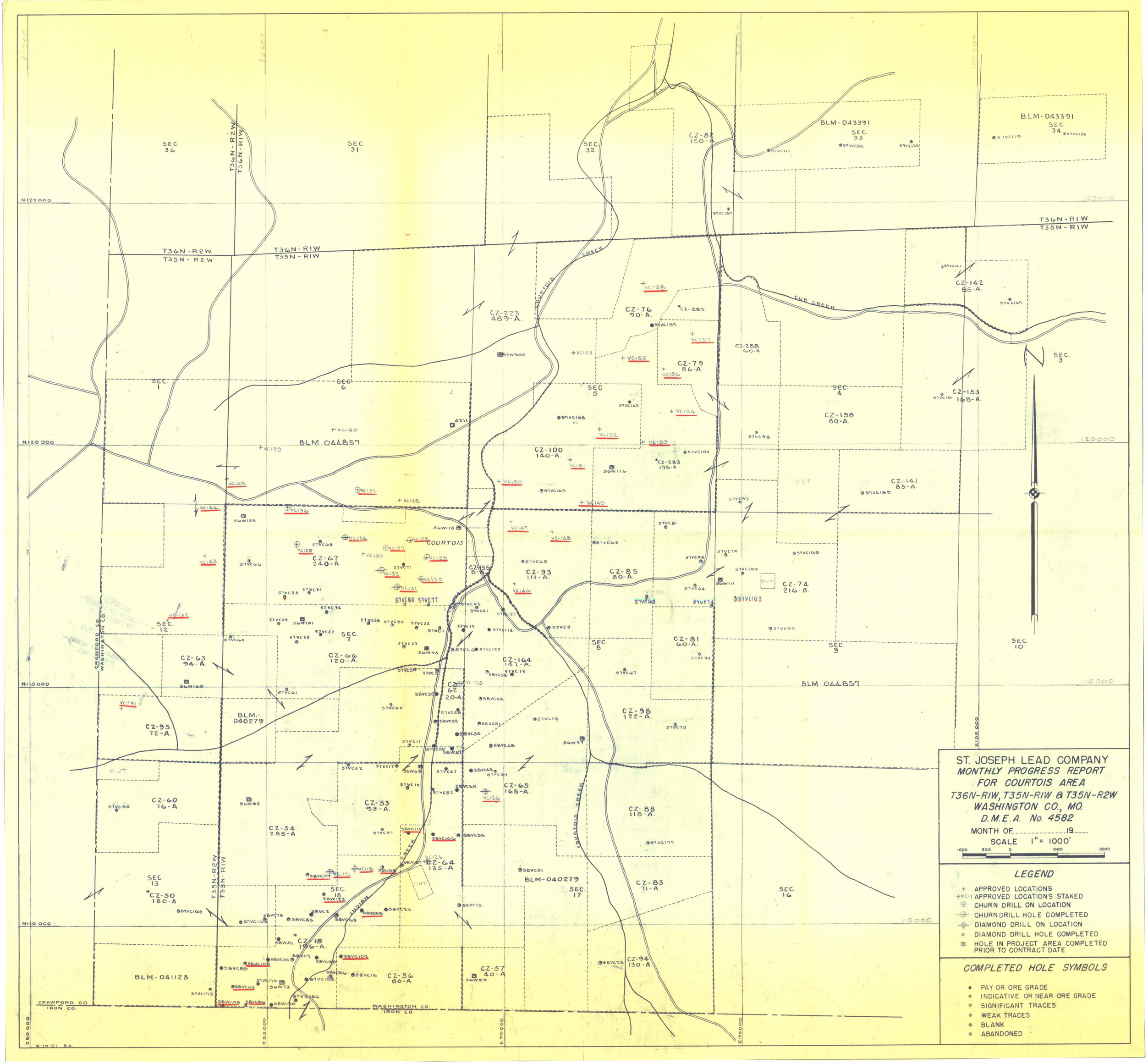
OUT
4-12-57 B.A.


ST. JOSEPH LEAD COMPANY
MONTHLY PROGRESS REPORT
FOR COURTOIS AREA
T36N-R1W, T35N-R1W & T35N-R2W
WASHINGTON CO., MO.
