UNITED STATES
DEPARTMENT OF THE INTERIOR
Defense Minerals Exploration Administration

OFFICIAL DOCKET FILE

Terminated ~~(or cancelled)~~ without certification. DMEA No. 1232 X

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

Left Side

- ✓ Certificate of Audit (Final).
- Interim Audit(s).
- Report of Review.
- Termination Notice or Agreement.
- Recision Notice.
- Assignment of Contract.
- Contract Amendments (latest on top).
- ✓ Contract with all exhibits and annexes.
- Owner's Consent to Lien.
- Subordination Agreement.
- Leases and assignments of leases.
- ✓ Application and attachments.
- Schedule of Collections.
- ✓ Operator's monthly reports and all attachments (latest on top).

Right Side

- ✓ Project summary.
- Work completed analysis.
- All other material is filed in chronological order with correspondence including the following reports as checked:
- ✓ Final Field Team Report. (Tab)
- Operator's Final Report.
- ✓ Interim Reports.
- ✓ On-site Exam Report(s). (Tab)
- Settlement Sheets.

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

Maps in folder number _____

Operator's Monthly Reports in folder number _____

E R. 1/26/57 _____ Reviewer's Initials

7973

DEFENSE MINERALS EXPLORATION ADMINISTRATION
CONTRACT ADMINISTRATION AND AUDIT DIVISION

AUDIT CERTIFICATE

I have examined the records and transactions of:

Alaska Copper Corporation
1013 Smith Tower
Seattle, Washington

pertaining to Exploration Project Contract Idm-1276, Docket No. DM4-1232X, for the period from April 16, 1952 to June 4, 1953, covering a project of exploration for copper on property known as the Fidalgo-Alaska Mine, near Cordova, Alaska.

My examination was made in accordance with generally accepted standards applicable to the circumstances.

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

Total cost billed by contractor		$23,558.75
Less: Salvage sales of property	$1,782.70	
Credits for returns	616.26	
Unused insurance premiums	295.12	2,694.08
Net claimed cost		$20,864.67
Exceptions (See Audit Report for details)		
Prior to this audit	$ -0-	
During this audit	1,077.54	1,077.54
Total accepted cost		$19,787.13

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 Nine thousand eight hundred ninety-three and 57/100 Dollars,

$9,893.57

is valid and proper.

This certificate is issued on the provision that the Regional Executive Officer, the Administrator, or other competent official has accepted or will accept the project as having otherwise met the terms of the contract.

E. J. Brekhus, Auditor

September 30, 1953

AUDIT REPORT

I INTRODUCTION

On September 23, 24 and 25, 1953, a final audit (covering the period April 16, 1952 to June 4, 1953) was made of the records and accounts of operations pertaining to Contract No. Idm-E276, Docket No. DMA-1232X with the:

Alaska Copper Corporation
1013 Smith Tower
Seattle 4, Washington

covering a project of exploration for Copper on property known as the Fidalgo-Alaska Mine, near Cordova, Alaska.

The accounting records under this contract are located in the Company's main office at the above address.

During the course of the audit Mr. Charles F. Herbert, President of the Corporation was present and was consulted as required. His cooperation and assistance greatly facilitated the audit.

II GENERAL INFORMATION ON RECORDS

The accounting records of the project are maintained in an individual general ledger with detailed cost allocations which provided the basis for billings on the MF-104's. A separate ledger covering disbursements for the project is also maintained. However, the general records did not furnish the necessary cost allocations to the individual items of work specified in the contract, which were limited by allowable maximums. The expenditures for equipment, materials and services were supported by vendors' invoices, and cancelled checks. Cancelled checks covering net amounts in payrolls were on file. No detailed breakdown of labor or time cards was available for determining the amount of labor allocable between Initial Rehabilitation and Repairs and the exploratory drilling.

The public accounting firm of Boulet & Kohler of Fairbanks, Alaska performed the detailed accounting done for the project. The general accounts of the Corporation are audited annually by the firm of Sites and Lale, certified public accountants of Seattle, Washington.

III SCOPE OF AUDIT AND FINDINGS

The audit was limited to ascertaining the accuracy, propriety and validity of the costs as shown in the "Totals to Date" column of Form MF-104, Operator's Monthly Report and Voucher, for the month of August, 1952, and the credits issued subsequently for return premium on insurance, and receipts from sales of equipment and supplies. The extent of the audit

and the findings under each of the "Items of Cost", which included only the costs of the Preliminary Exploration authorized by the contract, follow:

(1) Independent Contracts:

Not applicable to this contract.

(2) Labor and Supervision: $8,659.33

All charges in this item were checked against the payrolls, cancelled checks and rates as authorized in Exhibit "A" of the contract. The Operator entered into a contract with the diamond driller whereby a price of $1.25 per foot was agreed upon. As this is not provided for in the contract a calculation of the total time and amount earned was made and earnings in excess of the maximum of $2.75 per hour stipulated in the contract were disallowed. This amounted to $221.26. All other rates paid were at or below the contract rates.

The contract provided for engaging an engineer foreman at a rate of $3.00 per hour. Mr. Charles F. Herbert performed all the engineering and supervised the operation. However, he did not bill for the specific time spent on the job, and in lieu thereof charged his traveling expenses against the operations. At time of audit a summary was made of time spent on the project. It was found that the total time spent was 63 days. At a rate of $3.00 per hour for an 8 hour day the billable time would have amounted to $1,512.00. The total of $932.84 billed was therefore accepted as allowable cost under the contract.

It was found that total costs, disallowances and costs properly chargeable under this item and Initial Rehabilitation and Repairs were found to be as follows:

	Total Cost	Disallowed by Audit	Accepted Cost
Labor	$7,947.75	$221.26	$7,726.49
Supervision	932.84	-	932.84
	$8,880.59	$221.26	$8,659.33

Examination of the diary maintained by the Operator indicated that the work of moving equipment up to the mine and brushing out, as called for under Rehabilitation and Repairs in Exhibit "A" of the contract, was performed simultaneously. It was stated that because of heavy snow conditions the time involved and resultant cost exceeded original estimates. However, as the Operator failed to keep separate records of labor allocable to Rehabilitation and Repairs the total of allowable maximum for this item ($2,000.00) is combined with the total under Labor and Supervision ($8,442.00) in the contract for limitation of acceptable cost against the combined cost of these items.

The actual cost, otherwise acceptable, allowable maximums and disallowance are as follows:

Actual Costs:		
Labor and Supervision as above		$ 8,659.33
Payroll Taxes		324.61
Liability Insurance		550.78
Boarding House Loss		1,122.10
Initial Rehabilitation & Repair (materials only)		486.03
Total		$11,142.85
Allowable Maximums (per Exhibit "A"):		
Labor, Supervision, etc. (including payroll taxes and insurance)	$8,442.00	
Rehabilitation & Repairs	2,000.00	10,442.00
Disallowed: Excess over Allowable Maximum		$ 700.85

(3) Operating Materials and Supplies: $2,651.48

Analysis was made of all charges in this category and reclassification made as presented below. All invoices were examined and a limited number traced to the disbursement ledger and cancelled checks issued in payment therefor. Drill steel and empty oil drums returned for credit, and sales of materials and supplies were credited against their respective accounts. A quantity of air hose, water hose and a gasoline can in the above category, plus the 5/16" wire rope charged under (4), and the two oil space heaters and cookstove charged under (7), having a total cost of $1,065.40, remained unsold at time work was terminated. In order to close out the project the Operator agreed to take over these items at the estimated value of 50 percent of the original cost. This transfer as well as the other sales and credits were accepted by the Executive Officer of the Field Team as being fair and reasonable.

The total net charges, properly chargeable and allowable under this item were found to consist of the following:

	Net Cost
Pipe and Fittings	$ 95.75
Drill Steel	1,218.58
Diesel Fuel, Gas and Oil	461.51
Small Equipment and Hand Tools	283.31
Hose and Couplings	168.21
Miscellaneous Supplies	424.12
Total	$2,651.48

(4) Operating Equipment: $4,845.13

The Operator rented a core drill and a 210 CFM compressor for the four months the project was under way for $250.00 and $500.00 per month, respectively. Both items of equipment were acquired on a lease purchase agreement.

At termination of the project the compressor was returned, but the Operator elected to pay a balance of $1,941.96 on the diamond drill. This item was resold to the DeCoursey Mountain Mining Company for $2,000 on April 2, 1953. Therefore, this audit makes a disallowance of $19.73 against this item which is $1,000.00/$2,941.96 of $58.04, the net credit of the transaction. The cost of freight for return of the diamond drill to Seattle was also saved by this sale.

The contract contains an estimate of $2,000.00 for freight on the above items of equipment and a D-4 Tractor which the Operator planned on bringing in from Jack Wade Creek, 30 miles to Sixty Mile, Yukon Territory and then overland to Valdez, a distance of approximately 350 miles. This moving operation, while possible to perform in 1951 when negotiations of this contract were initiated, was deemed not possible to perform in May, 1952 due to heavy snow remaining at that time. In lieu of moving the tractor, in agreement with the Executive Officer of the DMEA Field Team, a small double drum winch was purchased, and proved adequate for the work to be done.

This winch purchased in Seattle at a cost of $900.00 was sold for $500.00 after the project was terminated. The 1,500 feet of 5/16" wire rope purchased in addition for $462.00 was taken over by the Operator for 50 percent of its original cost. These transactions have been accepted by the Executive Officer of the DMEA Field Team as fair and reasonable and within the scope and purpose of the contract.

The proper and allowable costs for Operating Equipment were found to be:

	Cost	Disallowed by Audit	Accepted Cost
Rental of Compressor - 4 months	$2,000.00	$ -	$2,000.00
Purchase of Diamond Drill	1,000.00	19.73	980.27
" " Winch	400.00	-	400.00
" " Wire Rope	231.00	-	231.00
Freight, including insurance	1,233.86	-	1,233.86
	$4,864.86	$19.73	$4,845.13

(5) Initial Rehabilitation and Repairs: $486.03

As stated under (2) Labor and Supervision above, the labor in Initial Rehabilitation and Repair was not recorded separately from the

drilling labor and other labor performed. The materials identified as applicable to this category were found to consist of the following:

	Cost
Lumber	$200.00
Roofing	55.00
Hardware, nails and screws	30.36
Celloglass	24.00
Casual labor, repairing part of roof	10.00
Freight on above lumber	166.67
Total	$486.03

Because the above does not represent the total cost applicable to this category it has previously been combined with Labor and Supervision under that section to calculate the disallowance for costs in excess of the combined allowable maximums as called for in the contract.

(6) New Buildings, Improvements, etc.: -0-

As the project was terminated after completion of the "Preliminary Exploration" specified in the contract there was no authorization for expenditures under this category up to date of termination. Costs shown on operator's MF-104 were reclassified and applied to other sections wherein the costs should have been included.

(7) Miscellaneous: $3,963.04

Miscellaneous costs were contained in all subsections of Operator's final MF-104 except (2) Labor and Supervision. At time all direct costs were analyzed, the costs normally shown under (7) Miscellaneous were scheduled. In addition costs applicable to the various groupings as set out under "Materials, Supplies and General" on pages 7 and 8 of Exhibit "A" were summarized in like manner. It was found that costs charged, disallowances and accepted costs under this item consisted of the following:

	Costs	Auditor's Disallowances	Accepted Costs
Repairs to Equipment	$ 7.24	$	$ 7.24
Sampling and Analysis	197.99		197.99
Payroll Taxes	333.90	1/ 9.29	324.61*
Liability Insurance	550.78		550.78*
Transportation of Personnel	476.95		476.95
Freight	335.23		335.23
2 Heaters	35.00		35.00
Range	81.25		81.25
Bunks, Bedding and Chairs	111.73		111.73
Kitchen Utensils and Dishes	61.33		61.33
Tent and Platform	95.82		95.82
Mail Service	135.56		135.56

	Costs	Auditor's Disallowances	Accepted Costs
Boat Rental	113.00		113.00
Communications	32.12	2/ 9.38	22.74
Office Supplies and Postage	58.13		58.13
Accounting	233.58		233.58
Boarding House Loss	1,122.10		1,122.10*
	$3,981.71	$18.67	$3,963.04

1/ Disallowance of payroll taxes at 4.25 on the $221.26 disallowance made under (2) Labor and Supervision.

2/ Disallowance of cost of telegram from Yukon Territory, not a charge applicable to this operation.

The items above which may require further explanation are as follows:

Sampling and Analysis includes besides assays, the cost of materials in core boxes. Freight includes only freight which could not readily be allocated to costs in any of the categories previously presented. The 2 Heaters; Range; Bunks, Bedding and Chairs; Kitchen Utensils and Dishes; Tent and Platform; and Office Supplies and Postage costs are net amounts after crediting costs for the proceeds of sales.

The three items identified with an asterisk (*) have been included with Labor and Supervision in determining the excess over the allowable maximums under those sections of this report. The remainder of the items amounting to $1,965.55 are added to the total of $2,651.48 shown under (3) Operating Materials and Supplies totalling $4,617.03. This exceeds the allowable maximum of $4,500.00 for "Materials, Supplies and General" on page 9 of Exhibit "A" by $117.03. This amount of excess is therefore disallowed.

IV CONCLUSION

Under Exhibit "A" (page 1) of the contract is outlined the work contemplated under the first stage designated as Preliminary Exploration. The exploration work called for includes 1,500 feet of diamond drilling. The Operator and the Executive Officer of the DMEA Field Team, prior to completion of the above drilling, agreed that additional footage should be drilled as long as funds remained within the allowable maximum of $19,942.00 provided for under "Preliminary Exploration" in the contract. Accordingly, 1,816 feet of diamond drilling was completed before the operation was closed down.

This audit has disclosed that all costs, as charged to this project, with the exception of the disallowances itemized under (2) Labor and Supervision, (4) Operating Equipment, (7) Miscellaneous, and the disallowances for exceeding the "allowable maximums" under two subgroupings in Exhibit "A" of the contract, are reasonable and proper under the terms of the contract, including the Exhibit "A".

The adjustements between Items of Costs, as shown on the August, 1952, MF-104, less subsequent credits against cost, the recommended disallowances, and approved amounts are summarized as follows:

Items of Costs	Totals per Aug. 1952 MF-104	Distribution Corrected	Credits and Sales of Eqpt. and Supplies	Disallowed by Audit	Accepted Cost
(2) Labor & Super.					
Labor	$ 6,252.75	$ 7,947.75	$	$ 221.26	$ 7,726.49
Supervision	932.84	932.84			932.84
Technical Serv.	233.58				
(3) Operating Mat'ls. and Supplies	5,265.82				
Pipe & Fittings		111.82	16.07		95.75
Drill Steel		1,756.84	538.26		1,218.58
Diesel Fuel, Gas and Oil		539.51	78.00		461.51
Small Eqpt. and Hand Tools		657.64	374.33		283.31
Hose & Couplings		445.40	277.19		168.21
Misc. Supplies		475.71	51.59		424.12
(4) Operating Eqpt.					
Rental	3,113.77	2,000.00			2,000.00
Purchase		2,362.00	731.00	19.73	1,611.27
Freight	2,189.97	1,280.01	46.15		1,233.86
(5) Initial Rehab. and Repairs	2,000.00	486.03			486.03
(6) New Buildings, Improvements, etc.	1,500.00				
(7) Miscellaneous					
Repairs to Eqpt.		7.24			7.24
Samp.& Analysis	46.63	214.61	16.62		197.99
Payroll Taxes	333.90	333.90		9.29	324.61
Liability Ins.	799.75	799.75	248.97		550.78
Transp. of Pers.		476.95			476.95
Freight		335.23			335.23
Heaters		70.00	35.00		35.00
Range		162.50	81.25		81.25

Items of Costs	Totals per Aug. 1952 MF-104	Distribution Corrected	Sales of Eqpt. and Supplies	Disallowed by Audit	Accepted Cost
Bunks, Bedding and Chairs		152.90	41.17		111.73
Kitchen Utensils and Dishes		166.33	105.00		61.33
Tent & Platform		148.30	52.48		95.82
Mail Service		135.56			135.56
Boat Rental		113.00			113.00
Communications		32.12		9.38	22.74
Office Supplies and Postage		59.13	1.00		58.13
Accounting		233.58			233.58
Boarding House Loss	889.74	1,122.10			1,122.10
Excess of Labor, Supv. and Initial Rehab. & Repairs over $10,442.00 authorized				700.85	(700.85)
Excess of Mat'ls. Supplies & General over the $4,500.00 authorized				117.03	(117.03)
	$23,558.75	$23,558.75	$2,694.08	$1,077.54	$19,787.13

The audit also disclosed that the audited status as of June 4, 1953, of the allowable maximums under this contract were as follows:

	Allowable Maximum	Total Costs	Balance
Preliminary Exploration			
Labor and Supervision	$ 8,442.00	$	$
Rehabilitation & Repairs	2,000.00		
	10,442.00	10,442.00	-0-
Operating Equipment	5,000.00	4,845.13	154.87
Materials Supplies & General	4,500.00	4,500.00	-0-
Total	19,942.00	19,787.13	154.87
Secondary Exploration	92,606.00	-0-	92,606.00

Upon completion of Preliminary Exploration it was decided by mutual agreement between the Operator and representatives of the Government to terminate the project.

At the conclusion of the audit, the findings were discussed with Mr. Charles F. Herbert, President of the Corporation, who indicated his full acceptance thereof.

B. J. BREEHOS
Auditor

September 30, 1953

MF-200
(June 1951)

Docket No. DMA 1232X
Commodity Copper
Idm-E276

UNITED STATES OF AMERICA
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS ADMINISTRATION

Government's Copy

EXPLORATION PROJECT CONTRACT [1]

It is agreed this 18th day of March, 1952, between the United States of America, acting through the Department of the Interior, Defense Minerals Administration, hereinafter called the "Government," and [2] the Alaska Copper Corporation, 1125 Smith Tower, Seattle 4, Washington.

hereinafter called the "Operator," as follows:

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

2. *Operator's property rights.* The exploration project shall be conducted on that certain property situated in the ~~State~~ Territory of Alaska, ~~County of~~ Third Judicial Division described as follows: [3] Fifteen (15) patented mining claims described in U. S. Patent No. 1072905, as recorded in Volume 37, Page 184, Valdez Recording Precinct, Third Judicial Division, Alaska, and named as follows: Delta, Epsilon No. 1, Epsilon No. 2, Porcupine, Rex, Sandy, Agnes, Queen, Queen Fraction, Buster, Mermaid, Tony C., Bay View, Eureka, Smoky.

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

(*a*) That he is the sole owner, in possession and entitled to possession, and that the property is subject only to the following claims, liens, or encumbrances as to each of which the subordination agreement of the holder is attached: No claims, liens, or encumbrances.

~~(*b*) That he is the sole owner, in possession and entitled to possession, and that the property is subject only to the following claims, liens, or encumbrances as to each of which the subordination agreement of the holder is attached:~~

3. *Exploration project.* The Operator, within sixty (60) days from the date of this contract shall commence work on a project of exploration for [5] Copper; shall prosecute the work efficiently, expertly, in a workmanlike manner, in accordance with good mining standards, with suitable and adequate equipment, materials, and labor, all properly designed to bring the project to completion within a period of [6] 24 months (24) from the date of this contract. The exploration project and the work to be performed are more fully described on Exhibit "A" attached hereto, which, with any maps or drawings thereto attached, is made a part of this contract.

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

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

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

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

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

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

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

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

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

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

13. *Payment to the Operator.* The monthly progress report (invoice), to the extent approved by the Government, shall be processed for payment by the Government. Payment shall be made in the amount of 50 percent of the approved costs incurred; *Provided,* That the aggregate total of all sums paid by the Government under this agreement shall not exceed $56,274.00, which is 50 percent of the agreed estimated total cost of this project, $112,548.00.

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

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

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

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

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

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

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

Executed in sextuplicate the day and year first above written.

Alaska Copper Corporation
(Operator)

By Charles F. Herbert
President
by Glen H. Franklin
Secretary-Treasurer

THE UNITED STATES OF AMERICA

By C P Mittendorf
Acting Administrator
Defense Minerals Exploration
Administration

U. S. GOVERNMENT PRINTING OFFICE 16—64086-1

EXPLORATION PROJECT CONTRACT
ALASKA COPPER CORPORATION
DOCKET NO. DMEA-1232

EXHIBIT "A"

Statement of the Work

This project is planned in two parts to be known as Preliminary Exploration and Secondary Exploration. The Preliminary Exploration will consist of from 150 to 1500 feet of diamond drilling and from 1 to 10 holes from the lower adit level of the mine in an effort to locate and confirm any downward extensions of the persistent ore shoots which have been mined in the upper levels and which geophysical surveys have indicated may extend to the lower level. If in the opinion of the Government the results of the drilling warrant it, the Secondary Exploration will be undertaken consisting of the driving of approximately 580 feet of crosscuts and drifts and approximately 520 feet of raise for the purpose of exploring the area between the lower adit level and the No. 4 mine level (former main working level).

If at any time during the course of the Preliminary Exploration the Government determines and notifies the Operator that the results thus far obtained will not warrant the continuance of the project, the Government shall be liable for no further payments under the contract except as to costs already incurred by the Operator or necessarily incident to the prompt discontinuance of the project. If at any time during the course of the Preliminary Exploration the Government determines and notifies the Operator that the results thus far obtained warrant the immediate commencement of the Secondary Exploration, the Operator shall promptly start the Secondary Exploration and no costs of drilling carried on after such notice shall be considered allowable costs of the project.

Preliminary Exploration

The Preliminary Exploration program will include the following:

1. Establishment of a temporary camp.

2. Obtaining, transporting and installing the diamond drilling equipment required on this project.

3. Drill a maximum of 1500 feet in from 1 to 10 holes whose location, direction, inclination and length will be determined by mutual agreement between the Operator and the Field Team engineers. This drilling is to explore for the downward extension of known ore bodies on the upper levels of the mine, and the favorable areas indicated by the geophysical survey. The tentative location and proposed sequence of drill holes are shown on the attached map.

Secondary Exploration

The exact location and length of the proposed crosscut, raise, and intermediate drifts cannot be determined in advance, but a general plan of exploration is shown on the attached map (Secondary Exploration). The plan is to explore the 520 foot vertical distance between the lower adit level and the No. 4 Level in the upper workings of the mine. This secondary exploration project will be started only if sufficient ore or mineralization is discovered on the lower adit level, in the opinion of the Government engineers, to justify it.

The work required to accomplish these objectives is estimated as follows:

	Feet
Crosscut to ore shoot on adit level	150
Drift on adit level	130
Raise adit level to No. 4 mine level	520
Intermediate levels, 3 @ 100 feet ea.	300
Total	1,100

Estimate of Costs

The following is an estimate of the costs of the project:

Except insofar as any item of requirement or the estimated cost thereof set forth herein, is here 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 herein 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.

FIXTURES AND IMPROVEMENTS

Preliminary Exploration

None

Secondary Exploration

Building, frame, shed type (combin. compressor shed-shop)	$ 750.00
Additional cook-bunkhouse equipment	450.00
Freight and construction	300.00
	$1,500.00

OPERATING EQUIPMENT

Preliminary Exploration

The following diamond drilling and accessory equipment will be rented.

Drill, core, air driven, compl. w/pump, rods, etc., 3 mo. @ $500	$1,500.00
Compressor, gas or diesel, 315 cu. ft., 3 mo. @ $500	1,500.00
Tractor, D-4 or equiv. (furnished by contractor)	no charge
Freight, forward & return (incl. tractor)	2,000.00
	$5,000.00

Secondary Exploration

New or good used equipment whichever is available, will be purchased for the second phase of the exploration program. Costs are estimated on the basis of present quotations with allowances for increases as follows:

Compressor, skid mounted portable, 315 cu. ft. diesel	$8,000.00
Trammer, storage battery type	2,800.00
Battery, Edison storage, 35 cells C-6	1,700.00

Charger, battery, engine driven w/controls	$ 750.00
Cars, mine, 21 cu. ft., 6 ea @ $300	1,800.00
Drill, drifter, LM-67, automatic	900.00
Drill, stoper	700.00
Hose, air & water, 2 sets @ $65	130.00
Column, saddle & clamp for drifter	140.00
Pump, drill water supply, air operated	260.00
Hoist, tugger, Joy F-112, air motor	760.00
Cable, 1000 ft. ½-inch @ $.15	150.00
Oilers, chuck wrenches, spuds, etc.	75.00
Pipe, ventilating, flexible, 12 inch, 2000 ft. @ $.80	1,600.00
Pipe, ventilating, flex., 600 ft. @ $.60	360.00
Fittings, ventilating tube, various	100.00
Fan, ventilating, engine driven, Ventair TE-4	275.00
Pipe, air, 2", 1000 ft. @ $.35	350.00
Pipe, water, 1", 1000 ft. @ $.17	170.00
Fittings, pipe, 1" & 2", valves, etc.	100.00
Steel, drill, shankless, 1" Q.O.x 2 ft., 10 ea. @ $4.25	42.50
Steel, drill, shankless, 1" Q.O. x 4 ft. 10 ea. @ $6.05	60.50
Steel, drill, shankless, 1" Q.O. x 6 ft. 20 ea. @ $7.85	157.00

Bits, tungsten carbide, 1 5/8", 50 ea. @ $15	$ 750.00
Tools, misc. mine and shop	1,000.00
Tractor, D-4 or equiv. w/dozer & winch	10,000.00
Parts, spare, engine, compressor, drill, tractor, etc.	1,500.00
Wagon or drag, tractor drawn (freighting beach to mine)	1,000.00
Loader, mobile, air operated, Joy HL-3 or equiv.	2,812.00
Track; rail, spikes, bolts & ties compl. 500 ft. @ $2.30	1,150.00
	$39,592.00
Add 10% for price increases subsequent to quotation	3,958.00
Freight & barges, source to mine, 30 T. @ $100	3,000.00
Total equipment	$46,550.00

LABOR AND SUPERVISION

Preliminary Exploration

No.	Classification	Wage scale per hour	Cost 1/ Av. Day
1	Diamond driller	$2.75	$ 25.143
1	Diamond drill helper-sampler	2.50	22.857
1	Engineer-foreman	3.00	29.143
1	Cook-roustabout	2.25	20.571
4			$ 97.714
	Soc. Security, Unempl. Indus. Ins. & loss on boardinghouse, 20% of salaries		19.540
	Total labor and supervision		$117.25

1/ Based on 7-day week with 1½ times over 40 hours.

Moving and setting up, 7 days @ $117.25	$ 820.75
Drilling (60 days @ 25 ft./day @ $117.25	7,035.00
Dismantling & moving out 5 days @ $117.25	586.25
Total labor and supervision, job	$8,442.00

Secondary Exploration

No.	Classification	Wage scale per hour	Cost 2/ Av./Day
2	Miners	$2.75	$ 50.286
2	Laborers, underground	2.25	41.142
1	Compressor operator-mech.-frmr	2.50	22.857
1	Cook	2.25	20.571
1	Engineer-foreman (2-shift operation)	3.00	29.143
7			$163.999
	Soc. Security, Unempl.' Indus. Inc. & loss on boardinghouse (20%)		32.799
	Total labor and supervision		$196.80

Installing vent. tube & equip., 10 days @ $196.80	$1,968.00
Crosscutting & drifting, 580' @ 4'/shift, 73 days @ $196.80	14,366.40
Raising, 520' @ 3'/shift (incl. timbering) 78.87 days @ $196.80	15,521.60
Total labor and supervision, job	$31,856.00

2/ Based on 7-day week with 1½ times over 40 hours. - 2 shift operation.

REHABILITATION AND REPAIRS

Preliminary Exploration

The former camp at the property has been largely destroyed by the elements. One building at the beach (1300 feet from the mine) can be repaired for use by a small crew. Some material may be salvaged from other collapsed buildings. For the preliminary diamond drill exploration, repairs and rehabilitation will be limited to minimum requirements as follows:

New roof and general repairs to building at beach	$1,500.00
Brushing out and minimum repairs to road, beach to mine	500.00
Total Rehabilitation & Repairs	$2,000.00

Secondary Exploration

If the work continues, winter housing facilities must be provided for a crew of 7 men. Insulation of the beach building and additional repairs estimated to cost approximately $2,000 will provide suitable quarters for the small crew.

MATERIALS, SUPPLIES AND GENERAL

Preliminary Exploration

Oil, fuel, (for compressor, tractor & stove)	$ 260.00
2,000 gal. @ $.13 & lubricating 55 gal. @ $.60	33.00
Grease & special oils	25.00
Cement, quick setting, 500# @ $7	35.00
Bits, coring & reaming, shells, etc.	750.00
Misc. small tools and supplies	397.00
Barge service and barrels	500.00

Transportation of personnel, assaying, etc.	$1,000.00
Cookstove, oil burning, with tank and fittings	250.00
Heaters, oil burning, large, 2 ea. @ $125	250.00
Cots, steel, folding w/mattresses, 5 ea. @ $40	200.00
Bags, sleeping or equiv. blankets, 5 ea. @ $25	125.00
Utensils, cooking and dining room, service for 5	200.00
Tent, 14' x 16', heavy duty, w/wood floor and walls 1 ea.	175.00
Freight and Installation	300.00
Total	$4,500.00

Secondary Exploration

Oil, fuel (stove & diesel) 6,000 gal. @ $.13	$ 780.00
Oil, lubricating, 150 gal. @ $.60	90.00
Gasoline (battery charger & fan) 500 gal. @ $.20	100.00
Grease & special lubricants	75.00
Timber and lumber 3/ (mine) 21,000 f.b.m. @ $125/M	2,625.00

3/Raise timbers: Estimate based on 5' x 9' two compartment raise, sets on 5-foot centers consists of 8 x 8 caps, 4 x 8 posts and collars braces, and 3" chute logging, total of 200 f.b.m. per set including ladders, slide etc. Crosscut and drifts will require no timber.

Dynamite, 40%, 5 ton @ $25/100#	$2,500.00
Detonators, elect. delay, 3500 @ $23/C (Av.)	805.00
Carbide, 500# @ $10	50.00
Carbide lamps, hard hats & safety equip.	175.00
Misc. supplies & small tools, picks, shovels, etc.	1,000.00
Freight and barging, oil barrels	1,000.00
Transportation of personnel, assaying, etc.	1,500.00
	$10,700.00

SUMMARY

Preliminary Exploration		
Fixtures and Improvements	$ .00	
Operating equipment (rentals)	5,000.00	
Labor and Supervision	8,442.00	
Rehabilitation and Repairs	2,000.00	
Materials, Supplies and General	4,500.00	
Total		$19,942.00
Secondary Exploration		
Fixtures and Improvements	1,500.00	
Operating equipment (purchases)	46,550.00	
Labor and Supervision	31,856.00	
Materials, Supplies and General	10,700.00	
Rehabilitation and Repairs	2,000.00	
		$92,606.00
TOTAL EXPLORATION PROJECT		$112,548.00

NOTE: Estimated costs of all items shown in the above summary are the allowable maximum expenditure permitted for that sub-division of the estimated cost of the project.

Form MF-103
(April 1951)

U. S. DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS ADMINISTRATION

Budget Bureau No. 42-R1035.
Approval expires 6-30-51.

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

DO NOT FILL IN THIS BLOCK

Docket No. dma 12132 X

Date received 5/21/51

Participation

Alaska Copper Corporation
1617 Smith Tower
Seattle 4, Washington

Name and address of applicant

Date May 17, 1951

FILL IN THIS BLOCK

Date of application May 17, 1951

Estimated cost $30,000

Mineral or metal Copper

Percentage of Government participation 50%

Location of mine Fidalgo Bay, near Valdez, Alaska

Date of filing MF-100

DMA Docket Number, if available dma 12132 X

INSTRUCTIONS

Read Mineral Order 5, Regulations Governing Government Aid in Defense Projects, before completing this application. Submit four signed copies of the application to Defense Minerals Administration, Department of the Interior, Washington 25, D. C., or to the nearest field executive officer thereof, with your name and address on each sheet of the application and all accompanying papers. If any question is inapplicable, or if you cannot answer it, so state on the form. Where the space provided for answer is insufficient, answer on a separate sheet, annex it to the application form, and refer to it in space for answer. If the application is approved, you will be presented with an exploration project contract on Form MF-200, for your signature.

THE APPLICANT

*1. Is applicant an individual, partnership, or corporation?
*2. If a partnership, state names and addresses of partners.
*3. If a corporation, state names and addresses of officers, directors, and five largest stockholders.
*4. Describe the mining and general business experience of (*a*) the applicant, and (*b*) the person or persons who will manage the project.
*5. Are you the owner or the lessee of the property?
6. If owner, state what claims, liens, or encumbrances, if any, are against the property.
7. If lessee, attach a copy of the lease and state if it is in good standing.

NOTE.—It will be necessary to procure and attach to the exploration project contract agreements of claimants, lienors, encumbrances and lessors subordinating their interests in the property to the interest of the Government under the contract.

8. Furnish current financial statement, showing assets and liabilities, and a profit and loss statement.
9. How much money is applicant prepared to invest in proposed project? Is it sufficient to pay your part of the cost of the project as detailed in question 23 of this application form, in accordance with the regulations on Government participation (Section 9 of Mineral Order 5)?

*If you have already answered these questions on MF-100, you are not required to answer the questions for this application.

16—64067-1

THE PROPERTY

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

    NOTE.—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 (*b*) 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.

*11. State the present and former names of the property, if any.
*12. State, in detail, the location of the property with reference to towns, railroads, roads, shipping points, including distances and directions and kinds and conditions of roads.
*13. State source and quantity of water available for operations and its sufficiency at all seasons.
State amount of power to be used, rate per hour or other cost, and source.
*14. Describe any existing useable facilities, equipment, buildings, or structure now on the property that will be devoted to the exploration work.
15. State in detail how the ore could be shipped and how and where milled.
*16. History:
    (*a*) Give a statement, as complete as possible, of previous exploration, development, operation, and production of property, with reasons for any past suspensions of operations.
    (*b*) State briefly the known history and production of adjoining and neighboring properties.
    (*c*) Furnish any available (private) reports that may apply to this application, including results of mine examinations, recommended exploration and development, and metallurgical investigations.
*17. Production:
    (*a*) If mine is in production, furnish the following information:

	Tons per day	*Grade or analysis*	*Cost per ton*	*Net value per ton*
(1) Mining				
(2) Milling				
(3) Shipped or sold				

*18. Ore or mineral reserves: (If property is or has been operating.)
    (*a*) Describe the ore or mineral deposits briefly.
    (*b*) Submit available maps and assay data.
    (*c*) Give estimated tonnage and grade of each class of ore reserves.
19. State any conditions or circumstances regarding the property not sufficiently brought out by the foregoing questions.

THE EXPLORATION

20. For what mineral or minerals and for what types of deposits and ores will the exploration be conducted?
21. Describe briefly, but concisely, the proposed work and the estimated time required to complete it.

    NOTE.—The Government will not participate in a project that will require more than 2 years to complete.
22. Furnish statement of the geological basis of the project with particular emphasis on factors leading the operator to expect the finding of commercial ore bodies. This statement should be accompanied by supporting maps such as geological maps, maps of the proposed openings and assay maps, sample lists, and other pertinent data.

THE REQUIREMENTS AND COSTS

23. Tabulate in the form of an itemized statement with a sum for each item the estimated requirements and costs of the project so that the total will give the estimated cost of the project in which the Government will participate, as follows:
    (*a*) Labor, by numbers and classes (miners, muckers, millmen, etc.), with wages of each.
    (*b*) Supervisors, by numbers and positions, with salaries of each.
    (*c*) Cost of necessary repairs to existing facilities, structures, and buildings.
    (*d*) Cost of necessary installation or construction of additional facilities, structures, and buildings.
    (*e*) Cost of items of equipment, not now owned by the applicant which must be purchased for operations at a cost of $50 or more each.
    (*f*) Cost of rental for equipment which the operator proposes to rent.
    (*g*) Rental value of items of equipment which the operator now owns and which will be devoted to the work.
    (*h*) Cost of materials and supplies, including items of equipment costing less than $50 each.
    (*i*) Cost of power, water, utilities, and any other items not provided for above.
24. Furnish a time schedule of the project, stated in terms of months after project is approved, showing progress expected to be accomplished and the money expected to be spent.

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.

Alaska Copper Corporation
(Name of company)

By Charles F. Herbert
(Signature of authorized official)

May 17, 1951
(Date)

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.

*Same as footnote on page 1.

16—64067-1 U. S. GOVERNMENT PRINTING OFFICE

ALASKA COPPER CORPORATION
1617 SMITH TOWER
SEATTLE 4, WASHINGTON

1 to 5, answered on MF-100.

6. There are no claims or liens against the property.

8. Corporation has been inactive since 1942. Sole assets are the mining property. No known liabilities.

9. Applicant will invest $15,000 in the project. This sum will be furnished to applicant by the Yukon Placer Mining Company. The amount furnished will be sufficient to pay applicant's part of the cost of the project.

10. (a) Fifteen patented mining claims, described in U. S. Patent No. 1072905, Volume 37, Page 184, Valdez Recording Precinct, Third Judicial Division, Alaska.

(b) Same area as above.

11 to 14, answered on MF-100.

15. Ore of shipping grade will be shipped by ship or barge to smelter at Tacoma, Washington. If milling is indicated, a mill must be built on the property.

16 to 19, answered on MF-100.

