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BATES NO. USGSP0000041.3

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Polaris Mining Company
Docket No. DMEH-2879

AGREEMENT

THIS AGREEMENT, entered into this 7th day of January, 1963, between COEUR D'ALENE MINES CORPORATION, an Idaho Corporation, hereinafter called "Coeur d'Alene Mines", and POLARIS MINING COMPANY, a Delaware Corporation duly qualified to do business in the State of Idaho, hereinafter called "Polaris", WITNESSETH:

WHEREAS, Polaris is and for many years has been the owner of a large group of lode mining claims situated in Yreka and Evolution Mining Districts, Shoshone County, Idaho, and is participating, along with certain other companies, in the exploration and development of other adjacent or nearby properties; and

WHEREAS, Silver Summit Mining Company, an Idaho Corporation, was recently merged into Polaris and by virtue of such merger Polaris became and now is the owner of a large group of lode mining claims formerly owned by Silver Summit Mining Company in which said group of claims extensive exploration work has heretofore been performed including, among other things, a shaft which has been sunk to Silver Summit's 3000 foot level and an offset winze which has been sunk to Silver Summit's 3400 foot level and including also extensive exploration work which has been performed laterally from Silver Summit's said shaft and from its said winze on levels just mentioned as well as on intermediate and higher levels in the Silver Summit property; and

WHEREAS, Coeur d'Alene Mines has heretofore performed a large amount of exploration work in its own property and has discovered therein certain ore bodies which have heretofore been worked out and Coeur d'Alene Mines is now without any productive ore body and is and for a considerable time last past it has been without funds, except those raised by assessments levied upon its outstanding stock, with which to carry on any further exploration or development program; and

WHEREAS, pursuant to an understanding and arrangement between Coeur d'Alene Mines and Coeur d'Alene Consolidated Silver-Lead Mines, Inc., and with a view to exploring a large area lying southerly from the Coeur d'Alene Mines group of claims, Coeur d'Alene Mines and Coeur d'Alene Consolidated Silver-Lead Mines, Inc., which will hereinafter be called "Coeur d'Alene Consolidated", negotiated the following contracts:

A. A contract in writing entered into on the 23rd day of May, 1946, between Coeur d'Alene Mines and American Silver Mining Company, which will hereinafter be called "American Silver", in and by which Coeur d'Alene Mines was given the right to drive a crosscut southerly from its shaft on its 2800 level into and through and for the purpose of exploring the American Silver group of lode claims lying adjacent to and southerly from the Coeur d'Alene Mines property, and the right to develop and mine any and all commercial ore bodies which might be discovered in the American Silver property as a result of the driving of said crosscut or as a result of exploration work to be performed by Coeur d'Alene Mines laterally from said crosscut. Said contract provided, among other things, that any and all commercial ore which might be discovered in the American Silver property as a result of said exploration work should belong one-half to American Silver and one-half to Coeur d'Alene Mines. Said contract is recorded in the office of the County Recorder of Shoshone County, Idaho, in Book "J" of Bonds and Agreements at page 134, reference to which, for further particulars, is hereby made. The American Silver group hereinabove referred to consisted and consists of the lode claims which are listed on the sheet which is hereunto annexed, marked Exhibit "B", and which is hereby referred to and by reference made a part of this agreement.

B. A contract in writing entered into on the 23rd day of May, 1946, between Coeur d'Alene Mines and American Silver in and by which certain litigation then and theretofore pending between said two companies was compromised and settled and in and by which the ownership of the ore which had

theretofore been or which might thereafter be discovered in a certain area described in said agreement was compromised and finally settled, which said agreement is recorded in the office of said County Recorder in Book "J" of Bonds and Agreements at page 139, reference to which is hereby made.

C. A contract in writing entered into on the 17th day of July, 1946 between Coeur d'Alene Mines and Silver Standard Mining Company, which will hereinafter be called "Silver Standard", in and by which Coeur d'Alene Mines was given the right to extend the crosscut mentioned in the preceding paragraph numbered "A" southerly into and through and for the purpose of exploring the Silver Standard group of lode claims lying adjacent to and southerly from said American Silver property, and the right to develop and mine any and all commercial ore bodies which might be discovered in the Silver Standard property as a result of the driving of said crosscut or as a result of exploration work to be performed by Coeur d'Alene Mines laterally from said crosscut. Said contract provided, among other things, that any and all commercial ore which might be discovered in the Silver Standard property as a result of said exploration work should belong one-half to Silver Standard and one-half to Coeur d'Alene Mines. Said contract is recorded in the office of said County Recorder in Book "J" of Bonds and Agreements at page 144, reference to which, for further particulars, is hereby made. The Silver Standard group hereinabove referred to consisted and consists of the lode claims which are listed on the sheet which is hereunto annexed, marked Exhibit "C", and which is hereby referred to and by reference made a part of this agreement.

D. A contract in writing entered into on the 23rd day of May, 1946, between Coeur d'Alene Mines and Coeur d'Alene Consolidated in and by which it was recited, among other things, that Coeur d'Alene Consolidated had been and was then negotiating for the right to explore, develop and mine certain properties in the immediate vicinity of the group of claims owned by Coeur d'Alene Mines, and had been and was then negotiating for an interest in any and

all commercial ore which might be discovered in such properties (particular reference being had to the American Silver and the Silver Standard properties hereinabove mentioned), and in and by which said agreement it was provided, among other things, that if as a result of such negotiations Coeur d'Alene Consolidated should succeed in acquiring such exploration and mining rights in such other properties and an interest in any and all commercial ore which might be discovered therein, then and in such event Coeur d'Alene Mines should drive a crosscut southerly from its shaft on its 2800 level for the purpose of exploring such other properties and should perform such other exploration work therein as Coeur d'Alene Consolidated should desire to have performed, all such work to be performed by Coeur d'Alene Mines and the entire cost thereof to be paid by Coeur d'Alene Consolidated; and in and by which said agreement it was provided that the Freeman & Sites group of claims owned by Coeur d'Alene Consolidated and consisting of the BANK ROLL, BLUE BOAR, CHESTERFIELD and KING PIN lode claims, should be included in such exploration and development project, and in and by which said agreement it was provided that Coeur d'Alene Consolidated should convey to Coeur d'Alene Mines an interest, to be agreed upon and determined later, in any and all commercial ore which might be discovered in said Freeman & Sites Group and also a portion, to be agreed upon and determined later, of such interest as Coeur d'Alene Consolidated might as a result of the aforesaid negotiations acquire in any and all commercial ore which might be discovered in any and all other properties in which exploration and mining rights might be acquired by Coeur d'Alene Consolidated as a result of the aforesaid negotiations. Said agreement between Coeur d'Alene Mines and Coeur d'Alene Consolidated is recorded in the office of said County Recorder in Book "J" of Bonds and Agreements at page 141 and is hereby referred to for further particulars.

E. A contract in writing entered into on the 28th day of May, 1948, between Coeur d'Alene Mines and Coeur d'Alene Consolidated, and designated

"First Supplemental Agreement", in and by which it was recited, among other things, that as a result of the negotiations referred to in the aforesaid contract of May 23, 1946, between said parties the contracts mentioned in the foregoing paragraphs of this agreement, numbered "A", "B" and "C", were entered into, and wherein it was recited that subsequent to the execution of the aforesaid contract between Coeur d'Alene Mines and Coeur d'Alene Consolidated mentioned in the foregoing paragraph of this agreement, numbered "D", Coeur d'Alene Consolidated had acquired by purchase the Michaels & Fahle Group consisting of the HAWK and the O.K. claims, and wherein it was recited that on the 18th day of February, 1948, Coeur d'Alene Consolidated had entered into an agreement with Callahan Consolidated Mines, Inc., which will hereinafter be referred to as "Callahan Consolidated", in and by which Callahan Consolidated had agreed to assume all obligations of Coeur d'Alene Consolidated with respect to the financing of all exploration work which remained to be performed by Coeur d'Alene Mines under the terms and conditions of the aforesaid contract mentioned in the foregoing paragraph of this agreement numbered "D", and in and by which said "First Supplemental Agreement" it was provided, among other things, that the interests in any and all commercial ore which might be discovered in the properties included and/or to be included in said exploration project should be allocated as follows:

AMERICAN SILVER GROUP

Coeur d'Alene Mines.....35%

Coeur d'Alene Consolidated..... 7-1/2%

Callahan Consolidated..... 7-1/2%

American Silver retaining..... 50%

SILVER STANDARD GROUP

Coeur d'Alene Mines.....25%

Coeur d'Alene Consolidated.....12-1/2%

Callahan Consolidated.....12-1/2%

Silver Standard retaining..... 50%

FREEMAN & SITES GROUP

Coeur d'Alene Mines.....25%

Coeur d'Alene Consolidated.....37-1/2%

Callahan Consolidated.....37-1/2

MICHAELS & FAHLE GROUP

Coeur d'Alene Mines.....25%

Coeur d'Alene Consolidated.....37-1/2%

Callahan Consolidated.....37-1/2%

Said "First Supplemental Agreement" is recorded in the office of the aforesaid County Recorder in Book "J" of Bonds and Agreements at page 148 and is hereby referred to for further particulars therein contained; and

WHEREAS, on or about the 18th day of January, 1951, Coeur d'Alene Consolidated conveyed or attempted to convey an entire interest in said Michaels & Fahle Group of claims to Day Mines, Inc., and American Smelting & Refining Company by a certain deed which is recorded in the office of the aforesaid County Recorder in Book 85 of Deeds at page 29, reference to which is hereby made, and on or about the 24th day of July, 1952, Callahan Consolidated filed a suit in the District Court of the First Judicial District of the State of Idaho, in and for the County of Shoshone, being suit No. 11682, wherein said Callahan Consolidated, plaintiff in said suit, is seeking to have it adjudged by said court that said conveyance or attempted conveyance of said property was void and of no effect, which said suit is still pending and undetermined; and

WHEREAS, an unlitigated controversy exists between Coeur d'Alene Mines, on the one hand, and Coeur d'Alene Consolidated and Callahan Consolidated, on the other hand, as to the rights of said parties with respect to certain ore which was discovered in a certain vein or in certain veins found near the boundary line between the American Silver property and the Silver Standard property as a result of certain exploration work which was performed by Coeur d'Alene Mines westerly from the aforesaid crosscut that was driven southerly from Coeur d'Alene Mines's shaft; and

WHEREAS, Polaris would be interested in further exploring the property of Coeur d'Alene Mines and in exploring the property of Rainbow Mining and Milling Company, Ltd., in which Coeur d'Alene Mines owns at least 51% stock interest, and in further exploring the various other properties hereinbefore mentioned provided Coeur d'Alene Mines shall be able to and shall settle and finally adjust all litigation and/or controversies hereinabove mentioned, and provided Coeur d'Alene Mines shall be able to have its present contracts with American Silver, Silver Standard and Coeur d'Alene Consolidated modified as hereinafter specified, and Coeur d'Alene Mines would be interested in entering into a contract with Polaris under which Polaris would undertake the continuation of the exploration work contemplated by the various agreements hereinabove mentioned, and under which Polaris would undertake the exploration of the property of Rainbow Mining and Milling Company, Ltd., and the further exploration of the property of Coeur d'Alene Mines, it being recognized by both parties hereto that Polaris, having an opening on its 3000 foot level which is some 330 feet lower than the deepest level of Coeur d'Alene Mines, or in other words 330 feet deeper than the exploration work heretofore performed by Coeur d'Alene Mines in its own property or under the agreements hereinabove mentioned, Polaris would be in a position to continue the exploration work contemplated by the aforesaid agreements, having ample finances therefor, and thus relieve Coeur d'Alene Mines from the necessity of levying further assessments upon its outstanding stock.

NOW, THEREFORE, in consideration of the premises and in consideration of the work to be performed by Polaris as hereinafter provided, and in consideration of the mutual covenants hereinafter set out and by each of the parties hereto to be faithfully kept and performed, IT IS HEREBY MUTUALLY UNDERSTOOD AND AGREED:

1. Coeur d'Alene Mines shall use its best efforts to bring about an early settlement or other final disposition of the aforesaid litigation with respect to the Michaels and Fahle group of claims to the end that said claims shall be included in the development project to be undertaken by Polaris under the terms and conditions of this agreement.

2. Coeur d'Alene Mines shall forthwith proceed to settle all controversies now existing between itself, on the one hand, and Coeur d'Alene Consolidated and Callahan Consolidated, on the other hand, as to the rights of said parties with respect to the ore which was heretofore discovered or which may hereafter be discovered in a certain vein or certain veins found near the boundary line between American Silver property and Silver Standard property as a result of certain exploration work which was performed by Coeur d'Alene Mines westerly from the aforesaid crosscut that was driven southerly from the Coeur d'Alene Mines shaft.

3. Coeur d'Alene Mines shall forthwith endeavor to bring about a modification, by supplemental agreement or otherwise, of each and all of its aforesaid agreements with respect to the American Silver group of claims, the Silver Standard group of claims, the Freeman and Sites group of claims and the Michaels and Fahle group of claims to the effect that if any commercial ore shall be developed in any of said properties as a result of the exploration work to be performed by Polaris under the terms and conditions of this agreement, Polaris shall own 40% of any and all such commercial ore which may be so developed in any and all of said properties, and to the further effect that regardless of any controversy which may arise between the parties to said agreements or any of them with respect to the ownership, as between said parties or any of them, of any ore which may be developed in any of the aforesaid properties as a result of the exploration work which may be performed by Polaris under the terms of this agreement, or which may arise between said parties or any of them on account of any other matter or thing whatsoever,

Polaris shall not be prevented from nor interfered with in any way in its exploring, developing, mining, milling and marketing any ore body or ore bodies which may be developed in any of the aforesaid properties nor from deducting for Polaris its own proportionate share of the net smelter returns from such ore, and to the further effect that if any controversy shall at any time arise between the parties to said agreement or any of them as to the ownership, as between themselves, of any ore which may be mined by Polaris in any of said properties, or as to the ownership, as between said parties or any of them, of the proceeds of the marketing of such ore, Polaris shall have the right to continue, without interference by or upon the part of any of said parties, with the mining, milling and marketing of said ore and shall have the right to deduct from the smelter returns from said ore its full share thereof including any and all costs and expenses incurred by Polaris in the mining, milling and marketing of said ore and the right to impound the balance or such portion of the balance of said net smelter returns the ownership of which may at any time be in controversy between said other parties or any of them.

4. Coeur d'Alene Mines shall forthwith endeavor to bring about a further modification, by supplemental agreements or otherwise, of each and all of its aforesaid agreements to the effect that so long as Polaris shall be performing any of the exploration and/or development work hereinafter specified, in and during the period of three years from and after the date on which Polaris shall commence work under this agreement, Polaris shall be considered to be performing the minimum work requirements required to be performed by Coeur d'Alene Mines under the terms and conditions of the latter company's agreements with American Silver, Silver Standard, Coeur d'Alene Consolidated and Callahan Consolidated or any of them, or in other words, to the effect that any and all work requirements specified in any of the aforesaid contracts which Coeur d'Alene Mines has heretofore entered into with the owners of any property which is to be included in the exploration and development project provided

for in this agreement shall be waived so long as Polaris shall, during said three-year period, be performing the minimum work requirements hereinafter specified in any property included in the exploration and development project provided for by the terms of this agreement, and to the further effect that upon the expiration of said period of three years the minimum amount of work to be performed under any contract into which Coeur d'Alene Mines has heretofore entered with any of said other parties shall not exceed 60 man-shifts per calendar month and with the provision that if in any calendar month Polaris shall perform work in any of said other properties in excess of 60 man-shifts then and in such event the excess of work performed in such calendar month over and above said 60 man-shifts may be carried forward by Polaris and credited to the work required to be done in that particular property in any subsequent month in the same calendar year in which the minimum amount of required work may not have been performed.

5. Coeur d'Alene Mines shall endeavor to have included in its said supplemental agreements with American Silver, Silver Standard and Coeur d'Alene Consolidated an express provision to the effect that the property of Rainbow Mining and Milling Company, Ltd. may be explored by Coeur d'Alene Mines and/or Polaris through the use of any and all underground openings then existing or which may thereafter be driven in any and/or all of the properties hereinabove mentioned and that if commercial ore shall be discovered in said Rainbow property, said ore may be mined and removed from said property through the underground openings in any and/or all of the other properties hereinabove mentioned, and Coeur d'Alene Mines shall also endeavor to have included in its said supplemental agreements with said American Silver, Silver Standard and Coeur d'Alene Consolidated a further express provision to the effect that if Polaris shall at any time while this agreement is in effect acquire any mining rights in any nearby properties other than those herein mentioned then in such event Polaris shall have the right so long as this agreement shall

remain in effect to explore, develop and mine such other properties through any and all underground openings then existing or which may thereafter be driven in said American Silver, Silver Standard and Coeur d'Alene Consolidated properties or any of them.

6. Polaris shall have and is hereby given the right to further explore the property of Coeur d'Alene Mines and the properties of American Silver, Silver Standard and Coeur d'Alene Consolidated by means of such underground openings, including diamond drilling, as Polaris may wish to drive in said properties or any thereof either on or from Coeur d'Alene Mines's present 2800 level or on or from Polaris's present 3000 level or on any higher or deeper level, either in the property of Polaris or in any other property included in this agreement, on or from which Polaris may desire to drive an opening or openings. The character of the exploration work which shall be performed by Polaris in said or any of said properties and the place or places where said work shall be performed shall be left entirely to the judgment of Polaris and although it is understood that the exploration work which Polaris is to perform under the terms of this agreement shall be of such character as in the judgment of Polaris will determine whether any commercial ore body or ore bodies exist in any of the properties hereinabove mentioned it is not the intent of this agreement to specify what work shall be performed by Polaris nor where said work shall be done, except that IT IS EXPRESSLY UNDERSTOOD AND AGREED that the first underground work to be performed by Polaris under the terms of this agreement shall be to extend its so-called 3000 level Merger east drift easterly an estimated distance of 3000 to 3500 feet from its present face into the property of Silver Standard and/or the property of American Silver to and for the purpose of exploring the downward extension of the vein or veins in which Coeur d'Alene Mines has heretofore discovered a showing of commercial mineralization within the boundaries of American Silver's Maud S claim and Silver Standard's Nora and Standard claims on Coeur d'Alene Mines's 2800 level,

and except that from some point on or near said vein or veins Polaris shall drive a raise of such dimensions as shall be decided upon by Polaris to make a connection with Coeur d'Alene Mines's opening on its said 2800 level, it being understood and agreed that if as a result of the extension of said Merger east drift commercial ore shall be found in the aforesaid vein or veins in which said discovery of said commercial mineralization was made by Coeur d'Alene Mines as aforesaid, then Polaris shall drift on said vein or veins such distance along said structure or structures as in the judgment of Polaris shall appear to be warranted by the existing geological conditions. The work provided for in this paragraph shall be performed by Polaris at the rate of not less than eighty (80) man shifts per calendar month; PROVIDED, however, that the excess of man shifts above eighty (80) in any calendar month may be carried forward and credited to any calendar month or months in the same calendar year in which less than 80 man shifts of work may be performed, the intent of this agreement being that not less than 960 man shifts of work shall be performed by Polaris in each calendar year during the progress of the work provided for in this paragraph and during the progress of the work hereinafter provided for in paragraph 7 of this agreement.

7. Subject to authorization by the stockholders of Rainbow Mining and Milling Company, Ltd., hereinafter referred to as "Rainbow", Polaris shall have and is hereby given the right to drive such underground opening or openings from Coeur d'Alene Mines's 2800 level or from Polaris's 3000 level or on any higher or deeper level either in the property of Polaris or in any other property included in this agreement as Polaris may desire to drive into and for the purpose of exploring Rainbow's group of mining claims situated adjacent to and southeasterly from Coeur d'Alene Mines's group of claims, and Polaris hereby agrees that, subject to such authorization and when the work specified in paragraph 6 shall have been completed, Polaris will drive an underground opening on Polaris's aforesaid 3000 level from a point in the aforesaid Merger east drift extension into said Rainbow property such distance as in the judgment

of Polaris shall appear to be justified by existing geological conditions but in any event a distance of not less than 300 feet easterly from the west end line, or the southerly or northerly extension of the west end line of Rainbow's Pride of the Rockies claim, Mineral Survey No. 2761; PROVIDED that if the proposed agreement referred to in paragraph 8 of this agreement shall be entered into between Polaris and Rainbow, Polaris agrees that after the minimum work in this paragraph above provided for shall have been performed by Polaris in the Rainbow property Polaris will throughout the life of said agreement continue exploration or development work or mining operations in the Rainbow property at the rate of not less than 480 man shifts in each and every calendar year in which Rainbow shall, by written notice to Polaris, require Polaris to continue work in the Rainbow property. If any such notice shall be given, it shall be served on Polaris prior to the first day of January of the year in which such work is to be performed; and IT IS FURTHER UNDERSTOOD AND AGREED that, if as a result of the exploration work to be performed by Polaris in said Rainbow property any commercial ore shall be discovered therein, Polaris shall have the right to mine said ore, and in connection with its so doing Polaris shall have the right to use any and all underground openings then existing or which may thereafter be driven in the property of Coeur d'Alene Mines and/or in any of the other properties included in this agreement, including Coeur d'Alene Mines's shaft.

8. It is not the intent of this agreement that Polaris shall be required to perform any work in the property of Coeur d'Alene Mines so long as Polaris shall keep its said contract with Rainbow in full force and effect and so long as it shall comply with all of the work requirements thereunder, but IT IS UNDERSTOOD AND AGREED that if said agreement and all work in the Rainbow property shall be abandoned by Polaris, then thenceforth Polaris will perform exploration and/or development work and/or mining in the property of Coeur d'Alene Mines at the rate of not less than 480 man shifts in each and every succeeding calendar

year in which Coeur d'Alene Mines shall, by written notice to Polaris, require Polaris to perform said work. If any such notice shall be given, it shall be served on Polaris prior to the first day of January of the year in which said work is to be performed; PROVIDED, however, that Polaris shall have the right at any time, at its option, to surrender its right to perform any exploration or development work or to do any mining in the property of Coeur d'Alene Mines and in such event Polaris thenceforth shall be released from any and all obligations to perform work in the property of Coeur d'Alene Mines but that all other terms and provisions of this agreement shall remain in full force and effect.

9. IT IS FURTHER UNDERSTOOD AND AGREED that Coeur d'Alene Mines shall cause to be called and held at as early a date as convenient a special meeting of the stockholders of Rainbow for the purpose of considering a proposed agreement between Polaris and Rainbow under and pursuant to which Polaris would be given the right to explore Rainbow's aforesaid property and under and pursuant to which Polaris would become the owner of one-half (1/2) of any and all commercial ore which might be discovered in the Rainbow property as a result of the exploration work to be performed therein by Polaris and under and pursuant to which Polaris would be given the right to mine, mill and market any and all such ore for itself and on behalf of Rainbow and to charge to and collect from Rainbow out of its share of said ore one-half (1/2) of all costs and expenses incurred by Polaris, after the discovery of said ore, in the development, mining, milling and marketing of said ore, IT BEING UNDERSTOOD AND AGREED that prior to the calling of said special meeting of stockholders of Rainbow Polaris shall prepare and submit to the directors of Coeur d'Alene Mines the proposed agreement to be considered by the Rainbow stockholders at their said special meeting, such agreement to set out in detail each and all of the terms and conditions upon which Polaris would be willing to undertake the exploration, development and mining of the Rainbow property.

10. IT IS FURTHER UNDERSTOOD AND AGREED that if as a result of the exploration work to be performed by Polaris in any of the properties hereinabove mentioned, including the Rainbow property if an agreement shall be entered into between Polaris and Rainbow which shall provide for Polaris's exploration and mining of the Rainbow property, any commercial ore shall be discovered in said properties or any thereof said ore shall be mined by Polaris and in connection with the mining thereof Polaris shall have the right to use any underground opening or openings, including Coeur d'Alene Mines's shaft, which shall then exist or which may thereafter be driven in any of the properties mentioned in this agreement.

11. IT IS FURTHER UNDERSTOOD AND AGREED that in its performance of the exploration work contemplated by this agreement and also in connection with its mining, transportation and milling of any and all commercial ore which may be discovered in any of the properties hereinabove mentioned, including the Rainbow property, Polaris shall, at any and all times during the life of this agreement, have the right, at its option, to use without charge therefor against Polaris for depreciation or otherwise any and all mining machinery and equipment, including Coeur d'Alene Mines's concentration mill and at any and all times during the period of three years from and after the date on which Polaris shall commence work under this agreement, unless this agreement shall be sooner surrendered by Polaris or otherwise terminated, and after the expiration of said period of three years, and until the notice hereinafter in this paragraph provided for shall be given, Polaris shall maintain said machinery and equipment and said mill in as good a state of repair as that in which it was at the time possession thereof was taken by Polaris, reasonable wear and tear and damage by the elements being excepted, and shall pay any and all taxes which may be assessed against any and all such machinery and equipment and said mill and shall carry fire insurance on said mill and on such machinery and equipment as shall be insurable in an amount not less than the fire insurance now carried thereon by Coeur d'Alene Mines, such insurance to be for the benefit of both parties

hereto but to be made payable to Coeur d'Alene Mines in the event any of the insured property shall be damaged or destroyed by fire. In this connection, IT IS EXPRESSLY UNDERSTOOD AND AGREED that in the event any of the property covered by such insurance shall be so damaged that collection shall be made under the policy or policies of insurance being carried by Polaris, the proceeds of such collection shall be used in the immediate repair or replacement of the property which shall have been so damaged provided such damaged property can be repaired or replaced at a cost not exceeding the amount of insurance collected. If the cost of the repair or replacement of said property shall exceed the amount of insurance so collected, and if Polaris shall nevertheless desire to have said damaged property repaired or replaced, the total amount of insurance which shall have been collected shall be applied upon the cost of such repairs or replacements and the balance of such cost shall be paid by Polaris, and in such event Polaris shall own an interest in the property so repaired or replaced in the ratio which the amount so paid by Polaris shall bear to the full value of said property; and PROVIDED, further, that if commercial ore shall be discovered in any of the properties hereinabove mentioned then and in such event and so long as such property or properties shall remain in production all taxes and insurance premiums referred to in this paragraph shall continue to be paid by Polaris but shall be considered and treated as a part of Polaris's operating costs and expenses and shall be chargeable to all parties which shall be interested in such production in like manner as Polaris's other operating costs and expenses shall be chargeable as herein elsewhere provided. IT IS FURTHER UNDERSTOOD AND AGREED, however, that if at any time after the expiration of the aforesaid period of three years, if this agreement shall still be in effect, Polaris shall determine that it no longer desires to use in its operations hereunder said Coeur d'Alene Mines's mill and/or its hoist and/or any of its other machinery and equipment, then and in such event Polaris may by notice in writing to Coeur d'Alene Mines surrender its option to use said mill and/or said hoist and/or said other machinery and equipment and from and after the date on which said notice

shall be served on Coeur d'Alene Mines Polaris shall be released from any and all obligations to keep said mill or any of said other property specified in said notice insured or in repair or to pay taxes thereon.

12. IT IS UNDERSTOOD AND AGREED that if as a result of the exploration work to be performed by Polaris under the terms of this agreement any commercial ore shall be discovered in the aforesaid property of Coeur d'Alene Mines, one-half (1/2) of said ore shall become and remain the property of Polaris and one-half (1/2) of said ore shall be and remain the property of Coeur d'Alene Mines and Polaris shall mine said ore and all thereof at a rate best suited to good and efficient mining practice and shall mill said ore or cause the same to be milled and shall in Polaris's name ship and sell said ore including Coeur d' Alene Mines's one-half thereof or the concentrates derived therefrom to the smelter or smelters with which Polaris shall have smelting or selling arrangements and Polaris shall pay over to Coeur d'Alene Mines the full amount of the net smelter returns which shall from time to time be received by Polaris for and on account of Coeur d'Alene Mines's one-half of said ore. The first payment of such net smelter returns to Coeur d'Alene Mines shall be made by Polaris within sixty (60) days from and after the first shipment of such ore or concentrates to the smelter and thereafter settlements with Coeur d'Alene Mines shall be made monthly by Polaris or at such other intervals as may from time to time be agreed upon between Polaris and Coeur d'Alene Mines. At the time each settlement is made Polaris shall furnish to Coeur d'Alene Mines duplicates of all smelter settlement sheets pertaining to the ore and/or concentrates for or on account of which such settlement is being made. The term "net smelter returns", as herein used, shall be construed to mean the net amount which shall be paid by the smelter or smelters for Coeur d'Alene Mines's said ore and/or concentrates, after the deduction of all smelter treatment charges and all penalties and all transportation charges upon such ore and/or concentrates from the mill to the smelter. If the United States Government or any agency thereof shall then be paying any premium or bonus or subsidy for or on account of the mining of

Coeur d'Alene Mines's said ore, then Coeur d'Alene Mines shall make its own claim for and shall be entitled to collect such premium, bonus or subsidy.

13. Coeur d'Alene Mines agrees to reimburse Polaris promptly upon receipt of billing for all costs and expenses incurred by Polaris which shall be properly chargeable to the development, mining, treatment and sale of Coeur d'Alene Mines's said ore including, among other things, such indirect costs and expenses as property taxes, mine license taxes, engineering costs, cost of supervision, bookkeeping and other office expenses, etc., and actual milling costs. As and when Coeur d'Alene Mines is billed for said costs and expenses, Polaris shall furnish to Coeur d'Alene Mines statements in writing showing all of Polaris's charges against Coeur d'Alene Mines in connection with the development, mining, processing and marketing of Coeur d'Alene Mines's ore on account of which such billing is rendered. Such statements shall contain sufficient detail to fully inform Coeur d'Alene Mines as to each item with which Coeur d'Alene Mines has been or is being charged. Any and all questions which may arise with respect to the costs and expenses which Polaris shall be entitled to charge against the development, mining, treatment and sale of Coeur d'Alene Mines's said ore, or with respect to the accounting procedure which shall be employed in arriving at the proper settlements between the parties hereto shall be settled if possible by conferences between the officers of Polaris and Coeur d'Alene Mines and shall be finally disposed of by exchange of letters. But if such questions or any of them cannot be settled and disposed of in that manner, then such question or questions shall be promptly referred to and determined by a panel of three arbitrators as hereinafter provided.

14. For the sake of convenience Polaris may, at its option, deduct from Coeur d'Alene Mines's share of said net smelter returns the full amount of all costs mentioned in paragraph 13 of this agreement and then pay over to Coeur d'Alene Mines the balance of its share of said net smelter returns.

15. From and after the date on which Polaris shall commence exploration work in the property of Coeur d'Alene Mines Polaris shall furnish to Coeur d'

Alene Mines monthly progress reports showing the character and amount of work performed by Polaris during the preceding calendar month and the place or places where said work was performed. And from and after the date on which underground exploration work shall be commenced within the boundaries of Coeur d'Alene Mines's group of claims and so long as exploration work is being performed therein Polaris shall include in its said monthly reports up-to-date progress maps, sample data and geologist's maps in order that Coeur d'Alene Mines may be kept currently informed as to the character and amount of work which Polaris is performing and as to the geological conditions which are being encountered. All exploration work which shall be performed by Polaris in the property of Coeur d'Alene Mines itself shall be performed by Polaris at its own expense and no portion of the cost of said work shall be charged to Coeur d'Alene Mines; PROVIDED, however, that if as a result of such exploration work commercial ore shall be discovered in the property of Coeur d'Alene Mines, then the cost of any and all further exploration and development work which may be performed by Polaris in said Coeur d'Alene Mines property shall be treated as operating expense and shall be paid for out of the proceeds from production from said property.

16. If commercial ore shall be found in Coeur d'Alene Mines's property as a result of the work to be performed by Polaris under the terms of this agreement, then during any and all periods in which Polaris shall be mining said ore Polaris shall furnish to Coeur d'Alene Mines monthly statements in writing in which there shall be shown the amount of work performed during the preceding month, the tonnage of ore mined, the tonnage of ore milled, the tonnage of concentrates produced, and a detailed statement of all direct and indirect costs which have been charged against Coeur d'Alene Mines in connection with Polaris's operations during the preceding month. If Coeur d'Alene Mines shall object to any such monthly statement or to any part thereof, Coeur d'Alene Mines shall so advise Polaris in writing within sixty (60) days from and after Coeur d'Alene Mines's receipt of such statement and shall set out in detail the reason or reasons

for such objections. If no such objections are made by Coeur d'Alene Mines within said period of sixty days, then the statement or statements to which no such objection shall have been made shall be considered and treated as correct and shall not thereafter be questioned; PROVIDED, however, that any statement or statements which may be so furnished by Polaris may at any subsequent time be amended by Polaris with respect to Polaris's labor costs if after such statement or statements shall have been rendered any retroactive wage increase shall be negotiated between Polaris and its workmen employed in or upon Coeur d'Alene Mines's property, and PROVIDED FURTHER, that monthly charges shall be subject to adjustment at the end of each year when records are closed and audited on an annual basis and such adjustments shall be prorated to individual months in that year.

17. At any and all times when Polaris may be performing any work under the terms of this agreement Coeur d'Alene Mines shall have the right, through its engineers, geologists and other authorized agents, but at their own risk, to inspect any and all work which is being performed by Polaris and shall have the right to take samples of any and all ore which Polaris may be mining and shall have the right to observe and inspect Polaris's milling of said ore and shall have the right to inspect all of Polaris's maps of its workings in any property in which Polaris may be performing work under the terms of this agreement and all of Polaris's assay data with respect to ore that is being mined in said properties or any thereof and shall have the right to make copies of such data and of said maps and shall have the right at any and all reasonable times to examine Polaris's books and records pertaining to its operations in said or any of said properties.

18. IT IS UNDERSTOOD AND AGREED that if this agreement shall become effective as hereinafter provided, then from and after the effective date hereof Polaris shall, in its performance of work in the American Silver, Silver Standard and Coeur d'Alene Consolidated properties abide by and comply with the terms and conditions of Coeur d'Alene Mines's aforesaid contracts with the respective owners of said properties, as said contracts or any of them shall be modified as hereinabove provided.

19. Throughout the life of this agreement Polaris shall perform in or upon or for the direct benefit of Coeur d'Alene Mines's unpatented claims sufficient work to comply with all annual labor or assessment work requirements, including such labor or assessment work as may be required to be performed for the year ending July 1, 1953. Such work shall be performed at Polaris's own expense until such time as said Coeur d'Alene Mines property shall have become productive and self-supporting, but from that time on the cost of all such annual assessment work shall be included in Polaris's operating expense. In due time each year Polaris shall cause to be filed for record in the office of the County Recorder of Shoshone County, Idaho, proof, in the usual form, that such annual labor or assessment work has been fully performed.

20. From and after the effective date of this agreement Polaris shall promptly pay when due any and all state and county taxes which may be assessed against Coeur d'Alene Mines's said mining claims beginning with the year 1953 and shall continue so to do until such time as said taxes can be paid as an operating expense out of profits from production.

21. At any and all times when Polaris may be in possession of said Coeur d'Alene Mines property and performing work thereon or therein Polaris shall post and keep posted on said property a notice to the effect that Polaris will be responsible for any and all debts which may be incurred by Polaris for labor, materials, supplies or otherwise in connection with Polaris's work in or upon said property and Polaris agrees that it will at all times promptly pay the wages of all workmen who may be employed by Polaris in or about said premises and that Polaris will promptly pay for any and all equipment and supplies which may be purchased by Polaris for use on said property and that Polaris will in all ways fully protect Coeur d'Alene Mines against any and all liens or other liabilities arising out of or in connection with any and all work which may be performed by Polaris in or upon said Coeur d'Alene Mines property.

22. IT IS FURTHER UNDERSTOOD AND AGREED that Polaris shall have the right to use any and/or all of the underground openings of Coeur d'Alene Mines, including its shaft, for the purpose of exploring, developing and mining any of the properties hereinabove mentioned as well as other nearby properties, and IT IS AGREED that in the event Polaris shall hereafter acquire any such other properties or any mining rights and privileges therein and shall wish to use Coeur d'Alene Mines's underground openings for the purpose of exploring, developing and mining such other properties then and in such event and in consideration of Polaris's right so to do Coeur d'Alene Mines shall be entitled to own ten percent (10%) of any and all ore which shall be mined by Polaris in any and all such other properties exclusive of the property of Rainbow and which shall be transported to the surface through the use of Coeur d'Alene Mines's said facilities, as a charge for the use of such facilities, including Coeur d'Alene Mines's shaft, its hoist and such other equipment owned by Coeur d'Alene Mines, including its concentration mill, as Polaris may desire to use in connection with its operations in such other property or properties; PROVIDED, however, that Polaris shall be entitled to charge against Coeur d'Alene Mines and Coeur d'Alene Mines shall pay to Polaris ten percent (10%) of all costs and expenses which shall be incurred by Polaris in the development, mining, milling and marketing of all ore which may be mined from such other property or properties and transported to the surface through the use of the facilities of Coeur d'Alene Mines.

23. IT IS FURTHER UNDERSTOOD AND AGREED that throughout the life of this agreement Polaris shall have the right to place or install in or upon the property of Coeur d'Alene Mines such surface structures and such surface and/or underground machinery, equipment or supplies as may be necessary for the use of Polaris in its operations under this agreement and any and all buildings, exclusive of machinery, equipment or supplies installed or contained therein, shall become and remain the property of Coeur d'Alene Mines but that any and all machinery, equipment and supplies which shall be placed or installed by Polaris

in or upon said Coeur d'Alene Mines's property shall be and remain the property of Polaris and, subject only to the limitations on the removal of the same as set out in Coeur d'Alene Mines's aforesaid agreements with American Silver, Silver Standard and Coeur d'Alene Consolidated or any of them, Polaris shall have the right to remove from said premises any and all such machinery, equipment and supplies at any time during the life of this agreement or within 90 days from and after the termination of this agreement from any cause whatsoever.

24. IT IS FURTHER UNDERSTOOD AND AGREED that if this agreement shall become effective as hereinafter provided then from and after the effective date hereof and so long as this agreement shall thereafter remain in full force and effect Polaris shall have and is hereby given exclusive possession of each and all of the aforesaid mining claims owned by Coeur d'Alene Mines and also the exclusive possession of each and all of the mining claims owned by American Silver, Silver Standard and Coeur d'Alene Consolidated to the same extent that Coeur d'Alene Mines itself would have been or would be entitled to the exclusive possession of said other properties under its aforesaid agreements with the owners thereof and Polaris shall also be and it hereby is given the exclusive right to explore the property of Coeur d'Alene Mines and the exclusive right to mine, mill and market any and all commercial ore which may be discovered therein as a result of Polaris's exploration work in said property and Polaris shall also have and is hereby given the exclusive right to explore the American Silver, Silver Standard and Coeur d'Alene Consolidated properties and exclusive right to mine, mill and market any and all commercial ore which may be discovered in said properties or any thereof to the full extent and under the same terms and conditions that Coeur d'Alene Mines itself would have been or would be entitled to explore said properties or any thereof and to mine, mill and market any and all commercial ore discovered therein if this agreement had not been executed, IT BEING UNDERSTOOD AND AGREED that the intent of this agreement is that if the aforesaid agreements between Coeur d'Alene Mines, American

Silver, Silver Standard and Coeur d'Alene Consolidated shall be modified as hereinabove provided and if this agreement shall become effective as hereinafter provided then Polaris shall assume all the duties and obligations of Coeur d'Alene Mines under each and all of said agreements and shall have the same rights and privileges under each and all of said agreements as Coeur d'Alene Mines itself would have had or would have if this agreement had not been executed.

25. IT IS FURTHER UNDERSTOOD AND AGREED that any and all work which may be performed by Polaris under the terms of this agreement in any of the properties hereinabove specifically named shall be performed by Polaris in a good and miner-like manner and under the exclusive direction and supervision of Polaris and with Polaris's own crew or crews.

26. IT IS FURTHER AGREED that if at any time Polaris shall elect to perform no work or no further work in some one or more of the properties hereinabove mentioned, its election in that regard shall not in any wise affect or alter any of the terms and conditions of this agreement with respect to the remaining properties herein mentioned; PROVIDED, however, that if such election shall be made by Polaris notice thereof shall be given by Polaris in writing to Coeur d'Alene Mines and if Coeur d'Alene Mines shall continue work in any such property or properties in which Polaris shall have so elected to discontinue work Coeur d'Alene Mines shall have the right at its option to use in connection with said work, any and all underground openings then being used by Polaris within the properties of American Silver, Silver Standard, Coeur d'Alene Consolidated and Coeur d'Alene Mines or any of them, and also Coeur d'Alene Mines's surface plant, including its mill and Coeur d'Alene Mines's shaft, its hoist and such other equipment owned by Coeur d'Alene Mines, as Coeur d'Alene Mines may desire to use, so long as in so doing Coeur d'Alene Mines shall not interfere with the operations of Polaris or with the use of said facilities by Polaris.

27. IT IS FURTHER UNDERSTOOD AND AGREED that if Polaris shall discontinue and permanently abandon all work in the property of Coeur d'Alene Mines, or in the property of American Silver, or in the property of Silver Standard, or in the property of Coeur d'Alene Consolidated, Polaris shall

thenceforth have no interest whatsoever in any ore which may then be known to exist or which may thereafter be discovered in any of said properties in which Polaris shall have permanently discontinued and abandoned work hereunder.

28. Whenever the time for the performance of any work or other act is limited by the terms of this agreement and the performance thereof is hindered, prevented or delayed by reason of law, regulations or act of any governmental authority, inability to obtain labor, equipment, materials or supplies in the open market, or by reason of fire, floods, strikes, walk-outs, riots, war whether declared or not, Acts of God or the public enemy, or any other causes or conditions, whether or not of the nature of the foregoing, beyond the control of Polaris then the time for the performance of any such obligation hereunder shall be extended to the extent of such delay; PROVIDED, however, that if any such delay or delays shall occur, Polaris shall give written notice thereof to Coeur d'Alene Mines at the commencement of such delay or delays and shall state in such notice the reason or reasons therefor and shall also promptly give written notice to Coeur d'Alene Mines of the termination of such delay or delays.

29. Notwithstanding any of the provisions of this agreement Polaris shall have the right at any time to surrender this agreement and to cease all work hereunder and in the event of its so doing Polaris shall become and be fully released from any and all further obligations hereunder except that in the event of such surrender of this agreement by Polaris, Polaris shall remain liable for the payment of and shall pay any and all debts and/or expenses theretofore incurred by it in connection with its operations under the terms of this agreement and except that Polaris shall remain liable for the payment of and shall pay any and all monies which may then be owing and unpaid to Coeur d'Alene Mines or to any other interested party on account of ores theretofore produced by

Polaris from any of the properties herein mentioned; PROVIDED, however, that notwithstanding its surrender of this agreement Polaris shall remain obligated to perform the annual labor or assessment work in or upon or for the benefit of each and every unpatented claim belonging to Coeur d'Alene Mines, or to pay the cost of performing such work for the current assessment year unless Polaris shall have notified Coeur d'Alene Mines in writing not later than the first day of March in the calendar year in which said assessment work is required to be performed of Polaris's intention to surrender this agreement and of its intention not to perform said annual labor or assessment work; and PROVIDED, further, that Polaris shall leave all underground openings then being used by Polaris in any of the properties in which Polaris may at such time be performing work under the terms of this agreement in a good state of repair and in condition for continued operations, but subject, however, to Polaris's right to remove machinery and equipment as hereinabove provided.

30. While this agreement is not conditioned upon Polaris's obtaining a United States Government loan to assist it in financing the work contemplated by this agreement, it is understood that Polaris may wish to apply for and to endeavor to obtain such a loan. IT IS FURTHER UNDERSTOOD that if Polaris should make application for such a loan it would very likely be necessary in connection with such application for Polaris to obtain the written consent thereto of all parties, including Coeur d'Alene Mines, who would have any interest in the ore which might be discovered and mined in the property or properties whose exploration and development should be partially financed by means of such loan. IT IS FURTHER UNDERSTOOD that such a loan would necessarily have to be made repayable to the Government at a fixed royalty rate based upon the entire production from such property or properties. In this connection IT IS AGREED that if Polaris shall at any time during the life of this agreement elect to make application for such a loan, Coeur d'Alene Mines will, if and when called upon by Polaris so to do, give its written consent thereto; PROVIDED, however, that

Polaris shall, and it agrees that it will, promptly refund to Coeur d'Alene Mines any and all monies which may thereafter be repaid to the Government out of Coeur d'Alene Mines's share of the production from such property or properties.

31. IT IS UNDERSTOOD AND AGREED that if any controversy or dispute shall at any time or times arise between the parties hereto with respect to any matter or thing whatsoever covered by this agreement then and in such event said controversy or dispute shall be settled if possible by conferences between the managements of the respective parties hereto but if such controversy or dispute cannot be so settled and finally disposed of then and in that event the same shall be referred to a panel of three arbitrators one of whom shall be selected by Polaris and one by Coeur d'Alene Mines and the two so selected shall select a third arbitrator. Any and all data or information which may be required by said arbitrators in their consideration of such controversy or dispute shall be promptly furnished by the party having possession thereof and IT IS FURTHER UNDERSTOOD AND AGREED that the decision of a majority of said arbitrators shall then be reduced to writing and furnished to and accepted by both parties hereto as final and binding.