D.M.E.A. No. 4582
MONTH OF _____ 19____
SCALE 1" = 1000'
1000 500 0 1000 2000
LEGEND
APPROVED LOCATIONS
APPROVED LOCATIONS STAKED
CHURN DRILL ON LOCATION
CHURN DRILL HOLE COMPLETED
DIAMOND DRILL ON LOCATION
DIAMOND DRILL HOLE COMPLETED
HOLE IN PROJECT AREA COMPLETED PRIOR TO CONTRACT DATE
COMPLETED HOLE SYMBOLS
PAY OR ORE GRADE
INDICATIVE OR NEAR ORE GRADE
SIGNIFICANT TRACES
WEAK TRACES
BLANK
ABANDONED
T36N-R2W
T35N-R2W
T36N-R1W
T35N-R1W
T35N-R2W
T35N-R1W
SEC. 36
SEC. 31
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SEC. 33
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SEC. 1
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SEC. 12
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SEC. 9
SEC. 10
SEC. 13
SEC. 18
SEC. 17
SEC. 16
COURTOIS CREEK
CUB CREEK
INDIAN CREEK
CRAWFORD CO.
WASHINGTON CO.
IRON CO.
BLM-043391
BLM-044857
BLM-040279
BLM-041128
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CZ-223 489-A.
CZ-76 90-A.
CZ-79 86-A.
CZ-288 60-A.
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CZ-57 40-A
CZ-94 130-A
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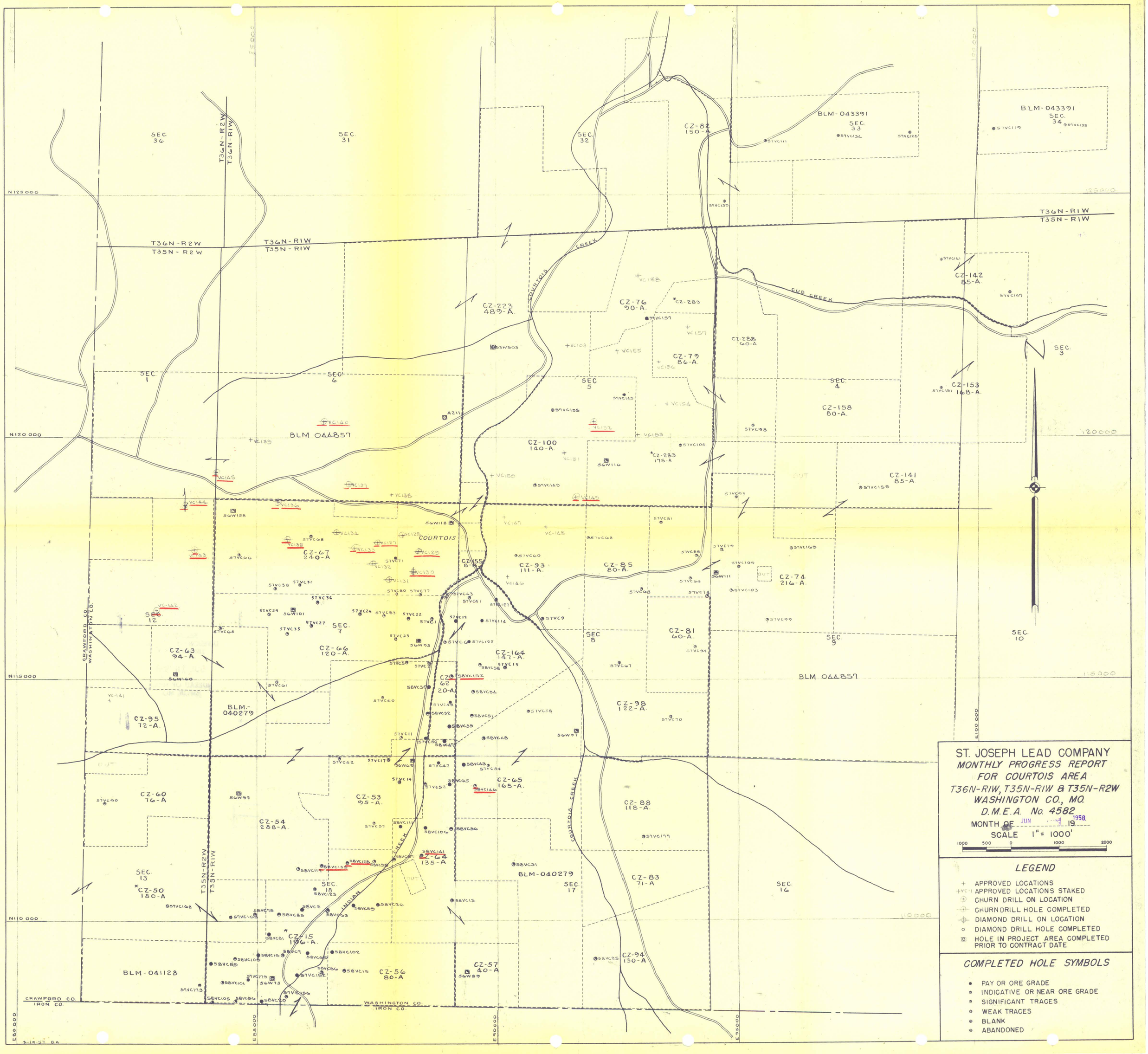
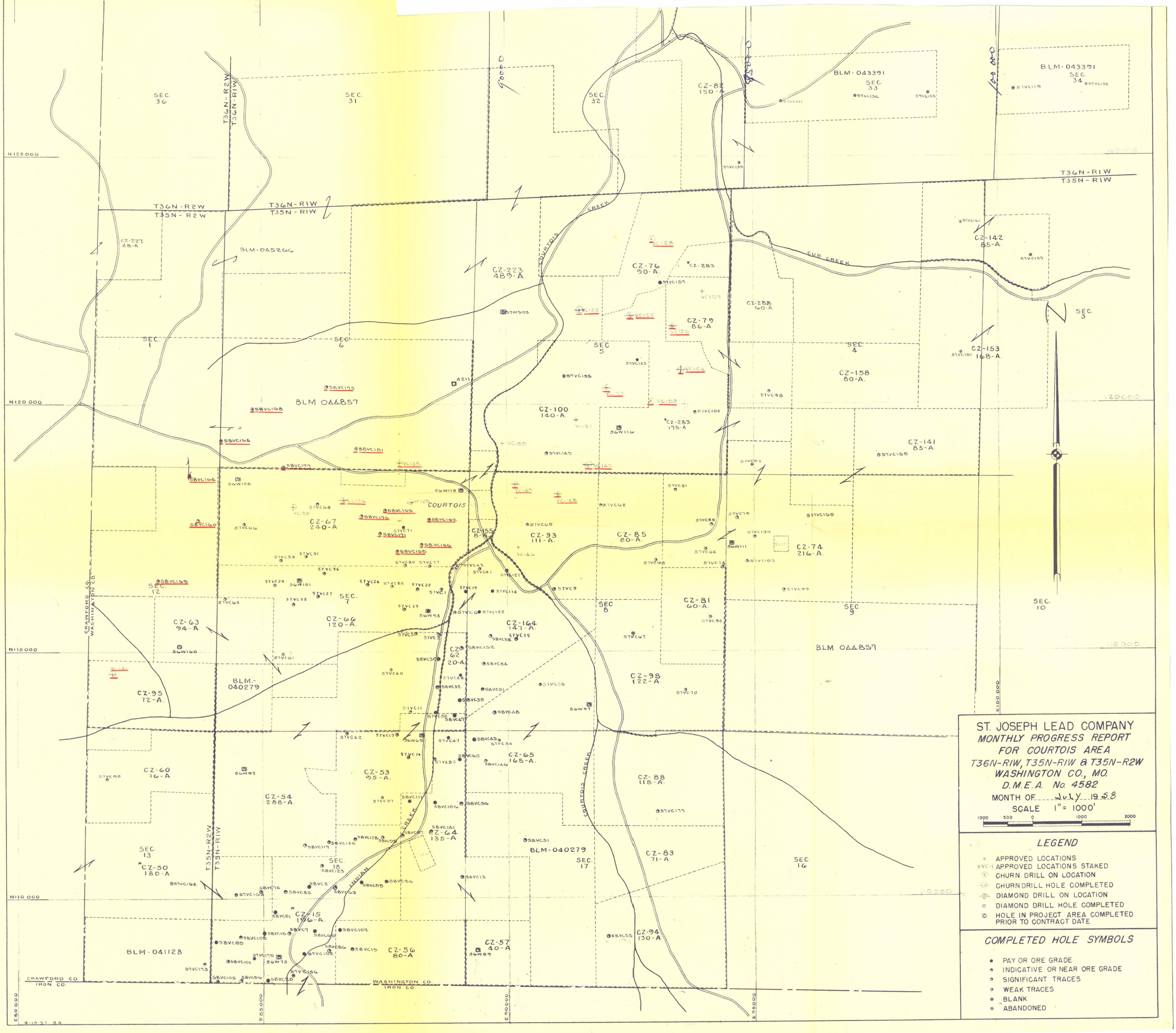
4-19-57 B.A.


ST. JOSEPH LEAD COMPANY
MONTHLY PROGRESS REPORT
FOR COURTOIS AREA
T36N-R1W, T35N-R1W & T35N-R2W
WASHINGTON CO., MO.
