EXTRA COPY O. M. E. RECEIVED DEC 16 1958		
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1201 N. Division St.
Spokane 2, Washington

December 8, 1958

Mr. George Mayer, OME Auditor
Room 430, Custom House
555 Battery Street
San Francisco 11, Calif.

Re: Docket No. DMEA-2879 (copper-lead-antimony)
Polaris Mining Company
Polaris East Exploration Project
Shoshone County, Idaho
Amended Contract No. Idm-8541

Dear Mr. Mayer:

The work authorized under the referenced contract was completed on September 19, 1958.

The number of units of work satisfactorily completed by the Operator and accepted by the Field Team are:

Stage I	Authorized	Completed to Feb. 28, 1955 *
Drifting	9,225 ft.	5,388.7 ft.
Crosscutting	1,500 ft.	218.5 ft.
Sidescraping	1,560 ft.	753.2 ft.
Raising	330 ft.	324.1 ft.
Diamond drilling	15,200 ft.	2,452.7 ft.

*Audit dated September 2, 1955, by C. A. Turner, DMEA Auditor, was for the period June 3, 1953 to February 28, 1955.

Stage I	Authorized**	Completed thru June 1957***
Drifting and/or crosscutting	11,618.4 ft.	11,618.4 ft.
Sidescraping	1,175 ft.	1,175 ft.
Raising	330 ft.	324.1 ft.
Diamond drilling	19,788 ft.	19,788 ft.

** Authorized under Amendment No. 4, dated December 7, 1956.
***Includes footages completed to February 28, 1955 and covered in DMEA Audit of September 2, 1955.

Phase II	Authorized	Completed
3000 level East drift	1,120.30 ft.	1,114.43 ft.
347 East drift and crosscut	1,373.7 ft.	1,381.85 ft.
Sidewriping	100 ft.	100 ft.
Diamond drilling	5,000 ft.	5,539.1 ft.

The Operator's final engineering and geological report was received December 5, 1956. This report meets the requirements of Article 5(c) of the contract.

A pseudo-certification is contained in Annex III of the Amended Contract.

The total amount paid to date to the Operator is $434,444.35.

A Report of Review in lieu of a final audit is in order and requested.

By Field Team, Region I

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

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

cc: OPE (2)
Mr. Chambers
USGS (2)
USBM (AB)

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

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION

JAN 19 1959

Budget Bureau No. 42-R1036.5

~~Stage II~~

OPERATOR'S MONTHLY REPORT AND VOUCHER

Month of August 1958 Docket No. DMEA 28[illegible] Contract No. IDM-E541
Operator's Name Polaris Mining Company Minerals Copper, Lead, Antimony (and incidental Silver)
Address Box 320, Wallace Idaho
Contract Amount, $ ~~147,000.00~~ 873,840.00 Government Participation: 50 % Amount, $ ~~73,500.00~~ 436,920.00

ITEMS OF COSTS	FOR OPERATOR'S USE: Monthly Total	Totals Previously Reported	Totals To Date	FOR GOVERNMENT USE ONLY: Approved Monthly Total	Approved Totals Previously Reported	Approved Totals To Date
Stage II						
(1) Independent Contracts: Short Form Core						
Drilling		$ 21,666.60	$ 21,666.60		21666.60	21666.60
Bulldozing						
Crosscutting		37,853.28	37,853.28		37853.28	37853.28
Drifting 84.4 @ $48.78	$ 4117.03	79,979.70	84,096.73	4117.03	79979.70	84096.73
Sideswipe		2,550.00	2,550.00		2550.00	2550.00
(2) Labor and Supervision:						
Labor						
Supervision						
Technical Services						
(3) Operating Mat'ls. and Supplies:						
Timber						
Explosives						
Pipe						
Track						
(4) Operating Equipment:						
Rental						
Purchase						
Depreciation						
(5) Initial Rehabilitation and Repairs						
(6) New Bldgs., Improvements, etc.						
(7) Miscellaneous:						
Repairs to Equipment						
Sampling and Analysis						
Payroll Taxes						
Liability Insurance						
(8) Contingencies (specify):						
Stage I					726838.94	726838.94
TOTALS	$ 4117.03	142,049.58	$146,166.61	4117.03	848888.52	873005.55

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

Date 9-4-58 *Payee Polaris Mining Company

Per John R. Matthews Title Secretary

*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:

$ 2058.51

Signature Dorothy F. Long
(Authorized Certifying Officer)

Date 1/15/59 Vou. No. 2271

(See other side)

(For Government Use Only)

OPERATOR'S MONTHLY REPORT AND VOUCHER

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. E54 in accordance with the terms of the contract.

Signature /s/ John A. Bardill Title Metallurgist Date Sept. 7, 1958

APPROVAL BY DMEA EXECUTIVE OFFICER OR ALTERNATE:

Signature /s/ A. E. Weissenborn Title Exec. Officer Date Jan. 13, 1958

MONTHLY REPORT OF OPERATOR

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

Form MF-104A
(April 1952)

Budget Bureau No. 42-R1151.2

UNITED STATES
DEPARTMENT OF THE INTERIOR

DEFENSE MINERALS EXPLORATION ADMINISTRATION

Stage II

OPERATOR'S UNIT COST AND PROGRESS REPORT

JUN 10 1959
O.M.E.

Month of August 1958 Docket No. DMEA 2[illegible] Contract No. DMI-[illegible]541
Operator's Name Polaris Mining Company Minerals Copper, Lead, Antimony (and incidental Silver)
Address Box 320, Wallace, Idaho

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	Feet	$ 4117.03	84.4	$ 84096.73	1724.0	$ 48.78	2500	$ 48.78*
Crosscutting				37853.28	776.0			
Raising								
Shafts Sideswipe	"			2550.00	100.0	25.50	100	25.50*
Winzes								
Drilling: Core	"			21666.60	4814.8	4.50	5000	4.50*
Churn								
Auger								
Stripping								
Trenching								
Test Pits								
Roads and Trails								
Total Distributed Costs								Total Costs Authorized by Contract
Operating Equipment Purchased								
Initial Rehabilitation and Repairs								
New Buildings, Improvements, etc.								
Total Costs								

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

Date 9-4-58 Operator Polaris Mining Company

Per John R. Muschatt Title Secretary

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)

*Maximum allowed by contract

/s/ John A. Bardell

INSTRUCTIONS

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

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

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

GPO 872894

POLARIS MINING COMPANY
P. O. BOX 320
WALLACE, IDAHO

September second
1958

Defense Minerals Exploration Administration
United States Department of the Interior
1201 North Division Street
Spokane, Washington

Re: Progress Report
Polaris East Exploration Project
August - 1958
Docket No. DMEA - 2879
Contract No. IDM-E541

Gentlemen:

Progress in the Polaris East Exploration Project during the month of August included 85.2 feet of drifting and 20.3 feet of crosscutting.

The 347 East Drift was advanced 85.2 feet to Station PE3025 plus 112.0 feet and two diamond drill crosscuts (361 North crosscut and 361 South crosscut) were driven 10.3 feet and 10.0 feet respectively. This completes the DMEA contract for drifting and crosscutting with 185.2 feet of diamond drilling remaining to be done under the contract.

No significant mineralization was exposed in either the drifting or crosscutting during July. Short diamond drill holes will be driven in both the north and south walls of the drift to explore the extensions of the northeasterly - southwesterly striking veins which were exposed during the month of July.

Hole No. 3512 which is being drilled southerly from 329 Southwest drift advanced 696.0 feet and had reached a depth of 721.0 feet by the end of August. 331-A Raise from 329 Southwest drift was driven 31.2 feet and has now reached the sill of 2900 level 331-B North drift.

Yours very truly,

M. W. Hutchinson

M. W. Hutchinson
Geologist

MWH/hdh/fl

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

Budget Bureau No. 42-R1036.5

RECEIVED NOV 10 58 O.M.E.

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

Month of July, 195 8 Docket No. DMEA 2879 Contract No. IDM-E541

Operator's Name Polaris Mining Company Minerals Copper, Lead, Antimony (and incidental Silver)

Address Box 320 - Wallace, Idaho

Contract Amount, $ ~~147,000.00~~ 873,840.00 Government Participation: 50% Amount, $ ~~73,500.00~~ 436,920.00

ITEMS OF COSTS	FOR OPERATOR'S USE: Monthly Total	Totals Previously Reported	Totals To Date	FOR GOVERNMENT USE ONLY: Approved Monthly Total	Approved Totals Previously Reported	Approved Totals To Date
(1) Independent Short Form Contracts:						
Drilling Core 314.1 @ $4.50	$ 1413.45	$ 20253.15	$ 21666.60	1413.45	20253.15	21666.60
Bulldozing						
Crosscutting		37853.28	37853.28		37853.28	37853.28
Drifting 129.2 @ $48.70	6302.38	73677.32	79979.70	6302.38	73677.32	79979.70
Sideswipe		2550.00	2550.00		2550.00	2550.00
(2) Labor and Supervision:						
Labor						
Supervision						
Technical Services						
(3) Operating Mat'ls. and Supplies:						
Timber						
Explosives						
Pipe						
Track						
(4) Operating Equipment:						
Rental						
Purchase						
Depreciation						
(5) Initial Rehabilitation and Repairs						
(6) New Bldgs., Improvements, etc.						
(7) Miscellaneous:						
Repairs to Equipment						
Sampling and Analysis						
Payroll Taxes						
Liability Insurance						
(8) Contingencies (specify):						
Stage I					726838.94	726838.94
TOTALS	$ 7715.83	$ 134333.75	$ 142049.58	7715.83	861172.69	868888.52

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

Date 8-6-58 *Payee Polaris Mining Company

Per John R. Muttlemann Title Secretary

*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:

$ 385792

Signature Dorothy F. Long
(Authorized Certifying Officer)

Date 11/4/58 Vou. No. 22442

(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. E541 in accordance with the terms of the contract.

Signature 1s/ John A. Bardill Title Metallurgist Date Nov. 3, 1958

APPROVAL BY DMEA EXECUTIVE OFFICER OR ALTERNATE:

Signature 1s/ A. E. Weissenborn Title Exec. Officer Date Nov. 3, 1958

MONTHLY REPORT OF OPERATOR

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

Form M7-104A
(April 1962)

Budget Bureau No. 42-R1151.2

RECEIVED
NOV 10 1958
O.M.E.

UNITED STATES
DEPARTMENT OF THE INTERIOR

DEFENSE MINERALS EXPLORATION ADMINISTRATION

Stage II

OPERATOR'S UNIT COST AND PROGRESS REPORT

Month of July 1958 Docket No. DMEA 2879 Contract No. IDM-E541

Operator's Name Polaris Mining Company Minerals Copper, Lead, Antimony (and incidental Silver)

Address Box 320 - Wallace, Idaho

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	Feet	$ 6302.38	129.2	$ 79979.70	1639.6	$ 48.78	2500	$ 48.78*
Crosscutting				37853.28	776.0			
Raising								
~~Sinks~~ Sideswipe	"			2550.00	100.0	25.50	100	25.50*
Winzes								
Drilling: Core	"	1413.45	314.1	21666.60	4814.8	4.50	5000	4.50*
Churn								
Auger								
Stripping								
Trenching								
Test Pits								
Roads and Trails								
Total Distributed Costs		7715.83		142049.58				Total Costs Authorized by Contract
Operating Equipment Purchased								
Initial Rehabilitation and Repairs								
New Buildings, Improvements, etc.								
Total Costs								

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

Date 8-6-58 Operator Polaris Mining Company

Per John R. Matthews Title Secretary

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

(Instructions on reverse)

Remarks:

(For Government use only)

*Maximum allowed by contract

/s/ John D. Bordell

INSTRUCTIONS

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

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

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

GPO 872894

POLARIS MINING COMPANY

P. O. Box 320
WALLACE, IDAHO

August fifth
1958

Defense Minerals Exploration Administration
United States Department of the Interior
1201 North Division Street
Spokane, Washington

Re: Progress Report
Polaris East Exploration Project
July - 1958
Docket No. DMEA - 2879
Contract No. IDM-E541

Gentlemen:

Progress in the Polaris East Exploration Project during the month of July included 280.2 feet of drifting, 9.0 feet of crosscutting and 339.1 feet of diamond drilling. 129.2 Feet of the drifting and 314.1 feet of the drilling were done toward completing the DMEA contract.

The 347 East drift was advanced 129.2 feet to station PE3020 plus 224.8 feet, leaving 84.4 feet yet to be driven under the DMEA contract. As shown on the attached 50-scale progress maps, two small north and northeasterly striking siderite-tetrahedrite veins were exposed. The best assay obtained was 0.3 feet of 487.0 ounces silver and 7.04 percent copper from the most easterly of these two veins.

Two diamond drill holes were driven northwesterly from 347 East drift. Hole No. 3510 was drilled to a depth of 201.1 feet and No. 3511 to 113.0 feet. These holes showed only small scattered siderite stringers with minor amounts of tetrahedrite. The logs of both holes are included with this report.

The 329 Southwest drift was continued after crosscutting an additional 9.0 ft. northwesterly in an effort to expose the offset portion of the vein previously followed in this drift. The drift advanced 150.8 feet and was stopped after having passed through a strong fault structure which is presumed to be the Polaris fault. A diamond drill hole (No. 3512) has now been started to explore the area to the south of this fault. It had reached a depth of 25 feet by the end of July.

No. 331-A raise was started from 329 Southwest drift at a point approximately 65 feet north of 331-B raise to facilitate the mining of the ore in the 331-B to 331-A section. This raise had been driven 30.6 feet by the end of the month.

Yours very truly,

M. W. Hutchinson

M. W. Hutchinson
Geologist

MWH/hdh/dv
Encs.

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

Budget Bureau No. 42-R1036.5

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

W

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

~~Stage II~~

Month of June 1958 Docket No. DMEA 2879 Contract No. IDM-E541

Operator's Name Polaris Mining Company Minerals Copper, Lead, Antimony (and incidental Silver)

Address Box 320, Wallace, Idaho

Contract Amount, $~~147,000.00~~ $273,840.00 Government Participation: 50 % Amount, $~~73,500.00~~ 136,920.00

ITEMS OF COSTS	FOR OPERATOR'S USE: Monthly Total	Totals Previously Reported	Totals To Date	FOR GOVERNMENT USE ONLY: Approved Monthly Total	Approved Totals Previously Reported	Approved Totals To Date
Stage II						
(1) Independent / Short Form Contracts:						
Drilling Core		$ 20253.15	$ 20253.15		20253.15	20253.15
Bulldozing						
Crosscutting		37853.28	37853.28		37853.28	37853.28
Drifting 182.9 @ $48.78	$8921.86	64755.46	73677.32	8921.86	64755.46	73677.32
Sideswipe		2550.00	2550.00		2550.00	2550.00
(2) Labor and Supervision:						
Labor						
Supervision						
Technical Services						
(3) Operating Mat'ls. and Supplies:						
Timber						
Explosives						
Pipe						
Track						
(4) Operating Equipment:						
Rental						
Purchase						
Depreciation						
(5) Initial Rehabilitation and Repairs						
(6) New Bldgs., Improvements, etc.						
(7) Miscellaneous:						
Repairs to Equipment						
Sampling and Analysis						
Payroll Taxes						
Liability Insurance						
(8) Contingencies (specify):						
Stage I					726838.94	726838.94
TOTALS	$8921.86	$125411.89	$134333.75	8921.86	852250.83	861172.69

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

Date 7-3-58 *Payee Polaris Mining Company

Per John R. Mattson Title Secretary

*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:

$ 4460.93

Signature Dorothy F. Long (Authorized Certifying Officer)

Date 9/11/58 Vou. No. 2220

(See other side)

(For Government use only)

CERTIFICATION BY GOVERNMENT REPRESENTATIVE:

I certify that to the best of my knowledge and belief the contractor submitting this voucher is operating a Defense Minerals Exploration Administration project under Contract No. E 541 in accordance with the terms of the contract.

Signature /s/ John A. Bardill Title Metallurgist Date July 11, 1958

APPROVAL BY DMEA EXECUTIVE OFFICER OR ALTERNATE:

Signature /s/ A. E. Weissenborn Title Exec. Officer Date Sept. 11, 1958

MONTHLY REPORT OF OPERATOR

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

Form MF-104A
(April 1962)

Budget Bureau No. 42-R1151.2

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

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

Month of June 195 8 Docket No. DMEA 2879 Contract No. IDM-E541

Operator's Name Polaris Mining Company

Address Box 320, Wallace, Idaho

Minerals Copper, Lead, Antimony (and incidental Silver)

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	Feet	$8921.86	182.9	$ 73677.32	1510.4	$ 48.78	)2500	$ 48.78*
Crosscutting				37853.28	776.0		)	
Raising								
~~Shafts~~ Sideswipe	Feet			2550.00	100.0	25.50	100	25.50*
Winzes								
Drilling: Core	Feet			20253.15	4500.7	4.50	5000	4.50*
Churn								
Auger								
Stripping								
Trenching								
Test Pits								
Roads and Trails								
Total, Distributed Costs		8921.86		134333.75				Total Costs Authorized by Contract
Operating Equipment Purchased								
Initial Rehabilitation and Repairs								
New Buildings, Improvements, etc.								
Stage I				726838.94				
Total Costs		8921.86		861172.69				

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

Date 7-3-58 Operator Polaris Mining Company

Per John R. Matthews Title Secretary

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

(Instructions on reverse)

Remarks:

(For Government use only)

* Maximum allowed by contract

/s/ John D. Bardill

INSTRUCTIONS

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

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

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

GPO 872894

POLARIS MINING COMPANY

P. O. Box 320
WALLACE, IDAHO

EXTRA COPY
DMEA
RECEIVED SEP 18 1958

DATE	INITIALS	CODE

July eighth
1958

Defense Minerals Exploration Administration
United States Department of the Interior
1201 North Division Street
Spokane, Washington

Re: Progress Report
Polaris East Exploration
Project - June, 1958
Docket No. DMEA - 2879
Contract No. IDM - E541

Gentlemen:

Progress in the Polaris East Exploration Project during the month of June included 182.9 feet of drifting and 5.0 feet of sideswiping.

The 347 East drift advanced 182.9 feet to station PE3020 plus 95.6 feet. As shown on the attached 50 scale progress map, no mineralization of significance was exposed in this drift during the month.

Stoping continued in the 331-B to 331-A section above 2900 level.

Yours sincerely,

M. W. Hutchinson

M. W. Hutchinson
Geologist

MWH:nn

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

Budget Bureau No. 42-R1036.5

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION

~~Stage II~~

OPERATOR'S MONTHLY REPORT AND VOUCHER

Month of May 195 8 Docket No. DMEA 2879 Contract No. IDM-E541

Operator's Name Polaris Mining Company

Address Box 320 Wallace, Idaho

Minerals Copper, lead, antimony (and incidental silver)

Contract Amount, $ ~~417,000.00~~ 873,840.00 Government Participation: 50 % Amount, $ ~~73,500.00~~ 436,920.00

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
Stage II						
(1) Independent Short Form Contracts: Core						
Drilling		$ 20253.15	$ 20253.15		20253.15	20253.15
Bulldozing						
Crosscutting		37853.28	37853.28		37853.28	37853.28
Drifting 260.6 @ $48.78	$12712.07	52043.39	64755.46	12712.07	52043.39	64755.46
Sidestripe		2550.00	2550.00		2550.00	2550.00
(2) Labor and Supervision:						
Labor						
Supervision						
Technical Services						
(3) Operating Mat'ls. and Supplies:						
Timber						
Explosives						
Pipe						
Track						
(4) Operating Equipment:						
Rental						
Purchase						
Depreciation						
(5) Initial Rehabilitation and Repairs						
(6) New Bldgs., Improvements, etc.						
(7) Miscellaneous:						
Repairs to Equipment						
Sampling and Analysis						
Payroll Taxes						
Liability Insurance						
(8) Contingencies (specify):						
Stage I					726838.94	726838.94
TOTALS	~~$12712.07~~	~~$112699.82~~	~~$125411.89~~	12712.07	839538.76	852250.83

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

Date 8-4-58 *Payee Polaris Mining Company

Per John R. Matthews Title Secretary

*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:

$ 6356.04

Signature Dorothy F. Long
(Authorized Certifying Officer)

Date 7/15/58 Vou. No. 2194

(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. 6-541 in accordance with the terms of the contract.

Signature /s/ John A. Bardill Title Metallurgist Date June 16, 1958

APPROVAL BY DMEA EXECUTIVE OFFICER OR ALTERNATE:

Signature /s/ Wm. G. Agnew Title Acting Exec Date 7-15-58

MONTHLY REPORT OF OPERATOR

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

Form MF-104A
(April 1952)

Budget Bureau No. 42-R1151.2

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION

RECEIVED JUL 21 1958 D.M.E.A.

Stage II

OPERATOR'S UNIT COST AND PROGRESS REPORT

Month of May 1958 Docket No. DMEA 2879 Contract No. IDM-E541
Operator's Name Polaris Mining Company
Address Box 320 Wallace, Idaho
Minerals Copper, lead, antimony (and incidental silver)

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	feet	$12712.07	260.6	$64755.46	1327.5	$48.78)	2500	$48.78*
Crosscutting				37853.28	776.0	)		
Raising								
~~xxxx~~ Sideswipe	"			2550.00	100.0	25.50	100	25.50*
Winzes								
Drilling: Core	"			20253.15	4500.7	4.50	5000	4.50*
Churn								
Auger								
Stripping								
Trenching								
Test Pits								
Roads and Trails								
TOTAL DISTRIBUTED COSTS								TOTAL COSTS AUTHORIZED BY CONTRACT
Operating Equipment Purchased								
Initial Rehabilitation and Repairs								
New Buildings, Improvements, etc.								
TOTAL COSTS								

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

Date 6-4-58 Operator Polaris Mining Company

Per John R. Matthews Title Secretary

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)

*Maximum allowed by contract.

/s/ John A. Barrell

INSTRUCTIONS

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

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

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

GPO 872894

POLARIS MINING COMPANY
P. O. Box 320
Wallace, Idaho

June seventh
1958

Defense Minerals Exploration Administration
United States Department of the Interior
1201 North Division Street
Spokane, Washington

Re: Progress Report
Polaris East Exploration Project
May - 1958
Docket No. DMEA - 2879
Contract No. IDM - E541

Gentlemen:

Progress in the Polaris East Exploration Project during the month of May included 260.6 feet of drifting and 21.7 feet of sideswiping.

347 East drift advanced 260.6 feet to station PE3019 plus 29.8 feet. This drift exposed a 1.1 foot wide siderite pyrite vein with some chalcopyrite and minor tetrahedrite, striking N45° E and probably representing the southwesterly extension of the best zone of mineralization in hole No. 2506. The drift is continuing easterly, and short diamond drill holes will be driven in the north wall to explore the extension of the above mentioned vein.

Preparation of the ore section north of 331-B Raise on 2900 level for mining has been completed and stoping above 2900 level is proceeding.

Yours very truly,

M. W. Hutchinson

M. W. Hutchinson

MWH/hdh/dm

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

Budget Bureau No. 42-R1036.5

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

Stage II

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

Month of April, 1958 Docket No. DMEA 2879 Contract No. IDM-E 541
Operator's Name Polaris Mining Company Minerals Copper, Lead, Antimony (and incidental Silver)
Address Box 320 Wallace, Idaho
Contract Amount, $ ~~147,000.00~~ 873,840.00 Government Participation: 50 % Amount, $ ~~73,500.00~~ 436,920.00

ITEMS OF COSTS	FOR OPERATOR'S USE: Monthly Total	Totals Previously Reported	Totals To Date	FOR GOVERNMENT USE ONLY: Approved Monthly Total	Approved Totals Previously Reported	Approved Totals To Date
(1) Independent Short Form Contracts:						
Drilling Core 259.3 @ 34.50	$1,166.85	$19,086.30	$20,253.15	1166.85	19086.30	20253.15
Bulldozing						
Crosscutting 133.7 @ 48.78	6,521.89	31,331.39	37,853.28	6521.89	31331.39	37853.28
Drifting 40.0 @ 48.78	1,951.20	50,092.19	52,043.39	1951.20	50092.19	52043.39
Sideswipe		2,550.00	2,550.00		2550.00	2550.00
(2) Labor and Supervision:						
Labor						
Supervision						
Technical Services						
(3) Operating Mat'ls. and Supplies:						
Timber						
Explosives						
Pipe						
Track						
(4) Operating Equipment:						
Rental						
Purchase						
Depreciation						
(5) Initial Rehabilitation and Repairs						
(6) New Bldgs., Improvements, etc.						
(7) Miscellaneous:						
Repairs to Equipment						
Sampling and Analysis						
Payroll Taxes						
Liability Insurance						
(8) Contingencies (specify):						
Stage I					726838.94	726838.94
TOTALS	$9,639.94	$103,059.08	$112,699.02	9639.94	829898.82	839538.76

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

Date 5-5-58 *Payee Polaris Mining Company

Per [signature] Title President

*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:

$ 4819.97

Signature [signature]
(Authorized Certifying Officer)

Date 7-3-58 Vou. No. 2187

(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. 6541 in accordance with the terms of the contract.

Signature /s/ John D. Bardill Title Metallurgist Date May 16, 1958

APPROVAL BY DMEA EXECUTIVE OFFICER OR ALTERNATE:

Signature /s/ Wing G. Agnew Title Acting Exec. Date 7-2-58

MONTHLY REPORT OF OPERATOR

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

Form MF-104A
(April, 1962)

Budget Bureau No. 42-R1151.2

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION

RECEIVED JUL 10 1958 D.M.E.A.

OPERATOR'S UNIT COST AND PROGRESS REPORT Stage II

Month of April 1958 Docket No. DMEA 2079 Contract No. DMI-E 541
Operator's Name Polaris Mining Company Mineral Copper, Lead, Antimony (and incidental Silver)
Address Box 320 Wallace, Idaho

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	feet	$1,951.20	40.0	$52,043.39	1066.9	$48.78)	2500	$48.78 *
Crosscutting		6,521.89	133.7	37,853.28	776.0	)		
Raising								
~~xxxxx~~ Sideswipe				2,550.00	100.0	25.50	100	25.50 *
Winzes								
Drilling: Core	feet	1,166.85	259.3	20,253.15	4500.7	4.50	5000	4.50 *
Churn								
Auger								
Stripping								
Trenching								
Test Pits								
Roads and Trails								
Total Distributed Costs								Total Costs Authorized by Contract
Operating Equipment Purchased								
Initial Rehabilitation and Repairs								
New Buildings, Improvements, etc.								
Total Costs								

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

Date 5-5-58 Operator Polaris Mining Company

Per J. L. Darrell Title President

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)

* Maximum allowed by contract

/s/ John L. Darrell

INSTRUCTIONS

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

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

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

GPO 872894

POLARIS MINING COMPANY
P. O. BOX 320
WALLACE, IDAHO
May seventh
1958

Defense Minerals Exploration Administration
United States Department of the Interior
1201 North Division Street
Spokane, Washington

Re: Progress Report
Polaris East Exploration Project
April - 1958
Docket No. DMEA - 2879
Contract No. IDM - E541

Gentlemen:

Progress in the Polaris East Exploration Project during the month of April included 133.7 feet of crosscutting, 97.2 feet of drifting, 98.9 feet of sideswiping and 259.3 feet of diamond drilling. Of the drifting, 40.0 feet was done towards completing the DMEA contract.

337 Southeast crosscut advanced 133.7 feet to station PE3012 plus 170.2 feet. This crosscut exposed a northeasterly-southwesterly striking siderite vein showing minor tetrahedrite mineralization. As shown on the attached 50 scale progress map, 347 Northeast and Southwest drifts were driven a total of 57.2 feet on this structure, exposing an irregular siderite vein with spotty tetrahedrite mineralization. 347 East drift was started easterly to explore the mineralized zones encountered near the collars of diamond drill holes No. 3508 and 3509. This drift had advanced 40.0 feet by the end of April showing irregular pods of siderite and pyrite with mostly weak tetrahedrite. 347 East drift is now continuing easterly towards the mineralized zones shown in diamond drill hole No. 3506.

Holes No. 3508 and 3509 were drilled northerly 88.3 feet and 171.0 feet respectively from points near station PE3014. Sludges from hole No. 3508 assayed 13.8 ounces silver from 5.0 to 10.0 feet, 22.3 ounces from 10.0 to 15.0 and 18.1 ounces from 55.0 to 60.0. The section from 5.0 to 15.0 feet was explored by 347 East drift and found to represent a 7.0 foot wide pod of siderite and pyrite with spots of tetrahedrite which weakened to only small streaks of siderite and pyrite with very little tetrahedrite going east. The 55.0 to 60.0 foot section showed 2.6 feet of siderite, quartz and pyrite with some tetrahedrite which is probably the northeasterly extension of the vein exposed in 347 Northeast and Southwest drifts. Hole No. 3509 showed several siderite and pyrite veins but no significant mineralization. Logs of these two holes are included with this report.

The 2900 level southerly drift from 331-B raise was extended to a point 70.2 feet from the raise exposing only weak mineralization. The ore section north of the raise on this level is being prepared for stoping.

Yours very truly,

M. W. Hutchinson

M. W. Hutchinson
Geologist

MWH:dm
Encls.

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

Budget Bureau No. 42-R1036.5

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

Stage II

Month of March, 195 8 Docket No. DMEA 2079 Contract No. DMA-S 9.1
Operator's Name Polaris Mining Company Minerals Copper, Lead, Antimony (and incidental Silver)
Address Box 320, Wallace, Idaho
Contract Amount, $ ~~347,000.00~~ 273,840.00 Government Participation: 5% Amount, $ ~~73,500.00~~ 436,928.00

ITEMS OF COSTS	FOR OPERATOR'S USE: Monthly Total	Totals Previously Reported	Totals To Date	FOR GOVERNMENT USE ONLY: Approved Monthly Total	Approved Totals Previously Reported	Approved Totals To Date
(1) Independent Short Form Contracts:						
Drilling Core		$ 19086.30	$ 19086.30		19,086.30	19,086.30
Bulldozing						
Crosscutting 278.5 248.72	$13585.23	17746.16	31331.39	13585.23	17746.16	31,331.39
Drifting		50092.19	50092.19		50092.19	50,092.19
		2550.00	2550.00		2550.00	2550.00
(2) Labor and Supervision:						
Labor						
Supervision						
Technical Services						
(3) Operating Mat'ls. and Supplies:						
Timber						
Explosives						
Pipe						
Track						
(4) Operating Equipment:						
Rental						
Purchase						
Depreciation						
(5) Initial Rehabilitation and Repairs						
(6) New Bldgs., Improvements, etc.						
(7) Miscellaneous:						
Repairs to Equipment						
Sampling and Analysis						
Payroll Taxes						
Liability Insurance						
(8) Contingencies (specify):						
Stage I					726,838.94	726,838.94
				13585.23		
TOTALS	$13585.23	$ 89474.65	$ 103059.88		816,213.59	829,898.82

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

Date 4-8-58 *Payee Polaris Mining Company

Per [signature] Title President

*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:

$ 6792.62

Signature Harvey F. Long
(Authorized Certifying Officer)

Date 4/21/58 Vou. No. 2150

(See other side)

(For Government use only)

CERTIFICATION BY GOVERNMENT REPRESENTATIVE:

I certify that to the best of my knowledge and belief the contractor submitting this voucher is operating a Defense Minerals Exploration Administration project under Contract No. E 541 in accordance with the terms of the contract.

Signature /s/ John A. Bardill Title Metallurgist Date April 14, 1956

APPROVAL BY DMEA EXECUTIVE OFFICER OR ALTERNATE:

Signature /s/ A. E. Weissenborn Title Exec. Officer Date April 17, 1956

MONTHLY REPORT OF OPERATOR

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

GPO 872893

Form MF-104A
(April 1952)

Budget Bureau No. 42-R1151.2

RECEIVED APR 23 1958 D.M.E.A.

UNITED STATES
DEPARTMENT OF THE INTERIOR

DEFENSE MINERALS EXPLORATION ADMINISTRATION

OPERATOR'S UNIT COST AND PROGRESS REPORT

Stage II

Month of March 1958 Docket No. DMEA 2879 Contract No IDM-E 541

Operator's Name Polaris Mining Company Minerals Copper, Lead, Antimony (and incidental Silver)

Address Box 320, Wallace, Idaho

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	feet			$ 50092.19	1026.9	$ 48.78	2500	$ 48.78 *
Crosscutting		$13585.23	278.5	31331.39	642.3			
Raising								
~~Shafts~~ ~~Deck~~ Sidewipe				2550.00	100.0	25.50	100	25.50 *
Winzes								
Drilling: Core	feet			19086.30	4241.4	4.50	5000	4.50 *
Churn								
Auger								
Stripping								
Trenching								
Test Pits								
Roads and Trails								
TOTAL DISTRIBUTED COSTS		13585.23		103,059.88				TOTAL COSTS AUTHORIZED BY CONTRACT
Operating Equipment Purchased								
Initial Rehabilitation and Repairs								
New Buildings, Improvements, etc								
TOTAL COSTS								

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

Date 4-8-58 Operator Polaris Mining Company

Per J. D. Ardell Title President

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)

* Maximum allowed by contract

/s/ John D. Ardell

INSTRUCTIONS

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

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

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

GPO 872894

POLARIS MINING COMPANY
P. O. BOX 320
WALLACE, IDAHO

April fourth
1958

Defense Minerals Exploration Administration
United States Department of the Interior
1201 North Division Street
Spokane, Washington

Re: Progress Report
Polaris East Exploration Project
March - 1958
Docket No. DMEA - 2879
Contract No. IDM-E541

Gentlemen:

Progress in the Polaris East Exploration Project during the month of March included 278.5 feet of crosscutting and 8.0 feet of sideswiping.

337 Southeast crosscut advanced 278.5 feet to station PE3012 plus 36.5 feet. As shown on the attached 50 scale map, this crosscut exposed numerous small irregular stringers of siderite and pyrite with only minor amounts of tetrahedrite. No mineralization has yet been disclosed comparable to that shown in Hole 3504.

The 2900 level northerly drift from 331-B raise was extended 44.9 feet to a point 141.5 feet from the raise, exposing only spotty tetrahedrite beyond 90 feet from the raise. The southerly drift from 331-B raise on this level advanced 43.8 feet showing mostly weak mineralization.

Yours very truly,

M W Hutchinson
M. W. Hutchinson
Geologist

MWH/hdh

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

Budget Bureau No. 42-R1036.5

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

Stage II

RECEIVED MAR 27 1958 D.M.E.A.

Month of February, 1958 Docket No. DMEA 2879 Contract No. IDM-E 541

Operator's Name Polaris Mining Company Mineral Copper, Lead, Antimony (and incidental Silver)

Address Box 320 Wallace, Idaho

Contract Amount, $~~147,000.00~~ 873,840.00 Government Participation 50 % Amount, $~~73,500.00~~ 436,920.00

ITEMS OF COSTS	FOR OPERATOR'S USE: Monthly Total	Totals Previously Reported	Totals To Date	FOR GOVERNMENT USE ONLY: Approved Monthly Total	Approved Totals Previously Reported	Approved Totals To Date
(1) Independent Short Form Contracts:						
Drilling Core 207.8 @ $4.50	$ 935.10	$18,151.20	$19,086.30	935.10	18,151.20	19,086.30
Bulldozing						
Crosscutting 270.4 @ $48.78	13190.11	5,053.61	18,243.72	12692.55	5,053.61	17,746.16
Drifting		50,092.19	50,092.19		50,092.19	50,092.19
Sideswipe		2,550.00	2,550.00		2,550.00	2,550.00
(2) Labor and Supervision:						
Labor						
Supervision						
Technical Services						
(3) Operating Mat'ls. and Supplies:						
Timber						
Explosives						
Pipe						
Track						
(4) Operating Equipment:						
Rental						
Purchase						
Depreciation						
(5) Initial Rehabilitation and Repairs						
(6) New Bldgs., Improvements, etc.						
(7) Miscellaneous:						
Repairs to Equipment						
Sampling and Analysis						
Payroll Taxes						
Liability Insurance						
(8) Contingencies (specify):						
Stage I					726,838.94	726,838.94
TOTALS	$14125.21	$75,847.00	$89,972.21	13,627.65	802,685.94	816,313.59

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

Date 3-6-58 *Payee Polaris Mining Company

Per [signature] Title President

*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:

6813.83 $ 6813.83

Signature [signature] (Authorized Certifying Officer)

Date 3/21/58 Vou. No. 2139

(See other side)

(For Government use only)

CERTIFICATION BY GOVERNMENT REPRESENTATIVE:

I certify that to the best of my knowledge and belief the contractor submitting this voucher is operating a Defense Minerals Exploration Administration project under Contract No. E 541 in accordance with the terms of the contract.

Signature /s/ Stephen W. Fildok Title Mining Engr. Date 3-20-58

APPROVAL BY DMEA EXECUTIVE OFFICER OR ALTERNATE:

Signature /s/ A. E. Weissenborn Title Exec. Officer Date March 21, 1958

MONTHLY REPORT OF OPERATOR

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

Form MF-104A
(April 1962)

Budget Bureau No. 42-R1151.2

RECEIVED MAR 27 1958 DMEA

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION

OPERATOR'S UNIT COST AND PROGRESS REPORT

Stage II

Month of February 1958 Docket No. DMEA 2879 Contract No. IDM-E-541
Operator's Name Polaris Mining Company Minerals Copper, Lead, Antimony (and incidental Silver)
Address Box 320 Wallace, Idaho

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	feet	12692.56	260.2	$50,092.19	1,026.9	$48.78	2,500	$ 48.78 *
Crosscutting		~~$13190.11~~	~~270.4~~	~~18,243.72~~	~~374.0~~			
Raising				12,246.16	363.8			
~~Shaft~~ Sideswipe				2,550.00	100.0	25.50	100	25.50 *
Winzes								
Drilling: Core	feet	935.10	207.8	19,086.30	4,241.4	4.50	5,000	4.50 *
Churn								
Auger								
Stripping								
Trenching								
Test Pits								
Roads and Trails								
Total Distributed Costs								Total Costs Authorized by Contract
Operating Equipment Purchased								
Initial Rehabilitation and Repairs								
New Buildings, Improvements, etc.								
Total Costs								

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

Date 3-6-58 Operator Polaris Mining Company

Per F. J. Bordell Title President

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)

* Maximum allowed by contract.

/s/ Stephen W. Zoldok
Mining Engr., 3/20/58

INSTRUCTIONS

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

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

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

GPO 872894

POLARIS MINING COMPANY
P. O. Box 320
WALLACE, IDAHO

March seventh
1958

Defense Minerals Exploration Administration
United States Department of the Interior
1201 North Division Street
Spokane, Washington

Re: Progress Report
Polaris East Exploration Project
February - 1958
Docket No. DMEA - 2879
Contract No. IDM-E541

Gentlemen:

Progress in the Polaris East Exploration Project during the month of February included 270.4 feet of crosscutting and 207.8 feet of diamond drilling.

337 Southeast crosscut advanced 270.4 feet to station PE3010 plus 154.1; exposing only small irregular streaks and stringers of pyrite and siderite with minor amounts of tetrahedrite.

Diamond drill hole No. 3506 was completed to 763.3 feet for an advance of 16.4 feet and hole 3507 advanced 191.4 feet to a completed depth of 400.0 feet. No further significant mineralization was exposed in either hole. Logs of both these holes are included with this report.

The 2900 level northerly drift from 331-B raise was driven 92.6 feet showing fair tetrahedrite mineralization for most of that distance.

Yours very truly,

M. W. Hutchinson

M. W. Hutchinson

MWH:nn
Encs.

DMEA Field Team, Region I March 21, 1958

DMEA Certifying Officer, Region I

Contract Idm-E541
Monthly operating report for February 1958

The subject operating report for February 1958 has been processed and forwarded to the Disbursing Officer for payment.

A deletion in the amount of $497.56 for 10.2 feet of crosscutting for which the Operator was reimbursed on his January MF-104 (Voucher No. 2119 dated 2-13-58) has been made. This work was accomplished prior to February 3, 1958, the effective date of Amendment No. 1.

Dorothy F. Long

cc: DMEA (2)
USGS (2)
Contract Admin. (2)
Jack Bardill
AD

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

RECEIVED FEB 19 1958 D.M.E.A.

Budget Bureau No. 42-R1036.5

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

Month of January 1958 Docket No. DMEA 2879 Contract No. IDM-E 541

Operator's Name Polaris Mining Company Minerals Copper, Lead, Antimony (and incidental silver)

Address Box 320, Wallace, Idaho

Contract Amount, $ ~~147,000.00~~ 873,840.00 Government Participation: 50% Amount, $ ~~73,500.00~~ 436,920.00

ITEMS OF COSTS	FOR OPERATOR'S USE: Monthly Total	Totals Previously Reported	Totals To Date	FOR GOVERNMENT USE ONLY: Approved Monthly Total	Approved Totals Previously Reported	Approved Totals To Date
(1) Independent Short Form Contracts:						
Drilling Core 1155.7@$4.50	$5200.65	$12950.55	$18151.20	5200.65	12950.55	18,151.20
Bulldozing						
Crosscutting 102@$48.78	497.56	4556.05	5053.61	497.56	4556.05	5,053.61
Drifting		50092.19	50092.19		50092.19	50,092.19
Sideswipe		2550.00	2550.00		2550.00	2,550.00
(2) Labor and Supervision:						
Labor						
Supervision						
Technical Services						
(3) Operating Mat'ls. and Supplies:						
Timber						
Explosives						
Pipe						
Track						
(4) Operating Equipment:						
Rental						
Purchase						
Depreciation						
(5) Initial Rehabilitation and Repairs						
(6) New Bldgs., Improvements, etc.						
(7) Miscellaneous:						
Repairs to Equipment						
Sampling and Analysis						
Payroll Taxes						
Liability Insurance						
(8) Contingencies (specify):						
Stage I					726,838.94	726,838.94
TOTALS	$5698.21	$70148.79	$75847.00	5698.21	796,987.73	802,685.94

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

Date FEB 10 1958 *Payee Polaris Mining Company

Per [signature] Title President

*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:

$ 2849.10

Signature [signature] (Authorized Certifying Officer)

Date 7/13/58 Vou. No. 2119

(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. 6541 in accordance with the terms of the contract.

Signature /s/ Stephen W. Zolbok Title Mining Engr. Date Feb. 12, 1958

APPROVAL BY DMEA EXECUTIVE OFFICER OR ALTERNATE:

Signature /s/ A. K. Weissenborn Title Exec. Officer Date Feb. 12, 1958

MONTHLY REPORT OF OPERATOR

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

Form MF-104A
(April 1952)

Budget Bureau No. 42-R1151.2

RECEIVED FEB 19 1958 D.M.E.A.

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

Month of January 1958 Docket No. DMEA 2879 Contract No. IDM-E 541
Operator's Name Polaris Mining Company Minerals Copper, Lead, Antimony
Address Box 320, Wallace, Idaho (and incidental silver)

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	feet			$50092.19	1026.9	$48.78)	2500	$48.78*
Crosscutting		$497.56	10.2	5053.61	103.6	)		
Raising								
~~Shaft~~ Sideswipe				2550.00	100.0	25.50	100	25.50*
Winzes								
Drilling: Core	feet	5200.65	1155.7	18151.20	4033.6	4.50	5000	4.50*
Churn								
Auger								
Stripping								
Trenching								
Test Pits								
Roads and Trails								
TOTAL DISTRIBUTED COSTS								TOTAL COSTS AUTHORIZED BY CONTRACT
Operating Equipment Purchased								
Initial Rehabilitation and Repairs								
New Buildings, Improvements, etc								
TOTAL COSTS								

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

Date 2-7-58 Operator Polaris Mining Company

Per [signature] Title President

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)

* Maximum allowed by contract.

/s/ Stephen W. Goldok, Mining Engr.

INSTRUCTIONS

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

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

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

GPO 872894

POLARIS MINING COMPANY
P. O. BOX 320
WALLACE, IDAHO

February seventh
1958

Defense Minerals Exploration Administration
United States Department of the Interior
1201 North Division Street
Spokane, Washington

Re: Progress Report
Polaris East Exploration Project
January - 1958
Docket No. DMEA - 2879
Contract No. IDM-E541

Gentlemen:

Progress in the Polaris East Exploration Project during the month of January included 10.2 feet of crosscutting, 35.0 feet of sideswiping and 1155.7 feet of diamond drilling.

337 South crosscut was started to further explore the mineralized zones exposed in diamond drill holes Nos. 3504 and 3506, and had advanced 10.2 feet by the end of January. Exposures in this crosscut will determine the direction of future easterly drifting or lateral work.

Diamond drill hole No. 3501 was completed to 826.2 feet for an advance of 455.0 feet. Numerous siderite and pyrite veins were exposed in this hole but showed no mineralization comparable to that in hole No. 3504. The log of hole No. 3501 is included with this report.

As shown on the attached geologic map hole No. 3506 advanced 492.1 feet and had reached a depth of 746.9 feet by the end of the month. This hole also has exposed numerous siderite and pyrite veins. The best showing thus far in this hole was at 597.1 to 599.9 feet. The sludge from 595.0 to 600.0 feet assayed 29.2 ounces silver and 0.99 percent copper and split core from 597.1 to 599.9 feet assayed 97.3 ounces silver and 3.32 percent copper.

Hole 3507 was started northerly from near station PE3005 and had reached a depth of 208.6 feet by the end of the month. Logs of hole 3506 and 3507 will be included with next month's report.

The northerly drift from 331-B raise on 2800 level advanced 5.2 feet and preparations were made to start drifts northerly and southerly from this raise approximately 80 feet above 3000 level.

Yours very truly,

M. W. Hutchinson

M. W. Hutchinson
Geologist

Form I E-104 (Rev.) (April 1952)

RECEIVED JAN 27 1958 D.M.E.A.

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION

Budget Bureau No. 42-R1036.5

OPERATOR'S MONTHLY REPORT AND VOUCHER

Stage II

Month of December 195 7 Docket No. DMEA 2879 Contract No. IDM-E 541

Operator's Name Polaris Mining Company Minerals Copper, Lead, Antimony (and incidental silver)

Address Box 320, Wallace, Idaho

Contract Amount, $ ~~147,000.00~~ 873,840.00 Government Participation: 50 % Amount, $ ~~73,500.00~~ 436,920.00

ITEMS OF COSTS	FOR OPERATOR'S USE: Monthly Total	Totals Previously Reported	Totals To Date	FOR GOVERNMENT USE ONLY: Approved Monthly Total	Approved Totals Previously Reported	Approved Totals To Date
(1) Independent Short Form Contracts:						
Drilling Core 860.6@$4.50	$3872.70	$ 9077.85	$ 12950.55	3872.70	9077.85	12950.55
Bulldozing						
Crosscutting		4556.05	4556.05		4556.05	4556.05
Drifting 556@$48.78	2712.17	47380.02	50092.19	2712.17	47380.02	50092.19
Sidewipe-10.0@$25.50	255.00	2295.00	2550.00	255.00	2295.00	2550.00
(2) Labor and Supervision:						
Labor						
Supervision						
Technical Services						
(3) Operating Mat'ls. and Supplies:						
Timber						
Explosives						
Pipe						
Track						
(4) Operating Equipment:						
Rental						
Purchase						
Depreciation						
(5) Initial Rehabilitation and Repairs						
(6) New Bldgs., Improvements, etc.						
(7) Miscellaneous:						
Repairs to Equipment						
Sampling and Analysis						
Payroll Taxes						
Liability Insurance						
(8) Contingencies (specify):						
Stage I					726838.94	726838.94
TOTALS	$ 6839.87	$ 63308.92	$ 70148.79	6839.87	790147.86	796987.73

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

Date 1-7-58 *Payee Polaris Mining Company

Per [signature] Title President

*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:

$ 3419.94

Signature Dorothy F. Long (Authorized Certifying Officer)

Date 1/21/58 Vou. No. 2106

(See other side)

(For Government use only)

CERTIFICATION BY GOVERNMENT REPRESENTATIVE:

I certify that to the best of my knowledge and belief the contractor submitting this voucher is operating a Defense Minerals Exploration Administration project under Contract No. E 541 in accordance with the terms of the contract.

Signature /s/ John A. Bardill Title Metallurgist Date Jan. 17, 1958

APPROVAL BY DMEA EXECUTIVE OFFICER OR ALTERNATE:

Signature /s/ A. E. Weissenborn Title Exec. Officer Date Jan. 20, 1958

MONTHLY REPORT OF OPERATOR

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

Form ME-104A
(April 1952)

Budget Bureau No. 42-R1151.2

UNITED STATES
DEPARTMENT OF THE INTERIOR

DEFENSE MINERALS EXPLORATION ADMINISTRATION

RECEIVED JAN 27 1958 D.M.E.A.

OPERATOR'S UNIT COST AND PROGRESS REPORT Stage II

Month of December 1957 Docket No. DMEA 2879 Contract No. IDM-E 541

Operator's Name Polaris Mining Company Minerals Copper, Lead, Antimony

Address Box 320, Wallace, Idaho (and incidental silver)

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	feet	$2712.17	55.6	$50092.19	1026.9	$48.78)	2500	48.78*
Crosscutting				4556.05	93.4	)		
Raising								
~~Winzes~~ Sidewipe		255.00	10.0	2550.00	100.0	25.50	100	25.50*
Winzes								
Drilling: Core	feet	3872.70	860.6	12950.55	2877.9	4.50	5000	4.50*
Churn								
Auger								
Stripping								
Trenching								
Test Pits								
Roads and Trails								
TOTAL DISTRIBUTED COSTS		6839.87		70,148.79				TOTAL COSTS AUTHORIZED BY CONTRACT
Operating Equipment Purchased								
Initial Rehabilitation and Repairs								
New Buildings, Improvements, etc.								
Stage I				726,838.94				
TOTAL COSTS				796,987.73				

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

REMARKS:

Date 1-7-58 Operator Polaris Mining Company

Per [signature] Title President

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)

* Maximum allowed by contract.

/s/ John L. Bardell

INSTRUCTIONS

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

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

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

GPO 872894

POLARIS MINING COMPANY

P. O. Box 320
WALLACE, IDAHO

January tenth
1958

Defense Minerals Exploration Administration
United States Department of the Interior
1201 North Division Street
Spokane, Washington

Re: Progress Report
Polaris East Exploration Project
December - 1957
Docket No. DMEA - 2879
Contract No. IDM - E541

Gentlemen:

Progress in the Polaris East Exploration Project during the month of December included 55.6 feet of drifting, 14.0 feet of sideswiping and 860.6 feet of diamond drilling.

337 East drift advanced 55.6 feet to station PE3007 + 14.6 feet where it has been stopped while the south wall is being explored by diamond drilling. None of the diamond drill holes either to the north or to the south showed a continuation of the fault-vein structure previously followed by 337 East drift, but hole No. 3504 has exposed two or more interesting structures further out in the south wall.

Diamond drill hole No. 3504 was completed to 695.1 feet for an advance of 426.7 feet. As shown on the attached geologic map this hole intersected siderite-tetrahedrite veins, the sludges from which assayed 29.3 ounces silver and 0.83 percent copper from 560 feet to 565 feet and 37.1 ounces silver and 0.82 percent copper from 620 feet to 625 feet. Split core from 562.0 feet to 567.0 feet assayed 46.7 ounces silver and 1.21 percent copper and from 621.7 to 625.9 feet assayed 53.0 ounces silver and 1.29 percent copper. Several smaller veins with lesser values were also exposed in this hole.

Hole No. 3505 was drilled 100.1 feet northerly from near the face of 337 E. drift without exposing any structures of significance. The logs of holes 3504 and 3505 are included with this report.

Hole No. 3506 was started southerly from near the end of the drift and had reached a depth of 254.8 feet at the end of December.

Hole No. 3501 was started again for the purpose of establishing a strike on the veins exposed in hole No. 3504. This hole was advanced 79.0 feet and had reached a depth of 371.2 feet at the end of the month.

331-B Raise advanced 35.0 feet to a height of 222.9 feet, exposing a siderite vein with mostly weak mineralization. Drifts were started northeasterly and southerly from this raise at 2800 level, exposing spotty mineralization. The northeasterly drift advanced 21.4 feet and the drift to the south, 6.1 feet.

Very truly yours,

M. W. Hutchinson

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

Budget Bureau No. 42-R1036.5

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

Stage II

RECEIVED DEC 16 1957 DMEA

Month of November 1957 Docket No. DMEA 2879 Contract No. IDM-E 541

Operator's Name Polaris Mining Company Minerals Copper, lead, antimony(and incidental silver)

Address Box 320 - Wallace, Idaho

Contract Amount, $ 147,000.00 873,820.00 Government Participation: 50 % Amount, $ ~~73,500.00~~ 436,920.00

ITEMS OF COSTS	FOR OPERATOR'S USE: Monthly Total	Totals Previously Reported	Totals To Date	FOR GOVERNMENT USE ONLY: Approved Monthly Total	Approved Totals Previously Reported	Approved Totals To Date
(1) Independent Short Form Contracts:						
Drilling core 840.8 @ $4.50	3783.60	5294.25	9077.85	3783.60	5294.25	9077.85
Bulldozing						
Crosscutting 11.5 @ 48.78	560.97	3995.08	4556.05	560.97	3995.08	4556.05
Drifting 202.4 @ $48.78	9873.07	37506.95	47380.02	9873.07	37506.95	47380.02
Sidewipe		2295.00	2295.00		2295.00	2295.00
(2) Labor and Supervision:						
Labor						
Supervision						
Technical Services						
(3) Operating Mat'ls. and Supplies:						
Timber						
Explosives						
Pipe						
Track						
(4) Operating Equipment:						
Rental						
Purchase						
Depreciation						
(5) Initial Rehabilitation and Repairs						
(6) New Bldgs., Improvements, etc.						
(7) Miscellaneous:						
Repairs to Equipment						
Sampling and Analysis						
Payroll Taxes						
Liability Insurance						
(8) Contingencies (specify):						
Stage I					726838.94	726838.94
TOTALS	14217.64	49091.28	63308.92	14217.64	775920.22	790147.85

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

Date December 6, 1957 *Payee Polaris Mining Company

Per [signature] Title President

*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:

$ 7108.82

Signature [signature] (Authorized Certifying Officer)

Date 12/20/57 Vou. No. 2090

(See other side)

(For Government use only)

CERTIFICATION BY GOVERNMENT REPRESENTATIVE:

I certify that to the best of my knowledge and belief the contractor submitting this voucher is operating a Defense Minerals Exploration Administration project under Contract No. E 541 in accordance with the terms of the contract.

Signature /s/ John A. Bardill Title Metallurgist Date Dec. 16, 1957

APPROVAL BY DMEA EXECUTIVE OFFICER OR ALTERNATE:

Signature /s/ A. E. Wiesenford Title Exec. Officer Date Dec. 16, 1957

MONTHLY REPORT OF OPERATOR

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

Form MF-104A
(April 1952)

Budget Bureau No. 42-R1151.2

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION

RECEIVED DEC 26 1957 DMEA

OPERATOR'S UNIT COST AND PROGRESS REPORT

Stage II

Month of November 1957 Docket No. DMEA 2879 Contract No. IDM-E 541

Operator's Name Polaris Mining Company Minerals Copper, lead, antimony (and incidental silver)

Address Box 320 - Wallace, Idaho

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	feet	9873.07	202.4	47380.02	971.3	48.78	2500	48.78*
Crosscutting		560.97	11.5	4556.05	93.4			
Raising								
~~Shaft~~ Sidewipe				2295.00	90.0	25.50	100	25.50*
Winzes								
Drilling: Core	feet	3783.60	840.8	9077.85	2017.3	4.50	5000	4.50*
Churn								
Auger								
Stripping								
Trenching								
Test Pits								
Roads and Trails								
Total Distributed Costs								Total Costs Authorized by Contract
Operating Equipment Purchased								
Initial Rehabilitation and Repairs								
New Buildings, Improvements, etc.								
Total Costs								

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

Date December 6, 1957 Operator Polaris Mining Company

Per J. J. Randell Title President

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)

* Maximum allowed by contract.

/s/ John A. Randell

INSTRUCTIONS

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

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

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

GPO 872894

POLARIS MINING COMPANY
P. O. BOX 320
WALLACE, IDAHO
December fourth
1957

Defense Minerals Exploration Administration
United States Department of the Interior
1201 North Division Street
Spokane, Washington

Re: Progress Report
Polaris East Exploration Project
November - 1957
Docket No. DMEA - 2879
Contract No. IDM - E541

Gentlemen:

Progress in the Polaris East Exploration Project during the month of November included 202.4 feet of drifting, 11.5 feet of crosscutting and 840.8 feet of diamond drilling.

337 East drift advanced 202.4 feet to station PE3006 plus 63.6 feet. As shown on the attached geologic map the fault-vein structure previously followed by the drift pinched out or was offset by faulting. Diamond drill holes in the north and south walls have thus far failed to show a continuation of this structure.

346 North Diamond Drill crosscut advanced 5.4 feet and 346 South crosscut was driven 6.1 feet.

Diamond drill hole No. 3299 was completed to 473.2 feet for an advance of 48.2 feet. This hole exposed a zone of siderite and pyrite stringers from 448 to 455 feet, some of which contained minor amounts of tetrahedrite. The best sludge assays were 3.0 ounces silver from 445 to 450 feet and 4.5 ounces silver from 450 to 455 feet.

Hole No. 3501 was drilled 292.2 feet southeasterly from a point near station SS3098. Hole No. 3502 was drilled 68.0 feet northerly and No. 3503, 164.0 feet southerly, both from approximately 55 feet east of station PE3006. None of these holes intersected significant mineralization. The logs of holes 3299, 3501, 3502, and 3503 are included with this report.

Hole 3504 was started southerly from 346 south crosscut and had reached a depth of 268.4 feet at the end of November.

331-B Raise advanced 39.4 feet to a height of 187.9 feet, exposing rather weak mineralization early in the month but showing some improvement near the present back. This raise has now reached the elevation at which the north-south siderite vein would have been intersected by diamond drill hole No. 3293 which

was stopped in June during the installation of 24-inch fan line. Caved conditions at the collar of hole 3293 now prevent setting up again on this hole. It will probably not be extended so the log is now submitted.

Yours very truly,

M. W. Hutchinson

M. W. Hutchinson
Geologist

MWH/hdh/jh

W

[redacted]-104 (Rev.)
(April 1952)

Budget Bureau No. 42-R1036.5

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION

RECEIVED NOV 1957 D.M.E.A.

OPERATOR'S MONTHLY REPORT AND VOUCHER

Stage II

Month of October, 1957 Docket No. DMEA 2879 Contract No. IDM-E541

Operator's Name Polaris Mining Company Minerals Copper, Lead, Antimony (and incidental Silver)

Address Box 320, Wallace, Idaho

Contract Amount, $ 147,000.00 Government Participation: 50% Amount, $ 73,500.00

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 core 565.4 @ $4.50	2544.30	2749.95	5294.25	2544.30	2749.95	5294.25
Bulldozing						
Crosscutting 3.7 @ $48.78	180.49	3814.59	3995.08	180.49	3814.59	3995.08
Drifting 222.4 @ $48.78	10848.67	26658.28	37506.95	10848.67	26658.28	37506.95
Sideswipe 10.0 @ $25.50	255.00	2040.00	2295.00	255.00	2040.00	2295.00
(2) Labor and Supervision:						
Labor						
Supervision						
Technical Services						
(3) Operating Mat'ls. and Supplies:						
Timber						
Explosives						
Pipe						
Track						
(4) Operating Equipment:						
Rental						
Purchase						
Depreciation						
(5) Initial Rehabilitation and Repairs						
(6) New Bldgs., Improvements, etc.						
(7) Miscellaneous:						
Repairs to Equipment						
Sampling and Analysis						
Payroll Taxes						
Liability Insurance						
(8) Contingencies (specify):						
Stage I					726838.94	726838.94
TOTALS	13828.46	35262.82	49091.28	13828.46	762101.76	775930.22

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

Date Nov. 6, 1957 Payee Polaris Mining Company

Per [signature] Title President

*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:

$ 691423

Signature [signature] (Authorized Certifying Officer)

Date 11/14/57 Vou. No. 2072

(See other side)

(For Government use only)

CERTIFICATION BY GOVERNMENT REPRESENTATIVE:

I certify that to the best of my knowledge and belief the contractor submitting this voucher is operating a Defense Minerals Exploration Administration project under Contract No. E 541 in accordance with the terms of the contract.

Signature /s/ Stephen W. Foldok Title Mining Engr. Date 11-12-57

APPROVAL BY DMEA EXECUTIVE OFFICER OR ALTERNATE:

Signature /s/ A. E. Weissenborn Title Exec. Officer Date Nov. 13, 1957

MONTHLY REPORT OF OPERATOR

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

Form MF-104A
(April 1952)

Budget Bureau No. 42-R1151.2

RECEIVED NOV 18 1957 D.M.E.A.

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

Stage II

Month of October 195 7 Docket No. DMEA 2879 Contract No. IDM-E541

Operator's Name Polaris Mining Company Mineral Copper, Lead, Antimony (and incidental Silver)

Address Box 320, Wallace, Idaho

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	feet	10848.67	222.4	37506.95	768.9	48.78	2500	48.78*
Crosscutting		180.49	3.7	3995.08	81.9			
Raising								
~~Shafts~~ Sideswipe		255.00	10.0	2295.00	90.0	25.50	100	25.50*
Winzes								
Drilling: Core	feet	2544.30	565.4	5294.25	1176.5	4.50	5000	4.50*
Churn								
Auger								
Stripping								
Trenching								
Test Pits								
Roads and Trails								
TOTAL DISTRIBUTED COSTS								TOTAL COSTS AUTHORIZED BY CONTRACT
Operating Equipment Purchased								
Initial Rehabilitation and Repairs								
New Buildings, Improvements, etc.								
TOTAL COSTS								

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

Date November 6, 1957 Operator Polaris Mining Company

Per [signature] Title President

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

(Instructions on reverse)

REMARKS:

(For Government use only)

* Maximum allowed by contract.

/s/ Stephen W. Zoldok, Mining Engr.
11-12-57

INSTRUCTIONS

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

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

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

GPO 872894

POLARIS MINING COMPANY
P. O. BOX 320
WALLACE, IDAHO

OFFICIAL FILE COPY
DMEA
RECEIVED NOV 18 1957
DATE | CODE

November fifth
1957

Defense Minerals Exploration Administration
United States Department of the Interior
1201 North Division Street
Spokane, Washington

Re: Progress Report
Polaris East Exploration Project
October - 1957
Docket No. DMEA - 2879
Contract No. IDM - E541

Gentlemen:

Progress in the Polaris East Exploration Project during the month of October included 222.4 feet of drifting, 10.0 feet of sideswiping, 3.7 feet of crosscutting and 565.4 feet of diamond drilling.

337 East drift advanced 222.4 feet to station PE3005 plus 48.4 feet. As shown on the attached geologic map this drift continued along an easterly striking fault-vein structure and showed a 0.5 foot to 8.0 foot wide siderite vein with spots and streaks of tetrahedrite. Both the vein and the tetrahedrite mineralization weakened going easterly toward the present face. A diamond drill crosscut (346 north crosscut) was started and had advanced 3.7 feet at the end of October.

Diamond drill hole No. 3298 was completed to 215.9 for an advance of 99.8 feet. Hole No. 3500 was drilled to 40.6 feet in the south wall of 337 East drift from a point 73.0 feet east of station PE3004. Neither hole showed significant mineralization. The logs of these two holes are included with this report.

Diamond drill hole 3299 was started easterly from a point near SS3088 in the southwesterly drift and had reached a depth of 425.0 feet at the end of the month. This hole will be completed at a depth of about 500 feet and the log will be included with the report for November.

331-B Raise was driven 32.4 feet to a height of 148.5 feet. The siderite vein in this raise is still quite strong at the present back, but the tetrahedrite mineralization is somewhat weaker.

Yours very truly,

M. W. Hutchinson

M. W. Hutchinson
Geologist

MWH:jh

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

Budget Bureau No. 42-R1036.5

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

Stage II

Month of September, 1957 Docket No. DMEA/2079 Contract No. IDE-B 541

Operator's Name Polaris Mining Company Minerals Copper, Lead, Antimony (and incidental silver)

Address Box 320, Wallace, Idaho

Contract Amount, $ 147000.00 Government Participation: 50% Amount, $ 73500.00

ITEMS OF COSTS	FOR OPERATOR'S USE: Monthly Total	Totals Previously Reported	Totals To Date	FOR GOVERNMENT USE ONLY: Approved Monthly Total	Approved Totals Previously Reported	Approved Totals To Date
(1) Independent Short Form Contracts:						
Drilling Core 478.7[illegible].50	2154.15	595.80	2749.95	2154.15	595.80	2749.95
Bulldozing						
Crosscutting		3814.59	3814.59		3814.59	3814.59
Drifting 241.7 [illegible]48.78	11790.13	14868.15	26658.28	11790.13	14868.15	26658.28
Sideswipe 30.0 025.50	765.00	1275.00	2040.00	765.00	1275.00	2040.00
(2) Labor and Supervision:						
Labor						
Supervision						
Technical Services						
(3) Operating Mat'ls. and Supplies:						
Timber						
Explosives						
Pipe						
Track						
(4) Operating Equipment:						
Rental						
Purchase						
Depreciation						
(5) Initial Rehabilitation and Repairs						
(6) New Bldgs., Improvements, etc.						
(7) Miscellaneous:						
Repairs to Equipment						
Sampling and Analysis						
Payroll Taxes						
Liability Insurance						
(8) Contingencies (specify):						
Stage I					726838.94	726838.94
TOTALS	14709.28	20553.54	35262.82	14709.28	747392.48	762101.76

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

Date 10-4-57 *Payee Polaris Mining Company

Per [signature] Title President

*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:

$ 735464

Signature Dorothy F. Long (Authorized Certifying Officer)

Date 10/17/57 Vou. No. 2059

(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. E541 in accordance with the terms of the contract.

Signature /s/ John D. Bardill Title Metallurgist Date Oct. 14, 1957

APPROVAL BY DMEA EXECUTIVE OFFICER OR ALTERNATE:

Signature /s/ A. L. Weissenborn Title Exec. Officer Date Oct. 15, 1957

MONTHLY REPORT OF OPERATOR

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

Form MF-104A
(April 1952)

Budget Bureau No. 42-R1151.2

UNITED STATES
DEPARTMENT OF THE INTERIOR

DEFENSE MINERALS EXPLORATION ADMINISTRATION

OPERATOR'S UNIT COST AND PROGRESS REPORT

Stage II

Month of September 195 7 Docket No. DMEA 2879 Contract No. DMA-E 541

Operator's Name Polaris Mining Company

Address Box 320, Wallace, Idaho

Minerals Copper, Lead, Antimony (and incidental Silver)

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	feet	11790.13	241.7	26658.28	546.5	48.78)	2500	48.78*
Crosscutting				3014.59	73.2	)		
Raising								
~~Shafts~~ Sideswipe		765.00	30.0	2040.00	80.0	25.50	100	25.50*
Winzes								
Drilling: Core	feet	2154.15	478.7	2749.95	611.1	4.50	5000	4.50*
Churn								
Auger								
Stripping								
Trenching								
Test Pits								
Roads and Trails								
Total Distributed Costs								Total Costs Authorized by Contract
Operating Equipment Purchased								
Initial Rehabilitation and Repairs								
New Buildings, Improvements, etc.								
Total Costs								

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

Date 10-4-57 Operator Polaris Mining Company

Per [signature] Title President

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

(Instructions on reverse)

Remarks:

(For Government use only)

*Maximum allowed by contract

/s/ John A. Bardill

INSTRUCTIONS

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

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

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

GPO 872894

HECLA MINING COMPANY
P. O. BOX 320
WALLACE, IDAHO

October seventh
1957

Defense Minerals Exploration Administration
United States Department of the Interior
1201 North Division Street
Spokane, Washington

Re: Progress Report
Polaris East Exploration Project
September - 1957
Docket No. DMEA - 2879
Contract No. IDM - E541

Gentlemen:

Progress in the Polaris East Exploration Project during the month of September included 241.7 feet of drifting, 30.0 feet of sideswiping and 478.7 feet of diamond drilling.

337 East drift advanced 241.7 feet to station SS3100 plus 134.0. Near the end of the month as shown on the attached geologic map, this drift intersected a strong easterly striking fault-vein structure which is thought to be the same structure previously followed by 329 east drift. 337 East drift is now continuing along an 8.0 foot to 10.0 foot wide siderite vein which contains small streaks of tetrahedrite.

Diamond drill hole No. 3295 was drilled northerly from 337 north crosscut to a depth of 217.8 feet. This hole intersected a 5.5 foot wide siderite vein with minor tetrahedrite at 4.5 to 10.0 feet. Holes No. 3296 and 3297 were drilled northerly 86.6 feet and 58.2 feet, respectively from points a short distance easterly from station SS3100. These two holes each intersected a strong siderite vein with minor tetrahedrite. Hole No. 3298 is now being drilled northerly from 334 north crosscut and had reached a depth of 116.1 feet at the end of September. The logs of holes 3294, 3295, 3296 and 3297 are included with this report.

331-B Raise was driven 48.8 feet during the month to a height of 116.1 feet. The ore in this raise has weakened considerably near the present back.

Yours very truly,

M. W. Hutchinson

M. W. Hutchinson
Geologist

MWH/hdh/jh

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

RECEIVED SEP 16 1957 D.M.

Budget Bureau No. 42-R1036.5

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION

OPERATOR'S MONTHLY REPORT AND VOUCHER Stage II

Month of August, 1957 Docket No. DMEA 2879 Contract No. IDM-E541

Operator's Name Polaris Mining Company Minerals Copper, Lead, Antimony (and incidental silver)

Address Box 320 Wallace, Idaho

Contract Amount, $ 147,000.00 Government Participation: 50% Amount, $ 73,500.00

ITEMS OF COSTS	FOR OPERATOR'S USE: Monthly Total	Totals Previously Reported	Totals To Date	FOR GOVERNMENT USE ONLY: Approved Monthly Total	Approved Totals Previously Reported	Approved Totals To Date
(1) Independent Short Form Contracts:						
Drilling Core 132.4 $4.50	$ 595.80		$ 595.80	595.80	—	595.80
Bulldozing						
Crosscutting 60.9@$48.78	2970.70	$ 843.89	3814.59	2970.70	843.89	3814.59
Drifting 161.6@$48.78	7882.85	6985.30	14868.15	7882.85	6985.30	14868.15
Sideswipe 50.0@$25.50	1275.00		1275.00	1275.00	—	1275.00
(2) Labor and Supervision:						
Labor						
Supervision						
Technical Services						
(3) Operating Mat'ls. and Supplies:						
Timber						
Explosives						
Pipe						
Track						
(4) Operating Equipment:						
Rental						
Purchase						
Depreciation						
(5) Initial Rehabilitation and Repairs						
(6) New Bldgs., Improvements, etc.						
(7) Miscellaneous:						
Repairs to Equipment						
Sampling and Analysis						
Payroll Taxes						
Liability Insurance						
(8) Contingencies (specify):						
Stage II				1474.20	725,364.74	726,838.94
TOTALS	$12724.35	$7829.19	$20553.54	14198.55	733,193.93	747,392.48

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

Date 9-5-57 *Payee Polaris Mining Company

Per John R. Martin Title Treasurer

*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:

7099.28

$ 7099.28

Signature Dorothy F. Long (Authorized Certifying Officer)

Date 9/11/57 Vou. No. 2040

(See other side)

(For Government use only)

CERTIFICATION BY GOVERNMENT REPRESENTATIVE:

I certify that to the best of my knowledge and belief the contractor submitting this voucher is operating a Defense Minerals Exploration Administration project under Contract No. E 541 in accordance with the terms of the contract.

Signature /s/ John D. Bardill Title Metallurgist Date 9/10/57

APPROVAL BY DMEA EXECUTIVE OFFICER OR ALTERNATE:

Signature /s/ D. R. MacLaren Title Alternate Act. Exec. Officer Date 9/10/57

MONTHLY REPORT OF OPERATOR

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

Form MF-104A
(April 1952)

Budget Bureau No. 42-R1151.2

UNITED STATES
DEPARTMENT OF THE INTERIOR

DEFENSE MINERALS EXPLORATION ADMINISTRATION

OPERATOR'S UNIT COST AND PROGRESS REPORT Stage II

Month of August 195 7 Docket No. DMEA 2879 Contract No. IDM-E541

Operator's Name Polaris Mining Company Minerals Copper, Lead, Antimony (and incidental silver)

Address Box 320 Wallace, Idaho

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	feet	$7882.85	161.6	$ 14868.15	304.8	$48.78	2500	$48.78*
Crosscutting		2970.70	60.9	3814.59	78.2			
Raising								
~~Shafts~~ Sideswipe		1275.00	50.0	1275.00	50.0		100	25.50*
Winzes								
Drilling: Core		595.80	132.4	595.80	132.4		5000	4.50*
Churn								
Auger								
Stripping								
Trenching								
Test Pits								
Roads and Trails								
TOTAL DISTRIBUTED COSTS								TOTAL COSTS AUTHORIZED BY CONTRACT
Operating Equipment Purchased								
Initial Rehabilitation and Repairs								
New Buildings, Improvements, etc								
TOTAL COSTS								

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

Date 9-5-57 Operator Polaris Mining Company

Per John R. Matthews Title Treasurer

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

(Instructions on reverse)

REMARKS:

(For Government use only)

* Maximum allowed by contract

/s/ John D. Bardill

INSTRUCTIONS

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

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

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

GPO 872894

POLARIS MINING COMPANY
P. O. BOX 320
WALLACE, IDAHO

September fourth
1957

Defense Minerals Exploration Administration
United States Department of the Interior
1201 North Division Street
Spokane, Washington

Re: Progress Report
Polaris East Exploration Project
August - 1957
Docket No. DMEA - 2879
Contract No. IDM - E541

Gentlemen:

Progress in the Polaris East Exploration Project during the month of August included 161.6 feet of drifting, 60.9 feet of crosscutting, 50.0 feet of side-swiping and 460.0 feet of diamond drilling.

329 east drift advanced 129.0 feet and 337 east drift, 32.6 feet. 337 north crosscut was driven 60.9 feet.

329 east drift diverged southerly from the fault structure which previously has been followed, and for that reason 337 north crosscut was driven to check the position of this fault and to establish a diamond drill station. This crosscut showed the fault to have swung considerably further to the north than was expected. Because of this 337 east drift is now being driven to intersect and again follow the fault structure.

As shown on the attached geologic map, these two drifts and the northerly crosscut were in bleached St. Regis quartzites during the month and showed several small, irregular pyrite stringers. The northerly crosscut also exposed a 1.5 foot siderite-pyrite vein with a small amount of tetrahedrite and a rather strong fault structure near the face. This fault is thought to be the easterly extension of the structure previously followed by 329 east drift.

Diamond drill hole SS3294 was extended 460.0 feet to a depth of 888.8 feet. At that point the rods became stuck and thus far efforts to free them have not been successful. The log of this hole will be submitted when it has either been completed to the proposed 1000 foot depth or abandoned at the present 888.8 foot depth. This hole has shown no mineralization of significance.

331-B Raise was driven 51.3 feet during the month and had reached a point 67.3 feet above the rail at the end of August. The north-south siderite vein in this raise averaged from 8.0 to 12.0 feet in width and continued to contain fair amounts of tetrahedrite.

Yours very truly,

M. W. Hutchinson

M. W. Hutchinson
Geologist

MWH:nw

MF-104 (Rev.)
(April 1952)

Budget Bureau No. 42-R1036.5

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

Stage I

Month of August, 1957 Docket No. DMEA 2879 Contract No. IDM-E541
Operator's Name Polaris Mining Company Minerals Copper, Lead, Antimony (and incidental silver)
Address Box 320 Wallace, Idaho
Contract Amount, $ 726,838.94 Government Participation: 50 % Amount, $ 363,419.47

ITEMS OF COSTS	FOR OPERATOR'S USE: Monthly Total	Totals Previously Reported	Totals To Date	FOR GOVERNMENT USE ONLY: Approved Monthly Total	Approved Totals Previously Reported	Approved Totals To Date
(1) Independent Short Form Contracts:						
Drilling						
Bulldozing	Core 327.6@$4.50 $1474.20	$ 87571.80	$ 89046.00	1474.20	87571.80	89046.00
Crosscutting	xxxxxx Raising	30248.26	30248.26		30248.26	30248.26
Drifting		45578.78	45578.78		45578.78	45578.78
		532003.40	532003.40		532003.40	532003.40
	Sideswipe	29962.50	29962.50		29962.50	29962.50
(2) Labor and Supervision:						
Labor						
Supervision						
Technical Services						
(3) Operating Mat'ls. and Supplies:						
Timber						
Explosives						
Pipe						
Track						
(4) Operating Equipment:						
Rental						
Purchase						
Depreciation						
(5) Initial Rehabilitation and Repairs						
(6) New Bldgs., Improvements, etc.						
(7) Miscellaneous:						
Repairs to Equipment						
Sampling and Analysis						
Payroll Taxes						
Liability Insurance						
(8) Contingencies (specify):						
TOTALS	$1474.20	$725364.74	$726838.94	1474.20	725,364.74	726 838.94

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

Date 9-5-57 *Payee Polaris Mining Company

Per John R. Matthews Title ~~President~~ Treasurer

*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:

$ —0—

Signature Dorothy F. Long
(Authorized Certifying Officer)

Date 9/11/57 Vou. No. 2040

(See other side)

Carried to Mg-104, Stage II
Payment made from same.

(For Government use only)

CERTIFICATION BY GOVERNMENT REPRESENTATIVE:

I certify that to the best of my knowledge and belief the contractor submitting this voucher is operating a Defense Minerals Exploration Administration project under Contract No. E 541 in accordance with the terms of the contract.

Signature /s/ John A. Bardell Title Metallurgist Date 9/10/57

APPROVAL BY DMEA EXECUTIVE OFFICER OR ALTERNATE:

Signature /s/ D. R. MacLaren Title Alternate Act. Exec. Officer Date 9/10/57

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.

[redacted]F-104A
(April 1952)

Budget Bureau No. 42-R1151.2

UNITED STATES
DEPARTMENT OF THE INTERIOR

DEFENSE MINERALS EXPLORATION ADMINISTRATION

OPERATOR'S UNIT COST AND PROGRESS REPORT

Stage I

Month of August 7 Docket No. DMEA 2879 Contract IDM-E541

Operator's Name Polaris Mining Company

Address Box 325 Wallace, Idaho

Contract Copper, Lead, Antimony (and incidental silver)

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
	feet			$532003.40	10694.8	$49.74)	11618.4	$51.00**
Drifting				45578.78	923.6	49.35)		
~~Cross Cut~~ Sidewipe				30248.26	324.1	93.33	330	93.33*
Raising				29962.50	1175.0	25.50	1175	25.50*
Shafts		$1474.20	327.6	89046.00	19788.0	4.50	19788	4.50*
Winzes								
Drilling: Core								
Churn								
Auger								
Stripping								
Trenching								
Test Pits								
Roads and Trails								
Total Distributed Costs								Total Costs Authorized by Contract
Operating Equipment Purchased								
Initial Rehabilitation and Repairs								
New Buildings, Improvements, etc.								
Total Costs								

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

Date 9-5-57 Operator Polaris Mining Company

Per John R. Mattson Title President Treasurer

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

(Instructions on reverse)

Remarks:

* Maximum allowed by contract

** 6199.5 @ 50.53
5418.9 @ 48.78
11618.4

(For Government use only)

/s/ John A. Bardill

INSTRUCTIONS

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

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

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

GPO 872894

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

Budget Bureau No. 42-R1036.5

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION

OPERATOR'S MONTHLY REPORT AND VOUCHER

Stage II

Month of July, 1957 Docket No. DMEA 2879 Contract No. IDM-E 541
Operator's Name Polaris Mining Company Minerals Copper, Lead, Antimony (& incidental Silver)
Address Box 320, Wallace, Idaho
Contract Amount, $147,000.00 Government Participation: 50 % Amount, $73,500.00

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 17.3 @ $48.78	$ 843.89	$ - -	$ 843.89	843.89	-0-	843.89
Drifting 61.2 @ $48.78	2985.34	3999.96	6985.30	2985.34	3999.96	6985.30
(2) Labor and Supervision:						
Labor						
Supervision						
Technical Services						
(3) Operating Mat'ls. and Supplies:						
Timber						
Explosives						
Pipe						
Track						
(4) Operating Equipment:						
Rental						
Purchase						
Depreciation						
(5) Initial Rehabilitation and Repairs						
(6) New Bldgs., Improvements, etc.						
(7) Miscellaneous:						
Repairs to Equipment						
Sampling and Analysis						
Payroll Taxes						
Liability Insurance						
(8) Contingencies (specify): Stage I				1929.60	723,435.14	725,364.74
TOTALS	$3829.23	$3999.96	$7829.19	5758.83	727,435.10	733,193.93

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

Date 8-7-57 *Payee Polaris Mining Company

Per [signature] Title President

*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:

2879.42

$ 2879.42

Signature [signature] (Authorized Certifying Officer)

Date 8/21/57 Vou. No. 2078

(See other side)

(For Government use only)

CERTIFICATION BY GOVERNMENT REPRESENTATIVE:

I certify that to the best of my knowledge and belief the contractor submitting this voucher is operating a Defense Minerals Exploration Administration project under Contract No. E-541 in accordance with the terms of the contract.

Signature /s/ John D. Bardill Title Metallurgist Date 8/19/57

APPROVAL BY DMEA EXECUTIVE OFFICER OR ALTERNATE:

Signature /s/ A. E. Weissenborn Title Exec. Officer Date 8/20/57

MONTHLY REPORT OF OPERATOR

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

Form MF-104A
(April 1952)

Budget Bureau No. 42-R1151.2

UNITED STATES
DEPARTMENT OF THE INTERIOR

DEFENSE MINERALS EXPLORATION ADMINISTRATION

OPERATOR'S UNIT COST AND PROGRESS REPORT

Stage II

Month of July 1957 Docket No. DMEA 2879 Contract No. IDM-E541

Operator's Name Polaris Mining Company Minerals Copper, Lead, Antimony (and incidental Silver)

Address Box 320, Wallace, Idaho

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	feet	$2985.34	61.2	$6985.30	143.2 (165.5)	48.78	2500	$48.78 *
Crosscutting		843.89	17.3	843.89	17.3			
Raising								
Shafts ~~Sideswipe~~							100	25.25 (50) *
Winzes								
Drilling: Core							5000	4.50 *
Churn								
Auger								
Stripping								
Trenching								
Test Pits								
Roads and Trails								
TOTAL DISTRIBUTED COSTS								TOTAL COSTS AUTHORIZED BY CONTRACT
Operating Equipment Purchased								
Initial Rehabilitation and Repairs								
New Buildings, Improvements, etc								
TOTAL COSTS								

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

Date 8-7-57 Operator Polaris Mining Company

Per J. B. Ardell Title President

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)

/s/ John D. Bardill

INSTRUCTIONS

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

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

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

GPO 872894

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

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION

Budget Bureau No. 42-R1036.5

OPERATOR'S MONTHLY REPORT AND VOUCHER

Stage I

Month of July, 1957 Docket No. DMEA 2879 Contract No. IDM-E 541
Operator's Name Polaris Mining Company Minerals Copper, Lead, Antimony (and incidental Silver)
Address Box 320, Wallace, Idaho
Contract Amount, $ 726,838.94 Government Participation: 50 % Amount, $ 363,419.47

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 Core 428.8 @ $4.50	$ 1929.60	$ 85642.20	$ 87571.80	1929.60	85642.20	87,571.80
Bulldozing Raising		30248.26	30248.26		30248.26	30,248.26
Crosscutting		45578.78	45578.78		45578.78	45,578.78
Drifting		532003.40	532003.40		532,003.40	532,003.40
Sideswipe		29962.50	29962.50		29,962.50	29,962.50
(2) Labor and Supervision:						
Labor						
Supervision						
Technical Services						
(3) Operating Mat'ls. and Supplies:						
Timber						
Explosives						
Pipe						
Track						
(4) Operating Equipment:						
Rental						
Purchase						
Depreciation						
(5) Initial Rehabilitation and Repairs						
(6) New Bldgs., Improvements, etc.						
(7) Miscellaneous:						
Repairs to Equipment						
Sampling and Analysis						
Payroll Taxes						
Liability Insurance						
(8) Contingencies (specify):						
TOTALS	$ 1929.60	$723435.14	$725364.74	1929.60	723,435.14	725,364.74

I certify that the above bill is correct and just and that payment therefor has not been received.
Date 8-7-1957 *Payee Polaris Mining Company
Per [signature] Title President

*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:

$ —o—

Signature [signature]
(Authorized Certifying Officer)

Date 8/21/57 Vou. No. 2028
(See other side)

Carried to My-104 Stage II
Payment made from Base.

(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. 2541 in accordance with the terms of the contract.

Signature /s/ John D. Gardiel Title Metallurgist Date 8/19/57

APPROVAL BY DMEA EXECUTIVE OFFICER OR ALTERNATE:

Signature /s/ A. E. Weissenborn Title Exec. Officer Date 8/20/57

MONTHLY REPORT OF OPERATOR

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

Form MF-104A
(April 1952)

Budget Bureau No. 42-R1151.2

UNITED STATES
DEPARTMENT OF THE INTERIOR

DEFENSE MINERALS EXPLORATION ADMINISTRATION

OPERATOR'S UNIT COST AND PROGRESS REPORT

Stage I

Month of July 1957 Docket No. DMEA 2879 Contract No. IDM-E 541

Operator's Name Polaris Mining Company Minerals Copper, Lead, Antimony

Address Box 320, Wallace, Idaho (and incidental Silver)

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	feet			$532003.40	10694.8	$49.75)	11618.4	$51.00**
Crosscutting				45578.78	923.6	49.41)	324.1	
Raising				30248.26	324.1	93.33	~~330~~	93.33*
~~xxxx~~ Sideswipe				29962.50	1175.0	25.50	1175	25.50*
Winzes								
Drilling: Core		$1929.60	428.8	87571.80	19460.4	4.50	19788	4.50*
Churn								
Auger								
Stripping								
Trenching								
Test Pits								
Roads and Trails								
TOTAL DISTRIBUTED COSTS							TOTAL COSTS AUTHORIZED BY CONTRACT	
Operating Equipment Purchased								
Initial Rehabilitation and Repairs								
New Buildings, Improvements, etc.								
TOTAL COSTS								

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

REMARKS:

Date 8-7-1957 Operator Polaris Mining Company

Per [signature] Title President

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)

* Maximum allowed by contract

** 6,199.5 @ $50.53
5,418.9 @ 48.78
11,618.4

/s/ John A. Bardell

INSTRUCTIONS

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

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

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

GPO 872894

POLARIS MINING COMPANY
P. O. Box 320
WALLACE, IDAHO

August seventh
1957

Defense Minerals Exploration Administration
United States Department of the Interior
1201 North Division Street
Spokane, Washington

Re: Progress Report
Polaris East Exploration Project
July - 1957
Docket No. DMEA - 2879
Contract No. IDM - E541

Gentlemen:

Progress in the Polaris East Exploration Project included 61.2 feet of drifting, 17.3 feet of crosscutting and 428.8 feet of diamond drilling.

The easterly drift was advanced 61.2 feet to station SS3089 + 108.7 feet. Mineralization shown in this drift continued to be weak.

No. 334 North Crosscut was driven 17.3 feet for a diamond drill station. This crosscut exposed a 2.0 foot to 4.0 foot wide siderite-quartz-pyrite vein with minor tetrahedrite, as shown on the attached map.

Diamond drill hole 3294 was advanced 428.8 feet showing no significant mineralization.

As shown on the attached map, 331-B Raise was started on the north-south siderite vein and was driven 2.0 feet during the month of July.

Yours very truly,

M. W. Hutchinson

M. W. Hutchinson
Geologist

MWH:nn

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

Budget Bureau No. 42-R1036.5

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION

OPERATOR'S MONTHLY REPORT AND VOUCHER

Stage II

Month of February thru June, 1957 Docket No. DMEA 2879 Contract No. IIM-E 541

Operator's Name Polaris Mining Company Minerals Coppor, Lead, Antimony (and incidental Silver)

Address Box 320 Wallace, Idaho

Contract Amount, $ 147,000.00 Government Participation: 50 % Amount, $ 73,500.00

ITEMS OF COSTS	FOR OPERATOR'S USE: Monthly Total	Totals Previously Reported	Totals To Date	FOR GOVERNMENT USE ONLY: Approved Monthly Total	Approved Totals Previously Reported	Approved Totals To Date
(1) Independent / Short Form Contracts:						
Drilling						
Bulldozing						
Crosscutting						
Drifting 82.0 @ $48.78	$3999.96		$3999.96	3999.96	–	3999.96
(2) Labor and Supervision:						
Labor						
Supervision						
Technical Services						
(3) Operating Mat'ls. and Supplies:						
Timber						
Explosives						
Pipe						
Track						
(4) Operating Equipment:						
Rental						
Purchase						
Depreciation						
(5) Initial Rehabilitation and Repairs						
(6) New Bldgs., Improvements, etc.						
(7) Miscellaneous:						
Repairs to Equipment						
Sampling and Analysis						
Payroll Taxes						
Liability Insurance						
(8) Contingencies (specify):						
Stage I				19,042.46	704,392.68	723,435.14
TOTALS	$3999.96		$3999.96	23,042.42	704,392.68	727,435.10

RECEIVED AUG 5 1957 D.M.E.A.

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

Date 7-12-1957 *Payee Polaris Mining Company

Per [signature] Title President

*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:

$ 11,521.21

Signature Dorothy T. Lang (Authorized Certifying Officer)

Date 8/1/57 Vou. No. 2009

(See other side)

(For Government use only)

CERTIFICATION BY GOVERNMENT REPRESENTATIVE:

I certify that to the best of my knowledge and belief the contractor submitting this voucher is operating a Defense Minerals Exploration Administration project under Contract No. E 541 in accordance with the terms of the contract.

Signature /s/ John D. Bardell Title Metallurgist Date July 17, 1957

APPROVAL BY DMEA EXECUTIVE OFFICER OR ALTERNATE:

Signature /s/ A. E. Weissenborn Title Exec. Officer Date July 24, 1957

MONTHLY REPORT OF OPERATOR

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

Form MF-104A
(April 1952)

Budget Bureau No. 42-R1151.2

UNITED STATES
DEPARTMENT OF THE INTERIOR

DEFENSE MINERALS EXPLORATION ADMINISTRATION

OPERATOR'S UNIT COST AND PROGRESS REPORT

Stage II

Month of February thru June 1957 Docket No. DMEA 2879 Contract No. DMI-R 541

Operator's Name Polaris Mining Company Minerals Copper, Lead, Antimony (and incidental Silver)

Address Box 320 Wallace, Idaho

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	feet	$3999.96	82.0	$3999.96	82.0	$48.78	2500	$48.78*
Crosscutting								
Raising								
~~Stmk~~ Sideswipe		-	-	-	-	-	100	25.50*
Winzes								
Drilling: Core		-	-	-	-	-	5000	4.50*
Churn								
Auger								
Stripping								
Trenching								
Test Pits								
Roads and Trails								
TOTAL DISTRIBUTED COSTS								TOTAL COSTS AUTHORIZED BY CONTRACT
Operating Equipment Purchased								
Initial Rehabilitation and Repairs								
New Buildings, Improvements, etc.								
TOTAL COSTS								

RECEIVED AUG 5 1957 D.M.E.A.

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

REMARKS:

Date 7-12-1957 Operator Polaris Mining Company

Per [signature] Title President

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)

* Maximum allowed by contract

/s/ John D. Bardill

INSTRUCTIONS

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

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

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

GPO 872894

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

Budget Bureau No. 42-R1036.5

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

Stage I

Month of February thru June 1957 Docket No. DMEA 2879 Contract No. IIM-E 541

Operator's Name Polaris Mining Company Minerals Copper, Lead, Antimony (& incidental Silver)

Address Box 320, Wallace, Idaho

Contract Amount, $ 726,838.94 Government Participation: 50 % Amount, $ 363,419.47

ITEMS OF COSTS	FOR OPERATOR'S USE: Monthly Total	Totals Previously Reported	Totals To Date	FOR GOVERNMENT USE ONLY: Approved Monthly Total	Approved Totals Previously Reported	Approved Totals To Date
(1) Independent Short Form Contracts $4.50						
Drilling Core 2189.4 @	$ 9852.30	$ 75789.90	$ 85642.20	9852.30	75,789.90	85,642.20
~~xxxxxx~~ Raising	-	30248.26	30248.26		30,248.26	30,248.26
Crosscutting 94.2 @ $48.78	4595.08	40983.70	45578.78	4595.08	40,983.70	45,578.78
Drifting 94.2 @ $48.78	4595.08	527408.32	532003.40	4595.08	527,408.32	532,003.40
Sideswipe	-	29962.50	29962.50		29,962.50	29,962.50
(2) Labor and Supervision:						
Labor						
Supervision						
Technical Services						
(3) Operating Mat'ls. and Supplies:						
Timber						
Explosives						
Pipe						
Track						
(4) Operating Equipment:						
Rental						
Purchase						
Depreciation						
(5) Initial Rehabilitation and Repairs						
(6) New Bldgs., Improvements, etc.						
(7) Miscellaneous:						
Repairs to Equipment						
Sampling and Analysis						
Payroll Taxes						
Liability Insurance						
(8) Contingencies (specify):						
TOTALS	$19042.46	$704392.68	$723435.14	19042.46	704,392.68	723,435.14

RECEIVED AUG 5 1957 D.M.E.A.

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

Date 7-12-1957 *Payee Polaris Mining Company

Per J. B. Campbell Title President

*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)

Carried to MF-104 - Stage II
Payment made from Same.

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

$ —0—

Signature Dorothy F. Long
(Authorized Certifying Officer)

Date 8/1/57 Vou. No. 2009
(See other side)

(For Government use only)

CERTIFICATION BY GOVERNMENT REPRESENTATIVE:

I certify that to the best of my knowledge and belief the contractor submitting this voucher is operating a Defense Minerals Exploration Administration project under Contract No. E 541 in accordance with the terms of the contract.

Signature /s/ John D. Bardill Title Metallurgist Date July 17, 1957

APPROVAL BY DMEA EXECUTIVE OFFICER OR ALTERNATE:

Signature /s/ W. E. Weissenborn Title Exec. Officer Date July 24, 1957

MONTHLY REPORT OF OPERATOR

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

Form MF-104A
(April 1952)

Budget Bureau No. 42-R1151.2

UNITED STATES
DEPARTMENT OF THE INTERIOR

DEFENSE MINERALS EXPLORATION ADMINISTRATION

OPERATOR'S UNIT COST AND PROGRESS REPORT

Stage I

Month of February thru June 7 195 7 Docket No. DMEA 2879 Contract No. HM-E 541

Operator's Name Polaris Mining Company Minerals Copper, Lead, Antimony (and Incidental Silver)

Address Box 320 Wallace, Idaho

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	Feet	$ 4595.08	94.2	$ 532003.40	10694.8	$49.75)	11618.4	$ 51.00**
Crosscutting		4595.08	94.2	45578.78	923.6	49.41)		
Raising		-	-	30248.26	324.1	93.33	330	93.33*
xxxx Sideswipe Shafts		-	-	29962.50	1175.0	25.50	1175	25.50*
Winzes		-	-	-	-	-	-	-
Drilling: Core		9852.30	2189.4	85642.20	19031.6	4.50	19788	4.50*
Churn								
Auger								
Stripping								
Trenching								
Test Pits								
Roads and Trails								
Total Distributed Costs								Total Costs Authorized by Contract
Operating Equipment Purchased								
Initial Rehabilitation and Repairs								
New Buildings, Improvements, etc.								
Total Costs								

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

Date 7-12-1957 Operator Polaris Mining Company

Per J. D. Barkell Title President

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)

* Maximum allowed by contract

** 6199.5 @ $50.53
5418.9 @ 48.78
11618.4

/s/ John D. Barkell

RECEIVED AUG 5 1957 D.M.E.A.

