DMEA Form 9
Rev. 6/57

UNITED STATES
DEPARTMENT OF THE INTERIOR
Defense Minerals Exploration Administration

OFFICIAL DOCKET FILE

Idm-E NO. 301

DMEA NO. 2388

Application
- [ ] Denied
- [ ] Withdrawn

Contract
- [ ] Terminated - Not Certified
- [ ] Terminated - Certified
- [ ] Cancelled
- [ ] Royalty Agreement

The records contained in this file are marked (x) and arranged in this order:

Folder No. 1:

Left Side

- [X] Royalty Audits
- [X] Certification of Discovery
- [ ] Closing Letter
- [X] Cost Audits
- [ ] Termination Notice or Agreement
- [ ] Recision Notice
- [X] Assignment of Contract
- [ ] Contract Amendments
- [X] Contract with all exhibits and annexes
- [X] Owner's Consent to Lien and Subordination Agreement
- [X] Application and attachments

Right Side

- [X] Project summary (final)
- [X] Work Completed analysis (final)

All other material filed in chronological order including the following reports if checked:

- [X] Field Team Semi-Annual Report for Certified Project
- [X] Final Field Team Report (Tab)
- [X] Operator's Final Report (Tab)
- [X] Interim Field Team Reports
- [X] Operator's monthly reports and all attachments
- [X] On-site Exam Report (Tab)
- [ ] Settlement Sheets
- [ ] Drill Logs

Additional Folders:

Left Side

Folders No._____: Reports
- [ ] Analysis of Semi-Annual Inspection Reports
- [ ] Project Summary (Interim) by DMEA Engineers

Right Side

- [ ] Field Team Semi-Annual Report for Certified Project
- [ ] Field Team Interim Reports
- [ ] Operator's Monthly Reports with transmittal, narrative and maps.

Folders No._____: Maps (Use pocket folder or envelope)

Folders No._____: Settlement Sheets

Folders No._____: Drill Logs

Folders No._____: Royalty material

Reported Inactive 12/28/59

17963

Mr. Stewart

225

OFFICE OF MINERALS EXPLORATION
CONTRACT ADMINISTRATION AND AUDIT DIVISION

REPORT OF ROYALTY REVIEW

I have reviewed the files of the Office of Minerals Exploration, Washington, D. C., pertaining to Contract No. Idm-E301, Docket No. DMEA-2388 (Zinc-Lead), dated April 21, 1952, with

American Zinc, Lead and Smelting Co.
927 Old National Bank Building
Spokane, Washington

for the purpose of determining the amount of royalty due the U. S. Government on sales of minerals from property referred to as Blue Bird Mine located in Pend Oreille County, Washington, during the period April 21, 1952, through September 8, 1959.

In accordance with Termination Agreement dated July 7, 1953, royalty is payable on all minerals mined or produced from the land described in Article 2 of the contract for a period of 10 years from the date of the contract or until the total net amount contributed by the Government without interest is fully repaid, whichever occurs first. A Report of Review in lieu of final cost audit dated October 27, 1953, indicated accepted costs under the exploration contract amounting to $35,753.37 with the Government's contribution, on a 50 percent basis, being $17,876.67.

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

(1) Exploration work was discontinued prior to completion of the contract because of unsatisfactory results of surface diamond drilling;

(2) Reports of investigations by representatives of the Field Team, Region I, indicate that there has been no production of minerals from the land during the exploration period or subsequent thereto; and

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

The review indicated that there has not been any production or sales of minerals from the land described in Article 2 of the contract since April 21, 1952, and no royalty is due the Government.

C. E. Fisher
C. E. Fisher, OME Auditor

October 20, 1959

MME Form 22
April 59

DEPARTMENT OF THE INTERIOR
Office of Minerals Exploration

CHECK SHEET OF EXAMINING ENGINEER

Operator's Name American Zinc, Lead & Smelting Co.

Address 927 Old National Bank Building

Spokane, Washington

Exploration Contract No. Idm-E301 Docket No. DMEA-2388

		Check One Yes	Check One No.
1.	(a) Does the Operator stockpile ore subject to royalty repayment?		X
	(b) If so, is segregation and identification procedure adequate?		
2.	(a) Does Operator commingle production subject to DMEA or OME royalties with exempt production?		X
	(b) If so, do you consider the allocation of the commingled production equitable?		
3.	(a) Does the Operator stockpile mine or mill rejects (low grade ore, tailing, middlings, etc.) that may have potential value within the royalty payment period?		X
	(b) If so, are adequate records maintained on such material to protect the Government's interest?		
4.	Do you consider the assay controls in effect are adequate?	X	
5.	Do you consider that the manner of disposing of production gives the Government its fair royalty returns?	X	
6.	Do your periodic examinations of operations indicate the Operator is properly reporting his production of ores subject to DMEA or OME royalties?	X	
7.	Does the Operator buy from or sell to other Operators?		X
8.	Comment on any item 2 (b) to 6 if answer is No.		

Property inactive.

September 8, 1959
Date

S. W. Zoldok
Mining Engineer
S. W. Zoldok

53362

DEFENSE MINERALS EXPLORATION ADMINISTRATION
CONTRACT ADMINISTRATION AND AUDIT DIVISION

REPORT OF REVIEW

I have reviewed the Monthly Reports of:

American Zinc, Lead and Smelting Co.
927 Old National Bank Building
Spokane, Washington

pertaining to Exploration Project Contract No. I&m-E301, Docket No. DMEA-2388, covering a project of exploration for zinc and lead located in Pend Oreille County, Washington, commonly known as the Blue Bird Property, for the period of April 21, 1952 to July 7, 1953.

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 Executive Officer of the DMEA Field Team, 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 the estimated possible additional disallowances thereunder;
(b) the Monthly Reports were supported by documentary proof of costs claimed under a contract provision for payment by the Government on the basis of the actual costs incurred; and
(c) the major portion ($33,999.48) of the costs covered diamond drilling and bulldozing at unit rates under subcontracts.

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

Total cost as billed by Contractor		$36,624.56
Less: Salvage proceeds		-0-
Net Cost as claimed by Contractor		$36,624.56
Exceptions (Schedule attached):		
By DMEA Finance Officer	$871.19	
Herewith	-0-	871.19
Total Accepted Cost		$35,753.37

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 Seventeen thousand eight hundred seventy-six and 67/100 Dollars

$17,876.67

is considered valid and proper.

C. A. Turner, Auditor

October 27, 1953

SCHEDULE OF EXCEPTIONS

American Zinc, Lead and Smelting Co. DMEA-2388 Idm-E301

Supervision 1952	Claimed MF-104	Disallowed	Accepted Cost
May	$ 239.72	$ -0-	$ 239.72
June	641.53	391.53	250.00
July	301.45	82.48	218.97
August	305.23	55.23	250.00
September	352.31	102.31	250.00
October	563.48	313.48	250.00
November	258.64	8.64	250.00
December	45.20	-0-	45.20
Total	$2,707.56	$953.67	$1,753.89

Vacation pay claimed on July MF-104 was deleted by the Certifying Officer and accepted by the contractor on his October 1952 MF-104	$82.48
Amounts in excess of the allowable maximum of $250.00 per month were deleted by the Certifying Officer but not accepted by the contractor on his final MF-104, therefor	
Disallowance confirmed by this review	871.19
Total	$953.67

C. A. Turner, Auditor

October 27, 1953

Docket copy

AGREEMENT

It is agreed this 7th day of July 1953, between the United States of America, acting through the Department of the Interior, Defense Minerals Exploration Administration, hereinafter called the "Government", and American Zinc, Lead & Smelting Co., hereinafter called the "Operator", as follows:

WHEREAS, the parties hereto are also parties to an Exploration Project Contract dated April 21, 1952, Docket No. DMEA-2388, Contract Idm-E301; and

WHEREAS, the Operator desires to discontinue and permanently terminate the exploration work provided for in said contract;

NOW THEREFORE, it is understood and agreed as follows:

1. The work described in said Exploration Project Contract shall be discontinued and permanently terminated, before the completion thereof, as of July 7, 1953.

2. Any work prosecuted or costs incurred by the Operator after the date above fixed for termination, 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 cost of any reports, accounts, and winding-up and settlement actions provided for in the contract.

3. The Government's contribution to the cost of the work up to the time above fixed for termination is the sum of $17,876.67 1/, and said sum shall be repayable in the form of a percentage royalty on any minerals mined or produced from the land described in Article 2 of the contract within ten years from the date of said Exploration Project Contract, in the same manner and to the same extent and subject to all the terms and conditions of said Exploration Project Contract which are relevant thereto, as if the Government had made the certification of discovery or development referred to in Article 9 of said Exploration Project Contract.

2/ Subject to audit.

Executed in sextuplicate the day and year first above written.

THE UNITED STATES OF AMERICA

By C. O. Mittendorf
Administrator, Defense Minerals
Exploration Administration

Hoffman Jackson

AMERICAN ZINC, LEAD & SMELTING CO.

By R. A. Young
Vice President

By _____

I, W. J. Matthews, Jr., certify that I am the secretary of the corporation named as Operator herein; that R. A. Young, who signed this contract on behalf of the Operator, was then Vice President of said corporation; that said contract was duly signed for and in behalf of said corporation by authority of its governing body, and is within the scope of its corporate powers.

W. J. Matthews, Jr.
SECRETARY

[Corporate Seal]

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

RECEIVED
APR 24 1952
U.S.G.S.
SPOKANE, WASH.

DOCKET NO. DEA 2333

COMMODITY Zinc, lead

Idm-E301

Docket Copy

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

EXPLORATION PROJECT CONTRACT [1]

IT IS AGREED this 21st day of April, 1952, between the United States of America, acting through the Department of the Interior, Defense Minerals Exploration Administration, hereinafter called the "Government," and [2] American Zinc, Lead and Smelting Co.
627 Old National Bank Building
Spokane, Washington

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 Washington, County of Pend Oreille, described as follows: [3]
Blue Bird Group located in Secs. 30 and 31, T. 40 N., R. 44 E., and Secs. 25 and 36, T. 40 N., R. 43 E., W.M. Individual claims are listed on attached sheet, and shown on attached map.

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:
Lease and Option Agreement on Blue Bird - Dumont Property.

~~(b) That the Operator is owner, in possession and entitled to possession and the Owner's Consent to Lien is attached.~~
The Operator shall devote the land and all existing improvements, facilities, buildings, installations, and appurtenances to the purposes of the exploration project without any allowance for the use, rental value, depreciation, depletion, or other cost of acquiring, owning, or holding possession thereof.

ARTICLE 3. *Exploration project.*—The Operator, within 30 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 two years (2) 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.

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[1] If sufficient space is not provided in any blank, use an extra sheet of paper and refer to it in the blank.
[2] Full name, address, and nature of organization if any.
[3] 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. Production from which is not to be subject to the Government's percentage royalty.
[4] Strike the provision not applicable.
[5] Mineral or minerals.

(*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 $58,250.00, which is 50 percent of $116,500.00, 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.

American Zinc, Lead and Smelting Co.
(Operator)

By [signature]
Roy Young, Vice-President

THE UNITED STATES OF AMERICA

By [signature: C O Mittendorf]
Acting Administrator
Defense Minerals Exploration Administration

I, W. J. Matthews, Jr., certify that I am the Assistant secretary of the corporation named as Operator herein; that R. A. Young, who signed this contract on behalf of the Operator, was then Vice-President of said corporation; that said contract was duly signed for and in behalf of said corporation by authority of its governing body, and is within the scope of its corporate powers.

[signature: W. J. Matthews Jr.]
Secretary

[CORPORATE SEAL]

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

LIST OF MINING CLAIMS

Mining claims of location title:

Lucky Boy 1, Lucky Boy 2, Lucky Boy 3.
Blue Bird Lode, Blue Bird Lode 2, Blue Bird Lode 3, Blue Bird Lode 4, Blue Bird Lode 5, Blue Bird Lode 6, Blue Bird Lode 7, Blue Bird Lode 8, Blue Bird Lode 9.
Red Rock.
North Star 1, North Star 2, North Star 3, North Star 4.

A contiguous group of seventeen (17) mining claims, presently owned by George Dumont, William Dumont and Howard L. Kimmel, situated in parts of Section 36 and Section 25, Township 40 N., R. 43 E; W. M. and Section 30 and 31, Township 40 N., Range 44 E; W. M. of Pend Oreille County, Washington. (Hereafter referred to as Blue Bird-Dumont property.)

and,

An adjacent and a contiguous group (with the exception of one claim, namely Blue Bird 40 and a patented claim, Hill Lode No. 2.) of thirty-one (31) claims of location title, located and claimed by the American Zinc, Lead and Smelting Company, which are described as follows:

Blue Bird 10, Blue Bird 11, Blue Bird 12, Blue Bird 13, Blue Bird 14, Blue Bird 15, Blue Bird 16, Blue Bird 17, Blue Bird 18, Blue Bird 19, Blue Bird 20, Blue Bird 21, Blue Bird 22, Blue Bird 23, Blue Bird 24, Blue Bird 25, Blue Bird 26, Blue Bird 27, Blue Bird 28, Blue Bird 29, Blue Bird 30, Blue Bird 31, Blue Bird 32, Blue Bird 33, Blue Bird 34, Blue Bird 35, Blue Bird 36, Blue Bird 37, Blue Bird 38, Blue Bird 39,

Situated parts of Sections 30 and 31, Township 40, N. Range 44 E; W.M., Pend Oreille County, Washington

Blue Bird 40 (not contiguous)
Hill Lode No 2, Survey #1194, presently owned by Pend Oreille County and to be purchased by American Zinc, Lead and Smelting Company.

EXPLORATION PROJECT CONTRACT
AMERICAN ZINC, LEAD AND SMELTING COMPANY
DOCKET NO. DMEA-2388

EXHIBIT "A"

Description of the Work

The purpose of this project is to explore by diamond drilling the contact between the Ledbetter Slate and the underlying Metaline Limestone. The work is to be performed in two stages as follows:

Stage I:

A total of 9,000 feet of diamond drilling from the surface to explore the contact between the Ledbetter Slate and the Metaline Limestone. Holes are to be drilled at the approximate locations as shown on attached map.

Stage II:

Upon completion of Stage I, Stage II shall be undertaken if, in the opinion of the Government, the results of Stage I warrant further work. Stage II shall consist of an additional 9,000 feet of diamond drilling at locations agreeable to the Government and the Operator.

Estimated Costs of the Project

Stage I:

(1) Independent Contracts:

9,000 feet of diamond drilling @ $5/ft.	$ 45,000.00
125 hrs. of bulldozing @ $12/hr.1/	1,500.00

1/ Includes bulldozer, operator, and all operating supplies, repairs, and maintenance.

(2) Labor, Supervision, Consultants:

1 - Engineer-supervisor, part-time, $250/mo. for 9 months $ 2,750.00

(3) Operating Materials and Supplies:

Pipe, casing, assaying, core boxes and other miscellaneous items not supplied by independent contractor 9,000.00

(4) Operating Equipment:

To be purchased:

None

To be furnished by Operator:

None

(5) Rehabilitation and Repairs:

None

(6) New Buildings, Improvements, Installations:

None

(7) Miscellaneous:

None

(8) Contingencies:

None

Total for Stage I . . . $ 58,250.00

Stage II:

Duplicates Stage I in all items . . . 58,250.00

Total estimated costs $116,500.00

OWNER'S CONSENT TO LIEN

WHEREAS, the undersigned, as owner, co-owner, lessor, or seller has an interest in certain property in the State of Washington, County of Pend Oreille, which is the subject of a proposed Exploration Project Contract, hereinafter called the "Contract", between the United States of America, hereinafter called the "Government", and 1/

AMERICAN ZINC, LEAD AND SMELTING COMPANY

hereinafter called the "Operator"; and

WHEREAS, under certain provisions of said Contract which are set forth on the reverse side hereof, the Government will acquire certain rights and equities which do or may conflict with or be adverse to the interest of the undersigned in said property;

NOW THEREFORE, the undersigned, in consideration of said Contract and as an inducement to the Government and Operator to enter into same, undertakes and agrees as follows:

1. The Government's equity in and right to remove facilities, buildings, fixtures, and equipment, as provided in the Contract, shall prevail over and be prior and superior to any conflicting or adverse rights of the undersigned.

2. The Government's percentage royalty on net smelter returns or other net proceeds realized from ore, concentrates, or metal produced within ten (10) years from the date of the Contract, and the Government's lien for the payment of said percentage royalty shall attach to the mineral deposit and the production therefrom, in the amount of the Government's contribution, not in excess of 2/ $ 58,250.00, all upon the terms and conditions set forth in said Contract.

3. The undersigned shall commit no act nor assert any claim that may contravene or conflict with the lien, claim, or rights of the Government under the provisions of the said Contract. This agreement shall be binding upon the heirs, executors, administrators, successors, and assigns of the undersigned.

Dated this 5th day of February, 1952.

William Dumont

George Dumont

Helen I. Kimmel + Howard L. Kimmel

1/ Insert the name of the Operator as it will appear in the Exploration Project Contract.

2/ Insert the maximum amount of the Government's contribution.

RELEVANT CONTRACT PROVISIONS

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

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.

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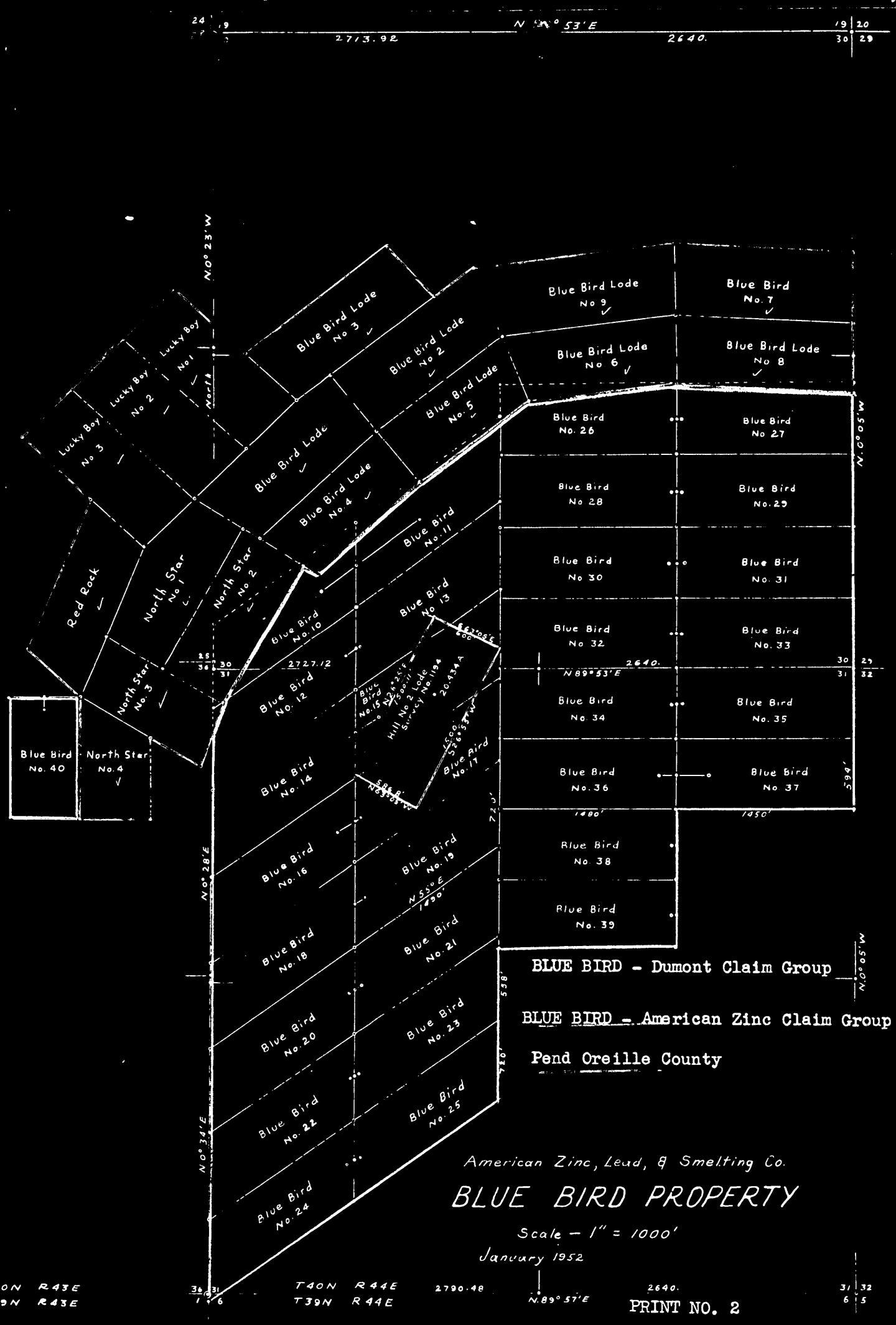
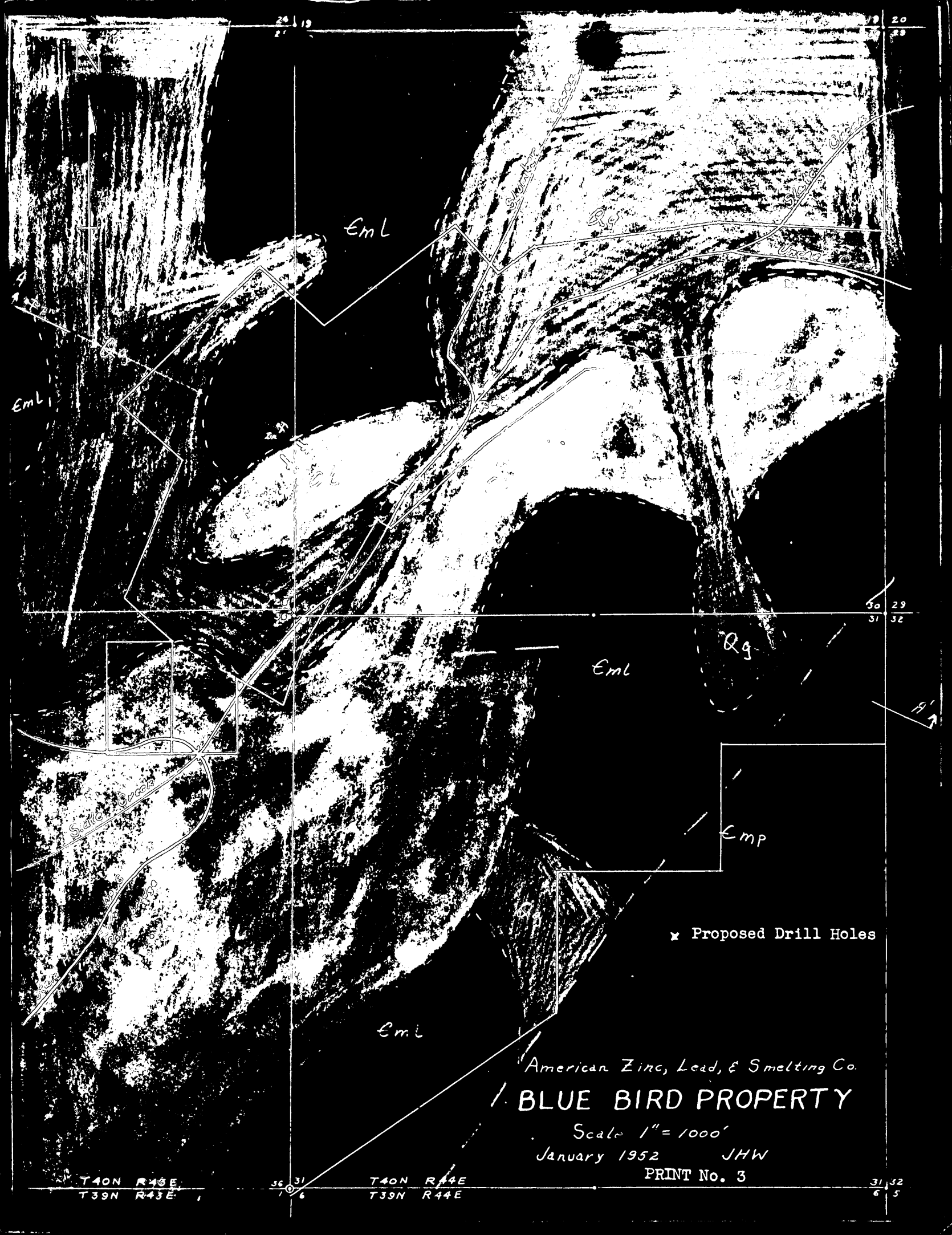
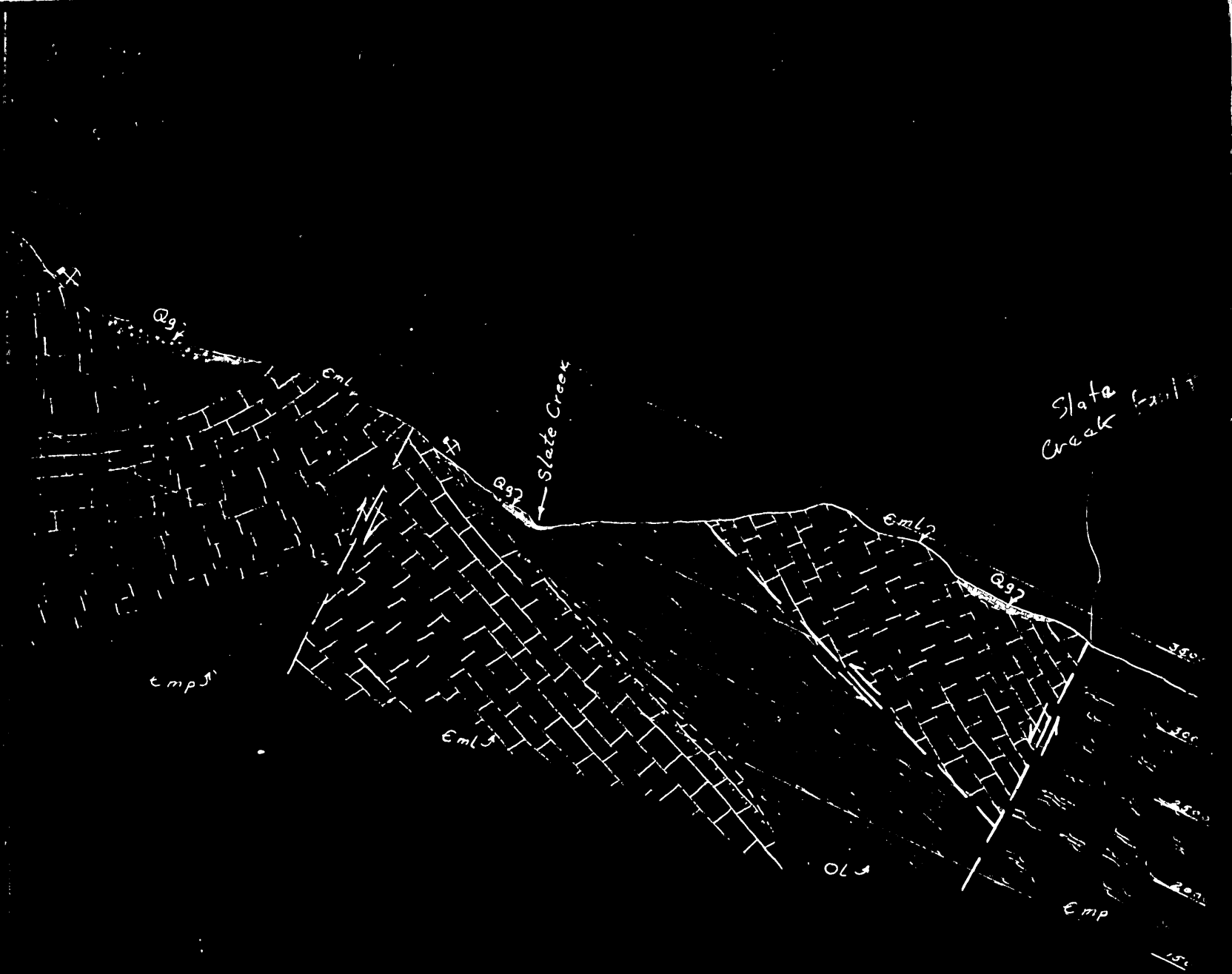
DEPARTMENT OF THE INTERIOR

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.


N
N 0° 53' E
2713.92
2640.
N 0° 23' W
Lucky Boy No 1
Lucky Boy No 2
Lucky Boy No 3
Red Rock
North Star No 1
North Star No 2
North Star No 3
North Star No. 4
Blue Bird No. 40
Blue Bird Lode No 3
Blue Bird Lode No 2
Blue Bird Lode No: 5
Blue Bird Lode
Blue Bird Lode No. 4
Blue Bird Lode No 9
Blue Bird No. 7
Blue Bird Lode No 6
Blue Bird Lode No 8
Blue Bird No. 26
Blue Bird No 27
Blue Bird No 28
Blue Bird No. 29
Blue Bird No 30
Blue Bird No. 31
Blue Bird No 32
Blue Bird No. 33
Blue Bird No 34
Blue Bird No. 35
Blue Bird No. 36
Blue Bird No 37
Blue Bird No. 38
Blue Bird No. 39
Blue Bird No. 11
Blue Bird No. 13
Blue Bird No. 10
Blue Bird No. 12
Blue Bird No. 15
Blue Bird No. 17
Blue Bird No. 14
Blue Bird No. 16
Blue Bird No. 19
Blue Bird No. 18
Blue Bird No. 21
Blue Bird No. 20
Blue Bird No. 23
Blue Bird No. 22
Blue Bird No. 25
Blue Bird No. 24
Hill No 2 Lode Survey No 1194
20.434 A
2727.12
N 89° 53' E
2640.
1480'
1450'
1500'
N 53° E
1490'
N 0° 05' W
N 0° 28' E
N 0° 34' E
T40N R43E
T39N R43E
T40N R44E
T39N R44E
2790.48
N.89° 57' E
BLUE BIRD - Dumont Claim Group
BLUE BIRD - American Zinc Claim Group
Pend Oreille County
American Zinc, Lead, & Smelting Co.
BLUE BIRD PROPERTY
Scale - 1" = 1000'
January 1952
PRINT NO. 2


Eml
Qg
Emp
Proposed Drill Holes
American Zinc, Lead, & Smelting Co.
BLUE BIRD PROPERTY
Scale 1" = 1000'
January 1952 JHW
PRINT No. 3
T40N R43E
T39N R43E
T40N R44E
T39N R44E



Probable ore horizon

Qg

Quaternary gravels

Ol

Ledbetter Slate

Eml

Metaline limestone

Emp

Maitlen phyllite

American Zinc, Lead & Smelting Co.

BLUE BIRD PROPERTY

SECTION

Modified after Section A-A' of U.S.G.S. Prof. Paper 202 of Pl. 1 by C.F. Park Jr.

Scale 1" = 1000'

January 1952 J.H.W.

PRINT No. 4

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-2388
Metal or Mineral
Date Received 2-21-52
Amount $
Participation (Government %)

AMERICAN ZINC, LEAD AND SMELTING COMPANY
927 OLD NATIONAL BANK BUILDING
SPOKANE, WASHINGTON.

Name and address of applicant

Date February 5, 1952

If you have already filed MF-100, give date filed May 4, 1951, type of assistance requested Exploration Loan,

DMA Docket Number (if available) 1166-X

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.

Department of the Interior
Defense Minerals Administration
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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.

AMERICAN ZINC, LEAD & SMELTING COMPANY
(Name of company)

By Ray [illegible]
(Signature of authorized official)

February 8, 1952
(Date)

Vice President
(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

FORM MF-103

List of Mining Claims

1. (a) Mining claims of location title:

Lucky Boy 1, Lucky Boy 2, Lucky Boy 3.
Blue Bird Lode, Blue Bird Lode 2, Blue Bird Lode 3, Blue Bird Lode 4, Blue Bird Lode 5, Blue Bird Lode 6, Blue Bird Lode 7, Blue Bird Lode 8, Blue Bird Lode 9,
Red Rock
North Star 1, North Star 2, North Star 3, North Star 4.

A contiguous group of seventeen (17) mining claims, presently owned by George Dumont, William Dumont and Howard L. Kimmel, situated in parts of Section 36 and Section 25, Township 40 N, R. 43 E; W. M. and Section 30 and 31, Township 40 N, Range 44 E; W. M. of Pend Oreille County, Washington. (Hereafter referred to as Blue Bird-Dumont property.)

and,

An adjacent and a contiguous group (with the exception of one claim, namely Blue Bird 40 and a patented claim, Hill Lode No. 2.) of thirty-one (31) claims of location title, located and claimed by the American Zinc, Lead and Smelting Company, which are described as follows:

Blue Bird 10, Blue Bird 11, Blue Bird 12, Blue Bird 13, Blue Bird 14, Blue Bird 15, Blue Bird 16, Blue Bird 17, Blue Bird 18, Blue Bird 19, Blue Bird 20, Blue Bird 21, Blue Bird 22, Blue Bird 23, Blue Bird 24, Blue Bird 25, Blue Bird 26, Blue Bird 27, Blue Bird 28, Blue Bird 29, Blue Bird 30, Blue Bird 31, Blue Bird 32, Blue Bird 33, Blue Bird 34, Blue Bird 35, Blue Bird 36, Blue Bird 37, Blue Bird 38, Blue Bird 39,

Situated parts of Sections 30 and 31, Township 40, N. Range 44 E; W. M., Pend Oreille County, Washington.

Blue Bird 40 (not contiguous)
Hill Lode No. 2.

(hereinafter referred to as Blue Bird-American Zinc property.)

(b) We are submitting herewith as an attachment to this application, a conformed copy of Lease and Option, dated November 19, 1951 by and between William Dumont, George Dumont and Howard L. Kimmel and wife, first parties, and the American Zinc, Lead and Smelting Company, second parties, covering the group of claims described above as Lucky Boy 1, 2 and 3, and Blue Bird Lode, 2, 3, 4, 5, 6, 7, 8 and 9, inclusive, Red Rock and North Star 1, 2, 3 and 4.

(c) The initial exploration work will be done on the Blue Bird-Dumont property described above. The probabilities are that all of the exploration work done under authorization that may result from this application will be done on the Blue Bird-Dumont property but it is possible that some of it may be done on the Blue Bird-American Zinc property.

2. (a) It is expected that zinc, lead and silver minerals will be discovered.

(b) Attached is a map and a section on 1000' scale and drawn after the geology as shown on Plate 1 (Map and Section AA) as of USGS Professional Paper No. 202.

The important discoveries in the Metaline District that have resulted in past and current production have been made where or in the vicinity of outcrops of the normal contact between Ledbetter Shale and the normal underlying formation, commonly called Metaline Limestone. We believe that such an outcrop condition exists for a considerable distance with a NE strike roughly through the center of the Blue Bird-Dumont group of claims. The two points where this contact has been exposed favorable formation is present that is mineralized with sphalerite. Most of the indicated contact is covered with overburden, probably of moderate thickness. From a geological viewpoint the area covered by this property is the most favorably located of any other area that we know about in the Metaline District, excepting the Grandview and Pend Oreille Mine areas, particularly from the standpoint of the possibility of making important mineral discoveries at the outcrop or at shallow depths. Conditions are favorable for the discovery, by diamond drilling as proposed in this application, of commercial ore bodies similar to those that occur at the Grandview and Pend Oreille Mines, four miles to the S. W. and probably adjacent to the same faulting system.

3. (a) The proposed exploration program is to be divided into two stages, the initial or first stage consisting of twenty-two (22) holes tentatively located on Print No. 3 submitted herewith, totaling about 9,000 feet of drilling. The second stage to consist of probably the same footage of diamond drilling or some modification thereof that the results of Stage 1 seem to justify and that the government will approve. The project will be discontinued if results accomplished in Stage 1 do not offer sufficient encouragement.

(b) The program could be started within sixty days of the date of the approval of this application and would require about two years to complete.

4. We are enclosing herewith prints that may be described as follows:

Print No. 1. USGS Metaline Quadrangle Topography Sheet, with the location of Blue Bird-Dumont and Blue Bird-American Zinc properties with respect to the location of American Zinc-Grandview Lease, American Zinc-Mineral Right and American Zinc-Lead Hill Mines, indicated thereon.

Print No. 2. A Claim Map showing the Blue Bird-Dumont property and the Blue Bird- American Zinc property segregated.

Print No. 3. A Surface Geological Map of the two Blue Bird properties with the locations of the proposed drill holes of Stage 1 of this application.

Print No. 4. A Geological Section across the Blue Bird properties.

5. There are no buildings on the property other than a one room cabin with outbuildings.

A gravel road across the property near its Northern edge and there are several spur logging roads crossing the property on the North side of Slate Creek. Other than providing for access to drill hole locations there will be no rehabilitation or repairs except what appears under Paragraph No. 9.

6. The exploration plan applied for herein does not contemplate additional facilities, buildings or fixtures to be purchased or installed.

7. (a) Will rent a bulldozer for access roads $8.00 to $12.00 per hour, total cost, depending upon size of the bulldozer. American Zinc, Lead and Smelting Company may rent diamond drill or drills to drilling contractor on basis of $3.00 per eight hour shift operated.

(b) Do not expect to purchase any operating equipment.

(c) Do not expect to furnish any equipment if satisfactory diamond drill contractor can be secured. Otherwise, American Zinc, Lead and Smelting Company may use its own diamond drills, charging project with depreciation rate satisfactory to the Government.

8. It is expected that a contract will be let for the diamond drilling. The diamond drilling crew, when weather permits, will consist of four diamond drillers, four diamond drill helpers and one supervisor, half-time. The American Zinc, Lead and Smelting Compay current wage scale is contracted for until July 1, 1952 and is as follows for

Day Shift Diamond Drillers	$1.895 per hour
Night Shift Diamond Drillers	1.955
Day Shift Diamond Drill Helpers	1.655
Night Shift Diamond Drill Helpers	1.715
Diamond Drill Supervisors	2.000

9. Drilling cost exclusive of pipe casing as of Item d.

(a)	First Stage	9,000 feet of drilling	$45,000.00
	Second Stage	9,000 feet of drilling	45,000.00

(b) American Zinc Company Engineer, Half-Time, at approximately $500.00 per month. Eighteen (18) Months operating time (excluding winter weather)

First Stage	2,750.00
Second Stage	2,750.00

9. (c) Cost of clearing, bulldozing and providing access for drill hole location.

First Stage	1,500.00
Second Stage	1,500.00

(d) Pipe, casing, materials and supplies, assaying, core boxes or any other miscellaneous small items not furnished by drilling contractor under the terms of his contract.

First Stage	9,000.00
Second Stage	9,000.00
Total	$ 116,500.00

10. a. American Zinc, Lead and Smelting Company is prepared to invest at least 50% of the cost of the proposed project.

b. Yes

LEASE AND OPTION

THIS INDENTURE, Made this 19th day of November, 1951 by and between William Dumont (53.34% ownership) of Metaline Falls, County of Pend Oreille, State of Washington and George Dumont (26.66% ownership) of Seattle, Washington and Howard L. Kimmel & Wife (20.00% ownership) of Newport, Washington, as first parties and the AMERICAN ZINC, LEAD AND SMELTING COMPANY, a corporation, as second party,

W I T N E S S E T H:

In consideration of the sum of $400.00 (Four Hundred Dollars) in hand paid by second party to first parties, receipt of which is hereby acknowledged, first parties hereby lease to second party and grant to it an Option to purchase the following mining location claims, situated in the Slate Creek Area of the Metaline Mining District in Pend Oreille County, Washington, wo-wit:

Lucky Boy No. 1	Blue Bird Lode No. 6
Lucky Boy No. 2	Blue Bird Lode No. 7
Lucky Boy No. 3	Blue Bird Lode No. 8
Blue Bird Lode	Blue Bird Lode No. 9
Blue Bird Lode No. 2	Red Rock
Blue Bird Lode No. 3	North Star No. 1
Blue Bird Lode No. 4	North Star No. 2
Blue Bird Lode No. 5	North Star No. 3

North Star No. 4

1. The purchase price under this Option is the sum of $60,000.00 which may be paid without interest as hereinafter stated.

2. The Second party may take possession of said claims and any improvements, material and equipment now thereon immediately upon the signing of this instrument and may do any mining, exploration, development or other work or make any improvements thereon which it may see fit, mine or ship any ore or mineral therefrom and for any of such purposes may use any timber on any portions of said claims; and may generally treat and use such premises as though it were the owner thereof.

3. Second party shall, as long as this Agreement remains in force, do any assessment work on said claims which may be required to keep the location thereof in good standing and shall pay, prior to delinquency, any taxes which may be levied or assessed on said premises, or improvement thereon, either prior or subsequent to patent. Second party shall have the right to commence and conduct proceedings for securing patents to said claims, or any of them, at its own expense, and first parties shall sign any papers and do any other act reasonably necessary or convenient in connection with such patent application, or applications, when requested by second party to do so. It is agreed, however, that second party shall have no obligation to protect or perfect title to said claim, other than to do assessment work as herein stated. It is also agreed that except for assessment work as herein provided for, the second party shall be under no duty or obligation to do any work.

4. Beginning in January, 1952, in order to keep this agreement in force, it will be necessary for the second party to pay the first party in advance on or before the 10th day of January, 1952, and on or before the 10th day of each succeeding month a minimum payment of $400.00 by royalty or otherwise, to apply on the remaining purchase price as herein provided.

5. If, during the period while this lease and option is in effect, second party ships to a smelter any ore or concentrate produced from ore removed from any of said claims, 10% of the net smelter returns therefrom shall be regarded as royalty for the use of said claims and shall be treated as follows:

(a) If any monthly minimum payment of $400.00 then matured remains unpaid at the accounting date, second party shall pay such royalty (10% of net smelter returns) to first parties to the amount of such unpaid monthly minimum;

(b) If all monthly minimum payments provided for hereunder have then been paid to first parties, second party may, at its option, retain such royalty and apply it on reimbursement to itself for any payments (other than royalty payments) theretofore made by it to first parties hereunder; or

(c) May pay such royalty to first parties to apply upon the minimum payment or payments maturing in the following month or months;

(d) If an when second party has reimbursed itself for all minimum payments theretofore made by it to first parties from sources other than royalty, thereafter all such royalty (10% of net smelter returns) shall be paid by it to first parties. Any royalty payments or accounting settlements of royalty obligations or options hwerein provided to the first party by the second party shall be made by the 10th of the month following the month in which the second party receives smelter return settlement. In addition to required payments, second party may, at any time, pay any part or all of the purchase price. Such additional payments, if less than the entire balance, shall be applied on the next maturing required monthly payment or payments.

6. It is expressly agreed that this lease and option covers all mining claims or interest therein, which first parties now own or claim, or may hereafter locate or otherwise acquire while this agreement remains in force in said Slate Creek area, particularly any or all claims that may be within Sections, 25 and 36; T 40 N; R 43 E; W. M., and Sections 30 and 31, T 40 N; R 44E; W. M. and shall include the full area of any part of which may be within any of said sections, even though the boundaries may extend into adjacent sections.

7. Upon payment in full of the above stated purchase price, either by cash or royalty, or both, first parties will transfer and convey said claims to second party by good and sufficient instrument. For that purpose, first parties shall at the time

of executing this agreement, also execute such instrument of transfer and conveyance and deposit it in escrow with the First National Bank, in Spokane, Washington. Said bank shall have full authority to receive payments hereunder and to deliver said transfer and conveyance to second party, or its assigns, on payment of the purchase price. First parties shall also on demand on second party execute and so deliver any other instrument required by second parto to assure transfer and conveyance of the property herein described, or any other property in the vicinity thereof not fully included in said description as provided in Paragraph 6 herein. First parties shall furnish to second party, an abstract of title, certified at least to date hereof, showing first parties' ownership of said claims, free from encumbrance. Second party may, at any time hereafter, procure such abstract of title, or extension of existing abstract, in case first parties have such abstract, advancing the cost thereof, which cost shall be applied in reduction of the purchase price of said claims.

8. This Agreement shall remain in full force and effect, as long as its terms are complied with by second party and until it has been terminated as herein provided. Second party may terminate it at any time by thirty days' written notice, mailed or delivered to the escrow holder hereof. In case second party fails to comply with the terms and conditions hereof, first parties, at their option, may notify it of such default by written notice, addressed to second party at 927 Old National Bank Building, Spokane, Washington, and, if second party fails to cure such default within thirty days from receipt of such notice, first parties may forfeit and terminate this contract.

9. Second party shall keep accurate account, separate from its other business of all ore removed from said claims and of all concentrates produced therefrom, and such records and accounts shall be open to the inspection of first parties at all reasonable times.

10. Upon the termination of this Agreement from any cause by either party first parties may retain all payments therefore made by second party. It is expressly agreed that the rights and remedies of first parties in the event of breach or default of second party hereunder shall be confined to the forfeiture and retention of sums paid by second party and first parties shall have no right of action for damages, specific performance or other relief on account hereof against second party.

11. It is further agreed that the second party may combine or mix ores taken from the claims covered by this agreement with ores from its other properties for milling purposes, provided proper accounting methods and customary methods of pro-rating or dividing each property's proportionate value is used.

12. Upon the termination of this Agreement from any cause by either party, second party may remove from said claims all improvements and equipment erected or placed thereon by it except any timbering installed as support of any underground workings. Said removal shall be made within ninety (90) days after the termination of this Agreement, unless such termination occurs within the months of December, January, February or March, in which event such removal shall be made within ninety days after the end of March. Upon the termination of this Agreement, second party shall at any time within ninety (90) days after surrendering possession and on demand of first parties, furnish to first parties copies of all maps, drill hole records and other sampling information then in possession of second party, affecting said claims and work done thereon by second party.

13. The terms and conditions hereof shall extend to the heirs, administrators, executors, grantees, lessees, assigns or other successors in interest of the parties hereto.

IN WITNESS WHEREOF the Parties hereto have executed this instrument the days and year first above written.

Signed: William Dumont

Signed: George Dumont

Signed: Howard L. Kimmel

Signed: Helen I. Kimmel
First Parties

AMERICAN ZINC, LEAD AND SMELTING COMPANY

BY: D. I. Hayes (signed)
As its Western Manager
Second Party

STATE OF WASHINGTON)
) ss
COUNTY OF PEND OREILLE)

I, the undersigned, a Notary Public in and for the State of Washington, do hereby certify that on this 20th day of November, 1951, personally appeared before me William Dumont, and Howard L. Kimmel and Helen I. Kimmel, his wife, to me known to be the individuals described in and who executed the within instrument and acknowledged to me that he signed and sealed the same as his free and voluntary act and deed for the uses and purposes therein mentioned.

Given under my hand and official seal the day and year in this certificate above written.

SEAL

S/ Lloyd A. Eyrich
Notary Public in and for the
State of Washington, residing
at Newport, Washington.

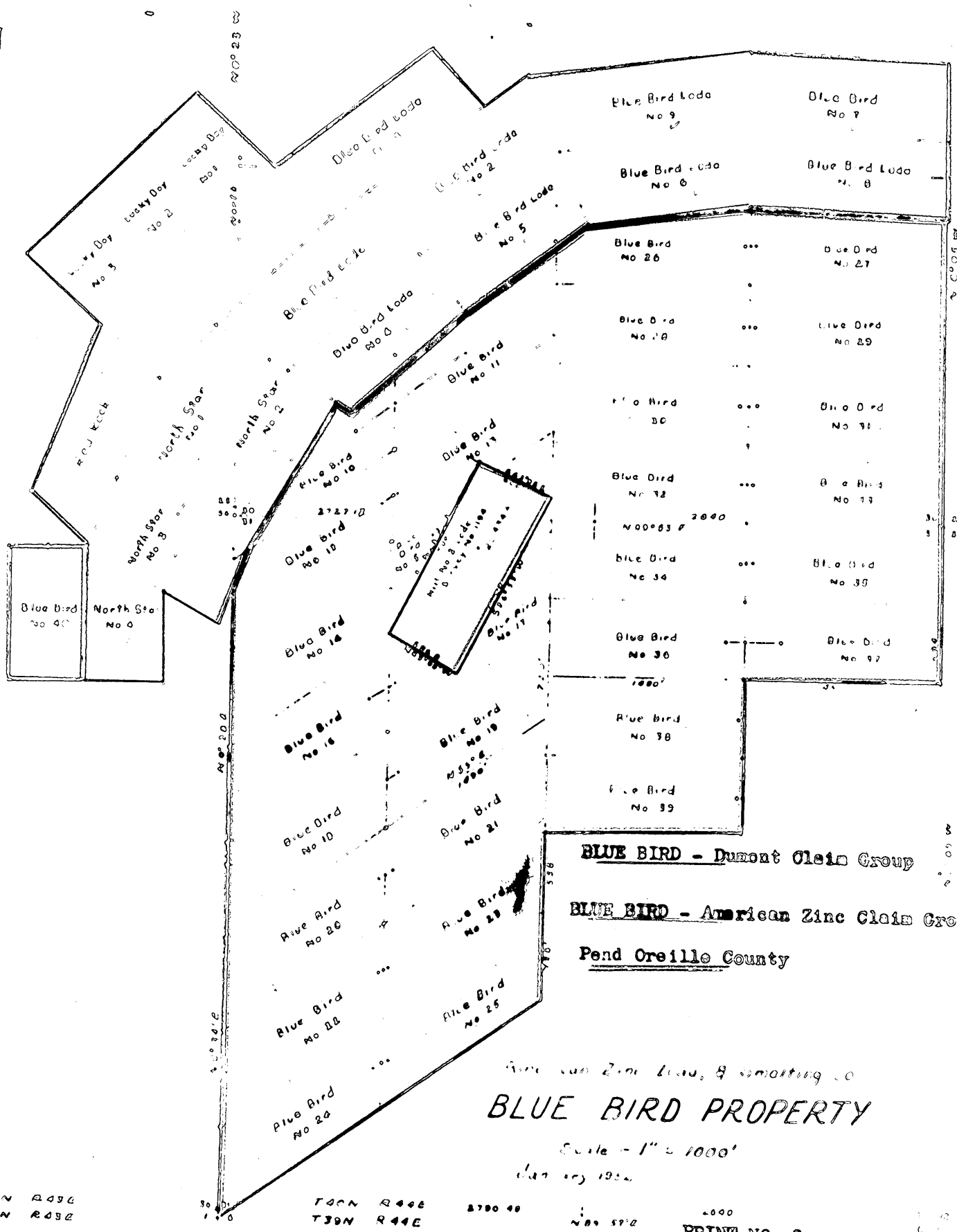
STATE OF WASHINGTON)
) ss
COUNTY OF KING)

I, the undersigned, a Notary Public in and for the above-named county and state, do hereby certify that on this 21st day of November, 1951, personally appeared before me George Dumont, to me known to be the individual described in and who executed the within instrument, and acknowledged that he signed and sealed the same as his free and voluntary act and deed, for the uses and purposes therein mentioned.