D.M.E.A. No. 4582
MONTH OF JUN 1958
SCALE 1" = 1000'
1000 500 0 1000 2000
LEGEND
APPROVED LOCATIONS
APPROVED LOCATIONS STAKED
CHURN DRILL ON LOCATION
CHURNDRILL HOLE COMPLETED
DIAMOND DRILL ON LOCATION
DIAMOND DRILL HOLE COMPLETED
HOLE IN PROJECT AREA COMPLETED PRIOR TO CONTRACT DATE
COMPLETED HOLE SYMBOLS
PAY OR ORE GRADE
INDICATIVE OR NEAR ORE GRADE
SIGNIFICANT TRACES
WEAK TRACES
BLANK
ABANDONED
T36N-R2W
T35N-R2W
T36N-R1W
T35N-R1W
T35N-R2W
T33N-R1W
SEC. 36
SEC. 31
SEC. 32
SEC. 33
SEC. 34
SEC. 1
SEC. 6
SEC. 5
SEC. 4
SEC. 3
SEC. 12
SEC. 7
SEC. 8
SEC. 9
SEC. 10
SEC. 13
SEC. 18
SEC. 17
SEC. 16
BLM-043391
BLM 044857
BLM-040279
BLM-041128
CZ-223 489-A.
CZ-82 150-A.
CZ-76 90-A.
CZ-283
CZ-79 86-A.
CZ-288 60-A.
CZ-142 85-A.
CZ-153 168-A.
CZ-158 80-A.
CZ-100 140-A.
CZ-283 175-A
CZ-141 85-A.
CZ-67 240-A
CZ-155 8-A
CZ-93 111-A.
CZ-85 80-A.
CZ-74 216-A.
CZ-63 94-A.
CZ-66 120-A.
CZ-164 147-A.
CZ-81 60-A.
CZ-98 122-A.
CZ-95 72-A.
CZ-62 20-A
CZ-60 76-A
CZ-53 95-A.
CZ-65 165-A.
CZ-88 118-A.
CZ-54 288-A.
CZ-64 135-A
CZ-50 180-A
CZ-83 71-A
CZ-15 196-A.
CZ-94 130-A
CZ-56 80-A
CZ-57 40-A
COURTOIS CREEK
CUB CREEK
INDIAN CREEK
CRAWFORD CO.
WASHINGTON CO.
IRON CO.
N125000
N120000
N115000
N110000
E100000
E80000
E85000
E90000
E95000
3-19-57 BA


ST. JOSEPH LEAD COMPANY
MONTHLY PROGRESS REPORT
FOR COURTOIS AREA
T36N-R1W, T35N-R1W & T35N-R2W
WASHINGTON CO., MO.
D.M.E.A. No. 4582
MONTH OF July 1958
SCALE 1" = 1000'
1000 500 0 1000 2000
LEGEND
APPROVED LOCATIONS
APPROVED LOCATIONS STAKED
CHURN DRILL ON LOCATION
CHURN DRILL HOLE COMPLETED
DIAMOND DRILL ON LOCATION
DIAMOND DRILL HOLE COMPLETED
HOLE IN PROJECT AREA COMPLETED PRIOR TO CONTRACT DATE
COMPLETED HOLE SYMBOLS
PAY OR ORE GRADE
INDICATIVE OR NEAR ORE GRADE
SIGNIFICANT TRACES
WEAK TRACES
BLANK
ABANDONED
T36N-R2W
T35N-R2W
T36N-R1W
T35N-R1W
T35N-R2W
T35N-R1W
SEC. 36
SEC. 31
SEC. 32
SEC. 33
SEC. 34
SEC. 1
SEC. 6
SEC. 5
SEC. 4
SEC. 3
SEC. 12
SEC. 7
SEC. 8
SEC. 9
SEC. 10
SEC. 13
SEC. 18
SEC. 17
SEC. 16
N125000
N120000
N115000
N110000
E80000
E85000
E90000
E95000
CRAWFORD CO.
WASHINGTON CO.
CRAWFORD CO.
IRON CO.
WASHINGTON CO.
IRON CO.
COURTOIS CREEK
CUB CREEK
INDIAN CREEK
BLM 044857
BLM-043391
BLM-045266
BLM-040279
BLM-041128
CZ-223 489-A.
CZ-227 48-A
CZ-82 150-A.
CZ-76 90-A.
CZ-283
CZ-79 86-A.
CZ-288 60-A
CZ-142 85-A.
CZ-153 168-A.
CZ-158 80-A.
CZ-100 140-A.
CZ-283 175-A
CZ-141 85-A
CZ-67 240-A
CZ-155 8-A
CZ-93 111-A.
CZ-85 80-A.
CZ-74 216-A.