32. IT IS UNDERSTOOD AND AGREED that this agreement shall become effective when, but not unless nor until Coeur d'Alene Mines shall within three (3) months from and after the date of this agreement succeed in settling or otherwise finally adjusting the controversies referred to in paragraph number "2" of this agreement and shall within said period of three (3) months succeed in obtaining modifications of its agreements with American Silver, Silver Standard and Coeur d'Alene Consolidated as set out in paragraphs numbered "3", "4" and "5" of this agreement.

33. Any notices required hereunder shall be deemed to be complete when made in writing, deposited in the U.S. Mail, postage prepaid thereon, addressed

if to Coeur d'Alene Mines — Coeur d'Alene Mines Corporation
Wallace, Idaho,

and if to Polaris

Polaris Mining Company
Wallace, Idaho

34. This agreement shall be binding upon and inure to the benefit of the parties hereto, their respective successors and assigns; PROVIDED, however, that Polaris shall not assign this agreement or any of its rights herein or its obligations hereunder without the prior written consent of Coeur d'Alene Mines.

IN WITNESS WHEREOF the parties hereto have caused this agreement to be executed in their respective names by their respective duly authorized officers and under their respective corporate seals the day and year herein first above written.

COEUR D'ALENE MINES CORPORATION

By /s/ H. L. Mowery
Its President

Attest:

/s/ D. A. Calloway
Its Secretary

(Seal)

POLARIS MINING COMPANY

By /s/ L. J. Landers
Its President

Attest:

/s/ Clyde Eaborn
Its Secretary

(Seal)

STATE OF IDAHO)
) ss.
COUNTY OF SHOSHONE)

On this 7th day of January, 1953, before me, the undersigned, a Notary Public for the State of Idaho, personally appeared H. C. MOWERY and W. A. CALLAWAY, known to me and to me known to be the president and secretary, respectively, of Coeur d'Alene Mines Corporation, one of the corporations whose name is subscribed to the foregoing instrument, and s evera lly acknowledged to me that said corporation executed the same.

IN TESTIMONY WHEREOF, I have hereunto set my hand and affixed my notarial seal the day and year in this certificate first above written.

s/ Marie Selemonson
Notary Public for the State of Idaho,
Residing at Wallace, Idaho.

My commission expires 6-5-53

(Seal)

STATE OF IDAHO)
) ss.
COUNTY OF SHOSHONE)

On this 7 day of January, 1953, before me, the undersigned, a Notary Public for the State of Idaho, personally appeared L. J. RANDALL and ELOF ENBOM, known to me and to me known to be the president and secretary, respectively, of Polaris Mining Company, one of the corporations whose name is subscribed to the foregoing instrument, and severally acknowledged to me that said corporation executed the same.

IN TESTIMONY WHEREOF, I have hereunto set my hand and affixed my notarial seal the day and year in this certificate first above written.

s/ Don R. Payne
Notary Public for the State of Idaho,
Residing at Wallace, Idaho.

My commission expires 7-10-54

(Seal)

AGREEMENT

THIS AGREEMENT, entered into this 7th day of January, 1963, between COEUR D'ALENE MINES CORPORATION, an Idaho Corporation, hereinafter called "Coeur d'Alene Mines", and POLARIS MINING COMPANY, a Delaware Corporation duly qualified to do business in the State of Idaho, hereinafter called "Polaris", WITNESSETH:

WHEREAS, Polaris is and for many years has been the owner of a large group of lode mining claims situated in Yreka and Evolution Mining Districts, Shoshone County, Idaho, and is participating, along with certain other companies, in the exploration and development of other adjacent or nearby properties; and

WHEREAS, Silver Summit Mining Company, an Idaho Corporation, was recently merged into Polaris and by virtue of such merger Polaris became and now is the owner of a large group of lode mining claims formerly owned by Silver Summit Mining Company in which said group of claims extensive exploration work has heretofore been performed including, among other things, a shaft which has been sunk to Silver Summit's 3000 foot level and an offset winze which has been sunk to Silver Summit's 3400 foot level and including also extensive exploration work which has been performed laterally from Silver Summit's said shaft and from its said winze on levels just mentioned as well as on intermediate and higher levels in the Silver Summit property; and

WHEREAS, Coeur d'Alene Mines has heretofore performed a large amount of exploration work in its own property and has discovered therein certain ore bodies which have heretofore been worked out and Coeur d'Alene Mines is now without any productive ore body and is and for a considerable time last past it has been without funds, except those raised by assessments levied upon its outstanding stock, with which to carry on any further exploration or development program; and

WHEREAS, pursuant to an understanding and arrangement between Coeur d'Alene Mines and Coeur d'Alene Consolidated Silver-Lead Mines, Inc., and with a view to exploring a large area lying southerly from the Coeur d' Alene Mines group of claims, Coeur d'Alene Mines and Coeur d'Alene Consolidated Silver-Lead Mines, Inc., which will hereinafter be called "Coeur d' Alene Consolidated", negotiated the following contracts:

A. A contract in writing entered into on the 23rd day of May, 1946, between Coeur d'Alene Mines and American Silver Mining Company, which will hereinafter be called "American Silver", in and by which Coeur d'Alene Mines was given the right to drive a crosscut southerly from its shaft on its 2800 level into and through and for the purpose of exploring the American Silver group of lode claims lying adjacent to and southerly from the Coeur d'Alene Mines property, and the right to develop and mine any and all commercial ore bodies which might be discovered in the American Silver property as a result of the driving of said crosscut or as a result of exploration work to be performed by Coeur d'Alene Mines laterally from said crosscut. Said contract provided, among other things, that any and all commercial ore which might be discovered in the American Silver property as a result of said exploration work should belong one-half to American Silver and one-half to Coeur d'Alene Mines. Said contract is recorded in the office of the County Recorder of Shoshone County, Idaho, in Book "J" of Bonds and Agreements at page 134, reference to which, for further particulars, is hereby made. The American Silver group hereinabove referred to consisted and consists of the lode claims which are listed on the sheet which is hereunto annexed, marked Exhibit "B", and which is hereby referred to and by reference made a part of this agreement.

B. A contract in writing entered into on the 23rd day of May, 1946, between Coeur d'Alene Mines and American Silver in and by which certain litigation then and theretofore pending between said two companies was compromised and settled and in and by which the ownership of the ore which had

theretofore been or which might thereafter be discovered in a certain area described in said agreement was compromised and finally settled, which said agreement is recorded in the office of said County Recorder in Book "J" of Bonds and Agreements at page 139, reference to which is hereby made.

C. A contract in writing entered into on the 17th day of July, 1946 between Coeur d'Alene Mines and Silver Standard Mining Company, which will hereinafter be called "Silver Standard", in and by which Coeur d'Alene Mines was given the right to extend the crosscut mentioned in the preceding paragraph numbered "A" southerly into and through and for the purpose of exploring the Silver Standard group of lode claims lying adjacent to and southerly from said American Silver property, and the right to develop and mine any and all commercial ore bodies which might be discovered in the Silver Standard property as a result of the driving of said crosscut or as a result of exploration work to be performed by Coeur d'Alene Mines laterally from said crosscut. Said contract provided, among other things, that any and all commercial ore which might be discovered in the Silver Standard property as a result of said exploration work should belong one-half to Silver Standard and one-half to Coeur d'Alene Mines. Said contract is recorded in the office of said County Recorder in Book "J" of Bonds and Agreements at page 144, reference to which, for further particulars, is hereby made. The Silver Standard group hereinabove referred to consisted and consists of the lode claims which are listed on the sheet which is hereunto annexed, marked Exhibit "C", and which is hereby referred to and by reference made a part of this agreement.

D. A contract in writing entered into on the 23rd day of May, 1946, between Coeur d'Alene Mines and Coeur d'Alene Consolidated in and by which it was recited, among other things, that Coeur d'Alene Consolidated had been and was then negotiating for the right to explore, develop and mine certain properties in the immediate vicinity of the group of claims owned by Coeur d'Alene Mines, and had been and was then negotiating for an interest in any and

all commercial ore which might be discovered in such properties (particular reference being had to the American Silver and the Silver Standard properties hereinabove mentioned), and in and by which said agreement it was provided, among other things, that if as a result of such negotiations Coeur d'Alene Consolidated should succeed in acquiring such exploration and mining rights in such other properties and an interest in any and all commercial ore which might be discovered therein, then and in such event Coeur d'Alene Mines should drive a crosscut southerly from its shaft on its 2800 level for the purpose of exploring such other properties and should perform such other exploration work therein as Coeur d'Alene Consolidated should desire to have performed, all such work to be performed by Coeur d'Alene Mines and the entire cost thereof to be paid by Coeur d'Alene Consolidated; and in and by which said agreement it was provided that the Freeman & Sites group of claims owned by Coeur d'Alene Consolidated and consisting of the BANK ROLL, BLUE BOAR, CHESTERFIELD and KING PIN lode claims, should be included in such exploration and development project, and in and by which said agreement it was provided that Coeur d'Alene Consolidated should convey to Coeur d'Alene Mines an interest, to be agreed upon and determined later, in any and all commercial ore which might be discovered in said Freeman & Sites Group and also a portion, to be agreed upon and determined later, of such interest as Coeur d'Alene Consolidated might as a result of the aforesaid negotiations acquire in any and all commercial ore which might be discovered in any and all other properties in which exploration and mining rights might be acquired by Coeur d'Alene Consolidated as a result of the aforesaid negotiations. Said agreement between Coeur d'Alene Mines and Coeur d'Alene Consolidated is recorded in the office of said County Recorder in Book "J" of Bonds and Agreements at page 141 and is hereby referred to for further particulars.

E. A contract in writing entered into on the 28th day of May, 1948, between Coeur d'Alene Mines and Coeur d'Alene Consolidated, and designated

"First Supplemental Agreement", in and by which it was recited, among other things, that as a result of the negotiations referred to in the aforesaid contract of May 23, 1946, between said parties the contracts mentioned in the foregoing paragraphs of this agreement, numbered "A", "B" and "C", were entered into, and wherein it was recited that subsequent to the execution of the aforesaid contract between Coeur d'Alene Mines and Coeur d'Alene Consolidated mentioned in the foregoing paragraph of this agreement, numbered "D", Coeur d'Alene Consolidated had acquired by purchase the Michaels & Fahle Group consisting of the HAWK and the O.K. claims, and wherein it was recited that on the 18th day of February, 1948, Coeur d'Alene Consolidated had entered into an agreement with Callahan Consolidated Mines, Inc., which will hereinafter be referred to as "Callahan Consolidated", in and by which Callahan Consolidated had agreed to assume all obligations of Coeur d'Alene Consolidated with respect to the financing of all exploration work which remained to be performed by Coeur d'Alene Mines under the terms and conditions of the aforesaid contract mentioned in the foregoing paragraph of this agreement numbered "D", and in and by which said "First Supplemental Agreement" it was provided, among other things, that the interests in any and all commercial ore which might be discovered in the properties included and/or to be included in said exploration project should be allocated as follows:

AMERICAN SILVER GROUP

Coeur d'Alene Mines.....35%

Coeur d'Alene Consolidated..... 7-1/2%

Callahan Consolidated..... 7-1/2%

American Silver retaining..... 50%

SILVER STANDARD GROUP

Coeur d'Alene Mines.....25%

Coeur d'Alene Consolidated.....12-1/2%

Callahan Consolidated.....12-1/2%

Silver Standard retaining..... 50%

FREEMAN & SITES GROUP

Coeur d'Alene Mines.....25%

Coeur d'Alene Consolidated.....37-1/2%

Callahan Consolidated.....37-1/2

MICHAELS & FAHLE GROUP

Coeur d'Alene Mines.....25%

Coeur d'Alene Consolidated.....37-1/2%

Callahan Consolidated.....37-1/2%

Said "First Supplemental Agreement" is recorded in the office of the aforesaid County Recorder in Book "J" of Bonds and Agreements at page 148 and is hereby referred to for further particulars therein contained; and

WHEREAS, on or about the 18th day of January, 1951, Coeur d'Alene Consolidated conveyed or attempted to convey an entire interest in said Michaels & Fahle Group of claims to Day Mines, Inc., and American Smelting & Refining Company by a certain deed which is recorded in the office of the aforesaid County Recorder in Book 85 of Deeds at page 29, reference to which is hereby made, and on or about the 24th day of July, 1952, Callahan Consolidated filed a suit in the District Court of the First Judicial District of the State of Idaho, in and for the County of Shoshone, being suit No. 11682, wherein said Callahan Consolidated, plaintiff in said suit, is seeking to have it adjudged by said court that said conveyance or attempted conveyance of said property was void and of no effect, which said suit is still pending and undetermined; and

WHEREAS, an unlitigated controversy exists between Coeur d'Alene Mines, on the one hand, and Coeur d'Alene Consolidated and Callahan Consolidated, on the other hand, as to the rights of said parties with respect to certain ore which was discovered in a certain vein or in certain veins found near the boundary line between the American Silver property and the Silver Standard property as a result of certain exploration work which was performed by Coeur d'Alene Mines westerly from the aforesaid crosscut that was driven southerly from Coeur d'Alene Mines's shaft; and

WHEREAS, Polaris would be interested in further exploring the property of Coeur d'Alene Mines and in exploring the property of Rainbow Mining and Milling Company, Ltd., in which Coeur d'Alene Mines owns at least 51% stock interest, and in further exploring the various other properties hereinbefore mentioned provided Coeur d'Alene Mines shall be able to and shall settle and finally adjust all litigation and/or controversies hereinabove mentioned, and provided Coeur d'Alene Mines shall be able to have its present contracts with American Silver, Silver Standard and Coeur d'Alene Consolidated modified as hereinafter specified, and Coeur d'Alene Mines would be interested in entering into a contract with Polaris under which Polaris would undertake the continuation of the exploration work contemplated by the various agreements hereinabove mentioned, and under which Polaris would undertake the exploration of the property of Rainbow Mining and Milling Company, Ltd., and the further exploration of the property of Coeur d'Alene Mines, it being recognized by both parties hereto that Polaris, having an opening on its 3000 foot level which is some 330 feet lower than the deepest level of Coeur d'Alene Mines, or in other words 330 feet deeper than the exploration work heretofore performed by Coeur d'Alene Mines in its own property or under the agreements hereinabove mentioned, Polaris would be in a position to continue the exploration work contemplated by the aforesaid agreements, having ample finances therefor, and thus relieve Coeur d'Alene Mines from the necessity of levying further assessments upon its outstanding stock.

NOW, THEREFORE, in consideration of the premises and in consideration of the work to be performed by Polaris as hereinafter provided, and in consideration of the mutual covenants hereinafter set out and by each of the parties hereto to be faithfully kept and performed, IT IS HEREBY MUTUALLY UNDERSTOOD AND AGREED:

1. Coeur d'Alene Mines shall use its best efforts to bring about an early settlement or other final disposition of the aforesaid litigation with respect to the Michaels and Fahle group of claims to the end that said claims shall be included in the development project to be undertaken by Polaris under the terms and conditions of this agreement.

2. Coeur d'Alene Mines shall forthwith proceed to settle all controversies now existing between itself, on the one hand, and Coeur d'Alene Consolidated and Callahan Consolidated, on the other hand, as to the rights of said parties with respect to the ore which was heretofore discovered or which may hereafter be discovered in a certain vein or certain veins found near the boundary line between American Silver property and Silver Standard property as a result of certain exploration work which was performed by Coeur d'Alene Mines westerly from the aforesaid crosscut that was driven southerly from the Coeur d'Alene Mines shaft.

3. Coeur d'Alene Mines shall forthwith endeavor to bring about a modification, by supplemental agreement or otherwise, of each and all of its aforesaid agreements with respect to the American Silver group of claims, the Silver Standard group of claims, the Freeman and Sites group of claims and the Michaels and Fahle group of claims to the effect that if any commercial ore shall be developed in any of said properties as a result of the exploration work to be performed by Polaris under the terms and conditions of this agreement, Polaris shall own 40% of any and all such commercial ore which may be so developed in any and all of said properties, and to the further effect that regardless of any controversy which may arise between the parties to said agreements or any of them with respect to the ownership, as between said parties or any of them, of any ore which may be developed in any of the aforesaid properties as a result of the exploration work which may be performed by Polaris under the terms of this agreement, or which may arise between said parties or any of them on account of any other matter or thing whatsoever,

Polaris shall not be prevented from nor interfered with in any way in its exploring, developing, mining, milling and marketing any ore body or ore bodies which may be developed in any of the aforesaid properties nor from deducting for Polaris its own proportionate share of the net smelter returns from such ore, and to the further effect that if any controversy shall at any time arise between the parties to said agreement or any of them as to the ownership, as between themselves, of any ore which may be mined by Polaris in any of said properties, or as to the ownership, as between said parties or any of them, of the proceeds of the marketing of such ore, Polaris shall have the right to continue, without interference by or upon the part of any of said parties, with the mining, milling and marketing of said ore and shall have the right to deduct from the smelter returns from said ore its full share thereof including any and all costs and expenses incurred by Polaris in the mining, milling and marketing of said ore and the right to impound the balance or such portion of the balance of said net smelter returns the ownership of which may at any time be in controversy between said other parties or any of them.

4. Coeur d'Alene Mines shall forthwith endeavor to bring about a further modification, by supplemental agreements or otherwise, of each and all of its aforesaid agreements to the effect that so long as Polaris shall be performing any of the exploration and/or development work hereinafter specified, in and during the period of three years from and after the date on which Polaris shall commence work under this agreement, Polaris shall be considered to be performing the minimum work requirements required to be performed by Coeur d'Alene Mines under the terms and conditions of the latter company's agreements with American Silver, Silver Standard, Coeur d'Alene Consolidated and Callahan Consolidated or any of them, or in other words, to the effect that any and all work requirements specified in any of the aforesaid contracts which Coeur d'Alene Mines has heretofore entered into with the owners of any property which is to be included in the exploration and development project provided

for in this agreement shall be waived so long as Polaris shall, during said three-year period, be performing the minimum work requirements hereinafter specified in any property included in the exploration and development project provided for by the terms of this agreement, and to the further effect that upon the expiration of said period of three years the minimum amount of work to be performed under any contract into which Coeur d'Alene Mines has heretofore entered with any of said other parties shall not exceed 60 man-shifts per calendar month and with the provision that if in any calendar month Polaris shall perform work in any of said other properties in excess of 60 man-shifts then and in such event the excess of work performed in such calendar month over and above said 60 man-shifts may be carried forward by Polaris and credited to the work required to be done in that particular property in any subsequent month in the same calendar year in which the minimum amount of required work may not have been performed.

5. Coeur d'Alene Mines shall endeavor to have included in its said supplemental agreements with American Silver, Silver Standard and Coeur d'Alene Consolidated an express provision to the effect that the property of Rainbow Mining and Milling Company, Ltd. may be explored by Coeur d'Alene Mines and/or Polaris through the use of any and all underground openings then existing or which may thereafter be driven in any and/or all of the properties hereinabove mentioned and that if commercial ore shall be discovered in said Rainbow property, said ore may be mined and removed from said property through the underground openings in any and/or all of the other properties hereinabove mentioned, and Coeur d'Alene Mines shall also endeavor to have included in its said supplemental agreements with said American Silver, Silver Standard and Coeur d'Alene Consolidated a further express provision to the effect that if Polaris shall at any time while this agreement is in effect acquire any mining rights in any nearby properties other than those herein mentioned then in such event Polaris shall have the right so long as this agreement shall

remain in effect to explore, develop and mine such other properties through any and all underground openings then existing or which may thereafter be driven in said American Silver, Silver Standard and Coeur d'Alene Consolidated properties or any of them.

6. Polaris shall have and is hereby given the right to further explore the property of Coeur d'Alene Mines and the properties of American Silver, Silver Standard and Coeur d'Alene Consolidated by means of such underground openings, including diamond drilling, as Polaris may wish to drive in said properties or any thereof either on or from Coeur d'Alene Mines's present 2800 level or on or from Polaris's present 3000 level or on any higher or deeper level, either in the property of Polaris or in any other property included in this agreement, on or from which Polaris may desire to drive an opening or openings. The character of the exploration work which shall be performed by Polaris in said or any of said properties and the place or places where said work shall be performed shall be left entirely to the judgment of Polaris and although it is understood that the exploration work which Polaris is to perform under the terms of this agreement shall be of such character as in the judgment of Polaris will determine whether any commercial ore body or ore bodies exist in any of the properties hereinabove mentioned it is not the intent of this agreement to specify what work shall be performed by Polaris nor where said work shall be done, except that IT IS EXPRESSLY UNDERSTOOD AND AGREED that the first underground work to be performed by Polaris under the terms of this agreement shall be to extend its so-called 3000 level Merger east drift easterly an estimated distance of 3000 to 3500 feet from its present face into the property of Silver Standard and/or the property of American Silver to and for the purpose of exploring the downward extension of the vein or veins in which Coeur d'Alene Mines has heretofore discovered a showing of commercial mineralization within the boundaries of American Silver's Maud S claim and Silver Standard's Nora and Standard claims on Coeur d'Alene Mines's 2800 level,

and except that from some point on or near said vein or veins Polaris shall drive a raise of such dimensions as shall be decided upon by Polaris to make a connection with Coeur d'Alene Mines's opening on its said 2800 level, it being understood and agreed that if as a result of the extension of said Merger east drift commercial ore shall be found in the aforesaid vein or veins in which said discovery of said commercial mineralization was made by Coeur d'Alene Mines as aforesaid, then Polaris shall drift on said vein or veins such distance along said structure or structures as in the judgment of Polaris shall appear to be warranted by the existing geological conditions. The work provided for in this paragraph shall be performed by Polaris at the rate of not less than eighty (80) man shifts per calendar month; PROVIDED, however, that the excess of man shifts above eighty (80) in any calendar month may be carried forward and credited to any calendar month or months in the same calendar year in which less than 80 man shifts of work may be performed, the intent of this agreement being that not less than 960 man shifts of work shall be performed by Polaris in each calendar year during the progress of the work provided for in this paragraph and during the progress of the work hereinafter provided for in paragraph 7 of this agreement.

7. Subject to authorization by the stockholders of Rainbow Mining and Milling Company, Ltd., hereinafter referred to as "Rainbow", Polaris shall have and is hereby given the right to drive such underground opening or openings from Coeur d'Alene Mines's 2800 level or from Polaris's 3000 level or on any higher or deeper level either in the property of Polaris or in any other property included in this agreement as Polaris may desire to drive into and for the purpose of exploring Rainbow's group of mining claims situated adjacent to and southeasterly from Coeur d'Alene Mines's group of claims, and Polaris hereby agrees that, subject to such authorization and when the work specified in paragraph 6 shall have been completed, Polaris will drive an underground opening on Polaris's aforesaid 3000 level from a point in the aforesaid Merger east drift extension into said Rainbow property such distance as in the judgment

of Polaris shall appear to be justified by existing geological conditions but in any event a distance of not less than 300 feet easterly from the west end line, or the southerly or northerly extension of the west end line of Rainbow's Pride of the Rockies claim, Mineral Survey No. 2761; PROVIDED that if the proposed agreement referred to in paragraph 8 of this agreement shall be entered into between Polaris and Rainbow, Polaris agrees that after the minimum work in this paragraph above provided for shall have been performed by Polaris in the Rainbow property Polaris will throughout the life of said agreement continue exploration or development work or mining operations in the Rainbow property at the rate of not less than 480 man shifts in each and every calendar year in which Rainbow shall, by written notice to Polaris, require Polaris to continue work in the Rainbow property. If any such notice shall be given, it shall be served on Polaris prior to the first day of January of the year in which such work is to be performed; and IT IS FURTHER UNDERSTOOD AND AGREED that, if as a result of the exploration work to be performed by Polaris in said Rainbow property any commercial ore shall be discovered therein, Polaris shall have the right to mine said ore, and in connection with its so doing Polaris shall have the right to use any and all underground openings then existing or which may thereafter be driven in the property of Coeur d'Alene Mines and/or in any of the other properties included in this agreement, including Coeur d'Alene Mines's shaft.

8. It is not the intent of this agreement that Polaris shall be required to perform any work in the property of Coeur d'Alene Mines so long as Polaris shall keep its said contract with Rainbow in full force and effect and so long as it shall comply with all of the work requirements thereunder, but IT IS UNDERSTOOD AND AGREED that if said agreement and all work in the Rainbow property shall be abandoned by Polaris, then thenceforth Polaris will perform exploration and/or development work and/or mining in the property of Coeur d'Alene Mines at the rate of not less than 480 man shifts in each and every succeeding calendar

year in which Coeur d'Alene Mines shall, by written notice to Polaris, require Polaris to perform said work. If any such notice shall be given, it shall be served on Polaris prior to the first day of January of the year in which said work is to be performed; PROVIDED, however, that Polaris shall have the right at any time, at its option, to surrender its right to perform any exploration or development work or to do any mining in the property of Coeur d'Alene Mines and in such event Polaris thenceforth shall be released from any and all obligations to perform work in the property of Coeur d'Alene Mines but that all other terms and provisions of this agreement shall remain in full force and effect.

9. IT IS FURTHER UNDERSTOOD AND AGREED that Coeur d'Alene Mines shall cause to be called and held at as early a date as convenient a special meeting of the stockholders of Rainbow for the purpose of considering a proposed agreement between Polaris and Rainbow under and pursuant to which Polaris would be given the right to explore Rainbow's aforesaid property and under and pursuant to which Polaris would become the owner of one-half (1/2) of any and all commercial ore which might be discovered in the Rainbow property as a result of the exploration work to be performed therein by Polaris and under and pursuant to which Polaris would be given the right to mine, mill and market any and all such ore for itself and on behalf of Rainbow and to charge to and collect from Rainbow out of its share of said ore one-half (1/2) of all costs and expenses incurred by Polaris, after the discovery of said ore, in the development, mining, milling and marketing of said ore, IT BEING UNDERSTOOD AND AGREED that prior to the calling of said special meeting of stockholders of Rainbow Polaris shall prepare and submit to the directors of Coeur d'Alene Mines the proposed agreement to be considered by the Rainbow stockholders at their said special meeting, such agreement to set out in detail each and all of the terms and conditions upon which Polaris would be willing to undertake the exploration, development and mining of the Rainbow property.

10. IT IS FURTHER UNDERSTOOD AND AGREED that if as a result of the exploration work to be performed by Polaris in any of the properties hereinabove mentioned, including the Rainbow property if an agreement shall be entered into between Polaris and Rainbow which shall provide for Polaris's exploration and mining of the Rainbow property, any commercial ore shall be discovered in said properties or any thereof said ore shall be mined by Polaris and in connection with the mining thereof Polaris shall have the right to use any underground opening or openings, including Coeur d'Alene Mines's shaft, which shall then exist or which may thereafter be driven in any of the properties mentioned in this agreement.

11. IT IS FURTHER UNDERSTOOD AND AGREED that in its performance of the exploration work contemplated by this agreement and also in connection with its mining, transportation and milling of any and all commercial ore which may be discovered in any of the properties hereinabove mentioned, including the Rainbow property, Polaris shall, at any and all times during the life of this agreement, have the right, at its option, to use without charge therefor against Polaris for depreciation or otherwise any and all mining machinery and equipment, including Coeur d'Alene Mines's concentration mill and at any and all times during the period of three years from and after the date on which Polaris shall commence work under this agreement, unless this agreement shall be sooner surrendered by Polaris or otherwise terminated, and after the expiration of said period of three years, and until the notice hereinafter in this paragraph provided for shall be given, Polaris shall maintain said machinery and equipment and said mill in as good a state of repair as that in which it was at the time possession thereof was taken by Polaris, reasonable wear and tear and damage by the elements being excepted, and shall pay any and all taxes which may be assessed against any and all such machinery and equipment and said mill and shall carry fire insurance on said mill and on such machinery and equipment as shall be insurable in an amount not less than the fire insurance now carried thereon by Coeur d'Alene Mines, such insurance to be for the benefit of both parties

hereto but to be made payable to Coeur d'Alene Mines in the event any of the insured property shall be damaged or destroyed by fire. In this connection, IT IS EXPRESSLY UNDERSTOOD AND AGREED that in the event any of the property covered by such insurance shall be so damaged that collection shall be made under the policy or policies of insurance being carried by Polaris, the proceeds of such collection shall be used in the immediate repair or replacement of the property which shall have been so damaged provided such damaged property can be repaired or replaced at a cost not exceeding the amount of insurance collected. If the cost of the repair or replacement of said property shall exceed the amount of insurance so collected, and if Polaris shall nevertheless desire to have said damaged property repaired or replaced, the total amount of insurance which shall have been collected shall be applied upon the cost of such repairs or replacements and the balance of such cost shall be paid by Polaris, and in such event Polaris shall own an interest in the property so repaired or replaced in the ratio which the amount so paid by Polaris shall bear to the full value of said property; and PROVIDED, further, that if commercial ore shall be discovered in any of the properties hereinabove mentioned then and in such event and so long as such property or properties shall remain in production all taxes and insurance premiums referred to in this paragraph shall continue to be paid by Polaris but shall be considered and treated as a part of Polaris's operating costs and expenses and shall be chargeable to all parties which shall be interested in such production in like manner as Polaris's other operating costs and expenses shall be chargeable as herein elsewhere provided. IT IS FURTHER UNDERSTOOD AND AGREED, however, that if at any time after the expiration of the aforesaid period of three years, if this agreement shall still be in effect, Polaris shall determine that it no longer desires to use in its operations hereunder said Coeur d'Alene Mines's mill and/or its hoist and/or any of its other machinery and equipment, then and in such event Polaris may by notice in writing to Coeur d'Alene Mines surrender its option to use said mill and/or said hoist and/or said other machinery and equipment and from and after the date on which said notice

shall be served on Coeur d'Alene Mines Polaris shall be released from any and all obligations to keep said mill or any of said other property specified in said notice insured or in repair or to pay taxes thereon.

12. IT IS UNDERSTOOD AND AGREED that if as a result of the exploration work to be performed by Polaris under the terms of this agreement any commercial ore shall be discovered in the aforesaid property of Coeur d'Alene Mines, one-half (1/2) of said ore shall become and remain the property of Polaris and one-half (1/2) of said ore shall be and remain the property of Coeur d'Alene Mines and Polaris shall mine said ore and all thereof at a rate best suited to good and efficient mining practice and shall mill said ore or cause the same to be milled and shall in Polaris's name ship and sell said ore including Coeur d' Alene Mines's one-half thereof or the concentrates derived therefrom to the smelter or smelters with which Polaris shall have smelting or selling arrangements and Polaris shall pay over to Coeur d'Alene Mines the full amount of the net smelter returns which shall from time to time be received by Polaris for and on account of Coeur d'Alene Mines's one-half of said ore. The first payment of such net smelter returns to Coeur d'Alene Mines shall be made by Polaris within sixty (60) days from and after the first shipment of such ore or concentrates to the smelter and thereafter settlements with Coeur d'Alene Mines shall be made monthly by Polaris or at such other intervals as may from time to time be agreed upon between Polaris and Coeur d'Alene Mines. At the time each settlement is made Polaris shall furnish to Coeur d'Alene Mines duplicates of all smelter settlement sheets pertaining to the ore and/or concentrates for or on account of which such settlement is being made. The term "net smelter returns", as herein used, shall be construed to mean the net amount which shall be paid by the smelter or smelters for Coeur d'Alene Mines's said ore and/or concentrates, after the deduction of all smelter treatment charges and all penalties and all transportation charges upon such ore and/or concentrates from the mill to the smelter. If the United States Government or any agency thereof shall then be paying any premium or bonus or subsidy for or on account of the mining of

Coeur d'Alene Mines's said ore, then Coeur d'Alene Mines shall make its own claim for and shall be entitled to collect such premium, bonus or subsidy.

13. Coeur d'Alene Mines agrees to reimburse Polaris promptly upon receipt of billing for all costs and expenses incurred by Polaris which shall be properly chargeable to the development, mining, treatment and sale of Coeur d'Alene Mines's said ore including, among other things, such indirect costs and expenses as property taxes, mine license taxes, engineering costs, cost of supervision, bookkeeping and other office expenses, etc., and actual milling costs. As and when Coeur d'Alene Mines is billed for said costs and expenses, Polaris shall furnish to Coeur d'Alene Mines statements in writing showing all of Polaris's charges against Coeur d'Alene Mines in connection with the development, mining, processing and marketing of Coeur d'Alene Mines's ore on account of which such billing is rendered. Such statements shall contain sufficient detail to fully inform Coeur d'Alene Mines as to each item with which Coeur d'Alene Mines has been or is being charged. Any and all questions which may arise with respect to the costs and expenses which Polaris shall be entitled to charge against the development, mining, treatment and sale of Coeur d'Alene Mines's said ore, or with respect to the accounting procedure which shall be employed in arriving at the proper settlements between the parties hereto shall be settled if possible by conferences between the officers of Polaris and Coeur d'Alene Mines and shall be finally disposed of by exchange of letters. But if such questions or any of them cannot be settled and disposed of in that manner, then such question or questions shall be promptly referred to and determined by a panel of three arbitrators as hereinafter provided.

14. For the sake of convenience Polaris may, at its option, deduct from Coeur d'Alene Mines's share of said net smelter returns the full amount of all costs mentioned in paragraph 13 of this agreement and then pay over to Coeur d'Alene Mines the balance of its share of said net smelter returns.

15. From and after the date on which Polaris shall commence exploration work in the property of Coeur d'Alene Mines Polaris shall furnish to Coeur d'

Alene Mines monthly progress reports showing the character and amount of work performed by Polaris during the preceding calendar month and the place or places where said work was performed. And from and after the date on which underground exploration work shall be commenced within the boundaries of Coeur d'Alene Mines's group of claims and so long as exploration work is being performed therein Polaris shall include in its said monthly reports up-to-date progress maps, sample data and geologist's maps in order that Coeur d'Alene Mines may be kept currently informed as to the character and amount of work which Polaris is performing and as to the geological conditions which are being encountered. All exploration work which shall be performed by Polaris in the property of Coeur d'Alene Mines itself shall be performed by Polaris at its own expense and no portion of the cost of said work shall be charged to Coeur d'Alene Mines; PROVIDED, however, that if as a result of such exploration work commercial ore shall be discovered in the property of Coeur d'Alene Mines, then the cost of any and all further exploration and development work which may be performed by Polaris in said Coeur d'Alene Mines property shall be treated as operating expense and shall be paid for out of the proceeds from production from said property.

16. If commercial ore shall be found in Coeur d'Alene Mines's property as a result of the work to be performed by Polaris under the terms of this agreement, then during any and all periods in which Polaris shall be mining said ore Polaris shall furnish to Coeur d'Alene Mines monthly statements in writing in which there shall be shown the amount of work performed during the preceding month, the tonnage of ore mined, the tonnage of ore milled, the tonnage of concentrates produced, and a detailed statement of all direct and indirect costs which have been charged against Coeur d'Alene Mines in connection with Polaris's operations during the preceding month. If Coeur d'Alene Mines shall object to any such monthly statement or to any part thereof, Coeur d'Alene Mines shall so advise Polaris in writing within sixty (60) days from and after Coeur d'Alene Mines's receipt of such statement and shall set out in detail the reason or reasons

for such objections. If no such objections are made by Coeur d'Alene Mines within said period of sixty days, then the statement or statements to which no such objection shall have been made shall be considered and treated as correct and shall not thereafter be questioned; PROVIDED, however, that any statement or statements which may be so furnished by Polaris may at any subsequent time be amended by Polaris with respect to Polaris's labor costs if after such statement or statements shall have been rendered any retroactive wage increase shall be negotiated between Polaris and its workmen employed in or upon Coeur d'Alene Mines's property, and PROVIDED FURTHER, that monthly charges shall be subject to adjustment at the end of each year when records are closed and audited on an annual basis and such adjustments shall be prorated to individual months in that year.

17. At any and all times when Polaris may be performing any work under the terms of this agreement Coeur d'Alene Mines shall have the right, through its engineers, geologists and other authorized agents, but at their own risk, to inspect any and all work which is being performed by Polaris and shall have the right to take samples of any and all ore which Polaris may be mining and shall have the right to observe and inspect Polaris's milling of said ore and shall have the right to inspect all of Polaris's maps of its workings in any property in which Polaris may be performing work under the terms of this agreement and all of Polaris's assay data with respect to ore that is being mined in said properties or any thereof and shall have the right to make copies of such data and of said maps and shall have the right at any and all reasonable times to examine Polaris's books and records pertaining to its operations in said or any of said properties.

18. IT IS UNDERSTOOD AND AGREED that if this agreement shall become effective as hereinafter provided, then from and after the effective date hereof Polaris shall, in its performance of work in the American Silver, Silver Standard and Coeur d'Alene Consolidated properties abide by and comply with the terms and conditions of Coeur d'Alene Mines's aforesaid contracts with the respective owners of said properties, as said contracts or any of them shall be modified as hereinabove provided.

19. Throughout the life of this agreement Polaris shall perform in or upon or for the direct benefit of Coeur d'Alene Mines's unpatented claims sufficient work to comply with all annual labor or assessment work requirements, including such labor or assessment work as may be required to be performed for the year ending July 1, 1953. Such work shall be performed at Polaris's own expense until such time as said Coeur d'Alene Mines property shall have become productive and self-supporting, but from that time on the cost of all such annual assessment work shall be included in Polaris's operating expense. In due time each year Polaris shall cause to be filed for record in the office of the County Recorder of Shoshone County, Idaho, proof, in the usual form, that such annual labor or assessment work has been fully performed.

20. From and after the effective date of this agreement Polaris shall promptly pay when due any and all state and county taxes which may be assessed against Coeur d'Alene Mines's said mining claims beginning with the year 1953 and shall continue so to do until such time as said taxes can be paid as an operating expense out of profits from production.

21. At any and all times when Polaris may be in possession of said Coeur d'Alene Mines property and performing work thereon or therein Polaris shall post and keep posted on said property a notice to the effect that Polaris will be responsible for any and all debts which may be incurred by Polaris for labor, materials, supplies or otherwise in connection with Polaris's work in or upon said property and Polaris agrees that it will at all times promptly pay the wages of all workmen who may be employed by Polaris in or about said premises and that Polaris will promptly pay for any and all equipment and supplies which may be purchased by Polaris for use on said property and that Polaris will in all ways fully protect Coeur d'Alene Mines against any and all liens or other liabilities arising out of or in connection with any and all work which may be performed by Polaris in or upon said Coeur d'Alene Mines property.

22. IT IS FURTHER UNDERSTOOD AND AGREED that Polaris shall have the right to use any and/or all of the underground openings of Coeur d'Alene Mines, including its shaft, for the purpose of exploring, developing and mining any of the properties hereinabove mentioned as well as other nearby properties, and IT IS AGREED that in the event Polaris shall hereafter acquire any such other properties or any mining rights and privileges therein and shall wish to use Coeur d'Alene Mines's underground openings for the purpose of exploring, developing and mining such other properties then and in such event and in consideration of Polaris's right so to do Coeur d'Alene Mines shall be entitled to own ten percent (10%) of any and all ore which shall be mined by Polaris in any and all such other properties exclusive of the property of Rainbow and which shall be transported to the surface through the use of Coeur d'Alene Mines's said facilities, as a charge for the use of such facilities, including Coeur d'Alene Mines's shaft, its hoist and such other equipment owned by Coeur d'Alene Mines, including its concentration mill, as Polaris may desire to use in connection with its operations in such other property or properties; PROVIDED, however, that Polaris shall be entitled to charge against Coeur d'Alene Mines and Coeur d'Alene Mines shall pay to Polaris ten percent (10%) of all costs and expenses which shall be incurred by Polaris in the development, mining, milling and marketing of all ore which may be mined from such other property or properties and transported to the surface through the use of the facilities of Coeur d'Alene Mines.

23. IT IS FURTHER UNDERSTOOD AND AGREED that throughout the life of this agreement Polaris shall have the right to place or install in or upon the property of Coeur d'Alene Mines such surface structures and such surface and/or underground machinery, equipment or supplies as may be necessary for the use of Polaris in its operations under this agreement and any and all buildings, exclusive of machinery, equipment or supplies installed or contained therein, shall become and remain the property of Coeur d'Alene Mines but that any and all machinery, equipment and supplies which shall be placed or installed by Polaris

in or upon said Coeur d'Alene Mines's property shall be and remain the property of Polaris and, subject only to the limitations on the removal of the same as set out in Coeur d'Alene Mines's aforesaid agreements with American Silver, Silver Standard and Coeur d'Alene Consolidated or any of them, Polaris shall have the right to remove from said premises any and all such machinery, equipment and supplies at any time during the life of this agreement or within 90 days from and after the termination of this agreement from any cause whatsoever.

24. IT IS FURTHER UNDERSTOOD AND AGREED that if this agreement shall become effective as hereinafter provided then from and after the effective date hereof and so long as this agreement shall thereafter remain in full force and effect Polaris shall have and is hereby given exclusive possession of each and all of the aforesaid mining claims owned by Coeur d'Alene Mines and also the exclusive possession of each and all of the mining claims owned by American Silver, Silver Standard and Coeur d'Alene Consolidated to the same extent that Coeur d'Alene Mines itself would have been or would be entitled to the exclusive possession of said other properties under its aforesaid agreements with the owners thereof and Polaris shall also be and it hereby is given the exclusive right to explore the property of Coeur d'Alene Mines and the exclusive right to mine, mill and market any and all commercial ore which may be discovered therein as a result of Polaris's exploration work in said property and Polaris shall also have and is hereby given the exclusive right to explore the American Silver, Silver Standard and Coeur d'Alene Consolidated properties and exclusive right to mine, mill and market any and all commercial ore which may be discovered in said properties or any thereof to the full extent and under the same terms and conditions that Coeur d'Alene Mines itself would have been or would be entitled to explore said properties or any thereof and to mine, mill and market any and all commercial ore discovered therein if this agreement had not been executed, IT BEING UNDERSTOOD AND AGREED that the intent of this agreement is that if the aforesaid agreements between Coeur d'Alene Mines, American

Silver, Silver Standard and Coeur d'Alene Consolidated shall be modified as hereinabove provided and if this agreement shall become effective as hereinafter provided then Polaris shall assume all the duties and obligations of Coeur d'Alene Mines under each and all of said agreements and shall have the same rights and privileges under each and all of said agreements as Coeur d'Alene Mines itself would have had or would have if this agreement had not been executed.

25. IT IS FURTHER UNDERSTOOD AND AGREED that any and all work which may be performed by Polaris under the terms of this agreement in any of the properties hereinabove specifically named shall be performed by Polaris in a good and miner-like manner and under the exclusive direction and supervision of Polaris and with Polaris's own crew or crews.

26. IT IS FURTHER AGREED that if at any time Polaris shall elect to perform no work or no further work in some one or more of the properties hereinabove mentioned, its election in that regard shall not in any wise affect or alter any of the terms and conditions of this agreement with respect to the remaining properties herein mentioned; PROVIDED, however, that if such election shall be made by Polaris notice thereof shall be given by Polaris in writing to Coeur d'Alene Mines and if Coeur d'Alene Mines shall continue work in any such property or properties in which Polaris shall have so elected to discontinue work Coeur d'Alene Mines shall have the right at its option to use in connection with said work, any and all underground openings then being used by Polaris within the properties of American Silver, Silver Standard, Coeur d'Alene Consolidated and Coeur d'Alene Mines or any of them, and also Coeur d'Alene Mines's surface plant, including its mill and Coeur d'Alene Mines's shaft, its hoist and such other equipment owned by Coeur d'Alene Mines, as Coeur d'Alene Mines may desire to use, so long as in so doing Coeur d'Alene Mines shall not interfere with the operations of Polaris or with the use of said facilities by Polaris.

27. IT IS FURTHER UNDERSTOOD AND AGREED that if Polaris shall discontinue and permanently abandon all work in the property of Coeur d'Alene Mines, or in the property of American Silver, or in the property of Silver Standard, or in the property of Coeur d'Alene Consolidated, Polaris shall

thenceforth have no interest whatsoever in any ore which may then be known to exist or which may thereafter be discovered in any of said properties in which Polaris shall have permanently discontinued and abandoned work hereunder.

28. Whenever the time for the performance of any work or other act is limited by the terms of this agreement and the performance thereof is hindered, prevented or delayed by reason of law, regulations or act of any governmental authority, inability to obtain labor, equipment, materials or supplies in the open market, or by reason of fire, floods, strikes, walk-outs, riots, war whether declared or not, Acts of God or the public enemy, or any other causes or conditions, whether or not of the nature of the foregoing, beyond the control of Polaris then the time for the performance of any such obligation hereunder shall be extended to the extent of such delay; PROVIDED, however, that if any such delay or delays shall occur, Polaris shall give written notice thereof to Coeur d'Alene Mines at the commencement of such delay or delays and shall state in such notice the reason or reasons therefor and shall also promptly give written notice to Coeur d'Alene Mines of the termination of such delay or delays.

