UNITED STATES
DEPARTMENT OF THE INTERIOR
Defense Minerals Exploration Administration

OFFICIAL DOCKET FILE

Terminated (~~or cancelled~~) without certification. DMEA No. 2471

This is the official contract file containing all official records of the project. Duplicate material has been removed. The records contained in the files are checked and are arranged in this manner:

Left Side

Certificate of Audit (Final).

Interim Audit(s).

✓ Report of Review.

✓ Termination Notice or Agreement.

Recision Notice.

Assignment of Contract.

✓ Contract Amendments (latest on top).

✓ Contract with all exhibits and annexes.

Owner's Consent to Lien.

Subordination Agreement.

Leases and assignments of leases.

✓ Application and attachments.

Schedule of Collections.

✓ Operator's monthly reports and all attachments (latest on top).

Right Side

✓ Project summary.

✓ Work completed analysis.

✓ All other material is filed in chronological order with correspondence including the following reports as checked:

✓ Final Field Team Report. (Tab)

Operator's Final Report.

✓ Interim Reports.

✓ On-site Exam Report(s). (Tab)

Settlement Sheets.

If additional folders are required because of volume of records, show folder numbers and contents below:

Maps in folder number _____

Operator's Monthly Reports in folder number _____

Reviewer's Initials

7973

DEFENSE MINERALS EXPLORATION ADMINISTRATION
CONTRACT ADMINISTRATION AND AUDIT DIVISION

REPORT OF REVIEW

I have reviewed the Monthly Reports of:

Albert F. Carlson (an individual)
Basin, Montana

pertaining to Exploration Project Contract No. Idm-M313, Docket No. 2471, including Amendment No. 1, for the period of May 12, 1952 to January 20, 1954, inclusive, covering a project for the exploration of lead-zinc on property, known as the Jefferson Claim, located in Jefferson County, Montana.

My review included an examination of the Monthly Reports (Forms MF-104) and supporting documents attached thereto, comparison of the costs claimed with the contract and pertinent schedules, consultation with the Government representative who visited and examined the project, and a determination of the reasonableness and propriety of the costs.

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

(a) the administrative cost to the Government of an audit would be excessive in relation to value of the contract or the estimated possible disallowances thereunder;
(b) the Monthly Reports were supported by documentary proof of the costs incurred under the contract;
(c) and a major portion ($1,980.00) of the costs incurred covered work performed at agreed hourly rates under independent contract.

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

Total cost as billed by Contractor	$2,289.38
Exceptions	-0-
Total Accepted Cost	$2,289.38

The contract calls for a 50 percent participation of exploration expenses by the United States Government. Therefore, payment to the Contractor by the Government in the amount of One thousand one hundred forty four and 69/100 Dollars

--$1,144.69--

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

C. A. Turner, Auditor

March 18, 1954

GOVERNMENT COPY

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
JAN 19 1954

TERMINATION OF EXPLORATION PROJECT CONTRACT BY AGREEMENT
AFTER COMMENCEMENT BUT BEFORE COMPLETION OF THE WORK

It is agreed this 20th day of January, 1954, between the United States of America, acting through the Department of the Interior, Defense Minerals Exploration Administration, hereinafter called the "Government," and Albert F. Carlson (an individual)

(North Boulder property, Jefferson Co., Mont., Lead-Zinc),

hereinafter called the "Operator," parties to that certain Exploration Project Contract Idm-E 313, Docket No. DMEA- 2471, dated May 12, 1952, that the said contract shall be and is hereby terminated as of the first date above written.

Any work prosecuted or costs incurred by the Operator after June 30, 1953 shall be for the sole account of the Operator, except for (a) such necessary and reasonable costs and expenses as may be incurred in preserving and disposing of any facilities, buildings, fixtures, equipment, or other items, to the cost of which the Government has contributed and in which the Government has an equity, and (b) the costs of any reports, accounts, and winding-up and settlement actions provided for in the contract.

The undersigned Operator hereby releases and agrees to save harmless the Government from all claims and demands under or arising out of said Exploration Project Contract, except as herein expressly otherwise provided.

Witness the following signatures as of the day and year first above written.

UNITED STATES OF AMERICA

By A. E. Weissenborn
A. E. Weissenborn
Executive Officer, DMEA
Field Team, Region II

Albert F. Carlson
ALBERT F. CARLSON

By

(Authority: Operating Committee letter of 1/8/54)

GOVERNMENT'S COPY

(Amendment to Change Starting and Completion Dates)

DMEA Docket No. 2471
(lead-zinc)

AMENDMENT NO. 1

It is agreed this 26th day of Jan. 195 3, between the United States of America, acting through the Department of the Interior, Defense Minerals Administration and Albert F. Carlson (an individual), Basin, Montana

each acting in consideration of the agreement to the other to the terms hereinafter set forth, that the Exploration Project Contract Idm-E313 of May 12th 195 2 between the parties hereto be modified and amended to change ~~the starting date from _____ to within _____ No. of day No. of days of the date of the contract and~~ the completion period from 12 No. of months to 18 No. of months from the date of the contract. The effective date of this amendment shall be January 26, 195 3.

This amendment is made by authority granted the Executive Office, DMA Field Team, Region II in Order No. 2684 by the Acting Secretary of the Interior.

This amendment shall not be construed to increase the estimated total cost of the project, the amount of the Government's contribution, or any item of allowable cost which is expressly designated "Allowable Maximum".

Executed in sextuplicate the day and year first above written.

Albert F. Carlson
ALBERT F. CARLSON
(Operator)
By _____

The United States of America
By A. E. Weissenborn
A.E.Weissenborn, Exec. Officer
DMEA Field Team, Region II

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
APR 27 1953

ALBERT F. CARLSON (NORTH BOULDER)
Contract Idm-E313
Docket No. DMEA 2471 (lead-zinc)

Justification of Amendment No. 1

This amendment is necessary in order to provide time for the project to be completed. The contract states that the work shall be brought to completion within a period of 12 months. This date would be May 12, 1953. The operation was suspended from October 1952 to the present because of winter conditions, and the indecisiveness of the Operator in doing exploratory work under the contract. The Operator appears to have decided on a definite course of action. It is in the best interest of the Government that an extension of time be granted for the completion of the work.

E. W. Buel

(*b*) The Government's payments in all cases will be based on actual, necessary costs (including contract unit prices) incurred not in excess of any "allowable maximum," and not in excess of the fixed percentage of the total aggregate estimated cost. Costs will be considered to be incurred only as they are or become due and payable.

(*c*) No items of general overhead, corporate management, interest, taxes (other than payroll and sales taxes) or any other indirect costs, or work performed or costs incurred before the date of this contract, shall be allowed as costs of the project in which the Government will participate.

ARTICLE 7. *Reports, accounts, audits.*—(*a*) *Progress reports.* The Operators shall provide the Government with monthly reports of work performed and costs (including contract unit prices) incurred under the contract, in quintuplicate (five copies), upon forms provided by the Government. These progress reports shall be certified by the Operator, and shall constitute both the Operator's invoice of costs incurred on the project during the period covered by the report and his voucher for repayment by the Government, unless the Government requires the use of a standard voucher form with invoice attached. Progress reports shall include surface and/or underground engineering-geological maps or sketches showing the progress of the exploration, with assay-reports on samples taken concurrently with the advance in mineralized ground.

(*b*) *Final report.*—Upon completion of the exploration work or termination of the contract the Operator shall provide the Government with an adequate geological and engineering report, in quintuplicate (five copies), including an estimate of ore reserves resulting from the exploration work.

(*c*) Compliance with requirements.—If, in the opinion of the Government, any of the Operator's reports are insufficient or incomplete, the Government may procure the making or completion of such reports and attachments as an expense of the exploration work; and the Government may withhold approval and payment of any vouchers depending upon insufficient or incomplete reports.

(*d*) *Accounts and audits.*—The Operator shall keep suitable records and accounts of operations, which the Government may inspect and audit at any time. The Government may at any time require an audit of the Operator's records and accounts by a certified public accountant, the cost thereof to be treated as a cost of the project. The Operator shall keep and preserve said records and accounts for at least 3 years after the completion of the project or the termination of this contract. Upon the completion of the project or termination of the contract the Operator shall render a final account as provided in Article 12.

ARTICLE 8. *Payments by the Government.*—(*a*) The Government will pay 50 percent of the allowable costs incurred, as they accrue, in an aggregate total amount not in excess of $ 12,450.00, which is 50 percent of $ 24,900.00, the agreed, estimated total cost of the project in which the Government will participate; *Provided,* that until the Operator's final report and final accounting have been rendered to the Government, and any final auditing required by the Government has been made, and a final settlement of the contract has been made, the Government may withhold from the last voucher or vouchers such sums as it sees fit not in excess of ten (10) percent of the maximum total which the Government might have been called upon to pay under the terms of the contract.

(*b*) The Government may make any payment or payments direct to independent contractors and to suppliers, for the account of the Operator, rather than to the Operator.

ARTICLE 9. *Repayment by Operator.*—(*a*) If, at any time, the Government considers that a discovery or a development from which production may be made has resulted from the exploration work, the Government, at any time not later than 6 months after the Operator has rendered the required final report and final account, may so certify in writing to the Operator. The certification shall describe broadly or indicate the nature of the discovery or development. In the event of such certification, any minerals mined or produced from the land described in Article 2 within 10 years from the date of this contract, including any mined or produced before the certification, shall be subject to a percentage royalty which the Operator or his successor in interest shall pay to the Government, upon the net smelter returns, the net concentrator returns, or other net amounts realized from the sale or other disposition of any such production, in whatever form disposed of, including ore, concentrates, or metal, until the total amount contributed by the Government, without interest, is fully repaid, or said 10 years have elapsed, whichever occurs first, as follows:

(1) One and one-half (1½) percent of any such net amounts not in excess of eight dollars ($8.00) per ton.

(2) One and one-half (1½) percent of any such net amounts, plus one-half (½) percent of such net amounts for each additional full fifty cents ($0.50) by which such net amounts exceed eight dollars ($8.00) per ton, but not in excess of five (5) percent of such net amounts.

(For instance: The percentage royalty on a net amount of five dollars ($5.00) per ton would be one and one-half (1½) percent; on a net amount of ten dollars ($10.00) per ton, three and one-half (3½) percent.)

(*b*) As here used, "net smelter returns," "net concentrator returns," and "other net amounts realized from the sale or other disposition," mean gross revenue from sales; or if not sold, the market value of the material after it is mined in the form in which and the place where it is held. In the case of integrated operations in which the material is not disposed of as such, these terms mean what is or would be gross income from mining operations for percentage depletion purposes in income-tax determination.

(*c*) To secure the payment of its percentage royalty, the Government shall have and is hereby granted a lien upon the land described in Article 2 and upon any production of minerals therefrom, until the royalty claim is extinguished by lapse of time or is fully paid.

(*d*) This article is not to be construed as imposing any obligation on the Operator or the Operator's successor in interest to engage in any mining or production operations.

ARTICLE 10. *Assignment, transfer, or loss of Operator's interest.*—Without the written consent of the Government, the Operator shall not assign or otherwise transfer or hypothecate this contract or any rights thereunder. The Operator shall not make any voluntary nor permit any involuntary transfer or conveyance of the Operator's rights in the land described in Article 2, without making suitable provision for the preservation of the Government's right to a percentage royalty on production and lien for the payment thereof; *Provided,* that mere failure by the Operator to maintain the Operator's rights in the land, without any consideration running to the Operator other than relief from the cost of maintaining such rights (as by surrender of a leasehold, failure to perform assessment work, or failure to exercise an option), coupled with complete abandonment by the Operator of all interest in or operations on the land for a period of 10 years from the date of this contract, shall not constitute such a transfer or conveyance. Should the Operator make or permit any transfer or conveyance in violation of this provision, the Operator shall be and remain liable for payment to the Government of the same amounts, at the same times, as would have been paid under the terms of the percentage royalty on production. If for any reason the net smelter returns, net concentrator returns, or other net amounts realized from the sale or other disposition of such production are not available as a means of measuring the amount of the Operator's liability, the amount thereof shall be estimated as well as may be, and in the event of dispute as to such estimates, the determination thereof by the Administrator of Defense Minerals Exploration Administration or by his successor shall be final and binding upon the Operator.

ARTICLE 11. *Title to and disposition of property.*—All facilities, buildings, fixtures, equipment, or other items costing more than $50.00 each, paid for or purchased with funds contributed jointly by the Operator and the Government, although title may be taken in the name of the Operator, shall belong to the Operator and the Government jointly, in proportion to their respective contributions, and upon the completion of the work or the termination of the contract shall be disposed of promptly by the Operator for the joint account of the Government and the Operator, either by return to the vendor, by sale to others, or purchase by the Operator at a price at least as high as could otherwise be obtained, as may appear to be for the best interest of the Government, unless the Government, in writing, waives its interest in any such item. If necessary to accomplish such disposition, the Operator shall dismantle, sever from the land, and remove any such item, the cost thereof to be for the joint account of the parties in proportion to their respective interests. If the Operator, within 90 days after the receipt of written notice from the Government, fails, neglects, or refuses to dispose of such property, the Government may itself enter upon the land, take possession of, and remove and dispose of any such property as above provided.

ARTICLE 12. *Termination and completion.*—The Government may, at any time, by written notice to the Operator, terminate this contract: (*a*) If the Operator fails to provide his share of the money necessary to prosecute operations pursuant to the terms of the contract; (*b*) if the Operator, in the opinion of the Government, fails to prosecute operations pursuant to the terms of the contract; or (*c*) if in the opinion of the Government, operations up to the time of the notice have not indicated the probability of making any worth while discovery and in the opinion of the Government further operations are not justified. Upon the completion of the project or any termination of the contract the Operator shall dispose of any remaining materials, supplies, facilities, buildings, fixtures, and equipment in which the Government has an interest, for the joint account of the Operator and the Government in the proportion of their respective interests; shall render to the Government a full and final accounting of his operations under the contract and his expenditures of money; and shall pay to the Government its pro rata share of any money remaining.

ARTICLE 13. *Changes and added provisions.* _____

Executed in sextuplicate the day and year first above written.

Albert F. Carlson
(Operator)

By _____

THE UNITED STATES OF AMERICA

By C. D. Mitterdorf
Acting Administrator, Defense Minerals Exploration Administration

I, _____, certify that I am the _____ secretary of the corporation named as Operator herein; that _____, who signed this contract on behalf of the Operator, was then _____ of said corporation; that said contract was duly signed for and in behalf of said corporation by authority of its governing body, and is within the scope of its corporate powers.

_____

[CORPORATE SEAL]

U. S. GOVERNMENT PRINTING OFFICE 16—66328-1

MF-200
(June 1951)
(Revised Feb. 1952)

DOCKET NO. DMEA 2471

COMMODITY Lead-Zinc

Idm-E313

Government's Copy

UNITED STATES OF AMERICA
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION

EXPLORATION PROJECT CONTRACT [1]

IT IS AGREED this 12th day of May, 1952, between the United States of America, acting through the Department of the Interior, Defense Minerals Exploration Administration, hereinafter called the "Government," and [2] Albert F. Carlson (an individual) Basin, Montana hereinafter called the "Operator," as follows:

ARTICLE 1. *Authority for contract.*—This agreement is entered into under the authority of the Defense Production Act of 1950, as amended, pursuant to DMEA Order 1 entitled "Government Aid in Defense Exploration Projects."

ARTICLE 2. *Operator's property rights.*—With respect to that certain land situated in the State of Montana, County of Jefferson, described as follows: [3] Patented lode claims as follows: North Boulder, Sur. No. 3239; Jefferson, Sur. No. 5703; Wisconsin, Sur. No. 5704; and patented placer claim, Lot 38, Sur. No. 64; and unpatented lode claims as follows: Jefferson Extension, Remnant, and East Extension North Boulder, all in secs. 13 and 14, R. 6 N., T. 7 W., MPM. For descriptions of unpatented lode claims see Appendix I.

the Operator represents and undertakes: [4]

(*a*) That the Operator is the owner, in possession and entitled to possession, and that the property is subject only to the following claims, liens, or encumbrances as to each of which the subordination agreement of the holder is attached: None

(*b*) The Operator shall devote the land and all existing improvements, facilities, buildings, installations, and appurtenances to the purposes of the exploration project without any allowance for the use, rental value, depreciation, depletion, or other cost of acquiring, owning, or holding possession thereof.

ARTICLE 3. *Exploration project.*—The Operator, within sixty (60) days from the date of this contract shall commence work on a project of exploration for [5] Lead - Zinc in or upon the described land; and shall bring the project to completion within a period of twelve (12) months from the date of this contract. The work to be performed is more fully described in Exhibit "A" attached hereto, which, with any maps or drawings thereto attached, are made a part of this contract. The Government will contribute to the cost of this work as hereafter provided.

ARTICLE 4. *Performance of the work.*—(*a*) *Operator's responsibility.* The work shall be performed efficiently, expertly, in a workmanlike manner, in accordance with good mining standards and State regulations for health and safety and for workmens' compensation and employers' liability insurance, with suitable and adequate equipment, materials, and labor, to bring the project to completion within the time fixed. To the extent specified in Exhibit "A," attached hereto, the work may be performed by independent contractor or contractors; and work not specified in Exhibit "A" for performance by independent contractor may nevertheless be so performed upon amendment of Exhibit "A," as agreed to by the parties, to state the work to be so performed and the estimated unit costs thereof, as provided hereafter.

(*b*) *Independent contracts.*—Any independent contract for the performance of work shall be on a unit-price basis (such as per foot of drilling, per foot of drifting, per hour of bulldozer operations, per cubic yard of material moved), or on some basis that will indicate the amount due for work performed at any stage of the work to be performed under such independent contract. The Government shall not be nor be considered to be a party to any such independent contract, and the Government's right to terminate the exploration project contract under any of its provisions shall not in any manner be affected by reason of any such independent contract. If the reference in Exhibit "A" to any such independent contract states that the Government's approval thereof is required, the Government may refuse to participate in the cost thereof unless and until it has given its written approval of the independent contract.

(*c*) *Government may inspect.*—The Government shall have the right to enter and observe and inspect the work at all reasonable times, and the Operator shall provide the Government with all available means for doing so. The Government may consult with and advise the Operator on all phases of the work.

ARTICLE 5. *Estimated costs of the project.*—A statement of the estimated cost of the project is set forth in Exhibit "A," attached hereto. Except insofar as any item of requirement or the estimated cost thereof set forth in Exhibit "A" is there or elsewhere designated as an "allowable maximum," such items of requirement and of related cost are estimates only, and may be exceeded to the extent that the Government may from time to time approve for the most economic and beneficial performance of the work within the limitation of the total aggregate estimate of costs. The Government's approval of any such excess over the estimate for an item of requirement or related cost will be signified by its approval and payment of any invoice or voucher for payment which expressly calls attention to such excess. Items expressly designated in Exhibit "A" or elsewhere as "allowable maximum," and the total aggregate estimated cost are limitations, and any excess therein will be for the sole account of the Operator in which the Government will not participate.

ARTICLE 6. *Allowable costs of the project.*—(*a*) The costs of the project in which the Government will participate are limited to the following:

(1) *Independent contracts.*—Payments to independent contractors under independent contracts listed in Exhibit "A." The estimated cost of any work to be performed under an independent contract is or shall be included in the estimate of costs in Exhibit "A" in terms of the estimated numbers of units of work to be performed, the estimated amount to be paid per unit, and the estimated total amount to be paid to the independent contractor, and such estimates shall be allowable maximums above which the Government will not contribute. Regardless of the provisions of any such independent contract, the Government will participate in the payments to the independent contractor only on account of work actually performed and that conforms with the provisions of the exploration project contract, and only to the extent that the Government deems the unit prices for the work under the independent contract to be reasonable and necessary. No such independent contract shall have the effect of increasing the estimated total cost of the exploration project contract nor the maximum amount which the Government will pay as provided in the exploration project contract.

(2) *Labor, supervision, consultants.*—Labor, supervision and technical services (including engineering and geological consultants), a schedule of which is included in the estimate of costs set forth in Exhibit "A." The requirements and related estimated costs for supervision and technical services are allowable maximums.

(3) *Operating materials and supplies.*—Necessary materials and supplies including items of equipment costing less than $50.00 each, and power, water, and fuel, a schedule of which is included in the estimate of costs in Exhibit "A."

(4) *Operating equipment.*—Any operating equipment to be rented or purchased, or which is owned and will be furnished by the Operator, with the estimated rental, purchase price, or the allowable depreciation, as the case may be, a schedule of which is included in Exhibit "A." Any items listed as owned and to be furnished by the Operator, and related initial allowable depreciation, are allowable maximums.

(5) *Rehabilitation and repairs.*—Any necessary initial rehabilitation or repairs of existing buildings, installations, fixtures, and movable operating equipment, now owned by the Operator and to be devoted to the purposes of the exploration contract, a schedule of which is included in the estimate of costs set forth in Exhibit "A." These items are allowable maximums.

(6) *New buildings, improvements, installations.*—Any necessary buildings, fixed improvements, or installations to be purchased, installed, or constructed for the purposes of the exploration work, with the estimated cost of each, a schedule of which is included in the estimate of costs in Exhibit "A." All of these items are allowable maximums.

(7) *Miscellaneous.*—Repairs to and maintenance of operating equipment (not including initial rehabilitation or repairs of the Operator's equipment), analytical work, accounting, workmen's compensation and employers' liability insurance and payroll taxes.

(8) *Contingencies.*—Such other necessary, reasonable direct costs of performing the exploration work, within the limit of the total aggregate estimate of costs, whether or not included in any schedule of costs in Exhibit "A," as may be approved by the Government in the course of the work, as indicated by its approval and payment of invoices and vouchers.

[1] If sufficient space is not provided in any blank, use an extra sheet of paper and refer to it in the blank.
[2] State name, address, and nature of organization if any.
[3] Give legal description or enough to identify the property, particularly excluding any land or interest therein to which the Government's lien is not to attach or the production from which is not to be subject to the Government's percentage royalty.
[4] Strike out the provision not applicable.
[5] Name of mineral or minerals.

EXPLORATION PROJECT CONTRACT
ALBERT F. CARLSON
DOCKET NO. DMEA-2471

Exhibit "A"

Description of the Work

The exploration work is designed to explore an ore body partly exposed in a bulldozer trench and shallow prospect shaft on the Jefferson Claim. The work shall be done in two stages. Stage I consists of bulldozer trenching and stripping between two creek beds, as indicated on the attached map, to more fully delineate the vein structure. If, in the opinion of the Government, the results of Stage I warrant the continuation of the project, then Stage II shall be approved and undertaken.

Stage II shall consist of shaft sinking, crosscutting, and drifting to probe the ore body at depth. The location of the shaft shall be determined by the results of the trenching and shall meet with the approval of the Government. The location, direction, and extent of the drifting and crosscutting, shall also be subject to the prior approval of the Government.

Estimated Costs of Project
(An asterisk following an item indicates allowable maximum)

Stage I

(1) Independent Contracts		
240 hours of bulldozing @ $12.00/hr., while working. (Includes operator, supplies, maintenance and all other costs)		$ 2,880.00*
(2) Labor, Supervision, Consultants		
Surface labor, rate per man per 8-hr. shift, $13.50	$225.00	
Supervisor 1/ @ $15.00/day for 40 days	600.00*	
Engineer, part time, to do surveying, mapping and any engineering required for this stage of the project	100.00*	925.00
(3) Operating Materials and Supplies		
None		

1/ Includes all costs of sampling, accounting, use of truck and other miscellaneous costs.

(4) Operating Equipment

None

(5) Rehabilitation and Repairs

None

(6) New Buildings, Improvements, Installations

None

(7) Miscellaneous

Assaying	$ 100.00
Total estimated costs — Stage I	$ 3,905.00*
Government participation @ 50%	$ 1,952.50*

Stage II

The estimated cost of Stage II is $20,995.00. The allowable costs of Stage II are those set forth in Article 6(a) of the contract form, but the schedules of estimated costs there referred to are waived except as indicated below.

(1) Independent Contracts

None

(2) Labor, Supervision, Consultants

In lieu of schedule, the actual costs of labor and supervision for sinking 110 feet of shaft, including 10 feet of sump 2/

In lieu of schedule, the actual costs of labor and supervision for 170 feet of crosscutting and drifting from the 100 foot level 2/

Engineer, part time, to do surveying, mapping and any engineering required for this stage of the project $ 200.00*

2/ The costs of the following classes of labor for an 8-hour shift shall not exceed the following: Shaft miner $14.00; miner, surface labor and timberman $13.50; working supervisor $15.00. These rates shall be subject to legal overtime, and revision to conform to rates generally paid for like work in the district in which the project is located.

(3) Operating Materials and Supplies

In lieu of schedule, actual costs shall be considered allowable costs

(4) Operating Equipment

To be rented:

1 - 210 cfm I R compressor @ $100.00/mo. for 7 mos.	$700.00	
1 - 30 HP hoist @ $65.00/mo. for 7 mos.	455.00	$ 1,155.00

To be furnished by Operator:

1 - 1¼ T. Chev. truck with dump bed, valued @ $2,250.00, $37.00 per mo. depreciation for 7 mos.		259.00*

To be purchased:

1 - Atlas rock drill RH-656 W with pneumatic pusher BMK 61A2, complete	$650.00	
1 - Mine car	100.00	
1 - DuPont 50 hole blasting machine	60.00	
1 - I R high head sump pump	385.00	1,195.00

(5) Rehabilitation and Repairs

Move and erect tool shed		50.00*

(6) New Buildings, Improvements, Installations

Construct compressor house	$200.00*	
Build headframe	500.00*	700.00*

(7) Miscellaneous

In lieu of schedule, actual costs shall be considered allowable costs.

Total estimated cost of project — Stages I and II	$24,900.00*
Government participation in project @ 50%	$12,450.00*

MF-200
(June 1951)

Docket No. DMA _____
Commodity Lead-zinc

UNITED STATES OF AMERICA
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS ADMINISTRATION

Office Copy
Not To be Used
Void
not corrected

EXPLORATION PROJECT CONTRACT [1]

It is agreed this _____ day of _____, 195__, between the United States of America, acting through the Department of the Interior, Defense Minerals Administration, hereinafter called the "Government," and [2]

Albert F. Carlson, Basin, Montana

hereinafter called the "Operator," as follows:

1. *Authority for contract.* This agreement is entered into under the authority of the Defense Production Act of 1950, pursuant to Mineral Order 5, entitled "Regulations Governing Government Aid in Defense Exploration Projects."

2. *Operator's property rights.* The exploration project shall be conducted on that certain property situated in the State of Montana, County of Jefferson described as follows: [3] Patented lode claims as follows: North Boulder, Sur. No. 3239; Jefferson, Sur. No. 5703; Wisconsin, Sur. No. 5704; and Patented placer claim, Lot 38, Sur. No. 64; and unpatented lode claims as follows: Jefferson Extension, Remnant, and East Extension North Boulder, all in secs. 13-14, R. 6 N., T. 7 W., MPM

with respect to which the Operator represents and undertakes: [4]

(*a*) That he is the sole owner, in possession and entitled to possession, and that the property is subject only to the following claims, liens, or encumbrances as to each of which the subordination agreement of the holder is attached: None

(*b*) ~~That he is a lessee, in possession and entitled to possession, and the subordination agreement of the lessor is attached.~~

3. *Exploration project.* The Operator, within thirty days from the date of this contract shall commence work on a project of exploration for [5] lead and zinc; shall prosecute the work efficiently, expertly, in a workmanlike manner, in accordance with good mining standards, with suitable and adequate equipment, materials, and labor, all properly designed to bring the project to completion within a period of [6] nine operating months* from the date of this contract. The exploration project and the work to be performed are more fully described on Exhibit "A" attached hereto, which, with any maps or drawings thereto attached, is made a part of this contract.

4. *Performance of the work.* The work shall be performed by the Operator, under his sole direction and control: *Provided,* That with the consent of the Government and its written approval of the contract or contracts, all or any part of the work may be performed by the Operator through contract or contracts with independent contractors. The Government shall have the right to enter and observe and inspect the work at all reasonable times, and the Operator shall provide the Government with all available means for doing so. The Government may consult with and advise the Operator on all phases of the work.

5. *Fixtures and improvements.* The Operator shall devote the land and all existing improvements, facilities, buildings, installations, and appurtenances to the purposes of the exploration project without any allowance for the use, rental value, depreciation, depletion, or other cost of acquiring, owning, or holding possession thereof. Any additional facilities, buildings, and fixtures, to be purchased, installed, or erected by the Operator, with the estimated cost of each, to which the Government will contribute currently its agreed pro rata share, are listed in Exhibit "A" attached hereto. The difference between the cost of such additional facilities, buildings, or fixtures, and the salvage value thereof at the conclusion of the work, shall be charged as a cost of the project to which the Government has contributed its pro rata share.