INSTRUCTIONS

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

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

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

GPO 872894

1 Copy to M.

POLARIS MINING COMPANY

P. O. Box 320
WALLACE, IDAHO

July second
1957

Defense Minerals Exploration Administration
United States Department of the Interior
1201 North Division Street
Spokane, Washington

Re: Progress Report
Polaris East Exploration Project
June - 1957
Docket No. DMEA - 2879
Contract No. IDM - E541

Gentlemen:

Progress in the Polaris East Exploration Project during June consisted of 79.7 feet of diamond drilling.

Neither the main easterly heading nor the southwesterly drift was advanced during the month. Work in these headings has been suspended while approximately 3400 feet of 24" fan line is being installed to improve ventilation.

Diamond Drill hole 3293 was advanced 79.7 feet to a depth of 332.5 feet as shown on the attached map. This hole has not yet intersected the upward extension of the north-south siderite vein. While the larger fan line is being installed, hole 3294 will be drilled southerly from a point near station SS3023. Hole 3293 will be completed after hole 3294 has been drilled.

Advance in the main easterly will be resumed as soon as ventilation alterations are completed.

Yours very truly,

M. W. Hutchinson

M. W. Hutchinson
Geologist

MWH:nn

1 Cy to Wash. 6/21/57

POLARIS MINING COMPANY

P. O. Box 320
WALLACE, IDAHO

June sixth
1957

OFFICIAL FILE COPY
DMEA
RECEIVED AUG 5 1957

DATE	INITIALS	CODE

Defense Minerals Exploration Administration
United States Department of the Interior
1201 North Division Street
Spokane, Washington

Re: Progress Report
Polaris East Exploration Project
May - 1957
Docket No. DMEA - 2879
Contract No. IDM-E541

Gentlemen:

Progress in the Polaris East Exploration Project during May included 206.7 feet of drifting, 15.0 feet of sideswiping and 279.8 feet of diamond drilling.

The easterly drift was advanced 18.5 feet to station SS3089 plus 47.5 feet. The fault-vein structure in this drift continued to show only weak mineralization.

The southerly drift was extended to station SS3093 plus 109.0 feet for an advance of 188.2 feet. As shown on the attached 50 scale map the siderite vein in this drift continued southwesterly to a point just back of the present face where it appears to have been offset by a minor fault. The probable continuation of this vein will be explored by diamond drilling before further southwesterly drifting is done. No mineralization of importance was exposed in this vein during the month.

A portion of the southerly drift in the area of the 143 foot long ore shoot was timbered in preparation for raising on this shoot. A preliminary estimate shows 160 tons of ore assaying 28.4 ounces silver and 0.41 percent copper per ton were produced.

Diamond drill hole 3292 was completed at a depth of 281.5 feet, showing no further mineralization of importance beyond the vein as described in the April report. The log of this hole is enclosed.

Hole 3293 is now being drilled southeasterly from a point near station SS3078 at a vertical angle of plus 32° to further explore the area over the more interesting portion of the north-south siderite vein. At the end of May it had reached a depth of 252.8 feet.

Hole 3287 did not intersect the vein exposed in the southwesterly drift as would have been the case if the hole had continued S. 6° E. as started. This hole was evidently deflected westerly approaching a course more nearly normal to the general strike and dip of the beds in this locality. It will be surveyed after hole 3293 is completed and the results of this survey will be included along with the log of hole 3293 in next month's report.

Yours very truly,

M. W. Hutchinson

M. W. Hutchinson
Geologist

MWH:mm

1 Cy to Wash. 6/5/57

POLARIS MINING COMPANY

P. O. BOX 320
WALLACE, IDAHO

May seventh
1957

Defense Minerals Exploration Administration
United States Department of the Interior
1201 North Division Street
Spokane, Washington

Re: Progress Report
Polaris East Exploration Project
April - 1957
Docket No. DMEA - 2879
Contract No. IDM-E541

Gentlemen:

Progress in the Polaris East Exploration Project during April included 245.5 feet of drifting, 67 feet of sideswiping and 429.5 feet of diamond drilling.

The easterly drift was extended to station SS3089 plus 29.0 feet east for an advance of 40.9 feet. As shown on the attached 50-scale maps, the fault-vein structure in this drift is quite strong in siderite-pyrite veining, but contains only minor amounts of tetrahedrite and chalcopyrite.

The southerly drift was started again and advanced 204.6 feet during April to station SS3091 plus 142.0 feet. After a small fault offset, the siderite vein in this drift continued southwesterly, but is only weakly mineralized.

Diamond drill hold No. 3291 was extended 175.0 feet to a completed depth of 273.0 feet. Several small quartz-pyrite-siderite stringers were intersected, but the highest sludge assay was 4.2 ounces silver at 85-90. The log of this hole is enclosed.

Diamond drill hole 3292 is now being drilled southeasterly from a point near station SS3078 at a vertical angle of plus 35°. At the end of April, it had reached a depth of 245.5 feet. Since the end of the month, this hole intersected the north-south siderite vein at 255.5 to 263.0 feet, approximately 105 feet vertically above former station SS3083A. Sludge samples from 255-260 feet and 260.265 feet assayed 17.0 ounces silver, 0.53 percent copper and 4.0 ounces silver and 0.08 percent copper respectively. The location of this hole is shown on the enclosed map.

Yours very truly,

M.W. Hutchinson

M. W. Hutchinson
Geologist

MWH:mm
Enclosures

W
1 Copy to Wash. 4/26

POLARIS MINING COMPANY

P. O. Box 320
WALLACE, IDAHO

OFFICIAL FILE COPY
DMEA
RECEIVED AUG 5 1957

DATE	INITIALS	CODE

April eighth
1957

Defense Minerals Exploration Administration
United States Department of the Interior
1201 North Division Street
Spokane, Washington

Re: Progress Report
Polaris East Exploration Project
March - 1957
Docket DMEA-2879
Contract No. IDM-E541

Gentlemen:

Progress in the Polaris East Exploration Project during March included 234.3 feet of drifting, 65.0 feet of sideswiping and 830.7 feet of diamond drilling.

The southerly drift on the "north-south" siderite vein was extended to station SS3088 plus 120.2 feet south for an advance of 220.5 feet during March. At the beginning of the month, the south drift had exposed a commercial grade section of the vein 81.0 feet long. The drift continued in ore for an additional 62.5 feet bringing the total length of this shoot to 143.5 feet. Based on face sample data, the grade of this shoot is 33.2 ounces silver and 0.72 percent copper, with an average width of 6.8 feet. This shoot was followed on the south by a 36 foot section of very weak mineralization and then another commercial shoot 37.5 feet long, 4.5 feet wide, with an average grade of 35.2 ounces silver and 1.50 percent copper.

As shown on the accompanying geologic map for the March advance, the vein continued south for a short distance and then turned westerly where it continued along a S. 30° W. bearing. Beyond the last small ore shoot the vein becomes narrower and is only weakly mineralized. The vein has nearly pinched out in the south face and the drift has been stopped. The possibility of an offset and continuation of the vein to the south will be explored by diamond drilling.

After discontinuing the south drift, easterly exploration along the main east-west zone was started again and as of the end of the month the drift had advanced 13.8 feet. The fault-vein structure is quite strong but is only weakly mineralized.

As shown on the enclosed map, diamond drill holes 3288 and 3289 were drilled to further explore both the north and south walls of the main east-west structure.

Numerous small slips and small pyrite and siderite stringers were encountered but no structures of significance were found.

A third diamond drill hole, No. 3290, was drilled northerly from station SS3073 to intersect the east-west mineralized zone between holes 3281 and 3283 which showed assays of 39.3 and 25.2 ounces silver respectively. (The locations of holes 3281 and 3283 are shown on the map accompanying the progress report for October, 1956.) Hole 3290 intersected the mineralized zone at 213 feet and was completed at a depth of 271 feet. Sludge samples from 210-215 and 215-220 feet assayed 11.6 ounces silver, 0.41 percent copper and 7.9 ounces silver and 0.22 percent copper respectively. The split core sample from the vein at 213.3-215.6 feet assayed 19.0 ounces silver and 0.63 percent copper.

Diamond drill hole 3291 now being drilled northerly from near station SS3074 will intersect the zone about 75 feet east of Hole 3283. At the end of the month, the hole had reached a depth of 78.0 feet.

Holes 3290 and 3291 were planned to further explore and check the continuity of the near commercial assays obtained in the earlier drilling in this part of the zone. The results thus far indicate that the ore sections would likely be too marginal and short in length to justify further exploration by drifting.

The logs of the three holes completed in March are enclosed.

Yours very truly,

H. E. Harper
Chief Geologist

HEH:mm

Enclosures

1 copy to Wash. 4/26

POLARIS MINING COMPANY

P. O. Box 320
WALLACE, IDAHO

OFFICIAL FILE COPY
DMEA
RECEIVED AUG 5 1957

DATE	INITIALS	CODE

March eleventh
1957

Defense Minerals Exploration Administration
United States Department of the Interior
1201 North Division Street
Spokane, Washington

Re: Progress Report
Polaris East Exploration Project
February - 1957
Docket DMEA-2879
Contract No. IDM-E541

Gentlemen:

Progress in the Polaris East Exploration Project during February included 207.2 feet of drifting and crosscutting, 102 feet of sideswiping and 569.7 feet of diamond drilling.

The work during February was confined to exploration of the north-south siderite vein which was intersected by the main easterly drift in January. North of the original drift, near Station SS3080 (now replaced by SS3083), the vein was explored by an easterly drift which was driven a length of 103.0 feet during the period. As shown on the attached 50-scale map, the vein was followed northeasterly for a distance of about 40 feet where it junctions with a strong south dipping fault striking about S. 80° E., and then turns easterly along the fault. The vein is 4.5 to 6.0 feet wide where it junctions with the fault and a short section, 25 feet long, averages about 30.0 ounces silver and 0.80% copper. East of this section, the vein becomes narrower and the present face is very weak.

To the south, the crosscut driven southerly from station SS3083 during January was advanced 5.0 feet in February and then connected with a second crosscut driven southerly from station SS3081 to provide a larger radius curve. After intersecting the vein, this latter crosscut was continued as a southerly drift along the vein. Total advance in this crosscut and drift for February was 99.2 feet. As shown on the attached map the vein is nearly vertical and has changed in strike from S. 30° W. to about S. 30° E.

Calculation of the sample data in the south drift up to March 1 indicates an ore shoot 81.0 feet long, 6.2 feet wide, with a weighted average grade of 32.39 ounces silver and 0.80% copper. Since March 1, the drift has advanced about 45 feet in ore which adds considerably to the length of this shoot.

During February diamond drill hole SS3287 was drilled southerly from the face of the south crosscut at station SS3077 plus 20 feet west. The hole cut numerous small quartz-pyrite-siderite stringers in the first 150 feet but no significant structures were encountered. The hole was completed at a depth of 569.7 feet and the log is enclosed.

Yours very truly,

H. E. Harper
Chief Geologist

HEH:mm

Enclosure

OFFICIAL FILE COPY
DMEA
RECEIVED AUG 5 1957

DATE	INITIALS	CODE

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

Budget Bureau No. 42-R1036.5

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

Month of January, 1957 Docket No. DMEA 2879 Contract No. [illegible]-5 541
Operator's Name Polaris Mining Company Minerals Copper, Lead, Antimony (and incidental silver
Address Box 320 - Wallace, Idaho
Contract Amount, $ 727,390.00 Government Participation: 50% Amount, $ 363,695.00

ITEMS OF COSTS	FOR OPERATOR'S USE: Monthly Total	Totals Previously Reported	Totals To Date	FOR GOVERNMENT USE ONLY: Approved Monthly Total	Approved Totals Previously Reported	Approved Totals To Date
(1) Independent Short Form Contracts:						
Drilling core 900.0 @ 40.50	4050.00	$71,739.90	$ 75,789.90	4050.00	71739.90	75789.90
Raising		30,248.26	30,248.26		30248.26	30248.26
Crosscutting 62.6 @ 48.78	3053.63	37,930.07	40,983.70	3053.63	37930.07	40983.70
Drifting 244.0 @ 48.78	11902.32	515,506.00	527,408.32	11902.32	515506.00	527408.32
Sidewipe		29,962.50	29,962.50		29962.50	29962.50
(2) Labor and Supervision:						
Labor						
Supervision						
Technical Services						
(3) Operating Mat'ls. and Supplies:						
Timber						
Explosives						
Pipe						
Track						
(4) Operating Equipment:						
Rental						
Purchase						
Depreciation						
(5) Initial Rehabilitation and Repairs						
(6) New Bldgs., Improvements, etc.						
(7) Miscellaneous:						
Repairs to Equipment						
Sampling and Analysis						
Payroll Taxes						
Liability Insurance						
(8) Contingencies (specify):						
TOTALS	$19005.95	$685,386.73	$704,392.68	19005.95	685386.73	704392.68

RECEIVED JUL 12 1957 D.M.E.A.

I certify that the above bill is correct and just and that payment therefor has not been received.
Date 2/22/57 *Payee Polaris Mining Company
Per [signature] Title President

*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:

$ 9502.98

Signature Dorothy F. Long
(Authorized Certifying Officer)

Date 7-5-57 Vou. No. 2000

(See other side)

(For Government use only)

CERTIFICATION BY GOVERNMENT REPRESENTATIVE:

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

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

APPROVAL BY DMEA EXECUTIVE OFFICER OR ALTERNATE:

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

MONTHLY REPORT OF OPERATOR

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

GPO 872893

Form 42F-104M
(April 1952)

Budget Bureau No. 42-R1151.2

UNITED STATES
DEPARTMENT OF THE INTERIOR

DEFENSE MINERALS EXPLORATION ADMINISTRATION

OPERATOR'S UNIT COST AND PROGRESS REPORT

Month of January 195 7 Docket No. DMEA 2079 Contract No. [illegible]-B 541

Operator's Name Polaris Mining Company Minerals Copper, Lead, Antimony (and incidental silver)

Address Box 320 - Wallace, Idaho

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	feet	21972.32	244.0	527,408.32	10600.0	49.75	11618.4	551.00*
Crosscutting		3053.63	62.0	40,983.70	829.4	49.41		
Raising				30,240.26	324.1	93.33	330	93.33*
~~Shafts~~ Sidewripe				29,962.50	1175.0	25.50	1175	25.50*
Winzes								
Drilling: Core		4650.05	900.0	75,709.90	16842.2	4.50	19788	4.50*
Churn								
Auger								
Stripping								
Trenching								
Test Pits								
Roads and Trails								
TOTAL DISTRIBUTED COSTS		19005.95		704392.68				TOTAL COSTS AUTHORIZED BY CONTRACT
Operating Equipment Purchased								
Initial Rehabilitation and Repairs								
New Buildings, Improvements, etc								
TOTAL COSTS		19005.95		704392.68				727390.00

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

REMARKS:

Date 2/12/57 Operator Polaris Mining Company

Per [signature] Title President

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)

* Maximum allowed by contract

** 6199.5 @ 50.53
5418.9 @ 48.78
11618.4

RECEIVED JUL 12 1957 D.M.E.A.

INSTRUCTIONS

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

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

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

GPO 872894

POLARIS MINING COMPANY

P. O. Box 320
WALLACE, IDAHO

February fourteenth
1957

OFFICIAL FILE COPY
DMEA
RECEIVED JUL 12 1957

RECEIVED
BUREAU OF MINES
FEB 15 1957
SPOKANE, WASH

DATE	INITIALS	CODE

Defense Minerals Exploration Administration
United States Department of the Interior
1201 North Division Street
Spokane, Washington

Re: ~~Progress Report~~
~~Polaris~~ East Exploration Project
January - 1957
~~Docket DMEA-2879~~
Contract No. IDM-E541

Gentlemen:

Progress in the Polaris East Exploration Project during January included 306.6 feet of drifting and crosscutting, 20 feet of sideswiping, and 900 feet of diamond drilling.

During January the main east drift was extended southeasterly 244.0 feet. For the most part, this followed the main structure, although poor ground conditions required some timbering and necessitated driving part of the drift along the hanging wall of the fault-vein. Numerous cross faults and a few narrow mineralized veins were exposed by the drift as shown on the attached 50-scale map.

About five feet east of station SS3080, the drift intersected a fairly large, weakly mineralized siderite vein which strikes N. 35-40 E. and appears to be intersecting the main east-west zone from the south. As shown on the enclosed map, a 27.6 foot north crosscut was driven from station 3080 to explore the extension of a cross fault which appears to displace the main east-west structure and a 35.0 foot south crosscut was driven to explore the large siderite vein. The vein contains scattered tetrahedrite and a little chalcopyrite, though most of its length and the face sample at the end of the mouth assayed 20.4 ounces silver and 0.80% copper across a width of 8.5 feet. Because of its altitude, the strike length of the vein will probably not be great but its importance will not be known until further drifting and diamond drilling is done.

Diamond drill hole 3286, drilled northeasterly from the end of the crosscut at station 3076 + 30 feet north, was completed at a depth of 900 feet. A few small stringers and faults were intersected but none were significant and the highest sludge assay was 1.7 ounces silver at 250-255 feet. The log of this hole is enclosed.

Yours very truly,

H E Harper

H. E. Harper
Chief Geologist

HEH:mm

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

Budget Bureau No. 42-R1036.5

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION

OPERATOR'S MONTHLY REPORT AND VOUCHER

Month of December, 1956 Docket No. DMEA 2879 Contract No. [illegible]-2561

Operator's Name Polaris Mining Company Minerals Copper, Lead, Antimony

Address Box 320 - Wallace, Idaho (and incidental silver)

Contract Amount, $ 727,390.00 Government Participation: 50 % Amount, $363,695.00

ITEMS OF COSTS	FOR OPERATOR'S USE: Monthly Total	Totals Previously Reported	Totals To Date	FOR GOVERNMENT USE ONLY: Approved Monthly Total	Approved Totals Previously Reported	Approved Totals To Date
(1) Independent Short Form Contracts:						
Drilling Core 322.0 @ 4.50 $1449	$	$ 70290.90	$ 71739.90	1449.00	70290.90	71739.90
Raising		30248.26	30248.26		30248.26	30248.26
Crosscutting 159.3 @ $48.76	$7770.65	30159.42	37930.07	7770.65	30159.42	37930.07
Drifting 77.1 @ $48.78	3760.94	511745.06	515506.00	3760.94	511745.06	515506.00
Sidewipe		29962.50	29962.50		29962.50	29962.50
(2) Labor and Supervision:						
Labor						
Supervision						
Technical Services						
(3) Operating Mat'ls. and Supplies:						
Timber						
Explosives						
Pipe						
Track						
(4) Operating Equipment:						
Rental						
Purchase						
Depreciation						
(5) Initial Rehabilitation and Repairs						
(6) New Bldgs., Improvements, etc.						
(7) Miscellaneous:						
Repairs to Equipment						
Sampling and Analysis						
Payroll Taxes						
Liability Insurance						
(8) Contingencies (specify):						
TOTALS	$22930.59	$662406.14	$685336.73	12980.59	672406.14	685386.73

RECEIVED JAN 24 1957 D.M.E.A.

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

Date 1-7-57 *Payee Polaris Mining Company

Per [signature] Title President

*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:

$ 6490 30

Signature [signature]
(Authorized Certifying Officer)

Date 1-18-57 Vou. No. 1928

(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. E541 in accordance with the terms of the contract.

Signature /S/ Eric G. Erickson Title Mining Engr Date 1-14-57

APPROVAL BY DMEA EXECUTIVE OFFICER OR ALTERNATE:

Signature /S/ A. E. Weissenborn Title Exec. Officer Date 1-15-57

MONTHLY REPORT OF OPERATOR

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

Form MF-104A
(April 1952)

Budget Bureau No. 42-R1151.2

UNITED STATES
DEPARTMENT OF THE INTERIOR

DEFENSE MINERALS EXPLORATION ADMINISTRATION

OPERATOR'S UNIT COST AND PROGRESS REPORT

Month of December 1956 Docket No. DMEA 2879 Contract No. [illegible]
Operator's Name Polaris Mining Company Minerals Copper, Lead, Antimony (& Incidental silver)
Address Box 320 — Wallace, Idaho

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	feet	3760.9[illegible]	77.1	515506.00	10356.6	49.78)	11618.4	51.00**
Crosscutting		7770.65	159.3	37930.07	766.8	49.47)		
Raising				30240.26	324.1	93.33	330	93.33*
Shafts: Stoonpipe				29962.50	1175.0	25.50	1175	25.50*
Winzes								
Drilling: Core		2149.00	322.0	71739.90	15942.2	4.50	19700	4.50*
Churn								
Auger								
Stripping								
Trenching								
Test Pits								
Roads and Trails								
TOTAL DISTRIBUTED COSTS								TOTAL COSTS AUTHORIZED BY CONTRACT
Operating Equipment Purchased								
Initial Rehabilitation and Repairs								
New Buildings, Improvements, etc.								
TOTAL COSTS								

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

Date 1-7-57 Operator Polaris Mining Company

Per [signature] Title President

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)

* Maximum allowed by contract
** 6199.5 @ 50.53
5418.9 @ 48.70
11618.4

/s/ Eric G. Erickson

RECEIVED
JAN 24 1957
D.M.E.A.

INSTRUCTIONS

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

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

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

GPO 872894

RECEIVED
BUREAU OF MINES
JAN 11 1957
SPOKANE, WASH.

POLARIS MINING COMPANY

P. O. BOX 320
WALLACE, IDAHO

RECEIVED
JAN 24 1957
D.M.E.A.

January eighth
1 9 5 7

Defense Minerals Exploration Administration
United States Department of the Interior
1201 North Division Street
Spokane, Washington

Re: Progress Report
Polaris East Exploration Project
December - 1956
Docket DMEA-2879
Contract No. IDM-E541

Gentlemen:

Progress in the Polaris East Exploration Project during the month of December included 159.3 feet of crosscutting, 77.1 feet of drifting, 70.0 feet of side-swiping and 322.0 feet of diamond drilling.

During December the footwall drift was advanced 73.1 feet easterly and the vein was then explored by two crosscuts (321 and 322) driven southerly from the drift as shown on the attached 50-scale map. Number 321 south crosscut was driven 36.0 feet south to intersect the vein at a point about 70 feet east of the vein-intersection in the main crosscut. At this point the vein is a fairly strong fault-vein structure varying from 2.5 to 4 feet in width and composed largely of fractured and brecciated quartzite, siderite and gouge with considerable pyrite, scattered tetrahedrite, galena and probably jamesonite or boulangerite. A sample across the vein on the west wall assayed 2.5 feet of 13.4 ounces silver, 0.43% copper and 0.1% lead while the weighted average of the samples across the vein on the east wall was 4.2 feet of 28.0 ounces silver, 1.24% copper and 3.8% lead. The assay results of individual samples are shown on the attached map.

Because of ground conditions it was not considered advisable to start drifting on the vein from 321 south crosscut, so a second crosscut (322) was driven 116.3 feet southeasterly from station SS3077 to again intersect the vein. The vein is of similar character here, but narrower, and the best sample was 0.9 feet of 20.5 ounces silver, 1.12% copper and 3.1% lead. From the end of this crosscut a drift was started easterly on the vein and at the end of the month had advanced 4.0 feet.

Diamond drill hole 3285 was extended 322.0 feet to a completed depth of 722 feet and a log of the hole is enclosed. A large fault zone was encountered at 391 to 402 feet and other minor pyritic zones were cut by the hole but no significant mineralization was found.

Diamond drill hole 3286 has now been started from 318 north crosscut at station 3076 + 30 feet northeast and will be drilled northerly to a depth of 1000 feet. The crosscut was advanced 7.0 feet in December to provide room for the drill setup.

Yours very truly,

H. E. Harper

H. E. Harper
Chief Geologist

HEH:mm

Enclosure

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

Budget Bureau No. 42-R1036.5

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION

OPERATOR'S MONTHLY REPORT AND VOUCHER

Month of November 1956 Docket No. DMEA 2879 Contract No. IDM-E541

Operator's Name Polaris Mining Company Minerals Copper, Lead, Antimony (and incidental silver)

Address Box 320 Wallace, Idaho

Contract Amount, $ 727,390.00 Government Participation: 50 % Amount, $ 363,695.00

ITEMS OF COSTS	FOR OPERATOR'S USE: Monthly Total	Totals Previously Reported	Totals To Date	FOR GOVERNMENT USE ONLY: Approved Monthly Total	Approved Totals Previously Reported	Approved Totals To Date
(1) Independent Short Form Contracts:						
Drilling Core	618.8894.50	2784.60	$ 67506.30	2784.60	67506.30	70290.90
Bulldozing Raising			30248.26		30248.26	30248.26
Crosscutting	117.21348.78	5717.02	24442.40	5717.02	24442.40	30159.42
Drifting	17.58348.78	853.65	510891.41	853.65	510891.41	511745.06
Sidewipe			29962.50		29962.50	29962.50
(2) Labor and Supervision:						
Labor						
Supervision						
Technical Services						
(3) Operating Mat'ls. and Supplies:						
Timber						
Explosives						
Pipe						
Track						
(4) Operating Equipment:						
Rental						
Purchase						
Depreciation						
(5) Initial Rehabilitation and Repairs						
(6) New Bldgs., Improvements, etc.						
(7) Miscellaneous:						
Repairs to Equipment						
Sampling and Analysis						
Payroll Taxes						
Liability Insurance						
(8) Contingencies (specify):						
TOTALS	~~$9355.27~~	~~$663050.87~~	~~$672406.14~~	9355.27	663050.87	672406.14

RECEIVED JAN 15 1957 D.M.E.A.

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

Date DEC 17 1956 *Payee Polaris Mining Company

Per [signature] Title President

*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:

$ 4677 64

Signature [signature]
(Authorized Certifying Officer)

Date 1-11-57 Vou. No. 1923
(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. E541 in accordance with the terms of the contract.

Signature 151 Eric G. Erickson Title Mining Engr. Date 1-3-57

APPROVAL BY DMEA EXECUTIVE OFFICER OR ALTERNATE:

Signature 151 A. E. Weissenborn Title Executive Officer Date 1-7-57

MONTHLY REPORT OF OPERATOR

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

Form MF-104A
(April 1952)

Budget Bureau No. 42-R1151.2

RECEIVED JAN 15 1957 D.M.E.A.

UNITED STATES
DEPARTMENT OF THE INTERIOR

DEFENSE MINERALS EXPLORATION ADMINISTRATION

OPERATOR'S UNIT COST AND PROGRESS REPORT

Month of November 1956 Docket No. DMEA 2879 Contract No. ITM-E541

Operator's Name Polaris Mining Company Minerals Copper, Lead, Antimony (& incidental silver)

Address Box 320 Wallace, Idaho

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	Feet	853.65	17.5	$511745.06	10279.5	(49.78)	11618.4	$ 51.00**
Crosscutting		5717.02	117.2	30159.42	607.5	(49.65)		
Raising				30248.26	324.1	93.33	330	93.33*
~~Shaft~~ Sideswipe				29962.50	1175.0	25.50	1175	25.50*
Winzes								
Drilling: Core		2784.60	618.8	70290.90	15620.2	4.50	19788	4.50*
Churn								
Auger								
Stripping								
Trenching								
Test Pits								
Roads and Trails								
TOTAL DISTRIBUTED COSTS								TOTAL COSTS AUTHORIZED BY CONTRACT
Operating Equipment Purchased								
Initial Rehabilitation and Repairs								
New Buildings, Improvements, etc								
TOTAL COSTS								

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

Date DEC 17 1956 Operator Polaris Mining Company

Per [signature] Title President

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

(Instructions on reverse)

REMARKS:

(For Government use only)

* Maximum allowed by contract

** 6199.5 @ 50.53
5418.9 @ 48.78
11618.4

/s/ Eric G Erickson

INSTRUCTIONS

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

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

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

GPO 872894

POLARIS MINING COMPANY
P. O. BOX 320
WALLACE, IDAHO

December seventeenth
1956

RECEIVED
JAN 15 1957
D.M.E.A.

Defense Minerals Exploration Administration
U. S. Department of the Interior
1201 North Division Street
Spokane, Washington

Re: Progress Report
Polaris East Exploration Project
November - 1956
Docket DMEA-2879
Contract No. IDM-E541

Gentlemen:

Progress in the Polaris East Exploration Project during November included 117.2 feet of crosscut, 17.5 feet of drift, 62.3 feet of sideswipe and 618.8 feet of diamond drilling.

The main heading or crosscut was extended northeasterly 117.2 feet and passed through the objective mineralized zone encountering the principal fault-vein along the footwall of the zone at station SS3075 plus 145 feet northeast. At this point the vein strikes S. 75° E., dips 67° south and is about 2.5 feet wide. The vein consists of strongly faulted and breviated quartzite with minor siderite gangue. Considerable pyrite is present but only very minor amounts of tetrahedrite can be seen. Samples from the east and west walls assayed only a trace of copper and 0.6 and 0.4 ounces silver respectively.

Original plans called for drifting easterly on the vein, but due to poor ground conditions (73 feet of crosscut had to be timbered) it was decided that an easterly drift along the north side or footwall of the vein would be most practical. The vein could then be explored at close intervals by short southerly crosscuts and the drift could be turned onto the vein if ground conditions improved. The drift was started about 20 feet in the footwall of the vein and as of the end of November had advanced 17.5 feet.

The first crosscut from the footwall drift has just now reached the vein at a point 70 feet east of the main crosscut. The vein has not been fully exposed nor sampled but specimens of the tetrahedrite indicate that the vein is probably of commercial grade at this point.

Other work during November included 42.3 feet of sideswiping in the main crosscut to complete the train switch and a 20 foot sideswipe at the start of the footwall drift.

Diamond drill hole No. SS3284 was drilled to intercept the mineralized zone about 130 feet west of the vein intercept in the main crosscut. No significant structure or mineralization was noted at the projected position of the vein and the highest sludge assay was 2.5 ounces silver at 85 to 90 feet. The hole was completed at a depth of 218.8 feet.

Diamond drill hole No. SS3285 reached a depth of 400 feet during November and is still advancing. No significant structures were encountered in this distance. The hole is located opposite drill hole 3284 (Station SS3074 + 20 feet west) and is being drilled to explore the area south of the lateral.

A 50-scale map showing the geology of the November advance and the location of the drill holes is enclosed. Also enclosed is the log of hole 3284.

Yours very truly,

H E Harper

H. E. Harper
Chief Geologist

HEH:mm

Enclosure

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

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION

Budget Bureau No. 42-R1036.5

OPERATOR'S MONTHLY REPORT AND VOUCHER

Month of October, 1956 Docket No. DMEA 229 Contract No. IM-2-941
Operator's Name Polaris Mining Co. Minerals Copper Lead Antimony (and Incidental Silver)
Address Box 320 - Wallace, Idaho
Contract Amount, $ [redacted] 727,390.00 Government Participation: 50% Amount, $ [redacted] 363,695.00

ITEMS OF COSTS	FOR OPERATOR'S USE: Monthly Total	Totals Previously Reported	Totals To Date	FOR GOVERNMENT USE ONLY: Approved Monthly Total	Approved Totals Previously Reported	Approved Totals To Date
(1) Independent Short Form Contracts:						
Drilling	$ 2,470.95	$ 65,035.35	$ 67,506.30	2470.95	65035.35	67506.30
Blasting		30,248.26	30,248.26		30248.26	30248.26
Crosscutting	585.36	23,857.04	24,442.40	585.36	23857.04	24442.40
Drifting	14,404.73	496,486.68	510,891.41	14404.73	496486.68	510891.41
Sidewalls	1,894.65	28,067.85	29,962.50	1894.65	28067.85	29962.50
(2) Labor and Supervision:						
Labor						
Supervision						
Technical Services						
(3) Operating Mat'ls. and Supplies:						
Timber						
Explosives						
Pipe						
Track						
(4) Operating Equipment:						
Rental						
Purchase						
Depreciation						
(5) Initial Rehabilitation and Repairs						
(6) New Bldgs., Improvements, etc.						
(7) Miscellaneous:						
Repairs to Equipment						
Sampling and Analysis						
Payroll Taxes						
Liability Insurance						
(8) Contingencies (specify):						
TOTALS	$19,355.69	$643,695.18	$663,050.87	19355.69	643695.18	663050.87

RECEIVED JAN 15 1957 D.M.E.A.

I certify that the above bill is correct and just and that payment therefor has not been received.
Date DEC 12 1956 *Payee Polaris Mining Company
Per [signature] Title President

*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:

$ 9677 85

Signature [signature]
(Authorized Certifying Officer)

Date 1-11-57 Vou. No. 1922
(See other side)

(For Government use only)

CERTIFICATION BY GOVERNMENT REPRESENTATIVE:

I certify that to the best of my knowledge and belief the contractor submitting this voucher is operating a Defense Minerals Exploration Administration project under Contract No. E-541 in accordance with the terms of the contract.

Signature /S/ Eric G. Erickson Title Mining Engr. Date 12-18-56

APPROVAL BY DMEA EXECUTIVE OFFICER OR ALTERNATE:

Signature /S/ Wing G. Agnew Title Acting Exec Officer Date 12-19-56

MONTHLY REPORT OF OPERATOR

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

Form MF-104A
(April 1952)

Budget Bureau No. 42-R1151.2

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION

RECEIVED JAN 15 1957 DMEA

OPERATOR'S UNIT COST AND PROGRESS REPORT

Month of October 1956 Docket No. DMEA 2879 Contract No. IDM-E541

Operator's Name Polaris Mining Company Minerals Copper, Lead, Antimony (& incidental Silver)

Address Box 320 Wallace, Idaho

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	feet	14404.73	295.3	510891.41	10262.0	49.78	1000 10618.4	51.00**
Crosscutting		585.36	12.0	24442.40	490.3	49.85		
Raising				30248.26	324.1	93.33	330	93.33*
~~Shaft~~ Sideswipe		1894.65	74.3	29962.50	1175.0	25.50	35 1140	25.50*
Winzes								
Drilling: Core		2470.95	549.1	67506.30	15001.4	4.50	1000 18788	4.50*
Churn								
Auger								
Stripping								
Trenching								
Test Pits								
Roads and Trails								
TOTAL DISTRIBUTED COSTS								TOTAL COSTS AUTHORIZED BY CONTRACT
Operating Equipment Purchased								
Initial Rehabilitation and Repairs								
New Buildings, Improvements, etc.								
TOTAL COSTS								

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

Date DEC 12 1956 Operator Polaris Mining Company

Per [signature] Title President

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)

*Maximum allowed by contract

** 6199.5 @ $50.53
5418.9 @ 48.78
11618.4

151 Eric G. Erickson

INSTRUCTIONS

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

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

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

GPO 872894

Polaris Mining Company

Wallace, Idaho
November thirteenth
1956

RECEIVED
JAN 15 1957
D.M.E.A.

Defense Minerals Exploration Administration
U. S. Department of the Interior
1201 North Division Street
Spokane, Washington

Re: Progress Report
Polaris East Exploration Project
October - 1956
Docket DMEA-2879
Contract No. IDM-E541

Gentlemen:

Progress in the Polaris East Exploration Project during October included 295.3 feet of easterly advance in the main heading, 74 feet of sideswipe for train switch, 12 feet of sideswipe and 16.5 feet of crosscut for diamond drill setups, and 549.1 feet of diamond drilling.

As shown on the enclosed 50-scale map, the main heading was extended about 160 feet easterly on line to a point near station SS3074 and then turned northeasterly and is now being extended as a crosscut to intersect the southeasterly trending mineralized zone encountered in the diamond drill holes. Numerous small shears and quartz-siderite-pyrite stringers were cut in the crosscut portion of the heading. The largest of these stringers contains some tetrahedrite and a sample across 1.1 feet assayed 7.5 ounces silver and 0.12% copper. Because of the sheared, blocky nature of the ground, the heading had to be stopped at a point about 20 feet beyond the face shown on the sketch and a 35 foot section was timbered. Work was resumed in the face this date and the crosscut should reach the projected position of the vein in about 40 feet.

During October diamond drill hole SS3282 was advanced 264.8 feet and completed at a depth of 340 feet. The hole intersected the mineralized zone about 90 feet west of the 39.3 ounce intercept in hole 3281 but the sludge sample (280-285 feet) assayed only 2.5 ounces silver. Diamond drill hole SS3283, located near station SS3073, was drilled to a depth of 284.3 feet. This hole intersected the vein at about 224.5 to 227.7 feet, approximately 210 feet east of the 39.3 ounce intercept in hole 3281. Due to the faulted nature of the ground, the core recovery of the vein was poor. The sludge samples for the intervals 220-225 and 225-230 feet assayed 13.2 ounces silver, 0.41% copper and 25.2 ounces silver, 0.79% copper respectively.

The locations of the drill holes are shown on the accompanying map and the detailed logs are enclosed.

A 12 foot sideswipe in the north wall and 16.5 foot crosscut in the south wall

about 20 feet west of station SS3074 were prepared for diamond drill setups. A 750 foot south hole will be drilled from this station to explore the area south of the lateral and a north hole (No. 3284) is now being drilled from this location to further test the mineralized zone between the intercept in hole 3283 and the projected intersection of the zone with the main heading crosscut.

Yours very truly,

H. E. Harper

H. E. Harper
Chief Geologist

HEH:mm

Enclosure

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

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION

Budget Bureau No. 42-R1036.5

RECEIVED
OCT 29 1956

OPERATOR'S MONTHLY REPORT AND VOUCHER

Month of September, 1956 Docket No. DMEA 2879 Contract No. IDM-E 541
Operator's Name Polaris Mining Company Minerals Copper, Lead, Antimony (and incidental silver)
Address Box 320 Wallace, Idaho
Contract Amount, $ 685,955.00 Government Participation: 50 % Amount, $ 342,977.50

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 core 493.204.50	2219.40	$ 62815.95	$ 65035.35			
~~Bulldozing~~ Raising		30248.26	30248.26			
Crosscutting 41 @ $48.78	1999.98	21857.06	23857.04			
Drifting 232.3 @ $48.78	11331.59	485155.09	496486.68			
Sideswipe 10.0025.50	255.00	27812.85	28067.85			
(2) Labor and Supervision:						
Labor						
Supervision						
Technical Services						
(3) Operating Mat'ls. and Supplies:						
Timber						
Explosives						
Pipe						
Track						
(4) Operating Equipment:						
Rental						
Purchase						
Depreciation						
(5) Initial Rehabilitation and Repairs						
(6) New Bldgs., Improvements, etc.						
(7) Miscellaneous:						
Repairs to Equipment						
Sampling and Analysis						
Payroll Taxes						
Liability Insurance						
(8) Contingencies (specify):						
TOTALS	15805.97	627889.21	643695.18	15805.97	627889.21	643695.18

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

Date 10-8-56 *Payee Polaris Mining Company

Per [signature] Title President

*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:

$ 7902 99

Signature [signature]
(Authorized Certifying Officer)

Date 10/22/56 Vou. No. 1899
(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. E541 in accordance with the terms of the contract.

Signature 1S1 Eric G. Erickson Title Mining Engr. Date 10/17/56

APPROVAL BY DMEA EXECUTIVE OFFICER OR ALTERNATE:

Signature 1S1 Wing G. Agnew Title Acting Exec. Date 10/19/56

MONTHLY REPORT OF OPERATOR

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

FORM MF-104A
(April 1952)

Budget Bureau No. 42-R1151.2

UNITED STATES
DEPARTMENT OF THE INTERIOR

DEFENSE MINERALS EXPLORATION ADMINISTRATION

RECEIVED
OCT 29 1956

OPERATOR'S UNIT COST AND PROGRESS REPORT

Month of September 1956 Docket No. DMEA 2879 Contract No. IIM-E 541

Operator's Name Polaris Mining Company Minerals Copper, Lead, Antimony (and incidental silver)

Address Box 320 Wallace, Idaho

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	feet	11331.59	232.3	496486.68	9966.7	49.81	10725	51.00 *
Crosscutting		1999.98	41.0	23857.04	478.3	49.88		
Raising				30248.26	324.1	93.33	330	93.33 *
~~Shafts~~ Sideswipe		255.00	10.0	28067.85	1100.7	25.50	1560	25.50 *
Winzes								
Drilling: Core		2219.40	493.2	65035.35	14452.3	4.50	15200	4.50 *
Churn								
Auger								
Stripping								
Trenching								
Test Pits								
Roads and Trails								
TOTAL DISTRIBUTED COSTS								TOTAL COSTS AUTHORIZED BY CONTRACT
Operating Equipment Purchased								
Initial Rehabilitation and Repairs								
New Buildings, Improvements, etc.								
TOTAL COSTS								

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

Date 10-8-56 Operator Polaris Mining Company

Per [signature] Title President

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

(Instructions on reverse)

REMARKS:

* Maximum allowed by contract.

(For Government use only)

/s/ Eric G. Erickson

INSTRUCTIONS

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

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

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

GPO 872894

DMEA

Polaris Mining Company

Wallace, Idaho
October ninth
1 9 5 6

RECEIVED
OCT 29 1956

Defense Minerals Exploration Administration
U. S. Department of the Interior
1201 North Division Street
Spokane, Washington

Re: Progress Report
Polaris East Exploration Project
September, 1956
Docket DMEA - 2879
Contract No. 1 DM-E541

Gentlemen:

During September the main heading was advanced 232.3 feet. This leaves about 160 feet to be driven to complete the lateral. Two north crosscuts, one 25 feet long at station SS3072 and one 16 feet long located 175 feet east of station SS3072, were driven for diamond drill stations and 10 feet was sideswiped for a switch opposite the latter drill station.

Diamond drill hole No. SS3281 was drilled to a depth of 418.0 feet. The hole shows a mineralized zone from about 245 to 279 feet with a good but narrow siderite-tetrahedrite vein at 277.8-279.1 feet. The five foot sludge sample from 275-280 feet assayed 39.3 ounces silver and 1.58 percent copper. Drill hole SS3282 is now being drilled from the same drill station to explore the zone about 140 feet west of the ore intercept in hole 3281. At the end of the month the hole had reached a depth of 75.2 feet.

A 50-scale map showing the lateral advance for the month and the location of the drill holes is enclosed. Also enclosed is the log of drill hole SS3281.

Yours very truly,

H. E. Harper

H. E. Harper
Chief Geologist

HEH:mm

Enclosures

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

W

Budget Bureau No. 42-R1036.5

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION

RECEIVED
SEP 24 1956

OPERATOR'S MONTHLY REPORT AND VOUCHER

Month of August, 1956 Docket No. DMEA 2879 Contract No IDM-E-541
Operator's Name Polaris Mining Company Minerals Copper, Lead, Antimony (&incidental Silver)
Address Box 320 Wallace, Idaho
Contract Amount, $ 685,955.00 Government Participation: 50% Amount, $ 342,977.50

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 Core 547.8@$4.50	$2465.10	$60350.85	$ 62815.95	2465.10	60350.85	62815.95
~~Bulldozing~~ Raising		30248.26	30248.26		30248.26	30248.26
Crosscutting		21857.06	21857.06		21857.06	21857.06
Drifting 348.0@$48.78	16975.44	468179.65	485155.09	16975.44	468179.65	485155.09
Sideswipe 11.0@$25.50	280.50	27532.35	27812.85	280.50	27532.35	27812.85
(2) Labor and Supervision:						
Labor						
Supervision						
Technical Services						
(3) Operating Mat'ls. and Supplies:						
Timber						
Explosives						
Pipe						
Track						
(4) Operating Equipment:						
Rental						
Purchase						
Depreciation						
(5) Initial Rehabilitation and Repairs						
(6) New Bldgs., Improvements, etc.						
(7) Miscellaneous:						
Repairs to Equipment						
Sampling and Analysis						
Payroll Taxes						
Liability Insurance						
(8) Contingencies (specify):						
TOTALS	$19721.04	$608168.17	$627889.21	19721.04	608168.17	627889.21

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

Date 9-10-56 *Payee Polaris Mining Company

Per [signature] Title President

*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:

$ 9860 52

Signature MEP
(Authorized Certifying Officer)

Date 9-21-56 Vou. No. 1874
(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. E541 in accordance with the terms of the contract.

Signature /S/ Eric G. Erickson Title Mining Engr. Date 9-18-56

APPROVAL BY DMEA EXECUTIVE OFFICER OR ALTERNATE:

Signature /S/ A. E. Weissenborn Title Exec Officer Date 9-20-56

MONTHLY REPORT OF OPERATOR

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

Form DF-104A
(April 1952)

Budget Bureau No. 42-R1151.2

UNITED STATES
DEPARTMENT OF THE INTERIOR

DEFENSE MINERALS EXPLORATION ADMINISTRATION

RECEIVED
SEP 24 1956

OPERATOR'S UNIT COST AND PROGRESS REPORT

Month of August 1956 Docket No. DMEA 2879 Contract No. IDM-E-541

Operator's Name Polaris Mining Company Minerals Copper, Lead, Antimony (and incidental Silver)

Address Box 320 Wallace, Idaho

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	feet	$16975.44	348.0	$485155.09	9734.4	$49.84	10725	$ 51.00*
Crosscutting	"			21857.06	437.3	49.98		
Raising	"			30248.26	324.1	93.33	330	93.33*
~~xxxx~~Sideswiping	"	280.50	11.0	27812.85	1090.7	25.50	1560	25.50*
Winzes								
Drilling: Core	"	2465.10	547.8	62815.95	13959.1	4.50	15200	4.50*
Churn								
Auger								
Stripping								
Trenching								
Test Pits								
Roads and Trails								
TOTAL DISTRIBUTED COSTS								TOTAL COSTS AUTHORIZED BY CONTRACT
Operating Equipment Purchased								
Initial Rehabilitation and Repairs								
New Buildings, Improvements, etc.								
TOTAL COSTS								

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

Date 9-10-56 Operator Polaris Mining Company

Per [signature] Title President

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

(Instructions on reverse)

REMARKS:

(For Government use only)

* Maximum allowed by contract

/s/ Eric G Erickson

INSTRUCTIONS

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

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

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

GPO 872894

Polaris Mining Company

RECEIVED
SEP 24 1956

Wallace, Idaho
September seventh
1956

Defense Minerals Exploration Administration
U. S. Department of the Interior
1201 North Division Street
Spokane 2, Washington

Re: Progress Report
Polaris East Exploration Project -
August, 1956
Docket DMEA - 2879
Contract No. 1 DM-E541

Gentlemen:

During August the main heading was advanced 348.0 feet and 11 feet was side-swiped from SS3071 plus 35 to 46 feet. A north crosscut is now being driven near the face to provide for a northerly diamond drill hole. This hole will be located approximately 400 feet east of Hole No. SS3279.

The geology covering the August work in the heading is shown on the attached 50-scale map. Two fault structures were crossed by the lateral in the August advance. The largest fault, located 125 feet west of station SS3071, is a sheared and brecciated zone about 7 feet wide with up to 6 inches of dark gouge on both the footwall and hangingwall. The fault strikes about S 45° E and dips 60 to 74 degrees to the southwest. Although the observed strike of this fault is somewhat more southerly than expected, its location fits reasonably well with our projection of the Polaris fault. The second, smaller fault, located at station SS3071, has a more easterly trend with a steep to vertical southerly dip. The rocks in this section of the lateral are bleached, light to medium gray quartzites. A few minor quartz and siderite stringers accompany the faults and other smaller slips.

Diamond drill hole No. SS3280 was advanced 547.8 feet and completed at a depth of 760 feet. Only minor mineralization was encountered in the hole. The sludge sample at 525 to 530 feet assayed 2.2 ounces silver and at 655 to 660 feet assayed 1.1 ounces silver. Small pyritic stringers with streaks of tetrahedrite were observed in the core at the 655 to 660 foot interval. A log of the hole and also Sheet No. 6 showing the location of the hole are enclosed.

Yours very truly,

H. E. Harper

H. E. Harper
Chief Geologist

HEH:mm

Enc.

W

-102 (Rev.)
(April 1952)

Budget Bureau No. 42-R1036.5

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION

OPERATOR'S MONTHLY REPORT AND VOUCHER

Month of July, 1956 Docket No. DMEA 2879 Contract No. IDM-E541

Operator's Name Polaris Mining Company Minerals Copper, Lead, Antimony (and Incidental Silver)

Address Box 320 Wallace, Idaho

Contract Amount, $ 685,955.00 Government Participation: 50 % Amount, $ 342,977.50

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 Contracts:						
Short Form Core						
Drilling 829.8 @ $4.50	$ 3734.10	$ 56616.75	$ 60350.85	3734.10	56616.75	60350.85
~~Raising~~ Raising		30248.26	30248.26		30248.26	30248.26
Crosscutting		21857.06	21857.06		21857.06	21857.06
Drifting 16.9 @ $48.78	824.38	467355.27	468179.65	824.38	467355.27	468179.65
Sideswipe		27532.35	27532.35		27532.35	27532.35
(2) Labor and Supervision:						
Labor						
Supervision						
Technical Services						
(3) Operating Mat'ls. and Supplies:						
Timber						
Explosives						
Pipe						
Track						
(4) Operating Equipment:						
Rental						
Purchase						
Depreciation						
(5) Initial Rehabilitation and Repairs						
(6) New Bldgs., Improvements, etc.						
(7) Miscellaneous:						
Repairs to Equipment						
Sampling and Analysis						
Payroll Taxes						
Liability Insurance						
(8) Contingencies (specify):						
TOTALS	$ 4558.48	$ 603609.69	$ 608168.17	4558.48	603609.69	608168.17

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

Date 8-7-56 *Payee Polaris Mining Company

Per [signature] Title President

*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)

RECEIVED AUG 27 1956

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

2279 24

$ 2279 24

Signature Myrtle I. Purdy (Authorized Certifying Officer)

Date 8-20-56 Vou. No. 1842

(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. 6541 in accordance with the terms of the contract.

Signature /S/ Eric G. Erickson Title Mining Engr Date 8-16-56

APPROVAL BY DMEA EXECUTIVE OFFICER OR ALTERNATE:

Signature /S/ Irving G. Agnew Title Acting Exec Date 8-20-56

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.

-104A
1952)

Budget Bureau No. 42-R1151.2

UNITED STATES
DEPARTMENT OF THE INTERIOR

DEFENSE MINERALS EXPLORATION ADMINISTRATION

OPERATOR'S UNIT COST AND PROGRESS REPORT

Month of July 1956 Docket No. DMEA 2879 Contract No. IDM-E541

Operator's Name Polaris Mining Company Minerals Copper, Lead, Antimony

Address Box 320 Wallace, Idaho (and incidental Silver)

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	feet	$824.38	16.9	$468179.65	9386.4	49.88	10725 *	$ 51.00 *
Crosscutting				21857.06	437.3	49.98		
Raising				30248.26	324.1	93.33	330	93.33 *
~~Stoping~~ Sideswiping				27532.35	1079.7	25.50	1560	25.50 *
Winzes								
Drilling: Core		3734.10	829.8	60350.85	13411.3	4.50	15200 *	4.50 *
Churn								
Auger								
Stripping								
Trenching								
Test Pits								
Roads and Trails								
TOTAL DISTRIBUTED COSTS								TOTAL COSTS AUTHORIZED BY CONTRACT
Operating Equipment Purchased								
Initial Rehabilitation and Repairs								
New Buildings, Improvements, etc.								
TOTAL COSTS								

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

Date 8-3-56 Operator Polaris Mining Company

Per [signature] Title President

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)

* Maximum allowed by contract

/S/ Eric G Erickson

RECEIVED
AUG 27 1956

INSTRUCTIONS

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

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

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

GPO 872894

DMEA

HECLA MINING COMPANY

P. O. BOX 320
WALLACE, IDAHO

August ten
1956

Defense Minerals Exploration Administration
U. S. Department of the Interior
1201 North Division Street
Spokane 2, Washington

Re: Progress Report
Polaris East Exploration Project - July, 1956
Docket DMEA - 2879
Contract No. 1 DM-E541

Gentlemen:

As noted in the June progress report, work in the main heading was suspended to permit diamond drilling and the work was not resumed until the last week in July. Total advance during the period was 16.9 feet.

Diamond drill hole No. 3279 was drilled northeasterly to explore the possible easterly extension of the zone of weak quartz-siderite-pyrite stringers at 355 to 375 feet in Hole 3278. The hole reached a total depth of 494.7 feet and encountered a zone of small pyritic stringers between 415 to 440 feet which gave sludge assays of 1.2 to 2.5 ozs. silver. Minor tetrahedrite is visible in the core at depths of 428 and 432 feet. The location of the hole and the sludge assays are shown on the attached map. A log of the hole is enclosed.

Other diamond drilling during July included deepening Hole 3275 and starting Hole 3280. Hole 3275 was extended 122.9 feet to a total depth of 778.3 feet to further explore the indicated mineralized zone. Sludge assays of 0.5 and 0.9 oz. silver indicate only very minor mineralization. A log of the completed hole is enclosed. Hole 3280 is being drilled northeasterly from the north crosscut at station SS 3064 to explore the mineralized zone at a point about midway between Holes 3275 and 3277. The hole reached a depth of 212.2 feet at the end of July. It is expected to intersect the projected zone at a depth of about 600 feet.

The present plans are to continue the main heading on line approximately 740 feet beyond the face as of July 31 to a point 300 feet east of the west end line of the Pride of the Rockies claim. Short crosscuts will be driven at desired intervals to provide for diamond drilling both to the north and south of the lateral.

Yours very truly,

H. E. Harper

H. E. Harper
Chief Geologist

HEH:mm

Enclosure

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

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION

Budget Bureau No. 42-R1036.5

RECEIVED
JUL 23 1956

OPERATOR'S MONTHLY REPORT AND VOUCHER

Month of June 1956 Docket No. DMEA 2879 Contract No. IDM-E541
Operator's Name Polaris Mining Company Mineral Copper, Lead, Antimony (and Incidental Silver)
Address Box 320, Wallace, Idaho
Contract Amount, $685,955.00 Government Participation: 50 % Amount, $342,977.50

ITEMS OF COSTS	FOR OPERATOR'S USE: Monthly Total	Totals Previously Reported	Totals To Date	FOR GOVERNMENT USE ONLY: Approved Monthly Total	Approved Totals Previously Reported	Approved Totals To Date
(1) Independent Contracts: Short Form						
Drilling core 1140.6@$4.50	$5132.70	$ 51,484.05	$ 56,616.75	5132.70	51484.05	56616.75
Bulldozing xxxxxxx Raising		30,248.26	30,248.26		30248.26	30248.26
Crosscutting 16.0@$48.78	780.48	21,076.58	21,857.06	780.48	21076.58	21857.06
Drifting 36.6 @ $48.78	1785.35	465,569.92	467,355.27	1785.35	465569.92	467355.27
Sideswipe		27,532.35	27,532.35		27532.35	27532.35
(2) Labor and Supervision:						
Labor						
Supervision						
Technical Services						
(3) Operating Mat'ls. and Supplies:						
Timber						
Explosives						
Pipe						
Track						
(4) Operating Equipment:						
Rental						
Purchase						
Depreciation						
(5) Initial Rehabilitation and Repairs						
(6) New Bldgs., Improvements, etc.						
(7) Miscellaneous:						
Repairs to Equipment						
Sampling and Analysis						
Payroll Taxes						
Liability Insurance						
(8) Contingencies (specify):						
TOTALS	$ 7698.53	$595,911.16	$603,609.69	7698.53	595911.16	603609.69

I certify that the above bill is correct and just and that payment therefor has not been received.
Date 7-9-56 *Payee Polaris Mining Company
Per [signature] Title President

*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:
$3849 27
Signature M&P
(Authorized Certifying Officer)
Date 7-20-56 Vou. No. 1827
(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. 6541 in accordance with the terms of the contract.

Signature 151 Eric G Erickson Title Mining Engr Date 7-18-56

APPROVAL BY DMEA EXECUTIVE OFFICER OR ALTERNATE:

Signature 151 Wing G Agnew Title Acting Exec Date 7-19-56

MONTHLY REPORT OF OPERATOR

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

Form MF-104A
(April 1952)

Budget Bureau No. 42-R1151.2

UNITED STATES
DEPARTMENT OF THE INTERIOR

DEFENSE MINERALS EXPLORATION ADMINISTRATION

OPERATOR'S UNIT COST AND PROGRESS REPORT

Month of June 1956 Docket No. DMEA 2879 Contract No. IDM-E541

Operator's Name Polaris Mining Company Minerals Copper, Lead, Antimony

Address Box 320, Wallace, Idaho (and Incidental Silver)

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	feet	1785.35	36.6	$467,355.27	9369.5	49.88	10725	$51.00*
Crosscutting	"	780.48	16.0	21,857.06	437.3	49.98		
Raising	"			30,248.26	324.1	93.33	330	93.33*
~~xxxxx~~Sideswiping	"			27,532.35	1079.7	25.50	1560	25.50*
Winzes								
Drilling: Core	"	5132.70	1140.6	56,616.75	12,581.5	4.50	15200	4.50*
Churn								
Auger								
Stripping								
Trenching								
Test Pits								
Roads and Trails								
TOTAL DISTRIBUTED COSTS		7698.53						TOTAL COSTS AUTHORIZED BY CONTRACT
Operating Equipment Purchased								
Initial Rehabilitation and Repairs								
New Buildings, Improvements, etc								
TOTAL COSTS		7698.53		603609.69				685955.00

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

Date 7-9-56 Operator Polaris Mining Company

Per [signature] Title President

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)

* Maximum allowed by contract

151 Eric G Erickson

INSTRUCTIONS

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

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

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

GPO 872894

DMEA

Polaris Mining Company

RECEIVED
JUL 23 1956

Wallace, Idaho
July ninth
1 9 5 6

Defense Minerals Exploration Administration
U. S. Department of the Interior
1201 North Division Street
Spokane 2, Washington

Re: Progress Report Polaris East
Exploration Project - June, 1956
Docket DMEA - 2879
Contract No. IDM-E541

Gentlemen:

Advance in the main easterly heading was limited to 36.6 feet and No. 301 north crosscut was driven 16.0 feet to a point 20.2 feet north of station SS3069. Bleached light gray quartzite is exposed in this new work. Work was temporarily suspended in the main heading as announced in the report for May.

As previously reported, Hole No. 3277 was drilled 101.7 feet during June and was completed at 611.0 feet. It encountered interesting mineralization and as a result, Hole No. 3278 (see map) was drilled northerly. It was drilled 1033.5 feet and completed during June although only minor mineralization was exposed as shown on the map. A log of 3278 is enclosed.

At present former Hole No. 3275 (northerly) is being extended a sufficient length to reach the projected position of the mineralization in Hole No. 3277. Another northeasterly hole is being drilled from the set-up in 301 north crosscut. Another hole may be drilled from the 3275 set-up to prospect the area between Holes 3275 and 3277 for the zone found in Hole No. 3277. The main heading may be extended soon depending upon what the drilling reveals.

Yours very truly,

Robert E. Sorenson

Robert E. Sorenson
Vice President

RES:cb
Enclosures

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

Budget Bureau No. 42-R1036.5

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

Month of May, 1956 Docket No. DMEA 2879 Contract No. IDM - E541
Operator's Name Polaris Mining Company Minerals Copper, Lead, Antimony (and Incidental Silver)
Address Box 320 Wallace, Idaho
Contract Amount, $ 685,955.00 Government Participation: 50 % Amount, $342,977.50

ITEMS OF COSTS	FOR OPERATOR'S USE: Monthly Total	Totals Previously Reported	Totals To Date	FOR GOVERNMENT USE ONLY: Approved Monthly Total	Approved Totals Previously Reported	Approved Totals To Date
(1) Independent Short Form Contracts:						
Drilling Core 1132.5@$4.50	$5096.25	$ 46387.80	$ 51484.05	5096.25	46387.80	51484.05
~~Blocking~~ Raising		30248.26	30248.26		30248.26	30248.26
Crosscutting 41.8@$48.78	2039.00	19037.58	21076.58	2039.00	19037.58	21076.58
Drifting 280.5 @ $48.78	13682.79	451887.13	465569.92	13682.79	451887.13	465569.92
Sideswipe 10.0 @ $ 25.50	255.00	27277.35	27532.35	255.00	27277.35	27532.35
(2) Labor and Supervision:						
Labor						
Supervision						
Technical Services						
(3) Operating Mat'ls. and Supplies:						
Timber						
Explosives						
Pipe						
Track						
(4) Operating Equipment:						
Rental						
Purchase						
Depreciation						
(5) Initial Rehabilitation and Repairs						
(6) New Bldgs., Improvements, etc.						
(7) Miscellaneous:						
Repairs to Equipment						
Sampling and Analysis						
Payroll Taxes						
Liability Insurance						
(8) Contingencies (specify):						
TOTALS	$21073.04	$ 574838.12	$ 595911.16	21073.04	574838.12	595911.16

I certify that the above bill is correct and just and that payment therefor has not been received.
Date JUN 29 1956 *Payee Polaris Mining Company
Per John R. Mattson Title Secretary

*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)

RECEIVED
JUL 13 1956

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

$ 10,536 52

Signature MAP
(Authorized Certifying Officer)

Date 7-10-56 Vou. No. 1816
(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. E541 in accordance with the terms of the contract.

Signature /S/ Stephen W. Zoldok Title Mining Engr. Date 7-9-56

APPROVAL BY DMEA EXECUTIVE OFFICER OR ALTERNATE:

Signature /S/ Wing G. Agnew Title Acting Exec. Date 7-9-56

MONTHLY REPORT OF OPERATOR

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

Form MF-104A
(April 1952)

Budget Bureau No. 42-R1151.2

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

Month of May 1956 Docket No. DMEA 2879 Contract No. IDM - E541

Operator's Name Polaris Mining Company Minerals Copper, Lead, Antimony (& Incidental Silver)

Address Box 320 Wallace, Idaho

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	feet	$13682.79	280.5	$465569.92	9332.9	49.88)	10725	$ 51.00*
Crosscutting	"	2039.00	41.8	21076.58	421.3	50.03)		
Raising	"			30248.26	324.1	93.33	330	93.33*
Shafts Sideswiping	"	255.00	10.0	27532.35	1079.7	25.50	1560	25.50*
Winzes								
Drilling: Core	"	5096.25	1132.5	51484.05	11440.9	4.50	15200	4.50*
Churn								
Auger								
Stripping								
Trenching								
Test Pits								
Roads and Trails								
TOTAL DISTRIBUTED COSTS								TOTAL COSTS AUTHORIZED BY CONTRACT
Operating Equipment Purchased								
Initial Rehabilitation and Repairs								
New Buildings, Improvements, etc.								
TOTAL COSTS								

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

Date JUN 29 1956 Operator Polaris Mining Company

Per John N. Matthews Title Secretary

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)

*Maximum allowed by contract

/S/ S. W. Zoldok

RECEIVED
JUL 13 1956

INSTRUCTIONS

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

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

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

GPO 872894

DMEA

Polaris Mining Company

Wallace, Idaho
July second
1956

Defense Minerals Exploration Administration
U. S. Department of the Interior
1201 North Division Street
Spokane 2, Washington

Re: Progress Report Polaris East
Exploration Project - May-1956
Docket No. DMEA-2879
Contract No. IDM-E541

Gentlemen:

This report has been delayed because of an extended absence from this office, and we hope it has not inconvenienced you.

During May the main heading was advanced 280.5 feet and 10 feet was side-swiped from SS3068 plus 218 to 228 feet. Number 297 north crosscut was advanced 26.8 feet to a point 31 feet north of station SS3068 and No. 297 south crosscut was advanced 15 feet to a point 18.8 feet south of station SS3068. The geology of the main heading and crosscuts is shown on the attached 50-scale map. Progress was entirely in bleached massive quartzite and argillaceous quartzite and no important vein structures were disclosed.

Diamond drill hole No. SS3275 was completed to 655.4 feet and a log of the hole is enclosed. Nothing of great significance was disclosed in this northerly hole. Drill hole SS3276 was completed southerly to 473.2 feet without finding anything of apparent importance. A log is enclosed.

Hole No. 3277 was drilled to a point 503.9 feet north at month end and was continued to completion at 611 feet in June. A log of this hole is enclosed. You will note that important and interesting mineralization was found from 495 to 515 feet, the sludge having assayed 11.8 oz. silver and 0.43% copper from 495 to 500 and 20.1 oz. silver and 1.21% copper from 510 to 515 feet. Additional holes are being drilled to explore for extensions of this mineralization; in fact, a northerly hole from a point near the east drift face was completed today at 1033.5 feet. A corresponding interesting grade showing was not found in the hole however. A log will be prepared and included in the report for the month of June.

Temporarily the drift has been discontinued while the exploratory drilling is in progress since drilling results may influence the direction of additional work.

Yours very truly,

Robert E. Sorenson

Robert E. Sorenson

W

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

Budget Bureau No. 42-R1036.5

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION

RECEIVED
MAY 21 1956

OPERATOR'S MONTHLY REPORT AND VOUCHER

Month of April, 1956 Docket No. DMEA 2879 Contract No. IDM-E-541
Operator's Name Polaris Mining Company Minerals Copper, Lead, Antimony & (Incidental Silver)
Address Box 320, Wallace, Idaho
Contract Amount, $ 685,955.00 Government Participation: 50 % Amount, $ 342,977.50

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, Core 849.9 @ $4.50	$ 3824.55	$ 42563.25	$ 46387.80	3824.55	42563.25	46387.80
Raising		30248.26	30248.26		30248.26	30248.26
Crosscutting		19037.58	19037.58		19037.58	19037.58
Drifting 300.7 @ $48.78	14668.15	437218.98	451887.13	14668.15	437218.98	451887.13
Sideswipe 12.00 @ $25.50	306.00	26971.35	27277.35	306.00	26971.35	27277.35
(2) Labor and Supervision:						
Labor						
Supervision						
Technical Services						
(3) Operating Mat'ls. and Supplies:						
Timber						
Explosives						
Pipe						
Track						
(4) Operating Equipment:						
Rental						
Purchase						
Depreciation						
(5) Initial Rehabilitation and Repairs						
(6) New Bldgs., Improvements, etc.						
(7) Miscellaneous:						
Repairs to Equipment						
Sampling and Analysis						
Payroll Taxes						
Liability Insurance						
(8) Contingencies (specify):						
TOTALS	$18798.70	$556039.42	$574838.12	18798.70	556039.42	574838.12

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

Date MAY 9 1956 *Payee Polaris Mining Company

Per [signature] Title President

*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:

$ 9399.35

Signature [signature]
(Authorized Certifying Officer)

Date 5/15/56 Vou. No. 1774
(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. E541 in accordance with the terms of the contract.

Signature 1st Eric G Erickson Title Mining Engr. Date 5/14/56

APPROVAL BY DMEA EXECUTIVE OFFICER OR ALTERNATE:

Signature 1st Wing G Agnew Title Acting Exec. Date 5/14/56

MONTHLY REPORT OF OPERATOR

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

Form MF-104A
(April 1952)

Budget Bureau No. 42-R1151.2

UNITED STATES
DEPARTMENT OF THE INTERIOR

RECEIVED
MAY 21 1956

DEFENSE MINERALS EXPLORATION ADMINISTRATION

OPERATOR'S UNIT COST AND PROGRESS REPORT

Month of April 1956 Docket No. DMEA 2879 Contract No. [illegible]
Operator's Name Polaris Mining Company Minerals Copper, Lead, Antimony & (Incidental Silver)
Address Box 320, Wallace, Idaho

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	feet	$14568.15	300.7	$451387.23	9052.4	49.92	9225	$51.00*
Crosscutting	"			19037.58	379.5	50.16	1500	51.00*
Raising	"			30248.86	324.1	93.33	330	93.33*
Slashing	"	306.00	12.0	27277.35	1069.7	25.50	1560	25.50*
Winzes								
Drilling: Core	"	3824.55	849.9	46387.80	10308.4	4.50	15200	4.50*
Churn								
Auger								
Stripping								
Trenching								
Test Pits								
Roads and Trails								
TOTAL DISTRIBUTED COSTS								TOTAL COSTS AUTHORIZED BY CONTRACT
Operating Equipment Purchased								
Initial Rehabilitation and Repairs								
New Buildings, Improvements, etc.								
TOTAL COSTS								

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

Date MAY 9 1956 Operator Polaris Mining Company

Per [signature] Title President

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

(Instructions on reverse)

REMARKS:

*maximum allowed by contract

(For Government use only)

/S/ Eric G Erickson

INSTRUCTIONS

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

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

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

GPO 872894

DMEA

Polaris Mining Company

RECEIVED
MAY 21 1956

Wallace, Idaho

May eighth
1956

Defense Minerals Exploration Administration
U. S. Department of the Interior
1201 North Division Street
Spokane 2, Washington

Re: Progress Report Polaris East
Exploration Project - April, 1956
Docket No. DMEA - 2879
Contract No. IDM-E541

Gentlemen:

During April the main heading was advanced 300.7 feet. Twelve feet of sideswiping was done in the section Station SS3066 plus 183 feet to plus 195 feet. Diamond drill hole No. 3274 was extended 349.9 feet to completion at 1001.2 feet. A log of the hole is attached. Nothing of great interest was found in this hole. Another northerly drill hole, No. 3275, was extended 500.0 feet during April, but it was not completed at month end. A log will be supplied upon completion.

The geology of the main heading is shown on the attached 50-scale map. Rock was massive, light-gray, bleached quartzite and only minor slips were exposed.

Yours very truly,

Robert E. Sorenson

Robert E. Sorenson

RES:cb
Encs.

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

Budget Bureau No. 42-R1036.5

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION

RECEIVED APR 23 1956

OPERATOR'S MONTHLY REPORT AND VOUCHER

Month of March, 1956 Docket No. DMEA 2879 Contract No. IDM-E541

Operator's Name Polaris Mining Company Minerals Copper, Lead, Antimony (and incidental Silver)

Address Box 320, Wallace, Idaho

Contract Amount, $685,955.00 Government Participation: 50 % Amount, $342,977.50

ITEMS OF COSTS	FOR OPERATOR'S USE: Monthly Total	Totals Previously Reported	Totals To Date	FOR GOVERNMENT USE ONLY: Approved Monthly Total	Approved Totals Previously Reported	Approved Totals To Date
(1) Independent Short Form Contracts:						
Drilling 721.1 @ Core $4.50	$3244.95	$39318.30	$42563.25	3244.95	39318.30	42563.25
~~Bulkhead~~ Raising		30248.26	30248.26		30248.26	30248.26
Crosscutting 30.3@48.78	1478.03	17559.55	19037.58	1478.03	17559.55	19037.58
Drifting 149.4@$48.78	7287.73	429931.25	437218.98	7287.73	429931.25	437218.98
Sideswipe 10.0@25.50	255.00	26716.35	26971.35	255.00	26716.35	26971.35
(2) Labor and Supervision:						
Labor						
Supervision						
Technical Services						
(3) Operating Mat'ls. and Supplies:						
Timber						
Explosives						
Pipe						
Track						
(4) Operating Equipment:						
Rental						
Purchase						
Depreciation						
(5) Initial Rehabilitation and Repairs						
(6) New Bldgs., Improvements, etc.						
(7) Miscellaneous:						
Repairs to Equipment						
Sampling and Analysis						
Payroll Taxes						
Liability Insurance						
(8) Contingencies (specify):						
TOTALS	$12265.71	$543773.71	$556039.42	12265.71	543773.71	556039.42

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

Date 4-11-56 *Payee Polaris Mining Company

Per [signature] Title President

*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:

$ 6132 86

Signature MAP
(Authorized Certifying Officer)

Date 4-18-56 Vou. No. 1754

(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. 6541 in accordance with the terms of the contract.

Signature 1st Eric G. Erickson Title Mining Engr. Date 4/16/56

APPROVAL BY DMEA EXECUTIVE OFFICER OR ALTERNATE:

Signature 1st A. E. Weissenborn Title Exec Officer Date 4/16/56

MONTHLY REPORT OF OPERATOR

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

Form MF-104A
(April 1952)

Budget Bureau No. 42-R1151.2

UNITED STATES
DEPARTMENT OF THE INTERIOR

DEFENSE MINERALS EXPLORATION ADMINISTRATION

OPERATOR'S UNIT COST AND PROGRESS REPORT

RECEIVED APR 23 1956

Month of March 1956 Docket No. DMEA 2879 Contract No. IDMGE541

Operator's Name Polaris Mining Company Minerals Copper, Lead, Antimony (and incidental Silver)

Address Box 320, Wallace, Idaho

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	feet	$7287.73	149.4	$437218.98	8751.7	49.96	9225	$51.00 *
Crosscutting	"	1478.03	30.3	19037.58	379.5	50.16	1500	51.00 *
Raising	"			30248.26	324.1	93.33	330	93.33 *
~~Shafts~~ Sideswiping	"	255.00	10.0	26971.35	1057.7	25.50	1560	25.50
Winzes								
Drilling: Core	"	3244.95	721.1	42563.25	9458.5	4.50	15200	4.50*
Churn								
Auger								
Stripping								
Trenching								
Test Pits								
Roads and Trails								
TOTAL DISTRIBUTED COSTS								TOTAL COSTS AUTHORIZED BY CONTRACT
Operating Equipment Purchased								
Initial Rehabilitation and Repairs								
New Buildings, Improvements, etc.								
TOTAL COSTS								

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

Date 4-11-56 Operator Polaris Mining Company

Per [signature] Title President

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)

*Maximum allowed by contract

(For Government use only)

151 Eric G Erickson

INSTRUCTIONS

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

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

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

GPO 872894

DMEA

Polaris Mining Company

Wallace, Idaho
April twelfth
1 9 5 6

RECEIVED
APR 23 1956

Defense Minerals Exploration Administration
U.S. Department of the Interior
1201 North Division Street
Spokane 2, Washington

Re: Progress Report Polaris East
Exploration Project - March-1956
Docket No. DMEA - 2879
Contract No. IDM-E541

Gentlemen:

The advance of the main easterly heading during the month of March was 149.4 feet. Ten feet of sideswipe from station SS3063 plus 119 to 129 feet was completed. Number 289 south crosscut was driven 16.3 feet to a point 21.1 feet south of station SS3064 and number 289 north crosscut was driven 14.0 feet to a point 20.9 feet north of the same station. These crosscuts will be used for later drill stations. Diamond drill hole No. 3273 was completed to 435.3 feet and a log of the hole is enclosed. Hole No. 3274 was drilled 651.3 feet during the month and is being continued. A log will be provided as soon as the hole is completed.

In drill hole 3273 light mineralization appears to be present in the section 45 to 90 feet, 140 to 145 feet and 185 to 190 feet. It is probably insignificant, however.

The geology of the section covered by main drift advance is shown on the attached 50-scale map. Rocks are still bleached argillaceous quartzite and quartzite and no strong structures were exposed.

Yours very truly,

Robert E. Sorenson

Robert E. Sorenson

RES:eel
Encs.

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

W

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION

Budget Bureau No. 42-R1036.5

RECEIVED
MAR 26 1956

OPERATOR'S MONTHLY REPORT AND VOUCHER

Month of February, 1956 Docket No. DMEA 2879 Contract No. Idm - E541

Operator's Name Polaris Mining Company Minerals copper, lead, antimony (and incidental silver)

Address Box 320 Wallace, Idaho

Contract Amount, $ 685,955.00 Government Participation: 50 % Amount, $ 342,977.50

ITEMS OF COSTS	FOR OPERATOR'S USE: Monthly Total	Totals Previously Reported	Totals To Date	FOR GOVERNMENT USE ONLY: Approved Monthly Total	Approved Totals Previously Reported	Approved Totals To Date
(1) Independent Short Form Contracts:						
Drilling core 403.4 @$4.50	1815.30	$ 37503.00	$ 39318.30	1815.30	37503.00	39318.30
~~[illegible]~~ raising		30248.26	30248.26		30248.26	30248.26
Crosscutting 6.0 @$48.78	292.68	17266.87	17559.55	292.68	17266.87	17559.55
Drifting 271.0 @ $48.78	13219.38	416711.87	429931.25	13219.38	416711.87	429931.25
Sideswipe		26716.35	26716.35		26716.35	26716.35
(2) Labor and Supervision:						
Labor						
Supervision						
Technical Services						
(3) Operating Mat'ls. and Supplies:						
Timber						
Explosives						
Pipe						
Track						
(4) Operating Equipment:						
Rental						
Purchase						
Depreciation						
(5) Initial Rehabilitation and Repairs						
(6) New Bldgs., Improvements, etc.						
(7) Miscellaneous:						
Repairs to Equipment						
Sampling and Analysis						
Payroll Taxes						
Liability Insurance						
(8) Contingencies (specify):						
TOTALS	15327.36	528446.35	543773.71	15327.36	528446.35	543773.71

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

Date 3-8-56 *Payee Polaris Mining Company

Per [signature] Title President

*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:

$ 7663 68

Signature [signature]
(Authorized Certifying Officer)

Date 3/22/56 Vou. No. 1737

(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. E541 in accordance with the terms of the contract.

Signature 151 Eric G. Erickson Title Mining Engr. Date 3/19/56

APPROVAL BY DMEA EXECUTIVE OFFICER OR ALTERNATE:

Signature 151 A. E. Weissenborn Title Exec Officer Date 3/19/56

MONTHLY REPORT OF OPERATOR

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

Form MF-104A
(April 1952)

Budget Bureau No. 42-R1151.2

UNITED STATES
DEPARTMENT OF THE INTERIOR

DEFENSE MINERALS EXPLORATION ADMINISTRATION

RECEIVED
MAR 26 1956

OPERATOR'S UNIT COST AND PROGRESS REPORT

Month of February 1956 Docket No. DMEA 2879 Contract No. Idm - E541

Operator's Name Polaris Mining Company Minerals copper, lead, antimony

Address Box 320 Wallace, Idaho (and incidental silver)

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	feet	13219.38	271.0	429931.25	8602.3	49.98	10725	~~$51.00~~ 48.78
Crosscutting	"	292.68	6.0	17559.55	349.2	50.29		
Raising	"			30248.26	324.1	93.33	330	93.33
~~Raise~~ sideswiping	"			26716.35	1047.7	25.50	1560	25.50
Winzes								
Drilling: Core	"	1815.30	403.4	39318.30	8737.4	4.50	15200	4.50
Churn								
Auger								
Stripping								
Trenching								
Test Pits								
Roads and Trails								
TOTAL DISTRIBUTED COSTS		15327.36		543773.71				TOTAL COSTS AUTHORIZED BY CONTRACT
Operating Equipment Purchased								
Initial Rehabilitation and Repairs								
New Buildings, Improvements, etc.								
TOTAL COSTS		15327.36		543773.71				685955.00

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

REMARKS:

Date 3-8-56 Operator Polaris Mining Company

Per [signature] Title President

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)

*Maximum allowed by contract.

/s/ Eric G. Erickson

INSTRUCTIONS

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

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

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

GPO 872894

DMEA

Polaris Mining Company

RECEIVED
MAR 26 1956

Wallace, Idaho

March twelfth
1 9 5 6

Defense Minerals Exploration Administration
U. S. Department of the Interior
1201 North Division Street
Spokane 2, Washington

Re: Progress Report Polaris East
Exploration Project-February-1956
Docket No. DMEA - 2879
Contract No. Idm-E541

Gentlemen:

The advance of the main easterly heading during February was 271.0 feet. No. 281 south crosscut was driven 6 feet to a point 13.3 feet south of station SS-3059. Diamond drill hole No. 3271 was advanced 37.9 feet thereby completing the hole to 934.2 feet. A log of the hole is enclosed. Hole No. 3273 was drilled 365.5 feet during the month and will be drilled to the property line. A log will be submitted after completion.

As shown on the attached 50-scale map, drift progress was in bleached fairly-massive white to gray quartzite. Some small fault structures were cut and bunches and stringers of quartz and siderite were exposed. Note that some mineralization is indicated on a gouge streak as shown by sample 4351 assaying 0.6 oz. silver and 0.01% copper and in a 4 inch siderite stringer - sample 4367 assaying 1.1 oz silver and 0.36% copper. The main heading is being turned northerly to bear directly toward the west face proposed in the original application. Diamond drill holes will probe both north and south as the drift advances.

Yours very truly,

Robert E. Sorenson

Robert E. Sorenson

RES:EEL
Encs.

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

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION

Budget Bureau No. 42-R1036.5

RECEIVED
FEB 20 1956

OPERATOR'S MONTHLY REPORT AND VOUCHER

Month of January, 1956 Docket No. DMEA 2879 Contract No. IDM-E541
Operator's Name Polaris Mining Company Minerals Copper, lead, antimony (and incidental silver)
Address Box 320 Wallace, Idaho
Contract Amount, $685,955.00 Government Participation: 50 % Amount, $342,977.50

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 Core 602.0 @$4.50	$2709.00	$34,794.00	$37,503.00	2709.00	34794.00	37503.00
~~Drifting~~ Raising		30,248.26	30,248.26		30248.26	30248.26
Crosscutting 29.5 @$48.78	1439.01	15,827.86	17,266.87	1439.01	15827.86	17266.87
Drifting 253.0 @$48.78	12341.34	404,370.53	416,711.87	12341.34	404370.53	416711.87
Sideswipe 50.0 @$25.50	1275.00	25,441.35	26,716.35	1275.00	25441.35	26716.35
(2) Labor and Supervision:						
Labor						
Supervision						
Technical Services						
(3) Operating Mat'ls. and Supplies:						
Timber						
Explosives						
Pipe						
Track						
(4) Operating Equipment:						
Rental						
Purchase						
Depreciation						
(5) Initial Rehabilitation and Repairs						
(6) New Bldgs., Improvements, etc.						
(7) Miscellaneous:						
Repairs to Equipment						
Sampling and Analysis						
Payroll Taxes						
Liability Insurance						
(8) Contingencies (specify):						
TOTALS	$17,764.35	$510,682.00	$528,446.35	17764.35	510682.00	528446.35

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

Date ..... *Payee Polaris Mining Company

Per [signature] Title President

*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:

$ 8882 18

Signature [signature]
(Authorized Certifying Officer)

Date 2/16/56 Vou. No. 1712
(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. E541 in accordance with the terms of the contract.

Signature /S/ Eric G. Erickson Title Mining Eng. Date 2/16/56

APPROVAL BY DMEA EXECUTIVE OFFICER OR ALTERNATE:

Signature /S/ Wing G. Agnew Title acting Exec. officer Date 2/16/56

MONTHLY REPORT OF OPERATOR

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

GPO 872893

Form MF-104A
(April 1952)

Budget Bureau No. 42-R1151.2

RECEIVED
FEB 20 1956

UNITED STATES
DEPARTMENT OF THE INTERIOR

DEFENSE MINERALS EXPLORATION ADMINISTRATION

OPERATOR'S UNIT COST AND PROGRESS REPORT

Month of January 1956 Docket No. DMEA 2879 Contract No. IDM-E541

Operator's Name Polaris Mining Company Minerals Copper, Lead, Antimony

Address Box 320 Wallace, Idaho (and incidental silver)

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	feet	$12,341.34	253.0	$416,711.87	8331.3	50.02	10725	$ 51.00*
Crosscutting	"	1,439.01	29.5	17,266.87	343.2	50.31		
Raising	"			30,248.26	324.1	93.33	330	93.33
Sideswiping	"	1,275.00	50.0	26,716.35	1047.7	25.50	1560	25.50
Winzes								
Drilling: Core	"	2,709.00	602.0	37,503.00	8334.0	4.50	15200	4.50
Churn								
Auger								
Stripping								
Trenching								
Test Pits								
Roads and Trails								
TOTAL DISTRIBUTED COSTS								TOTAL COSTS AUTHORIZED BY CONTRACT
Operating Equipment Purchased								
Initial Rehabilitation and Repairs								
New Buildings, Improvements, etc.								
TOTAL COSTS								

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

Date _____ Operator Polaris Mining Company

Per [signature] Title President

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

(Instructions on reverse)

REMARKS:

* Maximum allowed by contract.

(For Government use only)

151 Eric G. Erickson

INSTRUCTIONS

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

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

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

GPO 872894

Polaris Mining Company

RECEIVED
FEB 20 1956

Wallace, Idaho

February fourteenth
1956

Defense Minerals Exploration Administration
1201 North Division Street
Spokane 2, Washington

Re: Progress Report Polaris East
Exploration Project - January 1956
Docket No. DMEA - 2879
Contract No. IDM-E541

Gentlemen:

The main easterly heading was advanced a total of 253.0 feet during January. Sideswipe consisted of 37 feet (from station SS 3050 plus 18 to 55 feet) and 13 feet (from station SS 3058 plus 141 to 154 feet). Number 281 N. crosscut was driven 29.5 feet. Diamond drill hole No. 3271 was drilled 471.7 feet during the month and was still being continued. Hole No. 3272 was drilled 130.3 feet and completed to 987.0 feet. The log of SS 3272 is enclosed. The log of SS 3271 will be included in next month's report.

The attached 50-scale map shows the advance during January. Rocks are still bleached argillaceous quartzite containing minor quartz and siderite stringers. Several minor faults were found, and near the Rainbow west boundary a stronger fault structure was cut. In the hangingwall of this fault there was considerable coarse-grained siderite containing some pyrite, and north, or in the footwall, a strong fault zone was exposed in the north crosscut. Holes will be drilled both northerly and southerly from the crosscut and the sideswipe opposite the mouth of the crosscut.

Ventilation is getting to be a greater problem as this long drift continues to advance.

Yours very truly,

Robert E. Sorenson

Robert E. Sorenson

RES/rmr

Encs.

DMEA-104 (Rev.)
(April 1952)

Budget Bureau No. 42-R1036.5

RECEIVED
JAN 20 1956

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION

OPERATOR'S MONTHLY REPORT AND VOUCHER

Month of December, 1955 Docket No. DMEA 2879 Contract No. IDM-E 541
Operator's Name Polaris Mining Company Minerals Lead, Copper, Antimony (& Incidental Silver)
Address Box 320, Wallace, Idaho
Contract Amount, $685,955.00 Government Participation: 50 % Amount, $342,977.50

ITEMS OF COSTS	FOR OPERATOR'S USE: Monthly Total	Totals Previously Reported	Totals To Date	FOR GOVERNMENT USE ONLY: Approved Monthly Total	Approved Totals Previously Reported	Approved Totals To Date
(1) Independent Short Form Contracts:						
Drilling Core 1072.2 @ 4.50	4,824.90	29,969.10	34,794.00	4824.90	29969.10	34794.00
Raising		30,248.26	30,248.26		30248.26	30248.26
Crosscutting		15,827.86	15,827.86		15827.86	15827.86
Drifting 2904 @ 48.78	14,165.71	390,204.82	404,370.53	14165.71	390204.82	404370.53
Sideswipe 11.0 @ 25.50	280.50	25,160.85	25,441.35	280.50	25160.85	25441.35
(2) Labor and Supervision:						
Labor						
Supervision						
Technical Services						
(3) Operating Mat'ls. and Supplies:						
Timber						
Explosives						
Pipe						
Track						
(4) Operating Equipment:						
Rental						
Purchase						
Depreciation						
(5) Initial Rehabilitation and Repairs						
(6) New Bldgs., Improvements, etc.						
(7) Miscellaneous:						
Repairs to Equipment						
Sampling and Analysis						
Payroll Taxes						
Liability Insurance						
(8) Contingencies (specify):						
TOTALS	19,271.11	491,410.89	510,682.00	19271.11	491410.89	510682.00

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

Date 1-5-56 *Payee Polaris Mining Company

Per [signature] Title President

*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:

$ 9635 56

Signature [signature]
(Authorized Certifying Officer)

Date 1-16-56 Vou. No. 1689

(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. E541 in accordance with the terms of the contract.

Signature /S/ Eric G. Erickson Title Mining Engr Date 1-9-56

APPROVAL BY DMEA EXECUTIVE OFFICER OR ALTERNATE:

Signature /S/ Stephen W Zoldok Title Mining Engr Date 1-10-56

MONTHLY REPORT OF OPERATOR

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

Form MF-104A
(April 1952)

Budget Bureau No. 42-R1151.2

UNITED STATES
DEPARTMENT OF THE INTERIOR

RECEIVED
JAN 20 1956

DEFENSE MINERALS EXPLORATION ADMINISTRATION

OPERATOR'S UNIT COST AND PROGRESS REPORT

Month of December 195 5 Docket No. DMEA 2879 Contract No. IDM-E 541

Operator's Name Polaris Mining Company

Address Box 320, Wallace, Idaho

Minerals Copper, Lead, Antimony (and Incidental Silver)

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	feet	14,165.71	290.4	404,370.53	8,078.3	50.06	10725	~~$ 51.00*~~ 48.78
Crosscutting	"			15,827.86	313.7	50.46		
Raising	"			30,248.26	324.1	93.33	330	93.33 *
~~xxxx~~ Sideswiping	"	280.50	11.0	25,441.35	997.7	25.50	1560	25.50 *
Shafts								
Winzes	"	4,824.90	1,072.2	34,794.00	7,732.0	4.50	15200	4.50 *
Drilling: Core								
Churn								
Auger								
Stripping								
Trenching								
Test Pits								
Roads and Trails								
Total Distributed Costs								Total Costs Authorized by Contract
Operating Equipment Purchased								
Initial Rehabilitation and Repairs								
New Buildings, Improvements, etc.								
Total Costs		19271.11		570682.00				685955.00

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

Date 1-5-56 Operator Polaris Mining Company

Per [signature] Title President

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

(Instructions on reverse)

REMARKS:

(For Government use only)

* Maximum allowed by contract

/s/ E. G. Erickson

INSTRUCTIONS

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

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

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

GPO 872894

Polaris Mining Company

Wallace, Idaho
January fifth
1 9 5 6

RECEIVED
JAN 20 1956

Defense Minerals Exploration Administration
1201 North Division Street
Spokane 2, Washington

Re: Progress Report Polaris East
Exploration Project - Dec. 1955
Docket No. DMEA - 2879
Contract No. IDM-E 541

Gentlemen:

The main easterly heading was advanced 290.4 feet during December, and 11 feet of sideswipe (from Station 3055 plus 56 to 67 feet) was completed. Diamond drill hole No. SS 3270 was extended 215.5 feet to completion at 1010 feet and hole No. SS 3272 was extended 856.7 feet. A log of hole No. SS 3270 is attached and the log of hole SS 3272 will be provided upon completion of the hole.

The attached 50 scale map shows the geology of December's advance. Minor quartz and siderite stringers were exposed in bleached argillaceous quartzite. Also enclosed is Sheet No. 5 showing progress through November. This is the standard sheet which shows compiled information previously submitted on small monthly sheets.

Yours very truly,

Robert E. Sorenson

Robert E. Sorenson

RES/rmr

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

Budget Bureau No. 42-R1036.5

RECEIVED JAN 3

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

Month of November, 1955 Docket No. DMEA 2879 Contract No. IDM-E 541
Operator's Name Polaris Mining Company Minerals Copper, Lead, Antimony (& Incidental Silver)
Address Box 320, Wallace, Idaho
Contract Amount, $685,955.00 Government Participation: 50 % Amount, $342,977.50

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 Core 542.1 @ 4.50	2,439.45	27,529.65	29,969.10	2439.45	27529.65	29969.10
~~Bulldozing~~ raising		30,072.49	30,072.49	175.77	30072.49	30248.26
Crosscutting		15,942.29	15,942.29	50.29	15777.57	15827.86
Drifting 265.4 @ 51.00	13,535.40	379,244.55	392,779.95	14429.02	375775.80	390204.82
Sideswipe 91.0 @ 25.50	2,320.50	22,633.16	24,953.66	2527.69	22633.16	25160.85
(2) Labor and Supervision:						
Labor						
Supervision						
Technical Services						
(3) Operating Mat'ls. and Supplies:						
Timber						
Explosives						
Pipe						
Track						
(4) Operating Equipment:						
Rental						
Purchase						
Depreciation						
(5) Initial Rehabilitation and Repairs						
(6) New Bldgs., Improvements, etc.						
(7) Miscellaneous:						
Repairs to Equipment						
Sampling and Analysis						
Payroll Taxes						
Liability Insurance						
(8) Contingencies (specify):						
TOTALS	18,295.35	475,422.14	493,717.49	19622.22	471788.67	491410.89

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

Date 12-9-55 *Payee Polaris Mining Company

Per [signature] Title President

*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:

$ 9811.11

Signature MAP
(Authorized Certifying Officer)

Date 12-23-55 Vou. No. 1680
(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. E541 in accordance with the terms of the contract.

Signature /s/ Eric G. Erickson Title Mining Engr. Date 12-16-55

APPROVAL BY DMEA EXECUTIVE OFFICER OR ALTERNATE:

Signature /s/ Stephen W. Zoldok Title Mining Engr. Date 12-20-55

MONTHLY REPORT OF OPERATOR

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

Form MF-104A
(April 1952)

Budget Bureau No. 42-R1151.2

RECEIVED JAN 3 1956

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

Month of November 1955 Docket No. DMEA 2879 Contract No. IDM-E 541

Operator's Name Polaris Mining Company Mineral Copper, Lead, Antimony (& Incidental Silver)

Address Box 320, Wallace, Idaho

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
		14449.02		390 204.87				
Drifting	feet	13,535.40	265.4	~~392,779.95~~	7,787.9	50.43	10725	$ 51.00 *
Crosscutting	"	50.29	158.27	15,942.29	313.7	50.82		
Raising	"	2175.79	30.248	30,072.49	324.1	92.79	330	93.33
Sideswiping	"	2,320.50	91.0	24,953.66	986.7	25.29	1560	25.50
Winzes		25296.9		25160.85				
Drilling: Core	feet	2,439.45	542.1	29,969.10	6,659.8	4.50	15200	4.50
Churn								
Auger								
Stripping								
Trenching								
Test Pits								
Roads and Trails								
TOTAL DISTRIBUTED COSTS								TOTAL COSTS AUTHORIZED BY CONTRACT
Operating Equipment Purchased								
Initial Rehabilitation and Repairs								
New Buildings, Improvements, etc.								
TOTAL COSTS		19622.22		491 410.89				685955.00

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

Date 12-9-55 Operator Polaris Mining Company

Per [signature] Title President

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)

*Maximum allowed by contract

/s/ Eric G. Erickson

adjusted to audit report.