29. Notwithstanding any of the provisions of this agreement Polaris shall have the right at any time to surrender this agreement and to cease all work hereunder and in the event of its so doing Polaris shall become and be fully released from any and all further obligations hereunder except that in the event of such surrender of this agreement by Polaris, Polaris shall remain liable for the payment of and shall pay any and all debts and/or expenses theretofore incurred by it in connection with its operations under the terms of this agreement and except that Polaris shall remain liable for the payment of and shall pay any and all monies which may then be owing and unpaid to Coeur d'Alene Mines or to any other interested party on account of ores theretofore produced by

Polaris from any of the properties herein mentioned; PROVIDED, however, that notwithstanding its surrender of this agreement Polaris shall remain obligated to perform the annual labor or assessment work in or upon or for the benefit of each and every unpatented claim belonging to Coeur d'Alene Mines, or to pay the cost of performing such work for the current assessment year unless Polaris shall have notified Coeur d'Alene Mines in writing not later than the first day of March in the calendar year in which said assessment work is required to be performed of Polaris's intention to surrender this agreement and of its intention not to perform said annual labor or assessment work; and PROVIDED, further, that Polaris shall leave all underground openings then being used by Polaris in any of the properties in which Polaris may at such time be performing work under the terms of this agreement in a good state of repair and in condition for continued operations, but subject, however, to Polaris's right to remove machinery and equipment as hereinabove provided.

30. While this agreement is not conditioned upon Polaris's obtaining a United States Government loan to assist it in financing the work contemplated by this agreement, it is understood that Polaris may wish to apply for and to endeavor to obtain such a loan. IT IS FURTHER UNDERSTOOD that if Polaris should make application for such a loan it would very likely be necessary in connection with such application for Polaris to obtain the written consent thereto of all parties, including Coeur d'Alene Mines, who would have any interest in the ore which might be discovered and mined in the property or properties whose exploration and development should be partially financed by means of such loan. IT IS FURTHER UNDERSTOOD that such a loan would necessarily have to be made repayable to the Government at a fixed royalty rate based upon the entire production from such property or properties. In this connection IT IS AGREED that if Polaris shall at any time during the life of this agreement elect to make application for such a loan, Coeur d'Alene Mines will, if and when called upon by Polaris so to do, give its written consent thereto; PROVIDED, however, that

Polaris shall, and it agrees that it will, promptly refund to Coeur d'Alene Mines any and all monies which may thereafter be repaid to the Government out of Coeur d'Alene Mines's share of the production from such property or properties.

31. IT IS UNDERSTOOD AND AGREED that if any controversy or dispute shall at any time or times arise between the parties hereto with respect to any matter or thing whatsoever covered by this agreement then and in such event said controversy or dispute shall be settled if possible by conferences between the managements of the respective parties hereto but if such controversy or dispute cannot be so settled and finally disposed of then and in that event the same shall be referred to a panel of three arbitrators one of whom shall be selected by Polaris and one by Coeur d'Alene Mines and the two so selected shall select a third arbitrator. Any and all data or information which may be required by said arbitrators in their consideration of such controversy or dispute shall be promptly furnished by the party having possession thereof and IT IS FURTHER UNDERSTOOD AND AGREED that the decision of a majority of said arbitrators shall then be reduced to writing and furnished to and accepted by both parties hereto as final and binding.

32. IT IS UNDERSTOOD AND AGREED that this agreement shall become effective when, but not unless nor until Coeur d'Alene Mines shall within three (3) months from and after the date of this agreement succeed in settling or otherwise finally adjusting the controversies referred to in paragraph number "2" of this agreement and shall within said period of three (3) months succeed in obtaining modifications of its agreements with American Silver, Silver Standard and Coeur d'Alene Consolidated as set out in paragraphs numbered "3", "4" and "5" of this agreement.

33. Any notices required hereunder shall be deemed to be complete when made in writing, deposited in the U.S. Mail, postage prepaid thereon, addressed

if to Coeur d'Alene Mines	Coeur d'Alene Mines Corporation Wallace, Idaho,

and if to Polaris

Polaris Mining Company
Wallace, Idaho

34. This agreement shall be binding upon and inure to the benefit of the parties hereto, their respective successors and assigns; PROVIDED, however, that Polaris shall not assign this agreement or any of its rights herein or its obligations hereunder without the prior written consent of Coeur d'Alene Mines.

IN WITNESS WHEREOF the parties hereto have caused this agreement to be executed in their respective names by their respective duly authorized officers and under their respective corporate seals the day and year herein first above written.

COEUR D'ALENE MINES CORPORATION

By s/ W. R. Waters
Its President

Attest:

s/ H. G. Calloway
Its Secretary

(Seal)

POLARIS MINING COMPANY

By s/ L. J. Randall
Its President

Attest:

s/ Olof Erhom
Its Secretary

(Seal)

STATE OF IDAHO)
) ss.
COUNTY OF SHOSHONE)

On this 7 day of January, 1953, before me, the undersigned, a Notary Public for the State of Idaho, personally appeared H. C. MOWERY and W. A. CALLAWAY, known to me and to me known to be the president and secretary, respectively, of Coeur d'Alene Mines Corporation, one of the corporations whose name is subscribed to the foregoing instrument, and s evera lly acknowledged to me that said corporation executed the same.

IN TESTIMONY WHEREOF, I have hereunto set my hand and affixed my notarial seal the day and year in this certificate first above written.

(s) Marie Schermanson
Notary Public for the State of Idaho,
Residing at Wallace, Idaho.

(Seal)

My commission expires 6-5-53

STATE OF IDAHO)
) ss.
COUNTY OF SHOSHONE)

On this 7 day of January, 1953, before me, the undersigned, a Notary Public for the State of Idaho, personally appeared L. J. RANDALL and ELOF ENBOM, known to me and to me known to be the president and secretary, respectively, of Polaris Mining Company, one of the corporations whose name is subscribed to the foregoing instrument, and severally acknowledged to me that said corporation executed the same.

IN TESTIMONY WHEREOF, I have hereunto set my hand and affixed my notarial seal the day and year in this certificate first above written.

(s) Dean B. Payne
Notary Public for the State of Idaho,
Residing at Wallace, Idaho.

My commission expires 7-10-54

(Seal)

February 20-1953

POLARIS MINING COMPANY

Wallace Idaho

Polaris East Exploration Project

Drifting and Crosscutting

(Analysis of Estimated Direct Cost Per Foot)
(Based on 390' Per Month)

EXHIBIT B

	Average Monthly Cost		Cost Per Foot	
Direct Labor Cost				
Contract - 390' @ $13.19	$ 5 144		$ 13 19	
Federal and State Payroll Taxes (2.7%)	139		36	
Workmen's Compensation (3.04%)	169		43	
Employees' Group Insurance (1.03%)	53		14	
Retirement Plan Expense (2.65%)	133		34	
Vacation Pay (1.36%)	70		18	
Total		$ 5 708		$ 14 64
Direct Supplies				
Bits and Rods	$ 1 603		$ 4 11	
Drills and Drill Parts	921		2 36	
Powder	2 094		5 37	
Ventilation Duct	1 170		3 00	
Pipe and Track	1 248		3 20	
Total (Schedule B-1)	$ 7 036		$ 18 04	
Depreciation - Equipment (Exhibit E)	820		2 10	
Total Direct Supplies		7 856		20 14
Total Direct Labor and Supplies		$ 13 564		$ 34 78

NOTE: The contract rate per foot is based on a rate of $12.00 per foot, plus time and one-half over 40 hours per week and holiday time.

February 24-1953

POLARIS MINING COMPANY

Wallace Idaho

POLARIS EAST EXPLORATION PROJECT

Analysis of Other Operating Costs - Silver Summit Mine

SCHEDULE C-1

	Total Costs per Books May 1 to 12-31-52 (Operated on two-shift basis)				Adjusted Other Operating Costs	
	Labor	Supplies and Other	Total	Additions or (Exclusions)	Total	Per Month
Compressors	$ 1 855 59	$ 254 74	$ 2 110 33	$ 704 00 +(1)	$ 2 814 33	$ 351 79
Haulage	34 101 87	19 480 94	53 582 81	(20 093 57)-(1)(2)	33 489 24	4 186 15
Hoisting	37 380 61	8 645 28	46 025 89	(12 335 26)-(1)(2)	33 690 63	4 211 33
Pumping	486 67	2 62	489 29		489 29	61 16
Repair	21 827 40		21 827 40	(21 827 40)-(2)		
Shift Bosses and Foreman	19 431 48	133 37	19 564 85	(1 102 70)-(3)	18 462 15	2 307 77
Ventilation	4 286 21	15 871 14	20 157 35	(13 053 88)-(2)	7 103 47	887 93
Watchmen and Fire Protection	4 083 95		4 083 95	(4 083 95)-(3)		
Mine Machinery Repairs, etc.	9 225 56	7 845 79	17 071 35	(1 422 67)-(2)	15 648 68	1 956 08
Surface	3 409 25	2 940 65	6 349 90		6 349 90	793 74
Assaying		2 027 75	2 027 75		2 027 75	253 47
Electric Power		14 728 89	14 728 89		14 728 89	1 841 11
Engineering and Surveying	7 995 08	1 363 35	9 358 43	(636 15)-(2)	8 722 28	1 090 28
Heating		2 406 48	2 406 48		2 406 48	300 81
Insurance		3 538 21	3 538 21	(3 538 21)-(3)		
Maintenance and Repair		43 50	43 50		43 50	5 44
Rental Surface Facilities		5 625 00	5 625 00	(5 625 00)-(3)		
Shop and Payroll Expense (outside labor)		3 261 70	3 261 70		3 261 70	407 71
Taxes - Net Profits and Property		27 300 71	27 300 71	(27 300 71)-(3)		
- Social Security		7 479 50	7 479 50	(3 376 00)-(4)	4 103 50	512 94
Truck Operation		(128 48)-	(128 48)-	128 48 (3)		
Vacation Pay - Wage Earners	6 700 78		6 700 78	(1 712 00)-(4)	4 988 78	623 60
Workmen's Compensation		12 449 84	12 449 84	(4 088 00)-(4)	8 361 84	1 045 23
General Expense		18 237 80	18 237 80	(18 237 80)-(3)		
Mine Office	4 049 58	336 00	4 385 58		4 385 58	548 20
Employees' Group Insurance		3 455 88	3 455 88	(1 296 00)-(4)	2 159 88	269 99
Retirement Plan Expense		9 320 00	9 320 00	(3 240 00)-(4)	6 080 00	760 00
Depreciation of Facilities		374 90	374 90	(374 90)-(3)		
Total Other Operating Costs	$ 154 834 03	$ 166 995 56	$ 321 829 59	$(142 511 72)-	$ 179 317 87	$ 22 414 73

Explanations of Additions and Exclusions

1. Estimated additional cost of hoisting, compressed air and electric power to operate third shift. Total costs for eight-months period May 1 - Dec. 31-1952, are actual costs of operation on a two-shift basis.

2. Excluding expense items during May - Dec. 1952 which are not expected to occur during period of East Exploration Project.

3. Excluding general overhead items deemed non-allowable per instructions.

4. Exclusion of payroll costs which have been charged directly to Polaris East Exploration Project and other activities.

February 20-1953

POLARIS MINING COMPANY

Wallace Idaho

Polaris East Exploration Project

Drifting and Crosscutting

(Analysis of Estimated Direct Cost Per Foot)
(Based on 390' Per Month)

EXHIBIT B

	Average Monthly Cost		Cost Per Foot	
Direct Labor Cost				
Contract - 390' @ $13.19	$ 5 144		$ 13 19	
Federal and State Payroll Taxes (2.7%)	139		36	
Workmen's Compensation (3.04%)	169		43	
Employees' Group Insurance (1.03%)	53		14	
Retirement Plan Expense (2.65%)	133		34	
Vacation Pay (1.36%)	70		18	
Total		$ 5 708		$ 14 64
Direct Supplies				
Bits and Rods	$ 1 603		$ 4 11	
Drills and Drill Parts	921		2 36	
Powder	2 094		5 37	
Ventilation Duct	1 170		3 00	
Pipe and Track	1 248		3 20	
Total (Schedule B-1)	$ 7 036		$ 18 04	
Depreciation - Equipment (Exhibit E)	820		2 10	
Total Direct Supplies		7 856		20 14
Total Direct Labor and Supplies		$ 13 564		$ 34 78

NOTE: The contract rate per foot is based on a rate of $12.00 per foot, plus time and one-half over 40 hours per week and holiday time.

February 24-1953

POLARIS MINING COMPANY

Wallace Idaho

POLARIS EAST EXPLORATION PROJECT

Analysis of Other Operating Costs - Silver Summit Mine

SCHEDULE C-1

	Total Costs per Books May 1 to 12-31-52 (Operated on two-shift basis)			Additions or (Exclusions)	Adjusted Other Operating Costs	
	Labor	Supplies and Other	Total		Total	Per Month
Compressors	$ 1 855 59	$ 254 74	$ 2 110 33	$ 704 00 +(1)	$ 2 814 33	$ 351 79
Haulage	34 101 87	19 480 94	53 582 81	(20 093 57)-(1)(2)	33 489 24	4 186 15
Hoisting	37 380 61	8 645 28	46 025 89	(12 335 26)-(1)(2)	33 690 63	4 211 33
Pumping	486 67	2 62	489 29		489 29	61 16
Repair	21 827 40		21 827 40	(21 827 40)-(2)		
Shift Bosses and Foreman	19 431 48	133 37	19 564 85	(1 102 70)-(3)	18 462 15	2 307 77
Ventilation	4 286 21	15 871 14	20 157 35	(13 053 88)-(2)	7 103 47	887 93
Watchmen and Fire Protection	4 083 95		4 083 95	(4 083 95)-(3)		
Mine Machinery Repairs, etc.	9 225 56	7 845 79	17 071 35	(1 422 67)-(2)	15 648 68	1 956 08
Surface	3 409 25	2 940 65	6 349 90		6 349 90	793 74
Assaying		2 027 75	2 027 75		2 027 75	253 47
Electric Power		14 728 89	14 728 89		14 728 89	1 841 11
Engineering and Surveying	7 995 08	1 363 35	9 358 43	(636 15)-(2)	8 722 28	1 090 28
Heating		2 406 48	2 406 48		2 406 48	300 81
Insurance		3 538 21	3 538 21	(3 538 21)-(3)		
Maintenance and Repair		43 50	43 50		43 50	5 44
Rental Surface Facilities		5 625 00	5 625 00	(5 625 00)-(3)		
Shop and Payroll Expense (outside labor)		3 261 70	3 261 70		3 261 70	407 71
Taxes - Net Profits and Property		27 300 71	27 300 71	(27 300 71)-(3)		
- Social Security		7 479 50	7 479 50	(3 376 00)-(4)	4 103 50	512 94
Truck Operation		(128 48)-	(128 48)-	128 48 (3)		
Vacation Pay - Wage Earners	6 700 78		6 700 78	(1 712 00)-(4)	4 988 78	623 60
Workmen's Compensation		12 449 84	12 449 84	(4 088 00)-(4)	8 361 84	1 045 23
General Expense		18 237 80	18 237 80	(18 237 80)-(3)		
Mine Office	4 049 58	336 00	4 385 58		4 385 58	548 20
Employees' Group Insurance		3 455 88	3 455 88	(1 296 00)-(4)	2 159 88	269 99
Retirement Plan Expense		9 320 00	9 320 00	(3 240 00)-(4)	6 080 00	760 00
Depreciation of Facilities		374 90	374 90	(374 90)-(3)		
Total Other Operating Costs	$ 154 834 03	$ 166 995 56	$ 321 829 59	$(142 511 72)-	$ 179 317 87	$ 22 414 73

Explanations of Additions and Exclusions

1. Estimated additional cost of hoisting, compressed air and electric power to operate third shift. Total costs for eight-months period May 1 - Dec. 31-1952, are actual costs of operation on a two-shift basis.

2. Excluding expense items during May - Dec. 1952 which are not expected to occur during period of East Exploration Project.

3. Excluding general overhead items deemed non-allowable per instructions.

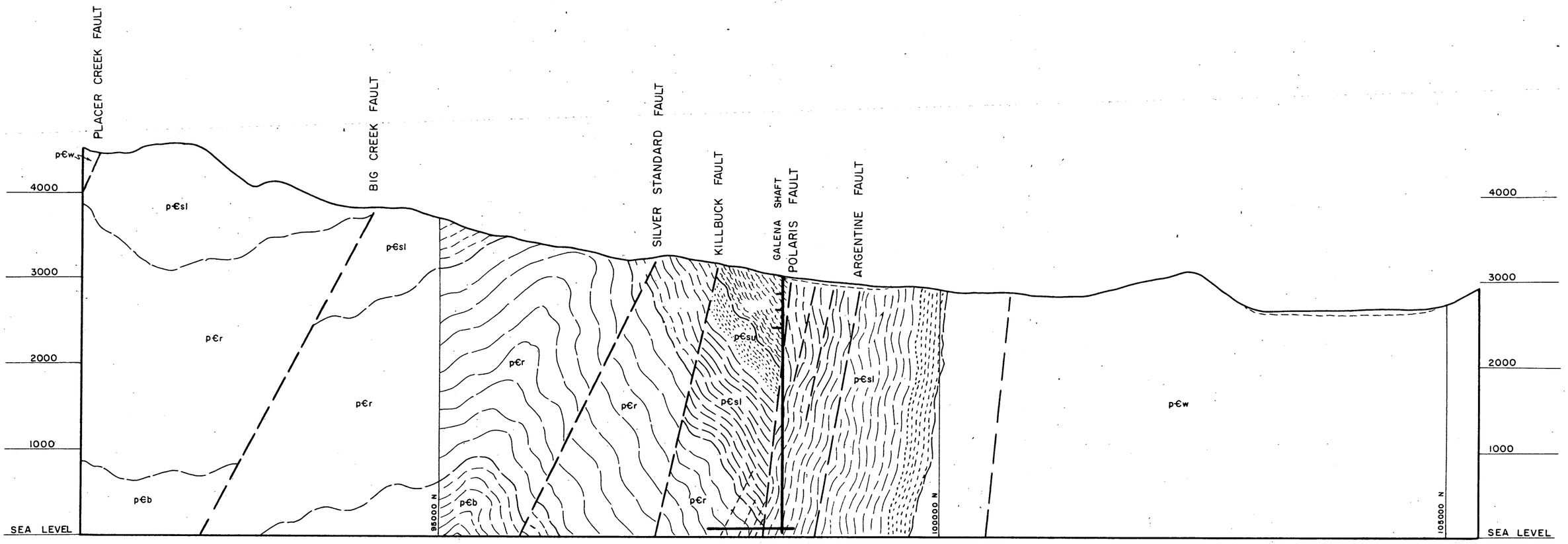
4. Exclusion of payroll costs which have been charged directly to Polaris East Exploration Project and other activities.

At the end of the 18 month period of exploration and the books are inspected for the purpose of determining the cost of drifting and crosscutting, which cost if less than $57.00 per foot shall be the unit cost to apply for the remainder of the contract, the same method of calculation shall apply as that used in the first 18 months of operation. The said unit cost of $57.00 per foot is made up of the direct operating cost of $34.78 per foot (See Exhibit B titled "Analysis of Estimated Direct Cost per Foot based on 390' per month" and dated February 20, 1953 and made a part hereof) added to the sum of $16.23 per foot which is the exploration work's share of those facilities mutually used by the Polaris East Exploration Project and the Silver Summit Mine of the Polaris Mining Company as is shown in Exhibit C dated February 24, 1953, titled "Allocation of Other Operating Costs to Polaris East Exploration Project" and made a part hereof. The average monthly cost shown in said Exhibit C will be arrived at for the full 18 months of exploration work by employing the same factors as is shown in Schedule C-1 dated February 24, 1953 and made a part hereof. Since the indirect, or other operating costs, presently calculated at $16.23 per ton are based on the Operator producing 2000 tons of ore per month and drifting and crosscutting

at its Silver Summit Mine

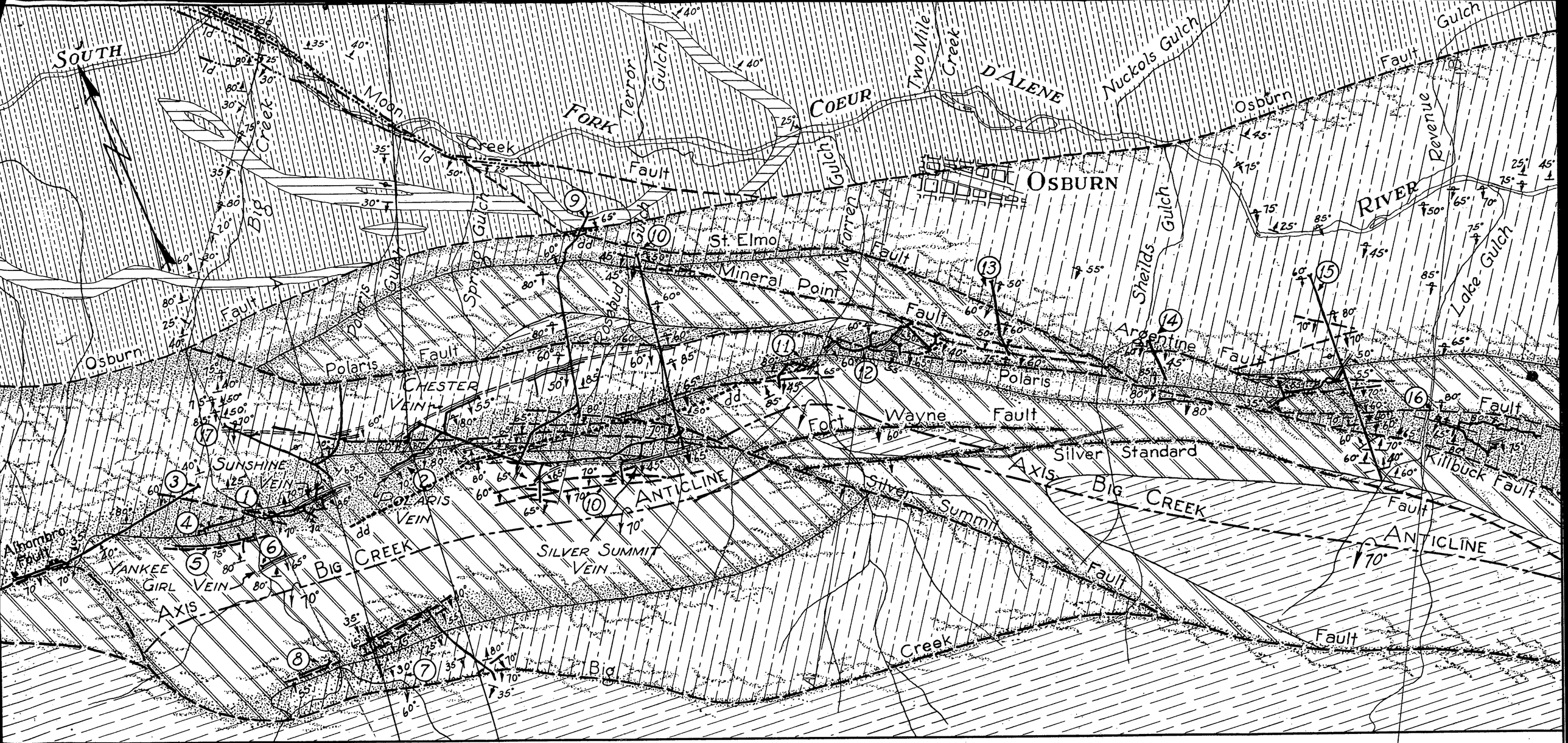
520 feet per month and since at the end of 18 months these figures may vary, the new figures will be used and the Exploration Project's pro rata share in percent re calculated and applied to the average monthly cost as before. However the figure of $16.23 (Other operating costs) is not to be increased above that figure but may be decreased if costs at the end of the 18 months so indicate. Should the Summit Mine be closed entirely at the end of 18 months, then the actual costs of the exploration as evidenced from an examination of the Operator's books will be the basis of payment and the cost per foot for drifting and crosscutting paid for accordingly but in no case will the cost be increased over a maximum of $51.00 per foot.

Cross Section BB'



Section B-B'

LOOKING N 60° W SCALE 1" = 1000'



Generalised Plan at 2750 ft. Elevation of the "Silver Belt," Coeur d'Alene Mining District, Idaho

Wallace Formation

St. Regis Formation

Revett Formation

Prichard Formation and Quartzite member

0 1000 2000 3000 4000 5000

Scale of Feet

Bleached rock, any formation

80° Vein

70° Fault

Diabase dike

Lamprophyre dike

40° Beds

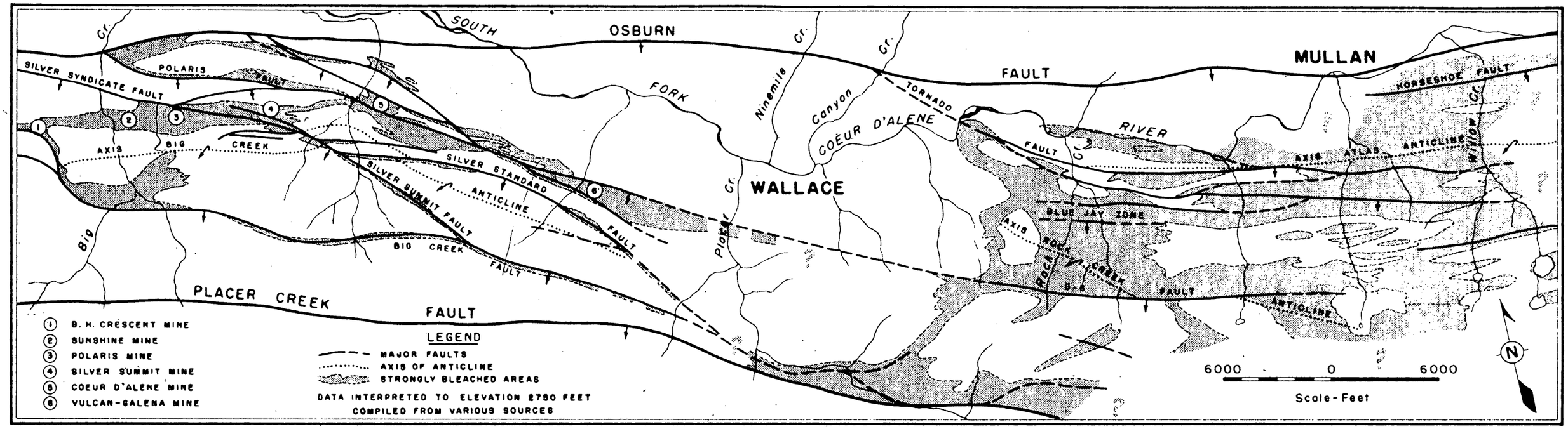
80° Overturned beds

Mine Workings

Approximate location of projected work

List of Mine Workings

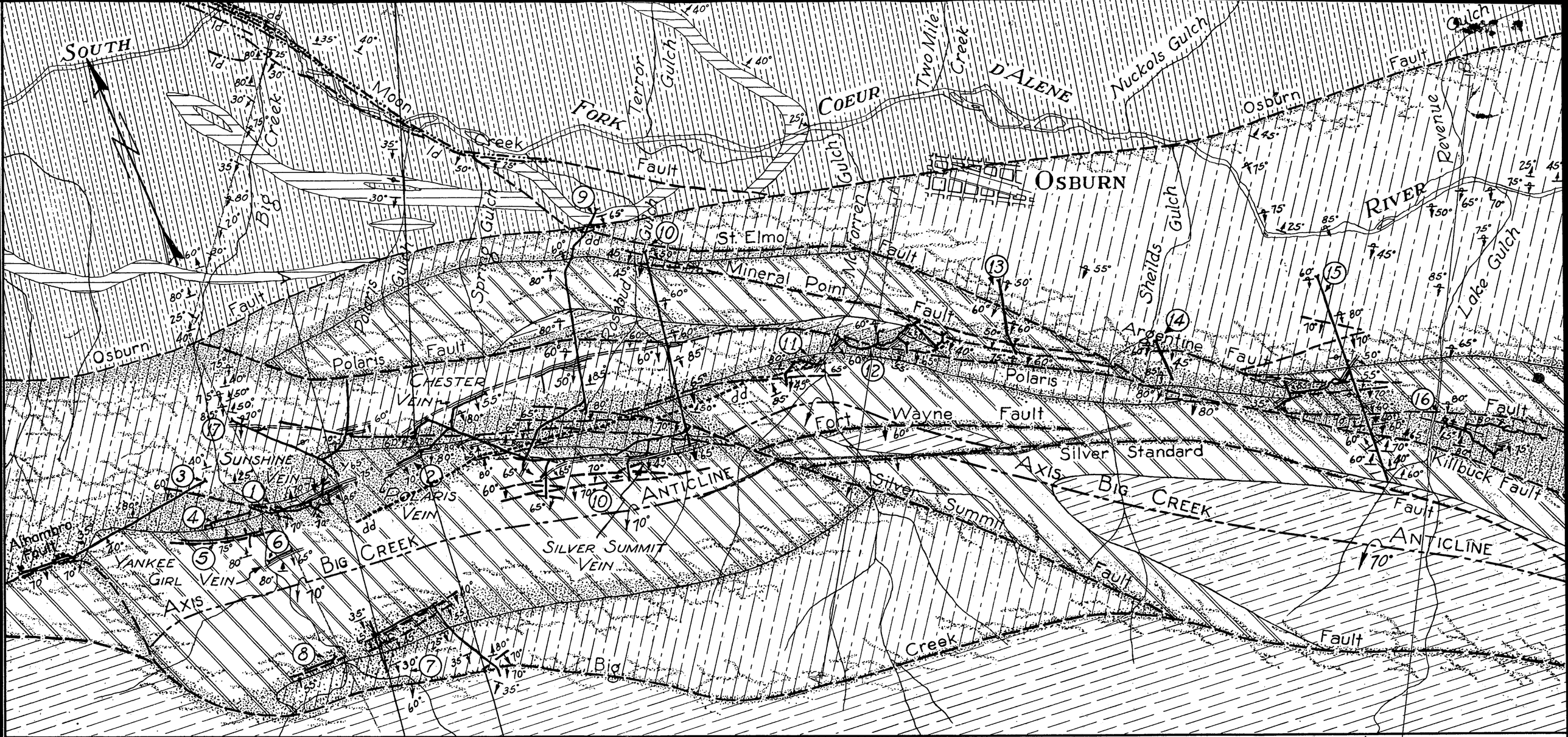
1 Sunshine and Price Tunnels
2 Polaris – 1000 Level
3 [illegible]
4 Crane
5 Gullickson
6 [illegible]
7 Metropolitan
8 Globe
9 [illegible]
10 Silver Summit
11 Merger
12 [illegible]
13 St. Elmo
14 Rainbow
15 [illegible]
16 Galena
17 Silver Syndicate



SILVER BELT OF THE COEUR D'ALENE MINING DISTRICT

SHOWING MAJOR FAULTS AND STRONGLY BLEACHED ZONES

FIG. 2



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Wallace Formation

St. Regis Formation

Revett Formation

Prichard Formation and Quartzite member

0 1000 2000 3000 4000 5000

Scale of Feet

Bleached rock, any formation

80° Vein

70° Fault

Diabase dike

Lamprophyre dike

40° Beds

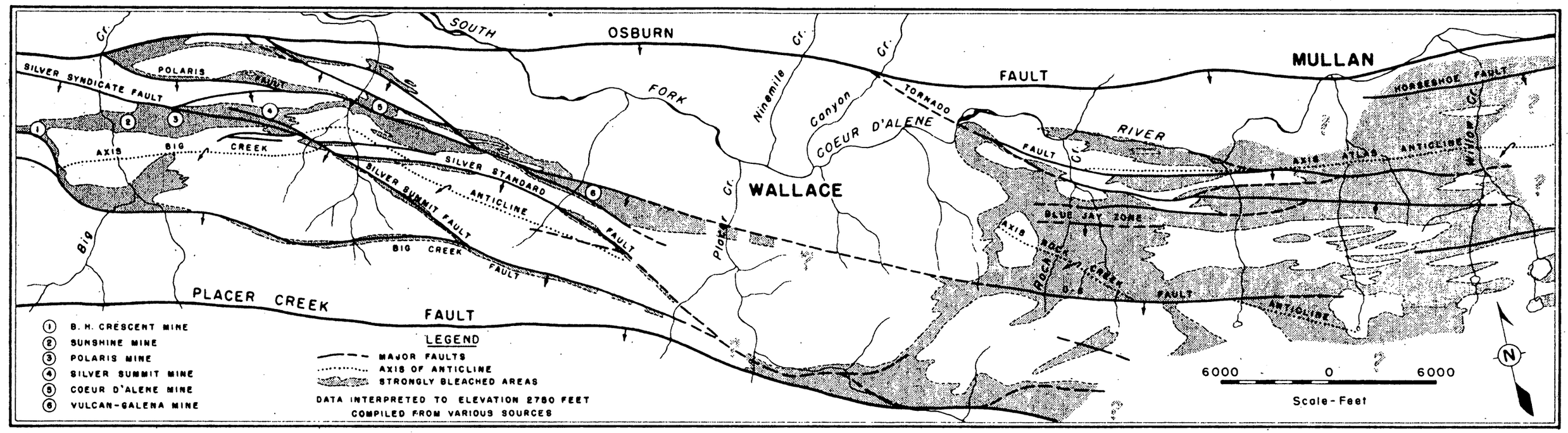
80° Overturned beds

Mine Workings

Approximate location of projected work

List of Mine Workings

1 Sunshine and Price Tunnels
2 Polaris – 1000 Level
4 Crane
5 Gullickson
6 Yankee Girl
7 Metropolitan
8 Globe
9 Silver Dollar
10 Silver Summit
11 Merger
12 Coeur d'Alene Mines
13 St. Elmo
14 Rainbow
15 Vulcan
16 Galena
17 Silver Syndicate

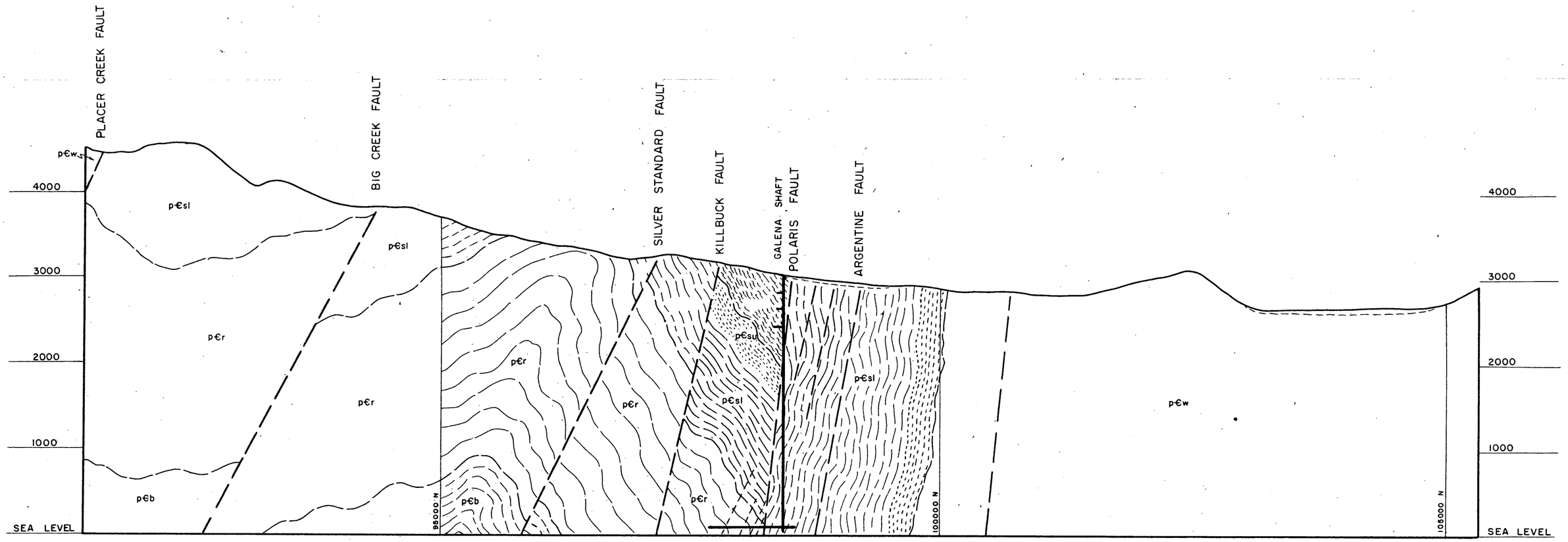


SILVER BELT OF THE COEUR D'ALENE MINING DISTRICT

SHOWING MAJOR FAULTS AND STRONGLY BLEACHED ZONES

FIG. 2

Cross Section BB'



Section B-B'

LOOKING N 60° W SCALE 1" = 1000'

DIAMOND DRILL RECORD

Standpipe
Casing

Started 2-12-54
Finished 4-30-54
Hole Size Ex
Depth 802.3
% Core Rec. 91%

Mine SILVER SUMMIT
Location Polaris E. Expl. Project
North face #148 N. X-Cut
Logged by M.W.H. & W.R.A. Date 2-12-54 to 5-1-54
Drilled by Holten & Collett

Hole No. SS 3254
Level 3000 Level
Grid 148
Latitude 82,413 S.
Departure 85,013 E.
Elevation -319'
Bearing N 03° W
Inclination + 1°

Depth Feet	Feet Core	Lithologic Description	Sample Data No.	Interval	Core Feet	Sple. Feet	Oz. Ag	% Pb	% Zn
0-3.1	2.5		E-203	0 - 5					
5.4	2.7								
10.4	4.7		4	10					
13.6	3.2		5	15					
18.6	4.7	0' - 41.0' Bleached arg. & arg							
21.1	2.4	qtzite. (First 7.0 about 50%	6	20					
26.1	4.9	bleached)	7	25					
27.8	1.5								
31.1	3.3		8	30					
33.0	1.6		9	35					
38.0	4.8								
End Box 1			10	40					
41.7	3.6								
47.0	4.8		11	45					
52.0	4.6		12	50					
56.8	4.7	41.0' - 65.6' Moderately bleached	13	55					
61.6	4.7	arg qtzite. (about 50% bleached)	14	60					
63.9	2.4								
65.6	2.3		15	65					
69.4	3.3		16	70					
74.2	4.8								
End Box 2			17	75					
79.1	4.7		18	80					
80.8	1.7	65.6' - 97.0' Predominantly							
84.9	3.7	purple arg. qtzite.	19	85					
89.8	4.7		20	90					
94.6	4.7		21	95					
99.6	4.7		22	100					
104.6	4.7		23	105					
106.9	2.2								
End Box 3			24	110					
110.8	4.0								
115.9	4.7		25	115					
120.6	4.7		26	120					
125.5	4.7		27	125					
129.0	3.4		E-228	125 - 130					
132.3	2.6	97.0' - 168.0' Bleached lt gray	29	135					
134.0	1.4	qtzite and arg qtzite. Mostly							
139.0	0.6	qtzite beginning at 129.0'.	230	140					
141.3	1.3	Badly broken 129.0' to 166.0'.							
143.5	1.5	Streaks chlorite at 157.5 to 159.0.							
145.6	1.6		31	145					

All Samples taken at 5.0 feet Intervals

All Assays are 0.00 or Trace except as shown.

Fm 108 3m 2-52

DIAMOND DRILL RECORD

Standpipe
Casing

Started
Finished
Hole Size
Depth
% Core Rec.

Mine
Location

Logged by Date
Drilled by

Hole No. SS 3254
Level 3000 Level
Grid 148
Latitude
Departure
Elevation
Bearing
Inclination

Depth Feet	Feet Core	Lithologic Description	Sample Data No.	Interval	Core Feet	Sple. Feet	Oz. Ag	% Pb	% Zn
147.8	0.7		E - 232	150					
149.2	1.2								
154.3	3.6		3	155					
156.1	1.9								
157.5	1.6								
End Box 4									
161.3	3.5		4	160					
164.0	2.6		5	165					
165.0	1.0								
166.0	1.0								
168.1	1.4		6	170					
170.3	2.1								
173.1	2.7	168.0' - 193.0' Bleached lt green-							
176.1	2.1	ish gray arg. qtzite, some arg.	7	175					
178.3	2.0	bands. ½" strs. sid. at 164.0							
182.9	3.4	and 167.7. Broken core 191.0' -	8	180					
185.1	2.1	192.0 and 204.0 - 207.0. Partly	9	185					
188.7	2.4	blchd. 201.0 - 204.0.							
191.0	2.2		240	190					
194.0	2.7		1	195					
197.8	2.7								
199.0	1.0		2	200					
End Box 5									
201.8	2.5								
204.2	1.4		3	205					
206.9	2.5								
209.9	2.9		4	210					
211.8	1.8								
213.6	1.7								
214.8	1.1		5	215					
216.4	1.6								
218.1	1.6								
220.0	1.3		6	220					
224.7	4.5	193.0' - 257.2' Mostly purple	7	225					
229.2	4.5	arg. qtzite. More qtzitic medium	8	230					
234.1	4.6	gray, 220.0 - 232.0. Broken 240-	9	235					
237.2	2.7	245.							
End Box 6									
238.7	1.5								
240.9	2.3		250	240					
243.9	2.8								
246.6	2.5		1	245					
251.4	4.9								
254.2	2.3								

All Samples taken at 5.0 feet Intervals

All Assays are 0.00 or Trace except as shown.

DIAMOND DRILL RECORD

Standpipe
Casing

Started
Finished
Hole Size
Depth
% Core Rec.

Mine
Location
Logged by Date
Drilled by

Hole No. SS 3254
Level 3000 Level
Grid 148
Latitude
Departure
Elevation
Bearing
Inclination

Depth Feet	Feet Core	Lithologic Description	Sample Data No.	Interval	Core Feet	Sple. Feet	Oz. Ag	% Pb	% Zn
255.5	1.4		E- 252	250					
257.0	1.5		3	255					
258.5	1.3								
262.2	3.8		4	260					
266.5	4.0	257.2' - 274.4' Slightly bleached	5	265					
268.7	2.0	arg. Minor Calcite strgs & Diss.							
273.7	4.9	blebs. 262.2 - 274.7. Brkn 273.7-	6	270					
274.7	1.0	274.7.	7	275					
End Box 7									
280.0	3.0		8	280					
285.0	4.7		9	285					
290.0	4.7		260	290					
295.0	4.8	274.4' - 313.0' Moderately blea-	1	295					
300.2	4.7	ched arg. and arg. qtzite. Lt.	2	300					
304.6	4.4	gray to medium gray, some pur-	3	305					
309.5	4.7	plish tints.	4	310					
314.5	5.0								
End Box 8			5	315					
319.5	5.0		6	320		5.0	0.2		
322.0	2.8	313.0' - 336.0' Medium gray to							
326.8	4.7	purple arg. and arg. qtzite.	7	325					
331.8	4.7	Small slips at 318.0, 321.8 & 328.0.	8	330					
336.8	4.8		9	335					
341.2	4.5	336.0' - 346.3' Lighter gray,	270	340					
346.2	4.7	moderately bleached, some pur-	1	345					
350.6	4.1	plish bands. Small slips at 345.0,	2	350					
End Box 9		and 350.6.							
353.2	2.9		3	355					
356.5	1.5								
360.5	4.5	346.3' - 390.0' Med. gray to pur-	4	360					
365.5	4.7	ple arg. qtzite. Broken core	5	365					
370.5	4.5	352.0 to 356. Some lighter gray	6	370					
375.2	4.7	arg. qtzite 365.0 - 380.0. Small	7	375					
380.2	4.8	slip at 361.0.	8	380					
384.7	4.4		9	385					
389.9	4.5		280	390					
394.1	4.8		1	395					
End Box 10		390.0' - 407.3' Med gray to lt.							
402.2	4.8	purple arg. qtzite. (about 50%	2	400					
407.3	4.7	bleached) ½" qtz at 408.0.	3	405					

All Samples taken at 5.0 feet Intervals

All Assays are 0.00 or Trace except as shown.

DIAMOND DRILL RECORD

Standpipe
Casing

Started
Finished
Hole Size
Depth
% Core Rec.

Mine
Location

Logged by Date
Drilled by

Hole No. SS 3254
Level 3000 Level
Grid 148
Latitude
Departure
Elevation
Bearing
Inclination

Depth Feet	Feet Core	Lithologic Description	Sample Data No.	Interval	Core Feet	Sple. Feet	Oz. Ag	% Pb	% Zn
408.8	1.2		E- 284	410					
411.0	1.9								
412.0	1.5								
414.7	1.3		5	415					
416.2	1.0								
418.7	2.5								
421.7	2.4	407.3' - 445.0' Purple arg. Badly	6	420					
423.5	1.3	broken 407.5 - 423.5. Slips at							
427.0	3.0	407.5 and 423.0. Small qtz strs	7	425			0.6		
430.0	2.7	at 438.5 & 444.2.	8	430					
431.0	1.0								
433.6	2.5		9	435					
438.9	1.8								
440.3	2.6		290	440					
444.2	1.6								
445.8	2.0		1	445			0.5		
450.1	4.7		2	450					
End of 12		445.0' - 457.0' Lt. gray arg.							
455.2	4.7	qtzite. Small qtz strs at 454.0 &	3	455			Trace		
457.4	2.0	455.0.							
459.2	1.8								
460.9	1.6		4	460			0.2		
464.8	3.9		5	465					
466.8	2.4								
469.0	2.1		6	470					
471.5	2.4	457.0' - 546.5' Med gray to pur-							
473.9	2.2	ple arg qtzite. Slips at 454.0,	7	475					
476.1	2.0	466.5, 471.0, 473.5 & 476.0. Small							
End 13 480.7	4.7	streaks calcite at 475.5 and	8	480					
484.4	4.2	484.4. Rock is light to med. gray	9	485					
489.4	4.7	partly bleached 484 to 491.9.							
491.9	2.6	Several ¼" calc. strs 491.0 to	300	490					
500.2	8.2	500.0. Lighter gray partly blea-	1	495					
505.4	4.8	ched 521.0 to 532.1. Slips, 4"-	2	500					
513.8	8.5	6" crush and gg 536.5 to 537.5 &	3	505					
521.5	7.8	546.1 to 546.5'.	4	510					
			5	515					
529.0	7.5		6	520					
			7	525					
532.1	3.0		8	530					
537.2	4.7		9	535					
			310	540					
547.5	3.0		1	545					

All Samples taken at 5.0 feet Intervals except as shown.