CZ-63 94-A.
CZ-66 120-A.
CZ-164 147-A.
CZ-81 60-A.
CZ-62 20-A.
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CZ-95 72-A.
CZ-60 76-A
CZ-53 95-A.
CZ-65 165-A.
CZ-88 118-A.
CZ-54 288-A.
CZ-64 135-A
CZ-83 71-A
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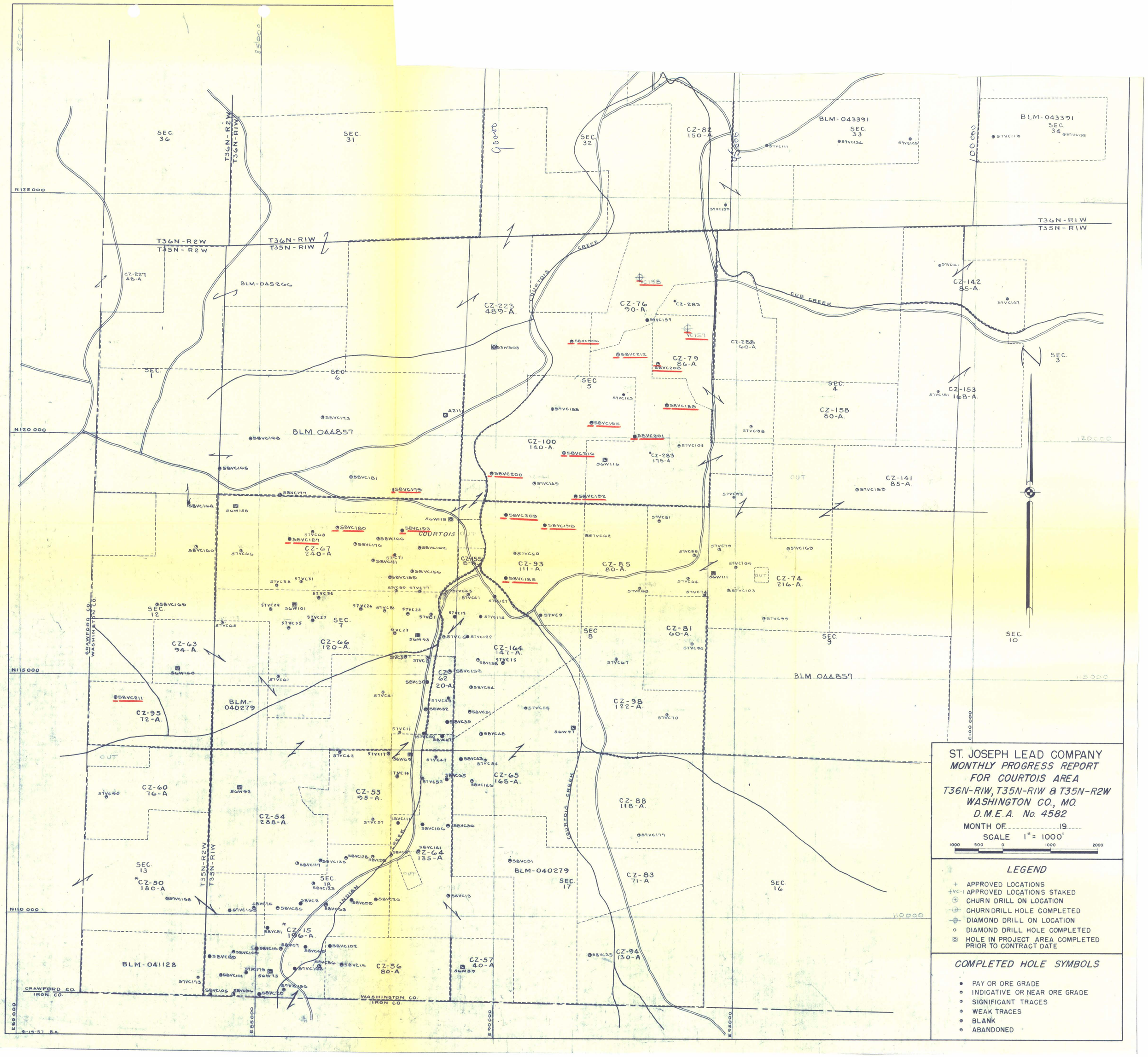
CZ-57 40-A
CZ-94 130-A
COURTOIS


ST. JOSEPH LEAD COMPANY
MONTHLY PROGRESS REPORT
FOR COURTOIS AREA
T36N-R1W, T35N-R1W & T35N-R2W
WASHINGTON CO., MO.