INSTRUCTIONS

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

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

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

GPO 872894

Polaris Mining Company

Wallace, Idaho
December ninth
1 9 5 5

Defense Minerals Exploration Administration
1201 North Division Street
Spokane 2, Washington

Re: Progress Report Polaris East
Exploration Project - Nov. 1955
Docket No. DMEA - 2879
Contract No. IDM-E 541

Gentlemen:

The main easterly heading was advanced 265.4 feet during November and 91.0 feet of switch sideswipe from Station SS - 3050 plus 151 to 242 feet was completed. Diamond drill hole No. SS-3268 was extended 221.6 feet completing the hole at 1004.2 feet. Hole No. SS-3270 was extended 320.5 feet and is still continuing. A log of SS-3268 is attached and the log for SS-3270 will be provided after the hole is completed.

The attached 50-scale map shows geology of the month's advance. The heading exposed minor quartz and siderite stringers in bleached argillaceous quartzite. The completed diamond drill hole No. SS-3268 crossed a section similar to that exposed in Coeur d'Alene Mines 2800 level south crosscut in the same general area. From 636 to 649 feet massive unmineralized white quartz was cut. Nothing else of interest was intersected by the hole.

Yours very truly,

Robert E. Sorenson

Robert E. Sorenson

RES/v

POLARIS MINING COMPANY
Contract Idm-E541

Adjustments on payments made to Operator for period May 1955 through August 1955 and payments to be made December 23, 1955 for the months of September, October, and November 1955.

- - - - - - - - - - - -

Date 1955	Claimed on Forms MF-104 Footage	Per Foot	Amount	Cost Determined by Audit Per foot	Amount	Adjustment of payments made on drifting and crosscutting during second period	
MF-1048 Paid							
May							
Drift	370.5	$51.00	$18,895.50	$48.78	$18,072.99	$822.51	
June							
Drift	315.9	51.00	16,110.90	48.78	15,409.60	701.30	
Xcut	24.0	51.00	1,224.00	48.78	1,170.72	53.28	
July							
Drift	289.2	51.00	14,749.20	48.78	14,107.18	642.02	
Xcut	21.0	51.00	1,071.00	48.78	1,024.38	46.62	
August							
Drift	309.5	51.00	15,784.50	48.78	15,097.41	687.09	
						$2,952.92	
				Drifting		$2,852.92	
				Crosscutting		99.90	$2,952.82
MF-1048 to be paid 12/23/55							
September							
Drift	156.4	51.00	$7,976.40	$48.78	$7,629.19	$ 347.21	
Xcut	29.2	51.00	1,489.20	48.78	1,424.38	64.82	
October							
Drift	121.0	51.00	6,171.00	48.78	5,902.38	268.62	
November							
Drift	265.4	51.00	13,535.40	48.78	12,946.21	589.19	
						$1,269.84	
				Drifting		$1,205.02	
				Crosscutting		64.82	1,269.84

Total adjustment due to difference in per foot price $4,222.66

Additional Costs allowed by audit for first period:

Drifting	$1,482.81	
Crosscutting	50.29	
Sideswipe	207.19	
Raising	175.77	1,916.06

Net deduction from costs claimed by Operator $2,306.60

DMEA Field Team, Region I, NW District December 27, 1955

DMEA Certifying Officer, Region I

Polaris Mining Company, Contract Idm-8541. Monthly operating reports May 1955 through November 1955.

Operating reports for the months of September, October, and November 1955 submitted by the Operator have been adjusted and payment has been made in accordance with the findings shown in the audit report by DMEA Auditor, C. A. Turner, dated September 2, 1955.

Adjustments have also been made to bring the per foot price for drifting and crosscutting to $48.78 for the months of May, June, July, and August 1955. This is the figure shown by the audit to be the actual cost of doing this work for the "first period" of the contract.

The audit allowed costs in excess of those claimed by the Operator for the first period of the contract in the amount of $1,916.06. This has been taken into consideration in making payment.

The date of May 1, 1955 is the date set by the Field Team as that on which the "second period" should start and as that on which the per foot price of $48.78 should become effective.

The adjustment made is as follows:

Adjustment of price from $51.00 per foot for drifting and crosscutting to $48.78 for the period May 1955 through November 1955	$4,222.66
Less additional costs allowed by the audit for the "first period"	1,916.06
Net deletion for period	$2,306.60

Myrtle Purdy

cc: Operator
DMEA (2)
USGS
Wash. (2) ✓
AD
Engineer

Form MF-164 (Rev.)
(April 1952)

Budget Bureau No. 42-R1036.5

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION

OPERATOR'S MONTHLY REPORT AND VOUCHER

RECEIVED JAN 3

Month of October, 1955 Docket No. DMEA 2879 Contract No. IDM-E-541
Operator's Name Polaris Mining Company Minerals Copper, Lead, Antimony (& Incidental Silver)
Address Box 320, Wallace, Idaho
Contract Amount, $ 685,955.00 Government Participation: 50% Amount, $ 342,977.50

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 Core 160.6 @ 4.50	722.70	26,806.95	27,529.65	722.70	26806.95	27529.65
Raising		30,072.49	30,072.49		30072.49	30072.49
Crosscutting		15,942.29	15,942.29		15777.57	15777.57
Drifting 121.0 @ 51.00	6,171.00	373,073.55	379,244.55	5902.38	369873.42	375775.80
Sideswipe 33.5 @ 25.50	854.25	21,778.91	22,633.16	854.25	21778.91	22633.16
(2) Labor and Supervision:						
Labor						
Supervision						
Technical Services						
(3) Operating Mat'ls. and Supplies:						
Timber						
Explosives						
Pipe						
Track						
(4) Operating Equipment:						
Rental						
Purchase						
Depreciation						
(5) Initial Rehabilitation and Repairs						
(6) New Bldgs., Improvements, etc.						
(7) Miscellaneous:						
Repairs to Equipment						
Sampling and Analysis						
Payroll Taxes						
Liability Insurance						
(8) Contingencies (specify):						
TOTALS	7,747.95	467,674.19	475,422.14	7479.33	464309.34	471788.67

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

Date 11-9-55 *Payee Polaris Mining Company

Per John R. Dunbar Title Secretary

*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:

$ 3739 67

Signature M. J. P.
(Authorized Certifying Officer)

Date 12-23-55 Vou. No. 1680

(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. 6541 in accordance with the terms of the contract.

Signature (S) Eric G Erickson Title Mining Engr Date Nov 16-55

APPROVAL BY DMEA EXECUTIVE OFFICER OR ALTERNATE:

Signature (S) Stephen W Zoldok Title Mining Engr Date Nov 17-55

MONTHLY REPORT OF OPERATOR

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

Form MF-164A
(April 1952)

Budget Bureau No. 42-R1151.2

RECEIVED
JAN 3 1956

UNITED STATES
DEPARTMENT OF THE INTERIOR

DEFENSE MINERALS EXPLORATION ADMINISTRATION

OPERATOR'S UNIT COST AND PROGRESS REPORT

Month of October 1955 Docket No. DMEA 2879 Contract No. IDM-E 541

Operator's Name Polaris Mining Company Minerals Copper, Lead, Antimony (& Incidental Silver)

Address Box 320, Wallace, Idaho

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	feet	6,171.00	121.0	379,244.55	7522.5	50.41	10725	$ 51.00 *
Crosscutting	"			15,942.29	313.7	50.82		
Raising	"			30,072.49	324.1	92.79	330	93.33
~~xxxx~~ Sideswiping	"	854.25	33.5	22,633.16	895.7	25.27	1560	25.50
Winzes								
Drilling: Core	"	722.70	160.6	27,529.65	6117.7	4.50	15200	4.50
Churn								
Auger								
Stripping								
Trenching								
Test Pits								
Roads and Trails								
TOTAL DISTRIBUTED COSTS								TOTAL COSTS AUTHORIZED BY CONTRACT
Operating Equipment Purchased								
Initial Rehabilitation and Repairs								
New Buildings, Improvements, etc.								
TOTAL COSTS								

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

Date 11-9-55 Operator Polaris Mining Company

Per John R. Montana Title Secretary

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)

* Maximum allowed by Contract

/S/ Eric G Erickson

INSTRUCTIONS

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

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

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

GPO 872894

Polaris Mining Company

U. S. BUREAU OF MINES
RECEIVED
NOV 14 1955
SPOKANE, WASHINGTON

Wallace, Idaho
November tenth
1 9 5 5

Defense Minerals Exploration Administration
1201 North Division Street
Spokane 2, Washington

Re: Progress Report Polaris East
Exploration Project - October
1955
Docket No. DMEA - 2879
Contract No. IDM-E 541

Gentlemen:

The main easterly heading was advanced 121.0 feet during October. 21.5 feet of switch sideswipe was completed in the section Station 3050 plus 129.5 to 151.0 feet and 12.0 feet of sideswipe was completed in the section Station 3044 plus 231 to 243 feet. Diamond drill hole No. SS3268 was drilled 111.6 feet (not completed) and SS3270 was drilled 49.0 feet (not completed). Logs will be provided upon completion of the holes. During the month new ventilation pipe installation and alteration of the ventilation system delayed drift and drilling advance but since that time the drift has been advanced without loss in time due to poor air.

The attached 50-scale map shows the geology along the section of drift which was driven during the month. Rock was bleached argillaceous quartzite and a few minor quartz and carbonate stringers were cut as shown on the map. No important exposures were made in the small amount of diamond drilling done during the month.

Yours very truly,

Robert E. Sorenson

Robert E. Sorenson

RES/v

Enc.

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

Budget Bureau No. 42-R1036.5

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

Month of September, 1955 Docket No. DMEA 2879 Contract No. IDM-E 541
Operator's Name Polaris Mining Company Mineral Copper, Lead, Antimony
Address Box 320, Wallace, Idaho (& Incidental Silver)
Contract Amount, $685,955.00 Government Participation: 50 % Amount, $342,977.50

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 Core-279.3 @ 4.50	1256.85	25550.10	26806.95	1256.85	25550.10	26806.95
~~xxxxxx~~ Raising		30072.49	30072.49		30072.49	30072.49
Crosscutting 29.2 @ 51.00	1489.20	14453.09	15942.29	1324.48	14453.09	15777.57
Drifting 156.4 @ 51.00	7976.40	365097.15	373073.55	4776.27	365097.15	369873.42
		21778.91	21778.91		21778.91	21778.91
(2) Labor and Supervision:						
Labor						
Supervision						
Technical Services						
(3) Operating Mat'ls. and Supplies:						
Timber						
Explosives						
Pipe						
Track						
(4) Operating Equipment:						
Rental						
Purchase						
Depreciation						
(5) Initial Rehabilitation and Repairs						
(6) New Bldgs., Improvements, etc.						
(7) Miscellaneous:						
Repairs to Equipment						
Sampling and Analysis						
Payroll Taxes						
Liability Insurance						
(8) Contingencies (specify):						
TOTALS	10722.45	456951.74	467674.19	7357.60	456951.74	464309.34

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

Date 10-10-55 *Payee Polaris Mining Company

Per John R. Mc[illegible] Title Secretary

*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:

$ 3678.80

Signature M.J.P.
(Authorized Certifying Officer)

Date 12-23-55 Vou. No. 1680
(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. E541 in accordance with the terms of the contract.

Signature /S/ Eric G Erickson Title Mining Engr Date 10-12-55

APPROVAL BY DMEA EXECUTIVE OFFICER OR ALTERNATE:

Signature /S/ Stephen W Zoldok Title Mining Engr Date 10-13-55

MONTHLY REPORT OF OPERATOR

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

Form MF-104A
(April 1952)

Budget Bureau No. 42-R1151.2

UNITED STATES
DEPARTMENT OF THE INTERIOR

DEFENSE MINERALS EXPLORATION ADMINISTRATION

OPERATOR'S UNIT COST AND PROGRESS REPORT

Month of September 1955 Docket No. DMEA 2879 Contract No. IDM-E 541

Operator's Name Polaris Mining Company Minerals copper, lead, antimony (& Incidental Silver)

Address Box 320, Wallace, Idaho

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	feet	7976.40	156.4	373073.55	7401.5	50.41	10725	$ 51.00 *
Crosscutting	"	1489.20	29.2	15942.29	313.7	50.82		
Raising	"			30072.49	324.1	92.79	330	93.33
Sideswiping	"			21778.91	862.2	25.26	1560	25.50
Winzes								
Drilling: Core	feet	1256.85	279.3	26806.95	5957.1	4.50	15200	4.50
Churn								
Auger								
Stripping								
Trenching								
Test Pits								
Roads and Trails								
TOTAL DISTRIBUTED COSTS								TOTAL COSTS AUTHORIZED BY CONTRACT
Operating Equipment Purchased								
Initial Rehabilitation and Repairs								
New Buildings, Improvements, etc.								
TOTAL COSTS								

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

Date 10-10-55 Operator Polaris Mining Company

Per John R. Matthews Title Secretary

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

(Instructions on reverse)

REMARKS:

(For Government use only)

*Maximum allowed by Contract

151 Eric G Erickson

INSTRUCTIONS

Preparation of Form MF-104A—Operator's Unit Cost and Progress Report.—Applicable places on Form 104A should be filled in by the Operator. The purpose of this form is twofold as follows: (1) to furnish the supervising engineers and other administrators with statistical information necessary to better determine the progress of the project; and (2) to furnish more permanent information on mining costs for future use. The more important phases of operation on which permanent information is desired have been outlined in the form. There are blank lines, however, for those unusual phases which may need to be reported for a particular project. It will be necessary for the Operator to distribute his costs among the applicable phases reported with the exception of three items the costs of which are not to be distributed by the Operator. These three items are: "Operating Equipment Purchased", "Initial Rehabilitation and Repairs", and "New Buildings, Improvements, etc." The reason for not distributing these items on a monthly basis is doubtless clear to the Operator, since such distribution might well overstate the cost for any one month or period short of the entire contract period.

Form MF-104A has been designed to tie in with Form MF-104 for both monthly and cumulative costs. The "Total Costs" on Form MF-104A for each month should equal the monthly "Total Costs" as reported on Form MF-104. This is also true of the "Total Costs To Date".

In preparing Form MF-104A, it will be necessary frequently to distribute certain costs over a number of items. For instance, supervisory and engineering costs may have to be distributed over several phases, such as, drifting, crosscutting, raising, etc., provided that these items were reported active for the month. Such distributions should be made on the basis of time spent on the various phases, on man days of labor charged to such phases, or on some other equitable basis. "Operating Equipment", "Initial Rehabilitation and Repairs", and "New Buildings Improvements, etc.", will be distributed to the several phases of the project by the Washington Office of DMEA at the close of the project if determined necessary. The last two columns headed "Authorized by Contract" will be filled in by the Operator if such information is found in the contract. This information is usually a part of Exhibit "A" of the contract. A space for remarks has been provided for the use of the Operator to call attention to any unusual circumstances causing excessive or disproportionate unit costs.

GPO 872894

Polaris Mining Company

Wallace, Idaho
October tenth
1 9 5 5

Defense Minerals Exploration Administration
1201 North Division Street
Spokane 2, Washington

Re: Progress Report Polaris East
Exploration Project - September 1955
Docket No. DMEA 2879
Contract No. IDM-E 541

Gentlemen:

The main easterly heading was advanced 156.4 feet during September and No. 263 North Crosscut was advanced 29.2 feet. The lesser advance was due primarily to the necessity of improving ventilation in this long advancing heading. Diamond drilling likewise was somewhat delayed and only short sections of holes Nos. 3270 and 3271 were drilled with a small machine. They will be deepened by the large machine which has just been returned from Canada after receiving a major overhaul. Advance in 3270 hole was 193.7 feet and in 3271 advance in September was 85.6 feet. Approximately 1800 feet of 24 inch pipe is being installed in the drift in an attempt to improve ventilation.

In September's drift advance some minor quartz and siderite stringers were exposed as shown on the attached map. Small specks of tetrahedrite were seen in a few places. Wall rock was bleached argillaceous quartzite.

Yours very truly,

Robert E. Sorenson

Robert E. Sorenson

RES/v

Encs.

Form MF-104 (Rev.)
(April 1952)

Budget Bureau No. 42-R1036.5

RECEIVED
SEP 26 1955

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION
OPERATOR'S MONTHLY REPORT AND VOUCHER

Month of August, 1955 Docket No. DMEA 2879 Contract No. IDM-E 541
Operator's Name Polaris Mining Company Minerals Copper, Lead, Antimony
Address Box 320, Wallace, Idaho (& Incidental Silver)
Contract Amount, $ 685,955.00 Government Participation: 50 % Amount, $ 342,977.50

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 Core-570.3@4.50	2566.35	22983.75	25550.10	2566.35	22983.75	25550.10
Raising		30072.49	30072.49		30072.49	30072.49
Crosscutting		14453.09	14453.09		14453.09	14453.09
Drifting 309.5 @ 51.00	15784.50	349312.65	365097.15	15784.50	349312.65	365097.15
Sideswipe 11.0@25.50	280.50	21498.41	21778.91	280.50	21498.41	21778.91
(2) Labor and Supervision:						
Labor						
Supervision						
Technical Services						
(3) Operating Mat'ls. and Supplies:						
Timber						
Explosives						
Pipe						
Track						
(4) Operating Equipment:						
Rental						
Purchase						
Depreciation						
(5) Initial Rehabilitation and Repairs						
(6) New Bldgs., Improvements, etc.						
(7) Miscellaneous:						
Repairs to Equipment						
Sampling and Analysis						
Payroll Taxes						
Liability Insurance						
(8) Contingencies (specify):						
TOTALS	18631.35	438320.39	456951.74	18631.35	438320.39	456951.74

I certify that the above bill is correct and just and that payment therefor has not been received.

Date 9-12-55 *Payee Polaris Mining Company

Per [signature] Title President

*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:

$ 9315.68

Signature [signature]
(Authorized Certifying Officer)

Date 9-21-55 Vou. No. 1614
(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. E541 in accordance with the terms of the contract.

Signature /S/ Eric G Erickson Title Mining Engr Date 9-19-55

APPROVAL BY DMEA EXECUTIVE OFFICER OR ALTERNATE:

Signature /S/ Stephen W Zoldok Title Mining Engr Date 9-19-55

MONTHLY REPORT OF OPERATOR

The Operator (Contractor) of an exploration project is required to make a monthly report to the Government through the Regional Executive Officer. This report consists of three parts as follows:

(a) *Form MF-104—Operator's Monthly Report and Voucher.*—This form details expenditures and constitutes a voucher for reimbursing the Operator for the Government's share of costs;

(b) *Form MF-104A—Operator's Unit Cost and Progress Report.*—This is a statistical report of expenditures which shows costs for the various types of operation; and

(c) *Narrative.*—A concise narrative description of progress made, results accomplished, and any unusual difficulties encountered must be furnished as an attachment to this Report and Voucher. Wherever possible, the narrative is to be illustrated with maps or sketches showing formations penetrated and location and assays of samples taken as well as advances in workings. In the case of diamond drilling or churn drilling, the location and inclination of holes is to be shown on a map; logs and assays also are to be submitted.

The Monthly Report of Operator should be prepared in an original and four copies all of which must be sent to the Executive Officer of the Region not later than the 15th of the month following.

Preparation of Form MF-104—Operator's Monthly Report and Voucher.—All the applicable spaces in Form MF-104 should be filled in by the Operator, and the Operator or his agent should sign the certification in the lower left corner of the form.

The items of costs are arranged in the order they appear in Article 6 (a) of Form MF-200 (Revised February 1952), however, this form is readily adaptable for use in reporting activities under other contract forms.

Under Item (1) delete words "Short Form" if the contract is a sub-contract under Form MF-200; and delete word "Independent" if the contract reported is on Form MF-200 (A). Also, report work paid for on a unit basis under contract Form MF-200 as though it were performed under an independent contract.

Under Item (2) include labor, supervision and technical services incurred for the exploratory operations. Do not include labor, supervision and technical services used for work performed under items (5) and (6).

Under Item (3) include the costs of material and supplies used in the project other than that used under items (5) and (6).

Under Item (4) appear the three types of operating equipment expenditures, that is, rental, purchase and depreciation. The expenditures made for renting equipment belonging to a third party will be reported under "Rental". The amount paid or duly obligated for payment for the purchase of equipment will be reported under "Purchase". The amount of expenditures due the Operator to reimburse him for depreciation of equipment owned will be reported under "Depreciation".

Item (5) comprises costs of labor, supervision, technical services, materials, etc., which are used in the initial rehabilitation and repair of existing buildings, installations, fixtures, and equipment. These costs, therefore, should not be reported under items (2) and (3).

Item (6) includes the labor, supervision, technical services, materials, etc., used in the installation or construction of new buildings, fixed improvements, etc., necessary for the project. These costs, therefore, should not be reported under items (2) and (3).

Item (7) covers miscellaneous types of expenditure such as payroll taxes, liability insurance, workmen's compensation insurance, repairs to equipment and sampling and analysis. Only that part of payroll taxes, liability insurance and workmen's compensation which are paid by the operator should be reported under item (7). The share paid by the employee as a payroll deduction is to be included under item (2) as labor costs.

Item (8) includes any unforeseen costs not included in the other seven categories.

The original of Form MF-104 when submitted for reimbursable expenses incurred under contract Form MF-200 must be supported by original documentation or by certified copies of purchase orders, payrolls or transcripts of payrolls, unless such documentation has been waived by the Regional Executive Officer. This certification may be stated thus, "Certified True Copy (or Transcript)", followed by appropriate signature. If the Executive Officer of the Region determines that a contract under Form MF-200 should have an "on-site" audit, that is, a Government auditor should make an audit of the Operator's books and records of account, the Operator need not support his monthly voucher with original or certified documents except in cases of equipment purchases whose individual costs exceed $50.00. In these cases the original or a certified copy of the purchase order or invoice should be attached to the Monthly Voucher. N. B.—Only the *original* of Form MF-104 is required to be documented. The four copies of Form MF-104 are not to be thus supported.

Form MF-104 submitted for reimbursement under fixed price contracts on Form MF-200 (A), however, are not required to be supported by documentation of any kind. The Operator will submit his claim under item (1) of Form MF-104 by deleting as stated above the word "Independent" and by showing the number of feet or other units immediately after the appropriate descriptive word, such as, drilling, bulldozing, crosscutting, drifting, etc., and giving the "Monthly Total" amount due. "Totals Previously Reported", and "Totals to Date" columns should also be filled in.

Form MF-104A
(April 1952)

Budget Bureau No. 42-R1151.2

UNITED STATES
DEPARTMENT OF THE INTERIOR

DEFENSE MINERALS EXPLORATION ADMINISTRATION

OPERATOR'S UNIT COST AND PROGRESS REPORT

RECEIVED
SEP 26 1955

Month of August 1955 Docket No. DMEA 2879 Contract No. IDM-E 541
Operator's Name Polaris Mining Company Minerals Copper, Lead, Antimony (& Incidental Silver)
Address Box 320, Wallace, Idaho

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	feet	15784.50	309.5	365097.15	7245.1	50.39	10725	$51.00*
Crosscutting	"			14453.09	284.5	50.80		
Raising	"			30072.49	324.1	92.79	330	93.33
~~Shaft~~ Sidewiping	"	280.50	11.0	21778.91	862.2	25.26	1560	25.50
Winzes								
Drilling: Core	"	2566.35	570.3	25550.10	5677.8	4.50	15200	4.50
Churn								
Auger								
Stripping								
Trenching								
Test Pits								
Roads and Trails								
TOTAL DISTRIBUTED COSTS								TOTAL COSTS AUTHORIZED BY CONTRACT
Operating Equipment Purchased								
Initial Rehabilitation and Repairs								
New Buildings, Improvements, etc.								
TOTAL COSTS								

The undersigned company, and the official executing this certification on its behalf, hereby certify that the information contained in this report is correct and complete to the best of their knowledge and belief.

Date 9-12-55 Operator Polaris Mining Company

Per [signature] Title President

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)

*Maximum allowed by Contract

/s/ Eric H Erickson

INSTRUCTIONS

Preparation of Form MF-104A—Operator's Unit Cost and Progress Report.—Applicable places on Form 104A should be filled in by the Operator. The purpose of this form is twofold as follows: (1) to furnish the supervising engineers and other administrators with statistical information necessary to better determine the progress of the project; and (2) to furnish more permanent information on mining costs for future use. The more important phases of operation on which permanent information is desired have been outlined in the form. There are blank lines, however, for those unusual phases which may need to be reported for a particular project. It will be necessary for the Operator to distribute his costs among the applicable phases reported with the exception of three items the costs of which are not to be distributed by the Operator. These three items are: "Operating Equipment Purchased", "Initial Rehabilitation and Repairs", and "New Buildings, Improvements, etc." The reason for not distributing these items on a monthly basis is doubtless clear to the Operator, since such distribution might well overstate the cost for any one month or period short of the entire contract period.

Form MF-104A has been designed to tie in with Form MF-104 for both monthly and cumulative costs. The "Total Costs" on Form MF-104A for each month should equal the monthly "Total Costs" as reported on Form MF-104. This is also true of the "Total Costs To Date".

In preparing Form MF-104A, it will be necessary frequently to distribute certain costs over a number of items. For instance, supervisory and engineering costs may have to be distributed over several phases, such as, drifting, crosscutting, raising, etc., provided that these items were reported active for the month. Such distributions should be made on the basis of time spent on the various phases, on man days of labor charged to such phases, or on some other equitable basis. "Operating Equipment", "Initial Rehabilitation and Repairs", and "New Buildings Improvements, etc.", will be distributed to the several phases of the project by the Washington Office of DMEA at the close of the project if determined necessary. The last two columns headed "Authorized by Contract" will be filled in by the Operator if such information is found in the contract. This information is usually a part of Exhibit "A" of the contract. A space for remarks has been provided for the use of the Operator to call attention to any unusual circumstances causing excessive or disproportionate unit costs.

GPO 872894

Polaris Mining Company

Wallace, Idaho

September twelfth
1955

RECEIVED
SEP 26 1955

Defense Minerals Exploration Administration
1201 North Division Street
Spokane 2, Washington

Re: Progress Report Polaris East
Exploration Project - August 1955
Docket No. DMEA 2879
Contract No. IDM-E 541

Gentlemen:

The main easterly heading was advanced 309.5 feet during August and 11.0 feet of switch sideswipe was completed in the section 99 to 110 feet east of station SS 3042. Diamond drill hole No. SS 3270 was advanced 231.3 feet and No. SS 3271 was advanced 339.0 feet. These holes will be completed to greater depth when our large diamond drill machine is returned from Boyles Brothers plant in Vancouver, B.C., where it is now being repaired. Hole No. 3270 is being drilled N.01°W from a point 30 feet north of station SS 3039. Hole No. 3271 is being advanced S.22°W from a point 25 feet S. W. of station SS 3041.

The main heading was advanced in bleached argillaceous quartzite. Some minor irregular quartz stringers were exposed in drifting. No sulphide mineralization of importance was exposed. Diamond drill results during August were also negative. Logs of holes will be submitted when drilling is finished.

Yours very truly,

Robert E. Sorenson

Robert E. Sorenson

RES
rmr

Encs.

Form MF-104 (Rev.)
(April 1952)

Budget Bureau No. 42-R1036.5

RECEIVED
AUG 26 1955

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION
OPERATOR'S MONTHLY REPORT AND VOUCHER

Month of July, 1955 Docket No. DMEA 2879 Contract No. IDM-E 541
Operator's Name Polaris Mining Company Minerals Copper, Lead, Antimony (& Incidental Silver)
Address Box 320, Wallace, Idaho
Contract Amount, $ 685,955.00 Government Participation: 50% Amount, $ 342,977.50

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 core 310 @ 4.50	1,395.00	21,588.75	22,983.75			
~~xxxxxxxx~~Raising		30,072.49	30,072.49			
Crosscutting 21.0 @ 51.00	1,071.00	13,382.09	14,453.09			
Drifting 289.2 @ 51.00	14,749.20	334,563.45	349,312.65			
Sideswipe 12.0 @ 25.50	306.00	21,192.41	21,498.41			
(2) Labor and Supervision:						
Labor						
Supervision						
Technical Services						
(3) Operating Mat'ls. and Supplies:						
Timber						
Explosives						
Pipe						
Track						
(4) Operating Equipment:						
Rental						
Purchase						
Depreciation						
(5) Initial Rehabilitation and Repairs						
(6) New Bldgs., Improvements, etc.						
(7) Miscellaneous:						
Repairs to Equipment						
Sampling and Analysis						
Payroll Taxes						
Liability Insurance						
(8) Contingencies (specify):						
TOTALS	17,521.20	420,799.19	438,320.39	17521.20	420799.19	438320.39

I certify that the above bill is correct and just and that payment therefor has not been received.

Date 8-10-55 *Payee Polaris Mining Company

Per [signature] Title President

*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:

$ 8760 60

Signature [signature]
(Authorized Certifying Officer)

Date 8-17-55 Vou. No. 1582

(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. E541 in accordance with the terms of the contract.

Signature (S) Stephen W. Zoldok Title Mining Eng Date 8-12-55

APPROVAL BY DMEA EXECUTIVE OFFICER OR ALTERNATE:

Signature (S) Stephen W. Zoldok Title Mining Eng Date 8-12-55

MONTHLY REPORT OF OPERATOR

The Operator (Contractor) of an exploration project is required to make a monthly report to the Government through the Regional Executive Officer. This report consists of three parts as follows:

(a) *Form MF-104—Operator's Monthly Report and Voucher.*—This form details expenditures and constitutes a voucher for reimbursing the Operator for the Government's share of costs;

(b) *Form MF-104A—Operator's Unit Cost and Progress Report.*—This is a statistical report of expenditures which shows costs for the various types of operation; and

(c) *Narrative.*—A concise narrative description of progress made, results accomplished, and any unusual difficulties encountered must be furnished as an attachment to this Report and Voucher. Wherever possible, the narrative is to be illustrated with maps or sketches showing formations penetrated and location and assays of samples taken as well as advances in workings. In the case of diamond drilling or churn drilling, the location and inclination of holes is to be shown on a map; logs and assays also are to be submitted.

The Monthly Report of Operator should be prepared in an original and four copies all of which must be sent to the Executive Officer of the Region not later than the 15th of the month following.

Preparation of Form MF-104—Operator's Monthly Report and Voucher.—All the applicable spaces in Form MF-104 should be filled in by the Operator, and the Operator or his agent should sign the certification in the lower left corner of the form.

The items of costs are arranged in the order they appear in Article 6 (a) of Form MF-200 (Revised February 1952), however, this form is readily adaptable for use in reporting activities under other contract forms.

Under Item (1) delete words "Short Form" if the contract is a sub-contract under Form MF-200; and delete word "Independent" if the contract reported is on Form MF-200 (A). Also, report work paid for on a unit basis under contract Form MF-200 as though it were performed under an independent contract.

Under Item (2) include labor, supervision and technical services incurred for the exploratory operations. Do not include labor, supervision and technical services used for work performed under items (5) and (6).

Under Item (3) include the costs of material and supplies used in the project other than that used under items (5) and (6).

Under Item (4) appear the three types of operating equipment expenditures, that is, rental, purchase and depreciation. The expenditures made for renting equipment belonging to a third party will be reported under "Rental". The amount paid or duly obligated for payment for the purchase of equipment will be reported under "Purchase". The amount of expenditures due the Operator to reimburse him for depreciation of equipment owned will be reported under "Depreciation".

Item (5) comprises costs of labor, supervision, technical services, materials, etc., which are used in the initial rehabilitation and repair of existing buildings, installations, fixtures, and equipment. These costs, therefore, should not be reported under items (2) and (3).

Item (6) includes the labor, supervision, technical services, materials, etc., used in the installation or construction of new buildings, fixed improvements, etc., necessary for the project. These costs, therefore, should not be reported under items (2) and (3).

Item (7) covers miscellaneous types of expenditure such as payroll taxes, liability insurance, workmen's compensation insurance, repairs to equipment and sampling and analysis. Only that part of payroll taxes, liability insurance and workmen's compensation which are paid by the operator should be reported under item (7). The share paid by the employee as a payroll deduction is to be included under item (2) as labor costs.

Item (8) includes any unforeseen costs not included in the other seven categories.

The original of Form MF-104 when submitted for reimbursable expenses incurred under contract Form MF-200 must be supported by original documentation or by certified copies of purchase orders, payrolls or transcripts of payrolls, unless such documentation has been waived by the Regional Executive Officer. This certification may be stated thus, "Certified True Copy (or Transcript)", followed by appropriate signature. If the Executive Officer of the Region determines that a contract under Form MF-200 should have an "on-site" audit, that is, a Government auditor should make an audit of the Operator's books and records of account, the Operator need not support his monthly voucher with original or certified documents except in cases of equipment purchases whose individual costs exceed $50.00. In these cases the original or a certified copy of the purchase order or invoice should be attached to the Monthly Voucher. N. B.—Only the *original* of Form MF-104 is required to be documented. The four copies of Form MF-104 are not to be thus supported.

Form MF-104 submitted for reimbursement under fixed price contracts on Form MF-200 (A), however, are not required to be supported by documentation of any kind. The Operator will submit his claim under item (1) of Form MF-104 by deleting as stated above the word "Independent" and by showing the number of feet or other units immediately after the appropriate descriptive word, such as, drilling, bulldozing, crosscutting, drifting, etc., and giving the "Monthly Total" amount due. "Totals Previously Reported", and "Totals to Date" columns should also be filled in.

Form MF-104A
(April 1952)

Budget Bureau No. 42-R1151.2

UNITED STATES
DEPARTMENT OF THE INTERIOR

DEFENSE MINERALS EXPLORATION ADMINISTRATION

RECEIVED
AUG 2 3 1955

OPERATOR'S UNIT COST AND PROGRESS REPORT

Month of July 1955 Docket No. DMEA 2879 Contract No. IDM-E 541
Operator's Name Polaris Mining Company Minerals Copper, Lead, Antimony (& Incidental Silver)
Address Box 320, Wallace, Idaho

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	feet	14,749.20	289.2	349,312.65	6935.6	50.37	10725	51.00 *
Crosscutting	"	1,071.00	21.0	14,453.09	284.5	50.80		
Raising	"			30,072.49	324.1	92.79	330	93.33
~~Stoping~~ Sideswiping	"	306.00	12.0	21,498.41	851.2	25.26	1560	25.50
Winzes								
Drilling: Core	feet	1,395.00	310.0	22,983.75	5107.5	4.50	15200	4.50
Churn								
Auger								
Stripping								
Trenching								
Test Pits								
Roads and Trails								
TOTAL DISTRIBUTED COSTS								TOTAL COSTS AUTHORIZED BY CONTRACT
Operating Equipment Purchased								
Initial Rehabilitation and Repairs								
New Buildings, Improvements, etc.								
TOTAL COSTS								

The undersigned company, and the official executing this certification on its behalf, hereby certify that the information contained in this report is correct and complete to the best of their knowledge and belief.

Date 8-10-55 Operator Polaris Mining Company

Per [signature] Title President

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)

* Maximum allowed by contract

/s/ Stephen W Zoldok

INSTRUCTIONS

Preparation of Form MF–104A—Operator's Unit Cost and Progress Report.—Applicable places on Form 104A should be filled in by the Operator. The purpose of this form is twofold as follows: (1) to furnish the supervising engineers and other administrators with statistical information necessary to better determine the progress of the project; and (2) to furnish more permanent information on mining costs for future use. The more important phases of operation on which permanent information is desired have been outlined in the form. There are blank lines, however, for those unusual phases which may need to be reported for a particular project. It will be necessary for the Operator to distribute his costs among the applicable phases reported with the exception of three items the costs of which are not to be distributed by the Operator. These three items are: "Operating Equipment Purchased", "Initial Rehabilitation and Repairs", and "New Buildings, Improvements, etc." The reason for not distributing these items on a monthly basis is doubtless clear to the Operator, since such distribution might well overstate the cost for any one month or period short of the entire contract period.

Form MF–104A has been designed to tie in with Form MF–104 for both monthly and cumulative costs. The "Total Costs" on Form MF–104A for each month should equal the monthly "Total Costs" as reported on Form MF–104. This is also true of the "Total Costs To Date".

In preparing Form MF–104A, it will be necessary frequently to distribute certain costs over a number of items. For instance, supervisory and engineering costs may have to be distributed over several phases, such as, drifting, crosscutting, raising, etc., provided that these items were reported active for the month. Such distributions should be made on the basis of time spent on the various phases, on man days of labor charged to such phases, or on some other equitable basis. "Operating Equipment", "Initial Rehabilitation and Repairs", and "New Buildings Improvements, etc.", will be distributed to the several phases of the project by the Washington Office of DMEA at the close of the project if determined necessary. The last two columns headed "Authorized by Contract" will be filled in by the Operator if such information is found in the contract. This information is usually a part of Exhibit "A" of the contract. A space for remarks has been provided for the use of the Operator to call attention to any unusual circumstances causing excessive or disproportionate unit costs.

GPO 872894

Polaris Mining Company

Wallace, Idaho
August tenth
1 9 5 5

RECEIVED
AUG 26 1955

Defense Minerals Exploration Administration
1201 North Division Street
Spokane 2, Washington

Re: Progress Report Polaris East
Exploration Project - July 1955
Docket No. DMEA 2879
Contract No. IDM-E 541

Gentlemen:

The main easterly heading was advanced 289.2 feet during July and 12.0 feet of switch sideswipe from station SS 3040 plus 45 to 57 feet was completed. A crosscut to be used for a diamond drill station was driven southerly 21.0 feet making the face 25.5 feet southerly from station SS 3041. No important or interesting structures were found in the work which was entirely in bleached argillaceous quartzite.

Diamond drill hole No. SS 3268 was continued 128 feet to a point 671 feet from the collar where trouble with the drilling machine forced a temporary stoppage of this hole. In the meantime hole No. SS 3269 was drilled south from a point 52 feet S.E. of station SS 3036 a distance of 182 feet. No structures of importance were exposed by either hole. A log of hole No. SS 3269 is enclosed. Difficulty of obtaining drill repair parts made it necessary to start another hole with a small machine awaiting the repairs. A log of hole No. 3268 will be submitted when the hole is complete.

Yours very truly,

Robert E. Sorenson

Robert E. Sorenson

RES
vfc

Enc.

Form MF-104 (Rev.)
(April 1952)

Budget Bureau No. 42-R1036.5

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION

RECEIVED
JUL 25 1955

OPERATOR'S MONTHLY REPORT AND VOUCHER

Month of June, 1955 Docket No. DMEA 2879 Contract No. IDM-E 541
Operator's Name Polaris Mining Company Minerals Copper, Lead, Antimony (& Incidental Silver)
Address Box 320, Wallace, Idaho
Contract Amount, $ 685,955.00 Government Participation: 50 % Amount, $ 342,977.50

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 Core 788.1 @ 4.50	3,546.45	18,042.30	21,588.75			
~~Extracting~~ Raising		30,072.49	30,072.49			
Crosscutting 24.0 @ 51.00	1,224.00	12,158.09	13,382.09			
Drifting 315.9 @ 51.00	16,110.90	318,452.55	334,563.45			
Sideswipe 12.0 @ 25.50	306.00	20,886.41	21,192.41			
(2) Labor and Supervision:						
Labor						
Supervision						
Technical Services						
(3) Operating Mat'ls. and Supplies:						
Timber						
Explosives						
Pipe						
Track						
(4) Operating Equipment:						
Rental						
Purchase						
Depreciation						
(5) Initial Rehabilitation and Repairs						
(6) New Bldgs., Improvements, etc.						
(7) Miscellaneous:						
Repairs to Equipment						
Sampling and Analysis						
Payroll Taxes						
Liability Insurance						
(8) Contingencies (specify):						
TOTALS	21,187.35	399,611.84	420,799.19	21187.35	399611.84	420799.19

I certify that the above bill is correct and just and that payment therefor has not been received.

Date 7-8-55 *Payee Polaris Mining Company

Per [signature] Title President

*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:

$ 10593 68

Signature MQP
(Authorized Certifying Officer)

Date 7-20-55 Vou. No. 1568
(See other side)

(For Government use only)

CERTIFICATION BY GOVERNMENT REPRESENTATIVE:

I certify that to the best of my knowledge and belief the contractor submitting this voucher is operating a Defense Minerals Exploration Administration project under Contract No. E 541 in accordance with the terms of the contract.

Signature /S/ Eric G. Erickson Title Mining Engr Date 7-16-55

APPROVAL BY DMEA EXECUTIVE OFFICER OR ALTERNATE:

Signature /S/ Stephen W Zoldok Title Mining Engr Date 7-18-55

MONTHLY REPORT OF OPERATOR

The Operator (Contractor) of an exploration project is required to make a monthly report to the Government through the Regional Executive Officer. This report consists of three parts as follows:

(a) *Form MF-104—Operator's Monthly Report and Voucher.*—This form details expenditures and constitutes a voucher for reimbursing the Operator for the Government's share of costs;

(b) *Form MF-104A—Operator's Unit Cost and Progress Report.*—This is a statistical report of expenditures which shows costs for the various types of operation; and

(c) *Narrative.*—A concise narrative description of progress made, results accomplished, and any unusual difficulties encountered must be furnished as an attachment to this Report and Voucher. Wherever possible, the narrative is to be illustrated with maps or sketches showing formations penetrated and location and assays of samples taken as well as advances in workings. In the case of diamond drilling or churn drilling, the location and inclination of holes is to be shown on a map; logs and assays also are to be submitted.

The Monthly Report of Operator should be prepared in an original and four copies all of which must be sent to the Executive Officer of the Region not later than the 15th of the month following.

Preparation of Form MF-104—Operator's Monthly Report and Voucher.—All the applicable spaces in Form MF-104 should be filled in by the Operator, and the Operator or his agent should sign the certification in the lower left corner of the form.

The items of costs are arranged in the order they appear in Article 6 (a) of Form MF-200 (Revised February 1952), however, this form is readily adaptable for use in reporting activities under other contract forms.

Under Item (1) delete words "Short Form" if the contract is a sub-contract under Form MF-200; and delete word "Independent" if the contract reported is on Form MF-200 (A). Also, report work paid for on a unit basis under contract Form MF-200 as though it were performed under an independent contract.

Under Item (2) include labor, supervision and technical services incurred for the exploratory operations. Do not include labor, supervision and technical services used for work performed under items (5) and (6).

Under Item (3) include the costs of material and supplies used in the project other than that used under items (5) and (6).

Under Item (4) appear the three types of operating equipment expenditures, that is, rental, purchase and depreciation. The expenditures made for renting equipment belonging to a third party will be reported under "Rental". The amount paid or duly obligated for payment for the purchase of equipment will be reported under "Purchase". The amount of expenditures due the Operator to reimburse him for depreciation of equipment owned will be reported under "Depreciation".

Item (5) comprises costs of labor, supervision, technical services, materials, etc., which are used in the initial rehabilitation and repair of existing buildings, installations, fixtures, and equipment. These costs, therefore, should not be reported under items (2) and (3).

Item (6) includes the labor, supervision, technical services, materials, etc., used in the installation or construction of new buildings, fixed improvements, etc., necessary for the project. These costs, therefore, should not be reported under items (2) and (3).

Item (7) covers miscellaneous types of expenditure such as payroll taxes, liability insurance, workmen's compensation insurance, repairs to equipment and sampling and analysis. Only that part of payroll taxes, liability insurance and workmen's compensation which are paid by the operator should be reported under item (7). The share paid by the employee as a payroll deduction is to be included under item (2) as labor costs.

Item (8) includes any unforeseen costs not included in the other seven categories.

The original of Form MF-104 when submitted for reimbursable expenses incurred under contract Form MF-200 must be supported by original documentation or by certified copies of purchase orders, payrolls or transcripts of payrolls, unless such documentation has been waived by the Regional Executive Officer. This certification may be stated thus, "Certified True Copy (or Transcript)", followed by appropriate signature. If the Executive Officer of the Region determines that a contract under Form MF-200 should have an "on-site" audit, that is, a Government auditor should make an audit of the Operator's books and records of account, the Operator need not support his monthly voucher with original or certified documents except in cases of equipment purchases whose individual costs exceed $50.00. In these cases the original or a certified copy of the purchase order or invoice should be attached to the Monthly Voucher. N. B.—Only the *original* of Form MF-104 is required to be documented. The four copies of Form MF-104 are not to be thus supported.

Form MF-104 submitted for reimbursement under fixed price contracts on Form MF-200 (A), however, are not required to be supported by documentation of any kind. The Operator will submit his claim under item (1) of Form MF-104 by deleting as stated above the word "Independent" and by showing the number of feet or other units immediately after the appropriate descriptive word, such as, drilling, bulldozing, crosscutting, drifting, etc., and giving the "Monthly Total" amount due. "Totals Previously Reported", and "Totals to Date" columns should also be filled in.

Form MF-104A
(April 1952)

Budget Bureau No. 42-R1151.2

UNITED STATES
DEPARTMENT OF THE INTERIOR

DEFENSE MINERALS EXPLORATION ADMINISTRATION

RECEIVED
JUL 25 1955

OPERATOR'S UNIT COST AND PROGRESS REPORT

Month of June 1955 Docket No. DMEA 2879 Contract No. IDM-E 541
Operator's Name Polaris Mining Company Minerals Copper, Lead, Antimony
Address Box 320, Wallace, Idaho (& Incidental Silver)

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	feet	16,110.90	315.9	334,563.45	6646.4	50.34	10725	51.00 *
Crosscutting	"	1,224.00	24.0	13,382.09	263.5	50.79		
Raising	"			30,072.49	324.1	92.79	330	93.33
~~Shafts~~ Sidewiping	"	306.00	12.0	21,192.41	839.2	25.25	1560	25.50
Winzes								
Drilling: Core	feet	3,546.45	788.1	21,588.75	4797.5	4.50	15200	4.50
Churn								
Auger								
Stripping								
Trenching								
Test Pits								
Roads and Trails								
TOTAL DISTRIBUTED COSTS								TOTAL COSTS AUTHORIZED BY CONTRACT
Operating Equipment Purchased								
Initial Rehabilitation and Repairs								
New Buildings, Improvements, etc.								
TOTAL COSTS								

The undersigned company, and the official executing this certification on its behalf, hereby certify that the information contained in this report is correct and complete to the best of their knowledge and belief.

Date 7-8-55 Operator Polaris Mining Company

Per [signature] Title President

NOTE.—Title 18, U. S. Code (Crimes), section 1001, makes it a criminal offense to make a willfully false statement or representation to any department or agency of the United States as to any matter within its jurisdiction.

(Instructions on reverse)

REMARKS:

(For Government use only)

*Maximum allowed by Contract

An audit is being made of actual cost of work performed through Feb. 1955. Report will be made by the Contract and Audit Dept.

151/ Eric G Erickson

E.G.E.

INSTRUCTIONS

Preparation of Form MF-104A—Operator's Unit Cost and Progress Report.—Applicable places on Form 104A should be filled in by the Operator. The purpose of this form is twofold as follows: (1) to furnish the supervising engineers and other administrators with statistical information necessary to better determine the progress of the project; and (2) to furnish more permanent information on mining costs for future use. The more important phases of operation on which permanent information is desired have been outlined in the form. There are blank lines, however, for those unusual phases which may need to be reported for a particular project. It will be necessary for the Operator to distribute his costs among the applicable phases reported with the exception of three items the costs of which are not to be distributed by the Operator. These three items are: "Operating Equipment Purchased", "Initial Rehabilitation and Repairs", and "New Buildings, Improvements, etc." The reason for not distributing these items on a monthly basis is doubtless clear to the Operator, since such distribution might well overstate the cost for any one month or period short of the entire contract period.

Form MF-104A has been designed to tie in with Form MF-104 for both monthly and cumulative costs. The "Total Costs" on Form MF-104A for each month should equal the monthly "Total Costs" as reported on Form MF-104. This is also true of the "Total Costs To Date".

In preparing Form MF-104A, it will be necessary frequently to distribute certain costs over a number of items. For instance, supervisory and engineering costs may have to be distributed over several phases, such as, drifting, crosscutting, raising, etc., provided that these items were reported active for the month. Such distributions should be made on the basis of time spent on the various phases, on man days of labor charged to such phases, or on some other equitable basis. "Operating Equipment", "Initial Rehabilitation and Repairs", and "New Buildings Improvements, etc.", will be distributed to the several phases of the project by the Washington Office of DMEA at the close of the project if determined necessary. The last two columns headed "Authorized by Contract" will be filled in by the Operator if such information is found in the contract. This information is usually a part of Exhibit "A" of the contract. A space for remarks has been provided for the use of the Operator to call attention to any unusual circumstances causing excessive or disproportionate unit costs.

GPO 872894

DMEA

Polaris Mining Company

RECEIVED
JUL 25 1955

Wallace, Idaho
July eleventh
1 9 5 5

Defense Minerals Exploration Administration
1201 North Division Street
Spokane 2, Washington

Re: Progress Report Polaris East
Exploration Project - June 1955
Docket No. DMEA 2879
Contract No. IDM-E 541

Gentlemen:

June advance in the main easterly heading was 315.9 feet and 12 feet of sideswipe was completed from Station SS3038 plus 41 to 53 feet. The progress was in argillaceous quartzite and some small irregular barren quartz and white carbonate stringers were exposed by the drift. No. 244 North X-Cut, shown on the map, was driven 24.0 feet. It will be used for a drill station for a long northerly hole.

Diamond drilling during the month consisted of the completion of drill hole No. SS-3267, a log of which is enclosed, and drilling 543 feet in drill hole No. SS3268 which is being drilled southerly from the crosscut at Station 3031. Nothing of great interest has been found in either hole but No. 3268 is being continued. A log will be prepared after completion of the hole.

Another enclosed map dated June 14 and titled "Sheet No. 4" shows the new drift in relation to old workings on Coeur d'Alene Mines 2800 level.

Yours very truly,

Robert E. Sorenson

Robert E. Sorenson

RES
vfc

Enc.

Form MF-104 (Rev.)
(April 1952)

Budget Bureau No. 42-R1036.5

RECEIVED
JUN 24 1955

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION
OPERATOR'S MONTHLY REPORT AND VOUCHER

Month of May, 1955 Docket No. DMEA 2879 Contract No. IDM-E 541
Operator's Name Polaris Mining Company Minerals copper, lead, antimony
Address Box 320 - Wallace, Idaho (&incidental silver)
Contract Amount, $685,955.00 Government Participation: 50 % Amount, $342,977.50

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 Core 688.7 @ 4.50	3,099.15	14,943.15	18,042.30			
Raiding		30,072.49	30,072.49			
Crosscutting		12,158.09	12,158.09			
Drifting 370.5 @ 51.00	18,895.50	299,557.05	318,452.55			
Sideswipe 11.0 @ 25.50	280.50	20,605.91	20,886.41			
(2) Labor and Supervision:						
Labor						
Supervision						
Technical Services						
(3) Operating Mat'ls. and Supplies:						
Timber						
Explosives						
Pipe						
Track						
(4) Operating Equipment:						
Rental						
Purchase						
Depreciation						
(5) Initial Rehabilitation and Repairs						
(6) New Bldgs., Improvements, etc.						
(7) Miscellaneous:						
Repairs to Equipment						
Sampling and Analysis						
Payroll Taxes						
Liability Insurance						
(8) Contingencies (specify):						
TOTALS	22,275.15	377,336.69	399,611.84	22275.15	377336.69	399611.84

I certify that the above bill is correct and just and that payment therefor has not been received.

Date 6-8-55 *Payee Polaris Mining Company

Per [signature] Title President

*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:

$11137.58

Signature [signature]
(Authorized Certifying Officer)

Date 6-20-55 Vou. No. 1539

(See other side)

(For Government use only)

CERTIFICATION BY GOVERNMENT REPRESENTATIVE:

I certify that to the best of my knowledge and belief the contractor submitting this voucher is operating a Defense Minerals Exploration Administration project under Contract No. E 541 in accordance with the terms of the contract.

Signature /S/ Eric G. Erickson Title Mining Engr. Date 6-14-55

APPROVAL BY DMEA EXECUTIVE OFFICER OR ALTERNATE:

Signature /S/ Stephen W. Zoldok Title Mining Engr. Date 6-16-55

MONTHLY REPORT OF OPERATOR

The Operator (Contractor) of an exploration project is required to make a monthly report to the Government through the Regional Executive Officer. This report consists of three parts as follows:

(a) *Form MF-104—Operator's Monthly Report and Voucher.*—This form details expenditures and constitutes a voucher for reimbursing the Operator for the Government's share of costs;

(b) *Form MF-104A—Operator's Unit Cost and Progress Report.*—This is a statistical report of expenditures which shows costs for the various types of operation; and

(c) *Narrative.*—A concise narrative description of progress made, results accomplished, and any unusual difficulties encountered must be furnished as an attachment to this Report and Voucher. Wherever possible, the narrative is to be illustrated with maps or sketches showing formations penetrated and location and assays of samples taken as well as advances in workings. In the case of diamond drilling or churn drilling, the location and inclination of holes is to be shown on a map; logs and assays also are to be submitted.

The Monthly Report of Operator should be prepared in an original and four copies all of which must be sent to the Executive Officer of the Region not later than the 15th of the month following.

Preparation of Form MF-104—Operator's Monthly Report and Voucher.—All the applicable spaces in Form MF-104 should be filled in by the Operator, and the Operator or his agent should sign the certification in the lower left corner of the form.

The items of costs are arranged in the order they appear in Article 6 (a) of Form MF-200 (Revised February 1952), however, this form is readily adaptable for use in reporting activities under other contract forms.

Under Item (1) delete words "Short Form" if the contract is a sub-contract under Form MF-200; and delete word "Independent" if the contract reported is on Form MF-200 (A). Also, report work paid for on a unit basis under contract Form MF-200 as though it were performed under an independent contract.

Under Item (2) include labor, supervision and technical services incurred for the exploratory operations. Do not include labor, supervision and technical services used for work performed under items (5) and (6).

Under Item (3) include the costs of material and supplies used in the project other than that used under items (5) and (6).

Under Item (4) appear the three types of operating equipment expenditures, that is, rental, purchase and depreciation. The expenditures made for renting equipment belonging to a third party will be reported under "Rental". The amount paid or duly obligated for payment for the purchase of equipment will be reported under "Purchase". The amount of expenditures due the Operator to reimburse him for depreciation of equipment owned will be reported under "Depreciation".

Item (5) comprises costs of labor, supervision, technical services, materials, etc., which are used in the initial rehabilitation and repair of existing buildings, installations, fixtures, and equipment. These costs, therefore, should not be reported under items (2) and (3).

Item (6) includes the labor, supervision, technical services, materials, etc., used in the installation or construction of new buildings, fixed improvements, etc., necessary for the project. These costs, therefore, should not be reported under items (2) and (3).

Item (7) covers miscellaneous types of expenditure such as payroll taxes, liability insurance, workmen's compensation insurance, repairs to equipment and sampling and analysis. Only that part of payroll taxes, liability insurance and workmen's compensation which are paid by the operator should be reported under item (7). The share paid by the employee as a payroll deduction is to be included under item (2) as labor costs.

Item (8) includes any unforeseen costs not included in the other seven categories.

The original of Form MF-104 when submitted for reimbursable expenses incurred under contract Form MF-200 must be supported by original documentation or by certified copies of purchase orders, payrolls or transcripts of payrolls, unless such documentation has been waived by the Regional Executive Officer. This certification may be stated thus, "Certified True Copy (or Transcript)", followed by appropriate signature. If the Executive Officer of the Region determines that a contract under Form MF-200 should have an "on-site" audit, that is, a Government auditor should make an audit of the Operator's books and records of account, the Operator need not support his monthly voucher with original or certified documents except in cases of equipment purchases whose individual costs exceed $50.00. In these cases the original or a certified copy of the purchase order or invoice should be attached to the Monthly Voucher. N. B.—Only the *original* of Form MF-104 is required to be documented. The four copies of Form MF-104 are not to be thus supported.

Form MF-104 submitted for reimbursement under fixed price contracts on Form MF-200 (A), however, are not required to be supported by documentation of any kind. The Operator will submit his claim under item (1) of Form MF-104 by deleting as stated above the word "Independent" and by showing the number of feet or other units immediately after the appropriate descriptive word, such as, drilling, bulldozing, crosscutting, drifting, etc., and giving the "Monthly Total" amount due. "Totals Previously Reported", and "Totals to Date" columns should also be filled in.

Form MX-104A
(April 1952)

Budget Bureau No. 42-R1151.2

UNITED STATES
DEPARTMENT OF THE INTERIOR

DEFENSE MINERALS EXPLORATION ADMINISTRATION

RECEIVED
JUN 24 1955

OPERATOR'S UNIT COST AND PROGRESS REPORT

Month of May 1955 Docket No. DMEA 2879 Contract No. IDM-E541

Operator's Name Polaris Mining Company Minerals copper, lead, antimony (& incidental silver)

Address Box 320, Wallace, Idaho

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	feet	18,895.50	370.5	318,452.55	6,330.5	50.30	10725	51.00 *
Crosscutting	"			12,158.09	239.5	50.76		
Raising	"			30,072.49	324.1	92.79	330	93.33
~~XXXXX~~ Sideswiping	"	280.50	11.0	20,886.41	827.2	25.25	1560	25.50
Winzes								
Drilling: Core	feet	3,099.15	688.7	18,042.30	4009.4	4.50	15200	4.50
Churn								
Auger								
Stripping								
Trenching								
Test Pits								
Roads and Trails								
TOTAL DISTRIBUTED COSTS								TOTAL COSTS AUTHORIZED BY CONTRACT
Operating Equipment Purchased								
Initial Rehabilitation and Repairs								
New Buildings, Improvements, etc.								
TOTAL COSTS		22275.15		399611.84				685955.00

The undersigned company, and the official executing this certification on its behalf, hereby certify that the information contained in this report is correct and complete to the best of their knowledge and belief.

Date 6-8-55 Operator Polaris Mining Company

Per [signature] Title President

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)

*Maximum allowed by contract

/s/ Eric G Erickson

INSTRUCTIONS

Preparation of Form MF-104A—Operator's Unit Cost and Progress Report.—Applicable places on Form 104A should be filled in by the Operator. The purpose of this form is twofold as follows: (1) to furnish the supervising engineers and other administrators with statistical information necessary to better determine the progress of the project; and (2) to furnish more permanent information on mining costs for future use. The more important phases of operation on which permanent information is desired have been outlined in the form. There are blank lines, however, for those unusual phases which may need to be reported for a particular project. It will be necessary for the Operator to distribute his costs among the applicable phases reported with the exception of three items the costs of which are not to be distributed by the Operator. These three items are: "Operating Equipment Purchased", "Initial Rehabilitation and Repairs", and "New Buildings, Improvements, etc." The reason for not distributing these items on a monthly basis is doubtless clear to the Operator, since such distribution might well overstate the cost for any one month or period short of the entire contract period.

Form MF-104A has been designed to tie in with Form MF-104 for both monthly and cumulative costs. The "Total Costs" on Form MF-104A for each month should equal the monthly "Total Costs" as reported on Form MF-104. This is also true of the "Total Costs To Date".

In preparing Form MF-104A, it will be necessary frequently to distribute certain costs over a number of items. For instance, supervisory and engineering costs may have to be distributed over several phases, such as, drifting, crosscutting, raising, etc., provided that these items were reported active for the month. Such distributions should be made on the basis of time spent on the various phases, on man days of labor charged to such phases, or on some other equitable basis. "Operating Equipment", "Initial Rehabilitation and Repairs", and "New Buildings Improvements, etc.", will be distributed to the several phases of the project by the Washington Office of DMEA at the close of the project if determined necessary. The last two columns headed "Authorized by Contract" will be filled in by the Operator if such information is found in the contract. This information is usually a part of Exhibit "A" of the contract. A space for remarks has been provided for the use of the Operator to call attention to any unusual circumstances causing excessive or disproportionate unit costs.

GPO 872894

DMEA

Polaris Mining Company

Wallace, Idaho

RECEIVED
JUN 24 1955

June ninth
1 9 5 5

Defense Minerals Exploration Administration
1201 North Division Street
Spokane 2, Washington

Re: Progress Report Polaris East
Exploration Project - May 1955
Docket No. DMEA 2879
Contract No. IDM-E 541

Gentlemen:

During May the main easterly heading was advanced 370.5 feet and 11 feet of sideswipe was done from Station S. S. 3036 plus 43 to 54 feet. Progress of the main heading is shown on the attached 50-scale map. The work was largely in bleached quartzite and argillaceous quartzite. Minor white carbonate and quartz stringers and lenses were exposed as shown.

Diamond drilling during the month consisted of:

Hole No.	Advance	Depth	Remarks
3265	132.3	1,000.3	Completed
3266	400.7	400.7	Completed
3267	155.7	-	Not Completed

Nothing of great importance was found in hole No. 3265, the log of which is attached, but the down dip extension of the Coeur d'Alene Mines siderite vein was probably cut in the zone between 948 and 969.

Drill hole No. 3266 was drilled to explore the northerly striking vein previously drifted upon in Coeur d'Alene Mines 2800 level work. Only small stringers of barren quartz and carbonate were cut in the hole. The log of the hole is attached.

Drill hole No. 3267 was drilled to cut this same structure further southwest. Since June 1st this hole likewise cut the vein and it was thin and barren. The log of the hole will be submitted somewhat later when it is finished.

A new hole is being started southerly opposite the location of No. 3265 hole.

Yours very truly,

Robert E. Sorenson

Robert E. Sorenson

RES/vfc

Encs.

Form MF-104 (Rev.)
(April 1952)

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION

Budget Bureau No. 42-R1036.5

Defense Minerals Administration
RECEIVED
MAY 13 1955

OPERATOR'S MONTHLY REPORT AND VOUCHER

Month of April, 1955 Docket No. DMEA 2879 Contract No IDM-E-541
Operator's Name Polaris Mining Company Minerals Copper, Lead, Antimony
Address Box 320 - Wallace, Idaho (& Incidental silver)
Contract Amount, $ 685,955.00 Government Participation: 50 % Amount, $ 342,977.50

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 core 868.0@4.50	$3906.00	$ 11037.15	$ 14943.15			
~~xxxxxx~~ raising		30072.49	30072.49			
Crosscutting 21.0@51.00	1071.00	11087.09	12158.09			
Drifting 282.9@51.00	14427.90	285129.15	299557.05			
Sideswipe 52.0 @ 25.50	1326.00	19279.91	20605.91			
(2) Labor and Supervision:						
Labor						
Supervision						
Technical Services						
(3) Operating Mat'ls. and Supplies:						
Timber						
Explosives						
Pipe						
Track						
(4) Operating Equipment:						
Rental						
Purchase						
Depreciation						
(5) Initial Rehabilitation and Repairs						
(6) New Bldgs., Improvements, etc.						
(7) Miscellaneous:						
Repairs to Equipment						
Sampling and Analysis						
Payroll Taxes						
Liability Insurance						
(8) Contingencies (specify):						
TOTALS	$20730.90	$356605.79	$377336.69	20730.90	356605.79	377336.69

I certify that the above bill is correct and just and that payment therefor has not been received.
Date 5-5-55 *Payee Polaris Mining Company
Per John R. Marchus Title Secretary

*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:

$ 10365 45

Signature MAP
(Authorized Certifying Officer)

Date 5-10-55 Vou. No. 1508
(See other side)

*Include 275.5' diamond drill advance in Hole No. ss3265 which was omitted from March-1955 report.

(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. E541 in accordance with the terms of the contract.

Signature /S/ Eric G. Erickson Title Mining Engr Date 5-9-55

APPROVAL BY DMEA EXECUTIVE OFFICER OR ALTERNATE:

Signature /S/ Stephen W Zoldok Title Mining Engr Date 5-9-55

MONTHLY REPORT OF OPERATOR

The Operator (Contractor) of an exploration project is required to make a monthly report to the Government through the Regional Executive Officer. This report consists of three parts as follows:

(a) *Form MF-104—Operator's Monthly Report and Voucher.*—This form details expenditures and constitutes a voucher for reimbursing the Operator for the Government's share of costs;

(b) *Form MF-104A—Operator's Unit Cost and Progress Report.*—This is a statistical report of expenditures which shows costs for the various types of operation; and

(c) *Narrative.*—A concise narrative description of progress made, results accomplished, and any unusual difficulties encountered must be furnished as an attachment to this Report and Voucher. Wherever possible, the narrative is to be illustrated with maps or sketches showing formations penetrated and location and assays of samples taken as well as advances in workings. In the case of diamond drilling or churn drilling, the location and inclination of holes is to be shown on a map; logs and assays also are to be submitted.

The Monthly Report of Operator should be prepared in an original and four copies all of which must be sent to the Executive Officer of the Region not later than the 15th of the month following.

Preparation of Form MF-104—Operator's Monthly Report and Voucher.—All the applicable spaces in Form MF-104 should be filled in by the Operator, and the Operator or his agent should sign the certification in the lower left corner of the form.

The items of costs are arranged in the order they appear in Article 6 (a) of Form MF-200 (Revised February 1952), however, this form is readily adaptable for use in reporting activities under other contract forms.

Under Item (1) delete words "Short Form" if the contract is a sub-contract under Form MF-200; and delete word "Independent" if the contract reported is on Form MF-200 (A). Also, report work paid for on a unit basis under contract Form MF-200 as though it were performed under an independent contract.

Under Item (2) include labor, supervision and technical services incurred for the exploratory operations. Do not include labor, supervision and technical services used for work performed under items (5) and (6).

Under Item (3) include the costs of material and supplies used in the project other than that used under items (5) and (6).

Under Item (4) appear the three types of operating equipment expenditures, that is, rental, purchase and depreciation. The expenditures made for renting equipment belonging to a third party will be reported under "Rental". The amount paid or duly obligated for payment for the purchase of equipment will be reported under "Purchase". The amount of expenditures due the Operator to reimburse him for depreciation of equipment owned will be reported under "Depreciation".

Item (5) comprises costs of labor, supervision, technical services, materials, etc., which are used in the initial rehabilitation and repair of existing buildings, installations, fixtures, and equipment. These costs, therefore, should not be reported under items (2) and (3).

Item (6) includes the labor, supervision, technical services, materials, etc., used in the installation or construction of new buildings, fixed improvements, etc., necessary for the project. These costs, therefore, should not be reported under items (2) and (3).

Item (7) covers miscellaneous types of expenditure such as payroll taxes, liability insurance, workmen's compensation insurance, repairs to equipment and sampling and analysis. Only that part of payroll taxes, liability insurance and workmen's compensation which are paid by the operator should be reported under item (7). The share paid by the employee as a payroll deduction is to be included under item (2) as labor costs.

Item (8) includes any unforeseen costs not included in the other seven categories.

The original of Form MF-104 when submitted for reimbursable expenses incurred under contract Form MF-200 must be supported by original documentation or by certified copies of purchase orders, payrolls or transcripts of payrolls, unless such documentation has been waived by the Regional Executive Officer. This certification may be stated thus, "Certified True Copy (or Transcript)", followed by appropriate signature. If the Executive Officer of the Region determines that a contract under Form MF-200 should have an "on-site" audit, that is, a Government auditor should make an audit of the Operator's books and records of account, the Operator need not support his monthly voucher with original or certified documents except in cases of equipment purchases whose individual costs exceed $50.00. In these cases the original or a certified copy of the purchase order or invoice should be attached to the Monthly Voucher. N. B.—Only the *original* of Form MF-104 is required to be documented. The four copies of Form MF-104 are not to be thus supported.

Form MF-104 submitted for reimbursement under fixed price contracts on Form MF-200 (A), however, are not required to be supported by documentation of any kind. The Operator will submit his claim under item (1) of Form MF-104 by deleting as stated above the word "Independent" and by showing the number of feet or other units immediately after the appropriate descriptive word, such as, drilling, bulldozing, crosscutting, drifting, etc., and giving the "Monthly Total" amount due. "Totals Previously Reported", and "Totals to Date" columns should also be filled in.

Form MF-104A
(April 1952)

Budget Bureau No. 42-R1151
Approval expires 6-30-53.

UNITED STATES
DEPARTMENT OF THE INTERIOR

DEFENSE MINERALS EXPLORATION ADMINISTRATION

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
MAY 13 1955

OPERATOR'S UNIT COST AND PROGRESS REPORT

Month of April 1955 Docket No. DMEA 2879 Contract No. IDM-E 541

Operator's Name Polaris Mining Company

Address Box 320 - Wallace, Idaho

Minerals Copper, Lead, Antimony (& Incidental Silver)

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	feet	$14427.90	282.9	$299557.05	5960.0	50.26	10725	$51.00*
Crosscutting	"	1071.00	21.0	12158.09	239.5	50.76		
Raising	"			30072.49	324.1	92.79	330	93.33
~~Mark~~ Sidesweiping	"	1326.00	52.0	20605.91	816.2	25.25	1560	25.50
Winzes								
Drilling: Core	feet	3906.00	868.0	14943.15	3320.7	4.50	15200	4.50
Churn								
Auger								
Stripping								
Trenching								
Test Pits								
Roads and Trails								
TOTAL DISTRIBUTED COSTS								TOTAL COSTS AUTHORIZED BY CONTRACT
Operating Equipment Purchased								
Initial Rehabilitation and Repairs								
New Buildings, Improvements, etc.								
TOTAL COSTS								685955.00

The undersigned company, and the official executing this certification on its behalf, hereby certify that the information contained in this report is correct and complete to the best of their knowledge and belief.

Date 5-5-55 Operator Polaris Mining Company

Per John R. Mathews Title Secretary

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)

*Maximum allowed by contract

Eric G Erickson

INSTRUCTIONS

Preparation of Form MF–104A—Operator's Unit Cost and Progress Report.—Applicable places on Form 104A should be filled in by the Operator. The purpose of this form is twofold as follows: (1) to furnish the supervising engineers and other administrators with statistical information necessary to better determine the progress of the project; and (2) to furnish more permanent information on mining costs for future use. The more important phases of operation on which permanent information is desired have been outlined in the form. There are blank lines, however, for those unusual phases which may need to be reported for a particular project. It will be necessary for the Operator to distribute his costs among the applicable phases reported with the exception of three items the costs of which are not to be distributed by the Operator. These three items are: "Operating Equipment Purchased", "Initial Rehabilitation and Repairs", and "New Buildings, Improvements, etc." The reason for not distributing these items on a monthly basis is doubtless clear to the Operator, since such distribution might well overstate the cost for any one month or period short of the entire contract period.

Form MF–104A has been designed to tie in with Form MF–104 for both monthly and cumulative costs. The "Total Costs" on Form MF–104A for each month should equal the monthly "Total Costs" as reported on Form MF–104. This is also true of the "Total Costs To Date".

In preparing Form MF–104A, it will be necessary frequently to distribute certain costs over a number of items. For instance, supervisory and engineering costs may have to be distributed over several phases, such as, drifting, crosscutting, raising, etc., provided that these items were reported active for the month. Such distributions should be made on the basis of time spent on the various phases, on man days of labor charged to such phases, or on some other equitable basis. "Operating Equipment", "Initial Rehabilitation and Repairs", and "New Buildings Improvements, etc.", will be distributed to the several phases of the project by the Washington Office of DMEA at the close of the project if determined necessary. The last two columns headed "Authorized by Contract" will be filled in by the Operator if such information is found in the contract. This information is usually a part of Exhibit "A" of the contract. A space for remarks has been provided for the use of the Operator to call attention to any unusual circumstances causing excessive or disproportionate unit costs.

GPO 83-38475

Polaris Mining Company

Wallace, Idaho

May fifth
1 9 5 5

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
MAY 13 1955

Defense Minerals Exploration Administration
U. S. Department of the Interior
South 157 Howard Street
Spokane 4, Washington

Re: Progress Report Polaris East Exploration
Project - April 1955 Docket No. D.M.E.A. 2879
Contract No. IDM-E- 541

Gentlemen:

During April the main easterly heading was advanced 282.9 feet and 27.0 feet of switch sideswipe was made from Station SS-3033 plus 248 to 275 feet and 25 feet of sideswipe was done at Station SS-3033 plus 305 to 330 feet. 21.0 feet of crosscut southerly from station SS-3035 was driven for a diamond drill station, the face being located 38.4 feet from station SS-3035. Progress of the main heading is shown on the attached 50-scale map. St. Regis wall rock was largely bleached and no mineralization of importance was found.

Diamond drill hole No. SS-3265 drilled 275.5 feet northerly during March was extended an additional 592.5 feet in April placing the face of the hole at 868.0 feet on May first. No mineralized structures of great importance appear thus far. A complete log will be submitted after completion of the hole.

The new drill station crosscut near station SS-3035 will be used for drilling a southeasterly hole in exploration of a northerly siderite vein previously explored on Coeur d'Alene Mines 2800 level.

Yours very truly,

Robert E. Sorenson

Robert E. Sorenson

RES:abs
Encs.

MF-104 (Rev.)
(April 1952)

Budget Bureau No. 42-R1036.5

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION

OPERATOR'S MONTHLY REPORT AND VOUCHER

Department of the Interior
Defense Minerals Administration
RECEIVED
APR 22 1955

Month of March, 1955 Docket No. DMEA 2879 Contract No. IDM-E-541
Operator's Name Polaris Mining Company Minerals copper, lead, antimony
Address Box 320 - Wallace, Idaho (& incidental silver)
Contract Amount, $ 685,955.00 Government Participation: 50 % Amount, $ 342,977.50

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		11,037.15	11,037.15			
~~Bulkhead~~ Raising		30,072.49	30,072.49			
Crosscutting		11,087.09	11,087.09			
Drifting 368.4@51.00	18,788.40	266,340.75	285,129.15			
Sideswipe 11.0 @ 25.50	280.50	18,999.41	19,279.91			
(2) Labor and Supervision:						
Labor						
Supervision						
Technical Services						
(3) Operating Mat'ls. and Supplies:						
Timber						
Explosives						
Pipe						
Track						
(4) Operating Equipment:						
Rental						
Purchase						
Depreciation						
(5) Initial Rehabilitation and Repairs						
(6) New Bldgs., Improvements, etc.						
(7) Miscellaneous:						
Repairs to Equipment						
Sampling and Analysis						
Payroll Taxes						
Liability Insurance						
(8) Contingencies (specify):						
TOTALS	19,068.90	337,536.89	356,605.79	19068.90	337536.89	356605.79

I certify that the above bill is correct and just and that payment therefor has not been received.
Date 4-8-55 *Payee Polaris Mining Company

Per John R. Matthews Title Secretary

*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:

$ 9534.45

Signature MQP
(Authorized Certifying Officer)

Date 4-15-55 Vou. No. 1483
(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. E541 in accordance with the terms of the contract.

Signature (S) Eric G. Erickson Title Mining Engr Date 4-12-55

APPROVAL BY DMEA EXECUTIVE OFFICER OR ALTERNATE:

Signature (S) Stephen W. Zoldak Title Mining Engr Date 4-12-55

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.

[redacted]104A
(April 1952)

Budget Bureau No. 42-R1151.2

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
APR 22 1955

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION
OPERATOR'S UNIT COST AND PROGRESS REPORT

Month of March 1955 Docket No. DMEA 2879 Contract No. IDM-E 541
Operator's Name Polaris Mining Company Minerals copper, lead, antimony
Address Box 320 - Wallace, Idaho (& incidental silver)

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
		18,788.40	368.4					
Drifting	feet	~~15,616.20~~	~~306.2~~	285,129.15	5677.1	50.22	~~11625~~	$51.00*
Crosscutting	"			11,087.09	218.5	50.74	10725	
Raising	"			30,072.49	324.1	92.79	330	$93.33
~~Shafts~~ sideswiping	"	280.50	11.0	19,279.91	764.2	25.23	1560	$25.50
Winzes								
Drilling: Core	feet			11,037.15	2452.7	4.50	~~5000~~	$4.50
Churn							15200	
Auger								
Stripping								
Trenching								
Test Pits								
Roads and Trails								
TOTAL DISTRIBUTED COSTS		19068.90		356,605.79				TOTAL COSTS AUTHORIZED BY CONTRACT
Operating Equipment Purchased								
Initial Rehabilitation and Repairs								
New Buildings, Improvements, etc.								
TOTAL COSTS		19,068.90		356,605.79				

The undersigned company, and the official executing this certification on its behalf, hereby certify that the information contained in this report is correct and complete to the best of their knowledge and belief.

Date 4-8-55 Operator Polaris Mining Company

Per John R. Mauthner Title Secretary

REMARKS: Amendment No. 1 increase diamond drilling to 15,200 ft and decrease drifting and crosscutting footage to 10,725 ft.

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)

*Maximum allowed by contract

E. G. Erickson 4/12/55

INSTRUCTIONS

Preparation of Form MF-104A—Operator's Unit Cost and Progress Report.—Applicable places on Form 104A should be filled in by the Operator. The purpose of this form is twofold as follows: (1) to furnish the supervising engineers and other administrators with statistical information necessary to better determine the progress of the project; and (2) to furnish more permanent information on mining costs for future use. The more important phases of operation on which permanent information is desired have been outlined in the form. There are blank lines, however, for those unusual phases which may need to be reported for a particular project. It will be necessary for the Operator to distribute his costs among the applicable phases reported with the exception of three items the costs of which are not to be distributed by the Operator. These three items are: "Operating Equipment Purchased", "Initial Rehabilitation and Repairs", and "New Buildings, Improvements, etc." The reason for not distributing these items on a monthly basis is doubtless clear to the Operator, since such distribution might well overstate the cost for any one month or period short of the entire contract period.

Form MF-104A has been designed to tie in with Form MF-104 for both monthly and cumulative costs. The "Total Costs" on Form MF-104A for each month should equal the monthly "Total Costs" as reported on Form MF-104. This is also true of the "Total Costs To Date".

In preparing Form MF-104A, it will be necessary frequently to distribute certain costs over a number of items. For instance, supervisory and engineering costs may have to be distributed over several phases, such as, drifting, crosscutting, raising, etc., provided that these items were reported active for the month. Such distributions should be made on the basis of time spent on the various phases, on man days of labor charged to such phases, or on some other equitable basis. "Operating Equipment", "Initial Rehabilitation and Repairs", and "New Buildings Improvements, etc.", will be distributed to the several phases of the project by the Washington Office of DMEA at the close of the project if determined necessary. The last two columns headed "Authorized by Contract" will be filled in by the Operator if such information is found in the contract. This information is usually a part of Exhibit "A" of the contract. A space for remarks has been provided for the use of the Operator to call attention to any unusual circumstances causing excessive or disproportionate unit costs.

GPO 872894

DMEA
1 map

Polaris Mining Company

Wallace, Idaho

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
APR 22 1955

April seventh
1 9 5 5

Defense Minerals Exploration Administration
U. S. Department of the Interior
South 157 Howard Street
Spokane 4, Washington

Re: Progress Report Polaris East
Exploration Project - March, 1955
Docket No. D.M.E.A. 2879
Contract No. IDM-E-541

Gentlemen:

During March the main easterly heading was continued for a distance of 368.4 feet and 11.0 feet of switch sideswipe was made from Station SS3032 + 202.0 to 213.0. Progress was in bleached and unbleached argillaceous quartzite with occasional small quartz stringers and minor siderite stringers with no associated sulphides.

A long flat diamond drill hole was started during the month from coordinate point 83484 south and 88399 east and bearing N.33° E. It was advanced 275.5 feet during the month. This hole probably will be drilled from 800 to 1000 feet in length. The log will be submitted after completion of the hole.

You will note on the attached map that the heading has almost reached a point under the main Coeur d'Alene Mines south crosscut where another diamond drill crosscut will be placed so that drill holes may be drilled southeasterly toward a large siderite vein of northeasterly strike which was explored from the Coeur d'Alene Mines 2800 level.

Yours very truly,

Robert E. Sorenson

Robert E. Sorenson

RES:abs
Encs.

[redacted]

Costs	Claimed	Allowed	Actual
Erdbau	$ 11,037.15	$ 11,037.15	$ 12,402.11
Rammen	30,072.49	30,248.26	55,145.37
Grundbau	11,687.69	11,137.38	288,007.69
Bohrung	266,340.75	267,823.56	
Ausschwemmung	18,999.41	19,206.60	
Totals	337,536.89	339,452.95	355,555.17

Grundbau, Bohrung & Ausschwemmung	296,427.25	298,167.54	288,007.69
Difference	$ 1,740.29		$ 10,159.85

Form MF-104 (Rev.)
(April 1952)

Budget Bureau No. 42-R1036.5

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION
OPERATOR'S MONTHLY REPORT AND VOUCHER

Month of February, 1955 Docket No. DMEA 2879 Contract No. IDM-E 541
Operator's Name Polaris Mining Company Minerals Copper, Lead, Antimony
Address Box 320, Wallace, Idaho (& Incidental Silver)
Contract Amount, $ 685,955.00 Government Participation: 50 % Amount, $ 342,977.50

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		11,037.15	11,037.15			
~~Bulldozing~~ Raising		30,072.49	30,072.49			
Crosscutting		11,087.09	11,087.09			
Drifting 306.2 @ 51.00	15616.20	250,724.55	266,340.75			
Sideswipe		18,999.41	18,999.41			
(2) Labor and Supervision:						
Labor						
Supervision						
Technical Services						
(3) Operating Mat'ls. and Supplies:						
Timber						
Explosives						
Pipe						
Track						
(4) Operating Equipment:						
Rental						
Purchase						
Depreciation						
(5) Initial Rehabilitation and Repairs						
(6) New Bldgs., Improvements, etc.						
(7) Miscellaneous:						
Repairs to Equipment						
Sampling and Analysis						
Payroll Taxes						
Liability Insurance						
(8) Contingencies (specify):						
TOTALS	15616.20	321,920.69	337,536.89	15616.20	321,920.69	337,536.89

I certify that the above bill is correct and just and that payment therefor has not been received.
Date March 9-1955 *Payee Polaris Mining Company
Per [signature] Title President

*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:

$ 7808 10

Signature MGP
(Authorized Certifying Officer)

Date 3-22-55 Vou. No. 1465
(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. E541 in accordance with the terms of the contract.

Signature 151 Eric G Erickson Title Mining Engr Date 3-18-55

APPROVAL BY DMEA EXECUTIVE OFFICER OR ALTERNATE:

Signature 151 Stephen W Zoldak Title Mining Engr Date 3-21-55

MONTHLY REPORT OF OPERATOR

The Operator (Contractor) of an exploration project is required to make a monthly report to the Government through the Regional Executive Officer. This report consists of three parts as follows:

(a) *Form MF-104—Operator's Monthly Report and Voucher.*—This form details expenditures and constitutes a voucher for reimbursing the Operator for the Government's share of costs;

(b) *Form MF-104A—Operator's Unit Cost and Progress Report.*—This is a statistical report of expenditures which shows costs for the various types of operation; and

(c) *Narrative.*—A concise narrative description of progress made, results accomplished, and any unusual difficulties encountered must be furnished as an attachment to this Report and Voucher. Wherever possible, the narrative is to be illustrated with maps or sketches showing formations penetrated and location and assays of samples taken as well as advances in workings. In the case of diamond drilling or churn drilling, the location and inclination of holes is to be shown on a map; logs and assays also are to be submitted.

The Monthly Report of Operator should be prepared in an original and four copies all of which must be sent to the Executive Officer of the Region not later than the 15th of the month following.

Preparation of Form MF-104—Operator's Monthly Report and Voucher.—All the applicable spaces in Form MF-104 should be filled in by the Operator, and the Operator or his agent should sign the certification in the lower left corner of the form.

The items of costs are arranged in the order they appear in Article 6 (a) of Form MF-200 (Revised February 1952), however, this form is readily adaptable for use in reporting activities under other contract forms.

Under Item (1) delete words "Short Form" if the contract is a sub-contract under Form MF-200; and delete word "Independent" if the contract reported is on Form MF-200 (A). Also, report work paid for on a unit basis under contract Form MF-200 as though it were performed under an independent contract.

Under Item (2) include labor, supervision and technical services incurred for the exploratory operations. Do not include labor, supervision and technical services used for work performed under items (5) and (6).

Under Item (3) include the costs of material and supplies used in the project other than that used under items (5) and (6).

Under Item (4) appear the three types of operating equipment expenditures, that is, rental, purchase and depreciation. The expenditures made for renting equipment belonging to a third party will be reported under "Rental". The amount paid or duly obligated for payment for the purchase of equipment will be reported under "Purchase". The amount of expenditures due the Operator to reimburse him for depreciation of equipment owned will be reported under "Depreciation".

Item (5) comprises costs of labor, supervision, technical services, materials, etc., which are used in the initial rehabilitation and repair of existing buildings, installations, fixtures, and equipment. These costs, therefore, should not be reported under items (2) and (3).

Item (6) includes the labor, supervision, technical services, materials, etc., used in the installation or construction of new buildings, fixed improvements, etc., necessary for the project. These costs, therefore, should not be reported under items (2) and (3).

Item (7) covers miscellaneous types of expenditure such as payroll taxes, liability insurance, workmen's compensation insurance, repairs to equipment and sampling and analysis. Only that part of payroll taxes, liability insurance and workmen's compensation which are paid by the operator should be reported under item (7). The share paid by the employee as a payroll deduction is to be included under item (2) as labor costs.

Item (8) includes any unforeseen costs not included in the other seven categories.

The original of Form MF-104 when submitted for reimbursable expenses incurred under contract Form MF-200 must be supported by original documentation or by certified copies of purchase orders, payrolls or transcripts of payrolls, unless such documentation has been waived by the Regional Executive Officer. This certification may be stated thus, "Certified True Copy (or Transcript)", followed by appropriate signature. If the Executive Officer of the Region determines that a contract under Form MF-200 should have an "on-site" audit, that is, a Government auditor should make an audit of the Operator's books and records of account, the Operator need not support his monthly voucher with original or certified documents except in cases of equipment purchases whose individual costs exceed $50.00. In these cases the original or a certified copy of the purchase order or invoice should be attached to the Monthly Voucher. N. B.—Only the *original* of Form MF-104 is required to be documented. The four copies of Form MF-104 are not to be thus supported.

Form MF-104 submitted for reimbursement under fixed price contracts on Form MF-200 (A), however, are not required to be supported by documentation of any kind. The Operator will submit his claim under item (1) of Form MF-104 by deleting as stated above the word "Independent" and by showing the number of feet or other units immediately after the appropriate descriptive word, such as, drilling, bulldozing, crosscutting, drifting, etc., and giving the "Monthly Total" amount due. "Totals Previously Reported", and "Totals to Date" columns should also be filled in.

Form MF-104A
(April 1952)

Budget Bureau No. 42-R1151.1
Approval expires 6-30-53.

UNITED STATES
DEPARTMENT OF THE INTERIOR

DEFENSE MINERALS EXPLORATION ADMINISTRATION

OPERATOR'S UNIT COST AND PROGRESS REPORT

Month of February 1955 Docket No. DMEA 2879 Contract No. IDM-E 541

Operator's Name Polaris Mining Company Minerals Copper, Lead, Antimony

Address Box 320, Wallace, Idaho (& Incidental Silver)

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	Feet	15616.20	306.2	266340.75	5308.7	50.17	11625	$51.00*
Crosscutting	Feet			11087.09	218.5	50.74		
Raising	Feet			30072.49	324.1	92.79	330	93.33
~~Raises~~ Sideswiping	Feet			18999.41	753.2	25.22	1560	25.50
Winzes								
Drilling: Core	Feet			11037.15	2452.7	4.50	5000	4.50
Churn								
Auger								
Stripping								
Trenching								
Test Pits								
Roads and Trails								
TOTAL DISTRIBUTED COSTS								TOTAL COSTS AUTHORIZED BY CONTRACT
Operating Equipment Purchased								
Initial Rehabilitation and Repairs								
New Buildings, Improvements, etc.								
TOTAL COSTS								

The undersigned company, and the official executing this certification on its behalf, hereby certify that the information contained in this report is correct and complete to the best of their knowledge and belief.

Date March 9, 1955 Operator Polaris Mining Company

Per [signature] Title President

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)

*Maximum allowed by contract

INSTRUCTIONS

Preparation of Form MF–104A—Operator's Unit Cost and Progress Report.—Applicable places on Form 104A should be filled in by the Operator. The purpose of this form is twofold as follows: (1) to furnish the supervising engineers and other administrators with statistical information necessary to better determine the progress of the project; and (2) to furnish more permanent information on mining costs for future use. The more important phases of operation on which permanent information is desired have been outlined in the form. There are blank lines, however, for those unusual phases which may need to be reported for a particular project. It will be necessary for the Operator to distribute his costs among the applicable phases reported with the exception of three items the costs of which are not to be distributed by the Operator. These three items are: "Operating Equipment Purchased", "Initial Rehabilitation and Repairs", and "New Buildings, Improvements, etc." The reason for not distributing these items on a monthly basis is doubtless clear to the Operator, since such distribution might well overstate the cost for any one month or period short of the entire contract period.

Form MF–104A has been designed to tie in with Form MF–104 for both monthly and cumulative costs. The "Total Costs" on Form MF–104A for each month should equal the monthly "Total Costs" as reported on Form MF–104. This is also true of the "Total Costs To Date".

In preparing Form MF–104A, it will be necessary frequently to distribute certain costs over a number of items. For instance, supervisory and engineering costs may have to be distributed over several phases, such as, drifting, crosscutting, raising, etc., provided that these items were reported active for the month. Such distributions should be made on the basis of time spent on the various phases, on man days of labor charged to such phases, or on some other equitable basis. "Operating Equipment", "Initial Rehabilitation and Repairs", and "New Buildings Improvements, etc.", will be distributed to the several phases of the project by the Washington Office of DMEA at the close of the project if determined necessary. The last two columns headed "Authorized by Contract" will be filled in by the Operator if such information is found in the contract. This information is usually a part of Exhibit "A" of the contract. A space for remarks has been provided for the use of the Operator to call attention to any unusual circumstances causing excessive or disproportionate unit costs.

GPO 83-38475

Polaris Mining Company

Wallace, Idaho
March eleventh
1 9 5 5

RECEIVED
MAR 25 1955

Defense Minerals Exploration Administration
U. S. Department of the Interior
South 157 Howard Street
Spokane 4, Washington

Re: Progress Report Polaris East
Exploration Project - February-1955
Docket No. DMEA 2879
Contract No. IDM-E-541

Gentlemen:

Through an oversight these statements were omitted from the statements previously sent you.

Yours very truly,

Lennis E. Hill

Lennis E. Hill

LEH/mg

DMEA -

Polaris Mining Company

Wallace, Idaho
March ninth
1 9 5 5

Defense Minerals Exploration Administration
U. S. Department of the Interior
South 157 Howard Street
Spokane 4, Washington

Re: Progress Report Polaris East
Exploration Project - February-1955
Docket No. DMEA 2879
Contract No. IDM-E-541

Gentlemen:

During February the main easterly heading was advanced 306.2 feet as shown on the attached 50-scale map. Progress was partially in bleached and partially in purplish argillaceous quartzite of the St. Regis formation. Some small irregular quartz veinlets and lenses with no associated sulphides were exposed in the drift. Beds are largely overturned and steeply dipping toward the south.

Yours very truly,

Robert E. Sorenson

R. E. Sorenson

RES:abs

Form MF-104 (Rev.)
(April 1952)

Budget Bureau No. 42-R1036.5

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION

Defense Minerals Administration
RECEIVED
FEB 21 1955

OPERATOR'S MONTHLY REPORT AND VOUCHER

Month of January, 1955 Docket No. DMEA 2879 Contract No. IDM-E 541
Operator's Name Polaris Mining Company Minerals Copper, Lead, Antimony (and Incidental Silver)
Address 320 Wallace, Idaho
Contract Amount, $ 685,955.00 Government Participation: 50 % Amount, $ 342,977.50

ITEMS OF COSTS	FOR OPERATOR'S USE: Monthly Total	Totals Previously Reported	Totals To Date	FOR GOVERNMENT USE ONLY: Approved Monthly Total	Approved Totals Previously Reported	Approved Totals To Date
(1) Independent Short Form Contracts:						
Drilling		$ 11,037.15	$ 11,037.15			
~~Raising~~ ~~Bonding~~		30,072.49	30,072.49			
Crosscutting 53.6 @51.00	$ 2,733.60	8,353.49	11,087.09			
Drifting 247.2 @ 51.00	12,607.20	238,117.35	250,724.55			
Sideswipe		18,999.41	18,999.41			
(2) Labor and Supervision:						
Labor						
Supervision						
Technical Services						
(3) Operating Mat'ls. and Supplies:						
Timber						
Explosives						
Pipe						
Track						
(4) Operating Equipment:						
Rental						
Purchase						
Depreciation						
(5) Initial Rehabilitation and Repairs						
(6) New Bldgs., Improvements, etc.						
(7) Miscellaneous:						
Repairs to Equipment						
Sampling and Analysis						
Payroll Taxes						
Liability Insurance						
(8) Contingencies (specify):						
TOTALS	$15,340.80	$306,579.89	$321,920.69	15340.80	306579.89	321920.69

I certify that the above bill is correct and just and that payment therefor has not been received.

Date 2-9-55 *Payee Polaris Mining Company

Per [signature] Title President

*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:

$ 7670.40

Signature MJP
(Authorized Certifying Officer)

Date 2/18/55 Vou. No. 1443
(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. E541 in accordance with the terms of the contract.

Signature /s/ Eric G. Erickson Title Mining Engr. Date 2/15/55

APPROVAL BY DMEA EXECUTIVE OFFICER OR ALTERNATE:

Signature /s/ Stephen W. Zoldok Title Mining Engr. Date 2/17/55

MONTHLY REPORT OF OPERATOR

The Operator (Contractor) of an exploration project is required to make a monthly report to the Government through the Regional Executive Officer. This report consists of three parts as follows:

(a) *Form MF-104—Operator's Monthly Report and Voucher.*—This form details expenditures and constitutes a voucher for reimbursing the Operator for the Government's share of costs;

(b) *Form MF-104A—Operator's Unit Cost and Progress Report.*—This is a statistical report of expenditures which shows costs for the various types of operation; and

(c) *Narrative.*—A concise narrative description of progress made, results accomplished, and any unusual difficulties encountered must be furnished as an attachment to this Report and Voucher. Wherever possible, the narrative is to be illustrated with maps or sketches showing formations penetrated and location and assays of samples taken as well as advances in workings. In the case of diamond drilling or churn drilling, the location and inclination of holes is to be shown on a map; logs and assays also are to be submitted.

The Monthly Report of Operator should be prepared in an original and four copies all of which must be sent to the Executive Officer of the Region not later than the 15th of the month following.

Preparation of Form MF-104—Operator's Monthly Report and Voucher.—All the applicable spaces in Form MF-104 should be filled in by the Operator, and the Operator or his agent should sign the certification in the lower left corner of the form.

The items of costs are arranged in the order they appear in Article 6 (a) of Form MF-200 (Revised February 1952), however, this form is readily adaptable for use in reporting activities under other contract forms.

Under Item (1) delete words "Short Form" if the contract is a sub-contract under Form MF-200; and delete word "Independent" if the contract reported is on Form MF-200 (A). Also, report work paid for on a unit basis under contract Form MF-200 as though it were performed under an independent contract.

Under Item (2) include labor, supervision and technical services incurred for the exploratory operations. Do not include labor, supervision and technical services used for work performed under items (5) and (6).

Under Item (3) include the costs of material and supplies used in the project other than that used under items (5) and (6).