All Assays are 0.00 or

DIAMOND DRILL RECORD

Standpipe
Casing
Started
Finished
Hole Size
Depth
% Core Rec.

Mine
Location
Logged by Date
Drilled by

Hole No. SS 3254
Level 3000 Level
Grid 148
Latitude
Departure
Elevation
Bearing
Inclination

Depth Feet	Feet Core	Lithologic Description	Sample Data No.	Interval	Core Feet	Sple. Feet	Oz. Ag	% Pb	% Zn
550.9	2.6	546.5'-602' Bleached lt. gray	E- 312	545- 550					
554.5	0.8	quartzite. Small qtz-calcite	3	555			0.3		
555.1	3.8	strgrs at 553.0 and 555.0 Some	4	560					
End Box 14		purple remnanents at 557.3 and	5	565					
557.3	2.4	573.6 to 583.2. Small qtz seams	6	570					
561.8	4.6	at 557.5,559.0, 566.0, 569.0, and	7	575					
565.5	3.8	575.0.	8	580					
568.7	3.6	Mud and gouge at the beginning of							
573.6	4.9	nearly every run from 565.5 to	9	585					
576.0	2.8	602.0, reported to be from small							
581.0	1.5	caved zone near 450 feet.	20	590					
582.3	1.4								
583.2	1.3		1	595					
587.5	3.5								
End Box 15			2	600					
589.1	3.2								
591.4	2.0		3	605					
593.8	2.6								
596.8	3.2		4	610					
598.5	2.8								
600.3	1.8		5	615					
602.0	2.1	602.0 to 622.0 Mostly purple							
604.9	3.0	arg. qtzt. Slip at 611.0	6	620					
606.5	2.0								
609.2	2.4		7	625					
611.0	2.8								
613.0	1.0		8	630					
615.4	2.9	622.0-671.0 Purple arg and arg.							
619.3	4.0	qtzt. Slips at 623.7, 627.8, 632.7, and							
622.0	1.8	634.5.							
End Box 16		Mostly broken ground 622.0 to 637.0	9	635					
623.7	1.5								
627.8	4.2		30	640					
632.7	3.2								
634.5	1.8		1	645					
637.0	2.4								
639.7	2.6		2	650					
643.0	2.4								
645.8	2.8		3	655					
650.7	4.5								
652.0	0.9		4	660					
653.9	1.7								
656.0	2.6								
658.7	1.9								
662.5	4.0								

All Samples taken at 5.0 feet Intervals

All Assays are 0.00 or Trace except as shown.

DIAMOND DRILL RECORD

Standpipe
Casing

Started
Finished
Hole Size
Depth
% Core Rec.

Mine
Location

Logged by Date
Drilled by

Hole No. SS 3254
Level 3000 Level
Grid 148
Latitude
Departure
Elevation
Bearing
Inclination

Depth Feet	Feet Core	Lithologic Description	Sample Data No.	Interval	Core Feet	Sple. Feet	Oz. Ag	% Pb	% Zn
667.5	1.7		E- 335	660 - 665					
671.1	2.2	671.1'to 680.7' Bleached lt.	6	670					
674.0	2.7	gray arg. qtzt. More solid core.	7	675					
677.3	3.2	slips at 674 and 680.5.							
680.7	3.7		8	680					
682.0	1.3	680.7' to 707.3' Med. gray to purple							
685.9	2.0	arg. qtzt.	9	685					
687.5	1.7								
689.0	1.7		340	690			0.1		
693.7	4.5		1	695			0.1		
699.0	4.7								
703.9	4.7		2	700					
709.1	4.2		3	705			0.1		
			4	710					
714.0	4.7		5	715			0.1		
715.9	2.0								
719.3	3.5								
721.8	2.5		6	720					
725.3	2.9		7	725					
729.9	4.5								
731.2	1.7		8	730					
733.2	1.9		9	735			0.7		
738.2	4.9		50	740					
742.2	4.0								
746.5	4.4	707.3' - 802.3' Mostly purple arg.	1	745					
748.2	1.7	qtzite. Some lt. gray, more qtz-							
752.3	3.6	itic rock 725.3 to 733.2. Slips	2	750					
754.7	3.0	at 731.2 & 733.0. Small seams							
756.0	0.4	calcite at 764.0 & 767.2. ½" qtz	3	755					
758.2	2.1	strs. at 775.0 and 783.0.	4	760					
760.3	2.3								
761.3	1.0								
765.6	4.5		5	765					
769.6	4.0								
770.6	1.0		6	770					
774.6	4.0		7	775					
776.0	1.5								
780.8	4.4		8	780					
End of Box	2.8								
785.8	2.3		9	785					
791.2	2.0		360	790					
794.7	3.4		1	795					
802.3	7.5		2	800					
		END OF HOLE							

All Samples taken at 5.0 feet Intervals

All Assays are 0.00 or Trace except as shown

Division Contract File
DMEL-2879
Polaris Mining Co.

Extra maps + drill record

1950 – Cu 1250 tons
Sb 800 tons

Pb 5900 tons
Zn 1400 tons

Silver Summit

1948–53 – 5 million oz Ag
1100 tons Cu

Polaris East Exploration Project
BMEA-2879

From Field Team report March 16, 1953:

Property lies in the Evolution Mining District known as the Silver Belt.

Ore is largely tetrahedrite a copper-antimony-silver ore.

The district ranked 17th among the copper producing areas of the U.S. in 1950. Copper production from this area in 1950 was 2,533,500 pounds. There should be associated some 1,600,000 pounds of antimony. Little attempt in that year to save the antimony. Sunshine Mining Co. (adjacent to the Polaris) expect to reopen their antimony smelter in 1953.

Lead production in 1950 = 11,802,200 lbs.
Zinc " " " = 2,914,400 "

The Coeur d'Alene Mine is a part of the Polaris East Exploration Project and no doubt produced some of the above poundages of metals 1950. (see P. 2)

From the Applicant's statements:

Deep exploration in the Rathbert-Omega areas in the east end of the Sunshine mine has produced to date 74,000,000 lead & 68,000,000 ounces silver plus a considerable poundage of copper & antimony.

In the Silver Summit mine (owned by Polaris) deep ore-bodies were opened up in 1948. To Jan. 1 1953 Silver Summit produced 4,965,082 ounces

Silver & 2,274,673 pounds of copper plus the associated antimony

Coeur d'Alene Mines production 1939 to 1944:

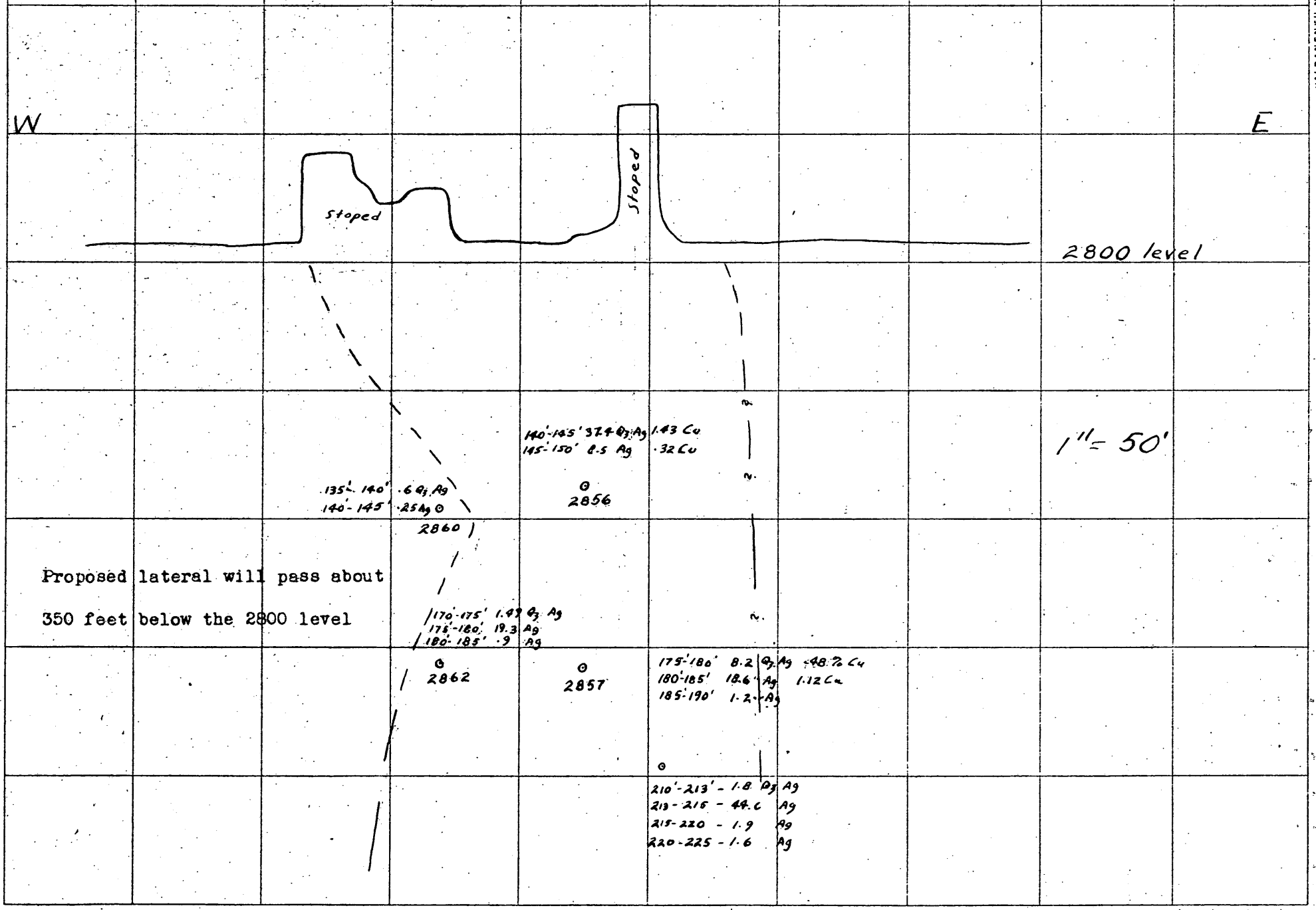
Copper = 10,113,568 lbs.
Antimony = 4,685,430 "
Silver = 5,276,152 ounces

The base metals appear in the veins with depth. Polaris exploration is to be done on the 3000 ft. level which is some 335 ft. below sea level.

EHR

Longitudinal Sec. 2

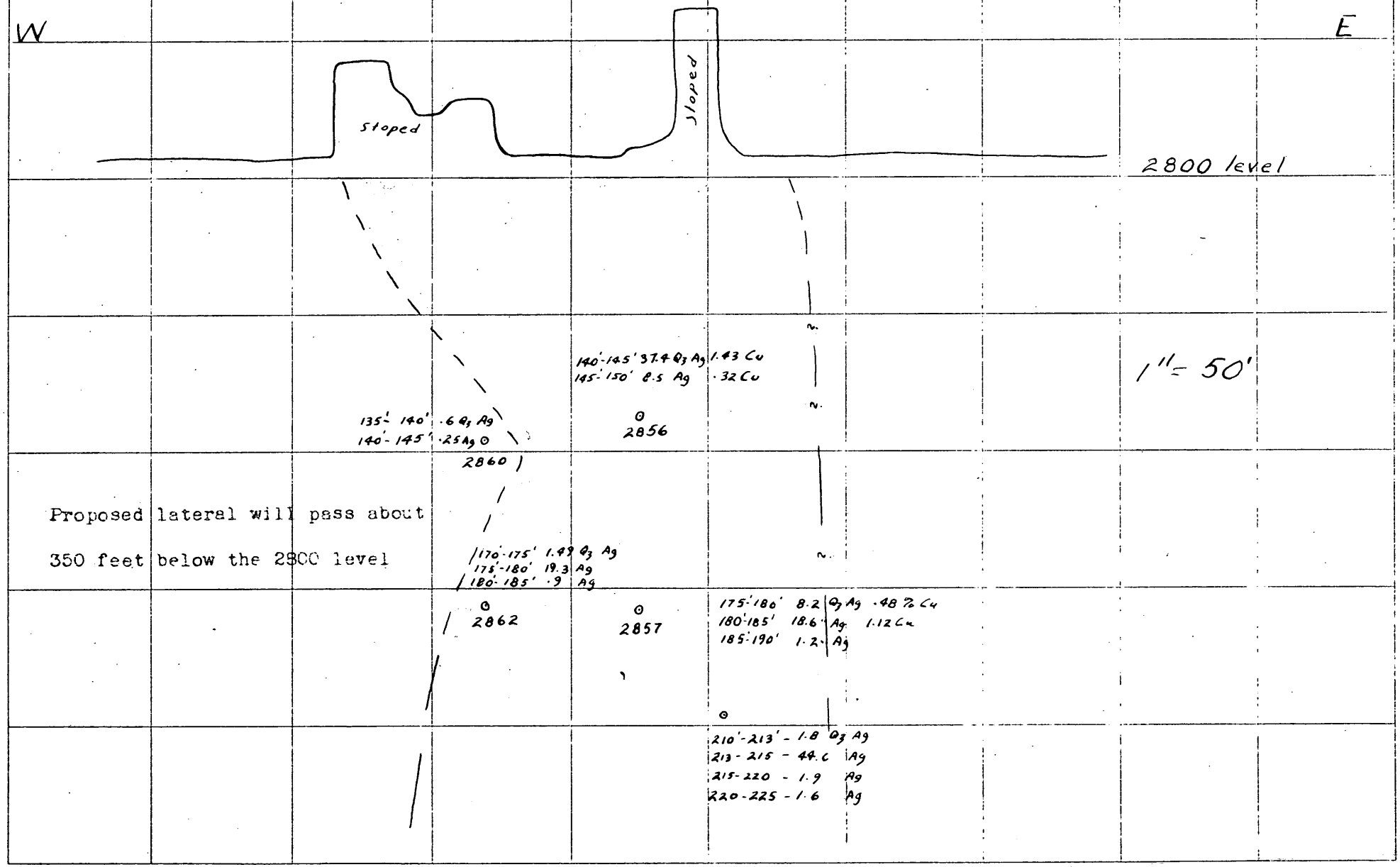
Longitudinal Section through 2800 level stope of Coeur d'Alene Mines, showing continuat ion ore below stope



"ALBANENE" NO. 195M K&E CO., N.Y. REG. U.S. PAT. OFF.

Longitudinal Sec. 2

Longitudinal Section through 2800 level stope of Coeur d'Alene Mines, showing continuation ore below stope



Mr. [illegible] W. Kendall, President
Polaris Mining Company
P. O. Box 320
Kellogg, Idaho

Re: Report of Proposed
(Copper, antimony, lead, zinc)
Polaris East Exploration Project
Shoshone County, Idaho

Dear Mr. Kendall:

This is to inform you that, effective April 15, 1953, the commitment of funds allocated to the DMA for exploration assistance under the Defense Production Act was restricted to certain specified metals and minerals still in short supply. Antimony, lead and zinc were not specified, and consequently were automatically removed from the list of metals or minerals eligible for exploration assistance.

Accordingly, I regret to advise you that the proposed Polaris East exploration project must be viewed solely from the standpoint of possible copper production. The project must show definite promise of yielding copper bearing material of acceptable grade and in quantities that will significantly improve the mineral supply position for the national defense program.

In the light of all information available to this agency, it is our considered opinion that the project would not result in a discovery, insofar as copper ore is concerned, sufficiently promising to justify government participation. Under these circumstances, we regret to advise that your application for exploration aid is denied. This action is taken with no prejudice to the overall merits of your proposed project.

The staff of the DMA wishes to express its appreciation for your interest in the exploration program and your understanding [illegible] the period your application was [illegible] under consideration.

Sincerely yours,

[illegible]/jm 5-19-53
cc to: Adm. Mining File
Operating Committee
Docket
Messrs. [illegible], Rm. 3621 Administrator
[illegible], Rm. 2-2A
DMA Mkg.
[illegible], Rm. 3061
DMA Field Team, Region II (2)

MF-200 (A)
(February 1952)

DOCKET NO. DMEA 2079

COMMODITY Copper, lead, antimony (and incidental silver)

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

Division copy

EXPLORATION PROJECT CONTRACT[1]

(Short Form)

Rewritten

IT IS AGREED this ..... day of ....., 195..., between the United States of America, acting through the Department of the Interior, Defense Minerals Exploration Administration, hereinafter called the "Government," and[2] Polaris Mining Company, a corporation duly organized and existing under and by virtue of the State of Delaware, P. O. Box 320, Wallace, Idaho, hereinafter called the "Operator," as follows, and as provided in Annex II, attached hereto as a part hereof:

~~hereinafter called the "Operator," as follows:~~

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

ARTICLE 2. *Operator's property rights.*—With respect to that certain land situated in the State of Idaho County of Shoshone ~~described as follows:~~ described in Annex 1 attached hereto as a part hereof, and on a claim map entitled DMEA-2079—Fig. 1—Part of the Silver Belt Coeur d'Alene Mining District", also attached hereto as a part hereof, with respect to which the Operator represents and undertakes and guarantees that by virtue of contractual ~~the Operator represents and undertakes~~ arrangements with others it has the necessary right, title, and interest to perform and carry out all of its undertakings ~~following claims, liens or encumbrances as to each of which the subordination agreement or the model lien waiver~~ and obligations set forth in this contract, and to secure the Government in the payment of any percentage royalty on production from said land which may accrue to the Government.

~~(b) That the Operator is a lessee, in possession and entitled to possession, and the Owner's Consent to Lien is attached.~~

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

ARTICLE 3. *Exploration project.*—The Operator, within ~~30~~ 6/ days from the date of this contract shall commence work on a project of exploration for[5] copper, lead, antimony (and incidental silver)

in or upon the described land; and shall bring the project to completion within a period of 40 months 6/ from the date of this contract. The work to be performed is more fully described in Exhibit "A" attached hereto, which, with any maps or drawings thereto attached, are made a part of this contract. The Government will contribute to the cost of this work as hereafter provided. The work shall be performed by the Operator or by independent contractor or contractors efficiently, expertly, in a workmanlike manner, in accordance with good mining standards and State regulations for health and safety and for workmen's compensation and employers' liability insurance, with suitable and adequate equipment, materials, and labor, to bring the project to completion within the time fixed. The Government shall have the right to enter and observe and inspect the work at all reasonable times, and the Operator shall provide the Government with all available means for doing so. The Government may consult with and advise the Operator on all phases of the work.

ARTICLE 4. *Costs of the project.*—The agreed, estimated costs of performing the work, expressed in terms of units of work to be performed (per foot of drifting, per foot of drilling, per cubic yard of material to be moved, etc.) are set forth in Exhibit "A," attached hereto. The Government will pay 50 percent of these agreed, estimated costs, as they accrue, for units of work actually performed that conform with the description or specifications for the work set forth in this contract, in an aggregate total amount not in excess of $342,977.50, which is 50 percent of $685,955.00, the agreed, estimated total cost of the project in which the Government will participate: *Provided,* That until the Operator's final report and final accounting have been rendered to the Government and any final check or auditing required by the Government has been made, and a final settlement of the contract has been made, the Government may withhold from the last voucher or vouchers such sums as it sees fit not in excess of ten (10) percent of the maximum total which the Government might have been called upon to pay under the terms of the contract. The Government may, as it sees fit, make payments direct to the Operator's independent contractors, if any, for the account of the Operator, rather than to the Operator.

ARTICLE 5. *Reports, accounts, audits.*—(*a*) *Progress reports.* The Operator shall provide the Government with monthly reports of units of work performed under the contract, in quintuplicate (five copies), upon forms provided by the Government. These progress reports shall be certified by the Operator, and shall constitute both the Operator's invoice of units of work performed on the project during the period covered by the report and his voucher for repayment by the Government, unless the Government requires the use of a standard voucher form with invoice attached. Progress reports shall include surface and/or underground engineering-geological maps or sketches showing the progress of the exploration, with assay-reports on samples taken concurrently with the advance in mineralized ground.

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

6/ The first day of the calender 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.

16—60329-1

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

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

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

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

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

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

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

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

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

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

ARTICLE 7. *Assignment, transfer, or loss of Operator's interest.*—Without the written consent of the Government, the Operator shall not assign or otherwise transfer or hypothecate this contract or any rights thereunder. The Operator shall not make any voluntary nor permit any involuntary transfer or conveyance of the Operator's rights in the land described in Article 2, without making suitable provision for the preservation of the Government's right to a percentage royalty on production and lien for the payment thereof; *Provided,* that mere failure by the Operator to maintain the Operator's rights in the land, without any consideration running to the Operator other than relief from the cost of maintaining such rights (as by surrender of a leasehold, failure to perform assessment work, or failure to exercise an option), coupled with complete abandonment by the Operator of all interest in or operations on the land for a period of 10 years from the date of this contract, shall not constitute such a transfer or conveyance. Should the Operator make or permit any transfer or conveyance in violation of this provision, the Operator shall be and remain liable for payment to the Government of the same amounts, at the same times, as would have been paid under the terms of the percentage royalty on production. If for any reason the net smelter returns, net concentrator returns, or other net amounts realized from the sale or other disposition of such production are not available as a means of measuring the amount of the Operator's liability, the amount thereof shall be estimated as well as may be, and in the event of dispute as to such estimates, the determination thereof by the Administrator of Defense Minerals Exploration Administration or by his successor shall be final and binding upon the Operator.

ARTICLE 8. *Termination and completion.*—The Government may, at any time, by written notice to the Operator, terminate this contract: (*a*) If the Operator fails to provide his share of the money necessary to prosecute operations pursuant to the terms of the contract; (*b*) if the Operator, in the opinion of the Government, fails to prosecute operations pursuant to the terms of the contract; or (*c*) if, in the opinion of the Government, operations up to the time of the notice have not indicated the probability of making any worth while discovery and in the opinion of the Government further operations are not justified.

ARTICLE 9. *Changes and added provisions* The words "10 years," wherever they occur in the above contract form, are hereby changed to 20 years.

Executed in sextuplicate the day and year first above written.

THE UNITED STATES OF AMERICA

POLARIS MINING COMPANY
(Operator)

By _____

By _____
Administrator, Defense Minerals Exploration Administration
Hoffland

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

_____ [CORPORATE SEAL]

U. S. GOVERNMENT PRINTING OFFICE 16—66329-1

MF-200 (A)
(February 1952)

DOCKET NO. DMEA 2879

COMMODITY Copper, lead, antimony (and incidental silver)

Docket copy

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

EXPLORATION PROJECT CONTRACT[1]

(Short Form)

IT IS AGREED this ..... day of ....., 195..., between the United States of America, acting through the Department of the Interior, Defense Minerals Exploration Administration, hereinafter called the "Government," and[2] Polaris Mining Company, a corporation duly organized and existing under and by virtue of the State of Delaware, P. O. Box 320, Wallace, Idaho, hereinafter called the "Operator," as follows, and as provided in Annex II, attached hereto as a part hereof:

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

ARTICLE 2. *Operator's property rights.*—With respect to that certain land situated in the State of Idaho County of Shoshone described in Annex I attached hereto as a part hereof, and on a claim map entitled "DMEA-2879--Fig. 1--Part of the Silver Belt Coeur d'Alene Mining District", also attached hereto as a part hereof, with respect to which the Operator represents and undertakes and guarantees that by virtue of contractual arrangements with others it has the necessary right, title, and interest to perform and carry out all of its undertakings and obligations set forth in this contract, and to secure the Government in the payment of any percentage royalty on production from said land which may accrue to the Government.

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

ARTICLE 3. *Exploration project.*—The Operator, within 30 6/ days from the date of this contract shall commence work on a project of exploration for[5] copper, lead, antimony (and incidental silver)

in or upon the described land; and shall bring the project to completion within a period of 40 months 6/ from the date of this contract. The work to be performed is more fully described in Exhibit "A" attached hereto, which, with any maps or drawings thereto attached, are made a part of this contract. The Government will contribute to the cost of this work as hereafter provided. The work shall be performed by the Operator or by independent contractor or contractors efficiently, expertly, in a workmanlike manner, in accordance with good mining standards and State regulations for health and safety and for workmen's compensation and employers' liability insurance, with suitable and adequate equipment, materials, and labor, to bring the project to completion within the time fixed. The Government shall have the right to enter and observe and inspect the work at all reasonable times, and the Operator shall provide the Government with all available means for doing so. The Government may consult with and advise the Operator on all phases of the work.

ARTICLE 4. *Costs of the project.*—The agreed, estimated costs of performing the work, expressed in terms of units of work to be performed (per foot of drifting, per foot of drilling, per cubic yard of material to be moved, etc.) are set forth in Exhibit "A," attached hereto. The Government will pay 50 percent of these agreed, estimated costs, as they accrue, for units of work actually performed that conform with the description or specifications for the work set forth in this contract, in an aggregate total amount not in excess of $342,977.50, which is 50 percent of $685,955.00 the agreed, estimated total cost of the project in which the Government will participate: *Provided,* That until the Operator's final report and final accounting have been rendered to the Government and any final check or auditing required by the Government has been made, and a final settlement of the contract has been made, the Government may withhold from the last voucher or vouchers such sums as it sees fit not in excess of ten (10) percent of the maximum total which the Government might have been called upon to pay under the terms of the contract. The Government may, as it sees fit, make payments direct to the Operator's independent contractors, if any, for the account of the Operator, rather than to the Operator.

ARTICLE 5. *Reports, accounts, audits.*—(*a*) *Progress reports.* The Operator shall provide the Government with monthly reports of units of work performed under the contract, in quintuplicate (five copies), upon forms provided by the Government. These progress reports shall be certified by the Operator, and shall constitute both the Operator's invoice of units of work performed on the project during the period covered by the report and his voucher for repayment by the Government, unless the Government requires the use of a standard voucher form with invoice attached. Progress reports shall include surface and/or underground engineering-geological maps or sketches showing the progress of the exploration, with assay-reports on samples taken concurrently with the advance in mineralized ground.

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[2] State name, address, and nature of organization if any.
[3] Give legal description or enough to identify the property, particularly excluding any land or interest therein to which the Government's lien is not to attach or the production from which is not to be subject to the Government's percentage royalty.
[4] Strike out the provision not applicable.
[5] Name of mineral or minerals.

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6/ 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.

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

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

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

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

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

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

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

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

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

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

ARTICLE 7. *Assignment, transfer, or loss of Operator's interest.*—Without the written consent of the Government, the Operator shall not assign or otherwise transfer or hypothecate this contract or any rights thereunder. The Operator shall not make any voluntary nor permit any involuntary transfer or conveyance of the Operator's rights in the land described in Article 2, without making suitable provision for the preservation of the Government's right to a percentage royalty on production and lien for the payment thereof; *Provided,* that mere failure by the Operator to maintain the Operator's rights in the land, without any consideration running to the Operator other than relief from the cost of maintaining such rights (as by surrender of a leasehold, failure to perform assessment work, or failure to exercise an option), coupled with complete abandonment by the Operator of all interest in or operations on the land for a period of 10 years from the date of this contract, shall not constitute such a transfer or conveyance. Should the Operator make or permit any transfer or conveyance in violation of this provision, the Operator shall be and remain liable for payment to the Government of the same amounts, at the same times, as would have been paid under the terms of the percentage royalty on production. If for any reason the net smelter returns, net concentrator returns, or other net amounts realized from the sale or other disposition of such production are not available as a means of measuring the amount of the Operator's liability, the amount thereof shall be estimated as well as may be, and in the event of dispute as to such estimates, the determination thereof by the Administrator of Defense Minerals Exploration Administration or by his successor shall be final and binding upon the Operator.

ARTICLE 8. *Termination and completion.*—The Government may, at any time, by written notice to the Operator, terminate this contract: (*a*) If the Operator fails to provide his share of the money necessary to prosecute operations pursuant to the terms of the contract; (*b*) if the Operator, in the opinion of the Government, fails to prosecute operations pursuant to the terms of the contract; or (*c*) if, in the opinion of the Government, operations up to the time of the notice have not indicated the probability of making any worth while discovery and in the opinion of the Government further operations are not justified.

ARTICLE 9. *Changes and added provisions* The words "10 years," wherever they occur in the above contract form, are hereby changed to "20 years."

Executed in sextuplicate the day and year first above written.

THE UNITED STATES OF AMERICA

POLARIS MINING COMPANY
(Operator)

By _____

By _____
Administrator, Defense Minerals Exploration Administration
Hoffland

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

_____ [CORPORATE SEAL]

U. S. GOVERNMENT PRINTING OFFICE 16—66329-1

MF-200 (A)
(February 1952)

DOCKET NO. DMEA 2-79

COMMODITY Copper, lead, antimony (and incidental silver)

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

Extra

EXPLORATION PROJECT CONTRACT[1]

(Short Form)

IT IS AGREED this ..... day of ....., 195..., between the United States of America, acting through the Department of the Interior, Defense Minerals Exploration Administration, hereinafter called the "Government," and[2] Polaris Mining Company, a corporation duly organized and existing under and by virtue of the State of Delaware, P. O. Box 320, Wallace, Idaho, hereinafter called the "Operator," as follows, and as provided in Annex II, attached hereto as a part hereof:

~~hereinafter called the "Operator," as follows:~~

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

ARTICLE 2. *Operator's property rights.*—With respect to that certain land situated in the State of Idaho County of Shoshone described as follows: described in Annex I attached hereto as a part hereof, and on a claim map entitled DMEA-2-79--Fig. 1--Part of the Silver Belt Coeur d'Alene Mining District", also attached hereto as a part hereof, with respect to which the Operator represents and undertakes and guarantees that by virtue of contractual arrangements with others it has the necessary right, title, and interest to perform and carry out all of its undertakings

~~(a) That the Operator is the owner in possession and entitled to possession, and that the property is free from the following claims, liens, or encumbrances as to each of which the subordination agreement of the holder is attached:~~

~~and obligations set forth in this contract, and to secure the Government in the payment of any percentage royalty on production from said land which may accrue to the Government.~~

~~(b) That the Operator is a lessee, in possession and entitled to possession, and the Owner's Consent to Lien is attached.~~

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

ARTICLE 3. *Exploration project.*—The Operator, within 30[6] days from the date of this contract shall commence work on a project of exploration for[5] Copper, lead, antimony (and incidental silver)

in or upon the described land; and shall bring the project to completion within a period of 40 months[6] from the date of this contract. The work to be performed is more fully described in Exhibit "A" attached hereto, which, with any maps or drawings thereto attached, are made a part of this contract. The Government will contribute to the cost of this work as hereafter provided. The work shall be performed by the Operator or by independent contractor or contractors efficiently, expertly, in a workmanlike manner, in accordance with good mining standards and State regulations for health and safety and for workmen's compensation and employers' liability insurance, with suitable and adequate equipment, materials, and labor, to bring the project to completion within the time fixed. The Government shall have the right to enter and observe and inspect the work at all reasonable times, and the Operator shall provide the Government with all available means for doing so. The Government may consult with and advise the Operator on all phases of the work.

ARTICLE 4. *Costs of the project.*—The agreed, estimated costs of performing the work, expressed in terms of units of work to be performed (per foot of drifting, per foot of drilling, per cubic yard of material to be moved, etc.) are set forth in Exhibit "A," attached hereto. The Government will pay 50 percent of these agreed, estimated costs, as they accrue, for units of work actually performed that conform with the description or specifications for the work set forth in this contract, in an aggregate total amount not in excess of $342,977.50, which is 50 percent of $685,955.00, the agreed, estimated total cost of the project in which the Government will participate: *Provided,* That until the Operator's final report and final accounting have been rendered to the Government and any final check or auditing required by the Government has been made, and a final settlement of the contract has been made, the Government may withhold from the last voucher or vouchers such sums as it sees fit not in excess of ten (10) percent of the maximum total which the Government might have been called upon to pay under the terms of the contract. The Government may, as it sees fit, make payments direct to the Operator's independent contractors, if any, for the account of the Operator, rather than to the Operator.

ARTICLE 5. *Reports, accounts, audits.*—(*a*) *Progress reports.* The Operator shall provide the Government with monthly reports of units of work performed under the contract, in quintuplicate (five copies), upon forms provided by the Government. These progress reports shall be certified by the Operator, and shall constitute both the Operator's invoice of units of work performed on the project during the period covered by the report and his voucher for repayment by the Government, unless the Government requires the use of a standard voucher form with invoice attached. Progress reports shall include surface and/or underground engineering-geological maps or sketches showing the progress of the exploration, with assay-reports on samples taken concurrently with the advance in mineralized ground.

[1] If sufficient space is not provided in any blank, use an extra sheet of paper and refer to it in the blank.
[2] State name, address, and nature of organization if any.
[3] Give legal description or enough to identify the property, particularly excluding any land or interest therein to which the Government's lien is not to attach or the production from which is not to be subject to the Government's percentage royalty.
[4] Strike out the provision not applicable.
[5] Name of mineral or minerals.
[6] 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.

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

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

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

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

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

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ARTICLE 7. *Assignment, transfer, or loss of Operator's interest.*—Without the written consent of the Government, the Operator shall not assign or otherwise transfer or hypothecate this contract or any rights thereunder. The Operator shall not make any voluntary nor permit any involuntary transfer or conveyance of the Operator's rights in the land described in Article 2, without making suitable provision for the preservation of the Government's right to a percentage royalty on production and lien for the payment thereof; *Provided,* that mere failure by the Operator to maintain the Operator's rights in the land, without any consideration running to the Operator other than relief from the cost of maintaining such rights (as by surrender of a leasehold, failure to perform assessment work, or failure to exercise an option), coupled with complete abandonment by the Operator of all interest in or operations on the land for a period of 10 years from the date of this contract, shall not constitute such a transfer or conveyance. Should the Operator make or permit any transfer or conveyance in violation of this provision, the Operator shall be and remain liable for payment to the Government of the same amounts, at the same times, as would have been paid under the terms of the percentage royalty on production. If for any reason the net smelter returns, net concentrator returns, or other net amounts realized from the sale or other disposition of such production are not available as a means of measuring the amount of the Operator's liability, the amount thereof shall be estimated as well as may be, and in the event of dispute as to such estimates, the determination thereof by the Administrator of Defense Minerals Exploration Administration or by his successor shall be final and binding upon the Operator.

ARTICLE 8. *Termination and completion.*—The Government may, at any time, by written notice to the Operator, terminate this contract: (*a*) If the Operator fails to provide his share of the money necessary to prosecute operations pursuant to the terms of the contract; (*b*) if the Operator, in the opinion of the Government, fails to prosecute operations pursuant to the terms of the contract; or (*c*) if, in the opinion of the Government, operations up to the time of the notice have not indicated the probability of making any worth while discovery and in the opinion of the Government further operations are not justified.

ARTICLE 9. *Changes and added provisions* The words "10 years," wherever they occur in the above contract form, are hereby changed to 20 years.

Executed in sextuplicate the day and year first above written.

THE UNITED STATES OF AMERICA

POLARIS MINING COMPANY
(Operator)

By _____

By _____
Administrator, Defense Minerals Exploration Administration

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

_____ [CORPORATE SEAL]

U. S. GOVERNMENT PRINTING OFFICE 16—66329-1

POLARIS MINING COMPANY
Exploration Project Contract

Docket No. DMEA-2879

ANNEX

Silver Standard Mining Company Property

Patented claims:

Name of claim	Survey No.
May	3268
Kaiser	3268
Nora	3268
Norway	3268

Unpatented claims:

Name of claim	Location notice recorded, Shoshone County, Idaho Quartz Location Book	Page
Hercules	24	596
Standard (amended)	19	643
Ruby	26	272
Grubstake (amended)	25	7
Silver	14	51
Pay Streak (amended)	25	8
Jumbo	14	44
Lead	14	46
Edison	24	491
June	24	490
Copper	14	43
Betty	24	489

American Silver Mining Company Property

Unpatented lode-mining claims

Name of Claim	Location notice recorded, Shoshone County, Idaho Quartz Locations Book	Page
Surprise (amended)	19	641
Maud S. (amended)	19	640
Buckeye (amended)	23	6
Kentucky (amended)	23	7
Silver Lead (amended)	23	14
North Star (amended)	23	13
Norwich Fr. No. 1 (amended)	23	11
Norwich Fr. No. 2 (amended)	23	12
Lucky Friday	23	18
Lucky Friday No. 1 (amended)	23	8
Lucky Friday No. 2 (amended)	23	9
Lucky Friday No. 3 (amended)	23	10
Lucky Friday No. 4 (amended)	23	436
Collins	23	17
Blue Jay (amended)	19	639

Rainbow Mining and Milling Company, Ltd.

Patented lode mining claims

Mineral Survey No. 3191

Blue Ribbon
July
John D.
Gaylord
Horseshoe
Hazzard
Rainbow No. 2
Vera
Blatz
James H.
Brooklet
Jane Wray
Thursday
Argentine Extension
Bobbie
Knob Hill
Lookout
Spider

Mineral Survey No. 2761

Sunshine
Pride of the Rockies
Rainbow
Mountain View

Merger Mines Property

(To be added to application)

OME

OFFICIAL FILE COPY
O. M. E.
RECEIVED JUL 13 1959

DATE	INITIALS	CODE
7-13	gad	V20
~~7-16~~	~~[illegible]~~	~~[illegible]~~

No. 157 Howard Street
Spokane 4, Washington
June 29, 1959

Mrs. Dorothy Long, Certifying Officer
OME Field Team, Region I
1201 North Division Street
Spokane 2, Washington

Re: Docket No. IDEA-2879 (Copper-Lead-Antimony)
Polaris Mining Company
Polaris East Exploration Project
Shoshone County, Idaho
Contract No. Idm-E541

Dear Mrs. Long:

Attached is Check No. 87076, dated June 25, 1959, for $1,897.91 received from the Hecla Mining Company (the operating company) which represents the Government's royalty on ore produced during the month of April 1959, according to the attached settlement sheet.

Sincerely yours,

A. E. Weissenborn
Executive Officer, OME
Field Team, Region I

Attachments as indicated
cc: Operator
OME w/encl. ✓
CPT

6-30-59
A.S.
$17,222.48

NON-PRIVILEGED DOCUMENT

TO BE PHOTOCOPIED AND PRODUCED

DO NOT CODE

BATES NO. USGSPO0000449

Schedule E-6

HECLA MINING COMPANY

POLARIS MINE

Rainbow Area - Final Settlement

Month of April - 1959

Dry tons milled	1,375	Ounces gold recovered	2.895
Mill feed assays		Ounces silver recovered	41,811
Ag - Ounces	30.94	Pounds copper recovered	19,336
Cu - Percent	0.71	Dry tons concentrates	63.68
Percent recovery			
Ag	98.29		
Cu	98.71		

CONCENTRATE DATA

Silver	656.59 oz.
Gold	0.0455 oz.
Copper	15.18% - 1.00% = 14.18%
Antimony	14.50%
Arsenic	1.67%

PAYMENT FOR METALS

Au 0.0455 oz. @ 91.14%	@ $ 34.9125	$ 1.448
Ag 656.59 oz. @ 96.141%	@ .90375	570.494
Cu 14.18%	@ .283097	80.286
Subtotal		$ 652.228
Less treatment		36.510
Net value per ton		$ 615.718

TREATMENT

Base charge	$ 22.67
Sb less 1% @ $1.00 per ton	13.50
As less 1% @ $0.50 per ton	.34
Total	$ 36.51

63.68 dry tons @ $615.718		$ 39 208 92
Freight		
69.527 tons @ $17.24	$ 1 198 65	
Minimum car charge	49 11	
Switching charge	3 18	1 250 94
Calculated returns		$ 37 957 98
To reconcile		20
Final returns		$ 37 958 18

OME

release copy

No. 157 Howard Street
Spokane 4, Washington
June 8, 1959

Mrs. Dorothy Long, Certifying Officer
OME Field Team, Region I
1201 North Division Street
Spokane 2, Washington

Re: Docket No. DMEA-2879 (Copper-Lead-Antimony) Hecla MiningCo. (formerly Polaris Mining Company)
Polaris East Exploration Project
Shoshone County, Idaho
Contract No. Idm-E541

Dear Mrs. Long:

Attached is Check No. 86934, dated June 3, 1959, for $815.97 received from the Hecla Mining Company which represents the Government's royalty on ore produced during the month of March 1959, according to the attached settlement sheet.

Sincerely yours,

Donald R. MacLaren
For: A. E. Weissenborn
Executive Officer, OME
Field Team, Region I

Attachments as indicated
cc: Operator
OME w/encl. ✓
CPF

OFFICIAL FILE COPY
O. M. E.
RECEIVED JUN 15 1959

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6/15		220
6/16		500

6-9-59
$15,324.57 ✓

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BATES NO. USGSP00000449

Schedule E-6

HECLA MINING COMPANY

POLARIS MINE

Rainbow Area - Final Settlement

Month of March - 1959

Dry tons milled	1,181	Ounces gold recovered	1.373
Mill feed assays		Ounces silver recovered	17,897
Ag - Ounces	15.47	Pounds copper recovered	7,608
Cu - Percent	0.33	Dry tons concentrates	26.50
Percent Recovery			
Ag	97.95		
Cu	97.29		

CONCENTRATE DATA

Silver	675.36 oz.
Gold	0.0518 oz.
Copper	14.35% - 1.00% = 13.35%
Antimony	9.64%
Arsenic	2.51%

PAYMENT FOR METALS

Au 0.0518 oz. @ 91.14% @ $ 34.9125		$ 1.648
Ag 675.36 oz. @ 96.491% @	.90375	588.939
Cu 13.35% @	.284877	76.062
Subtotal		$ 666.649
Less treatment		32.130
Net value per ton		$ 634.519

TREATMENT

Base charge	$ 22.73
Sb less 1% @ $1.00 per ton	8.64
As less 1% @ $0.50 per ton	76
Total	$ 32.13

26.50 dry tons @ $634.519	$ 16 814 75
Freight	
28.773 tons @ $17.24	496 05
Calculated returns	$ 16 318 70
To reconcile	62
Final returns	$ 16 319 32

OME

OFFICIAL FILE COPY O. M. E. RECEIVED MAY 14 1959		
DATE	INITIALS	CODE
5/4	a	220
~~5/11~~	~~[illegible]~~	~~[illegible]~~

So. 157 Howard Street
Spokane 4, Washington
May 4, 1959

Mrs. Dorothy Long, Certifying Officer
OME Field Team, Region I
1201 North Division Street
Spokane 2, Washington

Re: Docket No. DMEA-2879 (Copper-Lead-Antimony) Hecla Mining Co. (formerly Polaris Mining Company
Polaris East Exploration Project
Shoshone County, Idaho
Contract No. Idm-B541

Dear Mrs. Long:

Attached is Check No. 86703, dated April 28, 1959, for $1,231.46 received from the Hecla Mining Company which represents the Government's royalty on ore produced during the month of February 1959, according to the attached settlement sheet.

Sincerely yours,

R. D. Sample
For: A. E. Weissenborn
Executive Officer, OME
Field Team, Region I

Release Copy

Attachments as indicated
cc: Operator
OME w/encl.
CPF

5-4-59
D.L.
$14,508.60

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BATES NO. USGSPO0000449

Schedule E-6

HECLA MINING COMPANY

POLARIS MINE

Rainbow Area - Final Settlement

Month of February - 1959

Dry tons milled	1,036	Ounces gold recovered	2.479
Mill feed assays		Ounces silver recovered	26,462
Ag - Ounces	25.82	Pounds copper recovered	12,551
Cu - Percent	0.61	Dry tons concentrates	34.53
Percent Recovery			
Ag	98.86		
Cu	98.56		

CONCENTRATE DATA

Silver	766.35 oz.
Gold	0.0718 oz
Copper	18.17% - 1.00% = 17.17%
Antimony	12.57%
Arsenic	2.01%

PAYMENT FOR METALS

Au 0.0718 oz. @ 91.14%	@ $ 34.9125	$ 2.285
Ag 766.35 oz. @ 96.5%	@ .90284	667.675
Cu 17.17%	@ . 28214	96.887
Subtotal		$ 766.847
Less treatment		34.880
Net value per ton		$ 731.967

TREATMENT

Base charge	$ 22.80
Sb less 1% @ $1.00 per ton	11.57
As less 1% @ $0.50 per ton	.51
	$ 34.88

34.53 dry tons @ $731.967	$ 25 274 82
Freight	
37.474 wet tons @ $17.24	646 05
Calculated returns	$ 24 628 77
To reconcile	43
Final returns	$ 24 629 20

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SPOKANE, WASH.

OME

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So. 157 Howard Street
Spokane 4, Washington
March 31, 1959

Mrs. Dorothy Long, Certifying Officer
OME Field Team, Region I
1201 North Division Street
Spokane 2, Washington

Re: Docket No. DMEA-2879 (Copper-Lead-Antimony), Hecla Mining Co. (Formerly Polaris Mining Company
Polaris East Exploration Project
Shoshone County, Idaho
Contract No. Ida-2341

Dear Mrs. Long:

Attached is Check No. 8034, dated March 30, 1959, for $1,131.85 received from the Hecla Mining Company which represents the Government's royalty on ore produced during the month of January 1959, according to the attached settlement sheet.