20. Exploration will be for copper.

21. It is proposed to drive a crosscut from Level No. 5 into the expected ore zone, as determined by the electrical survey and by projection from Level No. 4. There will be a few hundred feet of drifting in the ore zone and five hundred feet of raise to Level No. 4, where there is good ore in the floor.

The project will require about eight months.

22. As shown in the reports and map accompanying the form MF-100, this mine has produced approximately 44 tons of 10% copper ore per vertical foot. It has been estimated that there are ten tons of 3% ore for each ton of 10% ore. Assays of samples from the floor of No. 4 level show that the ore continues at the same, or possibly better, grade and width below that level.

The Schlumberger electricl survey indicates that the productive zone lies 50 feet southeast of the crosscut in Level No. 5, which is 500 feet below Level No. 4.

It is apparent that the 500 foot vertical range in the productive zone is well worth exploration.

Other anamolies found by the electrical survey may also be investigated from Level No. 5.

ALASKA COPPER CORPORATION
1617 SMITH TOWER
SEATTLE 4, WASHINGTON

23. (a) Crosscutting, drifting and raising will be on contract at a price of $22.00 per lineal foot.

(b) During exploration there will be one supervisor, who will supervise the contract and do all mapping and sampling. His salary will be $600 a month.

(c) Only minimum repairs will be made. Estimated cost is $1,000.

(d) There will be no new construction.

(e) No equipment will be purchased.

(f) Compressor, drills, mine cars, etc., will be furnished by the contractor.

(g) Applicant will furnish additional equipment without rental charge against the project.

(h) Materials and supplies will cost about $4,000.

(i) All costs included above.

Summary:	Contract payments	$20,000
	Supervision	4,800
	Repairs	1,000
	Supplies	4,000
	Misc.	200
	Total	$30,000

24. Time schedule:

Preliminary work -	1 month
Crosscutting and drifting -	2 months
Raising -	4 months
Contingency for delays -	1 month
Total	8 months

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
MAY 21 1951
LANDON F. STROBEL
Executive Secretary

Form MF-100
(March 1951)

U. S. DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS ADMINISTRATION

Form approved.
Budget Bureau No. 42-R1026.

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

NOT TO BE FILLED IN BY APPLICANT

Docket No. dma 12322 X 1

Date received 5/21/51

Alaska Copper Corporation
1617 Smith Tower
Seattle, Washington 4

Name and address of applicant

Date May 15, 1951

INSTRUCTIONS

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

GENERAL TECHNICAL DATA

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

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

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

   If not in production or operation, estimated date when production will begin November, 1951
6. Experience of operators:

   Describe the mining and general business experience of (*a*) the applicant, and (*b*) the person or persons who manage the project.
7. History:
   (*a*) Give a statement, as complete as possible, of previous exploration, development, operation, and production of property, with reasons for suspension of operation.
   (*b*) State briefly the known history and production of adjoining and neighboring properties.
   (*c*) Furnish any available (private) reports that may apply to this application, including results of mine examinations, recommended exploration and development, and metallurgical investigations.

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

Name and Address (a)	Official Title (If officer is also director indicate by "D") (b)	Total of Annual Salary, Commissions, Bonuses, Etc., Received From Applicant and Affiliates During Last Fiscal Year (c)	Estimated Net Worth Outside of Interest in Applicant (d)	Number of Shares Held in Applicant Corporation: Common (e)	Number of Shares Held in Applicant Corporation: Preferred (f)	Life Insurance Carried for Benefit of Applicant: Amount (g)	Life Insurance Carried for Benefit of Applicant: Net Cash Surrender Value After Loans (h)
Charles F. Herbert 1617 Smith Twr., Seattle	President,D	None	70,000	495			
Harold Schmidt Healdsburgh, California	Director	None	85,000	1			
Glen D. Franklin Douglas, Alaska	D Secty-Treas.	None	80,000	1			
	Total	None	x x x x x			x x x x x	x x x x x

If more lines are needed continue on separate sheet.

9. Capital Stock Issues:

For Corporate Applicants

Item	Authorized (a)	Outstanding (b)	Par Value (c)	Number of Shares Outstanding (d)	Dividend Rate Last Paid* (e)
Common stock	$ 50,000	$ 50,000	$ 100.00	599	None
Preferred stock	$	$	$		

*Indicate period covered.

10. Production:

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

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

12. Ore or Mineral Reserves:

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

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

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

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

TOTAL ORE OR MINERAL RESERVES

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

(*c*) If placer:

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

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

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

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

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

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

13. Access Roads:

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

14. Water Supply:

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

15. Power:

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

16. Labor:

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

17. Equipment and Facilities:

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

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

CERTIFICATION

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

Alaska Copper Corporation
(Name of company)

By Charles F. Herbert
(Signature of authorized official)

May 15, 1951
(Date)

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—63792-1

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
MAY 21 1951
LANDON F. STROBEL
Executive Secretary

YUKON PLACER MINING CO.

1617 SMITH TOWER

SEATTLE 4, WASHINGTON

GENERAL TECHNICAL DATA

1. Materials produced:

   a. The chief product is COPPER

   b. The by-product is GOLD

2. Name of mine is FIDALGO MINE. It is an underground mine with access from adits.

   a. There are no shafts or winzes.

   b. There are approximately 4,800 linear feet of drifts and crosscuts.

   c. Adits are included as crosscuts.

   d. There are about 30,000 square feet of stopes and raises.

3. a. The mine is located on the South side of Port Fidalgo, one half mile east of Irish Cove. It is 43 miles by water from Valdez, Alaska and 55 miles by water from Cordova, Alaska.

   b. It is located in the Valdez Recording Precinct.

   c. It is located at approximately Latitude 60-46-30 North, Longitude 146-26-30 West.

   d. Location is in the Territory of Alaska.

4. a. The property is not in operation.

   b. Alaska Copper Corporation is owner of property and, in turn, is owned by Yukon Placer Mining Company through the shares held by Charles F. Herbert.

5. The property was in production from 1916 to 1920, inclusive.

6. Experience of operators:

   The Yukon Placer Mining Company is a partnership that has been operating gold placer mines in Alaska since 1938 (prior to 1946 the name of Wade Creek Dredging Company was used.) During the World War II, this partnership (excluding Charles F. Herbert) operated a quicksilver mine known as the Red Devil Mine at Sleetmute, Alaska. Operation was under the name, Kuskokwim Mining Company. This was the only successful quicksilver operation ever conducted in Alaska.

YUKON PLACER MINING CO.

1617 SMITH TOWER

SEATTLE 4, WASHINGTON

Present operations of Yukon Placer Mining Company are as follows:

a. Jack Wade Creek, Alaska. Gold Placer worked by bulldozers and sluice boxes.

b. Fourth of July Creek, Alaska. Gold placer worked by bulldozers and sluice boxes.

c. Glacier Creek, Y. T., Canada. Bucket dredge and bulldozer-dragline operations.

d. Ballarat Creek, Y. T., Canada. Gold placer worked bulldozers and sluice boxes.

Operations at Fidalgo Mine will be under Charles F. Herbert; mining engineer (University of Alaska, 1934); engineer Fern Gold Mines, Willow Creek Mines, Alluvial Golds, Inc., from 1934 to 1937; Supervising Engineer, RFC, 1937 to 1941; present partnership 1938 to date; United States Navy Civil Engineer Corps 1943 to 1946 (highest rank LCDR.)

7. History of Fidalgo Mine:

a. Property discovered in 1907; several hundred tons of ore shipped in 1913; operated by Alaska Mines Corporation 1916-1920, who shipped 16,715 tons of 10% copper ore. Geophysical survey made in 1930. No work except sampling since that date.

b. The property formerly operated by the Fidalgo Mining Company lies five miles east of applicant's property. There was some production of shipping ore by selective mining and hand sorting during the period 1913-1919. Production figures are not available.

Approximately 1,000 tons of shipping ore were recovered from the property of the Dickey Copper Company, which property is about one mile south of applicant's property.

The property of applicant is about seventeen miles from the Ellamar Mine which had a very profitable operation prior to and during World War I. High grade copper ore and gold-pyrite ore was shipped. Production figures have not been published.

c. The following reports are attached:

(1) Letter of June 15, 1921, to F. A. Twichell from Byron Wilson, Mine Superintendent, Alaska Mines Corporation.

(2) Memorandum regarding Coppermines, Inc., by F. A. Levensaler.

YUKON PLACER MINING CO.

1617 SMITH TOWER

SEATTLE 4, WASHINGTON

(3) Report on the electrical survey carried out for Coppermines, Incorporated, by E. G. Leonardon, Schlumberger Electrical Prospecting Methods, September 27, 1930.

(4) Report and maps by the U. S. Bureau of Mines.

8. The net worth of Yukon Placer Mining Company as determined at its annual meeting in January, 1951, and calculated according to the buy and sell provisions of the Partnership Agreement is $240,000 (including the assets of Wade Creek Dredging Company.)

9. Not applicable.

10. Not applicable.

11. It is estimated that the maximum monthly production would be 4,000 tons of 10% copper ore.

12. a. Chalcopyrite ore occurs in northward trending shear zones where these traverse a prominent easterly trending shear zone. At the mine workings the northerly zone of shearing (the mineralized zone) is from 150 to 200 feet wide. Ore minerals and pyrite replace cracks and are disseminated in the crushed sediments (graywackes and siliceous argillites.)

The high grade ore-shoots are chimney-like bodies that vary from a few feet to ten feet or more in width and from twenty to one hundred feet in length. The most important of these chimneys has been mined for a vertical distance of 310 feet and its continuation to an additional depth of 500 feet is indicated by the electrical survey.

Dips and rake of the oreshoots are steep. The ore and walls stand with little or no support.

b. (1) Assay plans are included in the attached ~~report~~ maps by the U. S. Bureau of Mines.

(2) It is expected that there will be developed 22,000 tons of 10% copper ore between number 9 level and number 4 level. According to Wilson (letter attached) there are 10 tons of 3% ore to each ton of 10% ore. If there is substance to his estimate (in which Levensaler seems to concur) there should be developed between number 9 level and number 4 level about 200,000 tons of 3% ore and an additional 150,000 tons of ore of similar grade above number 4 level.

YUKON PLACER MINING CO.

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SEATTLE 4, WASHINGTON

The electrical survey discovered two important anomalies that can be investigated from number 9 level. It is highly probable that additional ore will be developed in these.

The mine may possibly develop over a million tons of ore with a grade between 3% and 5%.

13. The portal of level No. 9 is about a quarter mile from deep water and at an elevation of 158 feet.

14. There is sufficient water for milling from a stream within a half mile from the portal of No. 9 level.

15. No electrical power is available. Diesel power will be used, usual cost in the area is about 3 cents per KWH.

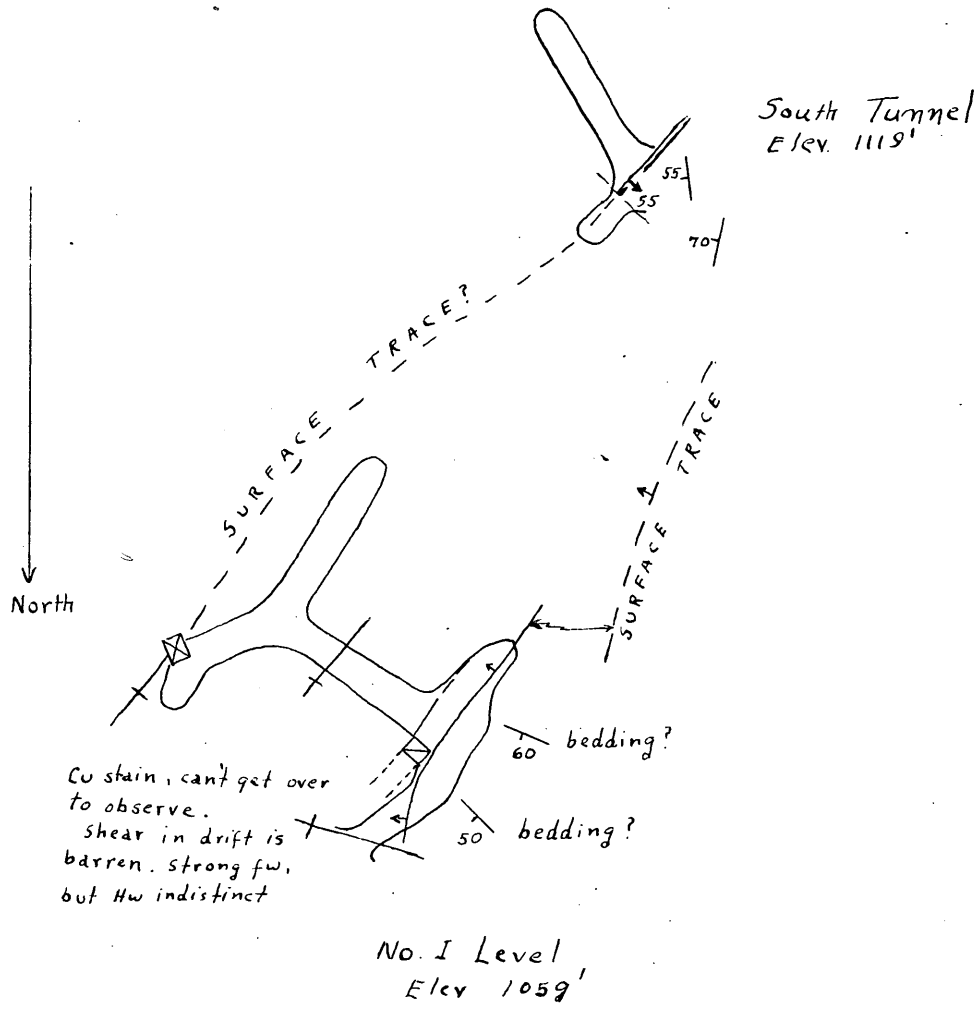
16. Not applicable.

17. Nearly all equipment and facilities must be furnished.

18. There are reasonable grounds to expect that the mine will develop a moderate tonnage of ore of sufficient grade to permit direct shipment to a smelter and to repay the cost of development and moderate investment in mine plant, buildings, and loading facilities. The ratio of net operating profit to investment in such development and facilities is about 3 to 1.

Applicant proposes to use all surplus profit after retirement of investment to continue development work and to attempt to prove enough ore of milling grade to warrant the installation of facilities suitable for handling such ore.

Fig. 4

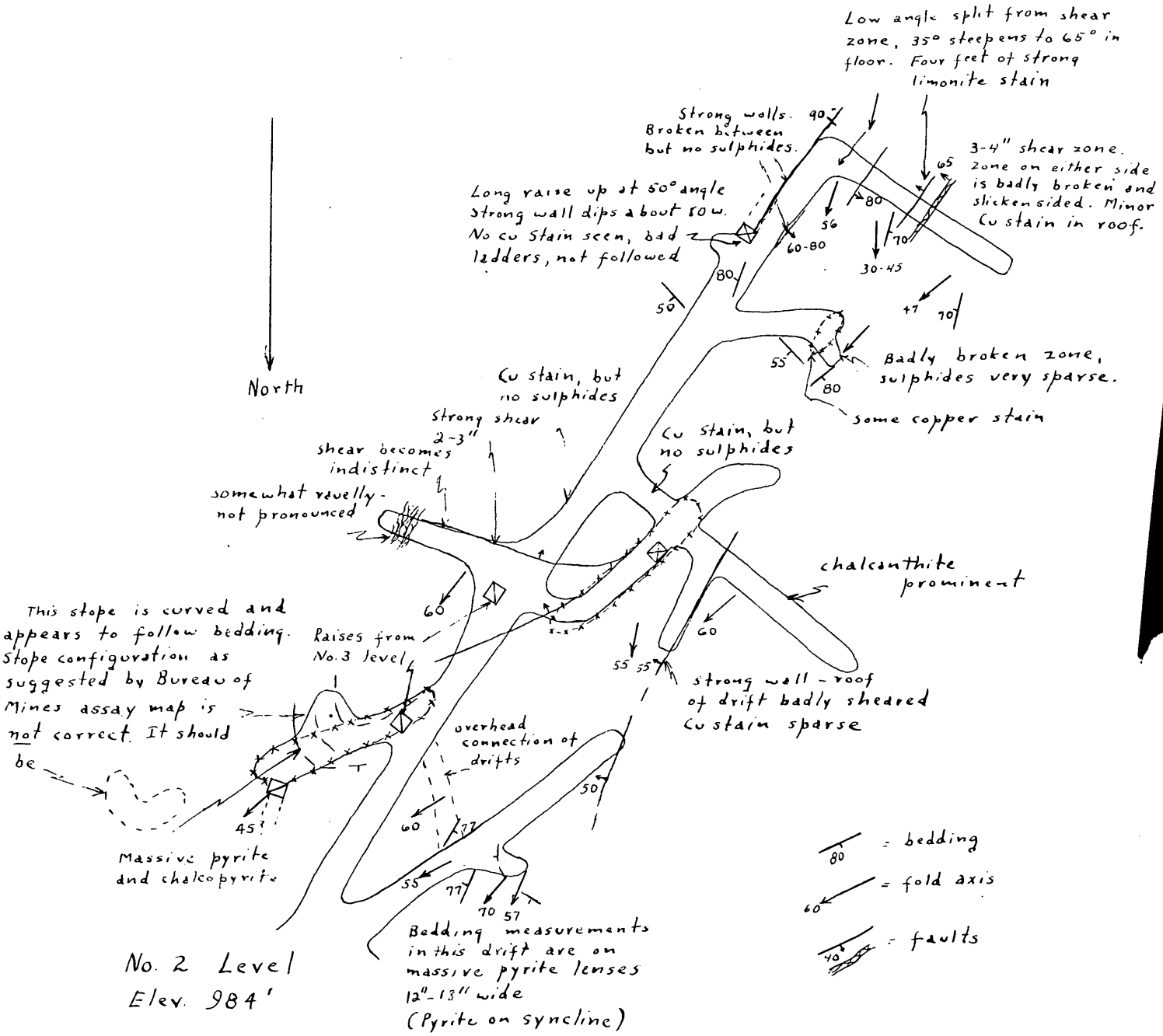


1" = 40'

U.S.G.S. Field Compilation - R.G. Ray
July 1951

Fidalgo-Alaska Mine

Fig. 5



No. 2 Level
Elev. 984'

FIDALGO-ALASKA MINE
U.S.G.S. Field Compilation, R.G. Ray
July 1951
1" = 40'

Fig. 6

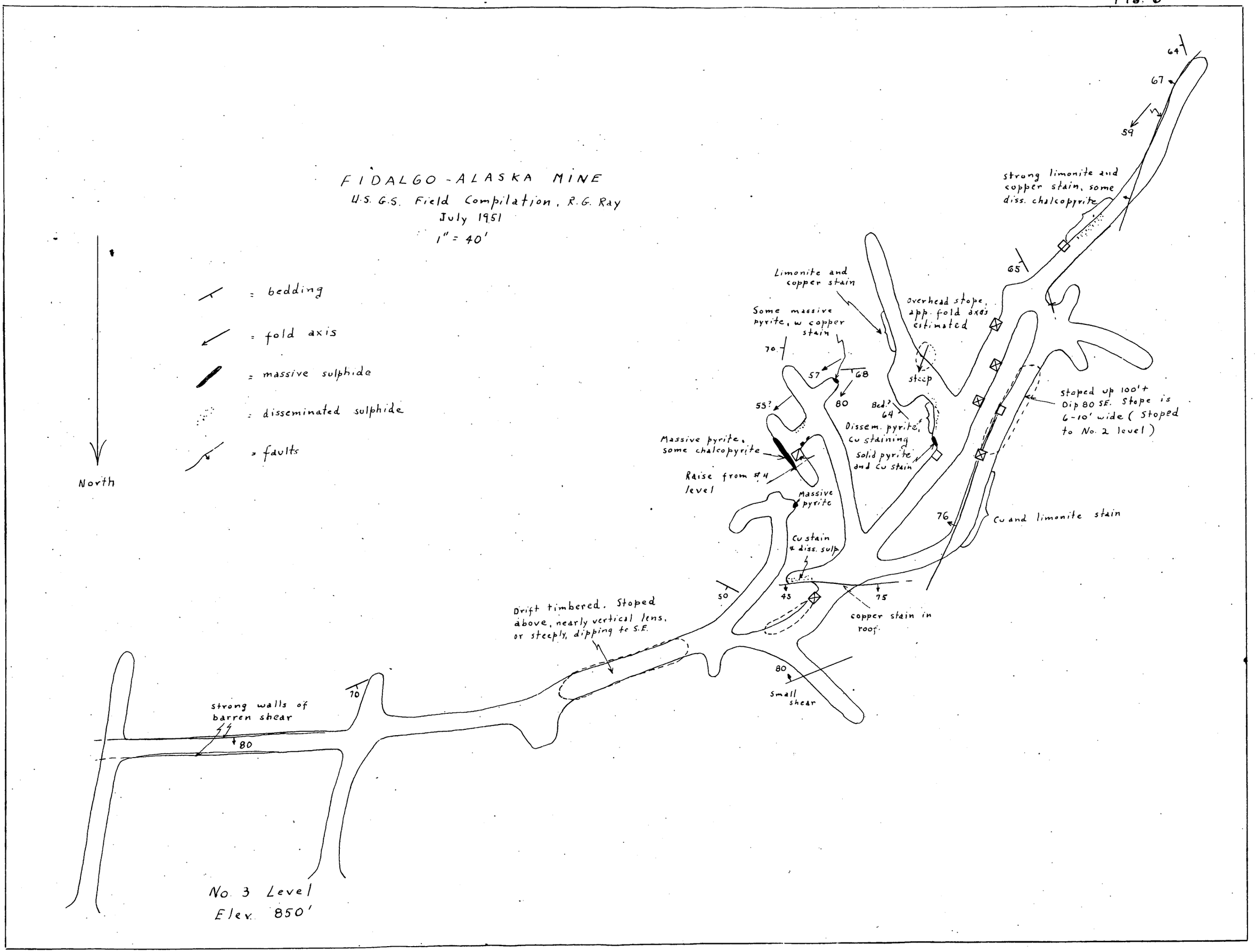
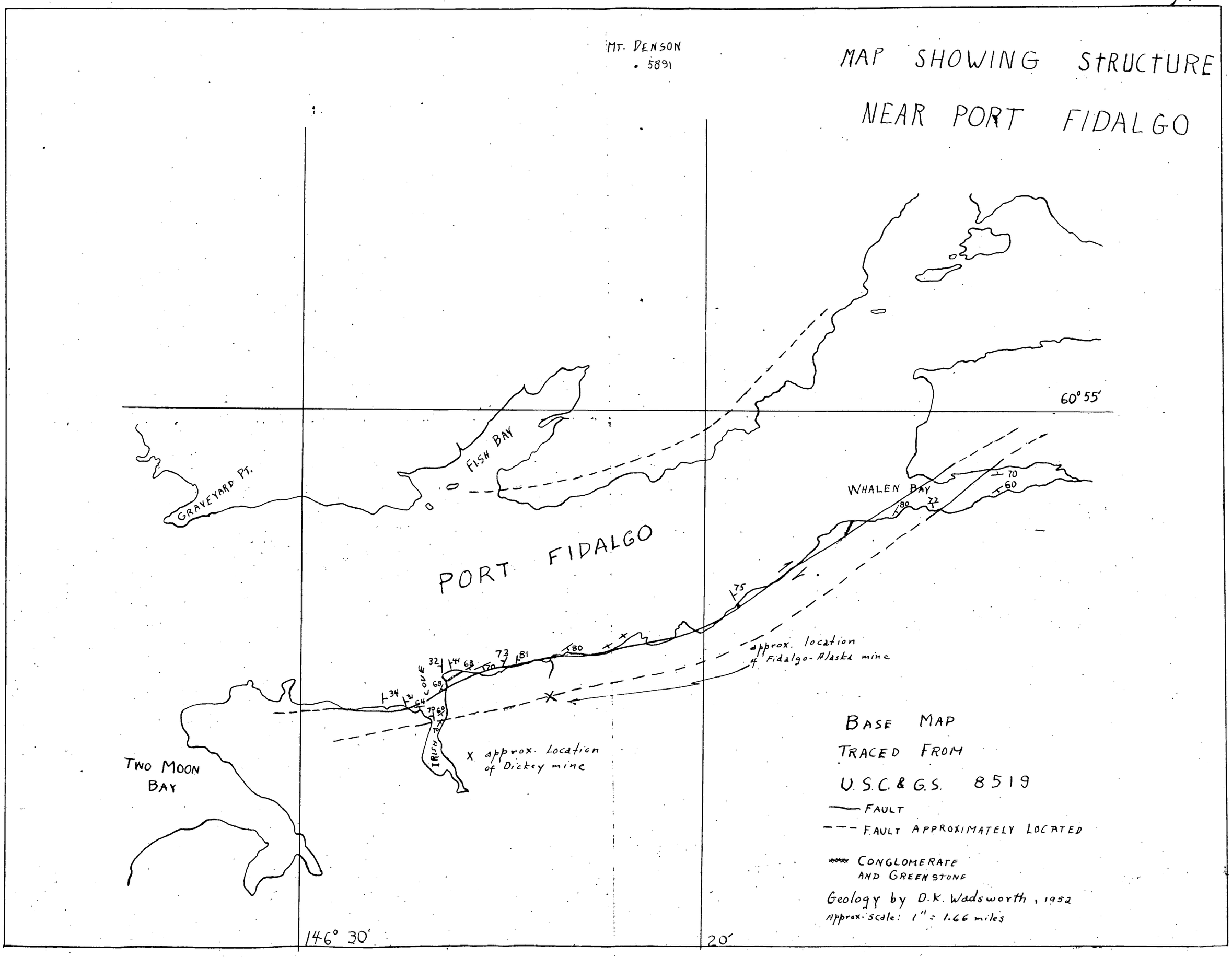

FIDALGO-ALASKA MINE
U.S.G.S. Field Compilation, R.G. Ray
July 1951
1" = 40'
= bedding
= fold axis
= massive sulphide
= disseminated sulphide
= faults
North
64
67
59
strong limonite and copper stain, some diss. chalcopyrite
65
Limonite and copper stain
Some massive pyrite, w copper stain
70
57
68
80
55?
Overhead stope, app. fold axis estimated
steep
Bed? 64
Dissem. pyrite, Cu staining
Solid pyrite and Cu stain
stoped up 100'+ Dip 80 SE. Stope is 6-10' wide (Stoped to No. 2 level)
Massive pyrite, some chalcopyrite
Raise from #4 level
Massive pyrite
76
Cu and limonite stain
Cu stain & diss. sulp.
50
45
75
copper stain in roof.
Drift timbered. Stoped above, nearly vertical lens, or steeply, dipping to S.E.
80
Small shear
70
strong walls of barren shear
80
No. 3 Level
Elev. 850'

Fig. 9


MAP SHOWING STRUCTURE
NEAR PORT FIDALGO
MT. DENSON
5891
60° 55'
GRAVEYARD PT.
FISH BAY
WHALEN BAY
PORT FIDALGO
IRISH COVE
approx. location of Fidalgo-Alaska mine
X approx. Location of Dickey mine
TWO MOON BAY
146° 30'
20'
BASE MAP
TRACED FROM
U.S.C.&G.S. 8519
FAULT
FAULT APPROXIMATELY LOCATED
CONGLOMERATE AND GREENSTONE
Geology by D.K. Wadsworth, 1952
Approx. scale: 1" = 1.66 miles

dma 12321X

Seattle, Washington
June 15, 1921

Mr. F. A. Twichell,
Seattle, Washington

Dear Sir:

Complying with your request for a report on the Fidalgo Property, I am employing the same method in arriving at conclusions as that used during the period of active operation, i.e., from March, 1916, to November, 1920.

You will probably recall that the usual method of estimating ore reserves, i.e., sampling, assaying and measuring "ore in sight" did not give any result on which we could depend but that basing future production on past performance did, on the whole, give a basis for calculation which proved satisfactory and fairly reliable.

Shortly after arriving at Fidalgo, March, 1916, I wrote you stating that"there is no commercial ore 'in sight' at Fidalto," and at that time outlined considerable work involving the expenditure of some $20,000, in addition to $30,000 which you have already expended without any assurance that you would get your money back other than that the shallow workings near the surface had produced several hundred tons of good grade ore and that the block of ground directly underneath probably would produce equally as much ore of the same average grade in proportion to the area explored as was produced above.

Basing your future operations on the above theory you permitted me to go ahead with the work outlined, with the result that you not only completed the development workin the block of ground in and around No. 2 tunnel, then then producing area, but mined and sold enough crude copper ore to pay for all the work formerly completed and had a cash balance before the end of the first year.

Continuing the same policy of basing future estimates on past performance, you continued dropping down to lower levels step by step, developing new ground and constantly exposing new ore bodies of commercial grade and paying for the work out of production until No. 4 level was reached, the lowest point at which ore can be mined successfully from the upper works.

On March 1st when I arrived at Fidalgo there was employed in and around the mine eighteen men. I immediately cut this force to twelve men as there was not sufficient tools or camp equipment to accommodate more than that number. It was necessary to supply the property with buildings, equipment, and tools from the ground up, which you did and at the same time continued operations and production and constantly increasing the force, equipment and production until at the time work was discontinued in 1920 there was and is ample accommodation for thirty men, with a completely equipped and modern plant for small scale operations.

Considering the fact that all mining and other operations connected with the production of ore was accomplished entirely by hand labor and under adverse conditions, Fidalgo is a remarkable example, as the property more than paid its own way and cancelled a burden of debt of some $155,000, including the purchase price of $125,000, and at all times developed ore in constantly increasing volume as depth was gained.

During the entire active life of the mine under your management the smelter records show an average grade of shipping ore assaying approximately 10% copper aggregating some 17,000 tons of ore and an average cost of approximately nine cents per pound of copper.

The ore shipp3d ranged in copper content from six to sixteen percent. The higher grade ore was the result of circumstances as weather conditions, congestion on account of shipping, and inadequate facilities during the first two years had more to do with grade of ore than actual natural conditions. Shipments where the grade ran 6% or less were premeditated, as that was done for the purpose of determining grade of possible mill ore. The high grade shipments were usually the result of careful sorting at periods when hand sorting was practicable or during cold periods when it was the result of selective mining underground.

No attempt was made to determine the extent of mill ore as all mining was confined to ore of shipping grade. Forty tons of sorted waste and stope waste from all points of the mine assayed 3.10% copper, with gold and silver valued of approximately $1.00 per ton. There are several thousand tons of waste in the various dumps containing sufficient copper to justify milling when the method for economical handling is provided. There are considerable areas exposed underground adjacent to the stoped areas which contain 3% copper ore.

A horizontal section made at any point in the explored portion of the ore zone would show a fairly uniform condition of low grade ore but a vast difference in high grade. The sill of No. 3 level does not show any extensive shoots of high grade, on the other hand the sill of No. 4 shows more high grade than at any other known point.

I wish to call your attention to the ore shoot marked No. 1 on the No. 4 level map. This ore shows for 80 feet on the sill of that level with an average thickness of eight feet. This ore body was mined out up to No. 3, a distance of 140 feet and averaged 40 feet long, 8 feet thick and produced approximately 5000 tons of better than 10% shipping ore. This is by far the largest single ore shoot in the mine and proves conclusively that the ore gains strength with depth. The ore shoots near the surface were smaller but of approximately the same grade.

There are four other ore shoots on the sill of No. 4, as shown on the accompanying maps, all of which may be sampled by taking up the track except the ore in the extreme northeast end which is filled in. The extreme southwest shoot did not go up but shows in the bottom, all the others are stoped up in varying degrees and will no doubt produce ore both up and down when mining is continued.

It has been suggested that youj continue work from above as formerly. I am not in favor of this. The old workings are above timber and water on the side of a rugged mountain and would only be continuing the same expensive unsatisfactory methods with the added expense of sinking below No. 4 for additional ore.

You have No. 5 tunnel completed to the ore zone, completly equipped for further prospecting, a first-class compressor plant, machine shop, buildings, equipment and tools and all necessary supplies including extra parts for all machines, to go ahead on short notice.

The machinery is all new, on concrete foundations greased and painted and well housed in structures built to withstand the climate. Timber and water are close and plentiful. There is running water in the buildings pipes, electric lights and telephone and camp equipment sufficient for all present needs and for some time to come.

T The above mentioned No. 5 tunnel comprising some 2000 linear feet with the machinery buildings, power plant equipment, etc., was constructed and purchased at a cost of $48,000, for the purpose of opening up and developing the Fidalgo Mine ore zone. I advised closing down for the reasonthat conditions were so bad that it was almost impossible to keep going. There is some evidence that this year will see general conditions such that you can go ahead with some degree of certainty and some assurance of uniform prices and at least guess as to what the cost will be.

To complete the No. 5 tunnel prospecting and drive an raise through to No. 4 will require 1,000 lin. feet of work. This should be done for not to exceed $20,000, and probably can be done for less.

I belive that the ore showing on No. 4 tunnel justifies doing this work and that the ore remaining in the bottom of No. 1 shoot as it shows on No. 4 level will pay for the work. Aside from this, I believe that there is as much more beneath No. 4 as there was above that level and that it can be taken out with power machinery at less cost per pound of copper than the area laready mined.

The above estimates are all made on the basis of crude shipping ore of a grade of 10%. All of the old workings from the surface down to No. 5 tunnel, a vertical distance of 800 feet or more, show areas of 3% ore. This low grade certainly can be mined and milled at a profit after all cost of development has been cared for through mining the high-grade. There is at least ten tons of low-grade ore for each ton of high-grade.

I have only considered the north ore shoot in this lette.r There is a surface showing 1000 feet S. W. of the present workings which is equally as good as the ore at the surface of the present workings. The surface between these two outcrops is concealed with debris. The present work can be extended after No. 5 is completed with the same assurance of finding ore as was the case before any development was done on the ground.

Following is a complete production record with costs, based on net paid for ore by Tacoma Smelting Companyh

(Signed) BYRON WILSON,
Superintendant

The property of the Alaska Mines Corporation comprises 20 non-patented lode claims, arranged in two groups, known as the Arley group of five claims and the Bay View group of fifteen claims, as shown on the attached blueprint, with one additional claim located recently and adjoining group on the easterly side thereof.

The property is located on the south shore of Fidalgo Bay, one mile east of Irish Cove, and 17 miles southeast of Ellamar. The north end lines of the Bay View group adjoin the beach, affording a frontage of 1800 feet. The present workings are situated about 2600 feet from tidewater.

Fidalgo Bay is one of the large fiords on the east limit of Prince William Sound, Alaska. The Bay has been charted by the U. S. C. & G. Survey for a distance of 3 miles beyond the landing of the Alaska Mines Corporation. All steamers running between Cordova and Valdez pass within 10 miles of the property, furnishing a frequent mail, passenger and freight service to and from Seattle. The charted portion of Fidalgo Bay is navigable for the largest boats on the Alaska run.

TOPOGRAPHY:

The general topography is characteristic of the entire Prince William Sound country, viz, rugged and glaciated hills rising rather abruptly 1000 or more feet from the beach; a low timber line 1200 or 1500 feet; and an enormous undergrowth of small shrubbery and decaying vegetation. The timber is spruce and hemlock of an exceptionally good quality and quantity for the district, sufficient for all mining and dock purposes. Good piling is plentiful; the hemlock is by far superior for such uses. It has been found advisable, however, to ship in lumber for building purposes. There are no large creeks in that vicinity but a small stream runs all the year round just below the present camp, ample for domestic purposes.

GEOLOGY:

The exposed rocks on the north slope of the hill are mostly sedimentaries, hard black to gray slates and diorite breaks through the slates and is undoubtedly the cause of the mineralization. The resulting shear-zones have a steep easterly dip and the strike nearly magnetic north, which is the pronounedd strike of the strongest shear-zones in the district.

The ore, which is pyrite and chalco-pyrite carries a little silver and traces of gold, and occurs in fractures zones and irregular lenses. These "shoots" have a strong pitch to the north. The ore bodies are traversed by slips in nearly any direction but show poor walls.

The property extends from the water's edge of Fidalgo Bay over and across two ridges or hills or mointains nearly to Irish Cove in its south and southwesterly direction, following the line of the shear-zones which are fully defined on the exposed surface. These ridges are about 1000 feet apart, the one to the north having an elevation of 1100 feet, the one to the south being some 200 feet higher. The original ore showings were as indicated in red ink on the blueprint attached and occur on the apex of the two ridges which run east and west. All development and mining operations up to date have been confined to the north showing, no work having been done on the south outcrop except to clear

away the surface to demonstrate the extent and nature of the ore on the surface. All indications are to the effect that the south outcrop is fully as strong and well defined as the northern one, and being in the same shear-zone should produce approximately the same grade and bulk of ore that the one to the north has developed.

The mine workings consist of four tunnels, No. 1, 2, 3, and 4, and from the area above No. 4 has come all of the ore taken out of the mine. The elevation of these tunnels are as follows:

No. 1,	1000 feet	No. 3,	796 feet
No. 2,	925 feet	No. 4,	658 feet

The principal amount of ore has come from the area between tunnels No. 4 and No. 3, and the showings on the floor of No. 4 are larger and of higher grade than at any point above.