Under Item (4) appear the three types of operating equipment expenditures, that is, rental, purchase and depreciation. The expenditures made for renting equipment belonging to a third party will be reported under "Rental". The amount paid or duly obligated for payment for the purchase of equipment will be reported under "Purchase". The amount of expenditures due the Operator to reimburse him for depreciation of equipment owned will be reported under "Depreciation".

Item (5) comprises costs of labor, supervision, technical services, materials, etc., which are used in the initial rehabilitation and repair of existing buildings, installations, fixtures, and equipment. These costs, therefore, should not be reported under items (2) and (3).

Item (6) includes the labor, supervision, technical services, materials, etc., used in the installation or construction of new buildings, fixed improvements, etc., necessary for the project. These costs, therefore, should not be reported under items (2) and (3).

Item (7) covers miscellaneous types of expenditure such as payroll taxes, liability insurance, workmen's compensation insurance, repairs to equipment and sampling and analysis. Only that part of payroll taxes, liability insurance and workmen's compensation which are paid by the operator should be reported under item (7). The share paid by the employee as a payroll deduction is to be included under item (2) as labor costs.

Item (8) includes any unforeseen costs not included in the other seven categories.

The original of Form MF-104 when submitted for reimbursable expenses incurred under contract Form MF-200 must be supported by original documentation or by certified copies of purchase orders, payrolls or transcripts of payrolls, unless such documentation has been waived by the Regional Executive Officer. This certification may be stated thus, "Certified True Copy (or Transcript)", followed by appropriate signature. If the Executive Officer of the Region determines that a contract under Form MF-200 should have an "on-site" audit, that is, a Government auditor should make an audit of the Operator's books and records of account, the Operator need not support his monthly voucher with original or certified documents except in cases of equipment purchases whose individual costs exceed $50.00. In these cases the original or a certified copy of the purchase order or invoice should be attached to the Monthly Voucher. N. B.—Only the *original* of Form MF-104 is required to be documented. The four copies of Form MF-104 are not to be thus supported.

Form MF-104 submitted for reimbursement under fixed price contracts on Form MF-200 (A), however, are not required to be supported by documentation of any kind. The Operator will submit his claim under item (1) of Form MF-104 by deleting as stated above the word "Independent" and by showing the number of feet or other units immediately after the appropriate descriptive word, such as, drilling, bulldozing, crosscutting, drifting, etc., and giving the "Monthly Total" amount due. "Totals Previously Reported", and "Totals to Date" columns should also be filled in.

Form MF-104A
(April 1952)

Budget Bureau No. 42-R1151.2

UNITED STATES
DEPARTMENT OF THE INTERIOR

DEFENSE MINERALS EXPLORATION ADMINISTRATION

OPERATOR'S UNIT COST AND PROGRESS REPORT

Month of January 1955 Docket No. DMEA 2879 Contract No. IDM-E 541

Operator's Name Polaris Mining Company Mineral Copper, Lead, Antimony

Address Box 320 Wallace, Idaho (and Incidental Silver)

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	feet	$12,607.20	247.2	$250,724.55	5002.5	50.12	11625	$ 51.00*
Crosscutting	"	2,733.60	53.6	11,087.09	218.5	50.74		
Raising	"			30,072.49	324.1	92.79	330	93.33
~~Slats~~ Sideswiping	"		14.0018	18,999.41	753.2	25.22	1560	25.50
Winzes								
Drilling: Core	feet			11,037.15	2452.7	4.50	5000	4.50
Churn								
Auger								
Stripping								
Trenching								
Test Pits								
Roads and Trails								
TOTAL DISTRIBUTED COSTS								TOTAL COSTS AUTHORIZED BY CONTRACT
Operating Equipment Purchased								
Initial Rehabilitation and Repairs								
New Buildings, Improvements, etc.								
TOTAL COSTS								

The undersigned company, and the official executing this certification on its behalf, hereby certify that the information contained in this report is correct and complete to the best of their knowledge and belief.

Date 2-9-55 Operator Polaris Mining Company

Per [signature] Title President

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)

*Maximum allowed by contract

INSTRUCTIONS

Preparation of Form MF–104A—Operator's Unit Cost and Progress Report.—Applicable places on Form 104A should be filled in by the Operator. The purpose of this form is twofold as follows: (1) to furnish the supervising engineers and other administrators with statistical information necessary to better determine the progress of the project; and (2) to furnish more permanent information on mining costs for future use. The more important phases of operation on which permanent information is desired have been outlined in the form. There are blank lines, however, for those unusual phases which may need to be reported for a particular project. It will be necessary for the Operator to distribute his costs among the applicable phases reported with the exception of three items the costs of which are not to be distributed by the Operator. These three items are: "Operating Equipment Purchased", "Initial Rehabilitation and Repairs", and "New Buildings, Improvements, etc." The reason for not distributing these items on a monthly basis is doubtless clear to the Operator, since such distribution might well overstate the cost for any one month or period short of the entire contract period.

Form MF–104A has been designed to tie in with Form MF–104 for both monthly and cumulative costs. The "Total Costs" on Form MF–104A for each month should equal the monthly "Total Costs" as reported on Form MF–104. This is also true of the "Total Costs To Date".

In preparing Form MF–104A, it will be necessary frequently to distribute certain costs over a number of items. For instance, supervisory and engineering costs may have to be distributed over several phases, such as, drifting, crosscutting, raising, etc., provided that these items were reported active for the month. Such distributions should be made on the basis of time spent on the various phases, on man days of labor charged to such phases, or on some other equitable basis. "Operating Equipment", "Initial Rehabilitation and Repairs", and "New Buildings Improvements, etc.", will be distributed to the several phases of the project by the Washington Office of DMEA at the close of the project if determined necessary. The last two columns headed "Authorized by Contract" will be filled in by the Operator if such information is found in the contract. This information is usually a part of Exhibit "A" of the contract. A space for remarks has been provided for the use of the Operator to call attention to any unusual circumstances causing excessive or disproportionate unit costs.

GPO 872894

Polaris Mining Company

Wallace, Idaho

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
FEB 21 1955

February ninth
1 9 5 5

Defense Minerals Exploration Administration
U. S. Department of the Interior
South 157 Howard Street
Spokane, Washington

Re: Progress Report Polaris East
Exploration Project - January 1955
Docket No. DMEA 2879
Contract No. IDM-E-541

Gentlemen:

During January the main easterly heading was advanced 247.2 feet, No. 218 North Crosscut was driven 28.3 feet and No. 218 South Crosscut was driven 25.3 feet. The crosscuts are to be used in drilling long diamond drill holes north and south of the main heading.

Advance for the month is shown on the attached 50-scale map dated February 1, 1955. The advance was in bleached quartzite and argillaceous quartzite. Some minor quartz streaks and lenses with a small amount of pyrite were associated quite intimately with a small zone of shearing as shown on the attached map.

Also attached is Sheet No. 3 which is a composite 50-scale map showing progress through November 1, 1954.

Yours very truly,

Robert E. Sorenson

Robert E. Sorenson

RES:abs
Enc.

Form MF-104 (Rev.)
(April 1952)

Budget Bureau No. 42-R1036.5

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION

OPERATOR'S MONTHLY REPORT AND VOUCHER

Month of December 1954 Docket No. DMEA 2879 Contract No. IDM-E 541

Operator's Name Polaris Mining Company Minerals Copper, Lead, Antimony (and incidental silver)

Address Box 320 - Wallace, Idaho

Contract Amount, $ 685,955.00 Government Participation: 50 % Amount, $ 342,977.50

ITEMS OF COSTS	FOR OPERATOR'S USE: Monthly Total	Totals Previously Reported	Totals To Date	FOR GOVERNMENT USE ONLY: Approved Monthly Total	Approved Totals Previously Reported	Approved Totals To Date
(1) Independent Short Form Contracts:						
Drilling		$ 11,037.15	$ 11,037.15			
Bulldozing		30,072.49	30,072.49			
Crosscutting		8,353.49	8,353.49			
Drifting 332.8 @ 51.00	$16,972.80	221,144.55	238,117.35			
Sideswipe 12.0 @ 25.50	306.00	18,693.41	18,999.41			
(2) Labor and Supervision:						
Labor						
Supervision						
Technical Services						
(3) Operating Mat'ls. and Supplies:						
Timber						
Explosives						
Pipe						
Track						
(4) Operating Equipment:						
Rental						
Purchase						
Depreciation						
(5) Initial Rehabilitation and Repairs						
(6) New Bldgs., Improvements, etc.						
(7) Miscellaneous:						
Repairs to Equipment						
Sampling and Analysis						
Payroll Taxes						
Liability Insurance						
(8) Contingencies (specify):						
TOTALS	$ 17,278.80	$289,301.09	$306,579.89	17278.80	289301.09	306579.89

I certify that the above bill is correct and just and that payment therefor has not been received.

Date 1-7-55 *Payee POLARIS MINING COMPANY

Per [signature] Title President

*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:

$ 8639.40

Signature MOP
(Authorized Certifying Officer)

Date 1-19-55 Vou. No. 1411

(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. E541 in accordance with the terms of the contract.

Signature 151 Eric G. Erickson Title Mining Engr. Date 1-14-55

APPROVAL BY DMEA EXECUTIVE OFFICER OR ALTERNATE:

Signature 151 Stephen W. Zoldok Title Mining Engr. Date 1-14-55

MONTHLY REPORT OF OPERATOR

The Operator (Contractor) of an exploration project is required to make a monthly report to the Government through the Regional Executive Officer. This report consists of three parts as follows:

(a) *Form MF-104—Operator's Monthly Report and Voucher.*—This form details expenditures and constitutes a voucher for reimbursing the Operator for the Government's share of costs;

(b) *Form MF-104A—Operator's Unit Cost and Progress Report.*—This is a statistical report of expenditures which shows costs for the various types of operation; and

(c) *Narrative.*—A concise narrative description of progress made, results accomplished, and any unusual difficulties encountered must be furnished as an attachment to this Report and Voucher. Wherever possible, the narrative is to be illustrated with maps or sketches showing formations penetrated and location and assays of samples taken as well as advances in workings. In the case of diamond drilling or churn drilling, the location and inclination of holes is to be shown on a map; logs and assays also are to be submitted.

The Monthly Report of Operator should be prepared in an original and four copies all of which must be sent to the Executive Officer of the Region not later than the 15th of the month following.

Preparation of Form MF-104—Operator's Monthly Report and Voucher.—All the applicable spaces in Form MF-104 should be filled in by the Operator, and the Operator or his agent should sign the certification in the lower left corner of the form.

The items of costs are arranged in the order they appear in Article 6 (a) of Form MF-200 (Revised February 1952), however, this form is readily adaptable for use in reporting activities under other contract forms.

Under Item (1) delete words "Short Form" if the contract is a sub-contract under Form MF-200; and delete word "Independent" if the contract reported is on Form MF-200 (A). Also, report work paid for on a unit basis under contract Form MF-200 as though it were performed under an independent contract.

Under Item (2) include labor, supervision and technical services incurred for the exploratory operations. Do not include labor, supervision and technical services used for work performed under items (5) and (6).

Under Item (3) include the costs of material and supplies used in the project other than that used under items (5) and (6).

Under Item (4) appear the three types of operating equipment expenditures, that is, rental, purchase and depreciation. The expenditures made for renting equipment belonging to a third party will be reported under "Rental". The amount paid or duly obligated for payment for the purchase of equipment will be reported under "Purchase". The amount of expenditures due the Operator to reimburse him for depreciation of equipment owned will be reported under "Depreciation".

Item (5) comprises costs of labor, supervision, technical services, materials, etc., which are used in the initial rehabilitation and repair of existing buildings, installations, fixtures, and equipment. These costs, therefore, should not be reported under items (2) and (3).

Item (6) includes the labor, supervision, technical services, materials, etc., used in the installation or construction of new buildings, fixed improvements, etc., necessary for the project. These costs, therefore, should not be reported under items (2) and (3).

Item (7) covers miscellaneous types of expenditure such as payroll taxes, liability insurance, workmen's compensation insurance, repairs to equipment and sampling and analysis. Only that part of payroll taxes, liability insurance and workmen's compensation which are paid by the operator should be reported under item (7). The share paid by the employee as a payroll deduction is to be included under item (2) as labor costs.

Item (8) includes any unforeseen costs not included in the other seven categories.

The original of Form MF-104 when submitted for reimbursable expenses incurred under contract Form MF-200 must be supported by original documentation or by certified copies of purchase orders, payrolls or transcripts of payrolls, unless such documentation has been waived by the Regional Executive Officer. This certification may be stated thus, "Certified True Copy (or Transcript)", followed by appropriate signature. If the Executive Officer of the Region determines that a contract under Form MF-200 should have an "on-site" audit, that is, a Government auditor should make an audit of the Operator's books and records of account, the Operator need not support his monthly voucher with original or certified documents except in cases of equipment purchases whose individual costs exceed $50.00. In these cases the original or a certified copy of the purchase order or invoice should be attached to the Monthly Voucher. N. B.—Only the *original* of Form MF-104 is required to be documented. The four copies of Form MF-104 are not to be thus supported.

Form MF-104 submitted for reimbursement under fixed price contracts on Form MF-200 (A), however, are not required to be supported by documentation of any kind. The Operator will submit his claim under item (1) of Form MF-104 by deleting as stated above the word "Independent" and by showing the number of feet or other units immediately after the appropriate descriptive word, such as, drilling, bulldozing, crosscutting, drifting, etc., and giving the "Monthly Total" amount due. "Totals Previously Reported", and "Totals to Date" columns should also be filled in.

Form MF-104A
(April 1952)

Budget Bureau No. 42-R1151.2

UNITED STATES
DEPARTMENT OF THE INTERIOR

DEFENSE MINERALS EXPLORATION ADMINISTRATION

OPERATOR'S UNIT COST AND PROGRESS REPORT

Month of December 1954 Docket No. DMEA 2879 Contract No. DMA-E 541

Operator's Name POLARIS MINING COMPANY Minerals copper, lead, antimony

Address Box 320 - Wallace, Idaho (and incidental silver)

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	feet	$16,972.00	332.8	$238,117.35	4755.3	$50.07	11,625	$51.00*
Crosscutting	"			8,353.49	164.9	50.66		
Raising	"			30,072.49	324.1	92.79	330	93.33
Shafts ~~Rect~~ sideswiping	"	306.00	12.0	18,999.41	753.2	25.22	1,560	25.50
Winzes								
Drilling: Core	"			11,037.15	2,452.7	4.50	5,000	4.50
Churn								
Auger								
Stripping								
Trenching								
Test Pits								
Roads and Trails								
TOTAL DISTRIBUTED COSTS								TOTAL COSTS AUTHORIZED BY CONTRACT
Operating Equipment Purchased								
Initial Rehabilitation and Repairs								
New Buildings, Improvements, etc.								
TOTAL COSTS								

The undersigned company, and the official executing this certification on its behalf, hereby certify that the information contained in this report is correct and complete to the best of their knowledge and belief.

Date 1-7-55 Operator Polaris Mining Company

Per [signature] Title President

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)

*maximum allowed by contract

INSTRUCTIONS

Preparation of Form MF-104A—Operator's Unit Cost and Progress Report.—Applicable places on Form 104A should be filled in by the Operator. The purpose of this form is twofold as follows: (1) to furnish the supervising engineers and other administrators with statistical information necessary to better determine the progress of the project; and (2) to furnish more permanent information on mining costs for future use. The more important phases of operation on which permanent information is desired have been outlined in the form. There are blank lines, however, for those unusual phases which may need to be reported for a particular project. It will be necessary for the Operator to distribute his costs among the applicable phases reported with the exception of three items the costs of which are not to be distributed by the Operator. These three items are: "Operating Equipment Purchased", "Initial Rehabilitation and Repairs", and "New Buildings, Improvements, etc." The reason for not distributing these items on a monthly basis is doubtless clear to the Operator, since such distribution might well overstate the cost for any one month or period short of the entire contract period.

Form MF-104A has been designed to tie in with Form MF-104 for both monthly and cumulative costs. The "Total Costs" on Form MF-104A for each month should equal the monthly "Total Costs" as reported on Form MF-104. This is also true of the "Total Costs To Date".

In preparing Form MF-104A, it will be necessary frequently to distribute certain costs over a number of items. For instance, supervisory and engineering costs may have to be distributed over several phases, such as, drifting, crosscutting, raising, etc., provided that these items were reported active for the month. Such distributions should be made on the basis of time spent on the various phases, on man days of labor charged to such phases, or on some other equitable basis. "Operating Equipment", "Initial Rehabilitation and Repairs", and "New Buildings Improvements, etc.", will be distributed to the several phases of the project by the Washington Office of DMEA at the close of the project if determined necessary. The last two columns headed "Authorized by Contract" will be filled in by the Operator if such information is found in the contract. This information is usually a part of Exhibit "A" of the contract. A space for remarks has been provided for the use of the Operator to call attention to any unusual circumstances causing excessive or disproportionate unit costs.

GPO 872894

Polaris Mining Company

Wallace, Idaho

Defense Minerals Administration
RECEIVED
JAN 24 1955

January seventh
1 9 5 5

Defense Minerals Exploration Administration
U. S. Department of the Interior
South 157 Howard Street
Spokane, Washington

Re: Progress Report Polaris East
Exploration Project - December 1954
Docket No. DMEA 2879
Contract No. IDM-E-541

Gentlemen:

During December the main easterly heading was advanced 332.8 feet and sideswiping 12 feet in length extended from Station SS-3029 +28.0 feet to + 40 feet.

Advance for the month is shown on the attached 50-scale map. Work was along the strike of bleached quartzite and argillaceous quartzite. Minor narrow barren quartz stringers were found as indicated on the map. No other mineralization of interest was found.

Yours very truly,

Robert E. Sorenson

Robert E. Sorenson

RES
abs

Enc.

MF-185 (Rev.)
(April 1952)

Budget Bureau No. 42-R1036.5

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION
OPERATOR'S MONTHLY REPORT AND VOUCHER

DEPARTMENT OF THE INTERIOR Defense Minerals Administration RECEIVED

Month of November, 1954 Docket No. DMEA 2879 Contract No. IDM-E 541
Operator's Name Polaris Mining Company Minerals Copper, Lead, Antimony
Address Box 320 - Wallace, Idaho (& Incidental silver)
Contract Amount, $ 685,955.00 Government Participation: 50% Amount, $ 342,977.50

ITEMS OF COSTS	FOR OPERATOR'S USE: Monthly Total	Totals Previously Reported	Totals To Date	FOR GOVERNMENT USE ONLY: Approved Monthly Total	Approved Totals Previously Reported	Approved Totals To Date
(1) Independent Short Form Contracts:						
Drilling		11 037 15	11 037 15			
Raising 80.3 @ 93.33	7 494 40	22 578 09	30 072 49			
Crosscutting		8 353 49	8 353 49			
Drifting 211.7 @ 51.00	10 796 70	210 347 85	221 144 55			
Sideswipe 10.0 @ 25.50	255 00	18 438 41	18 693 41			
(2) Labor and Supervision:						
Labor						
Supervision						
Technical Services						
(3) Operating Mat'ls. and Supplies:						
Timber						
Explosives						
Pipe						
Track						
(4) Operating Equipment:						
Rental						
Purchase						
Depreciation						
(5) Initial Rehabilitation and Repairs						
(6) New Bldgs., Improvements, etc.						
(7) Miscellaneous:						
Repairs to Equipment						
Sampling and Analysis						
Payroll Taxes						
Liability Insurance						
(8) Contingencies (specify):						
TOTALS	18 546 10	270 754 99	289 301 09	18546.10	270754.99	289301.09

I certify that the above bill is correct and just and that payment therefor has not been received.

Date 12-7-54 *Payee Polaris Mining Company

Per [signature] Title President

*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:

$ 9273.05

Signature [signature]
(Authorized Certifying Officer)

Date 12/16/54 Vou. No. 1380
(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. E541 in accordance with the terms of the contract.

Signature /s/ Eric G. Erickson Title Mining Engr. Date 12/13/54

APPROVAL BY DMEA EXECUTIVE OFFICER OR ALTERNATE:

Signature /s/ Stephen W. Zoldok Title Mining Engr. Date 12/13/54

MONTHLY REPORT OF OPERATOR

The Operator (Contractor) of an exploration project is required to make a monthly report to the Government through the Regional Executive Officer. This report consists of three parts as follows:

(a) *Form MF-104—Operator's Monthly Report and Voucher.*—This form details expenditures and constitutes a voucher for reimbursing the Operator for the Government's share of costs;

(b) *Form MF-104A—Operator's Unit Cost and Progress Report.*—This is a statistical report of expenditures which shows costs for the various types of operation; and

(c) *Narrative.*—A concise narrative description of progress made, results accomplished, and any unusual difficulties encountered must be furnished as an attachment to this Report and Voucher. Wherever possible, the narrative is to be illustrated with maps or sketches showing formations penetrated and location and assays of samples taken as well as advances in workings. In the case of diamond drilling or churn drilling, the location and inclination of holes is to be shown on a map; logs and assays also are to be submitted.

The Monthly Report of Operator should be prepared in an original and four copies all of which must be sent to the Executive Officer of the Region not later than the 15th of the month following.

Preparation of Form MF-104—Operator's Monthly Report and Voucher.—All the applicable spaces in Form MF-104 should be filled in by the Operator, and the Operator or his agent should sign the certification in the lower left corner of the form.

The items of costs are arranged in the order they appear in Article 6 (a) of Form MF-200 (Revised February 1952), however, this form is readily adaptable for use in reporting activities under other contract forms.

Under Item (1) delete words "Short Form" if the contract is a sub-contract under Form MF-200; and delete word "Independent" if the contract reported is on Form MF-200 (A). Also, report work paid for on a unit basis under contract Form MF-200 as though it were performed under an independent contract.

Under Item (2) include labor, supervision and technical services incurred for the exploratory operations. Do not include labor, supervision and technical services used for work performed under items (5) and (6).

Under Item (3) include the costs of material and supplies used in the project other than that used under items (5) and (6).

Under Item (4) appear the three types of operating equipment expenditures, that is, rental, purchase and depreciation. The expenditures made for renting equipment belonging to a third party will be reported under "Rental". The amount paid or duly obligated for payment for the purchase of equipment will be reported under "Purchase". The amount of expenditures due the Operator to reimburse him for depreciation of equipment owned will be reported under "Depreciation".

Item (5) comprises costs of labor, supervision, technical services, materials, etc., which are used in the initial rehabilitation and repair of existing buildings, installations, fixtures, and equipment. These costs, therefore, should not be reported under items (2) and (3).

Item (6) includes the labor, supervision, technical services, materials, etc., used in the installation or construction of new buildings, fixed improvements, etc., necessary for the project. These costs, therefore, should not be reported under items (2) and (3).

Item (7) covers miscellaneous types of expenditure such as payroll taxes, liability insurance, workmen's compensation insurance, repairs to equipment and sampling and analysis. Only that part of payroll taxes, liability insurance and workmen's compensation which are paid by the operator should be reported under item (7). The share paid by the employee as a payroll deduction is to be included under item (2) as labor costs.

Item (8) includes any unforeseen costs not included in the other seven categories.

The original of Form MF-104 when submitted for reimbursable expenses incurred under contract Form MF-200 must be supported by original documentation or by certified copies of purchase orders, payrolls or transcripts of payrolls, unless such documentation has been waived by the Regional Executive Officer. This certification may be stated thus, "Certified True Copy (or Transcript)", followed by appropriate signature. If the Executive Officer of the Region determines that a contract under Form MF-200 should have an "on-site" audit, that is, a Government auditor should make an audit of the Operator's books and records of account, the Operator need not support his monthly voucher with original or certified documents except in cases of equipment purchases whose individual costs exceed $50.00. In these cases the original or a certified copy of the purchase order or invoice should be attached to the Monthly Voucher. N. B.—Only the *original* of Form MF-104 is required to be documented. The four copies of Form MF-104 are not to be thus supported.

Form MF-104 submitted for reimbursement under fixed price contracts on Form MF-200 (A), however, are not required to be supported by documentation of any kind. The Operator will submit his claim under item (1) of Form MF-104 by deleting as stated above the word "Independent" and by showing the number of feet or other units immediately after the appropriate descriptive word, such as, drilling, bulldozing, crosscutting, drifting, etc., and giving the "Monthly Total" amount due. "Totals Previously Reported", and "Totals to Date" columns should also be filled in.

MF-101A
(April 1952)

Budget Bureau No. 42-R1151.2

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
DEC 23 1954

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION

OPERATOR'S UNIT COST AND PROGRESS REPORT

Month of November 1954 Docket No. DMEA 2879 Contract No. IDM-E 541
Operator's Name Polaris Mining Company Minerals Copper, Lead, Antimony
Address Box 320 - Wallace, Idaho (and incidental Silver)

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	feet	10,796.70	211.7	221,144.55	4,422.5	50.00	11,625	$51.00*
Crosscutting	"			8,353.49	164.9	50.66		
Raising	"	7,494.40	80.3	30,072.49	324.1	92.79	330	93.33
~~xxxx~~ sideswiping	"	255.00	10.0	18,693.41	741.2	25.22	1,560	25.50
Winzes								
Drilling: Core	feet			11,037.15	2,452.7	4.50	5,000	4.50
Churn								
Auger								
Stripping								
Trenching								
Test Pits								
Roads and Trails								
TOTAL DISTRIBUTED COSTS								TOTAL COSTS AUTHORIZED BY CONTRACT
Operating Equipment Purchased								
Initial Rehabilitation and Repairs								
New Buildings, Improvements, etc.								
TOTAL COSTS								

The undersigned company, and the official executing this certification on its behalf, hereby certify that the information contained in this report is correct and complete to the best of their knowledge and belief.

Date 12-7-54 Operator Polaris Mining Company

Per [signature] Title President

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)

*Maximum allowed by contract

INSTRUCTIONS

Preparation of Form MF-104A—Operator's Unit Cost and Progress Report.—Applicable places on Form 104A should be filled in by the Operator. The purpose of this form is twofold as follows: (1) to furnish the supervising engineers and other administrators with statistical information necessary to better determine the progress of the project; and (2) to furnish more permanent information on mining costs for future use. The more important phases of operation on which permanent information is desired have been outlined in the form. There are blank lines, however, for those unusual phases which may need to be reported for a particular project. It will be necessary for the Operator to distribute his costs among the applicable phases reported with the exception of three items the costs of which are not to be distributed by the Operator. These three items are: "Operating Equipment Purchased", "Initial Rehabilitation and Repairs", and "New Buildings, Improvements, etc." The reason for not distributing these items on a monthly basis is doubtless clear to the Operator, since such distribution might well overstate the cost for any one month or period short of the entire contract period.

Form MF-104A has been designed to tie in with Form MF-104 for both monthly and cumulative costs. The "Total Costs" on Form MF-104A for each month should equal the monthly "Total Costs" as reported on Form MF-104. This is also true of the "Total Costs To Date".

In preparing Form MF-104A, it will be necessary frequently to distribute certain costs over a number of items. For instance, supervisory and engineering costs may have to be distributed over several phases, such as, drifting, crosscutting, raising, etc., provided that these items were reported active for the month. Such distributions should be made on the basis of time spent on the various phases, on man days of labor charged to such phases, or on some other equitable basis. "Operating Equipment", "Initial Rehabilitation and Repairs", and "New Buildings Improvements, etc.", will be distributed to the several phases of the project by the Washington Office of DMEA at the close of the project if determined necessary. The last two columns headed "Authorized by Contract" will be filled in by the Operator if such information is found in the contract. This information is usually a part of Exhibit "A" of the contract. A space for remarks has been provided for the use of the Operator to call attention to any unusual circumstances causing excessive or disproportionate unit costs.

GPO 872894

Polaris Mining Company

Wallace, Idaho

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
DEC 23 1954

December seventh
1 9 5 4

Defense Minerals Exploration Administration
U. S. Department of the Interior
South 157 Howard Street
Spokane, Washington

Re: Progress Report Polaris East
Exploration Project- November-1954
Docket No. DMEA-2879
Contract No. IDM-E 541

Gentlemen:

In November, the main easterly heading was advanced 211.7 feet and sideswiping 10 feet in length extended from 3 feet N. W. of Station SS-3028 to 7 feet S. E. of that station. The timbered advance in the ventilation raise was 80.3 feet and the raise holed through to Coeur d'Alene Mines 2800 level during the month.

The attached 50-scale map shows the advance made in the main heading during November. Work was in bleached argillaceous quartzite. A few narrow barren quartz stringers were exposed in the first half of the month's advance. Nothing else of interest was exposed in the drifting.

Yours very truly,

Robert E. Sorenson

Robert E. Sorenson

RES
abs

Enc.

Form [illegible] (Rev.) (Ap[illegible]2)

Budget Bureau No. 42-R1036.3.
Approval expires 6-30-55.

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION

OPERATOR'S MONTHLY REPORT AND VOUCHER

RECEIVED

Month of October, 1954 Docket No. DMEA 2879 Contract No IDM-E 541
Operator's Name Polaris Mining Company Minerals copper, lead, antimony(&incidental silver)
Address Box 320 - Wallace, Idaho
Contract Amount, $685,955.00 Government Participation: 50 % Amount, $342,977.50

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		11,037.15	11,037.15			
Raising 110.6 @ 91.74	10,146.53	12,431.56	22,578.09			
Crosscutting		8,353.49	8,353.49			
Drifting 223.4@ 49.88	11,142.44	199,205.41	210,347.85			
Sideswipe 78.6 @ 24.94	1,960.15	16,478.26	18,438.41			
(2) Labor and Supervision:						
Labor						
Supervision						
Technical Services						
(3) Operating Mat'ls. and Supplies:						
Timber						
Explosives						
Pipe						
Track						
(4) Operating Equipment:						
Rental						
Purchase						
Depreciation						
(5) Initial Rehabilitation and Repairs						
(6) New Bldgs., Improvements, etc.						
(7) Miscellaneous:						
Repairs to Equipment						
Sampling and Analysis						
Payroll Taxes						
Liability Insurance						
(8) Contingencies (specify):						
TOTALS	23,249.12	247,505.87	270,754.99	23249.12	247505.87	270754.99

I certify that the above bill is correct and just and that payment therefor has not been received.

Date 11-5-54 *Payee Polaris Mining Company

Per [signature] Title President

*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:

$ 11624 56

Signature [signature]
(Authorized Certifying Officer)

Date 11/10/54 Vou. No. 1350
(See other side)

(For Government use only)

CERTIFICATION BY GOVERNMENT REPRESENTATIVE:

I certify that to the best of my knowledge and belief the contractor submitting this voucher is operating a Defense Minerals Exploration Administration project under Contract No. E-544 in accordance with the terms of the contract.

Signature (S) Eric G. Erickson Title Mining Engr Date 11/8/54

APPROVAL BY DMEA EXECUTIVE OFFICER OR ALTERNATE:

Signature (S) Stephen W Zoldak Title Mining Engr Date 11/9/54

MONTHLY REPORT OF OPERATOR

The Operator (Contractor) of an exploration project is required to make a monthly report to the Government through the Regional Executive Officer. This report consists of three parts as follows:

(a) *Form MF-104—Operator's Monthly Report and Voucher.*—This form details expenditures and constitutes a voucher for reimbursing the Operator for the Government's share of costs;

(b) *Form MF-104A—Operator's Unit Cost and Progress Report.*—This is a statistical report of expenditures which shows costs for the various types of operation; and

(c) *Narrative.*—A concise narrative description of progress made, results accomplished, and any unusual difficulties encountered must be furnished as an attachment to this Report and Voucher. Wherever possible, the narrative is to be illustrated with maps or sketches showing formations penetrated and location and assays of samples taken as well as advances in workings. In the case of diamond drilling or churn drilling, the location and inclination of holes is to be shown on a map; logs and assays also are to be submitted.

The Monthly Report of Operator should be prepared in an original and four copies all of which must be sent to the Executive Officer of the Region not later than the 15th of the month following.

Preparation of Form MF-104—Operator's Monthly Report and Voucher.—All the applicable spaces in Form MF-104 should be filled in by the Operator, and the Operator or his agent should sign the certification in the lower left corner of the form.

The items of costs are arranged in the order they appear in Article 6 (a) of Form MF-200 (Revised February 1952), however, this form is readily adaptable for use in reporting activities under other contract forms.

Under Item (1) delete words "Short Form" if the contract is a sub-contract under Form MF-200; and delete word "Independent" if the contract reported is on Form MF-200 (A). Also, report work paid for on a unit basis under contract Form MF-200 as though it were performed under an independent contract.

Under Item (2) include labor, supervision and technical services incurred for the exploratory operations. Do not include labor, supervision and technical services used for work performed under items (5) and (6).

Under Item (3) include the costs of material and supplies used in the project other than that used under items (5) and (6).

Under Item (4) appear the three types of operating equipment expenditures, that is, rental, purchase and depreciation. The expenditures made for renting equipment belonging to a third party will be reported under "Rental". The amount paid or duly obligated for payment for the purchase of equipment will be reported under "Purchase". The amount of expenditures due the Operator to reimburse him for depreciation of equipment owned will be reported under "Depreciation".

Item (5) comprises costs of labor, supervision, technical services, materials, etc., which are used in the initial rehabilitation and repair of existing buildings, installations, fixtures, and equipment. These costs, therefore, should not be reported under items (2) and (3).

Item (6) includes the labor, supervision, technical services, materials, etc., used in the installation or construction of new buildings, fixed improvements, etc., necessary for the project. These costs, therefore, should not be reported under items (2) and (3).

Item (7) covers miscellaneous types of expenditure such as payroll taxes, liability insurance, workmen's compensation insurance, repairs to equipment and sampling and analysis. Only that part of payroll taxes, liability insurance and workmen's compensation which are paid by the operator should be reported under item (7). The share paid by the employee as a payroll deduction is to be included under item (2) as labor costs.

Item (8) includes any unforeseen costs not included in the other seven categories.

The original of Form MF-104 when submitted for reimbursable expenses incurred under contract Form MF-200 must be supported by original documentation or by certified copies of purchase orders, payrolls or transcripts of payrolls, unless such documentation has been waived by the Regional Executive Officer. This certification may be stated thus, "Certified True Copy (or Transcript)", followed by appropriate signature. If the Executive Officer of the Region determines that a contract under Form MF-200 should have an "on-site" audit, that is, a Government auditor should make an audit of the Operator's books and records of account, the Operator need not support his monthly voucher with original or certified documents except in cases of equipment purchases whose individual costs exceed $50.00. In these cases the original or a certified copy of the purchase order or invoice should be attached to the Monthly Voucher. N. B.—Only the *original* of Form MF-104 is required to be documented. The four copies of Form MF-104 are not to be thus supported.

Form MF-104 submitted for reimbursement under fixed price contracts on Form MF-200 (A), however, are not required to be supported by documentation of any kind. The Operator will submit his claim under item (1) of Form MF-104 by deleting as stated above the word "Independent" and by showing the number of feet or other units immediately after the appropriate descriptive word, such as, drilling, bulldozing, crosscutting, drifting, etc., and giving the "Monthly Total" amount due. "Totals Previously Reported", and "Totals to Date" columns should also be filled in.

GPO 83-38476

Form MF-104A
(April 1952)

Budget Bureau No. 42-R1151.2

UNITED STATES
DEPARTMENT OF THE INTERIOR

DEFENSE MINERALS EXPLORATION ADMINISTRATION

OPERATOR'S UNIT COST AND PROGRESS REPORT

Month of October 1954 Docket No. DMEA 2879 Contract No. IDM-E 541

Operator's Name Polaris Mining Company Minerals Copper, lead, Antimony (and incidental silver)

Address Box 320 - Wallace, Idaho

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	feet	11,142.44	223.4	210,347.85	4,210.8	49.95	11,625	$ 51.00*
Crosscutting	"			8,353.49	164.9	50.66		
Raising	"	10,146.53	110.6	22,578.09	243.8	92.61	330	93.33
~~Misc.~~ Sideswiping	"	1,960.15	78.6	18,438.41	731.2	25.22	1,560	25.50
Winzes								
Drilling: Core	"			11,037.15	2,452.7	4.50	5,000	4.50
Churn								
Auger								
Stripping								
Trenching								
Test Pits								
Roads and Trails								
TOTAL DISTRIBUTED COSTS								TOTAL COSTS AUTHORIZED BY CONTRACT
Operating Equipment Purchased								
Initial Rehabilitation and Repairs								
New Buildings, Improvements, etc.								
TOTAL COSTS								

The undersigned company, and the official executing this certification on its behalf, hereby certify that the information contained in this report is correct and complete to the best of their knowledge and belief.

Date 11-5-54 Operator Polaris Mining Company

Per [signature] Title President

NOTE.—Title 18, U. S. Code (Crimes), section 1001, makes it a criminal offense to make a willfully false statement or representation to any department or agency of the United States as to any matter within its jurisdiction.

(Instructions on reverse)

REMARKS:

(For Government use only)

*Maximum allowed by contract

INSTRUCTIONS

Preparation of Form MF-104A—Operator's Unit Cost and Progress Report.—Applicable places on Form 104A should be filled in by the Operator. The purpose of this form is twofold as follows: (1) to furnish the supervising engineers and other administrators with statistical information necessary to better determine the progress of the project; and (2) to furnish more permanent information on mining costs for future use. The more important phases of operation on which permanent information is desired have been outlined in the form. There are blank lines, however, for those unusual phases which may need to be reported for a particular project. It will be necessary for the Operator to distribute his costs among the applicable phases reported with the exception of three items the costs of which are not to be distributed by the Operator. These three items are: "Operating Equipment Purchased", "Initial Rehabilitation and Repairs", and "New Buildings, Improvements, etc." The reason for not distributing these items on a monthly basis is doubtless clear to the Operator, since such distribution might well overstate the cost for any one month or period short of the entire contract period.

Form MF-104A has been designed to tie in with Form MF-104 for both monthly and cumulative costs. The "Total Costs" on Form MF-104A for each month should equal the monthly "Total Costs" as reported on Form MF-104. This is also true of the "Total Costs To Date".

In preparing Form MF-104A, it will be necessary frequently to distribute certain costs over a number of items. For instance, supervisory and engineering costs may have to be distributed over several phases, such as, drifting, crosscutting, raising, etc., provided that these items were reported active for the month. Such distributions should be made on the basis of time spent on the various phases, on man days of labor charged to such phases, or on some other equitable basis. "Operating Equipment", "Initial Rehabilitation and Repairs", and "New Buildings Improvements, etc.", will be distributed to the several phases of the project by the Washington Office of DMEA at the close of the project if determined necessary. The last two columns headed "Authorized by Contract" will be filled in by the Operator if such information is found in the contract. This information is usually a part of Exhibit "A" of the contract. A space for remarks has been provided for the use of the Operator to call attention to any unusual circumstances causing excessive or disproportionate unit costs.

GPO 872894

DMEA

Polaris Mining Company

Wallace, Idaho

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
NOV 13 1954

November fifth
1 9 5 4

Defense Minerals Exploration Administration
U. S. Department of the Interior
South 157 Howard Street
Spokane, Washington

Re: Progress Report Polaris East Exploration
Project - October-1954
Docket No. DMEA -2879
Contract No. IDM-E 541

Gentlemen:

During October the main easterly heading was advanced 223.4 feet and 78.6 feet of sideswiping extending from Station SS-3027 plus 66.6 feet to SS-3027 plus 145.2 feet was completed. The timbered advance in the ventilation raise was 110.6 feet. The present raise back is 261 feet above the rail and should hole through during November.

Advance in the main heading was in argillaceous quartzite largely steep dipping and overturned toward the south. Small stringers of quartz and siderite appear in the drift along some of the distance advanced. No sulphide mineralization was found in the drift. The drift is now within a rather long section which was unexplored on the level above.

Yours very truly,

Robert E. Sorenson

Robert E. Sorenson

RES
abs

Form MF-104 (Rev.)
(April 1952)

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION

Budget Bureau No. 42-R1036.5

Department of the Interior
Defense Minerals Administration
RECEIVED
SEP 10 1954

OPERATOR'S MONTHLY REPORT AND VOUCHER

Month of July, 1954 Docket No. DMEA 2879 Contract No. IDM-E541
Operator's Name Polaris Mining Company Minerals copper, lead, antimony (and incidental silver)
Address Box 320 Wallace, Idaho
Contract Amount, $ 685,955.00 Government Participation: ____% Amount, $ 342,977.50

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:	-	9,918.90	9,918.90			
Drilling						
Bulldozing						
Crosscutting 35.5 @ 49.94	1,772.94	1,245.95	3,018.89			
Drifting 357.2 @ 49.94	17,839.23	165,158.38	182,997.61			
Sideswipe 49.0 @24.97	1,223.57	9,552.89	10,776.46			
(2) Labor and Supervision:						
Labor						
Supervision						
Technical Services						
(3) Operating Mat'ls. and Supplies:						
Timber						
Explosives						
Pipe						
Track						
(4) Operating Equipment:						
Rental						
Purchase						
Depreciation						
(5) Initial Rehabilitation and Repairs						
(6) New Bldgs., Improvements, etc.						
(7) Miscellaneous:						
Repairs to Equipment						
Sampling and Analysis						
Payroll Taxes						
Liability Insurance						
(8) Contingencies (specify):						
TOTALS	20,835.74	185,876.12	206,711.86	20835.74	185876.12	206711.86

I certify that the above bill is correct and just and that payment therefor has not been received.

Date August 11, 1954 Payee Polaris Mining Company

Per [signature] Title President

*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:

$ 10417 87

Signature [signature]
(Authorized Certifying Officer)

Date 9/3/54 Vou. No. 1268
(See other side)

(For Government use only)

CERTIFICATION BY GOVERNMENT REPRESENTATIVE:

I certify that to the best of my knowledge and belief the contractor submitting this voucher is operating a Defense Minerals Exploration Administration project under Contract No. E 541 in accordance with the terms of the contract.

Signature /S/ Eric G Erickson Title Mining Engr. Date 8/26/54

APPROVAL BY DMEA EXECUTIVE OFFICER OR ALTERNATE:

Signature /S/ Stephen W Zoldok Title Mining Engr. Date 8/30/54

MONTHLY REPORT OF OPERATOR

The Operator (Contractor) of an exploration project is required to make a monthly report to the Government through the Regional Executive Officer. This report consists of three parts as follows:

(a) *Form MF-104—Operator's Monthly Report and Voucher.*—This form details expenditures and constitutes a voucher for reimbursing the Operator for the Government's share of costs;

(b) *Form MF-104A—Operator's Unit Cost and Progress Report.*—This is a statistical report of expenditures which shows costs for the various types of operation; and

(c) *Narrative.*—A concise narrative description of progress made, results accomplished, and any unusual difficulties encountered must be furnished as an attachment to this Report and Voucher. Wherever possible, the narrative is to be illustrated with maps or sketches showing formations penetrated and location and assays of samples taken as well as advances in workings. In the case of diamond drilling or churn drilling, the location and inclination of holes is to be shown on a map; logs and assays also are to be submitted.

The Monthly Report of Operator should be prepared in an original and four copies all of which must be sent to the Executive Officer of the Region not later than the 15th of the month following.

Preparation of Form MF-104—Operator's Monthly Report and Voucher.—All the applicable spaces in Form MF-104 should be filled in by the Operator, and the Operator or his agent should sign the certification in the lower left corner of the form.

The items of costs are arranged in the order they appear in Article 6 (a) of Form MF-200 (Revised February 1952), however, this form is readily adaptable for use in reporting activities under other contract forms.

Under Item (1) delete words "Short Form" if the contract is a sub-contract under Form MF-200; and delete word "Independent" if the contract reported is on Form MF-200 (A). Also, report work paid for on a unit basis under contract Form MF-200 as though it were performed under an independent contract.

Under Item (2) include labor, supervision and technical services incurred for the exploratory operations. Do not include labor, supervision and technical services used for work performed under items (5) and (6).

Under Item (3) include the costs of material and supplies used in the project other than that used under items (5) and (6).

Under Item (4) appear the three types of operating equipment expenditures, that is, rental, purchase and depreciation. The expenditures made for renting equipment belonging to a third party will be reported under "Rental". The amount paid or duly obligated for payment for the purchase of equipment will be reported under "Purchase". The amount of expenditures due the Operator to reimburse him for depreciation of equipment owned will be reported under "Depreciation".

Item (5) comprises costs of labor, supervision, technical services, materials, etc., which are used in the initial rehabilitation and repair of existing buildings, installations, fixtures, and equipment. These costs, therefore, should not be reported under items (2) and (3).

Item (6) includes the labor, supervision, technical services, materials, etc., used in the installation or construction of new buildings, fixed improvements, etc., necessary for the project. These costs, therefore, should not be reported under items (2) and (3).

Item (7) covers miscellaneous types of expenditure such as payroll taxes, liability insurance, workmen's compensation insurance, repairs to equipment and sampling and analysis. Only that part of payroll taxes, liability insurance and workmen's compensation which are paid by the operator should be reported under item (7). The share paid by the employee as a payroll deduction is to be included under item (2) as labor costs.

Item (8) includes any unforeseen costs not included in the other seven categories.

The original of Form MF-104 when submitted for reimbursable expenses incurred under contract Form MF-200 must be supported by original documentation or by certified copies of purchase orders, payrolls or transcripts of payrolls, unless such documentation has been waived by the Regional Executive Officer. This certification may be stated thus, "Certified True Copy (or Transcript)", followed by appropriate signature. If the Executive Officer of the Region determines that a contract under Form MF-200 should have an "on-site" audit, that is, a Government auditor should make an audit of the Operator's books and records of account, the Operator need not support his monthly voucher with original or certified documents except in cases of equipment purchases whose individual costs exceed $50.00. In these cases the original or a certified copy of the purchase order or invoice should be attached to the Monthly Voucher. N. B.—Only the *original* of Form MF-104 is required to be documented. The four copies of Form MF-104 are not to be thus supported.

Form MF-104 submitted for reimbursement under fixed price contracts on Form MF-200 (A), however, are not required to be supported by documentation of any kind. The Operator will submit his claim under item (1) of Form MF-104 by deleting as stated above the word "Independent" and by showing the number of feet or other units immediately after the appropriate descriptive word, such as, drilling, bulldozing, crosscutting, drifting, etc., and giving the "Monthly Total" amount due. "Totals Previously Reported", and "Totals to Date" columns should also be filled in.

Form MF-104A
(April 1952)

Budget Bureau No. 42-R1151.2

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
SEP 10 1954

UNITED STATES
DEPARTMENT OF THE INTERIOR

DEFENSE MINERALS EXPLORATION ADMINISTRATION

OPERATOR'S UNIT COST AND PROGRESS REPORT

Month of July 4 1954 Docket No. DMEA 2879 Contract IDM-E541

Operator's Name Polaris Mining Company

Address Box 320 Wallace, Idaho

Copper, lead, antimony (and incidental silver)

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	feet	17,839.23	357.2	182,997.61	3,669.6	49.87	11,625	$51.00*
Crosscutting	"	1,772.94	35.5	3,018.89	60.3	50.06		
~~Raise~~ Sidestriping	"	1,723.57	49.0	10,776.46	429.0	25.12	330	93.33
Shafts							1,560	25.50
Winzes	"			9,918.90	2,204.2	4.50	5,000	4.50
Drilling: Core								
Churn								
Auger								
Stripping								
Trenching								
Test Pits								
Roads and Trails								
TOTAL DISTRIBUTED COSTS								TOTAL COSTS AUTHORIZED BY CONTRACT
Operating Equipment Purchased								
Initial Rehabilitation and Repairs								
New Buildings, Improvements, etc.								
TOTAL COSTS								

The undersigned company, and the official executing this certification on its behalf, hereby certify that the information contained in this report is correct and complete to the best of their knowledge and belief.

Date July 4 Operator Polaris Mining Company

Per [signature] Title President

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)

* maximum allowed by contract

(For Government use only)

INSTRUCTIONS

Preparation of Form MF-104A—Operator's Unit Cost and Progress Report.—Applicable places on Form 104A should be filled in by the Operator. The purpose of this form is twofold as follows: (1) to furnish the supervising engineers and other administrators with statistical information necessary to better determine the progress of the project; and (2) to furnish more permanent information on mining costs for future use. The more important phases of operation on which permanent information is desired have been outlined in the form. There are blank lines, however, for those unusual phases which may need to be reported for a particular project. It will be necessary for the Operator to distribute his costs among the applicable phases reported with the exception of three items the costs of which are not to be distributed by the Operator. These three items are: "Operating Equipment Purchased", "Initial Rehabilitation and Repairs", and "New Buildings, Improvements, etc." The reason for not distributing these items on a monthly basis is doubtless clear to the Operator, since such distribution might well overstate the cost for any one month or period short of the entire contract period.

Form MF-104A has been designed to tie in with Form MF-104 for both monthly and cumulative costs. The "Total Costs" on Form MF-104A for each month should equal the monthly "Total Costs" as reported on Form MF-104. This is also true of the "Total Costs To Date".

In preparing Form MF-104A, it will be necessary frequently to distribute certain costs over a number of items. For instance, supervisory and engineering costs may have to be distributed over several phases, such as, drifting, crosscutting, raising, etc., provided that these items were reported active for the month. Such distributions should be made on the basis of time spent on the various phases, on man days of labor charged to such phases, or on some other equitable basis. "Operating Equipment", "Initial Rehabilitation and Repairs", and "New Buildings Improvements, etc.", will be distributed to the several phases of the project by the Washington Office of DMEA at the close of the project if determined necessary. The last two columns headed "Authorized by Contract" will be filled in by the Operator if such information is found in the contract. This information is usually a part of Exhibit "A" of the contract. A space for remarks has been provided for the use of the Operator to call attention to any unusual circumstances causing excessive or disproportionate unit costs.

GPO 872894

Polaris Mining Company

Wallace, Idaho

August tenth
1 9 5 4

Defense Minerals Exploration Administration
U. S. Department of the Interior
South 157 Howard Street
Spokane, Washington

Re: Progress Report Polaris East
Exploration Project - July-1954
Docket No. DMEA 2879
Contract No. IDM-E541

Gentlemen:

During July the main easterly heading was advanced 357.2 feet and 23 feet of sideswipe was completed. Also 9.0 feet of drift north and 15.0 feet of drift south was driven on the Wire Silver vein. The vent raise crosscut near SS 3018 was driven 11.5 feet and 26 feet of sideswipe was completed.

The attached 50-scale map shows progress for the month of July, the geology of the workings and samples taken on the Wire Silver vein.

Wall rock was mostly thin bedded grayish-green sericitic quartzite with rocks appearing to become more massive toward the face. A change in bedding direction appears to be taking place near the face of the main heading.

The tetrahedrite-siderite vein located about 150 feet southeast of Station SS 3018 is similar in character to the small stoped section on 2800 called the "Wire Silver" vein by the Coeur d'Alene Mines Corporation. Although the vein is rather narrow in this new work, the silver and copper content is interesting, reaching a maximum of 2.0 feet; assaying 90.7 ounces silver and 3.14% copper. Slabs for diamond drilling northerly and southerly for purposes of prospecting the vein extensions have been prepared and before any usable drift may be run, drilling should establish the probable trend. The erratic nature of the vein is only partially illustrated on this 50-scale map. Drilling is being started there now.

Near Station SS 3018 a northerly crosscut is being driven to a position under Station C 2828 (Coeur d'Alene 2800 level) and the raise will be spotted to hole in the vicinity of that station. Since August first the crosscut has reached that position and the raise is being started as planned. Advance will be made both in the raise and in the main heading.

Yours very truly,

Robert E. Sorenson

RES:dc

Robert E. Sorenson

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

Defense Minerals Administration
RECEIVED
OCT 18 1954

OPERATOR'S MONTHLY REPORT AND VOUCHER

Month of September, 1954 Docket No. DMEA 2879 Contract No. IDM-E 541
Operator's Name Polaris Mining Company
Address Box 320 Wallace, Idaho
Minerals Copper, Lead, Antimony (& Incidental silver)
Contract Amount, $ 685,955.00 Government Participation: 50 % Amount, $ 342,977.50

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		11037.15	11037.15		11037.15	11037.15
Raising 105.9 @ 93.33	9883.65	2547.91	12431.56	9883.65	2547.91	12431.56
Crosscutting		8353.49	8353.49		8353.49	8353.49
Drifting 175.1 @ 51.00	8930.10	190275.31	199205.41	8930.10	190275.31	199205.41
Sideswipe 102.01 @ 25.50	2601.00	13877.26	16,478.26	2601.00	13877.26	16478.26
(2) Labor and Supervision:						
Labor						
Supervision						
Technical Services						
(3) Operating Mat'ls. and Supplies:						
Timber						
Explosives						
Pipe						
Track						
(4) Operating Equipment:						
Rental						
Purchase						
Depreciation						
(5) Initial Rehabilitation and Repairs						
(6) New Bldgs., Improvements, etc.						
(7) Miscellaneous:						
Repairs to Equipment						
Sampling and Analysis						
Payroll Taxes						
Liability Insurance						
(8) Contingencies (specify):						
TOTALS	21414.75	226091.12	247505.87	21414.75	226091.12	247505.87

I certify that the above bill is correct and just and that payment therefor has not been received.
Date 10-7-54 *Payee POLARIS MINING COMPANY
Per [signature] Title President

*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:

$ 10707 37

Signature MAP
(Authorized Certifying Officer)

Date 10/13/54 Vou. No. 1316
(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. E541 in accordance with the terms of the contract.

Signature /s/ Eric G. Erickson Title Mining Engr Date 10/12/54

APPROVAL BY DMEA EXECUTIVE OFFICER OR ALTERNATE:

Signature /s/ Thomas E. Howard Title Mining Engr Date 10/12/54

MONTHLY REPORT OF OPERATOR

The Operator (Contractor) of an exploration project is required to make a monthly report to the Government through the Regional Executive Officer. This report consists of three parts as follows:

(a) *Form MF-104—Operator's Monthly Report and Voucher.*—This form details expenditures and constitutes a voucher for reimbursing the Operator for the Government's share of costs;

(b) *Form MF-104A—Operator's Unit Cost and Progress Report.*—This is a statistical report of expenditures which shows costs for the various types of operation; and

(c) *Narrative.*—A concise narrative description of progress made, results accomplished, and any unusual difficulties encountered must be furnished as an attachment to this Report and Voucher. Wherever possible, the narrative is to be illustrated with maps or sketches showing formations penetrated and location and assays of samples taken as well as advances in workings. In the case of diamond drilling or churn drilling, the location and inclination of holes is to be shown on a map; logs and assays also are to be submitted.

The Monthly Report of Operator should be prepared in an original and four copies all of which must be sent to the Executive Officer of the Region not later than the 15th of the month following.

Preparation of Form MF-104—Operator's Monthly Report and Voucher.—All the applicable spaces in Form MF-104 should be filled in by the Operator, and the Operator or his agent should sign the certification in the lower left corner of the form.

The items of costs are arranged in the order they appear in Article 6 (a) of Form MF-200 (Revised February 1952), however, this form is readily adaptable for use in reporting activities under other contract forms.

Under Item (1) delete words "Short Form" if the contract is a sub-contract under Form MF-200; and delete word "Independent" if the contract reported is on Form MF-200 (A). Also, report work paid for on a unit basis under contract Form MF-200 as though it were performed under an independent contract.

Under Item (2) include labor, supervision and technical services incurred for the exploratory operations. Do not include labor, supervision and technical services used for work performed under items (5) and (6).

Under Item (3) include the costs of material and supplies used in the project other than that used under items (5) and (6).

Under Item (4) appear the three types of operating equipment expenditures, that is, rental, purchase and depreciation. The expenditures made for renting equipment belonging to a third party will be reported under "Rental". The amount paid or duly obligated for payment for the purchase of equipment will be reported under "Purchase". The amount of expenditures due the Operator to reimburse him for depreciation of equipment owned will be reported under "Depreciation".

Item (5) comprises costs of labor, supervision, technical services, materials, etc., which are used in the initial rehabilitation and repair of existing buildings, installations, fixtures, and equipment. These costs, therefore, should not be reported under items (2) and (3).

Item (6) includes the labor, supervision, technical services, materials, etc., used in the installation or construction of new buildings, fixed improvements, etc., necessary for the project. These costs, therefore, should not be reported under items (2) and (3).

Item (7) covers miscellaneous types of expenditure such as payroll taxes, liability insurance, workmen's compensation insurance, repairs to equipment and sampling and analysis. Only that part of payroll taxes, liability insurance and workmen's compensation which are paid by the operator should be reported under item (7). The share paid by the employee as a payroll deduction is to be included under item (2) as labor costs.

Item (8) includes any unforeseen costs not included in the other seven categories.

The original of Form MF-104 when submitted for reimbursable expenses incurred under contract Form MF-200 must be supported by original documentation or by certified copies of purchase orders, payrolls or transcripts of payrolls, unless such documentation has been waived by the Regional Executive Officer. This certification may be stated thus, "Certified True Copy (or Transcript)", followed by appropriate signature. If the Executive Officer of the Region determines that a contract under Form MF-200 should have an "on-site" audit, that is, a Government auditor should make an audit of the Operator's books and records of account, the Operator need not support his monthly voucher with original or certified documents except in cases of equipment purchases whose individual costs exceed $50.00. In these cases the original or a certified copy of the purchase order or invoice should be attached to the Monthly Voucher. N. B.—Only the *original* of Form MF-104 is required to be documented. The four copies of Form MF-104 are not to be thus supported.

Form MF-104 submitted for reimbursement under fixed price contracts on Form MF-200 (A), however, are not required to be supported by documentation of any kind. The Operator will submit his claim under item (1) of Form MF-104 by deleting as stated above the word "Independent" and by showing the number of feet or other units immediately after the appropriate descriptive word, such as, drilling, bulldozing, crosscutting, drifting, etc., and giving the "Monthly Total" amount due. "Totals Previously Reported", and "Totals to Date" columns should also be filled in.

GPO 83-38476

Form ME-104A
(April 1952)

Budget Bureau No. 42-R1151.2

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
OCT 18 1954

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION
OPERATOR'S UNIT COST AND PROGRESS REPORT

Month of September 1954 Docket No. DMEA 2879 Contract No. IDM-E 541
Operator's Name Polaris Mining Company Minerals Copper, Lead, Antimony
Address Box 320 Wallace, Idaho (& Inidental Silver)

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	Feet	8930.10	175.1	199205.41	3987.4	49.96	11625	$ 51.00*
Crosscutting	Feet			8353.49	164.9	50.66		
Raising	Feet	9883.65	105.9	12431.56	133.2	93.33	330	93.33
~~xxxx~~ Sideswiping	Feet	2601.00	102.0	16478.26	652.6	25.25	1560	25.50
Winzes								
Drilling: Core	Feet			11037.15	2452.7	4.50	5000	4.50
Churn								
Auger								
Stripping								
Trenching								
Test Pits								
Roads and Trails								
Total Distributed Costs								Total Costs Authorized by Contract
Operating Equipment Purchased								
Initial Rehabilitation and Repairs								
New Buildings, Improvements, etc.								
Total Costs								

The undersigned company, and the official executing this certification on its behalf, hereby certify that the information contained in this report is correct and complete to the best of their knowledge and belief.

Date 10-7-54 Operator POLARIS MINING COMPANY

Per [signature] Title President

NOTE.—Title 18, U. S. Code (Crimes), section 1001, makes it a criminal offense to make a willfully false statement or representation to any department or agency of the United States as to any matter within its jurisdiction.

(Instructions on reverse)

Remarks:

(For Government use only)

*Maximum allowed by contract

INSTRUCTIONS

Preparation of Form MF-104A—Operator's Unit Cost and Progress Report.—Applicable places on Form 104A should be filled in by the Operator. The purpose of this form is twofold as follows: (1) to furnish the supervising engineers and other administrators with statistical information necessary to better determine the progress of the project; and (2) to furnish more permanent information on mining costs for future use. The more important phases of operation on which permanent information is desired have been outlined in the form. There are blank lines, however, for those unusual phases which may need to be reported for a particular project. It will be necessary for the Operator to distribute his costs among the applicable phases reported with the exception of three items the costs of which are not to be distributed by the Operator. These three items are: "Operating Equipment Purchased", "Initial Rehabilitation and Repairs", and "New Buildings, Improvements, etc." The reason for not distributing these items on a monthly basis is doubtless clear to the Operator, since such distribution might well overstate the cost for any one month or period short of the entire contract period.

Form MF-104A has been designed to tie in with Form MF-104 for both monthly and cumulative costs. The "Total Costs" on Form MF-104A for each month should equal the monthly "Total Costs" as reported on Form MF-104. This is also true of the "Total Costs To Date".

In preparing Form MF-104A, it will be necessary frequently to distribute certain costs over a number of items. For instance, supervisory and engineering costs may have to be distributed over several phases, such as, drifting, crosscutting, raising, etc., provided that these items were reported active for the month. Such distributions should be made on the basis of time spent on the various phases, on man days of labor charged to such phases, or on some other equitable basis. "Operating Equipment", "Initial Rehabilitation and Repairs", and "New Buildings Improvements, etc.", will be distributed to the several phases of the project by the Washington Office of DMEA at the close of the project if determined necessary. The last two columns headed "Authorized by Contract" will be filled in by the Operator if such information is found in the contract. This information is usually a part of Exhibit "A" of the contract. A space for remarks has been provided for the use of the Operator to call attention to any unusual circumstances causing excessive or disproportionate unit costs.

GPO 872894

Polaris Mining Company

Wallace, Idaho

October seventh
1954

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
OCT 18 1954

Defense Minerals Exploration Administration
U. S. Department of the Interior
South 157 Howard Street
Spokane, Washington

Re: Progress Report Polaris East
Exploration Project - September-1954
Docket No. DMEA 2879
Contract No. IDM-E 541

Gentlemen:

During September the main easterly heading was advanced 175.1 feet and 102.0 feet of sideswiping for switch room was done. The ventilation raise was advanced 105.9 feet (timbered).

The geology of the drift work is shown on the attached 50-scale map. Advance was in bleached argillaceous quartzite striking with the drift and overturned southerly dipping at a steep angle. No mineralization of consequence was found in the work. The heading will be driven on a line in the direction shown on the map.

Yours very truly,

Robert E. Sorenson

Robert E. Sorenson

RES/mg

Enc.

Form MP-104 (Rev.)
(April 1952)

Budget Bureau No. 42-R1036.5

Defense Minerals Administration
RECEIVED
SEP 27 1954

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION
OPERATOR'S MONTHLY REPORT AND VOUCHER

Month of August, 1954 Docket No. DMEA 2879 Contract No. IDM-E 541
Operator's Name Polaris Mining Company Minerals Copper, Lead, Antimony, (& incidental silver)
Address Box 320 Wallace, Idaho
Contract Amount, $ 685,955.00 Government Participation: 50 % Amount, $ 342,977.50

ITEMS OF COSTS	FOR OPERATOR'S USE: Monthly Total	Totals Previously Reported	Totals To Date	FOR GOVERNMENT USE ONLY: Approved Monthly Total	Approved Totals Previously Reported	Approved Totals To Date
(1) Independent Short Form Contracts:						
Drilling 248.5 @ 4.50	1,118.25	9,918.90	11,037.15	1118.25	9918.90	11037.15
Raising-Bulldozing 27.3 @ 93.33	2,547.91		2,547.91	2547.91		2547.91
Crosscutting 104.6 @ 51.00	5,334.60	3,018.89	8,353.49	5334.60	3018.89	8353.49
Drifting 142.7 @ 51.00	7,277.70	182,997.61	190,275.31	7277.70	182997.61	190275.31
Sideswipe 121.6 @ 25.50	3,100.80	10,776.46	13,877.26	3100.80	10776.46	13877.26
(2) Labor and Supervision:						
Labor						
Supervision						
Technical Services						
(3) Operating Mat'ls. and Supplies:						
Timber						
Explosives						
Pipe						
Track						
(4) Operating Equipment:						
Rental						
Purchase						
Depreciation						
(5) Initial Rehabilitation and Repairs						
(6) New Bldgs., Improvements, etc.						
(7) Miscellaneous:						
Repairs to Equipment						
Sampling and Analysis						
Payroll Taxes						
Liability Insurance						
(8) Contingencies (specify):						
TOTALS	19,379.26	206,711.86	226,091.12	19379.26	206711.86	226091.12

I certify that the above bill is correct and just and that payment therefor has not been received.

Date Sept. 8, 1954 Payee Polaris Mining Company

Per [signature] Title President

*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:

$ 9689 63

Signature [signature]
(Authorized Certifying Officer)

Date 9/23/54 Vou. No. 1297
(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. E541 in accordance with the terms of the contract.

Signature /s/ Eric G. Erickson Title Mining Engr Date 9/14/54

APPROVAL BY DMEA EXECUTIVE OFFICER OR ALTERNATE:

Signature /s/ Stephen W. Zoldok Title Mining Engr Date 9/15/54

MONTHLY REPORT OF OPERATOR

The Operator (Contractor) of an exploration project is required to make a monthly report to the Government through the Regional Executive Officer. This report consists of three parts as follows:

(a) *Form MF-104—Operator's Monthly Report and Voucher.*—This form details expenditures and constitutes a voucher for reimbursing the Operator for the Government's share of costs;

(b) *Form MF-104A—Operator's Unit Cost and Progress Report.*—This is a statistical report of expenditures which shows costs for the various types of operation; and

(c) *Narrative.*—A concise narrative description of progress made, results accomplished, and any unusual difficulties encountered must be furnished as an attachment to this Report and Voucher. Wherever possible, the narrative is to be illustrated with maps or sketches showing formations penetrated and location and assays of samples taken as well as advances in workings. In the case of diamond drilling or churn drilling, the location and inclination of holes is to be shown on a map; logs and assays also are to be submitted.

The Monthly Report of Operator should be prepared in an original and four copies all of which must be sent to the Executive Officer of the Region not later than the 15th of the month following.

Preparation of Form MF-104—Operator's Monthly Report and Voucher.—All the applicable spaces in Form MF-104 should be filled in by the Operator, and the Operator or his agent should sign the certification in the lower left corner of the form.

The items of costs are arranged in the order they appear in Article 6 (a) of Form MF-200 (Revised February 1952), however, this form is readily adaptable for use in reporting activities under other contract forms.

Under Item (1) delete words "Short Form" if the contract is a sub-contract under Form MF-200; and delete word "Independent" if the contract reported is on Form MF-200 (A). Also, report work paid for on a unit basis under contract Form MF-200 as though it were performed under an independent contract.

Under Item (2) include labor, supervision and technical services incurred for the exploratory operations. Do not include labor, supervision and technical services used for work performed under items (5) and (6).

Under Item (3) include the costs of material and supplies used in the project other than that used under items (5) and (6).

Under Item (4) appear the three types of operating equipment expenditures, that is, rental, purchase and depreciation. The expenditures made for renting equipment belonging to a third party will be reported under "Rental". The amount paid or duly obligated for payment for the purchase of equipment will be reported under "Purchase". The amount of expenditures due the Operator to reimburse him for depreciation of equipment owned will be reported under "Depreciation".

Item (5) comprises costs of labor, supervision, technical services, materials, etc., which are used in the initial rehabilitation and repair of existing buildings, installations, fixtures, and equipment. These costs, therefore, should not be reported under items (2) and (3).

Item (6) includes the labor, supervision, technical services, materials, etc., used in the installation or construction of new buildings, fixed improvements, etc., necessary for the project. These costs, therefore, should not be reported under items (2) and (3).

Item (7) covers miscellaneous types of expenditure such as payroll taxes, liability insurance, workmen's compensation insurance, repairs to equipment and sampling and analysis. Only that part of payroll taxes, liability insurance and workmen's compensation which are paid by the operator should be reported under item (7). The share paid by the employee as a payroll deduction is to be included under item (2) as labor costs.

Item (8) includes any unforeseen costs not included in the other seven categories.

The original of Form MF-104 when submitted for reimbursable expenses incurred under contract Form MF-200 must be supported by original documentation or by certified copies of purchase orders, payrolls or transcripts of payrolls, unless such documentation has been waived by the Regional Executive Officer. This certification may be stated thus, "Certified True Copy (or Transcript)", followed by appropriate signature. If the Executive Officer of the Region determines that a contract under Form MF-200 should have an "on-site" audit, that is, a Government auditor should make an audit of the Operator's books and records of account, the Operator need not support his monthly voucher with original or certified documents except in cases of equipment purchases whose individual costs exceed $50.00. In these cases the original or a certified copy of the purchase order or invoice should be attached to the Monthly Voucher. N. B.—Only the *original* of Form MF-104 is required to be documented. The four copies of Form MF-104 are not to be thus supported.

Form MF-104 submitted for reimbursement under fixed price contracts on Form MF-200 (A), however, are not required to be supported by documentation of any kind. The Operator will submit his claim under item (1) of Form MF-104 by deleting as stated above the word "Independent" and by showing the number of feet or other units immediately after the appropriate descriptive word, such as, drilling, bulldozing, crosscutting, drifting, etc., and giving the "Monthly Total" amount due. "Totals Previously Reported", and "Totals to Date" columns should also be filled in.

Form MF-104A
(April 1952)

Budget Bureau No. 42-R1151.2

UNITED STATES
DEPARTMENT OF THE INTERIOR

DEFENSE MINERALS EXPLORATION ADMINISTRATION

OPERATOR'S UNIT COST AND PROGRESS REPORT

DEPARTMENT OF THE INTERIOR
Minerals Administration
RECEIVED
SEP 27 1954

Month of August 1954 Docket No. DMEA 2879 Contract No. IDM-E 541

Operator's Name Polaris Mining Company Mineral Copper, lead, antimony (and incidental silver)

Address Box 320 Wallace, Idaho

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	feet	7,277.70	142.7	190,275.31	3,812.3	49.91	11,625	$ 51.00*
Crosscutting	"	5,334.60	104.6	8,353.49	164.9	50.66		
Raising		2,547.91	27.3	2,547.91	27.3	93.33	330	93.33
~~Shafts~~ Sideswiping	"	3,100.80	121.6	13,877.26	550.6	25.20	1,560	25.50
Winzes								
Drilling: Core	"	1,118.25	248.5	11,037.15	2,452.7	4.50	5,000	4.50
Churn								
Auger								
Stripping								
Trenching								
Test Pits								
Roads and Trails								
TOTAL DISTRIBUTED COSTS								TOTAL COSTS AUTHORIZED BY CONTRACT
Operating Equipment Purchased								
Initial Rehabilitation and Repairs								
New Buildings, Improvements, etc.								
TOTAL COSTS								

The undersigned company, and the official executing this certification on its behalf, hereby certify that the information contained in this report is correct and complete to the best of their knowledge and belief.

Date Sept. 8, 1954 Operator Polaris Mining Company

Per [signature] Title President

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)

* Maximum allowed by contract

INSTRUCTIONS

Preparation of Form MF-104A—Operator's Unit Cost and Progress Report.—Applicable places on Form 104A should be filled in by the Operator. The purpose of this form is twofold as follows: (1) to furnish the supervising engineers and other administrators with statistical information necessary to better determine the progress of the project; and (2) to furnish more permanent information on mining costs for future use. The more important phases of operation on which permanent information is desired have been outlined in the form. There are blank lines, however, for those unusual phases which may need to be reported for a particular project. It will be necessary for the Operator to distribute his costs among the applicable phases reported with the exception of three items the costs of which are not to be distributed by the Operator. These three items are: "Operating Equipment Purchased", "Initial Rehabilitation and Repairs", and "New Buildings, Improvements, etc." The reason for not distributing these items on a monthly basis is doubtless clear to the Operator, since such distribution might well overstate the cost for any one month or period short of the entire contract period.

Form MF-104A has been designed to tie in with Form MF-104 for both monthly and cumulative costs. The "Total Costs" on Form MF-104A for each month should equal the monthly "Total Costs" as reported on Form MF-104. This is also true of the "Total Costs To Date".

In preparing Form MF-104A, it will be necessary frequently to distribute certain costs over a number of items. For instance, supervisory and engineering costs may have to be distributed over several phases, such as, drifting, crosscutting, raising, etc., provided that these items were reported active for the month. Such distributions should be made on the basis of time spent on the various phases, on man days of labor charged to such phases, or on some other equitable basis. "Operating Equipment", "Initial Rehabilitation and Repairs", and "New Buildings Improvements, etc.", will be distributed to the several phases of the project by the Washington Office of DMEA at the close of the project if determined necessary. The last two columns headed "Authorized by Contract" will be filled in by the Operator if such information is found in the contract. This information is usually a part of Exhibit "A" of the contract. A space for remarks has been provided for the use of the Operator to call attention to any unusual circumstances causing excessive or disproportionate unit costs.

GPO 872894

Polaris Mining Company

Wallace, Idaho

September seventh
1954

Defense Minerals Exploration Administration
U. S. Department of the Interior
South 157 Howard Street
Spokane, Washington

Re: Progress Report Polaris East
Exploration Project - August-1954
Docket No. DMEA 2879
Contract No. IDM-E541

Gentlemen:

During August the main easterly heading was advanced 142.7 feet and eight feet of sideswiping was completed. The ventilation crosscut, (shown on the map) was driven 104.6 feet and 113.6 feet of sideswipe in connection with raise preparation was completed. The ventilation raise has been driven 27.3 feet (timbered). Diamond drill holes SS-3255, 3256, 3257 and 3258 were drilled to explore the Wire Silver vein. Lengths of these holes were respectively 78.0 feet, 50.5 feet, 55.0 feet and 65 feet.

The geology of the new work performed is indicated on the attached map. Work was in bleached quartzite and argillaceous quartzite. No mineralization of note was encountered except as shown on the attached drill logs covering the holes above mentioned.

The main heading is being driven on a line easterly approximately parallel with the zone explored above on Coeur d'Alene Mine's 2800 level.

Yours very truly,

Robert E. Sorenson

Robert E. Sorenson

RES:dc

encs.

Form MF-131 (Rev.)
(April 1952)

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION

Budget Bureau No. 42-R1036.3.
Approval expires 6-30-53.

OPERATOR'S MONTHLY REPORT AND VOUCHER

Month of June, 1954 Docket No. DMEA 2079 Contract No. IDM-E 541
Operator's Name Polaris Mining Co. Minerals copper, lead, antimony
Address Box 321 - Wallace, Idaho (and incidental silver)
Contract Amount, $685,955.00 Government Participation 50 % Amount, $ 342,977.50

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) Short Form Contracts:						
Drilling core 203 @ 4.50	913 50	9 005 40	9 918 90	913.50	9005.40	9918.90
Bulldozing						
Crosscutting		1 245 95	1 245 95		1245.95	1245.95
Drifting 346.8 @ 51.00	17 686 80	147 471 58	165 158 38	17686.80	147471.58	165158.38
Sideswipe 60.0 @ 25.50	1 530 00	8 022 89	9 552 89	1530.00	8022.89	9552.89
(2) Labor and Supervision:						
Labor						
Supervision						
Technical Services						
(3) Operating Mat'ls. and Supplies:						
Timber						
Explosives						
Pipe						
Track						
(4) Operating Equipment:						
Rental						
Purchase						
Depreciation						
(5) Initial Rehabilitation and Repairs						
(6) New Bldgs., Improvements, etc.						
(7) Miscellaneous:						
Repairs to Equipment						
Sampling and Analysis						
Payroll Taxes						
Liability Insurance						
(8) Contingencies (specify):						
TOTALS 20	~~130 30~~	~~165 745 82~~	~~185 876 12~~	20130.30	165745.82	185876.12

I certify that the above bill is correct and just and that payment therefor has not been received.

Date July 9-1954 *Payee Polaris Mining Company

Per [signature] Title President

*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:

$ 10065.15

Signature MJP
(Authorized Certifying Officer)

Date 7/20/54 Vou. No. 1223
(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. E541 in accordance with the terms of the contract.

Signature /s/ Eric G. Erickson Title Mining Engr. Date 7/13/54

APPROVAL BY DMEA EXECUTIVE OFFICER OR ALTERNATE:

Signature /s/ Stephen W. Zoldok Title Mining Engr. Date 7/14/54

MONTHLY REPORT OF OPERATOR

The Operator (Contractor) of an exploration project is required to make a monthly report to the Government through the Regional Executive Officer. This report consists of three parts as follows:

(a) *Form MF-104—Operator's Monthly Report and Voucher.*—This form details expenditures and constitutes a voucher for reimbursing the Operator for the Government's share of costs;

(b) *Form MF-104A—Operator's Unit Cost and Progress Report.*—This is a statistical report of expenditures which shows costs for the various types of operation; and

(c) *Narrative.*—A concise narrative description of progress made, results accomplished, and any unusual difficulties encountered must be furnished as an attachment to this Report and Voucher. Wherever possible, the narrative is to be illustrated with maps or sketches showing formations penetrated and location and assays of samples taken as well as advances in workings. In the case of diamond drilling or churn drilling, the location and inclination of holes is to be shown on a map; logs and assays also are to be submitted.

The Monthly Report of Operator should be prepared in an original and four copies all of which must be sent to the Executive Officer of the Region not later than the 15th of the month following.

Preparation of Form MF-104—Operator's Monthly Report and Voucher.—All the applicable spaces in Form MF-104 should be filled in by the Operator, and the Operator or his agent should sign the certification in the lower left corner of the form.

The items of costs are arranged in the order they appear in Article 6 (a) of Form MF-200 (Revised February 1952), however, this form is readily adaptable for use in reporting activities under other contract forms.

Under Item (1) delete words "Short Form" if the contract is a sub-contract under Form MF-200; and delete word "Independent" if the contract reported is on Form MF-200 (A). Also, report work paid for on a unit basis under contract Form MF-200 as though it were performed under an independent contract.

Under Item (2) include labor, supervision and technical services incurred for the exploratory operations. Do not include labor, supervision and technical services used for work performed under items (5) and (6).

Under Item (3) include the costs of material and supplies used in the project other than that used under items (5) and (6).

Under Item (4) appear the three types of operating equipment expenditures, that is, rental, purchase and depreciation. The expenditures made for renting equipment belonging to a third party will be reported under "Rental". The amount paid or duly obligated for payment for the purchase of equipment will be reported under "Purchase". The amount of expenditures due the Operator to reimburse him for depreciation of equipment owned will be reported under "Depreciation".

Item (5) comprises costs of labor, supervision, technical services, materials, etc., which are used in the initial rehabilitation and repair of existing buildings, installations, fixtures, and equipment. These costs, therefore, should not be reported under items (2) and (3).

Item (6) includes the labor, supervision, technical services, materials, etc., used in the installation or construction of new buildings, fixed improvements, etc., necessary for the project. These costs, therefore, should not be reported under items (2) and (3).

Item (7) covers miscellaneous types of expenditure such as payroll taxes, liability insurance, workmen's compensation insurance, repairs to equipment and sampling and analysis. Only that part of payroll taxes, liability insurance and workmen's compensation which are paid by the operator should be reported under item (7). The share paid by the employee as a payroll deduction is to be included under item (2) as labor costs.

Item (8) includes any unforeseen costs not included in the other seven categories.

The original of Form MF-104 when submitted for reimbursable expenses incurred under contract Form MF-200 must be supported by original documentation or by certified copies of purchase orders, payrolls or transcripts of payrolls, unless such documentation has been waived by the Regional Executive Officer. This certification may be stated thus, "Certified True Copy (or Transcript)", followed by appropriate signature. If the Executive Officer of the Region determines that a contract under Form MF-200 should have an "on-site" audit, that is, a Government auditor should make an audit of the Operator's books and records of account, the Operator need not support his monthly voucher with original or certified documents except in cases of equipment purchases whose individual costs exceed $50.00. In these cases the original or a certified copy of the purchase order or invoice should be attached to the Monthly Voucher. N. B.—Only the *original* of Form MF-104 is required to be documented. The four copies of Form MF-104 are not to be thus supported.

Form MF-104 submitted for reimbursement under fixed price contracts on Form MF-200 (A), however, are not required to be supported by documentation of any kind. The Operator will submit his claim under item (1) of Form MF-104 by deleting as stated above the word "Independent" and by showing the number of feet or other units immediately after the appropriate descriptive word, such as, drilling, bulldozing, crosscutting, drifting, etc., and giving the "Monthly Total" amount due. "Totals Previously Reported", and "Totals to Date" columns should also be filled in.

GPO 83-38476

Form MF-104A
(April 1952)

Budget Bureau No. 42-R1151
Approval expires 6-30-53.

UNITED STATES
DEPARTMENT OF THE INTERIOR

DEFENSE MINERALS EXPLORATION ADMINISTRATION

OPERATOR'S UNIT COST AND PROGRESS REPORT

Month of June 195 4 Docket No. DMEA 2879 Contract No. DMX-S 541
Operator's Name Polaris Mining Company Minerals copper, lead, antimony (and incidental silver)
Address Box 320 - Wallace, Idaho

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	Feet	17686 80	346.8	165 158 38	3,312.4	49 86	11,625	8 51 00*
Crosscutting	"			1 245 95	24.8	50 24		
Raising							330	93 33
~~Sinking~~ Side Swiping	"	1530 00	60.0	9 552 89	300	25 14	1,560	25 50
Winzes								
Drilling: Core	"	913 50	203.0	9 918 90	2,204.2	4 50	5,000	4 50
Churn								
Auger								
Stripping								
Trenching								
Test Pits								
Roads and Trails								
TOTAL DISTRIBUTED COSTS								TOTAL COSTS AUTHORIZED BY CONTRACT
Operating Equipment Purchased								
Initial Rehabilitation and Repairs								
New Buildings, Improvements, etc.								
TOTAL COSTS								

The undersigned company, and the official executing this certification on its behalf, hereby certify that the information contained in this report is correct and complete to the best of their knowledge and belief.

Date July 9-1954 Operator Polaris Mining Co.

Per [signature] Title President

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)

*Maximum allowed by contract.

INSTRUCTIONS

Preparation of Form MF-104A—Operator's Unit Cost and Progress Report.—Applicable places on Form 104A should be filled in by the Operator. The purpose of this form is twofold as follows: (1) to furnish the supervising engineers and other administrators with statistical information necessary to better determine the progress of the project; and (2) to furnish more permanent information on mining costs for future use. The more important phases of operation on which permanent information is desired have been outlined in the form. There are blank lines, however, for those unusual phases which may need to be reported for a particular project. It will be necessary for the Operator to distribute his costs among the applicable phases reported with the exception of three items the costs of which are not to be distributed by the Operator. These three items are: "Operating Equipment Purchased", "Initial Rehabilitation and Repairs", and "New Buildings, Improvements, etc." The reason for not distributing these items on a monthly basis is doubtless clear to the Operator, since such distribution might well overstate the cost for any one month or period short of the entire contract period.

Form MF-104A has been designed to tie in with Form MF-104 for both monthly and cumulative costs. The "Total Costs" on Form MF-104A for each month should equal the monthly "Total Costs" as reported on Form MF-104. This is also true of the "Total Costs To Date".

In preparing Form MF-104A, it will be necessary frequently to distribute certain costs over a number of items. For instance, supervisory and engineering costs may have to be distributed over several phases, such as, drifting, crosscutting, raising, etc., provided that these items were reported active for the month. Such distributions should be made on the basis of time spent on the various phases, on man days of labor charged to such phases, or on some other equitable basis. "Operating Equipment", "Initial Rehabilitation and Repairs", and "New Buildings Improvements, etc.", will be distributed to the several phases of the project by the Washington Office of DMEA at the close of the project if determined necessary. The last two columns headed "Authorized by Contract" will be filled in by the Operator if such information is found in the contract. This information is usually a part of Exhibit "A" of the contract. A space for remarks has been provided for the use of the Operator to call attention to any unusual circumstances causing excessive or disproportionate unit costs.

GPO 83-38475

Polaris Mining Company

Wallace, Idaho

July ninth
1 9 5 4

Defense Minerals Exploration Administration
U. S. Department of the Interior
S. 157 Howard Street
Spokane, Washington

Re: Progress Report Polaris East
Exploration Project - June-1954
Docket No. DMEA 2879
Contract No. IDM-E541

Gentlemen:

During the month of June the main easterly heading was advanced a total of 346.8 feet and 60 feet of sideswipe was completed. Diamond drill hole No. SS 3233 was completed to 100 feet and drill hole No. SS 3234 was drilled to 103 feet as shown on attached map and on attached logs of the holes.

The attached 50-scale map shows the advance for the month of June, the geology and the assays of samples taken in the drift. Samples on the map are indicated as follows: Sample No., Width, Silver Ounces, Copper %. About 200 feet of the month's advance followed the vein in which spotty silver-copper mineralization has occurred but no consistent interesting mineralization was found. The last 90 feet of heading has been driven on line toward a projection of the first or easterly wire silver ore shoot and toward a point from which a raise will be extended to the Coeur d'Alene Mines 2,800 level as planned. Advance has been largely in bleached argillaceous quartzite wall rock. Drilling seems to indicate that the structure followed on this new level is the same vein explored on the 2,800 level of Coeur d'Alene Mines.

Yours very truly,

Robert E. Sorenson

Robert E. Sorenson

RES:dc

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 May, 1954 Docket No. DMEA 2879 Contract No. IDM-E 541
Operator's Name Polaris Mining Company Minerals Copper, Lead, Antimony
Address Box 320 Wallace, Idaho (& Incidental Silver)
Contract Amount, $ 685,955.00 Government Participation: 50% Amount, $ 342,977.50

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) ~~[illegible]~~ Short Form Contracts:						
Drilling Core 259.5 @ 4.50	1,167.75	7,837.65	9,005.40			
Bulldozing						
Crosscutting		1,245.95	1,245.95			
Drifting 393.7 @ 50.30	19,801.29	127,670.29	147,471.58			
Sideswipe 28.0' @ 25.15	704.14	7,318.75	8,022.89			
(2) Labor and Supervision:						
Labor						
Supervision						
Technical Services						
(3) Operating Mat'ls. and Supplies:						
Timber						
Explosives						
Pipe						
Track						
(4) Operating Equipment:						
Rental						
Purchase						
Depreciation						
(5) Initial Rehabilitation and Repairs						
(6) New Bldgs., Improvements, etc.						
(7) Miscellaneous:						
Repairs to Equipment						
Sampling and Analysis						
Payroll Taxes						
Liability Insurance						
(8) Contingencies (specify):						
TOTALS	21,673.18	144,072.64	165,745.82	21673.18	144072.64	165745.82

I certify that the above bill is correct and just and that payment therefor has not been received.

Date June 7-1954 Payee Polaris Mining Company

Per [signature] Title President

*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:

$ 10836 59

Signature [signature] (Authorized Certifying Officer)

Date 6/23/54 Vou. No. 12000

(See other side)

(For Government use only)

CERTIFICATION BY GOVERNMENT REPRESENTATIVE:

I certify that to the best of my knowledge and belief the contractor submitting this voucher is operating a Defense Minerals Exploration Administration project under Contract No. E 541 in accordance with the terms of the contract.

Signature /S/ Eric G Erickson Title Mining Engr Date 6/16/54

APPROVAL BY DMEA EXECUTIVE OFFICER OR ALTERNATE:

Signature /S/ Stephen W Zoldok Title Mining Engr Date 6/16/54

MONTHLY REPORT OF OPERATOR

The Operator (Contractor) of an exploration project is required to make a monthly report to the Government through the Regional Executive Officer. This report consists of three parts as follows:

(a) *Form MF-104—Operator's Monthly Report and Voucher.*—This form details expenditures and constitutes a voucher for reimbursing the Operator for the Government's share of costs;

(b) *Form MF-104A—Operator's Unit Cost and Progress Report.*—This is a statistical report of expenditures which shows costs for the various types of operation; and

(c) *Narrative.*—A concise narrative description of progress made, results accomplished, and any unusual difficulties encountered must be furnished as an attachment to this Report and Voucher. Wherever possible, the narrative is to be illustrated with maps or sketches showing formations penetrated and location and assays of samples taken as well as advances in workings. In the case of diamond drilling or churn drilling, the location and inclination of holes is to be shown on a map; logs and assays also are to be submitted.

The Monthly Report of Operator should be prepared in an original and four copies all of which must be sent to the Executive Officer of the Region not later than the 15th of the month following.

Preparation of Form MF-104—Operator's Monthly Report and Voucher.—All the applicable spaces in Form MF-104 should be filled in by the Operator, and the Operator or his agent should sign the certification in the lower left corner of the form.

The items of costs are arranged in the order they appear in Article 6 (a) of Form MF-200 (Revised February 1952), however, this form is readily adaptable for use in reporting activities under other contract forms.

Under Item (1) delete words "Short Form" if the contract is a sub-contract under Form MF-200; and delete word "Independent" if the contract reported is on Form MF-200 (A). Also, report work paid for on a unit basis under contract Form MF-200 as though it were performed under an independent contract.

Under Item (2) include labor, supervision and technical services incurred for the exploratory operations. Do not include labor, supervision and technical services used for work performed under items (5) and (6).

Under Item (3) include the costs of material and supplies used in the project other than that used under items (5) and (6).

Under Item (4) appear the three types of operating equipment expenditures, that is, rental, purchase and depreciation. The expenditures made for renting equipment belonging to a third party will be reported under "Rental". The amount paid or duly obligated for payment for the purchase of equipment will be reported under "Purchase". The amount of expenditures due the Operator to reimburse him for depreciation of equipment owned will be reported under "Depreciation".

Item (5) comprises costs of labor, supervision, technical services, materials, etc., which are used in the initial rehabilitation and repair of existing buildings, installations, fixtures, and equipment. These costs, therefore, should not be reported under items (2) and (3).

Item (6) includes the labor, supervision, technical services, materials, etc., used in the installation or construction of new buildings, fixed improvements, etc., necessary for the project. These costs, therefore, should not be reported under items (2) and (3).

Item (7) covers miscellaneous types of expenditure such as payroll taxes, liability insurance, workmen's compensation insurance, repairs to equipment and sampling and analysis. Only that part of payroll taxes, liability insurance and workmen's compensation which are paid by the operator should be reported under item (7). The share paid by the employee as a payroll deduction is to be included under item (2) as labor costs.

Item (8) includes any unforeseen costs not included in the other seven categories.

The original of Form MF-104 when submitted for reimbursable expenses incurred under contract Form MF-200 must be supported by original documentation or by certified copies of purchase orders, payrolls or transcripts of payrolls, unless such documentation has been waived by the Regional Executive Officer. This certification may be stated thus, "Certified True Copy (or Transcript)", followed by appropriate signature. If the Executive Officer of the Region determines that a contract under Form MF-200 should have an "on-site" audit, that is, a Government auditor should make an audit of the Operator's books and records of account, the Operator need not support his monthly voucher with original or certified documents except in cases of equipment purchases whose individual costs exceed $50.00. In these cases the original or a certified copy of the purchase order or invoice should be attached to the Monthly Voucher. N. B.—Only the *original* of Form MF-104 is required to be documented. The four copies of Form MF-104 are not to be thus supported.

Form MF-104 submitted for reimbursement under fixed price contracts on Form MF-200 (A), however, are not required to be supported by documentation of any kind. The Operator will submit his claim under item (1) of Form MF-104 by deleting as stated above the word "Independent" and by showing the number of feet or other units immediately after the appropriate descriptive word, such as, drilling, bulldozing, crosscutting, drifting, etc., and giving the "Monthly Total" amount due. "Totals Previously Reported", and "Totals to Date" columns should also be filled in.

GPO 83-38476

Form MF-104A
(April 1952)

Budget Bureau No. 42-R1151
Approval expires 6-30-53.

UNITED STATES
DEPARTMENT OF THE INTERIOR

DEFENSE MINERALS EXPLORATION ADMINISTRATION

OPERATOR'S UNIT COST AND PROGRESS REPORT

Month of May 1954 Docket No. DMEA 2879 Contract No. IDM-2 541

Operator's Name Polaris Mining Co.

Address Box 320 Wallace, Idaho

Minerals Copper, Lead, Antimony (& Incidental Silver)

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	Feet	19801.29	393.7	147471.58	2965.6	49.73	11625	$ 51.00*
Crosscutting	Feet			1245.95	24.8	50.24		
Raising							330	93.33
~~Shafts~~ Side Swiping	Feet	704.14	28.0	8022.89	320	25.07	1560	25.50
Winzes								
Drilling: Core	Feet	1167.75	259.5	9005.40	2001.2	4.50	5000	4.50
Churn								
Auger								
Stripping								
Trenching								
Test Pits								
Roads and Trails								
Total Distributed Costs								Total Costs Authorized by Contract
Operating Equipment Purchased								
Initial Rehabilitation and Repairs								
New Buildings, Improvements, etc.								
Total Costs								

The undersigned company, and the official executing this certification on its behalf, hereby certify that the information contained in this report is correct and complete to the best of their knowledge and belief.

Date June 7-1954 Operator Polaris Mining Co.

Per [signature] Title President

NOTE.—Title 18, U. S. Code (Crimes), section 1001, makes it a criminal offense to make a willfully false statement or representation to any department or agency of the United States as to any matter within its jurisdiction.

(Instructions on reverse)

REMARKS:

(For Government use only)

* Maximum allowed by contract

INSTRUCTIONS

Preparation of Form MF-104A—Operator's Unit Cost and Progress Report.—Applicable places on Form 104A should be filled in by the Operator. The purpose of this form is twofold as follows: (1) to furnish the supervising engineers and other administrators with statistical information necessary to better determine the progress of the project; and (2) to furnish more permanent information on mining costs for future use. The more important phases of operation on which permanent information is desired have been outlined in the form. There are blank lines, however, for those unusual phases which may need to be reported for a particular project. It will be necessary for the Operator to distribute his costs among the applicable phases reported with the exception of three items the costs of which are not to be distributed by the Operator. These three items are: "Operating Equipment Purchased", "Initial Rehabilitation and Repairs", and "New Buildings, Improvements, etc." The reason for not distributing these items on a monthly basis is doubtless clear to the Operator, since such distribution might well overstate the cost for any one month or period short of the entire contract period.

Form MF-104A has been designed to tie in with Form MF-104 for both monthly and cumulative costs. The "Total Costs" on Form MF-104A for each month should equal the monthly "Total Costs" as reported on Form MF-104. This is also true of the "Total Costs To Date".

In preparing Form MF-104A, it will be necessary frequently to distribute certain costs over a number of items. For instance, supervisory and engineering costs may have to be distributed over several phases, such as, drifting, crosscutting, raising, etc., provided that these items were reported active for the month. Such distributions should be made on the basis of time spent on the various phases, on man days of labor charged to such phases, or on some other equitable basis. "Operating Equipment", "Initial Rehabilitation and Repairs", and "New Buildings Improvements, etc.", will be distributed to the several phases of the project by the Washington Office of DMEA at the close of the project if determined necessary. The last two columns headed "Authorized by Contract" will be filled in by the Operator if such information is found in the contract. This information is usually a part of Exhibit "A" of the contract. A space for remarks has been provided for the use of the Operator to call attention to any unusual circumstances causing excessive or disproportionate unit costs.

GPO 83-38475

Polaris Mining Company

Wallace, Idaho

June tenth
1 9 5 4

Defense Minerals Exploration Administration
U. S. Department of the Interior
South 157 Howard Street
Spokane, Washington

Re: Progress Report Polaris East
Exploration Project - May-1954
Docket No. D.M.E.A. 2879
Contract No. IDM-E541

Gentlemen:

During May the main easterly drift was advanced 393.7 feet and 28 feet of sideswiping was completed. Diamond drill hole No. SS3225 was advanced 41.5 feet and completed to 158 feet; SS3228 was completed to 166 feet, and SS3229 was drilled 52 feet or a total of 259.5 feet of drilling. Logs of the holes are attached.