6. *Operating equipment.* Any operating equipment to be rented, purchased, or furnished by the Operator, with the allowable rental, purchase price, or depreciation, as the case may be, is listed under appropriate headings in Exhibit "A" attached hereto. As to equipment purchased for the project, the Government will contribute its agreed pro rata share of the cost thereof, and the difference between the cost and the salvage value at the conclusion of the work shall be charged as a cost of the project to which the Government has contributed its pro rata share.

[1] If sufficient space is not provided in any blank, use an extra sheet of paper and refer to it in the blank.
[2] State name, address, and nature of organization if any.
[3] Give legal description or enough to identify the property.
[4] Strike out the provision not applicable.
[5] Name of mineral.
[6] Not in excess of 2 years.

*not to exceed 16 months from date of contract

7. *Title to and disposition of property.* All facilities, buildings, fixtures, equipment, and other items costing more than $50 each, paid for or purchased with funds contributed jointly by the Operator and the Government, shall belong to the Operator and the Government jointly, in proportion to their respective contributions, and upon the termination of the contract, if they have any salvage value, shall be disposed of for their joint account unless the Government, in writing, waives its interest in any such items. The Government may require the dismantling, severance from land, and removal of any such items in order to realize its interest in the salvage value thereof, and the cost of any such removal and of the disposal of the items shall be for the joint account of the parties in proportion to their respective interests.

8. *Labor and supervision.* An itemized schedule of labor, by numbers and classes (miners, muckers, millmen, etc.), and of supervisors, by numbers and positions, with the maximum wages or salaries that may be paid to each as an allowable cost of the project is set forth in Exhibit "A" attached hereto.

9. *Rehabilitation and repairs.* A statement of the cost of any necessary rehabilitation or repairs to put existing facilities, buildings, installations, and fixtures into useful and operable condition and which are to be allowed as costs of the project is included in Exhibit "A."

10. *Allowable costs of the project.* The costs of the project in which the Government will participate are limited to the necessary, reasonable, direct costs of performing the exploration work, including the costs of materials, supplies, engineering, power, water, analytical work, accounting, and utilities, including items of equipment costing less than $50 each; and the costs referred to in Articles 5, 6, 8, and 9, and the exhibits annexed to and referred to in this contract. Although the Government may pay part of the cost of new or additional facilities, structures, buildings, and equipment, only the depreciation on such items, computed as indicated in Articles 5 and 6, will be charged as a cost of the project. No items of general overhead, corporate management, interest, taxes, or any other indirect costs not expressly allowed by these provisions, or work performed or costs incurred before the date of this contract, shall be allowed as costs of the project in which the Government will participate.

11. *Accounts and audits.* The Operator shall keep suitable records and accounts of operations, which the Government may inspect and audit at any time. The Government may at any time require an audit of the Operator's records and accounts by a certified public accountant, the cost thereof to be treated as a cost of the project. The Operator shall keep and preserve said records and accounts for at least 3 years after the completion of the project or the termination of this contract.

12. *Progress reports.* The Operator shall provide the Government with monthly reports of work performed under the contract upon forms to be provided by the Government. Each monthly progress report shall bear the certification of the Operator and shall constitute the Operator's invoice of costs incurred on the project during the period covered by the report.

13. *Payment to the Operator.* The monthly progress report (invoice), to the extent approved by the Government, shall be processed for payment by the Government. Payment shall be made in the amount of 50 percent of the approved costs incurred; *Provided,* That the aggregate total of all sums paid by the Government under this agreement shall not exceed $12,290.00, which is 50 percent of the agreed estimated total cost of this project, $24,580.00.

14. *Final reports by Operator.* Upon completion of the project or termination of this contract, the Operator shall provide the Government with a comprehensive geologic and engineering report, including an estimate of ore reserves, to the best of his ability. Four copies of all reports shall be furnished to the Government.

15. *Repayment by Operator.* If, upon the completion of the exploration project or termination of the contract, the Government considers that a discovery or development has resulted from the work from which commercial production of ore may be made, the Government, within 6 months thereafter, shall so certify to the Operator, particularly describing and delimiting its estimate of the discovery or the development. Thereafter, if and as ore is produced as a result of such discovery or development, the Operator and his successor in interest shall be and become obligated to pay to the Government a percentage royalty on the net smelter returns or other net proceeds realized from such ore, concentrates, or metal produced within ten (10) years from the date of this contract, until the total amount contributed by the Government, without interest, is fully repaid or said 10 years have elapsed, whichever occurs first, as follows:

Of net smelter returns or other net proceeds not in excess of eight dollars ($8.00) per ton of ore: One and one-half (1½) percent.

Of net smelter returns or other net proceeds in excess of eight dollars ($8.00) per ton of ore: One and one-half (1½) percent, plus one-half (½) percent for each additional full fifty cents ($0.50) in excess of eight dollars ($8.00) per ton of ore, but not in excess of a maximum of five (5) percent.

This obligation to repay from net returns or proceeds shall be and remain a claim and lien upon the mineral deposit which is the subject of the exploration project and upon any production resulting from such discovery or development, in favor of the Government, until fully paid, or until said 10-year period has elapsed; and this claim and lien and the Government's right to repayment shall survive any termination of the contract, whether by completion of the exploration project or otherwise. This article is not to be construed as imposing any obligation on the Operator or his successor in interest to produce ore from any such discovery or development.

16. *No assignment of contract.* Without the written consent of the Government, the Operator shall not assign or otherwise transfer or hypothecate this contract or any rights thereunder.

17. *Termination and completion.* The Government may, at any time, by written notice to the Operator, terminate this contract: (*a*) If the Operator fails to provide his share of the money necessary to prosecute operations pursuant to the terms of the contract; (*b*) if the Operator, in the opinion of the Government, fails to prosecute operations pursuant to the terms of the contract; or (*c*) if in the opinion of the Government, operations up to the time of the notice have not indicated the probability of making any worthwhile discovery and in the opinion of the Government further operations are not justified. Upon the completion of the project or any termination of the contract the Operator shall render to the Government a full and final accounting of his operations under the contract and his expenditures of money; shall dispose of any unused materials, supplies, and equipment for the joint account of the Operator and the Government in the proportion of their respective interests; and shall pay to the Government its pro-rata share of any money remaining.

Executed in sextuplicate the day and year first above written.

THE UNITED STATES OF AMERICA

(Operator)

By ----------

By ----------

U. S. GOVERNMENT PRINTING OFFICE 16—64066-2

ALBERT F. CARLSON
Exploration Project Contract

EXHIBIT "A"

Exploration Project

The exploration program is designed to explore an ore body partly exposed in a bulldozer trench and shallow prospect shaft on the Jefferson claim. The program shall be done in two stages, the first to consist of bulldozer trenching and stripping between two creek beds, as indicated on the attached map, to more fully delineate the vein structure.

The second stage shall consist of shaft sinking, crosscutting, and drifting to probe the ore body at depth. Initiation of the second stage shall be contingent on the successful completion of Stage I and the prior approval of DMEA Field Team, Region II. The location of the shaft shall be determined by the results of the trenching and shall also be subject to Government approval.

Fixtures and Improvements

Stage I - none

Stage II

Item	Estimated cost
1. Construct compressor house	$200.00
2. Build headframe	500.00
3. Move and erect ~~combination~~ tool-shed ~~compressor house~~	50.00
Total	$750.00

Operating Equipment

Stage I

To be rented:

1 - D8 dozer, fully operated, at contract rate of $12.00 per hour for a maximum of 240 hours	$2,880.00
Total	$2,880.00

To be purchased: none

To be furnished: none

Operating Equipment (continued)

Stage II

To be rented:

Item	Estimated monthly rental*	Rental period	Total
1 - 210 cfm IR compressor	100.00	7 mo.	$700.00
1 - 30 HP hoist	65.00	7 mo.	455.00
			$1155.00

*These items may be rented under a rental-purchase plan. However, any equity established by the monthly payments shall belong to the Operator and the Government in proportion to their respective contributions to such payments. If at the termination of the contract the Operator elects to retain equipment partly paid for under such a plan, the Operator shall reimburse the Government for its equity.

To be purchased:

Item	Estimated cost
1 - Atlas rock drill RH-656W with pneumatic pusher BMK 61A2, complete	$650.00
1 - mine car	100.00
1 - DuPont 50 hole blasting machine	60.00
1 - Hoisting bucket	10.00
1 - IR high head sump pump	385.00
1 - 30" sheave wheel	30.00
Total	$1,235.00 - $40 $1195.00

To be furnished:

Item	Value	Monthly deprec. allowance	Total
1 - 1½ T. Chev. truck with dump bed	$2,250.	$37.00 for 7 mo.	$259.00
Total			$259.00

Labor and Supervision

Classification	Rate/8 hr. shift
Shaft miner	$14.00
Miner	13.50
Surface labor	13.50
Timberman	13.50
Working Supervisor	15.00

These rates shall be subject to change for legal overtime and changes made to make the wage scale conform to rates generally paid for like work in the district in which the project is located.

Rehabilitation and Repairs - none

Estimated Cost of the Project

Stage I

Time Schedule

	1.	240 hours bulldozing at $12/hr (to be contracted; contract rate to include operator, supplies and maintenance)	$2,880.00
	2.	Engineering	100.00
2 months	3.	~~Extra labor~~ Surface labor	225.00
	4.	Supervision* 40 days @ $15	600.00
	5.	Assaying	100.00
		Total, Stage I	$3,905.00

*To include all costs for sampling, accounting, use of truck and other miscellaneous costs.

Estimated Cost of the Project (cont.)

Stage II

Time Schedule

	1.	110 feet of shaft at $100/ft* (includes 10 feet of sump)	$11,000.00
	2.	170 feet of crosscutting and drifting from 100 level at $45/ft*	7,650.00
	3.	Fixtures and improvements	750.00
7 months	4.	Equipment to be purchased	1,175.00 *$1,195.00
	5.	Assaying	200.00
	6.	Engineering	200.00
		Total, Stage II	$20,675.00 ? 20,975.00 20,995
		GRAND TOTAL	$24,580.00 ? $24,880.00 $24,900.00

*Estimated per foot costs include all costs for labor, supervision, equipment rental, allowance for depreciation of Operator's equipment, sampling, operating supplies, accounting, and all other costs not specified separately above.

Form MF-103
(Revised June 1951)

UNITED STATES DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS ADMINISTRATION

Budget Bureau No. 42-R1035.1.

MF-103 Should Be Filed With General Technical Data Form MF-100

APPLICATION FOR AID FOR AN EXPLORATION PROJECT PURSUANT TO MINERAL ORDER 5, UNDER DEFENSE PRODUCTION ACT OF 1950

Not To Be Filled in by Applicant

Docket No. DMEA-247
Metal or Mineral
Date Received 4-7-52
Amount $
Participation (Government %)

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
APR 4 1952

Name and address of applicant

Albert F. Carlson,
Basin, Montana.

Date March 8th, 1952.

If you have already filed MF-100, give date filed _____, type of assistance requested _____,

DMA Docket Number (if available) _____

INSTRUCTIONS

Read Mineral Order 5, Regulations Governing Government Aid in Defense Projects, before completing this application. Submit four copies each, of the signed application form, General Technical Data Form MF-100, and answers to questions as specified, to Defense Minerals Administration, Department of the Interior, Washington 25, D. C., or to the nearest field executive office thereof, with your name and address on each sheet of the application and all accompanying papers. If you have previously filed MF-100, it is not necessary to file it again. However, you should indicate in space provided above the type of assistance previously applied for (loans, procurement contracts, etc.) and DMA Docket Number, if available. *When a question is inapplicable it should be so stated in the form.* Additional sheets should be attached in answering any questions or in supplying additional information. IF YOU CANNOT ANSWER A QUESTION, SO STATE.

1. (*a*) Give a description of the real property that will be in any way involved in the exploration project, including any existing mine or operating property.

   (*b*) If you are not the owner of the property, submit a copy of the lease, purchase option, or other agreements under which you are authorized to operate the property with each copy of your application.

   (*c*) Give the legal description of the exact parcel, plot, or area upon which the exploration is to be conducted.

   NOTE: (1) If both areas are the same, so state. The only obligation to repay the Government is from the net earnings from any commercial discovery made in the area specified in (*c*) above in which the exploration is to be conducted, and the expenditure of funds which may be charged as costs of the project must be limited to that area or to work necessary to perform the exploration in that area.

   (2) If applicant is not the owner of the property or if there are any liens or encumbrances against the property, copy of agreements of claimants, lienors, encumbrances, and lessors subordinating their interests in the property to the interest of the Government under the Exploration Project Contract will be required for attachment to the Contract.

2. (*a*) What metals or minerals do you expect to find?

   (*b*) Furnish statement of the geologic features of your property, giving type of ore deposit and reasons for expecting to find commercial ore bodies. Illustrate with maps or sketches. If you have a geologic or engineering report, or assay maps showing width and grade, please send them with application, stating whether or not you wish to have them returned.

The information requested in questions 3, 4, 5, 6, 7, 8, and 9 below should be answered specifically and in detail, as this information will be attached to and incorporated as part of the Exploration Project Contract, if such contract is entered into with you by the Government.

ANSWER EACH QUESTION ON SEPARATE SHEETS OF PAPER AND SUBMIT A COPY OF EACH ANSWER FOR EACH COPY OF YOUR APPLICATION.

3. (*a*) Describe fully the proposed work and give the total cost of the project.

   (*b*) State the time required to start the project and to complete it.

4. Submit a map or sketch of the property involved showing a plan (and cross section, if needed) of the present mine workings and the *location of the proposed exploration work* as related to geologic features, such as contacts, veins, ore-bearing beds, etc.

5. Furnish an itemized list of existing facilities, buildings, installations, and fixtures with a statement of the cost of any necessary rehabilitation or repairs to put into useful and operable condition.

6. Furnish a detailed list of additional facilities, buildings, and fixtures to be purchased, installed, or erected by you, with the estimated cost of each item.

7. Furnish a detailed list of operating equipment, separated into items to be—

   (*a*) Rented

   (*b*) Purchased

   (*c*) Furnished by you

   with the rental, purchase price, or depreciation of each item, as the case may be, to be charged as a cost of the project.

8. Furnish an itemized schedule of labor, by numbers and classes (miners, muckers, etc.) and of supervisors by numbers and positions, with the maximum wages or salaries to be paid to each.

9. Furnish a detailed list with estimated cost of each item for materials, supplies, engineering, assaying, accounting, power, water, utilities, and any other items not provided for above.

10. (*a*) How much are you prepared to invest in the proposed project?

    (*b*) Is this amount sufficient to pay your part of the cost of the project, in accordance with the regulations on Government participation (Sec. 9 of MO–5)?

11. State any conditions or circumstances regarding the property not sufficiently brought out by the foregoing questions.

CERTIFICATION

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

(Name of company)	By Albert J. Jackson (Signature of authorized official)
March 8th, 1952 (Date)	Owner (Title)

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.

U. S. GOVERNMENT PRINTING OFFICE 16—64067-2

1. (a) North Boulder Sur. 3239 - Jefferson Sur. 5703 - Jefferson Extension - Wisconsin Sur. 5704 - Remnant - East Extension North Boulder, all Mining Claims and Lot 38, Sur. 64 Placer.

   (b) Owner.

   (c) Jefferson Sur. 5703, Jefferson Extension, Lot 38, Sur. 64, and Wisconsin Sur. 5704.
   Exact location of shaft to be decided after preliminary trenching and the approval of the DMEA Field Team.

2. (a) Lead, Zinc, Manganese, Copper, Gold and Silver.

   (b) Map, assay data and shipping returns attached hereto. Preliminary work done by U. S. Bureau of Mines and myself during June, July, August, September and October 1951.

3. (a) Sink shaft 150 feet.
Crosscut vein - 50' Level 40 "
" " 100' " 70 "
" " 150' " 100 "

Drift - 50 feet east and 50 feet west on the 100' level.

TOTAL: 150 feet sinking.
210 " cross cutting.
100 " drifting.

Location of shaft to be determined after preliminary trenching and the approval of the DMEA Field Team.

Sinking, cross cutting and drifting to be by contract, myself to furnish all equipment, timber and hoisting.

TOTAL COST OF PROJECT: ($21,245.00), twenty one thousand two hundred forty five dollars.

(b) Project to commence spring of 1952 and to be completed in the fall of 1953. All work to be done under favorable weather conditions within that time limit.

4. Refer to Page 1 - 2A.

5. None, except timber which is available for this project.

6.	Move tool or change house to this property from my home place and re-bolt and re-roof	$ 50.00
	Purchase compressor house, which is prefabricated and bolts together, used	100.00
	Build head frame for shaft, estimated cost	250.00
	TOTAL	$400.00

7. (a) Compressor, Ingersoll Rand 1942 - 210 Ft. In first class operating condition, to be rented at the rate of $100.00 per month, and privilege of buying for $2200.00 at any time, all rental paid to be applied.

Hoist, 30 H. P., Continental Engine, to be rented, at the rate of $65.00 per month, with privilege of buying for $1250.00, with first three months of rent applying to purchase price.

(b) To be purchased:-

1 -	Atlas Rock Drill RH-656W	$340.00
1 -	Pneumatic Pusher, BMK 61A2	165.00
	Hose Assembly Complete with Fittings and Couplings -	
1 -	Set for Drill and Pusher	18.00
1 -	Set for Drill and Raising Feed	18.00
2 -	714-0834 - 2'7" Coromant Drill Steels	35.60
2 -	714-0833 - 5'3" " " "	39.20
1 -	DuPont - 100 Hole Electric Blasting Outfit	100.00
100 -	Ft. 2 Braid Air Hose 1" - 50' lengths	78.15
100 -	Ft. 2 Braid Water Hose 1/2" - 50 lengths	45.42
1 -	Set Handle Weights for Drill, RH-656W	6.90
600 -	Ft. 2" Black Pipe, @ $34.19 c. ft.	205.14
100 -	Ft. 1" " " @ $25.00 " "	25.00
5 -	2" Tees .60 ea.	3.00
6 -	2" Unions 1.74 ea.	10.44
10 -	2" Ells .75 ea.	7.50
20 -	2" Couplings .48 ea.	9.60
1 -	2" Pipe Cutter	8.95
1 -	24" Pipe Wrench	6.98
1 -	100 Lb. Drum Carbide	7.65
1 -	Large Justrite Carbide Lamp	3.50
300 -	Ft. 12# Rail)	
1 -	Mining Car) Used	40.00
300 -	Ft. 12# Rail, new 7.65 cwt.	91.80
40 -	Pr. 12# Fish Plates, .35 pr.	14.00
100 -	Lbs. Track Spikes	12.00
200 -	Ft. 5/8" Wire Rope, 6x19 IWRC .255 ft.	51.00
6 -	Clamps for above wire rope .45 ea.	2.70
1 -	50 Gal. Hoisting Bucket, Used	10.00
1 -	Keg 50D Common Nails	9.52
1 -	Keg 40D " "	9.52
1 -	Keg 30D " "	9.52
1 -	Assortment of Bolts, Nuts and Washers	12.00
1 -	No. 5 Greenfield Tap and Die Set	35.70
	Carried forward to Page 7 TOTAL	$ 1431.79

7. (b) To be purchased:

Brought forward from Page 6	$1431.79
1 - Ingersoll-Rand High Head Sump Pump, Complete, No. 35	385.00
2 - Turn Sheets, Steel	40.00
1 - 30" Sheave Wheel with bearings	30.00
Lumber for lining shaft compartment, guides, ladders, etc., 3,000 Board Feet	180.00
4 - #2 SH Western Miner Shovels, 27.87 Doz.	9.29
4 - 4 Lb. Drift Picks	3.87
Mine timber wedges	20.00
Blasting Powder, estimate	150.00
TOTAL	$2249.95

(c) To be furnished by me:

1 - 1-1/2 Ton Chev., Long Wheel Base Truck, flat bed, present mileage -15,000 miles. Dump box to be purchased for $250.00. Truck to be used for hauling all timber, supplies and machinery to mine, as well as, hauling muck from shaft as it is hoisted. Approximately 15 miles use per day. At a cost of 50 cents per mile which covers repairs, tires, gas, oil, insurance and depreciation. Daily record to be kept.

Have complete blacksmithing outfit, new pipe dies, all small tools, saws, gas barrels, pumps, pipe vises, etc., with a value of $800.00. Depreciation to be at the rate of 20%.

8. 2 Shaft Men 13.97 per day.
1 Surface Man 13.47 " "
1 Timber Man 13.47

These wages plus:
1-1/2% Social Security.
5-7/10 Montana Industrial Accident.
2-7/10 Montana Unemployment Compensation.

My Montana Industrial Accident Protection in force since 1939.
My Employers Social Security No. 810117993.

Surface man to do hoisting or anyother necessary work connected with this project.
Timber man to be employed long enough to cut and frame timber for this project.

Myself to act as Working Supervisor on this project, doing the accounting, driving truck, hauling muck, pumping water or where ever necessary, at $15.00 per day.

9. Assay rates:

Manganese	$1.00
Gold & Silver	1.50
Lead	1.00
Zinc	1.50
Copper	1.50

Estimated cost of assaying for this project $80.00.

10. (a) I am prepared to invest ($10,622.50) Ten thousand six hundred twenty two dollars fifty cents in this project.

(b) Yes. Lead, Zinc. (50-50 basis)

11. The total cost of shaft sinking for a 5' x 10' two compartment shaft in this district, as well as, the Butte district vary from $90.00 to $120.00 per foot depending on ground and water conditions.
For 5' x 7' drifts and cross cuts $25.00 to $30.00.

1 - Form MF-103
11 - Additional Pages.

Albert F. Carlson,
Basin, Montana.

Form MF-103
(Revised June 1951)

UNITED STATES DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS ADMINISTRATION

Budget Bureau No. 42-R1035.1.

MF-103 Should Be Filed With General Technical Data Form MF-100

APPLICATION FOR AID FOR AN EXPLORATION PROJECT PURSUANT TO MINERAL ORDER 5, UNDER DEFENSE PRODUCTION ACT OF 1950

Not To Be Filled in by Applicant

Docket No. DMEA-2411
Metal or Mineral
Date Received 4-7-52
Amount $
Participation (Government %)

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
APR 4 1952

Albert F. Carlson,
Basin, Montana.

Name and address of applicant

Date February 29th, 1952.

If you have already filed MF-100, give date filed _____, type of assistance requested _____,

DMA Docket Number (if available) _____

INSTRUCTIONS

Read Mineral Order 5, Regulations Governing Government Aid in Defense Projects, before completing this application. Submit four copies each, of the signed application form, General Technical Data Form MF-100, and answers to questions as specified, to Defense Minerals Administration, Department of the Interior, Washington 25, D. C., or to the nearest field executive office thereof, with your name and address on each sheet of the application and all accompanying papers. If you have previously filed MF-100, it is not necessary to file it again. However, you should indicate in space provided above the type of assistance previously applied for (loans, procurement contracts, etc.) and DMA Docket Number, if available. *When a question is inapplicable it should be so stated in the form.* Additional sheets should be attached in answering any questions or in supplying additional information. IF YOU CANNOT ANSWER A QUESTION, SO STATE.

1. (*a*) Give a description of the real property that will be in any way involved in the exploration project, including any existing mine or operating property.

   (*b*) If you are not the owner of the property, submit a copy of the lease, purchase option, or other agreements under which you are authorized to operate the property with each copy of your application.

   (*c*) Give the legal description of the exact parcel, plot, or area upon which the exploration is to be conducted.

   NOTE: (1) If both areas are the same, so state. The only obligation to repay the Government is from the net earnings from any commercial discovery made in the area specified in (*c*) above in which the exploration is to be conducted, and the expenditure of funds which may be charged as costs of the project must be limited to that area or to work necessary to perform the exploration in that area.

   (2) If applicant is not the owner of the property or if there are any liens or encumbrances against the property, copy of agreements of claimants, lienors, encumbrances, and lessors subordinating their interests in the property to the interest of the Government under the Exploration Project Contract will be required for attachment to the Contract.

2. (*a*) What metals or minerals do you expect to find?

   (*b*) Furnish statement of the geologic features of your property, giving type of ore deposit and reasons for expecting to find commercial ore bodies. Illustrate with maps or sketches. If you have a geologic or engineering report, or assay maps showing width and grade, please send them with application, stating whether or not you wish to have them returned.

The information requested in questions 3, 4, 5, 6, 7, 8, and 9 below should be answered specifically and in detail, as this information will be attached to and incorporated as part of the Exploration Project Contract, if such contract is entered into with you by the Government.

ANSWER EACH QUESTION ON SEPARATE SHEETS OF PAPER AND SUBMIT A COPY OF EACH ANSWER FOR EACH COPY OF YOUR APPLICATION.

3. (*a*) Describe fully the proposed work and give the total cost of the project.

   (*b*) State the time required to start the project and to complete it.

4. Submit a map or sketch of the property involved showing a plan (and cross section, if needed) of the present mine workings and the *location of the proposed exploration work* as related to geologic features, such as contacts, veins, ore-bearing beds, etc.

5. Furnish an itemized list of existing facilities, buildings, installations, and fixtures with a statement of the cost of any necessary rehabilitation or repairs to put into useful and operable condition.

6. Furnish a detailed list of additional facilities, buildings, and fixtures to be purchased, installed, or erected by you, with the estimated cost of each item.

7. Furnish a detailed list of operating equipment, separated into items to be—

   (*a*) Rented

   (*b*) Purchased

   (*c*) Furnished by you

   with the rental, purchase price, or depreciation of each item, as the case may be, to be charged as a cost of the project.

8. Furnish an itemized schedule of labor, by numbers and classes (miners, muckers, etc.) and of supervisors by numbers and positions, with the maximum wages or salaries to be paid to each.

9. Furnish a detailed list with estimated cost of each item for materials, supplies, engineering, assaying, accounting, power, water, utilities, and any other items not provided for above.

10. (*a*) How much are you prepared to invest in the proposed project?

    (*b*) Is this amount sufficient to pay your part of the cost of the project, in accordance with the regulations on Government participation (Sec. 9 of MO–5)?

11. State any conditions or circumstances regarding the property not sufficiently brought out by the foregoing questions.

CERTIFICATION

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

(Name of company)	By Albert F. Jackson (Signature of authorized official)
February 29th, 1952. (Date)	Owner. (Title)

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.

U. S. GOVERNMENT PRINTING OFFICE 16—64067-2

1. (a) North Boulder Sur. 8239 - Jefferson Sur. 5703 - Jefferson Extension - Wisconsin Sur. 5704 - Remnant - East Extension North Boulder, all Mining Claims and Lot 38, Sur. 64 Placer.

   (b) Owner.

   (c) Jefferson Sur. 5703, Jefferson Extension, Lot 38, Sur. 64, and Wisconsin Sur. 5704.

2. (a) Lead, Zinc, Manganese, Copper, Gold and Silver.

   (b) Map, assay data and shipping returns attached hereto. Preliminary work done by U. S. Bureau of Mines and myself during June, July, August, September and October 1951.

3. (a) Trenching and stripping on vein with D8 Dozer, approximately 900 feet.
Clearing timber from two areas.

Total cost of project ($3755.00), three thousand seven hundred fifty five dollars.

(b) Project to commence spring 1952, exact time depending on weather conditions and to be completed as soon as possible.

4. See Page 1 -2a.

5. None.

G. None.

7. (a) D8 Dozer and Operator to be contracted for at the rate of $12.00 per hour, or $96.00 per day.

(b) None.

(c) Truck for a short period of time to remove cut timber from two areas of Dozer operation. Cost to be included under Supervisor.

8. 1 Man Cutting Timber $13.47 per day.

This wage plus:
1-1/2% Social Security.
5-7/10% Montana Industrial Accident.
2-7/10% Montana Unemployment Compensation.

This man to be employed 15 days.

My Montana Industrial Accident Protection in force since 1959.
My Employers Social Security No. 810117993.

Myself to act as Supervisor at the rate of $15.00 per day. This includes use of truck and sampling.

9. Assay Rates:

Lead	$1.00
Zinc	1.00
Manganese	1.00
Copper	1.00
Gold & Silver	1.00

Estimated cost of assaying for this project $60.00
Accounting included in the cost of supervision.
Have enough maps, engineering reports and geological reports for this project.

10. (a) I am prepared to invest ($1877.50) , Eighteen hundred seventy seven dollars fifty cents in this project.

Summary of work to be accomplished:

20 Days Dozing	$96.00 per day, Contract		$2880.00
15 " Labor one man clearing timber			225.00
Assaying			50.00
Supervisor	40 days		600.00
	Lead, Zinc 50-50 basis		$3755.00

Supervisor above includes sampling, accounting use of truck and helping to remove cut timber.

(b) Yes.

11. None.

Albert F. Carlson,
Basin, Montana.

1- Form MD-103
10- Additional Pages.
1- Map with Assay data attached.

Form MF-100
(March 1951)

U. S. DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS ADMINISTRATION

Form approved.
Budget Bureau No. 42-R1026.

GENERAL TECHNICAL DATA
FOR USE UNDER THE
DEFENSE PRODUCTION ACT OF 1950

NOT TO BE FILLED IN BY APPLICANT

Docket No. DMEA-2471

Date received 4-7-52

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
APR 7 1952

Albert F. Carlson,
Basin, Montana.