For this reason it was determined to run a fifth tunnel (No. 5) at a much lower altitude, and this was done, over 1900 feet of standard tunnel has been run at an elevation of 158' to a point which brings it approximately under the ore known to exist in the floor of tunnel No. 4. No ore has been mined or found ? or taken out of tunnel No. 5, as it is not yet equipped for handling ore, and owing to the unfavorable conditions which existed in the copper market and the exorbitant cost of production, the owners decided that as soon as this work was completed, the work should be closed down. All precautions were taken to put all working portions of the mine, and machinery and appliances in first-class conditions in order that no delay would be encountered in resuming work when conditions should justify such resumption.

The mine is equipped with a wire tram, connecting tunnel No. 3 with the bunkers at the beach and shipping point with an auxiliary hoist from No. 4 to 3, with standing and running wire, buckets, switches, and all necessary appliances. This tram is approximately 2600 ft. long and delivers (by gravity) the ore from the mouth of tunnel No. 3 and dumps it into the bunker.

The compressor is an Ingersoll-Rand 14 x 9 x 12, air receiver 42" x 8' with all fittings, driven by a 75 H.P. Sampson distillate engine with belt drive. Air drills are of the Leymer-Ingersoll type #248 for hollow steel, with air and water connections and equipment, all well equipped with working parts and extras, all in first-class shape with air pipe, water pipe, ventilating pipe, fan, hoists, heating system under bunkers, (to insure winter shipping,) in fact, the equipment comprises every item necessary for safe and economical operation. Ore cars are the latest pattern, tracks are well laid, and the drainage is perfect, all tunnels being so driven as to drain themselves.

The buildings consist of ore bunkers at the beach, of 800 tons capacity, Superintendent's house and office, compressor house, bunker and cook house, storehouse, boiler house, carpenter shop, blacksmith shop and storage sheds, all at the waterfront, at which point there is also a shipping wharf 400 feet long from which the ore is handled to the steamers for shipment south. At tunnel No. 4 there is another bunk and cook house, the foreman's house, tool house, blacksmith shop, powder house, etc., also a complete outfit of tools, including mining, construction and repair tools, all in good working condition and ready for use. The cook and bunk houses are full equipped for a full crew of men and in excellent condition.

Supplies can be shipped direct from Seattle or can be obtained at very favorable prices at Valdez, 40 miles distant by water.

This property was taken over by the present owners late in 1915, and shipping of ore started early in 1916 and proceeded continuously until late in 1920, when they ceased mining and shipping for the reasons hereinabove stated. During that time the mine shipped and marketed 16,175 tons of ore of an average assay of 10% copper with a persistent showing of small quantities of gold and silver. The smelter sheet returns covering these shipments show a net return at the smelter, after deducting all costs of handling, treatment, refining and marketing, and all costs of transportation from smelter to the marketing point, in the sum of $514,726.13. Out of this sum the smelter paid the freight and war tax on these shipments from the mine to the smelter aggregating $61,740.96, leaving a net return in cash to the owners of $452,985.17.

The total operating costs of the mine for mining, handling and shipping this ore, including taxes, insurance, license, legal service, medical service, superintendents and clerical service, and overhead charges of every description, were $300,696.09, leaving a margin of $152,289.08 for the five years' operation.

It will further be borne in mind that all this ore was mined, handled and sorted by hand power, the air equipment which was installed having been used only in connection with driving tunnel No. 5.

The property is now in precisely the same shape as when work was closed down and is in such condition that operations could be resumed without any appreciable delay whatever.

Seattle, Washington.
June 28, 1921.

I hereby certify that the above and foregoing report, comprising pages 1 to 5 inclusive, following the letter signed by Byron Wilson, Superintendent, is the original report made by him in connection with and supplementary to said letter; that said report was dictated by him on the eve of his departure for Hyder, Alaska, and that the same was not transcribed in time for him to sign before his boat sailed and he was therefore compelled to leave Seattle, for which reason his signature was not endorsed thereon.

SECRETARY, Alaska Mines Corporation

dma 1232 X

REPORT ON THE

ELECTRICAL SURVEY CARRIED OUT

FOR THE

COPPERMINES INC.

IN PRINCE WILLIAM SOUND DIST.

ALASKA

New York City

September 27, 1930

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REPORT ON THE

ELECTRICAL SURVEY CARRIED OUT

FOR THE

COPPERMINES INC.

IN PRINCE WILLIAM SOUND DIST.

ALASKA

I. INTRODUCTION

The object of this report is the discussion of the results of an electrical survey, undertaken by the Schlumberger Electrical Prospecting Methods, during the months of June, July and August, on the properties of Coppermines Inc., in the Prince William Sound district, Alaska. The agreement for this work was entered into between Mr. R.E. Tobin, secretary of Coppermines Inc., and Mr. Asa C. Baldwin, Northwestern representative of the Schlumberger Electrical Prospecting Methods on May 26th, 1930.

The purpose of the survey will be discussed in greater detail below. In brief, its object was the investigation of the holdings of the Company in an effort to ascertain to what extent the properties were underlain by conductive sulphide mineralization, and thus, serve as a guide to subsequent exploration.

The ore is a complex mixture of several constitutents: chalcopyrite, pyrite, pyrrhotite and sphalerite. The presence of pyrrohotite is rare and sphalerite is scarcely perceptible. The predominant sulphides are, in fact, chalcopyrite and pyrite.

The geology of the region, as well as its mineral occurrences, has been discussed at length in Bulletin 605 of the U.S.G.S. The Ellamar District, Alaska, by S.R. Capps and B.L. Johnson. In particular, the property of the Coppermines Inc., is described in pp 117-120, under the heading, Fidalgo Alaska Copper Company. It is advisable that the reader refers to this publication.

The initial discovery of ore was made in 1907. It revealed a mineralized outcrop located in area 2. (see map No.4). The Fidalgo Alaska Copper Company, who owned the property at the time, launched an extensive exploration in an endeavor to determine the extent of the deposit, and large quantities of ore were removed. The mineralization occurs in a shear zone oriented approximately magnetic north. According to the U.S.G.S. bulletin, 605, already cited, there exists a whole set of such fissures with steep easterly or westerly dips.

A rough idea of the underground workings, existing in area 2, at the time of the electrical survey, may be obtained from the inspection of Map No. 6. Five different tunnels were driven at five different levels. They are numbered 1 to 5, and their altitudes above sea level are approximately in the order of; 1000, 925, 796, 658 and 158 feet. When discussing the results of the electrical survey at area No. 2, it is necessary to bear in mind that only the richest portions of the copper ore have been removed between the fourth level and the surface. Therefore the ground

between tunnel No. 4 and the surface, should not be considered as merely sterile rock. It is quite likely that in places, low grade copper ore or iron pyrite occurs. At tunnel No. 4 a mineralized body was encountered, the upper part of which has been mined out, but which seems to extend below the tunnel level. This body, in any event, constitutes the floor of the tunnel, spreading over a considerable length (60 to 80 feet). Tunnel No. 5 was driven for the purpose of exploiting the remainder of the ore. It was expected that this tunnel would cut the ore at a lower level, or, at least that it would encounter the shear zone in which the mineralization occurs. Contrary to these expectations, this shear zone was never located.

Besides the mineral deposits discussed above, ore outcrops are known to exist about 1000 feet southwest, at area 1 and about 2000 feet northeast at area 4.

The different problems which the electrical survey was called upon to study and solve are as outlined below:

1: The acquisition of additional information was desired by the company on the mineral resources of the property. They were especially desirous of ascertaining the relations existing between the initial discovery at area 2 and the mineralized outcrop existing in area 1.

2: A general reconnaissance of the shear zone at the surface was also requested so as to determine just how a mineralized outcrop discovered in area 4 is connected with the main occurance in area 2.

3: It is the intention of the Company to exploit the ore existing between tunnel No. 4 and 5 by means of a raise drawn from tunnel 5. It is therefore very desirable to ascertain the position of the tunnel No. 5 and

thereby its relation to the shear zone and the mineralization occuring therein.

The electrical work was performed by our Mr. J. Brunschwig, assisted by Mr. A.C. Baldwin. These two engineers left Seattle, Washington on June 14th, and arrived at Valdez, Alaska on June 19th. The field work was commenced on June 21st and lasted until July 25th. The amount of working days were 26. Mr. Brunschwig left Valdez on July 28th and was back at Seattle on August 5th. The total length of the survey was 52 days. This includes the trips back and forth from Seattle.

In the following pages, we shall first, endeavor to give a summary description of the electrical techniques of exploration employed. This will be followed by a discussion of the results. We shall close with our conclusions and recommendations.

II. SUMMARY DESCRIPTION OF THE METHODS OF EXPLORATION EMPLOYED

(1) Reconnaissance by the Spontaneous Polarization Method

The most convenient and rapid method of undertaking a preliminary examination for metallic minerals consists of studying the phenomena of spontaneous polarization.

A mass of metallically conductive material (the metallic sulphides, except sphalerite and cinnabar, the arsenides, native metals, etc.), enclosed in country rock, acts as a natural battery, the moisture in the encasing rock being the electrolyte, and the metallically conductive minerals acting as the metallic elements of the cell.

Near the surface, where the weak ground water solutions are oxidizing, the mineralization acts as the negative pole, whereas at depth the solutions are neutral or reducing, and the mineral mass is therefore positively charged. The electric current consequently generated by this natural battery flows down the apex through the conductive mass, out into the wall rocks, and back to the surface, where it completes the circuit by returning into the apex of the body (Fig. 1). Hence, an observer studying the ground overlying such a concealed generator of electricity will discover lines of current converging on one or more "negative" centers" located about the conductive mass.

This ensemble of effects constitutes the phenomena of "spontaneous polarization" which we abbreviate S.P.

The method is not of absolutely general application, since two conditions must be fulfilled to permit spontaneous current generation to take place:

a) - Metallic electrical conductivity of the ore minerals.

b) - Continuity of the mineralization of the deposit, so that an unbroken metallic path is offered to the current.

These conditions are, for example, generally well fulfilled by masses or veins of pyrite, chalcopyrite, etc.

The study of the spontaneously generated currents is very expeditiously carried out by measuring the differences of potentials which occur at the surface of the ground, along straight and parallel lines. Using the distances along these lines as abscissae, the corresponding potential values are plotted as ordinates, thus producing a profile of potentials. When this profile is flat or only slightly wavy, no electrical activity is noted. Areas of current generation are indicated by pronounced peaks of negative potentials in the S.P. profiles where they cross such areas.

The S.P. method is a very simple process of exploration since it necessitates only the location of the negative zones of potential at the surface of the ground, by means of a very light apparatus.

(2) Potential Method

This technique is more general in its application, since it can be used for studying stratigraphical and structural problems as well as in the search for ore.

The operation consists of creating an electrical field in the ground by means of passing an electrical current between two widely separated ground contacts. The form of the resultant field can then be studied

by means of a short, movable line used to shunt off a portion of the current in the ground through a measuring instrument. (See Fig. 2.)

This principle can be applied through a variety of techniques of which one of the most rapid is the determination of the resistivities of the sub-soil from observations of the drops of potential. A series of such observations frequently reveals valuable data concerning concealed geological occurrences.

In this type of exploration, it must be emphasized that relative differences in the distribution of the current are studied. A geological formation, (ore-body, for example) can not be discovered unless it presents an appreciable volume, more conductive or more resistant, in proportion to the encasing and overlying rocks.

Another technique of the potential process is known as the "map of the potentials." It consists of sending the current into the soil (at the surface or underground) as described above, and studying the distribution of the current at the surface, by tracing and mapping the equipotential curves, moting their form, and drawing therefrom conclusions regarding the electrical conductivity of the underlying material.

III. DISCUSSION OF THE RESULTS

1) Reconnaissance by Spontaneous Polarization

In order to rapidly outline the zones of electrical activity in the entire territory to be investigated, twenty-three profiles of spontaneous polarization were traced. They are shown on charts 1, 2 and 3. It is well to mention here, that these charts are not, strictly speaking, maps, since the distances between the different profiles are not plotted at a true scale, but are merely an ideal representation of the reconnaissance work, the purpose of which is to outline, broadly, the areas of electrical activity and to permit their further study by detailed measurements.

From the inspection of the profiles several zones of activity are apparent. They show negative differences of potential in the order of magnitude of about 100 to 250 millivolts. They have been numbered 1 to 5, going from the southwest to the northeast. They are the following:

Area 1,	on profiles		1,2 and 3
" 2,	"	"	6,7 and 8
" 3,	"	"	9, 10, 11 and 12
" 4,	"	"	18, 19 and 20
" 5,	"	"	18, 19, 20, 21 and 22

These areas were studied more minutely by tracing equipotential curves around each of them.

2) Detailed Study by S.P. Equipotential Curves

An equipotential curve drawn around an area of spontaneous electrical activity joins all points at the surface of the ground which are at an electrically given potential. Therefore, such a curve may be

pictured as a contour line of the mounnain of electrical activity which is centered on the mineralization. These curves, then, give a general picture of the mineralization near the surface. Accordingly, 13 equipotential curves were drawn around the five areas. They may be elaborated upon as follows: (see Map No. 4)

a) Area 1 - Zone of quite strong activity (about 150 millivolts) connected with the mineralization already known to outcrop in the area. Two distinct centers of negative potentials were located. From their position, as well as from the elongated form of the equipotential curve, it is apparent that the mineralization strikes, near the surface, approximately southeast - northwest. The study of this area was completed by artificial current work, which will be discussed later.

b) Area 2 - This is the area where the initial discovery was made. It shows by far, the most intense spontaneous activity of the region with a negative center of about 280 millivolts. Undoubtedly part of this activity is due to the fact that a great portion of the conductive mineralization has not been removed from the upper levels. The form of the equipotential curve, as well as its elongation oriented southwest - northeast, checks quite satisfactorily with what is known about the form and extension of the ore deposit.

A point of importance has been established by this part of the survey, namely; that there is no connection, near the surface, between the mineralization discovered in area 1 and 4 and the main occurrence. This clears up one of the questions which the electrical survey had been called upon to answer.

c) Area 3 - This is a zone of spontaneous activity of moderate intensity (about 140 millivolts.) Two distinct negative centers were located. The form of the curves, and the direction of the alignment of the centers, would indicate here a mineral occurrence, oriented southwest - northeast. The area of activity is of a limited extent and we do not believe that the amount of mineralization, at least near the surface, is considerable. It is advisable however, to ascertain its importance and value at depth by some exploration at the electrical centers (pits or drill holes).

d) Area 4 - This area is a zone of slight intensity (about 100 millivolts) and of a very limited extent horizontally. For the time being, we would not advise any exploration on this area.

e) Area 5 - Two negative centers were located in this area. Although one of them A_1, is connected with a very small zone of activity, it seems interesting because the rock is highly mineralized at the surface. We think that a shallow exploration is justified here. Center A_2 on the other hand, marks the place of an extensive reaction, outlined by a much larger curve. The spontaneous activity phenomenon is intense in the vicinity of A_2 and is also quite important in the remainder of the area. We think that it is very advisable to investigate this indication and we would advise, as a first work on it, the drilling of an inclined hole, in the neighborhood of point D. (Drill hole inclined at about 70° oriented as shown on map No. 4)

3) Study by Resistivity Measurements.

Due to the lack of time, it was impossible for our observers to draw a systematic map of resistivity of the entire belt, running from area 1 to area 5. This is rather unfortunate, since such measurements might have been helpful towards completing the knowledge obtained by the spontaneous polarization survey. In particular, they would probably have permitted the tracing of the outcrop under the overburden of the zones of fissuring and to see, whether or not, the five areas of spontaneous activity are located on the same shear zone.

A very limited amount of resistivity measurements were traced however, on area 1 and 3; they are not detailed here, inasmuch as they are quite difficult to interpret because they are too scattered and greatly disturbed by the rough topography. A more thorough work would have been necessary for obtaining definite conclusions. However, the measurements confirmed the existence of conductive masses in area 1 and under the northern center of area 3.

4) Study by Tracing Current Equipotential Curves

On areas 1 and 2, a connection was made with the mineralization and the current sent directly into the ore itself. The results of this work can be commented upon as follows:

a) Work at area 1 - (See map No. 5) The current was sent into the mineralization at point A. Three equipotential curves were traced, the largest one being incomplete. The interesting point put in evidence by these curves is that the earth connection A does not, by far, constitute a center of symmetry for them. The current shows a definite tendency to flow in

a northeast and southeast direction, and this fact demonstrates quite clearly that the mineralization extends towards the northeast and that the zone of fissuring dips probably towards the southeast. This point should be kept in mind when carrying out exploration in the area.

5) Work at Area 2 (See Map No. 6)

In this area the current was sent, underground, into the ore at points A_1 to A_5 of the fourth level. Equipotential curves C_1 to C_5 were traced at the surface. Here also the curves are not centered on the earth contacts. They show instead, that the zone of emergence of the current is in the region of curve C_1 northwest of the earth contact. This indicates, as was the case for the study of area 1, that the conductive mineralization and probably the shear zone, have a southeasterly dip.

We also tried to confirm this point by studying the distribution of the electrical potentials in tunnel 5. The measurements made on this level would indicate that the maximum of the potentials has not been reached at B and D at the end of the drifts AB and AD. Therefore, in our opinion, the ore occurrence (for the shear zone, in the case of lack of mineralization), would lie south of AB and east of AD. This information, combined with the fact that the zone of fissuring seems to be oriented in a southwest - northeast direction should help to direct the future exploration on this level.

This point may be examined more accurately by figuring on a vertical cross section, oriented northeast - southwest, the point of emergence of the current at the surface and the position of the earth

contact at level No. 4. With such a cross section it is possible to see approximately where the line connecting these two points encounters level No. 5. It would seem that this occurs no more than 50 feet southeast of point D.

IV. CONCLUSIONS

1: An electrical survey was carried out in June, July and August 1930, by the Schlumberger Electrical Prospecting Methods on the properties of Copperminas Inc., in the district of Prince William Sound, Alaska. The topography in the area under consideration, is exceedingly rough. This circumstance, combined with the existence of a fairly thick vegetation retarded the speed of the survey considerably.

2: The ground was first explored by means of the spontaneous polarization method. Five distinct areas of electrical activity were located, numbered 1 to 5. They do not seem to connect with each other. Except for area No. 2, which is fairly well explored underground, and for area No. 4, which is quite unimportant in extent and intensity, we advise a further investigation of these indications. This investigation should be carried out first by means of drill holes, as discussed above in Chap. III.

3: Some detailed exploration by potential methods was performed on areas 1 and 2. It showed that the mineralization dips towards the southeast at both places. This point is of Considerable importance since at level No. 5 cross cuts AD and AB which were undertaken with the intention of cutting the shear zone at a lower level failed to encounter it. According to the electrical results the shear zone at a lower level failed to encounter it. According to the electrical results the shear zone would seem to lie some 50 feet southeast of the end of cross cut AD.

Respectfully submitted,

E.G. Leonardon

New York City
Sept. 27, 1930

BUREAU OF MINES SAMPLES
ALASKA COPPER CORPORATION PROPERTY
FIDALGO BAY

Sample No.	Width in feet	Percent Cu	Sample No.	Width in feet	Percent Cu
1	3.0	18.14	20	3.5	0.64
2	7.0	15.68	21	4.7	1.60
3	5.0	6.94	22	5.0	1.72
4	5.0	9.48	23	4.0	0.95
5	5.0	15.20	24	5.0	1.40
6	5.0	13.63	25	5.0	1.82
7	5.0	12.12	26	2.7	4.42
8	5.0	23.94	27	4.0	6.95
9	2.3	20.86	28	3.0	0.65
10	5.0	15.54	29	3.8	3.00
11	5.0	14.76	30	4.5	2.42
12	2.2	9.25	31	3.5	2.20
13	2.4	4.92	32	3.2	1.55
14	3.0	11.88	33	5.0	0.48
15	2.0	19.34	34	5.0	1.85
16	4.3	8.04	35	4.2	4.18
17	5.0	3.78	36	4.7	2.05
18	4.7	5.08	37	5.0	0.72
19	4.0	0.84	38	5.0	10.98

dma/12321X

YUKON PLACER MINING CO.

1617 SMITH TOWER
SEATTLE 4, WASHINGTON

MEMORANDUM REGARDING COPPERMINES INCORPORATED

This company holds a very favorable lease and bond on a copper mine situated at tidewater, Fidalgo Bay, Alaska. The property is within ten miles of the steamer route between Cordova and Valdez, Prince William Sound.

The mine has produced approximately 20,000 tons of 10% copper ore down to a depth of 400' and stopped on good bottoms. In addition to the shipping ore, some 60,000 tons of 2½% ore was mined which is now in the dumps, fills and pillars. An extension of stopes in the low-grade areas will probably increase this to 100,000 tons.

Previous shipping records that are available show that 16,715 tons actually returned $514,726.13, or $30.80 per ton, at a total cost of $300,696.09, or $18.00 per ton, resulting in a profit of $12.80 per ton.

The new low level tunnel, 400' below the bottom level that produced the above tonnage, has been driven 1900', and is just now entering the ore zone. This tunnel will have to be extended another 100' or so and connected by a raise to the level above. At least four intermediate levels and cross-cuts should be driven within this distance involving altogether some 1400' of development work. This will cost approximately $35,000.00 and should develop at least 20,000 tons of 10% ore and 100,000 tons of 2½% ore.

From this grade of ore there will be a profit of $15.00 per ton on crude ore and $1.00 per ton on mill ore. In addition to the copper content, the ore carries a small amount of gold and silver. One thousand feet south of the present development in the same lode, another outcrop of ore of equal importance occurs. This has never been developed beyond a limited amount of surface exploration. Undoubtedly, the intervening 1000' harbors other ore bodies not visible at the surface. Extension of the low level tunnel will cut this ore at a vertical depth of 900' and should develop 50,000 tons of 10% ore and 200,000 tons of 2½% ore, according to present indications. This will involve 2500' of drifts, raises, and cross-cuts at a cost of $65,000; a mill of proper design capable of handling 300 tons per day with the necessary power plant, camp enlargement, etc., will cost $200,000.00.

A conservative picture of the possibilities of the venture is about as follows:

ORE FROM DEVELOPMENT:

70,000 tons of shipping ore at $15 per ton net	- - -	$1,050,000
400,000 to 500,000 tons mill ore at $1 per ton net	- - -	450,000
	NET OPERATING PROFIT	$1,500,000

-Continued-

YUKON PLACER MINING CO.

1617 SMITH TOWER

SEATTLE 4, WASHINGTON

COPPERMINES INCORPORATED - 2

(Carried Forward)	NET OPERATING PROFIT	$1,500,000
CAPITAL INVESTMENT:		
Development	$100,000	
Mill and additional equipment	200,000	300,000
	NET PROFIT	$1,200,000

To accomplish the above development and construction, it will take one and one-half years, mining and milling at the rate of 300 tons of mill ore and 50 tons of shipping ore per day, will take four and one-half years or a total of six years.

The initial risk will be $35,000. This will be further increased to $75,000 - $100,000; upon completion of all the plans, the total investment will be, say $300,000. The operation will retire this at the rate of $1000 per day; at the rate of three hundred working days per year, it will require approximately twelve months to retire the total investment. After that, all income from the sale of ore and/or concentrates will be a net profit. It is to be emphasized that the above calculation of outcome does not exhaust the possibilities of the property, as it embraces some twenty mineral lode claims containing good ore showings, as yet unexplored, which might produce many times this estimate.

Original signed

By: L. A. Levensaler

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
JAN 11 1954

OPERATOR'S MONTHLY REPORT AND VOUCHER

Month of AUGUST 195 2 Docket No. DMEA 1232 x Contract No. 2741

Operator's Name ALASKA COPPER CORPORATION Minerals Copper

Address CORDOVA, ALASKA

Contract Amount, $112,548.00 Government Participation: 50 % Amount, $ 56,274.00

ITEMS OF COSTS	FOR OPERATOR'S USE			FOR GOVERNMENT USE ONLY		
	Monthly Total	Totals Previously Reported	Totals To Date	Approved Monthly Total	Approved Totals Previously Reported	Approved Totals To Date
(1) Independent Short Form Contracts:						
Drilling						
Bulldozing						
Crosscutting						
Drifting						
(2) Labor and Supervision:						
Labor	1841.75	4411.00	6252.75			
Supervision	241.55	691.29	932.84			
Technical Services	125.00	108.58	233.58			
(3) Operating Mat'ls. and Supplies:						
Timber						
Explosives						
Pipe						
Track						
Various Supplies	1380.00	3885.82	5265.82			
(4) Operating Equipment:						
Rental	1613.77	1500.00	3113.77			
Purchase						
~~Depreciation~~ Freight	290.00	1899.97	2189.97			
(5) Initial Rehabilitation and Repairs		2000.00	2000.00			
(6) New Bldgs., Improvements, etc.		1500.00	1500.00			
(7) Miscellaneous:						
Repairs to Equipment						
Sampling and Analysis	16.33	30.30	46.63			
Payroll Taxes	258.44	75.46	333.90			
Liability Insurance		799.75	799.75			
Loss on Boardinghouse	889.74		889.74			
(8) Contingencies (specify):						
TOTALS	6656.58	16902.17	23558.75			

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

Date 9/29/53 *Payee Alaska Copper Corp

Per Ray Fowler Title Accountant

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

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

(Instructions on reverse)

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

$ 889.10

Signature [illegible] (Authorized Certifying Officer)

Date 12/29/53 Vou. No. DMEA-31

(See other side)

(For Government use only)

CERTIFICATION BY GOVERNMENT REPRESENTATIVE:

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

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

APPROVAL BY DMEA EXECUTIVE OFFICER OR ALTERNATE: Executive Officer Alaska Field Team Region I

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

MONTHLY REPORT OF OPERATOR

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

U. S. GOVERNMENT PRINTING OFFICE 205675

Form MP-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

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
JAN 11 1954

Month of AUGUST 195 2 Docket No. DMEA 1232 x Contract No.
Operator's Name ALASKA COPPER CORPORATION Minerals Copper
Address CORDOVA, ALASKA

OPERATION	UNIT	COSTS THIS MONTH	UNITS THIS MONTH	COSTS TO DATE	UNITS TO DATE	UNIT COSTS TO DATE	AUTHORIZED BY CONTRACT	
							Units	Unit Costs
Drifting								
Crosscutting								
Raising								
Shafts								
Winzes								
Drilling: Core	ft.	6656.58	235	20058.75	1816	11.04		
Churn								
Auger								
Stripping								
Trenching								
Test Pits								
Roads and Trails								
TOTAL DISTRIBUTED COSTS		6656.58		20058.75				TOTAL COSTS AUTHORIZED BY CONTRACT
Operating Equipment Purchased								
Initial Rehabilitation and Repairs				2000.00				
New Buildings, Improvements, etc.				1500.00				
TOTAL COSTS		6656.58		23558.75				

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 9/29/54 Operator Alaska Copper Corp
Per Ray Sohler Title Accountant

REMARKS:

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

(Instructions on reverse)

(For Government use only)

INSTRUCTIONS

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

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

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

U. S. GOVERNMENT PRINTING OFFICE 205676

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
JAN 11 1954

Contract Idm - E 276 - August 1952:

Amount approved for payment	$1,442.48
Contract Idm - E 336:	
Overpayment	553.38
Net Payment	$ 889.10

Above payment made in accordance with Audit Certificates dated September 30, 1953 and October 5, 1953.

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

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

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

Month of JULY 195 2 Docket No. DMEA 1232 x Contract No. Idm-E276
Operator's Name Alaska Copper Corporation Minerals Copper
Address Cordova, Alaska
Contract Amount, $ 112,548.00 Government Participation: 50 % Amount, $ 56,274.00

ITEMS OF COSTS	FOR OPERATOR'S USE			FOR GOVERNMENT USE ONLY		
	Monthly Total	Totals Previously Reported	Totals To Date	Approved Monthly Total	Approved Totals Previously Reported	Approved Totals To Date
(1) Independent / Short Form Contracts:						
Drilling						
Bulldozing						
Crosscutting						
Drifting						
(2) Labor and Supervision:						
Labor	2248.25	2162.75	4411.00	2,248.25	2,162.75	4,411.00
Supervision	115.50	575.79	691.29	115.50	575.79	691.29
Technical Services	108.58		108.58	108.58		108.58
(3) Operating Mat'ls. and Supplies:						
Timber						
Explosives						
Pipe						
Track						
Misc. Supplies	107.03	3778.79	3885.82	107.03	3,778.79	3,885.82
(4) Operating Equipment:						
Rental	750.00	750.00	1500.00	750.00	750.00	1,500.00
Purchase						
~~Depreciation~~ Freight		1899.97	1899.97	1	1,899.97	1,899.97
(5) Initial Rehabilitation and Repairs		2000.00	2000.00		2,000.00	2,000.00
(6) New Bldgs., Improvements, etc.		1500.00	1500.00		1,500.00	1,500.00
(7) Miscellaneous:						
Repairs to Equipment						
Sampling and Analysis		30.30	30.30		30.30	30.30
Payroll Taxes	75.46		75.46	75.46		75.46
Liability Insurance		799.75	799.75		799.75	799.75
(8) Contingencies (specify):						
TOTALS	3404.82	13497.35	16902.17	3,404.82	13,497.35	16,902.17

I certify that the above bill is correct and just and that payment therefor has not been received.
Date 8/14/52 *Payee Alaska Copper Corp
Per Ray Fohlen Title Accountant

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

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

(Instructions on reverse)

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

$ 1,702.41

Signature
(Authorized Certifying Officer)

Date 8/28/52 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. Idm-E 276 in accordance with the terms of the contract.

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

APPROVAL BY DMEA EXECUTIVE OFFICER OR ALTERNATE:
Alternate for S.H. Loraine, Exec. Officer, Region 1

Signature J. A. Hendlick Title Chief, Min. Div. Reg. 1 Date Aug. 20, 1952

MONTHLY REPORT OF OPERATOR

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

U. S. GOVERNMENT PRINTING OFFICE 205675

ALASKA COPPER CORPORATION
1013 Smith Tower
Seattle 4, Wash.

PROGRESS REPORT FOR
July, 1952

Fidalgo Operation

During the month of July 880 feet of diamond drilling were completed. Reference is made to the report and map of July 18, 1952 for the location of the holes in which drilling was done. These were:

Hole No. 2, 107 feet (completed at 150 feet)
Hole No. 11, 99 feet (abandoned because of severe bit wear and caving)
Hole No. 12, 200 feet
Hole No. 13, 203 feet
Hole No. 14, 203 feet
Hole No. 15, 68 feet (incomplete)
880

Hole No. 11 had shown in its first thirty feet more mineralization than had any previous hole, although the quantity of chalcopyrite was clearly insufficient to indicate even very low grade ore. Assays of this section and of the sludge from the caving section at the bottom of the hole gave negative results for gold and silver (through a mistake by the assayer no analyses for copper were mad e).

Hole No. 13 showed a marked increase in the quantity of chalcopyrite over that found in Hole No. 11, particularily between thirteen feet and thirty eight feet. However the material is clearly not ore and it has not been assayed.

Hole No. 14 showed a decrease in mineralization.

Hole No. 12 and the first sixty-eight feet of Hole No. 15 were principally in graywacke, with rare specks of chalcopyrite.

An additional fifty feet of drill rod, which had been ordered in May, still had not arrived at the end of the month. Consequently, the maximum possible depth of hole was 203 feet.

Three men were employed continuously during the period.

Port Fidalgo
August 12, 1952

ALASKA COPPER CORPORATION
by Charles F. Herbert
Charles F. Herbert, Pres.

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 July 1952 Docket No. DMEA 1232K Contract No. Idm-E276

Operator's Name Alaska Copper Corporation Minerals Copper

Address Cordova, Alaska

OPERATION	UNIT	COSTS THIS MONTH	UNITS THIS MONTH	COSTS TO DATE	UNITS TO DATE	UNIT COSTS TO DATE	AUTHORIZED BY CONTRACT	
							Units	Unit Costs
Drifting								
Crosscutting								
Raising								
Shafts								
Winzes								
Drilling: Core	ft.	3404.82	938	13402.17	1581	8.48		
Churn								
Auger								
Stripping								
Trenching								
Test Pits								
Roads and Trails								
TOTAL DISTRIBUTED COSTS		3404.82		13402.17				TOTAL COSTS AUTHORIZED BY CONTRACT
Operating Equipment Purchased								
Initial Rehabilitation and Repairs				2000.00				
New Buildings, Improvements, etc.				1500.00				
TOTAL COSTS		3404.82		16902.17				

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

Date 8/14/52 Operator Alaska Copper Corp

Per [signature] Title Accountant

REMARKS:

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

(Instructions on reverse)

(For Government use only)

INSTRUCTIONS

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

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

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

U. S. GOVERNMENT PRINTING OFFICE 205676

[illegible]-104 (Rev.)
[illegible]il 1952)

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION

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

Bu. Vou. No. .....
Sch. No. DMEA-3
~~P. O. No.~~
~~Cont. No.~~ 7/24/52

OPERATOR'S MONTHLY REPORT AND VOUCHER

Month of June, 1952 Docket No. DMEA 1232X Contract No. .....
Operator's Name Alaska Copper Corporation Minerals Copper
Address Cordova, Alaska
Contract Amount, $112,548.00 Government Participation: 50 % Amount, $.....

ITEMS OF COSTS	FOR OPERATOR'S USE			FOR GOVERNMENT USE ONLY		
	Monthly Total	Totals Previously Reported	Totals To Date	Approved Monthly Total	Approved Totals Previously Reported	Approved Totals To Date
(1) Independent Short Form Contracts:						
Drilling						
Bulldozing						
Crosscutting						
Drifting						
(2) Labor and Supervision:						
Labor	2063.25	99.50	2162.75	1,063.25	99.50	1,162.75
Supervision	113.52	462.27	575.79	113.52	462.27	575.79
Technical Services						
(3) Operating Mat'ls. and Supplies:						
Timber						
Explosives						
Pipe						
Track						
Fuel & Misc. Supplies	2247.61	1531.18	3778.79	1,247.61	1,531.18	3,778.79
(4) Operating Equipment:						
Rental	750.00		750.00	750.00	-0-	750.00
Purchase						
Depreciation Freight	1209.10	690.87	1899.97	1,209.10	690.87	1,899.97
(5) Initial Rehabilitation and Repairs		2000.00	2000.00		2,000.00	2,000.00
(6) New Bldgs., Improvements, etc.		1500.00	1500.00		1,500.00	1,500.00
(7) Miscellaneous:						
Repairs to Equipment						
Sampling and Analysis		30.30	30.30		30.30	30.30
Payroll Taxes						
Liability Insurance	49.75	750.00	799.75	49.75	750.00	799.75
(8) Contingencies (specify):						
TOTALS	6433.23	7064.12	13497.35	6,433.23	7,064.12	13,497.35

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

Date 7/12/52 *Payee Alaska Copper Corporation

Per [signature] Title Accountant

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

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

(Instructions on reverse)

Pursuant to authority vested in me, I certify that this account is correct and proper for payment in the amount of $ 3,426.42

Signature [signature]
(Authorized Certifying Officer)

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

(For Government use only)

CERTIFICATION BY GOVERNMENT REPRESENTATIVE:

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

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

APPROVAL BY DMEA EXECUTIVE OFFICER OR ALTERNATE:

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

MONTHLY REPORT OF OPERATOR

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

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

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

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

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

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

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

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

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

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

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

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 [illegible]F-104A
(A[illegible] 1952)

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

UNITED STATES
DEPARTMENT OF THE INTERIOR

DEFENSE MINERALS EXPLORATION ADMINISTRATION

OPERATOR'S UNIT COST AND PROGRESS REPORT

Month of June 195[illegible] Docket No. DMEA 1232 x Contract No.
Operator's Name Alaska Copper Corporation Minerals copper
Address Cordova, Alaska

OPERATION	Unit	Costs This Month	Units This Month	Costs to Date	Units to Date	Unit Costs to Date	Authorized by Contract: Units	Authorized by Contract: Unit Costs
Drifting								
Crosscutting								
Raising								
Shafts								
Winzes								
Drilling: Core	ft.	6433.23	643	9997.35	643	15.54		
Churn								
Auger								
Stripping								
Trenching								
Test Pits								
Roads and Trails								
Total Distributed Costs		6433.23		9997.35				Total Costs Authorized by Contract
Operating Equipment Purchased								
Initial Rehabilitation and Repairs				2000.00				
New Buildings, Improvements, etc.				1500.00				
Total Costs		6433.23		13497.35				

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 7/17/52 Operator Alaska Copper Corp.

Per Charles F. Hebert Title Pres.

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

Remarks:

(Instructions on reverse)

(For Government use only)

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
AUG 11 1952

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

MF-104
(April 1951)

Budget Bureau No. 42-R1036.
Approval expires 6-30-51.

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS ADMINISTRATION

Copy

Pu. Vou. No. DMA-9
Sch. No. DM-9
P. O. No.
Cost No.

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
JUN 20 1952

STRATEGIC AND CRITICAL MINERAL EXPLORATION PROGRAM
OPERATOR'S MONTHLY PROGRESS REPORT

Operators are to submit monthly reports to the designated field representative of the Defense Minerals Administration. Reports are to be submitted in quadruplicate prior to the 15th day of the month following the reporting period.

Narrative.—A concise narrative description of progress made, results accomplished, and any unusual difficulties encountered is to be furnished.