Sincerely yours,

A. E. Weissenborn
Executive Officer, OME
Field Team, Region I

Release Copy

Attachments as indicated
cc: Operator
OME w/encl.
CPF

4-1-59
(DATE)
D. L.
$13,277.14

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BATES NO. MSGSP0 0000449

Schedule E-6

HECLA MINING COMPANY

Polaris Mine

Rainbow Area - Final Settlement

Month of January - 1959

Dry tons milled	927.49	Ounces gold recovered	1.398
Mill feed assays		Ounces silver recovered	25,426
Ag - Ounces	27.84	Pounds copper recovered	11,668
Cu - Percent	0.64	Dry tons concentrates	34.73
Percent recovery			
Ag	98.47		
Cu	98.88		

CONCENTRATE DATA

Silver	732.10 oz.
Gold	0.0403 oz.
Copper	16.80% - 1.00% = 15.80%
Antimony	12.31%
Arsenic	2.12%

PAYMENT FOR METALS

Au 0.0403 oz. @ 91.14%	@	$ 31.2415	$ 1 147
Ag 732.10 oz. @ 96.5%	@	.89484	632.183
Cu 15.80%	@	.2639	83.392
Subtotal			$ 716.722
Less treatment			34.570
Net value per ton			$ 682.152

TREATMENT

Base charge	$ 22.70
Sb less 1% @ $1.00 per ton	11.31
As less 1% @ $0.50 per ton	.56
Total	$ 34.57

34.73 dry tons @ $682.152	$ 23 691 14
Freight:	
37.944 wet tons @ $17.24	654 16
Calculated returns	$ 23 036 98
To reconcile	(34)-
Final returns	$ 23 036 64

RECEIVED
MAR 31 1959
U. S. G. S.
SPOKANE, WASH.

OME

So. 157 Howard Street
Spokane 4, Washington
March 30, 1959

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O. M. E.
RECEIVED APR 9 1959
DATE CODE
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Mrs. Dorothy Long, Certifying Officer
OME Field Team, Region I
1201 North Division Street
Spokane 2, Washington

Re: Docket No. DMEA-2879 (Copper-Lead-Antimony) Hecla Mining Co. (Formerly Polaris Mining Company
Polaris East Exploration Project
Shoshone County, Idaho
Contract No. Idm-E541

Dear Mrs. Long:

Attached is Check No. 86431, dated March 27, 1959, for $926.70 received from the Hecla Mining Company which represents the Government's royalty on ore produced during the month of December 1958, according to the attached settlement sheet.

Sincerely yours,

A. E. Weissenborn
Executive Officer, OME
Field Team, Region I

Attachments as indicated
cc: Operator
OME w/encl.
CPF

Please Copy

3-31-59
D.L.
$12,125.31 X

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BATES NO. U5GSP000004449

Schedule E-6

HECLA MINING COMPANY

Polaris Mine

Rainbow Area - Final Production

December - 1958

Dry tons milled	976.61	Ounces gold recovered	1.648
Mill feed assays		Ounces silver recovered	20,272
Ag - Ounces	21.08	Pounds copper recovered	10,640
Cu - Percent	0.57	Dry tons concentrates	27.94
Percent recovery			
Ag	98.46		
Cu	96.00		

CONCENTRATE DATA

Silver	725.55 oz.
Gold	0.059 oz.
Copper	19.04% - 1.00% = 18.04%
Antimony	12.51%
Arsenic	1.72%

PAYMENT FOR METALS

Au 0.059 oz. @ 91.14% @ $ 20.3250		$ 1.093
Ag 725.55 oz. @ 96.16% @	.89178	622.185
Cu 18.04% @	.25555	92.202
Subtotal		$ 715.480
Less treatment		33.450
Net value per ton		$ 682.030

TREATMENT

Base charge	$ 21.58
Sb less 1% @ $1.00 per ton	11.51
As less 1% @ $0.50 per ton	.36
Total	$ 33.45

27.94 dry tons @	$ 682.030	$ 19 055 92
Freight:		
30.3185 wet tons @	$ 17.24	522 69
Calculated returns		$ 18 533 23
To reconcile		80
Final returns		$ 18 534 03

RECEIVED
MAR 30 1959
U. S. G. S.
SPOKANE, WASH.

OFFICIAL FILE COPY
O. M. E.
RECEIVED MAR 5 1959

DATE	INITIALS	CODE
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So. 157 Howard Street
Spokane 4, Washington
February 25, 1959

Mrs. Dorothy Long, Certifying Officer
OME Field Team, Region I
1201 North Division Street
Spokane 2, Washington

Re: Docket No. IMSA-2879 (Copper-Lead-Antimony) Hecla Mining Co. (formerly Polaris Mining Company
Polaris East Exploration Project
Shoshone County, Idaho
Contract No. Idm-8541

Dear Mrs. Long:

Attached is Check No. 86194, dated February 24, 1959, for $495.47 received from the Polaris Mining Company which represents the Government's royalty on ore produced during the month of November 1958, according to the attached settlement sheet.

Sincerely yours,

A. E. Weissenborn
Executive Officer, OME
Field Team, Region I

release copy

Attachments as indicated
cc: Operator
OME w/encl. ✓
CPF

2-26-59
L.L.
$11,198.61

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O. M. E.
RECEIVED MAR 5 1959
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Schedule E-6

HECLA MINING COMPANY

Polaris Mine

Rainbow Area - Final Production

November - 1958

Dry tons milled	650.88	Ounces gold recovered	0.59
Ag head assay	17.18	Ounces silver recovered	10,793
Cu head assay	0.47	Pounds copper recovered	5,956
		Dry tons concentrates	16.01

Percent recoverey	
Ag	96.52
Cu	97.02

CONCENTRATE DATA

Silver	674.13 oz.
Gold	0.0369 oz.
Copper	18.60% - 1.00% - 17.60%
Antimony	13.86%
Arsenic	1.50%

PAYMENT FOR METALS

Au 0.0369 oz. @ 91.14%	@ $ 11.9407	$ 0.402
Ag 674.13 oz. @ 96.15%	@ .89038	577.123
Cu 17.60%	@ .25946	91.330
Subtotal		$ 668.855
Less treatment		31.770
Net value per ton		$ 637.085

TREATMENT

Base charge	$ 16 37
1/2% value over $250 per ton	1.89
As less 1% @ $0.50 per ton	.25
Sb less 1% @ $1.00 per ton	12.86
Solid bottom car @ $0.50 per ton	.40
	$ 31.77

16.01 dry tons @ $637.085	$ 10 199 73
Freight:	
17.3390 wet tons @ $16.77	290 78
Calculated returns	$ 9 908 95
To reconcile	37
Final returns	$ 9 909 32

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	J	

So. 157 Howard Street
Spokane 4, Washington
January 9, 1959

Mrs. Dorothy Long, Certifying Officer
OME Field Team, Region I
1201 North Division Street
Spokane 2, Washington

Re: Docket No. DMEA-2879 (Copper-Lead-Antimony) Hecla Mining Co. (formerly Polaris Mining Company)
Polaris East Exploration Project
Shoshone County, Idaho
Contract No. Idm-2541

Dear Mrs. Long:

Attached is Check No. 85831, dated January 8, 1959, for $422.54 received from the Polaris Mining Company which represents the Government's royalty on ore produced during the month of October 1958, according to the attached settlement sheet.

Sincerely yours,

A. E. Weissenborn
Executive Officer, OME
Field Team, Region I

Release Copy

Attachments as indicated
cc: Operator
OME w/encl.
CFF

1-12-59
D.L.
$10,703.14

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BATES NO. USGSPO 0000449

Schedule E-6

HECLA MINING COMPANY

OFFICIAL FILE COPY
O. M. E.
RECEIVED JAN 19 1959

DATE	INITIALS	CODE

Polaris Mine

Rainbow Area - Final Production

October - 1958

Dry tons milled	461.60	Ounces gold recovered	0.346
Ag Head assay	19.58	Ounces silver recovered	9,013
Cu head assay	0.53	Pounds copper recovered	4,770
		Dry tons concentrates	10.27

Percent recovery	
Ag	99.73
Cu	98.05

CONCENTRATE DATA

Silver	877.62 oz.
Gold	0.0337 oz.
Copper	23.22% - 1.00%=22.22%
Antimony	13.03%
Arsenic	2.33%

PAYMENT FOR METALS

Au 0.0337 oz.	@ 91.14%	@ $ 34.9125	$	1.072
Ag 877.62 oz.	@ 96.50%	@ .89156		755.065
Cu 22.22%	@	.26068		115.846
Subtotal			$	871.983
Less treatment				31.100
Net value per ton			$	840.883

TREATMENT

Base charge	$ 14.79
1/2% value over $250 per ton	3.11
As less 1% @ $0.50 per ton	.67
Sb less 1% @ $1.00 per ton	12.03
Solid bottom car @ $0.50 per ton	.50
	$ 31.10

10.27 dry tons @ $840.883	$ 8 635 87
Freight:	
11.125 wet tons @ $16.64	185 12
Calculated returns	$ 8 450 75
To reconcile	06
Final returns	$ 8 450 81

OME

OFFICIAL FILE COPY
O. M. E.
RECEIVED DEC 8 1958

DATE	INITIALS	CODE
12/8	C	220
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So. 157 Howard Street
Spokane 4, Washington
December 2, 1958

Mrs. Dorothy Long, Certifying Officer
OME Field Team, Region I
1201 North Division Street
Spokane 2, Washington

Re: Docket No. DMEA-2879 (Copper-Lead-Antimony)
Polaris Mining Company
Polaris East Exploration Project
Shoshone County, Idaho
Contract No. Idm-E541

Dear Mrs. Long:

Attached is Check No. 85585, dated December 1, 1958, for $591.48 received from the Polaris Mining Company which represents the Government's royalty on ore produced during the month of September 1958, according to the attached settlement sheet.

Sincerely yours,

Donald R. MacLaren
For: A. E. Weissenborn
Executive Officer, OME
Field Team, Region I

Attachments as indicated
cc: Operator
OME w/encl. ✓
CPF

962.12
591.48
10750.60

ATTACHMENTS REC'D 12-3-58 (DATE)
BY L.L.
ROYALTY TO BE TOTALED $0,280.60 ✓

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BATES NO. USGSP00000449

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RECEIVED DEC 8 1958
DATE | INITIALS | CODE

Schedule E-6 M. E.

HECLA MINING COMPANY

Polaris Mine
Rainbow Area - Final Production

September - 1958

Dry tons milled	306.75	Ounces gold recovered	0.803
Ag Head assay	41.40	Ounces silver recovered	12,438
Cu head assay	1.17	Pounds copper recovered	7,119
		Dry tons concentrates	11.26

Percent recovery	
Ag	97.94
Cu	99.28

CONCENTRATE DATA

Silver	1,104.58 oz.
Gold	0.0713 oz.
Copper	31.61% - 1.00%=30.61%
Antimony	12.32%
Arsenic	1.90%

PAYMENT FOR METALS

Au 0.0713 oz. @ 91.14%	$ 34.9125	$	2.269
Ag 1104.58 oz @ 96.50%	.89123		949.980
Cu 30.61% @	.2418		148.030
Subtotal		$	1,100.279
Less treatment			31.780
Net value per ton		$	1,068.499

TREATMENT

Base charge	$ 15 26
½% value over $250 per ton	4 25
As less 1% @ $0.50 per ton	45
Sb less 1% @ $1.00 per ton	11 32
Solid bottom car @ $0.50 per ton	50
	$ 31 78

11.26 dry tons @ $1,068.499	$ 12 031 30
Freight	
12.1510 wet tons @ $16.64	202 19
Calculated returns	$ 11 829 11
To reconcile	54
Final returns	$ 11 829 65

OME

OFFICIAL FILE COPY O. M. E. RECEIVED NOV 17 1958		
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	J	

So. 157 Howard Street
Spokane 4, Washington
November 10, 1958

Mrs. Dorothy Long, Certifying Officer
OME Field Team, Region I
1201 North Division Street
Spokane 2, Washington

Re: Docket No. DMEA-2879 (Copper-Lead-Antimony)
Polaris Mining Company
Polaris East Exploration Project
Shoshone County, Idaho
Contract No. Idm-E541

Dear Mrs. Long:

Attached is Check No. 12338, dated November 6, 1958, for $968.86 received from the Polaris Mining Company which represents the Government's royalty on ore produced during the month of August 1958, according to the attached settlement sheet.

Sincerely yours,

A. E. Weissenborn
Executive Officer, OME
Field Team, Region I

Attachments as indicated
cc: Operator
OME w/encl. ✓
CPF

Release Copy

ATTACHMENTS RECD	11-10-58 (DATE)
BY	D.L.
ROYALTY PAID TO DATE	$9689.12

NON-PRIVILEGED DOCUMENT

TO BE PHOTOCOPIED AND PRODUCED

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BATES NO. USGSP0000044C

OFFICIAL FILE COPY
O. M. E.
RECEIVED NOV 17 1958

DATE	INITIALS	CODE

Schedule E-6

POLARIS MINING COMPANY

Rainbow Area - Final Production

August - 1958

Dry tons milled	657.15	Ounces gold recovered	1.706
Ag head assay	32.17	Ounces silver recovered	20,845
Cu head assay	0.91	Pounds copper recovered	11,919
		Dry tons concentrates	22.84
Percent recovery			
Ag	98.60		
Cu	99.44		

CONCENTRATE DATA

Silver	912.67 oz.
Gold	0.0747 oz.
Copper	26.09% - 1.00% = 25.09%
Antimony	19.34%
Arsenic	2.28%

PAYMENT FOR METALS

Au 0.0747 oz. @ 91.14%	$ 34.9125	$ 2.377
Ag 912.67 oz. @ 96.50%	.89	783.847
Cu 25.09% @	.23563	118.239
Subtotal		$ 904.463
Less treatment		38.240
Net value per ton		$ 866.223

TREATMENT

Base charge	$ 15 49
½% value over $250 per ton	3 27
As less 1% @ $0.50 per ton	64
Sb less 1% @ $1.00 per ton	18 34
Solid bottom car @ $0.50 per ton	50
	$ 38 24

22.84 dry tons @ $866.223	$ 19 784 53
Freight:	
24.475 wet tons @ $16.64	407 26
Calculated returns	$ 19 377 27
To reconcile	(15)-
Final returns	$ 19 377 12

Bo. 137 Howard Street
Spokane 4, Washington
October 6, 1958

COPY
1958
10/13 C 200
~~10/14 C 300~~

Mrs. Dorothy Long, Certifying Officer
OME, Field Team, Region I
1201 North Division Street
Spokane 2, Washington

Re: Docket No. DMEA-2879 (Copper-Lead-Antimony)
Polaris Mining Company
Polaris East Exploration Project
Shoshone County, Idaho
Contract No. Idm-E341

Dear Mrs. Long:

Attached is Check No. 12244, dated October 3, 1958, for $477.81 received from the Polaris Mining Company which represents the Government's royalty on ore produced during the month of July 1958, according to the attached settlement sheet.

Sincerely yours,

A. E. Weissenborn
Executive Officer, OME
Field Team, Region I

release copy

Attachments as indicated
cc: Operator
DMEA w/encl.
CPF

ATTACHMENTS RECD 10-6-58
BY D.L.
ROYALTY PMTS TO DATE $8720.26

NON-PRIVILEGED DOCUMENT

TO BE PHOTOCOPIED AND PRODUCED

DO NOT CODE

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O. M. E.
RECEIVED OCT 13 1958
DATE | INITIALS | CODE

Schedule E-6

POLARIS MINING COMPANY

Rainbow Area - Final Production

July - 1958

Dry tons milled	365.42	Ounces gold recovered	0.213
Ag head assay	28.77	Ounces silver recovered	10,238
Cu head assay	0.94	Pounds copper recovered	6,566
		Dry tons concentrates	15.09

Percent recovery	
Ag	28.77
Cu	0.94

CONCENTRATE DATA

Silver	678.46 oz.
Gold	0.0141 oz.
Copper	21.76% - 1.00% = 20.76%
Antimony	10.98%
Arsenic	2.25%

PAYMENT FOR METALS

Au 0.0141 oz. @ 91.14%	$ 27.6519	$ 0.341
Ag 678.46 oz. @ 96.34%	.89	581.738
Cu 20.76% @	.23582	97.912
Subtotal		$ 679.991
Less treatment		28.860
Net value per ton		$ 651.131

TREATMENT

Base charge	$ 15 60
1/2% value over $250 per ton	2 15
As less 1% @ $0.50 per ton	63
Sb less 1% @ $1.00 per ton	9 98
Solid bottom car @ $0.50 per ton	50
	$ 28 86

15.09 dry tons @ $651.131	$ 9 825 57
Freight:	
16.1645 wet tons @ $16.64	268 98
Calculated returns	$ 9 556 59
To reconcile	(30)-
Final returns	$ 9 556 29

RECEIVED
OCT 6 1958
U. S. G. S.
SPOKANE, WASH

the quick brown fox jumped over the lazy dog. Now is the time for all good men to come to the aid of their party

DMEA

So. 157 Howard Street
Spokane 4, Washington
August 27, 1958

9-8 C 220

Mrs. Dorothy Long, Certifying Officer
DMEA Field Team, Region I
1201 North Division Street
Spokane 2, Washington

Re: Docket No. DMEA-2879 (Copper-Lead-Antimony)
Polaris Mining Company
Polaris East Exploration Project
Shoshone County, Idaho
Contract No. Idm-E541

Dear Mrs. Long:

Attached is Check No. 12166, dated August 25, 1958, for $360.54 received from the Polaris Mining Company which represents the Government's royalty on ore produced during the month of June 1958, according to the attached settlement sheet.

Sincerely yours,

Donald R. MacLaren
For: Wing G. Agnew
Acting Executive Officer
DMEA Field Team, Region I

Release copy

Attachments as indicated
cc: Operator
DMEA w/encl.
CPF

8-28-58
A.L.
$82 42.45

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Schedule E-6

POLARIS MINING COMPANY

Rainbow Area - Final Production

June - 1958

Dry tons milled	380.42	Ounces gold recovered	0.123
Ag head assay	22.02	Ounces silver recovered	8,152
Cu head assay	0.50	Pounds copper recovered	3,666
		Dry tons concentrates	12.57

Percent recovery

Ag	97.30
Cu	96.92

CONCENTRATE DATA

Silver	648.53 oz.
Gold	0.0098 oz.
Copper	14.58% - 1.00% = 13.58%
Antimony	10.83%
Arsenic	1.13%

PAYMENT FOR METALS

Au 0.0098 oz. @ 91.14% @ $ 33.6484		$ 0.301
Ag 648.53 oz. @ 96.467% @	.89	556.800
Cu 13.58% @	.22925	62.264
Subtotal		$ 619.365
Less treatment		27.390
Net value per ton		$ 591.975

TREATMENT

Base charge	$ 15.14
½% value over $250 per ton	1.85
As less 1% @ $0.50 per ton	.07
Sb less 1% @ $1.00 per ton	9.83
Solid bottom car @ $0.50 per ton	.50
	$ 27.39

12.57 dry tons @ $591.975		$ 7 441 13
Freight:		
13.47 wet tons @ $16.64	$ 224 14	
3% Federal tax	6 20	
Total freight		230 34
Calculated returns		$ 7 210 79
To reconcile		(07)-
Final returns		$ 7 210 72

Official File
DMEA
RECEIVED AUG 25 1958

DATE	INITIALS	CODE
8/25	C	220
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So. 157 Howard Street
Spokane 4, Washington
August 14, 1958

Mrs. Dorothy Long, Certifying Officer
DMEA Field Team, Region I
1201 North Division Street
Spokane 2, Washington

Re: Docket No. DMEA-2879 (Copper-Lead-Antimony)
Polaris Mining Company
Polaris East Exploration Project
Shoshone County, Idaho
Contract No. Idm-E541

Dear Mrs. Long:

Attached is Check No. 12148, dated August 11, 1958, for $459.53 received from the Polaris Mining Company which represents the Government's royalty on ore produced during the month of May 1958, according to the attached settlement sheet.

Sincerely yours,

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

release copy

Attachments as indicated
cc: Operator
DMEA w/encl.
CFF

ATTACHMENTS RECD 8-19-58
BY A.L.
ROYALTY PAYS TO DATE $7881.91

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DATE | INITIALS | CODE

Schedule E-6

POLARIS MINING COMPANY

Rainbow Area - Final Production

May - 1958

Dry tons milled	482.48	Ounces gold recovered	0.078
Ag head assay	21.52	Ounces silver recovered	10,217
Cu head assay	0.59	Pounds coper recovered	5,581
		Dry tons concentrates	15.05

Percent recovery	
Ag	98.42
Cu	98.40

CONCENTRATE DATA

Silver	678.88 oz.
Gold	0.0052 oz.
Copper	18.54% - 1.00% = 17.54%
Antimony	13.22%
Arsenic	2.99%

PAYMENT FOR METALS

Au 0.0052 oz. @ 91.14% @ $ 34.9125		$	0.165
Ag 678.88 oz. @ 96.364% @	.89		582.234
Cu 17.54% @	.22122		77.604
Subtotal		$	660.003
Less treatment			30.880
Net value per ton		$	629.123

TREATMENT

Base charge	$ 15.11
½% value over $250 per ton	2.05
As less 1% @ $0.50 per ton	1.00
Sb less 1% @ $1.00 per ton	12.22
Solid bottom car @ $0.50 per ton	.50
	$ 30.88

15.05 dry tons @ $629.123		$ 9 468 30
Freight:		
16.2005 wet tons @ $16.64	$ 269 58	
3% Federal tax	8 09	
Total freight		277 67
Final returns		$ 9 190 63

DMEA

So. 157 Howard Street
Spokane 4, Washington
July 22, 1958

DMEA RECEIVED		
DATE		
7/28	S.J.	225 500

Mrs. Dorothy Long, Certifying Officer
DMEA Field Team, Region I
1201 North Division Street
Spokane 2, Washington

Re: Docket No. DMEA-2879 (Copper-Lead-Antimony)
Polaris Mining Company
Polaris East Exploration Project
Shoshone County, Idaho
Contract No. Idm-E541

Dear Mrs. Long:

Attached is Check No. 12106, dated July 21, 1958, for $780.35 received from the Polaris Mining Company which represents the Government's royalty on ore produced during the month of April 1958, according to the attached settlement sheet.

Sincerely yours,

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

release copy

Attachments as indicated
cc: Operator
DMEA w/encl.
CPF

ATTACHMENTS REC'D	7-22-58 (DATE)
BY	S.L.
ROYALTY PMTS TO DATE	$742.38

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Schedule E-6

POLARIS MINING COMPANY

Rainbow Area - Final Production

April - 1958

Dry tons milled	1,175.38	Ounces gold recovered	1.508
Ag head assay	15.30	Ounces silver recovered	17,001
Cu head assay	0.46	Pounds copper recovered	10,644
		Dry tons concentrates	25.45

Percent recovery

Ag	97.55
Cu	97.79

CONCENTRATE DATA

Silver	668.00 oz.
Gold	0.0593 oz.
Copper	20.91% - 1.00% = 19.91%
Antimony	9.59%
Arsenic	3.93%

PAYMENT FOR METALS

Au 0.0593 oz. @ 91.14% @	$ 34.9125	$ 1.887
Ag 668.00 oz. @ 96.00% @	.89	570.739
Cu 19.91% @ .	.21793	86.780
Subtotal		$ 659.406
Less treatment		27.680
Net value per ton		$ 631.726

TREATMENT

Base charge	$ 15.26
½% value over $250 per ton	2.05
As less 1% @ $0.50 per ton	1.47
Sb less 1% @ $1.00 per ton	8.59
Solid bottom car @ $0.50 per ton	.31
	$ 27.68

25.45 dry tons @ $631.726		$ 16 077 43
Freight:		
27.4815 wet tons @ $16.64	$ 457 29	
3% Federal tax	13 72	
Total freight		471 01
Calculated returns		$ 15 606 42
To reconcile		51
Final returns		$ 15 606 93

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DMEA
RECEIVED JUN 5 1958
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So. 157 Howard Street
Spokane 4, Washington

May 27, 1958

Mrs. Dorothy Long, Certifying Officer
DMEA Field Team, Region I
1201 North Division Street
Spokane 2, Washington

Re: Docket No. DMEA-2879 (Copper-Lead-Antimony)
Polaris Mining Company
Polaris East Exploration Project
Shoshone County, Idaho
Contract No. Idm-E541

Dear Mrs. Long:

Attached is Check No. 12018, dated May 26, 1958, for $547.52 received from the Polaris Mining Company which represents the Government's royalty on ore produced during the month of March 1958, according to the attached settlement sheet.

Sincerely yours,

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

release copy

Attachments as indicated
cc: Operator
DMEA w/encl.
CPF

ATTACHMENTS REC'D 5-27-58 DATE
BY A.L.
ROYALTY PMTS TO DATE $6642.03

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Schedule E-6

POLARIS MINING COMPANY

Rainbow Area - Final Production

March - 1958

Dry tons milled	566.06	Ounces gold recovered	1.39
Ag head assay	21.70	Ounces silver recovered	11,943
Cu head assay	0.61	Pounds copper recovered	6,825
		Dry tons concentrates	12.85

Percent recovery

Ag	97.22
Cu	98.24

CONCENTRATE DATA

Silver	929.42 oz.
Gold	0.1082 oz.
Copper	26.56% - 1.00% = 25.56%
Antimony	20.78%
Arsenic	2.19%

PAYMENT FOR METALS

Au 0.1082 oz. @ 91.14% @ $ 34.9125		$ 3.443
Ag 929.42 oz. @ 96.16% @	.89	795.420
Cu 25.56% @	.21787	111.375
Subtotal		$ 910.238
Less treatment		39.570
Net value per ton		$ 870.668

TREATMENT

Base charge	$ 15.47
½% value over $250 per ton	3.30
As less 1% @ $0.50 per ton	.60
Sb less 1% @ $1.00 per ton	19.78
Solid bottom car @ $0.50 per ton	.42
	$ 39.57

12.85 dry tons @ $870.668		$ 11 188 08
Freight:		
13.8810 wet tons @ $16.64	$ 230 98	
3% Federal tax	6 93	
Total freight		237 91
Calculated returns		$ 10 950 17
To reconcile		15
Final returns		$ 10 950 32

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So. 157 Howard Street
Spokane 4, Washington

May 2, 1958

Mrs. Dorothy Long, Certifying Officer
DMEA Field Team, Region I
1201 North Division Street
Spokane 2, Washington

Re: Docket No. DMEA-2879 (Copper-Lead-Antimony)
Polaris Mining Company
Polaris East Exploration Project
Shoshone County, Idaho
Contract No. Idm-E541

Dear Mrs. Long:

Attached is Check No. 11968, dated April 30, 1958, for $873.69 received from the Polaris Mining Company which represents the Government's royalty on ore produced during the month of February 1958, according to the attached settlement sheet.

Sincerely yours,

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

release copy

Attachments as indicated

cc: Operator
DMEA w/encl.
CPF

ATTACHMENTS REC'D 5-2-58 (DATE)
BY A.L.
ROYALTY FILES TO DATE $609.51

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BATES NO. USGSP0000449

Schedule E-6

POLARIS MINING COMPANY

Rainbow Area - Final Production

February - 1958

Dry tons milled	777.34	Ounces gold recovered	2.40
Ag head assay	25.76	Ounces silver recovered	19,139
Cu head assay	0.71	Pounds copper recovered	10,675
		Dry tons concentrates	23.66

Percent recovery

Ag	95.57
Cu	97.07

CONCENTRATE DATA

Silver	808.92 oz.
Gold	0.1014 oz.
Copper	22.56% - 1.00% = 21.56%
Antimony	15.46%
Arsenic	2.17%

PAYMENT FOR METALS

Au 0.1014 oz. @ $91.14% @ $ 34.9125		$ 3.226
Ag 808.92 oz. @ $96.5% @ .89		694.741
Cu 21.56% @ .215078		92.742
Subtotal		$ 790.709
Less treatment		33.730
Net value per ton		$ 756.979

TREATMENT

Base charge	$ 15.48
½% value over $250 per ton	2.70
As less 1% @ $0.50 per ton	.59
Sb less 1% @ $1.00 per ton	14.46
Solid bottom car @ $0.50 per ton	.50
Total	$ 33.73

23.66 dry tons @ $756.979		$ 17,910.12
Freight:		
25.5065 wet tons @ $16.61	$ 423.66	
3% Federal tax	12.71	
Total freight		436.37
Calculated returns		$ 17,473.75
To reconcile		(.05)-
Final returns		$ 17,473.70

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RECEIVED 12 1958
DATE CODE

DMEA

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DMEA
RECEIVED APR 7 1958
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4/7 | Klug | 566

So. 157 Howard Street
Spokane 4, Washington

April 1, 1958

Mrs. Dorothy Long, Certifying Officer
DMEA Field Team, Region I
1201 North Division Street
Spokane 2, Washington

Re: Docket No. DMEA-2879 (Copper-Lead-Antimony)
Polaris Mining Company
Polaris East Exploration Project
Shoshone County, Idaho
Contract No. Idm-E541

Dear Mrs. Long:

Attached is Check No. 11863, dated March 28, 1958, for $376.63 received from the Polaris Mining Company which represents the Government's royalty on ore produced during the month of January 1958, according to the attached settlement sheet.

Sincerely yours,

Release Copy

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

Attachments as indicated

cc: Operator
DMEA w/encl.
CPF

4844.19
376.63
5220.82

ATTACHMENTS REC'D 4-1-58 (DATE)
BY D.L.
ROYALTY PMTS TO DATE $5220.82

NON-PRIVILEGED DOCUMENT

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BATES NO. US GSP00000449

Schedule E-6

POLARIS MINING COMPANY

Rainbow Area - Final Production

January - 1958

Dry tons milled	728.33	Ounces gold recovered	0.88
Ag head assay	11.75	Ounces silver recovered	8,190
Cu head assay	0.37	Pounds copper recovered	5,224
		Dry tons concentrates	11.85
Percent recovery			
Ag	95.73		
Cu	96.00		

CONCENTRATE DATA

Silver	691.18 oz.
Gold	0.0743 oz.
Copper	22.04% - 1.00% = 21.04%
Antimony	16.38%
Arsenic	2.57%

PAYMENT FOR METALS

Au	.0743 oz. @ 91.14% @ $34.9125		$ 2.364
Ag	691.18 oz. @ 96.5% @ .89		593.620
Cu	21.04 % @ .21896		92.138
	Subtotal		$ 688.122
Less treatment			34.100
	Net value per ton		$ 654.022

TREATMENT

Base charge	$ 15.24
½% value over $250 per ton	2.19
As less 1% @ $0.50 per ton	.79
Sb less 1% @ $1.00 per ton	15.38
Solid bottom car @ $0.50 per ton	.50
Total	$ 34.10

11.85 dry tons @ $654.022		$ 7,750.16
Freight:		
12.8685 wet tons @ $16.39	$ 210.91	
3% federal tax	6.33	
Total freight		217.24
Calculated returns		$ 7,532.92
To reconcile		(34)-
Final returns		$ 7 532.58

RECEIVED

MAR 31 1958

U. S. G. S.
SPOKANE, WASH.

So. 157 Howard Street
Spokane 4, Washington

3/3 3/4 Q Kley 220 500

February 27, 1958

Mrs. Dorothy Long, Certifying Officer
DMEA Field Team, Region I
1201 North Division Street
Spokane 2, Washington

Re: Docket No. DMEA-2879 (Copper-Lead-Antimony)
Polaris Mining Company
Polaris East Exploration Project
Shoshone County, Idaho
Contract No. Idm-E541

Dear Mrs. Long:

Attached is Check No. 11813, dated February 26, 1958, for $308.18 received from the Polaris Mining Company which represents the Government's royalty on ore produced during the month of December 1957, according to the attached settlement sheet.

Sincerely yours,

Donald R. MacLaren
For: A. E. Weissenborn
Executive Officer, DMEA
Field Team, Region I

release copy

Attachments as indicated

cc: Operator
DMEA w/encl.
CPF

ATTACHMENTS REC'D 2-27-58 (DATE)
BY A.L.
ROYALTY PMTS TO DATE $4844.19

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BATES NO. USGSP0000049

Schedule E-6

POLARIS MINING COMPANY

Rainbow Area - Final Production

December - 1957

Dry tons milled	586.95	Ounces gold recovered	0.576
Ag head assay	11.52	Ounces silver recovered	6,507
Cu head assay	0.43	Pounds copper recovered	4,920
		Dry tons concentrates	10.04
Percent recovery			
Ag	96.24		
Cu	97.68		

CONCENTRATE DATA

Silver	648.11 oz.
Gold	0.0574 oz.
Copper	24.50% - 1.00% = 23.50%
Antimony	15.33%
Arsenic	4.97%

PAYMENT FOR METALS

Au	0.0574 oz. @ 91.14% @ $ 34.9125		$ 1.826
Ag	648.11 oz. @ 96.5 % @	.89	556.629
Cu	23.50 % @	.22876	107.517
	Subtotal		$ 665.972
Less treatment			33.840
	Net value per ton		$ 632.132

TREATMENT

Base charge	$ 14.94
½% value over $250 per ton	2.08
As less 1% @ $0.50 per ton	1.99
Sb less 1% @ $1.00 per ton	14.33
Solid bottom car @ $0.50 per ton	.50
Total	$ 33.84

10.04 dry tons @ $632.132		$ 6,346.61
Freight:		
10.848 wet tons @ $16.39	$ 177.80	
3% Federal tax	5.33	
Total freight		183.13
Calculated returns		$ 6,163.48
To reconcile		.03
Final returns		$ 6,163.51

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DMEA
RECEIVED MAR 3 1958
DATE

DMF4

So. 157 Howard Street
Spokane 4, Washington

February 11, 1958

RECEIVED FEB 19 1958		
DATE	AMTS	CODE
2-19		220
2-19		500

Mrs. Dorothy Long, Certifying Officer
DMEA Field Team, Region I
1201 North Division Street
Spokane 2, Washington

Re: Docket No. DMEA-2879 (Copper-Lead-Antimony)
Polaris Mining Company
Polaris East Exploration Project
Shoshone County, Idaho
Contract No. Idm-E541

Dear Mrs. Long:

Attached is Check No. 11790, dated February 7, 1958, for $236.33 received from the Polaris Mining Company which represents the Government's royalty on ore produced during the month of November 1957, according to the attached settlement sheet.

Sincerely yours,

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

release copy

Attachments as indicated

cc: Operator
DMEA w/encl.
CPF

ATTACHMENTS REC'D	2-11-58 (DATE)
BY	A.L.
ROYALTY PMTS TO DATE	$4536.01

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BATES NO. USGSP00000449

Schedule E-6

POLARIS MINING COMPANY

Rainbow Area - Final Production

November - 1957

Dry tons milled	461.37	Ounces gold recovered	0.74
Ag head assay	11.84	Ounces silver recovered	5,307
Cu head assay	0.28	Pounds copper recovered	2,394
		Dry tons concentrates	7.25
Percent recovery			
Ag	97.16		
Cu	94.21		

CONCENTRATE DATA

Silver	732.00 oz.
Gold	0.1021 oz.
Copper	16.51% - 1.00% = 15.51%
Antimony	15.90%
Arsenic	1.66%

PAYMENT FOR METALS

Au	0.1021 oz. @ 91.14% @ $34.9125	$	3.249
Ag	732.00 oz. @ 96.08% @ .89009		626.005
Cu	15.51 % @ .23827		73.911
	Subtotal	$	703.165
Less treatment			32.940
	Net value per ton	$	670.225

TREATMENT

Base charge	$ 14.94
½% value over $250 per ton	2.27
As less 1% @ $0.50 per ton	.33
Sb less 1% @ $1.00 per ton	14.90
Solid bottom car @ $0.50 per ton	.50
Total	$ 32.94

7.25 dry tons @ $670.225		$ 4,859.13
Freight:		
7.8475 wet tons @ $16.39	$ 128.62	
3% Federal tax	3.86	
Total freight		132.48
Calculated returns		$ 4,726.65
To reconcile		(09)-
Final returns		$ 4,726.56

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RECEIVED FEB 19 1958

DATE	INITIALS	CODE

DMEA

So. 157 Howard Street
Spokane 4, Washington

December 23, 1957

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RECEIVED DEC 30 1957
DATE | BATCH | CODE | AMOUNT
12/30 | C Kling | 220 | 500

Mrs. Dorothy Long, Certifying Officer
DMEA Field Team, Region I
1201 North Division Street
Spokane 2, Washington

Re: Docket No. DMEA-2879 (Copper-Lead-Antimony)
Polaris Mining Company
Polaris East Exploration Project
Shoshone County, Idaho
Contract No. Idm-E541

Dear Mrs. Long:

Attached is Check No. 11694, dated December 19, 1957, for $667.87 received from the Polaris Mining Company which represents the Government's royalty on ore produced during the month of October 1957, according to the attached settlement sheet.

Sincerely yours,

Release Copy

Donald R. MacLaren
For: A. E. Weissenborn
Executive Officer, DMEA
Field Team, Region I

Attachments as indicated

cc: Operator
DMEA w/encl.
CPF

ATTACHMENTS REC'D 12-24-57 (DATE)
BY D.L.
ROYALTY TONS TO DATE 4299.68

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DO NOT CODE

BATES NO. USGSPO0000449

Schedule E-6

POLARIS MINING COMPANY

Rainbow Area - Final Production

October - 1957

Dry tons milled	1,031.40	Ounces gold recovered	1.11
Ag head assay	14.88	Ounces silver recovered	14,901
Cu head assay	0.32	Pounds copper recovered	6,355
		Dry tons concentrates	19.11
Percent recovery			
Ag	97.09		
Cu	97.27		

CONCENTRATE DATA

Silver	779.74 oz.
Gold	0.0591 oz.
Copper	16.63% - 1.00% = 15.63%
Antimony	12.16%
Arsenic	1.64%

PAYMENT FOR METALS

Au	.0591 oz. @ 91.14% @ $34.9125	$ 1.881
Ag	779.74 oz. @ 96.00% @ .89525	670.140
Cu	15.63% @ .23855	74.571
	Subtotal	$ 746.592
Less treatment		29.550
	Net value per ton	$ 717.042

TREATMENT

Base charge	$ 15.09
½% value over $250 per ton	2.48
As less 1% @ $0.50 per ton	.32
Sb less 1% @ $1.00 per ton	11.16
Solid bottom car@ $0.50 per ton	.50
Total	$ 29.55

19.11 dry tons @ $717.042		$ 13,702.67
Freight:		
20.419 wet tons @ $16.39	$ 334.67	
3% Federal tax	10.04	
Total freight		344.71
Calculated returns		$ 13,357.96
To reconcile		(64)-
Final returns		$ 13,357.32

DMEA
RECEIVED DEC 13 1957

DATE		CODE
12/13	gb	220
12/17		500

So. 157 Howard Street
Spokane 4, Washington

December 9, 1957

Mrs. Dorothy Long, Certifying Officer
DMEA Field Team, Region I
1201 North Division Street
Spokane 2, Washington

Re: Docket No. DMEA-2879 (Copper-Lead-Antimony)
Polaris Mining Company
Polaris East Exploration Project
Shoshone County, Idaho
Contract No. Idm-E541

Dear Mrs. Long:

Attached is Check No. 11669, dated December 5, 1957, for $572.51 received from the Polaris Mining Company which represents the Government's royalty on ore produced during the month of September 1957, according to the attached settlement sheet.

Sincerely yours,

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

Release copy

Attachments as indicated

cc: Operator
DMEA w/encl.
CPF

ATTACHMENTS REC'D 12-10-57 (Date)
BY D.L.
ROYALTY PAID TO DATE $263.81

NON-PRIVILEGED DOCUMENT

TO BE PHOTOCOPIED AND PRODUCED

DO NOT CODE

BATES NO. MSG5P00000449

Schedule E-6

POLARIS MINING COMPANY

Rainbow Area - Final Production

September - 1957

Dry tons milled	626.00	Ounces gold recovered	1.02
Ag head assay	21.09	Ounces silver recovered	12,739
Cu head assay	0.37	Pounds copper recovered	4,474
		Dry tons concentrates	9.90

Percent recovery

Ag	96.48
Cu	96.31

CONCENTRATE DATA

Silver	1,286.77 oz.
Gold	0.1030 oz.
Copper	22.60% - 1.0% = 21.60%
Antimony	18.92%
Arsenic	2.73%

PAYMENT FOR METALS

Au	0.1030 oz. @ 91.14% @ $34.9125		$ 3.277
Ag	1286.77 oz. @ 96.00%	.89625	1,107.137
Cu	21.60% @	.23916	103.317
	Subtotal		$ 1,213.731
Less treatment			39.030
	Net value per ton		$ 1,174.701

TREATMENT

Base charge	$ 15.23
½% value over $250 per T.	4.51
As less 1% @ $0.50 per T.	.87
Sb less 1% @ $1.00 per T.	17.92
Solid bottom car @ $0.50 per ton	.50
Total	$ 39.03

9.90 dry tons @ $1,174.701		$ 11,629.54
Freight:		
10.6125 wet tons @ $16.39	$ 173.94	
3% Federal tax	5.22	
Total freight		179.16
Calculated returns		$ 11,450.38
To reconcile		(.19)
Final returns		$ 11,450.19

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AUG 13 1957
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DMEA
RECEIVED NOV 4 1957

DATE	INITIALS	CODE
11/4	gb	220
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So. 157 Howard Street
Spokane 4, Washington

October 29, 1957

Mrs. Dorothy Long, Certifying Officer
DMEA Field Team, Region I
1201 North Division Street
Spokane 2, Washington

Re: Docket No. DMEA-2879 (Copper-Lead-Antimony)
Polaris Mining Company
Polaris East Exploration Project
Shoshone County, Idaho
Contract No. Idm-E541

Dear Mrs. Long:

Attached is Check No. 11604, dated October 28, 1957, for $936.28 received from the Polaris Mining Company which represents the Government's royalty on ore produced during the month of Ausut 1957, according to the attached settlement sheet.

Sincerely yours,

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

release copy

Attachments as indicated

cc: Operator
DMEA w/encl.
CPF

ATTACHMENTS REC'D 10-30-57
BY D.L.
ROYALTY PAYS TO DATE 3,059.30

NON-PRIVILEGED DOCUMENT

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BATES NO. MSGSP0000044G

POLARIS MINING COMPANY

Rainbow Area - Final Production

August - 1957

Dry tons milled	770.90	Ounces gold recovered	0.91
Ag head assay	27.39	Ounces silver recovered	20,736
Cu head assay	0.50	Pounds copper recovered	7,514
		Dry tons concentrates	17.08
Percent recovery			
Ag	98.20		
Cu	97.78		

CONCENTRATE ASSAY

Silver	1,214.05 oz.
Gold	0.0533 oz.
Copper	22.00% - 1.00% = 21.00%
Antimony	14.92%
Arsenic	4.14%

PAYMENT FOR METALS

Au	0.0533 oz. @ 91.14% @ $34.9125	$ 1.696	
Ag	1214.05 oz. @ 96.232% @ .89632	1,047.175	
Cu	21.00% @ .24076	101.119	
	Subtotal	$ 1,149.990	
Less treatment		36.040	
	Net value per ton	$ 1,113.950	

TREATMENT

Base charge	$ 15.55
½% value over $250 per T.	4.50
As less 1% @ $0.50 per T.	1.57
Sb less 1% @ $1.00 per T.	13.92
Solid bottom car @ $ 0.50 per ton	.50
Total	$ 36.04

17.08 dry tons @ $ 1,113.950 . . . . . $ 19,026.27

Freight:		
18.309 wet tons @ $ 15.92	$ 291.42	
3% Federal tax	8.74	
Total freight		300.16
Calculated returns		$ 18,726.11
To reconcile		(.51)-
Final returns		$ 18,725.60

DMEA

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DMEA
RECEIVED OCT 15 1957

10/15 C 220
10/15 ~~Ulg~~ J 500

So. 157 Howard Street
Spokane 4, Washington

October 7, 1957

Mrs. Dorothy Long, Certifying Officer
DMEA Field Team, Region I
1201 North Division Street
Spokane 2, Washington

Re: Docket No. DMEA-2879 (Copper-Lead-Antimony)
Polaris Mining Company
Polaris East Exploration Project
Shoshone County, Idaho
Contract No. Idm-E541

Dear Mrs. Long:

Attached is Check No. 11558, dated October 3, 1957, for $190.94 received from the Polaris Mining Company which represents the Government's royalty on ore produced during the month of July 1957, according to the attached settlement sheet.