D.M.E.A. No. 4582
MONTH OF _____ 19____
SCALE 1" = 1000'
1000 500 0 1000 2000
LEGEND
APPROVED LOCATIONS
APPROVED LOCATIONS STAKED
CHURN DRILL ON LOCATION
CHURN DRILL HOLE COMPLETED
DIAMOND DRILL ON LOCATION
DIAMOND DRILL HOLE COMPLETED
HOLE IN PROJECT AREA COMPLETED PRIOR TO CONTRACT DATE
COMPLETED HOLE SYMBOLS
PAY OR ORE GRADE
INDICATIVE OR NEAR ORE GRADE
SIGNIFICANT TRACES
WEAK TRACES
BLANK
ABANDONED
T36N-R2W
T35N-R2W
T36N-R1W
T35N-R1W
SEC. 36
SEC. 31
SEC. 32
SEC. 33
SEC. 34
SEC. 1
SEC. 6
SEC. 5
SEC. 4
SEC. 3
SEC. 12
SEC. 7
SEC. 8
SEC. 9
SEC. 10
SEC. 13
SEC. 18
SEC. 17
SEC. 16
CZ-82 150-A.
BLM-043391
CZ-142 85-A.
CZ-223 489-A.
CZ-76 90-A.
CZ-283
CZ-288 60-A.
CZ-79 86-A.
CZ-153 168-A.
CZ-158 80-A.
BLM 044857
CZ-100 140-A.
CZ-283 175-A
CZ-141 85-A.
CZ-67 240-A
CZ-155 8-A
CZ-93 111-A.
CZ-85 80-A.
CZ-74 216-A.
CZ-63 94-A.
CZ-66 120-A.
CZ-164 147-A.
CZ-81 60-A.
CZ-62 20-A.
CZ-95 72-A.
BLM.-040279
CZ-98 122-A.
CZ-60 76-A
CZ-53 95-A.
CZ-65 165-A.
CZ-88 118-A.
CZ-54 288-A.
CZ-64 135-A
CZ-50 180-A
CZ-15 196-A.
CZ-83 71-A
BLM-041128
CZ-56 80-A
CZ-57 40-A
CZ-94 130-A
COURTOIS CREEK
CUB CREEK
INDIAN CREEK
CRAWFORD CO.
WASHINGTON CO.
IRON CO.
N125000
N120000
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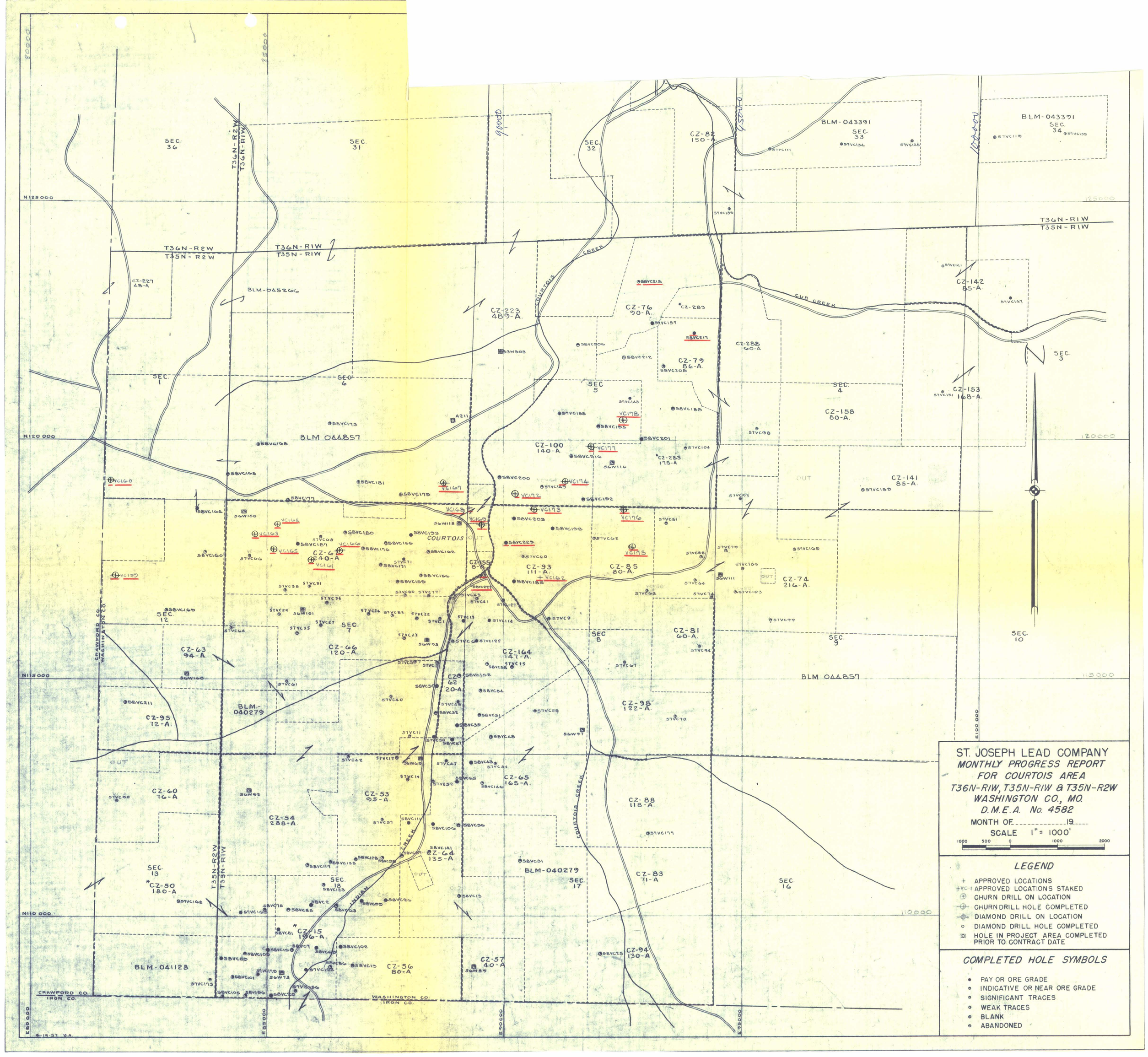
4-19-57 B.A.


ST. JOSEPH LEAD COMPANY
MONTHLY PROGRESS REPORT
FOR COURTOIS AREA
T36N-R1W, T35N-R1W & T35N-R2W
WASHINGTON CO., MO.