Maps.—Wherever possible, the narrative is to be illustrated with maps or sketches showing formations penetrated and location and assays of samples taken as well as advances in workings. In the case of diamond drilling or churn drilling, the location and inclination of holes is to be shown on a map; logs and assays also are to be submitted.

Cost Accounts.—All applicable parts of this form are to be filled in. This report will form the basis for payments of the Government's participating share of expenses. Audits of accounts will be made from time to time.

CERTIFICATION

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

ALASKA COPPER CORPORATION
(Name of Company)

By Charles F. Herbert
(Signature of Authorized Official)

6/6/52
(Date)

PRESIDENT
(Title)

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

16—64068-1

MONTHLY SUMMARY COST STATEMENT

Name of operator: ALASKA COPPER CORP.
Project No. DMA: 1232 x
Total contract amount: 112,548.00
Government participation percent: 50

Distribution of Expenditures for Month of MAY, 1952

Item	Monthly Total	Totals Previously Reported	Totals to Date	For Government Use Only: Approved Monthly Total	Approved Totals Previously Reported	Approved Totals to Date
Wages and salaries	2256.77		2256.77	2,256.77	-0-	2,256.77
Equipment purchase [1]						
Equipment rental [2]						
Buildings	775.65		775.65	775.65	-0-	775.65
Explosives						
Repair parts						
Other supplies	2590.83		2590.83	2,590.83	-0-	2,590.83
Power						
Transportation	690.87		690.87	690.87	-0-	690.87
Withholding taxes						
Compensation insurance	750.00		750.00	750.00	-0-	750.00
Other insurance						
Contract work						
Other (specify)						
Total	7064.12		7064.12	7064.12		
Totals previously reported					-0-	
Totals to date	7064.12		7064.12			7064.12

FOR GOVERNMENT USE ONLY

Checked by Erl
Entered by
Approved by
Amount approved for payment $3,532.06
Remarks

[1] Enter total purchase price in month purchase is made.
[2] Payments for rental of equipment or prorated depreciation on equipment owned by contractor.

16—64068-1

ALASKA COPPER CORPORATION
1125 Smith Tower
Seattle, Washington

PROGRESS REPORT
May, 1952
Fidalgo Operation

As of the end of May, no diamond drilling had been done at the property but the equipment had finally been set up so that drilling should commence on or about June 4th, 1952.

The late season and heavy snowfall and delay in shipment of equipment from Seattle resulted in a delayed schedule for the project and somewhat greater costs than had been estimated for the preliminary work. On May 1st, Herbert and the diamond driller went to Cordova and a cook was hired in that city, a boat procured to go to the property. Shortly prior to the trip to Cordova, we had been informed that the compressor, diamond drill and hoist had missed the boat in Seattle and would not arrive until May 16th. It was decided to proceed to the camp site with what supplies could be obtained to prepare the camp. On May 4th the crew left Cordova in a landing craft (LCM) and arrived at Fidalgo. There was three feet of snow down to the high tide level and no shelter so considerable time was spent in shoveling snow and preparing quarters. On the 8th of May, an additional man arrived on the job and work first began on clearing the trail and further making quarters habitable. Herbert returned to Cordova to check on the missing equipment. The drill, compressor and hoist finally arrived at Fidalgo on May 19th. One of the drums on the hoist froze immediately which hampered unloading operations. Fortunately, repairs were completed within a day or two. The heavy

snow made it very difficult to move equipment up the hill. The trail to the portal is about 1300 feet long, consists of a rather steep climb for the first 400 feet, then a flat, level stretch for about 500 feet, and then a very steep climb up to the portal. As the snow was 5 or 6 feet deep on the upper stretch of the trail, and completely covered the collapsed blacksmith shop which occupied the only possible site for the compressor, it was thought that time could be saved by using the old 4 inch pipeline that lay under the waste dump. The outlet to this line was discovered and the line was tested by filling with water. It appeared to be all right. By May 29th, the compressor had been moved into location at the base of the second hill and connected with the old 4 inch line. However, it was immediately discovered that the line would not carry sufficient air because of many leaks in the line under the dump. Therefore, it was necessary to shovel away the upper trail and clean away the old blacksmith shop.

By June 1st this was accomplished and the air line in the mine was tested. One break was found and this was repaired without difficulty. It is expected that diamond drilling will proceed through the month of June without serious interruption. Hole No. Five as shown on the map accompanying the exploration contract will be drilled first and Holes Six, Seven and Eight will most likely follow. Herbert will do all of the engineering work necessary in connection with this project but will not be on the payroll. His traveling expenses have been charged up to the wages and salaries account.

DATED this 1st day of June, 1952.

By _____
Charles F. Herbert

CFH:jrb

DISTRIBUTION OF WAGES AND SALARIES FOR MONTH OF MAY 1952

Name of operator ALASKA COPPER CORPORATION
Project No. DMA 1232 x
Total contract amount 112,548.00
Government participation percent 50

Type	Number	Man-Shifts	Rate	Total
Miners			$	$
Muckers				
Trammers				
Timbermen				
Pumpmen				
Hoistmen				
Surface				
Samplers				
Assayers				
Shift bosses				
Mechanics				
Electricians				
Blacksmiths				
Carpenters				
Drill runners	1	30	2.50/hr.	675.00
Drill helpers	1	24	2.50/hr.	530.00
Teamsters				
Manager				
Superintendent				
Engineers	1	31		462.27
Geologists				
Bookkeeper				
Foreman				
Clerks				
Stenographers				
Other Cook	1	29	2.25/hr.	589.50
Total	4	114		2256.77

Note.—Show only that portion of supervisory, office, and engineering salaries that is chargeable to this project.

FOR GOVERNMENT USE ONLY

Checked by
Entered by
Approved by
Remarks

16—64068-1

EXPLORATION UNIT COST AND PROGRESS REPORT FOR MONTH OF MAY, 1952

Name of operator ALASKA COPPER CORPORATION
Project No. DMA 1232 x
Total contract amount 112,548.00
Government participation, percent 50

Item	Costs					Progress				
	Wages [1] and salaries	Equipment [2]	Supplies	Other [3]	Total	Unit	Units this month	Units previously reported	Units to date	Units authorized by contract
Drifting										
Crosscutting										
Raising										
Shafts										
Winzes										
Drill holes	561.77	690.87	2255.53	750.00	4258.17					
Overburden										
Rehabilitation and preparation	1195.00		305.00		1500.00					
Geology and geophysics										
Trenching										
Sampling and assaying			30.30		30.30					
Roads and trails	500.00				500.00					
Test pits										
Other (specify) FIXTURES & IMPROVE.			775.65		775.65					
Totals	2256.77	690.87	3366.48	750.00	7064.12					

[1] Prorate supervisory, engineering, and office salaries in proportion to man-shifts of direct labor.
[2] Prorate charges for equipment that is not exclusively for one type of job (such as compressors) against authorized units of work in each category.
[3] Where entries in the "Other" column (above) are more than 25 percent of the total expenditures, a breakdown of this item should be made.

16—64068-1 U. S. GOVERNMENT PRINTING OFFICE

FOR GOVERNMENT USE ONLY

Checked by
Entered by
Approved by
Remarks

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

PROJECT SUMMARY REPORT

By: F. M. Murphy December 23, 1953

1. DMEA Docket No. 1232X (Copper)
Contract No. Idm-E276
Property: Alaska Copper Corporation
Port Fidalgo, Cordova, Alaska
15 patented mining claims owned by the Corporation and recorded in Valdez Precinct.
Office - 1013 Smith Tower, Seattle 4, Washington

2. Contract March 18, 1952.

Work authorized:

1) Preliminary exploration $19,942.00
a) establish camp, assemble equipment and diamond drill maximum of 1500 feet, Ex size

2) Secondary exploration depending on satisfactory results of first: $92,606.00

Crosscut to ore shoot on adit level	150 feet
Drift on adit level	130 feet
Raise, adit level to No. 4 mine level	520 feet
Intermediate levels, 3 @ 100 feet ea.	300 feet
T O T A L	1100 feet

Total estimated cost of project	$112,548.00
50% Government participation	$ 56,274.00

Work completed:

1816 Lin. feet core drilling @ $11.04/ft.	$20,058.75
Rehabilitation and repairs	$ 3,500.00
Total expended	$23,558.75

Project discontinued at end of drilling, about August 15, 1952, by mutual consent, as no ore was indicated by the drilling and there was no object of continuing the secondary exploration. However, final disposal of equipment was not completed until about April 1953.

3. Audit Certificate September 30, 1953.

Total cost billed by Operator	$23,558.75
Less salvage, etc., $2,694.08	$20,864.67
Exceptions (see Audit report)	$ 1,077.54
Total accepted cost	$19,787.13

4. No Certification recommended by Field Team.

Comments:

The operations were performed efficiently and within the spirit of the contract. As the location was remote and progress so rapid it was not practical to control the "maximum" provisions. A junior geologist of the Geological Survey remained at the property during most of the drilling program to log core and to make additional geologic studies in the general Port Fidalgo area.

The exploration was directed toward finding a downward continuation of ore shoots from the No. 4 level to the No. 5 (or No. 9) level. The inferred continuation of ore and the anticipated location of the ore shoot was based upon a geophysical survey (self-potential and resistivity electrical methods). Drill holes about 150 feet in length were expected to intersect the ore zone. No commercial ore was found by any of the 10 holes drilled, however, chalcopyrite in minor amounts was discovered by the drilling.

Two of the drill holes had a fairly strong flow of water containing some sulphates - this probably may be the cause for the electric anomaly noted by the geophysical survey.

The Field Team report points out "It should be noted that this exploration did not disprove a downward continuation of ore at the Fidalgo-Alaska mine - it merely tested the ground in the neighborhood of the electrical anomaly. Some disseminated chalcopyrite was found at depth, and ore bodies could exist in the areas not covered by diamond drill holes. It should also be pointed out that the mine has not been limited horizontally by the present workings, as chalcopyrite occurs throughout the No. 4 level (seemap).

F M Murphy

F. M. Murphy

FMMurphy/db
12-30-53
cc to: Adm. Reading File
~~Operating Committee~~
Docket (Original)
Mr. Ellis
Mr. Murphy

☑ Audited

☐ Certified

COST ANALYSIS SHEET - DMEA PROJECT

Analysis as of Dec. 8-54
Incl. Voucher for August 1952

☑ Actual Cost

☐ Agreed Unit Costs

Name Alaska Copper Corporation

Docket No. DMA-1232X

State Alaska

Commodity Copper

Idn-E No. 276

OPERATION	AUTHORIZED Units	AUTHORIZED Cost	COMPLETED Units	COMPLETED Cost	NET COST
Drifting & Crosscutting	580	$ 28,231.00			
Raising	520	20,825.00			
Shafts					
Winzes					
Drilling (Specify) Diamond	1500	17,942	1816	19,633.18	17,684.83
Surface Excavation					
Underground Excavation					
Roads and Trails		500.00 ✓			
Operating Equipment Purchased		46,550.00 ✓		2,362.00	1,611.87
Surface Rehabilitation & Repairs		3,500.00 ✓		486.03	486.03
Underground Rehabilitation					
New Building, Improvements, etc.					
Other (Specify)					
Totals		$ 112,548.00		$ 22,481.21	$ 19,787.13

Prepared by Ellis

February 11, 1955

Memorandum

To: Jay L. Chambers, Chief
Contract Adm. & Audit Division

From: Ernest Wm. Ellis, Chief
Base & Miscellaneous Metals Division

Subject: Completed contracts - no discovery made

We have checked the attached list of contracts prepared by Mrs. Alley of your Division. It is not our intention to write "completion" letters to the Operators on these particular contracts, although in each instance the exploration work was unsuccessful, for the reason that the work was completed sometime prior to the adoption of the procedure to prepare final letters to the Operators.

/s/ Ernest Wm. Ellis

1-26-5[illegible]

Rare and Miscellaneous Metals
Completed contracts on which certification or a closing letter of no discovery has not been issued.

Docket No.	Contract No.	Operator
1131	104	Sierra Copper Company
1324	108	Manley J. Gold and Joe Gold
1514	112	Maravillas Minerals Company
1348	123	Elkhorn Mining Company
979	132	S. S. T. Antimony
1215	142	Compton I. Waite
1660	148	Oscar Svensson
1535	169	Columbia Mining Company
2013	215	Amador Mining Company
527	232	Yucca Mining & Milling Co.
1429	269	J. Walter Duncan, Jr.
1232	276	Alaska Copper Corporation

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

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
JAN 11 1954

P. O. Box 560
Juneau, Alaska
January 6, 1954

MEMORANDUM

To: Operating Committee
Defense Minerals Exploration Administration

From: S. H. Lorain

Subject: Final Payment, Docket No. DMEA-1232X
Alaska Copper Corporation

Enclosed herewith are two copies each of form MF-104 and form MF-104A covering the adjusted payment made in accordance with Audit Certificates dated September 30, 1953 and October 5, 1953.

S. H. Lorain, Executive Officer
Alaska Field Team, Region I

Enclosures

cc: C.L.Sainsbury

FILE COPY
SURNAME:

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

JAN - 4 1954

Mr. L. J. Wilcox, Chief
Administrative Division
U. S. Bureau of Mines
P. O. Box 560
Juneau, Alaska

Dear Mr. Wilcox:

Thank you for your letter of December 29, wherein you call attention to my advice of November 10, 1953, regarding settlement of the amount due Alaska Copper Corporation on Contract Idn-1276, Docket No. DMA-1232X. You are of course correct in determining that the amount due is $1,442.48 as you have stated.

Sincerely yours,

B. J. Brekhus
DMA Auditor

BJBrekhus/wb
January 4, 1954

Copy to: Docket
Admr. Reading File
Mr. Brekhus

R.C.B.
1-4-54

FILE COPY
SURNAME:

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

NOV 10 1953

Mr. [illegible] Lorein
Executive Officer
[illegible] Field Term, Region [illegible]
P. O. Box 90[illegible]
Juneau, Alaska

Dear Mr. Lorein:

Enclosed herewith for distribution in accordance with the provisions of Sec. 3 to Suppl. No. 2 of DMA Circular 15, are two Final Audit Reports which Mr. Breiman prepared during his recent visit to Juneau:

Ic-276, DMA-1202 Alaska Copper Corporation

Ic-134, DMA-2269 Alaska Copper Corporation

Sincerely yours,

(Signed) E. D. Talbert

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

Enclosures

MM Breiman/wb
November 9, 1953

Copy to: Docket
Mr. Gualdero
Mr. Breiman
Admr. Reading File

OFFICE OF THE ADMINISTRATOR

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS ADMINISTRATION
~~WASHINGTON 25, D.C.~~
P. O. Box 560
Juneau, Alaska
August 24, 1953

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
AUG 27 1953

MEMORANDUM:

To: Operating Committee
Defense Minerals Exploration Administration

From: Alaska Field Team, Region I

Subject: Drill core assays
Docket No. DMA-1232X (copper)
Alaska Copper Corporation

On April 10th last you wrote to us for drill core assays to support our conclusions that no discovery should be certified for this project.

Inasmuch as all drill cores have been stored at the mine, without splitting, it was necessary that we send an expedition to the mine in order to obtain drill cores for assaying. In order to reduce the cost of this operation to the minimum we waited until the Bureau of Mines had a party in that area. By examination of the drill logs we selected those sections of drill core for which some mineralization was reported; these sections were obtained by the Bureau of Mines party and brought back for assay.

Enclosed herewith are the assay results from the selected sections. We believe that these assays should constitute substantial evidence that no discovery was made; three copies of the assay report are attached herewith.

S. H. Lorain, Executive Officer
Bureau of Mines, Member

cc: C. L. Sainsbury

Core Assays - DMEA-1232X, Alaska Copper Corp., Fidalgo-Alaska mine

6-303
(March 1947)

UNITED STATES DEPARTMENT OF THE INTERIOR
BUREAU OF MINES

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
No. Minerals 158
AUG 27 1953

Report to Mr. Mining Division
R. P. Maloney
S. H. Lorain
DMEA
~~Alaska Copper Company~~

Date received

Chemical Laboratory Report

Date reported June 19, 1953

Serial No.	DESCRIPTION	Lot No.	Cu	Pb	Zn	Au	Ag
2297	#2 hole 43-48'	1	*0.1	*0.1	*0.1	Tr	.07
2298	#1 hole 115-125'	2	*0.1	*0.1	*0.1	.01	.09
2299	#1 hole 130-144'	3	0.1	*0.1	*0.1	Tr	.05
2300	#5 hole 29-46'	4	0.1	*0.1	*0.1	Tr	.06
2301	" 46-61'	5	0.1	*0.1	*0.1	Tr	.05
2302	" 61-81'	6	0.1	*0.1	*0.1	Nil	.07
2303	" 147.5-150'	7	0.1	*0.1	*0.1	Nil	.02
2304	#7 hole 130-132'	8	*0.1	*0.1	*0.1	Nil	.05
2305	#8 hole 80-90'	9	*0.1	*0.1	*0.1	Nil	.01
2306	" 115-117'	10	0.1	*0.1	*0.1	Nil	.03
2307	#14 hole 35-50'	11	*0.1	*0.1	*0.1	Tr	.03
2308	#13 hole 203-295'	12	0.2	*0.1	*0.1	Tr	.05
2309	" 187-193'	13	0.2	*0.1	*0.1	Tr	.05
2310	" 160-170'	14	0.2	*0.1	*0.1	Tr	.04
2311	" 151-155'	15	0.2	*0.1	*0.1	Tr	.04
2312	" 100-110'	16	*0.1	*0.1	*0.1	Tr	.05

U. S. GOVERNMENT PRINTING OFFICE 16—33553-3

* - less than.

Signed
Dean H. Bollman, Chemist

6-303
(March 1947)

UNITED STATES DEPARTMENT OF THE INTERIOR
BUREAU OF MINES

DEPARTMENT OF THE INTERIOR
Natural Resources Administration
RECEIVED
AUG 27 1953

No. Mining-58

Report to Mr. Mining Division
R. P. Maloney
S. H. Lorain
DIEA
Alaska Copper Company

Date received

Chemical Laboratory Report

Date reported June 19, 1953

Serial No.	DESCRIPTION	Lot No.	Cu	Pb	Zn	Au	Ag
2313	#13 hole 70-90	17	0.2	*0.1	*0.1	Tr	.04
2314	" 50-70	18	0.2	*0.1	*0.1	Tr	.06
2315	" 30-35	19	*0.1	*0.1	*0.1	Nil	.04
2316	" 15-16	20	*0.1	*0.1	*0.1	Tr	Tr
2317	#11 hole 40-58'	21	*0.1	*0.1	*0.1	Nil	.02
2318	#12 hole 12-22'	22	*0.1	*0.1	*0.1	Tr	.05
2319	" 63-65'	23	*0.1	*0.1	*0.1	Tr	.03
2320	" 127-135	24	*0.1	*0.1	*0.1	Tr	Tr
2321	" 185-190	25	*0.1	*0.1	*0.1	Tr	Tr
2322	#15 hole 195-199	26	*0.1	*0.1	*0.1	Tr	.02
2323	#16 hole 85-90	27	*0.1	*0.1	*0.1	Tr	.04

U. S. GOVERNMENT PRINTING OFFICE 16—33553-3

Signed
Dean H. Bollman, Chemist

*-less than.

Core Assays, DMEA-1232X, Alaska Copper Corp, Fidalgo-Alaska, Alaska

Fidalgo

6-303
(March 1947)

UNITED STATES DEPARTMENT OF THE INTERIOR
BUREAU OF MINES

No. Ining-15[illegible]

Report to Mr. Mining Division
R. F. Maloney
R. A. Lorain
DMEA
Alaska Copper Company

Chemical Laboratory Report

Date received

Date reported June 19, 1953

Serial No.	DESCRIPTION	Lot No.	Cu	Pb	Zn	Au	Ag						
2297	#2 hole 43-48'	1	<0.1	<0.1	<0.1	Tr	.07						
2298	#1 hole 115-125'	2	<0.1	<0.1	<0.1	.01	.09						
2299	#1 hole 130-144'	3	0.1	<0.1	<0.1	Tr	.05						
2300	#5 hole 29-46'	4	0.1	<0.1	<0.1	Tr	.06						
2301	" 46-61'	5	0.1	<0.1	<0.1	Tr	.05						
2302	" 61-81'	6	0.1	<0.1	<0.1	Nil	.07						
2303	" 147.5-150'	7	0.1	<0.1	<0.1	Nil	.02						
2304	#7 hole 130-132'	8	<0.1	<0.1	<0.1	Nil	.05						
2305	#8 hole 80-90'	9	<0.1	<0.1	<0.1	Nil	.01						
2306	" 115-117'	10	0.1	<0.1	<0.1	Nil	.03						
2307	#14 hole 35-50'	11	<0.1	<0.1	<0.1	Tr	.03						
2308	#13 hole 203-295'	12	0.2	<0.1	<0.1	Tr	.05						
2309	" 187-193'	13	0.2	<0.1	<0.1	Tr	.05						
2310	" 16[illegible]-170'	14	0.2	<0.1	<0.1	Tr	.04						
2311	" 151-155'	15	0.2	<0.1	<0.1	Tr	.04						
2312	" 100-110'	16	<0.1	<0.1	<0.1	Tr	.05						

U. S. GOVERNMENT PRINTING OFFICE 16—33553-3

< - less than.

Signed Dean H. Bollman, Chemist

6-303
(March 1947)

UNITED STATES DEPARTMENT OF THE INTERIOR
BUREAU OF MINES

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
Received
MAR 23 1953

No. Mining-158

Report to Mr. Mining Division
A. K. Maloney
S. H. Lorain

Date received N/A
Alaska Copper Company

Chemical Laboratory Report

Date reported June 19, 1953

Serial No.	DESCRIPTION	Lot No.	Cu	Pb	Zn	Au	Ag						
2313	#13 hole 70-90	17	0.2	<0.1	<0.1	Tr	.04						
2314	" 50-70	18	0.2	<0.1	<0.1	Tr	.06						
2315	" 30-35	19	<0.1	<0.1	<0.1	Nil	.04						
2316	" 15-16	20	<0.1	<0.1	<0.1	Tr	Tr						
2317	#11 hole 40-58'	21	<0.1	<0.1	<0.1	Nil	.02						
2318	#12 hole 12-22'	22	<0.1	<0.1	<0.1	Tr	.05						
2319	" 63-65'	23	<0.1	<0.1	<0.1	Tr	.03						
2320	" 127-135	24	<0.1	<0.1	<0.1	Tr	Tr						
2321	" 185-190	25	<0.1	<0.1	<0.1	Tr	Tr						
2322	#15 hole 195-199	26	<0.1	<0.1	<0.1	Tr	.02						
2323	#16 hole 85-90	27	<0.1	<0.1	<0.1	Tr	.04						

U. S. GOVERNMENT PRINTING OFFICE 16—33553-3

<-less than.

Signed Dean H. Hollman, Chemist

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS ADMINISTRATION

~~WASHINGTON 25, D.C.~~
P. O. Box 560
Juneau, Alaska
May 8, 1953

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
MAY 15 1953

MEMORANDUM

To: George C. Selfridge, Chairman
Operating Committee
Defense Minerals Exploration Administration

From: S. H. Lorain

Subject: Assays of drill cores

re: Docket No. DMA-1232X (copper)
Alaska Copper Corporation

Pursuant to your memorandum of April 10 in which you quite properly point out that we should have some actual assays to support the "no discovery" decision Mr. Sainsbury wrote to Charles F. Herbert to find out whether he had any available assays and also to find out where the cores are presently situated. A copy of Mr. Sainsbury's letter was sent to you.

Under date of April 26 we received a letter from Mr. Herbert in which he says that the cores were not assayed because they had no core splitter and that the cores are all in the core boxes in a small cabin near the lower portal of the mine. Therefore it appears that it will be necessary for some member of the Field Team, or his representative, to make a trip to the mine this summer and obtain the material necessary for the assays.

Mr. Herbert states that he had some assays made from sludge rejects but that, by mistake, copper assays were not run on them. If the assayer has not discarded these samples Mr. Herbert will have copper assays on them run.

ALASKA FIELD TEAM, REGION I

S. H. Lorain

S. H. Lorain, Executive Officer
Bureau of Mines Member

R. S. Velikanje

R. S. Velikanje for C.L.Sainsbury
Geological Survey Member

cc: C.L.Sainsbury

dmea 1232

Alaska Copper Co.

P. O. Box 2639
Juneau, Alaska

April 17, 1953

Mr. Charles F. Herbert
1125 Smith Tower
Seattle 4, Washington

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
APR 24 1953

Dear Chuck:

We have recently been advised by Washington that it would be very desirable for us to have some assays made of the richer portions of some of the cores from Fidalgo in order to firmly fix the grade of "ore" encountered at Fidalgo in case of future exploration, or criticism.

In our final report we pointed out that some core had been shipped for assaying, but owing to an error [on the part of the assayer] it was assayed for gold and silver, but not copper.

Washington had indicated that we make every effort to obtain assays; therefore, we would appreciate it if you could inform us as to the location of cores and sludge samples. We seem to recall that the cores were left in Cordova, or at the mine.

A suggestion was made that rejects of the samples previously assayed might be available for copper analysis. Do you know if they are?

Bob Chapman informs us that you have completed the sale of all the surplus equipment from the Fidalgo project. If so, we have hopes that we may be able to call for a final audit of the contract, and so "settle up" with you.

Do you plan to be in the "north countree" this summer? If so, I look forward to a visit.

Very truly yours,

ALASKA FIELD TEAM, REGION I

CLS

C. L. Sainsbury, Acting
Executive Officer
Geological Survey Member

J. A. Herdlick, Acting
Bureau of Mines Member

cc: Herdlick
Selfridge ✓

700

FILE COPY
SURNAME:

Ellis
Selfridge
Hodges

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

Mr. [illegible] Morain
Executive Director
DMEA Field Team, Region I
P. O. Box 5[illegible]0
Juneau, Alaska

APR 1 0 1953

Re: Docket No. [illegible]-12326 (Copper)
Contract No. I[illegible]-5276
Alaska Copper Corporation
Territory of Alaska

Dear Mr. Morain:

We are enclosing copies of memoranda from the copper committee group pertaining to the captioned project. Both memoranda are dated April [illegible], 1953. One is from Mr. [illegible] Johnson of the Bureau of Mines and the other is from Mr. A. R. Kinkel, Jr., of the Geological Survey.

These comments, we believe, are pertinent and self-explanatory. Certainly if at least the samples that show the most mineralization were assayed for copper and the results bore out the field team's assertion that no ore was encountered by the exploration work, future criticism might be avoided with regards to this particular project.

Sincerely yours,

George C. Selfridge

Chairman, Operating Committee

Enclosures 2

EWEllis/gla
4-9-53

cc to: Adm. Reading File
Operating Committee
Docket
Messrs. A. R. Kinkel, Jr., Rm. 4234 GSA
C. H. Johnson, Rm. 3621
Ellis
DMEA Field Team, Region I

J. C. 4/10/53

[illegible]:

J. E. Hodges
Member, Bureau of Mines

A. R. Kinkel, Jr.
Member, Geological Survey

4/8/53 gla

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF MINES
WASHINGTON 25, D. C.

April 6, 1953

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
APR 7 1953

Memorandum

To: E. W. Ellis, DMEA

From: C. H. Johnson, Bureau of Mines

Subject: DMEA-1232X (Copper) Alaska Copper Corporation

I have reviewed the final report on this project transmitted by Lorain and Sainsbury, March 18, 1953. The report in general is satisfactory but I wish to call your attention to the fact that here again is a case of inadequate sampling. The drill logs, which are quite detailed, refer to numerous occurrences of chalcopyrite and the text itself mentions that the "initial holes drilled south of the west-trending portion of No. 5 level showed traces of chalcopyrite in that area." Although the report further states that "no material was penetrated that approached .5 percent of copper" I do not feel that this justifies dispensing with sampling and analysis. Sufficient effort and funds should be expended in every case where workings penetrate mineralized ground to obtain substantiating evidence to support the judgment of the examining engineer or geologist.

Perhaps these cores still are available, in which case it is possible that the matter can be remedied, and I would be glad to see an inquiry about it directed to the Field Team.

C. H. Johnson
C. H. Johnson

Copy to - Mr. Hedges
Mr. Kinkel-Room 4234-GSA
Minerals Division
C. H. Johnson
Files

4/8/53 gla

IN REPLY REFER TO:

G-MD-CNF

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
APR 7 1953

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

April 6, 1953

Memorandum

To: Mr. E. Wm. Ellis

From: Arthur R. Kinkel, Jr.

Subject: Lack of copper assays

Re: Docket DMEA-1232X
Alaska Copper Corporation
Fidalgo-Alaska Mine
Port Fidalgo, Cordova,
Alaska
Copper

Mr. C. H. Johnson and I have discussed the lack of copper assays at the Fidalgo-Alaska mine in Alaska, and we feel that if it is at all possible, this lack should be corrected. I would suggest that you find out from the field team if it is possible to have the rejects of the samples that were assayed for gold assayed for copper also. If this is not possible it might be in order to request that additional samples be taken from the core and assayed for copper.

In a case like this, we are at present willing to take the field team's estimate that no ore of commercial grade was found in the drilling, but it may save a great deal of dispute later on if we have actual figures for the copper values, rather than a visual estimate.

ARKinkel Jr

Arthur R. Kinkel, Jr.

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

P. O. Box 560
Juneau, Alaska
March 18, 1953

FINAL Fld Tm Report

MEMORANDUM

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
MAR 20 1953

To: Operating Committee
Defense Minerals Exploration Administration
Washington 25, D. C.

From: S. H. Lorain

Subject: Final Field Team report

re: Docket No. DMEA 1232X (copper)
Alaska Copper Corporation

Enclosed herewith is an original and three copies of a final operating report on the subject project. It will be noted that the supplies and small equipment have not been disposed of but are stored in a Bureau of Mines warehouse at Anchorage. It has been considered advisable to hold these until the beginning of next season's activities in the area in the hope that better prices might be obtained than could have been obtained last fall when the market for such material was negligible. Also it is to be noted that a number of financial adjustments are to be made.

We consider that the operations were performed very efficiently and within the spirit of the contract. Nevertheless the location was so remote from rapid communication and progress was so rapid that it was not practicable to control the "maximum" provisions in strict conformance with the letter of the contract. To have attempted that would have caused irreparable delay and additional cost. We are wondering whether these deviations can be taken care of by post-amendment or whether we will have to hold the contractor to the letter of the contract.

ALASKA FIELD TEAM, REGION I

S. H. Lorain, Executive Officer
Bureau of Mines Member

C. L. Sainsbury
Geological Survey Member

4-1-53

cc: C.L.Sainsbury
ENCLOSURES

Final (Interim) Field Team Report, Region I.

DMEA Docket No. 1232X, Copper, Alaska Copper Corporation
1125 Smith Tower, Seattle 4, Washington
Fidalgo-Alaska Mine, Port Fidalgo, near Cordova, Alaska

INTRODUCTION

The property under exploration is known as the Fidalgo-Alaska mine; it is located on the south shore of Port Fidalgo approximately 35 miles northwesterly from Cordova, Alaska. The property was referred to in early publications as the Schlosser mine.

Total ore shipped from the mine amounted to 16,601 tons of ore with an average assay of 9.67% of copper. Gross smelter return on ore was $514,726.13; and total costs (including purchase of mine and payment of a $20,000.00 debt) amounted to $362,437.07. The mine has been idle since 1920, but the geophysical survey upon which this exploration was based was not made until 1930. The mine was mapped and sampled by the Bureau of Mines in 1942.

A junior geologist of the Geological Survey remained at the property during most of the drilling program to log core and to do additional geologic studies in the general Port Fidalgo area.

SUMMARY OF THE EXPLORATION PROJECT

Target: The exploration was directed toward finding a downward continuation of ore shoots from the No. 4 level to the No. 5 (or No. 9) level. The inferred continuation of ore, and the anticipated location of the ore shoot, was based upon a geophysical survey

Reviewed by
DMEA OPERATING COMMITTEE

4-1-53
(date)

(self-potential and resistivity electrical methods) that outlined an electrical anomaly south of the westward turn in the No. 5 level. Drill holes about 150 feet in length were expected to intersect the ore zone.

Work Completed under the Exploration Program: The project was started in May, 1952, and completed in August, 1952. Work accomplished consisted of setting up a beach camp, placing a compressor and supplies at the No. 5 level, and drilling 1,750 feet of EX diamond-drill hole. Additional costs were incurred for dismantling camp and for freight to have the jointly-owned equipment transported to a suitable storage place.

The holes drilled are plotted on figure 8, and the logs of the holes are attached. Holes 15 and 16 were drilled after the geologist left, and were not logged.

Performance and Costs: The Operator did the work expertly and efficiently, and in accordance with the terms of his contract, or under changes authorized by the Executive Officer of the Field Team. The Operator exceeded his contract allowance for Phase I. of the program in order to complete the drilling northwest of the drift; he has stated his willingness to assume the full amount used in excess of contract allowance. Amount due Operator on final invoice is $6,656.58 from which adjustment will be made to deduct excess funds used in exploration.

The cost breakdown is attached as Table I, and the inventory of

equipment as reported by the Operator is included. Much of the equipment is not salvageable and will be written off by the Field Team.

TABLE I.

Schedule of Exploration Costs, and List of Salable Equipment on Hand.

Costs (Statement as of March 1, 1953)

(A) By item:		Expend.	Contract Estimate	Exp. Diff.
Labor and supervision				
Labor	$6,252.75			
Supervision . . .	932.84			
Tech. services. .	233.58	7,419.17	8,442.00	-1,022.83
Operating matls., supplies, and general				
Miscl.		5,265.82	4.500.00	765.82
Operating equipment				
Rental	3,113.77			
Freight.	2,189.97	5,303.74	5,000.00	303.74
Rehabilitation & repairs		3,500.00	2,000.00	1,500.00
Miscellaneous*				
Sampling, analysis.	46.63			
Payroll taxes . . .	333.90			
Liability ins. . .	799.75			
Loss bdghse	889.74	2,070.02	- - - -	2,070.02
Totals.		$23,558.75	19,942.00	3,616.75

* Should have been included as "general" under contract item "Materials, supplies and general."

(Note: Amount of final invoice (August 1952) is $6,656.58. Government share has not been paid and is being held pending final adjustment and disposal of supplies.)

(B) By Operation:

Core drilling . . . 1,816 lin. ft. @ $11.04 . . .	$20,058.75
Rehabilitation and repairs	3,500.00
	$23,558.75

(Note: Footage drilled exceeds contract maximum by 316 feet for which applicant agreed to assume responsibility)

The following supplies and equipment on hand are stored in Bureau of Mines warehouse at Fairbanks awaiting disposal.

EQUIPMENT AND SUPPLIES

Non expendable equipment and supplies purchased by Alaska Copper Corporation for Fidalgo - Alaska Mine

Item	Cost
Seattle Tent and Awning Co., 4/9/52; 1-Tent, 14'X16' Wall	$ 74.97
Glen Carrington Co., 4/24/52; 5 ea. S. D. Bunks @$10.00	50.00
Glen Carrington Co., 4/30/52; 1-Pacific oil range & fittings	162.50
Glen Carrington Co., 4/30/52; 2 ea. Heaters, space, oil @$35.00	70.00
Alaska Limited, 5/24/52; Hose,air, 1-inch,150 ft @1.29 (cpld)10%	174.15
Alaska Limited, 5/24/52; Hose, air,1½-inch,50ft @2.40 (cpld.)10%	108.00
Alaska Limited, 5/24/52; Hose, water,½-inch,204 ft @.464(uncpld)10%	85.20
Northern Commercial Co.,5/15/52;Sheaves, wire rope,6",2ea.@25.00	50.00
Northern Commercial Co.,5/15/52;Rope,wire,5/16",1500 ft @0.154	231.00

TOOLS

Odbury Company, 4/24/52;	Torch, blow,gasoline,#327 C&L, 1ea.	13.57
	Die,pipe threadings,Toledo, AD4, 1ea.	24.00
	Vise,Chain, BC-4, Rigid - 1 ea.	11.90
	Tong,pipe, 3½'Armstrong, 2 ea.@19.60	39.20
	Wrench, pipe,24" Trimo, 2 ea.@6.98	13.96
	Wrench,pipe, 18" Trimo, 2 ea.@4.04	8.08
	Wrench,Crescent, 15", 1 ea. @4.32	4.32
	Wrench, set, 1200 Proto, 1 ea.	24.33
	Wrench, set, socket, 5400 AB, 1 ea.	21.36
	Drill, breast, No. 118 MF, 1 ea.	7.25
	Drill, bits, set, 6B-W&B, 1 ea.	12.73
	Ratchet, 965N Stanley, 1 ea.	3.90
	Plugger, Irwin BBR62T, set, 1 ea.	4.27
	Tape, Lufkin HC 253	5.27
	Hammer, sledge, 10#, 2 ea. @5.68	11.36
	Hatchet, broad, TB-4, 1 wa.	3.10
	Axe, 3½#, swamping, 2 ea. @55.00/doz	9.17
	Saw, hand,Atkins 10pt.,No.400-26,1ea.@6.82	6.82
	Saw,hand,Atkins 5½ pt. 1 ea.	6.82
	Saw, docking, Atkins 59U, 1 ea.	4.48
	Hammers, machinists, Stanley, 3 total	4.96
	Hammers, blacksmith, 2 ea. @2.16	4.32
	Hammers, ripping, 2 ea. @2.00	4.00
	Bars, crow, 1½" X 5', 2 ea. @5.65	11.30

	Square, carpenters, 24", 1 @2.23	2.23
	Level, carpenters, 24" 1 @4.49	4.49
	Plate, screw, 25 pc., Wells, Set	44.95
	Vise, Parker 953, 1 ea.	18.00
	Hoist, hand, 1½ ton, Yale, W/8ft.1.ft,1 ea.	75.16
	Jack, hydraulic, Duff Horton #8-9, 1 ea.	19.25
	Total Tools Odbury Co., invoice	424.55
Northern Commercial Co.,	5/29/52; Hoist, 2-drum, Skagit model G-5-WIS, Type 2M-RA-G, Serial No. G5-A4 W/Wisconsin TP-4 engine, Serial No.1475752	900.00
	Cable,5/16", Plow steel, 3000ft.@0.154	462.00
	Blocks, snatch, steel,6"X1", 3ea.@14.00	42.00
	Total - Equipment and tools	2,834.70
Northern Commercial Co.,	6/12/52 - Drill Supplies (Blank shells, stones & setting charges, Check return & salvage on: EX D.T. Ring-type reamer shell #RE-1538; AX Core bit #RE-4456L; EX B.W. core bits #RE-6839, 6833, 6976, 6866, 6865, 6832; Truco S. W. coring bits, 2 each.	?
	Tap, rod, Longyear 3117 AC	16.50
	Total of Drill supplies (should be some salvage	826.44
Northern Commercial Co.,	5/15/52 - Misc. items of cook and mess hall equipment (all small) estimated at about $100.00 (not checked on invoice) but of doubtful resale value. Could be abandoned as this type of equipment is a drug on the market in Alaska.	100.00

Results of Exploration: The initial holes drilled south of the west-trending portion of No. 5 level showed traces of chalcopyrite in that area, but no material was penetrated that approached .5% of copper. Two of the holes had a fairly strong flow of water containing some sulphates - this very probably was the cause of the electrical anomaly of the geophysical survey. Subsequent drilling to the north of the drift, undertaken largely to test the Operator's theory that the ore occurred at the intersections of two distinct fault systems, disclosed slightly greater concentrations of pyrite and chalcopyrite, but still not in amounts great enough to be called ore. Some core from these holes was sent for assay, but owing to a mixup they were assayed only for gold and silver.