The attached 50-scale map shows the month's progress and the geology. About 35 feet east of station SS3006, what appears to be the "Wire Silver" vein was encountered in the drift, and at this point a narrow high-grade streak contained good silver assays as reported last month. Spotty narrow high-grade mineralization has been followed by the drift as shown on the attached map and since June 1, about 105 feet of additional work (yesterday) has been done on the vein without finding consistent or continuous mineralization. A small drill station has been prepared recently and diamond drill holes both toward the foot and hanging walls will be drilled since echelon structures may be expected in this area. Work has progressed through the vertical rake projection of a rather interesting section explosed on 2800 level above and through the section beneath the drill holes drilled below 2800 level by Coeur d'Alene Mines. The proposed wall drilling should either discount the presence of parallel mineralization or expose the dip projection of the mineralization seen above.

Wall rock has been bleached argillaceous quartzite and bleached quartzite.

Yours very truly,

Robert E. Sorenson

Robert E. Sorenson

RES:dc

Form MF-104 (Rev.)
(April 1952)

Budget Bureau No. 42-R1036.4
Approval expires 6-30-53.

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION

OPERATOR'S MONTHLY REPORT AND VOUCHER

Month of April, 1954 Docket No. DMEA 2879 Contract No. IDM-E 541
Operator's Name Polaris Mining Company Minerals Copper, Lead, Antimony (& Incidental Silver)
Address Box 320 Wallace, Idaho
Contract Amount, $ 685,955.00 Government Participation: 50 % Amount, $ 342,977.50

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 Core 462.0' @ 4.50	2,079.00	5,758.65	7,837.65*	2079.00	5758.65	7837.65
Bulldozing						
Crosscutting		1,245.95	1,245.95		1245.95	1245.95
Drifting 466.5 @ 48.22	22,496.10	105,174.19	127,670.29	22496.10	105174.19	127670.29
Sideswipe 8.0 @ 24.11	192.89	7,125.86	7,318.75	192.88		
(2) Labor and Supervision:						
Labor						
Supervision						
Technical Services						
(3) Operating Mat'ls. and Supplies:						
Timber						
Explosives						
Pipe						
Track						
(4) Operating Equipment:						
Rental						
Purchase						
Depreciation						
(5) Initial Rehabilitation and Repairs						
(6) New Bldgs., Improvements, etc.						
(7) Miscellaneous:						
Repairs to Equipment						
Sampling and Analysis						
Payroll Taxes						
Liability Insurance						
(8) Contingencies (specify):						
TOTALS	24,767.99	119,304.65	144,072.64	24767.99	119304.65	144072.64

I certify that the above bill is correct and just and that payment therefor has not been received.

Date May 5-1954 *Payee POLARIS MINING COMPANY

Per [signature] Title President

*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:

$ 12,384.00

Signature [signature] (Authorized Certifying Officer)

Date 5/18/54 Vou. No. 1171
(See other side)

* Including 147.2' diamond drill advance in Hole No. SS325A which was omitted from February, 1954 report.

(For Government use only)

CERTIFICATION BY GOVERNMENT REPRESENTATIVE:

I certify that to the best of my knowledge and belief the contractor submitting this voucher is operating a Defense Minerals Exploration Administration project under Contract No. E 541 in accordance with the terms of the contract.

Signature /S/ Eric G. Erickson Title Mining Engr Date 5/13/54

APPROVAL BY DMEA EXECUTIVE OFFICER OR ALTERNATE:

Signature /S/ Stephen W. Zoldok Title Mining Engr Date 5/13/54

MONTHLY REPORT OF OPERATOR

The Operator (Contractor) of an exploration project is required to make a monthly report to the Government through the Regional Executive Officer. This report consists of three parts as follows:

(a) *Form MF-104—Operator's Monthly Report and Voucher.*—This form details expenditures and constitutes a voucher for reimbursing the Operator for the Government's share of costs;

(b) *Form MF-104A—Operator's Unit Cost and Progress Report.*—This is a statistical report of expenditures which shows costs for the various types of operation; and

(c) *Narrative.*—A concise narrative description of progress made, results accomplished, and any unusual difficulties encountered must be furnished as an attachment to this Report and Voucher. Wherever possible, the narrative is to be illustrated with maps or sketches showing formations penetrated and location and assays of samples taken as well as advances in workings. In the case of diamond drilling or churn drilling, the location and inclination of holes is to be shown on a map; logs and assays also are to be submitted.

The Monthly Report of Operator should be prepared in an original and four copies all of which must be sent to the Executive Officer of the Region not later than the 15th of the month following.

Preparation of Form MF-104—Operator's Monthly Report and Voucher.—All the applicable spaces in Form MF-104 should be filled in by the Operator, and the Operator or his agent should sign the certification in the lower left corner of the form.

The items of costs are arranged in the order they appear in Article 6 (a) of Form MF-200 (Revised February 1952), however, this form is readily adaptable for use in reporting activities under other contract forms.

Under Item (1) delete words "Short Form" if the contract is a sub-contract under Form MF-200; and delete word "Independent" if the contract reported is on Form MF-200 (A). Also, report work paid for on a unit basis under contract Form MF-200 as though it were performed under an independent contract.

Under Item (2) include labor, supervision and technical services incurred for the exploratory operations. Do not include labor, supervision and technical services used for work performed under items (5) and (6).

Under Item (3) include the costs of material and supplies used in the project other than that used under items (5) and (6).

Under Item (4) appear the three types of operating equipment expenditures, that is, rental, purchase and depreciation. The expenditures made for renting equipment belonging to a third party will be reported under "Rental". The amount paid or duly obligated for payment for the purchase of equipment will be reported under "Purchase". The amount of expenditures due the Operator to reimburse him for depreciation of equipment owned will be reported under "Depreciation".

Item (5) comprises costs of labor, supervision, technical services, materials, etc., which are used in the initial rehabilitation and repair of existing buildings, installations, fixtures, and equipment. These costs, therefore, should not be reported under items (2) and (3).

Item (6) includes the labor, supervision, technical services, materials, etc., used in the installation or construction of new buildings, fixed improvements, etc., necessary for the project. These costs, therefore, should not be reported under items (2) and (3).

Item (7) covers miscellaneous types of expenditure such as payroll taxes, liability insurance, workmen's compensation insurance, repairs to equipment and sampling and analysis. Only that part of payroll taxes, liability insurance and workmen's compensation which are paid by the operator should be reported under item (7). The share paid by the employee as a payroll deduction is to be included under item (2) as labor costs.

Item (8) includes any unforeseen costs not included in the other seven categories.

The original of Form MF-104 when submitted for reimbursable expenses incurred under contract Form MF-200 must be supported by original documentation or by certified copies of purchase orders, payrolls or transcripts of payrolls, unless such documentation has been waived by the Regional Executive Officer. This certification may be stated thus, "Certified True Copy (or Transcript)", followed by appropriate signature. If the Executive Officer of the Region determines that a contract under Form MF-200 should have an "on-site" audit, that is, a Government auditor should make an audit of the Operator's books and records of account, the Operator need not support his monthly voucher with original or certified documents except in cases of equipment purchases whose individual costs exceed $50.00. In these cases the original or a certified copy of the purchase order or invoice should be attached to the Monthly Voucher. N. B.—Only the *original* of Form MF-104 is required to be documented. The four copies of Form MF-104 are not to be thus supported.

Form MF-104 submitted for reimbursement under fixed price contracts on Form MF-200 (A), however, are not required to be supported by documentation of any kind. The Operator will submit his claim under item (1) of Form MF-104 by deleting as stated above the word "Independent" and by showing the number of feet or other units immediately after the appropriate descriptive word, such as, drilling, bulldozing, crosscutting, drifting, etc., and giving the "Monthly Total" amount due. "Totals Previously Reported", and "Totals to Date" columns should also be filled in.

GPO 83-38476

Form MF-104A
(April 1952)

Budget Bureau No. 42-R1151.1
Approval expires 6-30-53.

UNITED STATES
DEPARTMENT OF THE INTERIOR

DEFENSE MINERALS EXPLORATION ADMINISTRATION

OPERATOR'S UNIT COST AND PROGRESS REPORT

Month of April 195 4 Docket No. DMEA 2879 Contract No. IDM-E 541

Operator's Name Polaris Mining Company

Address Box 320 Wallace, Idaho

Minerals Copper, Lead, Antimony (& Incidental Silver)

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	Feet	22496.10	466.5	127670.29	2571.9	49.64	11625	$ 51.00*
Crosscutting	Feet			1245.95	24.8	50.24		
Raising							330	93.33
xxxxx Sideswiping Shafts	Feet	192.89	8.0	7318.75	292	25.06	1560	25.50
Winzes								
Drilling: Core	Feet	2079.00	462.0	7837.65	1741.7	4.50	5000	4.50
Churn								
Auger								
Stripping								
Trenching								
Test Pits								
Roads and Trails								
Total Distributed Costs								Total Costs Authorized by Contract
Operating Equipment Purchased								
Initial Rehabilitation and Repairs								
New Buildings, Improvements, etc.								
Total Costs								

The undersigned company, and the official executing this certification on its behalf, hereby certify that the information contained in this report is correct and complete to the best of their knowledge and belief.

Date May 5-1954 Operator POLARIS MINING COMPANY

Per [signature] Title President

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)

* Maximum allowed by contract

INSTRUCTIONS

Preparation of Form MF–104A—Operator's Unit Cost and Progress Report.—Applicable places on Form 104A should be filled in by the Operator. The purpose of this form is twofold as follows: (1) to furnish the supervising engineers and other administrators with statistical information necessary to better determine the progress of the project; and (2) to furnish more permanent information on mining costs for future use. The more important phases of operation on which permanent information is desired have been outlined in the form. There are blank lines, however, for those unusual phases which may need to be reported for a particular project. It will be necessary for the Operator to distribute his costs among the applicable phases reported with the exception of three items the costs of which are not to be distributed by the Operator. These three items are: "Operating Equipment Purchased", "Initial Rehabilitation and Repairs", and "New Buildings, Improvements, etc." The reason for not distributing these items on a monthly basis is doubtless clear to the Operator, since such distribution might well overstate the cost for any one month or period short of the entire contract period.

Form MF–104A has been designed to tie in with Form MF–104 for both monthly and cumulative costs. The "Total Costs" on Form MF–104A for each month should equal the monthly "Total Costs" as reported on Form MF–104. This is also true of the "Total Costs To Date".

In preparing Form MF–104A, it will be necessary frequently to distribute certain costs over a number of items. For instance, supervisory and engineering costs may have to be distributed over several phases, such as, drifting, crosscutting, raising, etc., provided that these items were reported active for the month. Such distributions should be made on the basis of time spent on the various phases, on man days of labor charged to such phases, or on some other equitable basis. "Operating Equipment", "Initial Rehabilitation and Repairs", and "New Buildings Improvements, etc.", will be distributed to the several phases of the project by the Washington Office of DMEA at the close of the project if determined necessary. The last two columns headed "Authorized by Contract" will be filled in by the Operator if such information is found in the contract. This information is usually a part of Exhibit "A" of the contract. A space for remarks has been provided for the use of the Operator to call attention to any unusual circumstances causing excessive or disproportionate unit costs.

GPO 83-38475

Polaris Mining Company

Wallace, Idaho

May tenth
1 9 5 4

Defense Minerals Exploration Administration
U. S. Department of the Interior
South 157 Howard Street
Spokane, Washington

Re: Progress Report Polaris East Exploration
Project - April - 1954 Docket No. DMEA-2879
Contract No. IDM-E 541

Gentlemen:

During April the main easterly heading was advanced 466.5 feet and eight feet of sideswiping was done. Diamond drill hole No. 3254 was drilled an additional 198.3 feet and was completed to 802.3 feet on April 30th. Hole No. S.S. 3225 was drilled 116.5 feet

The attached log of drill hole S. S. 3254 is complete to the end of the hole.

Sheet No. 2, 50-scale, which is the second sheet of this type shows a composite of the section covered by previous monthly progress sheets.

The month's progress is shown on the attached 50-scale small map and geology is also shown. The heading was turned more southerly during the month of April to more nearly follow the projected position of the "Wire Silver" vein. For means of comparison the Coeur d'Alene Mines 2800 level drift is shown in dashed lines. Work was in bleached argillite and bleached quartzite and nothing of consequence was opened prior to May first. Since then, however, a vein was discovered about 245 feet southeasterly from station S3005. It was composed of siderite and quartz stringers with associated tetrahedrite. The first sample, 3093, representing 0.4 feet of high grade on the footwall side assayed 217.1 ounces silver and 8.35% copper. The balance, or 1.9 feet of vein, assayed 1.2 ounces silver and 9.43% copper. At s3005 plus 269 feet sample 3094 across 1.4 feet assayed 12.6 ounces silver and 0.47 % copper. Today's sample was taken at station 3005 plus 278 feet, across 0.7 feet but assay results are not available. As yet dip information is not sufficiently conclusive to determine if this vein exposure is the dip projection of the "Wire Silver" vein explored on Coeur d'Alene Mines 2800 level.

Yours very truly,

Robert E. Sorenson

RES:as

Robert E. Sorenson

Polaris Mining Company

Wallace, Idaho

RECEIVED
BUREAU OF MINES
MAY 13 1954
SPOKANE, WASH.

May twelfth
1 9 5 4

Defense Minerals Exploration Administration
U. S. Department of the Interior
South 157 Howard Street
Spokane, Washington

Re: Progress Report Polaris East Exploration
Project - April - 1954 Docket No. DMEA-2879
Contract No. IDM-E 541

Gentlemen:

In our report dated May tenth, covering the subject contract, an error was made in connection with the assay grade of the first sample, 3093, representing the balance, or 1.9 feet of vein. This assay should have been 1.2 ounces silver and 0.43% copper.

Yours very truly,

Robert E. Sorenson

RES:as

Robert E. Sorenson.

RECEIVED
MAY 13 1954
U. S. G. S.
SPOKANE, WASH.

Form MF-104 (Rev.)
(April 1952)

Budget Bureau No. 42-R1036.4
Approval expires 6-30-53.

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION
OPERATOR'S MONTHLY REPORT AND VOUCHER

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
APR 8 1954

Month of March, 1954 Docket No. DMEA 2879 Contract No. DMEA 541
Operator's Name Polaris Mining Company Minerals Copper, Lead, Antimony
Address Box 320 Wallace, Idaho (& Incidental Silver)
Contract Amount, $ 685,955.00 Government Participation: 50 % Amount, $ 342,977.50

ITEMS OF COSTS	FOR OPERATOR'S USE: Monthly Total	Totals Previously Reported	Totals To Date	FOR GOVERNMENT USE ONLY: Approved Monthly Total	Approved Totals Previously Reported	Approved Totals To Date
(1) [redacted] Short Form Contracts:						
Drilling Core 309.0'@4.50	1390.50	4368.15	5758.65			
Bulldozing						
Crosscutting		1245.95	1245.95			
Drifting 469.3'@48.14	22593.77	82580.42	105174.19			
Sideswipe 8.0' @ 24.07	192.57	6933.29	7125.86			
(2) Labor and Supervision:						
Labor						
Supervision						
Technical Services						
(3) Operating Mat'ls. and Supplies:						
Timber						
Explosives						
Pipe						
Track						
(4) Operating Equipment:						
Rental						
Purchase						
Depreciation						
(5) Initial Rehabilitation and Repairs						
(6) New Bldgs., Improvements, etc.						
(7) Miscellaneous:						
Repairs to Equipment						
Sampling and Analysis						
Payroll Taxes						
Liability Insurance						
(8) Contingencies (specify):						
TOTALS	24176.84	95127.81	119304.65	24176.84	95127.81	119304.65

I certify that the above bill is correct and just and that payment therefor has not been received.

Date April 12-1954 *Payee Polaris Mining Company

Per [signature] Title President

*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:

$ 12,088.42

Signature [signature] (Authorized Certifying Officer)

Date 4/23/54 Vou. No. 1144 (See other side)

(For Government use only)

CERTIFICATION BY GOVERNMENT REPRESENTATIVE:

I certify that to the best of my knowledge and belief the contractor submitting this voucher is operating a Defense Minerals Exploration Administration project under Contract No. E 541 in accordance with the terms of the contract.

Signature /S/ Eric G Erickson Title Mining Engr Date 4/16/54

APPROVAL BY DMEA EXECUTIVE OFFICER OR ALTERNATE:

Signature /S/ Stephen W Zoldok Title Mining Engr Date 4/16/54

MONTHLY REPORT OF OPERATOR

The Operator (Contractor) of an exploration project is required to make a monthly report to the Government through the Regional Executive Officer. This report consists of three parts as follows:

(a) *Form MF-104—Operator's Monthly Report and Voucher.*—This form details expenditures and constitutes a voucher for reimbursing the Operator for the Government's share of costs;

(b) *Form MF-104A—Operator's Unit Cost and Progress Report.*—This is a statistical report of expenditures which shows costs for the various types of operation; and

(c) *Narrative.*—A concise narrative description of progress made, results accomplished, and any unusual difficulties encountered must be furnished as an attachment to this Report and Voucher. Wherever possible, the narrative is to be illustrated with maps or sketches showing formations penetrated and location and assays of samples taken as well as advances in workings. In the case of diamond drilling or churn drilling, the location and inclination of holes is to be shown on a map; logs and assays also are to be submitted.

The Monthly Report of Operator should be prepared in an original and four copies all of which must be sent to the Executive Officer of the Region not later than the 15th of the month following.

Preparation of Form MF-104—Operator's Monthly Report and Voucher.—All the applicable spaces in Form MF-104 should be filled in by the Operator, and the Operator or his agent should sign the certification in the lower left corner of the form.

The items of costs are arranged in the order they appear in Article 6 (a) of Form MF-200 (Revised February 1952), however, this form is readily adaptable for use in reporting activities under other contract forms.

Under Item (1) delete words "Short Form" if the contract is a sub-contract under Form MF-200; and delete word "Independent" if the contract reported is on Form MF-200 (A). Also, report work paid for on a unit basis under contract Form MF-200 as though it were performed under an independent contract.

Under Item (2) include labor, supervision and technical services incurred for the exploratory operations. Do not include labor, supervision and technical services used for work performed under items (5) and (6).

Under Item (3) include the costs of material and supplies used in the project other than that used under items (5) and (6).

Under Item (4) appear the three types of operating equipment expenditures, that is, rental, purchase and depreciation. The expenditures made for renting equipment belonging to a third party will be reported under "Rental". The amount paid or duly obligated for payment for the purchase of equipment will be reported under "Purchase". The amount of expenditures due the Operator to reimburse him for depreciation of equipment owned will be reported under "Depreciation".

Item (5) comprises costs of labor, supervision, technical services, materials, etc., which are used in the initial rehabilitation and repair of existing buildings, installations, fixtures, and equipment. These costs, therefore, should not be reported under items (2) and (3).

Item (6) includes the labor, supervision, technical services, materials, etc., used in the installation or construction of new buildings, fixed improvements, etc., necessary for the project. These costs, therefore, should not be reported under items (2) and (3).

Item (7) covers miscellaneous types of expenditure such as payroll taxes, liability insurance, workmen's compensation insurance, repairs to equipment and sampling and analysis. Only that part of payroll taxes, liability insurance and workmen's compensation which are paid by the operator should be reported under item (7). The share paid by the employee as a payroll deduction is to be included under item (2) as labor costs.

Item (8) includes any unforeseen costs not included in the other seven categories.

The original of Form MF-104 when submitted for reimbursable expenses incurred under contract Form MF-200 must be supported by original documentation or by certified copies of purchase orders, payrolls or transcripts of payrolls, unless such documentation has been waived by the Regional Executive Officer. This certification may be stated thus, "Certified True Copy (or Transcript)", followed by appropriate signature. If the Executive Officer of the Region determines that a contract under Form MF-200 should have an "on-site" audit, that is, a Government auditor should make an audit of the Operator's books and records of account, the Operator need not support his monthly voucher with original or certified documents except in cases of equipment purchases whose individual costs exceed $50.00. In these cases the original or a certified copy of the purchase order or invoice should be attached to the Monthly Voucher. N. B.—Only the *original* of Form MF-104 is required to be documented. The four copies of Form MF-104 are not to be thus supported.

Form MF-104 submitted for reimbursement under fixed price contracts on Form MF-200 (A), however, are not required to be supported by documentation of any kind. The Operator will submit his claim under item (1) of Form MF-104 by deleting as stated above the word "Independent" and by showing the number of feet or other units immediately after the appropriate descriptive word, such as, drilling, bulldozing, crosscutting, drifting, etc., and giving the "Monthly Total" amount due. "Totals Previously Reported", and "Totals to Date" columns should also be filled in.

GPO 83-38476

Form MF-104A
(April 1952)

Budget Bureau No. 42-R1151.1
Approval expires 6-30-53.

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
APR 29 1954

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION
OPERATOR'S UNIT COST AND PROGRESS REPORT

Month of March 1954 Docket No. DMEA 2879 Contract No. IDM-E 541
Operator's Name Polaris Mining Co. Minerals Copper, Lead, Antimony (& Incidental Silver)
Address Box 320 Wallace, Idaho

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	Feet	22593.77	469.3	105174.19	2105.4	49.95	11625	$ 51.00*
Crosscutting	Feet			1245.95	24.8	50.24		
Raising							330	93.33
Side Swiping	Feet	192.57	8.0	7125.86	284	25.09	1560	25.50
Winzes								
Drilling: Core	Feet	1390.50	309.0	5758.65	1279.7	4.50	5000	4.50
Churn								
Auger								
Stripping								
Trenching								
Test Pits								
Roads and Trails								
Total Distributed Costs								Total Costs Authorized by Contract
Operating Equipment Purchased								
Initial Rehabilitation and Repairs								
New Buildings, Improvements, etc.								
Total Costs								

The undersigned company, and the official executing this certification on its behalf, hereby certify that the information contained in this report is correct and complete to the best of their knowledge and belief.

Date April 12-1954 Operator Polaris Mining Co.

Per J. J. Birdsall Title President

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)

* Maximum allowed by contract

INSTRUCTIONS

Preparation of Form MF–104A—Operator's Unit Cost and Progress Report.—Applicable places on Form 104A should be filled in by the Operator. The purpose of this form is twofold as follows: (1) to furnish the supervising engineers and other administrators with statistical information necessary to better determine the progress of the project; and (2) to furnish more permanent information on mining costs for future use. The more important phases of operation on which permanent information is desired have been outlined in the form. There are blank lines, however, for those unusual phases which may need to be reported for a particular project. It will be necessary for the Operator to distribute his costs among the applicable phases reported with the exception of three items the costs of which are not to be distributed by the Operator. These three items are: "Operating Equipment Purchased", "Initial Rehabilitation and Repairs", and "New Buildings, Improvements, etc." The reason for not distributing these items on a monthly basis is doubtless clear to the Operator, since such distribution might well overstate the cost for any one month or period short of the entire contract period.

Form MF–104A has been designed to tie in with Form MF–104 for both monthly and cumulative costs. The "Total Costs" on Form MF–104A for each month should equal the monthly "Total Costs" as reported on Form MF–104. This is also true of the "Total Costs To Date".

In preparing Form MF–104A, it will be necessary frequently to distribute certain costs over a number of items. For instance, supervisory and engineering costs may have to be distributed over several phases, such as, drifting, crosscutting, raising, etc., provided that these items were reported active for the month. Such distributions should be made on the basis of time spent on the various phases, on man days of labor charged to such phases, or on some other equitable basis. "Operating Equipment", "Initial Rehabilitation and Repairs", and "New Buildings Improvements, etc.", will be distributed to the several phases of the project by the Washington Office of DMEA at the close of the project if determined necessary. The last two columns headed "Authorized by Contract" will be filled in by the Operator if such information is found in the contract. This information is usually a part of Exhibit "A" of the contract. A space for remarks has been provided for the use of the Operator to call attention to any unusual circumstances causing excessive or disproportionate unit costs.

GPO 83-38475

Polaris Mining Company

Wallace, Idaho

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
APR 29 1954

April thirteenth
1 9 5 4

Defense Minerals Exploration Administration
U. S. Department of the Interior
S. 157 Howard Street
Spokane, Washington

Re: Progress Report Polaris East
Exploration Project - March-1954
Docket No. DMEA - 2879
Contract No. IDM-E 541

Gentlemen:

During March the main easterly heading was advanced 469.3 feet and eight feet of sideswipe was driven. Diamond drill hole No. S.S. 3254, started in February, was drilled an additional 309 feet and a complete log will be furnished upon completion of the hole.

The attached 50-scale map shows progress of drifting during March. Work disclosed bleached thick-bedded quartzite with a few sericitic sections. No mineralization of interest was found. It may possibly appear that the small fault structure at station S.S. 3000 is the dip projection of the wire silver vein seen on Coeur d'Alene Mines 2800. Projections have been made anticipating the structure near this point. A curve has now been made in the main heading along a bearing parallel with the wire silver vein as known on 2800 level of Coeur d'Alene Mines. Drilling of the walls as work progresses should serve to keep the work along a proper course and should succeed in locating the structure as soon as the westerly end of it becomes interesting. On the 2800 level of Coeur d'Alene Mines the interesting tetrabedrite was found about 400 feet westerly from the April first face of our new drift.

Yours very truly,

Robert E. Sorenson

Robert E. Sorenson

RES:dc

(Rev.)

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION

Budget Bureau No. 42-R1036.4
Approval expires 6-30-53.

RECEIVED
MAR 29 1954

OPERATOR'S MONTHLY REPORT AND VOUCHER

Month of February, 1954 Docket No. DMEA 2879 Contract No. IDM-E 541
Operator's Name Polaris Mining Company Minerals Copper, Lead, Antimony (&Incidental Silver)
Address Box 320 Wallace, Idaho
Contract Amount, $ 685,955.00 Government Participation: 50 % Amount, $ 342,977.50

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) [redacted] Short Form } Contracts:						
Drilling Core 593.1@4.50	2668.95	1699.20	4368.15	2668.95	1699.20	4368.15
Bulldozing						
Crosscutting 24.8'@50.24	1246.01		1246.01	1245.95		1245.95
Drifting 367.3'@50.24	18453.98	64127.27	82581.25	18453.15	64127.27	82580.42
Sideswipe 34' @ 25.12	854.12	6079.21	6933.33	854.08	6079.21	6933.29
(2) Labor and Supervision:						
Labor						
Supervision						
Technical Services						
(3) Operating Mat'ls. and Supplies:						
Timber						
Explosives						
Pipe						
Track						
(4) Operating Equipment:						
Rental						
Purchase						
Depreciation						
(5) Initial Rehabilitation and Repairs						
(6) New Bldgs., Improvements, etc.						
(7) Miscellaneous:						
Repairs to Equipment						
Sampling and Analysis						
Payroll Taxes						
Liability Insurance						
(8) Contingencies (specify):						
TOTALS	23223.06	71905.68	95128.74	23222.13	71905.68	95127.81

I certify that the above bill is correct and just and that payment therefor has not been received.

Date March 9, 1954 Payee Polaris Mining Company

Per [signature] Title President

*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:

$11,611.06

Signature [signature]
(Authorized Certifying Officer)

Date 3/17/54 Vou. No. 1121
(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. E541 in accordance with the terms of the contract.

Signature 1S1 Eric G Erickson Title Mining Engr Date 3/15/54

APPROVAL BY DMEA EXECUTIVE OFFICER OR ALTERNATE:

Signature 1S1 Stephen W Zoldoke Title Mining Engr Date 3/15/54

MONTHLY REPORT OF OPERATOR

The Operator (Contractor) of an exploration project is required to make a monthly report to the Government through the Regional Executive Officer. This report consists of three parts as follows:

(a) *Form MF-104—Operator's Monthly Report and Voucher.*—This form details expenditures and constitutes a voucher for reimbursing the Operator for the Government's share of costs;

(b) *Form MF-104A—Operator's Unit Cost and Progress Report.*—This is a statistical report of expenditures which shows costs for the various types of operation; and

(c) *Narrative.*—A concise narrative description of progress made, results accomplished, and any unusual difficulties encountered must be furnished as an attachment to this Report and Voucher. Wherever possible, the narrative is to be illustrated with maps or sketches showing formations penetrated and location and assays of samples taken as well as advances in workings. In the case of diamond drilling or churn drilling, the location and inclination of holes is to be shown on a map; logs and assays also are to be submitted.

The Monthly Report of Operator should be prepared in an original and four copies all of which must be sent to the Executive Officer of the Region not later than the 15th of the month following.

Preparation of Form MF-104—Operator's Monthly Report and Voucher.—All the applicable spaces in Form MF-104 should be filled in by the Operator, and the Operator or his agent should sign the certification in the lower left corner of the form.

The items of costs are arranged in the order they appear in Article 6 (a) of Form MF-200 (Revised February 1952), however, this form is readily adaptable for use in reporting activities under other contract forms.

Under Item (1) delete words "Short Form" if the contract is a sub-contract under Form MF-200; and delete word "Independent" if the contract reported is on Form MF-200 (A). Also, report work paid for on a unit basis under contract Form MF-200 as though it were performed under an independent contract.

Under Item (2) include labor, supervision and technical services incurred for the exploratory operations. Do not include labor, supervision and technical services used for work performed under items (5) and (6).

Under Item (3) include the costs of material and supplies used in the project other than that used under items (5) and (6).

Under Item (4) appear the three types of operating equipment expenditures, that is, rental, purchase and depreciation. The expenditures made for renting equipment belonging to a third party will be reported under "Rental". The amount paid or duly obligated for payment for the purchase of equipment will be reported under "Purchase". The amount of expenditures due the Operator to reimburse him for depreciation of equipment owned will be reported under "Depreciation".

Item (5) comprises costs of labor, supervision, technical services, materials, etc., which are used in the initial rehabilitation and repair of existing buildings, installations, fixtures, and equipment. These costs, therefore, should not be reported under items (2) and (3).

Item (6) includes the labor, supervision, technical services, materials, etc., used in the installation or construction of new buildings, fixed improvements, etc., necessary for the project. These costs, therefore, should not be reported under items (2) and (3).

Item (7) covers miscellaneous types of expenditure such as payroll taxes, liability insurance, workmen's compensation insurance, repairs to equipment and sampling and analysis. Only that part of payroll taxes, liability insurance and workmen's compensation which are paid by the operator should be reported under item (7). The share paid by the employee as a payroll deduction is to be included under item (2) as labor costs.

Item (8) includes any unforeseen costs not included in the other seven categories.

The original of Form MF-104 when submitted for reimbursable expenses incurred under contract Form MF-200 must be supported by original documentation or by certified copies of purchase orders, payrolls or transcripts of payrolls, unless such documentation has been waived by the Regional Executive Officer. This certification may be stated thus, "Certified True Copy (or Transcript)", followed by appropriate signature. If the Executive Officer of the Region determines that a contract under Form MF-200 should have an "on-site" audit, that is, a Government auditor should make an audit of the Operator's books and records of account, the Operator need not support his monthly voucher with original or certified documents except in cases of equipment purchases whose individual costs exceed $50.00. In these cases the original or a certified copy of the purchase order or invoice should be attached to the Monthly Voucher. N. B.—Only the *original* of Form MF-104 is required to be documented. The four copies of Form MF-104 are not to be thus supported.

Form MF-104 submitted for reimbursement under fixed price contracts on Form MF-200 (A), however, are not required to be supported by documentation of any kind. The Operator will submit his claim under item (1) of Form MF-104 by deleting as stated above the word "Independent" and by showing the number of feet or other units immediately after the appropriate descriptive word, such as, drilling, bulldozing, crosscutting, drifting, etc., and giving the "Monthly Total" amount due. "Totals Previously Reported", and "Totals to Date" columns should also be filled in.

GPO 83-38476

M 104A
(April 1952)

Budget Bureau No. 42-R1151.1
Approval expires 6-30-53.

UNITED STATES
DEPARTMENT OF THE INTERIOR

DEFENSE MINERALS EXPLORATION ADMINISTRATION

OPERATOR'S UNIT COST AND PROGRESS REPORT

Month of February 1954 Docket No. DMEA 2879 Contract No. IDM-E 541

Operator's Name Polaris Mining Co.

Address Box 320 Wallace, Idaho

Minerals Copper, Lead, Antimon (& Incidental Silver)

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	Feet	18453.98	367.3	82581.25	1636.1	50.47		
Crosscutting	Feet	1246.01	24.8	1246.01	24.8	50.24		
Raising								
Side Swiping	Feet	854.12	34	6933.33	276	25.12		
Winzes								
Drilling: Core	Feet	2668.95	593.1	4368.15	970.7	4.50		
Churn								
Auger								
Stripping								
Trenching								
Test Pits								
Roads and Trails								
Total Distributed Costs								Total Costs Authorized by Contract
Operating Equipment Purchased								
Initial Rehabilitation and Repairs								
New Buildings, Improvements, etc.								
Total Costs								

The undersigned company, and the official executing this certification on its behalf, hereby certify that the information contained in this report is correct and complete to the best of their knowledge and belief.

Date March 9-1954 Operator Polaris Mining Co.

Per [signature] Title President

NOTE.—Title 18, U. S. Code (Crimes), section 1001, makes it a criminal offense to make a willfully false statement or representation to any department or agency of the United States as to any matter within its jurisdiction.

(Instructions on reverse)

REMARKS:

(For Government use only)

INSTRUCTIONS

Preparation of Form MF–104A—Operator's Unit Cost and Progress Report.—Applicable places on Form 104A should be filled in by the Operator. The purpose of this form is twofold as follows: (1) to furnish the supervising engineers and other administrators with statistical information necessary to better determine the progress of the project; and (2) to furnish more permanent information on mining costs for future use. The more important phases of operation on which permanent information is desired have been outlined in the form. There are blank lines, however, for those unusual phases which may need to be reported for a particular project. It will be necessary for the Operator to distribute his costs among the applicable phases reported with the exception of three items the costs of which are not to be distributed by the Operator. These three items are: "Operating Equipment Purchased", "Initial Rehabilitation and Repairs", and "New Buildings, Improvements, etc." The reason for not distributing these items on a monthly basis is doubtless clear to the Operator, since such distribution might well overstate the cost for any one month or period short of the entire contract period.

Form MF–104A has been designed to tie in with Form MF–104 for both monthly and cumulative costs. The "Total Costs" on Form MF–104A for each month should equal the monthly "Total Costs" as reported on Form MF–104. This is also true of the "Total Costs To Date".

In preparing Form MF–104A, it will be necessary frequently to distribute certain costs over a number of items. For instance, supervisory and engineering costs may have to be distributed over several phases, such as, drifting, crosscutting, raising, etc., provided that these items were reported active for the month. Such distributions should be made on the basis of time spent on the various phases, on man days of labor charged to such phases, or on some other equitable basis. "Operating Equipment", "Initial Rehabilitation and Repairs", and "New Buildings Improvements, etc.", will be distributed to the several phases of the project by the Washington Office of DMEA at the close of the project if determined necessary. The last two columns headed "Authorized by Contract" will be filled in by the Operator if such information is found in the contract. This information is usually a part of Exhibit "A" of the contract. A space for remarks has been provided for the use of the Operator to call attention to any unusual circumstances causing excessive or disproportionate unit costs.

GPO 83-38475

Polaris Mining Company

Wallace, Idaho

March tenth
1954

Defense Minerals Exploration Administration
U. S. Department of the Interior
S. 157 Howard Street
Spokane, Washington

Re: Progress Report Polaris East
Exploration Project - February 1954
Docket No. D.M.E.A. - 2879
Contract No. 1DM-E 541

Gentlemen:

During February 1954, the main easterly heading was advanced 367.3 feet, 24.8 feet of crosscut was driven as a site for diamond drill hole S.S. 3254, 34 feet of sideswipe was driven and 593.1 feet of diamond drilling was completed.

The attached logs of Diamond drill holes Nos. S.S. 3251, 3252, and 3253 show the position of the holes as well as logged information and assay results. Nothing of great interest was disclosed in the drilling. Diamond drill hole No. S.S. 3254, drilled 147.8 feet in February is being continued and the log will be furnished upon the completion of the hole.

The 50-scale attached map shows the advance during the month and the geology of the section explored. Rocks continue to be largely bleached argillite and quartzite with some purplish unbleached bands. Drift work was in the property of Silver Standard Mining Company.

Yours very truly,

Robert E. Sorenson

Robert E. Sorenson

RES/mg

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 January, 1954 Docket No. DMEA 2879 Contract No. IIM-E 541
Operator's Name Polaris Mining Company Minerals Copper, Lead, Antimony (& Incidental Silver)
Address Box 320 Wallace, Idaho
Contract Amount, $685,955.00 Government Participation 50 % Amount, $342,977.50

ITEMS OF COSTS	FOR OPERATOR'S USE: Monthly Total	Totals Previously Reported	Totals To Date	FOR GOVERNMENT USE ONLY: Approved Monthly Total	Approved Totals Previously Reported	Approved Totals To Date
(1) Independent Short Form Contracts:						
Drilling Core 377.6' @ 4.50	1699.20		1,699.20	1699.20		
Bulldozing						
Crosscutting						
Drifting 406' @ $50.21	$ 20384.57	43,742.70	64,127.27			
Sidewipe 8' @ $25.10	200.83	5,878.38	6,079.21			
(2) Labor and Supervision:						
Labor						
Supervision						
Technical Services						
(3) Operating Mat'ls. and Supplies:						
Timber						
Explosives						
Pipe						
Track						
(4) Operating Equipment:						
Rental						
Purchase						
Depreciation						
(5) Initial Rehabilitation and Repairs						
(6) New Bldgs., Improvements, etc.						
(7) Miscellaneous:						
Repairs to Equipment						
Sampling and Analysis						
Payroll Taxes						
Liability Insurance						
(8) Contingencies (specify):						
TOTALS	$ 22,284.60	$ 49,621.08	$ 71,905.68	22284.60	49621.08	71905.68

I certify that the above bill is correct and just and that payment therefor has not been received.

Date February 9-54 *Payee Polaris Mining Company

Per [signature] Title President

*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:

$ 11 142 30

Signature [signature]
(Authorized Certifying Officer)

Date 2/18/54 Vou. No. 1085
(See other side)

(For Government use only)

CERTIFICATION BY GOVERNMENT REPRESENTATIVE:

I certify that to the best of my knowledge and belief the contractor submitting this voucher is operating a Defense Minerals Exploration Administration project under Contract No. E 541 in accordance with the terms of the contract.

Signature /S/ Eric G. Erickson Title Mining Engr. Date 2/15/54

APPROVAL BY DMEA EXECUTIVE OFFICER OR ALTERNATE:

Signature /S/ Stephen W. Zoldok Title Mining Engr. Date 2/15/54

MONTHLY REPORT OF OPERATOR

The Operator (Contractor) of an exploration project is required to make a monthly report to the Government through the Regional Executive Officer. This report consists of three parts as follows:

(a) *Form MF-104—Operator's Monthly Report and Voucher.*—This form details expenditures and constitutes a voucher for reimbursing the Operator for the Government's share of costs;

(b) *Form MF-104A—Operator's Unit Cost and Progress Report.*—This is a statistical report of expenditures which shows costs for the various types of operation; and

(c) *Narrative.*—A concise narrative description of progress made, results accomplished, and any unusual difficulties encountered must be furnished as an attachment to this Report and Voucher. Wherever possible, the narrative is to be illustrated with maps or sketches showing formations penetrated and location and assays of samples taken as well as advances in workings. In the case of diamond drilling or churn drilling, the location and inclination of holes is to be shown on a map; logs and assays also are to be submitted.

The Monthly Report of Operator should be prepared in an original and four copies all of which must be sent to the Executive Officer of the Region not later than the 15th of the month following.

Preparation of Form MF-104—Operator's Monthly Report and Voucher.—All the applicable spaces in Form MF-104 should be filled in by the Operator, and the Operator or his agent should sign the certification in the lower left corner of the form.

The items of costs are arranged in the order they appear in Article 6 (a) of Form MF-200 (Revised February 1952), however, this form is readily adaptable for use in reporting activities under other contract forms.

Under Item (1) delete words "Short Form" if the contract is a sub-contract under Form MF-200; and delete word "Independent" if the contract reported is on Form MF-200 (A). Also, report work paid for on a unit basis under contract Form MF-200 as though it were performed under an independent contract.

Under Item (2) include labor, supervision and technical services incurred for the exploratory operations. Do not include labor, supervision and technical services used for work performed under items (5) and (6).

Under Item (3) include the costs of material and supplies used in the project other than that used under items (5) and (6).

Under Item (4) appear the three types of operating equipment expenditures, that is, rental, purchase and depreciation. The expenditures made for renting equipment belonging to a third party will be reported under "Rental". The amount paid or duly obligated for payment for the purchase of equipment will be reported under "Purchase". The amount of expenditures due the Operator to reimburse him for depreciation of equipment owned will be reported under "Depreciation".

Item (5) comprises costs of labor, supervision, technical services, materials, etc., which are used in the initial rehabilitation and repair of existing buildings, installations, fixtures, and equipment. These costs, therefore, should not be reported under items (2) and (3).

Item (6) includes the labor, supervision, technical services, materials, etc., used in the installation or construction of new buildings, fixed improvements, etc., necessary for the project. These costs, therefore, should not be reported under items (2) and (3).

Item (7) covers miscellaneous types of expenditure such as payroll taxes, liability insurance, workmen's compensation insurance, repairs to equipment and sampling and analysis. Only that part of payroll taxes, liability insurance and workmen's compensation which are paid by the operator should be reported under item (7). The share paid by the employee as a payroll deduction is to be included under item (2) as labor costs.

Item (8) includes any unforeseen costs not included in the other seven categories.

The original of Form MF-104 when submitted for reimbursable expenses incurred under contract Form MF-2[illegible] must be supported by original documentation or by certified copies of purchase orders, payrolls or transcripts of payrolls, unless such documentation has been waived by the Regional Executive Officer. This certification may be stated thus, "Certified True Copy (or Transcript)", followed by appropriate signature. If the Executive Officer of the Region determines that a contract under Form MF-200 should have an "on-site" audit, that is, a Government auditor should make an audit of the Operator's books and records of account, the Operator need not support his monthly voucher with original or certified documents except in cases of equipment purchases whose individual costs exceed $50.00. In these cases the original or a certified copy of the purchase order or invoice should be attached to the Monthly Voucher. N. B.—Only the *original* of Form MF-104 is required to be documented. The four copies of Form MF-104 are not to be thus supported.

Form MF-104 submitted for reimbursement under fixed price contracts on Form MF-200 (A), however, are not required to be supported by documentation of any kind. The Operator will submit his claim under item (1) of Form MF-104 by deleting as stated above the word "Independent" and by showing the number of feet or other units immediately after the appropriate descriptive word, such as, drilling, bulldozing, crosscutting, drifting, etc., and giving the "Monthly Total" amount due. "Totals Previously Reported", and "Totals to Date" columns should also be filled in.

GPO 83-38476

Form MF-104A
(April 1952)

Budget Bureau No. 42-R1151.1
Approval expires 6-30-53.

UNITED STATES
DEPARTMENT OF THE INTERIOR

DEFENSE MINERALS EXPLORATION ADMINISTRATION

OPERATOR'S UNIT COST AND PROGRESS REPORT

FEB 23 1954

Month of January 1954 Docket No. DMEA 2879 Contract No. 1 DM-E 541
Operator's Name Polaris Mining Company Minerals Copper, Lead, Antimony
Address Box 320 Wallace, Idaho (& Incidental Silver)

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	Feet	$20,384.57	406	$ 64,127.27	1268.8	50.54	11625	$ 51.00*
Crosscutting							330	93.33
Raising								
Shafts Side Swiping	Feet	200.83	8	6,079.21	242	25.12	1560	25.50
Winzes								
Drilling: Core	Feet	1,699.20	377.6	1,699.20	377.6	4.50	5000	4.50
Churn								
Auger								
Stripping								
Trenching								
Test Pits								
Roads and Trails								
Total Distributed Costs								Total Costs Authorized by Contract
Operating Equipment Purchased								
Initial Rehabilitation and Repairs								
New Buildings, Improvements, etc.								
Total Costs								

The undersigned company, and the official executing this certification on its behalf, hereby certify that the information contained in this report is correct and complete to the best of their knowledge and belief.

Date February 9-1954 Operator Polaris Mining Co.

Per [signature] Title President

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)

* Maximum allowed by contract

INSTRUCTIONS

Preparation of Form MF–104A—Operator's Unit Cost and Progress Report.—Applicable places on Form 104A should be filled in by the Operator. The purpose of this form is twofold as follows: (1) to furnish the supervising engineers and other administrators with statistical information necessary to better determine the progress of the project; and (2) to furnish more permanent information on mining costs for future use. The more important phases of operation on which permanent information is desired have been outlined in the form. There are blank lines, however, for those unusual phases which may need to be reported for a particular project. It will be necessary for the Operator to distribute his costs among the applicable phases reported with the exception of three items the costs of which are not to be distributed by the Operator. These three items are: "Operating Equipment Purchased", "Initial Rehabilitation and Repairs", and "New Buildings, Improvements, etc." The reason for not distributing these items on a monthly basis is doubtless clear to the Operator, since such distribution might well overstate the cost for any one month or period short of the entire contract period.

Form MF–104A has been designed to tie in with Form MF–104 for both monthly and cumulative costs. The "Total Costs" on Form MF–104A for each month should equal the monthly "Total Costs" as reported on Form MF–104. This is also true of the "Total Costs To Date".

In preparing Form MF–104A, it will be necessary frequently to distribute certain costs over a number of items. For instance, supervisory and engineering costs may have to be distributed over several phases, such as, drifting, crosscutting, raising, etc., provided that these items were reported active for the month. Such distributions should be made on the basis of time spent on the various phases, on man days of labor charged to such phases, or on some other equitable basis. "Operating Equipment", "Initial Rehabilitation and Repairs", and "New Buildings Improvements, etc.", will be distributed to the several phases of the project by the Washington Office of DMEA at the close of the project if determined necessary. The last two columns headed "Authorized by Contract" will be filled in by the Operator if such information is found in the contract. This information is usually a part of Exhibit "A" of the contract. A space for remarks has been provided for the use of the Operator to call attention to any unusual circumstances causing excessive or disproportionate unit costs.

GPO 83-38475

Polaris Mining Company

Wallace, Idaho

FEB 23 1954

February ninth
1 9 5 4

Defense Minerals Exploration Administration
U. S. Department of the Interior
S. 157 Howard Street
Spokane, Washington

Re: Progress Report Polaris East
Exploration Project - January 1954
Docket No. D.M.E.A. - 2879
Contract No. 1DM - E541

Gentlemen:

During the month of January, 1954, the main easterly heading was advanced 406.0 feet to a point 189.3 feet east of station A3092. Eight feet of side-swiping was done.

The attached 50-scale small map shows progress and the geology of the section explored during the month. Another larger map attached shows the progress in relation to property lines and is the second "base map" submitted. No structures were crossed during the month and progress was in bleached and unbleached St. Regis argillite and argillaceous quartzite as shown on the map. You will note that the Merger east property line was crossed during the month and the property of Silver Standard was entered.

Diamond drill hole No. SS3250 was drilled north 220.4 feet from a point in the lateral at station A3084 plus 128 feet east. The log of this hole is attached. Another hole drilled south from the same set-up was advanced 157.2 feet during January. The log of this hole will be submitted later after completion.

Yours very truly,

Robert E. Sorenson

Robert E. Sorenson

RES:dc

104 (Rev.)
52)

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 20 1954

OPERATOR'S MONTHLY REPORT AND VOUCHER

Month of December, 1953 Docket No. DMEA 2879 Contract No. DM-E 541
Operator's Name Polaris Mining Company Mineral Copper, Lead, Antimony
Address Box 320 Wallace, Idaho (& Incidental Silver)
Contract Amount, $85,955.00 Government Participation 50 % Amount, $42,977.50

ITEMS OF COSTS	FOR OPERATOR'S USE: Monthly Total	Totals Previously Reported	Totals To Date	FOR GOVERNMENT USE ONLY: Approved Monthly Total	Approved Totals Previously Reported	Approved Totals To Date
(Independent Short Form) Contracts:						
Drilling						
Bulldozing						
Crosscutting						
Drifting 377.4' @ $51.00	$19,247.40	$24,495.30	$43,742.70			
Sideswipe 23' @ $25.50	586.50	5,291.88	5,878.38			
(2) Labor and Supervision:						
Labor						
Supervision						
Technical Services						
(3) Operating Mat'ls. and Supplies:						
Timber						
Explosives						
Pipe						
Track						
(4) Operating Equipment:						
Rental						
Purchase						
Depreciation						
(5) Initial Rehabilitation and Repairs						
(6) New Bldgs., Improvements, etc.						
(7) Miscellaneous:						
Repairs to Equipment						
Sampling and Analysis						
Payroll Taxes						
Liability Insurance						
(8) Contingencies (specify):						
TOTALS	$19,833.90	$29,787.18	$49,621.08	19,833.90	29,787.18	49,621.08

I certify that the above bill is correct and just and that payment therefor has not been received.

Date _____ *Payee Polaris Mining Company

Per John R. Manchester Title Treasurer

*When a voucher is signed or receipted in the name of a company or corporation, the name of the person writing the company or corporate name, as well as the capacity in which he signs, must appear. For example: "John Doe Company, per John Smith, Secretary," or "Treasurer," as the case may be.

NOTE.—Title 18, U. S. Code (Crimes), section 1001, makes it a criminal offense to make a willfully false statement or representation to any department or agency of the United States as to any matter within its jurisdiction.

(Instructions on reverse)

Pursuant to authority vested in me, I certify that this account is correct and proper for payment in the amount of:

$ 9,916.95

Signature _____ (Authorized Certifying Officer)

Date 1/20/54 Vou. No. 1056 (See other side)

(For Government use only)

CERTIFICATION BY GOVERNMENT REPRESENTATIVE:

I certify that to the best of my knowledge and belief the contractor submitting this voucher is operating a Defense Minerals Exploration Administration project under Contract No. E 541 in accordance with the terms of the contract.

Signature (S) Eric G Erickson Title Mining Engr Date 1/18/54

APPROVAL BY DMEA EXECUTIVE OFFICER OR ALTERNATE:

Signature (S) Stephen W Zoldok Title Mining Engr Date 1/18/54

MONTHLY REPORT OF OPERATOR

The Operator (Contractor) of an exploration project is required to make a monthly report to the Government through the Regional Executive Officer. This report consists of three parts as follows:

(a) *Form MF-104—Operator's Monthly Report and Voucher.*—This form details expenditures and constitutes a voucher for reimbursing the Operator for the Government's share of costs;

(b) *Form MF-104A—Operator's Unit Cost and Progress Report.*—This is a statistical report of expenditures which shows costs for the various types of operation; and

(c) *Narrative.*—A concise narrative description of progress made, results accomplished, and any unusual difficulties encountered must be furnished as an attachment to this Report and Voucher. Wherever possible, the narrative is to be illustrated with maps or sketches showing formations penetrated and location and assays of samples taken as well as advances in workings. In the case of diamond drilling or churn drilling, the location and inclination of holes is to be shown on a map; logs and assays also are to be submitted.

The Monthly Report of Operator should be prepared in an original and four copies all of which must be sent to the Executive Officer of the Region not later than the 15th of the month following.

Preparation of Form MF-104—Operator's Monthly Report and Voucher.—All the applicable spaces in Form MF-104 should be filled in by the Operator, and the Operator or his agent should sign the certification in the lower left corner of the form.

The items of costs are arranged in the order they appear in Article 6 (a) of Form MF-200 (Revised February 1952), however, this form is readily adaptable for use in reporting activities under other contract forms.

Under Item (1) delete words "Short Form" if the contract is a sub-contract under Form MF-200; and delete word "Independent" if the contract reported is on Form MF-200 (A). Also, report work paid for on a unit basis under contract Form MF-200 as though it were performed under an independent contract.

Under Item (2) include labor, supervision and technical services incurred for the exploratory operations. Do not include labor, supervision and technical services used for work performed under items (5) and (6).

Under Item (3) include the costs of material and supplies used in the project other than that used under items (5) and (6).

Under Item (4) appear the three types of operating equipment expenditures, that is, rental, purchase and depreciation. The expenditures made for renting equipment belonging to a third party will be reported under "Rental". The amount paid or duly obligated for payment for the purchase of equipment will be reported under "Purchase". The amount of expenditures due the Operator to reimburse him for depreciation of equipment owned will be reported under "Depreciation".

Item (5) comprises costs of labor, supervision, technical services, materials, etc., which are used in the initial rehabilitation and repair of existing buildings, installations, fixtures, and equipment. These costs, therefore, should not be reported under items (2) and (3).

Item (6) includes the labor, supervision, technical services, materials, etc., used in the installation or construction of new buildings, fixed improvements, etc., necessary for the project. These costs, therefore, should not be reported under items (2) and (3).

Item (7) covers miscellaneous types of expenditure such as payroll taxes, liability insurance, workmen's compensation insurance, repairs to equipment and sampling and analysis. Only that part of payroll taxes, liability insurance and workmen's compensation which are paid by the operator should be reported under item (7). The share paid by the employee as a payroll deduction is to be included under item (2) as labor costs.

Item (8) includes any unforeseen costs not included in the other seven categories.

The original of Form MF-104 when submitted for reimbursable expenses incurred under contract Form MF-200 must be supported by original documentation or by certified copies of purchase orders, payrolls or transcripts of payrolls, unless such documentation has been waived by the Regional Executive Officer. This certification may be stated thus, "Certified True Copy (or Transcript)", followed by appropriate signature. If the Executive Officer of the Region determines that a contract under Form MF-200 should have an "on-site" audit, that is, a Government auditor should make an audit of the Operator's books and records of account, the Operator need not support his monthly voucher with original or certified documents except in cases of equipment purchases whose individual costs exceed $50.00. In these cases the original or a certified copy of the purchase order or invoice should be attached to the Monthly Voucher. N. B.—Only the *original* of Form MF-104 is required to be documented. The four copies of Form MF-104 are not to be thus supported.

Form MF-104 submitted for reimbursement under fixed price contracts on Form MF-200 (A), however, are not required to be supported by documentation of any kind. The Operator will submit his claim under item (1) of Form MF-104 by deleting as stated above the word "Independent" and by showing the number of feet or other units immediately after the appropriate descriptive word, such as, drilling, bulldozing, crosscutting, drifting, etc., and giving the "Monthly Total" amount due. "Totals Previously Reported", and "Totals to Date" columns should also be filled in.

GPO 83-38476

Form MF-104A
(April 1952)

Budget Bureau No. 42-R1151.1
Approval expires 6-30-53.

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
JAN 20 1954

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION
OPERATOR'S UNIT COST AND PROGRESS REPORT

Month of December 1953 Docket No. DMEA 2879 Contract No. 10M-B 541

Operator's Name Polaris Mining Company Minerals Copper, Lead, Antimony (& Inicdental Silver)

Address Box 320 Wallace, Idaho

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	Feet	$19,247.40	377.4	$43,742.70	862.8	50.70	11625	$ 51.00*
Crosscutting								
Raising							330	93.33
xxxxSide Swiping		586.50	23	5,878.38	234	25.12	1560	25.50
Shafts							5000	4.50
Winzes								
Drilling: Core								
Churn								
Auger								
Stripping								
Trenching								
Test Pits								
Roads and Trails								
Total Distributed Costs								Total Costs Authorized by Contract
Operating Equipment Purchased								
Initial Rehabilitation and Repairs								
New Buildings, Improvements, etc.								
Total Costs								

The undersigned company, and the official executing this certification on its behalf, hereby certify that the information contained in this report is correct and complete to the best of their knowledge and belief.

Date _____ Operator Polaris Mining Company

Per John R. Muotkma Title Treasurer

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)

* Maximum allowed by contract

INSTRUCTIONS

Preparation of Form MF–104A—Operator's Unit Cost and Progress Report.—Applicable places on Form 104A should be filled in by the Operator. The purpose of this form is twofold as follows: (1) to furnish the supervising engineers and other administrators with statistical information necessary to better determine the progress of the project; and (2) to furnish more permanent information on mining costs for future use. The more important phases of operation on which permanent information is desired have been outlined in the form. There are blank lines, however, for those unusual phases which may need to be reported for a particular project. It will be necessary for the Operator to distribute his costs among the applicable phases reported with the exception of three items the costs of which are not to be distributed by the Operator. These three items are: "Operating Equipment Purchased", "Initial Rehabilitation and Repairs", and "New Buildings, Improvements, etc." The reason for not distributing these items on a monthly basis is doubtless clear to the Operator, since such distribution might well overstate the cost for any one month or period short of the entire contract period.

Form MF–104A has been designed to tie in with Form MF–104 for both monthly and cumulative costs. The "Total Costs" on Form MF–104A for each month should equal the monthly "Total Costs" as reported on Form MF–104. This is also true of the "Total Costs To Date".

In preparing Form MF–104A, it will be necessary frequently to distribute certain costs over a number of items. For instance, supervisory and engineering costs may have to be distributed over several phases, such as, drifting, crosscutting, raising, etc., provided that these items were reported active for the month. Such distributions should be made on the basis of time spent on the various phases, on man days of labor charged to such phases, or on some other equitable basis. "Operating Equipment", "Initial Rehabilitation and Repairs", and "New Buildings Improvements, etc.", will be distributed to the several phases of the project by the Washington Office of DMEA at the close of the project if determined necessary. The last two columns headed "Authorized by Contract" will be filled in by the Operator if such information is found in the contract. This information is usually a part of Exhibit "A" of the contract. A space for remarks has been provided for the use of the Operator to call attention to any unusual circumstances causing excessive or disproportionate unit costs.

GPO 83-38475

DMEA

Polaris Mining Company

Wallace, Idaho

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
JAN 29 1954

January seventh
1954

Defense Minerals Exploration Administration
U. S. Department of the Interior
South 157 Howard Street
Spokane, Washington

Re: Progress Report Polaris East
Exploration Project - December 1953
Docket No. D.M.E.A. - 2879
Contract No. 1DM-E 541

Gentlemen:

During the month of December - 1953, the main easterly heading was advanced 377.4 feet and 23 feet of sideswiping was done.

The attached 50-scale progress map shows the advance during the month of December and the geology of the section explored. Advance was in bleached and unbleached St. Regis quartzite and argillaceous quartzite as indicated on the map. Warps of the bedding have been minor.

In the section explored the past month only minor quartz veinlets with some specularite have been exposed. No important mineralization was opened.

Yours very truly,

Robert E. Sorenson

Robert E. Sorenson

RES/mg

Enc.

Form MF-104 (Rev.)
(April 1952)

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION

Budget Bureau No. 42-R1036.4
Approval expires 6-30-53

OPERATOR'S MONTHLY REPORT AND VOUCHER

Month of November, 1953 Docket No. DMEA 2879 Contract No. 1DM-E 541
Operator's Name Polaris Mining Company Minerals Copper, Lead, Antimony (& incidental silver)
Address Box 320 Wallace, Idaho
Contract Amount, $ 685,955.00 Government Participation: 50 % Amount, $ 342,977.50

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 306'@$50.15	$15,345.90	$ 9,149.40	$ 24,495.30	15345.90		
Sideswipe 211'@$25.08	5,291.88		5,291.88	5291.88		
(2) Labor and Supervision:						
Labor						
Supervision						
Technical Services						
(3) Operating Mat'ls. and Supplies:						
Timber						
Explosives						
Pipe						
Track						
(4) Operating Equipment:						
Rental						
Purchase						
Depreciation						
(5) Initial Rehabilitation and Repairs						
(6) New Bldgs., Improvements, etc.						
(7) Miscellaneous:						
Repairs to Equipment						
Sampling and Analysis						
Payroll Taxes						
Liability Insurance						
(8) Contingencies (specify):						
TOTALS	$20,637.78	$ 9,149.40	$ 29,787.18	20637.78	9149.40	29787.18

I certify that the above bill is correct and just and that payment therefor has not been received.

Date 12-10-53 *Payee Polaris Mining Company

Per [signature] Title President

*When a voucher is signed or receipted in the name of a company or corporation, the name of the person writing the company or corporate name, as well as the capacity in which he signs, must appear. For example: "John Doe Company, per John Smith, Secretary," or "Treasurer," as the case may be.

NOTE.—Title 18, U. S. Code (Crimes), section 1001, makes it a criminal offense to make a willfully false statement or representation to any department or agency of the United States as to any matter within its jurisdiction.

(Instructions on reverse)

Pursuant to authority vested in me, I certify that this account is correct and proper for payment in the amount of:

$ 10,318.89

Signature [signature]
(Authorized Certifying Officer)

Date 12/28/53 Vou. No. 1027
(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. E541 in accordance with the terms of the contract.

Signature /S/ Eric G. Erickson Title Mining Engr. Date 12/21/53

APPROVAL BY DMEA EXECUTIVE OFFICER OR ALTERNATE:

Signature /S/ Stephen W Zoldok Title Mining Engr Date 12/21/53

MONTHLY REPORT OF OPERATOR

The Operator (Contractor) of an exploration project is required to make a monthly report to the Government through the Regional Executive Officer. This report consists of three parts as follows:

(a) *Form MF-104—Operator's Monthly Report and Voucher.*—This form details expenditures and constitutes a voucher for reimbursing the Operator for the Government's share of costs;

(b) *Form MF-104A—Operator's Unit Cost and Progress Report.*—This is a statistical report of expenditures which shows costs for the various types of operation; and

(c) *Narrative.*—A concise narrative description of progress made, results accomplished, and any unusual difficulties encountered must be furnished as an attachment to this Report and Voucher. Wherever possible, the narrative is to be illustrated with maps or sketches showing formations penetrated and location and assays of samples taken as well as advances in workings. In the case of diamond drilling or churn drilling, the location and inclination of holes is to be shown on a map; logs and assays also are to be submitted.

The Monthly Report of Operator should be prepared in an original and four copies all of which must be sent to the Executive Officer of the Region not later than the 15th of the month following.

Preparation of Form MF-104—Operator's Monthly Report and Voucher.—All the applicable spaces in Form MF-104 should be filled in by the Operator, and the Operator or his agent should sign the certification in the lower left corner of the form.

The items of costs are arranged in the order they appear in Article 6 (a) of Form MF-200 (Revised February 1952), however, this form is readily adaptable for use in reporting activities under other contract forms.

Under Item (1) delete words "Short Form" if the contract is a sub-contract under Form MF-200; and delete word "Independent" if the contract reported is on Form MF-200 (A). Also, report work paid for on a unit basis under contract Form MF-200 as though it were performed under an independent contract.

Under Item (2) include labor, supervision and technical services incurred for the exploratory operations. Do not include labor, supervision and technical services used for work performed under items (5) and (6).

Under Item (3) include the costs of material and supplies used in the project other than that used under items (5) and (6).

Under Item (4) appear the three types of operating equipment expenditures, that is, rental, purchase and depreciation. The expenditures made for renting equipment belonging to a third party will be reported under "Rental". The amount paid or duly obligated for payment for the purchase of equipment will be reported under "Purchase". The amount of expenditures due the Operator to reimburse him for depreciation of equipment owned will be reported under "Depreciation".

Item (5) comprises costs of labor, supervision, technical services, materials, etc., which are used in the initial rehabilitation and repair of existing buildings, installations, fixtures, and equipment. These costs, therefore, should not be reported under items (2) and (3).

Item (6) includes the labor, supervision, technical services, materials, etc., used in the installation or construction of new buildings, fixed improvements, etc., necessary for the project. These costs, therefore, should not be reported under items (2) and (3).

Item (7) covers miscellaneous types of expenditure such as payroll taxes, liability insurance, workmen's compensation insurance, repairs to equipment and sampling and analysis. Only that part of payroll taxes, liability insurance and workmen's compensation which are paid by the operator should be reported under item (7). The share paid by the employee as a payroll deduction is to be included under item (2) as labor costs.

Item (8) includes any unforeseen costs not included in the other seven categories.

The original of Form MF-104 when submitted for reimbursable expenses incurred under contract Form MF-200 must be supported by original documentation or by certified copies of purchase orders, payrolls or transcripts of payrolls, unless such documentation has been waived by the Regional Executive Officer. This certification may be stated thus, "Certified True Copy (or Transcript)", followed by appropriate signature. If the Executive Officer of the Region determines that a contract under Form MF-200 should have an "on-site" audit, that is, a Government auditor should make an audit of the Operator's books and records of account, the Operator need not support his monthly voucher with original or certified documents except in cases of equipment purchases whose individual costs exceed $50.00. In these cases the original or a certified copy of the purchase order or invoice should be attached to the Monthly Voucher. N. B.—Only the *original* of Form MF-104 is required to be documented. The four copies of Form MF-104 are not to be thus supported.

Form MF-104 submitted for reimbursement under fixed price contracts on Form MF-200 (A), however, are not required to be supported by documentation of any kind. The Operator will submit his claim under item (1) of Form MF-104 by deleting as stated above the word "Independent" and by showing the number of feet or other units immediately after the appropriate descriptive word, such as, drilling, bulldozing, crosscutting, drifting, etc., and giving the "Monthly Total" amount due. "Totals Previously Reported", and "Totals to Date" columns should also be filled in.

GPO 83-38476

Form MF-104A
(April 1952)

Budget Bureau No. 42-R1151
Approval expires 6-30-53.

UNITED STATES
DEPARTMENT OF THE INTERIOR

DEFENSE MINERALS EXPLORATION ADMINISTRATION

OPERATOR'S UNIT COST AND PROGRESS REPORT

Month of November 1953 Docket No. DMEA 2879 Contract No. 1DM-E 541

Operator's Name Polaris Mining Company Minerals Copper, Lead, Antimony (& incidental silver)

Address Box 320 Wallace, Idaho

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	Feet	$15,345.90	306	$ 24,495.30	485.4	50.46	11625	$ 51.00*
Crosscutting								
Raising							330	93.33
~~Shafts~~ Side Swiping		5,291.88	211	5,291.88	211	25.08	1560	25.50
Winzes							5000	4.50
Drilling: Core							↓	↓
Churn								
Auger								
Stripping								
Trenching								
Test Pits								
Roads and Trails								
TOTAL DISTRIBUTED COSTS								TOTAL COSTS AUTHORIZED BY CONTRACT
Operating Equipment Purchased								
Initial Rehabilitation and Repairs								
New Buildings, Improvements, etc								
TOTAL COSTS								

The undersigned company, and the official executing this certification on its behalf, hereby certify that the information contained in this report is correct and complete to the best of their knowledge and belief.

Date Dec. 10, 1953 Operator Polaris Mining Company

Per [signature] Title President

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)

* Maximum allowed by contract

INSTRUCTIONS

Preparation of Form MF-104A—Operator's Unit Cost and Progress Report.—Applicable places on Form 104A should be filled in by the Operator. The purpose of this form is twofold as follows: (1) to furnish the supervising engineers and other administrators with statistical information necessary to better determine the progress of the project; and (2) to furnish more permanent information on mining costs for future use. The more important phases of operation on which permanent information is desired have been outlined in the form. There are blank lines, however, for those unusual phases which may need to be reported for a particular project. It will be necessary for the Operator to distribute his costs among the applicable phases reported with the exception of three items the costs of which are not to be distributed by the Operator. These three items are: "Operating Equipment Purchased", "Initial Rehabilitation and Repairs", and "New Buildings, Improvements, etc." The reason for not distributing these items on a monthly basis is doubtless clear to the Operator, since such distribution might well overstate the cost for any one month or period short of the entire contract period.

Form MF-104A has been designed to tie in with Form MF-104 for both monthly and cumulative costs. The "Total Costs" on Form MF-104A for each month should equal the monthly "Total Costs" as reported on Form MF-104. This is also true of the "Total Costs To Date".

In preparing Form MF-104A, it will be necessary frequently to distribute certain costs over a number of items. For instance, supervisory and engineering costs may have to be distributed over several phases, such as, drifting, crosscutting, raising, etc., provided that these items were reported active for the month. Such distributions should be made on the basis of time spent on the various phases, on man days of labor charged to such phases, or on some other equitable basis. "Operating Equipment", "Initial Rehabilitation and Repairs", and "New Buildings Improvements, etc.", will be distributed to the several phases of the project by the Washington Office of DMEA at the close of the project if determined necessary. The last two columns headed "Authorized by Contract" will be filled in by the Operator if such information is found in the contract. This information is usually a part of Exhibit "A" of the contract. A space for remarks has been provided for the use of the Operator to call attention to any unusual circumstances causing excessive or disproportionate unit costs.

GPO 83-38475

Polaris Mining Company

Wallace, Idaho

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
DEC 14 1953

December ninth
1953

Defense Minerals Exploration Administration
U. S. Department of the Interior
South 157 Howard Street
Spokane, Washington

Re: Progress Report Polaris East
Exploration Project - November 1953
Docket No. D. M. E. A.- 2879
Contract No. IDM - E541

Gentlemen:

During the month of November-1953, the main easterly heading was advanced 306.0 feet and the south wall was slabbed along a length of 211.0 feet providing adequate room for siding.

The attached 50-scale progress map shows the advance during the month of November and the geology of the section explored. Advance was largely in bleached St. Regis quartzite which strikes S. 70° to 80° E. and dips from vertical to 85° overturned toward the south. The purplish argillaceous quartzite appears to be a narrow band of less bleached rock. Further extension of the drift now has proved this purplish band to be a little more than twenty feet thick, the face having again entered bleached rock.

A few minor quartz stringers, some of them containing specularite, were crossed during the month, but no important mineralization was seen. Diamond drill holes will be drilled north and south from a point near Station A 3086.

Yours very truly,

Robert E. Sorenson

Robert E. Sorenson
Chief Engineer and
Geologist

RES:EB
Enc.

Form M[illegible]4 (Rev.)
(April 1952)

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION

Budget Bureau No. 42-R1036.4
Approval expires 6-30-53.

DEPARTMENT OF THE INTERIOR
Minerals Administration
RECEIVED
DEC 3 1953

OPERATOR'S MONTHLY REPORT AND VOUCHER

Month of October, 1953 Docket No. DMEA 2079 Contract No. XDY-8 541
Operator's Name Polaris Mining Company Minerals Copper, Lead, Antimony, (and incidental Silver)
Address Box 320, Wallace, Idaho
Contract Amount, $ 685,955.00 Government Participation: 50 % Amount, $ 342,977.50

ITEMS OF COSTS	FOR OPERATOR'S USE: Monthly Total	Totals Previously Reported	Totals To Date	FOR GOVERNMENT USE ONLY: Approved Monthly Total	Approved Totals Previously Reported	Approved Totals To Date
(1) ~~Independent~~ Short Form Contracts:						
Drilling						
Bulldozing						
Crosscutting						
Drifting 179.4' @51.00	$ 9,149.40	--	$ 9,149.40			
(2) Labor and Supervision:						
Labor						
Supervision						
Technical Services						
(3) Operating Mat'ls. and Supplies:						
Timber						
Explosives						
Pipe						
Track						
(4) Operating Equipment:						
Rental						
Purchase						
Depreciation						
(5) Initial Rehabilitation and Repairs						
(6) New Bldgs., Improvements, etc.						
(7) Miscellaneous:						
Repairs to Equipment						
Sampling and Analysis						
Payroll Taxes						
Liability Insurance						
(8) Contingencies (specify):						
TOTALS	$ 9,149.40	--	$ 9,149.40	9149.40		9149.40

I certify that the above bill is correct and just and that payment therefor has not been received.

Date 11 - 18 - 53 *Payee Polaris Mining Company

Per [signature] Title President

*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:

$ 4574.70

Signature [signature]
(Authorized Certifying Officer)

Date 11/18/53 Vou. No. 977
(See other side)

(For Government use only)

CERTIFICATION BY GOVERNMENT REPRESENTATIVE:

I certify that to the best of my knowledge and belief the contractor submitting this voucher is operating a Defense Minerals Exploration Administration project under Contract No. E-541 in accordance with the terms of the contract.

Signature /S/ Eric G. Erickson Title Mining Engr Date Nov 16-53

APPROVAL BY DMEA EXECUTIVE OFFICER OR ALTERNATE:

Signature /S/ John A. E. Weissenborn Title Exec. officer Date Nov 18-53

MONTHLY REPORT OF OPERATOR

The Operator (Contractor) of an exploration project is required to make a monthly report to the Government through the Regional Executive Officer. This report consists of three parts as follows:

(a) *Form MF-104—Operator's Monthly Report and Voucher.*—This form details expenditures and constitutes a voucher for reimbursing the Operator for the Government's share of costs;

(b) *Form MF-104A—Operator's Unit Cost and Progress Report.*—This is a statistical report of expenditures which shows costs for the various types of operation; and

(c) *Narrative.*—A concise narrative description of progress made, results accomplished, and any unusual difficulties encountered must be furnished as an attachment to this Report and Voucher. Wherever possible, the narrative is to be illustrated with maps or sketches showing formations penetrated and location and assays of samples taken as well as advances in workings. In the case of diamond drilling or churn drilling, the location and inclination of holes is to be shown on a map; logs and assays also are to be submitted.

The Monthly Report of Operator should be prepared in an original and four copies all of which must be sent to the Executive Officer of the Region not later than the 15th of the month following.

Preparation of Form MF-104—Operator's Monthly Report and Voucher.—All the applicable spaces in Form MF-104 should be filled in by the Operator, and the Operator or his agent should sign the certification in the lower left corner of the form.

The items of costs are arranged in the order they appear in Article 6 (a) of Form MF-200 (Revised February 1952), however, this form is readily adaptable for use in reporting activities under other contract forms.

Under Item (1) delete words "Short Form" if the contract is a sub-contract under Form MF-200; and delete word "Independent" if the contract reported is on Form MF-200 (A). Also, report work paid for on a unit basis under contract Form MF-200 as though it were performed under an independent contract.

Under Item (2) include labor, supervision and technical services incurred for the exploratory operations. Do not include labor, supervision and technical services used for work performed under items (5) and (6).

Under Item (3) include the costs of material and supplies used in the project other than that used under items (5) and (6).

Under Item (4) appear the three types of operating equipment expenditures, that is, rental, purchase and depreciation. The expenditures made for renting equipment belonging to a third party will be reported under "Rental". The amount paid or duly obligated for payment for the purchase of equipment will be reported under "Purchase". The amount of expenditures due the Operator to reimburse him for depreciation of equipment owned will be reported under "Depreciation".

Item (5) comprises costs of labor, supervision, technical services, materials, etc., which are used in the initial rehabilitation and repair of existing buildings, installations, fixtures, and equipment. These costs, therefore, should not be reported under items (2) and (3).

Item (6) includes the labor, supervision, technical services, materials, etc., used in the installation or construction of new buildings, fixed improvements, etc., necessary for the project. These costs, therefore, should not be reported under items (2) and (3).

Item (7) covers miscellaneous types of expenditure such as payroll taxes, liability insurance, workmen's compensation insurance, repairs to equipment and sampling and analysis. Only that part of payroll taxes, liability insurance and workmen's compensation which are paid by the operator should be reported under item (7). The share paid by the employee as a payroll deduction is to be included under item (2) as labor costs.

Item (8) includes any unforeseen costs not included in the other seven categories.

The original of Form MF-104 when submitted for reimbursable expenses incurred under contract Form MF-200 must be supported by original documentation or by certified copies of purchase orders, payrolls or transcripts of payrolls, unless such documentation has been waived by the Regional Executive Officer. This certification may be stated thus, "Certified True Copy (or Transcript)", followed by appropriate signature. If the Executive Officer of the Region determines that a contract under Form MF-200 should have an "on-site" audit, that is, a Government auditor should make an audit of the Operator's books and records of account, the Operator need not support his monthly voucher with original or certified documents except in cases of equipment purchases whose individual costs exceed $50.00. In these cases the original or a certified copy of the purchase order or invoice should be attached to the Monthly Voucher. N. B.—Only the *original* of Form MF-104 is required to be documented. The four copies of Form MF-104 are not to be thus supported.

Form MF-104 submitted for reimbursement under fixed price contracts on Form MF-200 (A), however, are not required to be supported by documentation of any kind. The Operator will submit his claim under item (1) of Form MF-104 by deleting as stated above the word "Independent" and by showing the number of feet or other units immediately after the appropriate descriptive word, such as, drilling, bulldozing, crosscutting, drifting, etc., and giving the "Monthly Total" amount due. "Totals Previously Reported", and "Totals to Date" columns should also be filled in.

GPO 83-38476

Form MVS-104A
(April 1952)

Budget Bureau No. 42-R1151.1
Approval expires 6-30-53.

UNITED STATES
DEPARTMENT OF THE INTERIOR

DEFENSE MINERALS EXPLORATION ADMINISTRATION

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
1953

OPERATOR'S UNIT COST AND PROGRESS REPORT

Month of October 1953 Docket No. DMEA 2879 Contract No. IDM-E 541

Operator's Name Polaris Mining Company Minerals Copper, Lead, Antimony, (and incidental Silver

Address Box 320, Wallace, Idaho

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	Feet	$9,149.40	179.4	$ 9,149.40	179.4	51.0	11625	$51.00 *
Crosscutting							330	93.33
Raising							1560	25.50
xxxx Side Swiping Shafts							5000	4.50
Winzes								
Drilling: Core								
Churn								
Auger								
Stripping								
Trenching								
Test Pits								
Roads and Trails								
Total Distributed Costs								Total Costs Authorized by Contract
Operating Equipment Purchased								
Initial Rehabilitation and Repairs								
New Buildings, Improvements, etc.								
Total Costs								

The undersigned company, and the official executing this certification on its behalf, hereby certify that the information contained in this report is correct and complete to the best of their knowledge and belief.

Date Nov. 12, 1953 Operator Polaris Mining Company

Per [signature] Title President

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)

* Maximum allowed by contract

INSTRUCTIONS

Preparation of Form MF–104A—Operator's Unit Cost and Progress Report.—Applicable places on Form 104A should be filled in by the Operator. The purpose of this form is twofold as follows: (1) to furnish the supervising engineers and other administrators with statistical information necessary to better determine the progress of the project; and (2) to furnish more permanent information on mining costs for future use. The more important phases of operation on which permanent information is desired have been outlined in the form. There are blank lines, however, for those unusual phases which may need to be reported for a particular project. It will be necessary for the Operator to distribute his costs among the applicable phases reported with the exception of three items the costs of which are not to be distributed by the Operator. These three items are: "Operating Equipment Purchased", "Initial Rehabilitation and Repairs", and "New Buildings, Improvements, etc." The reason for not distributing these items on a monthly basis is doubtless clear to the Operator, since such distribution might well overstate the cost for any one month or period short of the entire contract period.

Form MF–104A has been designed to tie in with Form MF–104 for both monthly and cumulative costs. The "Total Costs" on Form MF–104A for each month should equal the monthly "Total Costs" as reported on Form MF–104. This is also true of the "Total Costs To Date".

In preparing Form MF–104A, it will be necessary frequently to distribute certain costs over a number of items. For instance, supervisory and engineering costs may have to be distributed over several phases, such as, drifting, crosscutting, raising, etc., provided that these items were reported active for the month. Such distributions should be made on the basis of time spent on the various phases, on man days of labor charged to such phases, or on some other equitable basis. "Operating Equipment", "Initial Rehabilitation and Repairs", and "New Buildings Improvements, etc.", will be distributed to the several phases of the project by the Washington Office of DMEA at the close of the project if determined necessary. The last two columns headed "Authorized by Contract" will be filled in by the Operator if such information is found in the contract. This information is usually a part of Exhibit "A" of the contract. A space for remarks has been provided for the use of the Operator to call attention to any unusual circumstances causing excessive or disproportionate unit costs.

GPO 83-38475

Polaris Mining Company

Wallace, Idaho

Received
1953

November 12, 1953

Defense Minerals Exploration Administration
U. S. Department of the Interior
South 157 Howard Street
Spokane, Washington

Re: Progress Report Polaris East
Exploration Project - October-1953
Docket No. D.M.E.A. - 2879

Dear Sirs:

Work under the above numbered contract between Polaris Mining Company and the Defense Minerals Exploration Administration was actively commenced on August 25, 1953. From that date until October 16, 1953, the work consisted of rehabilitation of the old Merger East Drift, installation of air and water lines and ventilation pipe.

Drifting was begun on October 16, 1953 from the old east face and during the balance of the month 179.4 feet of advance was made as shown on the attached 50-scale progress map. The advance was made in purplish and bleached St. Regis Rock as shown in the purple color and yellow color respectively. Rocks are argillite and quartzite. The beds are all overturned dipping to the south. A small tight slip and a one-half inch quartz stringer are the only features found.

Yours very truly,

Robert E. Sorenson

Robert E. Sorenson
Chief Engineer and Geologist

RES/rw
enc.

HECLA

MINING COMPANY

First Quarter Report

Three Months Ending

March 31, 1979

To Our Shareholders:

OPERATING RESULTS

Hecla achieved excellent earnings during the first quarter of 1979, with unaudited net income of $5,450,358 ($0.78 per share).

The 1979 first quarter earnings compared with a net loss of $1,960,947 ($0.28 per share) during the same period in 1978, and with net income of $3,272,000 ($0.47 per share) during the fourth quarter of 1978, which income included $632,000 ($0.09 per share) from the sale of the Company's interest in the Liard-Schaft Creek property in British Columbia.

Corporate debt was reduced from $51,000,000 at the beginning of the first quarter of 1979 to $47,800,000 at the end of the quarter. During the past two quarters the outstanding principal of the debt has been reduced by $9,963,000.

NORTH IDAHO OPERATIONS

The Lucky Friday Mine and the Star-Morning Unit Area, operated by Hecla, continued normal operations during the first quarter and achieved very good results. The tonnage and grade of ore mined at the Lucky Friday was somewhat higher than that during the same period of 1978, reflecting the high-grade ore being developed on the west end of the vein. Tonnage and grade of ore mined at the Star Mine were also somewhat higher than during the same period of 1978. Earnings from Hecla's share of production by the Sunshine Unit Area also were improved compared to the same period of 1978.

Hecla's share of principal metals contained in concentrates for the comparable three-month period of 1979 and 1978 are as follows:

	Tons of Ore Milled	Ounces Silver	Tons Lead	Tons Zinc
January 1 to March 31, 1979	84,952	1,152,415	6,755	2,161
January 1 to March 31, 1978*	74,340	974,952	4,852	1,682

*The Lucky Friday Mine was closed by a labor strike from March 2 to March 26, 1978.

METAL PRICES

During the first quarter of 1979 the Handy & Harman silver price averaged $7.04 per ounce; the lead price averaged 43.4 cents per pound; and the zinc price averaged 35.8 cents per pound. Comparable figures for the first quarter of 1978 were $5.05 per ounce for silver, 33 cents per pound for lead, and 29.85 cents per pound for zinc.

Silver and lead prices reached all-time highs during that quarter. The silver price rose from $5.97 per ounce on January 2 to a high of $7.925 per ounce on February 22 and ended the first quarter of 1979 at $7.43 per ounce.

The lead price rose from 38 cents per pound on January 2 to a new all-time high of 48 cents per pound on March 13, and the price remained at that level through the balance of the quarter.

An annual silver review has been prepared by one of Hecla's employees, and is available to interested shareholders by writing the Company.

SUNSHINE LITIGATION

In mid-March Sunshine Mining Company and Hecla jointly announced that their respective Boards of Directors had ratified a series of five agreements which eliminate several long-standing operational conflicts and which will result in the dismissal of practically all litigation between the parties. The agreements will benefit all parties with interests in the Sunshine Mine Area, and Hecla management is pleased that these problems have finally been resolved in a satisfactory manner.

LISBON VALLEY PROJECT

Union Carbide Corporation, as operator of this uranium project, continued exploration and development drilling with encouraging results. Underground development is scheduled to begin shortly, with production planned to start in late 1981 or early 1982. Hecla's one-half of the project costs is being provided from the Company's current earnings.

LAKESHORE MINE

The Papago Tribe has leased the Lakeshore ore body to Noranda Exploration, Inc., a wholly-owned subsidiary of Noranda Mines Limited of Canada. Noranda has purchased the Lakeshore plant and other assets on the site from the Hecla-El Paso partnership for approximately $9.4 million cash and other minor considerations. The Hecla-El Paso partnership moved off the property on April 1, 1979, and no longer has any operations or personnel in Arizona. The only significant continuing obligations of the Hecla-El Paso partnership are for a portion of 1979 ad valorem taxes on the Lakeshore facilities and some continuing obligations under a power supply agreement. In taking over the Lakeshore property, Noranda assumed liability for a portion of the power supply liability, and negotiations to terminate the remainder are continuing.

GRANDUC MINES

Although Hecla wrote off its investment in Granduc Mines, Limited, in 1977, it continues to own 35.4% of the outstanding common stock and all of the redeemable preferred stock. Hecla also holds unsecured 5½% notes, which were issued to Hecla by Granduc in exchange for preferred shares purchased from Hecla in 1974, and unsecured notes for unpaid dividends. Granduc Mines, Limited, which owns the Granduc Mine located north of Stewart, British Columbia, recently negotiated an agreement with Esso Minerals Canada, pursuant to which Granduc would sell its interest in the mine, retaining a 15% defined share of net proceeds after recoupment by Esso of all costs from January 1, 1979, forward. As a part of the overall negotiations, Hecla and the former lessees of the Granduc Mine agreed to reduce the remaining debt owed them by one-half and to receive non-interest-bearing notes repayable from a defined portion of Granduc's share of proceeds from Esso. This agreement is subject to approval by Granduc shareholders. It is not possible to project what proceeds, if any, may be realized by Hecla as a result of this agreement.

ANNUAL MEETING

The 1979 Annual Meeting is scheduled to be held at the Ridpath Hotel in Spokane, Washington, at 9 a.m. on May 4, 1979.

The shareholders are again being asked to approve authorization of 1,000,000 shares of preferred stock, which will require the affirmative vote of two-thirds of the outstanding shares. A similar proposal at the time of the last annual meeting on January 16, 1979, failed because too small a percentage of outstanding stock was voted, although 89% of those voting approved the proposal. If the Preferred Stock authorization is approved, it will enable the Company to use preferred stock in lieu of cash to pay a part of the interest due under the existing bank credit agreement, thus conserving cash which can then be used for reduction of the debt principal, with consequent interest savings to Hecla. We urge all shareholders, particularly those who hold their shares in brokers' accounts, to vote their proxies and mail them promptly.

W. H. LOVE
President and
Chief Executive Officer

Wallace, Idaho
April 16, 1979

HECLA MINING COMPANY and WHOLLY OWNED SUBSIDIARIES

Consolidated Statements of Operations [Unaudited]

For the Three-Month Periods Ended March 31, 1979 and March 31, 1978

	Three Months Ended March 31, 1979	Three Months Ended March 31, 1978 (Note 1)
Income:		
Sales of concentrates and products	$ 11,845,124	$ 6,660,383
Interest and other income	232,265	10,800
	12,077,389	6,671,183
Costs and expenses:		
Cost of sales and other expenses not shown separately	4,633,195	4,016,116
Interest on bank loans	1,098,888	1,416,820
General and administrative expenses	527,856	443,633
Exploration	43,292	258,000
Property and excise taxes	236,800	305,874
	6,540,031	6,440,443
Income from continuing operations before income taxes	5,537,358	230,740
Provision for income taxes:		
Currently payable	87,000	21,600
Tax effect of loss carryforwards	1,656,700	— —
	1,743,700	21,600
Income from continuing operations on a fully taxed basis	3,793,658	209,140
Income tax credit:		
Reduction of provision for income taxes arising from carryforward of prior years operating losses	1,656,700	— —
Discontinued operations:		
(Loss) from Company's share of operations of the Lakeshore Mine, net of income tax benefits	— —	(2,170,087)
Net income (loss)	$ 5,450,358	$ (1,960,947)
Net income (loss) per share:		
Continuing operations	$ 0.54	$ 0.03
Income tax credit:	0.24	— —
Discontinued operations	— —	(0.31)
	$ 0.78	$ (0.28)

Notes:

(1) Sales, operating expenses, other income, other expenses and tax provision of discontinued operations have been reclassified to a single line item.

Notes to the financial statements as of December 31, 1978 substantially apply to these interim financial statements and are not repeated here.

HECLA MINING COMPANY and WHOLLY OWNED SUBSIDIARIES

Consolidated Balance Sheets [Unaudited]

March 31, 1979 and March 31, 1978

ASSETS	March 31 1979	March 31 1978
Current assets		
Cash	$ 1,194,408	$ 1,810,613
Due from sales of products	9,525,828	5,041,701
Inventories, lower of average cost or net realizable value	599,014	1,094,301
Prepaid expenses and other assets	683,495	892,995
Total current assets	12,002,745	8,839,610
Investments and interests in mining properties	515,830	515,830
Properties, plants and equipment at cost less accumulated depreciation, depletion and amortization	2,733,541	3,851,397
Net assets of discontinued operations (Note 1)	— —	105,388,659
Other assets	518,827	275,618
Total assets	$ 15,770,943	$ 118,871,114
LIABILITIES		
Current liabilities		
Current portion of notes payable to banks	$ — —	$ 11,000,000
Accounts payable and accrued taxes and expenses	7,608,075	6,519,814
Total current liabilities	7,608,075	17,519,814
Notes payable to banks, non-current	47,800,000	44,000,000
Deferred income taxes	— —	7,741,853
Pension plan reserves	1,872,195	2,079,136
Net reserve for discontinued operations	369,449	— —
Total liabilities	57,649,719	71,340,803
SHAREHOLDERS' EQUITY (DEFICIT)		
Common stock, 25c par value, authorized 20,000,000 shares, issued 6,988,959 shares	1,747,239	1,747,239
Capital surplus	28,273,073	28,273,073
Earnings (deficit) retained in the business		
Beginning balance	(77,346,726)	19,473,666
Net income (loss) for the three-month period	5,450,358	(1,960,947)
Ending balance	(71,896,368)	17,512,719
Deduct, common stock reacquired at cost, 245 shares	(2,720)	(2,720)
Total shareholders' equity (deficit)	(41,878,776)	47,530,311
	$ 15,770,943	$ 118,871,114

Notes:

(1) Properties, plants and equipment, reserves for depreciation and amortization, current assets, other assets, and current liabilities have been reclassified to a single line item.

Notes to the financial statements as of December 31, 1978 substantially apply to these interim financial statements and are not repeated here.

HECLA MINING COMPANY and WHOLLY OWNED SUBSIDIARIES

Consolidated Statements of Changes in Financial Position [Unaudited]

For the Three-Month Periods Ended March 31, 1979 and March 31, 1978

	Three Months Ended	
	March 31, 1979	March 31, 1978
Source of funds:		
Funds provided (used) by operations		
Continuing operations	$ 3,838,112	$ 254,590
Income tax credit	1,656,700	— —
Discontinued operations	— —	(2,170,087)
Increase (decrease) in pension plan reserve	(27,283)	(59,950)
Reduction in net assets of discontinued operations	— —	1,040,633
Decrease in working capital	— —	6,707,185
	5,467,529	5,772,371
Application of funds:		
Current portion of notes payable to banks	$ — —	$ 5,500,000
Bank Loan repayments	3,200,000	— —
Property additions	627,148	282,572
Reduction in reserve for discontinued operations	340,095	— —
Increase (decrease) in other assets	274,135	(10,201)
Increase in working capital	1,026,151	— —
	$ 5,467,527	$ 5,772,371

To - Hecla File

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HECLA MINING COMPANY

BOX 320

WALLACE, IDAHO 83873

First Class Mail

U S GEOL[illegible]ICAL SURVEY-OFFICE OF
MINERALS EXPLORATION-ATTN-
HAROLD KIRKEMO-NATIONAL CENTER
MAIL STOP 953

HECLA

MINING COMPANY

First Quarter Report

Three Months Ending

March 31, 1978

To The Shareholders Of Hecla Mining Company

OPERATING RESULTS

The Company's loss in the first quarter of 1978 is estimated to be $1,960,947, or $0.28 per share. This compares with a net loss for the Fourth Quarter of 1977 of $2,402,239 or $0.34 per share, and with a net loss of $963,540 for the first quarter of 1977. Losses in the fourth quarter of 1977, and for the first quarter of 1977, exclude equity in net loss of Granduc Mines, Limited, and write-off of Hecla's investment in Granduc Mines, Limited, December 31, 1977.

Hecla's share of the first quarter loss at the Lakeshore Mine, which has been on a stand-by status since early September, 1977, was $3,136,907. This amount includes interest on bank loans of $1,416,820 and depreciation charges of $771,000. The balance of the loss is attributed to Lakeshore stand-by costs, which included payroll expense, minimum royalty payments, property taxes, insurance, power costs, and miscellaneous supplies, and were partially offset by sales of some remaining copper inventory.

Hecla's first quarter results were also affected by a labor strike at the Lucky Friday mine which started on March 2, 1978. A three-year contract was negotiated and approved by the Union Local on March 25, and work at the mine was resumed on March 27, 1978.

HECLA-SUPERIOR OIL COMPANY AGREEMENTS

In order for Hecla to ease the burden of Lakeshore Mine expense, and to reduce the debt servicing requirements under the Company's Credit Agreement with the participating banks, an agreement in principle has been reached with The Superior Oil Company, which was announced to shareholders on March 15, 1978.

Under the terms of the agreement in principle, Superior would acquire Hecla's 50% ownership of the Lakeshore mineral interest in exchange for an advance royalty and additional future royalty payments contingent upon operating results or sale of the property. Superior would also lease Hecla's ½ interest in the Lakeshore plant and equipment for which it would pay Hecla an annual rental of $3,000,000. Superior would also assume Hecla's obligations under the existing operating agreement to bear 50% of future operating costs and capital expenditures. Hecla would continue to manage the Lakeshore Mine under a management contract. Further, Superior will purchase from Hecla 2,500,000 of its presently authorized but unissued common shares at a price of $7.50 per share. The entire proceeds of the sale of such stock and all rentals received by Hecla will be applied by Hecla to reduce its long-term debt. Hecla will grant to Superior an option, effective until May 31, 1980, to purchase a block of 1,250,000 unissued common shares at a price of $12.50 per share and an

additional option, effective until May 31, 1982 to purchase 1,250,000 unissued common shares at a price of $15 per share. At the time Superior purchases the initial 2,500,000 Hecla shares, McIntyre Mines, Ltd. a Canadian company affiliated with Superior, would purchase from a subsidiary of El Paso Natural Gas Company an additional 1,171,662 Hecla shares now owned by El Paso's subsidiary. McIntyre would purchase these shares at a price of $7.50 per share.

The agreement in principle is subject to the satisfactory completion by Superior of an investigation of the properties and operations of Hecla and the execution of a definitive contract approved by the Boards of Directors of Superior and Hecla, as well as by the shareholders of Hecla.

The transactions, if consummated, will relieve Hecla of its share of ongoing Lakeshore Mine expenditures and will result in substantial reduction of Hecla's indebtedness.

Superior's investigations, which were started shortly after agreement in principle was reached, are proceeding satisfactorily and the various contracts and agreements between the parties are being prepared.