Sincerely yours,

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

release copy

Attachments as indicated

cc: Operator
DMEA w/encl.
CPF

ATTACHMENTS REC'D 10-7-57 (DATE)
BY D.L.
ROYALTY PMTS TO DATE $2123.02

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BATES NO. USGSP00000449

Schedule E-6

POLARIS MINING COMPANY

Rainbow Area - Final Production

July - 1957

Dry tons milled	98.29	Ounces gold recovered	0.30
Ag head assay	44.65	Ounces silver recovered	4,273
Cu head assay	0.76	Pounds copper recovered	1,429
		Dry tons concentrates	3.94
Percent recovery			
Ag	97.36		
Cu	95.85		

CONCENTRATE ASSAY

Silver	1,084.52 oz.
Gold	0.0761 oz.
Copper	18.13% - 1.00%= 17.13%
Antimony	20.42%
Arsenic	3.75%

PAYMENT FOR METALS

Au	.0761 oz. @ 91.14% @ $34.9125	$	2.421
Ag	1,084.52 oz. @ 96% @ .89907		936.057
Cu	17.13% @ .2566		87.911
	Subtotal	$	1,026.389
Less treatment			40.520
	Net value per ton	$	985.869

TREATMENT

Base charge	$ 15 34
½% value over $250 per ton	3 88
As less 1% @ $0.50 per ton	1.38
Sb less 1% @ $1.00 per ton	19.42
Solid bottom car @ $0.50 per ton	.50
Total	$ 40 52

3.94 dry tons @ $985.869		$ 3 884 32
Freight:		
4.15 wet tons @ $15.36	$ 63 74	
3% Federal tax	1 91	
Total freight		65 65
Calculated returns		$ 3 818 67
To reconcile		04
Final returns		$ 3 818 71

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9/10	[illegible]	[illegible]

So. 157 Howard Street
Spokane 4, Washington

August 30, 1957

Mrs. Dorothy Long, Certifying Officer
DMEA Field Team, Region I
1201 North Division Street
Spokane 2, Washington

Re: Docket No. DMEA-2879 (Copper-Lead-Antimony)
Polaris Mining Company
Polaris East Exploration Project
Shoshone County, Idaho
Contract No. Idm-E541

Dear Mrs. Long:

Attached is Check No. 11496, dated August 29, 1957, for $83.00 received from the Polaris Mining Company which represents the Government's royalty on ore produced during the month of June 1957, according to the attached settlement sheet.

Sincerely yours,

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

Release Copy

Attachments as indicated

cc: Operator
DMEA w/encl.
CPF

ATTACHMENTS REC'D 9-3-57 (DATE)
BY D. L.
ROYALTY PMTS TO DATE $1932.08

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BATES NO. MSGSP0000649

Schedule E-6

POLARIS MINING COMPANY

Rainbow Area - Final Production

June - 1957

Dry tons milled	90.18	Ounces gold recovered	0.14
Ag head assay	22.18	Ounces silver recovered	1,929
Cu head assay	0.24	Pounds copper recovered	412
		Dry tons concentrates	2.07
Percent recovery			
Ag	96.45		
Cu	93.50		

CONCENTRATE ASSAY

Gold	0.0676 oz.
Silver	931.88 oz.
Copper	9.94% - 1.00% = 8.94%
Antimony	10.74%
Arsenic	1.95%

PAYMENT FOR METALS

Au- .0676 oz.	@ 91.14%	@ $34.9125	$ 2.151
Ag-931.88 oz.	@ 96%	@ .8925	798.435
Cu- 8.94%		@ .262424	46.921
Subtotal			$847.507
Less treatment			28.790
Net value per ton			$818.717

TREATMENT

Base charge	$ 15 08
½% value over $250 per ton	2 99
As less 1% @ $0.50 per ton	48
Sb less 1% @ $1.00 per ton	9 74
Solid bottom car @ $0.50 per ton	50
Total	$ 28 79

2.07 dry tons @ $818.717		$ 1 694 74
Freight		
2.2125 wet tons @ $15.36	$ 33 98	
3% Federal tax	1 02	
Total		35 00
Calculated returns		$ 1 659 74
To reconcile		24
Final returns		$ 1 659 98

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AUG 30 1957
U. S. G. S.
SPOKANE, WASH.

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RECEIVED AUG 19 1957

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~~8/19~~	[redacted]	

So. 157 Howard Street
Spokane 4, Washington

August 12, 1957

Mrs. Dorothy Long, Certifying Officer
DMEA Field Team, Region I
1201 North Division Street
Spokane 2, Washington

Re: Docket No. DMEA-2879 (Copper-Lead-Antimony)
Polaris Mining Company
Polaris East Exploration Project
Shoshone County, Idaho
Contract no. Idm-E541

Dear Mrs. Long:

Attached is Check No. 11462, dated August 8, 1957, for $177.13 received from the Polaris Mining Company which represents the Government's royalty on ore produced druing the month of May 1957, according to the attached settlement sheet.

Sincerely yours,

D. R. MacLaren
Acting Member, DMEA
Field Team, Region I

Release Copy

Attachments as indicated

cc: Operator
DMEA w/copy of settlement sheet
CPF

ATTACHMENTS REC'D 8-13-57 (DATE)
BY D. L.
ROYALTY PMTS TO DATE $1849.08

NON-PRIVILEGED DOCUMENT

TO BE PHOTOCOPIED AND PRODUCED

DO NOT CODE

BATES NO. USGS900000449

Schedule E-6

POLARIS MINING COMPANY

Rainbow Area - Final Production

May - 1957

Dry tons milled	152.85	Ounces gold recovered	0.14
Ag head assay	26.63	Ounces silver recovered	3,930
Cu head assay	0.45	Pounds copper recovered	1,333
		Dry tons concentrates	3.91

Percent recovery

Ag	96.54
Cu	97.14

withhold
do not copy

CONCENTRATE ASSAY

Silver	1,005.12 oz.
Gold	0.0358 oz.
Copper	17.05 % - 1.00% 16.05%
Antimony	13.40 %
Arsenic	3.41 %

PAYMENT FOR METALS

Au	0.0358 oz.	@ 91.14% @ $34.9125	$ 1.139
Ag	1,005.12 oz.	@ 96% @ .89607	864.632
Cu	16.05%	@ .28004	89.893
	Subtotal		$ 955.664
Less treatment			32.590
	Net value per ton		$ 923.074

TREATMENT

Base charge	$ 14 95
½% value over $250 per ton	3 53
As less 1% @ $0.50 per ton	1 21
Sb less 1% @ $1.00 per ton	12 40
Solid bottom car@ $0.50 per ton	50
Total	$ 32 59

3.91 dry tons @ $923.074		$ 3 609 22
Freight		
4.2005 wet tons @ $15.36	$ 64 52	
3% Federal tax	1 94	
Total		66 46
Calculated returns		$ 3 542 76
To reconcile		(11)-
Final returns		$ 3 542 65

Dmea

OFFICIAL FILE COPY DMEA RECEIVED JUL 29 1957		
DATE	INITIALS	CODE
7/29	P.K.	220
7/29	Klug	500

So. 157 Howard Street
Spokane 4, Washington

July 19, 1957

Mrs. Dorothy Long, Certifying Officer
DMEA Field Team, Region I
1201 North Division Street
Spokane 2, Washington

Re: Docket No. DMEA-2879 (Copper-Lead-Antimony)
Polaris Mining Company
Polaris East Exploration Project
Shoshone County, Idaho
Contract No. Idm-E541

Dear Mrs. Long:

Attached is Check No. 11433, dated July 18, 1957, for $16.87 received from the Polaris Mining Company which represents the Government's royalty on ore produced during the month of April 1957, according to the attached settlement sheet.

Sincerely yours,

Release copy

R. D. Sample
For: A. E. Weissenborn
Executive Officer, DMEA
Field Team, Region I

Attachments as indicated

cc: Operator
DMEA w/encl. ✓
CPF

ATTACHMENTS REC'D	7-22-57 (DATE)
BY	A.L.
ROYALTY PAID TO DATE	$671.95

NON-PRIVILEGED DOCUMENT

TO BE PHOTOCOPIED AND PRODUCED

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BATES NO. USGSPO0000449

POLARIS MINING COMPANY

Rainbow Area - Final Production

April - 1957

Dry tons milled	188.00	Ounces gold recovered	0.25
Ag head assay	3.06	Ounces silver recovered	518.
Cu head assay	0.10	Pounds copper recovered	313.
		Dry tons concentrates	5.01
Percent recovery			
Ag	89.93		
Cu	83.53		

CONCENTRATE ASSAY

Silver	103.39 oz.	
Gold	0.0499 oz.	
Copper	3.13 % - 1.00%	2.13%
Antimony	4.81%	
Arsenic	1.65%	

PAYMENT FOR METALS				TREATMENT	
Au-0.0499 oz. @ 91.14% @ $34.9125		$ 1.588		Base charge	$ 14.82
Ag-103.39 oz. @ 96.00% @	.903374	89.664		½% value over $250 per ton	
Cu-2.13% @	.2884844	12.289		As less 1% @ $0.50 per ton	.33
Subtotal		$103.541		Sb less 1% @ $1.00 per ton	3.81
Less treatment		19.460		Solid bottom car @ $0.50 per ton	.50
Net value per ton		$ 84.081		Total	$ 19.46

5.01 dry tons @ $84.081		$ 421 25
Freight:		
5.3055 wet tons @ $15.36	$ 81 49	
3% Federal tax	2 44	
Total freight		83 93
Calculated returns		$ 337 32
To reconcile		(01)-
Final returns		$ 337 31

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D M E A
RECEIVED JUL 29 1957
DATE | INITIALS | CODE

So. 157 Howard Street
Spokane 4, Washington

June 5, 1957

RECEIVED
JUN 13 1957
D.M.E.A.

Mrs. Dorothy Long, Certifying Officer
DMEA Field Team, Region I, NW District
1201 North Division Street
Spokane 2, Washington

Re: Docket No. DMEA-2379 (Copper-Lead-Antimony)
Polaris Mining Company
Polaris East Exploration Project
Shoshone County, Idaho
Contract No. idm-1541

Dear Mrs. Long:

Attached is Check No. 11333, dated June 3, 1957, for $801.25 received from the Polaris Mining Company which represents the Government's royalty on ore produced during the month of March 1957, according to the attached settlement sheet.

Sincerely yours,

A. J. Weissenborn
Executive Officer, DMEA
Field Team, Region I
Northwest District

Release Copy

Attachments as indicated

cc: Operator
DMEA w/encl.
CPF

ATTACHMENTS REC'D 6-6-57 (DATE)
BY D.L.
ROYALTY PMTS TO DATE $1655.08

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BATES NO. USGSPD0000449

Schedule E-6

POLARIS MINING COMPANY

Rainbow Area - Final Production

March - 1957

Dry tons milled	881.07	Ounces gold recovered	0.76
Ag head assay	19.74	Ounces silver recovered	16,820
Cu head assay	0.48	Pounds copper recovered	8,176
		Dry tons concentrates	16.00
Percent recovery			
Ag	96.69		
Cu	96.37		

RECEIVED JUN 13 1957 D.M.E.A.

CONCENTRATE ASSAY

Silver	1,051.25 ounces	
Gold	0.048 ounces	
Copper	25.55% - 1.00%	24.55%
Antimony	19.50%	
Arsenic	1.74%	

PAYMENT FOR METALS

Au-0.048 oz. @ 91.14% @ $34.9125		$ 1.527	
Ag-1051.25 oz.@96.1421% @	.90375	913.415	
Cu-24.55% @	.2893	142.046	
Subtotal		$1056.988	
Less treatment		38.220	
Net value per ton		$1018.768	

TREATMENT

Base charge	$ 14 81
½% value over $250 per ton	4 04
As less 1% @ $0.50 per ton	37
Sb less 1% @ $1.00 per ton	18 50
Solid bottom car @ $0.50 per ton	50
Total	$ 38 22

16.00 dry tons @ $1018.768		$ 16 300 29
Freight:		
17.3385 wet tons @ $15.40	$ 267 01	
3% federal tax	8 01	
Total		275 02
Calculated returns		$ 16 205 27
To reconcile		(19)
Final returns		$ 16 025 08

So. 157 Howard Street
Spokane 4, Washington

May 24, 1957

Mrs. Dorothy Long, Certifying Officer
DMEA Field Team, Region 1, NW District
1201 North Division Street
Spokane 2, Washington

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D M E A
RECEIVED MAY 31 1957

DATE	INITIALS	CODE
5/31	JWB	220
5/31	~~WPK~~	~~500~~

Re: Docket No. DMEA-2379 (Copper-~~Lead~~-Antimony)
Polaris Mining Company
Polaris East Exploration Project
Shoshone County, Idaho
Contract No. Idm-2541

Dear Mrs. Long:

Attached is Check No. 11319, dated May 22, 1957, for $673.96 received from the Polaris Mining Company which represents the Government's royalty on ore produced during the months of December 1956 and January and February 1957, according to the attached settlement sheets.

Sincerely yours,

Donald R. MacLaren
for: A. E. Weissenborn
Executive Officer, DMEA
Field Team, Region 1
Northwest District

Attachments as indicated

cc: Operator
DMEA w/encls.
CPF

ATTACHMENTS REC'D	5-27-57 (DATE)
BY	D.L.
ROYALTY PMTS TO DATE	$853.82

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BATES NO. USGSP0000449

RECEIVED
BUREAU OF MINES
MAY 2 1957
SPOKANE, WASH.

Schedule 2-6

POLARIS MINING COMPANY

Test Exploration Project - Final Production

December - 1956

Dry tons milled	49.05	Ounces gold recovered	0.03
Ag head assay	3.44	Ounces silver recovered	140
Cu head assay	0.14	Pounds copper recovered	113
		Dry tons concentrates	0.62

Percent recovery

Ag	94.[illegible]
Cu	94.04

CONCENTRATE ASSAY

Silver	225.32 oz.
Gold	0.044 oz.
Copper	9.15% - 1.00% = 8.15%
Antimony	14.55%
Arsenic	3.95%

PAYMENT FOR METALS

Au-0.044 oz. @ 91.14% @ $34.9125	$ 0.044	Base charge	$ 13 75
Ag-225.32 oz. @ 97.50% @ .90375	198.942	As less 1% @ $0.50 per ton	2 26
Cu-8.15% @ .33	53.790	Sb less 1% @ $1.00 per ton	13 55
Subtotal	$ 252.776	Solidbottom car @ $0.50 per ton	.50
Less treatment	30.000		
Net value per ton	$ [illegible]	Total	$ 30 06

[illegible]

Freight:

0.62 wet tons @ $15.36	$ 10 63
3% federal tax	.32
Total freight	10 95
Calculated returns	$ [illegible]
To reconcile	(05)
Final returns	$ [illegible]

Schedule 3-6

[redacted]

[redacted] Project - Final Production

[redacted]

[redacted]	[redacted]	[redacted]	[redacted]
[redacted]	[redacted]	[redacted]	[redacted]
[redacted]	[redacted]	[redacted]	[redacted]

Schedule E-6

POLARIS MINING COMPANY

East Exploration Project - Final Production

February - 1957

Dry tons milled	591.63	Ounces gold recovered	0.46
Ag head assay	22.16	Ounces silver recovered	12,839
Cu head assay	0.62	Pounds copper recovered	7,075
		Dry tons concentrates	15.78
Percent recovery			
Ag	97.93		
Cu	96.69		

[redacted]

Silver	868.70 oz.
Gold	0.0290 oz.
Copper	22.41% - 1.00 21.41%
Antimony	13.75%
Arsenic	2.50%

PAYMENT FOR METALS

Au-0.0290 oz. @ 91.14% @ $34.9125			$ 0.983
Ag-813.62 oz. @ 96.13288		.90375	706.887
Cu-21.41%	@	.20975	124.071
Subtotal			$831.861
Less treatment			31.650
Net value per ton			$800.211

TREATMENT

Base charge	$ 14 24
% value over $250 per ton	2 91
As less 1% @ $0.50 per ton	75
Sb less 1% @ $1.00 per ton	12 75
Solid bottom car @ $0.50 per ton	0 50
Total	$ 31 65

15.78 dry tons @ $800.211 . . . . . $ 12,627 33

Freight:

17.019 wet tons @ $15.36 $ 261 41

3% federal tax 7 8

Total freight [redacted]

Calculated return [redacted]

To reconcile [redacted]

Final returns [redacted]

Estimated returns [redacted]

Underestimate [redacted]

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION

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

~~Kingsbury~~
Betty

April 25, 1956

Mrs. Myrtle Purdy, Certifying Officer
DMEA Field Team, Region I, NW District
1202 North Division Street
Spokane 2, Washington

Re: Docket No. DMEA-2879 (Copper-Lead-Antimony)
Polaris Mining Company
Polaris East Exploration Project
Shoshone County, Idaho
Contract No. Idm-2541

Dear Mrs. Purdy:

Attached is Check No. 10520 dated April 23, 1956, for $174.87 received from the Polaris Mining Company which represents the Government's royalty on two shipments of concentrates from this project during the months of May and July 1954 according to the attached settlement sheets, and copy of Operator's letter.

Sincerely yours,

RECEIVED
APR 30 1956

A. E. Weissenborn
Executive Officer, DMEA
Field Team, Region I
Northwest District

Attachments as indicated

cc: Operator
DMEA w/encls. ✓
CPF

ATTACHMENTS REC'D 4-25-56 (DATE)
BY M.P.
ROYALTY PMTS TO DATE 174 87

[illegible]

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BATES NO. USGSP0000449

[illegible] ORE SHIPMENT

LOT NO.

Company

Dry Tons 2,160

GROSS VALUE

QUOTATIONS

METALLIC LOSSES

SETTLEMENT

Dry Tons

ASSAYS AND

Contained in Pelona shipment as follows:
lots PS-166, PS-167, to Tacoma Smelter
lots PS-168, PS-169, to Garfield Smelter

East Exploration Project
Feasy, 1956
Final

[redacted] ORE SETTLEMENT

LOT NO. _____

Pelona Mining Company

WEIGHTS: Wet 9907 lbs. H2O 3997 lbs. Dry 4520 lbs. Dry Tons 2.260

	ASSAYS	CONTENTS	QUOTATIONS	GROSS VALUE
Gold	0.1599 ozs.	.3598 ozs.	$34.125 per oz.	$ 12.27
Silver	677.20 ozs.	1535 ozs.	.89 per oz.	1366.15
Copper	26.4 %	1180 lbs.	29.700 per lb.	350.46
Lead	%	lbs.	per lb.	
Zinc	%	lbs.	per lb.	
Iron	%	lbs.		
Insol.	%	lbs.		
Sulphur	%	lbs.		
SO	19.91	900		
AS	0.88	40		

$ 1728.83

METALLIC LOSSES

Gold					1.08
Silver	—8% 3.577	oz.			49.17
Copper	— 1 unit from Assay	45 lbs.	29.20	13.37	
	— Remainder	1135 lbs.	.025	28.38	41.75
Lead	— ____% of Contents	lbs.			
	— Remainder	lbs.			
Zinc	— 87.5% of Contents	lbs.			

$ 92.00

TREATMENT

	Per Ton	
BASE CHARGE:	$ 11.300	
Credit ____% iron over (____% Zinc x 1.77) @ 40c		
Debit ____% iron under (____% Zinc x 1.77) @ 40c		
Credit ____% silica over (____% Iron x .667) @ 60c		
Debit ____% silica under (____% Iron x .667) @ 60c		
Credit ____% lime over (____% Iron x .970) @ 10c		
Debit ____% lime under (____% Iron x .970) @ 10c		
Silver charge over 30 oz. ____ oz. @ ____ per oz.	15.910	
Antimony charge over 1% @ 50c per unit		
Arsenic charge over 1% @ 50c per unit	.466	
~~Bismuth charge over 0.1% of wet lead @ 50c lb.~~ Labor	(1.02)	
~~Moisture charge over 10% @ 60c per unit~~ Haul	.288	
~~Sulphur charge over 10% @ 10c per unit~~ Sphl Bottom Cap	2.927	
Excess Value over $30.00 ton @ (.50%)		$ 1636.80
~~Freight on lead to New York @ ($ [redacted])~~		
TOTAL TREATMENT	$ 32.289	$ 75.23
		$ 1561.60
NET VALUE	20.26	
1.4535 Tons Deduct—Freight to Smelter 7.18 + 15%	.61	
—3% Tax	.47	$ 21.34
~~Smelting~~ Lutching charge		
		$ 1540.26
NET PROCEEDS		$ 1540.26

Polaris Mining Company

RECEIVED
DIV. OF MINES
APR 2 4 1956
SPOKANE, WASH.

Wallace, Idaho
April twenty-third
1 9 5 6

Defense Minerals Exploration Administration
U.S. Department of the Interior
1201 North Division Street
Spokane 2, Washington

ATTENTION: Mr. A. E. Weissenborn
Executive Officer

Re: Polaris East Exploration Project
Docket No. DMEA -2879
Contract No. Idm-E541

Gentlemen:

We recently reviewed with Mr. Erickson the matter of royalty due DMEA with respect to the subject contract. According to our records we would owe a royalty of 5% on $3,497.40 of net smelter returns for the months of May and July, 1954 amounting to $174.87, which is covered by the enclosed check.

Yours very truly,

Robert E. Sorenson

Robert E. Sorenson

RES:eel
Enc.

release
copy

HECLA MINING COMPANY
P. O. BOX 320
WALLACE, IDAHO 83873
(208) 752-1251

May 31, 1978

TO THE SHAREHOLDERS OF
HECLA MINING COMPANY

The text of a press release, jointly made by Hecla Mining Company and The Superior Oil Company on Tuesday afternoon May 30, 1978, follows:

> "In a joint press release issued March 14, 1978, The Superior Oil Company and Hecla Mining Company announced an agreement in principle under which Superior would acquire a participation in the Lakeshore copper mine near Casa Grande, Arizona, as well as a substantial stock interest in Hecla Mining Company. The companies jointly announce today that Superior has elected, following completion of its investigation of Hecla's properties and operations, to withdraw from the proposed transactions outlined in the agreement in principle."

I was informed of The Superior Oil Company decision to withdraw from the transactions outlined in our Memorandum of Agreement, dated March 14, 1978, by telephone early yesterday afternoon.

My understanding of Superior's reason for termination of the agreement is that they are reluctant to assume cost of Hecla's obligations at the Lakeshore copper mine in Arizona.

Insofar as we have been informed by Superior, or have been able to determine ourselves, Superior's investigations did not disclose any factors which had material or adverse effect on the value of Hecla's assets as represented to Superior. On the contrary, and to the best of our knowledge, Superior's investigation found all facets of Hecla's business to be as Hecla had represented prior to the agreements reached March 14, 1978.

As we have previously related to you, the substantial losses at the Lakeshore Mine have resulted in a serious drain on the Company's financial resources. It was necessary in early April to reach an agreement with the Company's lending banks to amend the Credit Agreement to increase the credit line to $56,339,000 and to defer the first payment of principal to July 1, 1978, when $6,839,000 will be due. We will now request a further extension of this date from the Banks.

In view of its financial problems, Hecla has been engaged for more than a year in efforts to find a method by which the burden of its Lakeshore Mine expenditures could be eased and the debt servicing requirements under the Credit Agreement reduced. After exploring various alternatives, agreements were reached with The Superior Oil Company which appeared to be of benefit to both companies. It is unfortunate that Superior has now decided to withdraw.

Since verbal agreements were reached by Hecla and Superior, a period of nearly 3 months has elapsed. During this crucial time efforts have been directed toward working with Superior's investigative team, drafting agreements, preparing a proxy statement, and re-negotiating terms of the Bank Credit Agreement.

With continuing assistance from our financial advisors, Lehman Brothers Kuhn Loeb Incorporated, we must now consider what other actions may be taken by the Company. We will report to you promptly when decisions are reached.

W. H. LOVE
President and
Chief Executive Officer

HECLA MINING COMPANY
Box 320
WALLACE, ID. 83873

FIRST CLASS MAIL

United States Department of the Interior

GEOLOGICAL SURVEY
RESTON, VIRGINIA 22092

In Reply Refer To:
United States v. Hecla Mining Company
USAtty. No. N-76-0130

United States Attorney
District of Idaho
Federal Building, Box 037
550 West Fort Street
Boise, Idaho 83724

Re: DMEA-2879 (Lead-Zinc-Copper-Antimony)
Hecla Mining Co. (Successor to
Polaris Mining Company)
Silver Summit Mine (Polaris East)
Shoshone County, Idaho
Amended Contract Idm-E541

Dear Sir:

This letter is to inquire about possible plans concerning a decision on the subject docket.

The enclosed copy of our file of correspondence on the docket is the only information we have since it was referred to the Department of Justice.

Mr. Willard P. Puffett, geologist and then Field Officer, OME Region I, U.S. Geological Survey's Office of Minerals Exploration (OME), retired on December 31, 1977. Mr. Puffett had planned to join Mr. Shurtliff in the meeting planned with Mr. Keane on July 21 or 22, 1977. A successor to Mr. Puffett has not been designated because the OME program is not funded at present for exploration contracts. We have no information on any actions or decisions on this matter since cancellation of that proposed meeting.

We are anxious to know what actions, if any, have been taken, and future plans regarding this matter.

Sincerely yours,

Harold Kirkemo

Harold Kirkemo, Chief
Office of Minerals Exploration

cc: T. H. Kiilsgaard w/copy of past correspondence
J. W. Hasler

Source of ore

Map of Hecla ground
see Docket

Acknowledgement that stockpile material was derived from Hecla ground

Letter from,
- ASARCO

Letter from
DME

shipment records ?

United States Department of Justice

UNITED STATES ATTORNEY

District of Idaho
Federal Building, Box 037
550 West Fort Street
BOISE, IDAHO 83724

July 8, 1977

Rec'd 7/11/77 WP

James P. Keane
Attorney at Law
311 Main Street
Kellogg, Idaho 83837

Re: United States v. Hecla Mining Company
USAtty. No. N-76-0130

Dear Mr. Keane:

Thank you for your letter of June 24, 1977, concerning a meeting to discuss this case on July 21 or July 22. Unfortunately I will be leaving the United States Attorney's Office to enter private practice on July 15, 1977, and I will not be able to attend the meeting. The case will have to be reassigned to a new Assistant United States Attorney and he will need time to become familiar with the case. It would probably be best to allow the new attorney to work directly with you in scheduling a future meeting.

Your cooperation in this matter has been appreciated.

Very truly yours,

M. KARL SHURTLIFF
United States Attorney
By:

Mikel H. Williams

MIKEL H. WILLIAMS
Assistant United States Attorney

MHW:ssj

cc: Willard Puffett
U.S. Geological Survey
Mail Stop 905
Denver Federal Center
Denver, Colorado 80225

6/17/77

Harold:

I got this material in the mail today. Tentatively, I plan to be in Reston the week of July 11, at which time we can discuss the Hecla matter.

Cheers!

Wallace

Copy sent to C.L. Martin 6/20/77

WM 6/17/77

United States Department of Justice

UNITED STATES ATTORNEY

District of Idaho
Federal Building, Box 037
550 West Fort Street
BOISE, IDAHO 83724

June 14, 1977

Mr. Williard Puffett
U. S. Geological Survey
Mail Stop 905
Denver Federal Center
Denver, Colorado 80225

Re: United States v. Hecla Mining Company - USAtty. No. N-76-0130, Proposed Civil Action to Recover Royalties.

Dear Mr. Puffett:

Please find enclosed copies of correspondence that have been sent between our Office, Hecla Mining Company, and United States Department of Justice. As indicated in the letter from Hecla Mining Company dated November 4, 1976, they would like to meet with us prior to the institution of any civil case in this matter to collect royalties, if any in fact are found to be due and owing. I will try to make arrangements with the Hecla Mining Company representatives for such a meeting during the week of July 18, 1977, as you requested during our telephone conversation last week. As soon as a firm date has been set, I will contact you immediately so you can make the necessary travel arrangements. I am also going to request that Hecla have available at the conference representatives from the American Smelting and Refining Company (ASARCEO) so we can better discover exactly what is involved in this matter.

If I can answer any further questions or be of any assistance to you during the meantime, please do not hesitate to contact our Office at FTS 554-1211.

Very truly yours,
M. KARL SHURTLIFF
United States Attorney
By

Mikel H. Williams

MIKEL H. WILLIAMS
Assistant United States Attorney

Enclosures

MHW:ds

United States Department of Justice

UNITED STATES ATTORNEY
District of Idaho
Federal Building, Box 037
550 West Fort Street
BOISE, IDAHO 83724

November 9, 1976

Department of Justice
Washington, D. C. 20530

Attention: Stuart E. Schiffer, Chief, Commercial Litigation Section, Civil Division

Dear Sir:

Re: Hecla Mining Company - USAtty. N-76-0130
DJ Ref. REL:KMcCARTHY:lmn 77-1164

Pursuant to your instructions in your memorandum of July 13, 1976, I have sent a demand letter to Hecla Mining Company (copy enclosed). I have enclosed a copy of their response. They indicate that they have no objection to Government inspection of pertinent records at ASARCO. How do you wish to proceed mechanically to make such inspection?

You will note also that the letter from Hecla Mining asks for a conference between their representatives and representatives of the Government. Do you desire such a conference, and if so, who would represent the Government?

Please advise regarding the above matters at your earliest convenience.

Sincerely yours,
WILBUR T. NELSON
United States Attorney
By

GARY L. MONTGOMERY
Assistant U. S. Attorney

GLM/nr
Encls.

HECLA MINING COMPANY
P. O. BOX 320
WALLACE, IDAHO 83873
(208) 752-1251

RECEIVED
NOV 9 1976
U.S. ATTY'S OFFICE
Ref to _____

November 4, 1976

CERTIFIED MAIL

Mr. Wilbur T. Nelson
United States Attorney
District of Idaho
Federal Building
Box 037
550 West Fort Street
Boise, Idaho 83724

Attention: Mr. Gary Montgomery
Assistant United States Attorney

Re: U.S. v. Hecla Mining Company -
U.S. Atty. No. N-76-0130

Dear Mr. Montgomery:

Reference is made to your letter of October 27, received in our offices October 29, pursuant to which the United States makes demand upon Hecla Mining Company for payment of royalties pursuant to contract executed on June 3, 1953 (the contract involves the DMEA-2879; contract No. IDM-E541).

It is stated in your letter that it is your understanding that Asarco will allow the Government to inspect the pertinent records, if Hecla has no objection, and you requested a letter from Hecla stating that Hecla has no objection to the Government inspection of pertinent records at Asarco to determine the exact amount of royalties due. Please be advised that Hecla has no objection to your inspection of documents in the possession of Asarco pertaining to ores milled and sold prior to November 1, 1975, for the purpose of ascertaining the exact amount alleged to be due the Government.

In addition, your letter stated that demand was made that Hecla make payment, or see that payment of royalties now owing is made, no later than November 22, 1976, and your letter further stated that if the royalties are not paid by that date the Government will file suit to collect same. Hecla presently has no means by which it could calculate a royalty if, in fact, one might be found to be owing. Further, we have been advised that a number of defenses are available to us, both in law and equity, in the event that a suit were in fact filed for non-payment of royalties. Some of the defenses lie in the general law (such as surety - principal relationship), in the terms of the Agreement itself (the numerous references to "its", meaning Polaris', production and the location of the ores produced and facilities used for extraction) and in equity (the expressed intent of Congress when passing the DMEA legislation, and the effect of such a claim encumbering non-DMEA properties).

As you have stated your intent to file a lawsuit on or about November 22, 1976, we believe it would be both advisable and beneficial for both of us to discuss these matters with you or other officials of your office prior to November 22, 1976, inasmuch as Hecla has no ownership of or interest in any of the production to which reference is made, nor do we have any of the records upon which a royalty calculation could be made. Further, it is our desire, if possible, to avoid the expense and inconvenience which would result from what apparently would become protracted legal proceedings.

May we look forward to hearing from you in this matter at your early convenience.

Very truly yours,

W. H. Love
President

WHL:skp

United States Department of Justice

UNITED STATES ATTORNEY

District of Idaho
Federal Building, Box 037
550 West Fort Street
BOISE, IDAHO 83724

October 27, 1976

CERTIFIED MAIL - RETURN RECEIPT REQUESTED

Mr. W. H. Love
President and Chief
Executive Officer
Hecla Mining Company
Hecla Building
Wallace, Idaho 83873

Dear Mr. Love:

Re: U. S. v. Hecla Mining Company - USAtty. No. N-76-0130

The United States hereby makes demand upon Hecla Mining Company (Hecla) for payment of royalties due and owing to the United States Government as a result of a contract executed on June 3, 1953. (The contract involved is DMEA-2879; Contract No. IDM-E541.) The operator under the contract was Polaris Mining Company (Polaris). Hecla is the successor in liability to Polaris under the contract. Under the contract, Hecla is, therefore, obligated to pay the Government royalties on mineral production from the property described in the contract, if the Government issued a Certificate of Discovery or Development on the project. The Government did issue such a Certificate.

In September, 1961, Hecla notified the Office of Minerals Exploration (OME) that it was surrendering its ownership rights to the lands involved. OME promptly notified Hecla that, even though it had surrendered its interest in the property, it nevertheless remained liable until November 1, 1975, as surety under Article VI(b) of the contract, as amended, for royalties due the Government on all minerals produced from such lands, or transported through mine workings developed under the DMEA contract.

Sometime after 1964, the American Smelting and Refining Company (ASARCO) began mining ore from the project land and stockpiling it. The Government informed Hecla and ASARCO that it had no objection to deferment of payment of royalties until the stockpiled ore was milled. In 1974 and 1975, ASARCO apparently milled the ore and sold it in quantities and grades which would yield approximately $25,000 in royalties to the Government. ASARCO, however, has declined to allow the Government to inspect its records; and, therefore, the $25,000 is merely an estimate. It is our understanding that ASARCO will allow the Government to inspect the pertinent records if Hecla says it has no objection, so that the exact amount of royalties due can be ascertained.

Hecla Mining Company cannot be released from its obligation to make royalty payments on production as required under the terms and provisions of the referenced contracts, and the royalty on production is a right accruing to the Government. Furthermore, there are no provisions in the contracts permitting the Government to waive its right to such royalty. Therefore, we hereby request a letter from Hecla indicating it has no objection to the Government inspecting pertinent documents at ASARCO to determine the exact amount of royalties due. In addition, we make demand upon Hecla to make payment, or to see that payment of royalties now owing is made, no later than November 22, 1976. If the royalties are not paid by said date, the Government will file suit to collect the same.

Very truly yours,
WILBUR T. NELSON
United States Attorney
By

GARY MONTGOMERY
Assistant United States Attorney

GM:rsn

SENDER: Be sure to follow instructions on other side

PLEASE FURNISH SERVICE(S) INDICATED BY CHECKED BLOCK(S)
(Additional charges required for these services)

☐ Show address where delivered ☐ Deliver ONLY to addressee

RECEIPT
Received the numbered article described below

REGISTERED NO. C3
CERTIFIED NO. 024191
INSURED NO.
DATE DELIVERED OCT 29 1976

(1) SIGNATURE OR NAME OF ADDRESSEE (Must always be filled in)
HECLA MINING COMPANY
BOX 320
WALLACE, IDAHO

(2) SIGNATURE OF ADDRESSEE'S AGENT, IF ANY
Chris Cole

(3) SHOW WHERE DELIVERED (Only if requested, and include ZIP Code)

DELIVER TO ADDRESSEE ONLY ..... 50¢
SPECIAL DELIVERY (extra fee required) .....

No.

PS Form 3800 Apr. 1971 NO INSURANCE COVERAGE PROVIDED— NOT FOR INTERNATIONAL MAIL (See other side)
☆ GPO : 1974 O - 551-454

FORM CIV-189
3-10-76

N-76-0130

UNITED STATES DEPARTMENT OF JUSTICE

WASHINGTON, D.C. 20530

Address Reply to the Division Indicated and Refer to Initials and Number

RECEIVED
OCT 8 1976
U.S. ATTY'S OFFICE
Ref to

September 29, 1976

REL:KMCCARTHY:lmn
77-1164

Marion J. Callister
United States Attorney
Boise, Idaho

Re: Hecla Mining Company

Dear Mr. Callister:

We have reviewed this matter and believe that it can be most effectively handled directly by your office without supervision by the Civil Division. Therefore, pursuant to § 4 of Civil Division Memo No. 374 (28 C.F.R., Chapter I, Part 0, Appendix to Subpart Y), authority is hereby delegated to you to proceed in such a fashion and effect such disposition of this matter as you deem advisable. In so proceeding, please bear in mind the limitations on delegations of authority as set forth in § 5 of Memo No. 374 and the need for soliciting agency views as set forth in § 6.

Please keep the agency concerned informed of the progress of this matter, and remit any recoveries directly to the agency. Although, in the absence of any special circumstances, you need not correspond with us further on this matter, you should, of course, always feel free to call upon us if you feel that we can be of assistance.

Sincerely,

REX E. LEE
Assistant Attorney General
Civil Division

By: Stuart E. Schiffer
Stuart E. Schiffer, Chief
Commercial Litigation Section

cc: Department of the Interior
Office of the Solicitor
Washington, D.C. 20240
Attn: John C. McDowell
Associate Solicitor
Division of Energy and Resources

CAA

EXTRA COPY
C. M. E.
RECEIVED
DATE

So. 157 Howard Street
Spokane, Washington 99204
May 18, 1964

Memorandum

To: Fiscal Section, Office of Management Operations
Office of the Secretary, Department of the Interior
Washington, D. C.

From: Acting Field Officer, Region 1

Subject: DMMA-2879 (Lead-Zinc-Copper-Antimony)
Hecla Mining Co. (Successor to
Polaris Mining Company)
Silver Summit Mine (Polaris East)
Shoshone County, Idaho
Amended Contract Idm-2941

Enclosed is the original of a Report of Royalty Review, dated May 4, 1964, covering the period November 8, 1960, through April 1, 1964.

As this Report of Royalty Review is for record purposes only, no copy is provided for the Operator. One copy, however, is being retained in the Spokane office files.

D. F. MacLaren

Enclosure

MLMmlsermls

cc: CMR(2)
CAAA
Director's Reading File
Resources Research Branch Chief

MAY 12 1964

Memorandum

To: Acting Field Officer, Region I (Signed) E. D. Talbert

From: Chief, Contract Administration and Audit Division

Subject: DMEA-2879 (Lead-Zinc-Copper-Antimony)
Hecla Mining Company, Successor to
Polaris Mining Company
Silver Summit Mine (Polaris East)
Shoshone County, Idaho
Amended Contract Idm-E541

The original and one copy of a Report of Royalty Review covering the subject contract are enclosed. If you concur in the facts stated therein, please make the following distribution:

(a) Original to the Fiscal Section, Office of Management Operations, Office of the Secretary, U. S. Department of the Interior, Washington, D. C. 20240; and

(b) One copy for your files.

This Report of Royalty Review is made for record purposes only; therefore, no copy for the Operator is provided.

As evidence of your concurrence, a copy of your memorandum transmitting the original report to the Fiscal Section should be furnished this Division. If for any reason you do not concur, both copies of the report should be returned to this Division with your comments.

Enclosures

EDTalbert/ama 5-12-64

cc:
Docket
Director's Reading File
CA & A Division
Fiscal Section

MAR 6 1963

Mr. Justin L. Rice
President
Rainbow Mining and Milling Company, Ltd.
Gyde-Taylor Building
Wallace, Idaho

Re: DMRA-2879 (Lead-Zinc-Copper-Antimony)
Hecla Mining Company, Successor to
Polaris Mining Company
Silver Summit Mine (Polaris East)
Shoshone County, Idaho
Amended Contract Ida-8341

Dear Mr. Rice:

We have your February 26 letter covering the referenced project. The requested letter copies are enclosed.

We regret that we do not know of any concerns which might be interested in taking over your property, nor do we know of any Government loan programs which might be applicable.

You make mention of the Government loan to the Magna Copper Company. This was made during an emergency period when copper was a highly critical metal.

You may be very sure that if, at any time, we should learn of any company which might be interested in operating your property we would be glad to refer them to you.

Sincerely yours,

George Fumich, Jr.

Director

Enclosures

WHGriswold/mm
3/6/63
cc: Director's Reading File
✓CMA Division
Region I (2) w/2 copies of incoming letter
Docket
Code 500

Mr. Justin L. Rice
President
Rainbow Mining and Milling Company, Ltd.
Cyde-Taylor Building
Wallace, Idaho

Re: HMEA-2879 (Lead-Zinc-Copper-Antimony)
Hecla Mining Company, Successor to
Polaris Mining Company
Silver Summit Mine (Polaris East)
Shoshone County, Idaho
Amended Contract Idm-8541

Dear Mr. Rice:

This is in reference to your May 11 inquiry concerning the subject contract.

The Hecla Mining Company as principal, or as surety if it is not the producer, is responsible to the Government for the payment of royalties on any production of minerals from the land covered by the contract or transported through workings to the east of which the Government has contributed.

We appreciate your statement that we will be notified at any time when there might be a change in the present status.

Sincerely yours,

George Fumich, Jr.

Director

WHGriswold/gla 5-21-62
Rewritten: WHGriswold/gla 5-22-62
Rewritten: WHGriswold/gla 5-25-62
Rewritten: GFumich/gla 6-1-62
cc to: Director's Reading File
Region I (2) w/2 cys incoming letter
Contract Division
Docket
Code 500

RAINBOW MINING AND MILLING COMPANY, LIMITED

203 GYDE-TAYLOR BUILDING
WALLACE, IDAHO

OFFICIAL FILE COPY
O. M. E
RECEIVED MAY 15 1962

May 11, 1962

United States Department of the Interior
Office of Minerals Exploration
Washington 25, D. C.

Re: MMA-2019
Contract Ida-8541

Gentlemen:

Please refer to your letter to us dated October 30, 1961 regarding the amount due the Government because of its participation in the exploration work which was performed under the above-captioned contract.

Your letter was our first official knowledge of the amount of the Government's participation in the exploration project and we would like some clarification of our position with regard to the amount due the Government. Are we correct in our assumption that repayment of the loan in the form of production royalties would be the responsibility of Hecla Mining Company and would not become a liability of this company or any other operator of the property? In other words, we want to be sure that the amount due the Government is not a lien on production from property and that Hecla Mining Company is the only concern or person that would be liable for repayment.

No work has been done in the property since Hecla surrendered its agreement; we will notify you when there is any change in the present status. You may not be aware that, prior to surrender of the agreement, Hecla Mining Company removed all rails, ventilation pipe, and air and water lines from the workings. Thus the possibility of future production through these workings is a rather remote one.

Yours very truly,

Justin L. Rice
President

Mn. REFERENCE SLIP

REV. 2-59 OFFICE OF MINERALS EXPLOR ON 11/ 3/61

TO: Chief, Div. of Field Operations	DATE	INITIALS
1.		
Re: DMEA-2879 (Pb-Zn-Cu-Sb)		
2. Hecla Mining Co., Successor to		
Polaris Mining Co.		
3. Silver Summit Mine (Polaris East)		
Shoshone County, Idaho		
4. Contract Idm-E541		
Donald R. MacLaren		
5. Donald R. MacLaren		
FROM: Acting Field Officer, Region I		

EXTRA COPY

O. M. E.

RECEIVED NOV 6 1961

DATE	INITIALS	CODE

FOR: Check items for action desired

X Action	Reply for signature of		
Approval	Investigate		Surname
Comment	Recommendations		Signature
Conference	Rewrite		File
Instructions	Your information		

REMARKS: John Matthews advised us by telephone that Merger Mines Corp. was notified of Hecla's liquidation of their interest in the land. Omission of a copy of the letter with others accompanying Matthews' letter of 9/19/61, to Weissenborn was an oversight. The date of 5/ 4/53 in your Merger letter (signed by the Director) is correct according to Matthews.

INT.-DUP. SEC., WASH., D.C. M56300-59

NOV 3 1961

Mr. C. H. Hunter, President
Morgan Mines Corporation
105 North 5th Street
Coeur d'Alene, Idaho

Re: IMBA-2879 (Lead-Zinc-Copper-Antimony)
Hecla Mining Company, Successor to
Polaris Mining Company
Silver Summit Mine (Polaris East)
Shoshone County, Idaho
Contract Ida-8141

Gentlemen:

Only recently did we learn that in May of 1960 the Hecla Mining Company, as successor in interest to Polaris Mining Company, surrendered the agreement of May 4, 1953, covering portion of your lands. Such lands, among others, were the subject of a Indemnity Mineral Exploration Administration contract, dated June 3, 1953, with the Polaris Mining Company. On March 23, 1956, the Office of Minerals Exploration, successor to the IMEA, issued a certification of discovery or development thereby obligating the operator under the contract to the payment of royalties on all production from the lands in the contract and on outside production transported through IMEA workings until November 1, 1973, or until the sum of $436,913.48, the Government's participation, is repaid, whichever occurs first.

As it is now the responsibility of OGC to see that royalty is paid whenever due under the terms of the contract, we shall appreciate being kept currently informed of any change in the status of the land and of the production therefrom.

Sincerely yours,

George Fumich, Jr.

Director

WMGrimwold/GCSelfridge/gla/hb/gla
10-27-61
cc to: Director's Reading File
Region I (2)
Contract Division
Docket
Code 500

OCT 3 0 1961

Rainbow Mining and Milling Company, Ltd.
Ogle-Taylor Building
Wallace, Idaho
Attention: Mr. R. C. Mowery

Re: DMEA-2879 (Lead-Zinc-Copper-Antimony)
Neale Mining Company, Successor to
Polaris Mining Company
Silver Summit Mine (Polaris Unit)
Shoshone County, Idaho
Contract Ida-8341

Gentlemen:

Only recently did we learn that in May of 1960 the Neale Mining Company, as successor in interest to Polaris Mining Company, surrendered the agreement of August 31, 1953, covering certain of your lands. Such lands, among others, were the subject of a Defense Minerals Exploration Administration contract, dated June 3, 1953, with the Polaris Mining Company. On March 23, 1959, the Office of Minerals Exploration, successor to the DMEA, issued a certification of discovery or development thereby obligating the operator under the contract to the payment of royalties on all production from the lands in the contract and on outside production transported through DMEA workings until November 1, 1975, or until the sum of $436,519.48, the Government's participation, is repaid, whichever occurs first.