Name and address of applicant

(2 Pages attached)

Date Feb.29th, 1952.

INSTRUCTIONS

This form is to be filed with Defense Minerals Administration, Department of the Interior, Washington 25, D. C. It should be accompanied by appropriate application form when a specific type of Government assistance is requested, in the form of (1) loan, (2) purchase contract, (3) Government guarantee of a private loan, (4) Necessity Certificate pursuant to the provisions of Sec. 124-A (Amortization Deduction) of Internal Revenue Code, 1950, (5) priorities or allocation of mining equipment, and maintenance, repair and operating supplies, and (6) other forms of Government assistance that might arise under the Act. Submit four (4) signed copies of the form and accompanying papers. Name and address should be stamped or typed on each sheet of this form and all accompanying papers. *When a question is inapplicable it should be so stated on the form.* Additional sheets may be attached in answering any questions or in supplying additional information. (IF YOU CANNOT ANSWER A QUESTION, SO STATE.) If a question is answered elsewhere indicate where answered. It is not necessary to answer it again.

GENERAL TECHNICAL DATA

Supply the following information on separate sheets, arranged, numbered, and lettered as indicated:

1. Materials produced:
   (*a*) What are the chief mine, mill, or smelter products?
   (*b*) What are the byproducts, if any?
2. Name(s) and type(s) of mine(s), mill(s), smelter(s), refinery(ies), pit(s), quarry (ies), drilling operation(s). Include old names of property, if any. Show extent of workings, including the following:
   (*a*) Linear feet of shafts.
   (*b*) Linear feet of drifts and crosscuts.
   (*c*) Linear feet of tunnels or adits.
   (*d*) Linear feet of other mine openings (explain briefly).

   Indicate whether mine is flooded or not. Describe any pumping problems. Give size or productive capacity.
3. For each operation listed above supply the following:
   (*a*) Distance and direction from nearest town and shipping point.
   (*b*) Mining district.
   (*c*) Township, Section, Range.
   (*d*) County, State.
4. (*a*) State whether or not property is now in operation, and if in operation, by whom operated.
   (*b*) Are you operating this property as:
   - ☐ Owner.
   - ☐ Lessee.
   - ☐ Contractor.
5. Number of years in production _____

   If not in production or operation, estimated date when production will begin _____
6. Experience of operators:
   Describe the mining and general business experience of (*a*) the applicant, and (*b*) the person or persons who manage the project.
7. History:
   (*a*) Give a statement, as complete as possible, of previous exploration, development, operation, and production of property, with reasons for suspension of operation.
   (*b*) State briefly the known history and production of adjoining and neighboring properties.
   (*c*) Furnish any available (private) reports that may apply to this application, including results of mine examinations, recommended exploration and development, and metallurgical investigations.

8. Names and addresses of Officers, Directors, or Partners, and in addition thereto, the five largest stockholders if applicant is a corporation.

Name and Address (a)	Official Title (If officer is also director indicate by "D") (b)	Total of Annual Salary, Commissions, Bonuses, Etc., Received From Applicant and Affiliates During Last Fiscal Year (c)	Estimated Net Worth Outside of Interest in Applicant (d)	Number of Shares Held in Applicant Corporation		Life Insurance Carried for Benefit of Applicant	
				Common (e)	Preferred (f)	Amount (g)	Net Cash Surrender Value After Loans (h)
	Total		x x x x x			x x x x x	x x x x x

If more lines are needed continue on separate sheet.

9. Capital Stock Issues:

For Corporate Applicants

Item	Authorized (a)	Outstanding (b)	Par Value (c)	Number of Shares Outstanding (d)	Dividend Rate Last Paid* (e)
Common stock	$	$	$		
Preferred stock	$	$	$		

*Indicate period covered.

10. Production:

Item	Kind of Product (a)	1948 Total (b)	1949 Total (c)	1950 Total (d)	Present Average Monthly (e)
1. Quantity of product mined or quarried (Short, long, metric tons; barrels; pounds; etc.)					
2. Quantity of product processed (specify unit of measure and type of process)					
3. Quantity and grade of product sold or shipped (specify units of measure)					

11. Do you contemplate a change in the present average monthly rate of production? If so, state estimated maximum monthly production and basis of change.

12. Ore or Mineral Reserves:

(a) Describe the ore or mineral deposit briefly. Accompany the application by any available report on the geology and ore reserves.

GENERAL TECHNICAL DATA.

1. Materials Produced:

   (a) Manganese, lead, zinc, copper, gold and silver.
   (b) None.

2. Jefferson Sur. 5703, Jefferson Extension, Lot 38, Sur. 64, and Wisconsin Sur. 5704.

   (a) 20 foot shaft on Jefferson.
   (b) 150 feet of crosscut and drift, Jefferson and Wisconsin.
   (c) None
   (d) Trenches.

   Will have water problem when sinking. Vein approximately 14 to 50 feet wide at places where it has been uncovered. Productive capacity uncertain at the present time.

3. (a) Five miles from Bernice, Montana or nine miles from Basin, Montana.

   (b) Alta Gulch.
   (c) T6N R7W.
   (d) Jefferson County, Montana.

4. (a) Property not in operation.
   (b) Owner.

5. Number of years in production not known. Uncertain when production will commence.

6. (a) Have managed my own business for many years, including mining and considerable prospecting.

   (b) Myself to manage this project.

7. (a) Preliminary work done by the U. S. Bureau of Mines and myself during June, July, August, September and October 1951. Approximately 100 tons of commercial ore saved while prospecting. Weather, equipment and money shortage were reasons for suspension.

   (b) Several car loads of ore shipped from North Boulder Sur. 3239, which is on the same vein east of this project.
   (c) No private reports available. The only reports I have are from the U. S. Bureau of Mines, Spokane, Wash.

Albert F. Carlson.
Basin, Montana.

GENERAL TECHNICAL DATA.

8. Albert F. Carlson, Owner.
Basin, Montana.

9. None.

10. See page 1 - 7 (a).

11. Inapplicable.

12. See page 1 - 7.

13. Five miles to rail-head at Bernice, or nine miles to Basin, Montana. Dirt road in very good condition.

14. Year around water supply from two streams and several springs.

15. Power. None.

16. Two shaftmen and myself.

17. Equipment and Facilities: None.

Albert F. Carlson,
Basin, Montana.

(*b*) If deposit is other than placer:

(1) Submit assay plans and/or sections showing location and size of proved (measured) and probable (indicated) ore or mineral reserve.

(2) State the tonnage (indicate type of ton) and grade of each class of ore reserve, as above, and show how computed. Tabulated total ore reserve as follows:

TOTAL ORE OR MINERAL RESERVES

Ore or Mineral Reserve	Estimated Tons (a)	Metal or Mineral Content Per Ton (Grade) (b)	Gross Value Per Ton (c)	Recoverable Unit Value Per Ton (d)	Estimated Cost of Production Per Ton (e)
Measured (proved)					
Indicated (probable)					

(*c*) If placer:

(1) Give estimated total yardage and average marketable mineral content of each deposit.

(2) Submit map showing location of placer deposit and surrounding area, with all test holes or pits. Submit logs of each hole and test pit with depth and average value of each.

(3) Describe gravel, stating whether fine, medium or coarse; loose, tight, cemented, or frozen, and whether it contains stumps or boulders more than 1 foot in diameter; if so, how large, and in what proportion.

(4) Describe bedrock, giving type (granite, sandstone, shale, etc.) and state whether it is hard or soft, smooth, uneven or rough.

(5) Describe overburden, stating whether loose, tight, or cemented; fine or coarse textured; furnish estimate of average thickness and total amount.

(6) Tabulate the reserves using the form outlined above for ore or mineral reserves.

13. Access Roads:

Give road distances to shipping, supply and residence points, stating kind and condition of roads.

14. Water Supply:

State source and quantity of water available for operations and whether sufficient for all seasons of year.

15. Power:

State amount of power used, rate per hour, and source thereof.

16. Labor:

State number and classes (miners, muckers, millmen, etc.) of men employed during a recent representative payroll period.

17. Equipment and Facilities:

Describe present equipment on the property, including buildings. (State condition.) List major pieces of equipment now owned or controlled and in serviceable condition available for this operation.

18. Are there any particular conditions or circumstances affecting your operations that are not described above? If so, explain.

CERTIFICATION

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

(Name of company)

By Albert Jackson
(Signature of authorized official)

3/29/54
(Date)

Owner
(Title)

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.

U. S. GOVERNMENT PRINTING OFFICE 16—63792-1

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

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION

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

OPERATOR'S MONTHLY REPORT AND VOUCHER

Month of June, 1953 Docket No. DMEA 2471 Contract No. Idm 313
Operator's Name Albert F. Carlson Minerals
Address Basin, Montana Lead-Zinc
Contract Amount, $ 24,900.00 Government Participation: 50 % Amount, $ 12,450.00

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						
Bulldozing	$318.00	$1662.00	$1980.00			
Crosscutting						
Drifting						
(2) Labor and Supervision:						
Labor						
Supervision	$ 49.69	$ 259.69	$ 309.38			
Technical Services						
(3) Operating Mat'ls. and Supplies:						
Timber						
Explosives						
Pipe						
Track						
(4) Operating Equipment:						
Rental						
Purchase						
Depreciation						
(5) Initial Rehabilitation and Repairs						
(6) New Bldgs., Improvements, etc.						
(7) Miscellaneous:						
Repairs to Equipment						
Sampling and Analysis						
Payroll Taxes						
Liability Insurance						
(8) Contingencies (specify):						
TOTALS	$367.69	$1921.69	$2289.38	367.69	1921.69	2289.38

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

Date 7/27/53 *Payee Albert F. Carlson

Per Title Owner

*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:

$ 183

Signature (Authorized Certifying Officer)

Date 4/6/54 Vou. No. 1129

(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. E213 in accordance with the terms of the contract.

Signature /s/ John D. Bardill Title Metallurgist Date 4/7/54

APPROVAL BY DMEA EXECUTIVE OFFICER OR ALTERNATE:

Signature /s/ Stephen W. Zoldok Title Mining Engr Date 4/7/54

MONTHLY REPORT OF OPERATOR

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

U. S. GOVERNMENT PRINTING OFFICE 205675

Form MF-104A
(April 1952)

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

UNITED STATES
DEPARTMENT OF THE INTERIOR

DEFENSE MINERALS EXPLORATION ADMINISTRATION

OPERATOR'S UNIT COST AND PROGRESS REPORT

Month of June 1953 Docket No. DMEA 2471 Contract No. Idm 313
Operator's Name Albert F. Carlson Minerals
Address Basin, Montana Lead-Zinc

OPERATION	UNIT	COSTS THIS MONTH	UNITS THIS MONTH	COSTS TO DATE	UNITS TO DATE	UNIT COSTS TO DATE	AUTHORIZED BY CONTRACT	
							Units	Unit Costs
Drifting								
Crosscutting								
Raising								
Shafts								
Winzes								
Drilling: Core								
Churn								
Auger								
Stripping								
Trenching	Hrs	$318.00	26½Hrs	$1980.00	165Hrs	$1980.00	240Hrs	$2880.00
Test Pits								
Roads and Trails								
Supervisor	"	$ 49.69	26½ "	$ 309.38	165 "	$ 309.38	320 "	$600.00
TOTAL DISTRIBUTED COSTS		$367.69		$2289.38				TOTAL COSTS AUTHORIZED BY CONTRACT
Operating Equipment Purchased		None						
Initial Rehabilitation and Repairs		"						
New Buildings, Improvements, etc.		"						
TOTAL COSTS		$367.69		$2289.38				

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

Date July 27, 1953 Operator Albert F. Carlson

Per Title Owner

REMARKS:
Bulldozing 26½ hours
@ $12.00 per hour
Supervision for the above
dozing $1.87½ per hour

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

(Instructions on reverse)

(For Government use only)

INSTRUCTIONS

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

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

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

U. S. GOVERNMENT PRINTING OFFICE 205676

NARRATIVE

June 1953
Idm 313
Albert E. Carlson,
Basin, Montana.

Dozed a trench 400 feet west of small shaft shown on maps as (Bureau of Mines shaft in trench No. 4), and 200 feet west of Carlson trench No. 1.

Trench when completed was 165 feet long with an average depth of 11 feet and an average width of 14 feet, uncovered vein structure of considerable width with stringers all thru the country rock on the hanging wall side, on account of exceptional hard rock was unable to doze deep enough to ascertain the exact vein width.

The trench was made to determine whether vein was narrower going west from the Bureau of Mines shaft and as a check against Carlson trench No. 1. Had considerable caving trouble on account of wet weather. From all trench showings made so far all indications are that vein is somewhat narrower going west from original discovery than it is going east.

Mr. Edward T. Ruppel of the U. S. Geological Survey inspected this work after it was completed.

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

Wash

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION

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

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
DEC 8 1952

OPERATOR'S MONTHLY REPORT AND VOUCHER

Month of October 1952 Docket No. DMEA 2471 Contract No. Idm 313
Operator's Name Albert F. Carlson,
Address Basin, Montana.
Minerals Lead-Zinc
Contract Amount, $ 24,900.00 Government Participation: 50 % Amount, $ 12,450.00

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						
Bulldozing	$264.00	$1398.00	$1662.00	264.00	1398.00	1662.00
Crosscutting						
Drifting						
(2) Labor and Supervision:						
Labor						
Supervision	41.25	218.44	259.69	41.25	218.44	259.69
Technical Services						
(3) Operating Mat'ls. and Supplies:						
Timber						
Explosives						
Pipe						
Track						
(4) Operating Equipment:						
Rental						
Purchase						
Depreciation						
(5) Initial Rehabilitation and Repairs						
(6) New Bldgs., Improvements, etc.						
(7) Miscellaneous:						
Repairs to Equipment						
Sampling and Analysis						
Payroll Taxes						
Liability Insurance						
(8) Contingencies (specify):						
TOTALS	$ 305.25	$1616.44	$1921.69	305.25	1616.44	1921.69

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

Date Nov. 12/52 *Payee Albert F. Carlson

Per _____ Title Owner

*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:

152.63

$ 152 63

Signature _____
(Authorized Certifying Officer)

Date 12/3/52 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. Idm-E313 in accordance with the terms of the contract.

Signature John S. McNabb Jr. Title Mining Engineer Date 11-21-52

APPROVAL BY DMEA EXECUTIVE OFFICER OR ALTERNATE:

Signature Thomas E Howard Title Min Engr Date 11-26-52

MONTHLY REPORT OF OPERATOR

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

U. S. GOVERNMENT PRINTING OFFICE 205675

Form MF-104A
(April 1952)

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

UNITED STATES
DEPARTMENT OF THE INTERIOR

DEFENSE MINERALS EXPLORATION ADMINISTRATION

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
DEC 8 1952

OPERATOR'S UNIT COST AND PROGRESS REPORT

Month of October 1952 Docket No. DMEA 2471 Contract No. Idm 313
Operator's Name Albert F. Carlson, Minerals
Address Basin, Montana. Lead-Zinc

OPERATION	UNIT	COSTS THIS MONTH	UNITS THIS MONTH	COSTS TO DATE	UNITS TO DATE	UNIT COSTS TO DATE	AUTHORIZED BY CONTRACT	
							Units	Unit Costs
Drifting								
Crosscutting								
Raising								
Shafts								
Winzes								
Drilling: Core								
Churn								
Auger								
Stripping								
Trenching	Hrs	$264.00	22Hrs	$1662.00	138½	$1662	240Hrs	$2880
Test Pits								
Roads and Trails								
Supervisor	"	41.25	22Hrs	259.69	138½	$259.69	320Hrs	$ 600
TOTAL DISTRIBUTED COSTS		$305.25		$1921.69				TOTAL COSTS AUTHORIZED BY CONTRACT
Operating Equipment Purchased		None						
Initial Rehabilitation and Repairs		"						
New Buildings, Improvements, etc.		"						
TOTAL COSTS		$305.25		$1921.69				

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

Date Nov. 12/52 Operator Albert F. Carlson

Per Title Owner

REMARKS:
Bulldozing - 22 hours
@ $12.00 per hour
Supervision for the above
dozing $1.87½ per hour.

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

(Instructions on reverse)

(For Government use only)

INSTRUCTIONS

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

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

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

U. S. GOVERNMENT PRINTING OFFICE 205676

NARRATIVE

October 1952.
Idm 313
Albert F. Carlson,
Basin, Montana.

Dozed a trench 420 feet east of small shaft shown on maps as Bureau of Mines shaft in trench No. 4, and 200 feet east of Carlson trench No. 2.

Trench when completed was 160 feet long, 11 feet wide and 20 feet deep in the lowest portion. Was unable to trench deep enough for true structure of vein as flow of water encountered hindered us from so doing. But enough was accomplished to prove that the vein is there, and more than 75 feet of the trench was very much altered material, with one small stringer of galena showing near the apparent foot wall.

Mr. George E. Becraft of the U. S. Geological Survey, inspected this trench while we were working on it. Am unable to sample this trench at the present time on account of water, but plan to do so when the weather is warmer and I have a pump available.

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

Wash

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

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
DEC 8 1952

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

Month of September, 1952 Docket No. DMEA 2471 Contract No. Idm 313
Operator's Name Albert F. Carlson, Minerals Lead-zinc
Address Basin, Montana.
Contract Amount, $ 24,900.00 Government Participation: 50 % Amount, $ 12,450.00

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						
Bulldozing	$270.00	$1128.00	$1398.00	270.00	1128.00	1398.00
Crosscutting						
Drifting						
(2) Labor and Supervision:						
Labor						
Supervision	42.19	176.25	218.44	42.19	176.25	218.44
Technical Services						
(3) Operating Mat'ls. and Supplies:						
Timber						
Explosives						
Pipe						
Track						
(4) Operating Equipment:						
Rental						
Purchase						
Depreciation						
(5) Initial Rehabilitation and Repairs						
(6) New Bldgs., Improvements, etc.						
(7) Miscellaneous:						
Repairs to Equipment						
Sampling and Analysis						
Payroll Taxes						
Liability Insurance						
(8) Contingencies (specify):						
TOTALS	$312.19	$1304.25	$1616.44	312.19	1304.25	1616.44

I certify that the above bill is correct and just and that payment therefor has not been received.
Date 11/12/52 *Payee Albert F. Carlson
Per _____ Title Owner

*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:

$ 156.09

Signature _____
(Authorized Certifying Officer)

Date 12/3/52 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. Idm-E 313 in accordance with the terms of the contract.

Signature John S. McNabb Jr. Title Mining Engineer Date 11-21-52

APPROVAL BY DMEA EXECUTIVE OFFICER OR ALTERNATE:

Signature Thomas E Howard Title Min Engr Date 11-24-52

MONTHLY REPORT OF OPERATOR

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

GPO 83-38476

Form MF-104A
(April 1952)

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

UNITED STATES
DEPARTMENT OF THE INTERIOR

DEFENSE MINERALS EXPLORATION ADMINISTRATION

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
DEC 8 1952

OPERATOR'S UNIT COST AND PROGRESS REPORT

Month of September 1952 Docket No. DMEA 2471 Contract No. Idm 313
Operator's Name Albert F. Carlson, Minerals Lead-Zinc
Address Basin, Montana.

OPERATION	UNIT	COSTS THIS MONTH	UNITS THIS MONTH	COSTS TO DATE	UNITS TO DATE	UNIT COSTS TO DATE	AUTHORIZED BY CONTRACT Units	AUTHORIZED BY CONTRACT Unit Costs
Drifting								
Crosscutting								
Raising								
Shafts								
Winzes								
Drilling: Core								
Churn								
Auger								
Stripping								
Trenching	Hrs	$270.00	22½	$1398.00	116½	$1398	240Hrs	$2880
Test Pits								
Roads and Trails								
Supervisor	"	42.19	22½	218.44	116½	$218.44	320"	$ 600
TOTAL DISTRIBUTED COSTS		$312.19		$1616.44				TOTAL COSTS AUTHORIZED BY CONTRACT
Operating Equipment Purchased		None						
Initial Rehabilitation and Repairs		"						
New Buildings, Improvements, etc.		"						
TOTAL COSTS		$312.19		$1616.44				

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

Date Nov. 12, 1952 Operator Albert F. Carlson

Per _____ Title Owner

REMARKS:
Bulldozing -22½ hours
@$12.00 per hour.
Supervision for the above
dozing $1.87½ per hour.

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

(Instructions on reverse)

(For Government use only)

INSTRUCTIONS

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

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

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

GPO 83-38475

NARRATIVE

September 1952.
Idm 313
Albert F. Carlson,
Basin, Montana.

Dozed a trench 220 feet east of small shaft, shown on maps as Bureau of Mines shaft, and approximately 125 feet south of Bureau of Mines trench no. 5 made in 1951. Exposed a very strong vein structure with following sampling results from foot wall to hanging wall as follows:

	oz Au	oz Ag	% Pb	% Cu	%Zn
2 Ft. Sample	0	1.6	1.7	0	1.3
5 " "	0	1.0	1.1	0.5	1.9
3 " "	0	1.0	1.4	0.1	2.8
3 " "	0	1.0	1.2	0	2.7
3 " "	0	1.4	0	0	2.5
3 " "	0	.6	0	0	.7
3 " "	0	.2	0	0	.7

Stringer of galena not included in these samples.

Mr. George E. Becraft of the U. S. Geological Survey and Mr. John McNabb of the U. S. Bureau of Mines inspected this trench at the time the work was being accomplished and after it was completed.

This trench is 14 feet wide and 130 feet long the deepest part being 20 feet on the east wall. Besides the 20 feet shown above as sampled, there is about 60 feet additional of much altered material.

After this trench was completed I was able to ascertain the true strike on the Carlson Prospect for the first time.

Standard Form No. 1034 a—Revised
Form prescribed by
Comptroller General, U. S.
September 7, 1950
(Gen. Reg. No. 51, Supp. No. 11)

Wash.

PU[redacted] VOUCHER FOR PURCHASES AND [redacted]

SERVICES OTHER THAN PERSONAL

[redacted]O. Vou. No. .....

Bu. Vou. No. DMA-399

U. S. Interior, Mines
(Department, bureau, or establishment)

Voucher prepared at Albany, Oregon 10/3/52
(Give place and date)

THE UNITED STATES, Dr., Payee's Account No. Idm 313

To Albert F. Carlson,
(Payee)

Basin, Montana
(Address) (City) (State)

PAID BY

(For use of Paying Office)

No. and Date of Order	Date of Delivery or Service	ARTICLES OR SERVICES (Enter description, item number of contract or Federal supply schedule, and other information deemed necessary) Discount Terms net	QUANTITY	UNIT PRICE Cost	UNIT PRICE Per	AMOUNT Dollars	AMOUNT Cts.
	July and August 1952	As per attached certified form MF-104 dated August 4, 1952	July August			444 208	00 12

PAYMENT:
- Complete ☐
- Partial ☐
- Final ☐

Use continuation sheet(s) if necessary

Shipped from to Weight Government B/L No. Total 652 12

(Payee must NOT use this space)

Differences .....

Account verified; correct for 652 12

(Signature or initials) .....

Contract No. Idm 313 Date Req. No. Date Invoice Rec'd.

652.12

MEMORANDUM

ACCOUNTING CLASSIFICATION (For completion by Administrative Office)

Appropriation, limitation, or project symbol	Appropriation title	Limit'n. or Proj't. Amount	Appropriation Amount
14X4401	Revolving Fund, Defense Production Act, Interior	652.12	652.12

Allotment symbol	Amount	Obligations liquidated	COST ACCOUNT Symbol	COST ACCOUNT Amount	OBJECTIVE CLASSIFICATION Symbol	OBJECTIVE CLASSIFICATION Amount

Paid by { Check No. ..... dated ....., 19....., for $..... / Cash, $....., on ....., 19..... } on Treasurer of the United States in favor of payee named above.

16—22900a-2

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

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

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

Month of August, 1952 Docket No. DMEA 2471 Contract No. 105 513

Operator's Name Albert F. Carlson Minerals Lead-Zinc

Address Basin, Montana

Contract Amount, $ 24,900.00 Government Participation: 50 % Amount, $ 12,450.00

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						
Bulldozing	$360.00	$768	$1128.00	360.00	768.00	1,128.00
Crosscutting						
Drifting						
(2) Labor and Supervision:						
Labor						
Supervision	$ 56.25	$120	$ 176.25	56.25	120.00	176.25
Technical Services						
(3) Operating Mat'ls. and Supplies:						
Timber						
Explosives						
Pipe						
Track						
(4) Operating Equipment:						
Rental						
Purchase						
Depreciation						
(5) Initial Rehabilitation and Repairs						
(6) New Bldgs., Improvements, etc.						
(7) Miscellaneous:						
Repairs to Equipment						
Sampling and Analysis						
Payroll Taxes						
Liability Insurance						
(8) Contingencies (specify):						
TOTALS	$416.25	$888.00	$1304.25 (1304.25)	416.25	888.00	1304.25

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

Date 9/11/52 *Payee Albert F. Carlson

Per _____ Title Owner

*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:

$ 708.12

Signature _____
(Authorized Certifying Officer)

Date 10-2-52 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. Idm E 313 in accordance with the terms of the contract.

Signature John S. Mc Nabb Jr. Title Mining Engineer Date 9-16-52

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.

U. S. GOVERNMENT PRINTING OFFICE 205675

Form MF-104A
(April 1952)

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

UNITED STATES
DEPARTMENT OF THE INTERIOR

DEFENSE MINERALS EXPLORATION ADMINISTRATION

OPERATOR'S UNIT COST AND PROGRESS REPORT

DEPT. OF THE INTERIOR
Defense Minerals Administration
RECEIVED
OCT 8 1952

Month of August 1952 Docket No. DMEA 2471 Contract No. Idm 313
Operator's Name Albert E. Carlson Minerals Lead-Zinc
Address Basin, Montana.

OPERATION	UNIT	COSTS THIS MONTH	UNITS THIS MONTH	COSTS TO DATE	UNITS TO DATE	UNIT COSTS TO DATE	AUTHORIZED BY CONTRACT	
							Units	Unit Costs
Drifting								
Crosscutting								
Raising								
Shafts								
Winzes								
Drilling: Core								
Churn								
Auger								
Stripping								
Trenching	Hrs	$360	30 Hrs	$1128	94 Hrs	$1128	240Hrs	$2880
Test Pits								
Roads and Trails								
Supervisor	"	$56.25	30 Hrs	$ 176.25	"	$176.25	320Hrs	$ 600
TOTAL DISTRIBUTED COSTS								TOTAL COSTS AUTHORIZED BY CONTRACT
Operating Equipment Purchased								
Initial Rehabilitation and Repairs								
New Buildings, Improvements, etc.								
TOTAL COSTS								

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

Date Sept. 11,1952 Operator Albert E. Carlson

Per Title Owner

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:
Bulldozing 30 hours @ $12.00 per hour.
Supervision for the above dozing $1.87½ per hour.

(Instructions on reverse)

(For Government use only)

INSTRUCTIONS

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

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

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

U. S. GOVERNMENT PRINTING OFFICE 205676

NARRATIVE

August 1952
Idm-E313
Albert F. Carlson
Basin, Montana

Trenched and stripped vein east of shaft in trench #4 to sulphide floor, exposed the vein to a width of more than 50 feet and approximately 100 feet along the strike in the sulphide zone with a very good showing. After accomplishing this trenching and stripping I was able to ascertain the true strike of the vein in an easterly direction. During the course of this ork I discovered there was a bend in the vein toward the south, which made the true strike of the vein 150 feet south of the U. S. Bureau of Mines trench #5 made in 1951. On my September work I have already made one trench east which verifies the above.

Have made arrangements to have my work for July, August and September surveyed, mapped and sampled. At the present time from the work that I have ompleted the vein is 50 to 60 feet wide along the strike for 400 feet. The only known depth is a shaft 19 feet deep in the sulphides which the U. S. Bureau of Mines and myself made in 1951.

Mr. George E. Becraft of the U. S. Geological Survey examined the property and work several times in August also Mr. John S. McNabb of the U. S. Bureau of Mines.

F[redacted].04 (Rev.)
[redacted] 1952)

Wash

UNITED STATES
DE[redacted]TMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION
OPERATOR'S MONTHLY REPORT AND VOUCHER

Budget Bureau No. 42-R1036.3
Approval expires 6-30-53.
Defense Minerals Administration
RECEIVED
OCT 1 [illegible]52

Month of July, 195[illegible] Docket No. DMEA 3471 Contract No. [illegible]
Operator's Name Albert E. Carlson Minerals Sod-Ino
Address Dodin, Montana.
Contract Amount, $ 24,900.00 Government Participation: 50 % Amount, $ 12,450.00

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						
Bulldozing	$768.00	None	$768.00	768.00	-0-	768.00
Crosscutting						
Drifting						
(2) Labor and Supervision:						
Labor						
Supervision	$120.00	None	$120.00	120.00	-0-	768.00
Technical Services						
(3) Operating Mat'ls. and Supplies:						
Timber						
Explosives						
Pipe						
Track						
(4) Operating Equipment:						
Rental						
Purchase						
Depreciation						
(5) Initial Rehabilitation and Repairs						
(6) New Bldgs., Improvements, etc.						
(7) Miscellaneous:						
Repairs to Equipment						
Sampling and Analysis						
Payroll Taxes						
Liability Insurance						
(8) Contingencies (specify):						
TOTALS	$888.00		$888.00	888.00	-0-	888.00

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

Date 8/4/52 *Payee Albert E. Carlson Owner

Per _____ 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:

$ 444.00

Signature WASG
(Authorized Certifying Officer)

Date 10-2-52 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. Idm E 313 in accordance with the terms of the contract.