GEOLOGY

Several different ideas of the structural control of ore shoots have been presented by different people who have studied the deposit - one is that the deposit is a "shear zone" deposit, another that favorable beds, and dragfolds in the beds, localized the ore shoots; and still another is that the ore occurs at intersections of different fracture systems. Several facts are presented below:

(1) The mine very definitely is located on a compound fault zone striking about N. 70° E. At the mine this fault zone is bounded by two distinct shears which, at the surface, are about 50 yards apart. This shear was traced eastward by geologists of the

Geological Survey for several miles. At one place, about one-half mile east of the Fidalgo-Alaska mine, considerable chalcopyrite - bearing float was found in talus filling the topographic cut that follows the northern split of the fault zone. In addition, two prospect holes east of the mine disclose chalcopyrite-bearing rock about on the strike of the fault zone. Some movement along this fault appears to have been post ore.

In addition, the general alignment of orebodies mined out or presently exposed in the workings follow a general northeast trend; however, these bodies do not bear any recognizable relation to individual shears as mapped on the surface or underground.

(2) The Geological Survey's preliminary mapping of the mine (R. G. Ray, 1951), showed a tendency for ore to occur preferentially in dragfolds plunging steeply eastward, and usually in the more siliceous beds. Subsequent examination confirmed this occurrence. At the surface west of the No. 1 level is exposed a quartzite bed heavily impregnated with chalcopyrite, striking perpendicularly to the shear zone, underlain by a more argillaceous bed that is barren.

In several of the drill cores, the sulphides showed a definite preference for the siliceous beds, and in several spots coarse-grained fragments in a finer grained matrix carried the sulphides.

It seems probable that the orebodies represent replacement by sulphides of more favorable host rocks (siliceous beds) in a compound fault zone striking northeast. The fault zone probably

acted as the avenue for entrance of the mineralizing solutions.

It should be noted that this exploration did not disprove a downward continuation of ore at the Fidalgo-Alaska mine - it merely tested the ground in the neighborhood of the electrical anomaly. Some disseminated chalcopyrite was found at depth, and orebodies could exist in the areas not covered by diamond-drill holes. It should also be pointed out that the mine has not been limited horizontally by the present workings, as chalcopyrite occurs throughout the No. 4 level (see map).

RECOMMENDATIONS

The Field Team recommends that no certification of discovery be issued, and that the contract be closed from the active file to await disposal of the salable equipment listed in the Operators Final Report. Much of the small equipment listed is not salable, and will be written off by the Field Team.

S. H. Lorain, Executive Officer
Field Team, Region I.

C. L. Sainsbury, Geological Survey
Field Team, Region I.

LOG NOTES

Hole No. 1 - 150'
Logged by D. K. Wadsworth

From	To	Core Recovered	Description
0	10	4'	Slate with qtzite, badly broken
10	15	5'	Slate with qtzite, no broken, good core
15	50	17'	Same, core recovery fair
50	90	3'	Same, core recovery poor
90	111	17'	Badly broken but fairly good recovery
111	115	4'	Good core, not broken
115	129?	9'	Broken, fair recovery
			At 115' blebs of CuFeS2
			At 124' several blebs CuFeS2
			At 129' bed with core 40°
			At 133' a few blebs CuFeS2
			At 138' a few blebs CuFeS2
			At 142' a few blebs CuFeS2

Hole No. 2 - 150'
Logged by D. K. Wadsworth

From	To	Core Recovered	Description
0	33	9'	Slate interbedded with graywacke, badly broken-poor core recovery. Qtz vein about 3/8" wide at 25', at 33', bed. hole 45°, good bedding.
33	46	10'	Same, but core recovery fair
46	105	28'	Argillite interbedded with greywacke at 46' well developed cubic crystals of pyrite enrichment will probably run 25% pyrite extends for about 4" in core.
105	131	21'	Pore core recovery. Slate with greywacke Soft rock deformation. Core not all broken up at 113' Qtz vein about ½" wide, about 40° to core.
			At 110' ground broken.
			At 119' ground broken.
120	131	11'	Slate with greywacke, apparently soft rock deformation as a. & g. are badly twisted up together. Core recovery good. Not broken
131	136	3'	Same, but not so much soft rock deformation Ground Broken.
136	150	11'	Slate with greywacke. Not much deformation Ground Broken at 146'.

Log D. D. Hole 5, Bearing (true) S. $8\frac{1}{2}^{\circ}$ E., Flat
Logged by C. L. Sainsbury (Fidalgo Mine)

Footage From	Footage To	Description
0	14'	drk slte w inc. lt. qtzite
14'	29'	same, small slick. pyrite at 17.5' in calcite vlt. elongation pebbles shows bed 5° - 10° to hole
29'	46'	drk slte (same), traces chalco., normally in more siliceous portions
46'	61'	same, but w less chalco., bed inclined to hole 25° at 56'
61'	81'	more shaly, w calcite veinlets 61' - 66', occas. chalco.
81'	147.5'	"wormy" shale, bedd. inc. 20° to hole at 89' - 25° at 115', no sulp.
147.5'	150	same with traces chalco.

Log D. D. Hole 7, Bearing (true) S. 5-10° E., Flat
Logged by C. L. Sainsbury (Fidalgo Mine)

Footage From	Footage To	Description
0	117'	argill. w few inc. siliceous grwke, at 28' bed. inc. to hole 25°, at 60' bed to hole 35°, at 78' bed. to hole 25°, very few small sulphide flecks throughout
117'	117.6'	slty argill. w lighter sil. fragments, traces pyrite in sil. fragments
118'	130'	banded argill., no sulp.
130'	132'	same, but w minute traces pyrite
132'	150'	blk argill., no sulphides.

LOG NOTES

Hole No. 8 - 150'
Logged by D. K. Wadsworth

From	To	Core Recovered	Description
0	26	25	Argillite with small inclusions of quartzite, many slips. Almost no sulphides. Large number of clacite stringers. Alittle chalcopyrite at 0 & about 8". At 1 ft. broken ground. At 26 ft. broken ground.
26	32	5	Same as above but with sulphides tiny specks mostly pyrite. At 32 ft., comparatively heavy mineralization for box but still not great. (trivial).
32	68		Sulphides less common. Increase in sulphides (especially chalcopyrite at 43 ft., to 44 ft. (specks), also broken ground. At 47 ft. broken ground followed by increase in sulphide specks (note reverse of previous) briefly. At 54 ft. broken ground-at 55½ ft. bedding about 30° to drill axis. concoidal fracture? At 56½ ft. chalcopyrite in fissures in quartzite. May run ½% for about 6". Found in fair sized spots. At 63 ft. slight increase in sulphides, little specks well disseminated 65 ft. Broken ground to 66 ft. 67 ft. a few more specks of chalcopyrite. 68 ft. broken ground and slight increase in ful. 70 ft. bed to hole about 30°.
68	97		Qtzite more predominate with argillite. 81' slight increase in sul. specks. 82½'fair showing of chalcopyrite, maybe 1% for any inch. 86 ft., a few spots of chalcopyrite.
97	129		Argillite again predominant with qtzite at 105' very small blebs of chalcopyrite well disseminated through the qtzite. Maybe ½% for about 6". At 113' broken ground and ½" qtz, vein with calcite. At 115' bed to hole about 30°. At 116' fair sized blebs of CuFeS2 at least 1 or 2% for about an inch-formed along fissures.
129	138		"Wormy slate."
138			Like 97' to 129'. At 141' a few blebs of CuFeS2. At 147' broken ground.

LOG NOTES
Hole No. 11 - 100'
Logged by D. K. Wadsworth

From	To	Core Recovered	Description
0	29	27'	Argillite interbedded with greywacke, fair sized blebs of chalcopyrite throughout. At 13', bed to core about 60°.
29	99	25'	Same, but broken, CuFeS2 less common but still an occassional bleb such as at 40', 51', 55', 58'. AT 77' qtz vein about 3" wide, about 45° to core-blebs at 88'.

Hole No. 12 - 200'
Logged by D. K. Wadsworth

From	To	Core Recovered	Description
0	65	58'	Argillite and greywacke not broken. At 12' several blebs of CuFeS2. At 19' several blebs CuFeS2. Broken ground at 23' & at 28'. Greywacke is predominant. At 42' broken ground. At 49' bleb CuFeS2. At 63' bedding to core about 35°. At 63.5' small vein of CuFeS2 & qtz about 35° to hole.
65	72	2'	Broken ground.
72	96	23'	Same as 0 to 65'. Broken ground about 79' - 80'. At 81' bedding to core about 0°. At 89' qtz vein ½" with vein about 45° to core.
96	100	8"	Broken ground
100	128	28'	Same as 72' to 96' at 101' a few blebs CuFeS2. This hole is almost barren of the tiny disseminated pyrite cubes that were so common in the south holes. At 128' small amount of CuFeS2.
128	131	3'	Same, but with tiny disseminated sulphide crystals, mostly pyrite.
131	135	4'	Massive greywacke-disseminated small blebs of CuFeS2.
135	142	7'	Interbedded slate & greywacke
142	149	7'	Same with disseminated sulphides.
149	156	3'	Massive greywacke with samll blebs of CuFeS2 disseminated. Ground broken.
156	160	2'	Slate and greywacke, ground broken.
160	165	1'	Massive greywacke, very little sul.
165	200	20'	Slate with greywacke broken some bleb CuFeS2 at 168'. At 187' very thin fissure filling CuFeS2.

LOG NOTES

Hole No. 13 - 200'
Logged by D. K. Wadsworth

From	To	Core Recovered	Description
0	8	3'	Broken argillite with greywacke, some blebs CuFeS2 throughout. Not so high grade as #11
8	24	15'	Argillite with greywacke, not broken, at 10' a little CuFeS2. At 15' bedding to hole about 40°. At 16' maybe 5% CuFeS2. for about 1", occurs in the greywacke in blebs.
24	28	1½'	Argillite with greywacke broken at 26'. several large blebs CuFeS2.
28	37½	9'	Interbedded argillite and greywacke, not broken. At 30' a few large bleb CuFeS2 At 32' a little fissure filling CuFeS2 At 33½' small blebs of CuFeS2 disseminated in the greywacke. At 34' about 1" that may run 10% CuFeS2.
37½	49	5'	Argillite with greywacke, broken ground.
49	63	13'	Argillite with greywacke, not broken. At 50' several large blebs of CuFeS2 about 1" principally along a fissure making angle with core about 20°. At 51' more large blebs of CuFeS2 for about 1". At 52' vein of qtz and CuFeS2 from 1/16 to 1/8" with variable strike, several very thin CuFeS2 filled fissures to 53½'. At 55½', 2 thin ll fissures filled with CuFeS2, about 25° to hole. At 58½' thin fissure filling CuFeS2, about 25° to hole-from 59 to 59½ several large blebs of CuFeS2 in the greywacke. At 60' &60½' good sized blebs CuFeS2-bed to core about 30°. At 63' a small amount of disseminated CuFeS2.
63	64½	6"	Same, but broken.
64½	94	27'	Same, not broken. At 64½' a bleb CuFeS2 At 65' CuFeS2 up to 1/8" thick along fissure, angle with core about 40°. At 67' to 68½', small to good-sized blebs of CuFeS2 At 75½' a few med. blebs of CuFeS2. At 81' qtz & calcite vein up to 3/8" with med. sized blebs of CuFeS2. At 83', broken ground-at 88' CuFeS2 following two very thin beds of greywacke about 30° to hole- At 90', a few med. blebs of CuFeS2.
94	108	9'	Argillite with greywacke broken. At 100' a few small blebs CuFeS2 at 104' a few small blebs CuFeS2. At 108' several med. blebs CuFeS2.
108	116	8'	Same, not broken. At 116' a few small blebs CuFeS2.

LOG NOTES

Hole No. 13 cont.

From	To	Core Recovered	Description
116	123	3'	Same, but broken
123	134	9'	Same, not broken. At 134' a few med. blebs CuFeS2.
134	139½	1½'	Brkn
139½	151	11'	Not broken
151	155	1½'	Broken, much thin fissure filling CuFeS2, very low percent, though.
155	187	29'	Not broken. At 156' several med. blebs CuFeS2. at 156½' 1/12" wide seam of CuFeS2 angle with core about 80°. At 162' decided increase in disseminated CuFeS2 in greywacke for about 1". At 170' core is pred. greywacke with disseminated small blebs CuFeS2.
187	193	4'	Same, broken at 188', a couple moderately large blebs CuFeS2. At 192' a few med. blebs CuFeS2.
193	203	9'	Same, not broken.

Hole No. 14 -
Logged by D. K. Wadsworth

From	To	Core Recovered	Description
0	3	3'	Argillite with greywacke, good ground. At 0' a couple small blebs CuFeS2.
3	8	3½'	Broken
8	29	21'	Same, not broken. Ar prominent feature of thin section is a gradation of particle sizes from coarse to fine, then an abrupt change from fine to coarse, indicating bottom of seds is toward collar of hole. Bed with hole about 50°.
29	33	1'	Broken. At 35' a couple small blebs CuFeS2 At 38' small blebs CuFeS2 disseminated. in greywacke. At 48' couple small blebs CuFeS2. Between 43' & 48' 1 ft. of core lost, probably broken ground from 45' to 47'. In run 53' to 58' - 1' lost, probably brokeen from 56-58.
66	78	6'	Broken
78	83	5'	Not broken
83	113	18'	Broken
113	143	26'	Mostly not broken from 117' to 118' about 1' lost, broken. From 118' to 123' about 2' lost at 141' small bleb CuFeS2.
143	168	15'	Broken. At about 145' a few small blebs CuFeS2. At 163' calcite crystals, 3 sided pyramids - indicated formation in open fissure. Run from 153' to 158' is good.
168	188	19'	Now Broken - at 183' a few small blebs CuFeS2 about 2' lost from 183' to 188'.

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

P. O. Box 560
Juneau, Alaska
January 23, 1953

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
JAN 26 1953

Mr. George C. Selfridge
Chairman, Operating Committee
Defense Minerals Exploration Administration

re: Docket No. DMA-1232X (copper)
Alaska Copper Corporation

Dear Mr. Selfridge:

In reply to your letter of January 16 I cannot, at this moment, give you a firm commitment on the date of completion of the final Field Team report. The Geological Survey maintained close field contact with the operation, consequently I will ask them to prepare the final report on the exploration results. Mr. Sainsbury, the Survey member, is "outside" on a one month trip. When he returns I will see what he can do about it.

In Alaska it is necessary to defer until winter all office work that can be postponed. Our field season is all too short.

The operators wish to defer disposal of the equipment until the beginning of next field season when the market should be better. During the winter the market is practically dormant.

Yours sincerely,

S. H. Lorain, Executive Officer
Alaska Field Team, Region I

cc: C. L. Sainsbury
J. A. Herdlick

FILE COPY
SURNAME:

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

JAN 16 1953

AIR MAIL

BW.

Mr. S. H. Lorain,
Executive Officer
DMEA Field Team, Region I
P. O. Box 2990
Juneau, Alaska

Re: Docket No. DMA-1232A (Copper)
Contract No. Idm-E276
Alaska Copper Corporation
Territory of Alaska

Dear Mr. Lorain:

Referring to your letter to the Committee dated August 29, 1952, advising that the project operations under the above contract were discontinued, we would appreciate being advised when we may expect to receive the Field Team's final report covering the work completed. We, of course, have noted that final settlement of the contract cannot be made until the equipment and remaining supplies have been sold.

Sincerely yours,

George C. Selfridge

Chairman, Operating Committee

APPROVAL:

J. H. Hedges

Member, Bureau of Mines

T. P. Thayer

Member, Geological Survey

GLAult/EWEllis/gla
1-14-53
cc to: Adm. Reading File
Operating Committee
Docket
Messrs. CHJohnson, Rm. 3621
ARKinkel, Rm. 4234 GSA
Mr. Ellis

1-16-53

1232

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF MINES
Region I

P.O. Box 2990
Juneau, Alaska

September 3, 1952

Mr. Charles F. Herbert
Alaska Copper Corporation
P. O. Box 596
Nome, Alaska

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
SEP 8 1952

Dear Mr. Herbert:

Thanks for your letter of August 21, 1952 and the information on the disposal of equipment from the Fidalgo-Alaska DMA project.

After studying the presented methods of disposal and discussing the matter with Mr. Lemon and the U.S.G.S. members of the Field Team, it was concluded that final settlement of the contract cannot be made until the equipment and remaining supplies and materials have actually been sold to the best interest of the Government. The responsibility of disposal in years and sale should be made in accordance with the standard regulations and with Field Team approval.

Attached is an inventory of equipment and items to be sold for joint account as prepared from your invoices. Some of the smaller items may have been expended or of no further value, and are, of course subject to shortcomings.

Items of equipment costing over $50.00 are described separately and should be accounted for individually when sold. Groups of items costing less than $50.00 per item but having a combined value in excess of that amount, such as tools, boardinghouse equipment, etc., can be sold and accounted for in groups. You did not state what disposal is being made of used core bits, but no doubt these have been returned for salvage credit - if any. These items should all be accounted for on your final report.

Mr. Robert Chapman, U. S. Geological Survey representative in Fairbanks or the U.S.G.S. boys who were at Fidalgo this summer (if still available) are qualified to make a physical inventory of the equipment, o.k. sale, and make a final report on the project. If

Mr. Charles F. Herbert
Alaska Copper Corporation

9/3/52

these men are not available, or the equipment is not in their locality, the Field Team may send someone to make the final check.

Hope you do not have too much trouble with the "second-hand" equipment business.

Very truly yours,

J. A. Herdlick, Chief
Mining Division, Region I

Encls: 2

cc: 1125 Smith Tower, Seattle 4, Wash.

DMRA - Washington -(2)

Sainsbury, USGS

Lorain

Wilcox

EQUIPMENT AND SUPPLIES

Non-expendable equipment and supplies purchased by
Alaska Copper Corporation for Fidalgo - Alaska Mine

DMEA Docket 1232X; Contract-Idm-E-276

Seattle Tent and Awning Co., 4/9/52; 1-Tent, 14'X 16' Wall	$ 74.97
Glen Carrington Co., 4/24/52; 5 ea. S.D. Banks @ $10.00	50.00
Glen Carrington Co., 4/30/52; 1-Pacific oil range & fittings	162.50
Glen Carrington Co., 4/30/52; 2 ea. Heaters,space,oil @ $35.00	70.00
Alaska Limited, 5/24/52; Hose,air, 1-inch,150 ft @ 1.29(cpld)10%	174.15
Alaska Limited, 5/24/52; Hose,air,1½-inch,50 ft @ 2.40(cpld.)10%	108.00
Alaska Limited, 5/24/52; Hose,water,½-inch,204 ft @.464(uncpld)10%	85.20
Northern Commercial Co.,5/15/52;Sheares,wire rope,6",2ea.@ 25.00	50.00
Northern Commercial Co.,5/15/52;Rope,wire,5/16",1500 ft @ ~~25.00~~ 0.154	231.00

TOOLS ~~11~~

Odbury Company, 4/24/52;	Torch,blow,gasoline,#327 C&L, 1 ea.	13.57
	Die,pipe threadings,Toledo, AD4, 1 ea.	24.00
	Vise,Chain, BO-4, Rigid - 1 each	11.90
	Tong,pipe, 3½'Armstrong, 2 ea.@ 19.60	39.20
	Wrench,pipe, 24" Trimo, 2 ea.@ 6.98	13.96
	Wrench,pipe, 18" Trimo, 2 ea.@ 4.04	8.08
	Wrench, Crescent, 15", 1 each @ 4.32	4.32
	Wrench, set, 1200 Proto,1 each	24.33
	Wrench, set, socket, 5400 AB,1 each	21.36
	Drill,breast, No. 118 MF, 1 each	7.25
	Drill, bits, set, 6B-W&B, 1 each	12.73
	Ratchet, 965N Stanley, 1 each	3.90
	Plugger, Irwin BBR62T, set, 1 each	4.27
	Tape, Lufkin HC 253	5.27
	Hammer, sledge, 10#, 2 ea. @ 5.68	11.36
	Hatchet, broad, TB-4, 1 each	3.10
	Axe, 3½#, swamping, 2 ea. @ 55.00/doz	9.17
	Saw,hand, Atkins 10 pt.,No.400-26,1 ea@6.82	6.82
	Saw,hand, Atkins 5½ pt. 1 each	6.82
	Saw, docking, Atkins 59U, 1 each	4.48
	Hammers, machinists, Stanley, 3 total	4.96
	Hammers, blacksmith, 2 each @ 2.16	4.32
	Hammers, ripping, 2 each @ 2.00	4.00
	Bars, crow, 1½" X 5', 2 ea. @ 5.65	11.30
	Square,carpenters, 24", 1 @ 2.23	2.23
	Level, carpenters, 24" 1 @ 4.49	4.49
	Plate, screw, 25 pc., Wells, Set	44.95
	Vise, Parker 953, 1 each	18.00

	Hoist, hand, 1½ ton, Yale, W/8ft.l.ft, 1 ea.	75.16	
	Jack, hydraulic, Duff Norton #8-9, 1 ea.	19.25	
	Total Tools Odbury Co., invoice	424.55	424.55
Northern Commercial Co.,	5/29/52; Hoist, 2-drum, Skagit model G-5-WIS, Type 2M-R4-G, Serial No. 05-44 W/Wisconsin TP-4 engine, Serial No.1475752	900.00	
	Cable, 5/16", Plow steel, 3000ft. @0.154	462.00	
	Blocks, snatch, steel, 6"X 1", 3ea. @ 14.00	42.00	
	Total Equipg Tools	2,834.70	
Northern Commercial Co.,	6/12/52 - Drill Supplies (Blank shells, stones & setting charges, Check return & salvage on: EX D.T. Ring-type reamer shell #RE-1538; AX Core bit #RE-4456L; EX B.W. core bits #RE-6839, 6833, 6976, 6866, 6865, 6832; Truco S. W. coring bits, 2 each.	?	
	Tap, rod, Longyear 3117 AC	16.50	
	Total of Drill supplies (should be some salvage)	826.44	
Northern Commercial Co.,	5/15/52 - Misc. items of cook and mess hall equipment (all small) estimated at about $100.00 (not checked on invoice) but of doubtful resale value. Could be abandoned as this type of equipment is a drug on the market in Alaska.	100.00	

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
SEP 8 1952

OFFICE OF THE ADMINISTRATOR

UNITED STATES
DEPARTMENT OF THE INTERIOR

DEFENSE MINERALS ADMINISTRATION

WASHINGTON 25, D. C.

P. O. Box 2990
Juneau, Alaska
August 29, 1952

Mr. Frank E. Johnson, Chairman
Coordinating Committee
Defense Minerals Exploration Administration
Interior Building
Washington 25, D. C.

Re: Docket No. DMEA-1232X
Alaska Copper Corp.

Dear Mr. Johnson:

Enclosed are two copies of the MF-104 report and narrative for the month of July.

About week before last the operations were discontinued and the equipment was shipped out. Mr. Herbert, the manager, has attempted to sell the few items that had been purchased but was unable to do so. Pending further efforts the equipment probably will be stored in the Bureau of Mines warehouse at Fairbanks.

Yours sincerely,

S. H. Lorain
Executive Officer
Alaska Field Team, Region I

Enclosures 2

cc: E. A. Youngberg
U. S. Geological Survey
Juneau, Alaska

OFFICE OF THE ADMINISTRATOR

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS ADMINISTRATION

~~WASHINGTON 25, D. C.~~

P. O. Box 2990
Juneau, Alaska
August 7, 1952

Mr. Frank E. Johnson, Chairman
Operating Committee
Defense Minerals Exploration Administration
Interior Building
Washington 25, D. C.

Re: Docket DMEA-1232X
Alaska Copper Corporation

Dear Mr. Johnson:

Enclosed herewith are two copies of the June voucher for the subject contract. I cannot enclose a formal "narrative" because none was submitted with voucher. Instead there has been a running supply of information both from the operator and from field team representatives who have been in close touch with the operation. I will summarize the results to date.

The originally planned holes Nos. 1, 2, 5, 7, 8, have been drilled. Although some mineralization was found, none of it was nearly of ore grade. The U.S.G.S. men who were on the job agreed with the operator that, instead of drilling holes 3, 4, and 6, it would be better, with the remaining funds, to try several holes drilled northwesterly from the same drift. Accordingly holes 11, 12, 13, 14, are being drilled at about 60-80 foot intervals northwesterly. To date none of these have encountered mineralization of ore grade; consequently it is practically certain that the project will be terminated at the completion of "Stage I". Unofficial authorization, to be supplemented by a formal ammendment, for this change of plans has been given. The authorized cost of Stage I will not be exceeded.

We might have stopped after completion of No. 8 but, in view of the "landing" costs, and in view of the general agreement that geological evidence did not eliminate the chance of a discovery to the northwest, we were of the opinion that the area should be drilled while the equipment is on the ground.

Yours sincerely,

S. H. Lorain
Executive Officer
Alaska Field Team, Region I

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
AUG 11 1952

Enclosure
cc: E. A. Youngberg

STANDARD FORM NO. 64

Office Memorandum · UNITED STATES GOVERNMENT

Las Cu

TO : Field Team, Region I. DATE: July 7, 1952

FROM : C. L. Sainsbury, Geologist, Geological Survey, Juneau, Alaska

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
SEP 17 1952

SUBJECT: Progress report on Docket DMA 1232-X, Copper, Alaska Copper Corporation - Fidalgo Mine.

The mine was visited 5 days during the period June 24 - 29 to check upon the progress of the exploration project.

As of June 30, approximately 620 feet of drill hole had been drilled, encompassing holes 1, 5, 7, 8 and part of 2. To date, the drilling has outlines no shear zone, nor any encouraging sulphide mineralization. Four barren holes which penetrate the "ore zone" as outlined in the electrical survey without encountering either a definite shear zone or indications of commercial ore seem sufficient to cast strong doubt upon the validity of the electrical survey, or at least upon the interpretation of the survey.

Richard G. Ray of the Geological Survey pointed out that a lithologic control of ore bodies at Fidalgo is more apparent than a true "shear zone" mineralization. I believe this is true, although there is a shear zone striking about N.70°E. indicated topographically and by the general strike of individual faults as mapped underground. No close relation of orebodies to individual shears is apparent in the upper levels, however, but there is a decided preference by sulphides for coarser-grained siliceous beds in the upper levels.

Because the Fidalgo mine is located close to the Landlock overthrust fault (of considerable magnitude), a definite possibility exists that a localized zone of low-angle thrusting may have produced differential shearing (the vertical N.70°E. fault) confined only to the overlying rocks. In this case the ore bearing "shear zone" would not continue to the lowest level of the Fidalgo Mine, and exploration should be directed toward finding ore somewhere above the lower level. Such exploration will not be possible with the funds provided under the present contract.

Interpretation of local broken ground or poor core recovery as the "shear zone" probably will not be correct as the entire zone of rocks for several thousands of feet eastward from the trace of the Landlock overthrust is fractured; sheared and folded. In my opinion, the projection of faults from level to level in the upper workings is uncertain at best, and any fault projection from the #4 level to the #9 levle would be highly presumptive. Unless substantial sulphide bodies are cut in one or more of the remaining holes, the project definitely should be abandoned.

If the Field Team should consider a change in the outlined drilling program, the following suggestions are made: 1. One of the remaining holes should be drilled at least 200 or 250 feet in order to penetrate ground not yet

STANDARD FORM NO. 64

Office Memorandum · UNITED STATES GOVERNMENT

TO : Field Team, Region I. DATE: July 7, 1952

FROM : C. L. Sainsbury, Geologist, Geological Survey Juneau, Alaska

SUBJECT: Progress report on Docket DMA 1232-X, Copper, Alaska Copper Corporation - Fidalgo Mine. Page -2-

tested by the previous holes. 2. If an attempt were made to put in an up hole, the hole should be directed southeasterly and up from the adit near hole #8. This hole would crosscut both lithology and the prevailing shear direction, and would be directed so as to cut any localized overthrusting in the least possible distance and penetrate into ground above.

/s/ C. L. Sainsbury
Geologist

cc: S. H. Lorain

C
O
P
Y

Bureau of Mines
DEPARTMENT OF THE INTERIOR
RECEIVED
SEP 18 1952
Metal Economics Division

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF MINES
REGION I

OFFICE OF
REGIONAL DIRECTOR

P. O. BOX 2990
JUNEAU, ALASKA

June 17, 1952

DEPARTMENT OF THE INTERIOR
Defense Minerals Exploration Administration
RECEIVED
JUN 20 1952

Mr. Frank E. Johnson, Chairman
Operating Committee
Defense Minerals Exploration Administration
Interior Building
Washington 25, D. C.

Dear Mr. Johnson:

Enclosed herewith are two copies of form MF-104 and the narrative report of the Alaska Copper Corporation for the month of May 1952.

You will, I am sure, be interested to know that the Geological Survey is assigning a geologist to be resident at, and in the vicinity of, this project. The geologist will be in daily contact with the operation.

Yours sincerely,

S. H. Lorain
Regional Director, Region I

Enclosures

OFFICE OF THE ADMINISTRATOR

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

P. O. Box 2990
Juneau, Alaska
March 25, 1952

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
MAR 28 1952

Frank E. Johnson, Chairman
Operating Committee
Defense Minerals Exploration Administration
Interior Building
Washington 25, D. C.

Dear Mr. Johnson:

This will acknowledge receipt of your letter of March 18 and the six copies of the proposed contract on Docket DMA-1232X Alaska Copper Corporation.

We have obtained the signature of an authorized representative of the company and are enclosing herewith the original and three marked copies of the contract to your office. One copy has been delivered to the operator and another copy has been retained for our files.

I note your comments about maintaining contact with the operation for the purpose of prompt termination of the contract or authorization of the immediate commencement of the second stage. In view of the fact that both the Geological Survey and the Bureau of Mines plan to have field projects in the Prince William Sound this summer we should be able to maintain close contact with the operation. I can assure you that we will watch it closely.

Yours sincerely,

S. H. Lorain, Executive Officer
Alaska Field Team, Region I

Enclosures 4

cc: Wm. Twenhofel

FILE COPY
70C SURNAME:

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

AIR MAIL

MAR 1 - 1952

Mr. S. H. Lorain
Executive Officer, Region I
DMEA Field Team
P. O. Box 2990
Juneau, Alaska

Re: Docket DMA-1232Y (Copper)
Alaska Copper Corporation
Third Judicial Division
Territory of Alaska

Dear Mr. Lorain:

We are enclosing six copies of a proposed contract on the above captioned project.

If you are in agreement with the contract as drawn up, and it is acceptable to the Applicant, then kindly have the six copies signed by an authorized agent of the Applicant Corporation. Please return the original and three marked copies to Washington, deliver the Operator's copy to him, and retain the other copy for your files.

We believe that during the time that the diamond drilling is being done that one of your field engineers should re-study the geology of the mine and log the diamond drill holes periodically. From the information thus obtained you will then be in a position to either terminate the contract at or before the completion of the preliminary stage of the exploration project or to authorize the immediate commencement of the recovery stage.

Sincerely yours,

(signed) FRANK E. JOHNSON

cc 3/18/52 (GHB)

Chairman, Operating Committee
Defense Minerals Exploration
Administration

Enclosures - 6

Concurred:

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

W. F. Thayer (JHB)
Member, Geological Survey

HFKeller/jem
3/12/52
cc to: Adm. Reading File
Docket
Messrs. Johnson, CH. Rm. 3621
Nelson, Ned Rm. 4216 GS
Johnson, FE. Rm. 4624
Ellis
Keller
Field Team, Region I

FILE COPY
SURNAME:

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

AIR MAIL

MAR 18 1952

Mr. Charles F. Herbert
Alaska Copper Corporation
1125 Smith Tower
Seattle 4, Washington

Re: Docket No. DMA-1232X (Copper)
Eldorado, Alaska

Dear Mr. Herbert:

We are sending to Mr. S. A. Lerain, Executive Officer, Region I Field Team, P. O. Box 2990, Juneau, Alaska, six copies of the proposed exploration project contract covering the work outlined in the subject application. Mr. Lerain will obtain the signature of an authorized officer of your company as soon as possible.

We regret the delay in answering your letter of February 27, but we did so in order to give you definite information on the status of your application.

Sincerely yours,

3/18/52

C. O. Mittenderf (for)

Acting Administrator
Defense Minerals Exploration
Administration

HFKeller/glm 3-18-52
cc to: Adm. Reading File
Docket
Messrs. C.H.Johnson, Rm. 3621
Ned Nelson, Rm. 4216, GS
Mr. Ellis
Mr. Keller
Region I (2)

3/3/52 gla

ALASKA COPPER CORPORATION

1125 SMITH TOWER
SEATTLE 4, WASHINGTON
MUTUAL 1487

February 27, 1952

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
FEB 29 1952

Mr. C. O. Mittendorf
Chairman Operations Committee
Defense Minerals Exploration Administration
Department of the Interior
Washington, D.C.

Subject: DMA No. 1232 X

Dear Sir:

We should like to know if our amended application providing for diamond drilling our copper prospect at Fidalgo Bay has been approved.

It is most important to the success of this project that we take advantage of the favorable season. We believe that snow conditions are such that erection of a temporary camp and initiation of diamond drilling could be done in the near future.

Very truly yours,

ALASKA COPPER CORPORATION

by Charles F. Herbert
Charles F. Herbert

FILE COPY
SURNAME:

F E Johnson

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

Frank E. Johnson
Chairman, Operating Committee
Defense Minerals Exploration Adm.
Department of the Interior

DEFENSE PRODUCTION STAFF

March 13, 1952

S. H. LORAIN
P. O. BOX 2990
JUNEAU, ALASKA

RETEL MARCH 10 DOCKET 1232X ALASKA COPPER CORPORATION. PROPOSED CONTRACT IS EXPECTED TO BE FORWARDED TO YOU EARLY NEXT WEEK.

FRANK E. JOHNSON
CHAIRMAN, OPERATING COMMITTEE

FEJohnson/HFKeller/ jem/bih
cc to: Docket
Admr's. Reading File
Operating Committee
Messrs. Keller
Ellis
FEJohnson

FILE COPY
SURNAME:

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

Frank E. Johnson, Chairman
Operating Committee

Defense Minerals Exploration Adm.

1420137 Salaries and

Expenses, Defense Production Activities, 1952

March 12, 1952

S. H. LORAIN
BUREAU OF MINES
JUNEAU, ALASKA

RETEL MARCH 10 DOCKET 1232X ALASKA COPPER CORPORATION. PROPOSED CONTRACT IS FINISHED AND IS BEING PROCESSED BY THE OPERATING COMMITTEE.