D.M.E.A. No. 4582
MONTH OF _____ 19____
SCALE 1" = 1000'
1000 500 0 1000 2000
LEGEND
APPROVED LOCATIONS
APPROVED LOCATIONS STAKED
CHURN DRILL ON LOCATION
CHURN DRILL HOLE COMPLETED
DIAMOND DRILL ON LOCATION
DIAMOND DRILL HOLE COMPLETED
HOLE IN PROJECT AREA COMPLETED PRIOR TO CONTRACT DATE
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PAY OR ORE GRADE
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SIGNIFICANT TRACES
WEAK TRACES
BLANK
ABANDONED
T36N-R2W
T35N-R2W
T36N-R1W
T35N-R1W
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SEC. 1
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SEC. 8
SEC. 9
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SEC. 18
SEC. 17
SEC. 16
BLM-043391
BLM-045266
BLM 044857
BLM-040279
BLM-041128
CZ-227 48-A
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CZ-76 90-A.
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CZ-63 94-A.
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CZ-56 80-A
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CZ-94 130-A
COURTOIS CREEK
CUB CREEK
INDIAN CREEK
CRAWFORD CO.
WASHINGTON CO.
IRON CO.
N125000
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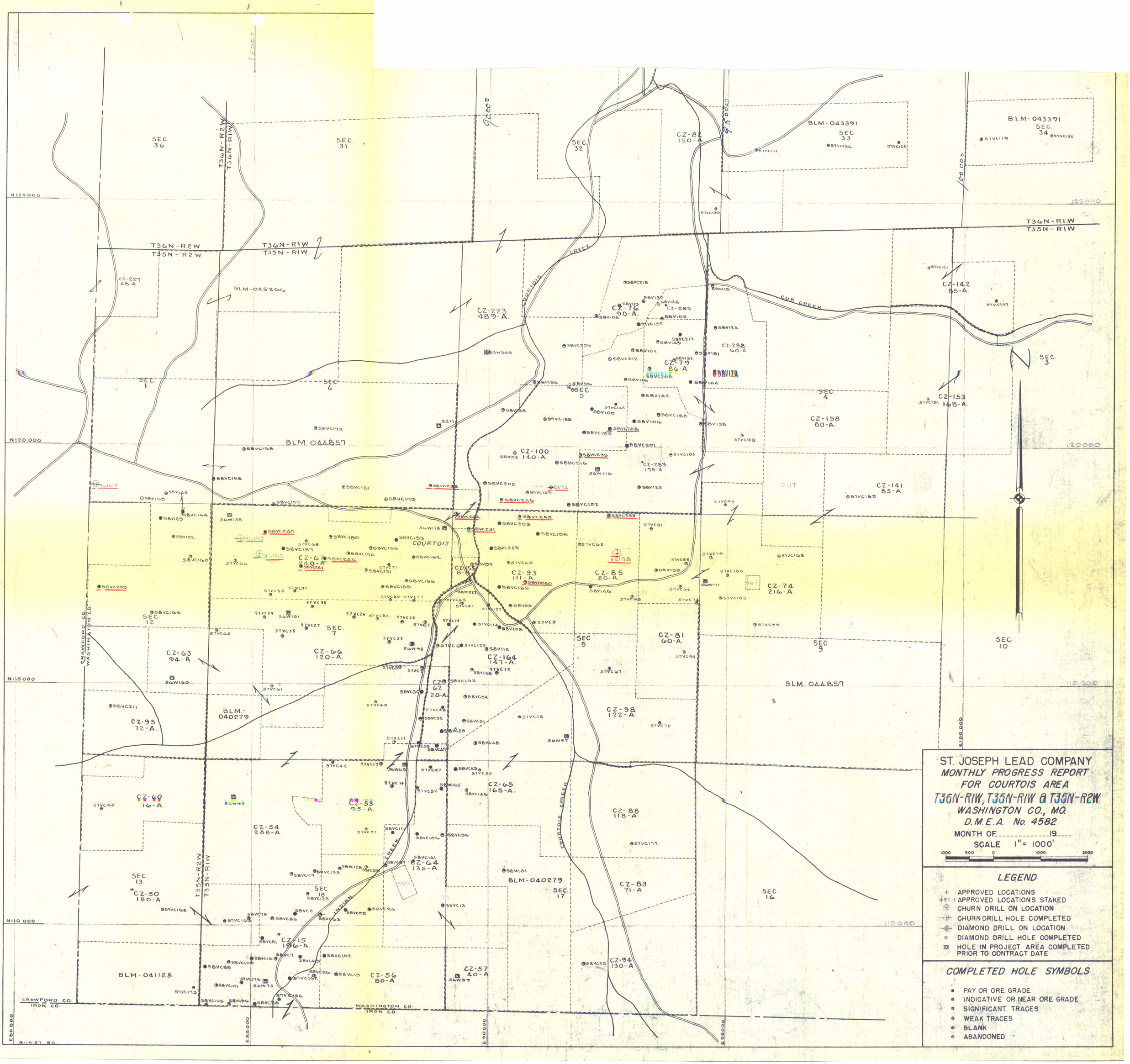
OUT


ST. JOSEPH LEAD COMPANY
MONTHLY PROGRESS REPORT
FOR COURTOIS AREA
T36N-R1W, T35N-R1W & T35N-R2W
WASHINGTON CO., MO.
D.M.E.A. No. 4582
MONTH OF _____ 19____
SCALE 1" = 1000'
1000 500 0 1000 2000