Signature John S. McNabb Jr. Title Mining Engineer Date 9-16-52

APPROVAL BY DMEA EXECUTIVE OFFICER OR ALTERNATE:

Signature L. E. Howard Title Min Engr Date 9/29/52

MONTHLY REPORT OF OPERATOR

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

U. S. GOVERNMENT PRINTING OFFICE 205675

F[redacted]104A
[redacted]1952)

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

Defense Minerals Administration
RECEIVED
OCT 1 [illegible]52

UNITED STATES
DEPARTMENT OF THE INTERIOR

DEFENSE MINERALS EXPLORATION ADMINISTRATION

OPERATOR'S UNIT COST AND PROGRESS REPORT

Month of July 1952 Docket No. DMEA 2671 Contract No. Idm 510
Operator's Name Albert E. Carlson, Minerals Lead-Zinc
Address Basin, Montana.

OPERATION	UNIT	COSTS THIS MONTH	UNITS THIS MONTH	COSTS TO DATE	UNITS TO DATE	UNIT COSTS TO DATE	AUTHORIZED BY CONTRACT Units	AUTHORIZED BY CONTRACT Unit Costs
Drifting								
Crosscutting								
Raising								
Shafts								
Winzes								
Drilling: Core								
Churn								
Auger								
Stripping								
Trenching	Hrs	$768	64 Hrs	$768	64 Hrs	$768	210 Hrs	$2520
Test Pits								
Roads and Trails								
Supervisor	"	$120	64 "	$120	64 "	$120	320 "	$ 600
TOTAL DISTRIBUTED COSTS		$888		$888				TOTAL COSTS AUTHORIZED BY CONTRACT
Operating Equipment Purchased		None		None				
Initial Rehabilitation and Repairs		"		"				
New Buildings, Improvements, etc.								
TOTAL COSTS		$888		$888				

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 Aug. 4th 1952 Operator Albert E. Carlson

Per Title Owner

REMARKS:

Bulldozing 8 Days @$96.00 per 8 hr. day.
Supervision 8 Days @$15.00

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

(Instructions on reverse)

(For Government use only)

INSTRUCTIONS

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

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

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

U. S. GOVERNMENT PRINTING OFFICE 205676

NARRATIVE

July 1952
Idm 313
Albert F. Carlson
Basin, Montana

Commenced bulldozing July 7th, 1952, owing to break down and mechanical difficulties on dozer, was unable to accomplish only 8 days of dozing in a 12 day period. Dozed one extra large trench approximately 175 feet west of trench #4 on the Jefferson, exposed the vein with an apparent width of more than 100 feet, with good foot wall structure with stringers of high grade lead, but so far no certainty as to just where the hanging wall is. Also dozed vein for a distance of 90 feet east of trench #4 on the Jefferson, uncovering vein more than 50 feet wide, sampling data, engineering data, etc. to be furnished with narrative for August 1952.

UNITED STATES
DEPARTMENT OF THE INTERIOR 500
DEFENSE MINERALS EXPLORATION ADMINISTRATION
WASHINGTON 25, D. C.

PROJECT SUMMARY REPORT

By: W. P. Klugescheid November 7, 1955

1. Docket No. DMEA-2471 (Lead-Zinc)
Contract No. Idm-E313
Property: North Boulder Property
Jefferson County, Montana

Operator: Albert F. Carlson
Basin, Montana

Operator's Property Rights: Owner

2. Contract dated May 12, 1952. To complete - 12 months.

Work Authorized

STAGE I

240 hours of bulldozing @ $12.00/hr.		$ 2,880.00*
Surface labor	$225.00	
Supervisor 40 days @ $15.00/day	600.00*	
Engineer part time	100.00*	925.00
Assaying		100.00
Total Stage I		$ 3,905.00

STAGE II

Engineer part time	$ 200.00*
Equipment rental	1,155.00
Equipment depreciation	259.00*
Equipment to be purchased	1,195.00
Surface rehabilitation and repairs	50.00*
New buildings	700.00*
110 feet of shaft sinking, 170 feet of crosscutting and drifting	17,436.00
Total Stage II	$20,995.00

* Maximum allowable

Total cost of Stage I	$ 3,905.00
Total cost of Stage II	20,995.00
Total estimated cost of the project	$24,900.00*
Government's participation @ 50%	$12,450.00

* Maximum allowable.

Amendments

No. 1 Dated January 26, 1953.

Increases completion period from 12 to 18 months.

Work Completed

Bulldozing 165 hours @ $12.00	$ 1,980.00
Supervision 165 hours @ $1.875	309.38
Total cost of project	$ 2,289.38
Government's participation @ 50%	$ 1,144.69

Mutual termination agreement dated January 20, 1954.

3. Audit - Report of Review dated March 18, 1954.

Total cost as billed by contractor	$ 2,289.38
Exceptions - None	
Total accepted cost	$ 2,289.38
Government's participation @ 50%	$ 1,144.69

4. Certification of Discovery - None issued.

Comments

Four bulldozer trenches across a vein and altered zone in the vicinity of the prospect shaft where lead-zinc minerals were exposed failed to disclose an ore deposit. Six diamond drill holes, drilled by a Canadian mining company in the same area, also gave negative results (the work of this company had nothing to do with the project.) Because of the poor results and the illness of the Operator the contract was terminated by mutual agreement.

The property is underlain by slightly to intensely recrystallized andesitic volcanic rocks apparently near the contact of the volcanic rocks with the intrusive quartz monzonite of the Boulder batholith. Only the volcanic rocks are exposed in the trenches; however, the quartz monzonite outcrops at some distance (several thousand feet).

The volcanic rocks have been moderately to intensely sheared. Veins consisting of quartz and small amounts of galena, pyrite, sphalerite, and rhodochrosite are present locally along this shear zone. The sheared zone varies in width in the second trench from 25 to 50 feet. Some mineralization was found in a short drift in the shear zone at the bottom of a short shaft sunk some years ago by the Bureau of Mines. This drift was driven by the Operator but previous to the obtaining of the DMEA assistance.

W. P. Klugescheid

W. P. Klugescheid

WPK/er 11/15/55

Copy to: Docket
Base Metals
Chron.

☒ Audited

☐ Certified

WORK ANALYSIS SHEET - DMEA PROJECT

Analysis as of 12/13/54.
Incl. Voucher for June, 1953.

☒ Actual Cost

☐ Agreed Unit Costs

Name Albert F. Carlson

Docket No. DMEA-2471

State Montana

Commodity Lead-Zinc

Idm-E No. 313

OPERATION	AUTHORIZED Units	AUTHORIZED Cost	COMPLETED Units	COMPLETED Cost	NET COST
Drifting & Crosscutting	170'	6 800 [1]			
Raising					
Shafts	110'	12250 [2]			
Winzes					
Drilling (Specify)					
Surface Excavation Bulldozing		3905 ~~$2,880.00~~		2289 ~~$1,980.00~~	2289 ~~$1,980.00~~
Underground Excavation					
Roads and Trails					
Operating Equipment Purchased		1,195.00			
Surface Rehabilitation & Repairs					
Underground Rehabilitation					
New Building, Improvements, etc.		750.00			
Other (Specify) Labor, Supervision etc.		~~$2,695.00~~		~~309.38~~	~~309.38~~
Totals		$24,900.00		$2,289.38	$2,289.38

[1] applied $40. per ft

[2] Balance allocated to start Sinking.

Prepared by A. F. Klugescheid

IN REPLY REFER TO:

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY
WASHINGTON 25, D. C.

RECEIVED
SEP 15 1955

September 14, 1955

Memorandum

To: W. R. Griswold, Defense Minerals Exploration Administration

From: W. P. Williams, U. S. Geological Survey

Subject: Review of Final Field Team Report, DMEA Docket No. 2471, Contract Idm-E313, Albert F. Carlson, North Boulder Prospect, Jefferson County, Montana, (lead-zinc).

I have reviewed the Final Field Team Report covering a DMEA exploration project on the subject property.

The work was terminated by agreement before completion of the work. The Field Team, however, is of the opinion that the property has been adequately explored. The work was not successful in discovering new ore deposits.

In view of the above considerations I agree with the Field Team's recommendation that no Certification of Discovery or Development be issued to the Operator by the Government.

WPWilliams

W. P. Williams

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION

~~WASHINGTON 25, D.C.~~
So. 157 Howard Street
Spokane 4, Washington

September 7, 1955

Mr. George C. Selfridge, Chairman
DMEA Operating Committee
Department of the Interior
Washington 25, D. C.

Re: Docket No. DMEA-2471
Albert F. Carlson
North Boulder Prospect
Jefferson County, Montana
Contract No. Idm-E313

Pb 3n

F.T. FINAL RPT.

Dear Mr. Selfridge:

Enclosed are four copies of the Field Team final report on the North Boulder prospect, written by John D. Bardill, Metallurgist, Bureau of Mines, and George E. Becraft, Geologist, Geological Survey.

The authors state that the exploration did not disclose any ore that might be mined, even on a small scale.

A Certification of Discovery or Development is not recommended.

By Field Team, Region I, NW District

Wing G. Agnew

Wing G. Agnew, Acting Exec. Officer
U. S. Bureau of Mines

Verne C. Fryklund Jr.

Verne C. Fryklund, Jr., Acting Member
U. S. Geological Survey

cc: USBM (2)
USGS (SRO)
Becraft

Received by
DMEA Operating Committee
9-14-55

RECEIVED
SEP 12 1955

DEPARTMENT OF THE INTERIOR

DEFENSE MINERALS EXPLORATION ADMINISTRATION

FIELD TEAM, REGION I
Northwest District

FINAL REPORT

Contract Idm-E31S

by

John D. Bardill
Metallurgist
U. S. Bureau of Mines

George E. Boorsft
Geologist
U. S. Geological Survey

ALBERT F. CARLSON
Basin, Montana

Docket No.:	DMEA 2471
Commodity:	Lead-zinc
Contract date:	May 12, 1952
Termination date:	January 20, 1954

NORTH BOULDER PROSPECT
Lowland Unorganized Mining District
Jefferson County, Montana

Spokane, Washington

July 1955

Reviewed by
DMEA OPERATING COMMITTEE
9-14-55
(date)

FINAL REPORT

ALBERT F. CARLSON
North Boulder Prospect
Lowland Unorganized Mining District
Jefferson County, Montana

Contract Idm-E313

* * * *

INTRODUCTION

This report describes a project conducted by Albert F. Carlson under an exploration contract with Defense Minerals Exploration Administration to explore by trenching, shaft sinking, drifting and crosscutting a lead-zinc lode prospect known as the North Boulder property, Jefferson County, Montana.

Summary

Four bulldozer trenches across a vein and altered zone in the vicinity of a prospect shaft where lead-zinc minerals were exposed failed to disclose an ore deposit. Six diamond drill holes (not part of contract work) drilled by a Canadian mining company in the same area also gave negative results. Because of the disappointing showing and the Operator's ill health, the contract was terminated by agreement before completion of the work.

Recommendation

A Certification of Discovery or Development is not recommended.

LOCATION AND ACCESSIBILITY

The North Boulder prospect is in the Lowland unorganized mining district, Jefferson County, Montana, in secs. 13 and 14, T. 6 N., R. 7 W., M.P.M., in the Alta Gulch area.

The deposit is easily accessible from U. S. Highway 91 by the Deer Lodge Forest-Boulder River county road, which joins the highway 4 miles west of Basin. From the highway the route is 5 miles over a well-graded county road to Alta Gulch-Thunderbolt Lookout road and about 1 mile from the county road cut-off.

The nearest shipping point is at Bernice, a Great Northern Railroad depot near the junction of U. S. Highway 91 and the county road 6 miles from the prospect.

The district is on the eastern slope of the Continental Divide in a generally mountainous area. The topography in the immediate area of the deposit appears as knolls of low relief at an altitude of about 6,400 feet. The climate is mild from late spring to early fall; the winters are not severe, with only light snowfalls.

PROPERTY

The property consists of:

Patented Lode Claims

North Boulder	Survey No. 5289
Jefferson	" " 5703
Wisconsin	" " 5704

Patented Placer Claim

Lot 38	Survey No. 64

Unpatented Lode Claims (recorded in the Jefferson County Clerk and Recorder's office at Boulder, Montana)

Jefferson Extension	Book 46	Page 629
Remnant	" 46	" 562
(East) Extension, North Boulder	" 46	" 628

Although titles were not searched, the claims are believed to be owned by the Operator.

The mine workings consist of two shafts on the North Boulder claim and one on the Jefferson claim. The larger shaft on the North Boulder claim, sunk many years ago, is caved at the collar. Several hundred feet of workings from the old shaft are indicated by the size of the dump. In 1947 the Operator sunk another shaft to a depth of about 20 feet on the North Boulder claim. From the bottom of this shaft the vein was drifted on for a distance of about 25 feet from which point a 5-ft. crosscut was driven across the vein. These workings are now inaccessible.

In 1951 the Bureau of Mines sank an 18-foot prospect shaft on the Jefferson claim. Immediately following the closing of the Bureau of Mines project, the Operator drove a 35-foot cross-cut from the bottom of this prospect shaft.

Two caved adits are on the Jefferson claim. These adits appear to be small workings; the total drifting probably did not exceed 200 feet.

Several caved prospect pits are scattered along the trend of the vein structure. Most of these appear to have been shallow. Additional shallow trenching done by the Operator failed to disclose a favorable vein structure.

There are no surface improvements.

GEOLOGY

The property is underlain by slightly to intensely recrystallized Cretaceous (?) andesitic volcanic rocks apparently near the contact of the volcanic rocks with the intrusive quartz monzonite of the Boulder batholith. Only the volcanic rocks are exposed in the bulldozer trenches; however, the quartz monzonite crops out a few thousand feet northeast of the Bureau of Mines shaft.

The volcanic rocks have been moderately to intensely sheared along an east-trending zone (fig. 1). Veins consisting of quartz and small amounts of galena, pyrite, sphalerite, and rhodochrosite are present locally along this sheared zone. The sheared zone is covered by a thick mantle of hillwash but is exposed in several bulldozer trenches. The sheared zone ranges in width from about 25 feet in the second trench on the vein west of the Bureau of Mines shaft to about 50 feet in the vicinity of the shaft.

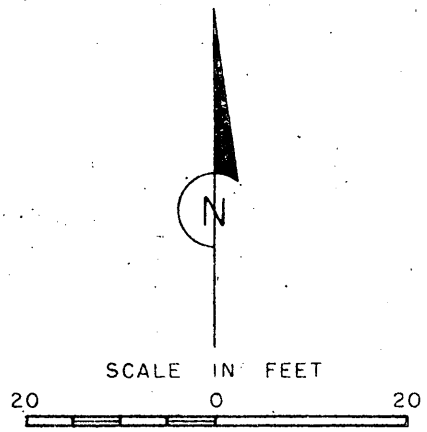
The best exposure of the sulfide-bearing veins is in the bulldozed area adjacent to the Bureau of Mines shaft (figs. 1 and 2). Here at least five separate veins are exposed over a width of 30 feet; the veins ranging in width from a few inches to 2 feet.

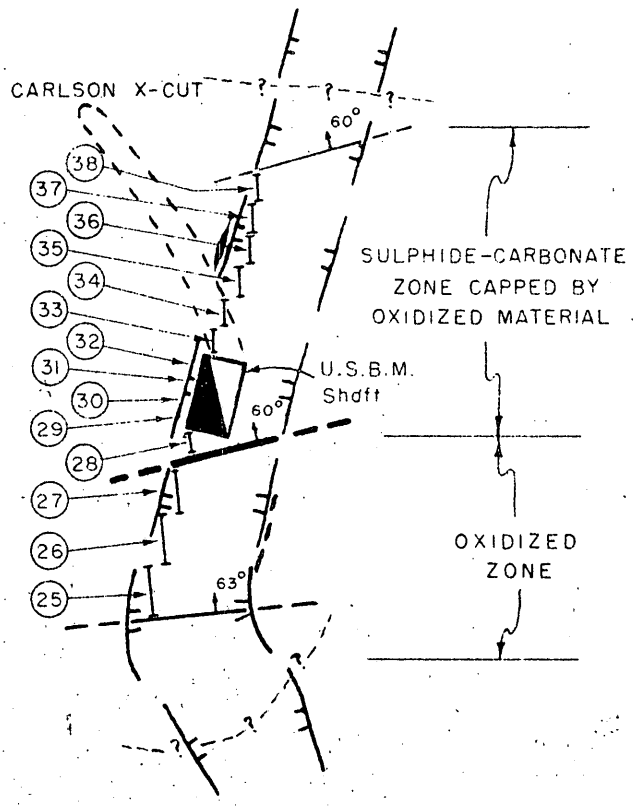
In the vicinity of the shaft the attitude of the sheared zone and the veins, which approximately parallel the sheared zone, changes from a strike of N. 80° E. and dip of 60° NW. in the western half of the bulldozed area to a strike of S. 80° E. and dip of 60° NE. in the eastern half of the bulldozed area.

CHANNEL SAMPLE DATA

Sample No.	Length in feet	Ounces		Percent			
		Au	Ag	Pb	Zn	Mn	Cu
25	5.0	0.01	0.8	0.15	<0.1	1.20	0.03
26	5.0	0.02	2.2	0.15	<0.1	0.59	0.03
27	5.0	0.01	2.4	0.20	<0.1	0.37	0.05
28	2.5	0.005	2.3	1.38	0.21	1.40	0.04
29	2.5	0.08	6.8	12.9	0.34	0.78	0.81
30	2.5	0.08	3.0	8.97	<0.1	0.37	0.22
31	2.5	0.08	3.5	8.07	0.31	0.45	0.49
32	2.5	0.05	1.2	1.79	<0.1	0.70	0.14
33	2.5	<.005	0.7	2.56	<0.1	0.45	0.10
34	2.5	0.01	0.7	0.15	<0.1	1.30	0.10
35	2.5	0.04	2.3	4.86	0.73	0.92	1.32
36	2.5	0.01	0.9	1.87	<0.1	0.16	0.09
37	2.5	0.01	0.9	0.23	<0.1	0.14	0.07
38	2.5	0.01	0.5	0.15	<0.1	0.16	0.02
39*	Grab	0.01	2.4	3.58	<0.1	0.41	0.76
41*	Grab	0.005	1.4	0.26	0.10	0.06	0.03
42*	Grab	0.005	0.8	0.23	0.16	4.5	0.05

NOTE: * indicates shaft grab sample.
Sample 39 — Taken 5 ft. below collar in oxide zone.
Sample 41 — Taken 15 ft. below collar in oxide zone.
Sample 42 — Taken 15 ft. below collar in sulphide-carbonate zone.





LEGEND

- Fault, showing dip.
- Gouge pockets.
- -?- -?- Probable contact with unaltered zone.
- (25) Channel sample.
- USBM Trench

Mapping plane — trench bottom.
Compass & tape survey.
F. W. BUEL, U.S.B.M.

FIGURE 2 – Assay - Geology Plan in vicinity of U.S.B.M. Shaft
North Boulder Property, Jefferson County, Montana

In the four trenches put in with DMEA assistance, two west of the shaft and two east of the shaft (fig. 1), only the upper, oxidized part of the shear zone is exposed. In these trenches the zone is moderately to intensely iron stained, locally containing quartz veins and, rarely, galena. Samples taken by the operator from these trenches are said to average about 1.0 ounce silver, 1.5 percent lead, 2.0 percent zinc, and a trace copper.

Channel sample data obtained in the vicinity of the Bureau of Mines shaft prior to the granting of the DMEA contract are shown in figure 2.

In December 1952 the Bureau of Mines shaft was unwatered. This shaft is 18 feet deep with a short crosscut to the north from this level. Sample data from this crosscut are given on figures 3 and 4.

Subsequent to the DMEA exploration program, the property was leased to the Mentor Exploration and Development Co., Ltd., Toronto, Canada, which drilled six diamond drill holes from about 145 to 200 feet in length. The locations of these holes are shown on figure 1. Core recovery was very poor. Core logs made by Philip Chubb, geologist for the Mentor Company, and sample data from the sludge are contained in the map holder.

The DMEA trenching and the subsequent diamond drilling indicates that the shear zone is continuous for a distance of at least 1,000 feet. Locally it includes some concentrations of lead and zinc minerals which nearly approach ore grade, but these concentrations appear to be small and scattered.

THE PROJECT

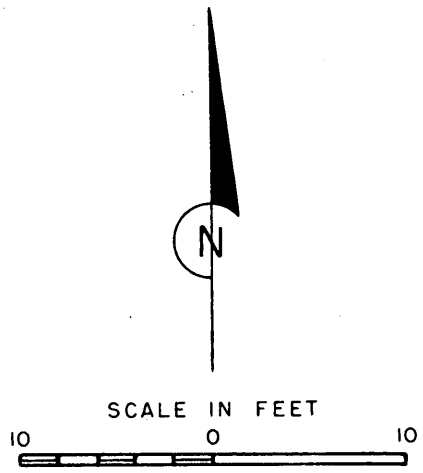
Prior to the DMEA contract, the Bureau of Mines undertook a reconnaissance prospecting project at this property in July 1951 and completed it in September 1951. The work consisted of 8 bulldozer trenches having a total length of 1,045 feet, an average length of 131 feet, average depth of 15 feet, and width of 12 feet. One 5- by 8-foot shaft, 18 feet deep, was sunk where the vein contained galena, sphalerite and rhodochrosite (see figs. 2 and 3).

The mineralized zone appeared to be of sufficient importance to warrant further exploration by additional trenching and underground work.

SAMPLE DATA*

Sample No.	Length in Feet	Ounces		Percent			
		Au	Ag	Pb	Zn	Mn	Cu
44	5.0	0.005	1.0	1.25	1.13	4.3	0.08
45 48	5.0 5.0 }	0.03	1.9	4.06	4.08	7.8	1.89
46	5.0	0.01	0.9	1.33	0.76	3.9	0.44
47	5.0	0.02	1.9	3.07	5.38	6.8	1.38
49	5.0	0.005	0.5	0.10	<0.1	0.66	0.23
50	5.0	0.01	0.4	0.13	<0.1	0.74	0.18

Note: * Samples from each round taken by owner and analyzed by U.S.B.M.



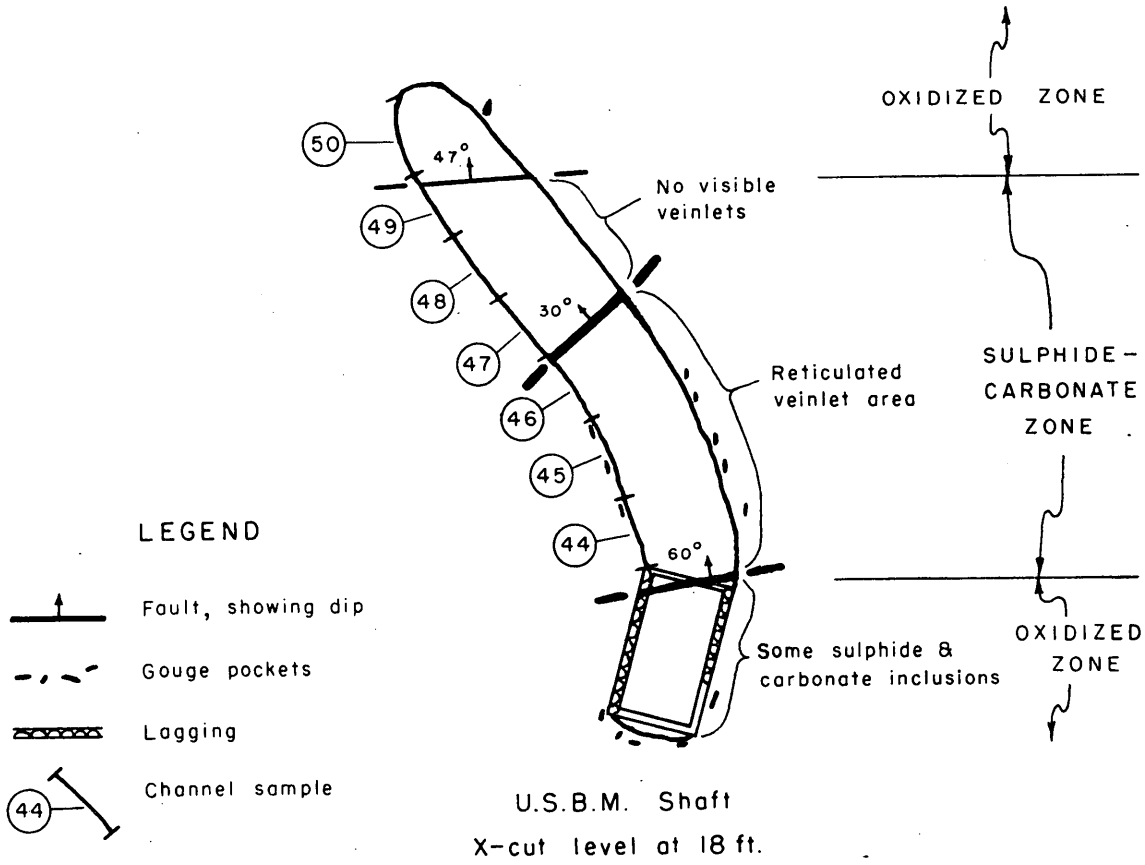
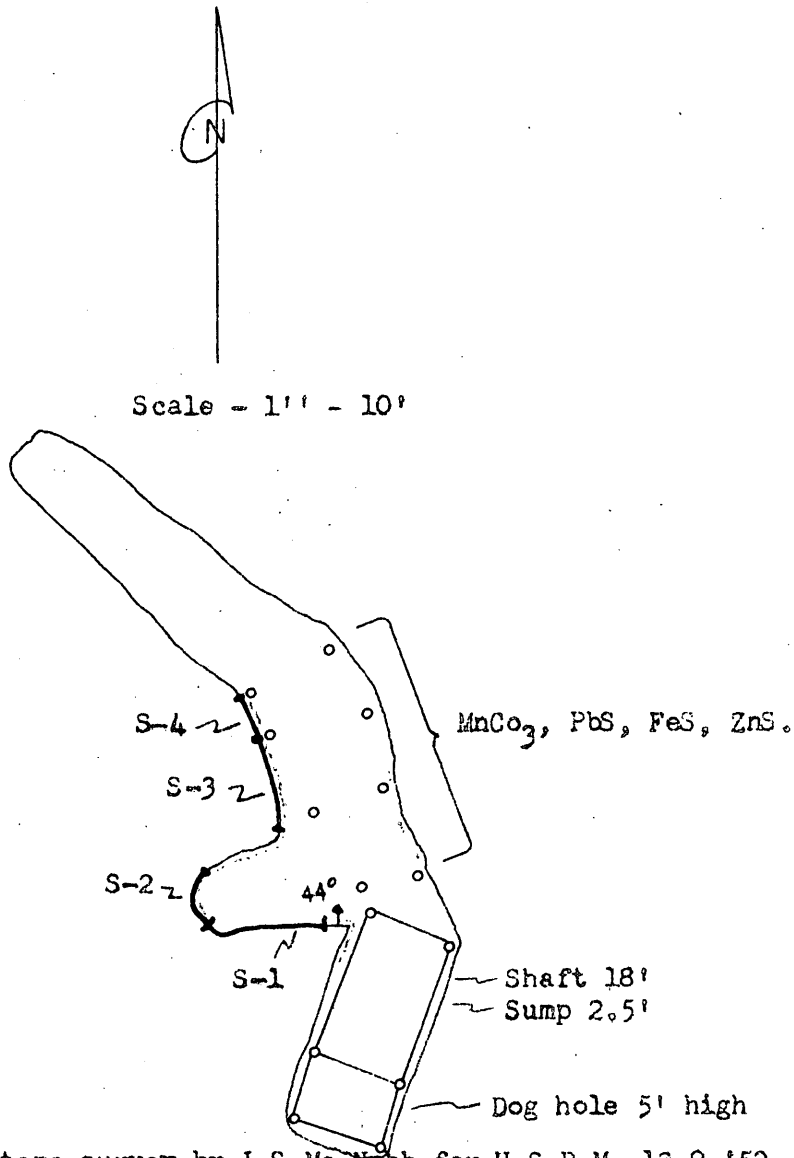


Figure #3.—Assay-geology plan of Carlson Crosscut, Jefferson Claim.