FRANK E. JOHNSON, CHAIRMAN
OPERATING COMMITTEE

HFKeller/jem
cc to: Adm. Reading File
Docket
Messrs. Keller
Ellis
Johnson, F.E.
Operating Committee

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MAR 11 1952
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MAIL CENTER

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FM S H LORAIN BUR OF MINES JUNEAU ALASKA

TO FRANK E JOHNSON CHAIRMAN OPERATING COMM DEFENSE MINERALS EXPLORATION

ADMN INT BLDG WASHDC
MINES GRNC

COULD YOU ADVISE WHAT ACTION TAKEN ON DOCKET 1232X ALASKA COPPER

CORPORATION ACCOUNT SEASONAL OPERATION MOST IMPORTANT HAVE DECISION

EARLIEST POSSIBLE MOMENT

CFN 1232X
10/1906Z

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
MAR 11 1952

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DEPT. OF ARMY, AGO
RECEIVED
MAR 10 28 3 3 z5
RADIO CO

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

February 28, 1952

Memorandum

To: Acting Administrator

From: Chief Counsel

Subject: Alaska Copper Corporation, proposed Exploration Project Contract - DMA-1232X

I am unable to approve the subject proposed contract, which was prepared in the field, and has been signed by the applicant. Some of the defects are of a minor nature and might have been passed, but others require correction; therefore all will be indicated hereafter.

1. I can see no point to the changes made in Article 3 of the contract form, with respect to the time for completion, and they are ambiguous. The form should be used as is, and the time for completion should be fixed at 20 months from the date of the contract, or whatever is necessary not in excess of 24 months from the date of the contract.

2. By the description of the work in Exhibit "A", it is divided into what are termed: "Preliminary Exploration" and "Secondary Exploration". Various operations are made to depend upon the results of previous operations. For instance, it says: "evidence of ore in any of the drill holes from the lower adit level will be considered sufficient justification for further exploration by crosscutting . . ."; "The drilling program may, therefore, be suspended . . ."; "If justified by evidence accumulated during the exploration program, approximately 580 feet of crosscut and drifts . . . will be driven . . ."; "The secondary program will depend on results obtained from diamond drilling and the recommendation of DMEA engineers". There are various other such expressions with respect to the work. None of these expressions clearly and certainly provide that the determinations are to be made by the Government. It might be stated:

"If, in the opinion of the Government . . ." such and such an event takes place, then further work will be continued, etc. As it now stands there is too much room for dispute between the Government and the Operator as to continued operations which depend upon previous operations.

3. The last sentence on the first page of Exhibit "A" is devoid of meaning as far as I can make out. I think that this sentence should be stricken out.

4. In the fourth item on the first page of Exhibit "A" change the word "on" to "and".

5. At the bottom of page two of Exhibit "A" are some recitals about the possibility of procuring contractors to perform all or some part of the work. These recitals should be stricken out. The contract form in Article 4, expressly provides for performance of the work by contractors if the contracts are approved by the Government. The recitals about contractors tend to conflict with this standard provision in the contract form, and render it somewhat ambiguous. They serve no useful purpose in Exhibit "A".

6. A sentence at the top of page four of Exhibit "A" reads: "The following diamond drilling and accessory equipment will be rented or obtained on rental-purchase contract as follows:" Included in this equipment is a drill and incidentals, which are to be used at most for three months, perhaps only a few weeks. It seems to me to be improper to permit the procurement of a drill rig on "rental-purchase contract" when the rig is to be used only for such a short time. I would assume that there is no necessity for purchasing a drill for such short use, and it should be procured on a straight rental basis. Moreover, as a general proposition, it is bad practice to permit the procurement of any equipment for these Exploration Project Contracts on a "rental-purchase" basis. As discussed in connection with other contracts, the Government contributes to such rental-purchase payments, without much chance of acquiring any interest in the equipment that is to be purchased.

7. The comments stated in this numbered paragraph are outside the scope of my functions as an attorney, and they may be altogether wrong, but I will give them here for whatever they may be worth. This contract looks to me like an attempt to get the Government to participate in the cost of a development project as contrasted with an exploration project. If the preliminary drilling discloses the slightest evidence of mineralization, it is to be dropped, and crosscutting and drifting is to be started, and raising on the discovery. Much costly equipment is to be purchased. This does not look to me to be within the definition of "Exploration Project" as set forth in MO-5.

If, in spite of the foregoing remarks, the engineers come to the conclusion that this project is a suitable one for an Exploration Project Contract, I believe that the contract as presented here contains sufficient material for stating a good contract with Exhibit "A" annexed. If this is desired, I do think that with a little help from the responsible engineer, I could redraft the contract in a form that would be acceptable both to the Government and to the applicant.

Please advise what you want me to do.

J. L. Hoffmund
Chief Counsel

2/18/52 gla

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF MINES
WASHINGTON 25, D. C.

February 14, 1952

DEPARTMENT OF THE INTERIOR
BUREAU OF MINES
RECEIVED
FEB 18 1952

Memorandum

To: E. W. Ellis, DMEA

From: C. H. Johnson, Bureau of Mines

Subject: DMEA 1232X - Alaska Copper Corporation

I have studied Mr. Lorain's letter to F. E. Johnson dated January 23, 1952, likewise Mr. Nelson's comments thereon, with interest.

I am in agreement with Mr. Nelson that the project has merit and recommend that the DMEA approve Stage 1, at least, approximately as laid out in the proposal.

It may not be feasible to provide in the contract for further geological work in advance of drilling as Mr. Nelson suggests, but perhaps the Field Team can be requested to have a mining geologist visit the job and make a careful examination of the cores when the first two holes of the proposed drill program are completed. It might be apparent by then that a more or less drastic revision of the layout would be desirable.

Mr. Nelson urges that further consideration be given to drilling from the surface to test downward extension of the orebodies at some point between the number 4 adit and the bottom adit. It seems to me that the Field Team has pretty definitely rejected the suggestion already made along this line, and I therefore do not recommend that DMEA insist on any upper-level or intermediate exploration. The Field Team philosophy appears to be to "shoot the works" on the bottom adit and if nothing is found, pull out. Apparently, their reasoning is that if the oreshoot does not go down to that level, it is not worth hunting for, and on the other hand if it does extend to that depth the proposed drilling program is pretty sure to find it. I don't think this is good general policy but believe you should accept the considered judgment of the Field Team in this case.

I have no further comment beyond what I said in an earlier memorandum about the merits of Stage 2. It will necessarily be a rather indefinite and general proposal unless and until an orebody is found and more or less completely explored on the bottom level.

It is a problem for DMEA to decide, whether it wishes to include such a second stage proposal in the contract.

Your file on this application, including Mr. Nelson's memorandum to you dated February 6, 1952 and a copy of Mr. Lorain's letter to Mr. F. E. Johnson dated January 23, 1952, is returned herewith.

C. H. Johnson

C. H. Johnson

Attachments

Copy to: Mr. Nelson - GS
Minerals Division
C. H. Johnson
Files

IN REPLY REFER TO:

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

February 6, 1952

Memorandum

To: Mr. E. Wm. Ellis

From: Mr. N. E. Nelson

Subject: DMEA-1232X, Alaska-Fidalgo Copper Corporation Seattle, Washington, and letter of S. H. Lorain of January 23, 1952.

The contents of Mr. Lorain's letter to Mr. F. E. Johnson have been noted. Parts are well taken, especially as to the economies to be secured by working from the lowest adit.

The matter of the "big bite" remains open. Fortunately we now know that two U.S.G.S. men spent two weeks on the property in July 1951 and mapped the levels in what would seem to be a rather thorough manner. Mr. Lorain says the geologists disagree with the Bureau of Mines' men in certain particulars. Study of Mr. Ray's report (December 10, 1951) leads me to think the disagreement is strong and the "big bite" is larger than guessed before having had access to Mr. Ray's report and a talk with Mr. Ray. Of the proposed work from the lowest or No. 5 level, Mr. Ray says,

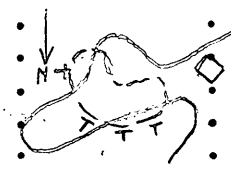
"This report is not intended to discourage exploratory work at the Fidalgo-Alaska mine, or as unfavorable criticism in considering the DMA loan on the property, but rather to point out the hazard in exploration from the No. 5 level in view of the recent geologic studies that suggest a possible new interpretation of the geologic setting. Economic factors permitting, exploration by diamond drilling from altitudes nearer the No. 4 level, say 100 feet below, etc., would involve a tremendously lesser risk and greater chance of hitting extensions of ore lenses, some of which may bottom well above the No. 5 level. Direct sinking from the No. 4 level on known orebodies might also be considered, although the erratic nature of the ore on that level has been pointed out in Holt's report (Supplement, 1942). Exploration from the No. 5 level would seem to be almost a "wildcat" proposition."

If Mr. Ray is right, no distinct shear zone exists and some other obscure structural or lithologic control governs the location

of the small centers of good mineralization.

Reference to the maps which accompany the Ray report shows more work was done after the composite plan of the application was prepared. No reference line or coordinates are given by which the longitudinal section can be accurately tied to the plans, but there is some reason for thinking the main ore shoot on No. 4 level sampled by Holt has a nearly vertical dip and perhaps less pitch or plunge than that suggested by the longitudinal section. If so, the downward continuation of the good ore which Holt sampled on No. 4, or the structural condition which governs it, may lie within the bend of the lowest adit instead of to the south of the east and west drift as presumed by those who planned the drilling. Reference to the mapping of the long adit gives no hint that either assumption is the correct one. (Mr. Ray says the "ravelled" zone shown in the north-south crosscut, near the inner end of the lowest adit does not suggest a fault zone, but it might interfere with the drilling of hole No. 1 as presently laid out).

The copper contents of the Holt samples shown on the assay plan of No. 4 level might suggest the plunge of that ore shoot is changing. The "center of gravity" of the samples is in the westerly half of the plan outline of the oreshoot. It may or may not be indicative of plunge change. Again the ..... shaped orebody shown by stoping on No. 2 level which . . seems to be in the top of the ore shown at No. 4, (Holt's . high grade) makes around the nose of a fold which . plunges northeasterly. Such a nose is not indicated for . the ore at No. 3 and it may not show at No. 4, but the . plunge from 2 to 4, a vertical distance of 274' (Ray) ..... is at about 77°. The dip is not so well indicated, but between 2 and 4 is nearly vertical.



At any rate, there seems to be some reason for thinking the downward continuation of the ore zone is not necessarily in the area where the geophysical survey has put it, and some consideration should be given to the drilling of holes to the north of the east-west drift as well as to the south of the drift.

The Ray report suggests drilling from the mountain side southwest of and below the portal of No. 4 adit. Admittedly it is tough terrain, but if at all accessible and too long holes would not be required such a plan should be looked into. This, if feasible, would split the "bite".

Writing in August 1942, Stephen P. Holt, says (B. of M. report) "Due to the small sizes and erratic nature of ore lenses, and long distance, 500 ft. between 4th and 9th levels, even close spaced holes will

not be reasonably certain of striking ore . . .". "Ore on the 4th level, when trenched in the bottom, proved quite erratic, with slate bands where least expected, then bands of apparent high grade chalcopyrite where slate, from appearances of stopes above should be. All of which makes a projection to lower tunnel, and estimate of ore reserves to such a distance, very uncertain, almost impossible".

The chances are longer than when first reviewed, but the proposal still has merit. More study on the ground should precede the actual drilling and the cores should be logged and the information mapped as drilling proceeds. A rigid program is not indicated for this prospect.

N. E. Nelson

Ned E. Nelson
Geologist

OFFICE OF THE ADMINISTRATOR

1/30/52 gla

UNITED STATES
DEPARTMENT OF THE INTERIOR

DEFENSE MINERALS ADMINISTRATION

~~WASHINGTON 25, D.C.~~

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
JAN 28 1952

P. O. Box 2990
Juneau, Alaska
January 23, 1952

Mr. Frank E. Johnson
Chairman, Operating Committee
Defense Minerals Exploration Administration
Washington 25, D. C.

Re: Docket No. DMA-1232X (Copper)
Alaska Copper Corporation
1125 Smith Tower
Seattle 4, Washington

Dear Mr. Johnson:

I have just received your letter of January 17 regarding the subject application. Pursuant to your request, I am enclosing herewith another copy of the application and proposed contract. This is our last copy - please be sure to return it to us. In the past we have not had much luck in getting these back.

The various points that have been raised by Charlie Johnson and Ned Nelson were well taken. They had been considered by the Field Team but were not discussed in detail because we thought that the main consideration was so clear that an elaborate discussion of details might only befog the issue. I will discuss them, item by item, but, first, I want to bring out the basic consideration that has governed our thinking as well as that of the applicants. The indicated deposit is so small that exploration, under present conditions, probably would not be attractive except for the existence of the low level, 1,500 foot crosscut in good condition and complete with rail and pipe. If the ore shoot, or echelons of it, can be found close to the lower crosscut, we would have 500 feet of "backs" of reasonably assured high grade ore that could be mined with minimum additional expenditure - also a probability of further continuation below the crosscut level. In view of the fact that considerable evidence is favorable to such a discovery, the chances could be figured at about 50-50. Therefore the small amount of risk capital involved in the first step appears justified. It is our recommendation, and the desire of the applicant, that, if the ore is not found by the work planned on the lower adit level, the project be dropped at that point.

Copy of the application was not attached herewith, when discussed in Baprate and Brandt.

I think that Ned Nelson's question about the "big bite" has been answered in the above paragraph. At least that is our reasoning which, as I have said, agrees with the reasoning of the applicants. To follow such small and irregular ore shoots downward by drilling or by sinking (or raising) would be so costly as to involve relatively large risks in proportion to the possible tonnage. We do not think that additional work should be done above the lower adit, or even on the lower adit, if the proposed "first step" program does not yield ore or pretty strong indications of ore. It is a matter of keeping the high risk expenditures in proper relation to possible gains.

Ned's question about "rocks in the lower adit" and Charlie's reference to further geological study may be answered together. Our engineer, Thorne, examined the property last summer; one of our war time engineers examined it during the war; and two men from the U.S.G.S. spent two weeks making a detailed map of it last summer. The geologists disagree, in regard to some details, with the Bureau of Mines engineers and they have brought forward some new details which may prove valuable in detailed development. Nevertheless I cannot see that the over-all conception has been changed. In any event all concerned reached the same profound conclusion that "either it is there or it isn't there". The only way to find out is to go and look. All were agreed that the area encompassed by the program offered the best apparent chance. Any work beyond that would be based, chiefly, on guesses. If we admit the possibility of a very slightly flattened southeast dip, the selected area is about where the ore ought to be (if it goes down) and it is where the geophysical survey indicated that the ore may be. It would be pretty hard to find a better basis for primary exploration. The rock in the main adit is strongly folded, but not broken, graywacke, slate, and sandstone, just as are the wall rocks adjacent to the ore zone in the upper levels.

The former operations were shut down in 1921 when copper prices dropped during the post-War I depression. Evidently the operators did not think that further risk was justified by the possible gains at those prices. They were small, hand to mouth, operators; by the time prices recovered they had moved to greener pastures.

The drilling sequence proposed for the drill holes was determined on the basis of two considerations. First was the desire to avoid tramming out muck made in sideswiping for drill stations. By starting to drill from the innermost station they could work on the "retreat" without blocking the track. By so doing the cost of station cutting should be so small that it was not included as a separate cost item. In any event all of the proposed holes should be drilled unless ore is found before then. A secondary consideration in determining the drilling sequence is the fact that some copper mineralization was reported in the crosscut from which proposed Hole No. 1 is to be drilled. This was the only strong copper mineralization found in the lower

adit, therefore it might be assumed to be nearest to the hoped for ore shoot.

The holes have been spaced to cut the indicated-inferred ore zone at about 50 foot intervals throughout a distance that will encompass either a northeasterly rake or a zero rake. It would not pick up a southwesterly rake but the ore zone in the upper levels gives no indication of a southwesterly rake. Furthermore the inferred ore zone projection coincides with the geophysical indications.

We think that our estimated drilling speed is correct. The rock is, chiefly, massive graywacke with no strong faults indicated. On such short holes this should be easy drilling.

With respect to Charlie's question about the $90,000 expenditure for raising and drifting, this would not be expended unless the ore were found at the lower level. In that case repayment would be almost assured. The lower cost given in the earlier application was based on the applicant's expectation of getting a firm contract. The Field Team thought that their estimate was too low but was willing to accept it on the basis of a contract. This opinion was confirmed when the applicants were not able to obtain the contract at their price. About half of the second phase program will be raising which, to be safe, must be figured at better than $100 a foot. We did not figure it in just that way but the estimate amounts to about $150 a foot for raising and $30 a foot for drifting - including cost of equipment, camp, transportation, etc. We do not think that is excessive; we hope that they will be able to better that cost but we should allow some margin.

The arithmetical error pointed out in your letter was a mistake in our office. It will not, however, materially affect the cost of the program.

I hope that the above discussion conveys our thinking in an understandable manner. If you have any further questions we will be glad to try to clear them up.

Yours sincerely,

S. H. Lorain
Executive Officer
Alaska Field Team, Region I

Enclosure

cc: Wm. S. Twenhofel

700
FILE COPY
SURNAME:
Ellis
Johnson
Nelson

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

JAN 17 1952 FILE MAIL

Mr. S. H. Lorain
Executive Officer, Region I
DMEA Field Team
Post Office Box 2990
Juneau, Alaska

Re: Docket No. DMA-1232X (Copper)
Alaska Copper Corporation
1125 Smith Tower
Seattle 4, Washington

Dear Mr. Lorain:

This will acknowledge receipt of five copies of a proposed contract for the above captioned Applicant. The sixth copy you may have kept for your files. However, it should be forwarded here as it is possible that there may be some corrections necessary.

In studying the memorandums submitted by the Commodity Committee men, we find that a few questions have arisen and therefore believe it necessary to refer said questions to you. A copy of these memorandums are enclosed and are self explanatory. The most pertinent question brought out is the location and direction of drill holes 1 to 8, inclusive. It does appear from a study of the maps that the position of the proposed holes should be given serious consideration. Of course, the fact that the lower adit level did not cut a vein or brecciated zone would lead one to infer that the zone, if it exists, is south-east of the present workings. Please give this question further consideration.

The second paragraph of Mr. Johnson's letter is also well made in that it indicates a cost averaging in excess of $80.00 (everything included) per foot for crosscuts, drifts, and raises.

Under "C. Labor and Supervision," page 6, there is an error, 887 days at $196.80 amounts to $17,121.60. Perhaps the $15,521.60 figure should remain and the days reduced accordingly.

Sincerely yours,

1-17-52

(Signed) FRANK JOHNSON

Chairman, Operating Committee
Defense Minerals Exploration
Administration
M Ellis/gla/jem 1-10-52
cc to: Adm. Reading File
Mails & Files Br.
Docket
Messrs. Ellis
Johnson, CH Rm. 3621
Nelson, Ned Rm. 4215 GS
Field Team, Region I

Enclosures - 2

APPROVED:

Member, Bureau of Mines

Member, Geological Survey

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF MINES
WASHINGTON 25, D. C.

January 8, 1952

Memorandum

To: E. W. Ellis, Rare and Miscellaneous Metals Branch, DMEA

From: C. H. Johnson

Subject: DMA 1232X - Alaska Copper Corporation

I have no hesitation in concurring in the first stage of this project with only the suggestion that DMEA request the field team to arrange for a careful geological study to be made if possible prior to beginning work. I feel that far too much reliance has been placed on the reported results of the electrical geophysical survey made in 1921. It is seldom that geophysical work can spot a target of this kind as precisely as seems to be taken for granted by the applicant. Geological study might indicate that it would be better to disregard the geophysical survey and explore in the opposite direction for the downward extension of the ore shoots. From the maps submitted it certainly appears that the ore shoots on the upper levels rake to the northeast. If this is correct, it would be advisable to drill the holes first that appear to prospect the northeast end of the target rather than starting at the extreme southwest end.

The second stage of the prospect now appears much more costly than I previously thought it would be. Applicant estimates the cost in excess of $90,000 for 1100 feet of underground working. I suggest that DMEA may not wish to tie up such a large sum until there is better evidence that a commensurate tonnage may be indicated by its expenditure. As it stands now, the project is somewhat speculative although the first stage is well justified.

In further reference to the first stage of the project, it may be noted that no provision appears to have been made for cutting any stations. Perhaps no stations will be needed but it seems to me that it would be wise to provide for the contingency. The time estimate for the diamond drilling is on the optimistic side. It would be better to assume a daily average of 12 to 15 feet per working day. This would raise the drilling time estimate to 100 days, and the cost to $11,725, making the total of Item 8, Labor and Supervision, $13,132 instead of $8,442.

The file is returned herewith.

Copy to Mr Nelson
" " Minerals Div.
" " Base Metal Br.

Attachment

C. H. Johnson

C. H. Johnson, Chief
Base Metals Branch

IN REPLY REFER TO:

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

January 4, 1952

Memorandum

To: Mr. Ernest Wm. Ellis

From: Mr. N. E. Nelson

Subject: IMA-1232X, Alaska Copper Corporation

This revamped application appears to be well drawn and from the engineering data available one cannot doubt the existance of good grade ore below No. 4 level. That it will extend to the level of No. 9 adit is not so certain and in case it does so extend the exploration program planned (Stage I) may not locate it since the "bite" is large - 500 ft. - and the real target, a short ore shoot which was missed once, is small.

More information as to the rocks encountered in the No. 9 level might be of interest and might tend to explain the shutting down and failure to reopen while the camps and equipment were on the ground and in good condition.

Since such questions are not raised by the field team, they may not be in order, and concurrence with the field team's recommendation is warranted.

N. E. Nelson

Ned E. Nelson
Geologist

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS ADMINISTRATION
~~WASHINGTON 25, D. C.~~
P. O. Box 2990
Juneau, Alaska

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
JAN 2 - 1952

December 19, 1951

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

Re: Docket DMA-1232X
Alaska Copper Corporation
1125 ~~1617~~ Smith Tower
Seattle 4, Washington

Dear Mr. Mittendorf:

The enclosed contract (MF-200) and attached exhibits represent the second revision of the DMA exploration loan proposal recorded above. The original proposal and first revision together with favorable recommendations by the Field Team were forwarded under dates of May 25 and October 15, 1951. Favorable action by the Operating Committee was indicated by subsequent correspondence, but a contract for either proposal could not be completed because of the inability of the applicant to obtain firm contracts for the proposed work. The enclosed contract provides for completing the originally proposed exploration in two stages on company account if suitable contractors cannot be engaged.

The Field Team has assisted in preparing the revised contract presented herewith and approves of the program as proposed by the applicant. Because of the short field season in the Prince William Sound area, the loan should be granted as a unit with the second phase of the program following immediately after favorable drilling results and recommendations by the Field Team.

The applicants are unwilling to spend more than $10,000 in preliminary exploration, but are willing and able to carry out their 50 percent participation in the expanded program if such is justified by drilling results.

Very truly yours,

S. H. Lorain
Executive Officer
Field Team, Region I

Encl: 1

Gowen
2574

Department of the Interior

Defense Minerals Administration

1420137 Salaries and Expenses,
Defense Production Activities, Interior,
1952 100.0000 (300)

J. E. C. Gowen

Mr. S. H. Lorain
Bureau of Mines
Juneau, Alaska

Reurtel October 16 and letter October 5 regarding Docket 1232X. Suggest it worthwhile to work out project on basis of cross-cutting, drifting and raising on structure even if delay should require postponing work for several months. Actual production would not be delayed as proposed underground work would be necessary in case diamond drilling results were favorable.

Tom Lyon
TCL

JBGowen:rw
10-17-51

Copy to: Administrator's Reading File
Audits
Copper Branch
Coordinating Committee
Files-DMA Docket

Mr. Gaverin

310

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DEFENSE MINERALS ADMINISTRATION WASHINGTON, D.C.
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FM S H LORAIN BUR OF MINES JUNEAU ALASKA

TO TOM LYON CHAIRMAN COORDINATING COMMITTEE DEFENSE MINERALS ADMIN DEPT

OF THE INT WASHDC
MINES GRNC

PLEASE REFER MY LETTER OCTOBER 5 REGARDING DOCKET 1232X AND

REQUESTING TELEGRAPHIC OPINION NO REPLY YET WEATHER CONDITIONS RENDER

SPEED VITAL

CFN 5 1232X
15/1846Z

OFFICIAL FILE COPY

To	Init.	Date
310	JT	10/16
Rec'd	PK	OCT 16 1951

1232X

MF-500

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS ADMINISTRATION

REFERENCE SLIP

DATE 10-9-51

REFERRED TO:

1. Sio
2.
3.
4.

OCT 9 1951

FOR:

..... Action	..... Recommendation
..... Approval	..... Record of .....
..... Comment	..... Referring to .....
..... Conference	..... Reply for signature of .....
..... Consideration	..... Rewriting
..... Filing	..... Signature
..... Instructions	..... Suggestions
..... Investigation	..... Your information
..... Initials	
..... Mailing	
..... Previous correspondence	

REMARKS: .....

Check (X) before the items needing attention.

Initials of sender.

G. E. C.

GPO 16—63815-1

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS ADMINISTRATION
~~WASHINGTON 25, D. C.~~
P. O. Box 2990
Juneau, Alaska

October 5, 1951

DEFENSE MINERALS ADMINISTRATION WASHINGTON, D.C.
OCT 9 11 15 AM '51

Tom Lyon, Chairman
Coordinating Committee
Defense Minerals Administration
Washington 25, D. C.

Reference: Docket DMA-1232X
Alaska Copper Corporation

Dear Mr. Lyon:

This application which has reference to exploration of a small high grade copper property at Fidalgo, on Prince William Sound, Alaska, was submitted to your office on May 18 last, but approval of the application has been withheld pending the obtaining of a firm contract by the applicant. I described the situation briefly in my monthly report for September.

Because he was unable to obtain a drifting and raising contract the applicant now proposes to change his program to diamond drilling at a somewhat smaller over-all cost. The Field Team believes that such a program will be acceptable. The applicant now is endeavoring to obtain a diamond and drilling contract that would be approved by DMA.

I have just received the following telegram from Charles F. Herbert:

"REFER MY LETTER SEPTEMBER 3RD RE ALASKA COPPER. HAVE BID FROM ARCTIC DEALERS OF VANCOUVER, B.C. FOR COST PLUS TWENTY (20) PERCENT ON FIRST THOUSAND FEET DRILLING AND FOOTAGE. BID ON ADDITIONAL DRILLING TO BE BASED ON TWENTY (20) PERCENT OF ESTIMATED COST AFTER EXPERIENCE. WE BELIEVE THAT THE COST WILL BE WITHIN MY ESTIMATE. IF YOUR OFFICE CONCUR IN OUR PROGRAM WE WILL MAKE CONTRACT AT ONCE AND BEGIN TO GET EQUIPMENT ON JOB. WE FULLY UNDERSTAND THAT APPROVAL BY YOU IS NOT BINDING ON DMA."

BUREAU OF MINES
WASHINGTON, D. C.

OCT 9 9 56 AM '51

Obviously the above is not a firm contract, consequently, I am wondering if it would be acceptable to the Washington office DMA. I doubt if any better can be obtained, and I believe that the price will be within the cost estimated by a revised application, which is now in our hands.

Will you please advise me by wire so that I can notify Mr. Herbert with regard to the attitude that DMA will take in this matter.

Yours sincerely,

S. H. Lorain
Executive Officer
Alaska Field Team, Region I

1232X

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF MINES
REGION I

OFFICE OF
REGIONAL DIRECTOR

P. O. BOX 2990
JUNEAU, ALASKA

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
JUL 20 1951
LAMBOM F. STROBEL
Executive Secretary

July 17, 1951

MEMORANDUM

To: Tom Lyon, Chairman, Coordinating Committee, DMA

From: S. H. Lorain

Subject: DMA 1232X - Alaska Copper Corporation

I note your recent correspondence with the subject corporation and that they will not be able to obtain a firm bid from the contractor until after August 8th. This, of course, will put them past the current deadline of July 31. I am afraid that they are not going to get started this season and that may mean more then a years delay in production.

In view of the excellent chances for small but low cost production from this property and of the reliability of the parties concerned, I am wondering if it might not be possible to approve the application inside the July 31st deadline on a contingent basis?

S. H. Lorain
Regional Director, Region I
(Chairman, AlaskaField Team, DMA)

cc: Wm. Twenhofel

YUKON PLACER MINING CO.

1617 SMITH TOWER
SEATTLE 4, WASHINGTON

Air Mail

Defense Minerals Administration
RECEIVED
JUL 16 1951
LANDON F. STROBEL
Executive Secretary

July 13, 1951

Mr. Tom Lyon
Director Coordinating Committee
Defense Minerals Administration
Department of the Interior
Washington 25, D.C.

Ref.: DMA 1232X Alaska Copper Corporation

Dear Sir:

I have today received your telegram of the 12th, which is as follows:

RE FIDALGO INFORMATION SUBMITTED IN ANSWER MY TELEGRAM MAY 25

INSUFFICIENT CONTRACT CANNOT BE NEGOTIATED BEFORE ITEMIZED

COSTS OF PROJECT OR COPY OF FIRM BID ON FOOTAGE BASIS

RECEIVED TO COMPLETE EXHIBIT A

TOM LYON

In company with Mr. Ellingen, the contractor, and with an engineer of the US Bureau of Mines (if possible) I shall visit the Fidalgo Bay property on August 8th and shortly thereafter will submit to your office a firm bid on a footage basis or itemized costs of the project.

Very truly yours,

ALASKA COPPER CORPORATION

by Charles F. Herbert
Charles F. Herbert

FILE COPY
SURNAME:

Gowen

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

Lyon Ext. 3433

Department of the Interior
Defense Minerals Administration

July 11, 1951

Mr. S. H. Lorain
U. S. Bureau of Mines
Box 2990
Juneau, Alaska

Re Fidalgo advising applicant information submitted in answer my telegram May 25 insufficient Contract cannot be negotiated before itemized costs or copy of firm bid on footage basis received to complete Exhibit A.

Tom Lyon

CONFIRMATION

W

JBGowen:jp

Copy to: Audits
Records and Reports Branch
Executive Officer, RegionI
Copper Branch
Files

FILE COPY
SURNAME:

Gowen

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

Lyon Fxt. 3433

Department of the Interior
Defense Minerals Administration

July 11, 1951

Alaska Copper Corporation
Glacier Creek, Yukon Territory
Canada

C. F. Herbert

Re Fidalgo information submitted in answer my telegram May 25 insufficient Contract cannot be negotiated before itemized costs of project or copy of firm bid on footage basis received to complete Exhibit A

Tom Lyon

W

JBGowen:jp

Copy to: Audits
Records and Reports Branch
Executive Officer, Region I
Copper Branch
Files

Exhibit 1232

856

CLASS OF SERVICE

This is a full-rate Telegram or Cablegram unless its deferred character is indicated by a suitable symbol above or preceding the address.

WESTERN UNION

W. P. MARSHALL, PRESIDENT

1208

SYMBOLS

DL=Day Letter

NL=Night Letter

LT=Night Letter Telegram

VLT=Int'l Victory Ltr.

Mr. Strobel
Lyon
Rec 7/12

SVC JUL 11 PM 10 51

The filing time shown in the date line on telegrams and day letters is STANDARD TIME at point of origin. Time of receipt is STANDARD TIME at point of destination

DE.YA371 DH DM

WASHINGTON D.C. JUL 11 1951

TOM LYON

DEPT OF THE INTERIOR WASHDC

YOUR TELEGRAMJUL 11 ALASKA COPPER CORP GLACIER CREEK

YUKON TERRITORY UNDELIVERED ADDRESSEE NOW AT WASHINGTON

ATHLETIC CLUB SEATTLE WASH

WESTERN UNION NA 7100 EXT 263

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
JUL 12 1951
10:01 am
LANDON F. STROBEL
Executive Secretary

THE COMPANY WILL APPRECIATE SUGGESTIONS FROM ITS PATRONS CONCERNING ITS SERVICE

Mr. Gower

YUKON PLACER MINING CO.

1617 SMITH TOWER
SEATTLE 4, WASHINGTON

ALASKA COPPER CORPORATION
July 11, 1951

RECEIVED
JUL 16 1951
LANDON R. SCHOBEL
Executive Secretary

Mr. Tom Lyon
Director, Coordinating Committee
Defense Minerals Administration
Department of the Interior
Washington 25, D.C.

Ref.: DMA 1232X Alaska Copper Corporation

Dear Sir:

Mr. Glen D. Franklin, Secretary-Treasurer of Alaska Copper Corporation is now in Juneau, Alaska where he has conferred with Mr. S. H. Lorain, Regional Director, U.S. Bureau of Mines, regarding the subject application.

As a result of these conversations, Mr. Frankling has requested that I submit to you a guarantee of the minimum amount of development work we would accomplish at the Fidalgo Bay property.

We believe that the work outlined below may be sufficient to reasonably disprove the existence of a commercial orebody, although clearly insufficient to adequately develop such an orebody.

Alaska Copper Corporation will guarantee accomplishment of the following development work:

1. Drive a crosscut from level No.9 to the projected ore zone, an estimated distance of 60 feet or less.

2. Drive a drift at least 170 feet along the ore zone. Explore the walls of the ore zone by prospect holes and short crosscuts so that the effective width of the drift will be at least fifteen feet.

3. Raise at least fifty feet on the best showing uncovered in the drift and, by prospect holes give the raise an effective width of fifteen feet.

4. Complete sampling and assay of all development work.

YUKON PLACER MINING CO.

1617 SMITH TOWER

SEATTLE 4, WASHINGTON

We believe that the proposed minimum amount of development (aggregating about 300 feet) can be done for $ 10,000 or less, including such payments to the contractor as may be necessary to compensate him for unrecovered costs in the event of foreclosure of the contract.

If this minimum amount of development fails to evidence ore of satisfactory grade and extent, the advisability of abandoning the project should be carefully studied. We most certainly recognize the possibility that even though the minimum development work should not develop ore, a geological study of the new workings might indicate the advisability of continued development. In this event we should seek the advice of the U. S. Bureau of Mines or other representatives of the Defense Minerals Administration.

We appreciate the prompt attention given this application by your office and recognize that the delays have been largely due to the fact that I have been in the field most of the time and have had trouble getting mail forwarded to me.

Very truly yours,

ALASKA COPPER CORPORATION

by Charles F. Herbert

Charles F. Herbert, Pres.

cc: S. H. Lorain, Regional Director, U.S. Bureau of Mines, Juneau
J. D. Mason, Chief Engineer, Transcontinental Resources, Ltd.

Exhibit A

Approximately 400 feet of crosscut and drift are to be driven on the No. 5 to find and explore the shear zone (ore) supposed to be in the locality indicated on Map 2. (The proposed crosscuts and diamond drillholes on that map were laid out by the Bureau of Mines in 1942, and it is not indicated that Applicant intends to follow same pattern of crosscutting.)

Applicant then proposes to drive a raise to the No. 4 level, 500 feet above the No. 5 level, to explore the orebody further.

Applicant states that "other anomalies found by the electrical survey may also be investigated from the level No. 5," but he does not, evidently, include this in his cost estimate.

Project should be subdivided into two stages, the first consisting of exploration by ~~drift and~~ crosscut and drift on the No. 5 level, the second, exploration by raising on the ore to the No. 4 level. The second stage should be contingent on the success of the first.

Project can then be summarized:

I Crosscut and drift on No. 5 level, 400 feet @ $22 per foot (contract)	$8,800
Supervision 4 months @ 600	2400
Repairs & rehabilitation	1000
Supplies	200
	$14,200

II Raise from No 5 to No 4 level 500 feet @ $22 per foot (contract)	11,000
Supervision 4 mo. @ 600	2400
Supplies	2400
	$15,800

Recommendations

It is recommended that ~~any~~ a contract be presented to Applicant ~~based on~~ for a 2-stage project as outlined in Exhibit A, the second stage to be contingent upon approval by Government prior to starting it. Contract should provide that no charges will be made against the project over and above the amounts indicated, but that Applicant will meet all such expenses and costs as must be incurred to prosecute ~~the work~~ successfully and rapidly, ~~without expense~~ and the Government shall not be liable for any costs ~~over~~ exceeding to the extent of 50 percent of those estimated in Exhibit A.

72
79 12
12
12200

3500
600
21000.00

Alternate Projects, 1232x

A.

1. Continue No 9 Level main crosscut 100 feet south 100'

2. Drift east and west on any favorable structure exposed. E 50'

W & SW 300'

3. Examine main 9th level crosscut South for any geological structure which might represent the downward extension of either or both of structures which were stoped on No 3 and No. 4 levels at points marked in red on maps as 3-3 and 4-3. It is very doubtful that these two stopes are on the same structure or orebody.

If such a structure is found in the main 9th level crosscut,:

Drift SW. 150

Total work 600'

Cost 600' contract @ $22.00	$13200
Supervision 6 mos @ $600	3600
Repairs and rehabilitation	1000
Supplies	3000
	20800

Alternate Projects

B.