ANNUAL MEETING

The transactions described above are subject to approval of Hecla shareholders as well as by the Boards of Directors of both Hecla and The Superior Oil Company. The necessary proxy materials for submission to Hecla's shareholders in advance of the Shareholders' Meeting are being drafted. As soon as possible the proxy statement will be cleared with the Securities and Exchange Commission, a date for the Annual Shareholders' Meeting will be set, and the proxy statement and ballot will be mailed to each shareholder.

NORTH IDAHO OPERATIONS

With the exception of the 3½-week strike at the Lucky Friday mine in March, operations at the Lucky Friday, Star-Morning Unit, and the Sunshine Unit Area proceeded satisfactorily.

Hecla's share of principal metals produced from North Idaho operations for the three-month periods of 1978 and 1977 was as follows:

	Tons of Ore Milled	Ounces Silver	Tons Lead	Tons Zinc
January 1 to March 31, 1978	74,340	974,952	4,852	1,682
January 1 to March 31, 1977	72,633	723,964	6,224	2,009

HECLA MINING COMPANY
BOX 320
WALLACE, IDAHO 83873

First Class Mail

METAL PRICES

The Handy and Harmon average price of silver was $5.05 per ounce during the first quarter of 1978, as compared to an average price of $4.62 per ounce for the year 1977. Silver market fundamentals are good and we anticipate a long-term upward trend in the price, but with considerable day-to-day volatility.

The lead price remained at 33c per lb. throughout the first quarter of 1978, but was dropped to 31c per lb. by ASARCO on May 1, 1978.

The zinc price, which averaged 34.39c per lb. in 1977, was reduced from 30.5c to 29c per lb. on February 22, 1978, and averaged 29.85c per lb. in the first quarter. The zinc over-supply situation continues and most domestic producers have reduced production substantially.

The domestic producer price for cathode copper averaged 62.38c per lb. during the first quarter, compared to an average of 66.21c per lb. for the year 1977. Near-term outlook for a substantial and much needed increase in the price of copper is still bleak, although there is some evidence that excess stocks are beginning to decrease and the price trend should be slowly upward from this point.

OTHER

The Phase II drilling program on Hecla's Lisbon Valley, Utah leases, under a 50-50 joint venture with Union Carbide Corporation, was completed in April with favorable results.

Total drilling on the project to date includes 7 deep holes to explore the Chinle formation, and 120 holes to explore the Morrison Salt Wash formation. Most of the Salt Wash holes were drilled in an area 1,000 to 2,000 feet wide and extending for a length of about 6,000 feet across the northerly part of the property. A majority of the holes in this area were mineralized, including 20 which are classified as probable ore. Union Carbide has advised that a development drilling program will be started later this year to block-out and more closely define the mineralized areas.

Wallace, Idaho
May 2, 1978

W. H. LOVE
President and
Chief Executive Officer

HECLA MINING COMPANY AND WHOLLY OWNED SUBSIDIARIES

Consolidated Statements of Operations

For the Three-Month Periods Ended March 31, 1978 and March 31, 1977

	THREE MONTHS ENDED March 31, 1978 (Note 1)	March 31, 1977
Income:		
Sales of concentrates and products	$ 7,259,507	$ 13,255,515
Gain on sale of investments	— —	578,313
Interest and other income	15,635	22,770
Equity in net loss of Granduc Mines, Limited	— —	(83,300)
	7,275,142	13,773,298
Costs and expenses:		
Cost of sales and other expenses not shown separately	6,323,623	12,295,480
Exploration	258,000	309,000
Property and excise taxes	399,596	948,804
Depreciation, depletion and amortization	816,450	1,138,923
Interest on bank loans	1,416,820	1,015,231
	9,214,489	15,707,438
Loss from operations before income taxes (benefits)	(1,939,347)	(1,934,140)
Estimated income taxes (benefits)		
Currently payable	21,600	33,100
Deferred (Note 2)	— —	(920,400)
	21,600	(887,300)
Net loss	$ (1,960,947)	$ (1,046,840)
Net loss per share	$ (0.28)	$ (0.15)*

*Adjusted for 1977 stock dividend.

Notes (1) Unaudited and subject to year-end audit adjustments.
(2) It is not anticipated that previously provided deferred income taxes will reverse from timing differences during 1978. In 1977 net deferred tax benefits resulted from the carryback of available net operating losses against deferred taxes provided in prior years.

Average metal prices:		
Silver — (per ounce, Handy & Harman, N.Y.)	$ 5.05	$ 4.59
Lead — (per pound, M.W. U.S. Producer)	33.00c	28.85c
Zinc — (per pound, Prime Western delivered)	29.85c	37.00c
Copper — (per pound, M.W., U.S. Producer, refined)	62.38c	68.50c

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HECLA MINING COMPANY

Second Quarter Report

Six Months Ending June 30, 1977

To The Shareholders Of HECLA MINING COMPANY:

Earnings

The Company again experienced a loss in the second quarter of 1977 which is estimated at $1,497,581, or $0.21 per share. This compares with a net loss for the first quarter of 1977 of $1,046,840, or $0.15 per share, and a net loss on a restated basis of $2,071,165, or $0.30 per share for the second quarter of 1976.

Consolidated net loss for the first six months of 1977 was $2,544,421, or $0.36 per share, as compared to a restated loss of $1,128,209, or $0.16 per share in the same period in 1976.

The loss in the second quarter of 1977 was due to continuing operating losses at the Lakeshore Mine and to equity in the net loss of Granduc Mines, Limited. Hecla's share of the Lakeshore Mine net loss was $3,138,000 which included interest cost on bank loans of $1,074,000 and amortization and depreciation charges of $1,156,000. This compares with a net loss in the first quarter of 1977 of $2,478,000 which included interest on bank loans of $1,015,000 and amortization and depreciation charges of $1,087,000, and a restated net loss in the second quarter of 1976 of $3,211,000 which included interest expense on bank loans of $917,000 and amortization and depreciation charges of $1,006,000.

The Company's results were also adversely affected by its equity in the net loss of Granduc Mines, Limited of $268,800 for the second quarter of 1977, as compared to a net loss of $83,300 in the first quarter of 1977, and $138,900 in the second quarter of 1976.

The Lakeshore Mine

During the second quarter, the 50%-owned Lakeshore Mine achieved some improvement in mine production, but encountered unexpected problems in the metallurgical plant, and overall results were not as good as in the first quarter. The third and fourth quarters are expected to show improvement in both mine production and metallurgical processing.

The copper industry has now experienced three years of low prices, particularly in relation to production costs. Profits throughout the industry have largely disappeared. Prices did strenghthen during the first four months of 1977, but have now fallen back, and the outlook is poor. Meanwhile, wage and supply costs continue to rise. The Lakeshore Mine cannot achieve an operating profit before depreciation, amortization, and interest costs without a material increase in the copper price.

Hecla's 50% share of production from the Lakeshore Mine for the second quarter of 1977 was 7,316 tons of copper produced from 494,865 tons of ore processed and purchased concentrates.

North Idaho Operations

The Lucky Friday, Star-Morning Unit and Sunshine Unit Area operations all experienced good operating results during the second quarter. We are pleased to report resumption of income from the Sunshine Unit Area following a

year-long strike which was settled on March 14, 1977. The Sunshine Mine operated throughout the second quarter, and Hecla realized an operating profit from the Unit Area of $450,000 in the second quarter compared to a first quarter cash operating loss of $350,000; production at this operation is now back to normal rates.

A strike at The Bunker Hill Company in Kellogg, Idaho, on May 6 has necessitated stockpiling of zinc concentrate production from the Star Unit Area since that time. Lead concentrates from both the Lucky Friday and Star Unit continue to be delivered to The Bunker Hill Company which is operating the lead smelter with supervisory personnel.

Concentrate production from the Sunshine Mine is being shipped to Asarco's East Helena, Montana, lead smelter, following commencement of a strike at Asarco's copper smelter in Tacoma, Washington, on July 1.

Hecla's share of principal metals contained in metallic concentrates produced from North Idaho operations for the first six-month periods of 1977 and 1976 was as follows:

First Six Months	Tons of Ore Milled	Ounces Silver	Tons Lead	Tons Zinc
1977	153,686	1,830,589	12,370	3,899
1976	149,864	1,808,248	12,558	3,702

Metal Prices

The U.S. Producers copper price, after improving to 74c per pound in late March, fell to 71c per pound in late April, to 68c per pound in June and to 65c per pound in mid-July. London Metal Exchange and New York Commodity Exchange prices are even lower, on August 1 being quoted at 54.5c and 54.6c per pound, respectively.

In the face of twice-normal world stocks of copper metal and a continuing excess of production as compared to consumption, it is indicated that the market price for copper will increase only if world business conditions improve substantially, thus increasing demand. Failing that, world production must be curtailed to bring supply and demand into balance. There is little prospect of foreign production cutbacks; some U.S. production has been curtailed and further reductions in domestic production are expected.

The present copper price outlook is grim and many knowledgeable industry observers predict that copper supplies will exceed demand until 1979 or 1980.

The average silver price received by Hecla during the first six months of 1977 was $4.62 per ounce, as compared to an average of $4.35 per ounce for 1976, $4.42 per ounce for 1975 and $4.71 per ounce for 1974. As previously stated, the average silver price tends to be level, or slightly down when inflationary factors are considered. Nevertheless, market fundamentals appear better, and we believe that the long-term upward trend will prevail.

The lead price, which had increased from 26c per pound at the beginning of the year to 31c per pound in March, remained at that level during the second quarter. Demand is good and it presently appears the 31c per pound price will be stable for the next several months.

The zinc price declined from 37c per pound to 34c per pound on May 17. Large amounts of foreign zinc are being sold in the U.S. which has resulted in an excess domestic supply. Consequently, there is much discounting of the price,

with pressure on the 34c quotation, the London Metal Exchange price being about 24c per pound.

Financial

Expenditures at the Lakeshore Mine are shared equally by Hecla and the El Paso Natural Gas Company. Hecla borrowings for this purpose, under revolving credit agreements with participating banks, reached the available line of credit of $53,000,000 early in 1977, which includes $5,300,000 in compensating balances. The revolving credit notes were converted to 5-year term notes on June 30, 1977. The remainder of Hecla's share of costs has been financed internally.

Without a significant improvement in Lakeshore operating results, the Company will not be able to meet the first scheduled repayment to the lending banks of $5,300,000 which is due December 31, 1977. The Company is currently carrying on discussions with the lending banks concerning possible changes in the loan agreement, including the dates of scheduled repayments, which must be extended.

Additionally, the Company is analyzing alternatives in seeking other help in relieving the financial burden of the Lakeshore Mine. In this regard, the Directors of the Company have retained the Chase Manhattan Bank to act as financial advisor to the Company.

General

Legal proceedings related to the "Sunshine Mining Company Shareholders Committee", which were discussed at some length in the Company's Proxy Statement and first quarter report to shareholders, are dormant with no further developments of consequence since May 5, 1977, the date of the first quarter report. It is the opinion of counsel for the Company that these cases against the Company will be dismissed.

The first-phase drilling program on Hecla's Lisbon Valley, Utah leases, under a 50-50 joint venture with Union Carbide Corporaton, was completed in May with favorable results. Six of the eleven Salt Wash holes contained vanadium-uranium mineralization and one of the five deep Chinle holes was mineralized. Union Carbide, operator of the joint venture, has recommended a substantial second-phase drilling program which will completely evaluate the rest of the 1,100-acre property outside the proven favorable trend, and will offset with close-spaced drilling the previously drilled holes which contained probable ore grade mineralization. The second-phase drilling program is expected to start in November.

Concluding, I believe the future outlook for Hecla will improve despite the current problems. The copper market will turn eventually. Meanwhile, the lead market is good, and we have much confidence in the long-term future of the silver market. We sincerely appreciate the patience and understanding of all our shareholders, and the unstinting efforts of our very able employees.

W. H.Love
President and
Chief Executive Officer

August 8, 1977

HECLA MINING COMPANY

Consolidated Statements of Loss (Unaudited)

For the Six-Month Periods Ending June 30, 1977 and June 30, 1976

	SIX MONTHS ENDED	
	June 30 1977	June 30 1976 (Note)
Income:		
Sales of metals and concentrates	$ 29,182,750	$ 14,142,429
Net gain on sale of stocks held for investment	578,313	238,463
Dividend, interest and other income	119,802	78,136
Equity in net (loss) of Granduc Mines, Limited	(352,100)	(206,100)
	29,528,765	14,252,928
Costs and Expenses:		
Cost of sales and other expenses not shown separately	27,664,218	12,808,540
Exploration	618,000	612,000
Property and excise taxes	1,387,071	869,148
Depreciation, depletion and amortization	2,342,344	1,100,741
Interest on bank loans	2,089,353	1,767,327
Less - interest capitalized		(850,724)
	34,100,986	16,307,032
Net (loss) from continuing operations before income taxes	(4,572,221)	(2,054,104)
Estimated taxes on income		
Currently payable	73,900	44,700
Deferred	(2,101,700)	(933,700)
	(2,027,800)	(889,000)
Net (loss) from continuing operations	(2,544,421)	(1,165,104)
Discontinued operations:		
Income from operations of Ace Concrete Co. (less applicable Income Taxes of $4,400)		36,895
Net (loss)	$ (2,544,421)	$ (1,128,209)
Average shares outstanding	6,988,714*	6,988,714**
Net income (loss) per share		
Continuing operations	$ (0.36)	$ (0.17)
Discontinued operations		.01
	$ (0.36)	$ (0.16)
Note: Restated to reflect year end adjustments		
Average metal prices:		
Silver - (per ounce, Handy & Harman, N.Y.)	$ 4.62	$ 4.33
Lead - (per pound, M.W. U.S. Producer)	29.93c	21.01c
Zinc - (per pound, Prime Western delivered)	36.26c	37.02c
Copper - (per pound, M.W., U.S. Producer, refined)	70.16c	66.45c

* Adjusted to reflect shares issued pursuant to the 2% stock dividend paid August 5, 1977 to shareholders of record May 20, 1977.

**Adjusted to reflect shares issued pursuant to the 2% stock dividends paid August 6, 1976 and August 5, 1977.

HECLA MINING COMPANY

BOX 320

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HECLA MINING COMPANY
1977 ANNUAL REPORT

HECLA MINING COMPANY
1977 ANNUAL REPORT

Annual Report
of the Directors of
Hecla Mining Company
for the year ended
December 31, 1977

At year end 1977
Shareholders of Record 15,287
Employees 864

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Annual Meeting

The annual meeting of shareholders will be held at the Ridpath Hotel, Spokane, Washington, on Wednesday, May 3, 1978, at 9 a.m., Pacific Daylight Time.

Financial Highlights

	1977	1976	1975
Sales	**$ 48,477,878**	$34,044,158	$25,425,333
Net income (loss)	**$(13,597,400)**	$ (5,438,215)	$ 5,953,699
Net income (loss) per share (1)	**$(1.95)**	$(0.78)	$0.85
Stock dividends per share	**2%**	2%	2%
Shares of capital stock outstanding at end of period	**6,988,714**	6,851,680	6,717,334

Note: (1) On weighted average of shares outstanding and adjusted to reflect 2% stock dividends paid.

TO THE SHAREHOLDERS OF HECLA MINING COMPANY

The worst year in the copper industry since the 1930's, in terms of market price as related to production costs, resulted in Hecla Mining Company's poorest year since its incorporation in 1898. However, good results were obtained in north Idaho operations, and exploration on our Utah uranium property was very encouraging.

The Company's consolidated net loss for the year 1977 was $13,597,400, or $1.95 per share, as compared to a net loss of $5,438,215, or $0.78 per share for the year 1976. Earnings per share in both years have been adjusted for the 2% stock dividend paid in 1977.

The net loss for 1977 was attributable to (1) Lakeshore mine operating losses, (2) equity in the 1977 net loss of Granduc Mines, Limited, and (3) a writeoff of our investment in Granduc Mines, Limited.

Hecla's operations in north Idaho were generally normal throughout the year at both the Lucky Friday mine and the Star-Morning Unit. A labor strike at The Bunker Hill Company's plants necessitated stockpiling of zinc concentrate from the Star-Morning Unit area from May 6 to November 7, 1977, and it will be several months before this inventory can be worked off. At the Sunshine mine, a year-long strike was settled on March 14, 1977, and the Company realized income from its 33.25% interest in the Sunshine Unit Area during the last nine months of the year. Production at this operation is now at normal rates.

In late 1969, Hecla began development of the Lakeshore copper mine in Arizona, as operator under a 50-50 partnership agreement with El Paso Natural Gas Company. A completely integrated mining and metallurgical facility was constructed and became operational for accounting purposes on April 1, 1976. However, because of large losses resulting from low copper prices, operations were suspended in early September 1977. The suspension will continue until conditions in the copper industry justify a resumption of operations. Hecla's total investment in the Lakeshore mine on December 31, 1977 was $102,605,000, excluding working capital.

Hecla's share of the net loss from the Lakeshore mine in 1977 was $13,413,000, including depreciation and amortization charges of $4,071,000 and interest cost of $4,679,000.

The Lakeshore mine is a viable property based upon the historical ratio of copper price to costs, but will not generate a profit at today's severely depressed prices. Unfortunately, it is not known when copper prices will return to a normal level. World stocks of copper are very high, and it may be two or three years before demand exceeds supplies. In the meantime, the cost of maintaining the property on stand-by basis is substantial. Additionally, it would be advantageous to do certain mine development work and construct a solvent-extraction electrowinning plant in preparation for resumption of operations. We cannot afford these expenditures and are therefore seeking others who can assist in financing the operation.

The substantial losses at the Lakeshore mine have resulted in a serious drain on the Company's financial resources, and during the fourth quarter of 1977 it was necessary to sell the GWU note, (discussed below) and to reach an agreement with the lending banks to amend the Credit Agreement. The credit line was increased from $53,000,000 to $55,000,000, the first payment of principal of $5,500,000 was deferred from December 31, 1977 to July 1, 1978, and provision was made to defer the payment of interest for the first quarter of 1978, due March 31, 1978, to June 30, 1978, if that becomes necessary. (All interest payments due under the Credit Agreement through year-end 1977 were paid.)

Hecla must resolve its financial problems by easing the burden of Lakeshore Mine expenditures and by reducing the short-term debt servicing requirements under the Credit Agreement with the banks. To assist management in this effort, the investment banking firm of Kuhn Loeb & Co. Incorporated (now Lehman Brothers Kuhn Loeb Incorporated) was engaged on August 31, 1977. Although extensive efforts have been made, no definitive arrangements

have been reached at time of writing this report.

Hecla's equity in the net loss of Granduc Mines, Limited for the year 1977 was $802,800, as compared to equity in the net loss of $406,400 for 1976.

The writeoff of the carrying value of our investment in Granduc Mines, Limited resulted in an additional charge to 1977 operating results of $5,560,483. This action followed announcements by the lessees (ASARCO and Newmont) of the 1977 writeoffs of their remaining interest in the Granduc mine joint venture, and a subsequent announcement by Granduc Mines, Limited that it was writing down the mining properties of that company to a nominal value of $1, and writing off the unamortized balance of mine development and preproduction expenditures.

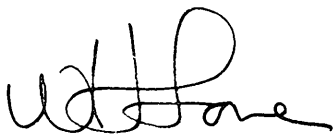
On March 18, 1977, Hecla sold its common stock holdings in Sunshine Mining Company to Great Western United Corporation in exchange for a promissory note with a face value of $3,152,400 and bearing interest at 130% of the prime rate. A capital gain of $578,313 was recorded in the second quarter of 1977 for this transaction. In late 1977, the note was sold for $2,600,000, plus accrued interest, resulting in a loss of $552,400 in the fourth quarter. (See Note (4) to Financial Statements.)

Exploration drilling on Hecla's Lisbon Valley leases, under a 50-50 joint venture with Union Carbide Corporation, was encouraging, with 44 exploratory drill holes being completed during 1977. While several holes are considered to be of ore grade, an additional large number of drill holes must be completed before the importance of this uranium-vanadium prospect can be accurately evaluated.

At the regular meeting of the Hecla Board of Directors in November, the Directors reluctantly accepted the resignation of Mr. W.B. Warren, Executive Vice President and Treasurer, The El Paso Company, which owns a 16.7% capital stock interest in Hecla. Mr. Warren served from May 1972. The Directors of Hecla sincerely appreciate the valuable contribution of Mr. Warren during his tenure.

A description of Hecla's exploration and development activity, mining operations and interests, production analyses, metal markets and prices, and financial analyses are set forth on the following pages of this report.

We are grateful to Hecla's shareholders for their continued support, and particularly to our employees for their loyalty, skill, and unstinting efforts on behalf of the Company.



W.H. Love
President

February 13, 1978

DESCRIPTION OF EXPLORATION AND DEVELOPMENT ACTIVITY

During 1977, Hecla's exploration efforts were directed mainly to the western United States and western Canada in areas considered favorable for the occurrence of gold, silver, uranium, copper-molybdenum, lead, and zinc deposits.

The Company's principal exploration office is at the corporate headquarters in Wallace, Idaho. Other exploration offices are maintained in Reno, Nevada; Denver, Colorado; and Vancouver, British Columbia.

Expenditures on property examinations and exploration and development related to nonproducing properties amounted to $1,335,000 in 1977 as compared to $1,303,000 in 1976 and $1,149,000 in 1975. These figures include capitalized development expenditures of $154,000, $55,000 and $43,000 respectively, on the Liard-Schaft Creek copper-molybdenum property in British Columbia.

Expenditures on exploration projects conducted from North Idaho operations accounted for $422,000 of the total 1977 expenditures.

Exploration drilling was undertaken on Hecla's Lisbon Valley, Utah leases under a 50-50 joint venture with Union Carbide Corporation. The initial drilling program was completed in May with favorable results, and a second-stage program was started in November and is still in progress. A total of 44 exploratory drill holes were completed during the year. Several of the holes encountered uranium-vanadium mineralization of probable ore grade, but much additional drilling is required before the importance of the project can be fully evaluated.

In the Coeur d'Alene District of Idaho, Hecla's exploration and development projects included the D.I.A., Abot North, and West Independence properties in the Lucky Friday and Star-Morning mine areas near Mullan, the Chester Area of the Sunshine Mine, and the Consolidated Silver property in the Silver Belt west of Wallace.

The D.I.A. project covers portions of the Gold Hunter, Independence and Abot properties lying north and west of the Lucky Friday Mine. The properties are being explored from a long northerly crosscut on the Lucky Friday Mine 4050' level. During 1977, the D.I.A. crosscut was extended 1,041 feet to completion at a point beneath the old Gold Hunter Mine where it exposed the downward extension of the Gold Hunter mineralized zone. The zone in the crosscut is approximately 200 feet wide and contains numerous narrow but widely spaced veins containing good values in silver, lead and zinc. A west drift was started near the central part of the zone and was advanced 390 feet by year-end. Exploration of the zone to the east of the D.I.A. crosscut is also planned for 1978. Results thus far are encouraging, but additional lateral exploration is needed before the significance of the zone on the 4050' level can be evaluated.

The West Independence property is being explored from the 7300' level of the Star-Morning Mine. The East lateral advanced 529 feet to completion, and 3,915 feet of diamond drilling in 4 holes were completed during the year. The lateral and diamond drilling have explored a broad shear zone which is the easterly expression of the East Morning vein-fault in the West Independence property. No significant mineralization has been found thus far, and one or two additional holes from the lateral will complete the program.

Asarco Incorporated's lease and operating agreement on the Consolidated Silver property was terminated on December 31, 1976. Hecla's participation was also terminated, but Hecla maintains an interest in the property through its ownership of 50.1% of the outstanding common shares of Consolidated Silver Corporation. The property was held on a maintenance basis during 1977, and Consolidated Silver is attempting to find other parties who might be interested in a further work program.

The Chester Area is a strip of ground 400 feet wide and approximately 1,500 feet in length, adjoining the Sunshine

Mine on the east, and is leased to the owners of the Sunshine Unit Area. Hecla owns a 54.2% stock interest in Chester Mining Company but does not participate as a shareholder in dividends paid by Chester. In lieu thereof, Hecla receives royalty income directly from the owners of the Sunshine Unit Area. There are no significant known reserves remaining in the Chester Area, and future production will depend on results of deeper development. The Sunshine 5400' level East drift has been extended into the area a short distance and will be continued through the length of the area following completion of other required development in the Sunshine Unit Area.

In Nevada, the Ruby Hill property at Eureka continued on a standby basis during 1977. The property is leased by Hecla Mining Company, Cyprus Exploration Company, Richmond-Eureka Mining Company, and Silver Eureka Corporation, with Hecla as the operator.

Investigation of several areas in western Canada was carried out during the 1977 field season. One hole was drilled to a depth of 2,113 feet at the Liard-Schaft Creek copper-moly property in northern British Columbia, and geologic studies were continued. Additional fill-in drilling and bulk sampling is needed, but this work is not presently scheduled.

Diamond drilling and geologic studies were continued on copper, silver and gold properties in the southwest. Investigations of areas having potential for precious and base metals will be continued in the western states.

MINING OPERATIONS AND INTERESTS

LUCKY FRIDAY MINE

Coeur d'Alene District — Idaho

Hecla's wholly-owned Lucky Friday mine produced 182,412 tons of ore assaying 14.73 ounces of silver per ton, 10.57% lead, and 1.38% zinc in 1977, compared with 186,520 tons of ore assaying 14.41 ounces of silver per ton, 10.91% lead, and 1.47% zinc in 1976. Calculated ore reserves at year-end were 510,000 tons compared with 475,000 tons at the end of 1976.

Operating costs during 1977 increased about 13 percent, and smelting treatment charges were up 10 percent. However, the cost increases were more than offset by increases in the price of lead and silver. The price of lead rose from an average of 23.1¢ per pound in 1976 to an average of 30.7¢ per pound in 1977, and silver increased from an average of $4.35 per ounce in 1976 to an average of $4.62 per ounce in 1977. The price of zinc dropped from an average of 37¢ per pound in 1976 to an average of 34.4¢ per pound in 1977, but had little effect since the production of zinc at Lucky Friday is small in comparison to that of silver and lead.

The continued development on the west end of the Lucky Friday vein on both the 4050 and 4250 foot levels has been very encouraging. The ore has extended into the Hunter Ranch property where production is owned equally by Day Mines, Inc., and Hecla. The silver content in the westerly section of the vein is considerably greater than the mine average.

The laterals and crosscuts on the 4450' level which are required for mining of the vein are now about 90% completed. Five crosscuts were completed through the vein, and raises are being driven in preparation for subdrifting. The ore in the vein exposed in the crosscuts is comparable in width and grade to the level above.

The main shaft was deepened to a point 262 feet below the 4660' level. The 4660' level station and pockets are nearly completed, and excavation of the 4875' level station has been started.

The capacity of the existing main shaft and hoisting facilities are limited to use above the 5100' level. Therefore, a new offset shaft located approximately 550 feet southwest of the present shaft has been planned to facilitate the mining of ores below the 5100' level to a depth of 9,700 feet. A new hoist for the offset shaft will be installed on the 4660' level, and the 4875' level will be used for transfer of ore, waste and supplies.

The present 3-year agreement between Hecla and the United Steel-

workers of America with respect to its Lucky Friday mine employees expires on March 2, 1978. Negotiations for a new agreement are scheduled to start in February.

STAR-MORNING UNIT AREA

Coeur d'Alene District — Idaho

Hecla is the operator of the Star-Morning Unit Area. Production from the mine is owned 30% by Hecla and 70% by the Bunker Hill Company. Hecla also receives a small royalty on ores mined from the Morning section of the mine.

The mine produced 293,466 tons of ore during 1977, compared with 282,037 tons in the preceding year. Hecla's share of the 1977 production was 88,040 tons of ore assaying 2.72 ounces of silver per ton, 5.43% lead, and 6.23% zinc, compared with 1976 production of 84,612 tons of ore assaying 2.98 ounces of silver per ton, 5.61% lead, and 6.05% zinc. Hecla's 30% share of the computed ore reserves was 290,000 tons at the end of 1977 as compared to 344,000 tons at the end of 1976.

Operating costs were only slightly above 1976, but smelter treatment charges were up nearly 22 percent. The reduction in the price of zinc essentially offset all of the benefits gained from the increases in the price of lead; therefore, 1977 results were less favorable than the previous year.

Production from the several Star-Morning veins was maintained at a high level throughout the year with principal production coming from the deeper levels of the mine. Stope preparation on the 7700' level was completed early in the year, and development is now in progress on the 7900' level. The 7900' level main haulage crosscut has been completed through the Morning East, Intermediate and Main veins, and the development lateral has been started.

A strike at the Bunker Hill Company's plants at Kellogg, Idaho, which started on May 6, was settled on September 19, 1977. During the strike, lead concentrate from the Unit Area was treated by the Bunker Hill smelter. However, it was necessary to stockpile zinc concentrate from the Star-Morning Unit Area, and shipment of zinc concentrate did not resume until November. It is not known when the inventory of stockpiled zinc concentrate can be processed.

As stated in the 1976 Annual Report, the Company submitted to arbitration a dispute with The Bunker Hill Company concerning the concentrate sales agreements covering Star-Morning Unit Area concentrate production. The dispute involved an increase in smelting charges which was unilaterally imposed by Bunker Hill in mid-year 1975 and which materially affected revenue. The arbitrator determined that the dispute was arbitrable and that a fiduciary relationship exists between the parties. In late 1977, the arbitrator rendered an award which, in principle, holds that the former concentrate sales agreement was effective until January 1, 1976, after which the terms of Bunker Hill's proposal should become effective. Hecla has recorded its revenue from the operation since mid-1975 on the basis of Bunker Hill's proposal.

SUNSHINE UNIT AREA

Coeur d'Alene District — Idaho

Sunshine Mining Company is the operator of the Sunshine Unit Area which produces the ore owned by Hecla Mining Company, Sunshine Mining Company, and Silver Dollar Mining Company. Hecla's 33.25% share of Unit Area production was 44,024 tons of ore assaying 24.36 ounces of silver per ton in 1977, compared with 13,447 tons of ore assaying 24.65 ounces of silver per ton in 1976. Hecla's share of the estimated Unit Area ore reserves at year-end was 284,000 tons, compared with 295,000 tons at the end of 1976.

In late 1976, Hecla joined a committee formed for the purpose of effecting a change in Sunshine Mining Company's management. In March 1977, Hecla sold the shares of Sunshine Mining Company stock that it had owned for a number of years to Great Western United Corporation, who purchased the stock for the purpose of acquiring control of Sunshine Mining Company. In October 1977, the managements of Sunshine and Great Western reached an agreement pursuant to which Great Western subsequently acquired additional common stock of Sunshine to increase their ownership to approximately 28% of Sunshine's outstanding stock, placed three of its officers on the Board of Directors of Sunshine and named new corporate officers, including the chief executive. The sale of Hecla's shares of Sunshine Mining Company stock did not affect, in any way, Hecla's 33.25% ownership of the Sunshine

Unit Area.

The Sunshine mine, which was closed one year by a labor strike which started on March 11, 1976, resumed operations on March 14, 1977. The closure of the mine by the labor strike was costly to Hecla inasmuch as the company had to bear its share of standby costs at the mine in addition to loss of revenue from the operation during the work stoppage.

Principal development work during the year was on the Copper vein where an additional 150-foot length of ore was developed on the 4800' level. The total length of ore now developed on the Copper vein at this horizon is 1,030 feet. Stope preparation is underway with excavation started in six raises. On the 4600' level, a crosscut was driven to the Copper vein from the 4600 west lateral, and drifting is now progressing westerly on the vein. Plans for deeper development of the Copper vein on the 5000' level require a long westerly lateral to be driven from workings near the No. 10 shaft, and this work has now been started.

Considerable rehabilitation work has been done in the No. 10 shaft below the 5400' level in order to resume development of the 5600' level, which is needed in order to maintain constant production in the future.

In March 1974, Silver Syndicate, Inc., filed a suit against the Sunshine Unit Area owners claiming that Syndicate owned 50% of the ores in the 625, H and J veins in the Sunshine mine west of a dividing plane established by an agreement in 1943, and further claiming that Hecla and Sunshine conspired to withhold these ores. In 1975, Sunshine filed a cross complaint against its Unit partners, Hecla and Silver Dollar, claiming that Sunshine owned 100% of these ores. In Hecla's answer, it has claimed ownership of 33.25% of the ores in question regardless of the outcome of the Syndicate litigation. In November 1975, the issue of Syndicate's ownership was tried, and on January 22, 1976, the trial court rendered a decision in favor of Syndicate. Hecla, Sunshine and Silver Dollar have appealed this decision to the Idaho Supreme Court. It is not known when oral argument on this appeal will be heard. The second and third portions of the trifurcated case are not expected to come to trial until after decision of the Idaho Supreme Court. Hecla has not reflected any income from the disputed ores, but failure to prove a proportional ownership of such ore in Hecla might have a material bearing on future results to be reported from Hecla's share of Sunshine Unit Area operations.

In July 1975, Sunshine Mining Company brought suit against Hecla and Silver Dollar Mining Company claiming that Sunshine has incurred certain expenses for the No. 12 shaft and that its Unit partners are obligated to pay their proportional share of these expenses (33.25% in the case of Hecla) plus interest. Hecla's answer and counterclaim states that Hecla should not be charged for the costs of the No. 12 shaft on the basis that its principal purpose is for development of properties of other companies who have separate agreements with Sunshine. Hecla also contends that certain Unit Area charges by Sunshine were and are improper, and has demanded an accounting with respect to these items. Since 1958, the Unit Area partners have paid the entire costs of certain facilities and mine openings within the Unit Area including the main No. 10 production shaft. Hecla claims that Sunshine does not have the right to use these facilities and openings for any purpose other than Unit Area operations. The proceedings in this suit are still in the preliminary stages.

In June 1976, Hecla and Silver Dollar filed suit against Sunshine claiming that certain funds related to antimony sales by Sunshine were wrongfully withheld by Sunshine and asking for specific general and punitive damages. Sunshine subsequently counterclaimed against Hecla and Silver Dollar claiming that certain sums were owned by reason of certain facilities which Sunshine had placed in its new antimony plant which have altered the facts and that the contract should be reformed in order to allow Sunshine a greater profit from its Antimony Plant. In the Company's answer to the Cross Claim, the Company has alleged that the facilities were in fact contemplated by the Agreement. Since the filing of the Complaint by the Company, Sunshine has remitted the principal amount owing plus interest at 8%. A dispute still is present, however, as to the manner of calculating interest due. The proceedings in this suit are still in the preliminary stages.

In October 1976, Hecla filed suit against Sunshine in Superior Court in Spokane County, Washington, involv-

ing charges made by Sunshine related to the salary and related charges paid to Mr. C.E. Nelson, then President of Sunshine, which have been improperly charged to Sunshine Unit Area operations contrary to provisions of the Unit Area Agreement of 1958. Motions to dismiss this suit have been filed by Sunshine with the Superior Court, but no date has been set for the argument of these motions.

Management intends to pursue vigorously all of these matters of litigation in order to protect Hecla's rights and ownership and to obtain equitable treatment by Sunshine as the Unit operator.

LAKESHORE MINE

Pinal County, Arizona

Hecla and the El Paso Natural Gas Company are equal partners in this large copper mining project, with Hecla being the operator. The property is leased from the Papago Indian Tribe on a royalty basis.

A completely integrated mine and metallurgical facility began operations in January, 1976, and was considered operational for accounting purposes on April 1, 1976. Production continued until early September, 1977. It was suspended at this time because of financial losses resulting from the low copper price and because of an inventory build-up of cement copper precipitates resulting from strikes at receiving smelters. The suspension of operations continued through year end.

Hecla's after-tax share of the net loss from Lakeshore operations for the twelve months of 1977 was $13,413,000, including amortization and depreciation of $4,071,000, and interest expense of $4,679,000. (See Note 2 to the financial statements.) This compares with a net loss for the nine operational months of 1976 of $10,244,733, including amortization and depreciation of $3,136,000 and interest expense of $3,040,296. Hecla's investment in the Lakeshore facility at year end was $102,605,000, excluding working capital. (See Note 8 to the financial statements.)

Oxide ore production during the eight months of operation in 1977 was 1,271,000 tons containing 0.98% acid soluble copper. This compares with a production of 1,460,000 tons containing 1.03% acid soluble copper during the entire year of 1976, including the first quarter start-up period. Sulfide ore production during the eight-month period of 1977 was 1,216,000 tons at 0.91% copper, as compared with the full year 1976 production of 1,231,000 tons at 0.76% copper. Copper production during 1977 was 35,605 tons, as compared with the 1976 production of 28,378 tons. Of the 1977 copper production, 15,410 tons was from the treatment of custom concentrates purchased from others. During 1976 the production from purchased concentrates was 8,758 tons. Fifty percent of the indicated production each year was for Hecla's account.

The oxide mine continued to be a very satisfactory operation. The decline in the monthly production rate which occurred in late 1976 was reversed and the production rate during the operating months of 1977 averaged 7% higher than during 1976. The full production rate was exceeded during June, and during the three months immediately preceding the suspension of operating production averaged 92% of the design rate. Ore grade was about the same as in 1976.

We continued to experience difficulties in the sulfide mine. Although the average monthly production rate was up 26% as compared with 1976, and was continuing to improve, the average for the year was only about 66% of the design rate. The problem continued to be slow development of proper methods for control of this block caving operation. Ore grade improved substantially, reflecting both better grade control in mining and the planned normal progression of mining into higher grade parts of the tactite deposit.

The production rate of cathode copper from sulfide ore and purchased concentrate was up 47% over that of 1976 and the plant exceeded design capacity during the month of April. Some production difficulties were encountered during the summer when an abnormal combination of high temperatures and high humidity revealed a correctable design error in the roaster gas cooling system.

The production rate of copper in precipitate, from both oxide and sulfide ore, was up 54%. The quality of the product was disappointing, however. A facility to redissolve some of this product and convert it to cathode, utilizing some excess tankhouse capacity, was built early in the year in anticipation of a strike at smelters to which this product is shipped. In spite of this action, a sub-

stantial inventory of this precipitate accumulated by September. Most of it was sold by year end, however.

Substantial reductions in operating costs were achieved during the year in spite of the continued increases in wage rates and in the costs of materials and supplies. Direct unit mining costs were reduced 21% and processing costs 19%, as compared with the operating period of 1976. Total operating costs per pound of metal produced, exclusive of concentrate purchase costs, were reduced 30%. These reductions reflect the higher grade of sulfide ore, the higher production rates, and conscientious efforts of the operating staff to improve efficiency.

In spite of the improvements in operating performance achieved, the deterioration of the copper price which began in late April caused such large operating losses that a decision was made to suspend operations early in September. The suspension of operations led to the lay-off of about 1500 people. Key technical and supervisory staff have been retained and are accomplishing maintenance work and modifications to improve operating efficiency upon the resumption of operations.

There were a number of other significant accomplishments during the year that will be beneficial when mining is resumed. Physical facilities were improved by the installation of a tailing thickener and related equipment for the reclamation of a large portion of process water. This installation was nearly completed at the time of suspension of operations. Freedom from environmental problems for the foreseeable future was assured by issuance of an unrestricted operating permit by the Arizona air pollution control regulatory agency. Our non-union operating status was continued when we successfully appealed an adverse decision of the National Labor Relations Board. A new ten-year lease agreement was concluded with the Papago Indian Tribe.

GRANDUC MINES, LIMITED (N.P.L.) British Columbia

Hecla owns 35.4% of the outstanding common stock of Granduc Mines, Limited, all of the 357,000 remaining outstanding shares of redeemable preferred stock, unsecured 5½% notes which were issued by Granduc in exchange for the par value of preferred shares purchased from Hecla in 1974, and unsecured notes for unpaid dividend equivalents accrued to date of purchase. Granduc Mines, Limited, owns the Granduc Mine, located north of Stewart, British Columbia, which it leases to Newmont Mines, Limited, a wholly-owned subsidiary of Newmont Mining Corporation, and ASARCO Incorporated.

Mining and milling operations of the Granduc Mine were begun in late 1970 with a reduced rate commencing in early 1975 and again in 1976 to minimize cash losses due to sharply lower world copper prices and rapidly increasing costs. By the end of 1977 a total of 13,238,000 tons of ore had been milled, and ore reserves at the end of 1977 were estimated as 15,900,000 tons of ore averaging 1.65% copper before dilution, compared with 17,958,000 tons of ore averaging 1.68% copper before dilution at the end of 1976. These reserves include the ore blocks below the 2600' access tunnel level. An exploration program involving 2000 feet of drifting and 5000 feet of diamond drilling on 2600' level has been started to further test and evaluate a mineral zone exposed by surface diamond drill holes in an area north of the mine.

Results from 1977 operations were unsatisfactory because of the low copper price, and in December 1977 the Lessees of the Granduc Mine announced that they were writing off their remaining interests in the joint venture Granduc Mine because of poor performance resulting from a combination of factors, including lower international copper prices, rising fuel and other costs. Mining operations will continue until the presently developed ore reserves are exhausted.

Based on the foregoing, Granduc Mines, Limited, wrote down the mining properties of that company to a nominal value of $1 and wrote off the unamortized balance of mine development and preproduction expenditures.

In view of these steps taken by the Lessees of the Granduc Mine and the owner of the Mine, Granduc Mines, Limited, Hecla has written off the carrying value of its investment in Granduc Mines, Limited, resulting in a charge to 1977 operations of $5,560,483.

Further details of pertinent provisions of the lease and financial results are set forth in Note 7 to the Financial Statements.

METAL MARKETS AND PRICES

SILVER

The Handy & Harman average price was $4.62 per ounce in 1977, compared to $4.35 per ounce in 1976, and $4.42 per ounce in 1975. During 1977 the low was $4.30 per ounce on January 11; the high was $4.96 on March 21; and at December 30 the Handy & Harman price was $4.78 per ounce.

In 1977, U.S. mine production is estimated at 37.5 million ounces with industrial consumption of 165 million ounces, compared to 34.3 million ounces of mine production and 170.6 million ounces of consumption in 1976. Commodity exchange inventories in New York, Chicago and London increased from 144.3 million ounces to 149.9 million ounces during the year.

Preliminary figures for 1977 indicate Free World consumption was 411 million ounces and new mine production was 254 million ounces. The resulting 157-million-ounce primary deficit was filled by salvage and aboveground inventories. Comparable revised figures for 1976 were Free World consumption of 429.2 million ounces and new mine production of 246.7 million ounces, resulting in a 182.5-million-ounce primary deficit.

Silver has the characteristic of being relatively inelastic in supply because more than three-quarters of mined silver is a by-product from copper and lead mines. On the demand side, silver's specialized uses such as in photography, electronics, and plating, where value of silver is only a small part of total product cost, are relatively unaffected by price.

Congress again rejected sale of silver from the 139.5-million-ounce strategic reserve. Hecla Mining Company believes that silver and other metals that are imported should be purchased for national security and that the strategic stockpile should be retained intact.

COPPER

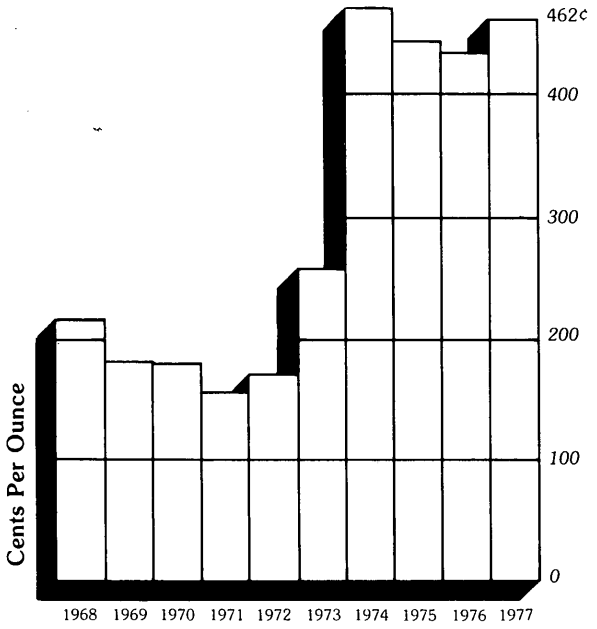
The domestic producer price for cathode copper was 65¢ per pound at the beginning of the year, increasing to 68¢ in late January, to 71¢ on March 4, and to 74¢ on March 22, which was the high for the year. On April 27 the price decreased to a split price of 71-74¢, which continued to May 24 when the price declined to 71¢. On June 1 there was again a split price of 68-71¢, and on July 7 the price dropped to 68¢. On July 20 the price decreased to a split price of 65-68¢, and on July 25 declined to 65¢. On August 18 there was a split price of 63-65¢, and on August 23 the price decreased to 60¢. On December 12 there was a split price of 60-63¢, and on December 22 the price increased to 63¢, which was the price at the close of the period. The average 1977 Metals Week producer cathode price was 66.21¢, as compared to 68.98¢ in 1976 and 63.25¢ in 1975.

On the New York Commodity Exchange (COMEX) the copper spot price began the year at 63.6¢ per pound, reached a high of 71.8¢ on March 18, a low of 51.8¢ on August 15, recovering to 59.5¢ at year-end, and averaged 60.3¢ in 1977, as compared to 64.1¢ in 1976.

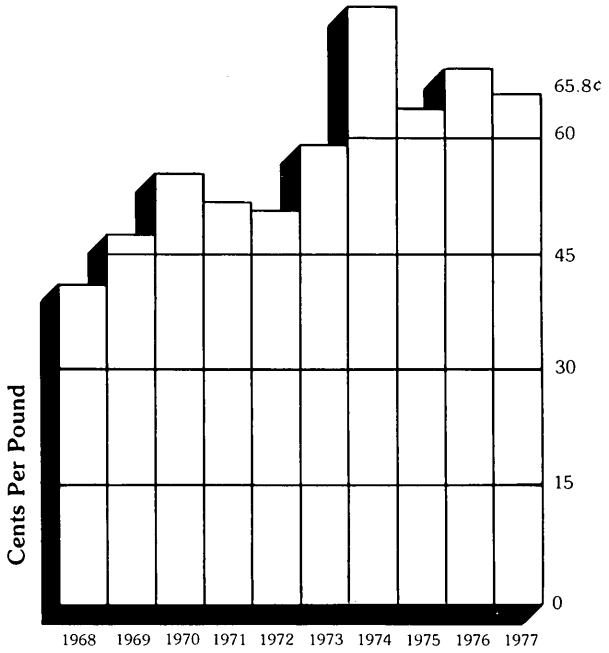
Notable events during the year were the U.S. copper strike, mine closures in the U.S. and Canada, lack of closures in the exporting nations, and inventory buildup. COMEX and LME stocks increased 3% to reach a record high of 891,157 short tons, while 1977 proved to be the third year of the most depressed period for copper (as related to cost) in this century.

A sustained price improvement can be expected when production from government-controlled mines in Chile, Peru, Zambia, Zaire, and elsewhere is curtailed or consumption increases to reduce excess supplies.

There will be some U.S. mine relief if a 7 to 15¢ pollution tariff is assessed against imports, quotas are imposed on imports, or if copper is purchased for the U.S. strategic stockpile.



Silver New York Handy & Harman



Copper Wirebars F.O.B. Domestic Refinery

LEAD

The domestic lead price was 25.5¢ per pound at the beginning of the year and increased in steps to 31¢ per pound on February 28, to 32¢ on October 31, and to 33¢ on December 7, which was the year-end price. The average 1977 price was 30.70¢ per pound, compared to 23.10¢ per pound in 1976, and 21.53¢ in 1975.

Estimated 1977 U.S. lead consumption in all forms increased to 1,514,000 tons as compared to 1,490,000 tons in 1976. U.S. 1977 supply was about 1,578,170 tons, which included 589,000 tons of recoverable mine production, 723,000 tons recovered from secondary production, 237,000 tons of net imports, and 29,170 tons of inventory reduction. This compares with 1,469,615 tons in 1976 which included 609,546 tons of mine production, 725,198 tons of secondary production, 171,871 tons of net imports, and a 63,000-ton decrease in inventory.

Lead stocks at U.S. primary smelters and refineries changed from 45,646 tons at year-end 1976 to 16,476 tons at the end of 1977, considered a very low level of stocks. No sales were made from the U.S. government 601,000-ton stockpile. The stockpile goal of 865,000 tons announced October 1, 1976 was reaffirmed on October 7, 1977.

Some loss in consumption for tetraethyl use has been more than balanced by the growing use of lead in batteries.

Lead producers and users are under pressure from government agencies to reach impracticable and costly further reductions in vehicle and plant emissions as well as working environments. The long-term effect of these regulatory influences on the lead market cannot yet be assessed.

ZINC

The domestic METALS WEEK prime western delivered zinc price was 37¢ per pound at the beginning of the year, decreased to 34¢ on May 17, and moved to a split price on October 4 of 31-34¢; on November 7 the price further decreased to 30.5-31¢, and on November 21 the price was decreased to 30.5¢, where it closed the period. The average was 34.39¢ for 1977, as compared to 37.01¢ per pound in 1976 and 38.96¢ in 1975.

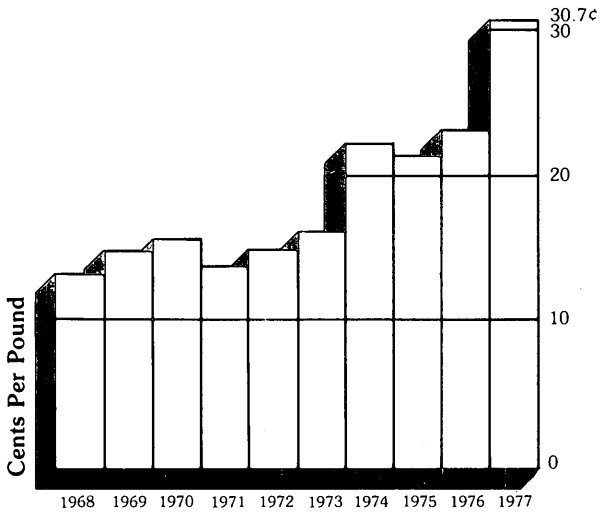
Estimated U.S. zinc consumption in all forms was 1,446,460 tons which was 6.2% less than the 1,541,890 tons consumed in 1976. U.S. slab zinc consumption decreased 1% to 1,125,300 tons, of which 463,000 tons (recoverable) were from newly-mined U.S. production and the balance from secondary production, imports, and from 44,200-ton inventory decrease. This compares to 1,134,141 tons of slab zinc consumed in 1976 and newly-mined domestic production of 484,513 tons of recoverable zinc.

In 1977, net zinc imports for consumption in all forms decreased 24% to 660,500 tons from 865,900 tons in 1976.

Zinc smelter stocks increased from 117,000 tons to 117,500 tons during 1977. Consumer slab zinc stocks were reduced from 121,200 tons to 76,500 tons during the first 11 months of 1977. Zinc remains in plentiful supply, and the market is weak as evidenced by the 21.6¢ LME price which was 8.9¢ under the U.S. producer price (on February 2, 1978).

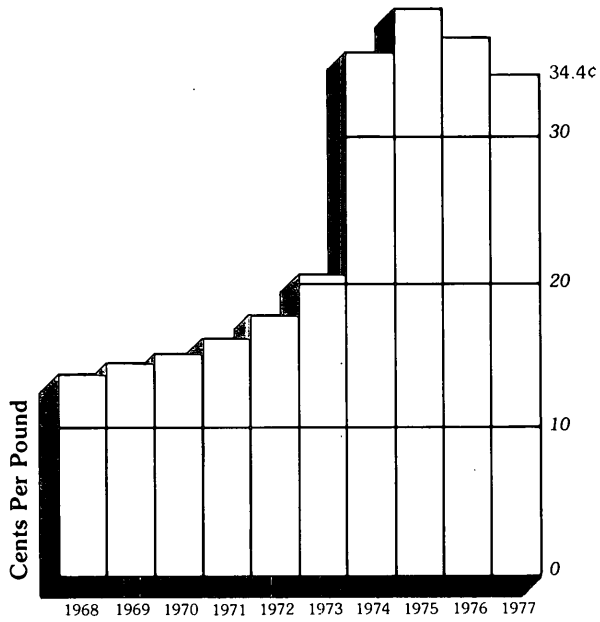
Trading in zinc future contracts started on COMEX in February, 1978.

No zinc sales were made from the 374,159 tons in the strategic reserve. The goal of 1,313,000 tons was reaffirmed on October 7, 1977.



Lead

"New York" prior to December 1971 "Delivered" or U.S. Producer thereafter.



Zinc

Prime Western East St. Louis through January 1971; U.S. Prime Western thereafter.

PRODUCTION ANALYSIS

1977 production of metals contained in products was as follows:

	Tons of Ore Processed	Ounces Gold	Ounces Silver	Tons Lead	Tons Zinc	Tons Copper
Lucky Friday Mine	182,412	1,367	2,636,447	18,972	2,355	334
Sunshine Unit Area (1)	44,024		1,077,220			219
Star-Morning Unit Area (1)	88,040		226,428	4,542	5,223	
Lakeshore Mine (1)	1,350,014	881	35,830			17,802(2)
	1,664,490	2,248	3,975,925	23,514	7,578	18,355

(1) Reflects Hecla's share of production from these properties.
(2) Represents 10,097 tons from the mine and 7,705 tons from purchased concentrates.

The following table represents total production of metals contained in products for the past 5 years.

	Tons of Ore Processed	Ounces Gold	Ounces Silver	Tons Lead	Tons Zinc	Tons Copper
1973 (1)	295,462	1,271	3,853,939	23,202	7,074	438
1974	300,236	1,026	3,579,872	19,791	6,638	454
1975	319,927	1,245	4,172,037	22,223	6,602	535
1976 (1)(2)	1,563,862	1,847	3,233,688	24,581	7,484	14,531
1977 (1)	**1,664,490**	**2,248**	**3,975,925**	**23,514**	**7,578**	**18,355**

(1) The Sunshine Unit Area was closed because of a labor strike from March 11, 1973 to July 15, 1973, and from March 11, 1976 until March 14, 1977.
(2) Includes Hecla's 50% share of production from the Lakeshore Mine from January 1, 1976 to year-end.

AVERAGE METAL PRICES

		1977				
	1976	First Quarter	Second Quarter	Third Quarter	Fourth Quarter	Year
Silver - $ per oz. (Handy & Harman)	4.35	4.59	4.64	4.49	4.77	**4.62**
Lead - ¢ per lb. MW US Producer	23.10	28.85	31.00	31.00	31.96	**30.70**
Zinc - ¢ per lb. MW US P.W.	37.01	37.00	35.52	34.00	31.04	**34.39**
Copper - ¢ per lb. Metals Week cathode	68.98	68.50	72.39	63.53	60.40	**66.21**
Copper - ¢ per lb. COMEX - 1st position	64.07	66.43	63.10	55.08	56.57	**60.29**
Gold - $ per oz. (London Final)	124.84	138.93	145.52	145.95	160.47	**147.72**

PRICE RANGE OF HECLA STOCK

For the years ended December 31, 1977 and 1976:

	First Quarter	Second Quarter	Third Quarter	Fourth Quarter
1977 — High	15-3/8	14-3/8	11-5/8	9-1/8
— Low	11-1/8	10-3/4	8	6-3/4
1976 — High	17-5/8	17	15-3/4	13
— Low	13-3/4	13-5/8	10-5/8	10-5/8

Hecla Mining Company and Wholly Owned Subsidiaries

SUMMARY OF OPERATIONS

	Years Ended December 31				
	1977	1976	1975	1974	1973
	(in thousands except for per share amounts)				
Sales of concentrates and products (1)	**$ 48,478**	$34,044	$25,425	$25,028	$15,589
Income (loss) from continuing operations before income taxes	**(17,769)**	(11,159)	9,350	12,374	5,643
Provision (benefit) for income taxes	**(4,172)**	(5,227)	3,420	4,074	1,477
Income from discontinued operations, after applicable income taxes	**---**	494	24	141	69
Net income (loss)	**$(13,597)**	$(5,438)	$ 5,953	$ 8,441	$ 4,235
Average number of shares outstanding (2)	**6,989**	6,989	6,989	6,989	6,989
Net income (loss) per share					
Continuing operations	**$(1.95)**	$ (.85)	$ .84	$ 1.19	$ .60
Discontinued operations	**---**	.07	.01	.02	.01
	$(1.95)	$ (.78)	$. .85	$ 1.21	$ .61
Stock dividend	**2%**	2%	2%	2%	2%

Notes:

(1) Hecla and its wholly owned subsidiaries are engaged in mining, concentrating and processing of non-ferrous metal ores. During the past five years the percentage of total sales and revenues contributed by products were as follows:

	1977	1976	1975	1974	1973
Copper	**44.5%**	38.6%	0.9%	1.0%	1.0%
Silver	**31.8**	32.2	62.3	60.4	54.2
Lead	**21.0**	22.9	26.4	26.9	35.1
All others	**2.7**	6.3	10.4	11.7	9.7
	100.0%	100.0%	100.0%	100.0%	100.0%

(2) Adjusted to reflect the 2% stock dividends paid in August of each year.

MANAGEMENT'S DISCUSSION and ANALYSIS of THE SUMMARY of OPERATIONS

The increase in net loss for 1977 from 1976 was primarily attributable to the significant writeoff of the Company's investment in Granduc Mines, Limited coupled with an increase ($3,172,149) in net loss of the Lakeshore Mine. Other contributing factors included reduced income tax benefits being available in 1977 to offset deferred tax provisions of prior years, decreased gains on sale of securities and higher other expenses, partially offset by increased silver and lead prices at the Company's North Idaho operations and improved earnings at the Sunshine Unit Area at the Sunshine Mine which was closed by a labor strike form March 11, 1976 to March 14, 1977.

The net loss realized in 1976 as compared with the net income earned in 1975 was primarily attributable to the significant net loss ($10,240,833) of the Lakeshore Mine which was placed on an operational status on April 1, 1976, coupled with the adverse effect of the closure of the Sunshine Unit Area at the Sunshine Mine due to a labor strike which commenced March 11, 1976. Increased operating and smelter concentrate treatment costs incurred in 1976 were offset in part by increased production, improved average grade of ore mined, and improved lead prices realized at the Company's other North Idaho operations. There was also a decrease in the Company's share in net losses of 35.4% owned Granduc Mines, Limited, based on the equity method of accounting.

Hecla Mining Company and Wholly Owned Subsidiaries

CONSOLIDATED STATEMENTS OF OPERATIONS

For the Years Ended December 31, 1977 and 1976

	1977	1976
Income:		
Sale of concentrates and products	**$ 48,477,878**	$ 34,044,158
Gain on sale of securities (Note 4)	**25,913**	362,517
Interest and other income	**317,345**	160,461
Equity in net loss of Granduc Mines, Limited (Note 7)	**(802,800)**	(406,400)
	48,018,336	34,160,736
Costs and expenses:		
Cost of sales and other expenses not shown separately	**51,947,899**	39,174,554
Exploration	**1,181,189**	1,248,672
Property and excise taxes	**2,419,172**	1,856,448
Interest on bank loans	**4,678,993**	3,891,020
Less interest capitalized		(850,724)
Unusual item (Note 7):		
Write-off of remaining investment in Granduc Mines, Limited	**5,560,483**	---
	65,787,736	45,319,970
Loss from continuing operations before income tax benefits	**(17,769,400)**	(11,159,234)
Income tax benefits (Note 5)	**(4,172,000)**	(5,227,400)
Net loss from continuing operations	**(13,597,400)**	(5,931,834)
Discontinued operations (Note 12):		
Income from operations of Ace Concrete Co. (less applicable income taxes of $32,500)		35,305
Gain from sale of assets of Ace Concrete Co. (less applicable income taxes of $423,000)		458,314
		493,619
Net loss	**$(13,597,400)**	$ (5,438,215)
Net income (loss) per share:		
Continuing operations	**$(1.95)**	$(.85)
Discontinued operations		.07
	$(1.95)	$(.78)

The accompanying notes are an integral part of the financial statements.

Hecla Mining Company and Wholly Owned Subsidiaries

CONSOLIDATED STATEMENTS OF CHANGES IN FINANCIAL POSITION

For the Years Ended December 31, 1977 and 1976

	1977	1976
Use of working capital:		
Net loss from continuing operations	**$ 13,597,400**	$ 5,931,834
Items not requiring outlay of working capital in the current year:		
Depreciation, depletion and amortization	**(4,263,085)**	(3,339,235)
Decrease in deferred income taxes	**4,302,300**	5,326,700
Equity in net loss of Granduc Mines, Limited	**(802,800)**	(406,400)
Add: Gain on sale of securities, included in proceeds below	**25,913**	362,517
Write-off of investment in Granduc Mines, Limited	**(5,560,483)**	
Working capital used by continuing operations	**7,299,245**	7,875,416
Discontinued operations:		
Income from discontinued operations		(493,619)
Add: Gain on sale of assets of Ace Concrete Co. included in proceeds below		881,314
Increase in deferred income taxes		(455,500)
		(67,805)
Working capital used by operations	**7,299,245**	7,807,611
Other uses of working capital:		
Increase in current portion of notes payable to banks	**382,000**	798,000
Decrease in pension plan reserves	**258,364**	
Property additions		
Lakeshore	**1,341,476**	8,105,637
Other	**221,929**	381,030
Increase (decrease) in other assets	**21,090**	(11,006)
Total use of working capital	**9,524,104**	17,081,272
Source of working capital:		
Net proceeds from sales of securities (Note 4)	**2,600,000**	559,538
Proceeds from sales of property and equipment		1,986,487
Borrowings from banks	**3,820,000**	7,980,000
Increase in pension plan reserve		9,584
Other, net		202,244
Total source of working capital	**6,420,000**	10,757,853
Decrease in working capital	**$ (3,104,104)**	$(6,343,419)
Changes in components which increased (decreased) working capital:		
Cash	**$ (2,998,867)**	$(4,852,365)
Receivables	**(879,722)**	(1,174,189)
Inventories	**(1,557,070)**	3,128,819
Prepaid expenses	**35,471**	165,837
Accounts payable and accrued expenses	**2,999,942**	(2,632,978)
Current portion of notes payable to banks	**(382,000)**	(798,000)
Accrued taxes	**(321,858)**	(180,543)
Decrease in working capital	**$ (3,104,104)**	$(6,343,419)

The accompanying notes are an integral part of the financial statements.

Hecla Mining Company and Wholly Owned Subsidiaries

CONSOLIDATED BALANCE SHEETS

December 31, 1977 and 1976

ASSETS

	1977	1976
Current assets:		
Cash (Note 3)	**$ 2,037,055**	$ 5,035,922
Due from sales of products	**5,160,485**	4,498,042
Accounts and notes receivable	**642,466**	2,184,631
Inventories (Note 6)	**5,729,482**	7,286,552
Prepaid expenses	**449,465**	413,994
Total current assets	**14,018,953**	19,419,141
Investments and interests in mining properties:		
Granduc Mines, Limited (N.P.L.) (Note 7)		6,363,283
Marketable equity securities, at market (Note 4)		2,311,760
Other	**515,830**	515,828
Properties, plants and equipment, at cost, less accumulated depreciation, depletion and amortization (Notes 2 and 8)	**106,219,450**	108,919,133
Other assets	**285,819**	264,729
	$121,040,052	$137,793,874

The accompanying notes are an integral part of the financial statements.

Hecla Mining Company and Wholly Owned Subsidiaries

CONSOLIDATED BALANCE SHEETS

December 31, 1977 and 1976

LIABILITIES

	1977	1976
Current liabilities:		
Notes payable to banks (Note 3)	$ 5,500,000	$ 5,118,000
Accounts payable and accrued expenses	4,656,439	7,656,381
Accrued taxes	2,011,416	1,689,558
Total current liabilities	12,167,855	14,463,939
Notes payable to Banks (Note 3)	49,500,000	46,062,000
Deferred income taxes (Note 5)	7,741,853	12,044,153
Pension plan reserves (Note 10)	2,139,086	2,397,450
Total liabilities	71,548,794	74,967,542

SHAREHOLDERS' EQUITY

Capital stock, 25¢ par value:		
Authorized 12,000,000 shares: issued 1977, 6,988,959 shares: 1976, 6,851,925 shares (Note 9)	1,747,239	1,712,980
Capital surplus	28,273,073	26,611,200
Earnings retained in the business (Note 3)	19,473,666	34,767,198
Net unrealized loss on marketable equity securities (Note 4)		(262,326)
	49,493,978	62,829,052
Less, capital stock reacquired, at cost:		
245 shares	2,720	2,720
Total shareholders' equity	49,491,258	62,826,332
	$121,040,052	$137,793,874

The accompanying notes are an integral part of the financial statements.

Hecla Mining Company and Wholly Owned Subsidiaries

CONSOLIDATED STATEMENTS OF CHANGES IN SHAREHOLDERS' EQUITY

For the Years Ended December 31, 1977 and 1976

	Capital Stock Shares	Capital Stock Amount	Capital Surplus	Earnings Retained in the Business	Net Unrealized Loss on Marketable Equity Securities
Balances, December 31, 1975	6,717,578	$1,679,394	$24,471,527	$42,378,672	$(252,355)
Stock dividend, 2%	134,347	33,586	2,139,673	(2,173,259)	
Net loss for year				(5,438,215)	
Net change in unrealized loss on noncurrent marketable equity securities (Note 4)					(9,971)
Balances, December 31, 1976	6,851,925	1,712,980	26,611,200	34,767,198	(262,326)
Stock dividend, 2%	137,034	34,259	1,661,873	(1,696,132)	
Net loss for year				(13,597,400)	
Net change in unrealized loss on noncurrent marketable equity securities (Note 4)					262,326
Balances, December 31, 1977	$6,988,959	$1,747,239	$28,273,073	$19,473,666	$ ---

The accompanying notes are an integral part of the financial statements.

REPORT OF CERTIFIED PUBLIC ACCOUNTANTS
To the Board of Directors and Shareholders of Hecla Mining Company

We have examined the consolidated balance sheets of Hecla Mining Company and wholly owned subsidiaries as of December 31, 1977 and 1976, and the related statements of operations, changes in shareholders' equity and changes in financial position for the years then ended. Our examinations were made in accordance with generally accepted auditing standards and, accordingly, included such tests of the accounting records and such other auditing procedures as we considered necessary in the circumstances.

In our report dated February 8, 1977, our opinion on the 1976 financial statements was qualified as being subject to the ultimate realization of the carrying value of the Company's investment in Granduc. As explained in Note 7, the carrying amount of that investment has been charged to operations in the current year as required by generally accepted accounting principles. Accordingly, our present opinion as presented herein is different from that expressed in our report on the 1976 financial statements.

As described in Note 2, the Lakeshore Mine, a large copper ore deposit, suspended operations in October 1977 for an indefinite period of time as a result of the low level of copper prices. Without a significant increase in the current level of copper prices, it will not be possible for the Company to recover its investment in the property.

The accompanying financial statements have been prepared on a going concern basis. However, the ability of the Company to continue operations as a going concern is dependent on future developments, including, as described in Note 3, its ability to obtain sufficient funds to meet scheduled debt payments.

In our opinion, subject to the ultimate realization of the carrying value of the Company's investment in the Lakeshore Mine and the securing of adequate financing referred to in the preceeding paragraphs, the aforementioned financial statements present fairly the consolidated financial position of Hecla Mining Company and its wholly owned subsidiaries at December 31, 1977 and 1976, and the consolidated results of their operations, changes in shareholders' equity, and changes in financial position for the years then ended, in conformity with generally accepted accounting principles applied on a consistent basis.

Coopers & Lybrand

New York, New York
February 8, 1978

NOTES TO FINANCIAL STATEMENTS

1. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES:

Company's business — Hecla and its wholly owned subsidiaries are engaged in mining, concentrating and processing of non-ferrous metal ores. The Company's major customers for the products and concentrates are ASARCO Incorporated Southwire Company and Bunker Hill Company. Sales to these customers in 1977 are as follows:

ASARCO Incorporated	$ 8,371,631
Southwire Company	13,305,406
Bunker Hill Company	22,196,840
Others	4,604,001
	$48,477,878

Basis of consolidation — The consolidated financial statements include the accounts of the Company, its wholly owned subsidiaries and its proportionate share of the accounts of the joint ventures in which it participates.

Inventories — Inventories are stated at the lower of average cost or estimated net realizable value.

Investments — The Company follows the equity method of accounting for investments in common stock of companies 20% to 50% owned. Marketable equity securities are carried at the lower of cost or market. Investments not intended for resale or not readily marketable are included in other investments at cost.

Properties, plants and equipment — Properties, plants and equipment are stated at cost. Maintenance, repairs and renewals are charged to operations. Betterments of a major nature are capitalized.

Interest — Interest on loans from banks applicable to the Lakeshore Mine was capitalized as part of Project costs through March 31, 1976. The Lakeshore Mine was placed on an operational status on April 1, 1976, and interest expense subsequent to that date has been charged to operations; previously capitalized interest expense is being amortized by charges to earnings over the estimated life of the Mine.

Depreciation and depletion — Depreciation on the Lakeshore Mine is computed, generally, on a straight-line composite method over its estimated useful life. When depreciable assets are sold or otherwise retired from service, their cost, less amounts realized on sale or salvage, is charged or credited to the accumulated depreciation account. Prior to the date the Lakeshore Mine was placed on an operational status, depreciation was charged to deferred development costs. Depreciation on other properties is computed, generally, on the declining-balance method. Depletion is computed on a unit-of-production basis on estimated ore reserves.

Mine exploration and development — Exploration costs are charged to income as incurred, as are normal development costs at operating mines. Major mine development expenditures at operating properties and development expenditures at new mining properties not yet producing are capitalized and amortized, generally, on a unit-of-production basis determined in relation to estimated ore reserves.

Pension plans — The Company funds pension costs to the extent of actuarially computed current service costs plus amortization of prior service costs over a 10 to 30 year period.

Income taxes - Income taxes deferred arise principally from major mine development expenses which are deferred and amortized in the financial statements and deducted currently in the income tax returns. Investment tax credits are treated as a reduction of income tax expense in the year in which the assets to which they apply are placed in service if there is reasonable assurance that the credits will be realized. Investment credits arising in 1977 and 1976 were not taken into account in providing for taxes.

Net loss per share — Net loss per share is based on the weighted average number of shares of stock and stock equivalents (stock options) outstanding during the year. No stock equivalents are included in the computation for 1977 or 1976 as the stock options were anti-dilutive. Per-share amounts have been adjusted retroactively to reflect the 2% stock dividends paid in August of each year.

2. LAKESHORE MINE:

Hecla and El Paso Natural Gas Company each own a one-half interest in a large copper ore deposit in Arizona known as the Lakeshore Mine. El Paso owns 16.77% of Hecla's capital stock. Under the amended agreement with El Paso, which became effective as of January 1, 1973, El Paso provided all of the funds for development of the property from that date until they equaled certain defined expenditures contributed by Hecla through December 31, 1972. This equalizing occurred in early 1974, and since that time each party has contributed equally to further costs of developing, constructing and operating the property. In consideration for El Paso having agreed to make capital contributions earlier than originally anticipated, certain additional tax benefits, amounting to

$4,000,000, were allocated to El Paso.

The Lakeshore Mine was placed on an operational status on April 1, 1976. On September 4, 1977 operations of the Mine were suspended for an indefinite period due to losses resulting from the low level of copper prices. It is anticipated that the Lakeshore Mine will be returned to an operational status when copper prices and production costs return to a more normal relationship.

Hecla's share of the net loss from the Lakeshore Mine that is included in the accompanying financial statements is summarized as follows:

	Year Ended December 31, 1977	Nine Months Ended December 31, 1976
Sales and other income	$ 21,978,916	$ 13,154,528
Costs of production	33,897,505	24,669,565
Depreciation and amortization	4,071,000	3,136,000
Operating loss	(15,989,589)	(14,651,037)
Interest expense	4,678,993	3,040,296
Income tax benefits	(7,255,600)	(7,450,500)
Net loss	$(13,412,982)	$(10,240,833)

3. NOTES PAYABLE TO BANKS:

In December 1972, the Company entered into a Credit Agreement with certain major commercial banks. Under the Agreement, which was last amended as of October 1, 1977 the Company may borrow up to $55,000,000, which it has, to assist in financing Hecla's share of the costs to develop, construct and operate the Lakeshore Mine. The Credit Agreement requires the Company to maintain a defined consolidated net worth of $50,000,000, (before giving effect to the write-off of its investment in Granduc Mines, Limited as discussed in Note 7). The Credit Agreement also provides that the Company may not pay any cash dividends unless, after giving effect to such payment, the sum of all such payments made after December 31, 1974 would not exceed 50% of cumulative consolidated net income for the period from December 31, 1974, to the date of payment, less the sum of $13,500,000. At December 31, 1977, the Company's net worth exceeded the defined net worth requirement by $5,051,742; however, no cumulative consolidated net income was available for cash dividend purposes.

On June 30, 1977 revolving credit notes were converted into term notes. Pursuant to the October 1, 1977 Amendment to the Credit Agreement these term notes are payable in eight semiannual installments of $5,500,000 commencing July 1, 1978 with a final installment of $11,000,000 due on July 1, 1982. The interest rate is based on the bank's prime commercial rate times 110% plus 1% per annum (9.525% at December 31, 1977).

In connection with this Agreement the Company is to maintain 10% of the notes outstanding in compensating balances. At December 31, 1977, the Company was maintaining compensating balances of approximately $1,000,000 which amount did not meet the compensating balance requirements under the Agreement. Withdrawal of such balances is not legally restricted; but additional interest is payable on use of same.

The Company is carrying on further discussions with the lending Banks concerning possible changes in the terms of the loans and related matters. Absent changes in the Credit Agreement or the securing of additional funds from another source it is anticipated that the Company will not be able to make the scheduled payments to the banks on July 1, 1978, nor to finance the return of the Lakeshore Mine to operational status.

4. MARKETABLE EQUITY SECURITIES:

At December 31, 1976, the Company's investment in marketable equity securities consisted solely of a 3.7% interest in Sunshine Mining Company common stock, with a cost of $2,574,087. During March 1977, the Company sold this stock to Great Western United Corporation for a gain of $578,313. In October 1977 the Company sold the $3,152,400 note receivable that it obtained for the stock to El Paso Natural Gas Company for $2,600,000 plus accrued interest. The $552,400 discount on sale of the note has been netted against the original gain on sale of the Sunshine stock.

Notes to Financial Statements, Continued

5. INCOME TAXES:

The components of the tax benefit are as follows:

1977	Continuing Operations	Discontinued Operations	Total
Currently payable:			
State and local	$ 130,300		$ 130,300
Deferred:			
Federal	(4,053,100)		(4,053,100)
State and local	(249,200)		(249,200)
	(4,302,300)		(4,302,300)
	$(4,172,000)		$(4,172,000)
1976			
Currently payable:			
State and local	$ 99,300		$ 99,300
Deferred:			
Federal	(5,092,500)	$ 455,500	(4,637,000)
State and local	(234,200)		(234,200)
	(5,326,700)	455,500	(4,871,200)
	$(5,227,400)	$ 455,500	$(4,771,900)

The 1977 net deferred tax benefit results from the carryback of available net operating losses to the extent deferred taxes were provided in prior years and offsetting deferred tax credits to the extent it is anticipated that timing differences will reverse during the carryforward periods.

The 1976 net deferred tax benefit results principally from utilizing available net operating losses to offset deferred tax provisions of prior years.

Total tax benefits are less than the amount which would be provided by applying the U.S. Federal income tax rate of 48% to the loss before tax. The reason for this difference (expressed as a percentage of pretax loss) are as follows:

	1977	1976
Computed "statutory" tax benefit	**(48%)**	(48%)
Effect of percentage depletion	**(12)**	(15)
Minimum tax	**1**	10
Effect of equity in net loss of Granduc Mines, Limited	**2**	2
Effect of write-off of investment in Granduc Mines, Limited	**15**	
State and local income taxes		(1)
Reversal of investment credit		4
Other		1
Operating loss carryforward not recognized due to the limitation of available reversing timing differences in the carryforward period	**18**	
	(24%)	(47%)

For Federal income tax purposes, the Company has operating loss carryforwards amounting to approximately $50,700,000 at December 31, 1977, with $11,800,000 expiring in 1980, $24,400,000 in 1983, and $14,500,000 in 1984.

The Company has investment tax credit carryforwards of $2,850,000 which are available to reduce future U.S. Federal tax liabilities, if any.

6. INVENTORIES:

Inventories at December 31, 1977 and 1976 consisted of the following:

	1977	1976
Materials and supplies	$ 3,365,088	$ 3,395,049
Metals — work in process	1,568,165	1,381,076
Finished metals and products	796,229	2,510,427
	$ 5,729,482	$ 7,286,552

7. INVESTMENT IN GRANDUC MINES, LIMITED (N.P.L.):

The Company's investment in Granduc Mines, Limited at December 31, 1976 was composed of the following:

5½% redeemable cumulative preferred stock, 357,000 shares, $5 par value (100% owned), at cost	$ 1,650,846
Common stock, 1,189,700 shares (35.4% owned) at equity	3,277,542
5½% notes receivable (face amounts $1,551,500 Canadian)	1,434,895
	$ 6,363,283

On October 1, 1965, Granduc leased substantially all of its properties in British Columbia, Canada for a term of 50 years (with an option to renew for 25 years) to Newmont Mines, Limited, a wholly owned subsidiary of Newmont Mining Corporation, and ASARCO Incorporated. Under the terms of the lease, the Lessees provided all necessary funds, services and equipment to put the mine into production, and such preproduction costs are not chargeable against Granduc Mines, Limited. Granduc receives a 22½% share of defined net proceeds realized from the Granduc Mine after March 1, 1971. After 32,500,000 short tons have been milled, the percentage increases from 22½% to 25%. A total of 13,238,000 tons have been milled to December 31, 1977.

The Lease Agreement of 1965 provides that a minimum of 80% of the first defined net proceeds received by Granduc Mines, Limited be committed to concurrent redemption of Hecla's shares of 5½% preferred stock and prior advances made by the Lessees, plus dividends and interest respectively,

accumulating thereon after March 1, 1971, the date of beginning operations. From March 1, 1971 through December 31, 1973, there was a deficiency in defined net proceeds. The deficiency was recovered in early 1974, and thereafter a 22½% share of defined net proceeds became payable to Granduc. Shares of defined net proceeds occurred in 1974 and 1975 resulting in cash payments to Granduc, but none occurred in 1976 or 1977. The Lessees have reported a deficiency in defined net proceeds at December 31, 1977, of which Granduc's 22½% share was $1,670,478. This amount must be recovered by the Lessees before any future share of defined net proceeds would be payable to Granduc.

Granduc Mines, Limited reported an estimated net loss of $2,269,222 for 1977, compared with a net loss of $1,148,564 for 1976. These losses include a deficiency in net proceeds, on an accrual basis of accounting, of $705,479 in 1977, compared with net proceeds of $255,163 in 1976. The 1977 loss includes amortization and depletion deductions of $1,136,755,and exploration, administration, taxes, and interest expense of $426,988; comparable amounts for 1976 were $1,002,100 and $401,600.

During 1974, 693,000 5½% preferred shares were purchased by Granduc from Hecla for unsecured 5½% notes, equal to the par value of the shares, together with unsecured notes for unpaid dividends.

In December 1977 Newmont and ASARCO, the Lessees of the Granduc Mine, announced that they were writing off their remaining interests in the joint venture Granduc Mine because of poor performance resulting from a combination of factors, including lower international copper prices. Based on the foregoing Granduc Mines, Limited wrote down the mining properties of that company to a nominal value of $1 and wrote off the unamortized balance of mine development and preproduction expenditures. In view of these steps taken by the Lessees of the Granduc Mine and the owner of the Mine, Granduc Mines, Limited, Hecla has written off the carrying value of its investment in Granduc Mines, Limited resulting in a charge to 1977 operations of $5,560,483.

8. PROPERTIES, PLANTS and EQUIPMENT:

	1977	1976
Lakeshore Mine (see Note 2):		
Mining properties	**$ 3,022,989**	$ 3,022,989
Deferred development costs	**43,923,992**	43,923,992
Plants and equipment	**67,871,661**	66,656,186
	114,818,642	113,603,167
Other:		
Mining properties	**1,584,709**	1,534,151
Deferred development costs	**3,622,272**	3,468,627
Plants and equipment	**3,891,568**	3,876,848
Land	**33,256**	33,256
	123,950,447	122,516,049
Less accumulated depreciation, depletion and amortization (including $5,132,468 charged to deferred development costs and plant and equipment of the Lakeshore Mine during the preproduction period)	**17,730,997**	13,596,916
	$106,219,450	$108,919,133
Depreciation, depletion and amortization:		
Charged to operations	**$ 4,263,085**	$ 3,453,034
Charged to deferred development costs		642,419
	$ 4,263,085	$ 4,095,453

9. STOCK OPTIONS:

In April 1970 the shareholders approved a stock option plan providing for the issuance of qualified stock options to officers and key employees at 100% of fair market value on the dates the options are granted. The Company reserved 105,817 shares (as adjusted for stock dividends) of authorized and unissued capital stock for that purpose. The options are to be granted for a period of five years; half are exercisable during the first two and one-half years and the remainder are exer-

cisable during the second two and one-half years. Options for 91,817 shares were granted in 1974. No options have been exercised to date. Options for 5,308 and 4,193 shares expired in 1977 and 1976, respectively. The option status at December 31, 1977 is as follows:

	No. of Shares	Option Price Per Share	Option Price Total
Shares under option at December 31, 1977	82,316	$18.14-21.41	$1,594,092
Options presently exercisable	82,316	$18.14-21.41	$1,594,092

No amounts are reflected in income in connection with the grant or exercise of options.

10. EMPLOYEE BENEFITS:

The Company and its wholly owned subsidiaries have pension plans covering substantially all employees. Total pension expense charged to income was $768,000 for 1977 and $673,000 for 1976. Based upon the latest actuarial information available, the unfunded past service costs at December 31, 1977 were approximately $2,090,000.

During 1976 the Company adopted a Deferred Compensation Plan, which permits eligible officers to defer a portion of their compensation. The deferred compensation is distributable in cash after retirement or termination. The amount deferred at December 31, 1977 and 1976 is $161,650 and $60,585, respectively.

11. LITIGATION:

On May 2, 1972, a disastrous fire occurred at the Sunshine Mine operated by Sunshine Mining Company in which 91 miners lost their lives. As a result, suits were brought in Federal Court by certain of the widows and heirs of the deceased miners and a suit was also brought by Sunshine Mining Company claiming that certain manufacturers of products used in the mine and the U.S. Bureau of Mines were negligent in allowing certain flammable materials to be in the mine. Two of the manufacturers filed third party complaints against Hecla and twelve others claiming that these parties had joint control with Sunshine and negligently failed to exercise due care as mutual agents and principals in the operation of the Sunshine Mine and asking for contribution in the event that the plaintiffs are successful in their claims. In 1976 a motion for Summary Judgment was filed on behalf of the Company and, after oral argument, the Federal District Court granted Summary Judgment dismissing the case against the Company. This decision of the Court has been appealed to the Circuit Court of Appeals by the manufacturers and oral argument on the appeal was heard in 1977, but no decision has been rendered by the Circuit Court of Appeals to date. The Company and its counsel are of the opinion that the decision of the District Court dismissing the Company will be upheld.

It is the opinion of the Company and its counsel that the outcome of the aforementioned suit and of other additional miscellaneous litigation and proceedings now pending will not materially affect the operations or the financial position of the Company or any of its subsidiaries.

12. DISCONTINUED OPERATIONS:

On September 1, 1976, the Company sold substantially all of the operating assets of Ace Concrete Co., a wholly owned subsidiary, for $560,000 in cash and $1,440,000 in short-term interest-bearing notes receivable which were paid on February 1, 1977.

13. REPLACEMENT COST (UNAUDITED):

The Securities and Exchange Commission requires the Company to estimate the replacement cost of certain assets and expenses. The required information has been included in the Company's annual report on Form 10-K filed with the SEC.

Generally, the current replacement costs of productive capacity are higher than the comparable historical amounts. The higher replacement cost of depreciable property would result in increased depreciation charges. The current replacement cost of the Company's metal inventories, which principally relate to the Lakeshore Mine, and the associated cost of sales, using current replacement costs, are generally lower than comparable historical costs because Lakeshore metal inventories were produced at low mine production levels, with resulting higher unit costs than would exist at normal production levels. Current replacement cost of minor amounts of metal inventories and associated cost of sales at other locations are not significantly different from comparable historical amounts. For financial statement purposes, all metal inventories are stated at the lower of average cost or estimated net realizable value.

The differences between historical and replacement cost do not impact reported income of the Company.

14. QUARTERLY DATA (UNAUDITED):

Selected unaudited quarterly data for the years ended December 31, 1977 and 1976 as follows:

	1977				
	First Quarter (1)	Second Quarter	Third Quarter (2)	Fourth Quarter (1)(3)(4)	Total
Income:					
Sale of concentrates and products	$ 13,255,515	$15,927,235	$ 9,544,429	$ 9,750,699	$ 48,477,878
Other	517,783	(171,768)	(144,406)	(661,151)	(459,542)
	13,773,298	15,755,467	9,400,023	9,089,548	48,018,336
Costs and expenses	15,707,438	18,393,548	14,444,990	17,241,760	65,787,736
Loss from continuing operations before income taxes	$ (1,934,140)	$ (2,638,081)	$ (5,044,957)	$ (8,182,312)	$ (17,769,400)
Net loss	$ (1,046,840)	$ (1,497,581)	$ (2,870,667)	$ (8,182,312)	$ (13,597,400)
Net loss per share:					
Continuing operations	$ (.15)	$ (.21)	$ (.41)	$(1.18)	$(1.95)
Discontinued operations					
	$ (.15)	$ (.21)	$ (.41)	$(1.18)	$(1.95)

	1976				
	First Quarter	Second Quarter (2)	Third Quarter	Fourth Quarter	Total
Income:					
Sale of concentrates and products	$ 5,757,878	$ 8,384,551	$10,519,539	$ 9,382,190	$ 34,044,158
Other	(44,408)	154,907	59,469	(53,390)	116,578
	5,713,470	8,539,458	10,579,008	9,328,800	34,160,736
Costs and expenses	4,292,539	12,014,493	14,498,408	14,514,530	45,319,970
Income (loss) from continuing operations before income taxes	$ 1,420,931	$ (3,475,035)	$ (3,919,400)	$ (5,185,730)	$ (11,159,234)
Net income (loss) from discontinued operations (5)	$ (66,725)	$ 99,937	$ 506,093	$ (45,686)	$ 493,619
Net income (loss)	$ 942,955	$ (2,071,165)	$ (1,549,045)	$ (2,760,960)	$ (5,438,215)
Net income (loss) per share					
Continuing operations	$ .15	$ (.31)	$ (.30)	$ (.39)	$ (.85)
Discontinued operations	(.01)	.01	.08	(.01)	.07
	$ .14	$ (.30)	$ (.22)	$ (.40)	$ (.78)

(1) See Note 4 regarding the Company's sale of its investment in Sunshine Mining Company common stock.
(2) See Note 2 regarding the operational status of the Lakeshore Mine.
(3) See Note 7 regarding the write-off of the Company's investment in Granduc Mines, Limited.
(4) No tax benefit was available in the fourth quarter 1977 due, as explained in Note 5, to the limitation of reversing timing differences and the lack of a tax benefit in connection with the Granduc write-off.
(5) See Note 12 of Notes to Financial Statements.

Officers

William H. Love
President and Chief Executive Officer

William A. Griffith
Senior Vice President

Gordon M. Miner
Senior Vice President

William J. Grismer
Vice President—Finance & Sec.-Treas.

Herbert E. Harper
Vice President—Exploration

James H. Hunter
Vice President

Directors

***Horton Herman**
(of Counsel). Paine, Lowe, Coffin, Herman and O'Kelley, Attorneys at Law, Spokane, Washington.

****William H. Love**
President and Chief Executive Officer of Hecla Mining Company, Wallace, Idaho.

William T. Pettijohn
Formerly Senior Staff Consultant of Parsons-Jurden Company (Retired November, 1977), Tucson, Arizona.

***Lester J. Randall**
Formerly Chairman of the Board of Hecla Mining Company (Retired December, 1972), Coeur d'Alene, Idaho.

Edward McL. Tittmann
Formerly Chairman of the Board and Chief Executive Officer of American Smelting and Refining Company (Retired April, 1971), Reno, Nevada.

John R. (Jack) Williams
Formerly Governor of the State of Arizona (Retired January, 1975), Phoenix, Arizona.

*Member of Executive Committee
**Chairman of Executive Committee

Management Staff

Corporate Headquarters Wallace, Idaho
President and Chief Executive Officer **William H. Love**
Senior Vice President **William A. Griffith**
Senior Vice President **Gordon M. Miner**
Vice President—Finance and Secretary-Treasurer **William J. Grismer**
Vice President—Exploration **Herbert E. Harper**
Controller and Assistant Treasurer **Thomas T. Giles**
Investment Manager **Philip M. Lindstrom**
Assistant Secretary **Wayne L. Schoonmaker**
Marketing Coordinator **Ned M. Tower**

Idaho Operations
Chief Engineer **Wallace E. Crandall**
General Mill Superintendent **Bill E. McKee**
Personnel Manager **Gus Voltolini**

Star-Morning Unit Burke, Idaho
Manager **William Anderson**

Lucky Friday Mine Mullan, Idaho
Manager **Arthur Brown**

Lakeshore Mine Casa Grande, Arizona
Vice President and General Manager **James H. Hunter**
Assistant General Manager **George L. Wilhelm**
Administrative Assistant **Gilberto I. Valdez**
Mine Manager **E.W. Cokayne**
Metallurgical Manager **Paul M. Musgrove, Jr.**
Maintenance Manager **Derk Perdok**
Chief Engineer **Thomas W. Phillips**
Administrative Manager and Controller **Frederick J. Wagner**

Exploration Offices
Vancouver, B.C., Canada
Manager **Philip I. Conley**
Denver, Colorado
Manager **James S. Hastings**
Reno, Nevada
Manager **William P. Johnston**

Hecla Mining Company

Incorporated under the laws of the State of Washington, July, 1898.

Capitalization—12,000,000 shares of a par value of 25¢ each ($3,000,000) of which 6,988,714 shares were outstanding on December 31, 1977.

Main Office, Hecla Building, Wallace, Idaho 83873.
Phone **208-752-1251**
Telex **326 476 HECLA CO WALC**

Eastern Transfer Agent
Registrar and Transfer Company, 140 Cedar Street, New York, NY 10006

Eastern Registrar
Manufacturers Hanover Trust Company, 40 Wall Street, New York, NY 10015

Western Transfer Agent
Spokane and Eastern Branch, Seattle-First National Bank, Spokane, WA 99210

Western Registrar
Pacific National Bank of Washington, Spokane, WA 99210

Shares of the Corporation are traded on
the New York Stock Exchange, New York, NY
the Spokane Stock Exchange, Spokane, WA
and the Pacific Coast Stock Exchange, San Francisco, CA

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SECOND QUARTER

REPORT

Six Months Ending June 30, 1976

WALLACE, IDAHO

TO THE SHAREHOLDERS OF HECLA MINING COMPANY:

Earnings

As forecast in the First Quarter Report, the Company experienced a loss in the second quarter of 1976. The consolidated net loss for the quarter was $3,240,965, or $0.48 per share, as compared to net income of $942,956, or $0.14 per share, for the first quarter of 1976 and $1,841,316, or $0.27 per share, for the second quarter of 1975.

The second quarter loss also resulted in a consolidated net loss for the first six months of 1976 of $2,298,009, or $0.34 per share. This compares with consolidated net income of $3,446,280, or $0.50 per share, for the same period in 1975.

The loss during the second quarter primarily resulted from the Company's share of the net loss incurred by the Lakeshore operation in the amount of $4,385,108. This amount includes amortization and depreciation expense of $1,006,000, and interest on bank loans of $916,602. The Lakeshore Mine, a 50-50 partnership with El Paso Natural Gas Company, was placed on an operational status for accounting purposes as of April 1, 1976. Net operational results from that time forward, including current interest costs, are reflected in the Company's regular income account.

Other factors which adversely affected the Company's earnings were loss of income from the Sunshine Unit Area as result of a labor strike, and the Company's equity in the net loss of Granduc Mines, Limited for the first six months of 1976 in the amount of $206,000.

The Lakeshore Mine

As previously noted to the shareholders, the costs per pound of copper produced during the buildup of production to full plant capacity are higher than normal and it is anticipated that operating losses will continue, probably into the fourth quarter. Although it was earlier reported that full-scale operation was expected by year end, it now appears that goal may have been optimistic and that full production in both oxide and sulfide mines may not be attained until the second quarter of 1977.

Based on achievement of full production rates at the Lakeshore Mine and improvement in the price for copper, we still anticipate that the Lakeshore Mine will make an important contribution to Hecla earnings in the future.

The oxide mine is now operating at near its rated capacity and is on schedule. However, the sulfide mine has achieved only about 50% of rated capacity. The problems are related to difficulties with controlling caving of the ore, including difficulty with ore passes, excessive ground weight over extraction drift openings, and trouble with fragmentation of caved material. The ore-pass problem has been overcome and the other problems are being worked out as rapidly as possible.

The metallurgical plants are operating well and appear capable of achieving projected operating results. In order to operate the plants as efficiently as possible, we have been treating purchased concentrates from

outside sources to partially offset the production shortfall from the sulfide mine.

Total Lakeshore Mine project development costs to July 1, 1976 are $198 million, which includes $11 million of working capital. Additional working capital of $9 million is estimated to be required by the end of the year to finance increased inventories in process and in-transit, and product sales receivables.

North Idaho Operations

The Lucky Friday and Star-Morning Unit operated normally throughout the second quarter. The Sunshine Mine has been closed by a strike since March 11, 1976 and the matter is still unsettled at time of this report. Hecla must bear its share of standby costs at the mine in addition to the loss of revenue from this source.

Hecla's share of principal metals contained in metallic concentrates produced from North Idaho operations for the six-months periods of 1976 and 1975 was as follows:

	Tons of Ore Milled	Ounces Silver	Tons Lead	Tons Zinc
January 1 to June 30, 1976	149,864	1,808,248	12,558	3,702
January 1 to June 30, 1975	163,233	2,062,146	10,924	3,264

Metal Prices

The copper price of 63c per pound (Metals Week US Producer Cathode) at the beginning of the year was increased to 66c on March 22, to 70c on April 13, and to 74c per pound on July 1, 1976. World stocks of copper are still high, but increasing consumption is generally expected to bring further price improvement by early 1977.

Silver prices rose from a low of $3.815 per ounce in January, 1976, to a high of $4.945 on June 14, and averaged $4.33 per ounce for the first six months of 1976, as compared with $4.35 per ounce during the same period in 1975. Although prices are volatile, a continuing rising trend seems probable.

Lead was priced at 19.0c per pound in January, rose to 21.0c on March 22 and to 23.0c per pound on May 14, 1976. The average price during the six-month period was 20.34c. Demand for lead is good and further price improvement is generally expected.

Financing

In the second quarter an agreement, effective June 30, 1976, was reached with the lending banks under the Company's Credit Agreement increasing revolving credit lines from $48,000,000 to $53,000,000 to be used to assist in financing Hecla's estimated share of costs required to complete the Lakeshore Mine, provide working capital and bring the property to full production. Conversion to five-year term notes will now take place not later than June 30, 1977, and semiannual payments of principal will commence December 31, 1977, each one year later than previously.