Given under my hand and official seal the day and year last above written.

SEAL

S/ Ralph B. Bellinger
Notary Public for State of Washington
Residing at Seattle, Washington.



BLUE BIRD - Dumont Claim Group

BLUE BIRD - American Zinc Claim Group

Pend Oreille County

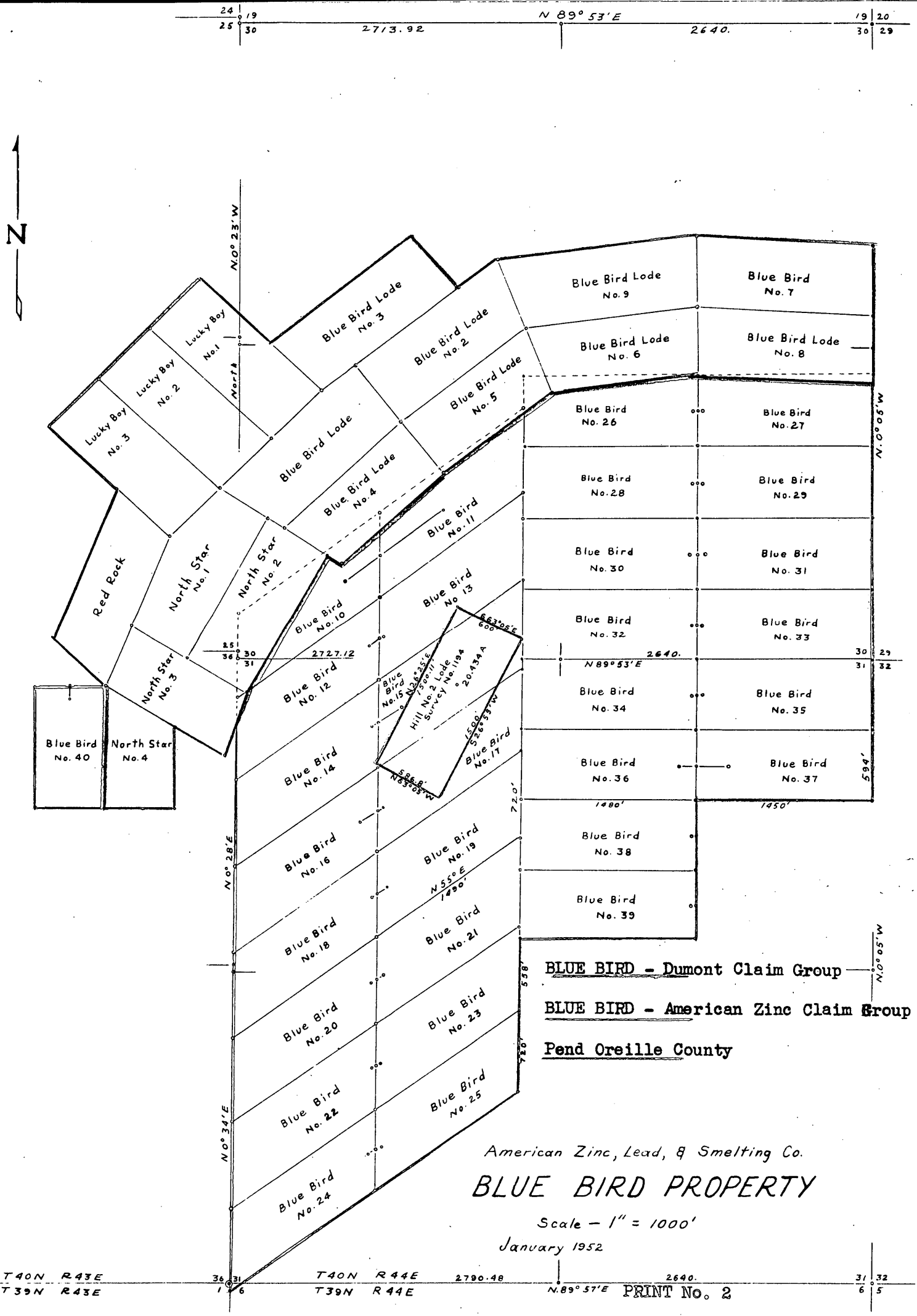
Pine Cone Zinc Lead & Smelting Co

BLUE BIRD PROPERTY

Scale - 1" = 1000'

January 1952

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
FEB 14 1955



BLUE BIRD - Dumont Claim Group

BLUE BIRD - American Zinc Claim Group

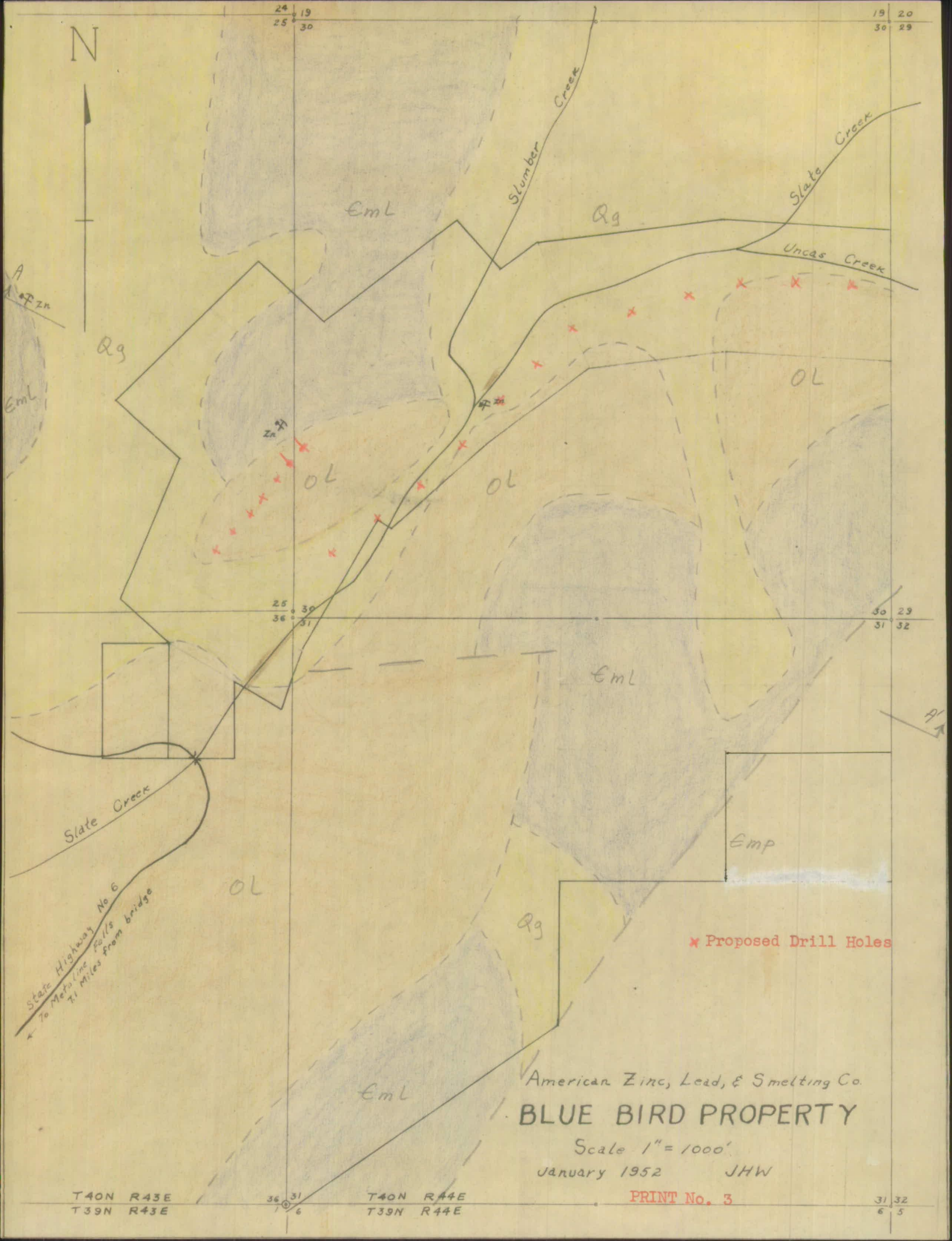
Pend Oreille County

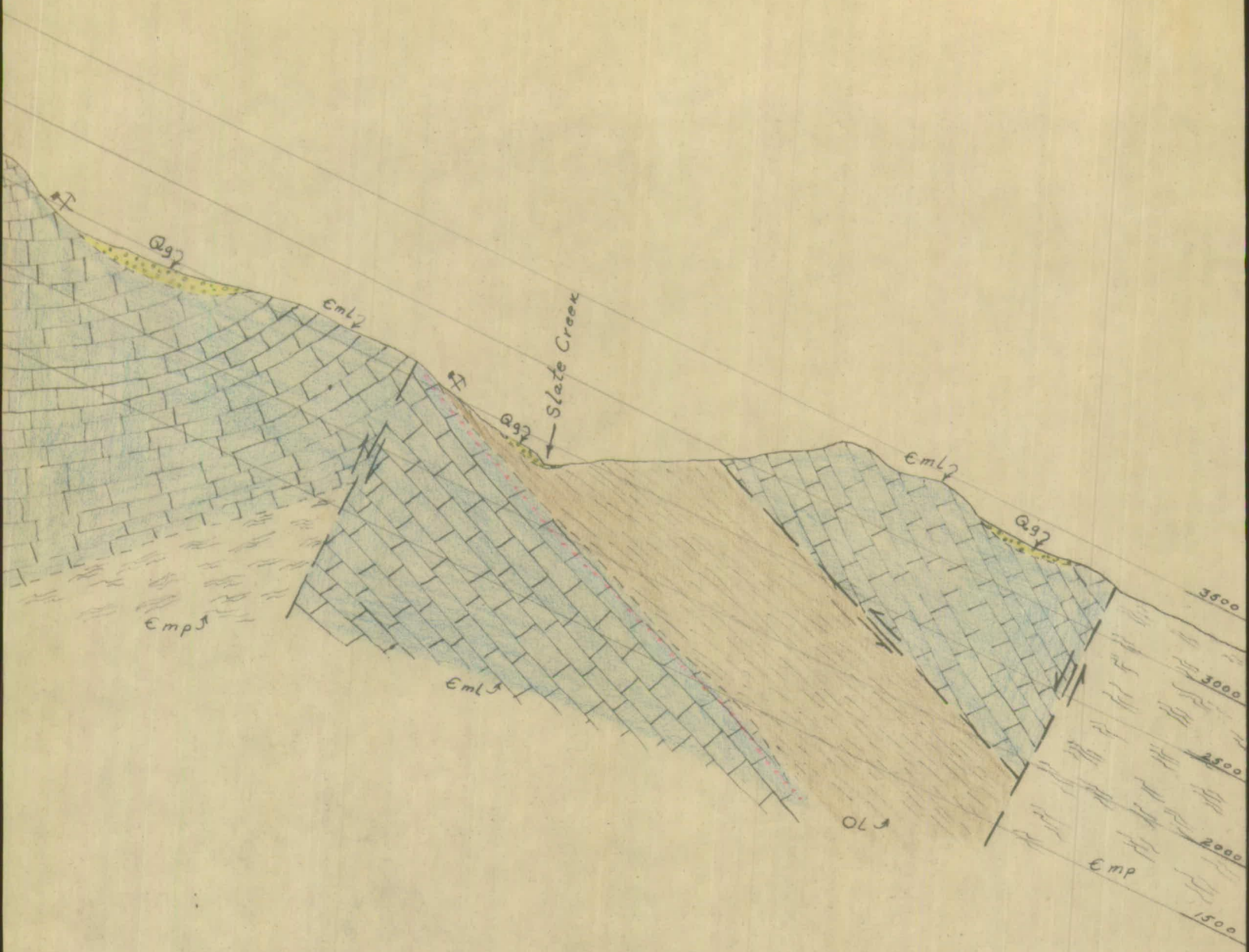
American Zinc, Lead, & Smelting Co.

BLUE BIRD PROPERTY

Scale - 1" = 1000'

January 1952


N
Slumber Creek
Slate Creek
Uncas Creek
Qg
Eml
OL
Emp
A
A'
Zn
Slate Creek
State Highway No 6
To Metaline Falls
7.1 Miles from bridge
Proposed Drill Holes
American Zinc, Lead, & Smelting Co.
BLUE BIRD PROPERTY
Scale 1" = 1000'
January 1952 JHW
PRINT No. 3
T40N R43E
T39N R43E
T40N R44E
T39N R44E



Probable ore horizon

Qg

Quaternary gravels

Ol

Ledbetter Slate

Eml

Metaline limestone

Emp

Maitlen phyllite

American Zinc, Lead & Smelting Co.

BLUE BIRD PROPERTY

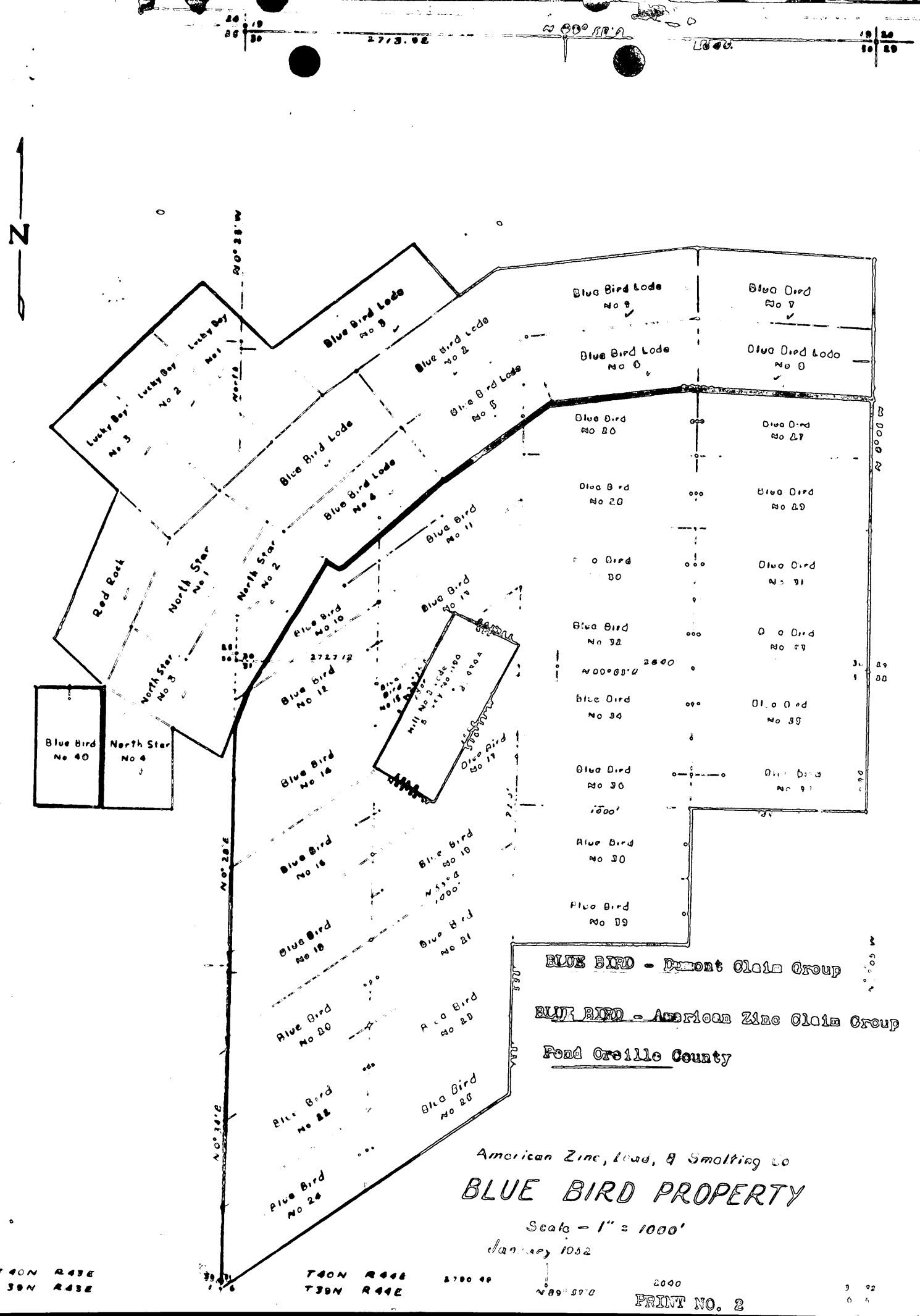
SECTION

Modified after Section A-A' of U.S.G.S. Prof. Paper 202 of Pl. 1 by C.F. Park Jr.

Scale 1" = 1000'

January 1952 J.H.W.

PRINT No. 4


N
Blue Bird Lode No 3
Blue Bird Lode No 2
Blue Bird Lode No 5
Blue Bird Lode No 4
Blue Bird Lode No 9
Blue Bird Lode No 8
Blue Bird No 7
Blue Bird No 6
Blue Bird No 20
Blue Bird No 27
Blue Bird No 29
Blue Bird No 31
Blue Bird No 32
Blue Bird No 34
Blue Bird No 36
Blue Bird No 39
Blue Bird No 11
Blue Bird No 10
Blue Bird No 12
Blue Bird No 14
Blue Bird No 16
Blue Bird No 18
Blue Bird No 19
Blue Bird No 21
Blue Bird No 26
Blue Bird No 24
Lucky Boy No 1
Lucky Boy No 2
Lucky Boy No 3
Red Rock
North Star No 1
North Star No 2
North Star No 3
North Star No 4
Blue Bird No 40
N 00° 00' W
N 89° 59' W
2640
2727.12
2790.48
T40N R43E
T39N R43E
T40N R44E
T39N R44E
BLUE BIRD - Dumont Claim Group
BLUE BIRD - American Zinc Claim Group
Pend Oreille County
American Zinc, Lead, & Smelting Co
BLUE BIRD PROPERTY
Scale - 1" = 1000'
January 1952
PRINT NO. 2

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
FEB 14 1955

LIST OF MINING CLAIMS

Mining claims of location title:

Lucky Boy 1, Lucky Boy 2, Lucky Boy 3.
Blue Bird Lode, Blue Bird Lode 2, Blue Bird Lode 3, Blue Bird Lode 4, Blue Bird Lode 5, Blue Bird Lode 6, Blue Bird Lode 7, Blue Bird Lode 8, Blue Bird Lode 9,
Red Rock
North Star 1, North Star 2, North Star 3, North Star 4.

A contiguous group of seventeen (17) mining claims, presently owned by George Dumont, William Dumont and Howard L. Kimmel, situated in parts of Section 36 and Section 25, Township 40 N., R. 43 E; W. M. and Section 30 and 31, Township 40 N., Range 44 E; W. M. of Pend Oreille County, Washington. (Hereafter referred to as Blue Bird-Dumont property.)

and,

An adjacent and a contiguous group (with the exception of one claim, namely Blue Bird 40 and a patented claim, Hill Lode No. 2.) of thirty-one (31) claims of location title, located and claimed by the American Zinc, Lead and Smelting Company, which are described as follows:

Blue Bird 10, Blue Bird 11, Blue Bird 12, Blue Bird 13, Blue Bird 14, Blue Bird 15, Blue Bird 16, Blue Bird 17, Blue Bird 18, Blue Bird 19, Blue Bird 20, Blue Bird 21, Blue Bird 22, Blue Bird 23, Blue Bird 24, Blue Bird 25, Blue Bird 26, Blue Bird 27, Blue Bird 28, Blue Bird 29, Blue Bird 30, Blue Bird 31, Blue Bird 32, Blue Bird 33, Blue Bird 34, Blue Bird 35, Blue Bird 36, Blue Bird 37, Blue Bird 38, Blue Bird 39,

Situated parts of Sections 30 and 31, Township 40, N. Range 44 E; W.M., Pend Oreille County, Washington

Blue Bird 40 (not contiguous)
Hill Lode No. 2, Survey #1194, presently owned by Pend Oreille County and to be purchased by American Zinc, Lead and Smelting Company.
(~~Hereinafter referred to as Blue Bird-American Zinc property.~~)

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

PROJECT SUMMARY REPORT

By: W. P. Klugescheid May 24, 1955

1. Docket No. DMEA-2388 (Lead-Zinc)
Contract No. Idm-E301
Property: Blue Bird Mine
PendOreille County, Washington

Operator: American Zinc, Lead & Smelting Co.
927 Old National Bank Building
Spokane, Washington

Operator's Property Rights: Owner of part and, Lease and Option. Agreement on Blue Bird-Dumont Property.

2. Contract dated April 21, 1952. To complete - 24 months

Work Authorized:

STAGE I

9,000 feet of diamond drilling @ $5.00/ft.	$ 45,000.00
125 hours of bulldozing @ $12.00 per hr.	1,500.00
1 - Engineer-supervisor, part-time @ $250.00 per month for 9 months	2,750.00
Pipe, casing, assaying, core boxes and other miscellaneous items not supplied by independent contractor	9,000.00
Total for Stage I	$ 58,250.00

STAGE II

Duplicates Stage I in all items	$58,250.00
Total cost of the project	$116,500.00
Government's participation @ 50%	$ 58,250.00

Amendments

None

Work Completed:

STAGE I

6,783 feet of diamond drilling	$32,730.48
Bulldozing	1,269.00
Engineer-supervisor	1,753.89
Total cost of the project	$35,753.37
Government's participation @ 50%	$17,876.67

Work was terminated by a mutual Termination Agreement dated July 7, 1953.

3. Audit - Report of Review issued October 27, 1953.

Total cost as billed by contractor	$36,624.56
Exceptions - Less	871.19
Total accepted cost	$35,753.37
Government's participation @ 50%	$17,876.67

4. Certification of Discovery - none issued.

No ore reserves. **Pseudo-certification in termination agreement.**

5. Comments

No certification was recommended as a result of the contract work. The completed diamond drilling indicated only thin, scattered lenses of very low-grade, zinc-lead-bearing rock. These lenses are too thin and too limited in horizontal extent to be profitably exploited under present-day mining practices.

No further exploration of the Blue Bird claims in the Slate Creek mining district is justified at this time as the completed work has satisfactorily explored the Upper Metaline limestone and has indicated that the minable portions of the known ore zone do not persist through the district at the depth explored.

The most important ore-bearing formation in northern Pend Oreille County is the Metaline limestone of Middle Cambrian age. The outcrops of this formation are confined to a triangular-shaped area, starting near Ione, Washington, and widening gradually northward to the International Border. The east and west sides of the area are marked by the Slate Creek and Flume Creek faults, respectively, which are steep-angled normal faults of more than 10,000 feet displacement.

The ore zone of the Upper Metaline limestone has been the most productive zone in the area. This ore horizona occurs in the extreme upper part of the Metaline limestone, generally within 200 feet of the contact between this formation and the overlying Ledbetter slate of Ordovician age. In general the ore zone is strongly dolomitized and silicified and has jasperoid throughout it. The silicified dolomite is extremely fine-grained and has been finely to coarsely brecciated. The ore minerals occur as light-yellow to deep amber sphalerite and galena, the zinc to lead ration being on the order of 4 to 1.

The attitude of the ore bodies conforms in general to the bedding of the dolomite, dipping at a low angle to the northeast. There is a tendency for the thicker and richer mineralized zones to follow flat anticlinal folds that plunge to the northeast.

As the known ore bodies generally occur within 200 to 300 feet of the overlying Ledbetter slate, it has been the general practice in exploring for their extension, to drill through the Ledbetter slate to determine if the upper 200 or 300 feet of the Metaline limestone has certain characteristics, such as silicification, dolomitization, brecciation, and mineralization in order to determine if the ore zone is present.

Surface exposures in the area of the project, indicated that a thin layer of the Ledbetter slate occurred, and although the few exposures of the Metaline limestone were not considered sufficiently silicified to be a part of the ore horizon developed in the Metaline mining district, it was believed that the ore zone might exist in the area covered by the slate.

The project was divided into two stages, each consisting of 9,000 feet of diamond drilling and 125 hours of bulldozing to prepare the drill sites. Stage II was only to be carried out if Stage I was successful in finding evidence that the ore zone exists in the area.

Seventeen holes were drilled which explored an area about 3,600 feet long with a maximum width of about 1,000 feet. Seven of the holes intersected thin zones in which sphalerite, galena and pyrite occur. The remainder of the holes contained no ore minerals. The maximum thickness of any mineralized zone which assayed 8.32% Zn was only 5 feet. Lead values were very low in all the holes and where the Zn values were worth while the beds were very thin.

Although there was no Certification of Discovery, there is a provision in the Termination Agreement which stipulates that should any ore be produced from the area covered by the contract within 10 years from the date of the contract, the Government would receive repayment of the amount it had contributed to the completed exploration. This payment would be as royalties from the sale of any ore which was produced from the property.

There was no operating equipment purchased for this project.

W. P. Klugescheid

WPK/er 5/26/55
Copy to: Docket
Base Metals
Chron.

W. P. Klugescheid

☒ Audited

☐ Certified

W[illegible]K ANALYSIS SHEET - DMEA PROJEC[illegible]

Analysis as of 12/10/54.
Incl. Voucher for December 1952

☒ Actual Cost

☐ Agreed Unit Costs

Nam[illegible] American, Zinc, Lead and Smelting Co.

Docket No. DMEA-2388

State Washington

Commodity Lead-Zinc

Idm-E No. 301

OPERATION	AUTHORIZED Units	AUTHORIZED Cost	COMPLETED Units	COMPLETED Cost	NET COST
Drifting & Crosscutting					
Raising					
Shafts					
Winzes					
Drilling (Specify) Diamond	18,000'	116,500.00 $90,000.00	6,886'	35,753 $32,730.48	~~$5,787.37~~
Sur[illegible]e Excavation ~~Battleship~~		~~[illegible]~~		~~[illegible]~~	~~1,367.00~~
Underground Excavation					
Roads and Trails					
Operating Equipment Purchased					
Surface Rehabilitation & Repairs					
Underground Rehabilitation					
New Building, Improvements, etc.					
Other (Specify) Supervision + Misc.		~~[illegible]~~		~~1,753.89~~	1,753.89
Totals		$116,500.00		$35,753.37	$35,753.37

Prepared by W. P. Klugescheid

71626

American Zinc, Lead and Smelting Company

CLARENCE V. BURNS
VICE PRESIDENT AND CONTROLLER

1600 PAUL BROWN BUILDING
SAINT LOUIS 1, MISSOURI

April 19, 1963

File 502-2-4

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

DATE	INITIALS	CODE
4/22	[illegible]	800
	Dismissed	500
		220

Mr. George Tumick, Jr.,
Director
United States Department
of the Interior
Office of Minerals Exploration
Washington 25, D.C.

Dear Mr. Tumick:

Re: DMEA-2388 (Lead-Zinc)
Blue Bird Mine
Pend Oreille County, Washington
Contract No. Idm-E301

We acknowledge receipt of your letter of April 16th with relation to the above described contract.

This is to advise we will comply with the requirements of the contract with respect to preservation of the records.

Very truly yours,

C. V. Burns

Vice President and Controller

CVB:mar

DMEA Form 7
(12-56)

OFFICIAL FILE COPY

Date	Surname	Code
4/16	Murphy	500
	On Leave	500
4/16	Tailant	800
	Selfridge	120
4/16	Johnson	110
4/16	Fumich	100
		220

APR 16 1963

American Zinc, Lead and Smelting Company
1600 Paul Brown Building
818 Olive Street
St. Louis 1, Missouri

Attention: Mr. G. V. Burns, Vice President and Controller

Re: DMEA-2388 (Lead-Zinc)
American Zinc, Lead and Smelting Company
Blue Bird Mine
Pend Oreille County, Washington
Contract Idm-2301

Gentlemen:

By the terms of the subject Exploration Project Contract and the Agreement, dated July 7, 1953, all minerals mined or produced from April 21, 1952, to April 21, 1962, were subject to the Government's percentage royalty as set forth in said contract.

As the period during which production was subject to royalty has now expired, the Government according to its present records retains no claim or lien against the property subject to the contract or any future production therefrom. We, therefore, are closing our books and records on this contract. Your attention, however, is called to the provisions of the contract which require the Operator to keep and preserve certain records for the periods indicated.

Sincerely yours,

George Fumich, Jr.

(pk)

Director

FMMurphy/mm
4/16/63
cc: Mr. William Dumont and Mr. Geo. Dumont, P.O. Box 171, Canby, Oregon
Mr. Howard L, Kimmel, Newport, Washington
Region I (2)
Director's Reading File
CA&A Division
✓Docket
Code 500

8623

DMEA Form 7
(12-56)

OFFICIAL FILE COPY

Date	Surname	Code
4/16	Murphy	500
	On Leave	500
4/16	Tatchit	800
	Selbredge	120
4/16	Johnson	110
4/16	Fumich	100
		220

APR 1 6 1963

Mr. Howard L. Kimmel

Newport, Washington

Re: DMEA-2388 (Lead-Zinc)
American Zinc, Lead and Smelting Company
Blue Bird Mine
Pend Oreille County, Washington
Contract Idm-2301

Dear Mr. Kimmel:

Enclosed is a self-explanatory letter of today to the Operator under the subject contract.

This correspondence relates to the Owner's Consent to Lien signed by you and Mrs. Kimmel on February 5, 1952, under the Defense Minerals Exploration Administration program.

Your letter of April 4, 1963, and the enclosed royalty payment are acknowledged.

Sincerely yours,

George Fumich, Jr.

Director

Enclosure

FMMurphy/mm
4/16/63
cc: Director's Reading File
Region I (2)
Docket
Code 500

8623

MME Form 7
(10-58)

OFFICIAL FILE COPY

Date	Surname	Code
10/19	Murphy	500
	Ondeake	500
10/22	Talbot	800
		120
		110
		100
		220

American Zinc, Lead and Smelting Company
1600 Paul Brown Building
818 Olive Street
St. Louis 1, Missouri

Attention: Mr. C. V. Burns, Vice President and Controller

Re: DMEA-2388 (Lead-Zinc)
American Zinc, Lead and Smelting Company
Blue Bird Mine
Pend Oreille County, Washington
Contract Idm-2301

Gentlemen:

By the terms of the subject Exploration Project Contract and the Agreement, dated July 7, 1953, all minerals mined or produced from April 21, 1952, to April 21, 1962, were subject to the Government's percentage royalty as set forth in said contract.

As the period during which production was subject to royalty has now expired, the Government according to its present records retains no claim or lien against the property subject to the contract or any future production therefrom. We, therefore, are closing our books and records on this contract. Your attention, however, is called to the provisions of the contract which require the contractor to keep and preserve certain records for the periods indicated.

Sincerely yours,

Director

FMMurphy/mm
10-19-62

Mission [illegible] letter [illegible]

cc: Director's reading file
CA&A Division
Region III (2)
Docket
Code 500
William Dumont, Metaline Falls, Washington
George Dumont, Seattle, Washington
Mr. & Mrs. Howard L. Kimmel, Newport, Washington

43683

DMEA Form 7
(12-56)

OFFICIAL FILE COPY

Date	Surname	Code
4/15	Murphy	500
	Kimmel	500
4/15	Tallent	800
		120
		110
		107
		220

Mr. Howard L. Kimmel

Newport, Washington

Re: DMEA-2388 (Lead-Zinc)
American Zinc, Lead and Smelting Company
Blue Bird Mine
Pend Oreille County, Washington
Contract Idm-K301

Dear Mr. Kimmel:

~~This is with reference to~~ Your letter of April 4 and the enclosed royalty payment are acknowledged.

By the terms of the subject Exploration Project Contract and the Agreement, dated July 7, 1953, all minerals mined or produced from April 21, 1952, to April 21, 1962, were subject to the Government's percentage royalty as set forth in said contract.

As the period during which production was subject to royalty has now expired, the Government according to its present records retains no claim or lien against the property subject to the contract or any future production therefrom. We, therefore, are closing our books and records on this contract.

The above relates to the Owner's Consent to Lien signed by you and Mrs. Kimmel on February 5, 1952, under the Defense Minerals Exploration Administration program.

Sincerely yours,

Enclosure returned with accompanying letter of today to FM

Director

FMMurphy/mm
4/15/63
cc: Director's Reading File
Region I (2)
CA&A Division
Docket
Code 500

8623

DMEA Form 7
(12-56)

OFFICIAL FILE COPY

Date	Surname	Code
4/16	Murphy	500
4/16	Talbot	500
		800
	Selfridge	120
4/16	[illegible]	110
4/16	[illegible]	100
		220

APR 16 1963

Mr. William Dumont and
Mr. George Dumont
P. O. Box 171
Canby, Oregon

Re: DMEA-2388 (Lead-Zinc)
American Zinc, Lead and Smelting Company
Blue Bird Mine
Pend Oreille County, Washington
Contract Idm-2301

Gentlemen:

Enclosed is a self-explanatory letter of today to the Operator under the subject contract.

This correspondence relates to the Owner's Consent to Lien signed by you on February 5, 1952, under the Defense Minerals Exploration Administration.

Sincerely yours,

George Fumich, Jr.

Director

Enclosure

FMMurphy/mm
4/16/63
cc: Director's Reading File
Region I (2)
✓Docket
Code 500

8623

White Release
to Kimmel

OFFICIAL FILE COPY
O M E
RECEIVED APR 10 1963

DATE		
4/10		800
	Kimmel	500
		220

April 8, 1963

[illegible]

[illegible] United States Atomic Energy Commission
Office of the Controller, Operations
Washington 25, D. C.

[illegible] Acting Director, Operations

[illegible] Reimbursement of Inspection Costs
Contract No. Idm-8301
American Zinc, Lead and Smelting Company
Blue Bird Mine
Pend Oreille County, Washington
Docket No. DMEA-2388 (Lead-Zinc)

Appropriation Symbol: DMEA 14X4401

Attached is a check on Pollock:

Check No.: 1239

Date: April 4, 1963

From: Howard L. Kimmel (Newport Br., Nat'l Bk. of Commerce of Seattle)

Amount: $24.00

Period:

Lot No.:

[illegible]

[illegible]

[illegible]

Operator
OME(2) w/cy incoming letter
CPF

Newport, Wa
4-4-1963

U.S. Dept of Interior,
Office of Minerals Exploration.
Gentlemen;

In answer to your letter of Apr. 3rd re contract Ida 3 161, I am enclosing my check for $24.00 to clear up the matter.
Thank you for for co operation in the matter.

Yours truly,

Howard L. Kimmel

So. 157 Howard Street
Spokane 4, Washington
April 3, 1963

Mr. Howard L. Kimmel
Newport, Washington

4/5 800 +20 500

Re: DMEA-2388 (Lead-Zinc)
American Zinc, Lead and Smelting Company
Blue Bird Mine
Pend Oreille County, Washington
Contract Idm-E301

Dear Mr. Kimmel:

Item 3 of an Agreement dated July 7, 1953, by which the above-cited contract was terminated effective on that date states:

"The Government's contribution to the cost of the work up to the time above fixed for termination is the sum of $17,876.67 (subject to audit), and said sum shall be repayable in the form of a percentage royalty on any minerals mined or produced from the land described in Article 2 of the contract within ten years from the date of said Exploration Project Contract, in the same manner and to the same extent and subject to all the terms and conditions of said Exploration Project Contract which are relevant thereto, as if the Government had made the certification of discovery or development referred to in Article 9 of said Exploration Project Contract."

The date of the Exploration Project Contract is April 21, 1952, and in accordance with the terms of the quoted item and of Article 9 of the contract, royalty on the net amounts realized from the sale of any minerals produced from the land between that date and April 21, 1962, is due the Government. State and Federal reports on mineral resources and production include gravel as a mineral commodity.

At $0.02 per yard, the gravel produced from the land subordinated to the cited DMEA contract had a net value considerably less than $8.00 per ton, on which the royalty is 1½ percent. Therefore, it appears that the royalty due the Government on the $1,600.00 you received for gravel is $24.00. Payment is hereby requested.

Your check, made payable to the Office of Minerals Exploration, should be mailed to this office at your earliest convenience. I have been advised by our Washington, D. C., office that upon receipt of your remittance we shall be able to lift the Government lien against any further production from this property.

Sincerely yours,

D. R. MacLaren
Acting Field Officer, OME, Region I

DRMacLaren:my
cc: OME(2); CPF
Reading copies to: Nelan, McKelvey

DMEA Form 7
(12-56)

OFFICIAL FILE COPY

Date	Surname	Code
	[illegible]	500
3/28	Talbert	800
	Selfridge	130
5/28	[illegible]	110
3/28	[illegible]	100
		220

Memorandum

MAR 28 1963

To: Acting Field Officer, Region I

From: Chief, Division of Field Operations

Subject: DMEA-2388 (Lead-Zinc)
American Zinc, Lead and Smelting Company
Blue Bird Mine
Pend Oreille County, Washington
Contract Idm-2301

We are enclosing a copy of a Form 63 (plus attached material) received from H. L. Kimmel. You will note the stated production of $1,600 which, on a 1½% royalty base, would create an obligation to the Government of $24.00. A copy of a Form 63 returned by the Operator and a copy of a letter from William Dumont are also enclosed.

Will you kindly make the proper demand upon Mr. Kimmel for payment. It might encourage him to liquidate promptly if you would tell him that we shall be able to lift the Government lien against any further production from this property upon receipt of his remittance.

George C. Selfridge (gla)

Enclosure

WRGriswold/mm
3/28/63
cc: Director's Reading File
Review Committee
✓Docket
Code 500

8623

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

March 8, 1963

Re: DMEA-2388 (Lead-Zinc)
American Zinc, Lead and Smelting Company
Blue Bird Mine
Pend Oreille County, Wash.
Contract Idm-E301

REGISTERED MAIL
RETURN RECEIPT REQUESTED

Mr. Howard Kimmel
c/o Kimmel Drugs
Newport, Washington

Dear Sir:

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

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

Sincerely yours,

W. R. Griswold, Chief
Division of Minerals

OFFICIAL FILE COPY
O. M. E
RECEIVED MAR 21 1963

DATE	INITIALS	CODE
3/21		800
		~~120~~
3/21		100
3/21		~~110~~
		500

MME Form 63
Revised 3-62

REQUEST FOR INFORMATION ON CERTIFIED PROJECT AND PROJECT UNDER ROYALTY AGREEMENT

1. Since September 8, 1959, has there been a change in ownership, lease, or sublease? If yes, please state details of the transaction below and provide a true or signed copy of the pertinent documents, unless they have been provided before. Yes [x] No [ ]

State of Washington, gravel pit lease, Copy enclosed

2. Since September 8, 1959, has there been any production from the land subject to the contract? Yes [x] No [ ]

Gravel

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

	Quantity	Value
.02 per yd		$1600.00

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

Type	Quantity	Estimated Grade	Location
Ore	Tons		
Concentrates	Tons		
Other	Tons		

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

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

Disposition of Material	Quantity	Value

Submitted by:

Name H.L.Kimmel Title Leasee

Address Newport, Washington Date 3-18-63

4511

STATE OF WASHINGTON
ALB[illegible] B. ROSELLINI, GOVERNOR

WASHINGTON
STATE HIGHWAY COMMISSION
DEPARTMENT OF HIGHWAYS

W. A. BUGGE, DIRECTOR
TRANSPORTATION BUILDING
OLYMPIA

September 4, 1959

[illegible] E. Ehtel
[illegible], Washington

Rural Grville County Pit Site PS-[illegible] Parcel [illegible]

Dear Sir:

This is to advise you that your recent transaction with the State of Washington, in connection with the above-referenced project, has been approved by the Right of Way Division. The warrant in payment thereof is now being processed and will be mailed from this office within the next three or four [illegible]

Very truly yours,

W. A. BUGGE
Director of Highways

By: J. ARNOLD OGSLEY
Chief Right of Way Agent

WAB: bd
SAC
cc: R/W Agent, Dist. # 6 - Schmeeder

WASHINGTON
STATE HIGHWAY COMMISSION
DEPARTMENT OF HIGHWAYS
W. A. BUGGE, DIRECTOR
TRANSPORTATION BUILDING
OLYMPIA

September 23, 1959

Samuel L. Kimmel
Longview, Washington

Pend Oreille County Pit Site PS-PO-56 Parcel #23601

Dear Sir:

In the attached State Warrant No. A 798639, in the amount of $ [illegible] payable to

yourself and Helen Kimmel

is full, complete and final payment and settlement for all lands leased, approx. 10.61 acres, as part consideration

in connection with the above subject section of highway, as [illegible]

Voucher No. 525 [illegible] Dated [illegible], 1959

Remarks:

Very truly yours,

W. A. BUGGE
Director of Highways

By: J. ARNOLD [illegible]
Chief Right of Way Agent

BORROW PERMIT LEASE
(Royalty Basis)

[redacted] State Highway No. _____

KNOW ALL MEN BY THESE PRESENTS, that [redacted]

[redacted] Dollars ($1.00) [redacted]

for and in consideration of [redacted]
in hand paid, the receipt whereof is hereby acknowledged, do__ hereby grant and warrant unto the STATE OF WASHINGTON the exclusive right, permit, license and lease to use and occupy the hereinafter described lands at any and all times from date hereof until [redacted] 19[redacted] for the purpose of excavating and removing highway materials consisting of rock, gravel, sand or earth from any portion of said lands, crushing and stockpiling highway materials thereon, and operating all necessary machinery and equipment thereon, said lands being situated in [redacted] County, State of Washington, and described as follows, to-wit:

[redacted]

The lands being leased herein contain an area of 10.[redacted] acres, more or less, the specific details concerning all of which are to be found within that certain map of definite location now of record and on file in the office of the Director of [redacted] at Olympia, Washington, and bearing date of approval [redacted].

The right, privilege and permit of ingress and egress over and across other lands owned by the Lessor herein, for a haul road of sufficient width to conveniently transport said highway materials and equipment to and from said lands, [redacted] hereby granted to the State of Washington and/or its Agents by the [redacted].

As a further consideration, the State of Washington shall pay to the Lessor herein, at the rate of [redacted] cents per cubic yard, for all materials removed by the State of Washington and/or its agents, said payment to be made in the following manner: [redacted] to be made on monthly basis for all materials [redacted] during previous month.

DATED this [redacted]

day of [redacted], 19[redacted].

STATE OF WASHINGTON)
County of _____)ss

I, the undersigned, a Notary Public in and for the State of Washington, do hereby certify that on this _____day of _____19__, personally appeared before me _____

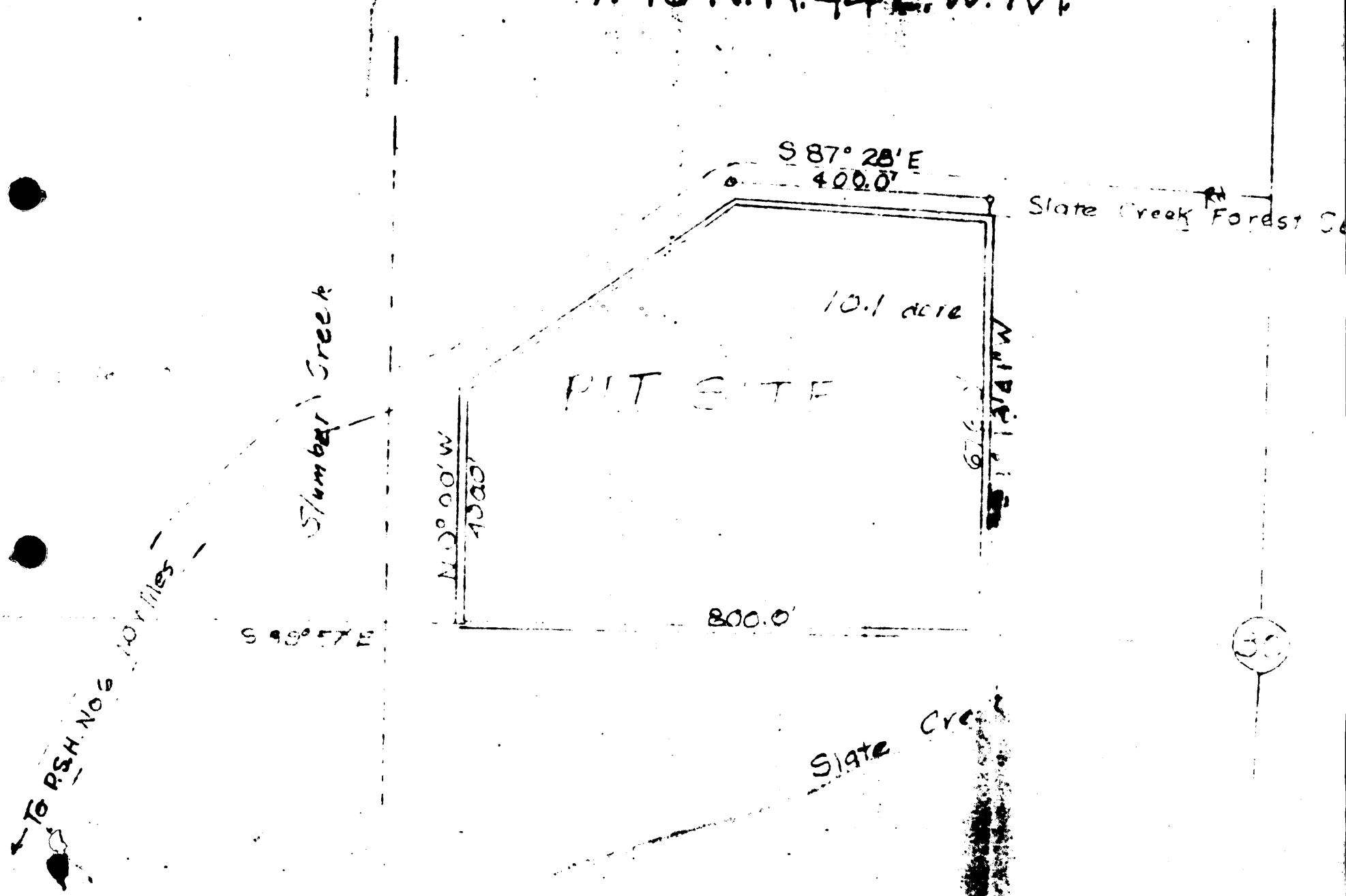
to me known to be the individual__ described in and who executed the within instrument, and acknowledged that_____signed and sealed the same as _____ free and voluntary act and deed, for the purposes therein mentioned

Given under my hand and official seal the day and year first above written.

Notary Public in and for the State of Washington, residing at _____

[redacted] (7-23-52)

T.40 N. R.44 E. W.M.


S 87° 28' E
400.0'
Slate Creek Forest C
10.1 acre
PIT SITE
N 41° W
N 0° 00' W
1320'
800.0'
S 89° 57' E
Slumber Creek
Slate Cre
To P.S.H. No 6 10 miles

#1-INSTRUCTIONS TO DELIVERING EMPLOYEE

☐ Deliver *ONLY* to addressee

☐ Show address where delivered

(Additional charges required for these services)

RETURN RECEIPT

Received the numbered article described on other side.

SIGNATURE OR NAME OF ADDRESSEE *(must always be filled in)*

Howard Fenimore

SIGNATURE OF ADDRESSEE'S AGENT, IF ANY

DATE DELIVERED	ADDRESS WHERE DELIVERED *(only if requested in item #1)*
APR 3 '80	

C55—16—71548-4 GPO

? Cont. 301 2302 - Rm. Jane Lindsay

POST OFFICE DEPARTMENT
OFFICIAL BUSINESS

PENALTY FOR PRIVATE USE TO AVOID PAYMENT OF POSTAGE, $300

NEWPORT, WASH.
MAR 14
5-PM
1963

POSTMARK OF DELIVERING OFFICE

INSTRUCTIONS: Fill in items below and complete #1 on other side, when applicable. Moisten gummed ends and attach to back of article. Print on front of article RETURN RECEIPT REQUESTED.

RETURN TO

REGISTERED NO.	NAME OF SENDER
598008	MIN. EXPLORTION
CERTIFIED NO.	STREET AND NO. OR P. O. BOX
	DEPT. INTERIOR
INSURED NO.	CITY, ZONE AND STATE
	WASHINGTON D.C.