(Pb Zn) Idm. E - 313



Samples and Brunton-tape survey by J.S.Mc Nabb for U.S.B.M. 12-9-'52

Sample No.	Width	Oz. Au	Oz.Ag	%Pb	%Zn	%Cu	%Mn
S-1	6.5'	0.04	0.5	0.6	0.5	0.12	5.9
S-2	3.0'	*	*	2.7	0.3	*	*
S-3	4.0'	*	*	4.6	7.0	*	*
S-4	2.5'	*	*	1.9	0.8	*	*

* No test made. Analyses made by Peter Mack, Walace, Idaho.

FIGURE 4 - Assay Plan of 18 foot level, U.S.B.M. Shaft
North Boulder Property, Jefferson County, Montana

The project was designed to prospect this zone on the Jefferson claim in two stages. Stage I consisted of not more than 240 hours of bulldozer trenching by independent contract and some sampling. If in the opinion of the Government the results of Stage I warranted continuation of the project, then Stage II would be approved and undertaken. Stage II would consist of 110 feet of shaft including 10 feet of sump and 170 feet of crosscutting and drifting from the 100-foot level on an actual cost basis. Stage I was estimated to cost $3,805.00 and Stage II $20,995.00, or a total of $24,800.00 in which the Government participation would be $12,400.00. Expenditures for supervision, equipment rental and purchase, sampling, and new buildings, etc., were included.

Operator started work on June 7, 1952, and excavated Trench No. 1 about 100 feet west from the Bureau of Mines shaft. The trench was about 130 feet long, 14 feet wide, with a maximum depth of 20 feet. A bleached white zone from 2 to 5 feet wide was intersected in the altered zone. Trench No. 2 was located about 260 feet east of the Bureau of Mines shaft and was approximately 120 feet long and 13 feet wide. Trench No. 3 was located about 420 feet east of the Bureau of Mines shaft. It was about 160 feet long, 11 feet wide, and 20 feet deep. Trench No. 4 was located about 320 feet west of the shaft and measured about 165 feet long, 12 feet wide, and 14 feet deep.

Trenching demonstrated the presence of a shear zone, but no ore was found. See figure 1 for the location of the trenches.

Amendment No. 1, dated January 26, 1953, changed the period of completion from 12 to 18 months, which extended the completion date to November 12, 1953. During the summer of 1953, the Operator bulldozed one trench.

In an agreement dated August 8, 1953, the Operator leased the property with an option to purchase to Henry Shute of Butte, Montana. Shute's plan was to sink an inclined exploratory shaft on the ore, then strip the overburden and mine the ore by open-pit methods. A shallow inclined shaft about 15 feet deep was sunk, which promptly caved. This work was to be done at Shute's expense apart from the DMEA contract.

Later in September Shute assigned his lease to the Mentor Exploration & Development Co., Ltd., of Toronto, Ontario. The company diamond drilled five holes to prospect in the vicinity of the Bureau of Mines shaft and DMEA trenches and one hole near the old Carlson shaft. Hole No. 4, just west of the Bureau of Mines shaft, was the

only one which encountered any significant amounts of lead, zinc, and silver. A zone roughly between 125 and 1 0 feet deep showed silver assays from 0.6 to 2.9 ounces silver per ton, 0.8 to 2.2 percent lead, and 0.1 to 6.5 percent zinc. Refer to figure 1 for location, depth, bearing, and inclination of the holes. Reference should be made to the logs of the holes and assays of the samples taken. (See map holder.) The company terminated its lease because of the disappointing drilling results. Although the diamond drilling was not a specific part of the DMEA project, this supplemental data is presented through the courtesy of the Canadian company with the consent of the Operator.

No further work was done, and the contract was terminated January 20, 1954, by agreement but before completion of the work. On March 22, 1954, the Field Team accepted copies of the Operator's drill logs, maps, and assays in lieu of a final report.

Exploitation Possibilities

Neither the DMEA trenches nor the six diamond drill holes drilled by the Canadian mining company located any ore that might be mined even on a small scale.

Summary of Factual Data

Work

The contract, dated May 12, 1952, was in the amount of $24,800.00 of which $12,450.00 was to be the Government's participating share. The final audit of accounts shows only $2,289.38 was expended on the project of which amount the Government contributed $1,144.69.

Four trenches aggregating about 645 linear feet were cut with a bulldozer, requiring 165 hours, under Stage I by independent contracts.

Stage II providing for shaft sinking, crosscutting and drifting was never undertaken.

There was no production from this project.

Equipment

Stage II provided for the purchase of a rock drill, mine car, blasting machine, and high head sump pump, but since this phase of the project was never undertaken this equipment was not purchased.

Discussion of Conclusions

Prior to the DMEA contract trenching, Carlson had driven a short crosscut northwest from the bottom of the 18-foot Bureau of Mines exploratory shaft which in several places showed mineralization of ore grade.

This property was adequately prospected by trenching and diamond drilling with negative results; therefore, a Certification of Discovery or Development is not recommended.

Enclosures
Distribution:
DMEA (4)
USBM (5)
USGS (SRO)
Dockot
Beeraft

APPENDIX

Detailed Summary of Project Costs

Cost to bulldoze four trenches approximately 645 total linear feet with varying depths. One hundred sixty-five hours were required to cut the trenches.

Item	Total Cost	Unit Cost per Foot
(1) Bulldozing - 165 hours 645 linear feet	$1,980.00	$3.07
(2) Supervision - 165 hours @ $1.875 per hour	309.38	.48
Total Cost	$2,289.38	$3.55

The Government participated in 50 percent of the exploration expenses, amounting to $1,144.69.

Note: These costs have been taken from the final audit which has been approved by Washington, D. C.

PROPERTY Corlyn Prospect, Montana.

HOLE NUMBER 1

SHEET NUMBER 1

SECTION FROM ..... TO .....

DIAMOND DRILL RECORD

LOCATION: LAT. Moe Bay.
DEP.

ELEVATION OF COLLAR

DATUM

DIRECTION AT START: BEARING N 16° E.
DIP 60°

STARTED October 6

COMPLETED October 12

ULTIMATE DEPTH

PROPOSED DEPTH

DEPTH FEET	FORMATION	SAMPLE NO.	WIDTH OF SAMPLE	GOLD $	SLUDGE GOLD $		
0-52	Saprolite zone, cased.						
52-72	Slightly weathered quartz monzonite, dark grey, 10% recovery.						
72-93	Contact phase, showing assimilation or replacement of quartz monzonite by aplite, both slightly porphyritic in character. Partial talc replacement of feldspar, 30% recovery.						
93-127	Aplite, white, fine-grained, in part slightly porphyritic. talcose, containing small percentage of disseminated pyrite, galena, and in fractures. 50% recovery.			Sludges Taken			
127-130	Contact phase as above, high talc.			130-135			
130-140	As above but with small quartz stringers, sulphides, in 8 inches recovered. Return water showing heavy talc.			135-140 140-145 145-150 150-155 155-160			
140-145	2 inches quartz recovered containing sulphides, Pb. Fe heavy talc indicated by return water.						
145-150	Commenced using D core barrel. Segments of core recovered only, about 10% recovery. Fragments are quartz with galena, sphalerite, pyrite, chalcopyrite and rhodochrosite. Heavy talc.						
150-161	Aplitic quartz monzonite, talcose, 25% recovery of core fragments, a few solid pieces. Pb, Zn, Fe Cu sulphides present. Rhodochrosite and some rhodonite, core at 161.						

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PROPERTY Carlson Prospect.

HOLE NUMBER 1

SHEET NUMBER 8

DIAMOND DRILL RECORD

SECTION FROM ..... TO .....

LOCATION: LAT. .....
DEP. .....

ELEVATION OF COLLAR .....

DATUM .....

DIRECTION AT START: BEARING .....
DIP .....

STARTED .....

COMPLETED .....

ULTIMATE DEPTH .....

PROPOSED DEPTH .....

DEPTH FEET	FORMATION	SAMPLE NO.	WIDTH OF SAMPLE	GOLD $	SLUDGE / GOLD $		
161-202	quartz monzonite, slightly porphyritic to porphyritic. rare sulphides, sludge at 164. partial talc replacement or hornblende. 50% recovery.						
202	End of hole. stopped use of B core barrel at 170.						

Remarks

It appears that in the ore zone the feldspar has been replaced by hornblende and and later the hornblende was replaced by talc, leaving as a result quartz grains enclosed in talc such a condition making core recovery almost impossible. The contained sulphides and carbonates being of lesser quantity and only slightly harder failed also to core.

Sludge; The white and silky nature of the return water shows the high talc content, and the captured sludge consists chiefly of quartz grains and finer grains of sulphides. ~~The sulphide content is extremely difficult to estimate, but probably lower than expectations.~~

The very low core recovery in the zone, about 15 percent composed of the hardest material, ~~indicates that the only reliable samples will be the sludges therefore the core will not~~ be sampled at the present but kept for specimen purposes.

P. T. Chubb.

NORTHERN MINER PRESS LIMITED, TORONTO—STOCK FORM No. 501 REV. 9/48

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SIGNED

JOHN S. ROACH

Phone 2-8131

LEWIS & WALKER

ASSAYERS AND CHEMISTS

SHIPPERS' REPRESENTATIVES

Drawer 1980

108 North Wyoming Street
BUTTE, MONTANA

Date Oct 15, 1953

Basin Jib Gold Mines

Your Sample Assayed as Follows:

Hole #1	OZS. PER TON SILVER	OZS. PER TON GOLD	VALUE PER TON AT $35 PER OZ. GOLD $ CTS.	% COPPER	% LEAD	% ZINC	% SILICA	% IRON	% MANGANESE	%
135-145				Trace	0.10	Trace				
145-155				Trace	Trace	Trace				
155-165				Trace	Trace	Trace				
165-175				0.03	0.10	0.30				
175-185				0.01	0.15	0.20				
185-195				Trace	0.10	0.10				

Charges $

Respectfully Submitted

Lewis & Walker

JM

PROPERTY Goudson Prospect; Montana.

HOLE NUMBER 2

SHEET NUMBER 1

SECTION FROM ..... TO .....

DIAMOND DRILL RECORD

LOCATION: LAT. See map.
DEP.

ELEVATION OF COLLAR

DATUM

DIRECTION AT START: BEARING N.
DIP -65°

STARTED October 12

COMPLETED October 22.

ULTIMATE DEPTH

PROPOSED DEPTH

DEPTH FEET	FORMATION	SAMPLE No.	WIDTH OF SAMPLE	GOLD $	SLUDGE GOLD $		
0-60	Casing; hole later cased to 150'						
	0-40 Saprolite zone.						
	40-60 Weathered monzonite.						
60-89	Quartz monzonite, slightly propylitized, a few narrow quartz stringers carrying lead and zinc. 35% recovery.						
89-109	Impure aplite, in part altered monzonite, a few narrow quartz stringers with pyrite, rare galena.						
109-160	Propylitized quartz monzonite, slightly talcose, only 8' of core, quartz, recovered between 125 and 140 containing low sulphides. Water recovery indicates talc.						
160-185	No core recovery, sludge indicates above.						
184-185	Sludge and wash pink colored, iron oxide.						
185-200	No core recovery (1 foot only) sludge and core show propylitized and talcose monzonite.						

JOHN S. ROACH

Phone 2-8131

LEWIS & WALKER

ASSAYERS AND CHEMISTS

SHIPPERS' REPRESENTATIVES

Drawer 1980

108 North Wyoming Street
BUTTE, MONTANA

Date Oct 29, 1953

Basin Jib Gold Mines

Your Sample Assayed as Follows:

	OZS. PER TON SILVER	OZS. PER TON GOLD	VALUE PER TON AT $35 PER OZ. GOLD $ Cts.	% COPPER	% LEAD	% ZINC	% SILICA	% IRON	% MANGANESE	%
H 2 125'-130'					0.20	Trace				
H 2 135'-140'					0.15	Trace				
H 2 175'-180' (?)					0.10	Trace				
(?) 180'-185'					0.30	Trace				
H 2 185'-190'					0.20	Trace				
H 2 190'-195'					0.10	Trace				
H 2 195'-200'					0.05	Trace				

Charges $

Respectfully Submitted

Lewis & Walker

PROPERTY [illegible]

HOLE NUMBER 3

SHEET NUMBER

SECTION FROM ..... TO .....

DIAMOND DRILL RECORD

LOCATION: LAT. See MAP
DEP.

ELEVATION OF COLLAR

DATUM

DIRECTION AT START: BEARING South
DIP 45°

STARTED [illegible]

COMPLETED [illegible]

ULTIMATE DEPTH

PROPOSED DEPTH

DEPTH FEET	FORMATION	SAMPLE No.	WIDTH OF SAMPLE	GOLD $	SLUDGE GOLD $		
0-25	Casing. Saprolite zone. Bx.						
25-63	Ax casing core, slightly weathered monzonite.						
63-125	Normal grey monzonite, quartz stringer with sulphides at 110. 20% recovery.						
125-200	Monzonite, recovered core slightly porphyritic. [illegible] talc. quartz stringers with sulphides at 130, 145. 20% recovery.						
	Sludge samples: 125-130						
	130-135						
	135-140						
	140-145						

NORTHERN MINER PRESS LIMITED, TORONTO—STOCK FORM No. 501 REV. 9/44

JOHN S. ROACH

Phone 2-8131

LEWIS & WALKER

ASSAYERS AND CHEMISTS

SHIPPERS' REPRESENTATIVES

Drawer 1980

108 North Wyoming Street
BUTTE, MONTANA

Date Oct 29, 1953

Basin Jib Gold Mines

Your Sample Assayed as Follows:

	OZS. PER TON SILVER	OZS. PER TON GOLD	VALUE PER TON AT $35 PER OZ. GOLD $ Cts.	% COPPER	% LEAD	% ZINC	% SILICA	% IRON	% MANGANESE	%
H 3 125'-130'					0.05	Trace				
H 3 130'-135'					Trace	Trace				
H 3 135'-140'					0.10	Trace				
H 3 140'-145'					0.15	Trace				

Charges $_____

Respectfully Submitted

Lewis & Walker
JSR

Property Carlson Prospect, Montana

Hole Number 4

Sheet Number 1

Section From _____ to _____

DIAMOND DRILL RECORD

Location: Lat _____
Dep See map

Elevation of Collar _____
Datum _____
Direction at Start: Bearing _____
Dip _____

Started October 27
Completed October 31
Ultimate Depth 144
Proposed Depth _____

Depth Feet	Formation	Sample No.	Width of Sample	Gold $	Sludge Gold $
0-39	Saprolite zone, Bx casing				
39-61	Ax casing, core, weathered slightly porphyritic monzonite				
61-115	Slightly porphyritic monzonite, slightly talcose				
115-140	Vein zone, heavy talcose water, 2 feet of core recovered shows good grade galena, rhodochrosite, chalcopyrite and a little sphalerite.				
140-144	Slightly porphyritic monzonite. End of hole				
	Specimen sample from 133'				
	Core samples: 115-120				
	120-125				
	125-130				
	130-135				
	135-140				
	The division of core between samples above is very inaccurate				
	Sludge samples are at five foot intervals between 115 and 140				
	Sludge examination would indicate low values except for one five foot section				

Drilled by _____ Signed _____

JOHN S. ROACH

Phone: 2-8131

LEWIS & WALKER

ASSAYERS AND CHEMISTS

SHIPPERS' REPRESENTATIVES

Drawer 1980

108 North Wyoming Street
BUTTE, MONTANA

Date Nov 2, 1953

Basin Jib Gold Mines

Your Sample Assayed as Follows:

Ore	OZS. PER TON SILVER	OZS. PER TON GOLD	VALUE PER TON AT $35 PER OZ. GOLD $ CTS.	% COPPER	% LEAD	% ZINC	% SILICA	% IRON	% MANGANESE	%
Hole 4--115-120	0.50	0.005		0.02	0.60	1.10				
" " 120-125	1.00	0.02		0.36	0.90	1.20				
" " 125-150	0.60	0.01		0.51	2.10	0.60				
" " 130-135	2.00	0.04		0.08	2.20	2.40				
" " 135-140	2.90	0.08		Trace	1.00	0.10				
Barite sample=~~$33.80~~ $BaSO_4$										

Charges $

Respectfully Submitted

Lewis & Walker

JOHN S. ROACH

Phone 2-8131

LEWIS & WALKER

ASSAYERS AND CHEMISTS

SHIPPERS' REPRESENTATIVES

Drawer 1980

108 North Wyoming Street
BUTTE, MONTANA

Date July 5, 19[illegible]

Basin - Jib Gold Mines

Your Sample Assayed as Follows:

	OZS. PER TON	OZS. PER TON	VALUE PER TON AT $35 PER OZ.	%	%	%	%	%	%	%
	SILVER	GOLD	GOLD $ CTS.	COPPER	LEAD	ZINC	~~MANGANESE~~			
Hole #4										
115' - 120'					0.90	1.90				
120' - 125'					0.80	0.90				
125' - 130'					1.50	~~1.60~~ Zn assay 6.50%				
130' - 135'					1.30	2.40				
135' - 140'					0.80	3.80				

Charges $

Respectfully Submitted

Lewis & Walker

JM

Property Carlson Prospect, Montana

Hole Number 5

Sheet Number

Section from ____ To ____

DIAMOND DRILL RECORD

Location: Lat. ____ Dep. See Map

Elevation of Collar ____

Datum ____

Direction at Start: Bearing South. Dip -45°

Started November 1

Completed November 10.

Ultimate Depth ____

Proposed Depth ____

Depth Feet	Formation	Sample No.	Width of Sample	Gold	Sludge Gold $
0-30	Nx Casing.				
30-63	Ax Casing. Monzonite, slightly porphyritic to porphyritic.				
63-145	Normal porphyritic monzonite, slight alteration only no evidence of mineralization. Talc zone if existant at expected horizon of 110 feet very narrow. 25 percent core recovery.				

Sludge samples.
115-120
120-125
125-130

Drilled by P. A. C.

PROPERTY CARLSON PROJECT, Montana.

HOLE NUMBER 6

SHEET NUMBER 1

SECTION FROM ..... TO .....

DIAMOND DRILL RECORD

LOCATION: LAT. See Map
DEP.

ELEVATION OF COLLAR

DATUM 285'

DIRECTION AT START: BEARING South
DIP -45°

STARTED November 10, 1953

COMPLETED November 15, 1953

ULTIMATE DEPTH 150'

PROPOSED DEPTH

DEPTH FEET	FORMATION	SAMPLE No.	WIDTH OF SAMPLE	GOLD $	SLUDGE / GOLD $
0 - 23	N.X. Casing				
23 - 69	N.X. Casing core				
	23 - 29 Argillite				
	29 - 150 Homestake; very poor core recovery; very muddy 93 - 120; no core 93 - 120.				
	Sludge Samples				
	90 - 100				
	100 - 110				
	110 - 120				
	120 - 130				

UNITED STATES 500
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION
WASHINGTON 25, D. C.

File Copy
Surname

February 9, 1955

Memorandum

To: Chief, Contract Administration & Audit Division

From: Chief, Base Metals Division

Subject: Contracts for which no closing letters will be prepared

We have been advised not to prepare closing letters for the following contracts as too long a period has passed since the completion or termination of these contracts.

Docket No.	Contract No.	Operator
1593	I4m-7113	Ambassador Mines Corporation
1936	7160	Sun Valley Lead-Silver Mines, Inc.
2037	7159	Amadee Saugnet
1630	7182	American Zinc, Lead & Smelting Co.
2008	7226	Linton Mines
2034	7273	White Pine Lead Company
1476	7287	Buckskin Mines, Inc.
2471	7313	Albert F. Carlson
2475	7318	Jim Creek Mines, Inc.

W. R. Griswold

WRGriswold/bjl

W. R. Griswold

Copy to: Docket (9)
Base Metals (9)
Chron.

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

MAR 29 1954

Mr. Charles A. Turner
DMEA Auditor
1201 North Division Street
Spokane 2, Washington

Re: Contract Idm-E313, DMEA-2471
Albert F. Carlson
Jefferson County, Montana

Dear Mr. Turner:

Receipt is acknowledged of your Report of Review covering the above-cited contract.

The Report is acceptable and normal distribution may be effected.

Sincerely yours,

(Signed) J. L. Chambers

Jay L. Chambers, Chief
Contract Administration
and Audit Division

WBorofies/wb
March 29, 1954

Copy to: Docket
Admr. Reading File
Mr. Chambers

R.C.S.
3-29-54

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION

~~WASHINGTON 25, D.C.~~
So. 157 Howard Street
Spokane 4, Washington

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
MAR 26 1954

March 22, 1954

Mr. R. J. Hindman, Certifying Officer
DMEA Field Team, Region II
1201 North Division
Spokane, Washington

Re: Docket No. DMEA-2471 (lead-zinc)
Albert F. Carlson
Jefferson County, Montana
Contract No. Idm-E313

Dear Mr. Hindman:

This is to advise you that work on the subject contract was terminated by agreement on January 20, 1954, before completion of the work. On March 11, 1954, the operator mailed to this office a letter in which he stated that the invoice for June 1953 would be his final invoice. Attached to his letter were copies of drill logs, maps, and assay data as requested of him by Field Team letter of January 22, 1954.

The Executive Officer hereby accepts the operator's letter with attached data in lieu of a final report. These data, pertaining to work not done under DMEA contract, can be advantageously incorporated into the Field Team's final report.

Project work consisted only of a small amount of subcontract bulldozing and, therefore, no Government equity was acquired in equipment or supplies.

As all contract obligations have either been met or waived, it is requested that the subject contract be scheduled for immediate audit and that final payment to the operator be made as soon as possible so that the account may be closed.

Sincerely yours,

A. E. Weissenborn
Executive Officer, DMEA
Field Team, Region II

cc: USBM (2)
DMEA (2)
Hall
Jay L. Chambers, Wash., D. C.

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION
~~WASHINGTON 25, D.C.~~
So. 157 Howard Street
Spokane 4, Washington

Department of the Interior
Defense Minerals Administration
Received
MAR 19 1954

March 15, 1954

Mr. George C. Selfridge, Chairman
Operating Committee, DMEA
Department of the Interior
Washington 25, D. C.

Re: Docket No. DMEA-2471 (lead-zinc)
Albert F. Carlson
North Boulder Property
Jefferson County, Montana
Contract No. Idm-E313

Dear Mr. Selfridge:

Enclosed are the original and two signed copies of an agreement mutually terminating the above-referenced contract after commencement but before completion of the work.

Distribution of this document is being made in the usual manner.

Sincerely yours,

A. E. Weissenborn
Executive Officer, DMEA
Field Team, Region II

Enclosure
cc: Finance Officer w/encl.
USBM (2)
Becraft

RECEIVED
MAR 25 1954
GENERAL COUNSEL
DEFENSE MINERALS
ADMINISTRATION

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

1201 N. Division St.
Spokane 2, Washington
March 10, 1954

MEMORANDUM

To: DMEA Field Team, Region II

From: John D. Bardill, Bureau of Mines

Subject: Final inspection report, North Boulder (A. F. Carlson) Property, Jefferson County, Montana, Contract Idm-E313, Docket No. DMEA 2471

Termination of the contract by mutual consent before completion of the work was discussed with Mr. A. F. Carlson at his home near Basin, Montana, March 9, 1954. Mr. Carlson agreed to sign the termination agreement forms, which had already been submitted to him, within the next few days and transmit them to Spokane, together with drill logs, assays, and maps.

Mr. Carlson has been confined to the hospital most of the time for the last few months, which accounts for his delay in signing and returning the termination agreement forms.

The Government has no equity in equipment or supplies for the project.

John D. Bardill

Orig. & 3 cys - Wash.
USGS (2)
DMEA
M/D
AD
JDB/he

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION

WASHINGTON 25, D.C.
So. 157 Howard Street
Spokane 4, Washington

March 10, 1954

Mr. A. T. Carlson
Basin
Montana

Re: Docket No. DMEA 2471 (lead-zinc)
North Boulder property
Jefferson County, Montana
Contract No. Idm-1313

Dear Mr. Carlson:

Under cover of a letter to you of January 22, 1954, copies of a mutual termination agreement were sent to you for your signature. We would appreciate your signing the forms and returning them to this office as soon as possible.

Also, it was pointed out to you that the sum of $367.00 was being withheld by our Certifying Officer pending receipt of your final invoice, if any, and final report on project work. Particularly we would like to receive the drill logs, assay data, and any maps that you may have received from the Mentor Exploration and Development Company concerning their work on your property.

We are very anxious to get your contract closed and make final settlement with you. Therefore, your immediate attention to this matter is requested.

Very truly yours,

A. E. Weissenborn
Executive Officer, DMEA
Field Team, Region II

cc: DMEA (2)
USBM (2)
Hindman
Becraft

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION
~~WASHINGTON, D.C.~~
So. 157 Howard Street
Spokane 4, Washington

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration

January 22, 1954

Mr. A. F. Carlson
Basin, Montana

Re: Docket No. DMEA-2471 (lead-zinc)
North Boulder property
Jefferson County, Montana
Contract No. Idm-8313

Dear Mr. Carlson:

Mr. John D. Bardill, U. S. Bureau of Mines, has informed us that he visited with you at your home on December 9, 1953, to discuss the status of your DMEA contract. Mr. Bardill has advised that he conferred with you on the possibility of terminating the contract by mutual agreement before completion of the work, and that you agreed it would be to the best interests of the Government and yourself to terminate by this procedure. Pursuant to this agreement, we have prepared a form for mutual termination, which is enclosed herewith. Please sign all copies of this form, retain that copy marked for the Operator and return the others to this office.

Your attention is directed to that section of the agreement in which it is noted that costs of any work done after June 30, 1953, shall be for the sole account of the Operator, except for those necessary costs of settling the contract. In this connection, our Certifying Officer has informed us that he is withholding payment on an invoice submitted by you for the month of June 1953 in the amount of $367.69. This payment has been withheld pending settlement of the contract. It will be paid when you have returned the signed termination forms and when you have presented us with your final invoice and final report on project work, as specified in the contract. It is assumed that your June invoice will be your final invoice as no project work is known to have been done since then. However, if you have incurred allowable contract costs necessary to the closing out of the contract since that time they should be presented for consideration.

We will not require an extensive final report from you concerning project work. We would appreciate the drill logs, assay data, and any maps that you may have received from the Mentor Exploration and Development Company concerning their work on your property. We would like to incorporate this information with that which we already have on your property to complete our DMEA records. In the event you have only one copy of the data we need, we would be glad to return it to you upon request.

In addition to the map, assay, and drill log data we would also like a letter from you describing very briefly what was done in the way of DMEA project work, and stating that no more project costs will be billed to the Government after the final invoice has been presented.

Your attention to this matter will be appreciated.

By Field Team, Region II

A. E. Weissenborn, Executive Officer
(U. S. Geological Survey)

Thomas E. Howard, Acting Member
(U. S. Bureau of Mines)

Enclosure

cc: USBM (2)
DMEA (2)
Becraft
Hindman

FILE COPY
SURNAME:

500

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

JAN - 8 1954

Mr. A. E. Weissenborn
Executive Officer
DMEA Field Team, Region II
South 157 Howard Street
Spokane 4, Washington

Re: Docket No. DMEA-2471 (Lead-Zinc)
Albert F. Carlson
North Boulder Property
Jefferson County, Montana
Contract No. Idm-E313

Dear Mr. Weissenborn:

In reference to your letter of December 30, 1953, regarding the above contract, we are in agreement with you that this contract should be terminated. This is your authority to terminate the contract by mutual agreement. This agreement should include a clause protecting the Government from costs beyond the October 1952 Operator's Report (Form MF-104).

We would appreciate receiving the final Field Team report, the final Operator's report, and the final audit at your earliest convenience.

Sincerely yours,

George C. Selfridge (GCB)
Chairman, Operating Committee

APPROVED:

J. H. Hedges (GCB)
Member, Bureau of Mines

D. M. Larrabee (GCB)
Member, Geological Survey

JWAlt/bjl (1/7/54)

Copy to: Docket
Admr. R. File
Op. Committee
Base Metals
Mr. Kinkel
Mr. Bishop
Chron.

R.C.H. 1-8-54

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION
~~WASHINGTON 25, D.C.~~
So. 157 Howard Street
Spokane 4, Washington

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
JAN 6 1954

December 30, 1953

Mr. George C. Selfridge, Chairman
Operating Committee, DMEA
Department of the Interior
Washington 25, D. C.

Re: Docket No. DMEA-2471 (lead-zinc)
A. F. Carlson
North Boulder Property
Jefferson County, Montana
Contract No. Idm-E313

Dear Mr. Selfridge:

Attached are four copies of a routine inspection report on the subject property by John D. Bardill, U. S. Bureau of Mines, in which it is noted that the Operator has agreed to terminate project work by agreement before completion of the work.

As the Field Team believes there is little chance of completing the project, and as Government participation in project costs thus far has been quite slight, permission is hereby requested to terminate by mutual agreement before completion of the work.