In case A1 discloses no structure upon which to drift

Work done (A1)	100'
3. Drift as in (A3)	150'
4. Crosscut SE	100
5. Drift SE 160'± NW 70'±	230
Total	580±

Cost Same as A. $20800

C. In case A1 and B4 disclose no structure:

Work done	200'
6. Crosscut SE 100'	100
7. Drift 50' NE, 50' SW	100
A3 -	150
Total	550'

Cost 550' @ $22.00	12100
Supervision 6 mos @ $600	3600
Repairs & rehab.	1000
Supplies	2750
Total	19450

6/5/51

Defense Minerals Administration 7-2-51

Review of Application for Exploration Assistance

Docket No. DMA 1232X

Commodity Copper

Total Amount $30000

Govt. Participation $15000

1. Name and Address of Applicant Alaska Copper Corporation, 1617 Smith Tower, Seattle 4, Wash (Glacier Creek, Yukon Terr. Canada)

2. Location of Property Hidalgo Bay, Prince William Sound, Alaska, 43 mi from Valdez

3. Mineral or metal Copper Is it listed in Section 9 of MO-5?

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 Geological probabilities may not be
b) Poor adversely affected by project proposed. Some attention might be given to area northwest of No 9 Level drift.

c) None

d) Don't know—needs field examination

e) Is there an alternative and favorable project?
(If so, attach an explanation)

5. Is the applicant's right to the property clearly stated? Applicant claims (question 5, 6, 7)*. to be owner of 15 patented claims

6. If applicant is a lessee, is a copy of the lease attached?

Does the lease have sufficient time to run to cover a future productive period?

*question numbers are those of MF-103

7. Are subordination agreements necessary? No

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 — will be contracted.

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? _____ 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? _____

Is this part a worthwhile exploration project?_____

d) Are the cost estimates detailed? No

Can they be summarized, as on page 2 of Procedural Instruction 5-A, from the available data?_____ If so, attach a draft.

e) Are the cost estimates reasonable? Do not know

f) Should more information be requested from applicant? Yes

g) Is a field examination necessary to complete Exhibit A? No

11. Exhibit B (question 23-d)*

a) Is it applicable? Will be included in contract price

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? Included in contract

b) Sufficient data?_____ If so, attach a draft.

c) Are rents and charges reasonable?_____

d) Is a field check needed?_____

13. Exhibit D (question 23-a, b)*

a) Are there sufficient data? In contract

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?

15. In your judgment, can the proposed work be done in the proposed time? Yes

(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? It is recommended that the application be approved, and that Government assistance in the amount of $15000 be granted the applicant. Approval is also recommended by the DMA Field Team, Region I. It will be necessary for applicant to furnish copy of firm bid on work in lieu of Exhibit A.

Reviewed by: J B Gowen
C H Huson
D C Macharen

Date 7/2/51

97692

Re Fidalgo we are advising applicant it will be necessary to furnish copy of contract for your information. Copper branch ~~agree~~ will recommend favorable action if he complies.

Re Radovan it will be impossible to ~~agree~~ negotiate contract without reasonably specific program and exhibits. Action will have to await your visit and trust funds will be appropriated next fiscal year.

fractions minimum ~~and maximum~~ forces of work.

CLASS OF SERVICE

This is a full-rate Telegram or Cablegram unless its deferred character is indicated by a suitable symbol above or preceding the address.

WESTERN UNION

W. P. MARSHALL, PRESIDENT

Pres. Gowen
Feb. 25 22

SYMBOLS

DL=Day Letter
NL=Night Letter
LT=Int'l Letter Telegram
VLT=Int'l Victory Ltr.

The filing time shown in the date line on telegrams and day letters is STANDARD TIME at point of origin. Time of receipt is STANDARD TIME at point of destination

1951 JUN 30 AM 3 33

RA069 DEA037

DE YA016 49 NL 1 EXTRA VIA EDMONTON=CNT WHITEHORSE YUKON 29=

MR TOM LYON=

DIRECTOR COORDINATING COMMITTEE DMA DEPT OF INTERIOR

WASHDC=

REFERENCE DMA 1232X AND LORAINE WIRE TWENTY EIGHTH NO FORMAL CONTRACT WITH ELLINGEN AS YET OUR UNDERSTAND WITH HIM IS THAT WE WILL SPEND AT LEAST TEN THOUSAND AND GUARANTEE HIM COSTS AND REASONABLE COMPENSATION FOR HIS TIME IF CONTRACT PAYMENTS OF TEN THOUSAND FAIL TO COVER THESE=

ALASKA COPPER CORP PER C F HERBERT=

UNDERSTAND 1232X=

WE WILL APPRECIATE SUGGESTIONS FROM ITS PATRONS CONCERNING ITS SERVICE

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
JUL 2 - 1951
9:40
LANDON F. STROBEL
Executive Secretary

1951 JUN 30 AM 7 15

OLY

Mr. Young
Copies to

JUL 2 1951

~~JUL 2 1951~~

~~LANDON F. STROBEL~~ Lyon

THE WESTERN UNION TELEGRAPH COMPANY

NOTICE REGARDING TELEGRAM

W. P. MARSHALL, PRESIDENT

1951 JUN 27 PM 4 18
WASHINGTON, D.C.

WP0109
DELIVERY NO.

_____ 19____
(STREET ADDRESS, CITY, AND DATE)

TOM LYON
NAME

DEFENSE MINERALS
ADDRESS

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
JUN 28 1951
LANDON F. STROBEL
Executive Secretary

Your telegram of JUNE 27 1951 to ALASKA COPPER CORP
DATE ADDRESSEE

at SEATTLE WASH is undelivered for the following reason:
ADDRESS AND CITY

~~ABOVE FIRM HAS MOVED GLACIER CREEK YUKON TERR CANADA~~

If you have occasion to correct the address originally supplied, please call RE 1820

and ask for EX-4187

Form 101 (Rev. 2-49)

THE WESTERN UNION TELEGRAPH COMPANY

BUREAU OF MINES
MAIL ROOM
WASHINGTON, D. C.
JUN 28 8 57 AM '51

BUREAU OF MINES
WASHINGTON, D.C.

1951 JUN 28 AM 8 59

FILE COPY
SURNAME:

Gowen
Wheeler

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

Department of the Interior

Defense Minerals Administration

June 26, 1951

Alaska Copper Corporation
1617 Smith Tower
Seattle 4, Washington

Re your application exploration assistance Fidalgo Mine it will be necessary for you to furnish a copy of a firm bid from contractor for definite minimum footages of work to complete Exhibit A of Form MF-200.

Tom Lyon

Tom Lyon

C O N F I R M A T I O N

Copy to: Audits
Executive Secretary
Executive Officer, DMA Field Team, Region I
Copper Branch
Files

JBGowen:jp

FILE COPY
SURNAME:

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

Department of the Interior
Defense Minerals Administration

Gowen
Ext. 2574

June 25, 1951

Mr. S. H. Lorain
U. S. Bureau of Mines
Box 2990
Juneau, Alaska

Re Fidalgo we are advising applicant it will be necessary to furnish copy of contract for definite minimum footages of work. For your information Copper Branch will recommend favorable action if he complies.

DMA-1119-856

Re Radovan it will be impossible to negotiate contract without reasonably specific programs and exhibits. Action will have to await your visit and trust funds will be appropriated next fiscal year.

Tom Lyon

CONFIRMATION

Copy to: Audits
Copper Branch, Rm. 2522
Executive Secretary
Files
Mr. Maye

DMA 12 32

856

21 W 1016

DEPT/ARMY COMCENTER
GREENWICH CIVIL TIME

951 JUN 21 20 06 5

Action: Int Dept

Trip No. _____ By _____

Delivered By
RADIO COMMUNICATIONS SECTION AGO
THE ADJUTANT GENERAL'S OFFICE
DEPARTMENT OF THE ARMY
Room 1 A 869 The Pentagon
LI 6700 Extension 7130

JUN 22 1951

WKB106

RR UEPC

DE UKJC 192A

R 2118252

FM S H LORAIN BUR OF MINES JUNEAU ALASKA

TO CHARLES H JOHNSON MINERALS DIV BUR OF MINES WASHDC
MINES GRNC

UNABLE OBTAIN ADEQUATE EXHIBIT MATERIAL FROM RADOVAN COPPER PLAN

PERSONAL TRIP TO PROPERTY BUT MAY NOT BE ABLE COMPLETE BEFORE

JULY 1 PLEASE ADVISE IF THAT PLAN WILL PERMIT APPROVAL

UNDER 1951 FUNDS ALSO PLEASE CHECK FIDALGO COPPER APPLICATION AND

ADVISE

CFN RADOVAN 1 1951 FIDALGO
21/1825Z

BUREAU OF MINES
WASHINGTON, D. C.

JUN 22 12 52 PM '51

K

19 Mar 911

1951 JUN 19 18 40

The Pentagon
Extension 71388

DMA-1232X

FORWARDED BY
SIGNAL CORPS
DEPT OF ARMY
COMM CENTER
LIBERTY 6-0000
EXT 00307

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WKA111

RR UEPC

DE UKJC 175A

JUN 20 1951

R 191817Z

M S H LORAIN BUR OF MINES JUNEAU ALASKA

TO TOM LYON DEFENSE MINERALS ADMN DEPT OF INT WASHDC
MINES GRNC

PLEASE ADVISE STATUS FIDALGO COPPER EXPLORATION APPLICATION
PARTICULARLY IF ADDITIONAL DATA NEEDED TO COMPLETE CONTRACT
19/1817Z

RECEIVED
JUN 20 1951
LANDON F. STROBEL
Executive Secretary

EE

CHARLES F. HERBERT
HAROLD H. SCHMIDT
GLEN D. FRANKLIN
EARL ELLINGEN
L. J. STAMPE

~~YUKON PLACER MINING CO.~~

P. O. BOX 1108
~~FAIRBANKS, ALASKA~~
AND
~~GLACIER CREEK, Y. T.~~

Mr. Pittendorf
Dma-1232 X

Alaska Copper Corporation
1617 Smith Tower
Seattle 4, Wash.

June 14, 1951

Mr. Tom Lyon
Director, Coordinating Committee
Defense Minerals Administration
Department of the Interior
Washington 25, D.C.

Dear Mr. Lyon:

In accordance with a request from Mr. S. H. Lorain, Regional Director, U. S. Bureau of Mines, Juneau, Alaska, I am enclosing four copies of Exhibits A, B, C, D, and E according to Exploration Project Contract Form MF-200. The exhibits are to form part of the application to DMA by Alaska Copper Corporation for an exploration project loan in the amount of $ 15,000, which amount is to be matched by $ 15,000 of this company's funds.

It is recognized that the enclosed exhibits are not as detailed as would be desirable, but much of this difficulty is due to the simplicity of the project.

It is apparent that the most favorable locus for the occurrence of valuable ore is well defined by the work done one the upper levels of the mine and by the electrical surveys of Schlumberger. The project can be proven or disproven by crosscutting, drifting and raising within close limits.

Since it is most desirable to expend as much as possible of the available funds on underground work and to avoid the purchase of equipment or the erection of permanent facilities until the property should become a proven mine, Alaska Copper Corporation has arranged to contract all of the work to a man of proven competence who has the necessary equipment and who is familiar with local conditions.

The project seems to offer an opportunity to develop a small copper mine at low cost.

Very truly yours,

ALASKA COPPER CORPORATION

by Charles F. Herbert
Charles F. Herbert, President

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
JUN 22 1951
Executive Secretary

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
JUN 22 1951
LANDON F. STROBEL
Executive Secretary

CHARLES F. HERBERT
HAROLD H. SCHMIDT
GLEN D. FRANKLIN
EARL ELLINGEN
L. J. STAMPE

Dma-1232X

~~YUKON PLACER MINING CO.~~

P. O. BOX 1108
~~FAIRBANKS, ALASKA~~
AND
~~GLACIER CREEK, Y. T.~~

Alaska Copper Corporation
1617 Smith Tower
Seattle 4, Wash.

June 14, 1951

The following exhibits are in accordance with the Defense Minerals Administration Exploration Project Contract Form MF-200, in connection with the application of the Alaska Copper Corporation for an exploration project contract in the amount of $ 30,000.00, one half of which amount is to be furnished by that company and one half to be furnished by the Defense Minerals Administration as a loan.

EXHIBIT A (see attached sketch)

The work on the project will be done by Mr. Chris Ellingen of Douglas, Alaska. Mr. Ellingen has all of the equipment and some of the supplies required for the project at his mining property in Glacier Bay, Alaska. He will move this equipment a nd supplies by his own boat from Glacier Bay to Fidalgo Bay.

Mr. Ellingen will provide temporary housing and equipment as part of his contract price.

The estimated time schedule is as follows:

Clean and repair Level No.9	15 days
Drive crosscut 50 feet	15 days
Drift 170 feet	40 days
Raise 500 feet	120 days
Total: 720 feet of development	190 days

If work can be started on September 1, 1951, the exploration project should be completed on or about March 15, 1951. Additional drifting on the main level or sublevels would be done as completed development should indicate and to the extent that funds for such work are available.

The estimated cost of the project is set forth in the application.

ALASKA COPPER CORP.

No. 9 LEVEL

SCALE 1" = 40'

CHARLES F. HERBERT
HAROLD H. SCHMIDT
GLEN D. FRANKLIN
EARL ELLINGEN
L. J. STAMPE

~~YUKON PLACER MINING CO.~~

P. O. BOX 1108
~~FAIRBANKS, ALASKA~~
AND
~~GLACIER CREEK, Y. T.~~

Alaska Copper Corporation
1617 Smith Tower
Seattle 4, Wash.

EXHIBIT B

There are no fixtures or improvements of value excepting the underground workings and the pipe and track in place, all of which will be used without cost against the contract.

The contractor will furnish equipment and temporary housing as part of his contract.

EXHIBIT C

As noted in Exhibit B, the contractor will furnish the operating equipment as part of his contract. There will be no direct charge for rental.

EXHIBIT D

The contractor will furnish all labor, as required, as part of the contract.

It may be advisable for part of the time to employ one resident engineer at a cost of about $ 600 a month.

Supervision, engineering and home office expense of Alaska Copper Corporation will not be charged against the exploration project contract.

EXHIBIT E

It is not planned to repair any existing facilities until the development program is completed.

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
JUN 22 1951
LANDON F. STROBEL
Executive Secretary

Defense Minerals Administration 6-10-51

Review of Application for Exploration Assistance

Docket No. 1232 X

Commodity Copper

Total Amount $30,000

Govt. Participation $15,000

1. Name and Address of Applicant Alaska Copper Corporation 1617 Smith Tower, Seattle 4, Washington

2. Location of Property Fidalgo Bay, Prince William Sound, Alaska, 43 mi. from Valdez.

3. Mineral or metal Copper 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 ✓

b) Poor

c) None

d) Don't know --- needs field examination

e) Is there an alternative and favorable project? (If so, attach an explanation)

5. Is the applicant's right to the property clearly stated? (question 5, 6, 7) Applicant claims to be owner of 15 patented claims.

6. If applicant is a lessee, is a copy of the lease attached?

Does the lease have sufficient time to run to cover a future productive period?

*Question numbers are those of MF-103

7. Are subordination agreements necessary? No

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 } Not known and not discussed by Applicant or Field Team. As Applicant is subsidiary of an operating Alaska mining company, it is believed these points can be passed on without delaying for field investigation

b) Equipment and supplies
(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? Not fully

If not, are there sufficient data given so that you can describe the project? See attached draft. If so, attach a draft.

b) Is there an adequate map or sketch of the proposed work? Maps of mine are furnished, but work is not laid out thereon.

c) Is the proposed work "exploration" under the definition of Section 8, MD-5? Yes

If not, what part of it is?

Is this part a worthwhile exploration project? _____

d) Are the cost estimates detailed? No

Can they be summarized, as on page 2 of Procedural Instruction 5-A, from the available data? _____ If so, attach a draft. See attached

e) Are the cost estimates reasonable? They seem too low

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? No. Applicant states that contractor will furnish equipment and that no charge will be made against the project for any additional equipment furnished by applicant

b) Sufficient data? _____ If so, attach a draft.

c) Are rents and charges reasonable?

d) Is a field check needed? No.

13. Exhibit D (question 23-a,b)

a) Are there sufficient data? No wages to be paid by Applicant - only supervision, @ $600 per month, which seems not excessive.

b) Is the schedule adequate for the work proposed?

c) Is the schedule excessive for the work proposed?

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? Yes. Applicant states "Only minimum repairs will be made. Estimated cost $1000." No further detail is given. We cannot tell whether $1000 is

b) Sufficient data?

c) Reasonable? adequate, but recommend project be approved without delay for field examination.

d) Field check needed?

15. In your judgment, can the proposed work be done in the proposed time? Yes

(All exploration must be completed within two years.)

16. If field examination is not needed, attach your recommendation. See attached

17. If field examination is needed, do you have any special instructions for the field team not indicated by your answers to the foregoing questions?

Reviewed by: C. H. Johnson 6/10/51
J. P. Gowen

Date

FILE COPY
SURNAME:

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

June 7, 1950

Mr. Charles F. Herbert
President
Alaska Copper Corporation
1617 Smith Tower
Seattle 4, Washington

Subject: DMA-1232X
Re: Exploration Loan
Fidalgo - Alaska Copper

My dear Mr. Herbert:

Receipt is acknowledged of your application and attachments of May 17, 1951 for an exploration loan under the Defense Production Act of 1950.

The application was assigned Docket Number DMA-1232X and was referred to Mr. J. B. Gowen, Chief, Copper Branch on May 24, 1951.

In any future correspondence relating to your application, kindly refer to DMA-1232X.

Sincerely yours,

LANDON F. STROBEL

Landon F. Strobel
Executive Secretary

LFSTROBEL:js
cc: Strobel-2
√Files
Gowen
Lyon

DRAFT-MacLare

OK DRW

June 1, 1951

Docket No.: DMA-1232X
Copper $30,000
Gvt. 50% $15,000

Memorandum

To: Director, Expansion Production Division

From: Director, Supply Division

Subject: DMA-1232X, Exploration Project for copper, Alaska Copper Corporation, Fidalgo Mine, Territory of Alaska

A. Alaska Copper Corporation, 1617 Smith Tower, Seattle 4, Washington.

B. Located in the Territory of Alaska, Valdez Recording precinct, South side of Port Fidalgo one half mile east Trish Cove.

C. Conclusions:

1. Pertinent to the copper programs
2. Project is technically feasible
3. Requirements will probably be available
4. Applicant is willing and able to furnish 50% of required amount,
5. Applicant is believed to be competent.

D. It is recommended that an exploration contract on a 50-50 basis be granted. Total amount to be $30,000; government to provide $15,000.

E. Applicant proposes to drive approximately 80 feet of crosscut from Level No. 9 into expected ore zone, as indicated by geophysical survey and by projection from Level No. 4. This will be followed by about 300 feet of drifting in the ore zone, and a 500 foot raise to Level No. 4,

where there is good ore shown in the floor. This work of approximately 900 feet will be done by contract at $22.00 per foot, average. Cost estimates are as follows:

Contract payments	$20,000
Supervision	4,800
Repairs	1,000
Supplies	4,000
Misc.	200
Total	$30,000

Applicant will put ~~of~~ up $15,000 and asks the government to meet the balance in accordance with the copper expansion program.

F. It is expected to develop about 22,000 tons of 10% copper ore between Levels 9 and 4. From ore previously developed, it appears possible that for each ton of 10 percent ore, 10 tons of 3% ore may be expected. If successful this would make available some 220,000 tons of ore averaging 4 percent copper, or 17,000,000 pounds of copper in approximately 8 months time.

G. Technical feasibility:

1. It appears that this mine has produced about 40 tons of 10 percent copper ore per vertical foot, and that for each tone of 10% ore, there are about 10 tons at 3%. Assays show that the grade seems to hold fairly constant with a slight improvement with depth. Geophysical survey indicates that the ore zone continues to the 9th level, and is located about 50 feet southeast of working on that level.

2. through 5 not applicable

6. The applicant submits the following time schedule, which appears reasonable.

← Preliminary work	1 month
Crosscutting and drifting	2 months
← Raising	4 months
Contingency for delays	1 month
Total time	8 months

H. 1.and 2. Nearly all equipment and facilities must be furnished. Compressors, drills, mine cars, etc. will be furnished by the Contractor. No equipment will be purchased, and no new construction will be undertaken. Only minimum repairs will be made, at an estimated cost of $1,000. Any additional equipment necessary will be furnished by applicant without rental charge against project.

3. From Valdez, Alaska, 43 miles by water. From Cordova, Alaska, 55 miles by water, From Tacoma, Washington, by water. Mine is one half mile inland, by trail.

4. Will be furnished by Contractor.

5. Diesel power will be used. Usual cost in the area is about 3 cents per kwh.

I. 1. To be financed under the usual terms of a government participation exploration contract.

2. Sum of $15,000, government's share, appears sufficient and ~~for~~ for the possibilities offered, very reasonable.

3. Not applicable.

4. To be made from sale of any ore discovered and subsequently mined under the usual provisions of this type of assistance.

5. Not applicable.

J. Letter of transmittal of application~~s~~ states Mr. Charles F. Herbert is a well known and successful Alaskan mining operator, and is believed to have been in the Washington Office of the R.F.C. during the war.

K. 1. None

2. None

The complete file on this Docket No. DMA-1232X is enclosed.

Tom Lyon, Directir
Supply Division

Attachments

Copy to: S. H. Lorain, P. O. Box 2990, Juneau, Alaska (2)
Executive Secretary
Copper Branch
Mr. Lyon
Mr. MacLaren
Files

STANDARD FORM No. 14
APPROVED BY THE PRESIDENT
MARCH 10, 1926

Gowen
Ext 2574

TELEGRAM

OFFICIAL BUSINESS—GOVERNMENT RATES

FROM Department of the Interior

BUREAU Defense Minerals Administration

CHG. APPROPRIATION

U. S. GOVERNMENT PRINTING OFFICE 10—1723

May 25, 1951

Mr. S. H. Lorain
U. S. Bureau of Mines
Box 2990
Juneau, Alaska

Re Fidalgo we are advising applicant it will be necessary to furnish copy of contract for definite minimum ~~footypes~~ footages of work. For your information Copper Branch will recommend favorable action if he complies.

Re Radovan it will be impossible to negotiate contract without reasonably specific program and exhibits. Action will have to await your visit and trust funds will be appropriated next fiscal year.

2 yellow copies

On second yellow only. CONFIRMATION on file copy on down to pink

Copy to: Audits
Copper Branch
Executive Secretary
Files

LANDON F. STROBEL

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF MINES
REGION I

OFFICE OF
REGIONAL DIRECTOR

P. O. BOX 2990
JUNEAU, ALASKA

ON SITE Report

May 25, 1951

James Boyd, Administrator
Defense Minerals Administration
Department of the Interior
Washington 25, D. C.

Dear Dr. Boyd:

Enclosed herewith are the original and three copies of an evaluation by the Field Team, Region I of an application for an exploration loan by the Alaska Copper Corporation. The application was forwarded to your office on May 18. Although the application has not been referred to this office, we are taking the liberty of submitting an opinion without waiting for a request.

Inasmuch as all of the available data are contained in the original application, we have not prepared a detailed analysis but are sending an opinion only. We think that the merits of the proposal are obvious.

Yours sincerely,

S. H. Lorain
Regional Director, Region I
(Chairman, Alaska Field Team, DMA)

Encls. 4

cc: Wm. Twenhofel

REPORT OF ALASKA FIELD TEAM

Application for Exploration Contract, Alaska Copper Corporation, 1617 Smith Tower, Seattle 4, Washington

(Fidalgo - Alaska Copper Mine)

INTRODUCTION

On May 18, 1951, the DMA Field Team, Region I, forwarded an application for an exploration contract by the Alaska Copper Corporation to the Defense Minerals Administration in Washington, D. C. This report presents the Field Team's evaluation of the application. The Field Team considers the application and the substantiating materials to be very complete; consequently this report is brief.

The following reports and sources have been utilized in preparing this Field Team report:

1. Application for exploration contract by Alaska Copper Corporation, May 17, 1951.

2. "Report on the electrical survey carried out for the Coppermines Inc. in Prince William Sound district Alaska"; private report by Schumberger Electrical Prospecting Methods, September 27, 1930.

3. U. S. Geol. Survey Bull. 963-B, 1950, pp. 60-61.

4. U. S. Geol. Survey Bull. 605, 1915, pp. 117-120.

DESCRIPTION

The property in question is known as the "Schlosser property" and as the "Fidalgo-Alaska Copper mine". It is on the south side of Port Fidalgo about one-half mile east of Irish Cove. The mine openings range in altitude from 150 to 1000 feet and are about one-half mile from the beach. Port Fidalgo is a fiord on Prince William Sound on the south coast of Alaska.

The mine was formerly operated by the Fidalgo-Alaska Copper Co. and it produced chalcopyrite ore during 1916 to 1920. The mine has not produced since 1920. The total production was 16,175 tons of ore averaging 10 percent of copper.

All buildings and surface installations are now in ruins.

The lower adit at altitude 158 feet was driven prior to 1920 and was designed to undercut the orebody 500 feet below its lowest point. This adit did not encounter the orebody at this depth, but according to the electrical surveys made in 1930 the orebody is presumed to lie 50 feet beyond the farthest extension of the lower adit.

APPLICANT'S PROPOSAL

The applicant is prepared to invest $15,000 to be matched by an equal amount from the Government. The applicant proposes (1) to extend the lower adit (level no. 5) into the area where the electrical survey indicated the ore zone should lie. The lower adit is 500 feet below the lowermost exposure of the orebody previously mined. If the ore zone actually is encountered the applicant proposes (2) to drive raises, drifts, and cross-cuts to more fully explore the ore zone.

In addition the applicant proposes (3) to explore from the lower adit several of the other electrical anomalies outlined by surface surveys.

DISCUSSION

This mine has produced a small and profitable amount of chalcopyrite ore averaging about 10 percent of copper. During the period of past production (1916-1920) no attempt was made to mill the ore and the operator did not attempt to mine low-grade ore. A considerable block of unexplored ground exists between the number 4 and 5 levels. (Difference in elevation is 500 feet).

The electrical survey made in 1930 indicates that the lower adit (no. 5), if extended about 50 feet should encounter the shear zone in which may be an ore body. The geologic probability of making a discovery of an ore body is very good. The DMA Field Team consider this prospect to be, by far, the best small copper prospect in Alaska that might be made available for quick production of high-grade copper ore.

The prospect is well situated with respect to shipping to the Tacoma smelter. It is within a half a mile from a protected deep-water harbor and the lower adit (proposed main haulage level) is but 158 feet above sea level. Adequate water supplies for domestic and mill use are readily available. Adequate timber supplies, if needed, are available on the site.

The Alaska Copper Corporation is a subsidiary of the Yukon Placer Mining Co. a successful Alaskan gold placer company. The president of the corporation is Charles F. Herbert who is a well known, respected, and successful mining operator and engineer. The Alaska Copper Corporation is the sole owner of the 23 patented lode claims covering this prospect.

RECOMMENDATION

For the reasons discussed above, the DMA Field Team recommends that an exploration contract for $30,000 (applicant to contribute one half) be made with the Alaska Copper Corporation.

Field Team, Region I

_____, Executive Officer
S. H. Lorain, Regional Director
Region I, U. S. Bureau of Mines

W. S. Twenhofel
W. S. Twenhofel, Geologist
U. S. Geological Survey

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(Fidalgo - Alaska Copper Mine)

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Field Team, Region I

_____, Executive Officer
S. H. Lorain, Regional Director
Region I, U. S. Bureau of Mines

W. S. Twenhofel
W. S. Twenhofel, Geologist
U. S. Geological Survey

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Application for Exploration Contract, Alaska Copper Corporation, 1617 Smith Tower, Seattle 4, Washington

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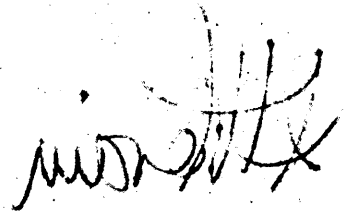
Field Team, Region I

_____, Executive Officer
S. H. Lorain, Regional Director
Region I, U. S. Bureau of Mines

W. S. Twenhofel
W. S. Twenhofel, Geologist
U. S. Geological Survey



UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF MINES
REGION I

OFFICE OF
REGIONAL DIRECTOR

P. O. BOX 2990
JUNEAU, ALASKA

May 18, 1951

James Boyd, Administrator
Defense Minerals Administration
Department of the Interior
Washington 25, D. C.

Dear Dr. Boyd:

I am enclosing herewith an application from the Alaska Copper Corporation for an exploration loan of $15,000 to cover government participation in an exploration program at the Fidalgo-Alaska copper mine near Valdez.

Mr. Twenhofel is out of town; consequently, I can not send you a joint approval until he comes back. Nevertheless, I am reasonably sure that he will concur in a strong approval of this application. The Bureau of Mines considers this to be by all odds the best small copper prospect in Alaska that might be made available for quick production of high grade ore. I had already put it on my proposed list for possible 1952 projects.

The Alaska Copper Corporation application is very complete. It contains practically all of the data that we could submit were we to prepare a report on it. The head of the Company is Mr. Charles F. Herbert who is a well known and successful Alaskan mining operator and engineer. I believe that he was in the Washington office of RFC during the war; consequently, he should be known personally to some of the Washington officials.

As soon as Mr. Twenhofel returns we will send you a joint letter giving our opinion of this application, but unless further information is requested by DMA we will not submit a detailed report.

Yours sincerely,

S. H. Lorain
Regional Director, Region I
(Chairman, Alaska Field Team, DMA)

cc: Wm. Twenhofel
Encls. 4

BUREAU OF MINES
WASHINGTON, D. C.

MAY 21 11 37 AM '51

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
MAY 21 1951
LAMBOM F. STROBEL
Executive Secretary

May 9, 1951

Mr. William A. O'Neill, Manager
Alaska Copper Mines, Inc.
1001 Smith Tower
Seattle, Washington

Subject: DMA-1119 X
Re: Exploration Loan -
Radovan Copper Property
(Alaska)

My dear Mr. O'Neill:

Receipt is acknowledged of your application and attachments of April 30, 1951 from the ALASKA COPPER MINES, INC. for a Government loan under the Defense Production Act of 1950.

The application was assigned Docket Number 1119 X and referred to Mr. J. B. Gowen, Chief, Copper Branch, on May 8, 1951.

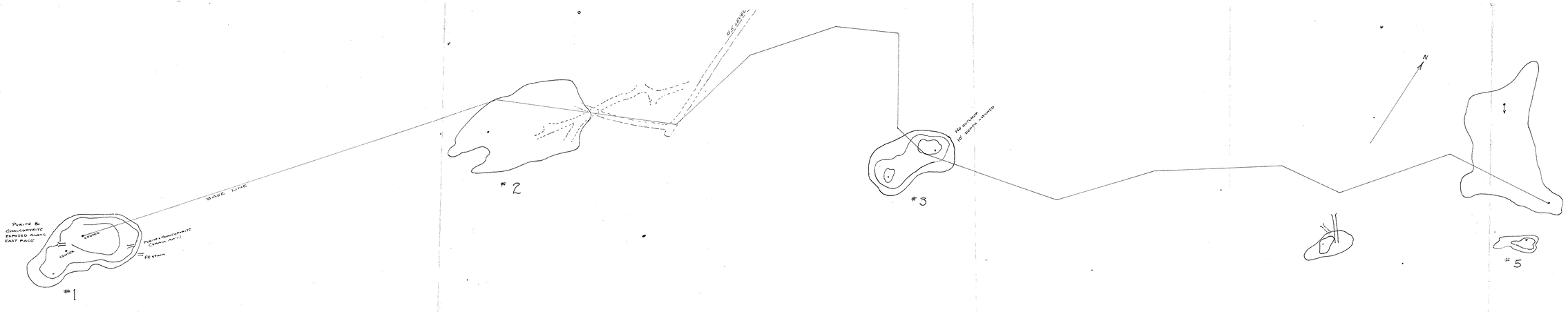
In any future correspondence relating to your application, kindly refer to DMA-1119 X.

Sincerely yours,

LANDON F. STROBEL

Landon F. Strobel
Executive Secretary

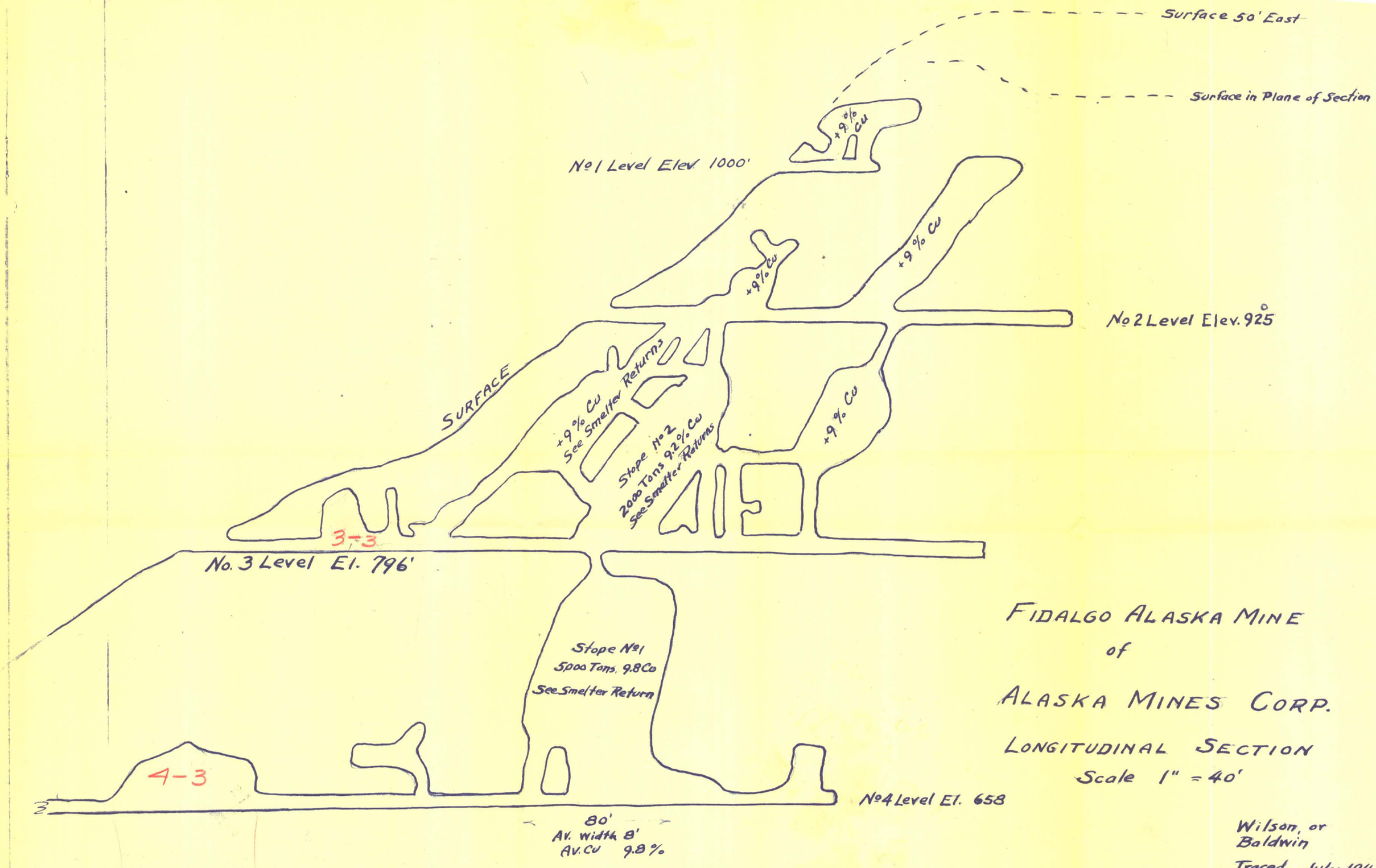
LFSTROBEL:aec
copies to Strobel-2
files
Mr. Gowen
Mr. Lyon



FIDALGO MINE

ELECTRICAL SURVEY

SCALE 1"=40'



FIDALGO ALASKA MINE
of
ALASKA MINES CORP.
LONGITUDINAL SECTION
Scale 1" = 40'

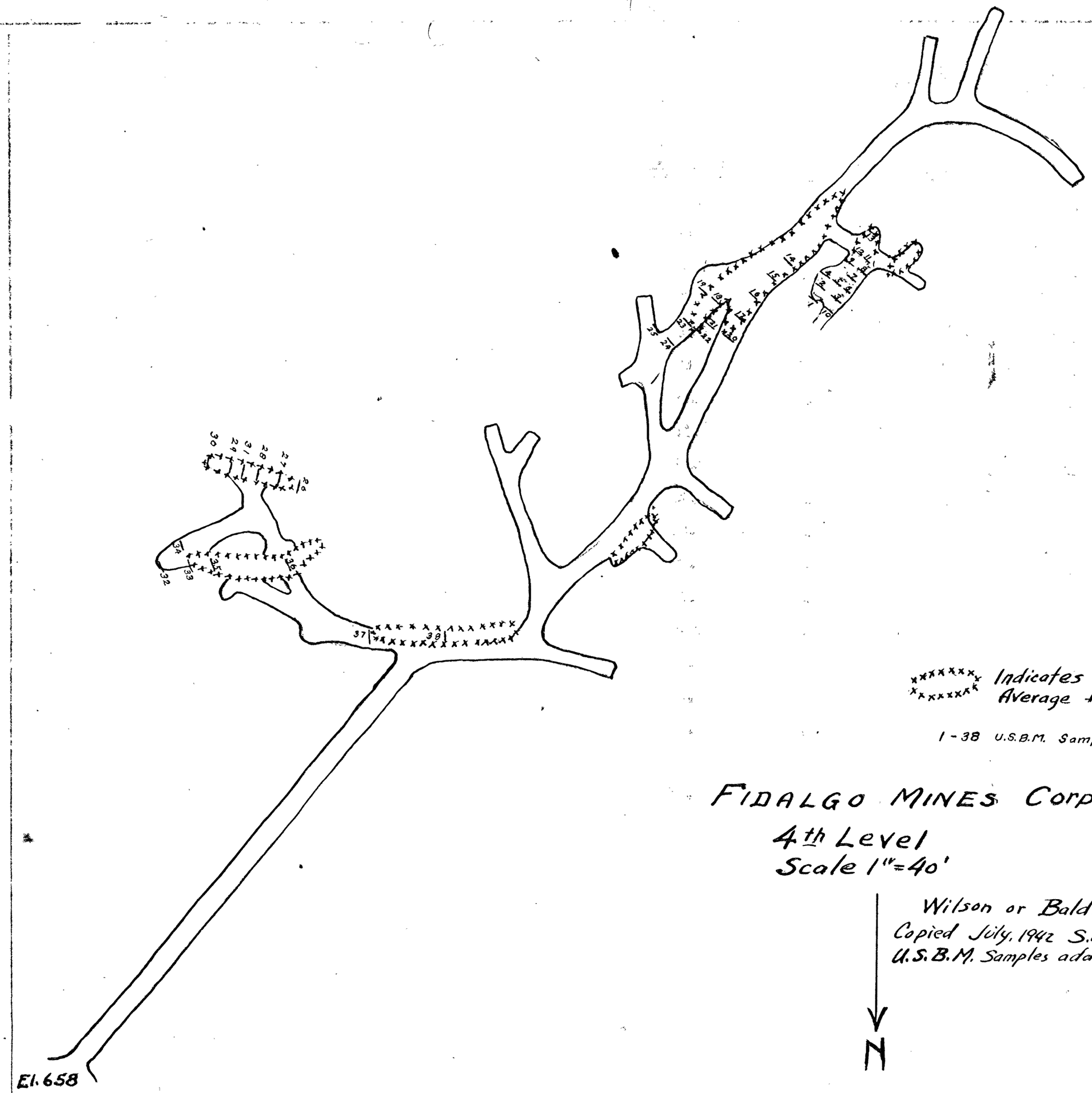
Wilson, or
Baldwin

Traced July 1942
S.P. Holt

7

BUREAU OF MINES SAMPLES
ALASKA COPPER CORPORATION PROPERTY
FIDALGO BAY

Sample No.	Width in feet	Percent Cu	Sample No.	Width in feet	Percent Cu
1	3.0	18.14	20	3.5	0.64
2	7.0	15.68	21	4.7	1.60
3	5.0	6.94	22	5.0	1.72
4	5.0	9.48	23	4.0	0.95
5	5.0	15.20	24	5.0	1.40
6	5.0	13.63	25	5.0	1.82
7	5.0	12.12	26	2.7	4.42
8	5.0	23.94	27	4.0	6.95
9	2.3	20.86	28	3.0	0.65
10	5.0	15.54	29	3.8	3.00
11	5.0	14.76	30	4.5	2.42
12	2.2	9.25	31	3.5	2.20
13	2.4	4.92	32	3.2	1.55
14	3.0	11.88	33	5.0	0.48
15	2.0	19.34	34	5.0	1.85
16	4.3	8.04	35	4.2	4.18
17	5.0	3.78	36	4.7	2.05
18	4.7	5.08	37	5.0	0.72
19	4.0	0.84	38	5.0	10.98



xxxxxxx Indicates Ore of
xxxxxxx Average +3% Cu.