POD Form 3811 Jan. 1958

C55—16—71548-4

Griswold

220

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

March 8, 1963

Re: DMEA-2388 (Lead-Zinc)
American Zinc, Lead and Smelting Company
Blue Bird Mine
Pend Oreille County, Wash.
Contract Idm-8301

REGISTERED MAIL
RETURN RECEIPT REQUESTED

Mr. Howard Kimmel
c/o Kimmel Drugs
Newport, Washington

Dear Sir:

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

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

Sincerely yours,

W. R. Griswold

W. R. Griswold, Chief
Division of Minerals

MME Form 63
Revised 3-62

REQUEST FOR INFORMATION ON CERTIFIED PROJECT AND PROJECT UNDER ROYALTY AGREEMENT

1. Since September 8, 1959, has there been a change in ownership, lease, or sublease? If yes, please state details of the transaction below and provide a true or signed copy of the pertinent documents, unless they have been provided before. Yes ☐ No ☐

2. Since September 8, 1959, has there been any production from the land subject to the contract? Yes ☐ No ☐

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

	Quantity	Value
_____	_____	_____
_____	_____	_____

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

Type	Quantity		Estimated Grade	Location
Ore	_____	Tons	_____	_____
Concentrates	_____	Tons	_____	_____
Other	_____	Tons	_____	_____

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

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

Disposition of Material	Quantity	Value
_____	_____	_____

Submitted by:

Name _____ Title _____

Address _____ Date _____

4511

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

October 26, 1962

Re: DMEA-2388 (Lead-Zinc)
American Zinc, Lead and
Smelting Company
Blue Bird Mine
Pend Oreille County, Wash.
Contract Idm-E301

Mr. George Dumont
6636 Carlton Avenue
Seattle 8, Washington

Dear Mr. Dumont:

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

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

Sincerely yours,

W. R. Griswold, Chief
Division of Minerals

OFFICIAL FILE COPY
O. M. E
RECEIVED Nov 28 1962

DATE		
11/26		800
11-26		~~120~~
"		100
		~~140~~
	Griswold	500
		220

MME Form 63
Revised 3-62

DMEA-2388
Idm-E301

REQUEST FOR INFORMATION ON CERTIFIED PROJECT AND PROJECT UNDER ROYALTY AGREEMENT

1. Since September 8, 1959 , has there been a change in ownership, lease, or sublease? If yes, please state details of the transaction below and provide a true or signed copy of the pertinent documents, unless they have been provided before. Yes ☐ No ☐

2. Since September 8, 1959 , has there been any production from the land subject to the contract? Yes ☐ No ☐

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

	Quantity	Value
_____		
_____	_____	_____

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

Type	Quantity		Estimated Grade	Location
Ore	_____	Tons	_____	_____
Concentrates	_____	Tons	_____	_____
Other	_____	Tons	_____	_____

3. Since September 8, 1959 , has any production been transported through workings (see of contract)? Yes ☐ No ☐

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

Disposition of Material	Quantity	Value
_____	_____	_____

Submitted by:

Name _____ Title _____

Address _____ Date _____

4511

Canby Ore.
Nov. 20. 1962

Mr W. R. Griswold
Chief Division of Minerals
Dear Sir
Inclosed are
the papers sent to my brother
George Dumont. I had the
largest intrest so will answer.
My brother George Dumont and
Myself William Dumont give
Howard Kimmel a deed to the
Blue Bird Mining Claims I believe
in 1953 after the american
Lead Zinc Smelting Company
stoped work on the mining
claims please write to Mr
Kimmel at Newport Wash.
he should be able to give all

information you wish has
my brother and my self have been
the last 9 years in the state
of Ore.

Yours
Truly

William Dumont
P.O. box 171
Canby
Ore

please contact
Mr Kimmel address
Mr Howard Kimmel
Care of Kimmel drugs
Newport
Wash.

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

October 26, 1962

Re: DMEA-2380 (Lead-Zinc)
American Zinc, Lead and Smelting Company
Blue Bird Mine
Pend Oreille County, Wash.
Contract Idm-E301

Mr. and Mrs. Howard L. Kimmel

Newport, Washington

Dear Mr. and Mrs. Kimmel:

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

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

Sincerely yours,

W. R. Griswold

W. R. Griswold, Chief
Division of Minerals

MME Form 63
Revised 3-62

DMEA-2368
Idm-E301

REQUEST FOR INFORMATION ON CERTIFIED PROJECT AND PROJECT UNDER ROYALTY AGREEMENT

1. Since September 8, 1959, has there been a change in ownership, lease, or sublease? If yes, please state details of the transaction below and provide a true or signed copy of the pertinent documents, unless they have been provided before. Yes ☐ No ☐

2. Since September 8, 1959, has there been any production from the land subject to the contract? Yes ☐ No ☐

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

	Quantity	Value
_____	_____	_____
_____	_____	_____

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

Type	Quantity		Estimated Grade	Location
Ore	_____	Tons	_____	_____
Concentrates	_____	Tons	_____	_____
Other	_____	Tons	_____	_____

3. Since September 8, 1959, has any production been transported through workings (see of contract)? Yes ☐ No ☐

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

Disposition of Material	Quantity	Value
_____	_____	_____

Submitted by:

Name _____ Title _____

Address _____ Date _____

4511

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

October 26, 1962

Re: DMEA-2388 (Lead-Zinc)
American Zinc, Lead and Smelting Company
Blue Bird Mine
Pend Oreille County, Wash.
Contract Idm-E301

Mr. William Dumont
c/o Multnomah Bank
7840 S.W. Capitol, H.W.Y.
Portland, Oregon

Dear Mr. Dumont:

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

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

Sincerely yours,

W. R. Griswold

W. R. Griswold, Chief
Division of Minerals

MME Form 63
Revised 3-62

DMEA-2300
Idm-E301

REQUEST FOR INFORMATION ON CERTIFIED PROJECT AND PROJECT UNDER ROYALTY AGREEMENT

1. Since September 8, 1959, has there been a change in ownership, lease, or sublease? If yes, please state details of the transaction below and provide a true or signed copy of the pertinent documents, unless they have been provided before. Yes ☐ No ☐

2. Since September 8, 1959, has there been any production from the land subject to the contract? Yes ☐ No ☐

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

	Quantity	Value
_____	_____	_____
_____	_____	_____

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

Type	Quantity		Estimated Grade	Location
Ore	_____	Tons	_____	_____
Concentrates	_____	Tons	_____	_____
Other	_____	Tons	_____	_____

3. Since September 8, 1959, has any production been transported through workings (see of contract)? Yes ☐ No ☐

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

Disposition of Material	Quantity	Value
_____	_____	_____

Submitted by:

Name _____ Title _____

Address _____ Date _____

4511

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

August 29, 1962

Re: DMEA-2388 (Lead-Zinc)
American Zinc, Lead
& Smelting Company
Blue Bird Mine
Pend Oreille County, Wash.
Contract Idm-E301

American Zinc, Lead and Smelting Company
927 Old National Bank Building
Spokane, Washington

Gentlemen:

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

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

Sincerely yours,

W. R. Griswold, Chief
Division of Minerals

OFFICIAL FILE COPY
O. M. E.
RECEIVED OCT 10 1962

DATE	INITIALS	CODE
10/10		800
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10/10		110
	Griswold	500
		220

MME Form 63
Revised 3-62

DMEA-2388
Idm-E301

REQUEST FOR INFORMATION ON CERTIFIED PROJECT AND PROJECT UNDER ROYALTY AGREEMENT

1. Since September 8, 1959, has there been a change in ownership, lease, or sublease? If yes, please state details of the transaction below and provide a true or signed copy of the pertinent documents, unless they have been provided before. Yes ☐ No ☒

2. Since September 8, 1959, has there been any production from the land subject to the contract? Yes ☐ No ☒

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

	Quantity	Value

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

Type	Quantity		Estimated Grade	Location
Ore		Tons		
Concentrates		Tons		
Other		Tons		

3. Since September 8,1959, has any production been transported through workings (see of contract)? Yes ☐ No ☒

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

Disposition of Material	Quantity	Value

Submitted by:

Name C. V. Burns Title Vice President and Controller

Address 1600 Paul Brown Building
~~818 Olive Street~~
St.Louis 1, Missouri

Date October 9, 1962.

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

August 4, 1958

MEMORANDUM:

To: Mr. Wingfield N. Chamberlain
Division of Operation Control & Statistics

From: Director, Division of Base Metals

Subject: Semi-Annual Reports of Certified projects for the period January 1, 1958 thru June 30, 1958.

The following projects were inactive during the cited period.

Docket No.	Contract No.	Name
DMEA-3112	Idm-E651	Centrida Mines, Inc.
DMEA-432	Idm-E1	Mines Management, Inc.
DMEA-81	Idm-E18	United Minerals Corporation
DMEA-1166	Idm-E76	American Zinc, Lead & Smelting Co.
DMEA-390	Idm-E63	Highland-Surprise Cons. Mining Co.
DMEA-125	Idm-E81	Bennett Mining Company
DMEA-981	Idm-E88	Idaho Mining Company
DMEA-525	Idm-E137	Spokane Mining Syndicate
DMEA-1877	Idm-E155	William Mulcahy
DMEA-652	Idm-E177	South Mt. Mining & Concentrating Co.
DMEA-1596	Idm-E184	Nabob Silver-Lead Company

DMEA-2166	Idm-E208	Farmer Mine Enterprises
DMEA-1959	Idm-E223	Wylie M. Gardner and L. R. Vance
DMEA-2123	Idm-E228	Pacific Northwest Mining Company
DMEA-1831	Idm-E242	William Soren
DMEA-1175	Idm-E251	Amador Mining Company (assignee of Kootenay Copper Mines)
DMEA-1894	Idm-E266	Buchman, Breckon and Norden
DMEA-2213	Idm-E294	Elmer Enderlin
DMEA-2388	Idm-E301	American Zinc, Lead & Smelting Co.
DMEA-2269	Idm-E308	Mines Management, Inc.
DMEA-2420	Idm-E380	Hypotheek Mining & Milling Co.
DMEA-2237	Idm-E421	Signal Mining Company
DMEA-2637	Idm-E475	Goldonda Lead Mines
DMEA-2862	Idm-E482	Spokane-Idaho Mining Co.
DMEA-2612	Idm-E489	Granore Company (assignee of Index Mining Company)
DMEA-2929	Idm-E587	Grandview Mines
DMEA-3142	Idm-E644	Howe Sound Company
DMEA-3288	Idm-E667-	Alaska Copper Mines, Inc.
DMEA-3664	Idm-E819	Highland-Surprise Cons. Mining Co.

W. R. Griswold

WRG/dl 8-4-58
cc to: Dockets (28)
Admr. R. File
Chonr.

DMEA Form 7
(12-56)

OFFICIAL

Date	Sur

March 10, 1958

Memorandum

To: Wingfield Chamberlain, Statistics Branch
Division of Operation Contract and Statistics

From: Director, Division of Base Metals

Subject: Report on Semi-Annual Reports of Certified Projects for the Period July 1, 1957 thru December 31, 1957.

The following projects were inactive during the cited period.

Docket No.	Contract No.	Name
DMEA-432	Idm-E1	Mines Management, Inc.
DMEA-2341	Idm-R436	Western States Copper Corporation
DMEA-2388	Idm-2301	American Zinc, Lead & Smelting Company
DMEA-2426	Idm-2345	Ira L. Mosely
DMEA-2612	Idm-E489	Granore Company, Assignee, (Index Mining Company)

W. R. Griswold

RECEIVED JAN 30 1958		
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		~~500~~

1201 N. Division St.
Spokane 2, Washington

January 24, 1958

2388

Mr. W. F. Myers
616 Beech Street
Kennewick, Washington

Dear Mr. Myers:

This is in reply to your letter of January 22, 1958, in which you inquire if the cores or drill logs of the diamond drilling done on the American Zinc Company's Blue Bird group of claims in the Metaline District could be made available for your inspection since you own adjacent claims.

The Blue Bird group of claims was drilled under DMEA Contract No. Idm-E301. Although we have the logs of this drilling in our files it is not the policy of the Defense Minerals Exploration Administration to release such information to the public in general. The American Zinc, Lead & Smelting Co., Metaline Falls, Washington, has this information in their files, and we would have no objections if they wish to release it to you.

Sincerely yours,

Wing G. Agnew, Chief
Spokane Field Office

cc: DMEA (2)
USGS (2)

(Re: Docket No. DMEA-2388 (zinc-lead), American Zinc, Pend Oreille County, Wash., Contract No. Idm-E301)

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION

SEMI-ANNUAL REPORT OF CERTIFIED PROJECT

Reporting period: January 1 to June 30, 1957 Date of exam: May 22, 1957

Operator: American Zinc, Lead & Smelting Co., 927 Old National Bank Building, Spokane, Wash.

Mine name: Bluebird

County and State: Pend Oreille County, Washington

Docket number and commodity: DMEA-2388 (zinc-lead)

Contract number: Idm-E301

7/11	P.K.	220
11	Com	100

Project inactive. No change in status since report of January 1 to June 30, 1956.

Mr. E. A. Frick, engineer for Grandview mine, stated that no new work had been done and nothing had been planned for the Bluebird claims this summer.

Signed: Galen G. Waddell (Engineer)

Distribution:
DMEA (4)
USGS (2)
USBM (AD)
USBM (2)

OFFICIAL FILE COPY
DMEA
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" | Com | 100

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION

SEMI-ANNUAL REPORT OF CERTIFIED PROJECT

Reporting period: July 1 to December 31, 1957

Date of exam: November 15, 1957

Operator: American Zinc, Lead & Smelting Co.
927 Old National Bank Bldg.
Spokane, Washington

Mine name: Bluebird

County and State: Pend Oreille County, Washington

Docket number and commodity: DMEA-2388 (zinc-lead)

Contract number: Idm-E301

Property inactive. No change in royalty status since report of January 1 to June 30, 1956.

Mr. R. J. J. Lampson, the new engineer for the Grandview mine, stated that no new work had been done and nothing had been planned for the Bluebird claims in the immediate future.

Signed: Galen G. Waddell (Engineer)

Distribution:
DMEA (4)
USGS (2)
USBM (AD)
USBM (2)

RECEIVED
JAN 22 1957
D.M.E.A.

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION

SEMI-ANNUAL REPORT OF CERTIFIED PROJECT

Reporting period: July 1 to December 31, 1956 Date of exam: Dec. 18, 1956

Operator: American Zinc, Lead & Smelting Co., 927 Old National Bank Bldg., Spokane, Wash.

Mine name: Bluebird

County and State: Pend Oreille County, Washington

Docket number and commodity: DMEA-2388 (zinc-lead)

Contract number: Idm-E301

Project inactive. No change in status since report of January 1 to June 30, 1956.

Under INVESTMENT DATA it should be noted that the assessment work performed included an access road and one diamond drill hole 971 feet in depth. The cost of the road and the drilling was $4,400.

Signed: M. R. Lickes (Engineer)

Distribution:
DMEA (4)
USGS (2)
USBM (2)
USBM (AD)

301

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION

SEMI-ANNUAL REPORT OF CERTIFIED PROJECT

Reporting period: January 1 to June 30, 1956 Date of exam: June 12, 1956

Operator: American Zinc, Lead & Smelting Co., 927 Old National Bank Building, Spokane, Washington

Mine name: Bluebird

County and State: Pend Oreille County, Washington

Docket number and Commodity: DMEA-2388 (zinc-lead)

Contract number: Idm-E301

Date of contract: April 21, 1952

Date of certification: July 7, 1953 (see Termination Agreement)

Expiration date of royalty payments: April 21, 1962

Total amount of contract: $116,500.00

Total expenditures under contract: $ 35,753.37

Amount of Government participation at 50%: $ 17,876.67

Royalty payments this period: none

Previous royalty payments: none

Total royalty payments to date: none

Percent Government participation repaid: none

RECEIVED
JUL 12 1956

Royalty due on production to date: none

Royalty remarks: none

Original estimate of reserves (from final Engr.-Geol. report):	The final report states: "... There is no basis on which to indicate or infer any appreciable ore reserves in the area drilled."
Increase (or decrease) of reserves by work performed subsequent to original and last Field Team estimates:	none
Revised estimate of reserves:	none
Production this period:	none
Amount of previous production (since date of contract):	none
Total DMEA produciton to date:	none
Percent of revised reserves mined:	none

Production remarks:

There has been no production from this property.

Other remarks:

American Zinc continues to do assessment work on claims staked by them but has relinquished their lease on the Dumont claims.

Signed: M. R. Lickes (Engineer)

Distribution:
DMEA (4)
USGS (2)
USBM (AD)
USBM (2)

ADDENDUM TO
SEMI-ANNUAL REPORT OF CERTIFIED PROJECT
March 15, 1956

Reporting period: July 1, 1955 to December 31, 1955

Operator: American Zinc, Lead & Smelting Company

Mine name: Bluebird

County and State: Pend Oreille County, Washington

Docket No. and Commodity: DMEA-2388 (zinc-lead)

Contract No.: Idm-E301

Other Remarks: (Page 2)

No ore reserves were calculated as a result of the DMEA project and none have been added since.

Production potential for the immediate future is nil; for the next 10 years, probably the same. The mineralization is spotty and low-grade.

Mining, milling, beneficiating, and marketing cannot be done profitably under current metal prices because the thin, lenticular pods of mineralized ground are small and low-grade.

Additional expenditures consist of annual assessment work, and no development is planned at the present time nor in the foreseeable future.

Signed: M. R. Lickes (Engr.)

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Distribution:
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USGS (2)
USBM (AD)
USBM (2)

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION

SEMI-ANNUAL REPORT OF CERTIFIED PROJECT

Period: July 1, 1955 to December 31, 1955

Docket No.: DMEA-2388
Contract No.: Idm-E301

Operator: American Zinc, Lead & Smelting Co., 927 Old National Bank Building, Spokane, Washington

Commodity: Zinc-lead

Mine name: Bluebird

County: Pend Oreille
State: Washington

Date of contract: April 21, 1952

Date of certification: July 7, 1953 (see Termination Agreement)

Expiration date of royalty payments: April 21, 1962

Date of examination for this report: December 21, 1955

Total amount of contract: $116,500.00

Total expenditures under contract: $ 35,753.37

Amount of Government participation at 50%: $ 17,876.67

Royalty payments this period: none

Previous royalty payments: none

Total royalty payments to date: none

% Loan repayment completed: none

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Amount of royalty due: none

Royalty remarks:

Original estimate of reserves
(from final Engr.-Geol. Report): "..., there is no basis on which to indicate or infer any appreciable ore reserves in the area drilled."

Increase (or decrease) of reserves by work performed subsequent to expiration or termination of contract: none

Revised estimate of reserves:

Production this period (ore or concentrates): none

Amount of previous production (since date of contract): none

Total DMEA production to date: none

% of revised reserves mined:

Production remarks:

There has been no production from this property.

Other remarks: (Investments, etc.)

Two diamond drill holes have been completed on the Bluebird claims for assessment work since termination of the DMEA project.

Signed: M. R. Lickes (Engr.)

Distribution:
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UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION

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SEMI-ANNUAL REPORT OF CERTIFIED PROJECT

Period: January 1, 1955 to June 30, 1955

Docket No. DMEA 2388 (lead-zinc) Contract No. Idm-E301

Operator: American Zinc, Lead & Smelting Co.
927 Old National Bank Building
Spokane, Washington

Name of mine: Bluebird

County: Pend Oreille State: Washington

Date certified: July 7, 1953 Date of last inspection: June 20, 1955

Inspection engineer: M. R. Lickes

Contract amount: $116,500.00

Amount spent: 35,753.37 Government participation: $17,876.67

Amount repaid to date: none

Reserves: None inferred nor indicated.

Remarks: There has been no production from the property.

Distribution:
DMEA (4)
USGS (2)
USBM (2)
USBM (AD)

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
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February 10, 1955

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

Re: Docket No. DMEA-2388 (lead-zinc)
American Zinc, Lead and Smelting Co.
Blue Bird Group
Pend Oreille County, Washington
Contract No. Idm-E301

Dear Mr. Selfridge:

Enclosed are four copies of the Field Team final report on the above-captioned contract which has been prepared by Webster S. Anderson, mining engineer, Bureau of Mines, and Willard P. Puffett, geologist, Geological Survey.

It is recommended by the authors that no Certification of Discovery or Development be made as a result of the contract work. The completed diamond drilling indicated only thin, scattered lenses of very low-grade, zinc-lead-bearing rock. These lenses are too thin and too limited in horizontal extent to be profitably exploited under present-day mining practices.

The Field Team concurs with the recommendation of the authors.

By Field Team, Region I, NW District

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

John S. Vhay, Acting Member
U. S. Geological Survey

Reviewed by
DMEA OPERATING COMMITTEE
2-18-55
(date)

Enclosures
cc: USBM(2)
Puffett

DEPARTMENT OF THE INTERIOR

DEFENSE MINERALS EXPLORATION ADMINISTRATION

FIELD TEAM, REGION I

Northwest District

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
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FINAL REPORT

Contract Idm-E301

FIELD TEAM
FINAL REPORT

by

Webster S. Anderson
Mining Engineer
U. S. Bureau of Mines

Willard P. Puffett
Geologist
U. S. Geological Survey

AMERICAN ZINC, LEAD and SMELTING CO.
927 Old National Bank Building
Spokane, Washington

Docket No.:	DMEA-2388
Commodity:	Lead-Zinc
Contract date:	April 21, 1952
Termination date:	July 7, 1953

Reviewed by
DMEA OPERATING COMMITTEE
2-18-55
(date)

BLUE BIRD GROUP
Slate Creek Mining District
Pend Oreille County, Washington

Spokane, Washington

February 1955

FINAL REPORT

AMERICAN ZINC, LEAD AND SMELTING CO.
Blue Bird Group
Slate Creek Mining District
Pend Oreille County, Washington

Contract Idm-E301

* * * *

INTRODUCTION

This report describes an exploration project conducted jointly by the American Zinc, Lead and Smelting Company and the United States Government, through the Defense Minerals Exploration Administration, for zinc-lead ores in the Slate Creek mining district, Pend Oreille County, Washington.

Summary

The purpose of the project was to determine by diamond drilling if the ore zone in the Upper Metaline limestone extends northeastward from the Metaline mining district into the Slate Creek mining district. This ore zone has been extensively developed in the Grandview and Pend Oreille mines in the Metaline mining district, some 5½ miles southwest of the Slate Creek district.

An exploration project contract between American Zinc, Lead and Smelting Company and the Defense Minerals Exploration Administration was signed on April 21, 1952. The contract designated that 9,000 feet of diamond drilling and 125 hours of bulldozing be done as Stage I. If the results justified it, a second stage with identical amounts of drilling and bulldozing was specified. Total amount of the contract was $116,500.00 and the Defense Minerals Exploration Administration participated in 50 percent of the costs.

Diamond drilling started on May 11, 1952. Seventeen diamond drill holes, Nos. 4 to 20, were completed; an additional hole was started but abandoned before hitting bedrock. A total of 6,886 feet of hole was drilled. This diamond drilling was completed on November 28, 1952. Lead and zinc sulfides were recovered in the core from Holes No. 5, 9, 12, 13, 14, 15, and 16. Not enough lead and zinc sulfides were found in Holes No. 5 and 13 to merit sampling. The thickest section containing ore minerals was in Hole No. 14, an inclined hole which intersected 13 feet of sparse to moderate amounts of lead and zinc sulfides and pyrite. Evidence for extensions of this zone was found in Holes No. 15, 16, and 13, but it was found to be much thinner and of lower grade.

The results of the drilling indicate that if the ore zone persists northeastward from the Metaline mining district to the Slate Creek mining district, its northeast extension is only as thin lenticular pods of small horizontal extent, which contain a very low percentage of lead and zinc.

The contract was terminated by mutual agreement between the Government and the American Zinc, Lead and Smelting Company on July 7, 1953. The Termination Agreement stipulated that should any ore be produced from the property within 10 years from the date of the contract, funds expended by the Government would be repaid as a percentage royalty from the proceeds realized from the sale of the ore.

Total cost of the completed contract work was $35,753.37 of which the Government contributed 50 percent or $17,876.67.

Recommendations

It is recommended that no Certification of Discovery or Development be made as a result of the contract work. The completed diamond drilling indicated only thin, scattered lenses of very low-grade, zinc-lead-bearing rock. These lenses are too thin and too limited in horizontal extent to be profitably exploited under present-day mining practices.

No further exploration of the Blue Bird claims in the Slate Creek mining district is justified at this time as the completed work has satisfactorily explored the Upper Metaline Limestone and has indicated that the minable portions of the known ore zone do not persist through the district at the depth explored.

LOCATION AND ACCESSIBILITY

The Blue Bird group includes 49 claims in secs. 30 and 31, T. 40 N., R. 44 E., and secs. 25 and 36, T. 40 N., R. 43 E., Willamette Meridian, Slate Creek mining district, Pend Oreille County, Washington.

The property is north of Slate Creek and northeast of State Highway 6. A good graveled road extends from the state highway, just north of the Slate Creek bridge, to the central part of the claims.

Altitudes in the area range from 2,200 to 2,800 feet. Surrounding areas are of moderate relief, up to 1,000 feet. Heavy timber and thick brush cover most of the surface.

Summer seasons from June through September are generally hot and dry, with the exception of thunderstorms in the higher regions. Considerable precipitation falls during the winter as snow, and temperatures commonly reach below zero and to extremes of -30°.

PROPERTY

The property listed in the contract comprises 49 claims. Included among these is a contiguous group of 17 claims known as the Blue Bird-Dumont property. The Blue Bird-Dumont property is in parts of secs. 36 and 25, T. 40 N., R. 43 E., and secs. 30 and 31, T. 40 N., R. 44 E., Willamette Meridian, Pend Oreille County, Washington. These claims are owned by George Dumont, William Dumont, and Howard L. Kimmel, and are designated as follows:

Lucky Boy 1, Lucky Boy 2, Lucky Boy 3.
Blue Bird Lode, Blue Bird Lode 2, Blue Bird Lode 3,
Blue Bird Lode 4, Blue Bird Lode 5, Blue Bird Lode 6,
Blue Bird Lode 7, Blue Bird Lode 8, Blue Bird Lode 9.
Red Rock
North Star 1, North Star 2, North Star 3, North Star 4.

Signed Owner's Consent to Lien is attached to the contract.

The American Zinc, Lead and Smelting Company owns by right of location 30 claims adjacent and contiguous to the Blue Bird-Dumont property. These claims are designated as the Blue Bird 10 through Blue Bird 39. These claims are in secs. 30 and 31, T. 40 N., R. 44 E., Willamette Meridian, Pend Oreille County, Washington.

The American Zinc, Lead and Smelting Company owns by right of location Blue Bird Claim No. 40, whose east side line is common with the west side line of the North Star No. 4 claim of the Blue Bird-Dumont property.

A patented claim, Bill No. 2 Lode, owned by Pend Oreille County, overlies parts of the Blue Bird 13, 15, and 17 claims.

The American Zinc, Lead and Smelting Company formally cancelled their lease and option on the Blue Bird-Dumont property effective 30 days after March 23, 1954.

A copy of the claim map is in the map pocket.

GEOLOGY

A detailed report on the geology of northern Pend Oreille County, Washington, has been published as U. S. Geol. Survey Professional Paper 202 by C. F. Park, Jr., and R. S. Cannon, Jr.

The most important ore-bearing formation in northern Pend Oreille County is the Metaline limestone of Middle Cambrian age. The outcrops of this formation are confined to a triangular-shaped area, starting near Ione, Washington, and widening gradually northward to the International Border. The east and west sides of the area are marked by the Slate Creek and Flume Creek faults, respectively, which are steep-angled normal faults of more than 10,000 feet displacement.

The ore zone in the Upper Metaline limestone has been the most productive mineralized zone in the area. (Currently, the Grandview and the Pend Oreille mines have a combined daily production of more than 3,000 tons of zinc-lead ore from this zone.) According to Park and Cannon, this ore horizon occurs in the extreme upper part of the Metaline limestone, generally within 200 feet of the contact between this formation and the overlying Ledbetter slate of Ordovician age. In general the ore zone is strongly dolomitized and silicified and has jasperoid throughout it. The silicified dolomite is extremely fine grained and has been finely to coarsely brecciated. The ore minerals occur as light-yellow to deep amber sphalerite and galena, the zinc to lead ratio being of the order of 4 to 1.

The attitude of the ore bodies conforms in general to the bedding in the dolomite, dipping at a low angle to the northeast. There is a tendency for the thicker and richer mineralized zones to follow flat anticlinal folds that plunge to the northeast.

As the known ore bodies generally occur within 200 to 300 feet of the overlying Ledbetter slate, it has been the general practice in exploring for their extension to drill through the Ledbetter slate to determine if the upper 200 to 300 feet of the Metaline limestone has certain characteristics, such as silicification, dolomitization, brecciation, and mineralization in order to determine if the ore zone is present.

THE PROJECT

The purpose of the exploration project was to explore for a lead-zinc ore body by drilling a series of diamond drill holes through the Ledbetter slate into the upper 200 feet of the Metaline limestone. Surface exposures indicated that a thin layer of the Ledbetter slate occurred in the area, and although the few exposures of Metaline limestone were not considered sufficiently silicified to be part of the ore horizon developed in the Metaline mining district, it was believed that the ore zone might exist in the areas covered by slate.

The project was divided into two stages, each consisting of 9,000 feet of diamond drilling and 125 hours of bulldozing. The bulldozing was for preparation of drill sites. Stage II of the project was not to be started unless results of Stage I were successful in finding evidence that the ore zone exists in the area.

Seventeen holes were completed under the contract. These holes explored an area about 3,600 feet long and a maximum width of 1,000 feet. The location and inclination of the holes are shown on the accompanying plan and section map.

Holes No. 5, 9, 12, 13, 14, 15, and 16 were successful in intersecting thin zones in which sphalerite, galena, and pyrite occur. No ore minerals were found in the other holes.

Following is the assay data the Operator obtained by sampling the parts of the core from the holes which intersected lead and zinc sulfides:

Hole No.	From	To	% Pb	% Zn	% Fe
9	283'	289'	Tr.	Tr.	--
12	1,045'6"	1,046'6"	0.08	16.93	3.05
14	93'	98'	Tr.	8.32	6.20
	102'	106'	0.02	3.11	8.00
	193'	197'	0.02	3.11	27.62
15	63'	66'6"	0.02	5.77	21.67
	88'7"	90'	Tr.	1.71	3.81
16	449'6"	454'4"	0.13	Tr.	2.94

Although some sphalerite and galena were found in the core of Holes No. 5 and 13, there were insufficient quantities of these minerals to warrant sampling the core. Copies of logs of the diamond drill hole cores are appended to this report.

Sections through the diamond drill holes are shown on the accompanying plan and section map. In making these sections, it has been assumed that none of the holes deviated from the bearing at which they were started. None of the holes was surveyed.

It is known that vertical holes drilled in the Metaline mining district do deviate considerably from vertical.

Results from drilling Holes No. 4 through 20, indicated the geologic improbability of finding better evidence of ore with continued drilling. Thus, the contract was terminated by mutual agreement between the Government and the Operator on July 7, 1953. A provision in the Termination Agreement stipulated that should ore be produced from the area covered by the contract within 10 years from the date of the contract, the Government was to receive repayment of the amount it had contributed to the completed exploration. This payment would be as royalties from the sale of any ore which was produced from the property.

Ore Reserves

According to the evidence obtained by constructing numerous sections through the diamond drill holes, there is insufficient justification to assume any continuous mineralized ore zone in the area drilled. Consequently, there is no basis on which to indicate or infer any appreciable ore reserves in the area drilled.

Summary of Factual Data

As of November 27, 1952, the Operator had completed 6,886 feet of diamond drilling, and of this total, the Operator submitted for payment 6,783 feet of drilling in which the Government participated. The total cost of diamond drilling averaged $5.399 per foot.

The exploration program was set up into two stages, and the start of work in the second stage was contingent on the results of the first stage. Each stage authorized 9,000 feet of diamond drilling with a total cost of $116,500.00 for the two stages at an average cost of $6.47 per foot of hole completed.

The costs were lower than anticipated as the Operator did not include total costs for dozing access roads and furnishing the core boxes on company account.

The total expenditure under the contract was $35,753.37 of which amount the Government contributed 50 percent or $17,876.67.

There was no operating equipment purchased for the project.

Discussion of Conclusions

As the overburden at the property extended at some places to depths of 200 feet, some difficulty was incurred in ledging the holes with a churn drill. This slowed progress on the drilling to a certain extent but did not materially affect the over-all performance or costs of work completed under the contract.

All work completed under the contract was well supervised and carried out in a workmanlike manner.

Geologic evidence found by drilling indicates that the ore zone developed in the Metaline mining district probably does not extend northeast to the Slate Creek district.

Enclosures

Distribution:
DMEA (4)
USBM (5)
USGS (SRO)
Docket
Puffett

COPY

N: 7731.7
E: 3128.6
El: 2684.9

B.B. D D No. 4

Surface

Dom 45°

N. 40° W.

Start: 5-5-52
Finish: 5-15-52

0	-19'6"	Overburden
19'6"	- 53'	Black shale cored AX
53	- 84'	Recrystalline grey dolomite. Considerable graphite. Core broken.
84	- 86'	Recrystalline grey dolomite. Broken and leached
86	- 98	Recrystalline grey dolomite. Broken core.
98	- 154	Dense grey limestone
154	- 176	Dense and fine grained light grey dolomite.
176	- 178'6"	Gouge and coal gouge and grey dolomite
179		Bottom (178'6")

Note: Core recovery good.

Logged by: H. F. M.

Drill: No. 8
Driller: Mendenhall, Felty
Helper: Westling, Norton

Not sampled.

BB DD No. 5

N. 6803.4
E. 2068.3
El. 2662.1

Surface

Vertical

Down

Start: 5-14-52
Finish: 6-14-52

0 - 11	Overburden
11-51	Black shale. Considerable FeS scattered throughout. Banded 45° at 12', 55° at 23', 65° at 33', 50° at 43', 50° at 48'.
51 - 133	Black shale. Banded 70° at 55', 55° at 70', 40° at 114'. Much of core is crushed and granulated. Considerable FeS in shale and seams of shale. Grey quartzite 130' - 130'6". Banded 50° at 120'.
133 - 134	Grey quartzite.
134 - 140	Black shale. Banded 55° at 138'.
140 - 140'6"	Grey quartzite.
140'6" - 144	Black shale.
144 - 145	Grey quartzite.
145 - 153	Black shale. Banded 55° at 150'.
153 - 155	Grey quartzite.
155 - 156	Black shale.
156 - 157	Grey quartzite.
157 - 160	Black shale. Banded 45° at 159'.
160 - 161	Grey quartzite.
161 - 162	Black shale.
162 - 163	Siliceous limestone.
163 - 243	Black shale. Cored. Banded 40° at 169, 45° at 172, 60° at 184, 6" lime at 186, mixed lime chert and shale from 190'6" to 191' Considerable FeS. Banded 45° at 206'. Chert from 207'4" to 211'4". Two feet of core, highly shattered. Banded 15° with hole at 213, 45° at 219, 35° at 236.
243-260	Black shale. Plug bit.
260 - 265	Black shale. Cored. Banded 55° with hole at 261.
265 - 314'6"	Black shale. Plug bit.
314'6" - 316	Medium grey recrystalline dolomite. Slightly siliceous.
316 317	Dark grey quartzite.
317 324	Coarse grained recrystalline grey dolomite.
324 335'7"	Fine grained grey siliceous dolomite. Occasional quartz and blue chert eyes and occasional scattered fine grained FeS. Speck of ZnS at 331'6"
335'7" 336'4"	No core.
336'4" 344	Breccia of recrystalline grey lime and grey chert. Solution pitted. Fault gouge at 341'6". Occasional shine FeS.
344 355	Recrystalline grey dolomite with some dark chert. Considerable FeS 347 349.
355 357'5"	Fine grained light grey dense limestone. Considerable graphite stiolites.
357	Bottom.

B.B. No. 5 (continued)

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Note: Core recovery good.
Logged by: JBM and EFM
Drill No. 78736
Driller: C. Orton J. Anderson and E. Roland
Helper: D. Shackelton. Norton C. H. Shauge

Not sampled.

COPY

B.B. D.D. No. 6

N. 7729.7
E. 3130.0
El. 2685.6

Surface

Vertical Down

Start: 3-15-52
Finish: 3-28-52

0-24	Overburden
24-25	Boulder. AX cored.
25-27	Black shale. AX cored.
27-34	Dolomite, some massive FeS. Plug bit.
34-49	Recrystallized dolomite. Considerable graphite and FeS.
49-77	Recrystallized gray dolomite. Heavy FeS at 67'.
77-81	Dark recrystallized dolomite FeS at 79.
81-91	Recrystallized and fine grained gray dolomite. Much broken and considerable leaching.
91-183	Fine grained gray dolomite. Much broken. Small amount of dense gray dolomite.
183-207	Dense gray limestone.
207-215	Recrystallized and dense gray limestone.
215-221'2"	Recrystallized and dense gray limestone. Crushed.
221	Bottom (221'2")

Note: Core recovery good.
Logged by: E. F. M.
Drill No. 8
Driller: Ed Foltz, Forstagen, E. L. Sprigg, J. Anderson.
Helper: W. Westling; C. Orton; D. R. Roberts; Horton

Not sampled except for check sample.
5" core taken at 66'

Fe	Zn	ZnO
Tr.	Tr.	Tr.

N. 7771.7
E. 3092.8
El. 2578.5

COPY

Blue Bird D. D. No. 7 Elev
Surface

No. 40° W. down 30°

Start: 5-29-52
Finish: 6-3-52

0 - 11	Overburden and rotten shale. No core	
11 - 27	Overburden and rotten shale. Ax core.	
27 - 34	Black shale and dolomite. Plug bit.	
34 - 37	Black shale. Bailed 90° with hole.	
37 - 100'6"	Recrystallized gray dolomite. Much broken. 4" FeS at 46'. Considerable leaching 43' to 44'. Speck of ZnS at 93' & 80' & 80'6" & 84'	
101	Bottom (100'6")	

Note: Core recovery good
Logged by: EM
Drill: No. 8
Drillers: Anderson, Seright
Helpers: Norton, Roberts

Not Sampled

COPY

N. 7468.8
E. 2838.1
El. 2659.

Blue Bird DD No. 8

Surface | Elev:

Vertical | Start: 6-3-52 | Datum
Finish: 6-10-52

0 - 18	Overburden
18 - 20	No core.
20 - 23	Black shale. AX. Bended 40° with hole.
23 - 36'2"	Black shale. Plug bit. Bended 45° with hole.
36'2" - 38'9"	Black shale. Cored EX. Bended 55° with hole.
38'9" - 45'9"	Black shale. Plug bit.
45'9" - 61'2"	Black shale. EX. Bended 18° with hole at 46'; bended 50° at 60'.
61'2" - 120	Black shale. Plug bit.
120 - 126	Mixed lime and shale; plug bit.
126 - 128	Fine grained gray dolomite and chert.
128 - 142	Breccia of mostly gray limestone and some chert and some dolomite. Occasional shale FOS.
142 - 190	Medium grained gray limestone. Breccia of mixed light and dark dolomite. Some chert. Matrix of gray limestone from 148'6" to 150 and 151 to 157 and 160 to 164'6" and from 168' to 174'. Slickensides at 176'6".
190	Bottom (190')

Note: Core recovery good.
Logged by: MM
Drill: No. 8
Driller: Sorlight, Anderson
Helper: Anderson, Horton

Not sampled.

COPY

N. 7202.5
E. 2986.3
Elev. 2602.5

Blue Bird D. D. No. 9
Surface

Vertical / Down

Start: 6-10-52
Finish: 6-26-52

0-9	Overburden
9-15	Cored AX. Slate bedded 55° with hole at 15'
15-106'1"	Black shale. Plug bit.
106'1"-109'2"	Mixed shale, quartz and chert. Cored EX
109 2"-131'6"	Black shale. Plug bit.
131'6"-142	Mixed grey chert and siliceous dolomite.
142-158	Recrystalline coarse grained dolomite and grey chert. Occasional specks FeS.
158-210	Mixed recrystalline grey dolomite, fine grained siliceous dolomite and dark grey chert.
210-215'4"	Fine grained grey limestone.
215'4"-216	Graphite (fault)
216-217	Cemented breccia of siliceous dolomite and dark chert.
217-219'3"	Black shale. Cored EX. Bedded 45 to 65° with hole.
219'3"-231'1"	Black shale. Plug bit.
231'-239	Dark and light grey dolomite breccia with nodules of chert. Very weak shows ZnS and FeS at 232'.
239'-241	Fine grained siliceous grey dolomite and chert nodules.
241-247'6"	Recrystalline grey dolomite and light grey chert breccia.
247'6"-249	Fine grained limey dolomite.
249-251	Gouge and sand-gouge.
251-259	Fine grained siliceous dolomite and chert.
259-261	Zebra rock
261-267	Dark grey dolomite with light grey dolomite eyes. 2" core from 262'2" to 267'7".
267-269	Zebra rock.
269-289	Dark and light grey dolomite and light chert. Considerable FeS 270-271 and 283-289.
289-291	Mostly light and dark grey chert, some dolomite.
291-342	Coarse recrystalline grey dolomite, some chert, and scattered FeS.
342-363'7"	Dense fine grained grey dolomite.
364	Bottom (363'7")

Note: Core recovery good except as noted.
Logged by: JEF
Drill No. 8
Driller: Morton, Sarlight
Helper: Rumerhart, Roberts

Check Samples only -	Pb	Zn	ZnO
283'-289'	Tr.	Tr.	Tr.
321'	0.10	Tr.	Tr.

COPY

B.B. No. 10

Start: 6 16 52
Finish: 7 2 52

N 5581.6
E 1789.9
Elev 2575.3

Vertical — Down

0 - 5	Overburden
5 - 9'1"	Black shale. Cored AX.
9'1" - 49'6"	Black shale. Plug bit. Banded 75° v hole at 40'.
49'6" - 51'6"	Gray quartzite. Cored EX.
51'6" - 53'10"	Black shale. Cored.
53'10" - 443'1"	Black shale, plugged. Occasional bands of gray qtzite.
443'1" - 476	Fine grained gray silicous dolomite v considerable graphite.
476 - 477	Fine-grained gray quartzite.
477 - 523	Light gray, medium grained dolomite with considerable graphite. Small quartz filled vug at 497'
523 - 530	No core.
530 - 532'6"	Fine grained gray dolomite. Core shattered and vuggy. Quartz filling in vugs.
533	Bottom (532'6")

Noted: Core recovery good except as noted in log.

Logged by: JEF
Drill: 78756
Driller: Mendenhall, Roland, Orton
Helper: Rummelhart, Stackleton, Strange, Groo

Not sampled

COPY

D. D. No. 11

N: 6983.8
E: 2750.4
Elev: 2389.9

Vertical

Start: 6 24 52
Finish: 7 8 52

Down

0 30	Overburden.
30 158'11"	Black shale and grey quartzite. Plug bit.
158'8" - 165'3"	Grey quartzite and occasional shale. Cored EX. Landed 60° W. hole at 165'
165'3" - 330	Mixed shale and grey quartzite plugged.
330 - 352	Medium grey fine grained calcareous dolomite with some graphite. Slightly siliceous.
352 - 367	Medium grey, medium grained calcareous dolomite. Slightly siliceous with some graphite. Fine grained scattered FeS from 357 to 358. Considerable fine grained FeS 366 367'
367 389 5"	Course-grained recrystalline light grey dolomite with some graphite.
389'5" 394	Fault zone. Recrystalline grey dolomite and gouge
394 - 403	Recrystalline grey dolomite with graphite. Solution cavity & FeS at 397 - 398'6"
403 - 404'8"	Fine grained grey dolomite with considerable graphite
404'8" - 405	Black mud
405 - 407'11"	Fine grained medium grey dolomite
408	Bottom (407'11")

Note: Core recovery good.
Logged by: J. H. W.
Drill: No. 18
Drillers: Mendenhall, Norton, L. Van Dyke, Orton
Helpers: Rummelhart, J. Van Dyke, Shackleton

Not sampled.

N. 6643.4
E. 2838.2
El. 2628.6

COPY

Blue Bird DD No. 12

Vert

Down

(Surface)
Start: 6 26-52
Finish: 8 23-52

0 - 165	Overburden
165 - 533	Black shale with intermittent quartzite stringers. Plug bit. Banded 35° with hole at 350', 55° at 500'.
533 - 534'9"	Black shale. Cored FX. Slickensides.
534'9" - 891	Black shale with intermittent quartzite stringers. Plug bit. Banded parallel with hole at 575'; perpendicular at 700'; 30° at 750'; 90° at 875'.
891 - 1058'3"	Black shale. Plug bit. Banded 87° with hole at 900'; 90° with hole 911 to 1058'.
1058'3" - 1071'7"	Coarse recrystalline grey dolomite. Some brecciation. Little chert 1045'6" 1046'3". Reddish grey dolomite with high-grade brownish ZnS at 1046'3" - 1071'7". Recrystalline grey dolomite with considerable brecciation. A little graphite in seams. Some FeS. Some solution pitting in breccia. Specks ZnS at 1069'. Two inches good ZnS at 1071'.
1071'7" - 1078'3"	Medium grained, medium grey, slightly siliceous dolomite. Some solution pitting. Speck ZnS at 1071'8". Core broken.
1078'3" - 1088	Recrystalline grey dolomite. Shines ZnS at 1069' - 1069'6". Some FeS at 1065'. Very dark dense dolomite from 1073'7" - 1073'7". FeS stringer with specks ZnS at 1077 and 1078'.
1088 - 1099	Medium coarse grained recrystalline dolomite. Small stringers FeS at 1090'.
1099 - 1122'7"	Medium fine grained recrystalline dolomite. A little FeS at 1115'6". Core broken 1121 - 1122'7".
1123 (1122'7")	Bottom

Note: Core recovery good.
Logged: HFM - EAF
Driller: Rutledge, Mendenhall, Orton

Sampled	Pb	Zn	ZnO	Fe
1045'6" - 1046'6"	0.03	16.93	Tr	3.03

COPY

N. 6966.3
E. 3658.0
El. 2504.4

Blue Bird DD No. 13

Vert (Surface) Dom

Start: 7-3-52
Finish: 8-11-52

0-88	Overburden
88-123	Black shale and quartzite. Plug bit.
123-126	Quartzite. Shiner FeS. EX core.
126 - 152	Black shale and quartzite. Plug bit.
152 - 157	Black shale. Cored EX.
157 - 193	No core. Plug bit.
193 - 607'5"	Black shale with intermittent quartzite stringers. Plug bit. Bended 40° with hole at 500'; 15° at 400'; 15° at 600'.
607'5" - 623	Gray dolomite, fine-grained with some chert. FeS at 615 and 621'. Few specks ZnS at 615'.
623 - 642	Medium fine-grained siliceous dolomite and chert breccia. Occasional specks FeS to 637. A few fragments black shale in breccia. Weak scattered shiner ZnS at 632.
642 - 656	Mottled dark and light gray dolomite and little chert. A few small calcite stringers. Heavy FeS from 652 to 654. Few specks ZnS at 652. Calcite from 653 to 653'5".
656 - 683'2"	Calcite breccia of shale. Dark dolomite and dolomite with tan cast. Mostly calcite from 680'6" to 681'6".
683'2" - 689'6"	Breccia of little shale. Tan and gray dolomite and mostly calcite.
689'6" - 697'6"	Black shale. Bended 10° with hole at 691 and 63° with hole at 693'.
697'6" - 703'6"	Black shale. Plug bit.
703'6" - 711'8"	Dark gray siliceous dolomite and chert.
711'8" - 714	Breccia of dark and light dolomite and chert.
714 - 739	Coarsely brecciated dark and light dolomite, shale, chert and calcite. FeS at 716, 723, 729, and 727. Speck ZnS at 719'8".
739 - 739'4"	Shale mud.
739'4" - 743	Broken chert, dolomite and little shale. Some FeS.
743 - 743'8"	Mostly shale and a little dolomite. Coup. Siliceous shale.
743'8" - 747	Brecciated dolomite, dolomite chert cemented and a few fragments of shale. Some FeS at 744'.
747 - 758'6"	Brecciated dolomite and chert cemented with calcite. Solution pitting throughout. Some FeS at 751. Speck ZnS at 749'.
758'6" - 762'10"	Mottled dark and light dolomite. A little brecciated at 762.
762'10" - 780	Dark and light dolomite and chert. Finely brecciated in spots.

(Continued)

Blue Bird DD No. 13 (continued)

780 - 792	Brecciated dolomite and chert.
792 - 793'4"	Dolomite. Core badly broken.
793'4" - 811	Brecciated dolomite. A little chert and calcite
811 - 815	Brecciated dolomite and recrystallized dolomite.
815 - 826'3"	Dark and light dolomite and chert. Slight brecciation in spots. A little coral rock at 815. A little recrystallized dolomite from 825 on.
826'3" - 844	Brecciated dolomite and recrystallized dolomite. Very small amount of chert pieces at 844.
844 - 845	Calcite.
845 - 846'6"	Dark grey dolomite. Calcite in veins.
846'6" - 871	Dark and light dolomite and calcite.
871 - 876	Calcite
876 - 879	Dark and light dolomite and calcite.
879 - 882'8"	Fine grained grey dolomite and calcite.
882'8" - 875	Fine grain grey dolomite and chert. Some recrystallized dolomite. Brecciated and solution pitted at 863 to 867. Core broken at 870.
875 - 880	Dark and light dolomite and chert. Some recrystallized dolomite.
880 - 882	Broken chert solution pitted and stained, pieces at 881.
882 - 910'7"	Mostly fine grained grey and coarse grained recrystallized dolomite, chert at 883 and 902. Core broken 896 - 899. Also some solution stains.
911 (910'7")	Bottom

Note: Core recovery good.
Logged: E. A. T.
Driller: Van Dyke, Rutledge, Roland, Orton

Not sampled.