No discovery should be certified.

A prompt reply will be appreciated.

By Field Team, Region II

A. E. Weissenborn

A. E. Weissenborn, Executive Officer
(U. S. Geological Survey)

Thomas E. Howard

Thomas E. Howard, Acting Member
(U. S. Bureau of Mines)

Enclosure
cc: USBM (2)
Becraft

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

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
JAN 6 1954

1201 N. Division St.
Spokane 2, Washington
December 17, 1953

MEMORANDUM

To: DMEA Field Team, Region II

From: John D. Bardill, Bureau of Mines

Subject: Routine inspection, North Boulder (A. F. Carlson) Property, Jefferson County, Montana, Contract No. Idm-E313, Docket No. DMEA 2471

The project progress was discussed with Mr. A. F. Carlson, Operator, on December 9, 1953, at his home. Mr. Carlson recently returned from the hospital where he had been confined.

During Mr. Carlson's illness, Mr. Denison Denny reportedly diamond drilled 1039 feet; however, Carlson did not know the number of holes drilled nor did he have the drill logs.

The Operator has agreed to terminate the contract by mutual consent before completion of the work because he is not capable of doing the work himself and does not expect that he will be able to interest anyone this winter. The Government's participation to date is only $960.84. The contract, dated May 12, 1952, is in the amount of $24,900.00.

I recommend that the necessary measures to terminate the contract should be taken by the Field Team because there is little likelihood that the Operator will resume work on the project.

John D. Bardill

Orig. & 3 cys - Wash.
USGS (2)
DMEA
M/D
AD
JDB/he

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

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
DEC 31 1953

1201 N. Division St.
Spokane 2, Washington
December 18, 1953

Mr. Denison Denny
Mentor Exploration & Development Co., Ltd.
Suite 1010
100 Adelaide Street, West
Toronto, Ontario, Canada

Subject: Docket No. DMEA 2471 (lead-zinc)
Albert F. Carlson
North Boulder Property
Jefferson County, Montana
Contract Idm-K313

Dear Mr. Denny:

Mr. A. F. Carlson has informed me that your company recently diamond drilled his property near Basin, Montana.

It will be very helpful to us to have the logs of your drill holes to complete our records of this DMEA project which was active prior to your operations. This information, if it can be made available, will assist greatly in our decision as to whether or not to continue the DMEA project.

Sincerely yours,

M. E. Volin, Member
DMEA Field Team
Region II

cc: DMEA, Wash. (2)
USGS (2)

Wash

PRODUCERS OF
MANITOULIN QUARTZITE

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
DEC 31 1953

MINE OFFICE
Box 193
LITTLE CURRENT, ONT.

U.S.G.S.
BUREAU OF MIN.
DEC 21 1953
SPOKANE, WASH.

Canadian Silica Corporation Limited

SUITE 1010 - 100 ADELAIDE ST. WEST
EMPIRE 3-9949
TORONTO 1
ONTARIO

Whitby, Ontario.
Dec. 15, 1953.

Mr. M.E. Volin,
1201 N. Division St.,
Spokane 2, Wash.

Re; Carlson Property,
Basin, Jefferson Co, Montana.
Docket No. DMLA 2471,
Contract No. IDm-1613

Dear Sir:

In reply to your letter of November 30, I beg to advise that the drill results obtained at this property do not, in our opinion, warrant further work of the type we were undertaking.

All drill logs, assay sheets and plane table map of the property made by us have been turned over to Mr. Carlson and he no doubt will make these available to you.

Sincerely yours,

P.A. Chute.

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

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
JAN 6 1954

1201 N. Division St.
Spokane 2, Washington
December 17, 1953

MEMORANDUM

To: DMEA Field Team, Region II

From: John D. Bardill, Bureau of Mines

Subject: Routine inspection, North Boulder (A. F. Carlson) Property, Jefferson County, Montana, Contract No. Idm-E313, Docket No. DMEA 2471

The project progress was discussed with Mr. A. F. Carlson, Operator, on December 9, 1953, at his home. Mr. Carlson recently returned from the hospital where he had been confined.

During Mr. Carlson's illness, Mr. Denison Denny reportedly diamond drilled 1039 feet; however, Carlson did not know the number of holes drilled nor did he have the drill logs.

The Operator has agreed to terminate the contract by mutual consent before completion of the work because he is not capable of doing the work himself and does not expect that he will be able to interest anyone this winter. The Government's participation to date is only $960.84. The contract, dated May 12, 1952, is in the amount of $24,900.00.

I recommend that the necessary measures to terminate the contract should be taken by the Field Team because there is little likelihood that the Operator will resume work on the project.

John D. Bardill

Orig. & 3 cys - Wash.
USGS (2)
DMEA
M/D
AD
JDB/he

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

DEPARTMENT OF THE INTERIOR
Bureau of Mines Helena
RECEIVED
DEC 3 1953

1201 N. Division St.
Spokane 2, Washington
November 30, 1953

Mr. Philip Chubb
Skookum Motel
Butte, Montana

Subject: Carlson Property
Basin, Jefferson County, Montana
Docket No. DMEA 2471 (lead-zinc)
Contract No. Idm-E313

Dear Mr. Chubb:

Mr. John D. Bardill, Bureau of Mines engineer, informed me after his last trip to Basin that you had discussed with him the results of the first two diamond drill holes at the Carlson property. I understand these results were negative but that you were still hopeful that subsequent holes would be more successful.

Mr. Carlson recently requested an extension of his DMEA contract until next spring. Whether or not the contract will be extended depends largely upon the results of your drilling. We shall appreciate receiving the logs of the holes and learning whether Mr. Denny plans to continue exploration of the property. If it is inconvenient to forward this information, Mr. Bardill will contact you on his next trip to Butte early in December.

Your cooperation in this matter will be appreciated.

Sincerely yours,

M. E. Volin, Member
DMEA Field Team, Region II

cc: DMEA, Wash. (2)
USGS (2)

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

1201 N. Division St.
Spokane 2, Washington
November 30, 1953

Mrs. Albert Carlson
Basin, Montana

Subject: North Boulder Property
Jefferson County, Montana
Docket No. DMEA 2471 (lead-zinc)
Contract No. Idm-E313

Dear Mrs. Carlson:

This will acknowledge your letter of November 12, 1953, regarding extension of the subject contract until next spring. I am sorry to learn that Mr. Carlson has been ill and hope that his recovery will be rapid.

Mr. John D. Bardill, Bureau of Mines engineer, will call on you at Basin early in December to discuss the results of the diamond drilling being done by Mr. Denny of Toronto. A decision to extend the contract will depend on the results of this work. In the meantime, the contract will be extended to allow time for this discussion with you and a decision.

Sincerely yours,

M. E. Volin, Member
DMEA Field Team, Region II

cc: DMEA, Wash. (2)
USGS (2)

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

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
NOV 1 6 1953

1201 N. Division St.
Spokane 2, Washington
October 30, 1953

MEMORANDUM

To: DMEA Field Team, Region II

From: John D. Bardill, Bureau of Mines

Subject: Routine inspection, North Boulder (A. F. Carlson) Property, Jefferson County, Montana, Contract No. Idm-E313, Docket No. DMEA 2471 (lead-zinc)

The subject contract project is inactive pending the results of preliminary diamond drilling by Denison Denny, president of Mentor Exploration and Development Co., Ltd., Toronto, Canada, lessee. The drilling is at the expense of the lessee.

On October 24, 1953 a visit was made to the project to observe the lessee's work progress. Mrs. A. F. Carlson informed me that Mr. Carlson had been stricken with a serious heart attack while at the drill site and is now hospitalized at Portland. He is not expected to be active for sometime.

At Basin, Mont., I met Mr. Philip Chubb, geologist for Mr. Denny and in charge of the diamond drilling which is under contract to Boyles Bros. Mr. Chubb stated that two diamond drill holes from the surface in the hanging wall near the shaft had been completed. The holes were drilled at an angle of 60 degrees to intercept and cut the vein structure about 130 feet down dip. Core recovery in the quartz monzonite country rock was about 50 percent and in the sheared vein structure less than 10 percent. Sludge samples from the shear zone assayed about 0.1 percent lead. Mr. Chubb thought there was a possibility that the dip of the vein may have steepened sharply or even reversed and that the holes may have gone beneath the mineralized vein. The third hole is being drilled at a much flatter angle to explore this possibility. Five holes will be drilled before a decision is made whether or not to continue drilling.

A Field Team letter dated October 6, 1953 to the Chairman, DMEA Operating Committee, recommended extension of the contract for 3 months from the present termination date of November 12, to evaluate the drilling program and to determine whether the contract should be extended further. Mr. Chubb was of the opinion that if Mr. Denny's Canadian company decided to continue exploration and development they would not be interested in the DMEA contract.

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

RECEIVED
NOV 16 1953

1201 N. Division St.
Spokane 2, Washington
October 30, 1953

MEMORANDUM

To: DMEA Field Team, Region II

From: John D. Bardill, Bureau of Mines

Subject: Routine inspection, North Boulder (A. F. Carlson) Property, Jefferson County, Montana, Contract No. Idm-E313, Docket No. DMEA 2471 (lead-zinc)

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The drilling progress and results will be reported again in the near future and recommendation will be made for further consideration by the Field Team.

John D. Bardill

John D. Bardill

Orig. & 3 cys - Wash.
USGS (2)
DMEA
M/D
AD
JDB/he

FILE COPY
SURNAME: 9B

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

OCT 19 1953

Mr. A. E. Weissenborn
Executive Officer
DMEA Field Team, Region II
South 157 Howard Street
Spokane 4, Washington

Re: Docket No. DMEA-2471 (Lead-Zinc)
Albert F. Carlson
North Boulder Property
Jefferson County, Montana
Contract No. Idm-E313

Dear Mr. Weissenborn:

In reference to your letter of October 6, 1953, regarding the above contract, we are in accord with your recommendation that the completion time of this contract be extended. However, a longer period than three months may be necessary. This will depend on when the new lessee, the Canadian firm, starts its drilling program, and when the drilling is expected to be completed. As you will be in touch with this project, we will leave the matter of the completion time to your judgment.

This is your authority to prepare an amendment allowing the Operator an extension of time to complete the work, but not beyond May 12, 1954. This amendment should also allow the Operator to recess operations now, until the date on which you think the work should be recommenced.

Sincerely yours,

George C. Selfridge (JWB)
Chairman, Operating Committee

APPROVED:

J. H. Hedges
Member, Bureau of Mines (JWB)

T. P. Thayer
Member, Geological Survey (JWB)

JWAlt/hmj (10-16-53)
CC to: Docket
Adm. R. File
Op. Committee
Mr. Kinkel
Mr. Bishop
Base Metals
Chron.

R.C.S. 10-19-53

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

1201 N. Division St.
Spokane 2, Washington
October 6, 1953

Mr. George C. Selfridge, Chairman
Operating Committee, DMEA
Department of the Interior
Washington 25, D. C.

Subject: Docket No. DMEA 2471 (lead-zinc)
North Boulder Property
Jefferson County, Montana
Contract No. Idm-E313

Dear Mr. Selfridge:

The subject exploration contract will expire November 12, 1953, unless extended. The Operator, Mr. A. F. Carlson, has not prosecuted the contract diligently, and to date a large part of the work still remains to be done. This is one of those contracts for which there is some doubt on the part of the Field Team that the Operator is competent to accomplish the exploration work, but the possibilities for a successful exploration are such that the Field Team has hoped that a competent operator would succeed to the contract by lease and assignment. This possibility has been discouraged by the unreasonable payments required by Mr. Carlson in several negotiations for leases.

The enclosed routine inspection report dated October 5, 1953, by John D. Bardill, Bureau of Mines, gives late developments at this property. The new lessee, a Canadian firm, apparently intends to undertake a diamond drilling project to be completed at an early date and to make a decision as to purchase on the basis of this drilling or upon subsequent shaft exploration. It is doubtful if the proposed 2000 feet of drilling can be completed in the 45 days set up in the agreement for this work.

Mr. Carlson wants to have the DMEA contract extended. Of the total Government obligation for $12,450 under this contract there has been paid to date $960.84, and a voucher in the amount of $183.84, payable to Mr. Carlson, is being held pending final settlement of the contract or continuation of it.

The Field Team considers the entrance of the Canadian company into the situation a favorable development and will follow the results of the diamond drilling work with interest. We are inclined to recommend a short extension of the contract, say of three months, to adequately cover the drilling program and give time for an evaluation as to whether it will then be worthwhile to extend the contract further.

On the other hand, if the Operating Committee believes that the contract should be allowed to expire without renewal, we will not object to this decision. The amount of Government funds involved is very small, as stated above. The principal reason for further extension of the contract after the diamond drilling would be to encourage a significant exploration.

By Field Team, Region II

A. E. Weissenborn

A. E. Weissenborn, Exec. Officer
U. S. Geological Survey

M. E. Volin

M. E. Volin, Member
U. S. Bureau of Mines

Enclosure

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

COPY

1201 N. Division St.
Spokane 2, Washington
October 5, 1953

MEMORANDUM

To: DME[A] Field Team, Region II

From: John D. Bardill, Metallurgist, Bureau of Mines

Subject: Routine inspection, North Boulder (A. F. Carlson) Property, Jefferson County, Montana, Contract No. Idm-E313, Docket No. DMEA 2471 (lead-zinc)

The subject property was visited September 12, 1953, accompanied by George E. Becraft, geologist, U. S. Geological Survey, A. F. Carlson, Operator, and Henry Shute, lessee of Butte, Montana.

Mr. Shute, in an agreement dated August 8, 1953, leased with an option to purchase the three patented and twenty-one located claims on the following terms:

?

Purchase price of $275,000 payable within two years or $300,000 payable during the third year.

Minimum monthly royalty payments of $300 during the period September 1953-April 1953, and $450 per month thereafter.

Royalty payments of 10 percent for ores netting $20 or less per ton and 20 percent for ores netting over $20 per ton are payable on all ores mined.

Pay additional royalties to the U. S. Treasury on the same basis until $1,144.70 has been repaid.

Royalty or monthly payments <u>are not</u> applicable on the purchase price.

These terms obviously are unreasonable.

Mr. Shute's plan was to sink an inclined shaft on the ore to a depth of 70 to 80 feet, then strip the overburden and mine the ore by open pit methods. He intended to beneficiate the ore in the flotation mill at Basin. The shaft had been sunk about 20 feet before work had stopped and the shaft filled with water. Carlson had some excellent specimens of high grade galena-rhodochrosite ore from the bottom of the

The property was visited again on September 29 to observe Mr. Shute's progress. In the meantime, Mr. Denison Denny, president of Mentor Exploration & Development Co., Ltd., 100 Adelaide Street, West, Toronto, Ontario, had been assigned Shute's agreement with Carlson's consent for a reported $5,000. Mr. Denny is also associated with Sudbury Contact Mines, Ltd., and Canadian Silica Corporation, Ltd. Mr. Carlson reported that Mr. Denny had agreed to diamond drill the mineralized zone to the extent of 2,000 feet of holes within the next 45 days. If the first two holes in the vicinity of Shute's shaft showed ore, Carlson stated that Denny planned to sink a vertical shaft in the footwall and crosscut to the vein. Denny had rented a bulldozer and operator and was leveling a site for the shaft collar at the time of my visit.

The contemplated work will be at the expense of the new Operator.

The present exploration project contract will expire November 12, 1953 unless extended. There is a possibility that the new Operator may wish to assume the contract if the work is of an exploratory nature.

Mr. Carlson stated that if Mr. Denny prospected the property diligently a more workable lease agreement would be drafted to replace the present one.

Mr. Denny's work progress will be observed with interest and reported regularly.

/s/ John D. Bardill

Orig. & 3 cys - Wash.
USGS (2)
DMEA
M/D
JDB/he

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

1201 N. Division St.
Spokane 2, Washington
October 5, 1953

MEMORANDUM

To: DMEA Field Team, Region II

From: John D. Bardill, Metallurgist, Bureau of Mines

Subject: Routine inspection, North Boulder (A. F. Carlson) Property, Jefferson County, Montana, Contract No. Idm-E313, Docket No. DMEA 2471 (lead-zinc)

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Mr. Denny's work progress will be observed with interest and reported regularly.

John D. Bardill

John D. Bardill

Orig. & 3 cys - Wash.
USGS (2)
DMEA
M/D
JDB/he

500
FILE COPY
SURNAME:

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

SEP 25 1953

N.S. in R.R.

Albert F. Carlson, Jefferson County, Montana
Docket No. DMEA 2471, Contract No. Idm-E313 (Lead-Zinc)

Date of contract - May 12, 1952, to complete - 12 months.
Amendment No. 1 extends the completion period from 12 to 18 months.

The work is to be done in two stages. Work of Stage I is to consist of bulldozer trenching and stripping. If the results of Stage I warrant the continuation of the project, then Stage II shall be undertaken. This work is to consist of 110 feet of shaft sinking and 170 feet of crosscutting and drifting.

The total estimated cost of the project is $24,900.00.

Work on the project was suspended in October 1952 because of winter conditions.

As of the September 1952 MF-104 report the amount of $1616.44 had been expended on the work of the project. Most of this amount was for bulldozing.

The Field Team reported that the findings have been encouraging.

Apparently the only work done this year was the bulldozing of one trench in June. The Field Team in their memorandum of July 27, 1953, states: "Mr. Carlson appears reluctant to resume exploration himself, and he has made a number of attempts to lease the North Boulder property to mining companies and to various other operators; all of these attempts have been unsuccessful but have used up a great deal of time. The necessity of immediately resuming operations was discussed with Mr. Carlson and he was advised that any additional extension of time under the contract might be difficult to obtain unless he can show an adequate amount of work completed during the months preceding the request for an extension. Mr. Carlson assured me that, if Coronado Copper Company does not lease the property, he will immediately begin sinking the shaft called for in the exploration contract."

A comparatively small amount of work has been done under the terms of the contract. The results from the work done under Stage I have been encouraging and warrant the work as proposed under Stage II. However, it is our opinion that unless Mr. Carlson has resumed work on the project this contract should be terminated.

/S/
Jacob W. Alt

JWAlt/hmj (9/15/53)
CC to: Docket
Mr. Mittendorf
Mr. Johnson
Mr. Selfridge
Mr. Alt
Mr. Keating
Mr. Griswold
Chron.

P. S. The Field Team recommended further trenching and stripping between the two creek beds to determine the full strike length and attitude of the ore body uncovered in trench No. 4. If trenching shows extension of the ore, shoot should be investigated by further sinking and by drifting.

As only a small amount of work has been done under the terms of the contract, it is impossible to evaluate this project.

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

1201 N. Division St.
Spokane 2, Washington
August 31, 1953

MEMORANDUM

To: DMEA Field Team, Region II

From: John D. Bardill, Metallurgist, Bureau of Mines

Subject: Routine inspection, North Boulder (A. F. Carlson), Jefferson County, Montana, Contract No. Idm-E313, Docket No. DMEA 2471 (lead-zinc)

Mr. A. F. Carlson, Operator, was visited at his home near Basin, Montana, August 8, 1953. A field inspection was not made because operations had not been resumed.

Mr. Carlson stated that a Mr. Shute of Butte planned to resume exploration work within a few days, but he did not divulge the terms of the agreement.

If work is not progressing under the terms of the contract at the time of the next routine inspection, I will recommend that the contract be terminated.

John D. Bardill

John D. Bardill

Orig. & 3 cys - Wash.
USGS (2)
DMEA
M/D
JDB/he

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION
~~WASHINGTON 25, D.C.~~
So. 157 Howard Street
Spokane 4, Washington

July 27, 1953

Memorandum

To: DMEA Field Team, Region II

From: Edward T. Ruppel, Geologist, U. S. Geological Survey

Subject: Docket No. DMEA 2471 (Lead-Zinc), Routine Inspection, North Boulder (A. F. Carlson), Jefferson County, Montana, Contract No. Idm-E313.

Mr. A. F. Carlson, Operator of the subject property, was visited July 26, 1953, at which time plans for continued exploration of the North Boulder property were discussed. Mr. Carlson has not yet resumed operations on the property, so no field inspection was made.

At the time of my visit, Mr. Carlson was waiting to hear from representatives of the Coronado Copper Company who recently visited the property. Mr. Carlson seemed to think the representatives were favorably disposed to leasing the property, but he has not been notified of any decision.

Mr. Carlson appears reluctant to resume exploration himself, and he has made a number of attempts to lease the North Boulder property to mining companies and to various other operators; all of these attempts have been unsuccessful but have used up a great deal of time. The necessity of immediately resuming operations was discussed with Mr. Carlson and he was advised that any additional extension of time under the contract might be difficult to obtain unless he can show an adequate amount of work completed during the months preceding the request for an extension. Mr. Carlson assured me that, if Coronado Copper Company does not lease the property, he will immediately begin sinking the shaft called for in the exploration contract.

Distribution:
DMEA (Orig. & 3)
USBM (2)
Docket
Ruppel

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION

~~WASHINGTON 25, D.C.~~
So. 157 Howard Street
Spokane 4, Washington

June 29, 1953

MEMORANDUM

To: DMEA Field Team, Region II

From: Edward T. Ruppel, Geologist, U. S. Geological Survey

Subject: Docket No. DMEA 2471 (Lead-Zinc), Routine Inspection, North Boulder (A. F. Carlson), Jefferson County, Montana, Contract No. Idm-E313.

Routine inspection of the North Boulder property was made on June 23, 1953, in company with Mr. A. F. Carlson, owner. The only work done during June, and since the last inspection, has been to bulldoze one trench across the sheared and mineralized zone about 250 feet west of the shaft collar. The trench trends north and is about 150 feet long and, in the shear zone, about 20 feet deep. The shear zone appears to have thinned to about 10-15 feet in thickness in this trench, and trends East-West, dipping 55° North. Mineralization appears limited to moderate limonite staining in moderately sheared andesitic volcanic rocks. Mr. Carlson had not sampled the trench at the time of my visit, but stated that he would sample it and would submit the assays and sketch map later.

Mr. Carlson stated that he has been delaying resumption of operations in the hope of making some leasing arrangement with American Metals Company, a representative of which was tentatively scheduled to visit the property in late June or early July. If the representative does not appear or if satisfactory arrangements with the American Metals Company cannot be made, Mr. Carlson plans to begin sinking the shaft early in July.

Distribution
DMEA(Orig.&3)
USBM(2)
Docket
Ruppel

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION
~~WASHINGTON 25, D. C.~~
1201 North Division Street
Spokane 2, Washington

May 22, 1953

MEMORANDUM

To: DMEA Field Team, Region II

From: E. W. Buel, Mining Engineer, Bureau of Mines

Subject: Interim report, North Boulder (A. F. Carlson), Jefferson County, Montana, Contract No. Idm-E313, Docket No. DMEA 2471 (lead-zinc)

Mr. A. F. Carlson, owner, was contacted May 9, 1953. He stated that he expects to resume work under the contract within a few weeks.

The Operator has graded the road to the property and is making other preparations for shaft sinking under the DMEA contract.

E. W. Buel

Orig. & 3 - Wash.
USGS - 2
DMEA
M/D
EWB/vf

Docket Copy

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION
~~WASHINGTON 25, D.C.~~
So. 157 Howard Street
Spokane 4, Washington

April 22, 1953

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
APR 27 1953

Mr. George C. Selfridge, Chairman
Operating Committee, DMEA
Department of the Interior
Washington 25, D. C.

Re: Docket No. DMEA-2471 (lead-zinc)
Albert F. Carlson
Jefferson County, Montana
Contract Idm-E313

Dear Mr. Selfridge:

Attached are the original and two signed copies of Amendment No. 1 to the subject contract, with attached justification.

Distribution of this amendment has been made in the usual manner.

Sincerely yours,

A. E. Weissenborn

A. E. Weissenborn
Executive Officer, DMEA
Field Team, Region II

RECEIVED
MAY 11 1953
GENERAL COUNSEL
DEFENSE MINERALS
ADMINISTRATION

Attachment

cc: USBM (2)
Becraft

cc 5/15

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

1201 N. Division St.
Spokane 2, Washington
April 9, 1953

MEMORANDUM

To: DMEA Field Team, Region II

From: E. W. Buel, Mining Engineer, Bureau of Mines

Subject: Interim report, North Boulder (A. F. Carlson), Jefferson County, Mont., Contract No. Idm-E313, Docket No. DMEA 2471 (lead-zinc)

Mr. A. F. Carlson, owner, was contacted on March 31, 1953, at Basin, Montana. It was learned that he expects to resume work in the near future, possibly sometime this month.

Another visit was made with Mr. Carlson on April 6, 1953, as requested by T. E. Howard, Chief, DMEA Section Bureau of Mines, Region II. The purpose of this visit was to check on why Mr. Carlson had not returned the copies sent to him for his signature of Amendment No. 1. This amendment extended the completion period from 12 to 18 months. Mr. Carlson stated that he intended to prepare a letter and send it along with copies of the amendment. He promised to do this as soon as possible.

A select specimen sample was taken of ore from the North Boulder property. This sample was taken at the request of the Field Team in order to conduct a micro-chemical analysis for the presence of germanium which is reported to be associated with some zinc ores in the Basin area.

E. W. Buel

E. W. Buel

Orig. & 3 cys - Wash.
USGS (2)
DMEA
M/D
EWB/he

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

1201 North Division Street
Spokane 2, Washington

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
MAR 19 1953

March 4, 1953

MEMORANDUM

To: DMEA Field Team, Region II

From: E. W. Buel, Mining Engineer, Bureau of Mines

Subject: Routine inspection, North Boulder (A. F. Carlson), Jefferson County, Montana, Contract No. Idm-E313, Docket No. DMEA 2471 (lead-zinc)

Work under the DMEA contract is suspended for the winter.

Mr. A. F. Carlson, owner, was seen February 26, 1953. He was informed that the Field Team will allow sinking a vertical shaft instead of the recommended inclined shaft. The Field Team, however, declined Carlson's request for an amendment which would have allowed crosscutting from the 50-foot level in addition to the allowable crosscutting under the contract from the 100-foot level. Mr. Carlson did not contest this denial.

If the present mild winter conditions continue, it is hoped that work under the contract can start sometime in April.

E. W. Buel

E. W. Buel

Orig. & 3 - Wash.
USGS - 2
DMEA
M/D
EWB/vf

2471

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

1201 N. Division St.
Spokane 2, Washington

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
MAR 9 1953

February 18, 1953

Memorandum

To: DMEA Field Team, Region II

From: E. W. Buel, Mining Engineer, Bureau of Mines

Subject: Routine inspection, North Boulder (A. F. Carlson), Jefferson County, Mont., Contract No. Idm-E313, Docket No. DMEA 2471 (lead-zinc)

The operation is still suspended for the winter.

Mr. A. F. Carlson, owner, was visited February 12, 1953. Time was spent in discussing with him the merits of sinking an incline shaft instead of a vertical shaft as stated in the contract. Mr. Carlson does not want to sink an incline shaft. He thinks the ground is too heavy and firmly believes in following the advice of company geologists and mining engineers who have visited the property and have told him to sink vertically. Mr. Carlson also stated that he would like an amendment to the contract which will allow crosscutting to be performed from the 50-foot level in addition to crosscutting from the 100-foot level. This request was discussed with the Field Team, and it was decided that sufficient geological data could be obtained from the 100-foot level.

E. W. Buel
E. W. Buel

Orig. & 3 cys - Wash.
USGS (2)
DMEA
M/D

EWB/kt

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS ADMINISTRATION
~~WASHINGTON 25, D. C.~~
1201 North Division St.
Spokane 2, Washington
January 27, 1953

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
FEB 5 1953

Keating
Betty

Reply to: M. E. Volin, Member
DMEA Field Team, Reg.II

Mr. Albert F. Carlson
Basin, Montana

Subject: Amendment No. 1
Contract Idm-E313
Docket No. DMEA 2471 (lead-zinc)

Dear Mr. Carlson:

Enclosed herewith are 7 copies of Amendment No. 1 to your Exploration Project Contract, which have been signed by the Executive Officer, DMEA Field Team, Region II. If the amendment meets with you approval please sign all copies, retain the copy marked "Operator's Copy" and return the remaining copies to this office.

Sincerely yours,

Thomas E. Howard
Chief, DMEA Section
Bureau of Mines, Region II

Enclosures

cc: DMEA, Wash. (2)
USGS (2)
DMEA
A/D
D/F

(Note: Amendment is to extend completion date.)

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION
~~WASHINGTON 25, D. C.~~
1201 North Division St.
Spokane 2, Washington

January 23, 1953.

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
FEB 16 1953

MEMORANDUM

To: DMEA Field Team, Region II

From: E. W. Buel, Mining Engineer, Bureau of Mines

Subject: Routine inspection, North Boulder (A. F. Carlson), Jefferson County, Montana, Contract No. Idm-E313, Docket No. DMEA 2471 (lead-zinc)

Mr. A. Carlson, owner, was seen January 15, 1953. The Operator said he has suspended operations for the winter. Work under the contract being discontinued sometime near the close of October, 1952. No inspection was made of the property. Time was spent in discussing with Mr. Carlson his plans for future work under the DMEA contract.