1 - 38 U.S.B.M. Samples

FIDALGO MINES Corp

4th Level

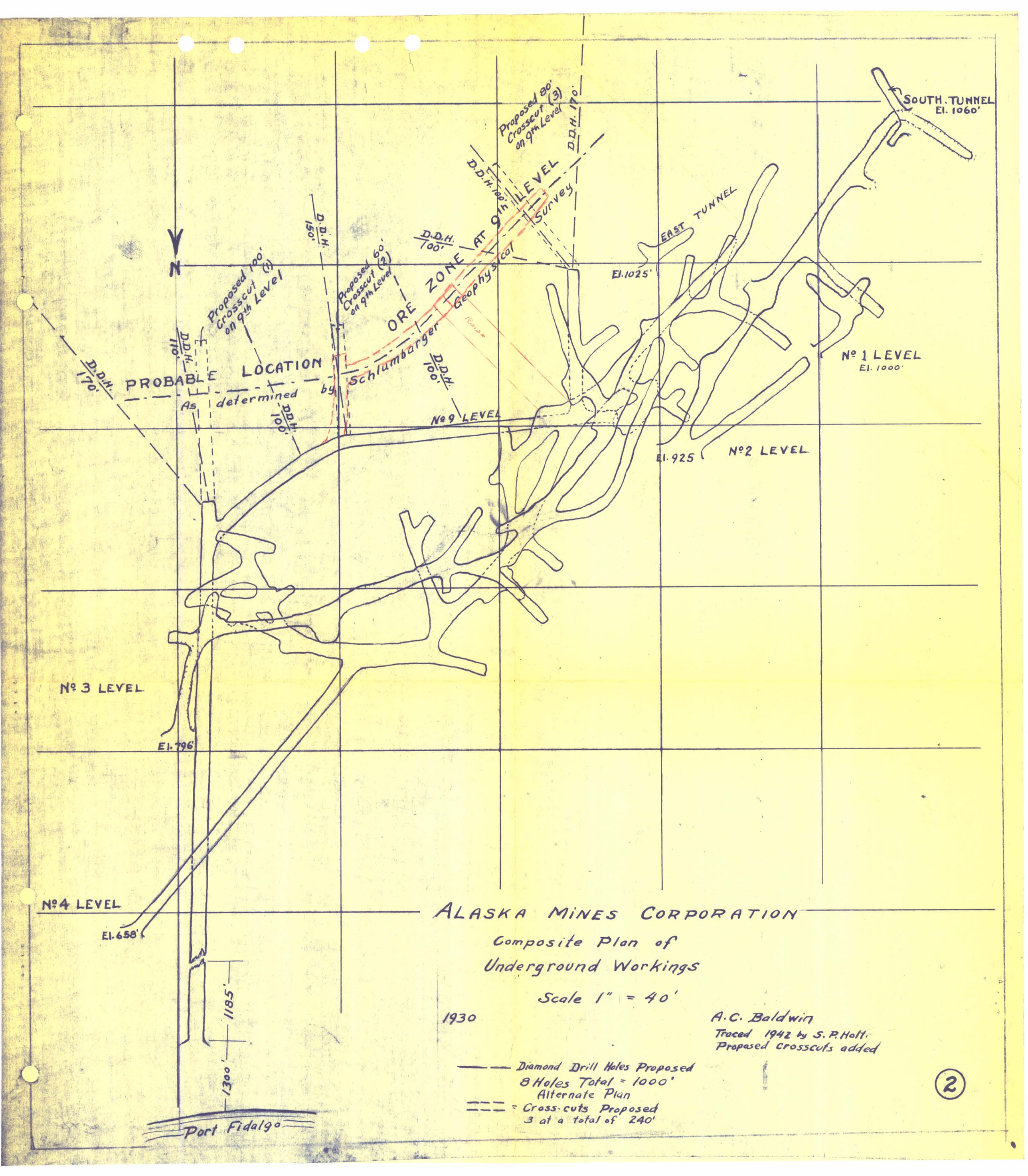
Scale 1" = 40'

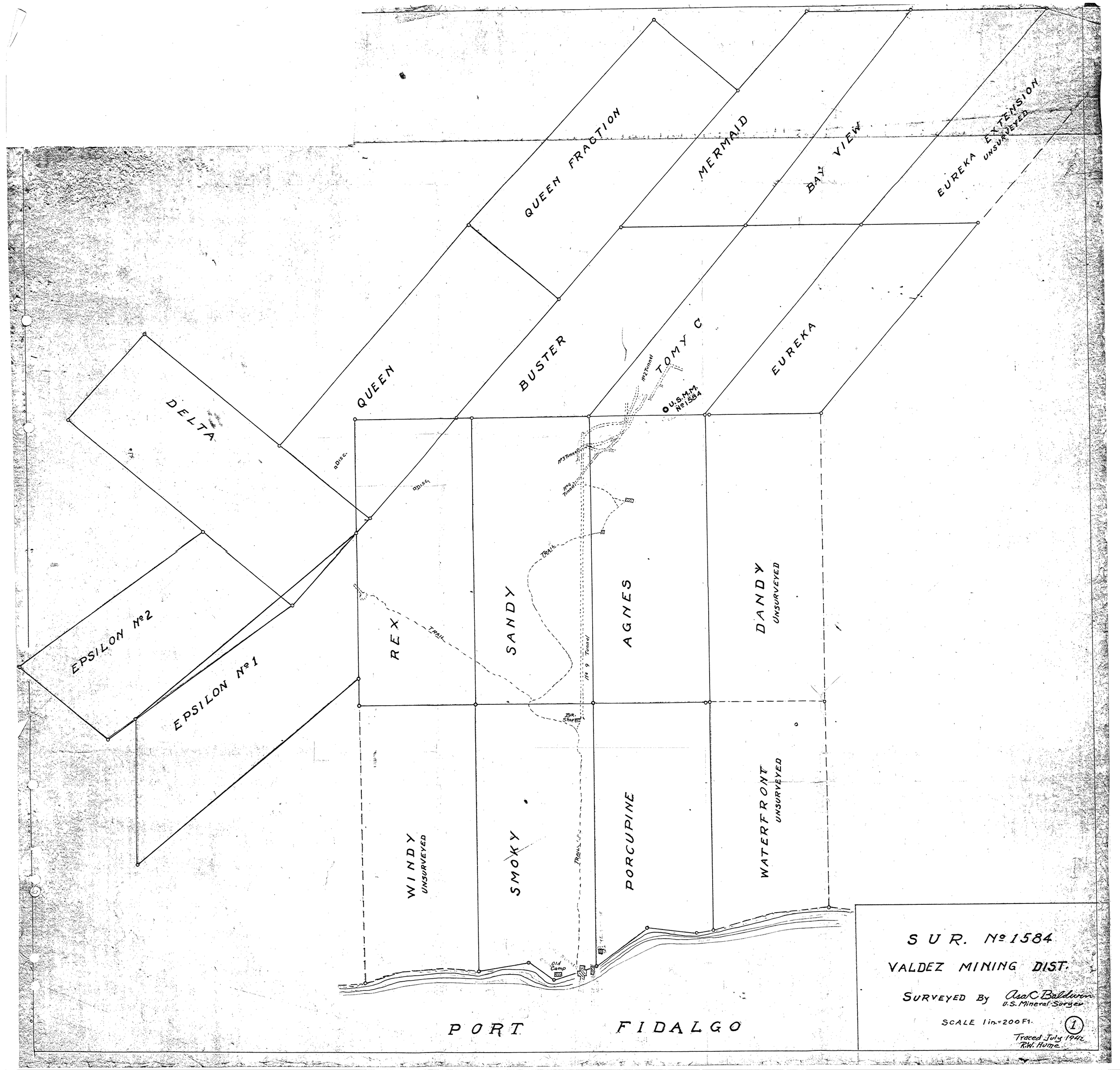
Wilson or Baldwin

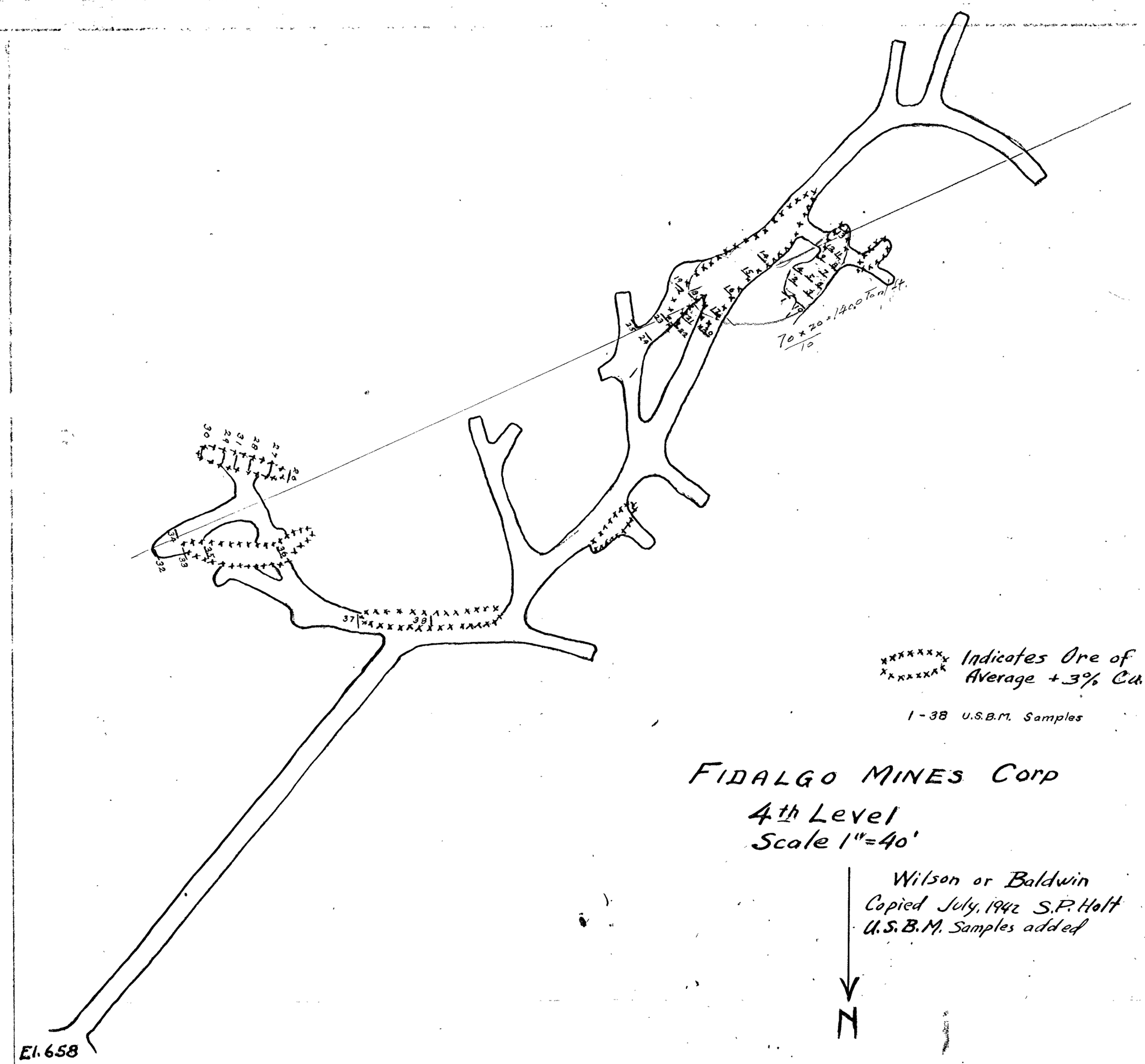
Copied July, 1942 S.P. Holt

U.S.B.M. Samples added

5


SOUTH TUNNEL
El. 1060'
EAST TUNNEL
El. 1025'
Nº 1 LEVEL
El. 1000'
Nº 9 LEVEL
El. 925
Nº 2 LEVEL
Nº 3 LEVEL
El. 796'
Nº 4 LEVEL
El. 658'
1185'
1300'
Port Fidalgo
N
ORE ZONE AT 9th LEVEL
Schlumberger Geophysical Survey
Raise
PROBABLE LOCATION
As determined by
Proposed 100' Crosscut (1) on 9th Level
Proposed 60' Crosscut (2) on 9th Level
Proposed 80' Crosscut (3) on 9th Level
D.D.H. 170'
D.D.H. 110'
D.D.H. 150'
D.D.H. 100'
D.D.H. 100'
D.D.H. 100'
D.D.H. 170'
ALASKA MINES CORPORATION
Composite Plan of
Underground Workings
Scale 1" = 40'
1930
A.C. Baldwin
Traced 1942 by S. P. Holt.
Proposed crosscuts added
Diamond Drill Holes Proposed
8 Holes Total = 1000'
Alternate Plan
= Cross-cuts Proposed
3 at a total of 240'
2


QUEEN FRACTION
MERMAID
BAY VIEW
EUREKA EXTENSION
UNSURVEYED
DELTA
QUEEN
BUSTER
TOMY C
EUREKA
U.S.M.M. No 1584
No 2 Tunnel
No 3 Tunnel
No 4 Tunnel
No 9 Tunnel
TRAIL
EPSILON No 2
EPSILON No 1
REX
SANDY
AGNES
DANDY
UNSURVEYED
Blk. Shop
WINDY
UNSURVEYED
SMOKY
PORCUPINE
WATERFRONT
UNSURVEYED
Old Camp
PORT FIDALGO
SUR. No 1584
VALDEZ MINING DIST.
SURVEYED BY Asa C. Baldwin
U.S. Mineral Surveyor
SCALE 1 in. = 200 Ft.
1
Traced July 1942
R.W. Hume



FIDALGO MINES Corp

4th Level

Scale 1" = 40'

Wilson or Baldwin

Copied July, 1942 S.P. Holt

U.S.B.M. Samples added

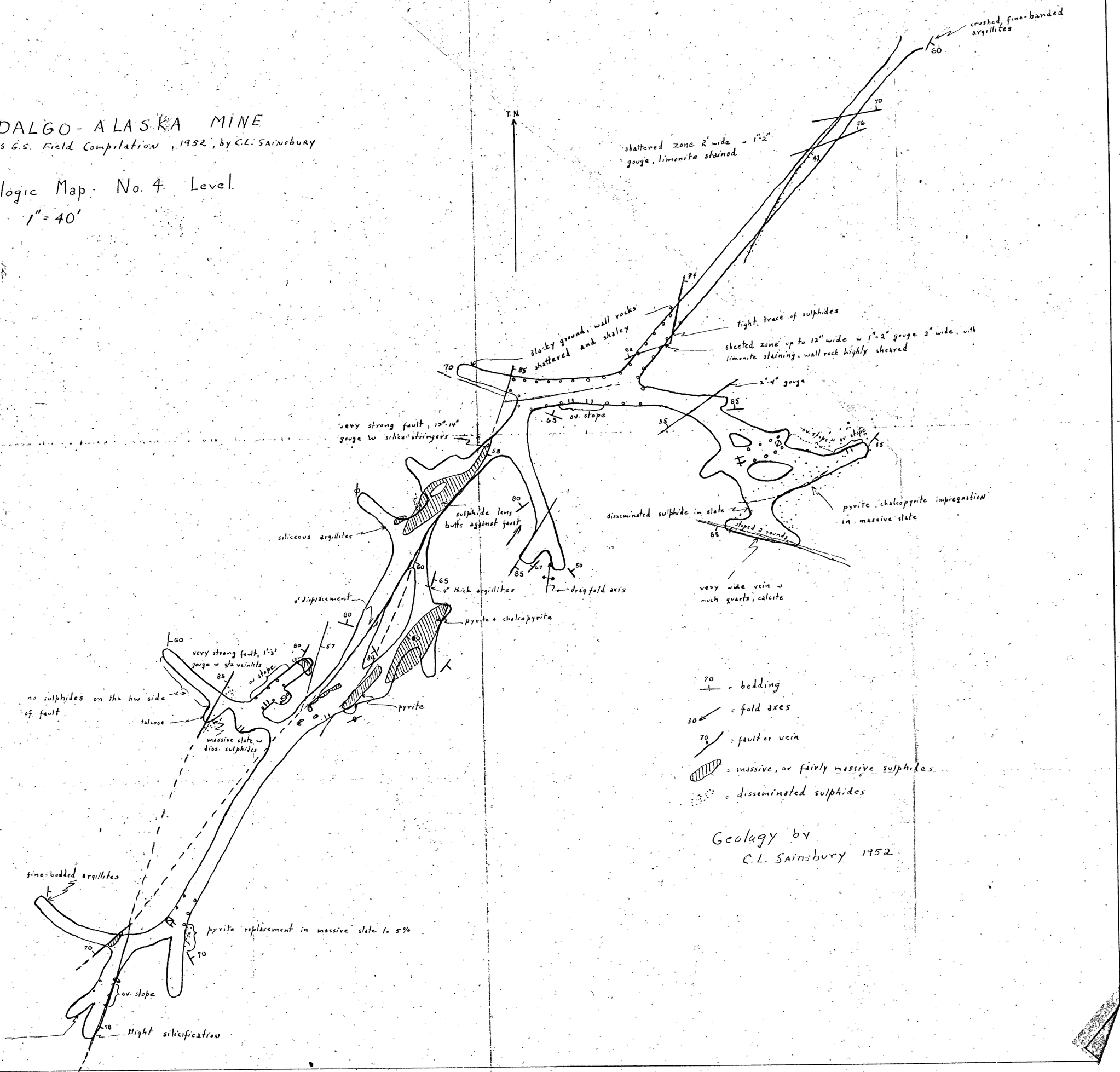
5

FIDALGO-ALASKA MINE

U.S.G.S. Field Compilation, 1952, by C.L. Sainsbury

Geologic Map - No. 4 Level

1" = 40'



Geology by
C.L. Sainsbury 1952

Fig. 8

FIDALGO-ALASKA MINE

U.S.G.S. Field Compilation - Composite map by R.E. Roy, C.L. Sainsbury
1951-52
1" = 40'

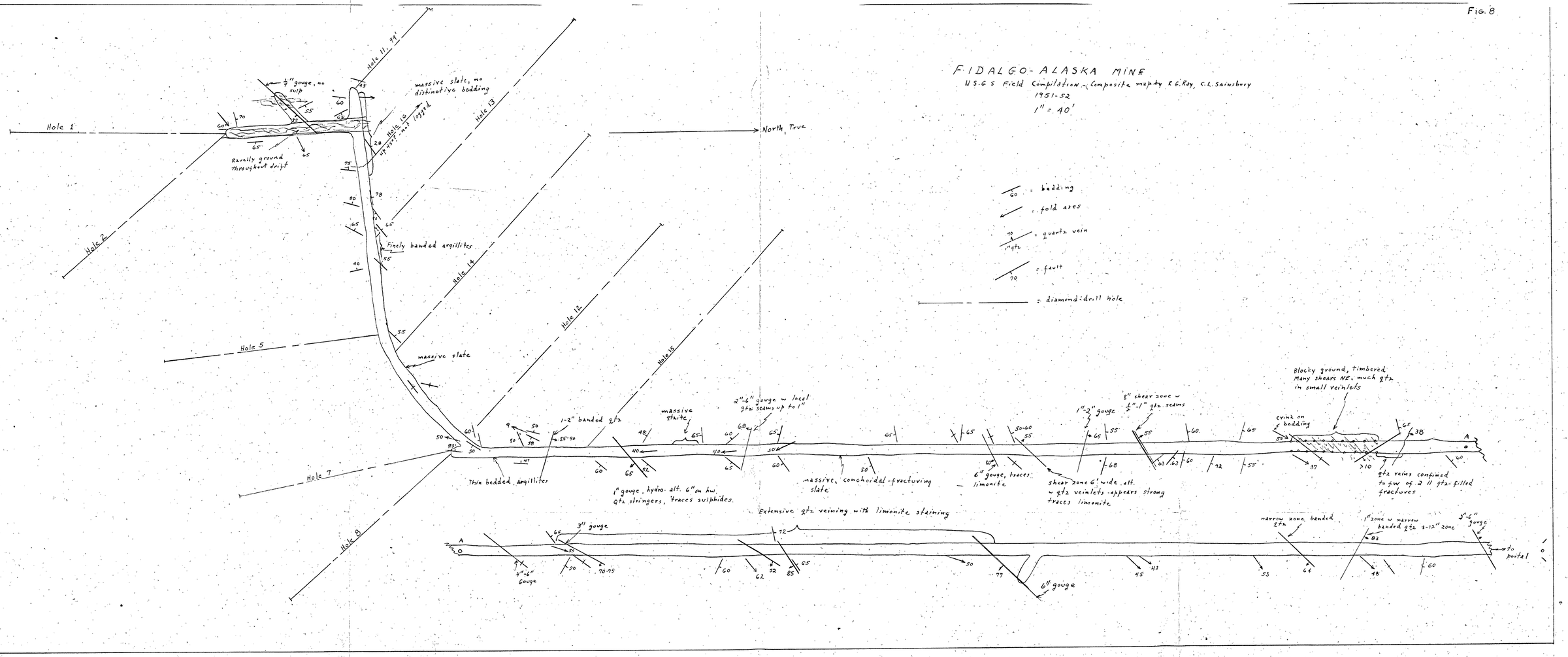
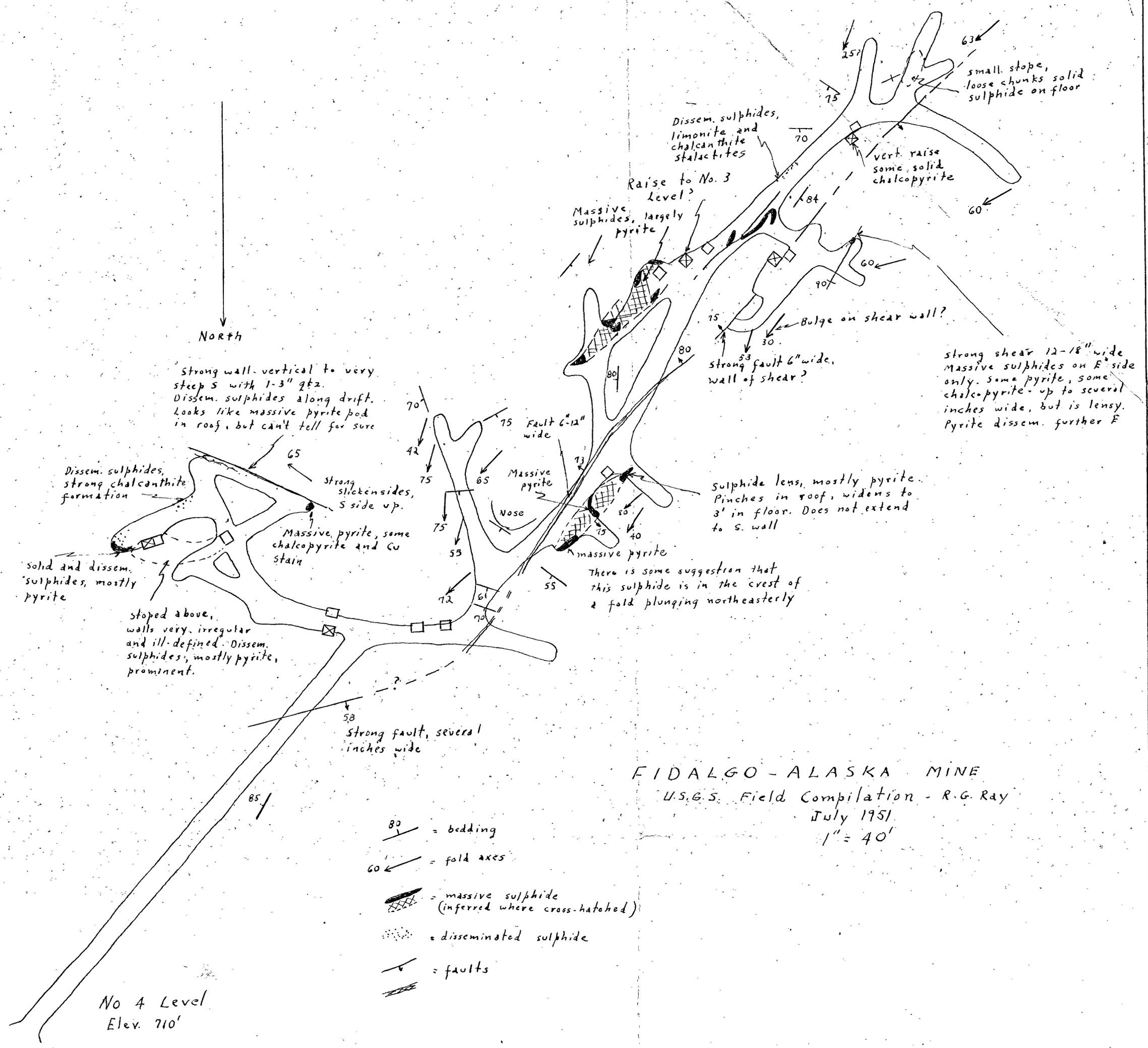
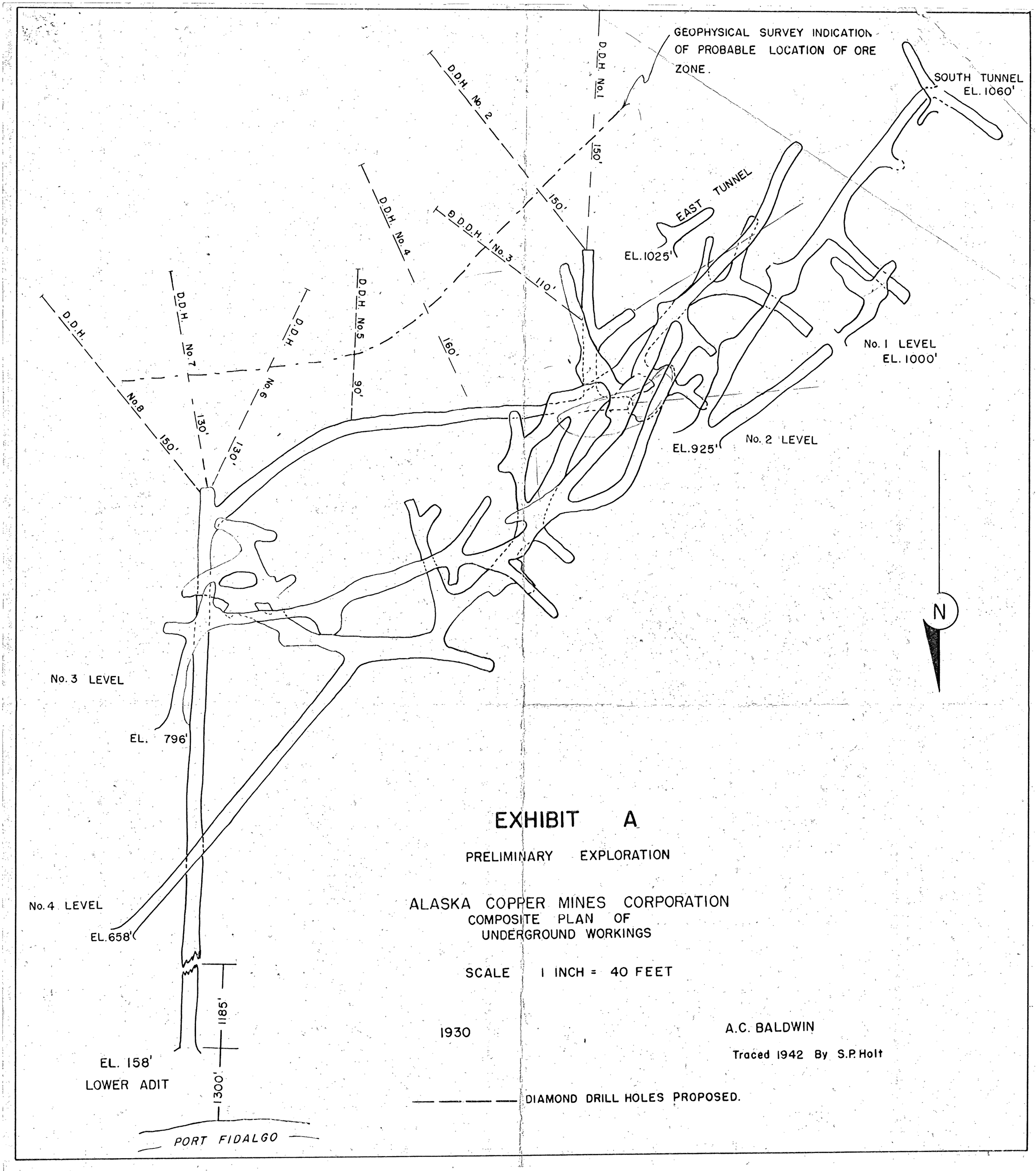
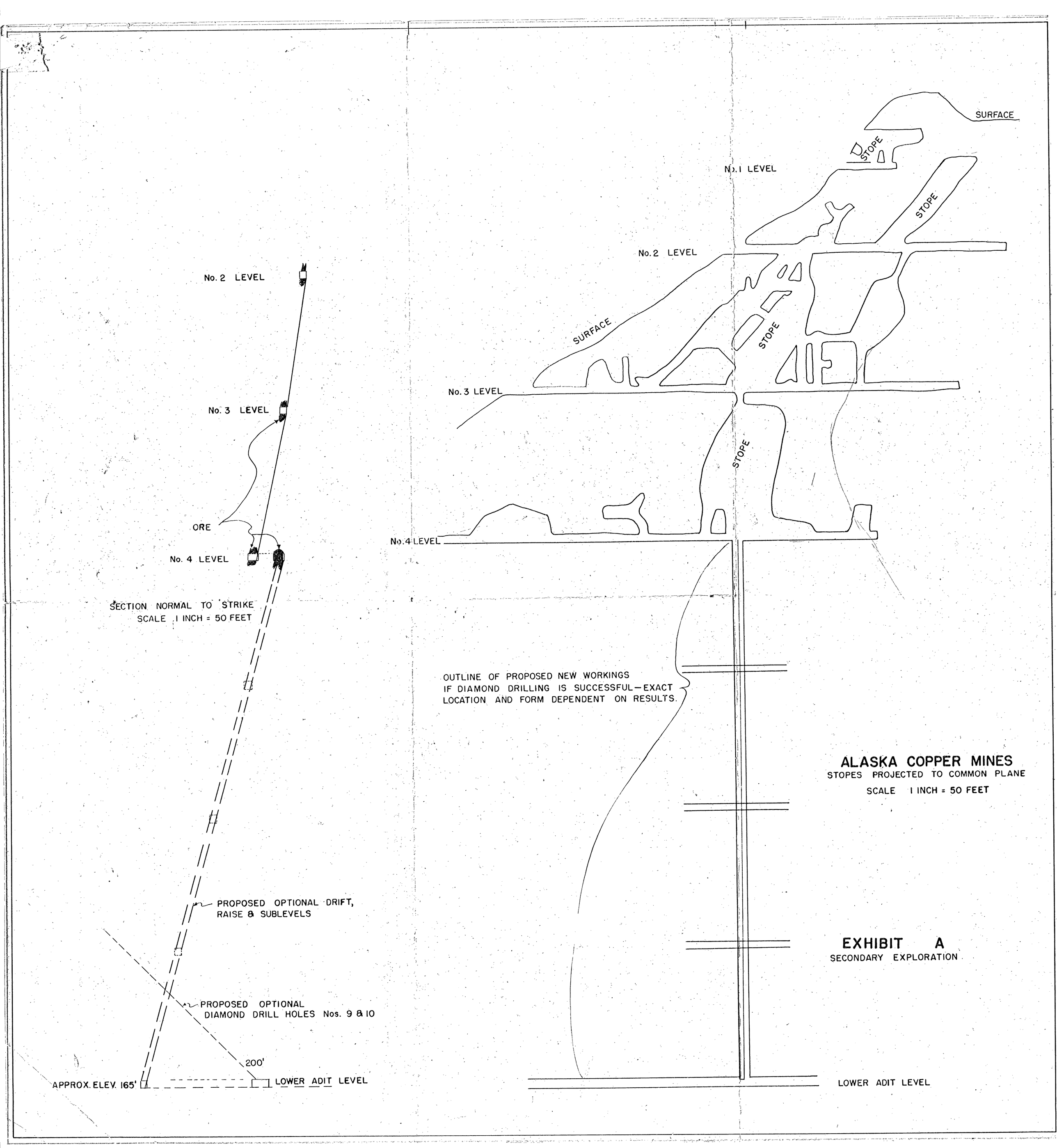


FIG. 7



FIDALGO - ALASKA MINE
U.S.G.S. Field Compilation - R.G. Ray
July 1951
1" = 40'


GEOPHYSICAL SURVEY INDICATION OF PROBABLE LOCATION OF ORE ZONE.
SOUTH TUNNEL EL. 1060'
EAST TUNNEL
EL. 1025'
No. 1 LEVEL EL. 1000'
No. 2 LEVEL
EL. 925'
D.D.H. No. 1
D.D.H. No. 2
D.D.H. No. 3
D.D.H. No. 4
D.D.H. No. 5
D.D.H. No. 6
D.D.H. No. 7
D.D.H. No. 8
150'
150'
110'
160'
90'
130'
130'
150'
N
No. 3 LEVEL
EL. 796'
No. 4 LEVEL
EL. 658'
1185'
1300'
EL. 158'
LOWER ADIT
PORT FIDALGO
EXHIBIT A
PRELIMINARY EXPLORATION
ALASKA COPPER MINES CORPORATION
COMPOSITE PLAN OF
UNDERGROUND WORKINGS
SCALE 1 INCH = 40 FEET
1930
A.C. BALDWIN
Traced 1942 By S.P. Holt
DIAMOND DRILL HOLES PROPOSED.



ALASKA COPPER MINES
STOPES PROJECTED TO COMMON PLANE
SCALE 1 INCH = 50 FEET

EXHIBIT A
SECONDARY EXPLORATION