COPY

N. 7942.4
E. 3966.5
El. 2552.8

Blue Bird D.D. No. 14
(Surface)

N. 15° W.

-45°

Start: 8-12-52
Finish: 8-22-52

0 - 4	Hard pan.
4 - 20	Black shale. BX
20 - 29	Black shale. Plug bit.
29 - 33'6"	Very siliceous. Grey dolomite. Thin stringer ZnS at 30'. ZnS shiner at 31'.
33'6" - 34	Black shale. Bended 60° with hole.
34 - 47	Siliceous grey dolomite. Occasional FeS.
47 - 51'6"	Grey dolomite. One-half inch band ZnS at 47'. Shiner ZnS at 49' and 50'.
51'6" - 52'6"	Grey dolomite. Much FeS; some ZnS.
52'6" - 53'6"	Grey dolomite.
53'6" - 60	Grey dolomite. Heavy FeS, a little ZnS with FeS.
60 - 93	Medium grey dolomite. Occasional brecciation. Six-inch heavy FeS at 90'3".
93 - 98	Recrystallized grey dolomite. Scattered FeS and ZnS. Considerable ZnS and FeS, 97' to 98'.
98 - 157	Recrystallized grey dolomite. Occasional heavy FeS. Shiner ZnS at 103'6" to 107'.
157 - 174	Recrystallized grey dolomite. Considerable brecciation. Three inch heavy FeS at 144'.
174 - 184	Gouge and semi-gouge. Recrystallized grey dolomite. Weak shiner ZnS at 180 to 181.
184 - 190	Recrystallized grey dolomite.
190 - 193	Recrystallized grey dolomite. Occasional heavy FeS.
193 - 197	Mostly FeS. Occasional shiner ZnS.
197 - 292	Recrystallized grey dolomite. Some crushing.
292 - 308	Recrystallized grey dolomite.
308	Bottom

Note: Core recovery good.
Logged: I. F. M.
Driller: Roland, Van Dyke, Foley, Richard

Sampled	Fe	Zn	ZnO	Pb
93 - 98	Tr	8.32	Tr	6.20
102 - 106	0.02	3.11	Tr	8.00
193 - 197	0.02	3.11	Tr	27.62

Blue Bird DD 15

Vert

(Surface)

Start: 8-23-52
Finish: 8-29-52

Dam

N. 7936.8
E. 3966.8
Elev: 2552.1

0 - 20	Black shale. Cored AX. Banded 55° with bole.
20 - 38	Black shale. Plug bit.
38 - 53	Dark and dull grey recrystalline dolomite.
53 - 66'6"	Recrystalline grey dolomite. Heavy FeS. Some ZnS 63' - 65'.
66'6" - 72	Recrystalline grey dolomite. Occasional FeS.
72 - 88	Recrystalline grey dolomite.
88 - 101	Recrystalline fine-grained grey dolomite. Shiner ZnS 89 - 90'.
126'7" - 163	Recrystalline and fine-grained grey dolomite. Pin point shiner ZnS at 130'. Some FeS at 132'. A little FeS at 136'.
101 - 126'7"	Recrystalline and fine-grained grey dolomite. Some FeS at 111' - 114'.
163 - 202	Fine-grained and recrystalline dolomite. Some brecciation.
202 - 203	Dark dolomite.
203 - 216	Mottled recrystalline dolomite.
216 - 217	Dark dolomite.
217 - 223	Mottled recrystalline dolomite.
223 - 226	Dark dolomite.
226 - 233	Recrystalline and fine-grained grey dolomite.
233 - 234	Dark dolomite.
234 - 263	Recrystalline fine-grained grey dolomite. Grey chert 244' to 246'. Banded 75° with bole at 259.
263	Bottom.

Note: Core recovery good.
Logged: E. J. M. and E. A. F.
Driller: Van Dyke, Roland, Rickstad

Sampled	Pb	Zn	ZnO	Fe
63 - 66'6"	0.02	5.77	Tr	21.67
88'7" - 90'	Tr	1.71	Tr	3.81

Copy

Blue Bird DD No. 16

N. 7496.4
E. 3916.8
El: 2517.9

(Surface)

Vert.

Down

Start: 8-26-52
Finish: 9-18-52

0 - 93	Overburden.
93 - 420	Black shale. Plug bit. Bended 65° with hole at 96', 75° with hole at 300', 80° with hole at 400'.
420 - 435	Recrystalline and fine grained grey dolomite. Much broken.
435 - 436	Medium dark grey dolomite.
436 - 450	Recrystalline and fine grained grey dolomite.
450 - 455	Recrystalline gray dolomite with a little grey chert. Considerable oxidation.
455 - 457	Recrystalline grey dolomite.
457 - 521	Calcite. Much broken. Some solution stain.
521	(521) Bottom

Note: Core recovery good.
Logged by: H.F.H. and E.A.F.
Driller: W. Rutledge, C. Orton, Van Dyke, Roland
Helper: Norton, McKitrick, Van Dyke, McKinney, Enright.
Drill: No. 18

Sampled	Pb	Zn	ZnO	Fe
449'6" - 454'4"	.13	Tr	Tr	2.94

N. 814.8
E. 394.1
El. 245.8

COPY

Blue Bird DD 17

Vert (Surface) Down

Start: 8-30-52
Finish: 9-15-52

0 - 14	Overburden.
14 - 21	Black shale. Cored AX.
21 - 49	Black shale. Plug bit.
49 - 50	Black shale. Cored AX. Bended 55° with hole.
50 - 154	Black shale. Plug bit.
154 - 153	Recrystalline dolomite. Considerable breaking.
153 - 154	Gouge and sand-gouge.
154 - 209'6"	Fine-grained and recrystalline dolomite.
210 (209'6")	Bottom

Note: Core recovery good.
Logged: E.F.M.
Driller: Roland, Richtrad and Van Dyke

Not sampled.

COPY

N. 8887.2
E. 6063.1
El. 2663.3

Blue Bird DD 18
(Surface)
Start: 9-16-52
Finish: 10-20-52

Vert | Dom

0 - 9	Overburden
9 - 330	Black shale. Plug bit.
330 - 340	Gray dolomite. Occasional gouge. Core much broken.
340 - 333	Calcite and gray limestone.
333 - 354	Sand-gouge of gray dolomite.
354 - 366	Gray massive limestone. Some solution pitting and some solution staining.
366 - 372	Gray massive limestone. Much broken. Gouge at 368. Gouge and sand gouge at 371.
372 - 399	Gray massive limestone.
399 - 403	Recrystallized limestone.
403 - 403'4"	Dark gray cherty dolomite.
403'4" - 436	Light gray recrystallized dolomite. Core somewhat broken. Occasional oxidation stain.
436	Bottom

Note: Core recovery fair due to broken and faulted zone.
Logged by E.A.J.
Driller: Van Dyke, Roland

Not sampled.

COPY

N. 8136.6
E. 4479.4
El. 2360.9

Blue Bird DD 19

Surface

Vert | Down

Start: 9-19-52
Finish: 10-23-52

0 - 107	Overburden.
107 - 110	Shale. AX core.
110 - 187	Black shale. Plug bit. Bended 75° with hole.
187 - 205	Dense grey limestone and calcite.
205 - 221	Dense grey limestone and recrystalline grey limestone. A little graphite.
221 - 226	Dense grey limestone.
226 - 228	Dense grey limestone and some glassy chert.
228 - 230	Dense grey limestone.
230 - 267	Recrystalline and fine grained grey dolomite. A little graphite and occasional solution stain.
267 - 270	Fine grained dark grey dolomite.
270 - 276'10"	Recrystalline grey limestone.
277 (276'10")	Bottom

Note: Core recovery good.
Logged: H.F.M.
Driller: Rutledge, Roland

COPY

N. 8213.6
E. 5083.0
El. 2609.8

Blue Bird DD 20

(Surface)

Vert Dom

Start: 10-21-52
Finish: 11-27-52

0 - 61	Overburden
61 - 70	Black shale. Cored AX. Banded 75° with hole.
70 - 80	Black shale. Cored EX.
80 - 270	Black shale. Plug bit. Banded 90° with hole at 150', 75° and 230'.
270 - 278	Recrystalline grey dolomite and dark chert. Considerable brecciation. Some flow structure. A little FeS.
278 - 293	Brecciated recrystalline dolomite.
293 - 306	Recrystalline grey dolomite. Brecciated. Considerable graphite and FeS.
306 - 316	Recrystalline grey dolomite. Brecciated. Considerable graphite.
316 - 331	Gray limestone. Some graphite mottling.
331 - 339	Recrystalline grey limestone and a little dark chert.
339 - 344	Grey limestone. Some graphite.
344 - 359	Recrystalline grey limestone. Considerable chert. Banded 50° with hole at 349'; probably not representative. Lost water at 358.
359 - 388	Dense grey limestone.
388 - 400	Recrystalline grey dolomite and recrystalline grey limestone.
400 - 427	Dense grey limestone.
427 - 440	Reddish grey limestone. Little chert.
440 - 455	Recrystalline and dense grey limestone. Six-inch dense dark grey limestone at 455
455 -	Bottom. (Dense grey limestone- 455).

Note: Core recovery good.
Logged by: HM and EAP
Driller: Roland and Van Dyke
Helper: Rigg and Van Dyke

Not sampled.

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

APR 20 1954

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

Re: Docket No. DMEA 2388 (lead-zinc)
American Zinc, Lead and Smelting Co.
Blue Bird Mine
Pend Oreille County, Washington
Contract No. Idm-E301 (terminated)

Dear Mr. Selfridge:

Enclosed are 3 copies of a letter dated April 2, 1954, with 2 maps submitted in lieu of a final report on the Blue Bird project of the American Zinc, Lead and Smelting Company, Pend Oreille County, Washington. Although extremely brief, this letter does summarize the necessary technical information and we have accepted it, although with some reluctance, in lieu of a final report.

By Field Team, Region II

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

Wing G. Agnew, Member
U. S. Bureau of Mines

Enclosure

cc: USBM (2)
Hindman
Puffett

American Zinc, Lead and Smelting Company

927 Old National Bank Building
Spokane, Washington

RECEIVED
APR 5 1954
U. S. G. S.
SPOKANE, WASH.

April 2, 1954

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
APR 26 1954

Mr. D. I. Hayes, Western Manager
American Zinc, Lead and Smelting Company
927 Old National Bank Building
Spokane, Washington.

Subject: Docket No. DMEA-2388 (lead-zinc)
American Zinc, Lead & Smelting Co.
Blue Bird Mine
Pend Oreille County, Washington
Contract No. Idm-E301

Dear Mr. Hayes:

Following is a final report summarizing the work done under the DMEA exploration contract.

Drilling on the DMEA project commenced May 20, 1952 by J. L. Havlick Diamond Drilling Company of Spokane, Washington and was suspended November 28th, 1952. Seventeen holes, Blue Bird Nos. 4 to 20, inclusive, were completed and No. 21 was suspended at 30 feet for a total of 6887 feet. Following is a brief summary of the holes drilled.

Hole No.	Angle	Overburden	Black Shale	Final Depth	Mineralization
4	-45°	0-19'6"	19'6"-53'	179	———
5	Vert.	0-11'	11-314'6	357	———
6	Vert.	0-25	25-27	221	———
7	-30°	0-11	11-37	101	———
8	Vert.	0-18	18-126	190	———
9	Vert.	0-9	9-131'6"	364	———
10	Vert.	0-5	5-443'7"	533	———
11	Vert.	0-30	30-158'11	408	———
12	Vert.	0-165	165-1038'3"	1123	1045'6-1046'6 (Pb. .08 Zn. 16.95 Fe.) 3.05
13	Vert.	0-88	88-608'5	911	———
14	-45°	0-4	4-34	308	102-106 (02 Pb. 3.11 Zn. 8.00 fe) 93-98' (Tr.pb. 8.32 zn. 6.20 fe. 193'-197
15	Vert.	---	0-38	263	(.02 Pb. 3.11 Zn. 27.62 fe 63-66'6 (.02 pb. 5.77 zn. 21.67 fe 88'7"-90 (Tr. Pb. 1.71 Zn. 3.81 fe
16	Vert.	0-95	95-420	521	449'6-454'4 (.13 pb. Tr. Zn. 2.94 fe)

FINAL REPORT

Hole No.	Angle	Overburden	Black Shale	Final Depth	Mineralization
17	Vert.	0-14	14-134	210	----------
18	Vert.	0-9	9-330	436	----------
19	Vert.	0-107	107-187	277	----------
20	Vert.	0-61	61-270	455	----------
21	Vert.	0-30	Not Completed		

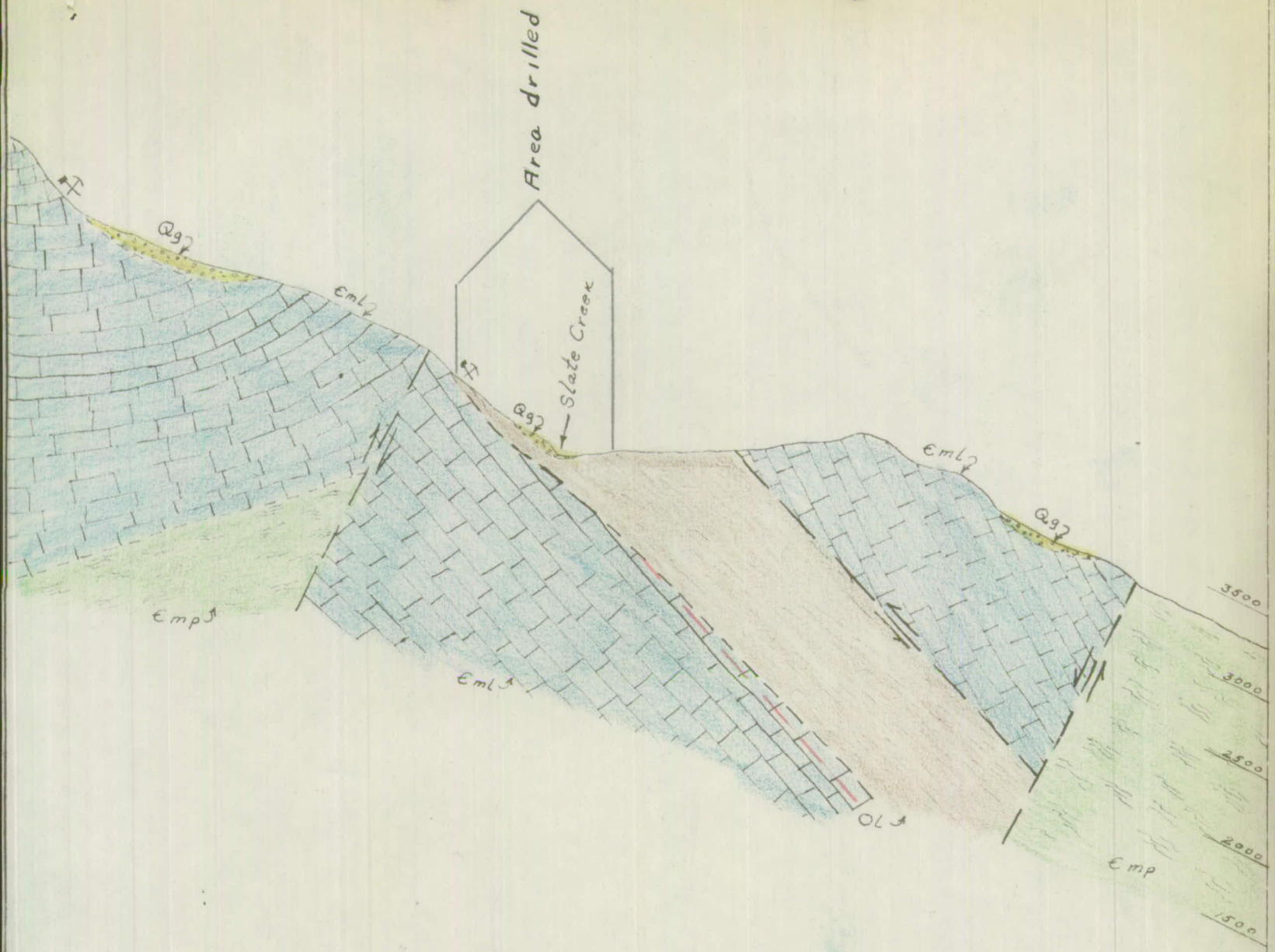
Drilling results on the Dumont Blue Bird property were disappointing. Just a few small sections of mineralization were encountered, none of which were indicative of a commercial orebody. The drilling indicated that on much of the Dumont ground the normal ore horizon of the district was absent due to faulting. Although the mineral encountered in holes Blue Bird 12, Blue Bird 14, Blue Bird 15 and Blue Bird 16 was not in normal ore horizon, it is felt that ore expectancy would have been much greater had the normal ore horizon been present.

Enclosed are ten copies of the Blue Bird area showing locations of the drill holes and ten copies of a section of the area showing the general area where the drilling was done.

Very truly yours,

Signed: E. A. FRICK

C O P Y



Probable ore horizon

Qg
Quaternary gravels

Ol
Ledbetter Slate

Eml
Metaline limestone

Emp
Maitlen phyllite

American Zinc, Lead & Smelting Co.

BLUE BIRD PROPERTY

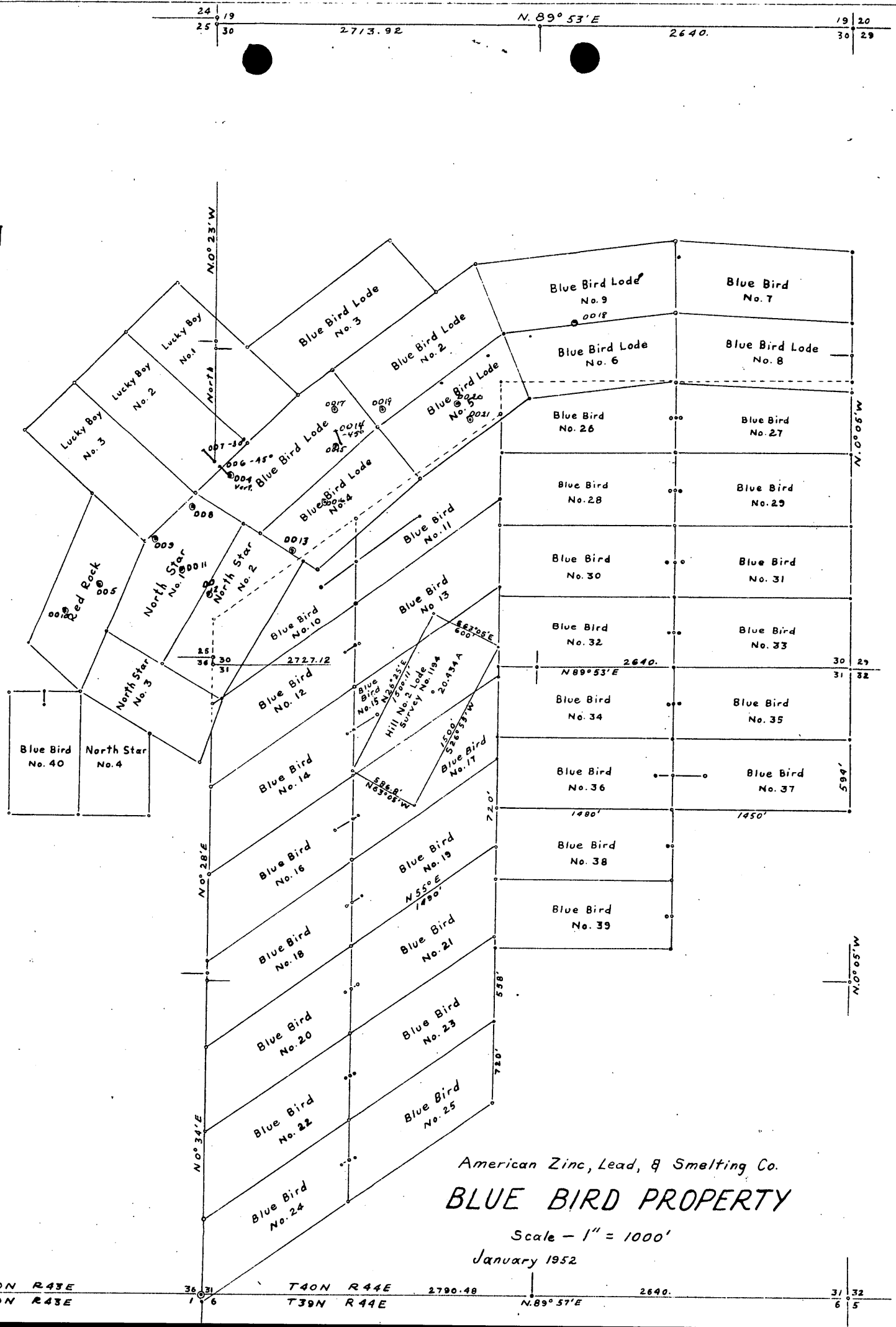
SECTION

Modified after Section A-A' of U.S.G.S. Prof. Paper 202 of Pl. 1 by C.F. Park Jr.

Scale 1" = 1000'

January 1952 J.H.W.

Modified March 1954 E.A.F.



American Zinc, Lead, & Smelting Co.

BLUE BIRD PROPERTY

Scale — 1" = 1000'

January 1952

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION
WASHINGTON 25, D. C.
No. 157 Howard Street
Spokane 4, Washington

March 30, 1954

Mr. Dale I. Hayes
Western Manager
American Zinc, Lead and Smelting Co.
927 Old National Bank Building
Spokane, Washington

Re: Docket No. DMEA 2388 (lead-zinc)
American Zinc, Lead and Smelting Co.
Blue Bird Mine
Pend Oreille County, Washington
Contract No. Idm-5301 (terminated)

Dear Mr. Hayes:

Thank you for your letter of March 26 stating that you are giving up your lease on the Blue Bird-Dumont property and asking whether we would like the cores of the drilling.

We would like to have the drill cores and a Bureau of Mines engineer will contact Mr. Dumont as you suggest and will arrange to remove the cores. In accordance with Mr. Frick's letter of March 18, we will wait until shortly after May 1 before removing the cores, so as to be sure the road to the cabin is open. We will also stop in at the office of the American Zinc, Lead and Smelting Company at the Grandview mine to return the key to the cabin.

Sincerely yours,

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

cc: Mr. E. A. Frick
American Zinc, Lead and Smelting Co.
Metaline Falls, Washington

USBM (2) w/ encls.
DMEA(2) w/ encls.
Puffett

American Zinc, Lead and Smelting Company

927 Old National Bank Building
Spokane, Washington

March 26, 1954.

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

Dear Mr. Weissenborn:

Please be advised that we have formally cancelled our Lease and Option on the Blue Bird-Dumont property, effective approximately thirty days after March 23, 1954. We are enclosing herewith a copy of this cancellation notice.

We are retaining, temporarily at least, location title to adjacent claims that we located soon after we took the Blue Bird-Dumont property over in November, 1951.

It is our understanding that the drill cores resulting from drill holes put down on the Blue Bird-Dumont property are now stored in the Dumont cabin, on the Dumont claims. Our Lease and Option agreement provides the following:

Paragraph 12 - "Upon the termination of this Agreement from any cause by either party, second party may remove from said claims all improvements and equipment erected or placed thereon by it except any timbering installed as support of any underground workings. Said removal shall be made within ninety days after the termination of this Agreement, unless such termination occurs within the months of December, January, February or March, in which event such removal shall be made within ninety days after the end of March. Upon the termination of this Agreement, second party shall at any time within ninety days after surrendering possession and on demand of first parties, furnish to first parties copies of all maps, drill hole records and other sampling information then in possession of second party, affecting said claims and work done thereon by second party."

This brings up the question as to the ownership of the cores. If the survey wants the cores, I suggest that they write Mr. Dumont. As far as we are concerned, the Survey or Dumont may have them.

Very truly yours,

D. I. Hayes
Western Manager

dih;mlc
cc/W.J.Matthews,Jr.
E.W.Frick

CANCELLATION AGREEMENT

First National Bank, Spokane, Washington
Howard L. Kimmel, Newport, Washington
Helen I. Kimmel, Newport, Washington
William Dumont, c/o Multnomah Bank, 7840 S. W. Capitol, H.W.Y., Portland, Oregon
George Dumont, 6636 Carlton Avenue, Seattle, 8, Washington

county is Multnomah
Fmpy

You and each of you will hereby take notice that the undersigned, AMERICAN ZINC, LEAD AND SMELTING COMPANY, a corporation, hereby elects to terminate that Lease and Option dated November 19, 1951 given by WILLIAM DUMONT, GEORGE DUMONT, HOWARD L. KIMMEL AND HELEN KIMMEL, to [illegible], originally given and as modified by that Modification of Lease and Option made the 24th day of February, 1953 by and between the same parties.

The Lease and Option relates to the following mining location claims, situated in the Slate Creek area of the Metaline Mining District, Pend Oreille County, Washington:

Lucky Boy No. 1	Blue Bird Lode No. 6
Lucky Boy No. 2	Blue Bird Lode No. 7
Lucky Boy No. 3	Blue Bird Lode No. 8
Blue Bird Lode	Blue Bird Lode No. 9
Blue Bird Lode No. 2	Red Rock
Blue Bird Lode No. 3	North Star No. 1
Blue Bird Lode No. 4	North Star No. 2
Blue Bird Lode No. 5	North Star No. 3

This notice shall become effective thirty (30) days after its receipt by the escrow holder and termination of said Lease and Option modified as aforesaid shall thereupon become final, pursuant to and subject to the terms thereof.

Dated at Spokane, Washington, the 23rd day of March, A. D. 1954.

AMERICAN ZINC, LEAD AND SMELTING CO.

By: D. I. HAYES

As its Western Manager

American Zinc, Lead and Smelting Company

927 Old National Bank Building
Spokane, Washington

March 26, 1954.

DMEA(2)

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

Re: Docket No. DMEA-2388 (lead-zinc)
American Zinc, Lead and Smelting Co.
Blue Bird Mine
Pend Oreille County, Washington
Contract No. Idm-E301

Dear Mr. Weissenborn:

This will acknowledge your letter of March 23rd in which you request a final report on the above captioned property.

I am requesting our Mr. E. W. Frick of Metaline Falls to prepare such a report.

Very truly yours,

D. I. Hayes
Western Manager

dih;mlc
cc/ewfrick

AMERICAN ZINC, LEAD & SMELTING COMPANY

H. F. MILLS, WESTERN GEOLOGIST

EXPLORATION DEPARTMENT

METALINE FALLS WASHINGTON

3-18-54

Mr. A. E. Weissenborn
Executive Officer, D.M.E.A.
Field Team, Region 2
South 157 Howard
Spokane, Wash.

Dear Mr, Weissenborn Re: D.M.A. Docket #1166-X

The American Zinc Lead and Smelting Co. is dropping its lease and option on the seventeen Dumont claims namely Lucky Boy No. 1, 2, and 3 Blue Bird Lode, Blue Bird Lode No. 2, 3, 4, 5, 6, 7, 8, and 9, Red Rock, and North Star No. 1, 2, 3, and 4.

In as much as the D. M. E. A. did not pick up the drill core from the diamond drill holes drilled on these claims we stored them in a cabin on these claims. Now that the lease and option is being dropped the core should be removed from this cabin. If you desire to get the core the key for the cabin is available at the American Zinc Office at the Grandview Mine, if not please inform us so we may discard it. In either case let us know your intentions.

Very truly yours,

A. Z. L. & S. Co.

E. A. Frick

E.A.Frick

P.S. If you plan on getting the core do not come before the first week in May or the roads to the cabin will not be open.

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION

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

March 23, 1954

Mr. D. I. Hayes, Manager
American Zinc, Lead and Smelting Company
927 Old National Bank Building
Spokane, Washington

Re: Docket No. DMEA-2388 (lead-zinc)
American Zinc, Lead & Smelting Co.
Bluebird Mine
Pend Oreille County, Washington
Contract No. Idm-E301

Dear Mr. Hayes:

In reviewing the docket file on the Bluebird contract we note that we have never received from you a final report summarizing the work done under the DMEA exploration contract. This undoubtedly represents an oversight on your part and we would appreciate it if we could get a final report on the property so that the file can be closed.

Sincerely yours,

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

cc: DMEA (2)
USBM (2)
Puffett

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

500

J.W. Alt.
Friauf
Selfridge
Johnson
Weissenborn

FEB 19 1954

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

Re: Docket No. DMEA-2388 (Lead-Zinc)
American Zinc, Lead & Smelting Co.
Blue Bird Mine
Pend Oreille County, Washington
Contract No. Idm-E301

Dear Mr. Weissenborn:

A review of the above docket shows that to date we have not received the Operator's final report nor the final report of the Field Team. This contract was terminated on July 7, 1953.

Will you please give this matter your attention and advise us what action you have taken regarding these reports.

Sincerely yours,

George C. Selfridge

Chairman, Operating Committee (JHB)

Concurred:

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

Philip W. Guild (JHB)
Member, Geological Survey

JWAlt/bjl (2/18/54)

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

R.C.S. 2-19-54

FILE COPY
SURNAME:
800

Talbert
Chambers

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

NOV 23 1953

Mr. C. A. Turner
DMA Auditor
1201 North Division Street
Spokane 2, Washington

Re: Idm-1301, DMA-2388
American Zinc, Lead and
Smelting Co.
Pend Oreille County, Wash.

Dear Mr. Turner:

Receipt is acknowledged of the revised Report of Review covering the referenced Exploration Project Contract.

It is noted that you have made all the corrections suggested by our letter of November 3, 1953, except for the amount certified for payment. In our letter it was stated "The amount certified as being valid and proper for payment should be $18,376.67 (to agree with the actual amount paid)". However, you have shown the amount as $18,376.68; and, therefore, we have corrected the Washington copies to read $18,376.67, the amount which the certifying officer has certified for payment.

Please correct the field copies accordingly, after which distribution may be effected.

In all cases where final payment has been made prior to final audit or review and only a one or two cents difference is indicated, the Audit Certificate or Report of Review should be in the amount paid. This avoids considerable paper work in adjusting obligation records both in Washington and the field.

Sincerely yours,

(Signed) J. L. Chambers

Jay L. Chambers, Chief
Contract Administration
and Audit Division

EDTalbert/ama
November 23, 1953
Copy to: Docket
Admr. Reading File
Mr. Chambers

R.C.S.
11-23-53

FILE COPY
SURNAME:
800

Talbert

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

NOV 3 1953

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

Re: Idm-E301, DMEA-2388
American Zinc, Lead & Smelting Co.
Pend Oreille County, Washington

Dear Mr. Turner:

The copies of your Report of Review covering the referenced project, as transmitted by your letter of October 29, 1953, are returned herewith for revision.

Disallowances in the amount of $871.19 have been indicated as having been made as a result of your review. This is erroneous. These disallowances were effected by the DMEA Finance Officer and should be so reflected in your Report of Review. The Schedule of Exceptions should indicate your confirmation of this disallowance. The Schedule of Exceptions should also bear your signature.

An error has also been made in the subtraction of the exception from the net cost as claimed by the contractor. The total accepted cost should be shown as $35,753.37, rather than $35,753.57. The amount certified as being valid and proper for payment should be $18,376.67 (to agree with the actual amount paid), instead of the $17,876.78 indicated on the Report of Review.

In the same mail there has been received a September MF-10A and MF-10AA for Day Mines, Inc., Contract Idm-E31. Attached thereto is a reference slip bearing this notation:

> "This is sent you at the request of C. A. Turner and has not yet been paid. His audit will be finished and the balance paid within the next day or two and your other copy will be sent in showing the amount paid. R. J. Hindman"

Please advise why this MF-10A and MF-10AA have been sent to us in advance. In this connection please see Operating Committee Minutes No. 192, dated March 20, 1953, which require in a case of completed or terminated projects the forwarding to the Operating Committee of an advance copy of the MF-10AA only. Mr. Hindman has been following this procedure in the past.

EDTalbert/wb 11-3-53

Sincerely yours,

(Signed) E. D. Talbert

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

cc: Docket
Admr. Read. File
Mr. Chambers

Enclosure

RCH 11-3-53

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
JUL 30 1953

American Zinc, Lead and Smelting Company

WILLIAM J. MATTHEWS, JR., Secretary & Treasurer
CLARENCE V. BURNS, Asst. Secretary & Asst. Treasurer

1600 PAUL BROWN BUILDING
SAINT LOUIS 1, MISSOURI

July 28, 1953
File 502-2-4

Mr. C. O. Mittendorf
Administrator
United States Department
of the Interior
Defense Minerals Exploration Administration
Washington 25, D. C.

Dear Mr. Mittendorf:

Re: Docket No. DMEA-2388 (Lead-Zinc)
Bluebird Mine
Pend Oreille County, Washington
Contract No. Idm-E301

Thank you for your letter of July 16, with which you enclosed an executed copy of agreement dated July 7, 1953, covering termination of the captioned contract.

Very truly yours,

C. V. Burns
Asst. Secretary & Asst. Treasurer

CVB:mhf
cc: H.I.Young
R.A.Young

FILE COPY
SURNAME: 911

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

JUL 13 1953

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

Re: Docket No. DMA-238 (lead-zinc)
American Zinc, Lead, and Smelting Co.
Bluebird Mine
Stevens and Oreille County, Washington
Contract No. Idm-8301

Dear Mr. Weissenborn:

Enclosed please find two copies of the Termination Agreement for the above Company, one copy to be retained by your office and the other one for the Finance Office. These copies have been signed by this office for the Government.

Sincerely yours,

George C. Selfridge

Chairman, Operating Committee

Enclosures 2

JWAlt/jh
7/10/53

cc. to: Docket
Adm. Reading File
Oper. Comm.
Base Metals
Chron.
Messrs; Bishop
Kinkel
Chambers

APPROVED:

J. H. Hedges

Member, Bureau of Mines

A. R. Kinkel, Jr.

Member, Geological Survey

R.G.B. 7-13-53

FILE COPY
SURNAME:

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

JUL 13 1953

Mr. R. A. Young, Vice President
American Zinc, Lead, and Smelting Co.
1600 Paul Brown Building
St. Louis 1, Missouri

Re: Docket No. DMEA-2388 (lead-zinc)
American Zinc, Lead, and Smelting Co.
Blue Bird Mine
Pend Oreille County, Washington
Contract No. Idm-2301

Dear Mr. Young:

Enclosed please find your copy of the Termination Agreement which has been signed by this office for the Government.

Sincerely yours,

C. O. Mittendorf

Administrator

Enclosure 1

JWAlt/jh
7/10/53
cc. to: Docket
Adm. Reading File
Oper. Comm.
Base Metals
Chron.
Messrs. Bishop
Kinkel
Chambers
DMEA Field Team, Region II, (2)

R.C.B. 7-13-53

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
JUL 8 1953

American Zinc, Lead and Smelting Company

WILLIAM J. MATTHEWS, JR., Secretary & Treasurer
CLARENCE V. BURNS, Asst. Secretary & Asst. Treasurer

1600 PAUL BROWN BUILDING
SAINT LOUIS 1, MISSOURI

July 7, 1953
File No. 502-2-4

Mr. C. O. Mittendorf
Administrator
United States Department
of the Interior
Defense Minerals Exploration Administration
Washington 25, D. C.

Dear Mr. Mittendorf:

Re: Docket No. DMEA-2388 (Lead-Zinc)
Bluebird Mine
Pend Oreille County, Washington
Contract No. Idm-E301

In response to your letters of May 19 and July 1, 1953, we are enclosing six copies of Termination Agreement on the captioned project, executed by R. A. Young, Vice President, and W. J. Matthews, Jr., Secretary.

Drilling was terminated on November 28, 1952, and our request for cancellation was dated March 16, 1953. It appears that either one of these dates, or the date of executing the enclosed agreement, would be appropriate for insertion in the first paragraph. Possibly under paragraph numbered 1, November 28 or November 30 would be appropriate. In paragraph numbered 3, the dollar amount reimbursed us by the Government was $17,876.67, as reflected in our records.

We shall be pleased to receive a fully executed copy of the Agreement at your convenience.

Very truly yours,

C. V. Burns

Asst. Secretary & Asst. Treasurer

CVB:mhf
cc: H.I.Young
R.A.Young
D.I.Hayes
C.A.Dobbel

7-9

FILE COPY
SURNAME:

500

Selfridge

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

JUL 1 1953

Mr. R. A. Young, Vice President
American Zinc, Lead and Smelting Co.
1600 Paul Brown Building
St. Louis 1, Missouri

Re: Docket No. DMEA 2388 (Lead-Zinc)
Blue Bird Mine
Pend Oreille County, Washington
Contract No. Idm-E301

Dear Mr. Young:

In a letter to me dated March 16, 1953, you asked to be advised whether it would be satisfactory to terminate the program without doing additional drilling on the project property.

After reviewing the results of the completed drilling with the Field Team and conferring with the Legal Division, on May 19 I sent you the original and five copies of an agreement which when executed terminated the contract.

To date we have not received an acknowledgment of the receipt of the agreement. Will you please inform us when we may expect its return.

Sincerely yours,

C. O. Mittendorf

Administrator

WRGriswold/GCSelfridge/hmj/esf
(7/1/53)
CC to: Docket
Adm. R. File
Op. Committee
Base Metals Division
Region II (2)
Mr. Kinkel
Mr. Bishop
Chron.

R.C.G. 7-1-53

FILE COPY
SURNAME:
500

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

Mr. R. A. Young, Vice President
American Zinc, Lead and Smelting Co.
1600 Paul Brown Building
St. Louis 1, Missouri

Re: Docket No. [illegible] 2388 (Lead-Zinc)
Blue Bird Mine
Pend Oreille County, Washington
Contract No. Idm-5301

Dear Mr. Young:

As had been requested by your company, on May 19 we sent you the original and five copies of an agreement terminating the above contract. It was requested that they be executed and returned to us.

Will you kindly forward them to us as soon as convenient.

Sincerely yours,

Administrator

WRGriswold/hmj
(6/30/53)
CC to: Docket
Adm. R. File
Op. Committee
Base Metals Division
Region II (2)
Mr. Kinkel
Mr. Bishop
Chron.

pb

140

FILE COPY
SURNAME:

Hoffmund
Simmons
Talbert
Umbel
Hedges
Martin
Johnson

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

MAY 19 1953

Mr. R. A. Young, Vice President
American Zinc, Lead and Smelting Co.
1600 Paul Brown Building
St. Louis 1, Missouri

Re: Docket No. DMEA-2388 (Lead-Zinc)
Bluebird Mine
Pend Oreille County, Washington
Contract No. Idm-E301

Dear Mr. Young:

Reference is made to your letter to me dated ~~April~~ March 16, requesting the termination of the exploration work under the subject contract. In response thereto I have attached for you to execute the original and five copies of a proposed agreement authorizing the permanent termination of this work. You will observe that the agreement provides for repayment of the Government's contribution to the work in the form of a percentage royalty on production in the same manner as if the work had been completed and a certification of discovery or development issued by the Government.

Please execute all copies of the termination agreement here submitted, return all copies to this office, and as soon as it is executed by the Government a fully executed copy will be returned to you.

The Government is grateful for your interest in the exploration program, and regrets that you deem it necessary or desirable not to complete the work contemplated by the exploration contract.

JLHofflund/em 4/29/53
Copy to: Mails & Files
Adm. R. File
Op. Comm.
J.H.Hedges
L.P.Thayer
Field Team,Reg.II(2)
Base Metals Div.
Enclosures 6
J.L.Hofflund
chron. pending

Sincerely yours,

C. O. Mittendorf

Administrator

mdd
5-19-53

RECEIVED
MAY 14 7 07 AM '53
GENERAL SERVICES ADMIN.
PUBLIC BLDGS. SERVICE
BMD - COMMUNICATIONS

388 WA SP /I-GS-G/

SPOKANE WASH 5-13-53 436

GEORGE SELFRIDGE CHAIRMAN OPERATINN COMMITTEE DMEA WA

REURLET MAY 5 ON AMERICAN ZINC BLUEBIRD PROPERTY DMEA 2388, NO OBJECTION TO PROPOSED AGREEMENT TO TERMINATE CONTRACT.

A E WEISSENBORN EXEC OFFICER DMEA FIELD TEAM REGION II SP

5 2388

AC 436

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
MAY 14 1953

MAY 14 9 12 AM '53

BUREAU OF MINES
MAIL ROOM
WASHINGTON, D. C.

Kriswell
ACO
Betty

17

AMERICAN ZINC COMPANY OF ILLINOIS

SIXTEENTH FLOOR PAUL BROWN BUILDING

818 OLIVE STREET

ST. LOUIS 1, MISSOURI

May 12, 1953

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
MAY 15 1953

Mr. C. O. Mittendorf
Administrator
United States Department
of the Interior
Defense Minerals Exploration Admin.
Washington 25, D. C.

Re: Docket No. DMEA-2388 (Lead-Zinc)
Bluebird Mine
Pend Oreille County, Washington
Contract No. Idm-E301

Dear Mr. Mittendorf:

Since receiving your letter of March 26 regarding the above captioned contract on Bluebird Mine I have not heard from you further. I am wondering if you have heard from the Executive Officer of Region II so that you can give us definite information on this subject.

Very truly yours,

Rayburn

Vice President

RAY:PR
(Dictated but not read.)

No reply necessary
Termination sent. 5/19/53

FILE COPY
SURNAME:

140

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

Griswold
AEKane
Rubin
Selfridge
Hoffman
AEKane
Rubin
Griswold
Selfridge
Hoffman
Weissenborn

Rewritten by

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

MAY 5 1953

Re: Docket No. DMEA-2388 (Lead-Zinc)
American Zinc, Lead and
Smelting Co.
Bluebird Mine
Pend Oreille County, Washington
Contract No. Idm-E301

Dear Mr. Weissenborn:

D.C. 5/5/53

Reference is made to your letter to the Chairman of the Operating Committee, dated April 15, in which you comment at length on the matter of terminating the subject contract.

Attached hereto is a copy of a proposed letter for the Administrator's signature to the Operator, to which is attached a draft of an agreement terminating the exploration project contract. Please let us have your comments on this proposal as soon as practicable; and if you agree with the proposal, the letter and agreement will be forwarded promptly to the Operator.

Referring further to your letter of April 15 we will comment as follows:

1. You say that you "realize that in certain cases the Government may need some sort of a club or whip to hold over the operator" in order to compel him to complete the work; but at the same time you say "We do not believe it fair to attempt to enforce the policy." A club or whip which is never to be used is not very effective. It seems to us plain that there may arise cases in which the operator should be compelled to complete the work regardless of his own feelings in the matter. It certainly would be neither legal nor in the best interest of the

Government to permit an operator to discontinue the work short of the goal, and to complete it later free of all obligation to repay the Government from such production as may result from the work.

2. Your concern for operators who may not understand the effect of the contract is commendable. It seems unlikely, however, that American Zinc, Lead and Smelting Co. did not have the benefit of counsel with respect to this contract, and thoroughly understood its provisions. Let's not forget that except for possible repayment from resulting production, the Government's contribution to work under these contracts is a grant or gift which many operators are extremely glad to get and which is of great pecuniary advantage to them.

3. It is totally unrealistic to speak of compelling the completion of the work in particular cases as a matter of "policy." In many cases it is just as satisfactory to the Government as it is to the operator to discontinue the work; and in most cases the Government will be willing to go along with the operator with respect to discontinuing, even though the Government would prefer to see the work completed. It is only in an unusual situation where failure to complete would be clearly detrimental to the Government and unduly advantageous to the operator that completion might be enforced. We think that the mining industry itself would applaud the enforcement of one of our contracts in a suitable case.

4. The Administrator has adopted in this case your suggestion for a termination of the work subject to the payment of royalties on any production in the future to cover the Government's contribution up to the time of termination. We think this is a good suggestion and probably can be adapted to other cases.

5. You say: "We feel that the policy, as inferred in Memorandum 18, would be contrary to the best interests of the DMRA program and the mining industry." Please read Memorandum No. 18 again. It does not lay down any "policy" of compelling operators to complete the work willy-nilly. It points out that if an operator permanently discontinues the work without the consent and agreement of the Government, he is in default under the provisions of the contract. Whether

the Government will require him to complete or not necessarily depends upon the circumstances in each case. It seems plain to us that it would neither be proper nor lawful to lay down a rule that under no circumstances would completion of the work be required if the operator desires to discontinue it.

Sincerely yours,

George C. Selfridge

Chairman, Operating Committee

(JLB)

Enclosure

Approved:

J. H. Hedges

Member, Bureau of Mines

(JLB)

A. R. Kinkel, Jr.

Member, Geological Survey

(JLB)

JLHofflund/em 4/28/53

Copy to: Mails and Files
Adm. R. File
Operating Committee
J. H. Hedges
L. P. Thayer
Base Metals Div.
J. L. Hofflund
chron.
pending

Reviewed by
DMEA OPERATING COMMITTEE

5-4-53
(date)

FILE COPY
SURNAME:

500

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

Inserted
Alkane
Gubin
Selfridge

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

Re: Docket No. DMA 2388 (Lead-Zinc)
American Zinc, Lead & Smelting Co.
Bluebird Mine
Pend Oreille County, Washington
Contract No. Idm-2301

Dear Mr. Weissenborn:

We have your most comprehensive letter of April 15, 1953, regarding the subject Operator's desire to terminate the above project.

We have, at no time, had any thought of putting an Operator onto "the financial rocks" or of driving "his company to financial ruin". Quite to the contrary, we hope at all times to maintain a fair and common-sense viewpoint, based upon actual economic realities.

But we are sure that you can realize that, since Government funds are involved, we must try to see that project affairs are handled in a proper and business-like manner, with due regard to the best interests of the Government. To do otherwise would be to leave ourselves open to well-deserved censure.

Hence, at no time can we accept a project termination as effected, merely upon receipt of such a notice from an Operator. On the other hand, if the Field should see fit to concur, and if such concurrence appears well-founded, it has never been our policy to insist that additional funds (both of the Government and the Operator) continue to be expended in an ill-advised and futile manner.

This, therefore, will be your authority to terminate the subject project by mutual consent, if you consider that such procedure is advisable.

Mr. Kinkel
Mr. Bishop
Chron.

WRGriswold/hmj (4/22/53)
CC to: Docket
Adm. R. File
Op. Committee
Base Metals

Reviewed by
DMEA OPERATING COMMITTEE
4-27-53
(date)

Sincerely yours,

George C. Selfridge
(JHB)
Chairman, Operating Committee

APPROVED: J. H. Hedges (JHB)
Member, Bureau of Mines

A. R. Kinkel, Jr. (JHB)
Member, Geological Survey

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

April 15, 1953

Air Mail

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

APR 20 1953

Re: Docket No. DMEA-1300 (Lead-Zinc)
American Zinc-Lead & Smelting Co.
Bluebird Mine
Pend Oreille County, Washington
Contract Lim-5301

Dear Mr. Selfridge:

This will acknowledge your letter of March 26 in which you ask our opinion as to whether the American Zinc-Lead & Smelting Company should be allowed to terminate the Bluebird contract or whether we should insist that it either be completed as outlined or the money refunded. There are two separate matters involved here. First, a local one concerning the Bluebird project only and whether the findings to date justify its termination or continuance, and second, a very important matter of principle, which is whether any company should be forced to continue a contract which, for one reason or another, it no longer wishes to complete. In order to keep these matters separate, we shall first review the Bluebird project itself and then add some of our thinking on the other and far more important matter.

It is quite true that we stated in our annual summary report that the results of the Bluebird project were "moderately encouraging". This also, from the Operator's own monthly report, is the view of the local engineer for the American Zinc Company.

The Bluebird property is in the Metaline district in Pend Oreille County, Washington. It adjoins the property of the Pend Oreille Mines and Metals Company, but is two or three miles distant from the major productive part of the district. It is important for this reason, for the finding of ore on this property would represent a major extension of the productive part of the district.

In the Metaline district the important replacement zinc and lead ore deposits are found in the upper two hundred to three hundred feet of the Cambrian Metaline limestone underlying the Ordovician Ledbetter slate. The potentially favorable ore horizon is believed to be present on at least part of the Bluebird property, but much of the area is covered with glacial drift, a condition not uncommon in the district, so that drill sites must be spotted without too much detailed guidance from surface geology. When drilling was shut down at the start of last winter, seventeen holes had been completed and the eighteenth had just been started. The drilling has revealed that underground conditions in the Bluebird area are considerably more complex than had been anticipated. Correlation of the drill holes suggest that steep postmineral faults cross the property so that there are several small blocks instead of one large undisturbed block. In addition, the favorable horizon in the Metaline limestone is missing in a significant number of the holes due either to faulting or to erosion of the top of the Metaline limestone prior to deposition of the Ledbetter slate. Three of the holes, however, cut ore of significant zinc-lead mineralization. These holes are: hole 12, 1 foot, 16.95 percent zinc, 0.08 percent lead, and 3.05 percent iron; hole no. 14, 5 feet, 8.32 percent zinc, trace of lead, 6.2 percent iron; hole no. 15, 3.5 feet, 5.77 percent zinc, 0.02 percent lead, 21.67 percent iron. Compared to results of the drilling of the Grandview lease four and one-half miles south of the Bluebird property, which has recently been successfully explored by American Zinc under a RFCA contract where 25 of 27 drill holes cut ore with an average ore intercept of 32 feet, the results of the Bluebird drilling are not much to get excited about. Nevertheless, the Bluebird drilling does indicate that the area is mineralized and offers a hope that further drilling may lead to a better understanding of the geology and structure of the area and could possibly lead to a significant discovery In our opinion, therefore, the results from the three holes, which incidentally are among the last drilled as they are numbered not according to the order drilled but according to a predesignated layout, are "moderately encouraging" or at least sufficiently encouraging to justify additional drilling. The local company engineer is also of this opinion as indicated in his monthly reports.

It should be realized, however, that this is doubtless only one of a number of prospects which the American Zinc and Lead Company is exploring. In times of depressed metal prices even such a large and financially sound company as the American Zinc does not have unlimited funds to devote to exploration, and that consequently, they must concentrate their exploration on what they regard as their most promising properties. Only the management, of course, can determine whether a property in Washington or one in Tennessee or Virginia or elsewhere in the country offers more promise. Therefore, if the company must curtail its exploration, it is justified in shutting down those projects which it considers least promising. We do not think, therefore, that there is any justification for attempting to force the company to complete the exploration of the Bluebird property for although there is room for "moderate encouragement" there are also certain unfavorable factors.