I have not made any DMEA inspections of the North Boulder prospect, consequently, all factual data incorporated in this report are the result of gathering such data from various sources, such as: Operator's monthly narratives, invoices, etc.

Work under the DMEA project was begun July 7, 1952. From August to October, 1952, inclusive, 74-1/2 hours of bulldozing was completed. Total units of bulldozing expended amount to 138-1/2 hours with 101-1/2 hours left under Stage I of the contract.

Work done during July and August has been described in J. S. McNabb's, Bureau of Mines, inspection report dated August 12, 1952, and G. Becraft, Geological Survey, inspection reported dated September 17, 1952, respectively.

A trench about 275 feet in a southeasterly direction from the Bureau of Mines shaft in Trench #4 (see map) was dozed during September, 1952. The trench exposed a mineralized zone that appears to parallel another vein structure, approximately 200 feet northward, which is cut by Trench #5. The new trench is 14 feet wide, 130 feet long, and reaches a maximum depth of 20 feet. Samples taken across 20 feet of the mineralized zone by Mr. Carlson, assayed as follows:

Length	Ounces Au	Ounces Ag	Percent Pb	Percent Zn	Percent Cu
2 ft.	N.D.	1.6	1.7	1.3	0
3	"	1.0	1.1	1.9	0.5
3	"	1.0	1.4	2.8	0.1
3	"	1.0	1.2	2.7	0
3	"	1.4	0	2.5	0
3	"	0.6	0	.7	0
3	"	0.2	0	.7	0

Work during October, 1952, consisted of dozing a trench approximately 420 feet east from the Bureau of Mines shaft. The trench measures 11 feet wide, 160 feet long, and 20 feet deep in the lowest part. Mr. Carlson stated that a flow of water encountered in the trench prevented him from deepening the trench or sampling. The trench, according to the Operator, shows an altered zone 75 feet in width containing one small galena stringer.

During November and December, the Operator was loaned mining equipment by a major Montana mining company. This equipment was used in driving a short dog hole with a length of 4 - 5 feet in the oxidized footwall from the shaft (see McNabb's map), and in taking out ore delineated by sampled areas S-1 and S-2. This ore has been stockpiled by the Operator. It is divided into about 20 tons of primary ore and 5 tons of oxidized ore. It is estimated that the primary ore will run about 10 percent combined lead and zinc. Mr. Carlson thinks the oxidized ore will assay close to 6 percent lead.

The Operator asked that time under the contract be extended. He intends to do some further bulldozing in the ~~newly acquired~~ placer ground west of the Bureau of Mines shaft.

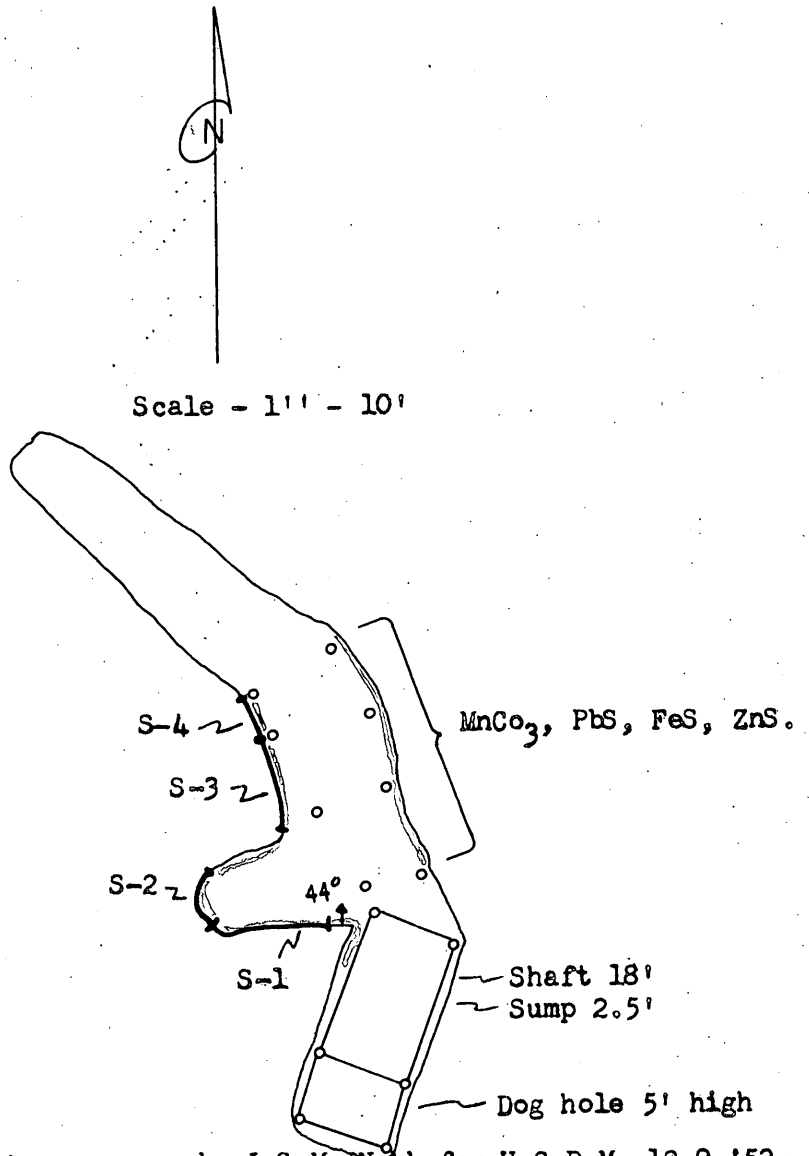
Upon completion of the trenching, the Operator intends to sink a 100 foot vertical shaft from the bottom of the Bureau of Mines shaft. He also requested an amendment to the contract which will allow crosscutting to be performed from the 50 foot level(exclusive of 18 feet in Bureau of Mines shaft, therefore its actually the 68 foot level). Contingent upon the results of crosscutting from the 50 foot level the shaft would be sunk to the 100 foot level with attendant crosscutting and drifting.

It is recommended that an extension of time be granted and that further consultations with the Field Team and Operator should be made regarding the feasibility of an incline shaft vs. vertical shaft and crosscutting on the 50 and 100 foot levels.

E. W. Buel

E. W. Buel

Orig. & 3 - Wash.
USGS - 2
DMEA
M/D
EWB/vf



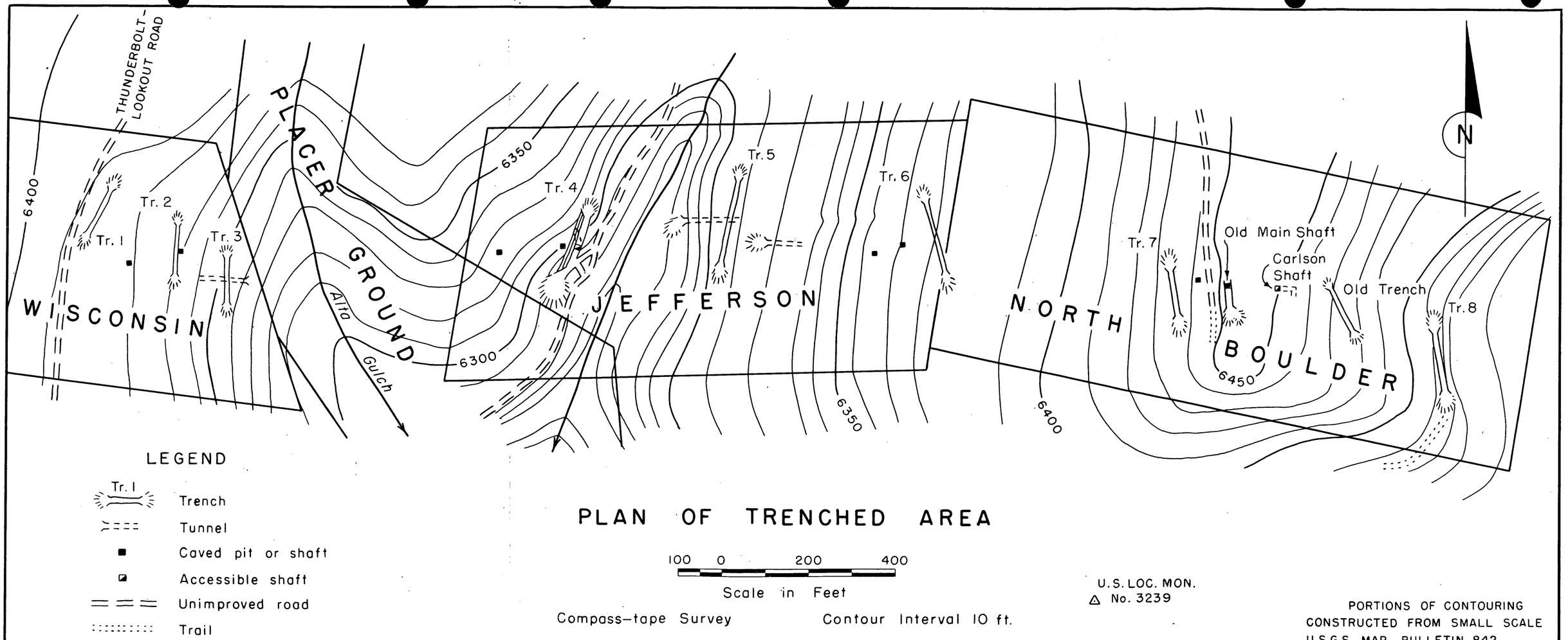
Samples and Brunton-tape survey by J.S.Mc Nabb for U.S.B.M. 12-9-'52

Sample No.	Width	Oz. Au	Oz.Ag	%Pb	%Zn	%Cu	%Mn
S-1	6.5'	0.04	0.5	0.6	0.5	0.12	5.9
S-2	3.0'	*	*	2.7	0.3	*	*
S-3	4.0'	*	*	4.6	7.0	*	*
S-4	2.5'	*	*	1.9	0.8	*	*

* No test made. Analyses made by Peter Mack, Wallace, Idaho.

NORTH BOULDER PROSPECT - A.F. CARLSON - JEFFERSON COUNTY, MONTANA

North Boulder Idm-E313 DMEA #24



PLAN OF TRENCHED AREA

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION

~~WASHINGTON 25, D.C.~~
So. 157 Howard Street
Spokane 4, Washington

January 23, 1953

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
Denver
JAN 23 1953

Mr. George C. Selfridge, Chairman
Operating Committee, DMEA
Dept. of Interior
Washington 25, D. C.

Re: Docket No. DMEA-2471 (Lead-Zinc)
Albert F. Carlson
Jefferson County, Montana
Contract No. Idm-E313

Dear Mr. Selfridge:

This is in reply to Mr. Johnson's letter of December 15 inquiring into the status of the A. F. Carlson contract. Reply has been delayed because we gave priority to the preparation of an annual report as requested by Mr. Mittendorf.

Mr. McNabb reports that following conversation with Mr. Carlson, ~~he~~ Carlson dug one more bulldozer trench on the property in October. Following this, the Anaconda Copper Mining Company pumped out the Bureau of Mines' shaft which has only a depth of around 20 feet and did a small amount of drifting at the bottom. This was not done as part of the DMEA contract. It has been mapped and sampled by McNabb and shows that the mineralized zone is about 20 feet in width. Assay results are as follows:

Sample	Width	Percent Pb	Percent Zn
S-1	6.5'	0.6	0.5
S-2	3.0'	2.7	0.3
S-3	4.0'	4.6	0.8

This is encouraging for a working so close to the surface.

McNabb and Becraft believe that about three diamond drill holes would be of some value. The Operator, although at first favorably disposed to diamond drilling, has changed his mind and now

wishes to sink the shaft. Inasmuch as the contract provides for sinking of a shaft, the findings to date have been encouraging, and there is no reason to terminate the contract on the basis of improbability of a discovery, it appears that the Government is obligated to support the shaft-sinking program if the Operator so desires. There is some discussion as to whether the shaft should be sunk on the incline following the ore or should be sunk vertically in the footwall. The Field Team would prefer to follow the ore because of the additional information that might be obtained; the Operator prefers a vertical shaft because of bad ground in the ore zone. The existing Bureau of Mines' shaft could be converted to an inclined shaft with very little trouble. However, because of the heavy ground in the ore zone, it may be necessary to sink a vertical rather than an inclined shaft. Further investigation and discussion with the Operator will ensue.

Sincerely yours

A E Weissenborn

A. E. Weissenborn
Executive Officer, DMEA
Field Team, Region II

cc: USBM (2)
Becraft

2471

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION
~~WASHINGTON 25, D. C.~~
So. 157 Howard Street
Spokane 4, Washington

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
JAN 6 1953

December 19, 1952

So what?

Memorandum

To: DMEA Field Team, Region II

From: George E. Becraft, Geologist, U. S. Geological Survey

Subject: Geologic maps, Docket No. DMEA-2471, (Lead-Zinc), Contract No. Idm-E313, North Boulder Lead Property, A. F. Carlson, Jefferson County, Montana.

During August and October 1952 two plane table surface maps were made of the subject property; one, at a scale of 1" = 200', shows all workings and the geology in the vicinity of the property, the other, at a scale of 1" = 40' shows the trenching accomplished under the contract and the geology. These maps show the workings as of October 25, 1952; it is cut about 300 feet east of the easternmost trench shown on the large scale map.

Copies of the two maps are enclosed.

George E. Becraft
Geologist

Enclosures 2
Dist: DMEA-Orig. & 3
USBM (2)
Docket
Becraft

FILE COPY
SURNAME:

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

BW.

Mr. A. E. Weissenborn
Executive Officer, Region II
DMEA Field Team
South 157 Howard Street
Spokane 4, Washington

DEC 15 1952

Re: Docket No. DMEA-2471 (Lead-Zinc)
Contract No. Idm-2313
Albert F. Carlson
Jefferson County, Montana

Dear Mr. Weissenborn:

Will you please advise us as to the status of the above-referenced docket and contract. The last memorandum in our files regarding an inspection of this property is from George Becraft, Geologist, U. S. Geological Survey, to you, dated September 17, 1952.

In the third and fourth paragraphs of this memorandum George Becraft states:

"On September 8, the property was again visited accompanied by the operator, and the trench which had been completed on September 6 was mapped. At this time it was decided that no further bulldozing be done. The operator informed me that approximately one-half of the money provided for bulldozing under the contract had been expended. Also at this time the possibility of diamond drilling in lieu of shaft sinking as Stage II of the contract was discussed with the operator. No agreement could be reached with the operator on this at this time because he apparently wanted time to consider it and to talk to Norman Kesten, M. S. and R. geologist, who has been helping the operator with geological advice.

"Finally the operator was visited at his home with John S. McNabb, U. S. Bureau of Mines, on September 12, 1952. At this time the operator apparently agreed that he would go ahead with a diamond drilling program if a competent driller could be located at a price satisfactory to the operator and the government. It was recommended by the field team representative that an amendment be drawn up permitting the drilling of

3 holes, totaling about 1000 feet, to intersect the vein zone at about 170 to 200 feet below the surface in the vicinity of the shaft. Sampling of the vein where exposed in the trenches was also recommended while the drillers were being located."

On December 8, 1952, we received the monthly progress reports (AE-104) for the months September and October with the Operator's narrative. According to these reports the Operator is still bulldozing trenches. Total money expended through October is $1,321.09.

As per the memorandum of George Decraft, it was decided that no further bulldozing be done and that an amendment be drawn up permitting the drilling of 3 holes totaling about 1000 feet.

We would appreciate a reply at your convenience regarding the status of this contract, and your recommendations on the future exploration work which should be performed.

Sincerely yours,

(signed) FRANK E. JOHNSON (JHB)

Chairman, Operating Committee

APPROVED:

Jo. H. Hedges (JHB)

Member, Bureau of Mines

A. R. Kinkel, JR (JHB)

Member, Geological Survey

JWAlt/hmj
(12-14-52)

J.H. 12-15-52

CC to: Adm. Reading File
Operating Committee
Docket File Copy
Mr. Keller (2)
Mr. Alt
Mr. Kinkle
Mr. Bishop

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS ADMINISTRATION
WASHINGTON 25, D. C.
No. 157 Howard Street
Spokane 1, Washington

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
OCT 1 1952

September 17, 1952

Memorandum

To: A. . . Grossheim, Executive Officer, DMA, Field Team, Region II

From: Warren . Hoover, Geologist, U. S. Geological Survey

Subject: Inspection and mapping, Project No. DMA 2471, Grant-Link, Contract No. Idr-313, North Boulder Lead Property, . . . Helena, Jefferson County, Montana

During August a plane table map was made of the North Boulder lead property by Lionel Goodwin and . Hoover of the U. S. Geological Survey. All of the trenches and old workings on the three claims included in the contract were surveyed in. The geology was mapped on August 22 and 23 by myself and . F. Goodwin. We were accompanied by the operator on August 23. At this time another trench was spotted about 250 feet east of the shaft. At the time of the mapping the operator had done considerable bulldozing at the shaft site and had exposed the vein zone for a distance of about 60 feet east of the shaft. The vein zone consists of at least 5 veins containing galena and light gray quartz in intensely altered and recrystallized Cretaceous (?) volcanic rocks. The zone is approximately 30 feet wide. The veins range in thickness from a few inches to about two feet. Under the contract the operator had also cut a trench about 100 feet west of the shaft. This trench is about 5 feet deep and 120 feet long. In this trench the vein zone is about 25 feet wide consisting of moderately to intensely altered volcanic rocks with a few quartz veins. The operator reported that a few pieces of galena were uncovered in this trench. There also is probably some lead ore dump in the trench and it should be capped.

On September 3, the property was again visited after notification that the trench which we had spotted about 250 feet east of the shaft was being cut. About four feet below the surface, a zone 15 feet wide of intensely altered volcanic rocks was encountered. At about 15 feet below the surface, a few pieces of galena were uncovered from a heavily iron-stained quartz vein.

On September 5, the property was again visited by request of the operator, at the trench which had been excavated on the east side of the shaft. It was felt by the geologist that no further bulldozing in

done. The operator informed me that approximately [illegible] of the money provided for [illegible] under the contract had been expended. Also at this time the possibility of diamond drilling in lieu of [illegible] under the contract was discussed with the operator. No agreement could be reached with the operator at this time because he apparently wanted time to consider it and to talk to [illegible] Morton, [illegible], who has been helping [illegible].

Finally the operator [illegible] with [illegible], Bureau of Mines, on September 12, 1952. At this time the operator apparently agreed that he would go ahead with a diamond drilling program if a competent driller could be located at a price satisfactory to the operator and the government. It was recommended by the field team representative that an amendment be drawn up permitting the drilling of 3 holes, totaling about 1200 feet, to intersect the vein zone at about 170 to 200 feet below the surface in the vicinity of the shaft. Sampling of the vein where exposed in the trenches was also recommended until the drillers were located.

The operator agreed to notify the field team representative as soon as the driller was located, at which time an amendment will be prepared.

Mr. [illegible] is proceeding with the contract very carefully and is obtaining much information for the money spent; however, [illegible] that it is sometimes difficult to obtain information as to whether he is in agreement with suggestions from the field team representatives.

George [illegible]. [illegible]ecraft

[illegible] (4)
[illegible] (2)
[illegible]

STANDARD FORM NO. 64

Office Memorandum • UNITED STATES GOVERNMENT

TO : M. E. Volin, Member, DMEA Field Team, REgion II DATE: Butte, Montana Aug. 12, 1952

FROM : John S. McNabb, Mining Engineer, Bureau of Mines

SUBJECT: Routine inspection of the North Boulder Lead Property, Idm-E 313, Jefferson County, Montana. Docket No. DMEA 2471.

A routine inspection of the the North Boulder Lead Property was made on July 30, 1952 in the company of Mr. A. F. Carlson, owner.

Work was begun under Contract Idm-E 313 during the month of July, and during that period it included 8 days of bulldozer trenching and stripping. Approximately 120,000 cu ft. of overburden was removed in the vicinity of the U. S. Bureau of Mines shaft that was sunk at the property last summer. This stripping operation has exposed the vein on the surface in an area east of the shaft. Mr. Carlson has sampled this exposure, but assay data was not yet available. A trench 20 feet deep and 175 feet long was cut 300 feet west of the shaft. This trench exposed the vein and the mineralized portions appears to exceed 50 feet. No samples have been taken in this trench.

At the time of my inspection I spotted another trench 300 feet to the west of the one just completed. I also went along with Mr. Carlson in his proposal to trench approximately 300 feet east of the shaft. When this work is complete I believe that enough information will be available to allow for a decision on whether or not a shaft should be sunk at the property under Stage II of the exploration contract.

I do not feel that it will be necessary to use up all of the money provided for dozing in Stage I of the contract. The property is to be examined by the U. S. G. S. in the near future, and it is also their intent to make a geologic map. Upon the completion of the proposed dozing and the mapping of the property I think we will be able to advise Mr. Carlson whether or not the shaft sinking program is warranted.

At the time of my meeting with Mr. Carlson I went over invoicing details with him, as he had just begun operations and was unfamiliar with the procedure.

John S. McNabb

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION
WASHINGTON 25, D. C.
So. 157 Howard Street
Spokane 4, Washington

June 24, 1952

Mr. Frank E. Johnson
Chairman, Operating Committee
Defense Minerals Exploration Administration
Department of the Interior
Washington 25, D. C.

Re: DMEA 2471, Lead-Zinc
Contract Idm-E313
Albert F. Carlson

Dear Mr. Johnson:

Enclosed are the original and three copies of the subject contract which have been signed by the Operator.

Sincerely yours,

Kathryn Gray
Kathryn Gray
For: A. E. Weissenborn
Executive Officer, DMEA
Field Team, Region II

Enclosures

cc: USBM

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
JUN 30 1952

7-8-52

Docket 500

FILE COPY
SURNAME:

J.W.A.
Moulds

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

Mr. A. E. Weissenborn
Executive Officer, Region II
DMEA Field Team
South 157 Howard Street
Spokane 8, Washington

MAY 12 1952

Re: Docket No. DMEA-2471 (lead-zinc)
Albert F. Carlson
Exploration Project Contract

Dear Mr. Weissenborn:

We are enclosing the original and five copies of the above contract, signed by this office for the Government, together with Exhibit "A" (3 pages) and one map.

Before the contract can be executed it will be necessary to obtain a description of the unpatented lode claims. This description may be the page and volume number of the County Book in which recorded, or survey numbers, if any, or a metes and bounds description, or a map designating the metes and bounds. This description should be attached to the contract.

If the contract meets with your approval, kindly present to the applicant for approval and signature and when completed distribute in the usual manner. In event the contract is not satisfactory, return all copies with your recommendation concerning any necessary modification.

Sincerely yours,

(Signed) FRANK E. JOHNSON

CC 5/12 (NB)

Chairman, Operating Committee
Defense Minerals Exploration
Administration

Enclosures - 6
APPROVED:

J. H. Hedges (NB)
Member, Bureau of Mines

D. M. Lemmon (NB)
Member, Geological Survey

JWAlt/hmj
5-7-52
CC to: Adm. Reading File
Op. Committee
Mr. Bishop
Mr. Moulds
Docket File Copy
Region II
Mr. McKnight
Mr. Alt

FILE COPY
SURNAME:

140

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

Arthur

May 1, 1952

Memorandum

H.S. in R.v.R.

To: Mr. D. E. Moulds

From: Chief Counsel

Subject: Docket No. DMEA-2471, Albert F. Carlson - Exploration Project Contract

There is attached in satisfactory legal form for execution, a contract covering the subject project, subject to the attachment to the contract of a further description of the unpatented lode claims. This description may be the page and volume number of the County book in which recorded, or the survey numbers, if any, or a metes and bounds description, or a map designating the metes and bounds.

J. L. Hofflund

J. L. Hofflund
Chief Counsel

Attachment

HCRubin/ema
cc: Mails & Files
J. L. Hofflund
H. C. Rubin
Chron.

IN REPLY REFER TO:

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY
WASHINGTON 25, D. C.

April 28, 1952

Memorandum

Re: DMEA-2471
Carlson Property
Alta Gulch District
Jefferson County, Montana
$24,900

To: Mr. D. E. Moulds

From: Mr. E. L. Newcomb

Subject: Recommendation for approval

The applicant requests Government assistance to further explore a zone of gold-silver-lead-zinc mineralization on the Wisconsin, Jefferson and Jefferson extension claims near Bernice, Montana.

A field team report recommends that a two stage project should be approved. Stage I consists of preliminary trenching and stripping, and Stage II, which is contingent on the Stage I results, involves sinking a 110-foot shaft and 170 feet of crosscutting and drifting from the 100 level of the new shaft.

The deposit is in diorite near a contact with andesite. The zone of mineralization strikes east-west and dips north, and has been traced by trenching about 2800 feet. The zone of mineralization is characterized as a silicified fissure vein, or veins, composed of oxidized and sulfide-carbonate orebodies. The sulfide carbonate zone is made up of reticulated veinlets, which often form small pockets of ore where veinlets intersect. In general, sulfide-carbonate orebodies are bounded by oxidized zones on the foot and hanging walls.

This prospect was first examined by the Bureau of Mines, in July, 1950, in connection with the Missouri Basin investigation of Jefferson county. As a result of this examination, trench exploration was recommended, and during the summer of 1951, the Bureau cut 8 trenches transverse to the zone of mineralization and a shallow shaft was sunk from trench No. 4. The results of extensive sampling in the trenches indicate that the average grade of the sulfide-carbonate zone is 0.015 oz. gold, 1.3 oz. silver, 2.21% lead, 1.99% zinc, 5.3% manganese and 0.80% copper. The oxidized zone averaged 0.013 oz. gold, 1.8 oz. silver, 0.17% lead, 0.1% zinc, 0.72% manganese and 0.36% copper.

We concur with the field team and recommend that the project, as outlined in the proposed contract, be approved.

E. L. Newcomb

E. L. Newcomb
Geologist

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF MINES
WASHINGTON 25, D. C.

April 22, 1952

Re: DMEA-2471
Lead and Zinc
Albert F. Carlson
Basin, Montana

Memorandum

To: Mr. D. E. Moulds, DMEA

From: H. E. Olund, USBM

Subject: Review of application of Albert F. Carlson, for his property in Secs. 13 and 14, R6N., T7W, M.P.M., Jefferson County, Montana

We have reviewed this application and will recommend that a contract be signed for the sum of $24,900, of which the Government will share $12,450 as its portion of the contract.

In arriving at this amount we had to correct the applicant's figures as follows:

On page 2 of Exhibit "A", under items "To be Purchased" we cut out the $10.00 for 1-hoisting bucket and the $30.00 for the 30 inch sheave wheel as these items cost less than $50.00 and should be included under "Supplies". This gives a total amount of $1,195 for items "To be Purchased".

On page 4, under "Estimated Cost of the Project" we entered the $1,195 instead of $1,175 under "Equipment to be Purchased". There had been an error of $300 in addition, which when corrected, made this column add up to $20,995. Then adding the sum of $3,905 (the cost of Stage I) to this amount gives a total of $24,900 for the 2 stages of exploration.

H. E. Olund

DMEA-2471

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF MINES
1201 N. Division St.
Spokane 2, Wash.
March 19, 1952

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
APR 4 1952

MEMORANDUM

To: Chairman, Operating Committee, DMEA, Washington, D. C.

From: Field Team, Region II

Subject: Applications for exploration assistance, North Boulder lead-zinc prospect, Jefferson County, Mont.

The subject applications accompanied by a memorandum report by E. W. Buel, mining engineer, Bureau of Mines, and a specimen exploration project contract are forwarded herewith for review. The Field Team, in full agreement with the examining engineer's recommendations, considers that the North Boulder prospect warrants the exploration work requested by the applicant.

As exposed by bulldozer trenching during the course of a Bureau of Mines reconnaissance investigation, the North Boulder vein structure was found to be remarkably strong and in one trench to contain significant amounts of lead and zinc accompanied by a manganese carbonate gangue.

The applicant is sincere, and whereas his mining experience is limited he probably is competent to direct the preliminary program requested.

It should be noted that, through misunderstanding, two applications singly involving bulldozer trenching and shaft sinking have been presented. These requests have been combined by the Field Team into a logical step job in the appended specimen contract.

By Field Team, Region II

A. E. Weissenborn, Exec. Officer
(U. S. Geological Survey)

M. E. Volin, Member
(U. S. Bureau of Mines)

cc: USGS, Spokane

ON-SITE EX 44

DMEA-2 471

1201 North Division Street
Spokane 2, Washington
March 20, 1952

MEMORANDUM

To: M. E. Volin, Member, DMEA Field Team, Region II

From: E. W. Bual, Mining Engineer, Bureau of Mines

Subject: Investigation of the North Boulder lead-zinc prospect, Jefferson County, Montana.
Commodities: Lead, zinc, manganese, gold, and silver.