Environmental Affairs

At the shareholders meeting held on May 4, 1976, Mr. William A. Griffith, Vice President, made some very pertinent remarks on environmental matters as they affect your Company. A copy of those remarks are appended and are highly recommended for your reading.

W. H. LOVE
President and
Chief Executive Officer

August 10, 1976

HECLA MINING COMPANY

Consolidated Statements of Income or Loss (Unaudited)

For the Six-Month Periods Ending June 30, 1976 and June 30, 1975

	SIX MONTHS ENDED June 30 1976	June 30 1975
Income:		
Sales of concentrates and products	$16,065,694	$14,834,544
Net gain on sale of stocks held for investment	238,463	348,541
Dividend, interest and other income	78,344	75,591
Equity in net (loss) of Granduc Mines, Limited	(206,100)	(298,300)
	16,176,401	14,960,376
Cost and Expenses:		
Cost of sales and other expenses not shown separately	14,586,354	8,322,838
Exploration	612,000	540,000
Property and excise taxes	889,557	524,382
Depreciation, depletion and amortization	1,184,696	166,276
Interest on bank loans	1,767,327	1,246,372
Less, interest capitalized	(850,724)	(1,246,372)
	18,189,210	9,553,496
	(2,012,809)	5,406,880
Estimated taxes on income		
Currently payable	44,700	73,700
Deferred	240,500	1,886,900
	285,200	1,960,600
Net income (loss)	$(2,298,009)	$ 3,446,280
Average shares outstanding	6,851,681*	6,851,681**
Net income (loss) per share	$ (0.34)*	$ 0.50**
Average metal prices		
Silver - (per ounce, Handy & Harman, N.Y.)	$ 4.33	$ 4.35
Lead - (per pound, M.W.U.S. Producer)	21.01c	23.39c
Zinc - (per pound, Prime Western, delivered)	37.02c	39.00c
Copper - (per pound, Metals Week refined)	66.45c	64.12c

*Adjusted to reflect shares issued pursuant to a 2% stock dividend paid August 6, 1976 to shareholders of record May 21, 1976.

**Adjusted to reflect shares issued pursuant to 2% stock dividend paid August 8, 1975 and August 6, 1976.

ANNUAL SHAREHOLDERS MEETING

MAY 4, 1976 — SPOKANE, WN.

Remarks by W. A. Griffith,
Vice President-Metallurgy

ENVIRONMENTAL AFFAIRS

On a number of occasions we have commented on the effects of environmental protection regulations on the performance of your company. It is appropriate to spend a few extra minutes this morning to tell you in a little more detail about the kind of problems we face. It is our hope that, with a better understanding, you may be able to exert some influence upon your legislators, and better explain our problems to your friends, to the end that a little more common sense be applied to these matters.

First, let me point out that it is a basic policy of your company to make every reasonable effort to minimize the damaging impact of our activities upon the environment.

I say "minimize," not "prevent," because we must all recognize that we cannot eat or breathe, clothe ourselves or keep warm, without these activities having some adverse effects upon our environment. Neither can we meet the public's demand for metals and minerals without digging holes in the ground and somehow disposing of our waste products.

I use the term "reasonable effort" because in all of these matters there must be the use of judgment — a reasonable judgment as to what constitutes an acceptable trade-off between costs and benefits.

You as individuals cannot escape responsibility for helping make that judgment. It is you as individuals who have needs and desires for material things made from minerals. It is you as individuals who benefit from environmental protection measures. And it is you, as individuals, who pay the bill for environmental protection since neither corporations nor government have any source of funds other than what they extract from you as taxes or price for products. It is important, then, that you help make that judgment as to what constitutes a reasonable effort.

Now let's look at an example of the kind of practical situation with which we are confronted. Please keep in mind that this is only one of many ways in which environmental regulations affect your company.

In North Idaho one of the primary environmental concerns affecting us is the protection of the streams and rivers draining the mining area. There is no question that in years past they were abused by pollution with mine tailings and sewage. The primary objective of environmental legislation as it affects this matter is to restore these streams to a degree of purity such that they do not threaten the health of the people nor animals, and so that, where it is possible, they may again support fish for recreational fishing.

Much progress has been made. Sewage disposal plants have been constructed to serve all of the communities, and the primary hazard to health has thereby been removed. Also, for a number of years, each of the effluent streams which we discharge from our operations into these rivers has been governed by permits issued by the federal Environmental Protection Agency and the State of Idaho. Each permit places strict limits on the concentration of silt in the effluent, the concentration of soluble metals, and the alkalinity. We are normally allowed 20 parts per million of silt and one part per million of combined dissolved lead, zinc, copper, cadmium, and mercury. (That is, 0.0001%.) The

limits are strict, but attainable, and compliance is strictly enforced. The limits are in accord with national guidelines which require the use of the best practical control technology currently available. Under these conditions the concentrations of silt and metals in the streams have dropped to levels far below those which constitute any hazard to man or beast, and as the long term effects of sewage pollution diminish, fish are reappearing in those portions of the streams otherwise suitable as a fish habitat. This is good. Undoubtedly it has made the Coeur d'Alene valley a somewhat healthier and pleasant place to live.

The cost, however, has been considerable. The people of the area have found the cost of the new sewage disposal system to be so onerous that a large percentage of them have simply refused to pay their sewage bills and are in arrears. The cost of removal of silt from the effluents we discharge into the streams has increased our tailing disposal costs from $0.06 per ton of ore treated prior to 1966 to $0.875 per ton of ore treated during 1975 and 1976 to date — an increase of 1458% in the ten-year period. Please keep in mind that these tailing disposal costs are and must be passed along to each of you in the form of higher prices for the metals contained in things you buy.

Perhaps this was all worthwhile and constitutes a reasonable trade-off between cost and benefits.

But, the regulatory agencies are not yet satisfied. Already the federal government has announced new and more stringent regulations, affecting what we may discharge into these streams, effective in 1977 — next year. These regulations more severely restrict the amounts of metals which may be contained in our discharges and apply not only to the potentially more harmful dissolved metals, but also to the relatively insoluble and harmless solid metallic minerals contained in rock particles. We honestly don't know of any way in which we can meet these regulations as they are now written, short of recycling all of our water and discharging none. This is obviously impossible in the case of water being pumped from a mine. This zero discharge may be possible in the case of a milling operation, although we doubt it. Certainly the cost would be so great as to place in jeopardy the continued survival of one of our two North Idaho operations.

But equally important, there would be no significant benefit from such additional expenditures. They would not protect the health of man nor beast. That has already been accomplished. They would not have any significant effect on the ability of trout to survive in these streams. Where the streams are otherwise suitable as a trout habitat, the fish are already coming back. In areas not suitable for trout survival, the complete elimination of these discharges would not make possible this survival.

So here we have an example of the kind of blind and unreasonable application of regulations with which we must contend — the kind of situation where some good old American common sense is needed to help define the proper trade-off between costs and benefits.

Your company will, of course, take whatever steps are available to us to fight such unreasonable and unjustified regulations.

HECLA MINING COMPANY

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HECLA MINING COMPANY

First Quarter Report

Three Months Ending March 31, 1977

TO THE SHAREHOLDERS OF HECLA MINING COMPANY:

Shareholders Meeting

Over 78% of the Company's 6,851,680 shares issued and outstanding were represented in person or by proxy at the Annual Meeting of Shareholders held in Spokane, Washington on May 4, 1977. Messrs. Horton Herman, W. H. Love, W. T. Pettijohn, L. J. Randall, E. McL. Tittmann, W. B. Warren and John R. "Jack" Williams were re-elected as Directors. The selection of Coopers & Lybrand as auditors was approved.

Company officials reviewed 1976 results along with 1977 first quarter progress. A comprehensive report was presented on the improved activities at the Lakeshore Property in Arizona. Officers also made detailed reports covering mining operations, exploration and development activity, marketing, and financial results. A copy of Remarks to Shareholders at the May 4, 1977 Annual Meeting will be mailed to you on request.

At the meeting of the Board of Directors held immediately following the Annual Meeting, the Directors re-elected Company officers including Mr. William H. Love, President and Chief Executive Officer; Mr. William A. Griffith, Vice President - Metallurgy; Mr. William J. Grismer, Vice President - Finance and Secretary-Treasurer; Mr. Herbert E. Harper, Vice President - Exploration; Mr. James H. Hunter, Vice President; and Mr. Gordon M. Miner, Vice President - Operations.

Following the Annual Shareholders' Meeting, the Board of Directors also declared a stock dividend of two percent (2%) (1 share for each 50 shares) payable on the outstanding capital shares. Stock certificates will be mailed on about August 5, 1977 to shareholders of record May 20, 1977. Stock dividends of two percent (2%) have been paid in each year commencing in 1970.

No fractional shares will be issued in connection with the stock dividend. If the aggregate amount of Hecla stock owned by you on May 20, 1977 is more or less than an even multiple of fifty (50) shares, you will receive an order form which will establish the fact that you own a fractional share accruing to you as the result of such stock dividend. The full details concerning this matter will be sent to you in the near future, including instructions for the arrangement for sale of odd-lot shares, if you wish to sell the shares which you will receive.

Earnings

The Company again experienced a loss in the first quarter of 1977 which is estimated at $1,046,840 or $0.15 per share. This compares with a net loss for the fourth quarter of 1976 of $2,760,960 or $0.40 per share, and net income of $942,955 or $0.14 per share for the first quarter of 1976.

The loss in the first quarter of 1977

was primarily due to continued operating losses at the Lakeshore Mine, and also to a loss in the Sunshine Unit Area operation. Hecla's share of the Lakeshore Mine net loss was $2,478,000 which included interest cost on bank loans of $1,015,000 and amortization and depreciation charges of $1,087,000. This compares with a net loss in the fourth quarter of 1976 of $3,615,000 including interest on bank loans of $1,046,000 and amortization and depreciation of $1,058,000.

Although we are far from happy with these results, you will note that considerable improvement was gained in the first quarter of 1977 over fourth quarter 1976 figures. We will achieve further improvement in the second quarter.

Losses continued to be experienced by the Sunshine Unit Area due to the labor strike which finally ended March 14, 1977. Hecla's net loss from this operation for the first three months of 1977 is estimated at $177,000, as compared to net income of $115,000 for the same period of 1976.

The Company's earnings were also adversely affected by its equity in the net loss of Granduc Mines, Limited, for the first three months of 1977 of $83,300, as compared to a net loss of $67,200 in the same period of 1976.

The Lakeshore Mine

We stated in the Annual Report that the operating loss experienced in 1976 at the Lakeshore Mine was due to start-up costs, difficulty in achieving full mine production rates, and low copper prices. Start-up problems have been largely eliminated. The oxide mine and metallurgical processing plants have reached full capacity, and in the sulfide mine, production is increasing and expected to reach a satisfactory level. Additionally, as efficiency has improved much progress has been made in lowering unit costs, especially during the last few months, despite ever-increasing labor and supply costs.

Low copper prices continue, however, especially when considered in relation to production costs and it seems doubtful that the operation can achieve a material operating profit before depreciation, amortization, and interest costs, unless at least some future small increase in the copper price is realized.

Expenditures at Lakeshore are being shared equally by Hecla and El Paso Natural Gas Company. Hecla borrowings for this purpose, under revolving credit agreements with participating banks, amount to $53 million at the present time; the remainder of our share of the costs have been financed internally. Hecla's presently available line of credit has now been taken down, and includes $5.3 million in compensating balances.

Hecla's 50% share of production from the Lakeshore Mine for the first three months of 1977 was 6,440 tons of copper, produced from 402,421 tons of ore processed and purchased concentrates.

North Idaho Operations

At the Lucky Friday and Star-Morning Unit operations, mining and concentration costs were up only slightly. However, smel-

ter charges for treating concentrates were up sharply and were only partly offset by increased metal production and a better average lead price during the year.

The year-long Sunshine Mine strike was finally settled and operation of the Sunshine Unit Area was resumed on March 14, 1977. There was only a very small amount of production in March, and Hecla's share of the Unit Area cash operating loss for the first quarter was about $350,000. Production is increasing, and we anticipate Hecla will realize income from the Unit Area during the second quarter of 1977.

Hecla's share of principal metals contained in metallic concentrates produced from North Idaho operations for the three month period of 1977 and 1976 was as follows:

	Tons of Ore Milled	Ounces Silver	Tons Lead	Tons Zinc
Jan. 1 to March 31, 1977	72,633	723,964	6,224	2,009
Jan. 1 to March 31, 1976	82,562	1,078,653	6,421	1,855

Metal Prices

Copper prices have shown some improvement in 1977, as U.S. major copper producers raised the producer price from 65c at Jan. 1 to 71c per pound, and then to 74c per pound. Last week certain producers again dropped the price to 71c per pound. LME and COMEX prices are even lower, by some 7 to 8 cents. There is still a large world stock of excess copper, and while we are optimistic that demand will increase and that world supplies possibly may be lessened, the consensus of copper industry experts is that a more realistic copper price should not be expected for a year or more. The industry does expect however to somewhat better present prices by the end of the year.

It should be noted that prevailing copper prices are very low as related to copper mining industry production costs. Over the past 20 years the copper price has averaged about 1.6 times cost of production; if this ratio were applicable in 1976 the average price for copper should have been 95c to $1.05 per pound - versus the actual average producer price for 1976 of 69c per pound. I do not mean to imply this cost/-price relationship will govern in the future, because (1) much of the world's copper is now produced by governments not really responsive to supply and demand pressures and (2) environmental preservationist groups have very effectively delayed or halted the construction of energy generating facilities. The copper market is hurt not only by loss of demand by these energy plants which have not moved off the drawing board, but is also hurt by an industrial capital spending rate which is depressed because energy is not or may not be available.

The average silver price received by Hecla during the first quarter of 1977 was $4.59 per ounce, as compared to an average of $4.35 per ounce for 1976, $4.42 per ounce for 1975, and $4.71 per ounce for 1974. As you can see, the silver price has been level, or slightly down, over the last 3-year period. We are hopeful that we will see improved prices through the rest of

this year and perhaps the time is now ripe for a substantial silver price rise.

The lead price is also very important to Hecla and since year end 1976 has increased from 25½-26c per pound to 31c per pound. The increase has been very welcome, and we are optimistic that the 31c price will hold.

The zinc price remained at 37c per pound for the first quarter.

Legal Proceedings

The Company's Proxy Statement (dated March 17, 1977) discussed activities of the "Sunshine Mining Company Shareholders Committee". In summary, it was noted that Hecla Mining Company, Silver Dollar Mining Company and Charles E. Schwab had entered into an agreement forming the Sunshine Mining Company Shareholders Committee, seeking to secure sufficient representation on Sunshine's Board of Directors at its 1977 annual meeting to effect a change in Sunshine's management. It was noted that Hecla and Silver Dollar did not intend to seek representation on Sunshine's Board of Directors, nor control of Sunshine or its management.

On January 13, 1977, Sunshine Mining Company commenced a lawsuit against Hecla, Silver Dollar and Messrs. C. E. Schwab, H. F. Magnuson (President and Chief Executive Officer of Silver Dollar) and W. H. Love (President and Chief Executive Officer of Hecla) in the United States District Court, Southern District of New York. The complaint alleges violations of the Securities Exchange Act of 1934, and seeks injunctive relief and damages.

The Shareholders Committee filed an answer denying the material allegations of Sunshine's complaint, seeking dismissal of the lawsuit and set forth an affirmative defense alleging violations of the Exchange Act by Sunshine.

On March 21, 1977 a press release was made in which Messrs. W. H. Love and H. F. Magnuson announced that Hecla Mining Company and Silver Dollar Mining Company had sold all shares of Sunshine Mining Company common stock owned by them to Great Western United Corporation, a firm headed by Nelson Bunker Hunt, W. Herbert Hunt and G. Michael Boswell all of Dallas, Texas. The sale included a total of 335,070 shares or approximately 6 percent of the outstanding common shares of Sunshine, of which 210,160 shares were owned by Hecla and 124,910 by Silver Dollar. The purchase price for the shares was $15 per share, subject to upward adjustment under certain conditions.

Great Western United Corporation thereafter announced its intention to make a tender offer for 2,000,000 shares of Sunshine common stock at $15.75 per share and to acquire control of Sunshine.

As a result of these developments the Shareholders' Committee was dissolved.

Hecla and Silver Dollar will continue to own their respective interests in the Unit Area of the Sunshine Mine, such ownership being unaffected by their sales of stock in Sunshine Mining Company.

On April 1, 1977, Sunshine Mining Company filed an action in Federal District Court in Boise, Idaho against Great Western United Corporation, N. B. Hunt,

W. H. Hunt, G. Michael Boswell, Hecla, Silver Dollar, C. E. Schwab, H. F. Magnuson and W. H. Love, seeking among other things, injunctive relief barring the named defendants from making a tender offer to buy shares in Sunshine Mining Company. A preliminary injunction against Hecla, Silver Dollar and Messrs. W. H. Love, H. F. Magnuson and C. E. Schwab was denied, although on other issues they remained as codefendants. Further, thereafter the Federal District Court dissolved the temporary restraining order and also denied Sunshine's request for a preliminary injunction with respect to all defendants.

General

Hecla entered into a 50-50 joint venture agreement with Union Carbide Corporation in December 1976 to explore Hecla's uranium properties in the Lisbon Valley area south of Moab, Utah. The properties consist of three separate leases totaling approximately 1,100 acres.

The first-phase drilling program was started in January. The drilling is under the direction of Union Carbide who is the operator for the joint venture. This program consists of eleven (11) holes to test the Salt Wash horizon at depths of 600-800 feet and five (5) holes to explore the Mossback member of the Chinle formation at a depth of about 2,600 feet. The holes are widely spaced, on approximately 2,000-foot centers.

Uranium - vanadium mineralization of probable ore grade was found in four of the eleven Salt Wash holes. Additional drilling will be required to determine the extent and continuity of the mineralization. The deeper Chinle holes have not been completed and the results thus far are inconclusive. Plans for further drilling are being considered and it is likely that a second stage drilling program will be undertaken later this year.

Concluding, I want to state that the future and outlook for Hecla is excellent, despite the losses we have reported. We do have confidence in metal prices for silver, copper, lead and zinc over the long term, and even more significantly we have confidence in our very able and hardworking employees. Hecla's people will get the job done.

W. H. LOVE
President and
Chief Executive Officer

May 5, 1977

HECLA MINING COMPANY

Consolidated Statements of Income or Loss (Unaudited)

For the Three-Month Periods Ending March 31, 1977 and March 31, 1976

	THREE MONTHS ENDED	
	March 31 1977	March 31 1976
Income:		
Sales of metals and concentrates	$ 13,255,515	$ 5,757,878
Net gain on sale of stocks held for investment	578,313	
Dividend, interest and other income	22,770	22,792
Equity in net (loss) of Granduc Mines, Limited	(83,300)	(67,200)
	13,773,298	5,713,470
Costs and Expenses:		
Cost of sales and other expenses not shown separately	12,295,480	3,688,844
Exploration	309,000	306,000
Property and excise taxes	948,804	250,768
Depreciation, depletion and amortization	1,138,923	46,927
Interest on bank loans	1,015,231	850,748
Less - interest capitalized		(850,748)
	15,707,438	4,292,539
Net income (loss) from continuing operations before income taxes	(1,934,140)	1,420,931
Estimated taxes on income		
Currently payable	33,100	19,600
Deferred	(920,400)	393,600
	(887,300)	413,200
Net income (loss) from continuing operations	(1,046,840)	1,007,731
Discontinued operations:		
Income (loss) from operations of Ace Concrete Company (less applicable Income Taxes of $(36,300))		(64,775)
Net income (loss)	$ (1,046,840)	$ 942,956
Average shares outstanding	6,851,680	6,851,680*
Net income (loss) per share:		
Continuing operations	$ (0.15)	$ 0.15
Discontinued operations		(0.01)
	$ (0.15)	$ 0.14*
Average metal prices:		
Silver - (per ounce, Handy & Harman, N.Y.)	$ 4.59	$4.11
Lead - (per pound, M.W. U.S. Producer)	28.85c	19.41c
Zinc - (per pound, Prime Western, delivered)	37.00c	37.04c
Copper - (per pound, Metals Week refined)	68.50c	63.35c

*Adjusted to reflect shares issued pursuant to the 2% stock dividend paid August 6, 1976 to shareholders of record May 21, 1976.

HECLA MINING COMPANY
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WALLACE, IDAHO 83873

208 752-1251

To the Shareholders of
HECLA MINING COMPANY

Hecla Mining Company's consolidated net loss for the year 1976 was $5,438,215 or $0.79 per share as compared to net income of $5,953,699 or $0.87 per share for the year 1975. The consolidated net loss for the fourth quarter of 1976 was $2,760,960 or $0.40 per share, as compared to a restated net loss of $1,549,045 or $0.23 per share for the third quarter of 1976, and net income of $997,671 or $0.15 per share for the fourth quarter of 1975.

The principal reason for the loss in the fourth quarter and for the year 1976 was the Company's one-half interest in the continued operating losses of the Lakeshore Mine. Hecla's loss attributable to Lakeshore during the fourth quarter was $3,615,000 which includes amortization and depreciation of $1,058,000 and interest on bank loans of $1,046,000. The Lakeshore Mine, a 50-50 partnership with El Paso Natural Gas Company, was placed on an operational status for accounting purposes as of April 1, 1976, and operating results from that time forward, including current interest costs, are reflected in the Company's regular income accounts. Hecla's share of net loss from the Lakeshore operation from April 1, 1976 through year end was $10,244,733 including amortization and depreciation of $3,136,000 and interest expense of $3,040,296.

Losses continue to be experienced by the Sunshine Unit Area due to a labor strike which commenced March 11, 1976, and Hecla's net loss from this operation for the year 1976 was $335,000 or $0.05 per share, as compared to net income for the year 1975 of $1,649,000 or $0.24 per share.

The Company's earnings were also adversely affected by its equity in the net loss of 35.4% owned Granduc Mines, Limited, for the year 1976 of $406,400 or $0.06 per share, compared to an equity in net loss of $782,200 or $0.11 per share for the year 1975.

Previously reported losses for the six and nine month periods ended June 30, and September 30, 1976 have been reduced by $1,169,800 and $2,344,800, respectively, resulting from the use of available net operating losses to offset deferred tax provisions of prior years. As restated, losses for such periods were as follows:

	Period Ended June 30, 1976	
	Three Months	Six Months
Net (loss)	$(2,071,165)	$(1,128,209)
(Loss) per share of capital stock	$(0.30)	$(0.16)

	Period Ended September 30, 1976	
	Three Months	Nine Months
Net (loss)	$(1,549,045)	$(2,677,254)
(Loss) per share of capital stock	$(0.23)	$(0.39)

The price of silver averaged $4.31 per ounce in the fourth quarter of 1976, and $4.35 per ounce for the year of 1976, as compared to an average of $4.42 per ounce for the year 1975. Lead prices averaged 25.78c per pound during the fourth quarter of 1976, as compared to an average price for the year 1976 of 23.10c per pound and for 1975 of 21.53c per pound. Copper averaged 69.04c per pound for the fourth quarter of 1976, 68.98c per pound for the year 1976, and 63.25c per pound for the year 1975.

The annual report, which will give detailed information with respect to financial affairs, operations and other matters is being prepared and will be mailed in late March 1977. The annual meeting of shareholders will be held in Spokane, Washington on Wednesday, May 4, 1977. The record date for shareholders entitled to vote at the annual meeting will be March 17, 1977.

W. H. LOVE
President and
Chief Executive Officer

February 17, 1977

stockpile zinc concentrate from the Star-Morning Unit Area; we will be able to resume shipment of zinc concentrate on November 7, but anticipate that it will be several months before the inventory of stockpiled zinc concentrate can be worked off. Lead concentrate from both the Lucky Friday and Star-Morning mines were treated by Bunker Hill during the strike period and it was not necessary to accumulate stockpiles.

Hecla's share of principal metals contained in metallic concentrates produced from North Idaho operations for the first nine-month periods of 1977 and 1976 was as follows:

First Nine Months	Tons of Ore Milled	Ounces Silver	Tons Lead	Tons Zinc
1977	232,875	2,885,470	17,696	5,719
1976	217,137	2,538,117	18,747	5,621

Metal Prices

The U.S. Producer copper price, which was 74c per pound in late March, declined to 71c in late April, to 68c in June, to 65c in mid-July and finally to 60c per pound August 17. London Metal Exchange and New York Commodity Exchange prices have recently ranged from 51c to about 56c per pound.

World stocks of copper remain high, with an excess above normal levels equal to about two months of normal consumption. However, there is some indication production and consumption are approximately in balance, although there appears to be little basis for optimism for any material improvement in price. Assuming an historical average cost-price relationship, copper should bring 90c to 105c per pound. At the present time, such a price level appears remote.

The average price for silver during the third quarter was $4.49 per ounce, compared to an average price of $4.62 per ounce during the first two quarters. Silver prices have been stronger the last few weeks, and hopefully an upward price trend will be resumed, as market fundamentals remain good.

The lead price remained at 31c per pound during the third quarter, increased to 32c per pound on October 31, and is expected to remain stable through the remainder of 1977.

The zinc price, which declined from 37c per pound to 34c per pound on May 17, fell further to 31-32c per pound on October 5. There have been substantial cutbacks by U.S. producers, but foreign zinc sold in the U.S. is still exerting pressure on the price, and further price reductions may be necessary.

W. H. Love
President and
Chief Executive Officer

November 7, 1977

HECLA MINING COMPANY
BOX 320
WALLACE, IDAHO 83873

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U S Geological Survey-Office of
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Harold Kirkemo-National Center
Mail Stop 953-12291 Sunrise Valley
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HECLA MINING COMPANY

Consolidated Statements of Loss (Unaudited)

For the Nine-Month Periods Ending September 30, 1977 and September 30, 1976

	NINE MONTHS ENDED	
	September 30 1977	September 30 1976 (Note)
Income—		
Sales of metals and concentrates	**$ 38,727,179**	$ 24,661,968
Net gain on sale of stocks held for investment	**578,313**	238,463
Dividend, interest and other income	**206,496**	218,605
Equity in net(loss) of Granduc Mines, Limited	**(583,200)**	(287,100)
	38,928,788	24,831,936
Costs and Expenses—		
Cost of sales and other expenses not shown separately	**39,002,940**	24,436,326
Exploration	**927,000**	918,000
Property and excise taxes	**1,897,420**	1,237,274
Depreciation, depletion and amortization	**3,456,039**	2,220,262
Interest on bank loans	**3,262,577**	2,844,302
Less - interest capitalized		(850,724)
	48,545,976	30,805,440
Net (loss) from continuing operations before income taxes	**(9,617,188)**	(5,973,504)
Estimated taxes on income		
Currently payable	**100,200**	77,700
Deferred	**(4,302,300)**	(2,830,100)
	(4,202,100)	(2,752,400)
Net (loss) from continuing operations	**(5,415,088)**	(3,221,104)
Discontinued operations—		
Gain from sale of assets of Ace Concrete Co. (less applicable Income Taxes of $424,000)		459,349
Income from operations of Ace Concrete Co. (less applicable Income Taxes of $61,300)		84,501
Net (loss)	**$(5,415,088)**	$(2,677,254)
Average shares outstanding	**6,988,714***	6,988,714**
Net income (loss) per share:		
Continuing operations	**$ (0.77)**	$ (0.46)
Discontinued operations		.08
	$ (0.77)	$ (0.38)
Note: Restated to reflect year end adjustments		
Average metal prices—		
Silver - (per ounce, Handy & Harman, N.Y.)	**$ 4.58**	$ 4.37
Lead - (per pound, M.W. U.S. Producer)	**30.28c**	22.21c
Zinc - (per pound, Prime Western delivered)	**35.51c**	37.38c
Copper - (per pound, M. W., U.S. Producer, refined)	**68.14c**	68.97c

*Adjusted to reflect shares issued pursuant to the 2% stock dividend paid August 5, 1977 to shareholders of record May 20, 1977.

**Adjusted to reflect shares issued pursuant to the 2% stock dividends paid August 6, 1976 and August 5, 1977.

a solution to easing the financial burden of the Lakeshore Mine is vital to the Company's future.

It was also stated in the Second Quarter Report to Shareholders that the Chase Manhattan Bank had been retained to act as financial advisor to the Company. In late August, the Chase Manhattan Bank withdrew from that assignment because of potential conflicts of interest. Shortly thereafter, on August 31, the Hecla Board of Directors retained the investment banking firm of Kuhn Loeb & Co. Incorporated, of New York City, to act as the company's financial advisor. Kuhn Loeb is presently assisting Hecla management in evaluation and analyses of various alternatives which might be available to the Company in reaching a long-term resolution of our present financial difficulties.

The Lakeshore Mine

Operations at the Lakeshore Mine, a joint venture of Hecla Mining Company and the El Paso Natural Gas Company, were temporarily suspended on September 4, 1977. The suspension was due to losses resulting from the low price for copper, and to an accumulation of copper inventory.

We were able to resume shipment of previously stockpiled copper precipitate in late September, following settlement of a labor strike which had closed ASARCO smelters from July 1 to September 7, 1977.

At the time of announcing the suspension of operations on August 29, the Company expected to resume operations on a curtailed basis on October 31. However, it was necessary to announce on October 17 that the suspension would continue for an indefinite period. Plans for resumption had included operating a part of the metallurgical plant to treat custom copper concentrates. However, the Company has not been able to complete satisfactory arrangements for procurement of those concentrates and alternative operating plans for resumption of production are being prepared and evaluated.

Since mid-August, the U.S. Producer copper price has been 60c per pound, and Commodity Exchange prices have ranged from 50c to 56c per pound. The Lakeshore Mine cannot generate a positive cash flow at these low price levels. However, the costs for maintaining the property on a suspended operations basis are substantial. A curtailed operation of the mine and plant would be advantageous if it could reduce cash outflow.

Several maintenance jobs which could only be accomplished during a shutdown of the plant have been essentially completed, and work by the staff on certain other improvements is being carried out. The mine and plant are being maintained in good condition for start-up.

Hecla's 50 percent share of production from the Lakeshore Mine for the third quarter of 1977 was 7,643 tons of copper produced from 676,000 tons of ore processed and purchased concentrate.

North Idaho Operations

Operations continued on a normal basis at the Lucky Friday, Star-Morning, and Sunshine mines during the third quarter.

A strike at The Bunker Hill Company's plants at Kellogg, Idaho, which started on May 6, was settled on September 19, 1977. Since the beginning of the strike it has been necessary to

File in Hecla docket

HECLA MINING COMPANY

Third Quarter Report

Nine Months Ending September 30, 1977

To The Shareholders Of HECLA MINING COMPANY:

Earnings

Losses continued during the third quarter of 1977 and are estimated to be $2,870,667, or $0.41 per share. This compares with a net loss for the second quarter of 1977 of $1,497,581, or $0.21 per share, and a net loss on a restated basis of $1,549,045, or $0.22 per share for the third quarter of 1976.

Consolidated net loss for the first nine months of 1977 was $5,415,088, or $0.77 per share, as compared to a restated loss of $2,677,254, or $0.38 per share in the same period in 1976.

The loss in the third quarter of 1977 was due to continuing operating losses at the Lakeshore Mine and to equity in the net loss of Granduc Mines, Limited.

Hecla's share of the Lakeshore Mine net loss was $4,123,000 which included interest cost on bank loans of $1,173,000 and amortization and depreciation charges of $1,066,000. This compares with a net loss in the second quarter of 1977 of $3,138,000 which included interest on bank loans of $1,074,000 and amortization and depreciation charges of $1,156,000, and a restated net loss in the third quarter of 1976 of $3,420,000 which included interest expense on bank loans of $1,077,000 and amortization and depreciation charges of $1,072,000.

Hecla's equity in the net loss of Granduc Mines, Limited was $231,100 for the third quarter of 1977, as compared to net loss of $268,800 in the second quarter of 1977, and $81,000 in the third quarter of 1976.

Financial

Substantial operating losses at the Lakeshore Mine since the property became operational on April 1, 1976 have resulted in a serious drain on the Company's financial resources.

As stated earlier, expenditures at the Lakeshore Mine are shared equally by Hecla and The El Paso Natural Gas Company. Hecla borrowings for this purpose, under revolving credit agreements with participating banks, reached $53,000,000 in early 1977. The revolving credit notes were converted to 5-year term notes on June 30, 1977. The remainder of Hecla's share of costs has been financed internally.

Losses are expected to continue during the fourth quarter as the cost for maintaining the Lakeshore Mine on a suspended basis, bank loan interest costs, and charges for depreciation, are expected to substantially exceed income realized from other sources.

In the Second Quarter Report to Shareholders, dated August 8, 1977, it was stated that without a significant improvement in Lakeshore results, the Company would not be able to meet the first scheduled repayment to the lending banks of $5,300,000 which was due December 31, 1977, and that discussions were being held with the banks concerning possible changes in the loan agreement.

The participating banks have now agreed in principle to increase the credit line to $55,000,000, defer the first payment of principal of $5,500,000 to June 30, 1978, and to additionally defer a part of the interest due, also to June 30, 1978. This action partially relieves the immediate cash flow problems of the Company, but finding

HECLA

MINING COMPANY

SECOND QUARTER REPORT

Six Months Ending

June 30, 1978

To The Shareholders Of Hecla Mining Company:

OPERATING RESULTS

The Company's loss in the second quarter of 1978 is estimated to be $2,189,793, or $0.31 per share. This compares with a net loss for the first quarter of 1978 of $1,960,947, or $0.28 per share, and with a net loss of $1,228,781, or $0.18 per share, for the second quarter of 1977.

Consolidated net loss for the first six months of 1978 was $4,150,740, or $0.59 per share, as compared to a loss for the first six months of 1977 of $2,192,321, or $0.31 per share, excluding equity in net loss of Granduc Mines Limited.

Hecla's share of the second quarter loss at the Lakeshore Mine, which has been on a standby status since early September 1977, was $3,381,375. This amount includes interest on bank loans of $1,526,184 and depreciation charges of $771,000. The balance of the loss of $1,084,191 is attributable to Lakeshore stand-by costs which included payroll expense, minimum royalty payments, property taxes, insurance, power costs, and miscellaneous supplies, partially offset by sales of some remaining copper inventory. The loss in the first quarter of 1978 was $3,136,907, which included interest on bank loans of $1,416,820 and depreciation charges of $771,000.

Since the First Quarter 1978 Report to Shareholders, which described an "agreement in principle" with The Superior Oil Company, two letters have been written to the shareholders.

The first letter, dated May 31, 1978, noted that The Superior Oil Company had elected to withdraw from the proposed transactions outlined in the "agreement in principle." In that letter, I stated that my understanding of Superior's reason for termination of the agreement was that Superior was reluctant to assume the cost of Hecla's obligation at the Lakeshore copper mine in Arizona, and I also noted we would continue to work with our financial advisors to consider alternative actions which might be taken by the Company.

The second letter, dated July 11, 1978, stated that the Company and its lending Banks agreed to amend the present Credit Agreement to defer the principal and interest payments due July 1, 1978 to September 30, 1978. Negotiations are presently being held with the Banks for the purpose of restructuring the debt to a long-term basis. The letter also noted (1) that Lakeshore had been placed on a custodial basis to substantially reduce holding costs; (2) that the Company had made a decision to dispose of its interest in the Lakeshore Mine; (3) that steps had been taken to close our three outside exploration offices; and (4) that a reduction of staff was being made at corporate headquarters in Wallace, Idaho.

Hecla is carrying its 50 percent interest in Lakeshore at a net book amount of approximately $101 million. When the final disposition of Lakeshore is known, we will make an appropriate readjustment of this amount. Assuming that the Lakeshore disposition results in a substantial loss to the Company, the book carrying amount will be written down, but we are not able at this time to accurately quantify such write-down. If a major adjustment is required, the Company will consider a quasi-reorganization under which various other properties will be appropriately revalued. As promptly as possible after we have in hand the necessary facts to make a proper decision we will so inform our shareholders.

We are continuing to solicit bids for our interest in the Lakeshore Mine and have received expressions of interest by several companies.

On Friday, August 4, 1978, The El Paso Company announced its intention to dispose of its 50 percent interest in the Lakeshore Mine, and further stated that its decision will result in El Paso's recording a one-time after-tax charge against its 1978 income of approximately $55 million.

NORTH IDAHO OPERATIONS

The Lucky Friday, Star-Morning Unit and Sunshine Unit Area operations continued normally during the second quarter with satisfactory overall results.

Hecla's share of principal metals contained in metallic concentrates produced from North Idaho Operations for the first six-month periods of 1978 and 1977 were as follows:

First Six Months	Tons of Ore Milled	Ounces Silver	Tons Lead	Tons Zinc
1978	155,781	1,992,649	10,366	3,617
1977	153,686	1,830,589	12,370	3,899

METAL PRICES

During the first six months of 1978 the Handy & Harman average price of silver was $5.12 per ounce; the lead price averaged 32.3 cents per pound; the zinc price averaged 29.4 cents per pound; and copper averaged 63.53 cents per pound.

ANNUAL MEETING

It is anticipated that the 1978 annual meeting of shareholders will be held sometime during late fall, at which time we should be able to report to the shareholders more definitively on the outlook and plans for the Company.

MANAGEMENT

As announced previously, we have discontinued Hecla's exploration program outside the Coeur d'Alene mining district and have completed reductions in the corporate staff at Wallace, Idaho.

With cessation of exploration activity, Mr. H. E. Harper, Vice President-Exploration, plans to take early retirement from the Company but will be retained on a consulting basis so that his knowledge, experience and judgment will be available to Hecla in the future.

Mr. Gordon M. Miner, Senior Vice President, has elected to leave the Company but has agreed to stay on in his present position until about the end of the year, at which time an orderly transition of his duties will have occurred.

Mr. James H. Hunter, Vice President and General Manager of the Lakeshore Mine, retired on July 1, 1978.

Mr. William A. Griffith has been named Executive Vice President and Chief Operating Officer of the Company, effective July 24, 1978. His responsibilities will embrace all of the operational and administrative functions of the Company.

W. H. LOVE
President and Chief Executive Officer

Wallace, Idaho
August 9, 1978

HECLA MINING COMPANY AND WHOLLY OWNED SUBSIDIARIES

Consolidated Statements of Operations

For the Six-Month Periods Ended June 30, 1978 and June 30, 1977

	SIX MONTHS ENDED	
	June 30, 1978 (Note 1)	June 30, 1977
Income:		
Sales of concentrates and products	$15,255,920	$29,182,750
Gain on sale of investments	— —	578,313
Interest and other income	36,741	119,802
Equity in net loss of Granduc Mines, Limited	— —	(352,100)
	15,292,661	29,528,765
Costs and expenses:		
Cost of sales and other expenses not shown separately	13,398,670	27,664,218
Exploration	516,000	618,000
Property and excise taxes	909,895	1,387,071
Depreciation, depletion and amortization	1,633,032	2,342,344
Interest on bank loans	2,943,004	2,089,353
	19,400,601	34,100,986
Loss from operations before income tax benefits	(4,107,940)	(4,572,221)
Estimated income taxes (benefits)		
Currently payable	42,800	73,900
Deferred (Note 2)	— —	(2,101,700)
	42,800	(2,027,800)
Net Loss	$(4,150,740)	$(2,544,421)
Net loss per share	$ (0.59)	$ (0.36)

Notes (1) Unaudited and subject to year-end audit adjustments.
(2) It is not anticipated that previously provided deferred income taxes will reverse from timing differences during 1978. In 1977 net deferred tax benefits resulted from the carryback of available net operating losses against deferred taxes provided in prior years.

Average metal prices:		
Silver — (per ounce, Handy & Harman, N.Y.)	$ 5.12	$ 4.62
Lead — (per pound, M.W. U.S. Producer)	32.33c	29.93c
Zinc — (per pound, Prime Western delivered)	29.43c	36.26c
Copper — (per pound, M.W., U.S. Producer, refined)	63.53c	73.78c

HECLA MINING COMPANY

BOX 320

WALLACE, IDAHO 83873

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HECLA MINING COMPANY

P. O. BOX 320
WALLACE, IDAHO 83873
208 752-1251

August 29, 1977

DEAR SHAREHOLDER:

The following is the text of a News Release issued today:

Hecla Mining Company announced today that operations at the Lakeshore Mine will be temporarily suspended on September 4, 1977, due to an accumulation of unsold copper and the current low price for copper. Operations on a curtailed basis are expected to resume October 31, 1977.

W. H. Love, President, said that the smelters who buy and treat Lakeshore copper precipitate have been closed since July 1 by a labor strike, which has caused an excessive backup of copper inventory at the Lakeshore plant. He also stated that since May, 1977, the U.S. Producer price for copper has declined 14c to 60c per pound, and that the Commodity Exchange and LME prices have declined about 17c to 53c per pound in the same period. Prices at these levels are not adequate to cover the direct costs of Lakeshore production.

About 1,500 employees will be laid off from the total crew of 1,630 people. During the suspension period certain maintenance in the metallurgical plant which can only be accomplished during a shutdown will be completed so that operations can proceed without interruption when the plant is restarted.

When operations are resumed, it is presently planned to produce on a curtailed basis, and it is anticipated that about 800 of the laid-off employees will be recalled.

The Lakeshore Mine is a joint venture of Hecla Mining Company and The El Paso Natural Gas Company, with Hecla as the operating partner.

W. H. LOVE,
President and
Chief Executive Officer

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HECLA MINING COMPANY

BOX 320

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Harold Kirkemo-National Center
Mail Stop 953-12291 Sunrise Valley
Reston Virginia 22092

***To The Shareholders Of* HECLA MINING COMPANY:**

OPERATING RESULTS: Hecla Mining Company's consolidated unaudited net income for the fourth quarter of 1978, all from continuing operations, was $3,272,000, ($0.47 per share) including a gain of $632,000 ($0.09 per share) from sale of the Company's interest in the Liard-Schaft Creek copper-moly property in northern British Columbia. This compares with net income from continuing operations of $1,090,000 ($0.16 per share) in the third quarter of 1978 and net income from continuing operations (excluding the write-off of the remaining investment in Granduc Mines, Limited) of $985,527 ($0.14 per share) in the fourth quarter of 1977.

The outstanding debt was reduced from $57,763,000 at the beginning of the fourth quarter of 1978 to $51,000,000 at the end of the quarter.

The consolidated unaudited net loss for the year 1978 was $96,820,000 ($13.85 per share) as compared to a net loss of $13,597,400 ($1.95 per share) for the year 1977.

The consolidated unaudited net loss for the year 1978 includes a $96,000,000 ($13.74 per share) write-off of the Company's investment in the Lakeshore Mine, and a $5,524,806 ($0.79 per share) loss from the discontinued operations of the Lakeshore Mine in the first nine months of 1978, prior to the write-off of the investment. Continuing operations for the year 1978, unaudited, therefor resulted in net income of $4,704,000 ($0.68 per share). For the year 1977, consolidated net loss included a $11,687,289 ($1.68 per share) loss from discontinued operations of the Lakeshore Mine, and a $5,560,483 ($0.79 per share) loss from the write-off of the Company's remaining investment in 35.4% owned Granduc Mines, Limited. Continuing operations for the year 1977, excluding the Granduc write-off therefor, resulted in net income of $3,650,372 ($0.52 per share).

ANNUAL SHAREHOLDERS MEETING: At the 1978 annual shareholders meeting held in Spokane, Washington, January 16, 1979, Messrs. Horton Herman, W. H. Love, William T. Pettijohn, L. J. Randall, E. McL. Tittmann and John R. Williams were reelected as directors to serve until the next annual meeting of shareholders. Shareholders also approved the selection of Messrs. Cooper & Lybrand, New York, New York, as the Company's auditors for 1979. The shareholders also considered three other proposals involving amendment to the Articles of Incorporation of the Company. The shareholders approved by more than the requisite ⅔ vote of all shares outstanding an increase, from 12,000,000 to 20,000,000, in the number of authorized shares of Capital Stock of the Company and redesignating the shares of such Stock as shares of Common Stock, a proposition which under New York Stock Exchange rules could be voted by brokers and nominees as record holders if the beneficial owner of the shares did not respond. However, the shareholders did not approve by the requisite ⅔ affirmative response a change in the Articles which would allow an increase in the maximum number of Directors from 7 to 11, and did not authorize by the requisite ⅔ affirmative response of all shares outstanding the proposed authorization of 1,000,000 shares of Preferred Stock, issuable in series. These latter two proposals could not, under New York Stock Exchange rules, be voted by brokers and nominees as record holders unless the beneficial owners responded. While response from individual shareholders of record was good (84%), the response with respect to these issues by shares registered in the name of a broker or nominee was poor (38%). This was particularly disappointing as approximately 89% of those shares that did respond were in favor of these propositions.

At a meeting of the Board of Directors immediately following the Annual Meeting of Shareholders, Mr. W. H. Love was named President and Chief Executive Officer, Mr. W. A. Griffith was named Executive Vice President and Chief Operating Officer, and Mr. W. J. Grismer was named Vice President - Finance and Secretary-Treasurer.

FINANCIAL: The bank credit agreement, entered into by the Company in 1972 to finance Hecla's share of the Lakeshore Project costs, was replaced during the fourth quarter of 1978 by a 3½ year declining balance revolving Credit and Security Agreement with a 9% interest rate and requiring no compensating balances. It will remain for the Company to refinance the then existing principal balance of the loans under the new credit agreement not later than December 31, 1981.

The new credit agreement also provides that the Company may elect to pay a part of the interest through issuance of preferred stock in lieu of cash, subject to authorization of preferred stock by the shareholders, and to the completion of a preferred stock agreement with the lending Banks. Since, as discussed above, the authorization of preferred stock was not approved by the shareholders at their meeting on January 16, 1979, and because management believes such authorization of preferred stock to be decidedly beneficial to shareholders, the Company is considering resubmitting this proposal to the shareholders at the next annual meeting, to be held May 4, 1979.

NORTH IDAHO OPERATIONS: The Lucky Friday, Star-Morning Unit and Sunshine Unit Area continued normal operations throughout the fourth quarter with satisfactory overall results. The grade of ore mined at the Lucky Friday was somewhat higher than that mined in 1977, reflecting the effect of higher grade ore being developed on the west end of the vein. Production from the Sunshine Unit Area for Hecla's account continued to be good, completing a year in which the Unit Area silver production was the highest since 1971. Hecla's share of principal metals contained in metallic concentrates produced from North Idaho operations for the years 1978 and 1977 were as follows:

	Tons of Ore Milled	Ounces Silver	Tons Lead	Tons Zinc
1978	306,406	4,134,109	21,562	7,391
1977	314,476	3,940,095	23,514	7,578

METAL PRICES: During the year 1978 the Handy & Harman silver price averaged $5.40 per ounce; the lead price averaged 33.7 cents per pound; and the zinc price averaged 31.0 cents per pound. December 31, 1978, metal prices were $6.07 per ounce for silver; 38.0 cents per pound for lead; and 34.0 cents per pound for zinc.

LIARD-SCHAFT CREEK PROPERTY: On December 8, 1978, Hecla Mining Company sold its 70% interest in the Liard-Schaft Creek copper-moly property in northern British Columbia to Teck Corporation, Vancouver, B. C., for $3,094,811 U.S. The sale resulted in net income of $632,000 ($0.09 per share) recorded in the fourth quarter of 1978. Hecla also retains a 5% fully carried net profits interest in the 70% interest sold. Proceeds from the sale were used to reduce the bank debt.

LAKESHORE MINE: Under the terms of an agreement with the Papago Tribe of Indians, previously reported to shareholders, the Papago Tribe has continued to pay the costs of maintenance and security of the facilities while seeking a new lessee for the property. They have not yet exercised the option which they hold to purchase the removable plant and equipment at its appraised salvage value.

LISBON VALLEY PROJECT: Drilling results on this 50-50 joint venture with Union Carbide located in the Lisbon Valley district about 30 miles south of Moab, San Juan County, Utah, have been sufficiently encouraging to warrant developing the property for production.

Union Carbide is the operator and plans to begin underground development early in 1979 with first production planned for late 1981 or early 1982. Pre-production capital requirements, of which Hecla's share is one-half, have been estimated by Union Carbide as approximately $6.5 million, to be expended over the next three years. Hecla's share of these costs in 1979 is estimated to be $1,530,000 and will be provided from current earnings.

W. H. LOVE
President and
Chief Executive Officer

Wallace, Idaho
January 17, 1979

The 1979 annual meeting of shareholders will be held May 4, 1979, in Spokane, Washington. The annual report to shareholders for the year 1978 will be mailed in early February and proxy material should be mailed in mid-March.

HECLA MINING COMPANY
Box 320
WALLACE, ID. 83873

WALLACE
JUN 8 '79
IDAHO

FIRST CLASS MAIL

Audit copy

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RECEIVED 7 1958
DATE CODE
800

AMENDED EXPLORATION PROJECT CONTRACT
POLARIS MINING COMPANY
DOCKET NO. DMEA 2879

AMENDMENT NO. 1

It is agreed this 14th day of February, 1958, between the United States of America, acting through the Department of the Interior, Defense Minerals Exploration Administration, and Polaris Mining Company, that Amended Exploration Project Contract No. Idm-E541 (Docket No. DMEA-2879), dated November 1, 1953, is amended effective February 3, 1958, as follows:

In Exhibit A, under Description of the Work, Stage II, the first paragraph of item 1 is changed to read:

"1.(a) Extend the east drift, previously driven, in an easterly direction to Sta. PE 3007 plus 14.6 feet, a total of not to exceed 1120.3 feet.

"(b) From approximately the intersection of coordinates 94,240E and 84,965S, drive a crosscut in a southeasterly direction to intersect drill hole SS 3504 midway between the ore intercepts at 565 and 625 feet. It is estimated that the length of this crosscut will be 700 feet. Then drift in an easterly direction on the most favorable structure encountered in the crosscut. The crosscut and drift under item (b) shall not exceed an aggregate of 1379.7 feet."

This amendment shall not be construed to increase the estimated total cost of the project, the aggregate total amount which the Government may be required to contribute, nor the fixed unit cost of any item of work.

Executed in quintuplicate the day and year first above written.

THE UNITED STATES OF AMERICA

By C. Mitchell Sears
Administrator, Defense Minerals
Exploration Administration

POLARIS MINING COMPANY

By T. G. Blandell
Title President

MME Form 14
Sept. 1958

Contract No. Idm-E) 541
14-23)

Docket No. DMEA) 2879
)

Date of Action January 30, 1959

DEPARTMENT OF THE INTERIOR
OFFICE OF MINERALS EXPLORATION

Terminated contract

OBLIGATION DOCUMENT

To: Chief, Accounts Section, Finance Branch, Bureau of Mines

From: Director, Division of Operations Control and Statistics

Please enter the amounts shown below on the accounts of the Office of Minerals Exploration.

Name and Address of Contractor: Polaris Mining Co.
P. O. Box 320
Wallace, Idaho

Date of Contract	Region	State	Commodity
June 3, 1953	I	Idaho	Copper-Lead-Antimony-Silver
	Reserve		Obligation
Prior Amount	0		436,920.00
Increase	0		0
Decrease	0		.52
Revised Amount	0		436,919.48

Remarks:

cc: 800
210

43244

DMEA Form 14

Contract No. Idm-E 541

Docket No. 2879

DEPARTMENT OF THE INTERIOR

Executed amendment

DEFENSE MINERALS EXPLORATION ADMINISTRATION

Obligation Document

TO: Chief, Finance Section, Budget and Finance Branch, Bureau of Mines

Please make the following entry on the records of the Defense Minerals Exploration Administration under the Strategic and Critical Minerals Exploration Program.

Date of Contract	Region	State	Commodity
June 3, 1953	I NW	Idaho	Copper-Lead-Antimony-Silver

Name and Address of Operator: Polaris Mining Company
P. O. Box 320
Wallace, Idaho

	Reserve	Obligation
Prior Amount	$73,225.00	$363,695.00
Increase	0	73,225.00
Decrease	73,225.00	0
Revised Amount	0	436,920.00

Remarks:

Allen S. Dakan, Chief
(Name)
Operations Control and
Statistics Division
(Title)

Date Delivered to Bureau of Mines, Washington 6/27/57

16416

DMEA Form 14

Contract No. Idm-E 541

Docket No. 2879

DEPARTMENT OF THE INTERIOR

Approved amendment

DEFENSE MINERALS EXPLORATION ADMINISTRATION

Obligation Document

TO: Chief, Finance Section, Budget and Finance Branch, Bureau of Mines

Please make the following entry on the records of the Defense Minerals Exploration Administration under the Strategic and Critical Minerals Exploration Program.

Date of Contract	Region	State	Commodity
June 3, 1953	I NW	Idaho	Copper-Lead-Antimony-Silver

Name and Address of Operator: Polaris Mining Company
P. O. Box 320
Wallace, Idaho

	Reserve	Obligation
Prior Amount	0	$363,695.00
Increase	$73,225.00	0
Decrease	0	0
Revised Amount	$73,225.00	$363,695.00

Remarks:

ALLEN S. DAKAN
(Name)

Allen S. Dakan, Chief
Operations Control and
Statistics Division
(Title)

Date Delivered to Bureau of Mines, Washington 6/11/57

16416

Contract No. Idm-E 541

Docket No. 2879

DEPARTMENT OF THE INTERIOR

Executed amendment

DEFENSE MINERALS EXPLORATION ADMINISTRATION

TO: Chief, Finance Section, Budget and Finance Branch, Bureau of Mines

Please make the following entry on the records of the Defense Minerals Exploration Administration under the Strategic and Critical Minerals Exploration Program.

Date of Contract	Region	State	Commodity
June 3, 1953	I NW	Idaho	Copper-Lead-Antimony-Silver

Name and Address of Operator: Polaris Mining Company
P. O. Box 320
Wallace, Idaho

	Reserve	Obligation
Prior Amount	$20,717.50	$342,977.50
Increase	0	20,717.50
Decrease	$20,717.50	0
Revised Amount	0	$363,695.00

Remarks:

W N C
(Name)
for Allen S. Dakan, Chief
Operations Control and
Statistics Division
(Title)

Date Delivered to Bureau of Mines, Washington 1/4/57

9892

Government's Copy

EXPLORATION PROJECT CONTRACT
POLARIS MINING COMPANY
DOCKET NO. DMEA-2879

Amendment No. 4

It is agreed this 7th day of December, 1956, between the United States of America, acting through the Department of the Interior, Defense Minerals Exploration Administration, and the Polaris Mining Company, that Exploration Project Contract No. Idm-E541 (Docket No. DMEA-2879), initially dated June 3, 1953, as amended, is hereby further amended, effective November 1, 1953, as follows:

A. Whereas, the Contract was dated June 3, 1953, and whereas footnote 6 of the Contract provides that "The first day of the calendar month next succeeding the date of commencement of the work shall be deemed to be the date of this Contract for all computations of time thereafter," and whereas the Operator commenced work on October 16, 1953, it is therefore agreed that the effective date of the Contract is November 1, 1953.

B. Exhibit "A" of the Contract, as amended by Amendment No. 3, is further amended, as follows:

(1) The following items are added immediately following item 5, and preceding the last paragraph under the heading Description of the Work:

"6. From the end of the lateral previously driven under Item 1 of this Exhibit "A," crosscut in a northeasterly direction approximately 250 feet to intersect the mineralized zone, indicated by diamond drill holes, then drift and/or crosscut along the mineralized zone for approximately 750 feet. Any drifting or crosscutting footage which is not used in performing Item 1 of this Exhibit "A," may be added, upon the previous approval by the Government, to the footage for drifting and/or crosscutting in this Item 6, provided that the total footage for all drifting and crosscutting under this Contract shall not exceed 11,618.4 feet.

"7. Sideswipe approximately 35 linear feet in the drift or crosscuts driven under Item 6, for the purpose of allowing space for diamond drill stations and double tracks for car switchings. Any footage for sideswiping

which is not used in performing Item 2 of this Exhibit "A," may be added, upon the previous approval by the Government, to the footage for sideswiping in this Item 7, provided that the total footage of sideswipes under this Contract shall not exceed 1,175 feet.

"8. Diamond drill approximately 1,000 feet with EX or AX bits, on both sides of the drift or crosscut driven under Item 6. All core shall be kept in core boxes for Government inspection. The mineralized sections of the core shall be split, one half thereof to be kept in core boxes for Government inspection together with the unsplit core, and the other half of the mineralized sections to be crushed for assaying. One half of the crushed material shall be delivered to the Government upon its request. The methods of recovering core and sludge samples, and of making sample analyses, shall be subject to Government approval. Any diamond drill footage which is not used in performing Item 3 of this Exhibit "A" may be added to the drilling footage allowed in this Item 8, provided that the total diamond drill footage under this Contract shall not exceed 19,788 feet."

(2) The costs set forth in Exhibit "A" under the heading Agreed Unit Costs are revised as follows:

"Agreed Unit Costs

1.	Drifts and crosscuts completed during first period, 6,199.5 feet @ $51.00/ft., which with decreases for certain months based on the proportion stated in paragraph 2 of Annex II of the Contract 1/, totals			$313,248.24
2.	Drifts and crosscuts,	5,418.9	feet @ $48.78/ft.	264,333.94
3.	Sideswipes,	1,175	feet @ $25.50/ft.	29,962.50
4.	Diamond drilling,	19,788	feet @ $4.50/ft.	89,046.00
5.	Raising,	330	feet @ $93.33/ft.	30,798.90
	Estimated Total Cost of the Project (rounded to)			$727,390.00
	Government Participation @ 50%			$363,695.00"

1/ The average unit cost resulting from application of such decreases is approximately $50.53. The cost of Item 1 is governed by the total price of $313,248.24.

C. The time fixed for completion of the work is extended from March 1, 1957 to June 1, 1957.

Executed in sextuplicate the day and year first above written.

THE UNITED STATES OF AMERICA

By _____
Administrator, Defense Minerals
Exploration Administration

POLARIS MINING COMPANY

By _____

Title _____

Contract No. Idm-E 541

Docket No. 2879

DEPARTMENT OF THE INTERIOR

Approved amendment

DEFENSE MINERALS EXPLORATION ADMINISTRATION

TO: Chief, Finance Section, Budget and Finance Branch, Bureau of Mines

Please make the following entry on the records of the Defense Minerals Exploration Administration under the Strategic and Critical Minerals Exploration Program.

Date of Contract	Region	State	Commodity
June 3, 1953	I NW	Idaho	Copper-Lead-Antimony-Silver

Name and Address of Operator: Polaris Mining Company
P. O. Box 320
Wallace, Idaho

	Reserve	Obligation
Prior Amount	0	$342,977.50
Increase	$20,717.50	0
Decrease	0	0
Revised Amount	$20,717.50	$342,977.50

Remarks:

Allen S. Dakan, Chief
Operations Control and
Statistics Division
(Name)
(Title)

Date Delivered to Bureau of Mines, Washington 12/10/56

9896

Government's copy

RECEIVED NOV 5 1956

EXPLORATION PROJECT CONTRACT
POLARIS MINING COMPANY
DOCKET NO. DMEA-2879

AMENDMENT NO. 3

It is agreed this 3rd day of October, 1956, between the United States of America, acting through the Department of the Interior, Defense Minerals Exploration Administration, and the Polaris Mining Company, that Exploration Project Contract No. Idm-E541 (Docket No. DMEA-2879), dated June 3, 1953, as amended, is hereby further amended as follows:

Exhibit "A" of the contract is deleted, and the following Exhibit "A" is substituted:

EXHIBIT "A"

Description of the Work

The purpose of this project is to explore, as indicated on said Figure 1 and also on Figure 2, entitled "DMEA-2879--Fig. 2--Longitudinal Section from the Bunker Hill Mine to the Galena Shaft, Showing Stoped Areas," attached hereto and made a part hereof, on the 3000-foot level of the Silver Summit mine and adjoining lands, for possible downward extensions of known ore bodies which have been exposed in the Coeur d'Alene mine, and for other ore bodies which may be found in adjoining land previously unexplored.

The work shall consist of the following:

1. Extend the present 3000-foot level of the Silver Summit mine (the No. 2 East Drift) 10,115 feet in an easterly direction. The drift shall be in cross section a minimum of 6 feet by 8 feet in the clear, and shall be properly equipped with haulage tracks, drainage facilities, and an air duct not less than 18 inches in diameter.

2. Sideswipe not to exceed 1,140 linear feet in the aforesaid drift for the purpose of allowing space for diamond drill stations and double tracks for car switchings.

3. Diamond drill not in excess of 18,788 feet with EX or AX bits, on both sides of the aforesaid drift. All core shall be kept in core boxes for Government inspection. The mineralized sections of the core shall be split, one half thereof to be kept in core boxes for Government inspection together with the unsplit core, and the other half of the mineralized sections to be crushed for assaying. One half of the crushed material shall be delivered to the Government upon its request. The methods of recovering core and sludge samples, and of making sample analyses, shall be subject to Government approval.

4. Crosscut from the aforesaid drift not in excess of 503.4 feet.

5. Drive a 330-foot, two-compartment ventilation and manway raise approximately 2,530 feet from the eastern boundary of the Merger mine land to connect with the southwest area drifts of the Coeur d'Alene mine. The ventilation compartment shall be approximately 5 feet by 6 feet inside the timbers and lined with 3-inch planks. The manway shall be approximately 3 feet by 5 feet inside the timber and equipped with ladders and landing platforms.

The locations and directions of drifts, crosscuts, and drilling sites, and the depth and attitude of drill holes, shall all be subject to the approval of the Government. All work shall be timbered as necessary.

Agreed Unit Costs

Drifts and crosscuts, 10,618.4 feet @ $51.00/ft.	$541,539.00	
Sideswipes, 1,140 linear feet @ $25.50/ft.	29,070.00	
Diamond drilling, 18,788 feet @ $4.50/ft.	84,546.00	
Raising, 330 feet @ $93.33/ft. (rounded to)	30,800.00	
Total Estimated Cost of Project		$685,955.00
Government Participation @ 50%		$342,977.50

This amendment shall not be construed to increase the estimated total cost of the project, the aggregate total amount which the Government may be required to contribute, or the agreed unit cost of any item of work.

Executed in sextuplicate the day and year first above written.

THE UNITED STATES OF AMERICA

By C Mittendorf
Administrator, Defense Minerals
Exploration Administration

POLARIS MINING COMPANY

By J B Randall
Title President

Government's Copy

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
APR 8 1955

EXPLORATION PROJECT CONTRACT
POLARIS MINING COMPANY
DOCKET NO. DMEA-2879

AMENDMENT NO. 1

It is agreed this 23rd day of March, 1955, between the United States of America, acting through the Department of the Interior, Defense Minerals Exploration Administration, and the Polaris Mining Company, a Corporation, that Exploration Project Contract Idm-E541 (Docket No. DMEA-2879), dated June 3, 1953, between the parties hereto, be modified and amended effective March 15, 1955, as follows:

1. In Exhibit "A":

(a) Under the title "Description of the Work" and the statement "the work shall consist of the following," in item 1., delete the figure 10,125 feet and substitute 9,225 feet; and in item 3., delete the figure 5,000 feet and substitute 15,200 feet.

(b) Under "Agreed Unit Costs," in the item "Drifts and crosscuts," delete the figures 11,625 feet and $592,875.00 and substitute 10,725 feet and $546,975.00; and in the item "Diamond drilling," delete the figures 5,000 feet and $22,500.00, and substitute 15,200 feet and $68,400.00

2. Article 6 of this contract, entitled "Repayment by Operator," as amended, is stricken out and replaced by Annex IV, attached hereto.

3. That part of the second sentence of Article 7 of this contract that follows the first semi-colon, beginning with the word "Provided," dealing with abandonment, is stricken out.

This amendment shall not be construed to increase the estimated total cost of the project nor the aggregate total amount which the Government may be required to contribute.

Executed in sextuplicate the day and year first above written.

THE UNITED STATES OF AMERICA

POLARIS MINING COMPANY

By [signature]
President
Att: John R. Matthews - Secretary

By [signature]
Administrator, Defense Minerals
Exploration Administration

ANNEX IV

The following provisions are in lieu of Article 6 :

Repayment by Operator.--a. Certification.--If the Government considers that a discovery or development from which production may be made has resulted from the work, the Government, at any time not later than six months after the Operator has rendered the final report and final account, may so certify in writing to the Operator. Such certification shall describe broadly or indicate the nature of the discovery or development.

b. Royalty on production.--The Operator, as principal, if the Operator is the producer, or as surety, if the Operator is not the producer, shall pay to the Government a royalty on all minerals mined or produced from the land,* as follows: (1) regardless of any certification of discovery or development, from the date of the contract until the lapse of the time within which the Government may make such certification, or until the total net amount contributed by the Government without interest is fully repaid, whichever occurs first; or (2) if the Government makes a certification of discovery or development, for a period of ten years* from the date of the contract, or until the total net amount contributed by the Government without interest is fully repaid, whichever occurs first.

c. Basis for computation.--The Government's royalty shall be a percentage of the gross proceeds (including any bonuses, premiums, allowances, or other benefits) from the production sold, in the form sold (ore, concentrates, metal, or equivalent), at the point of delivery (the f.o.b. point); except, that charges of the buyer arising in the regular course of business, and shown as deductions on the buyer's settlement sheets, on account of the cost of treatment processes performed by the buyer, sampling and assaying to determine the value of the production sold, and freight paid by the buyer to a carrier (not the Operator), shall be allowed as deductions in arriving at the "gross proceeds" as that term is used herein. Any costs of treatment processes, sampling or assaying, or transportation, performed or paid by the

* The word "land" refers to the land described in Article 2 of the Contract.

* The period "twenty years" is substituted for the period "ten years."

Operator or by anyone other than the buyer, are not deductible in arriving at the "gross proceeds" as that term is here used. The term "treatment processes," as here used, means those processes (such as milling, concentrating, smelting, refining, or equivalent) applied to the raw ore or other production after it is extracted from the ground, to put it into a commercially marketable form; excluding fabricating or manufacturing.

d. Unsold production.--If any production (ore, concentrates, metal, or equivalent), after the lapse of six months from the date the ore was extracted from the ground, remains neither sold nor used by the Operator in integrated manufacturing or fabricating operations (for instance, if it is stockpiled), the Government, at its option, as long as it so remains, may require the computation and payment of its royalty on the value of such production in the form (ore, concentrates, metal, or equivalent) it is in when the Government elects to require computation and payment. If any production is used by the Operator in integrated manufacturing or fabricating operations before the Government makes its election, the Government's royalty on such production shall be computed on the value thereof in the form in which and at the time when it is so used. "Value" as here used means what is or would be gross income from mining operations for percentage depletion purposes in Federal income tax determination, or the market value, whichever is greater.

e. Percentages of royalty.--The percentages of the Government's royalty shall be as follows:

> One and one-half ($1\frac{1}{2}$) percent of amounts ("gross proceeds" or "value") not in excess of eight dollars ($8.00) per ton of production in the form in which sold, held, or used, plus one-half ($\frac{1}{2}$) percent for each additional full fifty cents ($0.50) by which such amounts exceed eight dollars ($8.00) per ton, but not in excess of five (5) percent of such amounts.
>
> (For instance: the royalty on an amount of five dollars ($5.00) per ton, would be one and one-half ($1\frac{1}{2}$) percent; on an amount of ten dollars ($10.00) per ton, three and one-half ($3\frac{1}{2}$) percent.)

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
APR 8 1955

f. Lien for payment.--To secure the payment of its percentage royalty, there is hereby granted to the Government a lien upon the land or the Operator's interest in the land and upon any production of minerals therefrom, until the royalty claim is extinguished by lapse of time or is fully paid.

g. Notice to purchasers.--The Operator shall give notice of the Government's claim for royalty to any purchaser of the production, and shall authorize and direct such purchaser to pay the royalty directly to the Government and to furnish the Government with copies of the settlement sheets. If the records of any production and sales or other disposition of production, whether the production is by the Operator or by others, are not made available to the Government, the amount of the royalty may be estimated by the Administrator, Defense Minerals Exploration Administration, or his successor, and his estimate thereof shall be final and binding upon the Operator.

h. No obligation to produce.--Nothing in this contract is to be construed as imposing any obligation on the Operator or the Operator's successor in interest to engage in any mining or production operations.

i. Government not obligated to buy.--Nothing in this contract shall be construed as imposing any obligation on the Government to purchase any minerals mined or produced from the land.

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION
WASHINGTON 25, D. C.

Mr. A. [illegible] Eisenhorn
Executive Officer, Northwest District
DMEA Field Team, Region [illegible]
South 157 Howard Street
Spokane 1, Washington

JAN 14 1955

Re: Docket No. A-879
(Copper, antimony, lead)
Contract No. [illegible]-571
Polaris Mining Company
Polaris Mart Exploration Project
Shoshone County, Idaho

Dear Mr. Eisenhorn:

We refer to your letter, dated December 27, 1954, also the attached copies of letters exchanged by your office and Mr. L. J. Randall, President of Polaris Mining Company, regarding the subject contract.

Mr. Randall states in his letter that the actual unit costs of the exploration work will be higher after November 1, 1954, due to the following new factors: (1) the District changing from a 6-day to a 5-day work week, thus increasing the indirect costs chargeable to the exploration projects; (2) a wage increase granted to the industry on a District-wide basis, which will increase the direct costs.

In view of these new factors, the Operator suggests an increase in the time period to complete the contract and that consideration should be given to the possibility of raising the "Agreed Unit Costs" in the contract, after a review of the actual costs subsequent to the change in conditions.

We concur with your letter to Mr. Randall concerning the extension of the time to complete the contract. In regard to the question concerning the possibility of raising the "Agreed Unit Costs" for the second period work which starts March 1, 1955, the unit cost established by the contract is a maximum cost and we are not in a position to revise it upward.

A review of the costs billed by the Operator through November 1954 shows the sum of $289,198.04 expended for 1537.4 feet of drifting and crosscutting, or an average cost of $50.03 per foot of advance. Actually the Operator could have collected $40.30 per foot under the contract. This figure reflects excess footage over the basic footage

of 350 feet per month mentioned in the contract which reduced the indirect costs. The difference between $50.38 and $50.03, or $0.35, inures to a slight lowering of direct costs, of which the Operator did not take advantage by claiming the maximum allowable.

After the interim audit scheduled at the end of the first period, the new factors mentioned by the Operator might be considered before lowering the "Agreed Unit Costs" for the second period as required by the contract since the actual unit cost figure will be lower than the $51.00 per foot agreed unit cost.

Sincerely yours,

George C. Selfridge

Chairman, Operating Committee

APPROVED:

J. H. Hedges

Member, Bureau of Mines

Thor H. Kiilsgaard

Member, Geological Survey

FMurphy/EWEllis/gla
(1/10/55)
1/13/55
cc to: Adm.'s Reading File
Operating Committee
Docket File
Messrs. C. H. Johnson, Rm. 3621
T. H. Kiilsgaard, Rm. 5224
Contract Adm. & Audit Division ✓
Code 700

HECLA MINING COMPANY

AND

POLARIS MINING COMPANY

JUN 30 1959
O.M.E.

PROXY STATEMENT

SPECIAL MEETINGS OF SHAREHOLDERS
October 10, 1958
Ridpath Hotel, Spokane, Washington

To Consider
STATUTORY MERGER OF POLARIS MINING COMPANY
Into
HECLA MINING COMPANY
and
Increase in Authorized Capital Stock of Hecla Mining Company

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PROXY STATEMENT

FOR PROXIES SOLICITED BY THE MANAGEMENTS OF BOTH COMPANIES

Wallace, Idaho
August 8, 1958

TO THE SHAREHOLDERS OF HECLA MINING COMPANY:

and

TO THE SHAREHOLDERS OF POLARIS MINING COMPANY:

The following information concerning the enclosed proxy and the matters to be acted upon under authority of said proxy is submitted pursuant to the requirements of Regulation X-14 of the Securities and Exchange Act of 1934, as amended. The information submitted is required by the regulations of the Securities and Exchange Commission. However, the Commission has no authority to and does not pass upon the merits of this proposal submitted to the shareholders.

PLAN FOR MERGER

A plan is hereby submitted for the merger of Polaris Mining Company, hereinafter referred to as "Polaris", into Hecla Mining Company, hereinafter referred to as "Hecla".

The proposed method of merger is a statutory merger as provided for under the laws of the states of Washington and Delaware, since Hecla is a corporation organized under the laws of the state of Washington, and Polaris is a corporation organized under the laws of the State of Delaware.

A joint agreement, setting forth the terms of the merger, attached herewith and marked Exhibit "M", has been approved and executed by each member of the Board of Directors of Hecla Mining Company and by each member of the Board of Directors of Polaris Mining Company.

STOCK CONVERSION RATIO

Hecla presently owns 1,264,500 shares of Polaris stock representing 55.06% of the total of 2,296,620 shares of stock of that company issued and outstanding. The balance of 1,032,120 shares of Polaris is owned by the minority shareholders of that company.

As set forth in the joint agreement, attached hereto and marked Exhibit "M", the conversion ratio is on the basis of one (1) share of Hecla to be issued to the minority shareholders of Polaris in exchange for six (6) shares of Polaris. On this basis a total of 172,020 shares of Hecla will be required to effect the merger.

APPROVAL BY SHAREHOLDERS OF EACH COMPANY

Before the proposed merger can be effected the following actions must be submitted to and approved by shareholders of both corporations:

1. The joint agreement referred to above must be submitted to the shareholders of each corporation at special meetings of such shareholders called for that purpose. Such special meetings have been called and will be held at the hour of 10 o'clock a. m., Pacific Standard Time, on the 10th day of October, 1958, for the shareholders of Hecla, and at 2 o'clock p. m. on the same date for shareholders of Polaris, both meetings to be held at the Ridpath Hotel in Spokane, Washington. The laws of the state of Washington, under which Hecla is organized, require that such joint agreement must be adopted by a vote of at least two-thirds (2/3) of the total voting power

of all of the shareholders of Hecla, and likewise the laws of the State of Delaware, under which Polaris is organized, require that such joint agreement must be approved by at least two-thirds (2/3) of the total voting power of all of the shareholders of Polaris. However, notwithstanding that two-thirds (2/3) or more of all of the voting power of all of the shareholders of Polaris is voted in favor of the merger, the same shall not be consummated unless at least fifty (50%) percent of the minority shares of Polaris represented at the meeting (shares other than those owned by Hecla) are voted in favor of the merger.

In event fifty (50%) percent or more of the minority shares of Polaris represented at the meeting are voted in favor of the merger, Hecla will vote its Polaris shares in favor of the merger. However, in event less than fifty (50%) percent of the minority shares of Polaris represented at the meeting are voted in favor of the merger, Hecla will vote its Polaris shares against the merger.

2. In order to effect the consummation of the merger, Hecla shareholders, in addition to approval of the merger agreement set forth above, must also approve, by at least two-thirds (2/3) of all of the voting power of all of the shareholders, an amendment of the Certificate of Incorporation of Hecla Mining Company increasing the common capital stock of that company from Two Hundred and Fifty Thousand Dollars ($250,000) divided into one million (1,000,000) shares of a par value of twenty-five cents (25c) each to Three Hundred Seventy-five Thousand Dollars ($375,000) divided into one million five hundred thousand (1,500,000) shares of a par value of twenty-five cents (25c) each, and the issuance of 172,020 shares of capital stock of Hecla Mining Company to the minority shareholders of Polaris Mining Company, being one (1) share of Hecla stock for every six (6) shares of Polaris stock, to be issued to each and every shareholder of Polaris Mining Company other than Hecla Mining Company.

The shareholders of Hecla will vote for or against adoption of both of the above transactions, since neither transaction will be consummated unless both are consummated.

JOINT AGREEMENT - WHEN EFFECTIVE

The merger shall become effective as of the date the joint agreement, if approved, is filed in the office of the Secretary of State of the State of Washington, and in the office of the Secretary of State of the State of Delaware.

CAPITALIZATION IN THE EVENT PROPOSED MERGER IS EFFECTED

Hecla Mining Company is presently capitalized for Two Hundred Fifty Thousand Dollars ($250,000) divided into one million (1,000,000) shares of authorized capital stock of a par value of 25c per share, all of which is issued and outstanding. In the event the proposed merger is effected Hecla will increase its capitalization to Three Hundred Seventy-five Thousand Dollars ($375,000) divided into one million five hundred thousand (1,500,000) shares of a par value of twenty-five cents (25c) per share and will have one million one hundred seventy-two thousand twenty (1,172,020) shares outstanding. Hecla has no present plans for issuance of the remaining shares of unissued stock. However, management deemed it advisable to increase the authorized capital stock to 1,500,000 shares to provide additional shares to be issued to effect future advantageous transactions should opportunities for such transactions occur.

FACTORS CONSIDERED IN ARRIVING AT CONVERSION RATIO

In arriving at this conversion ratio of one share of Hecla for six shares of Polaris, due regard was given to factors such as working capital of each corporation, physical plant and equipment, known ore reserves, prospects for discovery of new ore deposits, present and estimated future net income, opportunity for participation in new ventures presented to management, and

other factors of lesser importance, all of which are complicated and difficult to evaluate. Admittedly, the final conversion ratio is, to some extent, an arbitrary figure, arrived at by management.

The following is a brief statement of factors involved in appraising relative values of the above two corporations.

The table set forth below discloses general information relative to the history and other pertinent data with respect to the two corporations (neither corporation has securities authorized or issued, other than those described below):

Name of Corporation	Year of Incorporation	State of Incorporation	Period of Corporate Existence	Shares Authorized	Par Value Per Share	Shares Outstanding (Exclusive of Treasury Stock)	Approx. Number of Shareholders
Hecla Mining Company	1898	Washington	Perpetual	1,000,000	$0.25	1,000,000	4,415
Polaris Mining Company	1937	Delaware	Perpetual	3,000,000	$0.25	2,296,620	3,067

Notes: 1. The transfer agent of both companies is the Registrar and Transfer Co., 15 Exchange Place, Jersey City 2, New Jersey. The company is also the registrar for Polaris Mining Company. However, the registrar for Hecla Mining Company is the Manufacturers Trust Company, 55 Broad Street, New York City.

2. Description of shares of stock:

Hecla Mining Company

(a) Dividend rights - All shares of stock carry equal dividend rights and there is no limitation on the payment of dividends contained in any indentures or other agreements.

(b) Liability to further call for assessment by registrant; All shares are fully paid and non-assessable.

(c) Pre-emptive rights - All shares have pre-emptive rights.

(d) There are no sinking fund provisions.

(e) There are no restrictions with respect to repurchase or redemption of shares, although the registrant has never made it a practice to purchase its own shares.

(f) All shares have equal voting rights, equal liquidation rights, equal conversion rights and equal redemption provisions.

Polaris Mining Company

The description of shares of stock set forth under note (2) above for Hecla shares is identical for Polaris shares except that Polaris shares do not have pre-emptive rights.

COMPARATIVE FINANCIAL AND PRODUCTION DATA

Detailed financial data with respect to each corporation is shown in the financial section of this report. (See Exhibits "A" to "D", inclusive).

The following schedules set forth pertinent financial data which was given consideration in arriving at the conversion ratio of one share of Hecla for six shares of Polaris:

COMPARATIVE SCHEDULE OF NET INCOME AND DIVIDENDS PAID AS REPORTED TO SHAREHOLDERS OF EACH COMPANY

	Net Income		Dividends Paid	
	Hecla	Polaris	By Hecla	By Polaris
1953	$580,545	$364,189	$500,000	$918,649
1954	361,834	549,013	200,000	459,324
1955	495,956	282,380	250,000	459,319
1956	904,997	334,491	450,000	— —
1957	786,599	199,237	500,000	114,831
5 months ended May 31, 1958	217,855	94,800	250,000	114,830

The net income above of Hecla and Polaris as reported to shareholders does not take into account certain rather material adjustments in depreciation, depletion, amortization and Federal Income taxes resulting from audits by the Internal Revenue Service made subsequent to such reports to shareholders. In addition thereto, the income of Hecla includes dividends received from Polaris rather than Hecla's share of the net income earned by Polaris by reason of its stock ownership in the latter company. Column (1) of the following schedule sets forth the adjusted net income of Hecla, after adjustments for depreciation, depletion, amortization and Federal Income taxes have been applied retroactively to the applicable periods. Columns (4) and (5) of the following schedule set forth a comparison based on the adjusted net income of Hecla on a consolidated basis (i.e., after excluding Polaris dividends received by Hecla, but after including Hecla's 55.06% share of the net income of Polaris) with the adjusted net income earned by the minority shareholders of Polaris.

	(1) Hecla Net Income (As Adjusted)	(2) Deduct Polaris Dividends Received by Hecla	(3) Add 55.06% of Polaris Net Income (Hecla's share)	(4) Hecla Consolidated Net Income Including Its Share of Polaris Income	(5) Polaris Net Income (Minority Shareholders) 1,032,120 Shares
1953	$580,545	$505,800	$205,602	$ 280,347	$167,813
1954	400,740	252,900	290,807	438,647	237,356
1955	509,330	252,900	160,325	416,755	130,857
1956	922,837	— —	184,168	1,107,005	150,323
1957	773,890	63,225	109,698	820,363	89,538
To May 31 - 1958	217,855	63,225	52,358 (1)	206,988	42,736

(1) Hecla's share of the net income of Polaris for the five months ended May 31, 1958 of $52,358 in Column (3) represents 55.06% of the total net income of that company before provision for abnormal losses on advances to and investments in capital stock of Accesso Systems, Inc. Likewise, such abnormal loss has been excluded in the net income of $42,736 for the minority shareholders in Column (5). Total net income of Polaris for the five months ended May 31, 1958 would have been $95,094 ($115,094 less income taxes of $20,000) had there been no such abnormal loss.

NET INCOME PER SHARE

	Hecla Net Income Per Share (Column 4 of above Schedule)	Polaris Net Income Per Share (Column 5 of Above Schedule)	Ratio of Earnings Per Share (Columns 4 and 5 above) Hecla		Polaris	Hecla Pro-Forma Combined Earnings Per Share See Note (1) Below
1953	28c	16c	1.67	to	1	38c
1954	44c	23c	1.85	to	1	58c
1955	42c	13c	3.18	to	1	47c
1956	$1.11	15c	7.36	to	1	$1.07
1957	82c	9c	9.16	to	1	78c
To May 31 - 1958	21c	4c	4.84	to	1	21c
Average 1955-1957	78c	12c	6.32	to	1	77c

(1) The last column in the above schedule shows the net income per share of Hecla on a pro-forma basis had such merger been effected on January 1, 1953.

The following is a condensed statement of the net income of Hecla and Polaris for the five month period ended May 31, 1958. In the opinion of management, all necessary adjustments have been made for a fair representation of the results of operation for the period.

CONDENSED STATEMENT OF NET INCOME

Five Months' Period Ended May 31, 1958

	Hecla Mining Company	Polaris Mining Company
Income		
Operating profit	$252,990	$154,126
Dividend income		
The Bunker Hill Company	15,000	
Polaris Mining Company	63,225	
Miscellaneous	13,994	1,075
Other income		
Rentals	30,058	
Interest	38,312	9,044
Sundry income and operating fees	18,309	365
Net gain, sale of capital assets	3,830	
Total income	$435,718	$164,610
Operating deductions:		
Exploration and property examination	$ 92,179	$
Other operating expenses	48,861	
General and administrative expenses	31,052	21,943
Taxes, property and excise	5,832	27,185
Depreciation (other than operating)	3,609	388
Total deductions	$181,533	$ 49,516

CONDENSED STATEMENT OF NET INCOME

(Continued)

Five Months' Period Ended May 31, 1958

	Hecla Mining Company	Polaris Mining Company
Net profit before income taxes	$254,185	$115,094
Less - Provision for income taxes (based on above profits)	35,800	— —
Net income before prior year adjustments and non-recurring expenses	$218,385	$115,094
Add or deduct:		
Excessive depreciation, amortization and depletion deducted in prior years	108,415	
Additional Federal income taxes deficiency for prior years	(38,305)-	
Estimated loss on collection of Accesso note due August 1, 1958 (see note (1) below)		(79,985)-
Provision for loss on Accesso stock (see note (2) below)		(18,000)-
Net income	$288,495	$ 17,109

Note (1) - Polaris holds a non-interest bearing note from Accesso Systems, Inc., of Seattle, Washington, dated August 1, 1956; due August 1, 1958, for $255,000, which at Polaris' option was convertible into Accesso stock at $1.50 per share on or before the maturity date; provided, however, that Polaris must notify Accesso on or before May 1, 1958, as to whether to take stock or demand payment at maturity. On April 25, Polaris notified Accesso that it would demand payment and not elect to take Accesso stock. An agreement has been executed between the two companies whereby Accesso, after paying its current obligations, will turn over to Polaris on or before August 1, 1958, all of its current assets and machinery and equipment valued at approximately $175,015, to apply on the note, leaving a balance of $79,985 which is being written off by Polaris as a bad debt.

Note (2) - Since Accesso Systems, Inc. is without funds to continue operations, the $18,000 cost of 18,000 shares of Accesso stock owned by Polaris is considered worthless and is being written off as a loss.

Polaris, in an attempt to diversify its activities, acquired its interest in Accesso Systems, Inc., in 1956. Accesso had exclusive sales and manufacturing rights on a national scale to a new design for hangers used to place acoustical tile in suspended ceilings, which allows access into the ceiling at any point. Surveys by architects indicated substantial potential earnings. However, after two years of experience with the system, Polaris management has concluded that the probable earning capacity would not be sufficient to warrant Polaris' further participation in stock of the company.

DIVIDENDS PAID PER SHARE
January 1, 1953 to May 31, 1958

	Hecla	Polaris
1953	50c	40c
1954	20c	20c
1955	25c	20c
1956	45c	—
1957	50c	5c
To May 31, 1958	*25c	5c

* 12½c of which was paid June 20th to shareholders of record May 20, 1958.

At a Board of Directors' meeting held July 25, 1958, Hecla declared a dividend of 12½c per share, payable September 19, 1958, to shareholders of record August 20, 1958. The Board of Directors of Polaris also held a meeting on July 25, 1958, but took no action with respect to a dividend.

PRODUCTION AND GRADE OF ORE MINED - POLARIS

The decrease in net income of Polaris since 1954 is largely attributable to a decrease in tons of ore mined, together with a decrease in the recovered silver content thereof (silver is the principal metal content). A comparison of production for the past five years is set forth as follows:

	Tons of Ore Mined	Total Oz. of Recovered Silver	Oz. of Recovered Silver Per Ton of Ore Mined
1953	113,620	3,226,526	28.4
1954	121,046	3,579,960	29.6
1955	113,282	2,750,511	24.3
1956	89,609	2,310,059	25.8
1957	98,564	2,456,777	25.0
To May 31, 1958	47,054	1,167,170	24.8

(For detailed information with respect to operations of Polaris and Hecla, please refer to the sections on Business of Hecla and Business of Polaris.)

NET ASSET VALUES

The following statement sets forth condensed comparative balance sheets of Hecla and Polaris as of December 31, 1957, separately and combined, before eliminating intercompany accounts and after making adjustments in certain items as explained in footnotes to this statement:

CURRENT ASSETS:	Hecla	Polaris	Combined
Cash and Government securities with accrued interest thereon	$ 3,897,950	$ 1,229,398	$ 5,127,348
Preferred and common stocks	762,421	— —	762,421
Accounts and notes receivable	669,587	237,891	907,478
Inventories	65,144	168,920	234,064
Prepaid insurance	35,562	15,980	51,542
Total	$ 5,430,664	$ 1,652,189	$ 7,082,853
Less-Current liabilities	985,406	179,261	1,164,667
Current assets less current liabilities	$ 4,445,258	$ 1,472,928	$ 5,918,186

INVESTMENTS AND ADVANCES:	Hecla	Polaris	Combined
The Bunker Hill Co. -			
Common stock at market value - Note (1)	$ 2,925,000	$	$ 2,925,000
Polaris Mining Company -			
Common stock - Note (1)	1,001,672		(See note 3)
Miscellaneous common stocks & sundry mining property interests at market value - Note (1)	11,100		11,100
Accesso Systems, Inc. -			
Common stock at market value		—	—
Mortgage note due 8-1-58 - Note (2)		175,015	175,015
Chester Mining Company -			
Common stock at book value		68,771	68,771
Note receivable at book value		33,177	33,177
Property, plant and equipment at cost less reserves - (Net)	862,253	69,347	931,600
Net asset value	$ 9,245,283	$ 1,819,238	$10,062,849

	Hecla	Polaris	Combined
Net asset value per share of stock outstanding	$ 9.25	79c	$8.59
Ratio of net asset value per share of stock	11.7 to 1		

The combined net asset value of 1/6 of a share of Hecla is $1.43 (1/6 of $8.59)

Note (1) - For purposes of the above statement, Hecla's investments in Bunker Hill stock are stated at market value as of December 31, 1957, rather than cost as reflected in the certified balance sheets of this report. Miscellaneous common stock and sundry mining property interests are also stated at market value. Its investment in Polaris is stated at its share of the adjusted book value (55.06% of $1,819,238). All other assets are stated at book value.

Note (2) - Polaris investment in common stock of Accesso is written off as worthless, and advances made by Polaris to Accesso are written down to the realizable value of those assets which are being turned over to Polaris by Accesso on or before August 1, 1958. (See footnote of explanation on page 10 following statement of net income of Polaris for the five months ended May 31, 1958.) All other assets of Polaris are stated at book value.

Note (3) - Hecla's investment in Polaris of $1,001,672 is eliminated in the combined statement for both companies in order to reflect the net asset value of the combined assets of both companies.

ADVANTAGES AND DISADVANTAGES OF PROPOSED MERGER

Although directors of both Hecla and Polaris have unanimously recommended by resolution that the proposed merger be consummated, there are possible advantages as well as disadvantages, as set forth below, which may result:

ADVANTAGES OF PROPOSED MERGER

1. Elimination of intercompany problems of management.

2. Elimination of intercompany accounting problems, and the necessity of preparing and filing numerous reports would be reduced.

3. The net working capital of Hecla Mining Company is $4,445,258 as compared to $1,472,928 in the case of Polaris. The cost of exploration and development of all mining properties is very costly under present-day conditions. This has resulted from inflationary trends during recent years, as well as from increased risk involved in exploration of present-day mining prospects. Mines with profitable ore bodies near the surface, especially in the Coeur d'Alene District, are difficult, if not impossible, to find. Exploration and development of deep-seated ore bodies is almost prohibitive for the smaller companies with limited financial resources. This makes it difficult for smaller companies to engage in exploration, which, of course, is necessary to replace present ore reserves as they become exhausted. The combined net working capital of both companies, in the event the merger is approved, will be $5,918,186 and will result in a financially stronger corporation than either Hecla or Polaris is at present.

DISADVANTAGES OF PROPOSED MERGER

1. Since it is impossible to foresee future income to be realized by either company, it is impossible to determine an accurate stock conversion ratio. Consequently the conversion ratio of one share of Hecla for six shares of Polaris was arrived at to some extent in an arbitrary manner. The average earnings per share for Hecla during the three years ended December 31, 1957 was 78c, as compared to 12c, which would indicate a conversion ratio of one share of Hecla for six shares of Polaris.

Management feels that Hecla with its 25% interest in the Radon uranium operation near Moab, Utah, its 19% common stock interest in The Bunker Hill Company, 55% interest in Polaris, and other interests described in the Proxy Statement, offers greater opportunity for sustained income than does Polaris Mining Company. The latter company's future income is largely dependent upon its success or failure in its income from the Silver Summit Mine and its interest in ores produced by Sunshine Mining Company.

PURCHASE OF DISSENTING SHARES

The merger agreement provides that the merger will not become effective in the event the aggregate market value of dissenting shares of both companies exceeds $500,000 as of the date the merger agreement is voted upon by the shareholders of each company, such market value to be based on the asked price as of that date.

FRACTIONAL SHARES

In the event the Hecla shares to be issued to a Polaris shareholder result in a fractional share, such fractional share will be purchased by Hecla at the market price as of the date the merger is recorded and filed with the Secretary of State, and a check in payment thereof will be forwarded to such shareholder along with the Hecla stock certificate issued in exchange for his shares of Polaris stock surrendered. If any shareholder shall object to Hecla's purchase of his fractional shares, as hereinabove provided, he may return the Hecla check issued in payment therefor within a period of thirty days after receipt of such check and thereupon a fractional script certificate issued to "Bearer" will be delivered to him in lieu of a certificate for such fractional shares. Such fractional script certificate when combined with other fractional script certificates aggregating a full share or more shall entitle the bearer to a certificate for a full share of common stock. A new script certificate will be issued for any excess script certificates surrendered in

excess of a full share of common stock. The holders of such script certificates shall not as such holders be stockholders of Hecla and shall not be entitled to dividends or to exercise any voting rights or to have or to exercise any other rights or privileges of stockholders. Any script certificates not surrendered in exchange for full shares within a period of two years from the date on which the merger is filed and recorded with the Secretary of State shall be redeemable only in cash at the market value of Hecla as of the expiration of such two-year period.

HISTORICAL MARKET PRICE OF STOCKS

Shares of Hecla Mining Company and of Polaris Mining Company are both listed on the Spokane Stock Exchange and the American Stock Exchange. The tabulation which follows shows the high and low sales price by calendar quarters since January 1, 1956, and the number of shares traded on each exchange:

AMERICAN STOCK EXCHANGE	Hecla			Polaris		
	High	Low	Shares Traded	High	Low	Shares Traded
1956						
1st quarter	11-1/2	9-5/8	83,800	2-7/8	2-1/8	30,700
2nd quarter	10-3/4	8-5/8	46,700	2-3/8	1-5/8	56,400
3rd quarter	9-1/2	8	50,300	1-3/4	1-1/2	41,800
4th quarter	9-1/8	7-1/2	62,500	1-5/8	1-1/8	61,900
1957						
1st quarter	9-1/8	7-5/8	27,400	2	1-3/8	32,600
2nd quarter	8-5/8	7-1/4	35,300	2	1-1/4	24,700
3rd quarter	8-1/4	7	31,200	1-5/8	1-1/8	26,700
4th quarter	7-1/8	5-5/8	83,600	1-1/4	7/8	38,600
1958						
1st quarter	8-3/8	6-3/4	31,800	2	15/16	60,600
2nd quarter	8-7/8	7-1/4	49,000	1-5/8	1-1/4	16,200
Market value as of August 8, 1958	8-5/8	8-5/8		1-1/4	1-1/4	

SPOKANE STOCK EXCHANGE	Hecla			Polaris		
	High	Low	Shares Traded	High	Low	Shares Traded
1956						
1st quarter	$11.40	$9.70	4,840	$2.82	$2.14	32,514
2nd quarter	10.50	8.70	6,060	2.17	1.50	21,916
3rd quarter	9.00	8.15	4,000	1.85	1.43	14,666
4th quarter	9.25	8.00	3,578	1.63	1.10	19,417
1957						
1st quarter	8.70	7.60	2,771	2.00	1.20	23,988
2nd quarter	8.50	7.15	1,425	2.00	1.25	9,123
3rd quarter	8.40	7.12	6,967	1.60	1.20	11,511
4th quarter	7.50	6.10	12,147	1.36	.98	35,137
1958						
1st quarter	8.30	6.75	6,298	2.05	1.00	47,723
2nd quarter	8.90	7.35	7,398	2.00	1.25	15,739
Market value as of August 8, 1958	8.75	8.75		1.30* Asked*	1.27** Bid**	

EFFECT OF PROPOSED MERGER

The effect of the proposed merger, if approved by the shareholders of each company,

would be for Hecla Mining Company to acquire by agreement and operation of law all of the property, rights, and privileges of Polaris Mining Compay. Hecla Mining Company would also assume all liabilites and obligations of the latter company, and Polaris Mining Company would thereafter cease to exist as a separate corporation.