The matter of whether the Government can or should ever force an operator to complete an exploration contract which he wishes to give up is, of course, of fundamental importance for transcending the immediate problem of the Bluebird property. We have refrained from protesting Memorandum 18 on this point because we realize that in certain cases the Government may need some sort of a club or whip to hold over an operator in order to induce him to fulfill his obligations under the contract. We refer specifically to those cases where the work has been done incompetently or the operator has made no apparent effort to dispose of equipment in which the Government has an interest or to make final closeout of the contract. We have several such cases pending which are causing us a considerable amount of concern. Fortunately, these cases are few but it is evident that there are certain cases where the Government must maintain a "get tough" policy and the possibility that the contractor would have to return all the money received under the contract might possibly be the answer. We hope that this weapon would be very rarely used, and we can foresee that in actual practive it would be difficult if not impossible to enforce this policy. The fact that the potential weapon is there, even though it is seldom or never used, may have a salutary effect. The attempt, however, to force a contractor to complete a contract, which he currently considers does not justify further exploration, is something else again. We are opposed to this policy and consider any attempt to put it into effect as most unwise. Our reasons for this belief are as follows:

1. We anticipate, as stated above that this policy would be very difficult or perhaps impossible to enforce. This, of course, is only an opinion and which you may very well discount because of the fact that we are not attorneys. It is presented, therefore, only as our belief.

2. We do not believe it fair to attempt to enforce the policy because we are quite sure very few of the holders of a DMEA contract in this area signed the contract with any idea that the Government would under any circumstances force them to complete the contract when in their opinion no further work is justified. Certainly the Field Team has never been under the impression that the Government could or would exercise this right. The matter has been discussed several times in phone conversations with various people in the Washington office of the DMEA and although we have nothing in writing until Memorandum 18, the opinion always expressed previous to this memorandum was that the DMEA would never force a contractor to complete his contract when he desired to quit it.

3. Certainly there is nothing in the contract which specifically says that the work must be completed at the will of the Government, and I am sure that a great many companies would not have signed the contract had they understood that they could not give it up if they so desired. This policy could be enforced in all new contracts if desired, but the only fair thing to do would be to either specifically place this provision in the contract or to advise the operator early in the negotiations for the contract that if he entered into the contract he would be expected to complete it 100 percent, even when in his judgment, the work should

not be completed or if economic conditions changed. The Government has the right to terminate the contract on geologic grounds without the concurrence of the operator; it would appear only fair and equitable that the operator should have the same privilege. Perhaps we are wrong legally in this but, ethically, it seems to us that this should work both ways.

4. Unless the Field Team is greatly mistaken, the enforcement of this provision will mean the death knell for the DMEA exploration program. Certainly no mining company would knowingly sign a contract which would obligate it to complete an expensive exploration program when in its judgment, the results no longer justify such work or when economic conditions have changed and are such that the company is no longer financially able to continue the exploration. A good many smaller mines are financing DMEA exploration from ore mined on their property which was either found during the exploration or previously known. If the price of metals is such that they no longer can mine the ore profitably and thus obtain funds for exploration, it seems unreasonable to expect that they will continue. Certainly in the case of the American Zinc, Lead, and Smelting Company we would not break the company financially if they were required to return the money expended on the Bluebird property or to complete the exploration outlined in the contract; but in the case of a good many of the small properties, we could very easily put them on the financial rocks by this policy. To us it does not make sense to require a mine manager to sign a contract which, through circumstances over which he had no control, namely the price level of metals, might lead his company to financial ruin, and we are quite certain that under these circumstances few mining people would sign a contract except for very short-range work. We feel very definitely that this policy is not designed to encourage exploration. We are, furthermore, willing to make a prediction that if an attempt is made to enforce this policy, it will be the fatal blow that will end the DMEA.

There is, however, a possible solution to this problem which we think would be, or could be, made satisfactory to all concerned. There are now two circumstances under which a contract might be terminated short of completion. These are as follows:

1. Because in the opinion of the Government, "operations.... have not indicated the probability of making any worthwhile discovery and....further operations are not justified." Termination may be made, on these grounds, whether the operator agrees with the Government's conclusion or not.

The contract may be terminated for the same reason by "mutual agreement" between the operator and the Government; in other words, it can be terminated if they are both of the opinion that further work is not justified.

In the above two cases the right to terminate is specifically written in the contract in Article VIII, and no penalty could cause to either party. Not only would there be no breach of contract and no reason to expect repayment, but no certification would be made--in fact, a negative certification would probably be made--and there would be no lien against the property by reason of the exploration work.

A third circumstance for termination before completion is the operator's desire to discontinue the contract for financial, geologic, or other reasons. Memorandum No. 1B implies that the contract will actually stand up so that the operator could be legally forced to repay funds expended to date because he did not complete the contract. Such enforcement, while it might be legal, would certainly not enhance the mining industry's opinion of DMEA. It would seem more logical to adopt a termination policy whereby the operator, if he breaches the contract, should be liable to repayment of the amount expended by the Government, such repayment to be from royalties on ore produced. The repayment period would be approvided in Article 6, ten years or until the full amount due the Government is repayed, whichever comes first. Furthermore, such a termination notice could be so worded that if exploration was resumed at any time within ten years after the date of the contract any ore mined as a result of either the DMEA exploration or the later exploration would be subject to a royalty to the Government, such royalties to continue until Government funds had been repaid. It seems to us that such a termination agreement should be acceptable to the Operator for if he had so little faith in the property that he gave up the contract then he should have no objections to paying a royalty on ore discovered should he be proven wrong in his judgment. These repayments, furthermore, would hurt no one for they would be small and would be paid only when and if ore were actually produced. At the same time it would protect the Government and enable it to have some opportunity for getting repayment for work which was abandoned short of the objective.

Regardless of what the final decision is on this matter of repayment to the Government for contracts terminated by the operator, it is firmly believed that present contracts should be excluded from consideration for we are sure that the majority of operators were not aware of such intent by the Government at the time they signed the contracts. For this reason it is believed that any decision arrived at by DMEA should either be worked into the contract or into the termination notice and in either event should be carefully explained to the Operator at the time he signs the contract.

We offer the above for your serious consideration. We believe that our suggested policy is more equitable and provides for better public relations than an arbitrary demand that either the contract be completed willy-nilly or the funds received from the Government be

returned. We feel that the policy, as inferred in Memorandum 18, would be contrary to the best interests of the DMEA program and the mining industry. Your reaction to these ideas would be appreciated.

By DMEA Field Team, Region II

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

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

cc: C. O. Mittendorf
USBM (2)
Kirkemo

UNITED STATES
DEPARTMENT OF THE INTERIOR

DOCKET COPY

DEFENSE MINERALS EXPLORATION ADMINISTRATION

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

April 15, 1953

Air Mail

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

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
APR 20 1953

Re: Docket No. DMEA-2388 (Lead-Zinc)
American Zinc-Lead & Smelting Co.
Bluebird Mine
Pend Oreille County, Washington
Contract Idm-E301

Dear Mr. Selfridge:

This will acknowledge your letter of March 26 in which you ask our opinion as to whether the American Zinc-Lead & Smelting Company should be allowed to terminate the Bluebird contract or whether we should insist that it either be completed as outlined or the money refunded. There are two separate matters involved here. First, a local one concerning the Bluebird project only and whether the findings to date justify its termination or continuance, and second, a very important matter of principle, which is whether any company should be forced to continue a contract which, for one reason or another, it no longer wishes to complete. In order to keep these matters separate, we shall first review the Bluebird project itself and then add some of our thinking on the other and far more important matter.

It is quite true that we stated in our annual summary report that the results of the Bluebird project were "moderately encouraging." This also, from the Operator's own monthly report, is the view of the local engineer for the American Zinc Company.

The Bluebird property is in the Metaline district in Pend Oreille County, Washington. It adjoins the property of the Pend Oreille Mines and Metals Company, but is two or three miles distant from the major productive part of the district. It is important for this reason, for the finding of ore on this property would represent a major extension of the productive part of the district.

In the Metaline district the important replacement zinc and lead ore deposits are found in the upper two hundred to three hundred feet of the Cambrian Metaline limestone underlying the Ordovician Ledbetter slate. The potentially favorable ore horizon is believed to be present on at least part of the Bluebird property, but much of the area is covered with glacial drift, a condition not uncommon in the district, so that drill sites must be spotted without too much detailed guidance from surface geology. When drilling was shut down at the start of last winter, seventeen holes had been completed and the eighteenth had just been started. The drilling has revealed that underground conditions in the Bluebird area are considerably more complex than had been anticipated. Correlation of the drill holes suggest that steep postmineral faults cross the property so that there are several small blocks instead of one large undisturbed block. In addition, the favorable horizon in the Metaline limestone is missing in a significant number of the holes due either to faulting or to erosion of the top of the Metaline limestone prior to deposition of the Ledbetter slate. Three of the holes, however, cut ore of significant zinc-lead mineralization. These holes are: hole 12, 1 foot, 16.95 percent zinc, 0.08 percent lead, and 3.05 percent iron; hole no. 14, 5 feet, 8.32 percent zinc, trace of lead, 6.2 percent iron; hole no. 15, 3.5 feet, 5.77 percent zinc, 0.02 percent lead, 21.67 percent iron. Compared to results of the drilling of the Grandview lease four and one-half miles south of the Bluebird property, which has recently been successfully explored by American Zinc under a DMEA contract where 25 of 27 drill holes cut ore with an average ore intercept of 32 feet, the results of the Bluebird drilling are not much to get excited about. Nevertheless, the Bluebird drilling does indicate that the area is mineralized and offers a hope that further drilling may lead to a better understanding of the geology and structure of the area and could possibly lead to a significant discovery. In our opinion, therefore, the results from the three holes, which incidentally are among the last drilled as they are numbered not according to the order drilled but according to a predesignated layout, are "moderately encouraging" or at least sufficiently encouraging to justify additional drilling. The local company engineer is also of this opinion as indicated in his monthly reports.

It should be realized, however, that this is doubtless only one of a number of prospects which the American Zinc and Lead Company is exploring. In times of depressed metal prices even such a large and financially sound company as the American Zinc does not have unlimited funds to devote to exploration, and that consequently, they must concentrate their exploration on what they regard as their most promising properties. Only the management, of course, can determine whether a property in Washington or one in Tennessee or Virginia or elsewhere in the country offers more promise. Therefore, if the company must curtail its exploration, it is justified in shutting down those projects which it considers least promising. We do not think, therefore, that there is any justification for attempting to force the company to complete the exploration of the Bluebird property for although there is room for "moderate encouragement" there are also certain unfavorable factors.

The matter of whether the Government can or should ever force an operator to complete an exploration contract which he wishes to give up is, of course, of fundamental importance for transcending the immediate problem of the Bluebird property. We have refrained from protesting Memorandum 18 on this point because we realize that in certain cases the Government may need some sort of a club or whip to hold over an operator in order to induce him to fulfill his obligations under the contract. We refer specifically to those cases where the work has been done incompetently or the operator has made no apparent effort to dispose of equipment in which the Government has an interest or to make final closeout of the contract. We have several such cases pending which are causing us a considerable amount of concern. Fortunately, these cases are few but it is evident that there are certain cases where the Government must maintain a "get tough" policy and the possibility that the contractor would have to return all the money received under the contract might possibly be the answer. We hope that this weapon would be very rarely used, and we can foresee that in actual practive it would be difficult if not impossible to enforce this policy. The fact that the potential weapon is there, even though it is seldom or never used, may have a salutary effect. The attempt, however, to force a contractor to complete a contract, which he currently considers does not justify further exploration, is something else again. We are opposed to this policy and consider any attempt to put it into effect as most unwise. Our reasons for this belief are as follows:

1. We anticipate, as stated above that this policy would be very difficult or perhaps impossible to enforce. This, of course, is only an opinion and which you may very well discount because of the fact that we are not attorneys. It is presented, therefore, only as our belief.

2. We do not believe it fair to attempt to enforce the policy because we are quite sure very few of the holders of a DMEA contract in this area signed the contract with any idea that the Government would under any circumstances force them to complete the contract when in their opinion no further work is justified. Certainly the Field Team has never been under the impression that the Government could or would exercise this right. The matter has been discussed several times in phone conversations with various people in the Washington office of the DMEA and although we have nothing in writing until Memorandum 18, the opinion always expressed previous to this memorandum was that the DMEA would never force a contractor to complete his contract when he desired to quit it.

3. Certainly there is nothing in the contract which specifically says that the work must be completed at the will of the Government, and I am sure that a great many companies would not have signed the contract had they understood that they could not give it up if they so desired. This policy could be enforced in all new contracts if desired, but the only fair thing to do would be to either specifically place this provision in the contract or to advise the operator early in the negotiations for the contract that if he entered into the contract he would be expected to complete it 100 percent, even when in his judgment, the work should

not be completed or if economic conditions changed. The Government has the right to terminate the contract on geologic grounds without the concurrence of the operator; it would appear only fair and equitable that the operator should have the same privilege. Perhaps we are wrong legally in this but, ethically, it seems to us that this should work both ways.

4. Unless the Field Team is greatly mistaken, the enforcement of this provision will mean the death knell for the DMEA exploration program. Certainly no mining company would knowingly sign a contract which would obligate it to complete an expensive exploration program when in its judgment, the results no longer justify such work or when economic conditions have changed and are such that the company is no longer financially able to continue the exploration. A good many smaller mines are financing DMEA exploration from ore mined on their property which was either found during the exploration or previously known. If the price of metals is such that they no longer can mine the ore profitably and thus obtain funds for exploration, it seems unreasonable to expect that they will continue. Certainly in the case of the American Zinc, Lead, and Smelting Company we would not break the company financially if they were required to return the money expended on the Bluebird property or to complete the exploration outlined in the contract; but in the case of a good many of the small properties, we could very easily put them on the financial rocks by this policy. To us it does not make sense to require a mine manager to sign a contract which, through circumstances over which he had no control, namely the price level of metals, might lead his company to financial ruin, and we are quite certain that under these circumstances few mining people would sign a contract except for very short-range work. We feel very definitely that this policy is not designed to encourage exploration. We are, furthermore, willing to make a prediction that if an attempt is made to enforce this policy, it will be the fatal blow that will end the DMEA.

There is, however, a possible solution to this problem which we think would be, or could be, made satisfactory to all concerned. There are now two circumstances under which a contract might be terminated short of completion. These are as follows:

1. Because in the opinion of the Government, "operations.... have not indicated the probability of making any worthwhile discovery and....further operations are not justified." Termination may be made, on these grounds, whether the operator agrees with the Government's conclusion or not.

The contract may be terminated for the same reason by "mutual agreement" between the operator and the Government; in other words, it can be terminated if they are both of the opinion that further work is not justified.

In the above two cases the right to terminate is specifically written in the contract in Article VIII, and no penalty could ensue to either party. Not only would there be no breach of contract and no reason to expect repayment, but no certification would be made--in fact, a negative certification would probably be made--and there would be no lien against the property by reason of the exploration work.

A third circumstance for termination before completion is the operator's desire to discontinue the contract for financial, geologic, or other reasons. Memorandum No. 18 implies that the contract will actually stand up so that the operator could be legally forced to repay funds expended to date because he did not complete the contract. Such enforcement, while it might be legal, would certainly not enhance the mining industry's opinion of DMEA. It would seem more logical to adopt a termination policy whereby the operator, if he breaches the contract, should be liable to repayment of the amount expended by the Government, such repayment to be from royalties on ore produced. The repayment period would be asprovided in Article 6, ten years or until the full amount due the Government is repayed, whichever comes first. Furthermore, such a termination notice could be so worded that if exploration was resumed at any time within ten years after the date of the contract any ore mined as a result of either the DMEA exploration or the later exploration would be subject to a royalty to the Government, such royalties to continue until Government funds had been repaid. It seems to us that such a termination agreement should be acceptable to the Operator for if he had so little faith in the property that he gave up the contract then he should have no objections to paying a royalty on ore discovered should he be proven wrong in his judgment. These repayments, furthermore, would hurt no one for they would be small and would be paid only when and if ore were actually produced. At the same time it would protect the Government and enable it to have some opportunity for getting repayment for work which was abandoned short of the objective.

Regardless of what the final decision is on this matter of repayment to the Government for contracts terminated by the operator, it is firmly believed that present contracts should be excluded from consideration for we are sure that the majority of operators were not aware of such intent by the Government at the time they signed the contracts. For this reason it is believed that any decision arrived at by DMEA should either be worked into the contract or into the termination notice and in either event should be carefully explained to the Operator at the time he signs the contract.

We offer the above for your serious consideration. We believe that our suggested policy is more equitable and provides for better public relations than an arbitrary demand that either the contract be completed willy-nilly or the funds received from the Government be

returned. We feel that the policy, as inferred in Memorandum 18, would be contrary to the best interests of the DMEA program and the mining industry. Your reaction to these ideas would be appreciated.

By DMEA Field Team, Region II

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

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

cc: C. O. Mittendorf
USBM (2)
Kirkemo

FILE COPY
SURNAME:

140

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

Rewritten by Griswold
AEKane
Bishop
Kinkel
Hodges
Hofflund

Mr. R. A. Young, Vice President
American Zinc, Lead and Smelting Co.
1600 Paul Brown Building
St Louis 1, Missouri

MAR 3 6 1953

Re: Docket No. DMEA-2388 (Lead-Zinc)
Bluebird Mine
Pend Oreille County, Washington
Contract No. Idm-E301

J. C. 3/26/53

Dear Mr. Young:

I have your letter of March 16, suggesting termination of the above project. I am referring the matter to Mr. A. E. Weissenborn, Executive Officer, Region II, South 157 Howard Street, Spokane 4, Washington, for his consideration, and will write to you again after I have heard from him.

If there is any additional information that you may care to furnish, I suggest you communicate directly with Mr. Weissenborn.

Sincerely yours,

C. O. Mittenderf (fw)

Administrator

WRGriswold/AEKane/em
Copy to: Mails and Files
Adm. R. File
Op. Comm.
Base Metals Div.
Region II (2)
Mr. Griswold
Mr. Kinkel
Mr. Bishop
Mr. Hofflund
Mr. Kane
pending chron

FILE COPY
500 SURNAME:

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

Griswold

Permitter 3/25/53
Ack/cmc

Mr. P. A. Young, Vice President
American Zinc, Lead and Smelting Co.
1700 Pearl Brown Building
Saint Louis, Missouri

Re: Docket No. DMEA 2388 (Lead-Zinc)
American Zinc, Lead & Smelting Co.
Bluebird Mine
Pend Oreille County, Washington
Contract No. Idm-5301

Dear Mr. Young:

I have your letter of March 16, in which you suggest termination of the above project. Under no possibility could I give you a reply without first referring the matter to Mr. . E. Weissenborn, Executive Officer, Region II, South 157 Howard Street, Spokane 8, Washington.

In case you might have additional information which was not covered in your letter to me, I suggest you communicate directly with Mr. Weissenborn.

Sincerely yours,

Administrator

WRGriswold/hmj
(3-23-53)
CC to: Docket
Admin. R. File
Op. Committee
Base Metals Div.
Region II (2)
Mr. Griswold
Mr. Kinkel
Mr. Bishop
Chron

FILE COPY
SURNAME: 500

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

Mr. A. E. Weissenborn, Executive Officer
DMEA Field Team, Region II
South 157 Howard Street
Spokane 8, Washington

MAR 26 1953

Re: Docket No. DMEA 2388 (~~Lead-Zinc~~)
American Zinc, Lead & Smelting Co.
Bluebird Mine
Pend Oreille County, Washington
Contract No. I[illegible]m-E301

Dear Mr. Weissenborn:

J.C. 3/26/53

The enclosed copy of a letter received from Mr. R. A. Young, Vice President of the American Zinc, Lead and Smelting Company is self-explanatory. We have advised Mr. Young that this is a matter to be cleared through your office.

We were somewhat surprised to receive this letter, in view of your comments upon the project in your year-end annual report. You expressed your feeling that although the drilling had not yet delineated mineable ore, nevertheless some zinc sulphides had been encountered and you felt that the outlook was moderately encouraging.

It may be that, in view of present depressed metal prices, the Operator wishes to eliminate projects which have not as yet been outstandingly successful, in spite of the fact that obtained data offer some encouragement.

We cannot agree to allowing operators to terminate their projects at will. The Operator, in signing a contract, has made certain commitments in return for receiving certain advantages. Hence, when we feel that it is to the Government's advantage, we must insist that such commitments be kept.

Will you kindly give this matter your mature consideration and let us have the benefit of your opinion as to what course of action you would recommend.

Sincerely yours,

George C. Ashbridge (JLB)
Chairman, Operating Committee

Enclosure
APPROVED:

J. R. Hodges (JLB)
Member, Bureau of Mines

A. E. Nickel, Jr. (JLB)

WRGriswold/hmj (3-23-53)
CC to: Docket
Admin. R. File
Op. Committee
Base Metals Div.
Mr. Kinkel
Mr. Bishop
Mr. Griswold
Chron.

American Zinc, Lead and Smelting Company

R. A. YOUNG
VICE-PRESIDENT

1600 PAUL BROWN BUILDING
SAINT LOUIS 1, MISSOURI

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
MAR 20 1953

March 16, 1953

Mr. C. O. Mittendorf
Administrator
Defense Minerals Exploration
Administration
Washington 25, D. C.

Dear Mr. Mittendorf:

Re: Docket No. DMEA 2388 — 301
Exploration Project Contract dated April 21, 1952
(Bluebird)

Contract No. 2388 provided for an exploration project consisting of two stages. Stage 1 covered the drilling of 9,000 feet of diamond drilling from the surface. The results of drilling under stage 1 would determine whether the work provided under stage 2 would be prosecuted.

Seventeen holes, a total of 6,886 feet, have been drilled under the program contemplated in stage 1. A total of $46,923.77 has been spent, of which $4,800 was for property payments. The Government's share of the expense is $17,876.69. The operator's share is $29,047.08.

Due to the negative results encountered in the 6,886 feet drilled, sufficient information has been obtained to indicate that not only the drilling under stage 2 is unwarranted, but that no further drilling should be done under stage 1.

Will you please advise whether it is satisfactory to terminate the program without doing any further drilling on the property covered by the project. An early reply will be much appreciated.

Very truly yours,

RAYoung

Vice President

RAY/CB/mf
cc: Mr.D.I.Hayes
W.J.Matthews,Jr.

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

1201 North Division St.
Spokane 2, Washington

January 9, 1953

MEMORANDUM

To: DMEA Field Team, Region II

From: W. S. Anderson, Mining Engineer, Bureau of Mines

Subject: Routine inspection, American Zinc-Lead and Smelting Company, (Bluebird Group), Pend Oreille County, Washington, Contract Idm-E301, Docket No. DMEA 2388 (lead-zinc)

The company's offices at the mine were visited January 1, 1953.

Operations at the subject property were suspended November 27, 1952 because of the difficulty of maintaining operations due to the snowfall during the last few weeks.

A review of work completed on the exploration project to date is as follows:

Hole	Depth	Coordinates	Collar Elevation	Date Started	Date Completed
B.B.4	179	N 7731.7 E 3128.6	2664.9	5-5-52	5-14-52
B.B.5	357	N 6808.4 E 2068.3	2662.1	5-14-52	6-14-52
B.B.6	221	N 7729.7 E 3130.0	2665.6	5-15-52	5-28-52
B.B.7	101	N 7771.7 E 3092.8	2678.3	5-29-52	6-3-52
B.B.8	190	N 7467.8 E 2828.1	2650.9	6-3-52	6-10-52
B.B.9	364	N 7202.5 E 2526.3	2642.5	6-10-52	6-26-52
B.B.10	533	N 6581.6 E 1789.9	2575.3	6-16-52	7- 2-52
B.B.11	408	N 6983.8 E 2750.4	2589.9	6-24-52	7- 8-52

B.B. 12	1122	N 6643.3 E 2898.2	2628.6	6-26-52	8-25-52
B.B. 13	911	N 6966.3 E 3658.0	2504.4	7- 3-52	8-11-52
B.B. 14	308	W 7942.4 E 3966.5	2552.8	8-12-52	8-22-52
B.B. 15	263	W 7936.8 E 3966.8	2552.1	8-23-52	8-29-52
B.B. 16	521	N 7496.4 E 3916.8	2517.9	8-26-52	9-18-52
B.B. 17	210	N.8164.8 E 3984.1	2545.8	8-30-52	9-15-52
B.B. 18	436	N 8887.2 E 6063.1	2665.3	9-16-52	10-20-52
B.B. 19	277	W 8136.6 E 4479.4	2560.9	9-19-52	10-25-52
B.B. 20	455	N 8213.6 E 5083.0	2609.8	10-21-52	11-27-52
B.B. 21	30	N 8106.1 E 5185.4	2642.2	?	?

Assays		Pb	Zn	ZnO	Fe
B.B. 12	1045.6' - 1046.6'	0.08	16.95	Tr.	3.05
B.B. 14	93' - 98'	Tr.	8.32	Tr.	6.20
	102' - 106'	0.02	3.11	Tr.	8.00
	193' - 197'	0.02	3.11	Tr.	27.62
B.B. 15	63' - 66.6'	0.02	5.77	Tr.	21.67
	88.7' - 90'	Tr.	1.71	Tr.	3.81

The exploration contract consists of two stages of 9000 feet of diamond drilling for each stage. Footage to date on the first stage is 6886 feet at an average cost of $5.393/foot for a total expenditure under the contract of $37,136.20. The total allowed for stage One is $58,250.00.

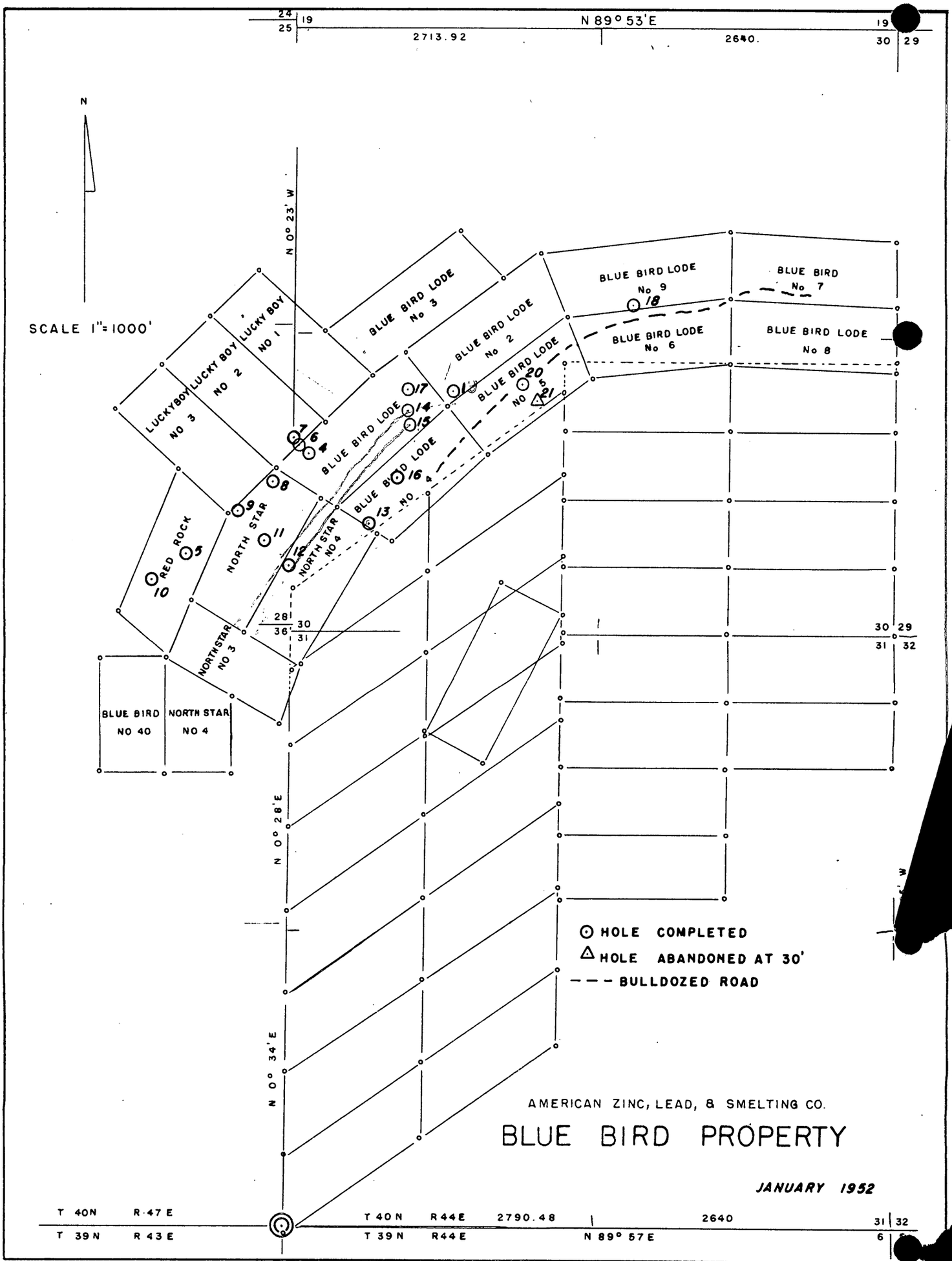
Drilling under the exploration contract will be resumed in the spring as soon as weather conditions permit.

Attached is a sketch showing approximate location of holes drilled.

W. S. Anderson

W. S. Anderson

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



AMERICAN ZINC, LEAD, & SMELTING CO.

BLUE BIRD PROPERTY

JANUARY 1952

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 December, 1952 Docket No. DMEA 2388 Contract No. E-301

Operator's Name American Zinc, Lead & Smelting Company Minerals Lead & Zinc

Address 927 Old Nat'l Bank Bldg., Spokane, Wash.

Contract Amount, $ 116,500.00 Government Participation: ____% Amount, $ 58,250.00

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		32,730.48	32,730.48		32,730.48	32,730.48
Bulldozing		1,269.00	1,269.00		1,269.00	1,269.00
Crosscutting						
Drifting						
(2) Labor and Supervision:						
Labor	45.20	2,579.88	2,625.08	45.20	1708.69	1753.89
Supervision						
Technical Services						
(3) Operating Mat'ls. and Supplies:						
Timber						
Explosives						
Pipe						
Track						
(4) Operating Equipment:						
Rental						
Purchase						
Depreciation						
(5) Initial Rehabilitation and Repairs						
(6) New Bldgs., Improvements, etc.						
(7) Miscellaneous:						
Repairs to Equipment						
Sampling and Analysis						
Payroll Taxes						
Liability Insurance						
(8) Contingencies (specify):						
TOTALS	45.20	36,579.36	36,624.56	45.20	35,708.17	35,753.37

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

Date 1/26/53 *Payee American Zinc, Lead & Smelting Co.

Per R. V. Thayer Title Cashier

*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:

$ 22.60

Signature _____ (Authorized Certifying Officer)

Date 2/10/53 Vou. No. 651

(See other side)

(For Government use only)

CERTIFICATION BY GOVERNMENT REPRESENTATIVE:

I certify that to the best of my knowledge and belief the contractor submitting this voucher is operating a Defense Minerals Exploration Administration project under Contract No. E 301 in accordance with the terms of the contract.

Signature /s/ Webster Sandman Title Mining Engr Date 2/9/53

APPROVAL BY DMEA EXECUTIVE OFFICER OR ALTERNATE:

Signature /s/ Thomas E. Howard Title Mining Engr. Date 2/9/53

MONTHLY REPORT OF OPERATOR

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

GPO 83-38476

Form MF-104A
(April 1952)

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

UNITED STATES
DEPARTMENT OF THE INTERIOR

DEFENSE MINERALS EXPLORATION ADMINISTRATION

OPERATOR'S UNIT COST AND PROGRESS REPORT

Month of December 1952 Docket No. DMEA 2388 Contract No. E-301
Operator's Name American Zinc, Lead and Smelting Company Minerals Lead & Zinc
Address 927 Old Nat'l Bank Building, Spokane, Wash.

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	feet	45.20	—	36,624.56	6783	5.399	18,000	6.472
Churn								
Auger								
Stripping								
Trenching								
Test Pits								
Roads and Trails								
TOTAL DISTRIBUTED COSTS		45.20		36,624.56				TOTAL COSTS AUTHORIZED BY CONTRACT
Operating Equipment Purchased								
Initial Rehabilitation and Repairs								
New Buildings, Improvements, etc.								
TOTAL COSTS		45.20		36,624.56				116,500.00

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

REMARKS:

Date 1/26/53 Operator American Zinc, Lead & Smelting Co.

Per R. V. Thayer Title Cashier

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

R. J. Hindman, Certifying Officer, DMEA February 9, 1953

W. S. Anderson, Mining Engineer, Bureau of Mines

American Zinc, Lead & Smelting Company, (Bluebird), Pend Oreille County, Washington, Contract Idm-E301, Docket No. DMEA 2388 (lead-zinc)

The charge of $45.20 on the MF-104 for December 1952 is for labor required to survey the diamond drill holes drilled under the exploration contract. This data is required under the contract and the labor costs to obtain same should be allowed.

The company did not include a narrative with the December MF-104 and to date diamond drill holes BB-4 through BB-19 have been drilled for a total of 6336 feet under the contract.

This memo should be considered as a substitute for the narrative.

W. S. Anderson

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

Budget Bureau No. 42-R1036.3.

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
JAN 2 ~~1952~~ 1953

OPERATOR'S MONTHLY REPORT AND VOUCHER

Month of November, 1952 Docket No. DMEA 2388 Contract No. E-301
Operator's Name American Zinc, Lead & Smelting Company Minerals Lead and Zinc
Address 927 Old National Bank Bldg., Spokane, Washington
Contract Amount, $ 116,500.00 Government Participation: 50 % Amount, $ 58,250.00

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:						~~[illegible]~~ Keating Betty
Drilling	2198.10	30,532.38	32,730.48			
Bulldozing	120.00	1,149.00	1,269.00			
Crosscutting						
Drifting						
(2) Labor and Supervision:						
Labor						
Supervision	258.64	2,321.24	2,579.88	612.55	2321.24	1708.69
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	2576.74	34,002.62	36,579.36	1705.55	34002.62	35,708.17

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

Date 12/11/52 *Payee American Zinc, Lead & Smelting Co.

Per R. T. Thayer Title Cashier

*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:

$ 852.77

Signature (Authorized Certifying Officer)

Date 12/23/52 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. 301 in accordance with the terms of the contract.

/s/ Signature Webster Sanderson Title Min Engr Date 12/22/52

APPROVAL BY DMEA EXECUTIVE OFFICER OR ALTERNATE:

/s/ Signature Thomas E Howard Title Min Engr Date 12/22/52

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
JAN 2 1952 1953

OPERATOR'S UNIT COST AND PROGRESS REPORT

Month of November 2 105 Docket No. DMEA 2388 Contract No. E-301

Operator's Name American Zinc, Lead & Smelting Company Minerals Lead & Zinc

Address 927 Old Nat'l Bank Bldg., Spokane, Washington.

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 ~~feet~~	feet	2576.74	426	36,579.36	6783	5.393	18,000	6.472
Churn								
Auger								
Stripping								
Trenching								
Test Pits								
Roads and Trails								
TOTAL DISTRIBUTED COSTS		2576.74		34,002.62				TOTAL COSTS AUTHORIZED BY CONTRACT
Operating Equipment Purchased								
Initial Rehabilitation and Repairs								
New Buildings, Improvements, etc.								
TOTAL COSTS		~~2576.74~~		~~34,002.62~~				~~116,500.00~~

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

REMARKS:

Date 12/11/52 Operator American Zinc, Lead & Smelting Co.

Per R. V. Sharp Title Cashier

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

Metaline Falls, Washington
December 1, 1952

TO: Mr. D. I. Hayes

FROM: Mr. H. F. Mills

Subject: BLUE BIRD PROPERTY
Report for November, 1952.

Exploration Project Contract
Docket DMEA 2388 - IDM- E-301
Commodity- Zinc

Dear Mr. Hayes:

On November 11th Hole BB 21 was suspended at 30 feet of depth and in overburden. On November 28th Hole BB 20 was completed at 455 feet of depth. 86 Manshifts were worked as compared with 168 for the preceding month. Completion of BB 20 terminates activity on the property for the current year.

At the end of October 58.4% of the first half of the Project allotment had been spent. November drilling should have brought this figure up to about 62%.

BB 20 went through the slate-lime contact at 270 feet of depth and showed favorable formation from 270 to 316 feet. No zinc or lead was encountered. There was considerable FeS between the footages of 295 and 306. Surface strikes and dips projected would indicate that the slate should be much deeper than proved to be the case. Dips in the slate indicated that the structure dipped between 40 and 80 degrees to the southeast whereas actually the slate lime contact was at ahigher elevation as drilling progressed southeast.

In my opinion resumption of the drilling program is fully justified. However, I would recommend that only one hole be drilling at a time until the structural situation is more clearly developed.

Yours very truly,

S/ H. F. Mills

C
O
P
Y

Mr. H. I. Young - St. Louis, Missouri

Mr. D. I. Hayes - Spokane, Washington

Mr. H. F. Mills
Mr. W. J. Matthews, Jr.
U. S. Bureau of Mines - Spokane

December 15, 1952

Exploration Project Contract
Docket No. IMLA-2388-
IDM-E-301 Commodity Zinc
Blue Bird Group of Claims
Progress Report
Month of November, 1952.

Dear Mr. Young:

Enclosed herewith is a copy of Mr. H. F. Mills' report for the month of November, 1952, on drilling in progress on the Blue Bird property.

Diamond drill hole BB 20 was completed during the month and diamond drill hole BB 21 was suspended at 30 feet.

All drilling on the property was discontinued as of November 28th.

BB 20 did not cut any zinc or lead mineralization but eleven feet of fairly heavy iron sulphide was encountered. Enclosed herewith is complete report for the month of November to the government on this project.

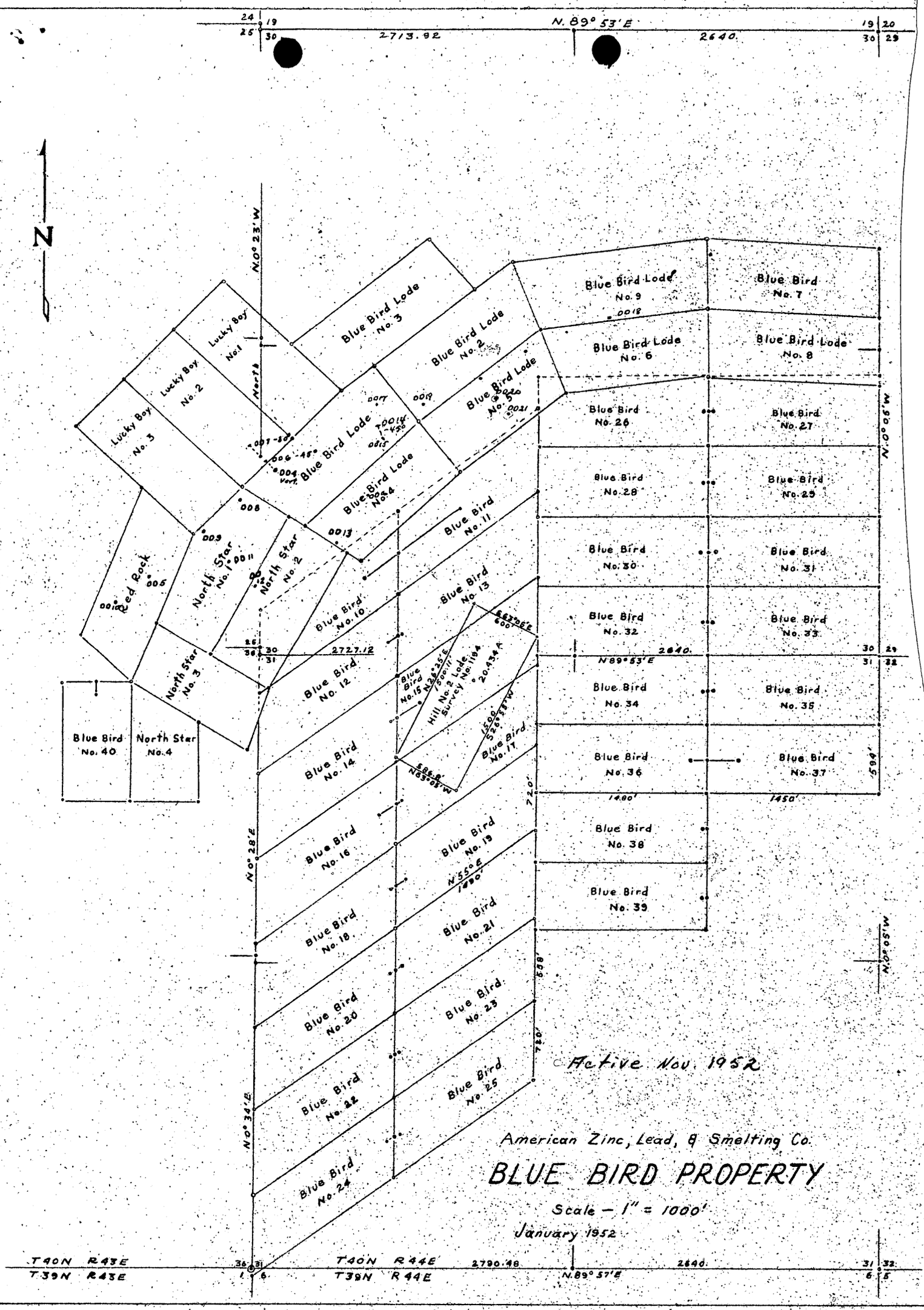
No further monthly reports will be made on this property until such time as some physical work is resumed there.

Very truly yours,

D. I. Hayes

dih;mle

Note: Drill Hole Records BB 16 - BB 17 and BB 18 are attached to Progress Report for November, 1952 to U. S. Bureau of Mines. Copies of these records are sent out in regular manner to St. Louis, Metaline Falls, etc.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N. 0° 23' W
Lucky Boy No. 1
Lucky Boy No. 2
Lucky Boy No. 3
Blue Bird Lode No. 3
Blue Bird Lode No. 2
Blue Bird Lode No. 5
Blue Bird Lode No. 4
Blue Bird Lode No. 9
Blue Bird No. 7
Blue Bird Lode No. 6
Blue Bird Lode No. 8
Blue Bird No. 26
Blue Bird No. 27
Blue Bird No. 28
Blue Bird No. 25
Blue Bird No. 30
Blue Bird No. 31
Blue Bird No. 32
Blue Bird No. 33
Blue Bird No. 34
Blue Bird No. 35
Blue Bird No. 36
Blue Bird No. 37
Blue Bird No. 38
Blue Bird No. 39
Red Rock
North Star No. 1
North Star No. 2
North Star No. 3
North Star No. 4
Blue Bird No. 40
Blue Bird No. 11
Blue Bird No. 10
Blue Bird No. 13
Blue Bird No. 12
Blue Bird No. 15
Hill No. 2 Lode Survey No. 1194
Blue Bird No. 17
Blue Bird No. 14
Blue Bird No. 16
Blue Bird No. 19
Blue Bird No. 18
Blue Bird No. 21
Blue Bird No. 20
Blue Bird No. 23
Blue Bird No. 22
Blue Bird No. 25
Blue Bird No. 24
N. 0° 28' E
N. 0° 34' E
N. 0° 05' W
2727.12
2640.
N 89° 53' E
1450'
1480'
Active Nov. 1952
American Zinc, Lead, & Smelting Co.
BLUE BIRD PROPERTY
Scale — 1" = 1000'
January 1952
T40N R43E
T39N R43E
T40N R44E
T39N R44E
2790.48
2640.
N. 89° 57' E

BLUE BIRD

Property

MONTH OF **Nov. 1952**

DIAMOND DRILLING

D.D. No.	Drill No.	Direction Hor.	Direction Vert.	Place	Start	Finish	Cur. Mon.	Prev. Mon.	Ledge	Ftge Tde	Final Depth	Assays From	Assays To	Pb	Zn	Zno
BB 20	78763	Vert.	Down	Surface	10/21	11/27	414	41	61		455	Not Sampled				
BB 21	18	"	"	"	10/27		116	18		30		Not Ledged (suspended.)				

TOTAL FOOTAGE DRILLED

		Current Month	Previous Month	Year to Date
Underground				
Surface		426	589	6783
Totals				

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

1201 North Division St.
Spokane 2, Washington

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
DEC 5 1952

November 25, 1952

MEMORANDUM

To: DMEA Field Team, Region II

From: W. S. Anderson, Mining Engineer, Bureau of Mines

Subject: Routine inspection, American Zinc, Lead and Smelting Co. (Bluebird Group), Pend Oreille County, Washington, Contract Idm-E301, Docket No. DMEA 2388 (lead-zinc)

The subject property was visited November 19, 1952.

One diamond drill was in operation at the property and was working one shift per day at the time of the visit. The drill was set up on D.D. hole B.B. 20 and was drilling at 363 feet in limestone.

Data on holes completed since the last visit and hole B.B. 20 which is now being drilled is as follows:

B.B. 18 Vertical
0 - 9 overburden
9 - 330 shale
330 - 436 limestone
Hole bottomed at 436 feet. Not sampled.

B.B. 19 Vertical
0 - 107 overburden
107 - 187 shale
187 - 277 limestone
Bottomed at 277 feet.

Samples --	No.	Location	Zn only determination
	73	265 ft.	0.20
	74	235 ft.	Tr.

B.B. 20 Vertical
0 - 61 overburden
61 - 270 black shale
270 - 363 limestone
Still drilling. Not sampled.

B.B. 21 Vertical
0 - 29-1/2 overburden
This hole was discontinued as the Operator is shutting down operations for the winter as soon as hole B.B. 20 is completed.

The holes have not been surveyed to date and as soon as the survey is completed coordinates and collar elevations will be plotted.

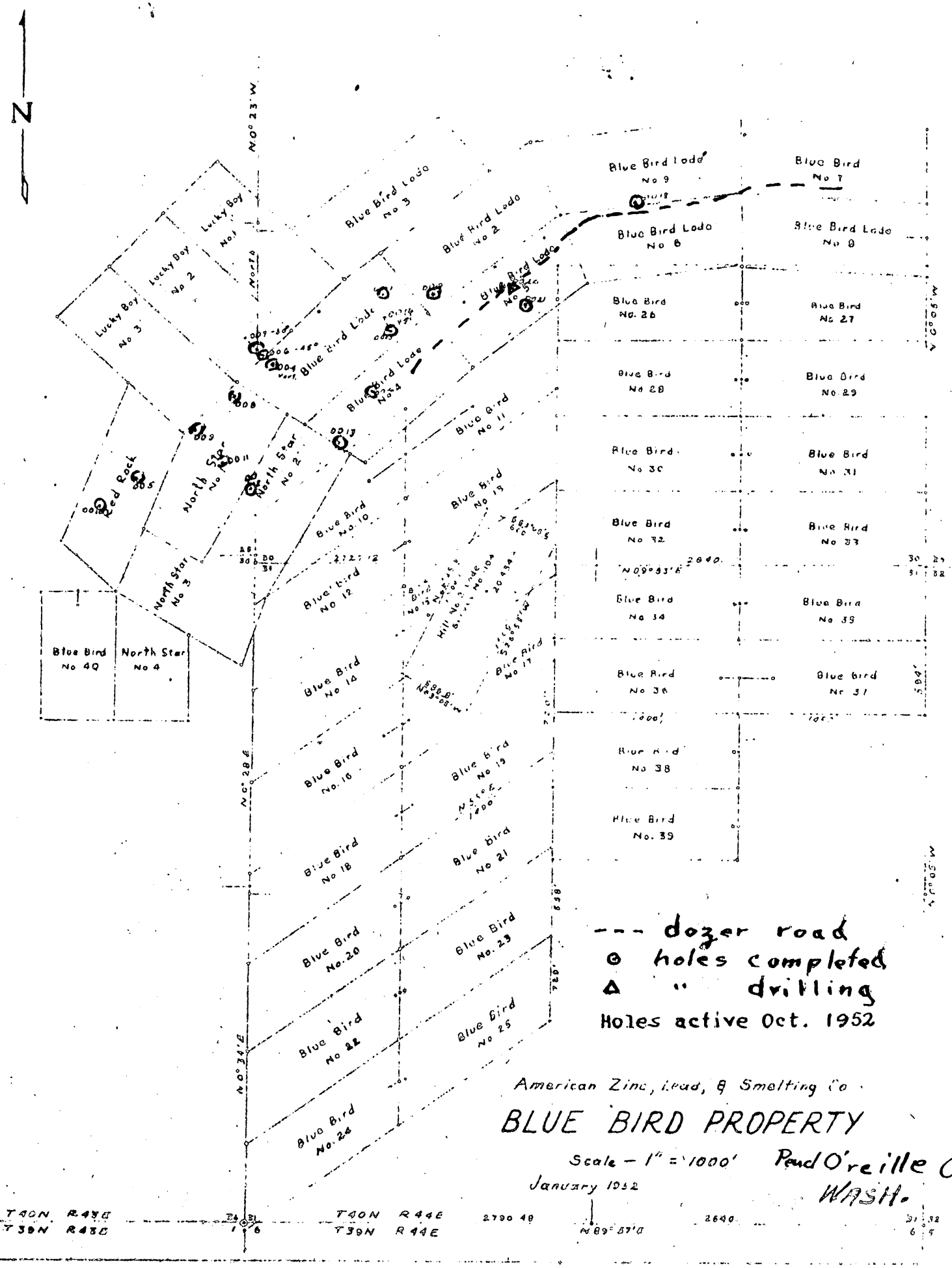
A sketch is attached to show approximate locations of holes that have been drilled.