As it is now the responsibility of OMX to see that royalty is paid whenever due under the terms of the contract, we shall appreciate being kept currently informed of any change in the status of the land and of the production therefrom.

Sincerely yours,

George Fumich, Jr.
Director

WHGriswold/GCSelfridge/gla/mb/gla
10-27-61

cc to: Director's Reading File
Region I (2)
Contract Division
Docket
Code 500

OCT 3 0 1961

Silver Standard Mining Company
E. 604 Mansy Avenue
Spokane 22, Washington
Attention: Mrs. C. M. Shaw, Secretary

Re: DMEA-2679 (Lead-Zinc-Copper-Antimony)
Hecla Mining Company, Successor to
Polaris Mining Company
Silver Summit Mine (Polaris East)
Shoshone County, Idaho
Contract Ida-E541

Gentlemen:

Only recently did we learn that in May of 1960 the Hecla Mining Company, as successor in interest to Polaris Mining Company, surrendered the agreement of May 4, 1953, covering certain of your lands. Such lands, among others, were the subject of a Defense Minerals Exploration Administration contract, dated June 3, 1953, with the Polaris Mining Company. On March 23, 1959, the Office of Minerals Exploration, successor to the DMEA, issued a certification of discovery or development thereby obligating the operator under the contract to the payment of royalties on all production from the lands in the contract and on outside production transported through DMEA workings until November 1, 1975, or until the sum of $436,919.48, the Government's participation, is repaid, whichever occurs first.

As it is now the responsibility of OME to see that royalty is paid whenever due under the terms of the contract, we shall appreciate being kept currently informed of any change in the status of the land and of the production therefrom.

Sincerely yours,

George Fumich, Jr.

Director

WRGriswold/GCSelfridge/gla/hb/gla
10-27-61
cc to: Director's Reading File
Region I (2)
Contract Division
Docket
Code 500

Identical letters to:
American Silver Mining Company
123 West 4th Avenue - Room 25
Spokane, Washington
Attn: Mr. L. B. Cimmell,
Coeur d'Alene Consolidated
Lead Mines,
621 Columbia Building
Spokane 1, Washington
Attn: Mr. James A. Ali

OFFICE OF MINERALS EXPLORATION
CONTRACT ADMINISTRATION AND AUDIT DIVISION

REPORT OF ROYALTY REVIEW

I have reviewed the files of the Washington office pertaining to Amended Contract Idm-E541, Docket DMEA-2879 (lead-zinc-copper-antimony), effective November 1, 1953, with

Polaris Mining Company
and its successor by merger
Hecla Mining Company
P. O. Box 320
Wallace, Idaho

for the purpose of determining the amount of royalty payable to the U. S. Government on sales of minerals from property referred to as the Silver Summit Mine located in Shoshone County, Idaho, during the period November 8, 1960, through April 1, 1964.

A certification of discovery or development was issued on March 23, 1959, and, in accordance with Article 6, Annex III, and Amendment No. 2, of the Amended Contract, royalty is payable on all minerals produced from the land described in Article 2 and Annex I of the Amended Contract and Annex I of a Prior Contract for a period of 22 years from the effective date of the contract or until the total net amount contributed by the Government without interest is fully repaid, whichever occurs first. A Report of Review dated December 16, 1958, indicated accepted costs under the exploration contract amounting to $873,838.95 with the Government's contribution on a 50 percent basis being $436,919.48.

The status of the project, the scope of review, and the reasons therefor are stated on page 2.

This review found no sales subject to the Government's royalty subsequent to the period covered by a prior Report of Royalty Review which found the sales subject to the Government's royalty through November 7, 1960, to be $344,448.98. The royalty account as of November 7, 1960, was:

Total Royalty Payable	$17,222.48
Total Royalty Paid	17,222.48
Balance of Royalty Due	$ -0-

As of April 1, 1964, the royalty account of this project was found to be:

Total Royalty Payable	$17,222.48
Total Royalty Paid	17,222.48
Balance of Royalty Due	$ -0-

E. D. Talbert, OME Auditor

May 4, 1964

STATUS OF PROJECT, SCOPE OF REVIEW
AND REASONS THEREFOR

This Amended Contract provides that the Operator, as principal if the producer or as surety if not the producer, shall pay to the Government a percentage royalty on all minerals produced from the land thereunder or transported through any workings to the cost of which the Government contributed. The land consists of 36 patented and 38 unpatented claims in the Silver Belt of the Coeur d'Alene Mining District. At the time the contract was executed the Operator (Polaris Mining Company) was in possession by virtue of 1953 agreements with Merger Mines Corporation, Rainbow Mining and Milling Company, Ltd., Silver Standard Mining Company, American Silver Mining Company, and Coeur d'Alene Consolidated Silver-Lead Mines, Inc.

The usual contractual requirement for Consents to Lien and Subordination Agreements was waived on the Operator's specific guarantee, in Annex I of the Amended Contract, that it had the necessary interest in the land "to secure the Government in the payment of any percentage royalty on production from said land that may accrue to the Government". This guarantee was in addition to the surety provision of Article 6(b) of the contract.

Exploration work under the contract was completed during September 1958. Production during the exploration period and thereafter until April 1959, when mining operations ceased, resulted in 481.89 SDT of concentrates containing 27.04 oz. Au, 374,865 oz. Ag, and 189,224 lbs Cu. The $344,448.93 proceeds subject to royalty are covered by Royalty Audit Reports and Certificates dated May 20, 1958, and June 25, 1959, and a Report of Royalty Review dated November 15, 1960.

By letter dated November 26, 1958, the Hecla Mining Company advised that, effective October 31, 1958, all rights and obligations of every kind of the Operator (Polaris Mining Company) had been assumed by Hecla as the surviving corporation of a merger. By letter dated September 19, 1961, Hecla advised that, by notices dated May 27, 1960, it had surrendered all interests in the properties under the contract.

Examination of the property on December 23, 1959, by an OME regional representative disclosed no unreported production and no activity on the property other than exploratory drilling. In a May 11, 1962, letter Rainbow Mining and Milling Company, Ltd., 203 Gyde-Taylor Building, Wallace, Idaho, (owner of 22 patented claims under the contract) stated that Hecla had removed all rails, ventilation pipe,

and air and water lines and that no work had been done on the property since Hecla surrendered its agreement. In an October 22, 1963, reply to a MME Form 63 inquiry, Rainbow indicated neither change in property status nor production since May 11, 1962.

In a February 15, 1964, reply to a MME Form 63 inquiry, Merger Mines Corporation, 421 Sherman Ave., Coeur d'Alene, Idaho, indicated no change in property status and no production since May 27, 1960, from the contract lands under its control (10 patented claims and 5 unpatented claims).

In an April 1, 1964, reply to a MME Form 63 inquiry, Silver Standard Mining Company, 13019 East 8th, Spokane, Washington, indicated no change in property status and no production since May 27, 1960, from the contract lands under its control (4 patented claims and 12 unpatented claims).

As of the date of this review no replies to MME Form 63 inquiries dated February 14, 1964, had been received from American Silver Mining Company and Coeur d'Alene Consolidated Silver-Lead Mines, Inc., regarding changes in property status and production since May 27, 1960, from the contract lands under their control (15 unpatented claims and 6 unpatented claims, respectively). Inasmuch as the royalty repayment period does not expire until November 1, 1975, further follow-up action to determine the present status of these unpatented claims is recommended.

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

(1) The files indicate that all production from the property since the date of the contract has been accounted for and proper royalty thereon paid;

(2) All mining operations on the property were discontinued during April 1959; and

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

The [illegible] Record

Vol. 78, No. 11, Established 1899 [illegible], Thursday, June 4, 1964 $2.00 a Year, 20c a Copy

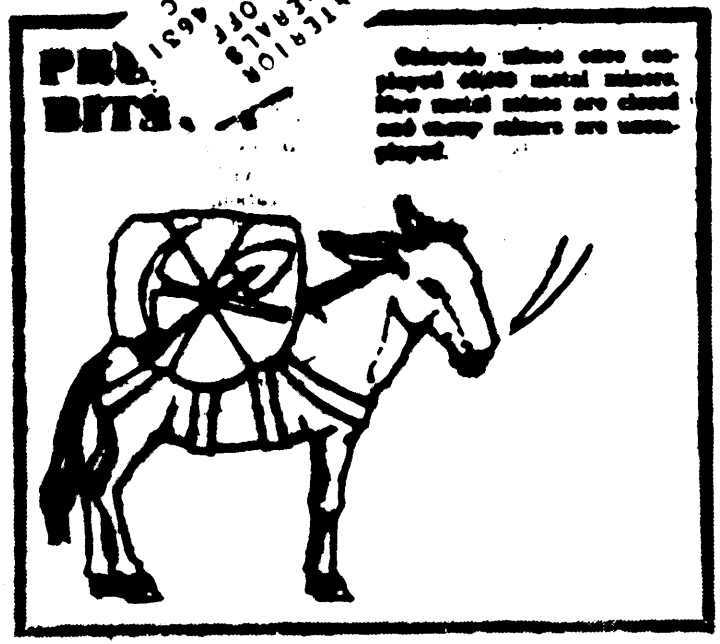
DEPT OF INTERIOR
BUR OF MINES
EXP ACM-INFO OFF
18 & E ST NW-R 4631
WASHINGTON 25 D C

Valley Miners To Organize

(Special to the Mining Record)—Seventy-five persons, nearly all interested in one phase or another of mining, met at Del Norte last week to discuss prospects for improving the mining industry in the San Luis Valley.

Consensus was that the Valley should organize a mining organization. Seven men were appointed to form such an association with members from each camp making up the board of directors.

Claim holders presented a history of their properties at the morning session. Afternoon speakers were Robert Palmer, executive director of the Mining Industrial Board who spoke on the mineral resources of the Valley and the state, showing the great need for minerals and development of mines; R. B. [illegible] of the American Smelting [illegible]ining Co.; Blaine Watts [illegible] United States Smelting, [illegible] and Mining Co.; and [illegible] Butler of the F. B. [illegible] New York who ex-[illegible] Butle[illegible]mperial smelting [illegible] Valley [illegible] mill of some agreed the [illegible] the large qu[illegible] a smelter or [illegible] ore, but it w[illegible] because of [illegible] of available [illegible]phasized it



Sinclair Has Plans To Recover Shale Oil

The Sinclair Oil Corp. announced it will test what it hopes will prove to be a low cost method of recovering shale oil in Western Colorado.

The Sinclair method, scheduled for field test this summer, calls for burning of part of the oil underground and the use of the resulting heat to release oil imbedded in the shale.

The released oil then is expected to flow through fractures created in the shale bed and is drawn off through a conventional oil [illegible]

[illegible] testified the [illegible] Shale Corp., and Cleveland-Cliffs Iron Corp. [illegible] a joint venture for production of oil from shale near Rifle. On May 1, the Interior Department [illegible] that it will [illegible]

Big Deal Is Rumored In Coeur d'Alenes

What appears to be the Coeur d'Alene District's biggest mining deal of recent years is in the making, involving the Silver Belt area, presently the "hottest" mining spot in the nation, the Wallace, Idaho, Miner reports.

Four properties — Coeur d'Alene Mines, Rainbow, American Silver and Merger—are getting topmost rating in the rumor list and there is no secret of the fact that the American Smelting and Refining Co. has an operating agreement in that area in the negotiation stages.

Coeur d'Alene Mines Corp. has been maintaining its shaft so that geological examinations could be made and stock in this firm has risen spectacularly in the past week. Stocks in the other three firms have also been rising.

Any large-scale operation in the area would open up many properties between the present Sunshine workings and the Gem mine, the Idaho newspaper continued.

The Chester vein in the Sunshine's Unit Area is producing some fine silver specimens on the 4,200 level. One specimen is said to have run over 500 ounces and was from the vein which measured six feet wide. New silver finds in the local district are proving to be richer in silver values as depth is attained. This has stirred interest in properties which have not been explored at this horizon.

Federal Resources of Salt Lake City, which started as a uranium firm and then diversified into silver and lead with operations at the Conjecture on Pend Oreille lake and in the Bailey district, is also reported to have examined the CDA Mines Corp.

Also mentioned were two big oil firms, which are interested in expanding into silver mining exploration.

[illegible] Theory Fo[illegible]ts, one of [illegible] leading [illegible]ment services. [illegible]

GF&P Tries to End Stream Pollution

The Colorado Game, Fish and Parks Commission authorized the Colorado Attorney General to file suit against the Thompson Creek Coal and Coke Co. [illegible] bail [illegible] and pollution [illegible] Crystal Silver at Carb[illegible] [illegible] Aspen Tim[illegible] the [illegible] operator [illegible] mine [illegible] stream [illegible] commi[illegible]

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BATES NO. USGSP00000450

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

CERTIFICATION BY THE UNITED STATES OF AMERICA
OF A DISCOVERY OR DEVELOPMENT UNDER
AN EXPLORATION PROJECT CONTRACT

To: Mr. John R. Matthews, Secretary-Treasurer
Hecla Mining Company
Post Office Box 320
Wallace, Idaho

Pursuant to the provisions of amended Exploration Project Contract No. Ida-E541, dated November 1, 1953, Docket No. IM m-2877, hereinafter called the "contract", between the Polaris Mining Company, a corporation, and the United States of America, hereinafter called the "Government"; to establish and fix the Government's percentage royalty on production and its lien thereon and on the land described in the contract, the Government considers and therefore certifies that discovery or development from which production may be made has resulted from the exploration work.

The nature of said discovery or development is described broadly or indicated as follows: Drifting easterly from the 3,000 level of the Silver Summit Mine has proved the existence of low grade copper-antimony ores with high silver content. Such ores occur in small faults and shear zones which have been filled and replaced to form replacement veins in the bleached Precambrian St. Regis quartzites.

Date MAR 23 1959

WEKlugescheid/sr 3/11 & 20/59
Copy to: Docket
Mr. C. A. Fredell, Dir.IIC.,DMS.
Mr. Lamb, U.S.
Mr. Killingsgard, U.S.
Dir Read File
Op. Committee
Cont. Adm. & Audit Div.
Finance Office
Region I (2)
Mr. E. L. Johnson
Mr. Grimwold
Chron.

THE UNITED STATES OF AMERICA

By Frank E. Johnson
Acting Director, Office of
Minerals Exploration

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

Release copy

MAR 24 1959

Mr. John R. Matthews, Secretary-Treasurer
Hecla Mining Company
Post Office Box 320
Wallace, Idaho

Re: Docket No. [illegible]-2879 (Lead-Zinc-Copper-Antimony)
Polaris Mining Company
Polaris East Exploration Project
Shoshone County, Idaho
Amended Contract No. Idm-2541

Dear Mr. Matthews:

Transmitted herewith is a certification of discovery or development related to the Amended Exploration Project Contract No. Idm-2541, dated November 1, 1953, on the lands described in the contract.

By the terms of the Amended Exploration Project Contract and of the certification, all minerals mined or produced from November 1, 1953, to November 1, 1975, are subject to the Government's percentage royalty as set forth in the contract, and also any production, regardless of where it comes from, that is transported through any working to the cost of which the Government has contributed, as set forth in Item (c) of Annex III of the Amended Exploration Project Contract, until the sum of $436,919.48, which the Government has advanced as its participating interest is repaid.

You should continue to make royalty payments, as in the past, to Executive Officer, OMX Field Team, Region 1, South 157 Howard Street, Spokane 4, Washington. The payments should be accompanied, as has been customary, by suitable evidence covering the liquidations of the various products.

You are requested to notify the Executive Officer of any change in ownership or production rights that may have any effect on the Government's right to its percentage royalty. Your attention is especially called to Article 2(c), relating to the preservation of the Government's right to a percentage royalty on production. Also, if production ceases at any time for an extended period, please notify the Executive Officer at six-month intervals that such is the case.

WPKlugescheid/er 3/11&20/59

Sincerely yours,

Frank E. Johnson

Acting Director

Enclosures

Region I (2)

CC: Docket
Mr. C.A.Fredell, Dir. TDS, DMS
Mr. Lamb, USBM
Mr. Killgaard, USGS
Cont. Adm. & Audit Div.
Finance Office -
Op. Committee - Chron.
Mr. Griswold

Dir. Read File
Mr. Johnson

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TO BE PHOTOCOPIED AND PRODUCED

DO NOT CODE

BATES NO. USGSP00000450

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

24 1959

Mr. Clarence A. Fredell, Director
Technical Research and Development Division
Defense Materials Service
General Services Administration
6018 GSA Building
Washington 25, D. C.

Re: Docket No. [illegible]-287) (Copper-Zinc-Antimony-Lead)
Polaris Mining Company
Polaris East Exploration Project
Shoshone County, Idaho
Amended Contract No. Idm-[illegible]541

Dear Mr. Fredell:

Enclosed is a copy of a certification of discovery or development related to Amended Exploration Project Contract No. Idm-[illegible]541.

The amended contract was dated November 1, 1953, with the Government participating to the extent of 50 per cent in an exploration project estimated to cost $873,840.00. Actual expenditures were $873,838.95, with the Government's share being half of such amount or $436,919.48.

The total amount of work provided for under the contract consisted of 14,116.4 feet of drifting and crosscutting, 1,275 feet of sideswiping, 24,750 feet of diamond drilling, and 324.1 feet of raising. All of the stated work was completed.

The discovery consisted of copper ores with auxiliary silver occurring in small faults and shear zones which have been filled and replaced to form replacement veins in the bleached St. Regis quartzites of the Belt series. The estimated ore reserve resulting from the work of exploration under the contract and subsequent work by the operator consisted of 18,300 tons of ore having an average grade of 25.15 ounces of silver per ton and 0.59 per cent copper. Another discovery of marginal ore is estimated to contain 11,200 tons having an average grade of 10.75 ounces of silver per ton and 0.30 per cent copper.

Sincerely yours, WPKlugescheid/er 3/11/59

Frank E. Johnson

Acting Director

CC: Docket
Mr. Lamb, USBM
Mr. Killsgaard, USGS
Dir. Read File
Op. Committee
Cont. Adm & Audit Div.
Region 1 (2)
Mr. Johnson
Mr. Griswold
Chron.

Enclosures

Extra

~~OFFICIAL~~ FILE COPY
O. M. E.
RECEIVED DEC 11 1958

DATE	INITIALS	CODE
		600

No. 157 Howard Street
Spokane 4, Washington

December 9, 1958

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

Re: Docket No. IMEA-2879 (Lead-Zinc-Copper-Antimony
Polaris Mining Company
Polaris Zhet exploration project
Shoshone County, Idaho
Contract No. Idm-8541

Dear Mr. Selfridge:

Enclosed are three copies of a letter dated November 2, 1958, from John R. Mathews, Secretary-Treasurer of Hecla Mining Company, in which he informs us that his company has assumed all the rights, obligations and liabilities of every kind heretofore possessed by Polaris Mining Company. He asks that all communications connected with any agreements or business in which Polaris Mining Company had an interest be addressed to Hecla Mining Company, P. O. Box 320, Wallace, Idaho.

The effective date of the merger was October 31, 1958.

Sincerely yours,

A. E. Weissenborn
Executive Officer, OME
Field Team Region I

cc: USBM (2)

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

November twenty-sixth
1958

RECEIVED
BUREAU OF MINES
NOV 28 1958
SPOKANE, WASH.

EXTRA COPY
O. M. E.
RECEIVED DEC 11 1958
DATE | INITIALS | CODE

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

Gentlemen:

This is to notify you that effective October 31, 1958, Polaris Mining Company was merged into Hecla Mining Company, with Hecla Mining Company being the surviving corporation. The merger agreement is on file with the respective Secretaries of State of the States of Delaware and Washington, and has been filed in the records of Shoshone County of the State of Idaho at Book K of Agreements, Page 154, #175743, and in the records of Spokane County of the State of Washington.

The merger agreement provides, among other things, that Hecla Mining Company assumes all the rights, obligations and liabilities of every kind heretofore possessed by Polaris Mining Company. You should, therefore, hereafter address all communications connected with any agreements or business in which Polaris Mining Company had an interest, to Hecla Mining Company, P. O. Box 320, Wallace, Idaho.

Very truly yours,

HECLA MINING COMPANY

By John R. Matthews
John R. Matthews
Secretary-Treasurer

JRM:fl

Audit copy

AMENDED EXPLORATION PROJECT CONTRACT
POLARIS MINING COMPANY
DOCKET NO. DMEA-2879

AMENDMENT NO. 2

It is agreed this 18th day of June, 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, as amended, is further amended effective June 1, 1958, as follows:

1. In Article 3, the completion date is extended from June 1, 1958 to November 1, 1958.

2. In Article 6, the period "twenty-two years" is substituted for the period "twenty-one years."

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 O Mittendorf
Administrator, Defense Minerals
Exploration Administration

POLARIS MINING COMPANY

By L J Rondell
Title President

DMEA
RECEIVED

RECEIVED
JUN 30 1958
U. S. G. S.
SPOKANE, WASH.

Polaris Mining Company

Wallace, Idaho

June twenty-seventh
1958

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

Re: Docket No. DMEA - 2079
(Copper, Lead, Antimony)
Polaris East Exploration
Project - Shoshone County,
Idaho - Amended Contract
No. Idm - E541

Dear Mr. Weissenborn:

We are enclosing three signed copies of amendment No. 2 of the above referred-to contract which grants extension of the completion date of the contract from June 1, 1958 to November 1, 1958.

We have retained the Operator's copy for our file.

Very truly yours,

John R. Matthews
Secretary-Treasurer

JRM:nn

Encls.

RECEIVED
JUN 29 1958
U. S. G. S.
SPOKANE, WASH.

Audit Copy

MF-200A
(Rev. April 1956)

OFFICIAL FILE COPY
DMEA
RECEIVED JUN 27 1957

DATE	INITIALS	CODE
		800

UNITED STATES OF AMERICA
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION
EXPLORATION PROJECT CONTRACT
(Short Form)

DMEA No.	Commodity	Contract No. Idm-E	County	State
2879	Lead-Zinc-Copper-Antimony	541	Shoshone	Idaho

It is agreed as of Nov. 1, 1953 between the United States of America, acting through the Department of the Interior, Defense Minerals Exploration Administration, hereinafter called the "Government," and Polaris Mining Company, a Delaware corporation

whose mailing address is P. O. Box 320
Wallace, Idaho
hereinafter called the "Operator," as follows:

ARTICLE 1. *Authority and project.*—(a) This contract is entered into under the authority of the Defense Production Act of 1950, as amended. It consists of this form (MF-200A), the attached Annex I (land description), Exhibit A (work and costs), and the maps and documents listed therein. The project work is a search for indicated or undeveloped deposits of the commodity designated above. The Operator shall ~~begin the work before~~ continue the work, and, subject to the provisions of Article 7 and Exhibit A, shall complete the work ~~within months from the date of the contract~~ not later than June 1, 1958. See Annex III.

(b) The description of the work and the fixed cost for each unit of work to be performed (per foot of drilling, per foot of drifting, per hour of operations, etc.) are hereby agreed upon as specified in Exhibit A. The estimated total cost of the project work is $873,840.00. The Government will contribute 50 percent of the fixed unit cost of the work performed, not exceeding $436,920.00, in accordance with the provisions of Articles 4 and 5, and Annex II.

(c) The Operator shall not transfer or assign this contract or any right or obligation thereunder without the written consent of the Government.

ARTICLE 2. *Operator's property rights.*—(a) The Operator represents and undertakes that Annex I correctly describes the land which is the subject of this contract and the nature of the Operator's rights of property and possession therein (whether as owner, lessee, or otherwise), and that such right, title, or interest is subject only to the following claims, liens, or encumbrances: See Annex I.

(b) The Subordination Agreement of the holder of any claim, lien, or encumbrance listed above and (if the Operator does not hold the legal title) the Consent to Lien of any holder of the legal title of the land (lessor, seller, optionor, etc.) are attached, as follows: See Annex I--Consents to Lien and Subordination Agreements are waived.

(c) The Operator shall preserve and maintain his right, title, and interest in the land and his right to the possession thereof for the purposes of this contract, and shall devote the land and all existing improvements, facilities, buildings, installations, and appurtenances to the purposes of this contract. The Operator shall neither transfer, convey, nor surrender the land nor any right, title, or interest therein, nor permit nor suffer any claim, lien, or encumbrance thereon, without expressly referring to and providing

in the instrument of conveyance, lien, or encumbrance for the preservation of the Government's right to a percentage royalty on production and lien for the payment thereof. Two copies of such instrument shall be furnished to the Government. If the Government's rights to royalty as provided in Article 6 have been terminated, the provisions of this paragraph (c) shall become inapplicable.

ARTICLE 3. *Performance of the work.*—(a) Operator's responsibility.—The work shall be performed diligently, efficiently, expertly, in a workmanlike manner, and in accordance with good mining standards and State regulations governing health, safety, and liability insurance covering employment. The Operator shall provide suitable and adequate equipment, facilities, materials, supplies, and labor to complete the work, as specified in Article 1 (a).

(b) *Government may inspect.*—The Operator shall consult with and inform the Government on all phases of the work as it progresses. The Government may enter at all reasonable times to inspect the work under the contract, and also after certification of discovery or development, to inspect production operations and underground workings. The Operator shall provide the Government with all reasonable means of access for such inspections.

ARTICLE 4. *Contribution by the Government.*—The Government will make its contribution on the basis of the monthly vouchers referred to in Article 5 (b); but all payments by the Government are provisional only, subject to audit, and until the account between the Operator and the Government is finally audited and settled and the Operator's final report has been rendered, the Government may withhold such sums as it sees fit but not in excess of 10 percent of the estimated total cost of the work. To the extent that excesses over fixed unit costs or any excess over the estimated total cost may be necessary for the performance of the work, the Operator shall incur and pay such excesses for his own account without contribution by the Government. The Government will not contribute to the cost of any work performed prior to the date of this contract. The Government may make payments for the account of the Operator directly to independent contractors and suppliers rather than to the Operator.

ARTICLE 5. *Reports, accounts, audits.*—(a) Operator's records.—The Operator shall keep suitable records and accounts of the units of work performed and of any production in which the Government may have an interest; and shall preserve those with respect to work performed for at least three years after final payment by the Government, and those with respect to production for at least three years after any obligation to pay royalties to the Government has terminated. The Government may inspect and audit said records and accounts at any time, either by itself or by a certified public accountant. The Comptroller General of the United States or his representative, until the expiration of said three-year periods, shall have access to and the right to examine all pertinent books, documents, papers, and records of the Operator.

(b) *Progress reports and vouchers.*—The Operator shall provide the Government with five copies of monthly progress reports in three sections as follows: (1) Operator's Monthly Report and Voucher showing a detailed statement of units of work performed during the reporting period; (2) Operator's Unit Cost and Progress Report showing the various types of work performed during the reporting period and the fixed unit costs incurred for each type of work; and (3) a Narrative Report of the work performed during the reporting period including adequate engineering-geological maps or sketches, drill hole logs and locations, and assay reports on samples taken concurrently with advance in mineralized ground. (Forms for reporting under (1) and (2) above will be provided by the Government.)

(c) *Final report.*—Upon completion of the work or termination of the Government's obligation to contribute to costs, the Operator shall furnish the Government with five copies of a final report (in addition to the final progress report and voucher). This final report shall include a geological and engineering evaluation of the results of the work performed under the contract with an estimate of the ore reserves resulting from such work, complete assay data, adequate geological and engineering maps or sketches, and a summary of the work performed and the unit costs thereof.

(d) *Report of sales.*—The Operator shall provide the Government with suitable accounting and documentary evidence covering all production to which the Government's percentage royalty relates, such as copies of smelter or concentrator settlement sheets, and certified accounts of production and sale or other disposition of production.

(e) *Compliance with requirements.*—If in the opinion of the Government any of the Operator's reports, records, or accounts are insufficient or incomplete, or if the Operator fails to make them, the Government may procure the making or completion of such with suitable attachments as an expense of the work to which the Operator shall contribute. The Government may withhold approval and payment of any vouchers relating to insufficient or incomplete reports, records, or accounts.

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 a sufficient final report (see Article 5), may so certify in writing to the Operator. Such certification shall describe broadly or indicate the nature of the discovery or development. **See Annex III.**

(b) *Royalty on production.*—The Operator, as principal if the Operator is the producer or as surety if the Operator is not the producer (for example, if the Operator either transfers or fails to retain his interest in the land), 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 ~~twenty years~~ **twenty-one** from the date of the contract or until the total net amount contributed by the Government without interest is fully repaid, whichever occurs first. **See Annex III.**

(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, assaying, or transportation performed or paid by the 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, but excluding fabricating or manufacturing) applied to the crude ore or other production after it is extracted from the ground to put it into a commercially marketable form.

(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 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 (1½) 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 (½) 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 (1½) percent; on an amount of ten dollars ($10.00) per ton, three and one-half (3½) percent.)

(f) *Time for computation and payment.*—The Government's royalty shall be computed and paid currently upon each lot sold, held, or used in integrated operations, as the case may be, as above provided in this Article.

(g) *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.

(h) *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.

(i) *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 production operations.

(j) *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.

ARTICLE 7. *Termination of the Government's obligations.*—(a) If in the opinion of the Government operations at any time have failed to achieve anticipated results that indicate the probability of making a worthwhile discovery and in the opinion of the Government further operations are not justified, the Government may give the Operator written notice thereof, and thereupon the Government shall be free of all obligation to pay on account of units of work not then performed, and the Operator shall be free of all further obligation to prosecute the work other than such as may be necessary and incidental to winding up, reporting, and accounting.

(b) If in the opinion of the Government the Operator is in any manner in default under the terms of the contract, the Government may give the Operator written notice of such default with a specification of reasonable time within which the default must be cured; and if the Operator fails to cure such default as required, thereupon the Government shall be relieved of all obligation to pay on account of units of work not performed when the notice was given, and the Operator shall be free of all obligation to prosecute the work other than such as may be necessary and incidental to winding up, reporting, and accounting. The Government may also avail itself of any other remedy the law may provide for breach of contract, including the right to rescind the contract and to demand repayment of all moneys contributed by the Government under the contract.

(c) The giving of any notice by the Government under the provisions of this Article 7 shall not affect the Government's rights as provided for in the contract with respect to a percentage royalty, and liens to secure the payment thereof, and such rights shall be fully preserved.

ARTICLE 8. *Notices to be given by the Government* may be delivered to the Operator or may be sent by registered mail addressed to the Operator at the mailing address stated in this contract. If mailed, notices are deemed to have been delivered five days after the date of mailing.

ARTICLE 9. *Officials not to benefit.*—No member of or delegate to Congress or resident commissioner shall be admitted to any share or part of this contract or to any benefit that may arise therefrom; but this provision shall not be construed to extend to this contract if made with a corporation for its general benefit.

ARTICLE 10. *Changes and added provisions.*—

See Annex III.

Executed in sextuplicate ~~[illegible]~~ this 20th day of June, 1957.

THE UNITED STATES OF AMERICA

POLARIS MINING COMPANY
(Operator)

By L. J. Randall
President

By C. F. Mitteudorf
Administrator, Defense Minerals Exploration Administration.

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

Polaris Mining Company

by John R. Matthews

[CORPORATE SEAL]

U. S. GOVERNMENT PRINTING OFFICE: 1956—O-383069

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AMENDED EXPLORATION PROJECT CONTRACT
POLARIS MINING COMPANY
DOCKET NO. DMEA-2879

ANNEX I

The land referred to in Article 2 of the Amended Contract consists of the patented and unpatented mining claims in Shoshone County, Idaho, described in Annex I of the Prior Contract, the descriptions therein being incorporated herein by reference.

SPECIAL UNDERTAKING CONCERNING THE LAND

The Operator represents, undertakes, and guarantees that by virtue of contractural arrangements with others, it has the necessary right, title, and interest in the land to perform and carry out all of its undertakings and obligations set forth in this amended contract and to secure the Government in the payment of any percentage royalty on production from said land that may accrue to the Government.

AMENDED EXPLORATION PROJECT CONTRACT
POLARIS MINING COMPANY
DOCKET NO. DMSA-2079

ANNEX II

WHEREAS:

The parties to this Amended Contract are parties to Contract No. IDM-E541(Docket No. DMSA-2079), dated June 3, 1953, and effective November 1, 1953 (see Amendment No. 4), executed on Form MF-200A of February 1952, having the same docket and contract numbers as this Amended Contract and hereinafter referred to as the "Prior Contract." The parties desire to restate their agreement, to add work to the project, and to increase the estimated total cost of the project.

NOW THEREFORE, it is agreed as follows:

1. Effective November 1, 1953, the Prior Contract is superseded by this Amended Contract which shall govern all rights and obligations of both parties, except that the costs of work described in and performed under Exhibit "A" of the Prior Contract (Stage I) shall be contributed to by the Government on the basis of the provisions of the Prior Contract.

2. The total net amount contributed by the Government under the Prior Contract is repayable under the royalty provisions of this Amended Contract.

3. The Operator hereby releases and agrees to save the Government harmless from all claims and demands arising out of the Prior Contract except as otherwise provided in this Annex II.

AMENDED EXPLORATION PROJECT CONTRACT
POLARIS MINING COMPANY
DOCKET NO. DMEA-2879

ANNEX III

(Article 10. Changes and Added Provisions)

(a) Annex II and Annex III are added to the items listed in Article 1 as a part of this Amended Contract.

(b) In Article 6(b)(2) the maximum period for payment of the Government's royalty is changed from ten years to 21 years from the effective date of the Prior Contract, November 1, 1953.

(c) A Special Agreement Concerning Royalty is added as follows:

> Notwithstanding the certification provisions of Article 6, and with no further action required on the part of the Government, 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 any of its production, regardless of where it comes from, that is transported through any shaft, winze, raise, crosscut, drift, or other working to the cost of which the Government has contributed, or any portion of said workings, for the same period as is described in Article 6(b)(2) of the Contract and pursuant to the terms of Article 6(c) et seq. However, in no event shall more than one royalty be due on or paid on the same production.
>
> In the event that production from outside the boundaries of the land described in Article 2 is transported through the workings described above, and neither the Operator nor any subsidiary or affiliate thereof has any interest in said production, the Government shall be paid the fixed rate of 5 per cent of the total transportation charges received by the Operator.

NON-PRIVILEGED DOCUMENT

TO BE PHOTOCOPIED AND PRODUCED

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EXPLORATION PROJECT CONTRACT
POLARIS MINING COMPANY
DOCKET NO. DMEA-2679

EXHIBIT A

Description of the Work

The purpose of the project is to explore for ores of lead, zinc, copper, and antimony, on the 3000-foot level of the Silver Summit Mine and adjoining lands, for possible downward extensions of known ore bodies which have been explored in the Coeur d'Alene Mine, and for other ore bodies which may be found in adjoining land previously unexplored.

The work is divided into two stages:

STAGE I

Consists of the work described in Exhibit A of the original contract as amended in four amendments.

STAGE II

Consists of additional work, as follows:

1. Extend the East drift, previously driven, in an easterly direction, and drive auxiliary crosscuts from it. The total amount of additional drifting and crosscutting shall not exceed 2,500 feet.

The drift and crosscuts shall be a minimum of 6 feet by 8 feet in cross-section, in the clear of timber, and shall be properly equipped with haulage tracks, drainage facilities, and an air duct not less than 18 inches in diameter.

2. Sidewalls not to exceed 100 linear feet in the drifts and crosscuts driven under item 1 of this Stage II, for the purpose of allowing space for diamond drill stations and double tracks for car switchings.

3. Diamond drill not in excess of 5,000 feet of hole with EX or AX bits on both sides of the drifts and crosscuts, driven under item 1, of this Stage II.

Significantly mineralized core shall be split, one half thereof kept in core boxes for Government inspection, and the other half 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.

The location, direction, and extent of each drift, crosscut, and drilling site; and the depth and attitude of each drill hole shall be subject to the approval of the Government.

Drifting and crosscutting shall not be done closer than 300 feet from a property boundary.

Agreed Unit Costs

Stage I

1. Drifts and crosscuts completed during first period fixed in Annex II of the prior contract, 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 original contract 1/. Totals	$313,248.24
2. Drifts and crosscuts, 5,418.9 feet @ $48.78/ft.	264,333.94
3. Diamondpipe, 1,173.0 feet @ $25.50/ft.	29,962.50

1/ The average unit cost resulting from application of such decreases is approximately $50.53. The cost of Item I is governed by the total price of $313,248.24.

4. Diamond drilling, 19,788 feet @ $4.50/ft.	89,046.00	
5. Raising, 324.1 feet @ $93.33/ft.	30,248.86	
Total cost of Stage I		$726,838.94

STAGE II

1. Drifts and crosscuts, 2,500 feet @ $48.78/ft. 2/	$121,950.00	
2. Sideswipes, 100 feet @ $25.50/ft.	2,550.00	
3. Diamond drilling, 5,000 feet @ $4.50/ft.	22,500.00	
Estimated total cost of Stage II		$147,000.00
Estimated total cost of the project (rounded to)		$873,840.00
Government's participation, 50%		$436,920.00

2/ The project will be carried out in conjunction with other operations of the Operator, using certain facilities and labor for both operations called "joint costs." If the advance of drifting and/or crosscutting is more than 390 feet in any month, the fixed unit cost per foot of such drifting and/or crosscutting shall be decreased by that proportion of the project's established share of the joint costs that the monthly increase in advance bears to the total advance in that month.

Government's copy

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JUN 25 1956

EXPLORATION PROJECT CONTRACT
POLARIS MINING COMPANY
DOCKET NO. DMEA-2879

AMENDMENT NO. 2

It is agreed this 1st day of June, 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 further amended as follows:

In Exhibit "A", under "Description of the Work," Item No. 4 is revised to read as follows:

4. Crosscut and/or drift at locations, in directions, and to the extent, approved in advance by the Government.

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 L J Randall

Title President

Docket No. DMEA 2070

Commodity Copper, Lead, antimony (incidental silver)

DEPARTMENT OF THE INTERIOR

DEFENSE MINERALS EXPLORATION ADMINISTRATION

STRATEGIC AND CRITICAL MINERALS EXPLORATION PROGRAM

TO: Chief, Finance Section, Budget and Finance Branch, Bureau of Mines

Please enter on the records of the Defense Minerals Exploration Administration, under the Strategic and Critical Minerals Exploration Program, the following contract, or amendment to contract.

Contract No. Idm-E 541

Date of Contract or Amendment: June 3, 1953

Name and Address of Operator:

Polaris Mining Company
P. O. Box 320
Wallace, Idaho

Amount of Government participation $ 342,977.50

Percent of Government participation 50 %

Region: II State: Idaho

(Name)

J. L. Chambers,
Chief, Contract Administration and Audit Division

(Title)

Date Delivered to Bureau of Mines, Washington. June 3, 1953

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Release Copy this page thru Annex III

DOCKET NO. DMEA 2879

COMMODITY Copper, lead, antimony (and incidental silver)

Government's Copy

IDM-E 541

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

EXPLORATION PROJECT CONTRACT[1]

(Short Form)

IT IS AGREED this 3rd day of June, 1953, between the United States of America, acting through the Department of the Interior, Defense Minerals Exploration Administration, hereinafter called the "Government," and[2] Polaris Mining Company, a corporation duly organized and existing under and by virtue of the laws of the State of Delaware, P. O. Box 320, Wallace, Idaho, hereinafter called the "Operator," as follows, and as provided in Annexes I, II, and III attached hereto and made a part hereof:

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

ARTICLE 2. *Operator's property rights.*—With respect to that certain land situated in the State of Idaho, County of Shoshone, described[3] in Annex I and on a claim map entitled "DMEA-2879—Fig. 1—Part of the Silver Belt Coeur d'Alene Mining District," also attached hereto as a part hereof, with respect to which the Operator represents and undertakes and guarantees, that by virtue of contractual arrangements with others it has the necessary right, title, and interest to perform and carry out all of its undertakings and obligations set forth in this contract, and to secure the Government in the payment of any percentage royalty on production from said land which may accrue to the Government.

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

ARTICLE 3. *Exploration project.*—The Operator, within 90 6/ days from the date of this contract shall commence work on a project of exploration for[5] copper, lead, antimony (and incidental silver) in or upon the described land; and shall bring the project to completion within a period of 40 months 6/ from the date of this contract. The work to be performed is more fully described in Exhibit "A" attached hereto, which, with any maps or drawings thereto attached, are made a part of this contract. The Government will contribute to the cost of this work as hereafter provided. The work shall be performed by the Operator or by independent contractor or contractors efficiently, expertly, in a workmanlike manner, in accordance with good mining standards and State regulations for health and safety and for workmen's compensation and employers' liability insurance, with suitable and adequate equipment, materials, and labor, to bring the project to completion within the time fixed. The Government shall have the right to enter and observe and inspect the work at all reasonable times, and the Operator shall provide the Government with all available means for doing so. The Government may consult with and advise the Operator on all phases of the work.

ARTICLE 4. *Costs of the project.*—The agreed, estimated costs of performing the work, expressed in terms of units of work to be performed (per foot of drifting, per foot of drilling, per cubic yard of material to be moved, etc.) are set forth in Exhibit "A," attached hereto. The Government will pay 50 percent of these agreed, estimated costs, as they accrue, for units of work actually performed that conform with the description or specifications for the work set forth in this contract, in an aggregate total amount not in excess of $342,977.50, which is 50 percent of $685,955.00 the agreed, estimated total cost of the project in which the Government will participate: *Provided,* That until the Operator's final report and final accounting have been rendered to the Government and any final check or auditing required by the Government has been made, and a final settlement of the contract has been made, the Government may withhold from the last voucher or vouchers such sums as it sees fit not in excess of ten (10) percent of the maximum total which the Government might have been called upon to pay under the terms of the contract. The Government may, as it sees fit, make payments direct to the Operator's independent contractors, if any, for the account of the Operator, rather than to the Operator.

ARTICLE 5. *Reports, accounts, audits.*—(*a*) *Progress reports.* The Operator shall provide the Government with monthly reports of units of work performed under the contract, in quintuplicate (five copies), upon forms provided by the Government. These progress reports shall be certified by the Operator, and shall constitute both the Operator's invoice of units of work performed on the project during the period covered by the report and his voucher for repayment by the Government, unless the Government requires the use of a standard voucher form with invoice attached. Progress reports shall include surface and/or underground engineering-geological maps or sketches showing the progress of the exploration, with assay-reports on samples taken concurrently with the advance in mineralized ground.

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

6/ 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.

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

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

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

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

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

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

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

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

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

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

ARTICLE 7. *Assignment, transfer, or loss of Operator's interest.*—Without the written consent of the Government, the Operator shall not assign or otherwise transfer or hypothecate this contract or any rights thereunder. The Operator shall not make any voluntary nor permit any involuntary transfer or conveyance of the Operator's rights in the land described in Article 2, without making suitable provision for the preservation of the Government's right to a percentage royalty on production and lien for the payment thereof; *Provided*, that mere failure by the Operator to maintain the Operator's rights in the land, without any consideration running to the Operator other than relief from the cost of maintaining such rights (as by surrender of a leasehold, failure to perform assessment work, or failure to exercise an option), coupled with complete abandonment by the Operator of all interest in or operations on the land for a period of 10 years from the date of this contract, shall not constitute such a transfer or conveyance. Should the Operator make or permit any transfer or conveyance in violation of this provision, the Operator shall be and remain liable for payment to the Government of the same amounts, at the same times, as would have been paid under the terms of the percentage royalty on production. If for any reason the net smelter returns, net concentrator returns, or other net amounts realized from the sale or other disposition of such production are not available as a means of measuring the amount of the Operator's liability, the amount thereof shall be estimated as well as may be, and in the event of dispute as to such estimates, the determination thereof by the Administrator of Defense Minerals Exploration Administration or by his successor shall be final and binding upon the Operator.

ARTICLE 8. *Termination and completion.*—The Government may, at any time, by written notice to the Operator, terminate this contract: (*a*) If the Operator fails to provide his share of the money necessary to prosecute operations pursuant to the terms of the contract; (*b*) if the Operator, in the opinion of the Government, fails to prosecute operations pursuant to the terms of the contract; or (*c*) if, in the opinion of the Government, operations up to the time of the notice have not indicated the probability of making any worth while discovery and in the opinion of the Government further operations are not justified.

ARTICLE 9. *Changes and added provisions* The words "10 years," wherever they occur in the above contract form, are hereby changed to "20 years."

Executed in sextuplicate the day and year first above written.

THE UNITED STATES OF AMERICA

By [signature]
Administrator, Defense Minerals Exploration Administration

POLARIS MINING COMPANY
(Operator)

By L. J. Randall
President

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

Elof Enbom

[CORPORATE SEAL]

U. S. GOVERNMENT PRINTING OFFICE 16—66329-1

EXPLORATION PROJECT CONTRACT
POLARIS MINING COMPANY
DOCKET NO. DMEA-2879

ANNEX I

The land referred to in Article 2 of the contract form consists of patented and unpatented mining claims all as indicated on said Figure 1, more particularly described as follows:

Merger Mines Corporation

(including only so much of the following claims that lie more than 200 feet south of a line representing the center of the Polaris Fault, which dips southerly 65 to 70 degrees)

Patented mining claims covered by Mineral Survey No. 3261--

Aetna	Lucky Stone No. 2
Bernardy No. 8	Lucky Stone No. 3
Little Gem	Lucky Stone No. 4
Lucky Boy	Manitoba
Lucky Stone	Reid

Unpatented mining claims recorded in Quartz Locations Office of Shoshone County, Idaho--

	Book	Page
Bill	29	319
Jack	29	320
Mark	29	321
Ray	29	322
Robin	29	323

Rainbow Mining and Milling Company, Ltd.