NO TAX LIABILITY RESULTING FROM MERGER

Management is in receipt of an opinion from the Commissioner of Internal Revenue that no taxable gain or loss will be recognized to either corporation or to the shareholders of Polaris from the exchange of their holdings for shares of Hecla Mining Company and that the basis for shares of Hecla acquired as a result of the merger will be the same as the cost or other basis of Polaris shares exchanged therefor.

EXPENSES OF MERGER

Under terms of the joint merger agreement, expenses of the merger, which are not expected to exceed $5,000, shall be borne by the Hecla Mining Company. Hecla Mining Company will pay the cost of the proxy solicitations to be made by both companies. The estimated cost does not include any cost for purchasing the stock of dissenting shareholders as hereinabove described, nor for the cost of unanticipated litigation which might arise in connection with the merger. Management is advised by counsel that the laws of the states of Washington and Delaware, the places of incorporation of Hecla and Polaris, both permit the merger of domestic and foreign corporations.

VOTING POWER PER SHARE

Each shareholder of Hecla Mining Company and of Polaris Mining Company is entitled to one vote for each share of stock outstanding in his name as of the record date. Hecla has 1,000,000 shares of stock outstanding and Polaris has 2,296,620 shares of stock outstanding.

REVOCABILITY OF PROXY

Proxies are revocable at the option of the person executing the same at any time prior to the time such proxy is voted at the meeting. In the case of Hecla shareholders, such revocation shall not become effective until notice thereof is given to the Secretary of the Corporation.

RIGHTS OF DISSENTING SHAREHOLDERS

The rights of dissenting shareholders who might oppose the proposed merger are governed by the laws of the states of Washington and Delaware, since Hecla Mining Company is organized under the laws of the State of Washington, and Polaris Mining Company is organized under the the laws of the State of Delaware. A brief summary of the laws of these two states with regard to the rights of dissenting shareholders is set forth as follows:

WASHINGTON LAW - DISSENTING SHAREHOLDERS

The Revised Code of the State of Washington, Sections 23.16.140, 23.16.150, 23.16.160 and 23.16.170, provide that a shareholder who did not vote in favor of the merger, and who, within twenty days after notice of the time, place and purpose of the meeting called to vote upon the merger was mailed to him, filed with the corporation his written objection to the merger demanding payment for his shares, shall be paid the value of his shares as of the date of the authorization of the merger with interest thereon at the rate of six percent (6%) per annum from said date. Any shareholder to whom notice of such meeting was not mailed and who did not vote in favor of the merger and who, within twenty (20) days after the date upon which

the merger was authorized, filed with the corporation his written objection to the merger demanding payment for his shares, shall have the right to have his shares appraised and paid for.

Any shareholder who did not vote in favor of the merger and who did not within the time allowed him file with the corporation his written objection to the merger, demanding payment for his shares, shall be bound by such corporate action with like force and effect as though such shareholder had voted in favor of the merger.

If, within thirty (30) days after such corporate action was taken, the corporation, including the surviving corporation, and any such shareholder cannot agree upon the value of the shares at the time the merger was authorized the corporation or any such shareholder may by petition filed in the Superior Court of the county in which was located the registered office of the corporation at the time the merger was authorized, within four months after the expiration of said period of thirty days, demand a determination of the value of the shares of all such shareholders as of the date of the authorization of the merger by an appraiser to be appointed by said court.

Voting against or a direction in the proxy to vote against the adoption of the merger agreement will not constitute a written objection as referred to in the above paragraphs with respect to dissenting shareholders under Washington law. The corporation will give no further notice of the date before which objection to the agreement must be filed as specified.

DELAWARE LAW — DISSENTING SHAREHOLDERS

Section 262 of Subchapter IX of Chapter 1 of Title 8 of the General Corporation Law of the State of Delaware provides that the corporation surviving the merger shall, within ten days after the date on which the agreement of merger has been filed and recorded, notify each stockholder who objected to the merger in writing, and whose shares were not voted in favor of such merger, and who filed written objection with the corporation before the taking of the vote on the merger, that said agreement has been filed and recorded. This notice shall be sent by registered mail, return receipt requested, addressed to said stockholder at his last known address as it appears on the books of the corporation and if any of such stockholders shall within twenty days after the date of mailing of said notice demand in writing, from the corporation surviving such merger, payment for his stock, such surviving corporation shall, within thirty days after the expiration of said period of twenty days, pay to him the value of his stock on the date of the recording of said agreement of merger, exclusive of any element of value arising from the expectation or accomplishment of such merger. If during said period of thirty days the corporation and any such objecting stockholder fail to agree as to the value of such stock, any such stockholder or the surviving corporation may by petition filed in the Court of Chancery within four months after the expiration of said period of thirty days demand a determination of the value of the stock of all such stockholders by an appraiser to be appointed by said Court.

Voting against or a direction in the proxy to vote against the adoption of the merger agreement will not constitute a written objection as referred to in the above paragraphs with respect to dissenting shareholders under Delaware law. The corporation will give no further notice of the date before which objection to the agreement must be filed as specified.

CONTINGENT LIABILITIES

Management knows of no contingent liabilities in connection with these two companies.

SHARES OF STOCK BENEFICIALLY OWNED BY OFFICERS AND DIRECTORS OF HECLA MINING COMPANY

Name and principal occupation	*Year in which first became Director*	*Common Stock Owned Beneficially Directly or Indirectly as of June 6, 1958* — *Hecla Mining Company*	*Polaris Mining Company*
JOSEPH T. HALL. For the past five years and more, Mr. Hall has been President and Director of Callahan Zinc-Lead Company and Vulcan Silver-Lead Corporation, 100 Park Avenue, New York City. (These companies were merged into Callahan Mining Corporation in April, 1958).	1958	200 shares See Note (a) below	none
RICHARD N. HUNT, Vice President, Director and Chief Geologist of U. S. Smelting, Refining and Mining Company, Salt Lake City, Utah.	1954	500 shares	none
GEORGE F. MAYER, Insurance broker, Milwaukee, Wisconsin.	1942	1,000 shares See Note (b) below	none
J. L. McCarthy, General Manager of White Pine Lumber Co., and Orofino Mercantile Co., Orofino, Idaho. Mr. McCarthy is also Vice President of Hecla Mining Company.	1946	1,475 shares See Note (c) below	1,000 shares
L. J. RANDALL, President of Hecla Mining Company.	1951	2,000 shares	100 shares
CARROLL SEARLS, Secretary and Director of Newmont Mining Corporation, New York, N. Y.	1952	200 shares See Note (d) below	none
CHARLES A. TILFORD, President and General Manager of Bitco, Inc., Spokane, Wash. (Bitco, Inc. is principally a dealer and distributor of mining and construction supplies.)	1953	1,485 shares	10 shares

Note (a) Callahan Mining Corporation, for which corporation Joseph T. Hall is president and director owns beneficially 49,500 shares of Hecla.

Note (b) Mr. Mayer represents an additional 19,333 shares of Hecla stock owned by members of his family who reside in Milwaukee and look to Mr. Mayer for representation.

Note (c) Mr. McCarthy is a trustee for a trust which owns beneficially 1,500 shares of Hecla Mining Company stock and 1,489 shares of Polaris Mining Company stock.

Note (d) Newmont Mining Corporation, for which corporation Carroll Searls is secretary and director, owns beneficially 45,300 shares of Hecla.

If the merger is consummated, L. J. Randall will own 16 additional shares, J. L. McCarthy 167 additional shares, and Charles A. Tilford one additional share of Hecla as a result of the conversion of their present ownership of Polaris stock shown in the following schedule. The shares of Hecla owned by other directors of Hecla and the corporations they represent will not change.

SHARES OF STOCK BENEFICIALLY OWNED BY OFFICERS AND DIRECTORS OF POLARIS MINING COMPANY

Name and principal occupation	*Year in which first became Director*	*Common Stock Owned Beneficially Directly or Indirectly as of June 6, 1958*	
		Polaris Mining Company	*Hecla Mining Company*
W. H. LOVE, Manager of Mines of all Hecla operations, including Polaris Mining Company.	1956	none	none
L. J. RANDALL, President of Hecla Mining Company.	1952	100 shares	2,000 shares
R. E. SORENSON, Vice President of Hecla Mining Company.	1951	66 shares	300 shares
CHARLES A. TILFORD, President and General Manager of Bitco, Inc., Spokane, Washington. (Bitco, Inc., is principally a dealer and distributor of mining and construction supplies.)	1956	10 shares	1,485 shares
GEORGE W. ZELLER, Vice President and Cashier of the First National Bank of Wallace, Idaho.	1948	1,000 shares	300 shares

The foregoing statements as to securities owned is based on information furnished by each director.

ADDITIONAL INFORMATION

Polaris Mining Company, under an informal arrangement has the use and benefit, at cost, of the supervisory, office, engineering and other facilities of Hecla Mining Company. During the fiscal year ended December 31, 1957, Polaris Mining Company was charged $53,435 by Hecla Mining Company for these services.

No action is to be taken with respect to the election of directors and in event the merger is consummated, the present Board of Directors and officers of Hecla Mining Company will continue in office. The aggregate amounts paid or set aside to all officers and directors of Hecla as a group, during the past fiscal year, were as follows:

Salaries and allowances	$60,358
Contributions to retirement plan - (Estimated)	4,287

The sum of $60,358 represents the total salaries and allowance paid to directors and officers of Hecla Mining Company. Of this amount, $39,488 was absorbed by Hecla and the balance of $20,870 was charged to affiliated operations under Hecla management.

No director or officer received remuneration in excess of $30,000 per year.

HISTORY AND BUSINESS OF HECLA MINING COMPANY

Hecla Mining Company was incorporated in the State of Washington on July 12, 1898. The Hecla mine at Burke, Idaho was one of the major producers of the Coeur d'Alene District. From 1898 to 1944 the mine produced 9,054,390 tons of ore containing 40,789,973 ounces silver, 732,030 tons lead, and 41,275 tons of zinc.

During the latter years of the Hecla mine operation, and since its exhaustion in 1944, Hecla acquired interests in other properties, both in the Coeur d'Alene District and in other areas. At the present time Hecla's principal interests include: Ownership of a majority interest in Polaris Mining Company, approximately 19% common stock interest in The Bunker Hill Com-

pany, 25% interest in the Radon mine near Moab, Utah, and a 50% interest in the Hot Rock property which adjoins the Radon. Hecla operates the Star mine for The Bunker Hill Company on a fee basis and is presently engaged in extensive exploration of the Silver Mountain property east of Mullan, Idaho as a joint venture with Bunker Hill. Other interests include a 30% interest in the Princeton property east of Silver Mountain, a non-operating property, and ownership of several patented and unpatented claims in addition to the main Hecla group of claims in the Mullan-Burke area.

Hecla is exploring the old Livingston Mine in Custer County, Idaho under an agreement with Idaho Custer Silver-Lead Mines, Inc., by which Hecla may obtain a 60% interest in the property if exploration results are successful. In addition, Hecla also owns the Red Bird lead-zinc mine and the Union gold mine in southern British Columbia. Both of these properties are inactive except for recent exploration work on the Red Bird.

INTEREST IN POLARIS

Hecla acquired control of Polaris Mining Company in 1937 and presently owns a 55% interest in the outstanding capital stock of that company.

INTEREST IN BUNKER HILL

Hecla owns a total of 300,000 shares of the common stock of The Bunker Hill Company, or approximately 19% of the total common shares outstanding.

The Bunker Hill Company owns the Bunker Hill mine, the Crescent mine, a lead smelter with associated refinery for lead and silver, a slag fuming unit, cadmium plant, electrolytic zinc plant, sulphuric acid plant, all located in or near Kellogg, Idaho, and the Star mine near Burke, Idaho.

In addition to the above, The Bunker Hill Company owns plant facilities at Seattle, Washington, where operations include the manufacture of lead and lead-alloy products and secondary lead smelting, as well as a chemical products plant where lead oxides used in lead-acid storage batteries, litharge for ceramics, oil refining and red lead for paints and glass making are manufactured.

The Bunker Hill also owns a 37½% operating interest in the Silver Mountain and a 30% interest in the Princeton properties located east of Mullan, Idaho. An exploration project is being conducted in the Silver Mountan Project but no mineralization of consequence has been encountered. There is no activity at the Princeton. Hecla also owns a 30% interest in the Princeton.

The Star Mine is managed and operated by Hecla for an anual fee of $30,000. In addition, Hecla is paid an additional $70,000 rental on facilities owned by Hecla and used in the operation of the Star Mine. All property taxes and insurance on these facilities are paid by Bunker Hill. The Silver Mountain, in which Hecla also has a 37½% interest, is also managed and operated by Hecla. All other operations listed above are operated and managed by Bunker Hill.

In addition to the above, the Bunker Hill Company owns a 36% interest in the capital stock of Pend Oreille Mines and Metals Corporation, which company operates a lead-zinc producing mine in the State of Washington, near Metaline Falls, Washington.

Due to the depressed market for lead and zinc, Bunker Hill's earnings per share of common stock have been substantially decreased. Because of reduced sales and accumulation of metal inventory, the output of the electrolytic zinc plant was reduced on January 1, 1958, from maximum capacity of 6,000 tons per month to 4,800 tons, and was further reduced on August 1, 1958 to 3,600 tons per month. The Bunker Hill mine and Star mine were reduced from a five-day operation to a four-day operation on February 1, 1958. Output at the lead smelter

was reduced on August 1, to 5,400 tons per month. Previous thereto this plant operated at its capacity of 8,400 tons per month.

The following table sets forth the production of operations owned by Bunker Hill for the years ended December 31, 1955, 1956 and 1957, as published in their annual reports:

LEAD SMELTER PRODUCTION AND SALES:

	PRODUCTION	SALES						
Year	Lead (Tons)	Lead (Tons)	Zinc In Fume (Tons)	Cadmium (Pounds)	Silver (Ounces)	Antimony (Tons)	Copper (Tons)	Gold (Ounces)
1957	106,027	99,688	21,001	54,372	5,932,170	703	805	9,769
1956	101,714	96,391	17,500	103,461	4,932,098	317	729	7,520
1955	90,861	95,976	18,034	153,774	5,156,891	1,118	622	5,320

ZINC PLANT PRODUCTION AND SALES:

	PRODUCTION		SALES	
Year	99.99+% Bunker Hill Zinc (Tons)	Electrolytic Cadmium (Pounds)	Zinc (Tons)	Electrolytic Cadmium (Pounds)
1957	68,832	599,809	65,820	540,674
1956	57,799	467,091	51,432	434,094
1955	56,625	463,356	59,293	628,672

ACID PLANT:

	Production Tons	Sales Tons
1955	46,361	46,155
1956	45,860	45,410
1957	96,041	96,146

STAR MINE PRODUCTION		METALS RECOVERED			KNOWN ORE RESERVES
Year	Milled (Dry Tons)	Lead (Tons)	Zinc (Tons)	Silver (Ounces)	(Tons)
1957	199,020	7,697	15,741	216,991	1,079,947
1956	189,821	7,086	13,324	207,017	1,372,684
1955	208,189	7,189	16,933	214,182	1,476,340

BUNKER HILL MINE PRODUCTION		METALS RECOVERED			KNOWN ORE RESERVES
Year	Milled (Dry Tons)	Lead (Tons)	Zinc (Tons)	Silver (Ounces)	(Tons)
1957	522,933	35,428	12,460	2,212,799	3,306,510
1956	531,334	31,555	10,686	2,028,535	3,103,126
1955	528,833	33,939	9,797	2,197,018	2,809,203

CRESCENT MINE

This property is in the development stage. During 1957 a small but persistent ore body was developed. Production was limited to 12,032 tons of ore from development work which produced 191,875 ounces of silver.

PEND OREILLE MINES AND METALS COMPANY

PRODUCTION DATA

	1955	1956	1957
Tons of ore milled	503,391	587,891	757,197
Grade of ore recovered			
% Lead	1.36%	1.37%	1.18%
% Zinc	1.61	1.28	1.54
Net income or (loss)	$286,584	$18,885	($138,752)

Effective February 1, 1958, this company also reduced its mining operation from a five-day basis to a four-day basis.

BUNKER HILL — DIVIDENDS & EARNINGS

The following sets forth comparative net income and dividends paid per share of common stock for the five years ended December 31, 1957:

		Net Income Per Share of Common Stock	Dividends Paid Per Share of Common Stock	Average Metal Price Lead	Average Metal Price Zinc
	1953	$0.81	$1.00	13.49c	10.85c
	1954	1.53	.75	14.05	10.68
	1955	2.06	1.20	15.14	12.30
	1956	1.81	1.20	16.01	13.49
	1957	.68	.90	14.66	11.40
1st Qtr.	1958	(.23)-Loss	—	13.00	10.00

The decrease in net income in 1957 was partially due to accelerated depreciation taken in that year. Lead is presently quoted at 11c and zinc 10c.

INTEREST IN THE RADON AND HOT ROCK GROUPS

The Radon group of ten claims is in the northerly part of the Big Indian Mining District about forty miles southeast of Moab in San Juan County, Utah. The Hot Rock group comprises thirty-five claims lying westerly from and adjacent to the Radon group.

Hecla acquired a 25% interest in Radon and a 50% interest in Hot Rock through an agreement with U & I Uranium, Inc. of Kellogg, Idaho in December, 1954. U & I Uranium, Inc. was later merged with Federal Uranium, Inc. and the agreement was subsequently assigned by the latter company to Radorock Resources, Inc. The merger and assignment, however, had no effect upon the terms of the agreement or Hecla's interests in the properties.

Under the terms of the agreement with respect to the Radon group, Hecla undertook further exploration, construction of a surface plant, the sinking of a shaft to a depth of 690 feet and subsequent development and mining of the ore body. Hecla retained 100% net smelter returns (after a 15% royalty) from production until the pre-production costs incurred by Hecla were returned. Hecla's pre-production costs were recovered by the end of October, 1956 and subsequent to that date Hecla has received 21.25% of the net smelter returns (25% of 85%) and pays 25% of the total cost of the operation.

RADON ORE BODY

The Radon ore body is a flat lying, tabular, blanket-type uranium deposit occurring in the Mossback member of the Chinle formation at the contact with the underlying Cutler formation. The principal ore mineral is urananite which occurs as interstitial filling and replacement of the cementing material in an arkosic sandstone.

The ore body trends about N. 20° W. and is continuous over a length of about 2100 feet between the north and south boundaries of the property. The average width of the ore body is

about 500 feet and the ore varies from less than one foot to more than eight feet in thickness. The average depth below the surface is about 600 feet.

The ore body is mined through a vertical, three-compartment, 690-foot shaft and is fully developed by a service incline driven easterly up dip (about 7 degrees) across the central part of the ore body and by four strike drifts, spaced about 120 feet apart, which extend from the service incline both north and south to the property boundaries. The ore is mined by the long wall method using Becorit steel props to control the cave. This method permits full recovery of ore with a minimum of dilution and is working very successfully. Mining was started at both the north and south property limits with the development of the longwall faces across the entire width of the ore body. The mined areas are allowed to cave and as mining progresses, the longwall faces advance toward the central part of the ore body at the service incline which will be the last area mined.

Production from the Radon is currently limited by Uranium Reduction Company to 6,000 tons per month. The ore reserve of the Radon mine as of January 1, 1958 was estimated at 423,230 tons assaying .725% U_3O_8. At the current rate of production the reserve is sufficient for 5.9 years of operation beyond January 1, 1958. However, on July 1, 1958, the allowable mill tonnage was reduced from 6,000 tons to approximately 4,200 tons per month of ore assaying .725% U_3O_8, with a provision that we will be paid a premium after April 1, 1962, based on grade of ore. The total premium to be paid after April 1, 1962 per ton of ore mined on ore assaying .725% U_3O_8 (the estimated average grade of remaining ore reserve) will be approximately $13.52 in excess of our present gross income per ton of such ore. Production data from the start of operations in 1955 through May 31, 1958 is set forth in the following tabulation:

	Tons Mined	% U_3O_8
1955	3,290	.490
1956	53,605	.438
1957	62,143	.850

Production and grade for past four quarters:

	Tons Produced	% U_3O_8
1957 Third quarter	4,177	.747
Fourth quarter	4,858	.935
1958 First quarter	4,501	.641
Second quarter	4,640	.639

Net profit per ton of ore produced:

	Net Sales Price	Cost of Production	Net Profit
1957 Third quarter	$62.38	$16.20	$46.18
Fourth quarter	78.67	15.83	62.84
1958 First quarter	53.24	14.95	38.29
Second quarter	53.00	13.58	39.42

Note - The cost of production above does not include depreciation, depletion and income taxes and the resulting net profit is therefore before deducting such costs.

HOT ROCK GROUP

Hecla owns a 50% interest in the Hot Rock group and under the terms of the agreement is entitled to 100% of any net profits from ores produced from the property until Hecla's exploration and development costs are recovered. Thereafter, Hecla is entitled to 50% of any net profits after payment of a 10% royalty.

A large drilling program was undertaken in 1956 which resulted in the discovery of a small ore body adjacent to the Cord property south of the Radon mine. Estimated reserve of the Hot Rock ore body is 31,210 tons of ore assaying .40% U_3O_8. The ore body will be developed and mined through a 2000-foot long crosscut from the Radon shaft. The crosscut is now advancing, and we expect to be in production prior to the end of 1958.

HISTORY AND BUSINESS OF POLARIS

Polaris Mining Company was incorporated in the State of Delaware in 1937. Its principal assets are the properties owned by Polaris, and those in which it has an interest, located in the Silver Belt of the Coeur d'Alene Mining District. These properties cover a one-mile wide strip of ground extending easterly from the Sunshine mine to the Galena property, a distance of approximately four miles. Polaris' activities in the above area are divided into two separate operations: The "Unitized Area" which includes parts of the Sunshine, Polaris and New Purim and Eleventh Hour properties and which is operated by Sunshine Mining Company; and the Silver Summit Mine which is owned and operated by Polaris and from which extensive exploration and development work is being done in adjacent areas.

UNITIZED AREA

The events leading to Polaris' present interest in the "Unitized Area" started with the development of the original Polaris group of three claims which were located in 1884. Early work on these claims was not profitable in that only small ore shoots and sporadic silver mineralization were found in the area explored by the shallow workings of the Polaris tunnel level. Hecla acquired controlling interest in the present Polaris Mining Company in 1937 and undertook deeper development by sinking a shaft to the 900 level, and later extended it to the Polaris 2300 level. Ore bodies were found on the 900 level which were subsequently developed and mined from Polaris 700 level to 2300 level. Later exploration and development work on both the Polaris veins and the Chester vein, from deeper workings of the neighboring Sunshine mine which adjoins Polaris on the west, resulted in the discovery of additional silver ore bodies of major importance on both vein systems. To avoid possible litigation over extralateral rights and to provide for the most feasible means of exploitation and further development of these ore bodies at greater depth, agreements were reached between Polaris, Sunshine, Silver Syndicate and Silver Dollar Mining Companies which defined the ownership in the various areas and established Sunshine as the operator.

In the above agreements the Omega and Rotbart areas were established to cover certain sections of the Chester vein, and the intervening Area was established to cover an area lying between the Polaris and Sunshine mines and which would also include the deeper extensions of the Polaris veins which are in the hanging wall or south of the Chester vein. Ownership in the Omega and Intervening areas was divided 50% to Polaris and 50% to Sunshine, and in the Rotbart area ownership was one-third Sunshine, one-third Polaris and one-third Silver Dollar, with Silver Dollar's portion subject to a royalty to Lincoln Mining Company, the owner of the area involved.

Production from these areas has been the principal source of income to Polaris since the discovery of the Omega ore body on the Chester vein in 1943. Polaris' share of the production from these areas to January 1, 1958 was 393,056 tons from the Omega and Intervening areas, and 257,982 tons from the Rotbart Area. The average grade of this production was 1.99% lead and 38.5 ounces silver per ton. Both the Chester Vein and the Polaris veins have now been developed and mined from Sunshine's 2300 level to the 4000 level, which is at an elevation of about 1300 feet below sea level.

The ore bodies on both the Chester and Polaris vein systems, as well as the main Sunshine vein, have decreased in size and grade in the lower levels of the mine, and the extent

to which they may exist in depth is not known. Further lateral development, as well as deeper exploration, is now in progress in an effort to extend the known reserves.

In order to better coordinate further exploration, development and mining of the widely scattered areas of the Sunshine mine, it was believed that a plan should be adopted under which the various areas could be operated as a single unit. Such a plan was agreed upon by Sunshine, Polaris and Silver Dollar Mining Companies; and the Sunshine, Omega, Lower Intervening, and Rotbart areas, and a westerly portion of the New Purim Area, were consolidated into a single unit to be operated on a "unitized" basis by Sunshine Mining Company. The "unitized" operation became effective January 1, 1958.

The participating interests of the three companies in the "unitized area" were determined on the basis of the present value of each company's interest and estimated future earning potential of the various areas in which the companies had an interest. The percentage participation agreed upon was: Sunshine Mining Company 57.14%, Polaris Mining Company 33.25% and Silver Dollar Mining Company 9.61%. Lincoln Mining Company receives a royalty, as does Hayden Hill Consolidated Mining Company, from certain sections of the "unitized" operation.

Sunshine Mining Company estimates Polaris' share of the January 1, 1958 ore reserve in the "unitized area" as 102,574 tons. This compares with Polaris' share of 122,909 tons reserve in the Omega and Rotbart areas as of January 1, 1957. Based on the present rate of production of 60,000 tons per year from Polaris' share of the "unitized area" reserve, the reserve is sufficient for 1.7 years operation beyond January 1, 1958. The reserve estimate includes only the developed and probable ore above 4000 level. However, there are substantial remaining areas considered favorable for exploration and discovery of additional ores.

SILVER SUMMIT OPERATION

The Silver Summit mine is owned and operated by Polaris Mining Company. Polaris acquired an interest in Silver Summit Mining Company during the latter part of the thirties by partly financing the sinking of the Silver Summit shaft to a depth of 1500 feet and exploring the Silver Summit No. 1 vein on the 600 and 1500 levels. Later, in 1945, Polaris financed an extensive deep level exploration program designed to explore the Silver Summit property and other adjacent areas. This program involved sinking the Silver Summit shaft an additional 1500 feet to the 3000 level, at elevation 340 feet below sea level, and extensive crosscutting to explore for the extension of the Silver Summit veins south of the shaft and also the Chester vein located about 1000 feet north of the shaft. Shaft sinking was completed by the end of 1946, and in 1947 the Silver Summit No. 2 vein was exposed by the south crosscut about 960 feet south of the shaft. Subsequent westerly drift development on this structure developed the No. 3 and 4 veins which have provided Silver Summit's principal production from 1948 to the present time.

Through agreements between Polaris and Silver Summit Mining Company with owners of adjoining properties, extensive exploration work was done in the New Purim area lying between the Silver Summit property and the Sunshine mine; and also in the Mineral Mountain, Chester, Good Hope, Chieftain and Nellie areas, covering a length of about two miles along the Chester vein easterly from the Sunshine-Omega area. In order to better finance further exploration, Silver Summit Mining Company was merged into Polaris Mining Company in September, 1952. Since that time, Polaris has done additional work in the New Purim, Chester and Mineral Mountain areas and has explored a large area extending about two and one-half miles easterly from the Silver Summit shaft from a lateral driven through the properties of Merger Mines Corporation, American Silver and Silver Standard Mining Companies, and into the Rainbow property where work is presently in progress.

The Silver Summit property includes three groups of patented claims totaling approximately 432 acres, and five unpatented claims held by location. In addition, there are approxi-

mately eighteen acres of patented land on part of which the Polaris mill and surface plant are located. The surface plant, including the mine office, shops, change room and a 300 ton per day flotation plant is located at the mouth of Rosebud Gulch near the Polaris Townsite nearly midway between Wallace and Kellogg. From the surface plant the Silver Summit shaft is reached through a mile-long southerly crosscut. As previously stated, the shaft is a standard, three-compartment, vertical shaft extending to the 3000 level at an elevation of about 340 feet below sea level. Hoisting is done with a 600 h.p. double-drum hoist which was installed in 1953.

The Silver Summit veins are explored and developed by drifting for a maximum strike length of about 4500 feet. The total aggregate drifting on the 2500, 3000, 3200 and 3400 levels is approximately 16,000 feet. The 2500 and 3000 levels are driven from the Silver Summit shaft and the 3200 and 3400 levels are established from a winze in the hanging wall of the veins.

The veins occur within a mineralized zone which is believed to be the easterly continuation of the Yankee Girl structure in the Sunshine Consolidated and Metropolitan areas of the Sunshine Mine. The veins are enclosed in a 200 to 350 foot wide bleached zone which trends about N. 80° W. and roughly parallels the veins in both dip and strike. Although the No. 3 and 4 veins in places show considerable continuity, the veins are more characteristically sheared and broken zones composed of numerous fractures and siderite-quartz stringers containing silver-bearing tetrahedrite and chalcopyrite. The veins dip steeply to the south cutting the enclosing, steep, north-dipping argillaceous quartzites of the St. Regis formation.

Small scattered ore shoots have been developed and mined throughout much of the zone explored by drifting, including the westerly area in New Purim ground. The largest ore shoots have been stoped continuously for a length of about 750 feet and through a vertical range of 400 feet between 2800 and 3200 levels. The ore shoots are very irregular in outline and, in most, the horizontal range is greater than the vertical extent.

The total developed and probable ore reserve of the Silver Summit veins as of January 1, 1958 was estimated at 18,322 tons assaying 34.4 ounces silver and 0.84% copper. This compares with an estimated 22,996 tons reserve for January 1, 1957. Production from the Silver Summit and New Purim areas during 1957 amounted to 44,756 tons assaying 24.6 ounces silver and 0.6% copper. A substantial addition to the reserve resulted from drift development west of 64 raise on 2800 level during 1957.

The reserves in the westerly part of the mine in the New Purim area have been mined out, and the bulk of the remaining reserve is in the 58-68 area above 3000 level. Based on the present 200 ton per day rate of production, the known reserves are sufficient to last only a few months. Continued additions to the reserve through normal development, however, will likely extend the operation beyond 1958.

The chances of finding additional ore laterally or at depth below 3400 level are not considered promising. Several small ore shoots on the No. 4 footwall vein extend below 3400 level, but it is doubtful that they can be mined profitably, and no major deeper development is contemplated.

There has been no exploration of the Silver Summit mineralized zone above 2500 level except for a small amount of drifting in the New Purim area on Silver Dollar's 1800 level, which exposed short sections of commercial grade silver ore. It is quite possible that ore shoots similar to those mined below 2500 level in both the New Purim and Silver Summit areas may exist at higher elevations, and this area may be explored by crosscutting and drifting on the 1750 or 1500 level.

The extensive exploratory work on 3000 level in areas adjacent to Silver Summit has not been successful in that no major ore bodies have yet been discovered, although a two-mile

length of the Chester vein has been explored, and a section of the Silver Belt extending about two and one-half miles easterly from the mine has been partially explored by a lateral and extensive diamond drilling.

Two small ore shoots were discoverd in the Rainbow property, and these are now being developed and mined. Total developed and probable reserves above the 3000 level, estimated for these ore shoots as of January 1, 1958 was 6,507 tons assaying 30.9 ounces silver and 0.76% copper.

Further easterly exploration is now in progress in the Rainbow ground, and additonal work in adjacent areas is planned.

OPERATING SUMMARY - UNITIZED AREA AND SILVER SUMMIT OPERATION

As pointed out previously, the "Unitized Area" of the Sunshine mine is operated by Sunshine Mining Company. Polaris owns 33.25% of the ore produced from the area and pays a like proportionate cost of the operation. The ore is mined, milled and marketed by Sunshine separately from other production from the mine.

The Silver Summit mine is owned and operated by Polaris Mining Company. Polaris owns 100% of the ore produced from the Silver Summit area and also 100% of the current production from the Rainbow area until production exceeds the cost of development. Thereafter, Polaris will receive 50% of the net profits from Rainbow production.

Information as to production for each operation for the five years ended December 31, 1957 is set forth in the following tabulation:

UNITIZED AREA

(Operated by Sunshine Mining Company For the Account of Polaris Mining Company)

	Tons Ore Mined	Metallic Contents Oz. Silver	Tons Lead	Tons Copper	Assays Oz. Silver	% Lead	% Copper
1953	66,497	2,012,443	213.51	282.87	30.26	0.32	0.43
1954	74,045	2,593,613	526.24	400.34	35.03	0.71	0.54
1955	64,776	1,758,695	432.70	297.00	27.15	0.67	0.46
1956	56,202	1,648,756	435.97	303.60	29.34	0.78	0.54
1957	59,501	1,534,600	572.79	273.41	25.79	0.96	0.46

SILVER SUMMIT MINE

(Operated by Polaris)

1953	47,123	1,214,083	—	406.35	25.76	—	0.86
1954	47,001	986,347	—	389.70	20.99	—	0.83
1955	48,506	991,816	—	302.64	20.45	—	0.62
1956	33,407	661,303	32.66	172.05	19.80	0.10	0.52
1957	39,063	922,177	—	231.22	23.61	—	0.59

Production and grade of ore mined for each of the above operations by quarters is set forth as follows:

	Tons of Ore Mined	ASSAYS Oz. Silver	% Lead	% Copper
Unitized area:				
1957 - Third quarter	15,633	24.48	.98	.43
- Fourth quarter	15,998	28.35	.76	.54
1958 - First quarter	15,454	27.22	.31	.53
- Second quarter	15,276	27.00	.22	.53
Silver Summit Mine:				
1957 - Third quarter	10,230	25.47	—	.68
- Fourth quarter	11,855	20.09	—	.58
1958 - First quarter	12,570	22.91	—	.70
- Second quarter	12,747	23.41	—	.62

Net profit per ton of ore produced before depreciation, depletion and taxes:

	Net Sales Price	Cost of Production	Net Profit
Unitized area:			
1957 - Third quarter	$25.35	$20.06	$5.29
- Fourth quarter	27.35	19.17	8.18
1958 - First quarter	24.64	17.74	6.90
- Second quarter	23.59	18.73	4.86
Silver Summit Mine:			
1957 - Third quarter	$23.27	$21.79	$1.48
- Fourth quarter	18.91	21.90	(2.99)-
1958 - First quarter	20.78	22.17	(1.39)-
- Second quarter	21.40	20.63	.77

Exhibit M

AGREEMENT OF MERGER

Hecla Mining Company and Polaris Mining Company

Wallace Idaho

THIS AGREEMENT, entered into this 25th day of July, 1958, between HECLA MINING COMPANY, a Washington corporation, hereinafter called "Hecla," and POLARIS MINING COMPANY, a Delaware corporation, hereinafter called "Polaris."

WITNESSETH:

WHEREAS, Hecla is capitalized for Two Hundred Fifty Thousand Dollars ($250,000) divided into one million (1,000,000) shares of non-assessable common stock of the par value of twenty-five cents (25c) per share, all of which is issued and outstanding, and Polaris is capitalized for Seven Hundred Fifty Thousand Dollars ($750,000), divided into three million (3,000,000) shares of non-assessable common stock of the par value of twenty-five cents (25c) per share, of which two million two hundred ninety-six thousand twenty (2,296,020) shares are issued and outstanding; and

WHEREAS, the respective Boards of Directors of said corporations are of the opinion that it would be for the benefit and to the advantage of each of said corporations and the stockholders thereof to merge Polaris into Hecla under and pursuant to the provisions of the Revised Code of the State Washington, 23.40.010 to 23.40.070, and under and pursuant to the corporation laws of the State of Delaware pertaining to the merger of corporations organized under the laws of Delaware with corporations organized under the laws of other states, and more particularly under and pursuant to the provisions of Subchapter IX of Chapter 1 of Title 8 of the General Corporation Laws of the State of Delaware.

NOW, THEREFORE, in consideration of the premises and in consideraton of the mutual covenants, and agreements hereinafter set out and by each of the parties hereto to be faithfully kept and performed, IT IS HEREBY MUTUALLY AGREED that Polaris shall be, and it hereby is merged into Hecla under and pursuant to the provisions of the Revised Code of the State of Washington, 23.40.010 to 23.40.070, and under and pursuant to the provisions of Subchapter IX of Chapter 1 of Title 8 of the General Corporation Laws of the State of Delaware pertaining to the merger of corporations organized under the laws of the State of Delaware with corporations organized under the laws of another state.

IT IS HEREBY FURTHER MUTUALLY AGREED that Polaris shall be so merged into Hecla in the manner and upon the terms and conditions following, to-wit:

1. (a) The Articles of Incorporation of Hecla Mining Company shall be amended to increase the presently authorized capital stock from Two Hundred Fifty Thousand Dollars ($250,000) divided into one million (1,000,000) shares of non-assessable common stock of a par value of twenty-five cents (25c) per share to Three Hundred Seventy-five Thousand Dollars ($375,000) divided into one million five hundred thousand (1,500,000) shares of non-assessable common stock of a par value of twenty-five cents (25c) per share, and

(b) Hecla shall issue to each and every minority stockholder of Polaris, that is to say, to every stockholder of Polaris other than Hecla, one (1) share of Hecla for every six (6) shares of Polaris owned by each and every such minority stockholder of Polaris and all Polaris stock now owned by Hecla shall be cancelled and no Hecla stock shall be issued therefor or in lieu thereof either to Hecla Mining Company or to any of its stockholders.

2. Upon the consummation of this agreement and the completion of the merger of Polaris into Hecla, as hereinafter provided, Hecla shall cause to be issued and delivered to a responsible custodian, trustee or responsible custodians or trustees, one certificate for 172,020 shares of the capital stock of Hecla, that is to say, the total number of shares which shall be required for issuance or transfer to Polaris minority stockholders at the rate of one (1) share of Hecla for every six (6) shares of Polaris. Each and every such stockholder in Polaris shall be directed to deliver to such custodians or trustees for cancellation such stockholder's certificate or certificates of Polaris stock duly endorsed, with such endorsements satisfactorily guaranteed, and as such certificates are so delivered to said custodians or trustees, said custodians or trustees shall cause to be transferred and delivered to each such Polaris stockholder, out of the stock represented by the aforesaid certificate the number of shares of Hecla which each of such Polaris stockholders shall be entitled to receive at the aforesaid rate of one (1) share of Hecla for every six (6) shares of Polaris; PROVIDED, however, that all fractional shares will be purchased by Hecla at the market price as of the date the merger is recorded and filed with the Secretary of State and a check in payment therefor will be forwarded along with the Hecla stock certificate issued in exchange for Polaris stock as described above. If any shareholder shall object to the sale of his fractional shares as hereinabove provided, he may return the Hecla check issued in payment therefor within a period of thirty (30) days after receipt of such check and thereupon a fractional script certificate issued to "Bearer" will be delivered to him in lieu of a certificate for such fractional shares. Such fractional script certificate when combined with other fractional script certificates aggregating a full share or more shall entitle the bearer to a certificate for a full share of Hecla common stock. A new script certificate will be issued for any excess script certificates surrendered in excess of a full share of common stock. The holders of such script certificates shall not as such holders be stockholders of Hecla and shall not be entitled to dividends or to exercise any voting rights or to have or to exercise any other rights or privileges of stockholders. Any script certificates not surrendered in exchange for full shares within a period of two years from which the merger is filed and recorded with the Secretary of State shall be thereafter redeemable only in cash at the market value of Hecla as of the expiration of such two-year period.

3. Upon the consummation of this agreement and the completion and effectuation of the merger of Polaris into Hecla said two corporations shall become and thereafter be one corporation, to-wit, Hecla Mining Company, and the separate corporate existence of Polaris shall cease and Hecla Mining Company shall possess all the rights, privileges, franchises and powers theretofore possessed by Polaris and Hecla, or either of them, and the title to and ownership of all property, real, personal and mixed, of each of said corporations, and all debts due or owing on whatsoever account to Polaris and/or to Hecla, including subscriptions for shares and other choses in action belonging to either of said corporations shall be taken and be deemed to be transferred to and vested in Hecla, without further act or deed, and Hecla shall be responsible for all of the liabilities and obligations of Polaris, including the obligation to perform any and all contracts or agreements heretofore entered into by Polaris with any other corporation or corporations, in the same manner and to the same extent as if Hecla itself had incurred such liabilities or obligations, and the liabilities of Polaris and Hecla, or of their respective shareholders, directors or officers shall not be affected, nor shall the rights of the creditors of Polaris or those of Hecla or of any persons who shall theretofore have had dealings with Po-

laris and/or Hecla be impaired by such merger and any claim then existing or action or proceeding then pending by or against Polaris and/or Hecla may be prosecuted to judgment as if such merger had not taken place, or Hecla may be proceeded against or substituted in the place of Polaris in such action or proceeding; and all property, rights, privileges, powers and franchises and all and every other interest of Polaris shall be thereafter as effectually the property of Hecla as they were the property of Polaris and the title to any real estate vested by deed or otherwise in Polaris shall not revert or be in any way impaired by the merger of Polaris into Hecla; PROVIDED, however, that all rights of creditors and all liens, if any, upon any property theretofore owned by Polaris shall be preserved and unimpaired, and all debts, liabilities and duties of Polaris shall thenceforth attach to Hecla and may be enforced against it to the same extent as if said debts, liabilities and duties had been incurred or contracted by Hecla.

4. IT IS FURTHER MUTUALLY UNDERSTOOD AND AGREED that pending final consummation of this agreement Polaris shall not make any distribution of funds to its shareholders by way of dividends or otherwise, and shall not pledge or subject to lien or encumbrance any of its properties or property rights and shall not sell or otherwise dispose of or transfer any of its assets except in its ordinary and usual course of business and shall not incur or become liable for any obligations or liabilities except such as may necessarily be incurred in the ordinary and usual course of its business and shall not make any unusual or extraordinary expenditure except for work which may necessarily be performed, or for materials, equipment and supplies which may necessarily be purchased, in compliance with contracts or agreements which Polaris may heretofore have entered into with other parties or for the proper maintenance of its mining properties.

5. Any and all expenses which may be incurred under or in connection with this agreement shall be assumed and paid by Hecla.

6. IT IS FURTHER MUTUALLY UNDERSTOOD AND AGREED that upon the consummation of this agreement and the effectuation of the merger of Polaris into Hecla, Hecla shall be governed by the laws of the State of Washington, but Hecla EXPRESSLY AGREES that it may be served with process in the State of Delaware in any proceedings for the enforcement of any obligation of any constituent corporaton of said State of Delaware, as well as for the enforcement of any obligation of Hecla arising from said merger, including any suit or other proceeding to enforce the right of any stockholder as determined in appraisal proceedings pursuant to the provisions of Section 262 of Subchapter IX of Chapter 1 of Title 8 of the General Corporation Laws of the State of Delaware, and Hecla hereby irrevocably appoints the Secretary of State of the State of Delaware as its agent to accept service of process in any such suit or other proceeding and hereby specifies Wallace, Idaho as the address to which a copy of such process shall be mailed to Hecla by the Secretary of State of the State of Delaware until such time as Hecla may, in writing to the Secretary of State, designate a different address.

7. This agreement shall be executed initially by Polaris' and Hecla's respective Boards of Directors upon the same being approved by a vote of a majority of each of said Boards of Directors and thereupon this agreement shall be submitted for consideration to the stockholders of Polaris at a meeting of such stockholders to be duly called in the manner provided by Section 251 of Subchapter IX of Chapter 1 of Title 8 of the General Corporation Laws of the State of Delaware and for consideration by the stockholders of Hecla at a meeting of such stockholders to be duly called in the manner provided by the Revised Code of the State of Washington, 23.32.010 to 23.32.040; and at each of said meetings, which shall be called and held separately, this agreement shall be considered and a vote, in person or by proxy, shall be taken for the adoption or rejection of the same, each share entitling the holder thereof to one vote; and if the votes

of the stockholders of each of said corporations representing two-thirds (2/3) of the total number of shares of its capital stock shall be for the adoption of this agreement, then that fact shall be certified on this agreement by the Secretary of each of said corporations, under the seal thereof; and this agreement, so adopted and certified, shall be signed in duplicate by the President and Secretary of each of said corporations, before a duly appointed and qualified Notary Public of and for the State of Idaho, to be the respective act, deed and agreement of each of said corporations and one copy of this agreement, so adopted, certified, signed and acknowledged shall be delivered to the Secretary of State of the State of Washington to be filed and recorded in his office, and a copy of said agreement, certified by said Secretary of State, shall be filed for record in the office of the auditor of the County of Spokane in which said county Hecla has its registered office; and one copy of this agreement when so adopted by the shareholders of both Hecla and Polaris and when so certified by the Secretary of each of said corporations, under the corporate seals thereof, and when so signed by the President and Secretary of each of said corporations, under the corporate seals thereof, and so acknowledged, shall be filed in the office of the Secretary of State of the State of Delaware, and a copy of said agreement and act of merger, certified by said Secretary of State, shall be recorded in the office of the recorder of the county in the State of Delaware, if any, in which Polaris shall or may have its original Certificate of Incorporation recorded; and one copy of this agreement when so adopted, certified, signed and acknowledged shall be filed for record in the office of the Secretary of State of the State of Idaho, and a copy of said agreement, certified by said Secretary of State shall be filed and recorded in the offices of the County Recorders of all counties in the State of Idaho in which Polaris owns land, the title to which will be transferred as a result of said merger.

8. Notwithstanding any of the foregoing provisions of this agreement, IT IS EXPRESSLY UNDERSTOOD AND AGREED that this agreement shall not become effective for any purpose unless at the aforesaid meeting of the stockholders of Polaris this agreement shall be approved and adopted by a vote of at least fifty percent (50%) of the capital stock of Polaris, which shall be represented by stockholders present in person or by proxy at said meeting, over and above and exclusive of all Polaris stock owned by Hecla; or, in other words, if at said meeting of Polaris stockholders this agreement shall be approved and adopted by a vote of stockholders owning two-thirds or more than two-thirds of the issued and outstanding capital stock of Polaris, this agreement shall nevertheless not become effective unless the stock which shall have been voted at said meeting in favor of the approval and adoption of this agreement shall have included at least fifty percent (50%) of Polaris stock owned by stockholders other than Hecla who shall be represented at said meeting either by proxy or by stockholders present in person.

9. And notwithstanding any of the foregoing provisions of this agreement it is EXPRESSLY UNDERSTOOD AND AGREED that this agreement shall not become effective for any purpose in event the aggregate market value of dissenting shares of both companies exceeds $500,000, as of the date this merger agreement is voted upon by the shareholders of each company, such market value to be based upon the "asked" price of such stock as of that date.

IN WITNESS WHEROF, This agreement has been executed on behalf of Polaris by each and all of the members of the Board of Directors of Polaris, and pursuant to a resolution adopted by unanimous vote of the members of said Board of Directors at a duly called special meeting of said Board; and this agreement has been executed on behalf of Hecla by each and all of the

members of the Board of Directors of Hecla, and pursuant to a resolution adopted by unanimous vote of the members of said Board of Directors at a duly called special meeting of said Board, the day and year herein first above written.

/s/ J. L. McCARTHY
/s/ L. J. RANDALL
/s/ GEORGE F. MAYER
/s/ JOSEPH T. HALL
/s/ CARROLL SEARLS
/s/ CHARLES A. TILFORD
/s/ R. N. HUNT

Members of the Board of Directors
HECLA MINING COMPANY

Attest:

/s/ JOHN R. MATTHEWS,
Secretary

(CORPORATE SEAL)

/s/ L. J. RANDALL
/s/ CHARLES A. TILFORD
/s/ ROBERT E. SORENSON
/s/ GEORGE W. ZELLER
/s/ W. H. LOVE

Members of the Board of Directors
POLARIS MINING COMPANY

Attest:

/s/ JOHN R. MATTHEWS,
Secretary

(CORPORATE SEAL)

INDEPENDENT CERTIFIED PUBLIC ACCOUNTANT'S OPINION

June 12, 1958

To the Boards of Directors of
Hecla Mining Company and
Polaris Mining Company
Wallace, Idaho

Gentlemen:

We have examined the following balance sheet and related statement of income and retained earnings and supporting schedules of Hecla Mining Company and Polaris Mining Company, which you are incorporating in your proxy statement to shareholders of each company:

EXHIBITS

A. Balance sheets for each Company as at December 31, 1957.

B. Statements of Income and Retained Earnings for each Company, for the years ended December 31, 1955, 1956, and 1957.

In our opinion, the above balance sheet and related statement of income and retained earnings and supporting schedules, together with the notes thereto, present fairly the financial position of each Company as of December 31, 1957, and the results of operation for the three years ended December 31, 1955, 1956 and 1957, in conformity with generally accepted accounting principles applied on a consistent basis.

We have also examined the following pro forma balance sheet and related statement of income and retained earnings and supporting schedule which you are also incorporating in your proxy statement:

EXHIBITS

C. Pro Forma Balance Sheet of Hecla Mining Company, after giving effect to proposed merger as at December 31, 1957.

D. Pro Forma Statement of Income for Hecla Mining Company, for the years ended December 31, 1955, 1956 and 1957, after giving effect to the proposed merger, had such merger been effected on January 1, 1955.

SCHEDULE

C-1 Analysis of Capital Surplus and Retained Earnings of Hecla Mining Company, after giving effect to proposed merger as at December 31, 1957.

In our opinion the above pro-forma balance sheet and related statement of income and supporting schedule present fairly the financial position of the company as at December 31, 1957, and results of operation for the three years ended December 31, 1955, 1956 and 1957, as it would have appeared had such proposed merger been effected on January 1, 1955, in conformity with generally accepted accounting principles applied on a consistent basis.

A. WADE STROWGER
Certified Public Accountant
Portland, Oregon

Exhibit A

HECLA MINING COMPANY

Balance Sheet, December 31, 1957

ASSETS

Current assets		
Cash, demand deposits		$ 735,857
Government securities, at amortized cost		
U. S. Treasury obligations (market value $3,158,245)	$ 3,141,135	
Municipal bonds (market value $10,000)	10,000	
Accrued interest thereon	10,958	3,162,093
Preferred and common stocks. At cost (Note 1)		762,421
Accounts receivable		
Trade	$ 326,779	
Related companies	280,476	
		607,255
Notes receivable, employees, partially secured (none from officers)		62,332
Deferred charges		
Supply inventories, at the lower of cost or market	$ 65,144	
Insurance prepaid	35,562	
		100,706
Total current assets		$ 5,430,664
Investments and mining property interests (Note 2)		
The Bunker Hill Company - Common stock	$ 5,065,990	
Polaris Mining Company - Common stock	301,217	
Miscellaneous common stocks	46,157	
Sundry mining property interests	41,686	
Total		5,455,050

Properties, plants and equipment (Note 3)

	Cost	*Provision for Depreciation Depletion and Amortization*	*Cost Less Allowance for Depreciation Etc.*	
Mining property	$ 442,536	$ 107,243	$ 335,293	
Permanent improvements	2,368,519	1,863,856	504,663	
Automotive equipment	47,195	26,565	20,630	
Office equipment	18,720	17,203	1,517	
Real estate	5,763	5,613	150	
	$ 2,882,733	$ 2,020,480		862,253
TOTAL ASSETS				$11,747,967

For Retirement Plan pension benefits for employees, see Note 4.

LIABILITIES

Current liabilities	
Accounts and wages payable	$ 733,364
Taxes payable, current year accruals	252,042
Total current liabilities	$ 985,406

CAPITAL

Capital stock	
Authorized 1,000,000 shares of par value $0.25 each all issued, outstanding and fully paid	250,000
Earnings retained in the business (Exhibit B)	10,512,561
TOTAL LIABILITIES	$11,747,967

Exhibit B

HECLA MINING COMPANY

Statement of Income and Retained Earnings

Years ended December 31, 1955, 1956, and 1957

	1955	1956	1957
Operating income (U & I Project)			
Ore sales, net		$ 1,668,900	$ 1,108,686
Less - Operating expenses		$ 817,043	$ 279,848
- Depreciation, depletion and amortization (Note 3)		190,905	106,335
Total operating expenditures		$ 1,007,948	$ 386,183
Operating profit	$ —	$ 660,952	$ 722,503
Dividend income			
The Bunker Hill Company	$ 126,160	$ 360,000	$ 270,000
Polaris Mining Company	252,900	—	63,225
Miscellaneous	—	9,981	35,625
Total dividend income	$ 379,060	$ 369,981	$ 368,850
Other revenue			
Rental income	$ 80,614	$ 71,747	$ 72,272
Interest income	38,191	58,165	95,350
Sundry income and operating fees	24,842	57,430	47,163
Net gain, sale of assets	149,755	37,009	28,896
Total other revenue	$ 293,402	$ 224,351	$ 243,681
Total income	$ 672,462	$ 1,255,284	$ 1,335,034
Operating deductions			
Exploration and property examination expense	$ 24,159	$ 100,051	$ 186,445
Other operating expenses	10,293	21,598	55,548
General and administrative expense	65,503	67,137	66,773
Taxes, property, excise and social security	14,274	11,185	10,846
Depreciation (other than U & I)	5,411	6,888	10,645
Total operating deductions	$ 119,640	$ 206,859	$ 330,257
Net profit before income taxes	$ 552,822	$ 1,048,425	$ 1,004,777
Less provision for income taxes	56,866	143,429	218,178
Net income	$ 495,956	$ 904,996	$ 786,599
Retained earnings, beginning of year	9,525,016	9,770,972	10,225,962
Total	$10,020,972	$10,675,968	$11,012,561
Less - Dividends paid (Cash)	250,000	450,006	500,000
Retained earnings, end of year	$ 9,770,972	$10,225,962	$10,512,561

(For supplementary profit and loss information, see note 5.)

HECLA MINING COMPANY

FOOTNOTES TO FINANCIAL STATEMENTS

Years ended December 31, 1955, 1956 and 1957

Note 1 - Preferred and listed stocks:

	Common Shares Owned	Cost	Market Value 12-31-57
Bethlehem Steel Corporation			
7% cumulative preferred	300	$ 46,859	$ 45,000
Pacific Lighting Corporation			
4-¾% cumulative preferred	500	49,500	54,500
Tennessee Gas Transmission			
5% cumulative 2nd preferred	5,000	500,000	477,500
U. S. Steel Corporation			
7% cumulative preferred	300	45,432	44,850
American Smelting & Refining Company			
Common	1,000	59,125	35,500
Norfolk & Western Railway Company			
Common	1,000	61,505	55,000
Total		$762,421	$712,350

Note 2 - Investment and mining property interests are analyzed as follows:

	Interest in Common Shares Owned	Shares Owned	Cost	Market Value 12-31-57
The Bunker Hill Company	18.95%	300,000	$5,065,990	$2,925,000
Polaris Mining Company	55.06%	1,264,500	301,217	See Below
Miscellaneous capital stock	minor		46,157	11,100
Sundry mining property interests			41,686	— —
Total			$5,455,050	$2,936,100

Shares of Polaris Mining Company were quoted on the American Stock Exchange at 87½c per share as of December 31, 1957. However, we cannot form an opinion as to the market value of such a large block.

Note 3 - Policy with reference to depreciation, depletion and amortization:

Depreciation, depletion and amortization on property being used in operating properties is computed upon the unit of production method. Under this method ore reserves are estimated at the beginning of each year by the engineering staff. The rate of depreciation, depletion and amortization per ton of ore mined is arrived at by dividing the remaining value after deducting reserves by the total tons of ore in reserve at the beginning of the year. The rate per ton is then multiplied by the total tons of ore extracted during the year.

Depreciation on property other than an operating property is written off on a straight line basis over its estimated useful life.

Maintenance, repairs and renewals are charged to profit and loss. Betterments of a major

nature are charged to appropriate capital accounts, and if minor in amount are charged to profit and loss.

Capital items disposed of during the year are credited with the full amount at which they are stated in the records of the corporation, and the accumulated reserves are likewise charged with the full amount of such accumulated reserves. Any profit or loss realized from such disposition is credited to "gain on sale of capital assets".

Note 4 - Retirement Plan pays pension to all retired employees with five or more years of continuous service. Yearly benefits are 1% of first $3,000 of each year's earnings plus 1½% of excess of $3,000 per year. Past service (at inception of plan January 1, 1947) benefits calculated in same manner but using average earnings for the years 1942 through 1946 and applied to all service after age 30. No starting age provision for future service (after January 1, 1947.)

Pension payable after age 65, maximum pension $6,000 per year. Vested rights if over fifty with ten years' service. Reduced pension for early retirement after age 55, no benefits accrue after age 65. Special provision for early retirement on account of total permanent disability after five years of service. Plan is fully funded and entirely paid for by the company.

The estimated cost of Hecla Mining Company Pension Plan is $15,000 annually.

Note 5 - Supplementary profit and loss information.

The following is an analysis of items charged to the profit and loss account. No portion of any item listed has been charged to any account other than profit and loss.

CHARGED TO COST OF GOODS SOLD OR OPERATING EXPENSES:	1955	1956	1957
Maintenance and repairs	$— —	$— —	$— —
Depreciation, depletion and amortization	— —	190,905	106,335
Taxes (other than income)			
Property	— —	4,478	1,108
Social Security	— —	8,163	3,470
Use, mine occupation and valuation, State of Utah	— —	17,187	17,405
CHARGED TO OTHER PROFIT AND LOSS ACCOUNTS:			
Taxes (other than income)			
Property	9,477	6,691	5,433
Corporation license	165	274	230
Social Security	4,632	4,220	5,183
	$ 14,274	$ 11,185	$ 10,846
Use, mine occupation and valuation, State of Utah	— —	— —	— —
Maintenance and betterments	460	4,172	31,667
Depreciation	5,410	6,888	10,645
Management service contracts	— —	— —	— —
Rents and royalties	— —	— —	— —

Exhibit A

POLARIS MINING COMPANY

Balance Sheet, December 31, 1957

ASSETS

Current assets		
Cash, demand deposits		$ 300,308
U. S. Government securities, at cost		
Treasury bonds and notes	$ 922,434	
Accrued interest thereon	6,656	
(Aggregate market value $926,384)		929,090
Accounts and notes receivable		
Due from ore sales	$ 133,703	
Other current receivables (none from officers)	104,188	237,891
Inventories, at the lower of cost or market		
Materials and supplies	$ 52,511	
Antimony concentrate	116,409	168,920
Insurance prepaid		15,980
Total current assets		$ 1,652,189
Other assets		
Accesso Systems, Inc.		
Stock at cost (Note 1)	$ 18,000	
Mortgage note, due August 1, 1958 (Note 1)	255,000	273,000
Chester Mining Company (Note 2)		
Stock at cost (55.4% interest)	$ 68,771	
Notes receivable	33,178	101,949

Property, plants and equipment (Note 3)

	Cost	*Provision for Depreciation Depletion and Amortization*	Cost - Less *Allowance for Depreciation Etc.*	
Mining property	$ 726,604	$ 716,411	$ 10,193	
Prepaid mining expense	15,443	14,967	476	
Plant and equipment				
Permanent improvements	891,854	834,988	56,866	
Dwellings	700	700	—	
Office equipment	1,768	1,657	111	
Trucks	4,416	2,715	1,701	
	$ 1,640,785	$ 1,571,438		69,347
TOTAL ASSETS				$ 2,096,485

For Retirement plan pension benefits for employees - See Note 4.

LIABILITIES

Current liabilities		
Accounts and wages payable		
Trade	$ 71,006	
Hecla Mining Company	21,997	$ 93,003
Taxes payable, current year accruals		86,258
Total current liabilities		$ 179,261

CAPITAL

Capital stock		
Authorized 3,000,000 shares of a par value $0.25 each	$ 750,000	
Unissued 703,008 shares	175,752	
Issued and fully paid 2,296,992 shares (Including 371-2/3 shares held by company)		574,248
Earnings retained in the business (Exhibit B)	$ 1,344,537	
Less - Cost of 371-2/3 shares of company stock acquired incident to Silver Summit merger in 1952	1,561	1,342,976
TOTAL LIABILITIES		$ 2,096,485

Exhibit B

POLARIS MINING COMPANY

Statement of Income and Retained Earnings

Years Ended December 31, 1955, 1956 and 1957

	1955	1956	1957
Operating income			
Ore sales, net	$ 2,738,286	$ 2,556,089	$ 2,393,533
Less - Operating expenses	$ 2,128,822	$ 1,986,565	$ 2,014,025
- Depreciation and depletion (Note 3)	95,841	54,797	28,728
Total deductions	$ 2,224,663	$ 2,041,362	$ 2,042,753
Gross profit from operations	$ 513,623	$ 514,727	$ 350,780
Other income			
Interest and sundry income	19,994	19,545	27,923
Total income	$ 533,617	$ 534,272	$ 378,703
Deductions from income			
General and administrative expense	$ 44,753	$ 46,040	$ 51,880
Taxes - Property and excise	86,810	70,459	72,495
Depreciation and depletion (other than included in operating expense) (Note 3)	635	635	709
Total deductions	$ 132,198	$ 117,134	$ 125,084
Net profit before income taxes	$ 401,419	$ 417,138	$ 253,619
Less - Provision for income taxes	119,039	82,648	54,382
Net income	$ 282,380	$ 334,490	$ 199,237
Retained earnings, beginning of year	1,102,580	925,641	1,260,131
Total	$ 1,384,960	$ 1,260,131	$ 1,459,368
Less - Dividends paid - Cash	459,319	—	114,831
Retained earnings, end of year	$ 925,641	$ 1,260,131	$ 1,344,537

For Supplementary profit and loss information, see Note 5.

POLARIS MINING COMPANY

FOOTNOTES TO FINANCIAL STATEMENTS

Years Ended December 31, 1955, 1956 and 1957

Note 1 - Polaris Mining Company is the owner of 18,000 shares of stock in Accesso Systems, Inc., representing 21.7% of the total shares issued and outstanding.

In addition, Polaris holds a non-interest bearing note from Accesso, dated August 17, 1956, due August 1, 1958, for $255,000, which at Polaris' option, was convertible into stock at $1.50 per share on or before August 1, 1958; provided, however, that Polaris must notify Accesso Systems, Inc., on or before May 1, 1958 as to whether it elected to take stock or demand payment at maturity. On April 25, 1958 Polaris notified Accesso that it would demand payment of the note and would not elect to take stock of Accesso. An agreement has been executed whereby Accesso will, after paying its current obligations, turn over to Polaris all of its current assets and machinery and equipment, valued at approximately $175,015 in partial payment of such note. Polaris will write off the remaining balance of $79,985 as a bad debt in 1958.

Since Accesso Systems, Inc. will be without funds or other assets necessary to continue operations after August 1, 1958, the $18,000 cost of shares of stock in Accesso must be considered as worthless after that date and will also be written off as a loss in 1958.

Note 2 - Polaris Mining Company is the owner of 507,796 shares or 55.4% of the total shares outstanding of Chester Mining Company. The stock is unlisted and no opinion is formed as to the market value of such a large block, although it is currently quoted over the counter in small share lots at 15c to 20c per share.

Note 3 - Policy with respect to depreciation, depletion and amortization:
Depreciation, depletion and amortization is based on the unit of production method. Under this method ore reserves are estimated at the beginning of each year by the engineering staff. The rate of depreciation, depletion and amortization per ton of ore mined is arrived at by dividing the remaining value after deducting reserves by the total tons of ore in reserve at the beginning of the year. The rate per ton is then multiplied by the total tons of ore extracted during the year.

Maintenance, repairs and renewals are charged to profit and loss. Betterments of a major nature are charged to appropriate capital accounts and if minor in amount, are charged to profit and loss.

Capital items disposed of during the year are credited with the full amount at which they are stated in the records of the corporation, and the accumulated reserves are likewise charged with the full amount of such accumulated reserves. Any profit or loss realized from such disposition is credited to "gain on sale of capital assets".

Note 4 - Retirement Plan pays pension to all retired employees with five or more years of continuous service. Yearly benefits are 1% of first $3,000 of each year's earnings plus 1½% of excess of $3,000 per year. Past service (at inception of plan January 1, 1947) benefits calculated in same manner but using average earnings for the years 1942 through 1946 and applied to all service after age 30. No starting age provision for future service (after January 1, 1947).

Pension payable after age 65, maximum pension $6,000 per year. Vested rights if over fifty with ten years' service. Reduced pension for early retirement after age 55, no benefits accrue after age 65. Special provision for early retirement on account of total permanent

disability after five years of service. Plan is fully funded and entirely paid for by the company.

The estimated cost of the pension plan to Polaris Mining Company is $16,000 annually.

Note 5 - Supplementary profit and loss information:

The following is an analysis of items charged to the profit and loss account. No portion of any item listed has been charged to any account other than profit and loss.

	1955	1956	1957
CHARGED TO COST OF GOODS SOLD OR TO OPERATING EXPENSE:			
Maintenance and repair	$42,169	$43,407	$43,005
Depreciation, depletion and amortization	95,841	54,797	28,728
CHARGED TO OTHER PROFIT AND LOSS ACCOUNTS:			
Taxes (other than income)			
Property	69,574	53,968	53,091
Corporation license	510	510	510
Social Security	16,726	15,981	18,894
Depreciation	635	635	709
Management and service contracts	— —	— —	— —
Rents and royalties	— —	— —	— —

Exhibit C

HECLA MINING COMPANY

PRO FORMA BALANCE SHEET, AFTER GIVING EFFECT TO PROPOSED MERGER

As per Balance Sheet Data as of December 31, 1957

ASSETS

Current assets		
Cash, demand deposits	$ 1,036,165	
Government securities (amortized cost)		
U. S. Treasury obligations (Market value $4,077,972)	4,063,569	
Municipal bonds (Market value $10,000)	10,000	
Accrued interest thereon	17,614	
Preferred and common stocks (Market value $712,350)	762,421	
Accounts receivable	827,750	
Notes receivable	62,332	
Supply inventory (lower of cost or market)	117,655	
Antimony metal (lower of cost or market)	116,409	
Prepaid insurance	51,542	
Total current assets		$ 7,065,457
Investments and advances (Cost)		
The Bunker Hill Company - Common stock	$ 5,065,990	
Chester Mining Company - Common stock	68,771	
Notes receivable - Chester Mining Company	33,177	
Accesso Systems, Inc. - Common Stock	18,000	
Note receivable - Accesso (Due August 1, 1958)	255,000	
Common stocks - Miscellaneous	46,157	
Sundry mining property interests	41,686	
Total		5,528,781
Property, plant and equipment (at cost)		
Mining properties	$ 1,184,583	
Permanent improvements	3,261,073	
Automotive equipment	51,612	
Office equipment	20,488	
Real estate	5,763	
Total	$ 4,523,519	
Deduct - Allowance for depletion and depreciation	3,591,919	931,600
TOTAL ASSETS		$13,525,838

LIABILITIES AND CAPITAL

Current liabilities		
Accounts and payroll payable	$ 808,972	
Taxes payable	338,299	
Total current liabilities		$ 1,147,271
Capital stock and surplus		
Authorized 1,500,000 shares of capital stock of a par value of 25c per share, of which 1,172,020 shares are issued and outstanding	$ 293,005	
Capital surplus (Schedule C-1)	228,465	
Retained earnings (Schedule C-1)	11,857,097	
Total capital stock and surplus		12,378,567
TOTAL LIABILITIES AND CAPITAL		$13,525,838

Schedule C-1

HECLA MINING COMPANY

ANALYSIS OF CAPITAL SURPLUS AND RETAINED EARNINGS

As per Balance Sheet Data as of December 31, 1957, After Giving Effect to Proposed Merger

CAPITAL SURPLUS

Net worth of Polaris Mining Company (Polaris Exhibit A)		
Capital stock outstanding		$ 574,248
Capital surplus		—
Earned surplus		1,344,536
Total		$ 1,918,784
Less cost of 371-2/3 shares of treasury stock		1,561
Net worth (assets less liabilities)		$ 1,917,223
Deduct - Payment by Hecla for above net worth		
Hecla cost for present stock equity in Polaris prior to merger 1,264,500 shares - 55% interest	$ 301,217	
Par value of Hecla shares issued to Polaris minority interests - To effect merger 172,020 shares @ 25c par value	43,005	
Total cost to Hecla for Polaris net worth		344,222
Book value of net worth acquired through merger that is in excess of costs		$ 1,573,001
Less - Retained earnings of Polaris carried forward to earned surplus account of Hecla		1,344,536
Total capital surplus after giving effect to merger		$ 228,465

RETAINED EARNINGS - See footnote

Total earnings of Hecla Mining Company from date of incorporation (1898 to 1957, inclusive)	$48,267,561	
Less dividends paid through 1957	37,755,000	
Retained earnings as of December 31, 1957		$10,512,561
Total earnings of Polaris Mining Company from date of incorporation (1937 to 1957, inclusive)	$ 8,266,328	
Less dividends paid through 1957	6,921,792	
Retained earnings as of December 31, 1957		1,344,536
Earned surplus after giving effect to merger		$11,857,097

Note - Hecla Mining Company acquired its interest in Polaris Mining Company in 1937, at the time the latter company was organized. Consequently, the entire earned surplus of Polaris from the date of organization is transferred to Hecla as the surviving corporation.

Exhibit D

HECLA MINING COMPANY

PRO FORMA STATEMENT OF INCOME

(After giving effect to proposed merger had such merger been effected on January 1, 1955)

For the Years Ended December 31, 1955, 1956 and 1957

	1955	1956	1957
Operating income			
Ore sales, net	$ 2,738,286	$ 4,224,989	$ 3,502,219
Less - Operating expenses	$ 2,128,822	$ 2,803,608	$ 2,293,873
- Depreciation and depletion	95,841	245,702	135,063
Total deductions	$ 2,224,663	$ 3,049,310	$ 2,428,936
Operating income	$ 513,623	$ 1,175,679	$ 1,073,283
Other income			
Dividend income			
The Bunker Hill Company	126,160	360,000	270,000
Miscellaneous	—	9,981	35,625
Rental income	80,614	71,747	72,272
Interest income	54,274	76,230	121,424
Sundry income	28,753	58,911	49,012
Gain, sale of capital assets	149,755	37,009	28,896
Total income	$ 953,179	$ 1,789,557	$ 1,650,512
Deductions from income			
Exploration and property examination	$ 24,159	$ 100,051	$ 186,445
Other operating expense	10,293	21,598	55,548
General and administrative expense	110,256	113,177	118,653
Taxes, property and excise	101,085	81,644	83,341
Depreciation (other than included in operating expense)	6,046	7,523	11,354
Total deductions	$ 251,839	$ 323,993	$ 455,341
Net profit before income taxes	$ 701,340	$ 1,465,564	$ 1,195,171
Less - Provision for income taxes	156,179	226,075	267,628
Net income	$ 545,161	$ 1,239,489	$ 927,543

NON-PRIVILEGED DOCUMENT

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DO NOT CODE

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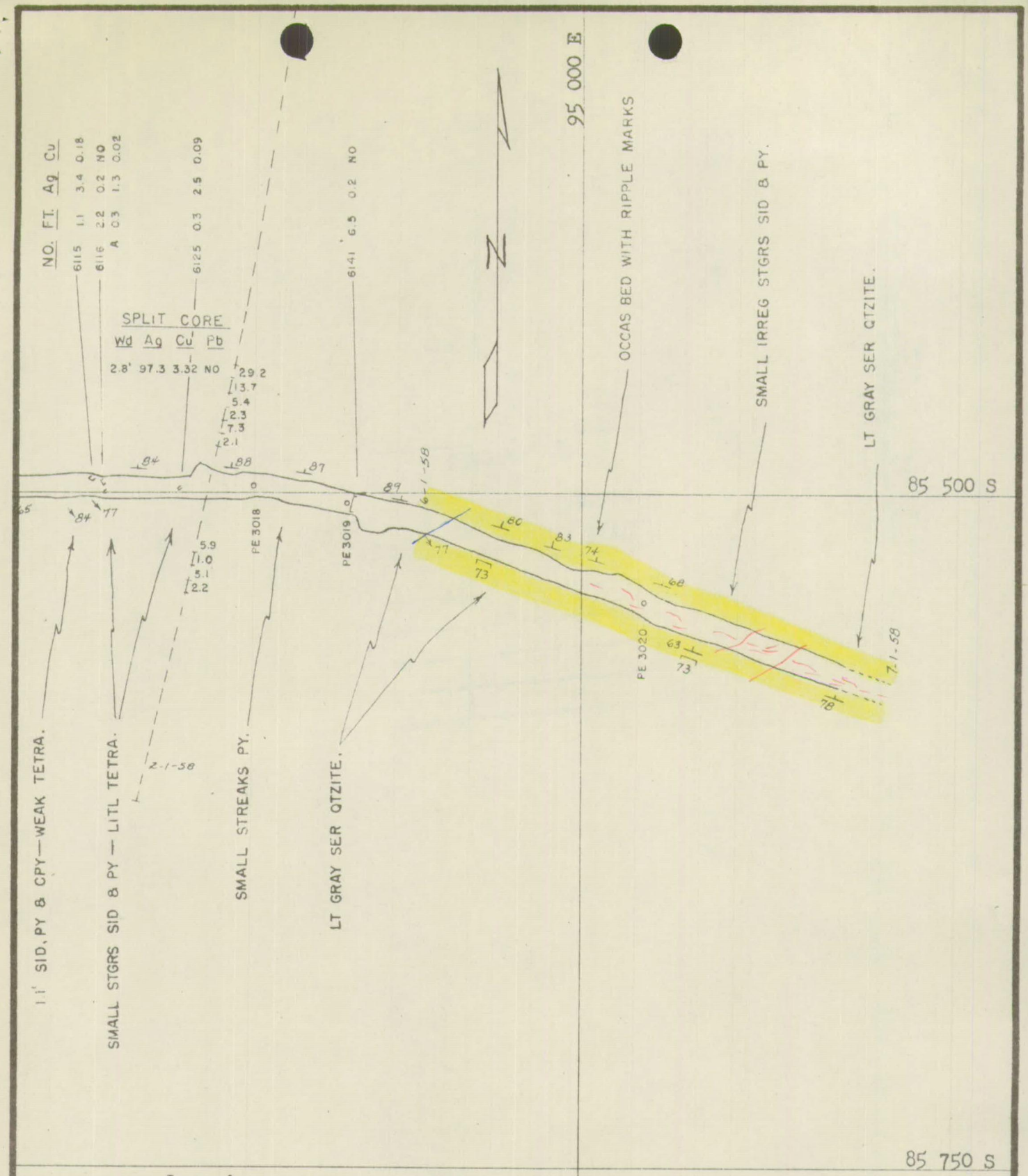


Legend

- Bleached rocks
- Unbleached St. Regis Formation
- 80 Strike and dip of sulfide veins
- 78 Strike and dip of non-sulfide veins
- 75 Strike and dip of faults
- 82 Strike and dip of beds
- 85 Strike and dip of overturned beds
- 70 Strike and dip of cleavage

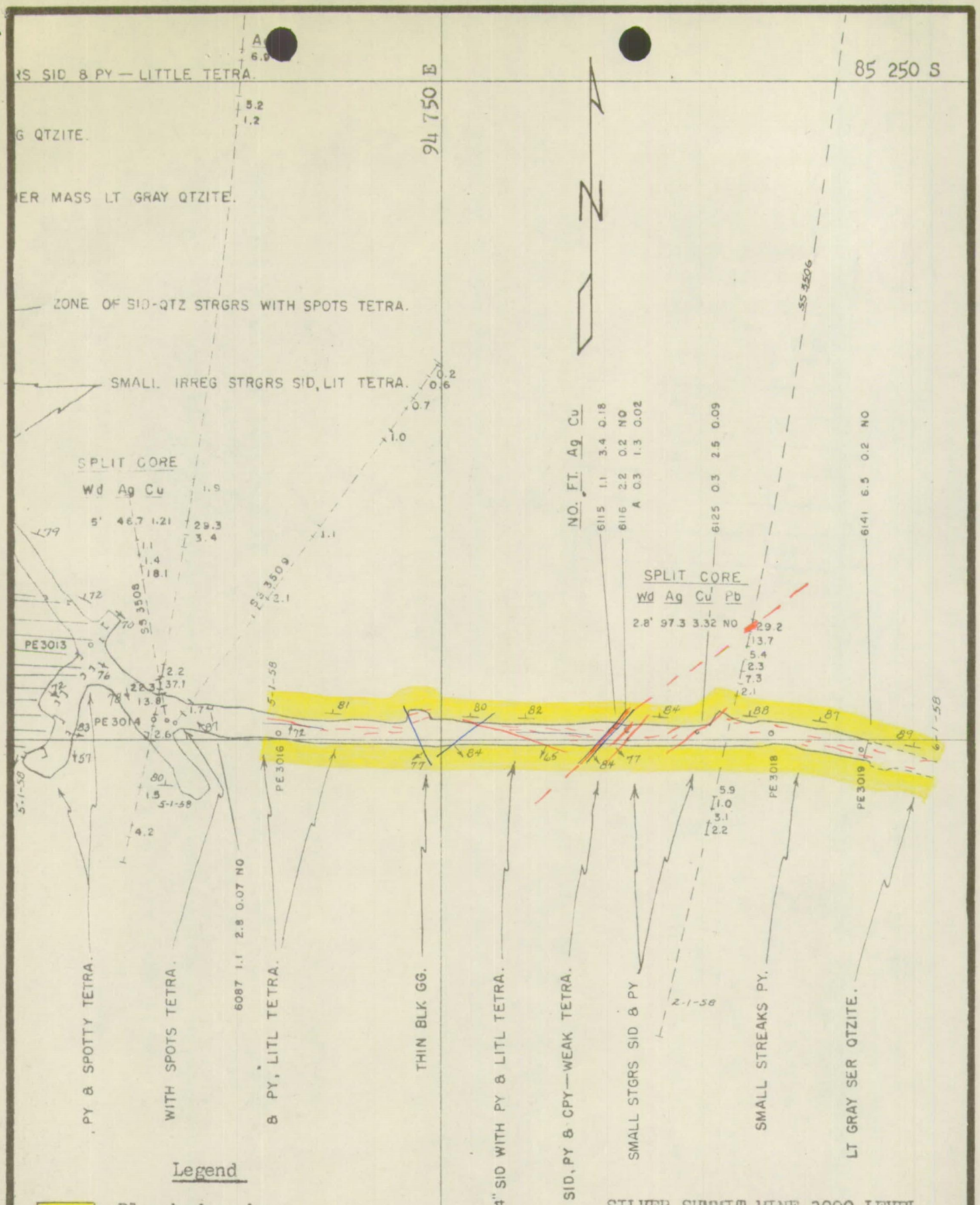
SILVER SUMMIT MINE 3000 LEVEL
POLARIS EAST EXPLORATION PROJECT
DMEA -- 2879

SHOSHONE COUNTY, IDAHO
Scale 1" = 50' July 1, 1958

Geology by J.H.J.

EXTRA COPY
D M E A
RECEIVED SEP 18 1958

DATE	INITIALS	CODE



Legend

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- 75 Strike and dip of faults
- 82 Strike and dip of beds
- 78 Strike and dip of overturned beds
- 65 Strike and dip of cleavage

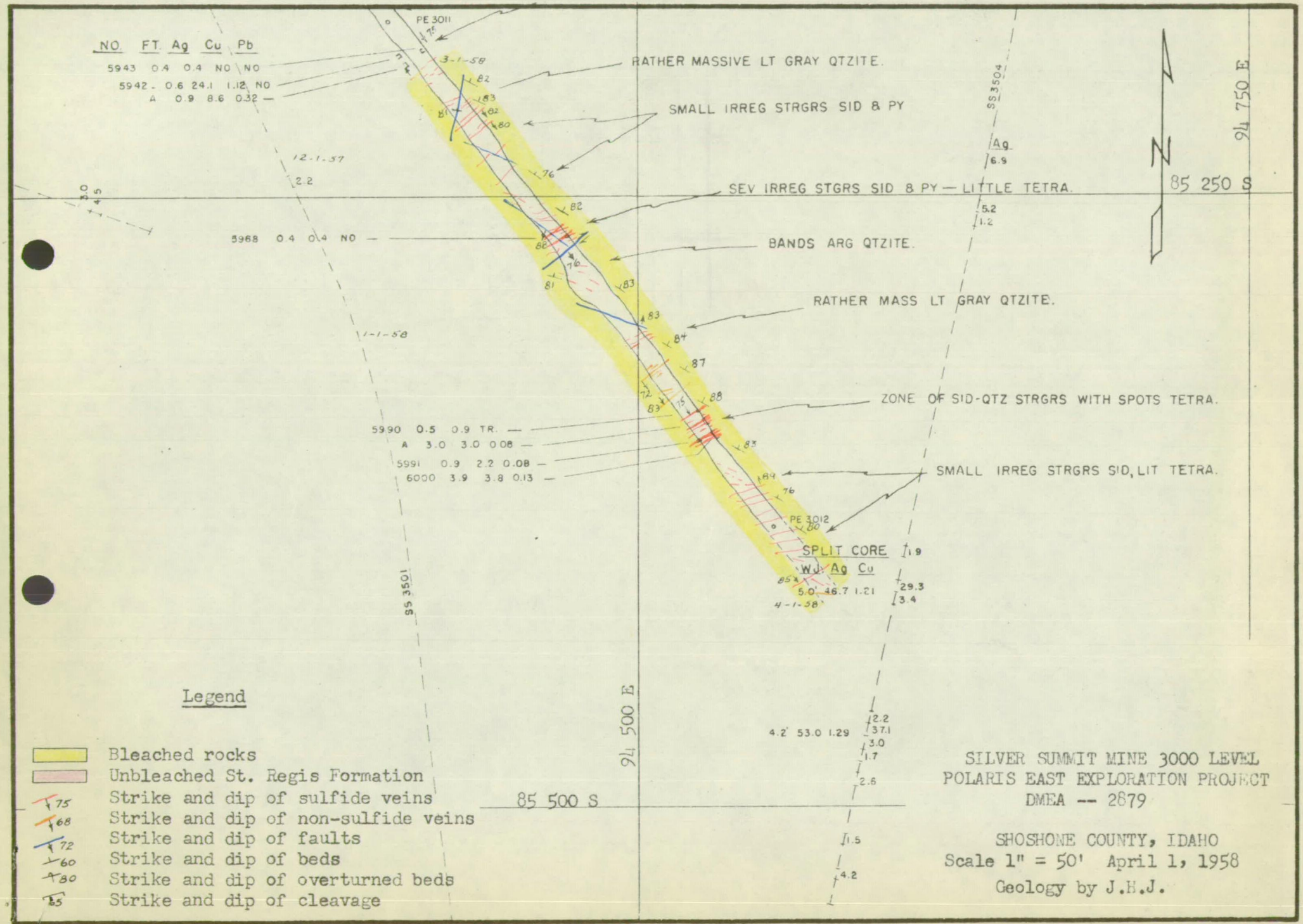
SILVER SUMMIT MINE 3000 LEVEL
POLARIS EAST EXPLORATION PROJECT
DMEA -- 2879

SHOSHONE COUNTY, IDAHO
Scale 1" = 50' June 1, 1958

Geology by J.H.J.

OFFICIAL FILE COPY
D M E A
RECEIVED JUL 21 1958

DATE	INITIALS	CODE

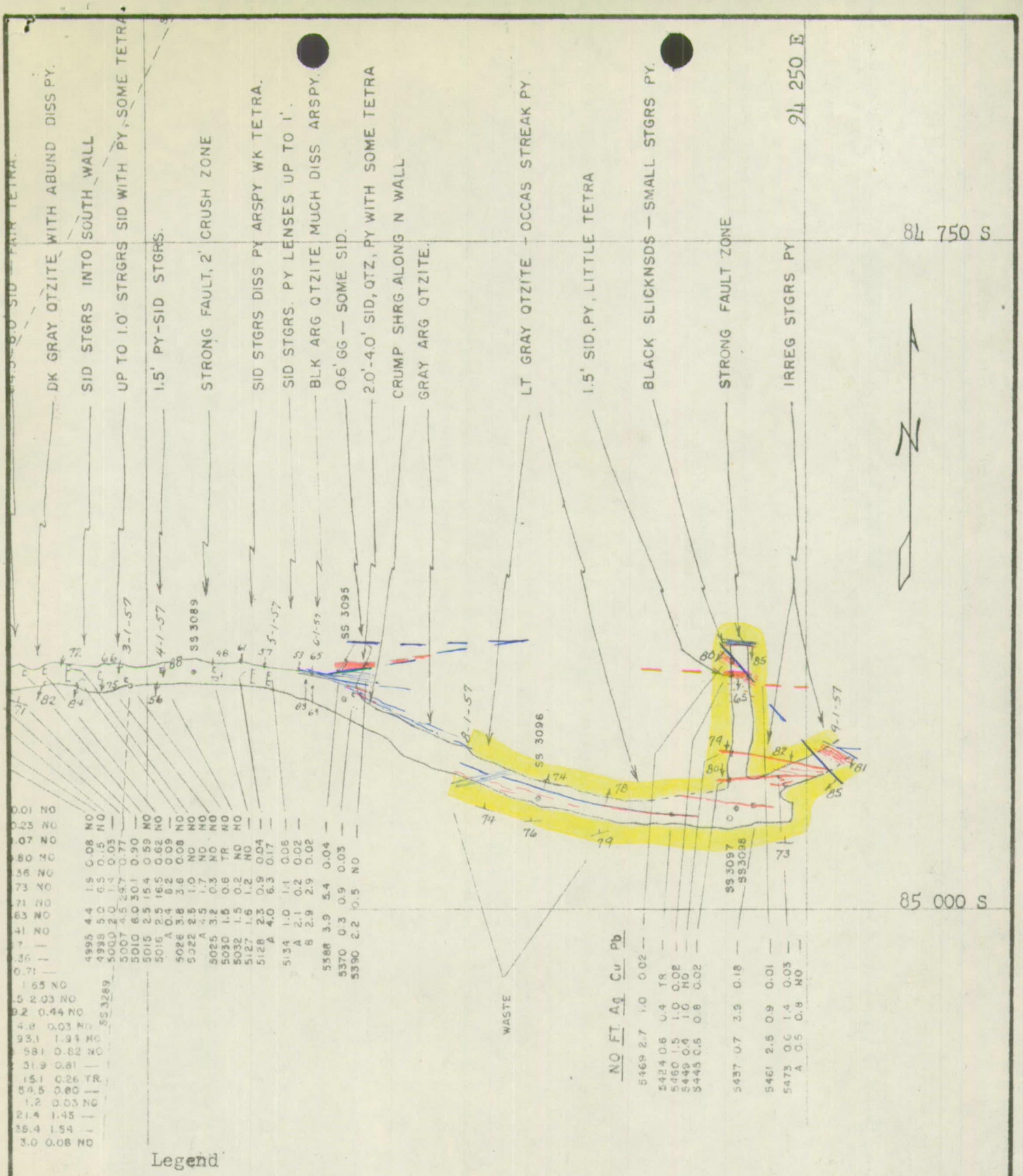


SILVER SUMMIT MINE 3000 LEVEL
POLARIS EAST EXPLORATION PROJECT
DMEA -- 2879

SHOSHONE COUNTY, IDAHO
Scale 1" = 50' April 1, 1958
Geology by J.H.J.

OFFICIAL FILE COPY
DMEA
RECEIVED 28 1958

DATE	INITIALS	CODE



Legend

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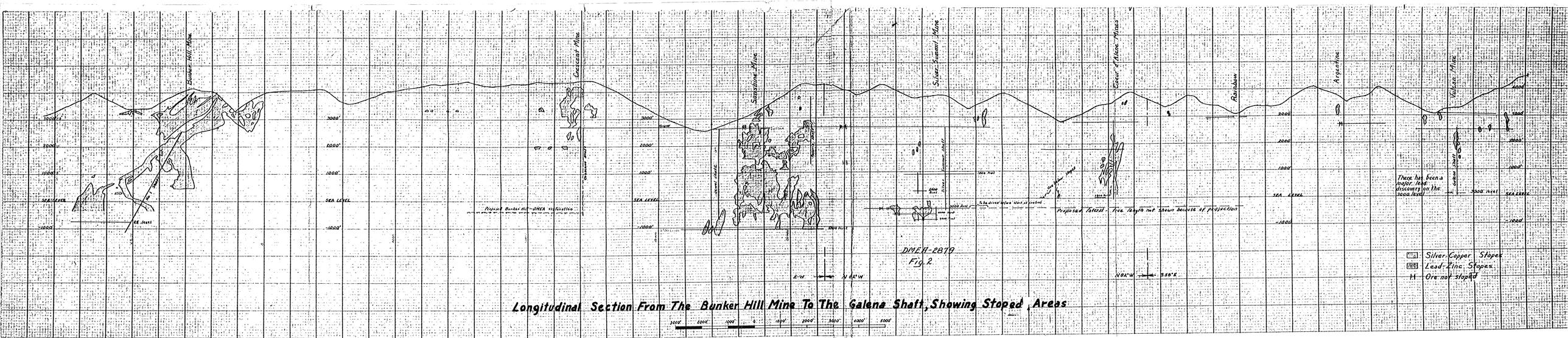
- Strike and dip of non-sulfide veins
- Strike and dip of faults
- Strike and dip of beds
- Strike and dip of overturned beds
- Strike and dip of cleavage

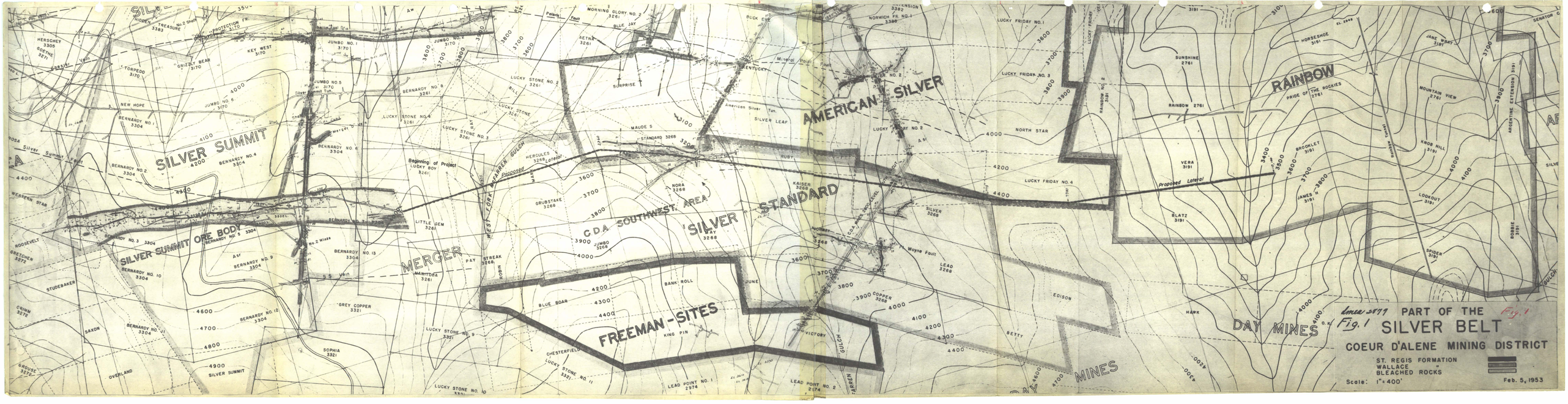
SILVER SUMMIT MINE 3000 LEVEL
POLARIS EAST EXPLORATION PROJECT
DMEA — 2879

SHOSHONE COUNTY, IDAHO
Scale 1" = 50' September 1, 1957

Geology by J.H.J.



Longitudinal Section From The Bunker Hill Mine To The Galena Shaft, Showing Stoped Areas


PART OF THE
SILVER BELT
COEUR D'ALENE MINING DISTRICT
ST. REGIS FORMATION
WALLACE "
BLEACHED ROCKS
Scale: 1"=400'
Feb. 5, 1953
SILVER SUMMIT
SILVER SUMMIT ORE BODY
MERGER
FREEMAN-SITES
C.D.A. SOUTHWEST AREA
SILVER STANDARD
AMERICAN SILVER
RAINBOW
DAY MINES
Proposed Lateral
Beginning of Project
Potlatch Fault
Mineral Point Fault
Ft. Wayne Fault
WEST FORK McABREN GULCH
HOLLY GULCH
TERREN GULCH
HERSCHEY 3305
GERTIE 3271
HIDDEN TREASURE
PROTECTION FR.
KEY WEST 3170
TORPEDO 3170
GRIZZLY BEAR 3170
NEW HOPE
JUMBO NO. 1 3170
JUMBO NO. 2 3170
JUMBO NO. 5 3170
JUMBO NO. 6 3170
BERNARDY NO. 1 3304
BERNARDY NO. 2 3304
BERNARDY NO. 3 3304
BERNARDY NO. 4 3304
BERNARDY NO. 5 3304
BERNARDY NO. 6 3304
BERNARDY NO. 9 3304
BERNARDY NO. 10 3304
BERNARDY NO. 11 3304
BERNARDY NO. 12 3304
BERNARDY NO. 13 3304
BERNARDY NO. 8 3261
LUCKY STONE NO. 4 3261
LUCKY STONE NO. 3 3261
LUCKY STONE NO. 2 3261
LUCKY STONE 3261
LUCKY STONE NO. 9 3321
LUCKY STONE NO. 10 3321
LUCKY STONE NO. 11 3321
LUCKY BOY 3261
LITTLE GEM 3261
MANITOBA 3261
PAY STREAK 3266
GREY COPPER 3321
SOPHIA 3321
SILVER SUMMIT
WESTERN STAR
ROOSEVELT
GRETCHEN 3272
STUDEBAKER
CRIMM 3274
SAXON
GROUSE 3272
OVERLAND
ETNA 3261
SURPRISE
MORNING GLORY NO. 2 3261
BLUE JAY
BUCK EYE
KENTUCKY
MAUDE S
STANDARD 3268
HERCULES 3268
GRUBSTAKE 3268
NORA 3268
KAISER 3268
RUBY
SILVER LEAF
SILVER 3268
LEAD 3268
COPPER 3268
JUMBO 3268
BLUE BOAR
BANK ROLL
KING PIN
JUNE
VICTORY
CHESTERFIELD
LEAD POINT NO. 1 2974
LEAD POINT NO. 2 2974
NORWICH FR. NO. 1 3386
LUCKY FRIDAY NO. 1
LUCKY FRIDAY NO. 2
LUCKY FRIDAY NO. 3
LUCKY FRIDAY NO. 4
NORTH STAR
EDISON
BETTY
HAWK
SUNSHINE 2761
RAINBOW 2761
VERA 3191
BLATZ 3191
HORSESHOE 3191
PRIDE OF THE ROCKIES 2761
MOUNTAIN VIEW 2761
KNOB HILL 3191
BROOKLET 3191
JAMES H 3191
LOOKOUT 3191
SPIDER 3191
JANE WEAY 3191
ARGENTINE EXTENSION 3191
BONNIE 3191
SENATOR