W. S. Anderson

W. S. Anderson

Enclosure

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


N
Lucky Boy No 1
Lucky Boy No 2
Lucky Boy No 3
Blue Bird Lode No 3
Blue Bird Lode No 2
Blue Bird Lode No 9
Blue Bird No 7
Blue Bird Lode No 8
Blue Bird Lode No 6
Blue Bird Lode No 5
Blue Bird Lode No 4
Blue Bird No 11
Blue Bird No 26
Blue Bird No 27
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Blue Bird No 29
Blue Bird No 30
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Blue Bird No 14
Blue Bird No 16
Blue Bird No 17
Blue Bird No 18
Blue Bird No 19
Blue Bird No 20
Blue Bird No 21
Blue Bird No 22
Blue Bird No 23
Blue Bird No 24
Blue Bird No 25
Hill No 2 Lode
N 0° 23' W
N 0° 28' E
N 0° 34' E
N 89° 57' E
2640
2790.49
T40N R43E
T39N R43E
T40N R44E
T39N R44E
--- dozer road
⊙ holes completed
△ " drilling
Holes active Oct. 1952
American Zinc, Lead, & Smelting Co.
BLUE BIRD PROPERTY
Scale – 1" = 1000'
January 1952
Pend O'reille Co.
WASH.

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.
Defense Minerals Administration
RECEIVED
DEC 4 1952

OPERATOR'S MONTHLY REPORT AND VOUCHER

Month of October, 1952 Docket No. DMEA 2388 Contract No. E-301
Operator's Name American Zinc, Lead & Smelting Company Minerals Lead-Zinc
Address
Contract Amount, $ 116,500.00 Government Participation: 50 % Amount, $ 58,250.00

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	3,169.94	27,362.44	30,532.38			
Bulldozing	569.00	580.00	1,149.00			
Crosscutting						
Drifting						
(2) Labor and Supervision:						
Labor						
Supervision	563.48	1,757.76	2,321.24			
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	4,302.42	29,700.20	34,002.62			

I certify that the above bill is correct and just and that payment therefor has not been received.
Date 11/19/52 *Payee American Zinc, Lead & Smelting Co.
Per B L Coome Title Cashier

*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:

$ 2151.21

Signature
(Authorized Certifying Officer)

Date 11/26/52 Vou. No.
(See other side)

MK

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

Signature Webster S. Anderson Title Mining Engr Date 11-24-52

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 4 1952

OPERATOR'S UNIT COST AND PROGRESS REPORT

Month of October 195 2 Docket No. DMEA 2388 Contract No. E-301
Operator's Name American Zinc, Lead & Smelting Company Minerals Lead-Zinc
Address Spokane, Washington.

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	feet	4,302.42	589	34,002.62	6357	5.349	18,000	6.472
Churn								
Auger								
Stripping								
Trenching								
Test Pits								
Roads and Trails								
								TOTAL COSTS AUTHORIZED BY CONTRACT
TOTAL DISTRIBUTED COSTS		4,302.42		34,002.62				
Operating Equipment Purchased								
Initial Rehabilitation and Repairs								
New Buildings, Improvements, etc.								
TOTAL COSTS		4,302.42		34,002.62				116,500.00

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

REMARKS:

Date 11/19/52 Operator American Zinc, Lead & Smelting Co.

Per B L Cromer Title Cashier

→ 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)

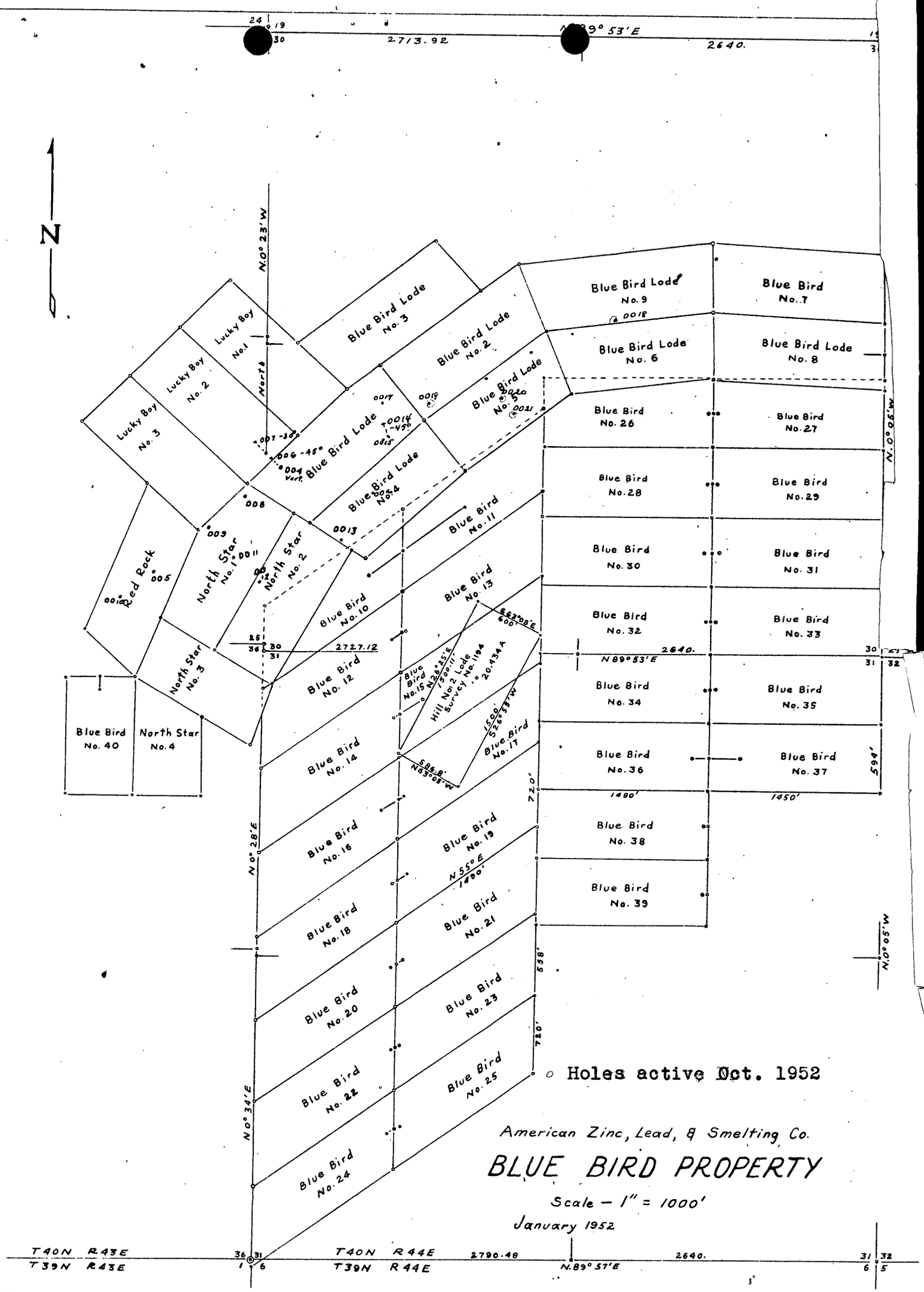
INSTRUCTIONS

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


N
N.89° 53'E
2713.92
2640.
N.0° 23'W
North
Lucky Boy No.1
Lucky Boy No.2
Lucky Boy No.3
Blue Bird Lode No.3
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N.0° 05'W
N.0° 28'E
N.0° 34'E
2727.12
N 89° 53'E
1480'
1450'
594'
720'
558'
1400'
N.55° E
586.8'
N.53° 05'W
1500'
S.26° 38'W
600'
S.63° 08'E
1500.11'
N.26° 25'E
20.434 A
Holes active Oct. 1952
American Zinc, Lead, & Smelting Co.
BLUE BIRD PROPERTY
Scale — 1" = 1000'
January 1952
T40N R43E
T39N R43E
T40N R44E
T39N R44E
2790.48
N.89° 57'E

Mr. H. I. Young - St. Louis, Mo.

Mr. D. I. Hayes - Spokane, Wash.

Mr. H. F. Mills
Mr. W. J. Matthews, Jr.
U. S. Bureau of Mines - Spokane

November 13, 195[illegible]

Exploration Project Contract
Docket No. [illegible]
IDM-E-301 Commodity Zinc
Blue Bird Group of Claims
Progress Report
Month of October, 195[illegible].

Dear Mr. Young:

Enclosed herewith is a copy of Mr. H. F. Mills report for the month of October, 195[illegible] on drilling in progress on the Blue Bird property.

Diamond drill holes BB 18 and 19 were completed during the month. These holes were disappointing and did not cut any mineralization. Drill holes BB 20 and BB 21 were started near the end of the month. As of this date BB 21 has been discontinued and BB 20, which is ledged, will be finished.

As soon as BB 20 is completed all work on the property will be discontinued, at least for the winter.

I am enclosing herewith our complete report for the month of October to the Government on this project.

Very truly yours,

D. I. Hayes

dih;mlc

To: Mr. D. I. Hayes

Metaline Falls, Washington
November 4, 1952

From: Mr. H. F. Mills

Subject: Blue Bird Property -
Report for October, 1952.

Exploration Project Contract
Docket No. DMEA 2383 - IDM E-301
Commodity Zinc.

Dear Mr. Hayes:

Throughout the month drilling was on a general scale of two rigs each operating double shift. 168 manshifts were worked as compared to 164 for the preceding month. 589 feet of hole was drilled bringing the total for the project to 6357 feet, which is 70.6% of the estimated footage for the first half of the project. However, drilling costs up to October 1st were running about 20% under the estimate.

Holes BB 18 and BB 19 were completed. Neither encountered zinc or lead mineralization. Both holes went from hanging wall slate into footwall dolomite with favorable horizon faulted out. Holes BB 20 and BB 21 were located down-dip to determine whether or not this negative condition would extend to substantial depth.

Currently holes BB 20 and BB 21 are at shallow depth and in overburden.

Very truly yours,

S/ H. F. Mills

c
o
p
y

BLUE BIRD Property

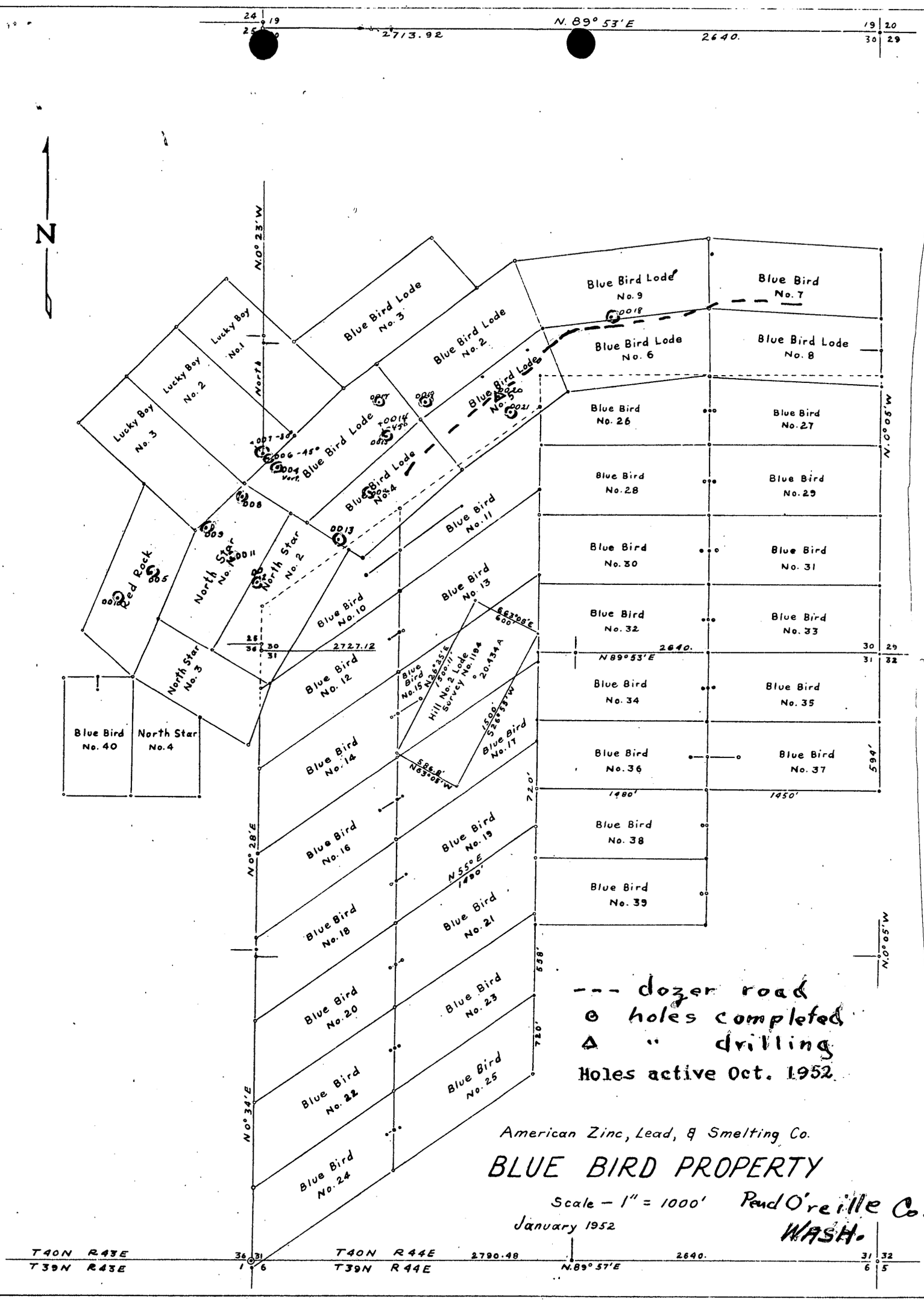
DIAMOND DRILLING

MONTH OF October, 1952

D.D. No.	Drill No.	Direction Hor.	Direction Vert.	Place	Start	Finish	Cur. Mon.	Prev. Mon.	Ledge	Ftge Tde	Final Depth	Assays From	Assays To	Pb	Zn	Zno
BB 18	78763	Vert.	Down	Surface	9/16	10/20	412	24	10		436	Not Sampled				
BB 19	18	Vert.	Down	Surface	9/19	10/24	118	59	107		277	Not Sampled				
BB 20	78763	Vert.	Down	Surface	10/21		41			41						
BB 21	18	Vert.	Down	Surface			18			18						
							589									

TOTAL FOOTAGE DRILLED

		Current Month	Previous Month	Year to Date
Underground				
Surface		589	757	6357
Totals				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Hill No. 2 Lode Survey No. 1184
20.434 A
2727.12
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N. 0° 34' E
N. 0° 05' W
N 89° 53' E
1480'
1450'
720'
558'
594'
--- dozer road
holes completed
Δ " drilling
Holes active Oct. 1952
American Zinc, Lead, & Smelting Co.
BLUE BIRD PROPERTY
Scale — 1" = 1000'
January 1952
Pend O'reille Co.
WASH.
T40N R43E
T39N R43E
T40N R44E
T39N R44E
2790.48
2640.
N. 89° 57' E

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

1201 North Division St.
Spokane 2, Washington

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
OCT 2 2 1952

Betty

October 22, 1952

MEMORANDUM

To: DMEA Field Team, Region II

From: W. S. Anderson, Mining Engineer, Bureau of Mines

Subject: Routine inspection, American Zinc, Lead & Smelting Co. (Bluebird Group), Pend Oreille County, Washington, Contract Idm-E301, Docket No. DMEA 2388 (zinc-lead)

An inspection of the subject property was made October 16, 1952. E. A. Frick, engineer for the company, accompanied me on a visit to the drilling sites.

Two diamond drills were in operation at the time of my visit drilling holes B.B. 18 and B.B. 19. Hole B.B. 18 was in shale at a depth of 389 feet. Hole B.B. 19 was at a depth of 107 feet which was all in overburden.

Data on holes B.B. 16 and B.B. 17 which were being drilled at the time of my last visit is as follows:

B.B. 16	Vertical	Bottomed
0 -- 95	overburden	
95 --420	shale	
420 - 521	limestone	

B.B. 17	Vertical	Bottomed
0 -- 14	overburden	
14 --134	shale	
134 --210	limestone	

Holes B.B. 16 and B.B. 17 were not sampled as there was no apparent mineralization.

The diamond drills were operating two shifts at the time of my visit.

W. S. Anderson

W. S. Anderson

Orig. & 3 - Wash.
USGS (2) M/D
DMEA WSA/vf

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

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION

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

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
NOV 6 1952

OPERATOR'S MONTHLY REPORT AND VOUCHER

Month of September, 195 2 Docket No. DMEA 2388 Contract No. D-301 alt

Operator's Name American Zinc, Lead & Smelting Company Minerals Lead-Zinc Betty

Address

Contract Amount, $ 116,500.00 Government Participation: 50 % Amount, $ 58,250.00

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	3,827.96	23,572.98	27,400.94	3827.96	23534.48	27362.44
Bulldozing		580.00	580.00		580.00	580.00
Crosscutting						
Drifting						
(2) Labor and Supervision:						
Labor						
Supervision	352.31	1,487.93	1,840.24	352.31	1405.45	1757.76
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	4,180.27	25,640.91	29,821.18	4180.27	25,519.93	29,700.20

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

Date 10/16/52 *Payee American Zinc, Lead & Smelting Co.

Per B L Coomes Title Cashier

*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:

$ 2090 13

Signature (Authorized Certifying Officer)

Date 10/28/52 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. ..... in accordance with the terms of the contract.

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

APPROVAL BY DMEA EXECUTIVE OFFICER OR ALTERNATE:

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

MONTHLY REPORT OF OPERATOR

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

GPO 83-38476

Form MF-104A
(April 1952)

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

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
NOV 3 1952

UNITED STATES
DEPARTMENT OF THE INTERIOR

DEFENSE MINERALS EXPLORATION ADMINISTRATION

OPERATOR'S UNIT COST AND PROGRESS REPORT

Month of Sept. 195 2 Docket No. DMEA 2383 Contract No. E-301
Operator's Name American Zinc, Lead & Smelting Co. Minerals Lead-Zinc
Address

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	feet	4,180.27	757	29,821.18	5768	5.170	18,000	6.472
Churn								
Auger								
Stripping								
Trenching								
Test Pits								
Roads and Trails								
TOTAL DISTRIBUTED COSTS		4,180.27	757	29,821.18				TOTAL COSTS AUTHORIZED BY CONTRACT
Operating Equipment Purchased								
Initial Rehabilitation and Repairs								
New Buildings, Improvements, etc.								
TOTAL COSTS		4,180.27	757	29,821.18				116,500.00

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

Date 10/16/52 Operator American Zinc, Lead & Smelting Co.

Per B R Coomer Title Cashier

REMARKS:

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

(Instructions on reverse)

(For Government use only)

INSTRUCTIONS

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

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

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

GPO 83-38475

4

October 10, 195 .

United States Bureau of Mines
1201 North Division Street
Spokane, Washington

Re: Exploration Project Contract
Docket No. IMLA- 338-
IBM E-301 - Community Inc
Blue Bird Group of Claims

Month of September, 195 .

Dear Sirs:

We enclose herewith our monthly progress report as of the requirements of Form MF-104 and Form MF-104A for the above captioned project.

Very truly yours,

D. L. Ryan
Western Manager

dlh,mlc
enclosures.

Mr. H. I. Young - St. Louis, Missouri

Mr. D. I. Hayes - Spokane, Washington.

Mr. H. F. Mills
Mr. W. J. Matthews, Jr.
U. S. Bureau of Mines - Spokane

October 10, 195

Exploration Project Contract
Contract No. [illegible]
ITM-2-131 Commodity Mine
Blue Bird Group of Claims
Progress Report
Month of September, 195 .

Dear Mr. Young:

Enclosed herewith is a copy of Mr. H. F. Mills' report for the month of September, 195 , on drilling in progress on the Blue Bird Property.

Diamond drill holes BB 16 and BB 17 were completed during the month. These holes did not cut any mineralization. The location of these holes were in the wildcat category.

I am enclosing herewith our complete report for the month of September to the government on this project.

Very truly yours,

D. I. Hayes

dih;mlc

Note: Drill Hole Records BB 12, 13 and 14 attached to Progress Report for September to U. S. Bureau of Mines only. Copies will be sent out in regular manner to St. Louis, Metalina Falls, etc.

Metaline Falls, Washington
October 2, 195[illegible]

TO: Mr. D. I. Hayes

FROM: Mr. H. F. Mills

Subject: Blue Bird Property
Report for September, 195[illegible].

Exploration Project Contract
Docket No. DMEA 3388 - IDM E-301
Commodity Zinc

Dear Mr. Hayes:

Throughout the month drilling was on a general scale of two rigs each operating double shift. Some time was lost on mechanical breakdown. 164 manshifts were worked as compared to 201 for the preceding month. 757 feet of hole was drilled, bringing the total for the project to 5768 feet, which is 64.1% of the estimated footage for the first half of the project.

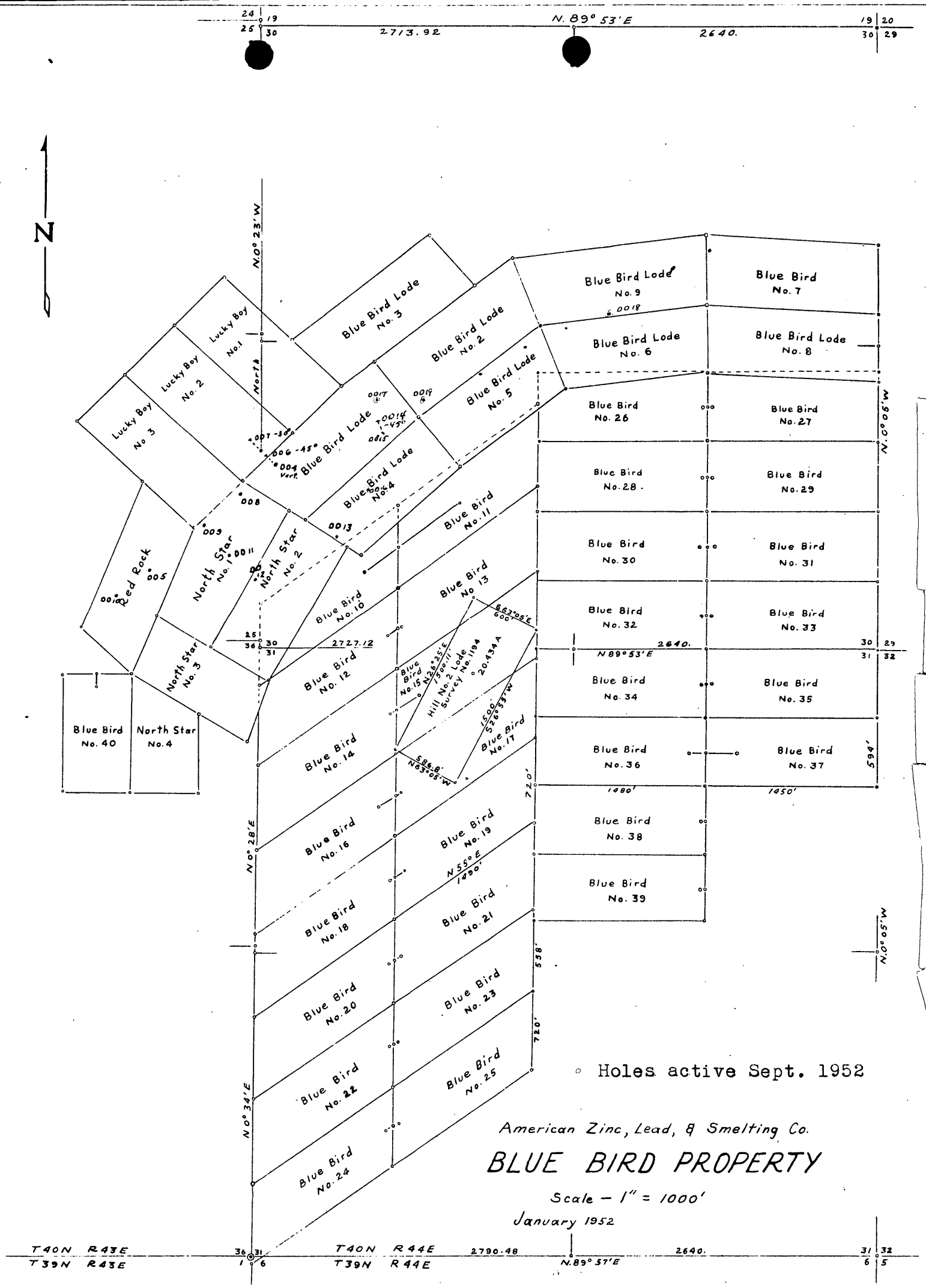
Two holes BB 16 and BB 17 were completed, both blanks. One drill is standpiping at 59 feet in BB19, which is about 450 feet upstream from the mineralized holes BB 14 and BB 15. The second drill is on BB 18 which is about 2200 feet upstream from Holes BB 14 and BB 15. BB 18 has been down several days while the motor is being rebuilt. The hole is at 24 feet depth and in shale.

During September the bulldozer cleared seven set-ups with connecting roads. Except for possible changes in spotting this completes the bulldozing for the first half of the project.

Yours very truly,

H. F. Mills

c
o
p
y


N. 89° 53' E
2713.92
2640.
N
N.0° 23' W
North
Lucky Boy No. 1
Lucky Boy No. 2
Lucky Boy No 3
Blue Bird Lode No. 3
Blue Bird Lode No. 2
Blue Bird Lode No. 5
Blue Bird Lode No. 9
Blue Bird No. 7
Blue Bird Lode No. 6
Blue Bird Lode No. 8
Blue Bird Lode No. 4
Red Rock
North Star No. 1
North Star No. 2
North Star No. 3
North Star No. 4
Blue Bird No. 40
Blue Bird No. 11
Blue Bird No. 10
Blue Bird No 13
Blue Bird No. 12
Blue Bird No. 14
Blue Bird No. 15
Blue Bird No. 17
Blue Bird No. 16
Blue Bird No. 19
Blue Bird No. 18
Blue Bird No. 21
Blue Bird No. 20
Blue Bird No. 23
Blue Bird No. 22
Blue Bird No. 25
Blue Bird No. 24
Hill No. 2 Lode Survey No. 1194
20.434 A
N 89° 53' E
2640.
Blue Bird No. 26
Blue Bird No. 27
Blue Bird No. 28
Blue Bird No. 29
Blue Bird No. 30
Blue Bird No. 31
Blue Bird No. 32
Blue Bird No. 33
Blue Bird No. 34
Blue Bird No. 35
Blue Bird No. 36
Blue Bird No. 37
Blue Bird No. 38
Blue Bird No. 39
N.0° 06' W
N.0° 05' W
N 0° 28' E
N 0° 34' E
2727.12
1480'
1450'
720'
558'
594'
1490'
N 55° E
Holes active Sept. 1952
American Zinc, Lead, & Smelting Co.
BLUE BIRD PROPERTY
Scale — 1" = 1000'
January 1952
T40N R43E
T39N R43E
T40N R44E
T39N R44E
2790.48
2640.
N.89° 57' E

BLUE BIRD

Property

MONTH OF Sept. 1952

DIAMOND DRILLING

D.D. No.	Drill No.	Direction Hor.	Direction Vert.	Place	Start	Finish	Cur. Mon.	Prev. Mon.	Ledge	Ftge Tde	Final Depth	Assays From	Assays To	Pb	Zn	Zno
BB16	18	Vert.	Down	Surf.	8/26	9/18	474	47	88		521	Not Sampled				
BB17	73763	Vert.	Down	Surf.	8/30	9/15	203	7	11		210	Not Sampled				
BB18	73763	Vert.	Down	Surf.	9/16		24		10	24						
BB19	18	Vert.	Down	Surf.	9/19		59			59						

TOTAL FOOTAGE DRILLED

		Current Month	Previous Month	Year to Date
Underground				
Surface		757	1045	5763
Totals				

N
E.
El

Blue Bird DD #12

Surface Vertical down

Start: 6-26-52
Finish: 8-25-52

0 - 165 Overburden
165 - 533 Black shale with intermittent Quartzite stringers Plug bit. Banded 35° with hole at 330' and 55° at 500'
533 - 534'9" Black shale cored EX. slickensides
534'9" - 891 Black shale Plug bit with intermittent quartz stringers to 825.
Banded parallel with hole at 575'
Banded perpendicular with hole at 700'
Banded 30° with hole at 750
Banded 90° with hole at 875
891 - 1038'3" Black shale plug bit. Banded 85° with hole at 900
Banded 90° with hole at 911 to 1038

1038'3 1051'7" Coarse recrystalline grey dolomite some brecciation some brecciation a little chert
1045'6" to 1046'3" Recrystalline grey dolomite with high grade brownish ZnS.
1046'3" to 1051'7" recrystalline grey dolomite with considerable brecciation. A little graphite in seams some FeS. Some solution pitting in breccia. Specks ZnS at 1049'. 2" good ZnS at 1051'
1051'7" - 1058'3" Medium grained medium grey slightly siliceous dolomite. Some solution pitting. Speck ZnS at 1051'8" Core much broken.
1058'3" - 1088 Recrystalline grey dolomite shines ZnS 1069 to 1069'6" Some FeS at 1066
Very dark dense dolomite from 1072'7" to 1073'7" FeS stringer with specks ZnS at 1077 and 1078.
1088 - 1099 Medium coarse grained recrystalline dolomite. Small stringer FeS at 1090.
1099 - 1122'7" Medium fine grained recrystalline dolomite. A little FeS to 1115. Stringer FeS with specks ZnS at 1115'6" Core broken 1121' to 1122'7"
1123 Bottom (1122'7")
Note: Core recovery good.
Logged by HFM & EAF
Driller - W. Rutledge, I. Mendenhall, C. Orton.
Helper D. Shackelton, G. Remelhart, Ted Newton.
Drill # 18

Sampled -

	Pb	Zn	ZnO	Fe
1045'6"-1046'6"	.08	16.45	Tr	3.05

N.

Blue Bird Mine

Section [illegible] [illegible]

Sec. [illegible] T. [illegible] S.

[illegible]

0 - 55 [illegible]

55 - 125 Black shale [illegible] very good [illegible] Very hard.

125 - 131 [illegible]

131 - 155 Black shale [illegible] very good [illegible] Very hard.

155 - 157 [illegible]

157 - 195 No [illegible] hard.

195 - 605'3" Black shale with northwestward [illegible] very good [illegible] Very hard.
[illegible]
[illegible]
[illegible]

605' - 625 Gray [illegible] with [illegible] with some [illegible]
[illegible]

625 - 642 [illegible]
[illegible]
[illegible]
[illegible]

642 - 656 [illegible]
[illegible]
[illegible]

656 - 685'2" Calcite. [illegible] of black shale [illegible]
[illegible]

685'2" - 687'6" [illegible] of a little black [illegible]
and [illegible] calcite.

687'6" - 687'6" Black shale [illegible] with [illegible]
[illegible] with [illegible] of [illegible].

687'6" - 696'6" [illegible]

696'6" - 697'8" [illegible]

697'8" - 701 [illegible]

701 - 739 [illegible] very hard [illegible]

739 - 739'9" [illegible]

739'9" - 743 [illegible]
[illegible]

743 - 745 [illegible]

745 - 749 [illegible]
[illegible]

749 - 755'6" [illegible]
[illegible]
[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

0 - 9 Hard [illegible]
9 - 20 Black shale [illegible]
20 - 49 Black shale [illegible]
49 - 116' Very [illegible] gray [illegible] shale [illegible]
116' - [illegible] [illegible]
[illegible] - [illegible] [illegible]
[illegible] - 216' [illegible] shales [illegible]
216' - 225' [illegible] shale [illegible]
225' - 232' Very [illegible] shale [illegible]
232' - 237' Very [illegible]
237' - 240' Very [illegible]
240' - 248 Very [illegible] [illegible] shales [illegible]
248 - 257 [illegible] [illegible] [illegible]
257 - 287 [illegible] [illegible] [illegible]
287 - 297 [illegible] [illegible] [illegible]
297 - 330 [illegible] [illegible] [illegible]
330 - 337 [illegible] [illegible] [illegible]
337 - 344 [illegible] [illegible] [illegible]
344 - 354 [illegible] [illegible] [illegible]
354 - 360 [illegible]
360 - 367 [illegible] [illegible]
367 - 377 [illegible] [illegible]
377 - 383 [illegible] [illegible]
383 - 388 [illegible]
388 [illegible]

Note. Core recovery poor.
Logged by: [illegible]
Dr. Mark Robert, Van Dyke [illegible]
Helper Shaver, Van Dyke [illegible]

Sampled.

93 - 98	[illegible]
183 - 186	[illegible]
193 - 197	[illegible]

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

1201 N. Division St.
Spokane 2, Wash.

September 9, 1952

MEMORANDUM

To: DMEA Field Team, Region II

From: W. S. Anderson, Mining Engineer, Bureau of Mines

Subject: Progress Examination, American Zinc, Lead & Smelting Co. (Bluebird Group), Pend Oreille County, Washington, Docket No. DMEA 2388 (zinc-lead) Contract Idm-E301.

An inspection was made of the Bluebird project on September 4, 1952. I was accompanied by E. A. Frick, Engineer for the American Zinc, Lead & Smelting Co.

At the time of the visit there were two diamond drills on the property. The drills are working on a contract let to the Havlick Diamond Drilling Company of Spokane, Washington. One drill was set up on hole B.B. 17. The drill was not in operation due to a rod bearing failure. B.B. 17 is a vertical hole and is down 119'. The other drill was set up on B.B. 16 and was stand piping. B.B. 16 is also a vertical hole and the stand pipe was down 69'.

A road was being dozed out along the line of Slate creek as shown on attached map.

Data on the holes drilled are as follows:

Hole B.B. 10	Vertical	Finished
0--5' overburden		
5'-443' shale		
443'-533' limestone		
Hole BB 11	Vertical	Finished
0'-30' overburden		
3'-352' shale		
352'-407'11" limestone		
Hole B.B. 12	Vertical	Finished
0'-165' overburden		
165'-1038'3" shale		
1038'3"-1122'7" limestone		

Hole B.B. 12 cont'd.

1045'6"-1046'3" Zn S High-grade
1049' Zn S shines
1051' 2" Zn S
1051'8" Zn S shines
1069'-1069'6" Zn S shines
1077' Zn S shines
1078' Zn S shines
1115'7" Zn S shines

Sample:	Pb	Zn	ZnO
#52			
1045'6" - 1046'6"	0.08%	16.95%	Tr

Hole B.B. 13	Vertical	Finished
0'-88' overburden		
88'-607'5" shale		
607'5"-689'6" limestone		
689'6"-708'6" shale		
708'6"--743' limestone		
743'-743'9" shale		
743'9"-910'7" limestone		

Hole B.B. 14	-45°	Finished
0-4' hardpan		
4'-29' shale		
29'-33'6" limestone		
33'6"-34' shale		
34'-308' limestone		
50' Zn S shines		
53'6"-60' Zn S shines		
97' - 98' Zn S		
103'6"-105' Zn S shines		
180'-181' Zn S shines		
193'-197' Zn S shines		

Samples	Pb	Zn	ZnO
#53 - 96'-98'	Tr	8.32%	Tr
#80 --102'-106'	0.02%	3.11%	Tr
#81 - 193'-197'	0.02%	3.11%	Tr

B.B. 15	Vertical	Finished
0'-38' shale		
38'-263' limestone		
63'-65' Zn S		
89'-90' Shines		
130' Zn S		

Sample:	Pb	Zn	ZnO
#82 - 63'-66'6"	0.02%	5.77%	Tr
#83 - 88'7"-90'	Tr	1.71%	Tr

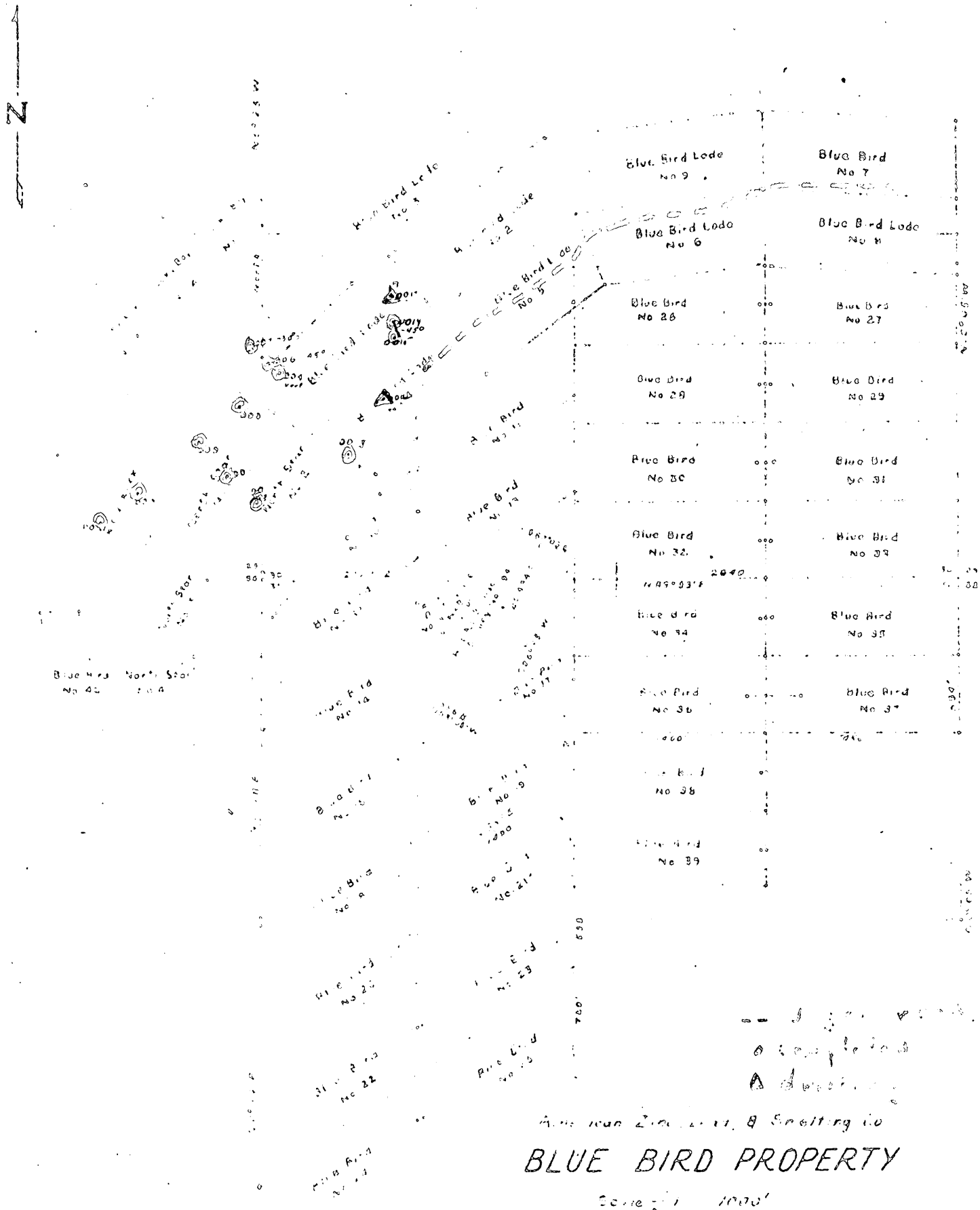
The drills are operating on two shifts at the present time.

W. S. Anderson

W. S. Anderson

Enclosure

CC: 3-Wash.
2-USGS
DMEA
M/D
D/F
WSA


N
Blue Bird Lode No 9
Blue Bird No 7
Blue Bird Lode No 6
Blue Bird Lode No 8
Blue Bird No 26
Blue Bird No 27
Blue Bird No 28
Blue Bird No 29
Blue Bird No 30
Blue Bird No 31
Blue Bird No 32
Blue Bird No 33
2640
Blue Bird No 34
Blue Bird No 35
Blue Bird No 36
Blue Bird No 37
Blue Bird No 38
Blue Bird No 39
Blue Bird No 42
North Star
BLUE BIRD PROPERTY

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

Wash

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

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION

Defense Minerals Administration
RECEIVED
1952

OPERATOR'S MONTHLY REPORT AND VOUCHER

Month of August 195[illegible] Docket No. DMEA [illegible] Contract No. [illegible]-301
Operator's Name American Zinc, Lead & Smelting Company Minerals Lead - Zinc
Address [illegible]
Contract Amount, $ 116,500.00 Government Participation: [illegible] % Amount, $ [illegible]

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	[illegible]	[illegible]	[illegible]	5,492.47	18,037.01	23,534.48
Bulldozing		580.00	580.00		580.00	580.00
Crosscutting						
Drifting						
(2) Labor and Supervision:						
Labor	[illegible]	[illegible]	[illegible]			
Supervision				305.23	1,100.22	1,405.45
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	[illegible]	19,799.71	[illegible]	5,802.70	19,717.23	25,519.93

I certify that the above bill is correct and just and that payment therefor has not been received. 9/9/52 American Zinc, Lead & Smelting Co.

Date _____ *Payee _____

Per B. L. Coome Title Cashier

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

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

(Instructions on reverse)

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

$ 2,901.35

Signature _____ (Authorized Certifying Officer)

Date 10/20/52 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. 301 in accordance with the terms of the contract.

Signature Webster L. Anderson Title Mining Eng Date 9/12/52

APPROVAL BY DMEA EXECUTIVE OFFICER OR ALTERNATE:

Signature Thomas E Howard Title Mining Engr Date 9/15/52

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.

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
NOV 3 1952

UNITED STATES
DEPARTMENT OF THE INTERIOR

DEFENSE MINERALS EXPLORATION ADMINISTRATION

OPERATOR'S UNIT COST AND PROGRESS REPORT

Month of August 1952 Docket No. DMEA 2388 Contract No. L-301
Operator's Name American Zinc, Lead and Smelting Company Minerals Lead-Zinc
Address 927 Old National Bank Building, Spokane, Wash.

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 Diamond	feet	5841.20	1045	25,640.91	5021	5.117	18,000	6.472
Churn								
Auger								
Stripping								
Trenching								
Test Pits								
Roads and Trails								
TOTAL DISTRIBUTED COSTS		5841.20	1045	25,640.91				TOTAL COSTS AUTHORIZED BY CONTRACT
Operating Equipment Purchased								
Initial Rehabilitation and Repairs								
New Buildings, Improvements, etc.								
TOTAL COSTS		5841.20	1045	25,640.91				116,500.00

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

Date 9/9/52 Operator American Zinc, Lead & Smelting Co.

Per B. L. Cooper Title Geologist

B. L. Cooper

REMARKS:

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

(Instructions on reverse)

(For Government use only)

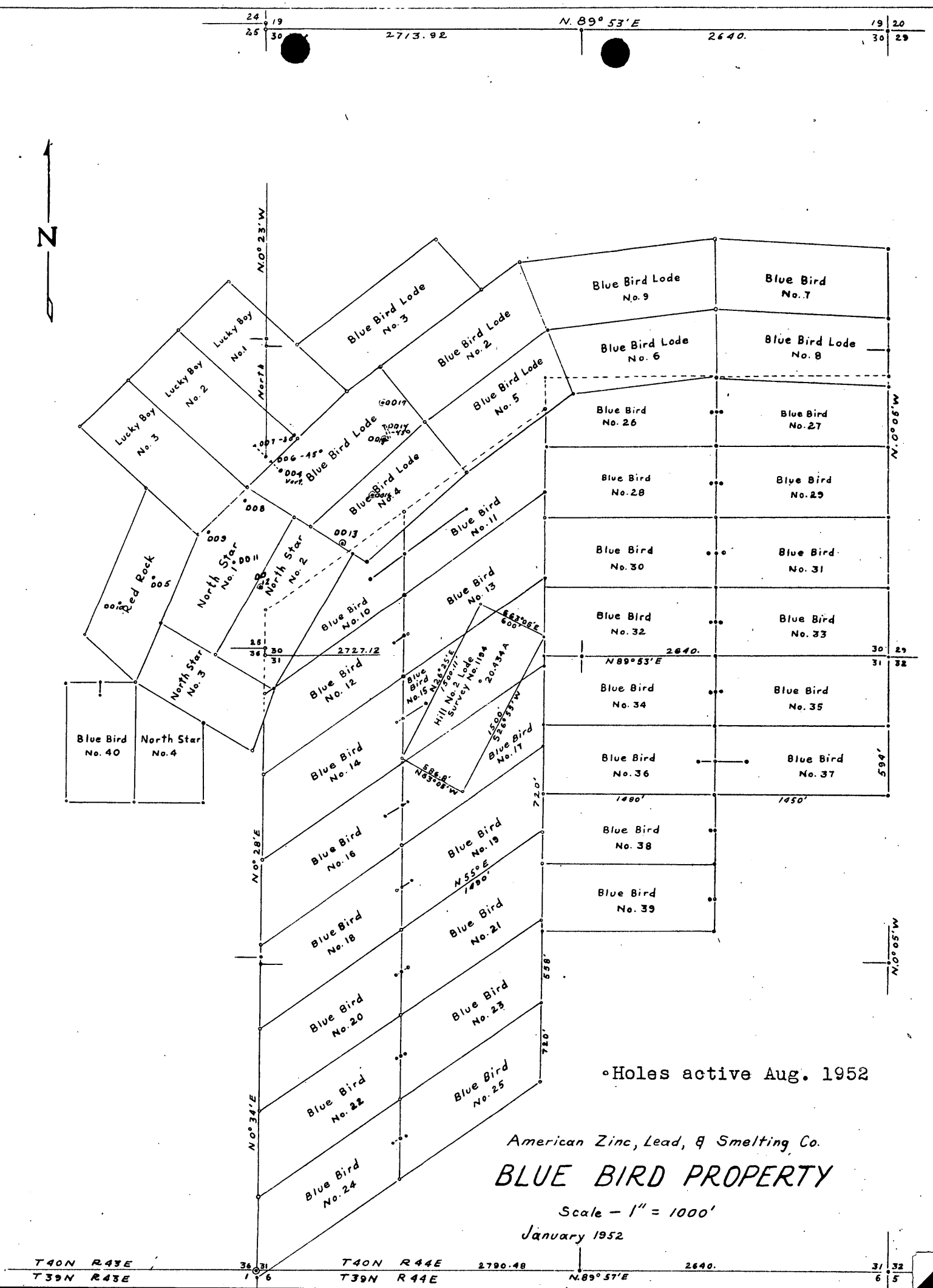
INSTRUCTIONS

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

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

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

U. S. GOVERNMENT PRINTING OFFICE 205676



∘Holes active Aug. 1952

American Zinc, Lead, & Smelting Co.

BLUE BIRD PROPERTY

Scale — 1" = 1000'

January 1952

BLUE BIRD

Property

MONTH OF Aug. 1952

DIAMOND DRILLING

D.D. No.	Drill No.	Direction Hor.	Direction Vert.	Place	Start	Finish	Cur. Mon.	Prev. Mon.	Ledge	Ftge Tde	Final Depth	Assays From	Assays To	Pb	Zn	Zno ZnO	Zno Fe
BB 12	18	Vert	Down	Surf.	6/26	8/25	301	821	166		1122	1045'6	1046'6	.08	16.95	Tr.	3.05
BB 13	78763	Vert	Down	Surf.	7/3	8/11	119	792	86		911						
BB 14	78763	N 15 W	- 45o	Surf	8/12	8/22	308		4		308	93	98	Tr.	8.32	Tr.	6.20
												102	106	0.02	3.11	Tr.	8.00
												193	197	0.02	3.11	Tr.	27.62
BB 15	78763	Vert	Down	Surf.	8/23	8/29	263		20		263	63	66'6	0.02	5.77	Tr	21.67
												88'7	90	Tr	1.71	Tr.	3.81
BB 16	18	Vert	Down	Surf.	8/26		47			47							
BB 17	78763	Vert	Down	Surf.	8/30		7			7							

TOTAL FOOTAGE DRILLED

		Current Month	Previous Month	Year to Date
Underground				
Surface		1045	1728	5011
Totals				

Mr. H. I. Young - St. Louis, Missouri

Mr. D. I. Hayes - Spokane, Washington.

Mr. H. F. Mills
Mr. .. J. Matthews, Jr.
U. S. Bureau of Mines - Spokane

September 11, 195.

Exploration Project Contract
Docket No. DMI - 383 -
IDM-I-331 - Commodity Zinc
Blue Bird Group of Claims
Progress Report
Month of August, 195 .

Dear Mr. Young:

Enclosed herewith is a copy of Mr. H. F. Mills' report for the month of August, 195., on drilling in progress on the Blue Bird property.

Diamond drill holes BB 12, BB 13, BB 14 and BB 15 were completed during August on this project. At the end of the month drill holes BB 16 and BB 17 were in progress.

Diamond drill holes BB 14, BB 14 and BB 15 all showed mineralization in thin sections associated with pyritic iron. This mineralization on account of not being typical and in relatively thin sections is of doubtful importance. Should thicker sections be found in grades comparable to 5 feet that was found in DD 14 and 3 feet that was found in DD 15, then such a discovery would become quite important.

I am enclosing herewith our complete report for the month of August to the Government on this project.

Very truly yours,

D. I. Hayes

dih,mlc

Note: Drill Hole Records BB 4- BB5-BB6-BB7-BB8-BB9-
BB 10-BB 11 attached to
Progress Report for August to U. S. Bureau of Mines only. Copies sent out in regular manner to St. Louis, Metaline Falls, etc.

Mr. H. I. Young - St. Louis, Missouri

Mr. D. I. Hayes - Spokane, Washington.

Mr. H. F. Mills
Mr. [illegible] J. Matthews, Jr.
U. S. Bureau of Mines - Spokane

September 12, 195[illegible]

Exploration Project Contract
Docket No. IDM[illegible] - [illegible]383 -
IDM-P-391 - Commodity Zinc
Blue Bird Group of Claim
Progress Report
Month of August, 195[illegible].

Dear Mr. Young:

Enclosed herewith is a copy of Mr. H. F. Mills' report for the month of August, 195[illegible], on drilling in progress on the Blue Bird property.

Diamond drill holes BB 12, BB 13, BB 14 and BB 15 were completed during August on this project. At the end of the month drill holes BB 16 and BB 17 were in progress.