The North Boulder prospect was first examined by the Bureau of Mines in July 1950, in connection with Missouri Basin investigation of Jefferson County, Mont. A preliminary report was submitted describing the features of the property and recommending trench exploration. Reconnaissance trenching of the deposit was undertaken by the Bureau in July 1951, and completed September 1951. The work consisted of 120 hours of bulldozer trenching, sampling, and shaft sinking. A full report of the investigation has been completed for publication as a Bureau of Mines R. I. The following summary of significant facts is submitted for DMEA information.

LOCATION OF DEPOSITS

The North Boulder prospect is in secs. 13 and 14, T. 6 N., R. 7 W., Basin district, Jefferson County, Mont. The property is reached from Basin along U. S. Highway 91, in a westerly direction to the Deer Lodge Forest-Boulder River county road, a distance of 4 miles, thence for a distance of 5 miles over the well graded county road to the Alta Gulch-Thunderbolt Lookout road. The property lies about 1 mile from the county road turn-off. The prospect is at an altitude of 6,400 feet (see attached map).

DESCRIPTION OF BUREAU WORK

The trenches, excavated with a TD-18 straight bladed bulldozer, normal to the vein structure, were in decomposed diorite. Desired trench depths could not always be reached because of water and caving. Location of trenches and workings are shown in the accompanying map. An ore shoot was disclosed in trench No. 4.

Reviewed by
DMEA OPERATING COMMITTEE
4-11-52
(NB) (date)

Extensive channel sampling was done in trenches where strong vein showings are present. Trenches exposing weak vein structure were sampled sparingly.

A shallow exploration shaft was sunk in the bottom of trench No. 4. The purpose of the shaft was to determine the downward extension and attitude of the exposed minerals.

Preliminary beneficiation tests were made at the Albany laboratory of the Bureau of Mines on composite samples of primary ore taken from the exploration shaft in trench No. 4. The object was to recover separate lead, zinc, and manganese concentrates.

A summary of the units of work performed is given below:

Work Units

Bulldozer trenches, number	8	
Bulldozer trenches, total length	1,045	feet
average length	131	"
average depth	15	"
average width	12	"
Shaft (5' x 8'), number	1	
depth	18	feet
Samples (channel), number	38	
total length	128.3	feet
average length	3.4	"
Samples, (grab) number	4	

Preliminary Metallurgical Test Data

	Assay	Percent Recovery
Lead concentrate	59.2 %	86.9 %
Zinc concentrate	53.7 %	87.3 %

(1) Gold and silver will concentrate with the lead.

(2) In two or three preliminary flotation tests, little could be learned regarding the manganese because of the presence of iron.

DESCRIPTION OF THE DEPOSIT

The deposit is near the contact between andesite and granitic rocks of the Boulder batholith. The country rock has been identified as diorite. The structural trend of the deposit is approximately east-west with dips ranging from moderately to steeply north. The structure is traced by trenching about 2,800 feet.

The deposit is a silicified fissure vein, or veins, composed of oxidized and sulphide-carbonate ore bodies. The sulphide-carbonate ore body is made up of narrow reticulated veinlets localized in a shatter zone. These veinlets commonly are less than 4 inches wide; they intersect in places to form high-grade galena-sphalerite ore pockets. The pockets are small; their largest dimension not exceeding a foot.

The sulphide-carbonate stringer zone is exposed by a crosscut driven from the shaft in trench No. 4. This stringer zone is about 25 feet wide; 15 feet is minable low-grade ore. The sulphide-carbonate zone is bounded by oxidized zones on the foot and hanging walls. The hanging wall oxidized zone is reported to be 5 feet wide but apparently is submarginal. The width of the footwall zone is unknown. From trenching, however, it appears that the width probably exceeds 30 feet. Samples taken from this oxidized zone indicate commercial ore grades.

The hypogene ore minerals are galena, sphalerite, and rhodochrosite with minor amounts of chalcopyrite. Cerussite is the dominant supergene ore mineral. Gold and silver are found associated with the ore minerals.

ORE RESERVES AND GRADE

Ore reserve estimates are based entirely on the exposures in trench No. 4. Because of inadequate exposures and structural data, ore reserves are not computed for the remaining trench locations. Ore reserves and grades of the sulphide-carbonate and oxidized ore zones of trench No. 4 are given in the tabulation below:

Ore Reserves

Zone	Indicated	Inferred
Sulphide-carbonate	1,000	6,700
Oxidized	800	-
Totals in short tons	1,800	6,700

Grade*

Zone	Au oz./ton	Ag oz./ton	Pb	Zn	Mn	Cu
			Percent			
Sulphide-Carbonate	0.015	1.3	2.21	1.99	5.30	0.80
Oxidized	0.013	1.8	0.17	0.1	<0.72	0.36

*Average grade of sampling is believed low. Mill heads of sulphide-carbonate crude ore, considerably diluted, showed 2.8 percent Pb and 2.5 percent Zn. Assays for Mn, Cu, Au, and Ag were not made.

RECOMMENDATIONS

1. Further trenching and stripping should be done between the two creek beds to determine the full strike length and attitude of the ore body uncovered in trench No. 4. The area proposed for trenching is outlined on the attached map.

2. If trenching shows extensions of the ore , shoot should be investigated by further shaft sinking and by drifting.

Accessory to the proposed program, further metallurgical testing might be conducted by the Bureau of Mines to determine the feasibility of making a salable manganese carbonate concentrate.

E. W. Buel.

cc: U.S.G.S.

SHIPPING RETURNS:

From North Boulder, Sur. 3239.

1 Lot May 29, 1947 - .085 Gold, 7 oz. Silver, 9.9% Lead, 1.3% Zinc, 5.2% Manganese. Dump.
1 Lot June 24, 1947 -.07 Gold, 5.7 oz. Silver, 4.2% Lead, 1% Zinc. Dump.
1 Lot Aug. 29, 1947 - .19 Gold, 8.4 oz. Silver, 13.5% Lead, 0.7 % Zinc. Carlson Shaft.
1 Lot Oct. 20, 1950 - .09 Gold, 4 oz. Silver, 4.6% Lead, 0.5 Zinc.

Shipped to American Smelting & Refining Co., Helena, Montana.

From Jefferson Sur. 5703. (Trench No. 4)

Approximately 100 tons of ore reovered while trenching and sinking test hole, average grade $20.00 per ton after sorting high grade therefrom. Vein 49 feet wide.

Shipped to Metals Milling Co., Basin, Montana.

ASSAY DATA:

From Wisconsin Sur. 5703. (Trench No. 3)
Vein 14 feet wide, foot wall side more than 5% Lead, 4 Oz. silver, .03 Gold, hanging wall side more than 10% Lead, 5 Oz. Silver, .05 Gold.

x On map indicates Dozing Project.

EXPLORATION

Subject: DMEA-2471
Re: Exploration Loan
North Boulder Sur., etc.
April 7, 1952

Mr. Albert F. Carlson
Basin
Montana

My dear Mr. Carlson:

This will acknowledge receipt of your application dated March 8, 1952 for a loan under the Defense Production Act of 1950.

Your application was assigned Docket Number DMEA-2471 and referred to the Iron and Ferro-Alloys Division.

Kindly refer to DMEA-2471 in any future correspondence relating to your application.

Sincerely yours,

ROBERT E. ADAMS

Robert E. Adams
Acting Administrative Officer

7862

Left This Message:

Received by— Edna

☆ U. S. GOVERNMENT PRINTING OFFICE: 1955 O-367995 16—65931-1

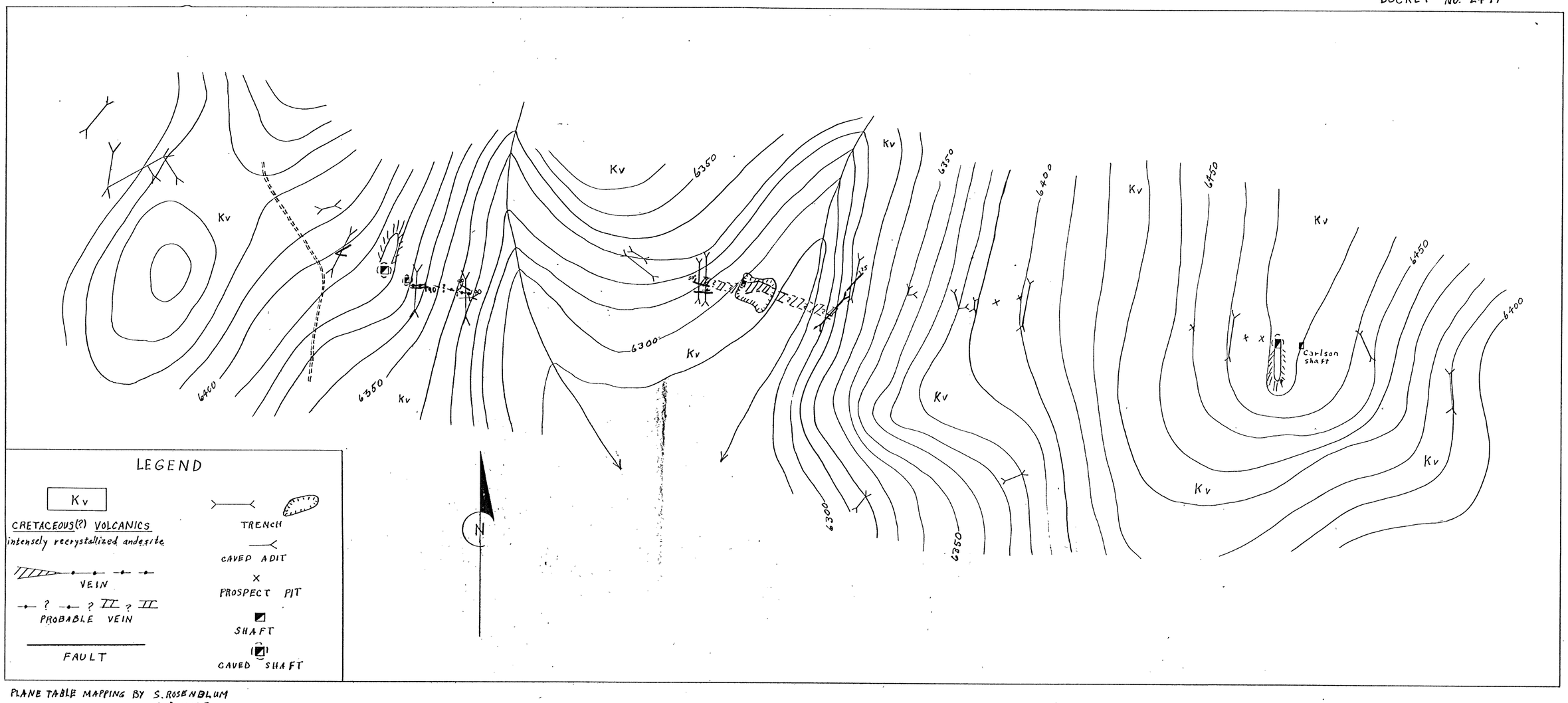
APPENDIX I

The unpatented lode claims listed in Article 2 of this contract are recorded in the Jefferson County Clerk and Recorders office at Boulder, Montana as follows:

Jefferson Extension,	Book 46,	page 629
Remnant,	Book 46,	page 562
(East) Extension North Boulder,	Book 46,	page 628

DEPARTMENT OF THE INTERIOR
UNITED STATES GEOLOGICAL SURVEY

DMEA
DOCKET NO. 2471



PLANE TABLE MAPPING BY S. ROSENBLUM
A. PAYOME
D. BRAMBILLA

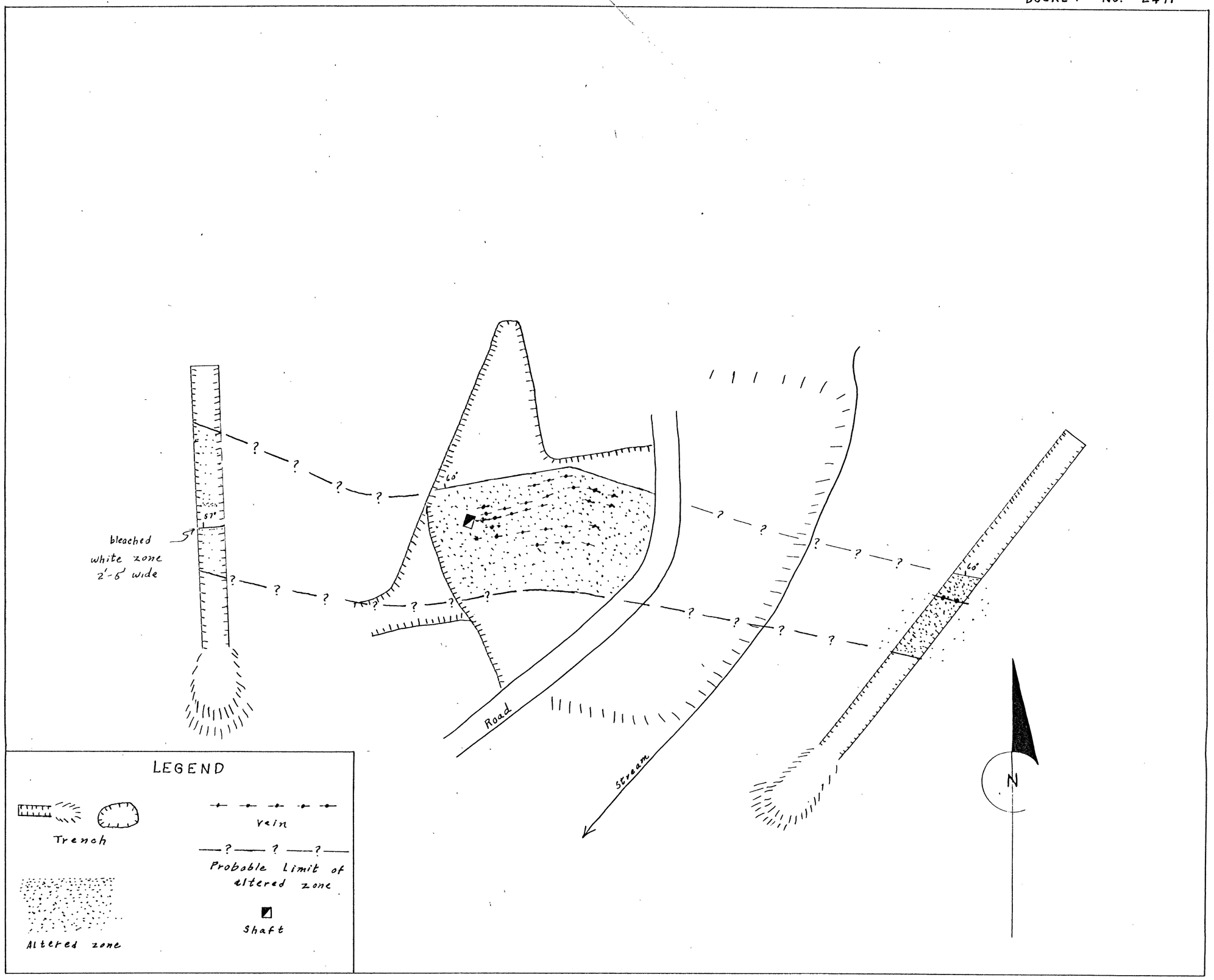
TOPOGRAPHY SKETCHED, DATUM ASSUMED

GEOLOGIC MAP OF THE NORTH BOULDER
LEAD PROSPECT, JEFFERSON CO. MONTANA

BY G. E. BECRAFT
1952
Scale 1" = 200'

DEPARTMENT OF THE INTERIOR
UNITED STATES GEOLOGICAL SURVEY

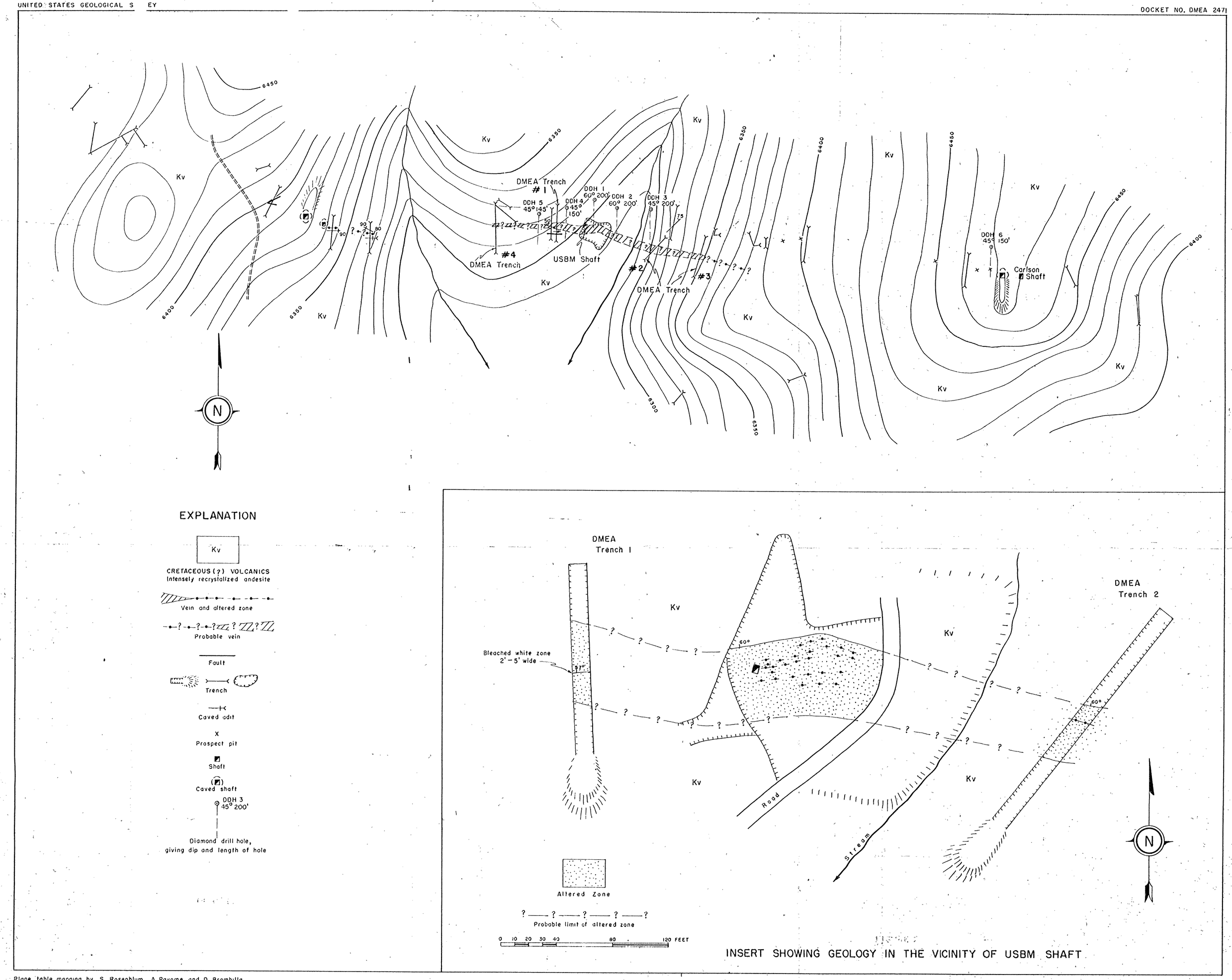
DMEA
DOCKET NO. 2471



MAP SHOWING GEOLOGY IN VICINITY
OF USBM SHAFT, NORTH BOULDER
LEAD PROSPECT, JEFFERSON CO., MONTANA

by
G. E. Becraft + S. Rosenblum
1952

Scale 1" = 40'



Plane table mapping by S. Rosenblum, A Payome and D. Brambilla
Topography sketched, datum assumed

GEOLOGIC MAP
OF THE

NORTH BOULDER LEAD PROSPECT

JEFFERSON COUNTY, MONTANA

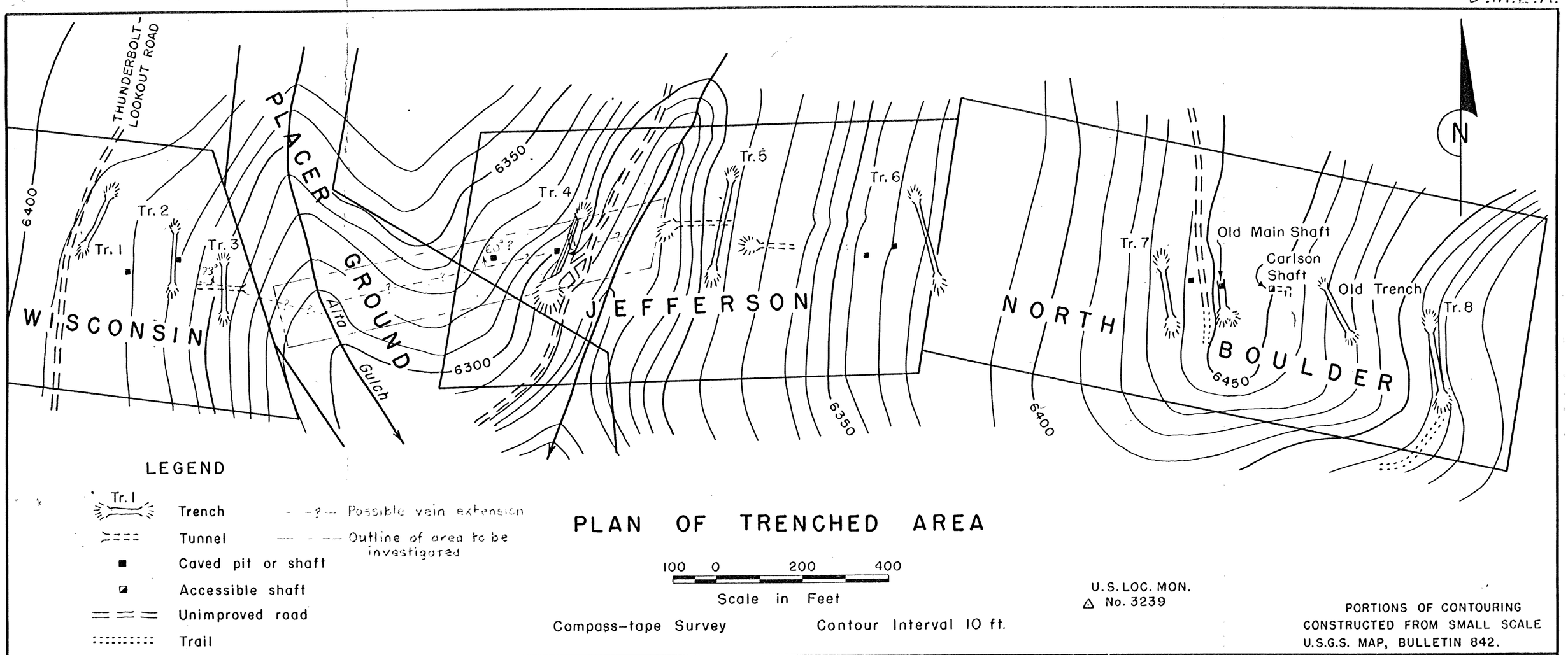
By G.E. Becraft

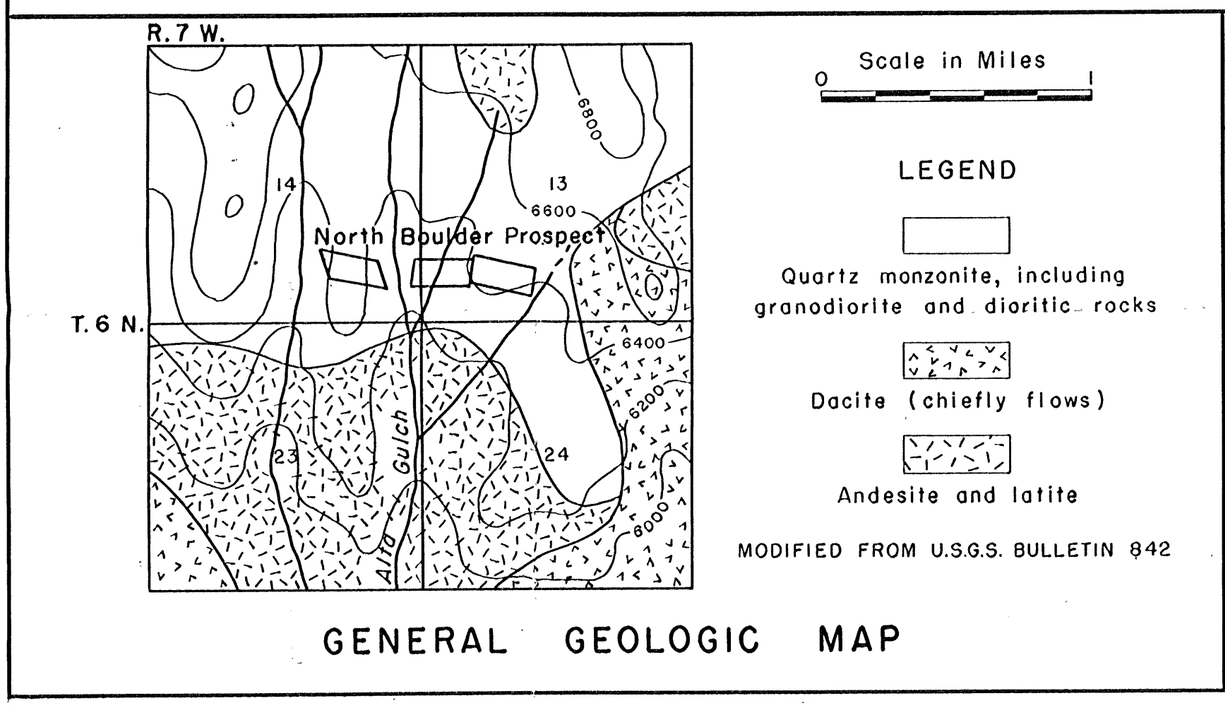
1954

0 200 400 600 800 1000 Feet

Figure 1

D.M.E.A.





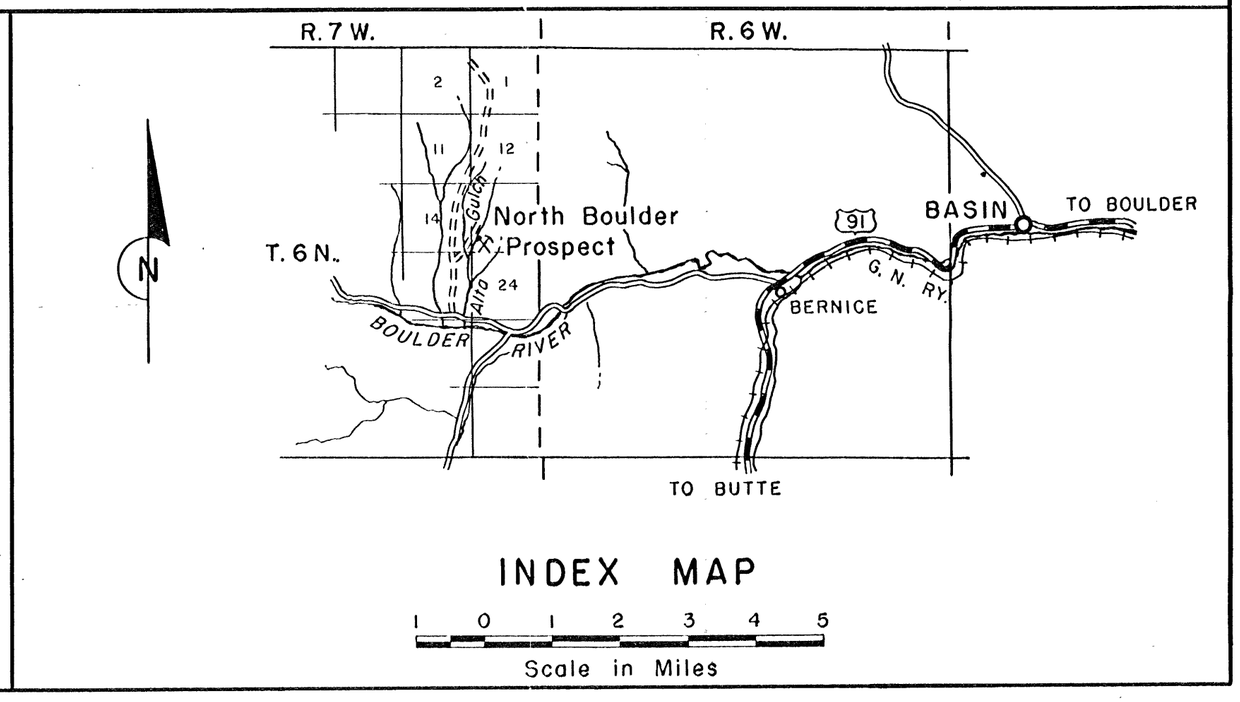


Figure - Index, geology, and trenching plans of North Boulder prospect, Jefferson County, Mont.