LEGEND
APPROVED LOCATIONS
APPROVED LOCATIONS STAKED
CHURN DRILL ON LOCATION
CHURN DRILL HOLE COMPLETED
DIAMOND DRILL ON LOCATION
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HOLE IN PROJECT AREA COMPLETED PRIOR TO CONTRACT DATE
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T36N-R2W
T35N-R2W
T36N-R1W
T35N-R1W
T35N-R2W
T35N-R1W
SEC. 36
SEC. 31
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SEC. 33
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SEC. 1
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SEC. 12
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SEC. 9
SEC. 10
SEC. 13
SEC. 18
SEC. 17
SEC. 16
COURTOIS CREEK
CUB CREEK
INDIAN CREEK
COURTOIS
CRAWFORD CO.
WASHINGTON CO.
IRON CO.
BLM-043391
BLM-045266
BLM 044857
BLM-040279
BLM-041128
CZ-227 48-A
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CZ-76 90-A
CZ-283
CZ-288 60-A
CZ-79 86-A
CZ-142 85-A
CZ-153 168-A
CZ-158 80-A
CZ-100 140-A
CZ-283 175-A
CZ-141 85-A
CZ-67 640-A
CZ-155 8-A
CZ-93 111-A
CZ-85 80-A
CZ-74 216-A
CZ-63 94-A
CZ-66 120-A
CZ-164 147-A
CZ-62 20-A
CZ-81 60-A
CZ-95 72-A
CZ-98 122-A
CZ-60 76-A
CZ-53 95-A
CZ-65 165-A
CZ-54 288-A
CZ-64 135-A
CZ-88 118-A
CZ-50 180-A
CZ-83 71-A
CZ-15 196-A
CZ-56 80-A
CZ-57 40-A
CZ-94 130-A
OUT
N125000
N120000
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E80000
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4-19-57 BA