Diamond drill holes BB 14, BB 14 and BB 15 all showed mineralization in thin sections associated with pyritic iron. This mineralization on account of not being typical and in relatively thin sections is of doubtful importance. Should thicker sections be found in grades comparable to 5 feet that was found in DD 14 and 3 feet that was found in DD 15, then such a discovery would become quite important.

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Very truly yours,

D. I. Hayes

dih;mlc

Note: Drill Hole Records BB 4- BB5-BB6-BB7-BB8-BB9-
BB 10-BB 11 attached to
Progress Report for August to U. S. Bureau of Mines only. Copies sent out in regular manner to St. Louis, Metaline Falls, etc.

N:
E:
El:

B.B. D.D. # 4

Down 45° Surface N.40°W

Start: 5-5-52
Finish: 5-15-52

0 - 19'6"	Overburden
19'6" - 53'	Black shale cored AX
53 - 84'	Recrystalline grey dolomite. considerable graphite. core broken
84 - 86'	Recrystalline grey dolomite. Broken and leached
86 - 98	Recrystalline grey dolomite. Broken core
98 - 154	Dense grey limestone
154 - 176	Dense and fine grained light grey dolomite
176 - 178'6"	Gouge and semi gouge and grey dolomite
179	Bottom (178'6")

Note: core recovery good.

Logged by: M.F.M.

Drill: #8
Driller: Mendenhall, Felty
Helper: Westling, Norton

Not Sampled.

Metaline Falls, Washington
September 5, 1952

To: Mr. B. I. Hayes

From: Mr. H. F. Mills

Subject: Blue Bird Property
Report for August, 1952

Exploration Project Contract
Docket No. DMEA-2388- IDM E-301
Commodity Zinc

Dear Mr. Hayes:

Throughout the month drilling was on a general scale of two rigs each operating double shift. 201 manshifts were worked on the Havlick diamond drilling contract. Footage for the month was 1045 bringing the total for the project todate to 5011 feet, which is 55.6% of the estimated footage for the first half of the project. Four holes were completed BB 12, BB 13, BB 14 and BB 15.

All of the holes completed showed ZnS justifying sampling except for BB 13 which showed ZnS but only to the extent of scattered pinpoint shines. BB 14 with five feet of 8.32% Zn approaches the ore hole classification.

BB 16 is standpiping in overburden and BB 17 is drilling in shale. BB 17 is about 200 feet north of holes BB 14 and BB 15. BB 16 is about halfway between BB 13 and holes BB 14 and BB 15.

The formation in holes BB 14 and 15 more closely resembles the formation to which we are accustomed in the district. The ZnS, however, is different from any of the ZnS previously observed in the district. It is reddish brown in color and in that respect resembles the Tri-State jack. It occurs sometimes as a replacement of limey dolomite and sometimes as seams and replacements in the iron sulphides. In either case it appears to be in close association with the iron sulphides (Note the Fe assays on the assay tabulation)

On August 31st the bulldozer was working on opening up set-ups to the northeast and further up the creek.

Yours very truly,

C O P Y

S/ H. F. Mills

N:
E:
El:

B.B DD #5

Vertical — Surface — Down.

Start: 5-14-52
Finish: 6-14-52

0-11	Overburden
11-51	Black shale. Considerable FeS scattered throughout. Banded 45° @ 12', 55° @ 25', 65° @ 35', 50° @ 45' 30° @ 48'
51-133	Black shale. Banded 70° @ 53', 55° @ 70', 40° @ 114' Much of core is crushed and granulated. Considerable FeS in shale and seams of shale. Grey quartzite 130'-130'6". Banded 50° @ 120'
133-134	Grey quartzite
134-140	Black shale Banded 55° @ 138'
140-140'6"	Grey quartzite
140'6"-144	Black shale
144-145	Grey Quartzite
145-153	Black shale banded 55° @ 150'
153-155	Grey quartzite
155-156	Black shale
156-157	Grey Quartzite
157-160	Black shale banded 45° @ 159'
160-161	Grey quartzite
161-162	Black shale
162-163	Siliceous limestone.
163-248	Black shale cored Banded 40° at 169, 45° at 172 60° at 184, 6" lime at 186, mixed lime chert and shale from 190'6" to 191' Considerable FeS Banded 45° at 206'. Chert from 207'4" to 211'4" 2' core lightly shattered. Banded 15° with hole at 213, 45° at 219, 35° at 236.
248-260	Black shale plug bit.
260-261	Black shale cored banded 55° with hole at 261
263-314'6"	Black shale Plug bit.
314'6"-316	Medium grey recrystalline dolomite slightly siliceous.
316-317	Dark grey quartzite
317-324	Coarse grained recrystalline grey dolomite.
324-335½'	Fine grained grey siliceous dolomite Occasional quartz and blue chert eyes and occasional scattered fine grained FeS Speck of ZnS at 331'6"

B.B DD #5 continued

B.B.D.D.5 continued

335'4"-336'4" No core.
336'4"-344 Breccia of recrystallize grey lime and grey chert. Solution pitted. Fault gouge at 341'6" Occasional shine FeS.
344-355 Recrystalline grey dolomite with some dark chert. Considerable FeS 347-349
355-357'5" Fine grained light grey dense limestone Considerable graphite stiolites
357 Bottom (357'5")

Note: Core recovery good.
Logged by J.H.W. & H.E.M.
Drill # 78436
Driller: C. Orton, J. Anderson E. Ruland
Helper: D. Shackelton, Norton, C.H. Skaggs

Not sampled.

N
E.
El.

B.B.D.D #6
Surface

Vertical Down

Start: 5-15-52.
Finish: 5-28-52.

0-	24	Overburden
24-	25	Boulder AX cored.
25-	27	Black shale AX Cored.
27-	34	Dolomite, some massive FeS. Plug bit.
34-	49	Recrystalline dolomite considerable graphite and FeS.
49-	77	Recrystalline grey dolomite, heavy FeS at 67'
77-	81	Dark recrystalline dolomite FeS at 79.
81	91	Recrystalline and fine grained grey dolomite much broken and considerable leaching.
91	183	Fine grained grey dolomite much broken Small amount of dense grey dolomite.
183-	207	Dense grey limestone.
207-	215	Recrystalline and dense grey limestone
215	221'2"	Recrystalline and dense grey limestone crushed.
	221	Bottom (221'2")

Note: Core recovery good.
Logged by: H.F.M.
Drill #8
Driller: Ed Falty; Verstegen
E.L. Seright; J. Anderson.

Helper: W. Westling; C. Oaten;
D.R. Roberts; Norton.

Not sampled except for check sample
5" core taken at 66'

Pb	Zn	ZnO.
Tr	Tr.	Tr.

Elev

Blue Bird DD #7
Surface

N 40° W

down 30°

Start: 5-29-52
Finish: 6-3-52

0 - 11 Overburden & rotten shale AX core
11 - 27 Overburden & rotten shale AX core
27 - 34 Black shale & dolomite Plug bit
34 - 37 Black Shale bended 90° with hole
37 - 100'6" Recrystallized grey dolomite. much broken 4" FeS @ 46'. Considerable leaching 43' & 44'
Specs of ZnS @ 95' & 80' & 80'6" & 84'
100 Bottom (100'6")

Note: core recovery good
Logged by: HFM

Drill: #8
Drillers: Anderson, Seright
Helpers: Norton, Roberts

Not Sampled

Elev:

Blue Bird D.D. # 8

Surface

Vertical — Down

Start: 6-3-52
Finish: 6-10-52

0 - 18	Overburden
18 - 20	No core
20 - 25	Black Shale Ax bended 40° with hole
25 - 36'2"	Black Shale plug bit bended 45° with hole
36'2" - 38'9"	Black shale cored Ex bended 55° with hole
38'9" - 45'8"	Black Shale plug bit
45'8" - 61'2"	Black shale Ex bended 18° with hole @ 46' bended 50° @ 60'
61'2" - 126	Black shale plug bit
126 - 126	Mixed lime and shale plug bit
126 - 128	Fine grained grey dolomite & chert
128 - 142	Breccia of mostly grey limestone and some chert and some dolomite. Occasional shines FeS
142 - 190	Medium grained grey limestone. Breccia of mixed light and dark dolomite. Some chert. Matrix of grey limestone from 148½ to 150 and 151 to 157 and 160 to 164½ and from 168 to 174. Slickensides @ 176½
190	Bottom (190)

Note: core recovery good.
Logged by: HFM

Drill: # 8
Driller: Seright, Anderson
Helper: Anderson, Norton

Not sampled.

Elev

Blue Bird D.D. #9
Surface

Vertical — Down

Start: 6-10-52
Finish: 6-26-52

0- 9	Overburden
9- 15	Cored Ax Slate banded 55° with hole @ 15'
15-101'1"	Black shale plug bit
101'1"-108'2"	Mixed shale, quartz & chert cored Ex
108'2"-131'6"	Black shale plug bit
131'6"-142	Mixed grey chert & siliceous dolomite
142-158	Recrystalline course grained dolomite and grey chert, occasional spots FeS
158-210	Mixed recrystalline grey dolomite, fine grained siliceous dolomite and dark grey chert
210-215'4"	Fine grained grey limestone
215'4"-216	Graphite (Fault)
216-217	Cemented breccia of siliceous dolomite & dark chert
217-219'3"	Black Shale cored Ex banded 75 & 65° with hole
219'3"-231'1"	Black Shale plug bit
231'-239	Dark & light grey dolomite breccia with nodules of chert. Very weak shines ZnS and PbS @ 232'
239'-241	Fine grained siliceous grey dolomite and chert nodules
241-247'6"	Recrystalline grey dolomite and light grey chert breccia
247'6"-249	Fine grained liney dolomite
249-251	Gouge and Semi-gouge
251-259	Fine grained siliceous dolomite & chert
259-261	Zebra rock
261-267	Dark grey dolomite with light grey dolomite eyes 2" core from 262'2" to 267'7"
267-269	Zebra rock
269-289	Dark & light grey dolomite and light chert Considerable FeS 270-271 and 283-289
289-291	Mostly light and dark grey chert, some dolomite
291-342	Coarse recrystalline grey dolomite, some chert and scattered FeS

Blue Bird D.D. #9
Continued

342 - 363'7" Dense fine grained grey dolomite

364 Bottom (363'9")

Note - Core recovery good except as noted

Logged by JHW

Drill #8
Driller - Norton, Seright
Helper - Rummelhart, Roberts

Check Samples only

	Pb	Zn	ZnO
283' - 289'	Tr	Tr	Tr
321'	0.10	Tr	Tr

N
E
Elev

B. B. # 10

Vertical

Down

Start: 6-11-52
Finish: 7-2-52

0 5	Overburden
5 7½	Blue shale cored 7½
7½ 47½	Blue shale plug hit. Reamed 75' to hole @ 70
47½ 51½	Grey graphite cored 4'
51½ 53½	Blue shale cored
53½ 443½	Blue shale plugged. Occasional bands of grey graphite.
443½ 475	Fine-grained grey siliceous dolomite w considerable graphite
475 477	Fine grained grey quartzite
477 525	Light grey, medium-grained dolomite with considerable graphite. Small quartz filled vug @ 477. Fine grained FGS @ 514'
525 530	No core
530 532½	Fine grained grey dolomite. Core shattered and vuggy. Quartz filled vugs
533	Bottom (532' 6")

Notes: Core recovery good except as noted in log.

Logged by: JAW.
Drill: 75 Ryan
Driller: Mendenhall, Roland, Cotton
Helper: Rowenhorst, Shackleton, Savage, Cox.

Not sampled

N
E
Elev:

Vertical

B. B. # 11

Down

Start: 6-24-52
Finish: 7-8-52

0 - 30	Overburden
30 - 138.5	Blue shale and grey quartzite plug bit.
138 - 145.5	Grey quartzite and occasional shale. Cored Ex Bandit 60° in hole @ 145'
145.5 - 330	Mixed shale and grey quartzite plugged.
330 - 352	Medium grey fine grained calcareous dolomite with some graphite. Slightly siliceous
352 - 361	Medium grey, medium grained calcareous dolomite. Slightly siliceous with some graphite. Fine-grained siliceous zones from 357 to 358. Considerable fine grained zones 366-367'
361 - 366.5	Coarse-grained recrystallized light grey dolomite with some graphite.
366.5 - 368	Fault zone. Recrystallized grey dolomite and gouge
368 - 402	Recrystallized grey dolomite with graphite. Solution cavity at 385 to 387 - 388.5
402 - 404.5	Fine grained grey dolomite with considerable graphite
404.5 - 405	Black shale
405 - 407.5	Fine grained medium grey dolomite
407.5	Bottom (407' in ⊥)

Notes: Core recovery good.
Logged by: J.H.W.
Drill: # 18
Drillers: Mendenhall, Morton, & Van Dyke, Clifford
Helpers: Rummelhart, S. Van Dyke, Stewart Van

Not Sampled

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

Wash

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION

DEPARTMENT OF THE INTERIOR
Budget Bureau No. 42-R1036.8
Approval expires 6-30-53
RECEIVED
OCT 8 1952

OPERATOR'S MONTHLY REPORT AND VOUCHER

Month of July 1952 Docket No. DMEA 2388 Contract No. E-301 Alb Betty
Operator's Name American Zinc, Lead and Smelting Company Minerals Zinc-Lead
Address 907 Old National Bank Building, Spokane, Wash.
Contract Amount, $ 116,500.00 Government Participation: 50 % Amount, $ 58,250.00

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	7727.06	10,309.95	18,037.01	✓	✓	✓
Bulldozing	320.00	260.00	580.00	✓	✓	✓
Crosscutting						
Drifting						
(2) Labor and Supervision:						
Labor	301.45	831.25	1,132.70	218.97	881.25	1,100.22
Supervision						
Technical Services						
(3) Operating Mat'ls. and Supplies:						
Timber						
Explosives						
Pipe						
Track						
(4) Operating Equipment:						
Rental						
Purchase						
Depreciation						
(5) Initial Rehabilitation and Repairs						
(6) New Bldgs., Improvements, etc.						
(7) Miscellaneous:						
Repairs to Equipment						
Sampling and Analysis						
Payroll Taxes						
Liability Insurance						
(8) Contingencies (specify):						
TOTALS	8349.51	11,451.20	19,799.71	8366.07	11451.20	19,717.27

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

Date 8/13/52 *Payee American Zinc, Lead & Smelting Co.

Per B L Coomer Title Cashier

*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:

$ 4133 00

Signature [illegible]
(Authorized Certifying Officer)

Date 9-30-52 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. 301 in accordance with the terms of the contract.

Signature Elmer A. Magill Title Mining Engr. Date Aug. 14, 1952

APPROVAL BY DMEA EXECUTIVE OFFICER OR ALTERNATE:

Signature Thomas E. Howard Title Mining Eng. Date 8/14/52

MONTHLY REPORT OF OPERATOR

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

U. S. GOVERNMENT PRINTING OFFICE 205675

Form MF-104A
(April 1952)

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

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
OCT 7 1952

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

Month of July 1952 Docket No. DMEA 2388 Contract No. E-301
Operator's Name American Zinc, Lead and Smelting Company Minerals Lead-Zinc
Address 927 Old National Bank Building, Spokane, Washington.

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		6,664.3		14,717.43				
Drilling: Core	feet	~~8348.51~~	1728	~~19,799.71~~	3966	4.992	18,000	6.472
Churn								
Auauger								
Stripping								
Trenching								
Test Pits								
Roads and Trails								
		6,664.3		14,717.43				
TOTAL DISTRIBUTED COSTS		~~8348.51~~	1728	~~19,799.71~~				TOTAL COSTS AUTHORIZED BY CONTRACT
Operating Equipment Purchased								
Initial Rehabilitation and Repairs								
New Buildings, Improvements, etc.		6,664.3		14,717.43				
TOTAL COSTS		~~8348.51~~	1728	~~19,799.71~~				116,500.00

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

Date 8/13/52 Operator American Zinc, Lead & Smelting Co.

Per B L Coomer Title Cashier

REMARKS:

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

(Instructions on reverse)

(For Government use only)

INSTRUCTIONS

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

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

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

U. S. GOVERNMENT PRINTING OFFICE 205676

TO: Mr. D. I. Hayes

Metaline Falls, Washington
August 2, 1952

FROM: Mr. H. F. Mills

Subject: BLUE BIRD Property

Report for July, 1952
Exploration Project Contract
Docket No. IMEA-2388
IDM E-301 Commodity Zinc

Dear Mr. Hayes:

Throughout the month drilling was on a general scale of two rigs each operating double shift. 188 Manshifts were worked on the diamond drills and about 10 shifts on the churn drill in ledging BB 12. Footage for the month was 1728 feet. Two holes, BB 10 and BB 11 were completed and two holes BB 12 and BB 13 were drilling at the end of the month.

BB 10 and BB 11 failed to encounter what is generally considered favorable formation and were quite negative except, perhaps that BB 11 showed considerable FeS mineralization. The significance, if any, of the FeS mineralization is not yet apparent.

BB 12 ledged at 166 feet of depth and is drilling in shale at 821 feet of depth. A brief log of BB 13 is as follows:

	0-86	Overburden
	86-607	Shale
	607-657	Siliceous dolomite (favorable formation) with a few pinpoint shines of ZnS
657-689	Mostly calcite	
689-709	Shale	
709-792	Coarse breccia of chert dolomite, shale and calcite	
792	Drilling	

BB 13 is distinctly an encouraging hole in that it shows good formation and mineralization even though the mineralization is very weak.

It appears that BB 13 is in a shear and fault zone and that BB 12 is on the down-throw side of this fault. The presence of such faulting was suspected but somewhat further southwest. The next holes will be spotted further northeast to get away from the necessity of deep holes, at least for the time being.

Yours very truly,

S/ H. F. Mills

copy

Mr. H. I. Young - St. Louis, Mo.

Mr. D. I. Hayes - Spokane, Wash.

Mr. H. F. Mills
Mr. W. J. Matthews, Jr.
U. S. Bureau of Mines - Spokane

August 14, 1952

Exploration Project Co
Docket No. DMEA - 2388
IDM- E-301 - Commodity
Blue Bird Group of Clai
Progress Report
Month of [redacted], 1952.

Dear Mr. Young:

Enclosed herewith is a copy of Mr. H. F. Mills' report for the month of July, 1952 on drilling in in progress on the Blue Bird property.

Diamond drill holes BB 10 and BB 11 were completed during July on this project. At the end of the month BB 12 and BB 13 were in progress.

No mineralization of importance was encountered during July. Drill Hole BB 13 which was at a depth of 792 feet at the end of the month cut what was believed to be favorable ore formation at depth 607 feet to 657 feet and showed a few shines of zinc. This hole has indicated the most encouraging situation found to date by any of the holes drilled.

Very truly yours,

D. I. Hayes

dih;mlc

NEWPORT MINER PRINT

[illegible]

Property

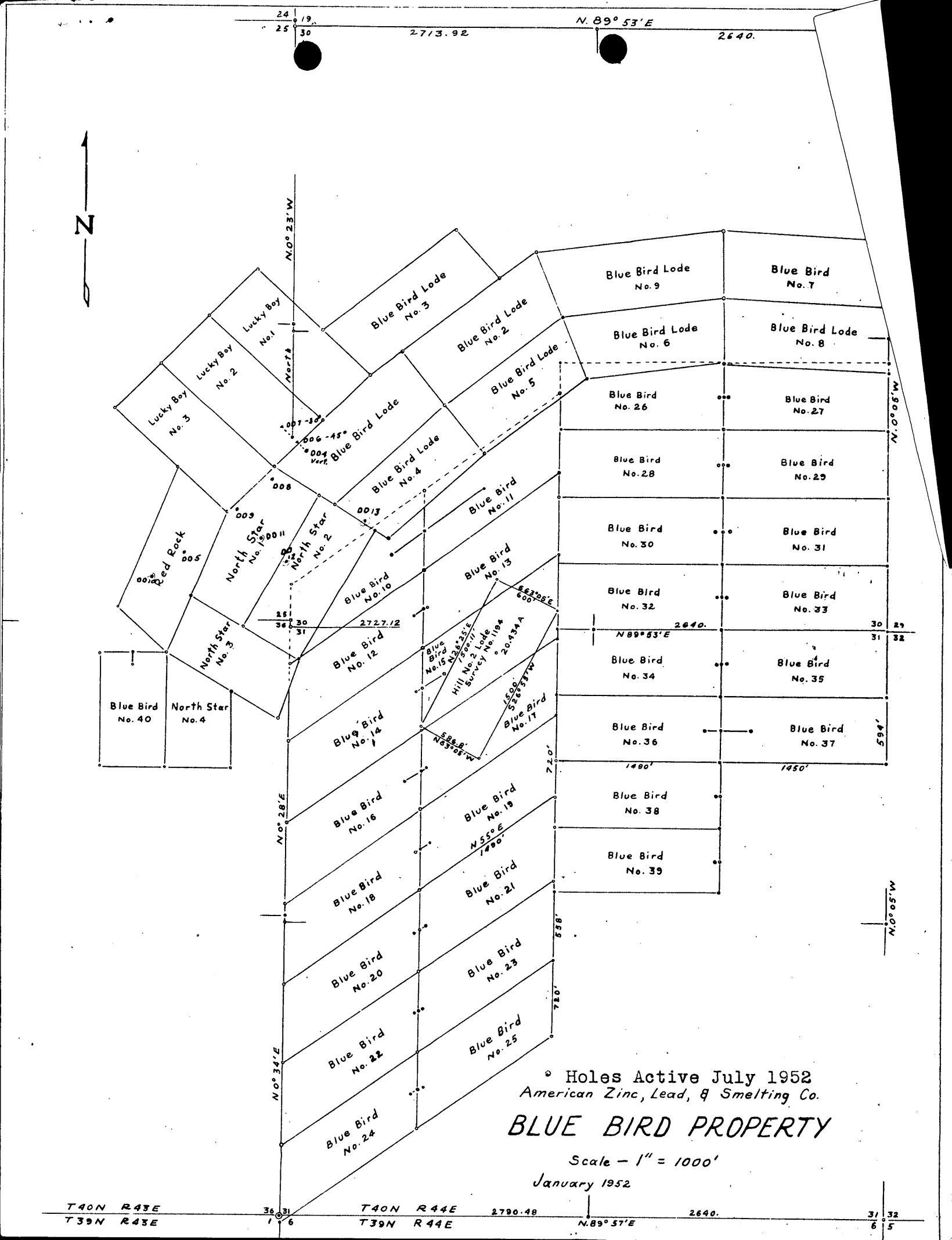
DIAMOND DRILLING

Month of July 19[illegible]

D. D. No.	Drill No.	Direction Hor.	Direction Vert.	Place	Start	Finish	Cur. Mon.	Prev. Mon.	Ledge	Ftge. Tde	Final Depth	Assays From	Assays To	Pb.	Zn.	Zno.
3010	7875	Vert	Down	Surf.	6/16	7/3	49	488	5		533					
[illegible]	18	Vert	Down	Surf.	6/4	7/8	180	[illegible]	30		428					
BB 1[illegible]	18	Vert	Down	Surf.	6/6		711	110	164	821						
BB 15	7876	Vert	Down	Surf	7/3		79[illegible]	0	86	79[illegible]						

TOTAL FOOTAGE DRILLED

		Current Month	Previous Month	Year to Date
Underground				
Surface		1720	1621	3966
Totals				



• Holes Active July 1952

American Zinc, Lead, & Smelting Co.

BLUE BIRD PROPERTY

Scale — 1" = 1000'

January 1952

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

July 22, 1952

Defense Minerals Administration
JUL 28 1952

Memorandum

To: A. E. Weissenborn, Exec. Officer, DMEA Field Team, Region II

From: Willard P. Puffett, Geologist, U. S. Geological Survey

Subject: Routine inspection of progress at American Zinc and Lead Bluebird Property, Pend Oreille County, Washington, under DMEA Contract Idm-E301, Docket No. 2388, Lead-Zinc.

An inspection was made of the Bluebird project on July 3, 1952. I was accompanied on this inspection by George P. Marinos, Professor of Geology, Athens, Greece.

The exploration project at the Bluebird property is a reconnaissance diamond drilling program wherein holes are drilled from the surface to explore the Metaline Limestone formation beneath the Ledbetter Slate. From data obtained in past experience in the area, the operators believe the ore horizon in the Metaline Limestone is a very siliceous dolomite immediately underlying the slate formation.

As of the date of the inspection, the project was very disappointing inasmuch as there was no evidence in the recovered core from completed diamond drill holes that the silicified dolomite ore horizon exists in the area being drilled. The operators are of the opinion that the slate-limestone contact is not a normal contact but rather is a fault contact, the ore horizon having been faulted off. Because of the evidence obtained, new drill holes started are being located in a line at nearly right angles to the strike of the formation and in this way it is hoped that information will be more quickly obtained on which to base a theory as to where the ore horizon can be located.

At the time of the inspection, holes BB 4, BB 5, BB 6, BB 7, BB 8, and BB 9 had been completed. Holes BB 11 and BB 12 were being drilled, BB 11 being at a depth of 384 feet and in limestone, whereas BB 12 had not as yet intersected the limestone formation.

General geologic data on the holes drilled are as follows:

Hole BB 4 Vertical Angle -45° Bearing N. 40° W.

Started: 5/5/52
Finished: 5/15/52

0.0'-19'6" Overburden
19'6"-53.0' Ledbetter Slate
53.0'-178.0' Metaline Limestone

No samples taken

Hole BB 5 Vertical Angle -90°

0'-11.0' Overburden
11-314'6" Ledbetter Slate
314'6"-357'5" Metaline Limestone

No samples taken

BB 6 Vertical Angle -90°

0'-24' Overburden
24'-27' Ledbetter Slate
27'-221'2" Metaline Limestone

3" sampled at 66.0' Tr.Pb, Tr.Zn, Tr.ZnO

BB 7 Vertical Angle -30° Bearing N. 40° W.

0'-11' Overburden
11'-37' Slate
37'-101' Metaline Limestone

No samples taken

BB 8 Vertical Angle -90°

0'-18' Overburden
18'-126' Slate
126'-190' Metaline Limestone

No samples taken

BB 9 Vertical Angle -90°

0'-9' Overburden
9'-131'6" Ledbetter Slate
131'6"-217' Metaline Limestone (?)
217'-231' Ledbetter Slate (?)
231'-363'7" Metaline Limestone (?)

Sample 2838-289' Tr.Pb, Tr.Zn, TrZnO

It will be noted that hole BB 9 intersected two horizons of slate. This is supporting evidence that there has been faulting near the contact, it being believed that the two slate horizons are the same but have been repeated due to faulting.

Willard P. Puffett
Geologist

cc: DMEA (2)
USBM (2)
USGS (SRO)

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

Keller

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

5

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

Month of June, 1952 Docket No. DMEA 2388 Contract No. E-301
Operator's Name American Zinc, Lead and Smelting Company Minerals Zinc-Lead
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Contract Amount, $ 116,500.00 Government Participation: 50 % Amount, $ 58,250.00

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	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	7,397.28	2,912.67	10,309.95			
Bulldozing		260.00	260.00			
Crosscutting						
Drifting						
(2) Labor and Supervision:						
Labor						
Supervision	641.53	239.72	881.25			
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	~~8,038.81~~	~~3,412.39~~	~~11,451.20~~	8038.81	3412.39	11,451.20

I certify that the above bill is correct and just and that payment therefor has not been received.
Date 7/15/52 *Payee American Zinc, Lead & Smelting Co.
Per B L Coomes Title Cashier

*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.

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(Instructions on reverse)

Pursuant to authority vested in me, I certify that this account is correct and proper for payment in the amount of:
$ 4019.40

Signature
(Authorized Certifying Officer)

Date Vou. No.
(See other side)

(For Government use only)

CERTIFICATION BY GOVERNMENT REPRESENTATIVE:

I certify that to the best of my knowledge and belief the contractor submitting this voucher is operating a Defense Minerals Exploration Administration project under Contract No. E 301 in accordance with the terms of the contract.

Signature Elmer A. Magill Title Mining Engr. Date July 17, 1952

APPROVAL BY DMEA EXECUTIVE OFFICER OR ALTERNATE:

Signature Thomas E. Howard Title Mining Engr. Date 7-17-52

MONTHLY REPORT OF OPERATOR

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(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.

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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

5

Month of June 1952 Docket No. DMEA 2388 Contract No. E-301

Operator's Name American Zinc, Lead and Smelting Company Minerals Lead-Zinc

Address 927 Old National Bank Building, Spokane, Wash.

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	feet	8038.81	1621	11,451.20	2238	5.117	18,000	6.472
Churn								
Auger								
Stripping								
Trenching								
Test Pits								
Roads and Trails								
TOTAL DISTRIBUTED COSTS								TOTAL COSTS AUTHORIZED BY CONTRACT
Operating Equipment Purchased								
Initial Rehabilitation and Repairs								
New Buildings, Improvements, etc.								
TOTAL COSTS								

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

Date 7/15/52 Operator American Zinc, Lead & Smelting Co.

Per B L Coomes Title Cashier

REMARKS:

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

(Instructions on reverse)

(For Government use only)

INSTRUCTIONS

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

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

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

U. S. GOVERNMENT PRINTING OFFICE 205676

NEWPORT MINER PRINT

BLUE BIRD

Property

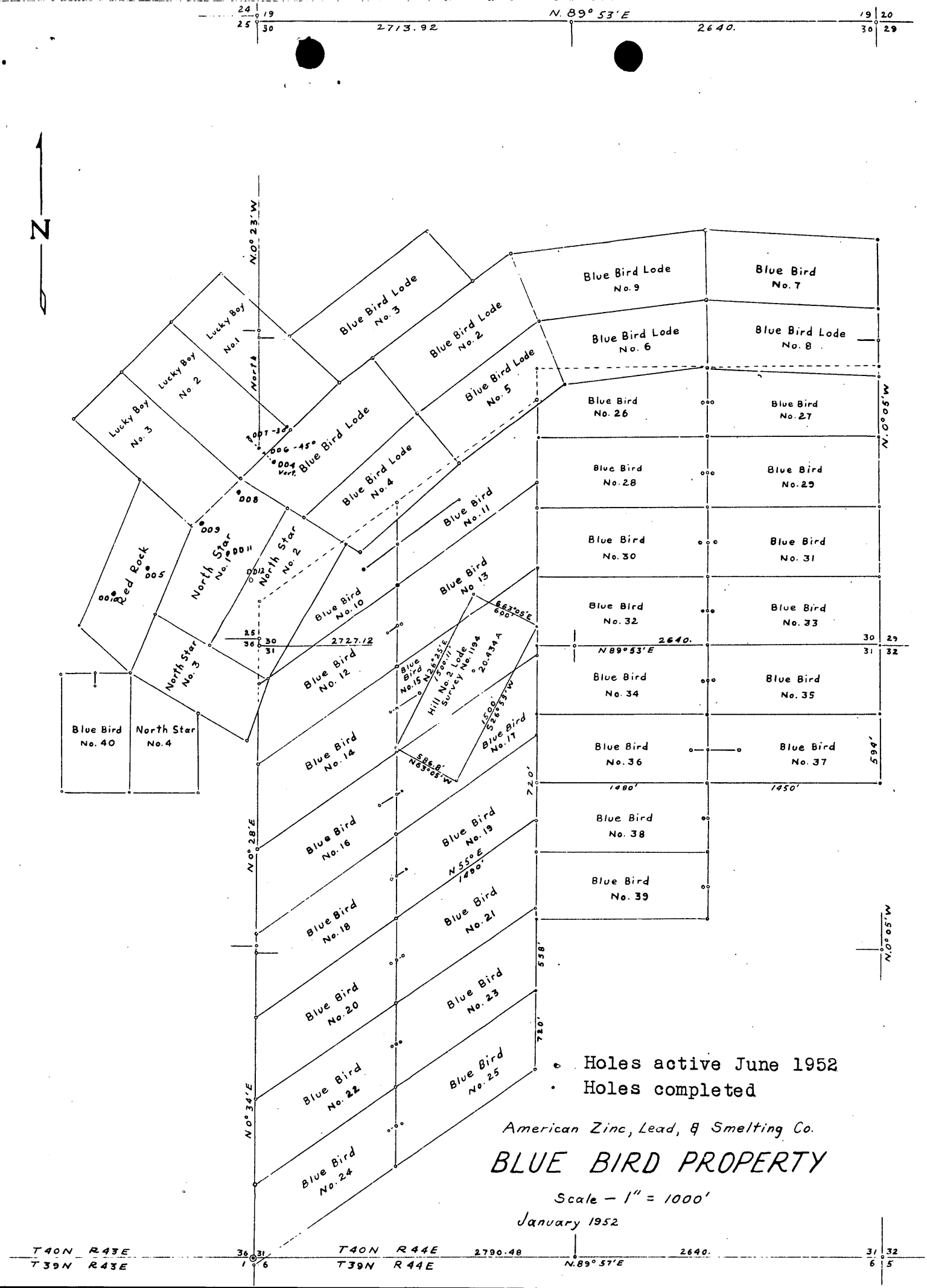
DIAMOND DRILLING

Month of June, 1952

D. D. No.	Drill No.	Direction Hor.	Direction Vert.	Place	Start	Finish	Cur. Mon.	Prev. Mon.	Ledge	Ftge. Tde	Final Depth	Assays From	Assays To	Pb.	Zn.	Zno.
BB 5	78736	Vert	Down	Surface	5/14	6/14	203	154	11		357					
BB 7	8	N400W	- 30o	Surface	5/29	6/3	38	63	11		101					
BB 8	8	Vert	Down	Surface	6/3	6/10	190	0	18		190					
BB 9	8	Vert	Down	Surface	6/10	6/26	364	0	9		364	283	289	Tr.	Tr.	Tr.
												321	321'3	0.10	Tr.	Tr.
BB 10	76736	Vert	Down	Surface	6/16		488	0	5	488						
BB 11	18	Vert	Down	Surface	6/24		228	0	30	228						
BB 12	Churn	Vert	Down	Surface	6/26		110	0		110						

TOTAL FOOTAGE DRILLED

		Current Month	Previous Month	Year to Date
Underground				
Surface		1621	617	2238
Totals				


N
N.89° 53'E
2713.92
2640.
N.0° 23'W
Lucky Boy No.1
Lucky Boy No. 2
Lucky Boy No. 3
North
Blue Bird Lode No. 3
Blue Bird Lode No. 2
Blue Bird Lode No. 5
Blue Bird Lode No. 4
Blue Bird Lode No. 9
Blue Bird No. 7
Blue Bird Lode No. 6
Blue Bird Lode No. 8
Blue Bird No. 26
Blue Bird No. 27
Blue Bird No. 28
Blue Bird No. 29
Blue Bird No. 30
Blue Bird No. 31
Blue Bird No. 32
Blue Bird No. 33
Blue Bird No. 34
Blue Bird No. 35
Blue Bird No. 36
Blue Bird No. 37
Blue Bird No. 38
Blue Bird No. 39
N.0° 05'W
Red Rock
North Star No. 1
North Star No. 2
North Star No. 3
North Star No. 4
Blue Bird No. 40
Blue Bird No. 11
Blue Bird No. 13
Blue Bird No. 10
Blue Bird No. 12
Blue Bird No. 14
Blue Bird No. 15
Blue Bird No. 16
Blue Bird No. 18
Blue Bird No. 20
Blue Bird No. 22
Blue Bird No. 24
Blue Bird No. 17
Blue Bird No. 19
Blue Bird No. 21
Blue Bird No. 23
Blue Bird No. 25
Hill No. 2 Lode Survey No. 1194
20.434 A
2727.12
N 89° 53'E
N 0° 28'E
N 0° 34'E
N 55° E
1490'
1480'
1450'
720'
558'
594'
• Holes active June 1952
· Holes completed
American Zinc, Lead, & Smelting Co.
BLUE BIRD PROPERTY
Scale — 1" = 1000'
January 1952
T40N R43E
T39N R43E
T40N R44E
T39N R44E
2790.48
2640.
N.89° 57'E

Metaline Falls, Washington
July 3, 1952.

To: Mr. B. I. Hayes

From: Mr. H. F. Mills

Subject: Blue Bird Property Progress Report for June, 1952.

Exploration Project Contract
Docket No. DMSA-2388
IDM E-301
Commodity Zinc

Dear Mr. Hayes:

Drilling progress on the Blue Bird Project for the month of June, 1952 is indicated by the following figures: 1,621 feet were drilled by a total of 239 manshifts. Of these total shifts 225 were on the Bevlick Diamond Drilling Contract and 14 were on the churn drill sub-contract. Two diamond drills were active throughout the month and the churn drill was put into operation in the latter part of the month. The 1,621 feet of drilling in June compares with 617 feet in May, when the project was initiated.

The accompanying 1000 scale map indicates the location of the holes and the sequence in which they were drilled. The line of holes composed of Nos. 4, 6, 8, 9,5 and 10 which runs S. 50 degrees W. follows closely the shale-lime contact, with the holes collaring in shale. In the normal stratigraphy of the Metaline District the ore horizon, which is composed of siliceous dolomite and chert, lies immediately beneath the shale. In preliminary planning for the Blue Bird Project it was assumed that the above mentioned row of holes would intersect this horizon. In the drilling to-date, however, the siliceous ore horizon has been negligible or missing.

It appears that there is a contact fault between the shale and lime which has cut out all or most of the ore horizon. In view of this, the original drilling plan has been modified somewhat. Several holes on the original line have been eliminated and a line of holes at right angles to the east has been started in an effort to get away from the area of faulting. Holes No. 11 and 12 are the start of this line.

No zinc or lead mineralization has been encountered in the drilling to date except for occasional specks. Several of the holes have cut rather intense FeS mineralization. A three inch section of this FeS in Hole No. 9 carried 0.10% lead, but a six foot section of similar mineralization in the same hole failed to carry either lead or zinc.

Very truly yours,

H. F. Mills

J. H. Judson for H. F. Mills

Mr. H. L. Young - St. Louis, Missouri

Mr. D. I. Hayes - Spokane

Mr. H. F. Mills
Mr. W. J. Matthews, Jr.
U. S. Bureau of Mines - Spokane

July 1[illegible], 195[illegible]

Exploration Project Contract
Docket No. IMKA - [illegible] -
IDM - I - 301 - Commodity Inc
Blue Bird Group of Claims
Progress Report
Month of June, 195[illegible].

Dear Mr. Young:

Enclosed herewith is a copy of Mr. H. F. Mills' report for the month of June, 195[illegible] on drilling in progress on the Blue Bird property.

Diamond drill holes BB 4 and BB 6 were completed during May on this project. Diamond drill holes BB 5 - BB 7 - BB 8 and BB 9 were completed during June. Drill Holes BB 10 and BB 11 and BB 12 were in progress at the end of the month.

No mineralization other than iron pyrite was encountered during June. The results to date have been quite disappointing.

Very truly yours,

D. I. Hayes

dih:mlc

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

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

SD

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

Month of May, 1952 Docket No. DMEA 2388 Contract No. E-301
Operator's Name American Zinc, Lead & Smelting Company Minerals Lead-Zinc
Address 927 Old National Bank Building, Spokane, Wash.
Contract Amount, $ 116,500.00 Government Participation: 50 % Amount, $ 58,250.00

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	2912.67		2912.67			
Bulldozing	260.00		260.00			
Crosscutting						
Drifting						
(2) Labor and Supervision:						
Labor						
Supervision	239.72		239.72			
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	3172.67		2172.67	3412.39		3412.39

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

Date 6/19/52 *Payee American Zinc, Lead & Smelting Co.

Per P. L. Coome Title Cashier

*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:

$ 1706.19

Signature (Authorized Certifying Officer)

Date 7/1/52 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. E301 in accordance with the terms of the contract.

Signature Elmer A. Magill Title Mgr. Engr. Date 6/20/52

APPROVAL BY DMEA EXECUTIVE OFFICER OR ALTERNATE:

Signature Glenn O. Reed Title Mng. Engr. Date 6/20

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 May 195 2 Docket No. DMEA 2388 Contract No. E-301

Operator's Name American Zinc, Lead & Smelting Co. Minerals Lead-Zinc

Address 927 Old National Bank Bldg., Spokane, Wash.

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	feet	3172.67	617	3172.67	617	5.142	18,000	6.472
Drilling: Core								
Churn								
Auger								
Stripping								
Trenching								
Test Pits								
Roads and Trails								
TOTAL DISTRIBUTED COSTS		3172.67		3172.67				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 6/19/52 Operator American Zinc, Lead & Smelting Co.

Per B. L. Coomes Title Cashier

REMARKS:

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

(Instructions on reverse)

(For Government use only)

INSTRUCTIONS

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

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

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

U. S. GOVERNMENT PRINTING OFFICE 205676

Washington, D. C.

TO: Mr. H. I. Young - St. Louis

Date: June 12, 1952

FROM: Mr. D. I. Hayes - Spokane

Subject: Exploration Project Contract Docket No. DMEA-2388-IDM-E-301 - Commodity Zinc - Blue Bird Group of Claims Progress Report month of May, 1952

Copies for:

Mr. H. F. Mills
Mr. W. J. Matthews, Jr.
U. S. Bureau of Mines - Spokane

Dear Mr. Young:

Enclosed herewith copy of Mr. H. F. Mills' report for the month of May, 1952, on drilling in progress on the Blue Bird property.

This is the initial report on exploration, Blue Bird property, which is Docket No. DMEA-2388-IDM E-301 - Commodity Zinc.

We are enclosing herewith copy of our report for the month of May, 1952 to the Government on this project.

Very truly yours,

D. I. Hayes

dih;mlc

c o p y

BRIL BIRD
Property

MONTH OF May, 1950

DIAMOND DRILLING

D.D. No.	Drill No.	Direction Hor.	Direction Vert.	Place	Start	Finish	Cur. Mon.	Prev. Mon.	Ledge	Ftge Tde	Final Depth	Assays From	Assays To	Pb	Zn	Zno
BB 4			- 45c	Surf.	5/5	5/15	179	0	10	179	179					
BB 5		Vert	Down	Surf.	5/14		154	0	11	154						
BB 6		Vert	Down	Surf.	5/25	5/[illegible]	221	0	21	221	221					
BB 7			- 20	Surf.	5/29		63	0	11	63						

TOTAL FOOTAGE DRILLED

		Current Month	Previous Month	Year to Date
Underground				
Surface		617	0	617
Totals				

To: Mr. D. I. Hayes

Date: Metaline Falls, Wash.
June 4, 1952

From: Mr. H. F. Mills

Subject: Blue Bird Property
Progress Report for May, 1952
DMEA 2388
Location: Slate Creek

Dear Mr. Hayes:

Two drills are active each manned double shift. The first drill commenced making hole on May 5th and the second on May 14th. 155 manshifts were worked in connection with the drilling contact.

Three holes were drilled on the property several years ago and the numbers of the current series was started with BB No. 4. Holes BB No. 4 and BB No. 6 were completed during May and BB No. 7 on June 3rd (100 feet of depth). BB No. 5 is drilling in shale at 154 feet of depth. Further details of location and of drilling are shown by the accompanying tabulation and map. BB No. 8 is moving on location "C" shown on the map.

No ZnS or PbS have been encountered in the drilling to date. Several feet of intensive FeS mineralization was encountered in BB No. 6 but assays showed absence of ZnS or PbS.

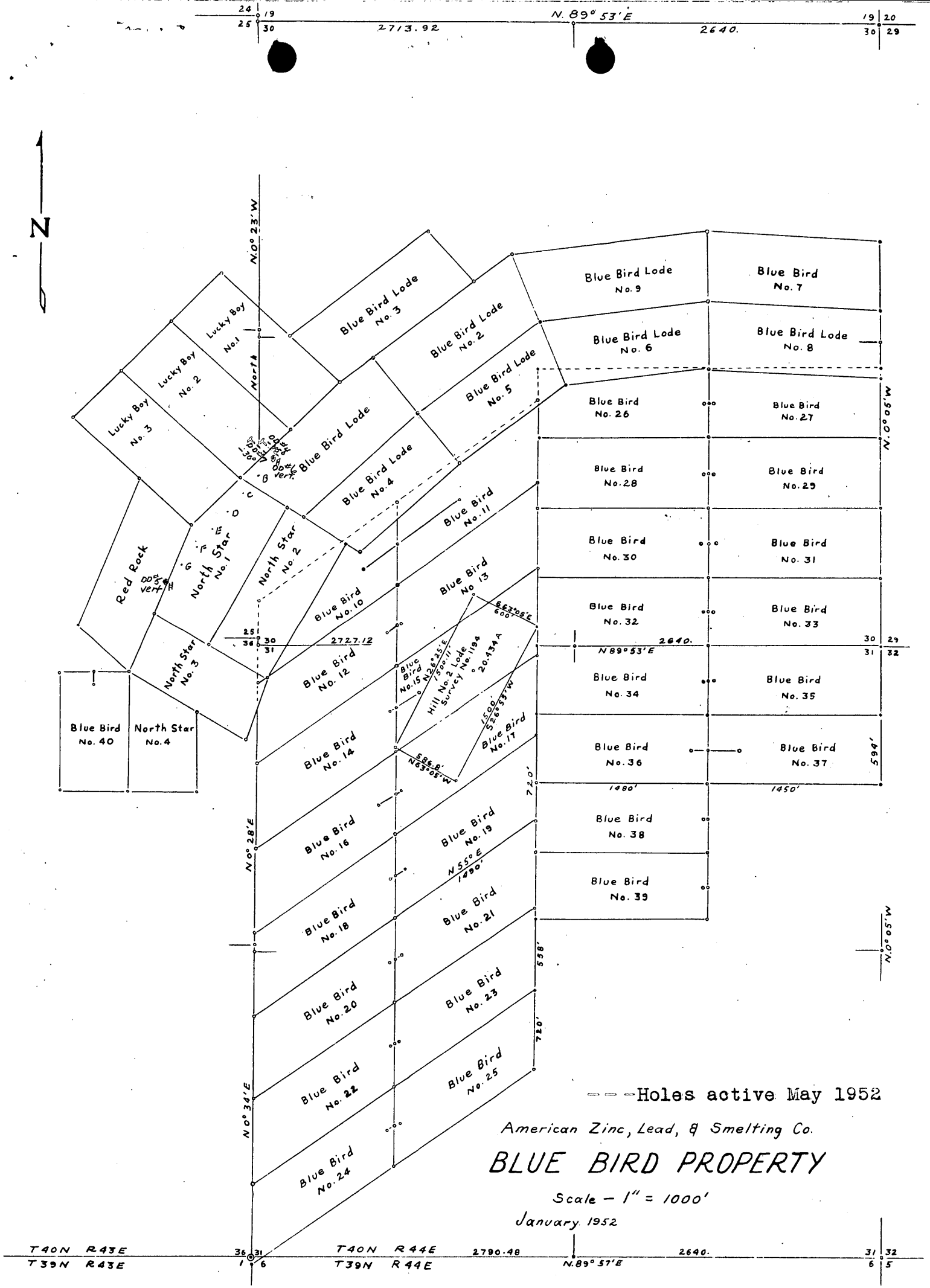
On June 3rd an additional claim, Blue Bird No. 41, was located along the north side of Blue Bird No. 7 claim. This was done to make sure that we would have control of the ground where the shale-lime contact outcrops and to get possibly more favorable drilling sites from a cost standpoint. The center line of the new claim follows close to Uncas Creek which is probably over the outcrop of the shale-lime contact (which contact is covered for some distance in all directions by overburden) and which would represent the locii of least depth of overburden.

Should it prove out that we want to drill on this claim we would, of course, have to make arrangements with the administration of the DMEA.

Yours very truly,

s/ H. F. Mills

c o p y


N. 89° 53' E
2713.92
2640.
N
N. 0° 23' W
Lucky Boy No. 1
Lucky Boy No. 2
Lucky Boy No. 3
Blue Bird Lode No. 3
Blue Bird Lode No. 2
Blue Bird Lode No. 5
Blue Bird Lode No. 4
Blue Bird Lode No. 9
Blue Bird No. 7
Blue Bird Lode No. 6
Blue Bird Lode No. 8
Red Rock
North Star No. 1
North Star No. 2
North Star No. 3
North Star No. 4
Blue Bird No. 40
Blue Bird No. 11
Blue Bird No. 13
Blue Bird No. 10
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Blue Bird No. 22
Blue Bird No. 24
Blue Bird No. 19
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20.434 A
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Blue Bird No. 34
Blue Bird No. 35
Blue Bird No. 36
Blue Bird No. 37
Blue Bird No. 38
Blue Bird No. 39
1480'
1450'
594'
720'
558'
N. 0° 05' W
N 0° 28' E
N 0° 34' E
T40N R43E
T39N R43E
T40N R44E
T39N R44E
2790.48
N. 89° 57' E
Holes active May 1952
American Zinc, Lead, & Smelting Co.
BLUE BIRD PROPERTY
Scale — 1" = 1000'
January 1952

M. E. Volin, Member, DMEA Field Team, Reg. II May 14, 1952

E. A. Magill, mining engineer, Bureau of Mines

Progress examination, American Zinc, Lead & Smelting Co. (Bluebird Group), Pend Oreille County, Wash. Docket No. DMEA 2388 (zinc-lead) Contract Idm-E301.

A progress examination was made of the subject property on May 12, 1952. This is the first progress examination to be made of the property.

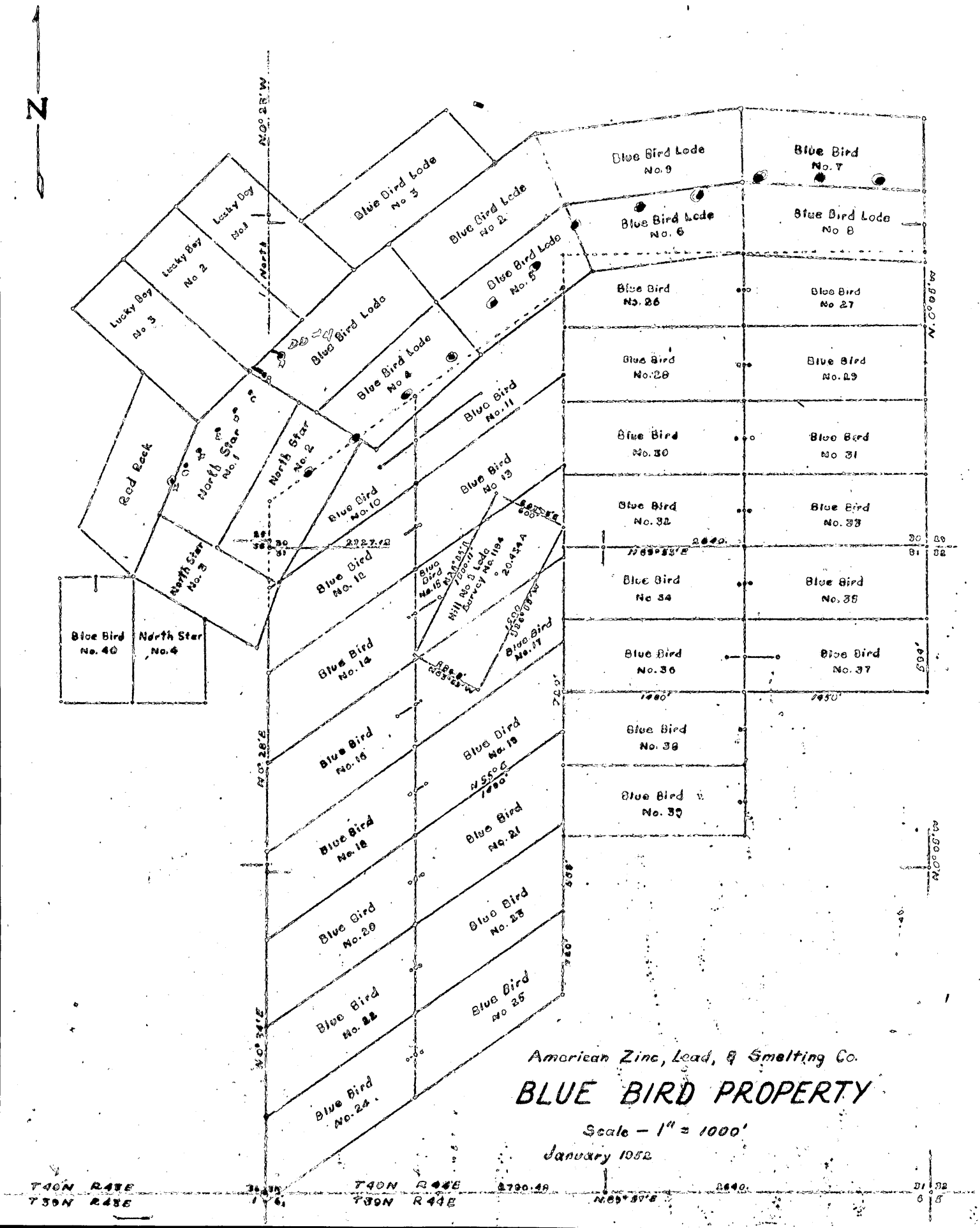
At the time of the visit there was one diamond drill in operation on the property. This drill was working on a contract let to Havlick Diamond Drilling Co. of Spokane, Wash. It was set up on Hole BB4 (see attached map). This hole (AX core) was at a depth of 23 feet in Ledbetter slate, the first 19 feet of the hole being in overburden. It was being drilled at an angle of -45°, direction about S. 25 W. Supposedly the slates will not be over 25 feet thick at this point. The operator intends to also drill a vertical hole from the same location.

Within the next few days the operator expects to commence drilling on the hole marked "N" on attached map. The intention is to drill a -45° and vertical hole from this setup also.

They plan to work the drills toward each other on a line, the holes being drilled at 200-foot intervals. The operator expects the majority of these holes to be 300 feet or less in depth. After completion of this series of 8 holes they intend to drill a series of vertical holes along the line of Slate Creek (see attached map).

E. A. Magill

Orig. to files
cc: USGS, Spokane
2 cys--Wash.
EAM



American Zinc, Lead, & Smelting Co.

BLUE BIRD PROPERTY

Scale – 1" = 1000'

January 1952

OFFICE OF THE ADMINISTRATOR

UNITED STATES
DEPARTMENT OF THE INTERIOR

DEFENSE MINERALS ADMINISTRATION

WASHINGTON 25, D. C.

So. 157 Howard Street
Spokane 4, Washington

2388

April 30, 1952

Chairman, Operating Committee
Defense Minerals Exploration Administration
Department of the Interior
Washington 25, D. C.

Dear Sir:

Enclosed are the original and three copies of Exploration Project Contract Idm-E301, the Blue Bird property, held by the American Zinc, Lead and Smelting Company, Spokane, Washington. One copy of the contract has been retained by the operator and one copy is being held for our files.

Sincerely yours,

Thor H. Kiilsgaard

Thor H. Kiilsgaard
For: A. E. Weissenborn
Executive Officer, DMEA
Field Team, Region II

Enclosures.

cc: USBM

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
MAY 5 1952

500

FILE COPY
SURNAME:

Moulds

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

APR 21 1952

Mr. A. E. Weissenborn
Executive Officer, Region II
DMEA Field Team
South 157 Howard Street
Spokane 8, Washington

Re: Contract No. DMEA 2388
American Zinc, Lead &
Smelting Company, Lead-Zinc
Pend Oreille, Washington

Dear Mr. Weissenborn:

We are transmitting, herewith, the original and five copies of a contract with attached Exhibit "A", Owner's Consent to Lien, and three maps. This contract has been signed for the Government and requires signature for the American Zinc, Lead and Smelting Company.

The information and costs presented in the recommendation of your office have been incorporated in Exhibit "A" in conformance to the new contract form. The applicant has advised, by letter, that the Hill Lode No. 2, Survey 1194, owned by Pend Oreille County, will be purchased when offered for tax sale. It is, therefore, incorporated in the property rights of the applicant.

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 modifications.

Sincerely yours,

(signed) FRANK E. JOHNSON

Chairman, Operating Committee (JB) E
Defense Minerals Exploration
Administration

Enclosures - 6
APPROVED:

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

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

DEMoulds/hmj 4-17-52
CC to: Adm. Reading File
Docket File Copy
Operating Committee
Region II (1)
Mr. McKnight
Mr. Bishop
Mr. Moulds

J.N. 4-21-52

American Zinc, Lead and Smelting Company

927 Old National Bank Building
Spokane, Washington

3/1

March 21, 1952.

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
APR 1 - 1952

United States
Department of the Interior
Defense Minerals Administration
Washington, 25, D. C.

Re: Docket DMEA 2388

Dear Sirs:

This will acknowledge your letter of March 10th relative to Blue Bird property drilling program.

The one claim you refer to which is located within the American Zinc group and titled "Hill No. 2 Lode, Survey # 1194" belongs to Pend Oreille County by reason of defaulted tax payments. This claim will come up for re-sale by the County about May 15, 1952 and American Zinc, Lead and Smelting Company has all ready made an initial minimum bid required by the County for this claim. A representative of American Zinc, Lead and Smelting Company will attend the sale for the purpose of further bidding. We have no reason to believe that any other party will bid against us.

Further regarding this claim, if you will superimpose Print No. 3 of the Blue Bird property over Print No. 2 which were enclosed with the application form MF-103, you will note that none of the proposed drill holes are on this claim. Actually, the closest drilling to this claim will be approximately 1,000 feet. You will also note that the initial drilling is all on the Blue Bird group under lease and option from William Dumont, George Dumont and Howard L. Kimmel and Wife.

You also ask for further information for the basis of increased costs in drilling and supervision. If you will refer to the original exploration program on the American Zinc land adjacent to the Grandview property, you will note that we under-estimated the cost of drilling and was granted permission to revise the contract with the diamond drill contractor.

The contract for the diamond drilling on the Blue Bird property is at a higher rate per foot than on the American zinc land, due to the fact that the property is located in a rather inaccessible part of the county and the contractor will have a greater expense in securing an adequate water supply. Also, whereas the shale is approximately 600 feet thick on the American Zinc land now being explored, it is only about 100 feet thick on the Blue Bird property and will necessitate much more drilling in limestone, at a higher cost per foot.

As to the supervision cost:

The increase is necessitated because of the further distance from the developed center of operations and will take more technical supervision. The American Zinc exploration drilling is located not more than one mile from our main office buildings in Metaline Falls, whereas the Blue Bird drilling will be about six miles away.

We trust the above information will enable you to complete processing the above application.

Very truly yours,

R. A. Young
Vice-President

500

FILE COPY
Surname:

Moulds

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

MAR 1 0 1952

Mr. R. A. Young, Vice President
American Zinc, Lead and Smelting Company
927 Old National Bank Building
Spokane, Washington

Re: Docket DMEA 2388

Dear Mr. Young:

A review of your application for exploration assistance on a drilling program on the Blue Bird property indicates that one claim located within the American Zinc group, Hill No. 2 Lode, Survey No. 1194, is owned by Pend Oreille County. As the patented claim has evident precedent over the located claims and also is not covered by subordination, we will appreciate your advising as to the status of this claim in relation to your project.

It is also noted that the estimated cost of drilling has advanced 30¢ and supervision 15¢ per foot. The over-all cost per foot is thus 47¢ higher than estimated for the Grandview project. We will appreciate further information concerning the basis for the increased cost.

Sincerely yours,

D. E. Moulds mch

D. E. Moulds, Chief
Base Metals Division
Defense Minerals Exploration
Administration

P.N. 3-10-52

DEMoulds/hmj
3-7-52
cc to: Adm. Reading File
Region II
Mr. Bishop
Mr. McKnight
Mr. Moulds

Defense Minerals Exploration Administration

Review of Application for Exploration Assistance

Docket No. DMEA-2388

Commodity Zinc, lead

To: Mr. C. O. Mittendorf

Total Amount $116,500

Govt. Participation $58,250

1. Name and Address of Applicant American Zinc, Lead & Smelting Company 927 Old National Bank Building, Spokane, Washington

2. Location of Property Blue Bird-Dumont property and Blue Bird American Zinc Property, Sec. 36, T. 40 N., R. 43 E., and Sec. 30, Sec. 31, T. 40 N., R. 44 E., W. M. Pend Oreille County, Washington

3. Mineral or metal Zinc and lead Is it listed in Section 9 of MO-5? Yes

If not, application will be rejected.

4. Geologic probability of discovery—based on data in application (question #16, 17, 18, 20 and 22)*

Mines or Survey reports, etc., do you rate chances:

a) Good See attached draft

b) Poor

c) None

d) Don't know—needs field examination

e) Is there an alternative and favorable project? No
(If so, attach an explanation)

5. Is the applicant's right to the property clearly stated? Yes
(question 5, 6, 7)*

6. If applicant is a lessee, is a copy of the lease attached? Yes

Does the lease have sufficient time to run to cover a future productive period? Yes

*question numbers are those of MF-103

3-4-52

4. (a) In the Metaline area replacement deposits are the most productive type and the principal ones are found in the Metaline limestone. These deposits, which are irregular in size and shape, usually occur in breccia zones whose fragments have been cemented together and replaced by jasperoid and ore minerals.

Study of the district[1] has revealed that deposition and localization of these replacement deposits evidently was controlled by major faults and by the Ledbetter slate. The ore deposits for the most part, occur within one mile of a major fault, such as the Flume Creek, Russian Creek or Slate Creek fault, where they are associated with minor breaks and breccia zones. In addition the principal replacement deposits are found in the Metaline limestone within 500 ft. of its contact with the overlying Ledbetter slate. It is believed that the slate acted as a dam to the rising solutions with resulting deposition of the ores in the Metaline limestone.

The above geologic conditions are present in the area to be explored. The block is within one mile of the Slate Creek fault, a split-off of which bounds the block on its southeast side. A second minor fault limits the block on its northwest side. Mapping has shown that the surface rock is Ledbetter slate which is underlain by the Metaline limestone. Furthermore, the tract to be explored is in the area of the Slate Creek fault zone, which trends northeast-southwest and along which or associated with which are the Bunker Hill (Lead Hill), Lucky Strike, Pend Oreille and other mines. A similar exploration project about five miles to the southwest in the area of the Slate Creek fault has been successful.

The field team recommends that the project be approved and the present reviewer concurs with this recommendation.

1/ Park, C. F., and Cannon, R. S. Geology and ore deposits of the Metaline quadrangle, Washington: U. S. Geological Survey Prof. Paper 202, 1943.

7. Are subordination agreements necessary? Yes, an ownerships lien

a) MF-201? _____

b) MF-202 _____

8. From the data presented, does the proposed project appear feasible from the point of view of:

a) Available manpower Yes

b) Equipment and supplies Yes
(question 14 plus general knowledge of availability)*

c) Accessibility (question 12)* Yes

d) Water (question 13)* Yes

e) Power (question 13)* Yes

Is a field check needed on any of these points? No

9. Does the experience of the applicant appear to be adequate to assure that he can properly conduct the proposed project? (question 4)* Yes

_____

Is a field check needed on this point? No

10. Exhibit A. (questions 21 and 22)*

a) Is the project adequately described? Yes

If not, are there sufficient data given so that you can describe the project? Yes If so, attach a draft.

b) Is there an adequate map or sketch of the proposed work? Yes

_____

c) Is the proposed work "exploration" under the definition of Section 8, MO-5? Yes

If not, what part of it is? _____

_____

_____

_____

10. (a) Drill about 18 holes in and near the contact between the Ledbetter Slate and Metaline Limestone, near the southern border of the Blue Bird-Dumont property.

10. (d) The exploration plan applied for does not contemplate additional facilities, buildings or fixtures to be purchased or installed. Bulldozer for access roads - rental = $8.00 to $12.00 per hour. Diamond drill, or drills - $3.00 per 8 hr. shift.

Day shift diamond drillers, (4 needed).....	$1.895	per hr.
Night " " " (4 needed).....	1.955	" "
Day " " drill helpers (4 needed).....	1.655	" "
Night " " " " (4 needed).....	1.715	" "
Diamond drill supervisors.....	2.000	" "

American Zinc Co. Engineer, 1/2 time at $500 per month

Total estimated cost of project

Stage I -

Cost of clearing and bulldozer rental.....	$ 1,500
Pipe, casing, materials & supplies, assaying core boxes and other miscellaneous items...	9,000
Supervision, engineer at $250/mo for 9 mos...	2,750
9000 ft. of diamond drilling at $5/ft.....	45,000
Total for Stage I.....	$58,250

Stage II $58,250

Total Cost.....$ 116,500

Is this part a worth-while exploration project?_____

d) Are the cost estimates detailed? Sufficiently for the job

Can they be summarized, as on page 2 of Procedural Instruction 5-A, from the available data? Yes If so, attach a draft. (attached)

e) Are the cost estimates reasonable? Yes

f) Should more information be requested from applicant? No

g) Is a field examination necessary to complete Exhibit A? No

11. Exhibit B (question 23-d)*

a) Is it applicable? No

b) If so, are sufficient data furnished?_____ If so, attach a draft.

c) Is a field check needed? No

12. Exhibit C (question 23-e, f and g)*

a) Is it applicable? Yes

b) Sufficient data? Yes If so, attach a draft.

c) Are rents and charges reasonable? Yes

d) Is a field check needed? No

13. Exhibit D (question 23-a, b)*

a) Are there sufficient data? Yes

b) Is the schedule adequate for the work proposed? Yes

c) Is the schedule excessive for the work proposed? No

d) Are the proposed wages and salaries reasonable? Yes

e) Is a field check needed? No

14. Exhibit E (question 23-c)*

a) Is it applicable? No

b) Sufficient data?

c) Reasonable?

d) Field check needed? No

15. In your judgment, can the proposed work be done in the proposed time? Don't know, field team should check

(All exploration must be completed within two years)

16. If field examination is not needed, attach your recommendation.

17. If field examination is needed, do you have any special instructions for the field team not indicated by your answers to the foregoing question? Field team has forwarded the owners' lien and a proposed contract, and recommends the project as presented by the applicant. The field team has already made its examination of the property.

H. E. Olund

Reviewed by: H. E. Olund, BM

O. M. Bishop

O. M. Bishop BS 3-3-52

E. J. Lyons

E. J. Lyons, GS 3-4-52

Date 3-4-52

EXPLORATION

Mr. R. A. Young, Vice President
American Zinc, Lead and Smelting Co.
927 Old Nationalbank Building
Spokane, Washington

Subject: DMEA-2388
Re: Exploration Loan
Blue Bird-Dumont and Blue Bird-American Zinc Properties
February 25, 1952

My dear Mr. Young:

This will acknowledge receipt of your application dated February 5, 1952 for a loan under the Defense Production Act of 1950.

Your application was assigned Docket Number DMEA-2388 and referred to the Base Metals Division.

Kindly refer to DMEA-2388 in any future correspondence relating to your application.

Sincerely yours,

H. E. ADAMS

Robert E. Adams
Acting Administrative Officer

2/26
Mr. Edward Trowbridge
Copy of Contract

7862

DMEA-3388

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

So. 157 Howard Street
Spokane 4, Washington

February 14, 1952

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
FEB 21 1952

Memorandum

To: Chairman, Operating Committee
Defense Minerals Exploration Administration

From: Field Team, Region II

Subject: Application for exploration loan by American Zinc, Lead and Smelting Company, 927 Old National Bank Building, Spokane, Washington.

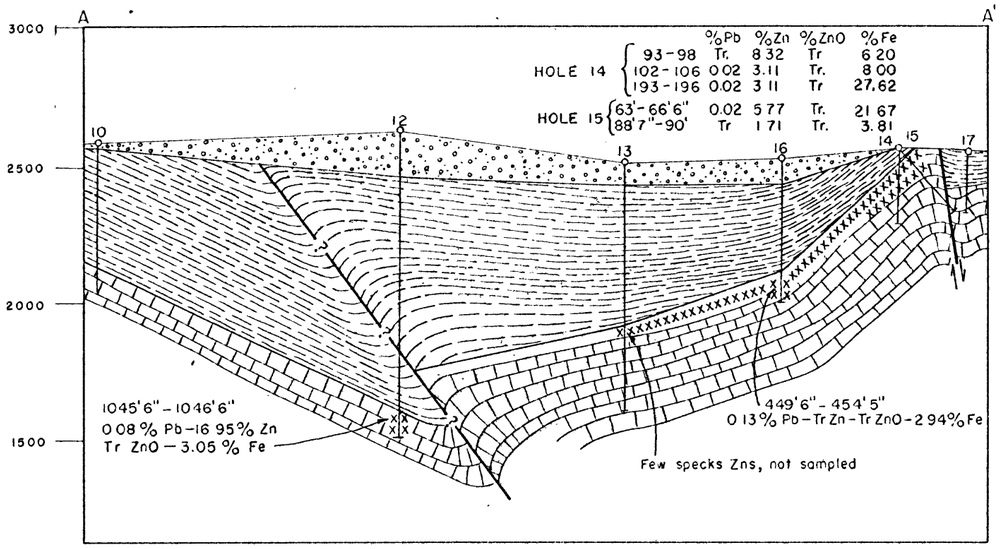
Enclosed are four copies of MF-103 submitted by the American Zinc, Lead Smelting Company, and six copies of a proposed contract. The property to be explored is geologically similar to the property now being explored under Exploration Project Contract Idm-E76. The proposed project might be described, as was the first project, as reconnaissance drilling of an area, which because of its geological environment and its proximity to known ore bodies, may be expected to contain ore bodies similar to the known ore bodies in the Metalline district.

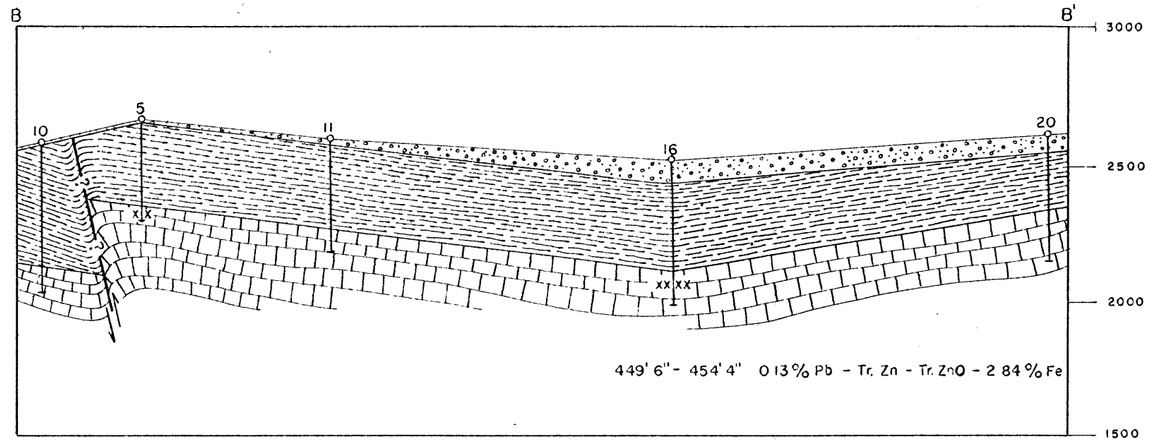
The success of the first project is such as to indicate favorable results from a second project. The Field Team recommends that the proposed exploration be approved.

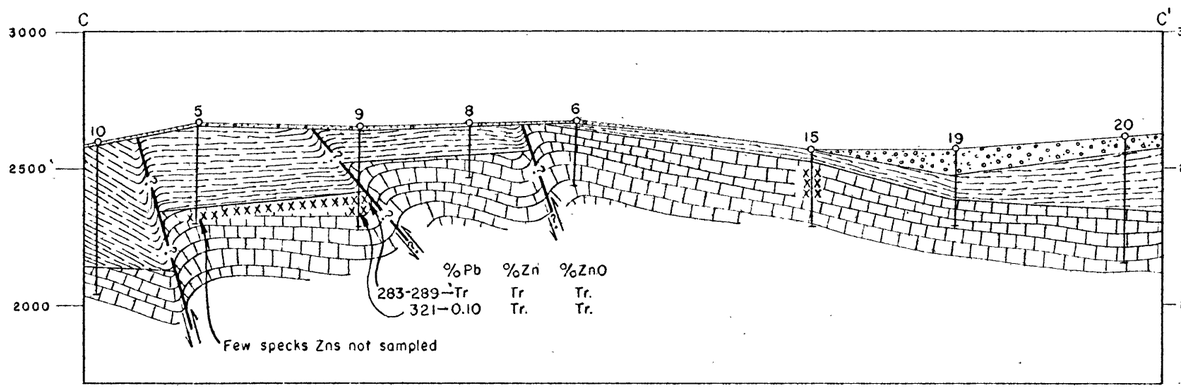
M. E. Volin, Acting Executive Officer
and Member
(U. S. Bureau of Mines)

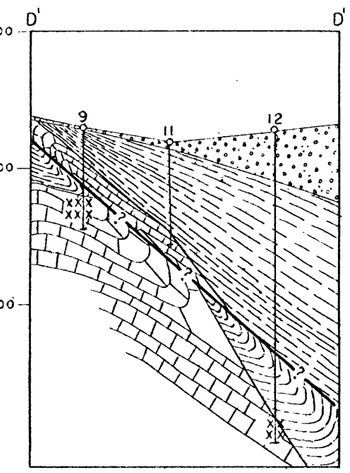
Enclosures
cc: USBM-Spokane

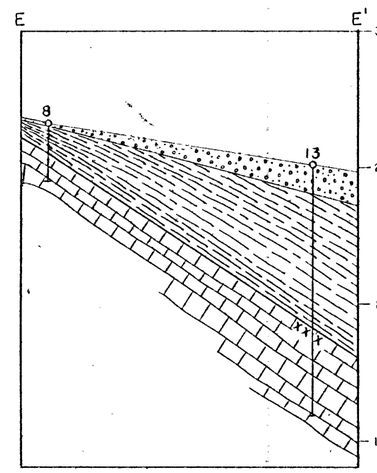
Thor H. Kiilsgaard
For: A. E. Weissenborn, Executive Officer
(U. S. Geological Survey)

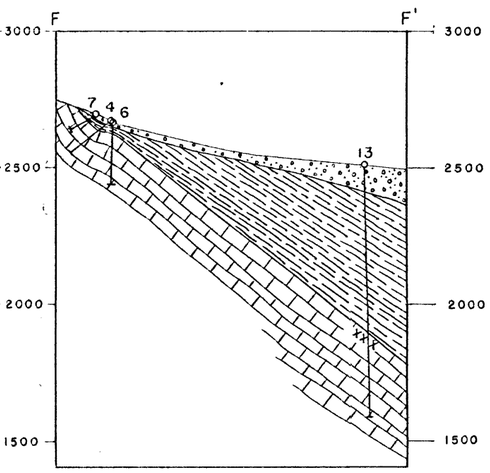












EXPLANATION

OVERBURDEN
Glaciofluvial and lake silts

LEDBETTER SLATE
Ordovician

METALINE LIMESTONE
Middle Cambrian

xxxxxxxx
xxxx
LEAD-ZINC MINERALS

o16-2518
Collar of DMEA D.D.H.
SHOWING ELEVATION

U
D
Fault

55
Strike and dip of cleavage

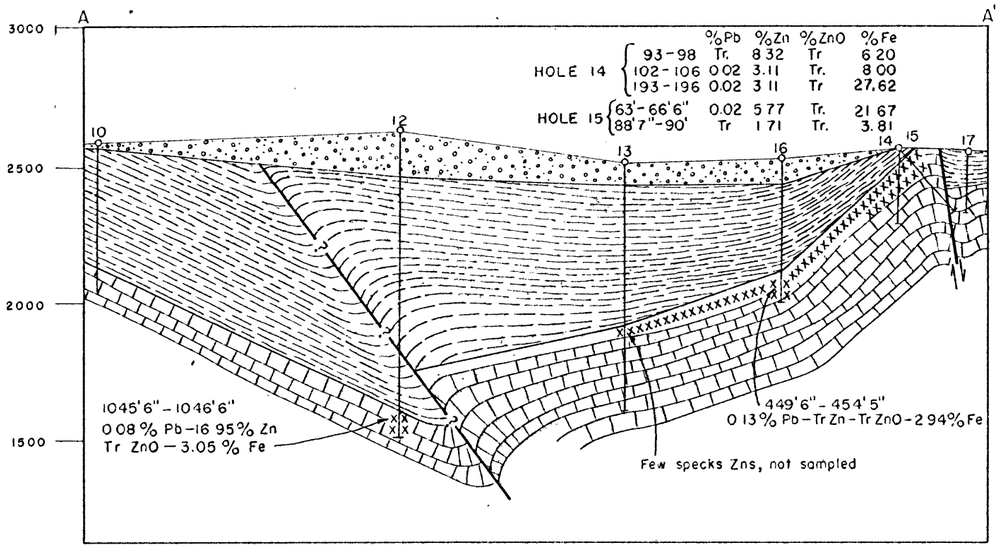
Line of section

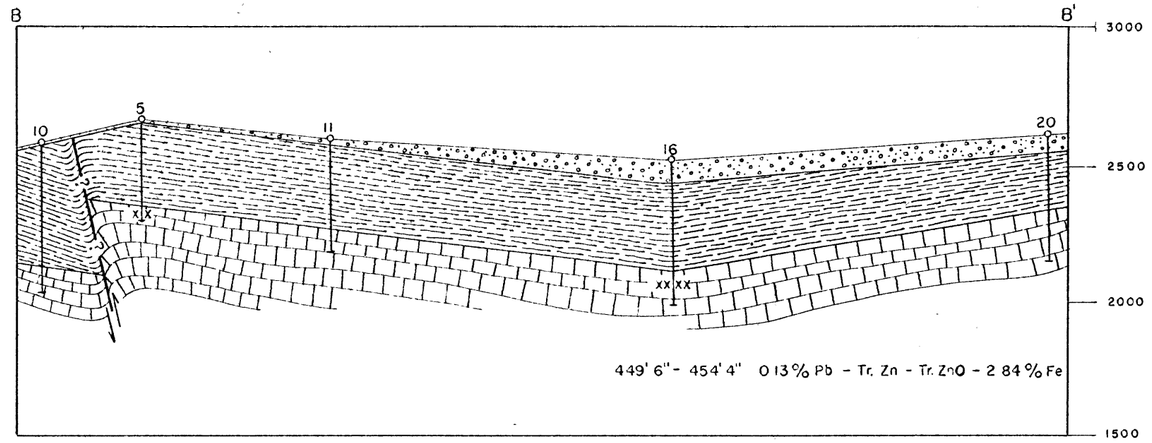
Vertical Sections Through Diamond Drill Holes

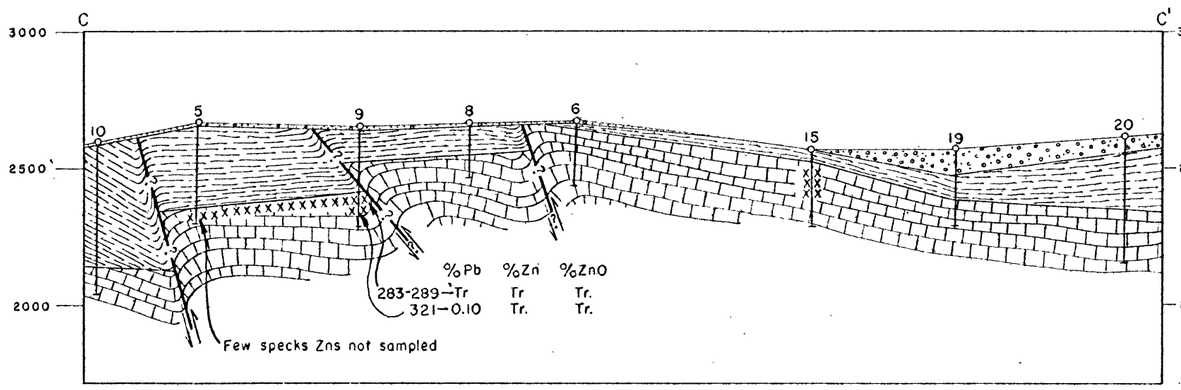
PLAN AND SECTIONS SHOWING RESULTS OF DMEA

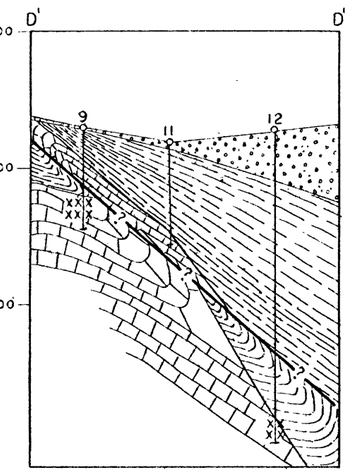
AMERICAN ZINC, LEAD AND SMELTING COMPANY'S BLUE

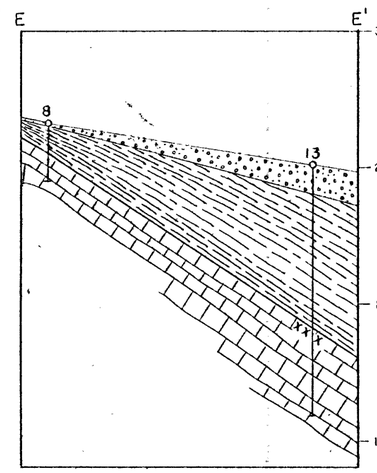
METALINE MINING DISTRICT, PEND OREILLE COUNTY,

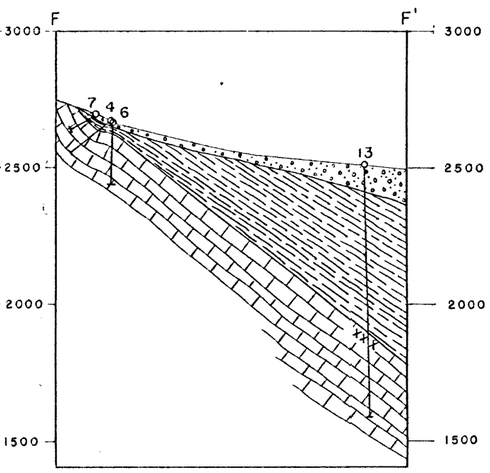












EXPLANATION

OVERBURDEN
Glaciofluvial and lake silts

LEDBETTER SLATE
Ordovician

METALINE LIMESTONE
Middle Cambrian

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LEAD-ZINC MINERALS

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Collar of DMEA D.D.H.
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Strike and dip of cleavage

Line of section

Vertical Sections Through Diamond Drill Holes

PLAN AND SECTIONS SHOWING RESULTS OF DMEA

AMERICAN ZINC, LEAD AND SMELTING COMPANY'S BLUE

METALINE MINING DISTRICT, PEND OREILLE COUNTY,

PRINT No. 1

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

WASHINGTON-IDAHO
METALINE QUADRANGLE

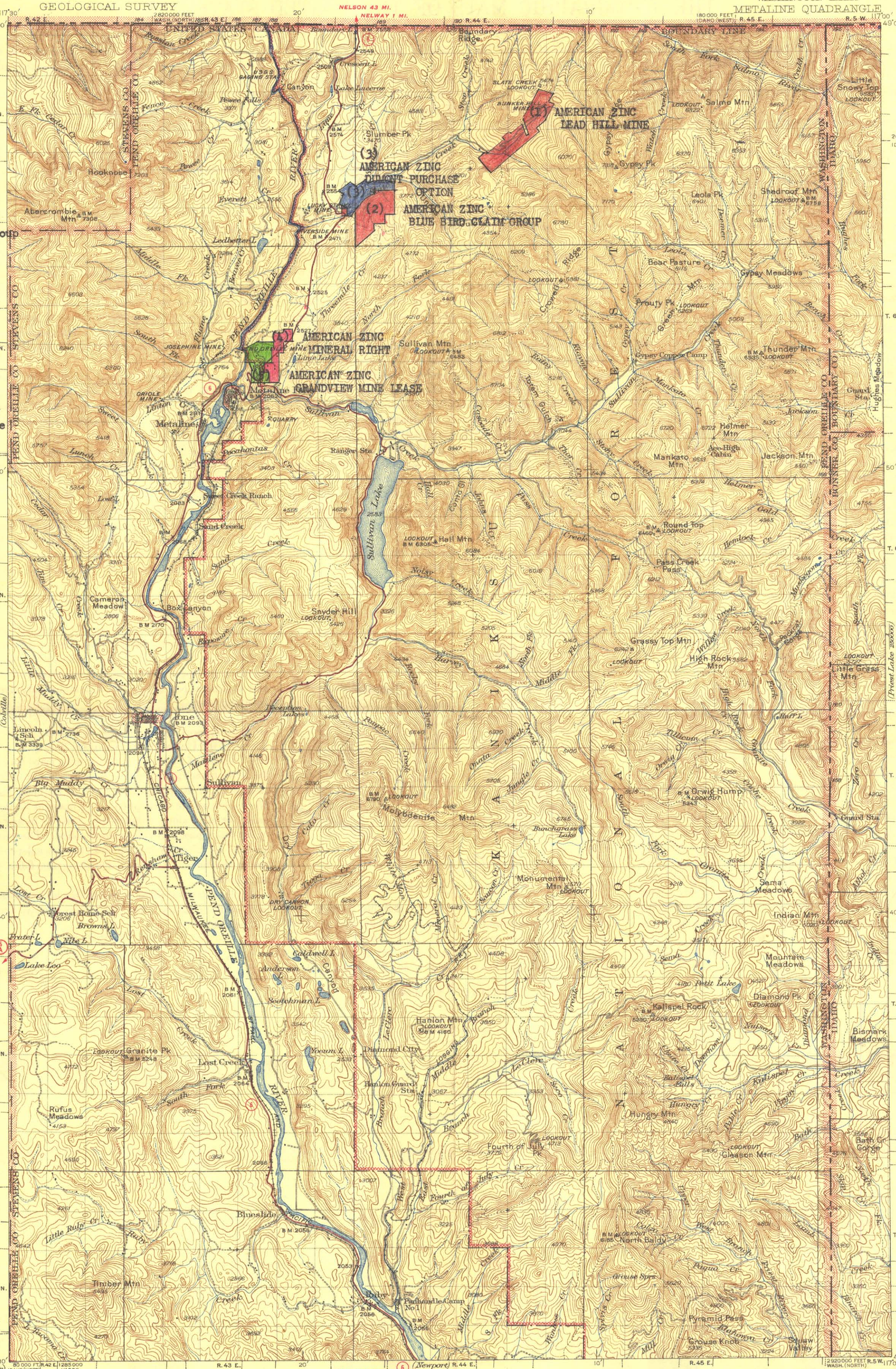
(1) American Zinc - LEAD HILL Mine

(2) American Zinc - BLUE BIRD Claim Group

(3) American Zinc - DUMONT Purchase Option

(4) American Zinc - Mineral Right

(5) American Zinc - GRANDVIEW MINE Lease



Topography by J.P. Harrison, E.S. Rickard, F.H. Purdy, J.A. Swart, and International Boundary Commission Surveyed in 1931-1932 and 1934

APPROXIMATE MEAN DECLINATION, 1934

Scale $\frac{1}{125000}$

Contour interval 100 feet

Datum is mean sea level

Polyconic projection. 1927 North American datum
5000 yard grid based on U.S. zone system, G
20000 foot grids based on Idaho (West) and Washington (North) rectangular coordinate systems

ROUTES USUALLY TRAVELED
HARD IMPERVIOUS SURFACES
OTHER SURFACE IMPROVEMENTS
U. S. ROUTE 1942
STATE ROUTE

To join Colville map use dotted projection corners

METALINE, WASH.-IDAHO

Edition of 1942
N4830-W11700/30

THE TOPOGRAPHIC MAPS OF THE UNITED STATES

The United States Geological Survey is making a series of standard topographic maps to cover the United States. This work has been in progress since 1882, and the published maps cover more than 47 percent of the country, exclusive of outlying possessions.

The maps are published on sheets that measure about 16½ by 20 inches. Under the general plan adopted the country is divided into quadrangles bounded by parallels of latitude and meridians of longitude. These quadrangles are mapped on different scales, the scale selected for each map being that which is best adapted to general use in the development of the country, and consequently, though the standard maps are of nearly uniform size, the areas that they represent are of different sizes. On the lower margin of each map are printed graphic scales showing distances in feet, meters, miles, and kilometers. In addition, the scale of the map is shown by a fraction expressing a fixed ratio between linear measurements on the map and corresponding distances on the ground. For example, the scale $\frac{1}{62,500}$ means that 1 unit on the map (such as 1 inch, 1 foot, or 1 meter) represents 62,500 of the same units on the earth's surface.

Although some areas are surveyed and some maps are compiled and published on special scales for special purposes, the standard topographic surveys and the resulting maps have for many years been of three types, differentiated as follows:

1. Surveys of areas in which there are problems of great public importance—relating, for example, to mineral development, irrigation, or reclamation of swamp areas—are made with sufficient detail to be used in the publication of maps on a scale of $\frac{1}{31,680}$ (1 inch = one-half mile) or $\frac{1}{24,000}$ (1 inch = 2,000 feet), with a contour interval of 1 to 100 feet, according to the relief of the particular area mapped.

2. Surveys of areas in which there are problems of average public importance, such as most of the basin of the Mississippi and its tributaries, are made with sufficient detail to be used in the publication of maps on a scale of $\frac{1}{62,500}$ (1 inch = nearly 1 mile), with a contour interval of 10 to 100 feet.

3. Surveys of areas in which the problems are of minor public importance, such as much of the mountain or desert region of Arizona or New Mexico, and the high mountain area of the northwest, are made with sufficient detail to be used in the publication of maps on a scale of $\frac{1}{125,000}$ (1 inch = nearly 2 miles) or $\frac{1}{250,000}$ (1 inch = nearly 4 miles), with a contour interval of 20 to 250 feet.

The aerial camera is now being used in mapping. From the information recorded on the photographs, planimetric maps, which show only drainage and culture, have been made for some areas in the United States. By the use of stereoscopic plotting apparatus, aerial photographs are utilized also in the making of the regular topographic maps, which show relief as well as drainage and culture.

A topographic survey of Alaska has been in progress since 1898, and nearly 44 percent of its area has now been mapped. About 15 percent of the Territory has been covered by maps on a scale of $\frac{1}{500,000}$ (1 inch = nearly 8 miles). For most of the remainder of the area surveyed the maps published are on a scale of $\frac{1}{250,000}$ (1 inch = nearly 4 miles). For some areas of particular economic importance, covering about 4,300 square miles, the maps published are on a scale of $\frac{1}{62,500}$ (1 inch = nearly 1 mile) or larger. In addition to the area covered by topographic maps, about 11,300 square miles of southeastern Alaska has been covered by planimetric maps on scales of $\frac{1}{125,000}$ and $\frac{1}{250,000}$.

The Hawaiian Islands have been surveyed, and the resulting maps are published on a scale of $\frac{1}{62,500}$.

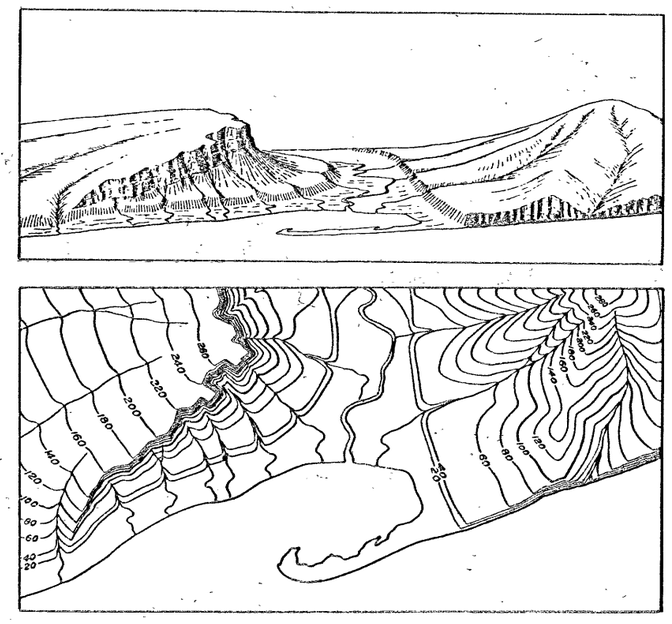
A survey of Puerto Rico is now in progress. The scale of the published maps is $\frac{1}{30,000}$.

The features shown on topographic maps may be arranged in three groups—(1) water, including seas, lakes, rivers, canals, swamps, and other bodies of water; (2) relief, including mountains, hills, valleys, and other features of the land surface; (3) culture (works of man), such as towns, cities, roads, railroads, and boundaries. The symbols used to represent these features are shown and explained below. Variations appear on some earlier maps, and additional features are represented on some special maps.

All the water features are represented in blue, the smaller streams and canals by single blue lines and the larger streams by double lines. The larger streams, lakes, and the sea are accentuated by blue water lining or blue tint. Intermittent streams—those whose beds are dry for a large part of the year—are shown by lines of blue dots and dashes.

Relief is shown by contour lines in brown, which on a few maps are supplemented by shading showing the effect of light thrown from the northwest across the area represented, for the purpose of giving the appearance of relief and thus aiding in the interpretation of the contour lines. A contour line represents an imaginary line on the ground (a contour) every part of which is at the same altitude above sea level. Such a line could be drawn at any altitude, but in practice only the contours at certain regular intervals of altitude are shown. The datum or zero of altitude of the Geological Survey maps is mean sea level. The 20-foot contour would be the shore line if the sea should rise 20 feet above mean sea level. Contour lines show the shape of the hills, mountains, and valleys, as well as their altitude. Successive contour lines that are far apart on the map indicate a gentle slope, lines that are close together indicate a steep slope, and lines that run together indicate a cliff.

The manner in which contour lines express altitude, form, and grade is shown in the figure below.



The sketch represents a river valley that lies between two hills. In the foreground is the sea, with a bay that is partly enclosed by a hooked sand bar. On each side of the valley is a terrace into which small streams have cut narrow gullies. The hill on the right has a rounded summit and gently sloping spurs separated by ravines. The spurs are truncated at their lower ends by a sea cliff. The hill at the left terminates abruptly at the valley in a steep scarp, from which it slopes gradually away and forms an inclined tableland that is traversed by a few shallow gullies. On the map each of these features is represented, directly beneath its position in the sketch, by contour lines.

The contour interval, or the vertical distance in feet between one contour and the next, is stated at the bottom of each map. This interval differs according to the topography of the area mapped: in a flat country it may be as small as 1 foot; in a mountainous region it may be as great as 250 feet. In order that the contours may be read more easily certain contour lines, every fourth or fifth, are made heavier than the others and are accompanied by figures showing altitude. The heights of many points—such as road intersections, summits, surfaces of lakes, and benchmarks—are also given on the map in figures, which show altitudes to the nearest foot only. More precise figures for the altitudes of benchmarks are given in the Geological Survey's bulletins on spirit leveling. The geodetic coordinates of triangulation and transit-traverse stations are also published in bulletins.

Lettering and the works of man are shown in black. Boundaries, such as those of a State, county, city, land grant, township, or reservation, are shown by continuous or broken lines of different kinds and weights. Public roads suitable for motor travel the greater part of the year are shown by solid double lines; poor public roads and private roads by dashed double lines; trails by dashed single lines. Additional public road classification if available is shown by red overprint.

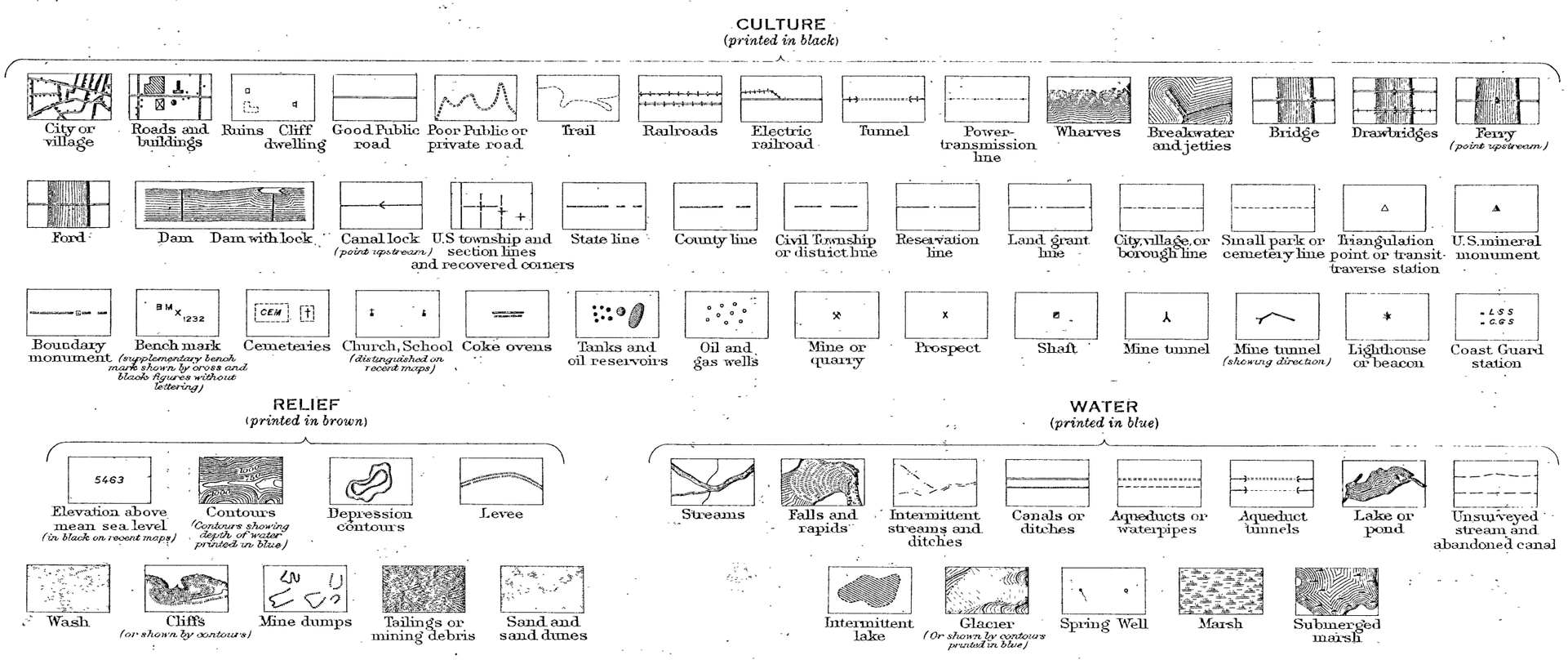
Each quadrangle is designated by the name of a city, town, or prominent natural feature within it, and on the margins of the map are printed the names of adjoining quadrangles of which maps have been published. More than 4,100 quadrangles in the United States have been surveyed, and maps of them similar to the one on the other side of this sheet have been published.

Geologic maps of some of the areas shown on the topographic maps have been published in the form of folios. Each folio includes maps showing the topography, geology, underground structure, and mineral deposits of the area mapped, and several pages of descriptive text. The text explains the maps and describes the topographic and geologic features of the country and its mineral products. Two hundred twenty-five folios have been published.

Index maps of each State and of Alaska and Hawaii showing the areas covered by topographic maps and geologic folios published by the United States Geological Survey may be obtained free. Copies of the standard topographic maps may be obtained for 10 cents each; some special maps are sold at different prices. A discount of 40 percent is allowed on an order amounting to $5 or more at the retail price. The discount is allowed on an order for maps alone, either of one kind or in any assortment, or for maps together with geologic folios. The geologic folios are sold for 25 cents or more each, the price depending on the size of the folio. A circular describing the folios will be sent on request.

Applications for maps or folios should be accompanied by cash, draft, or money order (not postage stamps) and should be addressed to

THE DIRECTOR,
United States Geological Survey,
Washington, D. C.

November 1937.

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