Patented mining claims covered by Mineral Survey No. 3191--

Blue Ribbon	Argentine Extension	Jane Wray
Gaylord	Blatz	Knob Hill
John D.	Bobbie	Lookout
July	Brooklet	Rainbow No. 2
Thursday	Horseshoe	Spider
	Hazzard	Vera
	James H.	

Patented mining claims covered by Mineral Survey No. 2761--

Mountain View
Pride of the Rockies
Rainbow
Sunshine

Silver Standard Mining Company

Patented mining claims covered by Mineral Survey No. 3268--

Kaiser
May
Nora
Norway

Unpatented mining claims recorded in Quartz Locations Office of Shoshone County, Idaho--

	Book	Page
Betty	24	489
Copper	14	43
Edison	24	491
Grubstake (amended)	25	7
Hercules	24	596
Jumbo	14	44
June	24	490
Lead	14	46
Pay Streak (amended)	25	8
Ruby	26	272
Silver	14	51
Standard (amended)	19	643

American Silver Mining Company

Unpatented mining claims recorded in Quartz Locations Office of Shoshone County, Idaho--

	Book	Page
Blue Jay (amended)	19	639
Buckeye "	23	6
Collins	23	17

	Book	Page
Kentucky (amended)	23	7
Lucky Friday	23	18
Lucky Friday No. 1 (amended)	23	8
Lucky Friday No. 2 (amended)	23	9
Lucky Friday No. 3 (amended)	23	10
Lucky Friday No. 4 (amended)	23	436
Maud S. (amended)	19	640
North Star (amended)	23	13
Norwich Fr. No. 1 (amended)	23	11
Norwich Fr. No. 2 (amended)	23	12
Silver Leaf (amended)	23	14
Surprise (amended)	19	641

Coeur d'Alene Consolidated Silver-Lead Mines, Inc.

Unpatented mining claims recorded in Quartz Locations Office of Shoshone County, Idaho--

	Book	Page
Bank Roll	21	151
Blue Boar	21	152
Chesterfield	21	153
King Pin	21	154
Red Brick	29	146
Victory	29	147

EXPLORATION PROJECT CONTRACT
POLARIS MINING COMPANY
DOCKET NO. DMEA-2879

ANNEX II

1. The exploration operations provided for in this contract, hereinafter called "the project," are divided into two periods: the first, 18 months from the date of this contract (see Note 6, page 1, contract form), hereinafter called the "first period"; and thereafter, until the work is completed or the contract terminated, hereinafter called the "second period." Upon the expiration of the first period, the Operator shall provide the Government with a detailed computation of the actual unit cost of drifting and crosscutting (treated as one operation) performed under this contract during said period. The Government may audit said computation to the extent that it sees fit, and shall have access to the Operator's books and records for this purpose. If the actual unit cost of drifting and crosscutting for the first period is less than $51.00 per foot, the actual cost for drifting and crosscutting shall be and become the agreed unit cost for drifting and crosscutting for the second period.

2. The project will be carried out in conjunction with other operations of the Operator, using certain facilities and labor for both operations, hereinafter called "joint costs." For the first period, the agreed unit costs of the project include an allowance of $16.23 per foot of drifting and crosscutting as the project's share of the joint costs. Except for one continuous period not in excess of four months (allowed for the raising operation), if the advance of drifting and/or crosscutting is more than 390 feet in any month, the agreed unit cost per foot for such drifting and/or crosscutting shall be decreased by that proportion of $16.23 that the monthly increase in advance bears to the total advance in that month.

3. In determining the actual cost of project drifting and crosscutting during the first period, nothing but the following items or elements shall be allowed: (a) the project's share of the joint costs, including the depreciation allowance for the hoist; and (b) the direct costs of labor, supplies, and depreciation (other than on the hoist) relating to project drifting and crosscutting. "The project's share," as used herein, means the ratio that the direct cost of

labor for project drifting and crosscutting bears to the direct cost for labor for all drifting, crosscutting, and stoping performed by the Operator on the project and in other operations. The direct cost of labor, supplies, and depreciation (other than on the hoist) for project drifting and crosscutting shall include only those items set forth in Exhibit "B," dated February 20, 1953, entitled "Polaris East Exploration Project—Drifting and Crosscutting," attached hereto as a part hereof. The monthly depreciation allowance for the hoist is 1/240 of $175,000. The joint costs are those items that are extended into the "per month" column of Schedule C-1, dated February 24, 1953, entitled "Polaris East Exploration Project—Analysis of Other Operating Costs," attached hereto as a part hereof.

4. For the second period, if the advance of drifting and/or crosscutting is more than 390 feet in any month, the agreed unit cost per foot of such drifting and/or crosscutting shall be decreased by that proportion of the project's established share of the joint costs that the monthly increase in advance bears to the total advance in that month.

EXPLORATION PROJECT CONTRACT
POLARIS MINING COMPANY
DOCKET NO. DMEA-2879

ANNEX III

The following provisions are in lieu of all of paragraph (a) of Article 6 which precedes the colon:

If at any time the Government considers that a discovery or development from which production may be made has resulted from the exploration work, the Government, at any time not later than six months after the Operator has rendered the final report and final account required by the exploration project contract, may so certify in writing to the Operator. Such certification shall describe broadly or indicate the nature of the discovery or development. The Operator, or his successor in interest, shall pay to the Government a royalty on all minerals mined or produced from the land which is the subject of the exploration project contract, 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 of discovery or development, or until the total net amount contributed by the Government, without interest, is fully repaid, whichever occurs first, unless the Government waives its right to a royalty; or (2) if the Government makes a certification of discovery or development, for a period of ten years (or other period fixed by the contract) from the date of the contract, or until the total net amount contributed by the Government, without interest, is fully repaid, whichever occurs first. Said royalty shall be a percentage of the net smelter returns, the net concentrator returns, or other net amounts realized from the sale or other disposition of any such production, in whatever form disposed of, including ore, concentrates, or metal, as follows:

NON-PRIVILEGED DOCUMENT

TO BE PHOTOCOPIED AND PRODUCED

DO NOT CODE

BATES NO. USGSP00000450

EXPLORATION PROJECT CONTRACT
POLARIS MINING COMPANY
DOCKET NO. DMEA-2879

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-2789--Fig. 2--Longitudinal Section from the Bunker Hill Mine to the Galena Shaft, Showing Stoped Areas," attached hereto as 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) 10,125 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 1560 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 5000 feet with EX or AX bits, on both sides of the aforesaid drift. The cores shall be split, one half thereof kept in core boxes for Government inspection, and the other half crushed for assaying, one half of the crushed material to 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 1500 feet.

5. Drive a 330-foot, two-compartment ventilation and manway raise approximately 2530 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 location and direction of drifts, crosscuts, and drilling sites, and the depth and attitude of drill holes shall all be subject to the approval of the Government.

Agreed Unit Costs

Drifts and crosscuts, 11,685 feet @ $51/ft.	$596,875.00	
Sideswipes, 1560 linear feet @ $25.50/ft.	39,780.00	
Diamond drilling, 5000 feet @ $4.50/ft.	22,500.00	
Raising, 330 feet @ $93.33/ft. (rounded to)	30,800.00	
Total Cost of the Project		$685,955.00
Government Participation @ 50%		$342,977.50

February 20-1953

POLARIS MINING COMPANY

Wallace Idaho

Polaris East Exploration Project

Drifting and Crosscutting

(Analysis of Estimated Direct Cost Per Foot)
(Based on 390' Per Month)

EXHIBIT B

	Average Monthly Cost		Cost Per Foot	
Direct Labor Cost				
Contract - 390' @ $13.19	$ 5 144		$ 13 19	
Federal and State Payroll Taxes (2.7%)	139		36	
Workmen's Compensation (3.04%)	169		43	
Employees' Group Insurance (1.03%)	53		14	
Retirement Plan Expense (2.65%)	133		34	
Vacation Pay (1.36%)	70		18	
Total		$ 5 708		$ 14 64
Direct Supplies				
Bits and Rods	$ 1 603		$ 4 11	
Drills and Drill Parts	921		2 36	
Powder	2 094		5 37	
Ventilation Duct	1 170		3 00	
Pipe and Track	1 248		3 20	
Total (Schedule B-1)	$ 7 036		$ 18 04	
Depreciation - Equipment (Exhibit E)	820		2 10	
Total Direct Supplies		7 856		20 14
Total Direct Labor and Supplies		$ 13 564		$ 34 78

NOTE: The contract rate per foot is based on a rate of $12.00 per foot, plus time and one-half over 40 hours per week and holiday time.

February 24-1953

POLARIS MINING COMPANY

Wallace Idaho

POLARIS EAST EXPLORATION PROJECT

Analysis of Other Operating Costs - Silver Summit Mine

SCHEDULE C-1

	Total Costs per Books May 1 to 12-31-52 (Operated on two-shift basis)				Adjusted Other Operating Costs	
	Labor	Supplies and Other	Total	Additions or (Exclusions)	Total	Per Month
Compressors	$ 1 855 59	$ 254 74	$ 2 110 33	$ 704 00 +(1)	$ 2 814 33	$ 351 79
Haulage	34 101 87	19 480 94	53 582 81	(20 093 57)-(1)(2)	33 489 24	4 186 15
Hoisting	37 380 61	8 645 28	46 025 89	(12 335 26)-(1)(2)	33 690 63	4 211 33
Pumping	486 67	2 62	489 29		489 29	61 16
Repair	21 827 40		21 827 40	(21 827 40)-(2)		
Shift Bosses and Foreman	19 431 48	133 37	19 564 85	(1 102 70)-(3)	18 462 15	2 307 77
Ventilation	4 286 21	15 871 14	20 157 35	(13 053 88)-(2)	7 103 47	887 93
Watchmen and Fire Protection	4 083 95		4 083 95	(4 083 95)-(3)		
Mine Machinery Repairs, etc.	9 225 56	7 845 79	17 071 35	(1 422 67)-(2)	15 648 68	1 956 08
Surface	3 409 25	2 940 65	6 349 90		6 349 90	793 74
Assaying		2 027 75	2 027 75		2 027 75	253 47
Electric Power		14 728 89	14 728 89		14 728 89	1 841 11
Engineering and Surveying	7 995 08	1 363 35	9 358 43	(636 15)-(2)	8 722 28	1 090 28
Heating		2 406 48	2 406 48		2 406 48	300 81
Insurance		3 538 21	3 538 21	(3 538 21)-(3)		
Maintenance and Repair		43 50	43 50		43 50	5 44
Rental Surface Facilities		5 625 00	5 625 00	(5 625 00)-(3)		
Shop and Payroll Expense (outside labor)		3 261 70	3 261 70		3 261 70	407 71
Taxes - Net Profits and Property		27 300 71	27 300 71	(27 300 71)-(3)		
- Social Security		7 479 50	7 479 50	(3 376 00)-(4)	4 103 50	512 94
Truck Operation		(128 48)-	(128 48)-	128 48 (3)		
Vacation Pay - Wage Earners	6 700 78		6 700 78	(1 712 00)-(4)	4 988 78	623 60
Workmen's Compensation		12 449 84	12 449 84	(4 088 00)-(4)	8 361 84	1 045 23
General Expense		18 237 80	18 237 80	(18 237 80)-(3)		
Mine Office	4 049 58	336 00	4 385 58		4 385 58	548 20
Employees' Group Insurance		3 455 88	3 455 88	(1 296 00)-(4)	2 159 88	269 99
Retirement Plan Expense		9 320 00	9 320 00	(3 240 00)-(4)	6 080 00	760 00
Depreciation of Facilities		374 90	374 90	(374 90)-(3)		
Total Other Operating Costs	$ 154 834 03	$ 166 995 56	$ 321 829 59	$(142 511 72)-	$ 179 317 87	$ 22 414 73

Explanations of Additions and Exclusions

1. Estimated additional cost of hoisting, compressed air and electric power to operate third shift. Total costs for eight-months period May 1 - Dec. 31-1952, are actual costs of operation on a two-shift basis.

2. Excluding expense items during May - Dec. 1952 which are not expected to occur during period of East Exploration Project.

3. Excluding general overhead items deemed non-allowable per instructions.

4. Exclusion of payroll costs which have been charged directly to Polaris East Exploration Project and other activities.

HECLA MINING COMPANY

Consolidated Statement of Income (Unaudited)

For the Nine-Month Periods Ending September 30, 1973 and September 30, 1972

	Nine Months Ended September 30 1973	Nine Months Ended September 30 1972
Sales of concentrates and products	$14,512,420	$16,210,620
Dividend, interest and other income	81,150	200,162
Gain on sale of silver bullion		348,000
Total revenue	14,593,570	16,758,782
Deduct		
Cost of sales	9,425,131	10,998,451
Exploration and Development - Outside projects	654,717	398,367
Consolidated Silver Project	30,283	51,633
Administrative and other miscellaneous expenses	296,179	522,768
Property and excise taxes	460,030	539,048
Depreciation, depletion and amortization	285,776	311,826
Total deductions	11,152,116	12,822,093
	3,441,454	3,936,689
Estimated taxes on income		
Currently payable	46,300	(278,000)
Deferred	853,000	1,317,500
	899,300	1,039,500
Income before equity in net income (loss) of Granduc Mines, Limited and extraordinary item	2,542,154	2,897,189
Equity in net income (loss) of Granduc Mines, Limited	56,900	(410,632)
Income before extraordinary item	2,599,054	2,486,557
Less: Share of net fire costs applicable to Sunshine Mine fire disaster (net of applicable income taxes of $132,500)		270,000
Net income	$ 2,599,054	$ 2,216,557
Average shares outstanding during period	6,456,492*	6,456,492**
Net income per share		
Income before equity in net income (loss) of Granduc Mines, Limited and extraordinary item	$ 0.39	$ 0.44
Equity in net income (loss) of Granduc Mines, Limited	0.01	(0.06)
Extraordinary item		(0.04)
Net income	$ 0.40*	$ 0.34**
Average metal prices		
Silver - (per ounce, Handy & Harman, N.Y.)	$ 2.41	$ 1.61
Lead - (per pound, New York)	16.08c	15.19c
Zinc - (per pound, Prime Western, delivered)	19.97c	17.54c
Copper - (per pound, Domestic)	57.96c	50.83c

*Adjusted to reflect shares issued pursuant to a 2% stock dividend paid August 3, 1973 to shareholders of record May 11, 1973.

**Adjusted to reflect shares issued pursuant to 2% stock dividends paid on August 4, 1972 and on August 3, 1973.

HECLA MINING COMPANY

TO THE SHAREHOLDERS OF
HECLA MINING COMPANY

The Company realized consolidated net income of $2,599,054, or $0.40 per share for the first nine months of 1973 which compares with consolidated net income of $2,216,557 or $0.34 per share for the first nine months of 1972. An average of 6,456,492 shares were outstanding for both periods after giving effect to 2% stock dividends paid in each year.

Consolidated net earnings of $1,252,914 or $0.19 per share for the third quarter of 1973 compares to $693,368 or $0.11 per share for the second quarter of 1973, and $678,617 or $0.10 per share for the third quarter of 1972 after deduction of an extraordinary item of $105,000 or $0.02 per share in the 1972 period. The increase in net earnings was largely due to reflecting Hecla's equity in the significantly improved results of 35.4% owned Granduc Mines, Limited. This amounted to income of $402,000 in the third quarter of 1973, as contrasted with an equity in net losses of $184,700 in the second quarter of 1973 and $143,048 in the third quarter of 1972.

Development and construction at the Company's Lakeshore property continue satisfactorily, and the mine plant and related metallurgical facilities are approximately 40% completed. Operations at other Company-operated properties continued throughout the third quarter on a normal basis. Results at the Sunshine Unit Area, in which Hecla has a 33.25% interest in production, improved due to the end of a four-month labor strike on July 15.

Hecla's earnings are adversely affected by the ceiling price placed on lead and zinc by the Cost of Living Council under the Phase IV program.

Zinc, for example, is being sold by Hecla at a ceiling of 19.8c per pound while Canadians sell zinc to United States consumers at 28c per pound and South Americans are receiving 42c from the same consumers. Other foreign producers selling zinc in this country are using the London Metal Exchange price, which has been over 50c for several weeks, and on November 7, 1973 reached 63.4c per pound.

The American miner has historically operated in a free international metal market and took the good with the bad during metal price cycles. Now he is forced to take only the low U. S. controlled prices, while the foreign miner is able to gain the advantage of the much higher world prices wherever he sells his metals, including U. S. markets. The price distortions are permanently damaging the U. S. mining industry and will ultimately lead to increasing domestic metal shortages.

A free world market is the only way to encourage

File in DMEA - 2079 docket

production and to balance consumption on internationally-traded commodities. It is imperative that controls be removed immediately in order to restore equity and market balance.

Hecla's share of production for the first nine months of 1973 as compared to the first nine months of 1972 was as follows:

Total production	First Nine Months 1973*	1972
Tons of ore produced	219,880	337,707
Ounces of silver	2,789,344	3,734,277
Ounces of gold	988	40,455
Tons of lead	17,848	21,203
Tons of zinc	5,380	7,829
Tons of copper	300	1,612

***No production from the Mayflower Mine which was closed down at the end of 1972.**

Hecla's share of production from properties in which a major interest is owned and related assays for the first nine months of 1973 were as follows:

	Lucky Friday Mine Mullan, Idaho	Star-Morning Unit Area Burke, Idaho	Sunshine Unit Area Kellogg, Idaho
Tons of ore mined	136,403	61,637	21,840
Assays:			
Silver - Ounces per ton	15.55	2.78	25.84
Lead - Percent	11.11	5.18	
Zinc - Percent	1.19	6.62	
Copper - Percent			0.48

W. H. LOVE
President and
Chief Executive Officer

November 7, 1973

THIRD QUARTER REPORT

Nine Months
Ended Sept. 30, 1973

Wallace, Idaho

Production for the first six months of 1974 as compared with the first six months of 1973 was as follows:

	First Six Months 1974	First Six Months 1973
Tons of ore produced	161,562	148,137
Ounces of silver	1,998,884	1,889,439
Tons of lead	10,795	12,522
Tons of zinc	3,717	3,751
Tons of copper	254	199

Hecla's share of production from properties in which a major interest is owned and related assays for the first six months of 1974 were as follows:

	Lucky Friday Mine Mullan, Idaho	Star-Morning Unit Area Burke, Idaho	Sunshine Unit Area Kellogg, Idaho
Tons of ore mined	90,402	45,012	26,148
Assays:			
Silver — Ounces per ton	13.64	2.54	26.80
Lead — Percent	9.80	4.88	
Zinc — Percent	1.15	6.49	
Copper — Percent			0.51

W. H. LOVE
President and
Chief Executive
Officer

August 12, 1974

HECLA MINING COMPANY

TO THE SHAREHOLDERS OF
HECLA MINING COMPANY:

The Company realized consolidated net income of $6,115,632, or $0.93 per share, for the first six months of 1974 which compares with consolidated net income of $1,441,840, or $0.22 per share, for the first six months of 1973. An average of 6,585,621 shares were outstanding for both periods after giving effect to 2% stock dividends paid in each year. Consolidated net earnings of $3,263,309, or $0.50 per share for the second quarter of 1974 compares to $2,852,323, or $0.43 per share for the first quarter of 1974, and $746,368, or $0.11 per share for the second quarter of 1973. The first six months of 1974 includes net gain on sale of securities of $397,000, or $0.06 per share after income tax effect.

Certificates for the 2% stock dividend declared on May 7, 1974 were mailed to shareholders on August 9, 1974.

The Company's earnings for the first six months of 1974 reflect improved metal prices; however, rapidly increasing production costs as a result of inflationary factors related to materials, labor and increased smelting charges are a matter of continuing concern. Also, the slow-down in the economy may lead to reduced prices for metals.

Hecla's earnings for the first six months of 1974 include 12c per share representing Hecla's equity share of the income of Granduc Mines, Limited for the same period. Because of the recent decline in the London Metal Exchange quoted price of copper and the anticipated effect of the new British Columbia "Super Royalty" Tax, this level of earnings is not expected to continue during the balance of the year.

Development of the Company's Lakeshore copper property and construction of the mine plant and related metallurgical facilities continued satisfactorily although underground development fell somewhat behind during the quarter, principally due to an unusually hot Arizona summer and a shortage of skilled underground workers. While plagued by late material and equipment deliveries surface construction achievement was close to expected levels.

HECLA MINING COMPANY

Consolidated Statements of Income (Unaudited)

For the Six-Month Periods Ending June 30, 1974 and June 30, 1973

	Six Months Ended June 30 1974	Six Months Ended June 30 1973
Sales of concentrates and products	$15,781,523	$ 9,512,184
Net gain on sale of stocks held for investment	612,183	—
Dividend, interest and other income	104,304	43,628
Equity in net income (loss) of Granduc Mines, Limited	817,000	(249,500) (1)
Total revenue	17,314,960	9,306,312
Deduct		
Cost of sales and other expenses not shown separately	7,383,209	6,372,872
Exploration	360,000	400,000
Property and excise taxes	483,407	287,476
Depreciation, depletion and amortization	183,012	190,624
Total deductions	8,409,628	7,250,972
	8,905,332	2,055,340
Estimated taxes on income		
Currently payable	140,600	31,600
Deferred	2,649,100	581,900
	2,789,700	613,500
Net income	$ 6,115,632	$ 1,441,840 (1)
Average shares outstanding during period	6,585,621*	6,585,622 **
Net income per share	$ 0.93*	$ 0.22** (1)
Average metal prices		
Silver - (per ounce, Handy & Harman, N.Y.)	$ 4.95	$ 2.28
Lead - (per pound, New York)	20.57c	15.87c
Zinc - (per pound, Prime Western, delivered)	33.37c	19.79c
Copper - (per pound, Domestic)	73.07c	57.21c
Copper - (per pound, London Metal Exchange)	116.49c	66.19c

* Adjusted to reflect shares issued pursuant to a 2% stock dividend paid August 9, 1974 to shareholders of record May 22, 1974.

** Adjusted to reflect shares issued pursuant to 2% stock dividends paid on August 3, 1973 and on August 9, 1974.

Note (1): Restated to reflect restatement of Granduc Mines, Limited reported earnings for quarterly periods.

HECLA MINING COMPANY

SECOND QUARTER REPORT

Six Months
Ended June 30, 1974

Wallace, Idaho

Production for the first quarter of 1976 as compared with the first quarter of 1975 was as follows:

	First Quarter 1976	First Quarter 1975
Tons of ore produced (1)	82,562	78,634
Ounces of silver	1,078,653	965,605
Tons of lead	6,421	5,084
Tons of zinc	1,855	1,641
Tons of copper	130	125

Hecla's share of production from properties in which a major interest is owned and related assays for the first three months of 1976 were as follows:

	Lucky Friday Mine Mullan, Idaho	Star-Morning Unit Area Burke, Idaho	Sunshine Unit Area Kellogg, Idaho
Tons of ore mined (1)	48,668	20,447	13,447 (2)
Assays:			
Silver - Ounces per ton	14.96	2.98	23.92
Lead - Percent	11.01	5.54	
Zinc - Percent	1.42	5.97	
Copper - Percent			0.44

Note (1) - The above tabulations do not reflect Lakeshore mine production. During the first quarter of 1976, 290,000 tons of ore were mined and 2,977,000 pounds of copper contained in products was shipped from the property.

Note (2) - On strike since March 11, 1976.

In a hearing held on April 23, 1976, the Federal District Court granted Hecla's motion for Summary Judgment in third party suits brought against Hecla and twelve others by certain manufacturers of products used in the Sunshine Mine at the time of the fire. The manufacturers had claimed that the parties had joint control with Sunshine and failed to exercise due care in the operation of the Sunshine Mine and had asked for contribution or indemnity in the event that the plaintiff widows and heirs of the deceased miners and others are successful in their claims against the third party plaintiffs. The Company is pleased with the outcome of the hearing on the motion which, if not appealed will relieve Hecla of further obligation to defend this matter.

W. H. LOVE
President and
Chief Executive
Officer

May 5, 1976

HECLA MINING COMPANY

TO THE SHAREHOLDERS OF HECLA MINING COMPANY:

Over 82% of the Company's 6,717,334 shares issued and outstanding were represented in person or by proxy at the Annual Meeting of Shareholders held in Spokane, Washington on May 4, 1976. Messrs. Horton Herman, W. H. Love, W. T. Pettijohn, L. J. Randall, E. McL. Tittmann, W. B. Warren and John R. "Jack" Williams were elected as Directors. The selection of Coopers & Lybrand as auditors was approved.

Company officials reviewed 1975 results along with 1976 first quarter progress. A comprehensive report was presented on the 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, 1976 Annual Meeting will be mailed to you on request.

At the meeting of the Board of Directors held immediately following the Annual Meeting, Mr. James H. Hunter was elected a Vice President of the Company. Mr. Love stated that Mr. Hunter has been General Manager of the Lakeshore Mine in Arizona since development of the operation started in late 1969, has performed in an outstanding manner, and that management was very pleased to see Mr. Hunter's accomplishments recognized by his election to Vice President.

The Directors re-elected other 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; 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 6, 1976 to shareholders of record May 21, 1976. 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 21, 1976 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.

Consolidated net income for the first quarter of 1976 was $942,956 or $0.14 per share. This compares with $997,671 or $0.15 per share for the fourth quarter of 1975, and $1,604,964 or $0.24 per share for the first quarter of 1975. These earnings include the Company's equity in net losses of Granduc Mines, Limited in the amount of $67,200 or $0.01 for the first quarter of 1976, $279,700 or $0.04 per share for the fourth quarter of 1975, and $58,500 or $0.01 per share for the first quarter of 1975. The first quarter of 1975 included net gains on sales of securities of $90,500 or $0.01 per share, while in the first quarter of 1976 and the fourth quarter of 1975 there were no securities transactions.

The Lakeshore mine in Arizona, a fifty-fifty partnership with El Paso Natural Gas Company, has started operations. Production from both the Oxide mine and Sulfide mine is presently at a little over 50% of capacity, and we expect to reach full production by year end. The metallurgical processing plant is fully operational, including the crushing plant, concentrator, roast-leach plant, acid plant, electrowinning plant, oxide ore vat leach and precipitation plant, and sponge iron plant. The first copper shipment was made on January 26, 1976.

The total project costs to April 1, 1976 are $192 million, which includes $7.4 million of working capital. Additional working capital of $11 million is estimated as required to finance in-process and in-transit materials and accounts receivable.

The Property was placed on an operational status as of April 1, 1976, and net operational results from that point forward will be reflected in the Company's regular income accounts. As has been previously noted, at the present copper prices the Lakeshore mine operation will not realize a profit and it is expected to generate only a nominal cash flow at full production. During build-up of production to full capacity, costs per pound of copper will be higher than normal, and operating losses will occur. This situation will materially affect Hecla's reported earnings beginning April 1, 1976, and we anticipate reporting a loss in the second quarter, and possibly losses for the full year of 1976.

Copper prices have shown some improvement in recent weeks, as U.S. major copper producers have raised their price from 63c per pound to 70c per pound. While there is still a large world stock of excess copper, we are very optimistic that increased demand will result in a realistic price within the next year. If that occurs, as we believe it will, the Lakeshore mine can be expected to make an important contribution to Hecla earnings.

Operations at other Company-owned properties continued throughout the first quarter on a normal basis with the exception of the Sunshine Unit Area where the Sunshine mine has been closed by a strike since March 11; no settlement of the labor dispute has been reached at date of this writing. It is axiomatic that mine operating results for 1976 will continue to be affected by rising costs of labor, supplies and concentrate treatment charges, unless overall metal prices rise proportionately. Recent increases in the price of lead were needed and have been very welcome. We anticipate an increasing price for silver during the coming year, and are optimistic about the metal markets in general.

HECLA MINING COMPANY

Consolidated Statements of Income (Unaudited)

For the Three-Month Periods Ending March 31, 1976 and March 31, 1975

	Three Months Ended	
	March 31 1976	March 31 1975
Income:		
Sales of concentrates and products	$6,325,912	$6,950,953
Net gain on sale of stocks held for investment		174,029
Dividend, interest and other income	23,080	35,579
Equity in net (loss) of Granduc Mines, Limited	(67,200)	(58,500)
	6,281,792	7,102,061
Costs and Expenses:		
Cost of sales and other expenses not shown separately	4,308,278	4,038,116
Exploration	306,000	270,000
Property and excise taxes	259,913	283,701
Depreciation, depletion and amortization	87,745	80,880
Interest on bank loans	850,748	604,846
Less, interest capitalized	(850,748)	(604,846)
	4,961,936	4,672,697
	1,319,856	2,429,364
Estimated taxes on income		
Currently payable	19,600	32,300
Deferred	357,300	792,100
	376,900	824,400
Net income	$ 942,956	$1,604,964
Average shares outstanding	6,717,334	6,717,334*
Net income per share	$ 0.14	$ 0.24*
Average metal prices		
Silver - (per ounce, Handy & Harman, N.Y.)	$ 4.11	$ 4.30
Lead - (per pound, M.W.U.S. Producer)	19.41c	24.50c
Zinc - (per pound, Prime Western, delivered)	37.04c	39.07c
Copper - (per pound, Metals Week refined)	63 35c	65 17c

*Adjusted to reflect shares issued pursuant to the 2% stock dividend paid August 8, 1975 to shareholders of record May 22, 1975.

Hecla file

HECLA MINING COMPANY

FIRST QUARTER REPORT

Three Months
Ending March 31, 1976

Wallace, Idaho

Hecla's share of production for the first nine months of 1974 as compared to the first nine months of 1973 was as follows:

	First Nine Months 1974	1973
Tons of ore produced	228,581	219,880
Ounces of silver	2,782,272	2,789,344
Tons of lead	15,168	17,848
Tons of zinc	5,178	5,380
Tons of copper	350	300

Hecla's share of production from properties in which a major interest is owned and related assays for the first nine months of 1974 were as follows:

	Lucky Friday Mine Mullan, Idaho	Star-Morning Unit Area Burke, Idaho	Sunshine Unit Area Kellogg, Idaho
Tons of ore mined	126,034	65,008	37,539
Assays:			
Silver — Ounces per ton	13.71	2.44	25.73
Lead — Percent	9.90	4.72	
Zinc — Percent	1.20	6.15	
Copper — Percent			0.49

W. H. LOVE
President and
Chief Executive
Officer

November 7, 1974

HECLA MINING COMPANY

TO THE SHAREHOLDERS OF HECLA MINING COMPANY:

The Company realized consolidated net income of $7,791,485, or $1.18 per share for the first nine months of 1974 which compares with consolidated net income of $2,579,554, or $0.39 per share for the first nine months of 1973. An average of 6,585,621 shares were outstanding for both periods, after giving effect to 2% stock dividends paid in each year. The first nine months of 1974 includes a net gain on sales of securities of $423,000 or $0.06 per share after income tax effect.

Consolidated net earnings of $1,675,853 or $0.25 per share for the third quarter of 1974 compare to $1,137,714 or $0.17 per share for the third quarter of 1973. Net income for the third quarter of 1974 compares to $3,263,309 or $0.50 per share for the second quarter of 1974. This decrease was principally attributable to low production at the Sunshine Unit Area due to operational problems, lower average silver prices and increased operating costs for the quarter, and a shortage of experienced miners at the Lucky Friday mine.

Development and construction at the Company's Lakeshore property continue satisfactorily, with the mine plant and related metallurgical facilities being approximately 68% completed at the end of the nine-month period. An agreement was reached during the third quarter between Hecla and American Smelting and Refining Company providing for the treatment of Hecla's one-half share of the copper precipitates (cement-copper) to be produced by the Lakeshore Mine for a period of six years, with continuation year to year for an additional four years unless terminated by either party on one year's notice. American Smelting and Refining Company will purchase 60% of the accountable copper on the basis of Metals Week U. S. producer price and will return 40% of the accountable copper on toll. El Paso Natural Gas Company, owner of the other one-half share of production from the Lakeshore Project, has entered into an identical agreement for treatment of its one-half portion of the copper precipitates produced at Lakeshore. It is anticipated that the property will come to regular production in the last half of 1975.

HECLA MINING COMPANY

Consolidated Statements of Income (Unaudited)

For the Nine-Month Periods Ending September 30, 1974 and September 30, 1973

	Nine Months Ended September 30 1974	Nine Months Ended September 30 1973
Sales of concentrates and products	$22,194,151	$14,512,420
Net gain on sale of stocks held for investment	651,151	—
Dividend, interest and other income	148,807	81,150
Equity in net income of Granduc Mines, Limited and in 1974 Dividend equivalents received on Preferred Stock retired and foreign exchange gain on funds received, net of income tax provision of $337,000	984,632	37,400 (1)
Total revenue	23,978,741	14,630,970
Deduct		
Cost of sales and other expenses not shown separately	11,204,288	9,721,310
Exploration	540,000	685,000
Property and excise taxes	774,022	460,030
Depreciation, depletion and amortization	275,746	285,776
Total deductions	12,794,056	11,152,116
	11,184,685	3,478,854
Estimated taxes on income		
Currently payable	198,400	46,300
Deferred	3,194,800	853,000
	3,393,200	899,300
Net income	$ 7,791,485	$ 2,579,554
Average shares outstanding during period	6,585,621*	6,585,621**
Net income per share	$ 1.18*	$ 0.39**
Average metal prices		
Silver - (per ounce, Handy & Harman, N.Y.)	$ 4.73	$ 2.41
Lead - (per pound, New York)	21.88c	16.08c
Zinc - (per pound, Prime Western, delivered)	34.84c	19.97c
Copper - (per pound, Domestic)	77.05c	57.96c
Copper - (per pound, London Metal Exchange)	103.75c	74.59c

* Adjusted to reflect shares issued pursuant to a 2% stock dividend paid August 9, 1974 to shareholders of record May 22, 1974.

** Adjusted to reflect shares issued pursuant to 2% stock dividends paid on August 3, 1973 and on August 9, 1974.

Note (1): Restated to reflect restatement of Granduc Mines, Limited reported earnings for quarterly periods.

HL

HECLA
MINING COMPANY

THIRD QUARTER REPORT

Nine Months
Ended Sept. 30, 1974

Wallace, Idaho

C A A Div.
Owe

So. 157 Howard Street
Spokane 4, Washington
November 28, 1960

12/2 Cee 210 800

Hecla Mining Company

Wallace, Idaho

Re: DMEA-2879 (Lead-Zinc-Copper-Antimony)
Hecla Mining Co. (Successor to
Polaris Mining Company
Silver Summit Mine (Polaris East)
Shoshone County, Idaho
Contract No. Ida-E541 (Amended)

Gentlemen:

Enclosed for your information and files is a Report of Royalty Review dated November 15, 1960, pertaining to royalty due the Government from production from the Silver Summit mine for the period June 19, 1959, through November 7, 1960.

Sincerely yours,

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

Enclosure

cc: Fiscal Section w/orig. of Report of Royalty Review
OME(2)
Contract Admin. & Audit Div., OME
Director
Econ. Geol.
P&EM

OFFICE OF MINERALS EXPLORATION
CONTRACT ADMINISTRATION AND AUDIT DIVISION

REPORT OF ROYALTY REVIEW

I have reviewed the files of the Office of Minerals Exploration, Washington, D. C., pertaining to Contract No. Idm-E541, Docket No. DMEA-2879 (Lead-Zinc-Copper-Antimony), and Amended Contract having the same contract and docket reference, both effective November 1, 1953, with

Hecla Mining Company, Wallace, Idaho
Successor to
Polaris Mining Company, Wallace, Idaho

for the purpose of determining the amount of royalty due the U. S. Government on sales of minerals from property referred to as Silver Summit Mine located in Shoshone County, Idaho, during the period June 19, 1959, through November 7, 1960.

A certification of discovery or development was issued on March 23, 1959, and, in accordance with Article 4, Annex III, and Amendment No. 2 of the amended contract, royalty is payable on all minerals mined or produced from the land described in Article 2 of the contract, or transported through workings to the cost of which the Government contributed, for a period of 22 years from the date of the contract or until the total net amount contributed by the Government without interest is fully repaid, whichever occurs first. A Report of Review in lieu of final audit dated December 16, 1958, indicated accepted costs under the exploration contract amounting to $873,838.95 with the Government's contribution, on a 50 percent basis, being $436,919.48.

The status of the project, the scope of review, and the reasons therefor are stated on page 2.

This review established the total sales of concentrates for the period to be $37,958.18. Royalty due the Government at rates specified in the contract is $1,897.91.

A prior Royalty Audit Report and Certificate found the sales subject to Government royalty through June 18, 1959, to be $344,890.80, including an estimate of $38,400.00 for value of production during April 1959. The actual value of such production was found to be $37,958.18. Thus, adjusted total sales to date amount to $344,448.98. The royalty account as of June 18, 1959, was:

Total Royalty due	$17,244.57
Total Royalty paid	15,324.57
Balance of Royalty Due	$ 1,920.00

At November 7, 1960, the royalty account of this project was found to be:

Total Royalty due	$17,222.48
Total Royalty paid	17,222.48
Balance of Royalty Due	$ -0-

C. E. Fisher

November 15, 1960 C. E. Fisher, OME Auditor

STATUS OF PROJECT, SCOPE OF REVIEW AND REASONS THEREFOR

A prior royalty audit pertained to operations and royalty payments applicable to the period November 1, 1953, through March 31, 1959, and included an estimate of the value of production and royalty due for April 1959 prior to suspension of mining operations at the property. The only payment of royalty during the period covered by the present review related to April 1959. My review included a recomputation of that settlement and a revised summary of the royalty account as is shown on the attached Exhibit "A".

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

(1) The only change in status of this account since the date of the last previous audit has been the adjustment of April 1959 operating results from an estimated to an actual basis;

(2) There was no production from the land under the contract during the period covered by this review; and

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

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BATES NO. USGSPO 0000450

Exhibit "A"

Idm-8541

Hecla Mining Company

DMEA-2879

Summary of Production, Sales, and Royalty

Item	November 1, 1953 through February 28, 1958		March 1, 1958 through November 7, 1960		Totals	
	Quantity	Value	Quantity	Value	Quantity	Value
Concentrates - SDT	117.36		364.48		481.89	
Metal content:						
Gold - oz.	7.230	$ 231.50	19.810	$ 590.45	27.040	$ 821.95
Silver - oz.	105,038	90,733.75	269,827	232,682.88	374,865	323,416.63
Copper - Pounds	48,476	12,088.96	140,748	33,319.34	189,224	45,408.30
Totals		$103,054.21		$266,592.67		$369,646.88
Deductions:						
Smelting and treatment		$ 4,142.06		$ 12,232.47		$ 16,374.53
Freight		2,028.61		6,794.76		8,823.37
Totals		$ 6,170.67		$ 19,027.23		$ 25,197.90
Net proceeds		$ 96,883.54		$247,565.44		$344,448.98
Royalty due		$ 4,844.19		$ 12,378.29		$ 17,222.48
Royalty paid		4,844.19		12,378.29		17,222.48

MME Form 22
April 59

DEPARTMENT OF THE INTERIOR
Office of Minerals Exploration

CHECK SHEET OF EXAMINING ENGINEER

Operator's Name ~~Hecla Mining Company~~

Address ~~Wallace, Idaho~~

Exploration Contract No. ~~Idm-E541~~ Docket No. ~~DMEA 2879~~

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

No production since last report of royalty review.

~~11/ 7/60~~
Date

D R Mackenzie
Mining Engineer
~~XXXXXXXXXXXXXXX~~
Acting Field Officer, OME
Region I

53362

QUADRUPLICATE Treasury Department Circular No. 945 - Rev., Supp. 1 (Third Amendment). Promulgated Sept. 11, 1957 by Treasury Department, Fiscal Service.

CERTIFICATE OF DEPOSIT
Standard Form 219

7/7/59 (Date sent)

14-23-020-51[redacted] (Deposit No.)

Identification of Accountable Officer Affected

(1) Office Deposit Symbol: 9020

(2) For Consolidated Abstract of Treasury Regional Office at (city and state): Portland, Oregon

Deposited with Federal Reserve Bank of San Francisco, Portland [redacted]nch, Oreg.
(Name and location of depositary)

(3) The Sum of $1,897.91

(4) Classification of Deposit

Account Symbol	Amount	Account Symbol	Amount
14X4401	$ 1,897.91		$

E 5441

(6) Department or Agency and address whose accounts are credited, IF OTHER THAN depositing agency.

(5)
Dorothy F. Long, Authorized Collector
Office of Minerals Exploration
1201 N. Division Street
Spokane 2, Washington

Depositor's title, Department or Agency and address. If deposit is made for another accounting entity, identify in (6).

(7) SPACE BELOW TO BE USED BY DEPOSITARY ONLY. I certify that the above amount has been received for credit in the account of the Treasurer of the United States on the date shown, subject to adjustment for uncollectible items included therein.

(Authorized signature)

(Date of credit in Treasurer's account)

Depositary will date, sign and forward to depositor.

E541 Polaris Mining Company $1,897.91

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O M. E.
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DATE		CODE
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SECOND ROYALTY
AUDIT REPORT

OFFICE OF MINERALS EXPLORATION
CONTRACT ADMINISTRATION AND AUDITS DIVISION

JUN 30 1959
O.M.E.

ROYALTY AUDIT CERTIFICATE

I have examined the production, sales, and royalty accounts and records pertaining to the sale of concentrates for the period March 1, 1958 through June 18, 1959, by

Hecla Mining Company
Wallace, Idaho
Successor to
Polaris Mining Company
Wallace, Idaho

produced from the Silver Summit Mine, located near Osburn, Shoshone County, Idaho, on which royalty is due the U. S. Government under terms of Contract No. Idm-E541, Docket No. DMEA-2879 (lead-zinc-copper-antimony) and Amended Contract having the same contract and docket reference, both effective as of November 1, 1953.

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

The audit established the total sales of such concentrates subject to DMEA royalty, partially estimated to be $248,007.26. Royalty due the Government at the contract rate of 5 percent is $12,400.38.

A prior audit for the period November 1, 1953 through February 28, 1958, found the sales subject to Government royalty for that period to be $96,883.54, which added to the sales for the period covered by this audit make a total of $344,890.80. The royalty account as of February 28, 1958, was

Total Royalty Due	$4,844.19
Total Royalty Paid	4,844.19
Balance of Royalty Due	$ -0-

As of June 18, 1959, the royalty account of this project was found to be

Total Royalty Due	$17,244.57*
Total Royalty Paid	15,324.57
Balance of Royalty Due	$ 1,920.00**

release
copy
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pg 3

* Partially estimated.
**Estimate

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

June 25, 1959

OFFICE OF MINERALS EXPLORATION
CONTRACT ADMINISTRATION AND AUDITS DIVISION

ROYALTY AUDIT REPORT

I. INTRODUCTION

On June 18, 1959, an audit was made of the production, sales, and royalty accounts and records of

Hecla Mining Company
Wallace, Idaho
Successor to
Polaris Mining Company
Wallace, Idaho

pertaining to the sale of concentrates during the period March 1, 1958 through June 18, 1959, produced from Silver Summit Mine, located near Osburn, Shoshone County, Idaho, on which royalty is due to the U. S. Government under the terms of Contract No. Idm-2541, Docket No. DMEA-2079 (lead, zinc, copper, antimony), effective November 1, 1953, as amended and superseded by Amended Contract No. Idm-2541, Docket No. DMEA-2079, executed June 20, 1957, and made effective as of November 1, 1953.

The original accounting records pertaining to production, sales, and royalty payable to the Government are maintained under the direction of John B. Mathews, secretary, and are in the custody of D. W. Morehouse, assistant secretary, and Lennis E. Hill, chief accountant, in the Operator's general office at Wallace, Idaho. The records were made available to this auditor by Mr. Hill, whose cooperation greatly facilitated the audit.

II. GENERAL INFORMATION

Article 6 of the Amended Contract as further amended by Amendment No. 2 provides that should the Government, within 6 months after completion or termination of the exploration project certify that a discovery or development has resulted from the work, the Operator shall pay to the Government a royalty on the value of any production from the land described in Article 2 of the contract during a period of 22 years from the effective date of the Prior Contract, November 1, 1953, or until the entire amount of the Government's contribution to the exploration costs has been repaid without interest, whichever occurs first. A certification of discovery or development was issued on March 23, 1959. Report of Review in lieu of final cost audit dated December 16, 1958, indicated the accepted costs of exploration to be $873,838.95 with the Government's contribution, on a 50 percent basis, being $436,919.48

Annex III of the Amended Contract provides that notwithstanding the certification provisions of Article 6, the Operator as principal or as surety shall pay to the Government a royalty on any of its production, regardless of where it comes from, that is transported through any shaft, winze, raise, crosscut, drift or other workings to the cost of which the Government has contributed. Such royalty shall be payable during the 22 year period referred to above, but in no event shall more than one royalty be due or paid on the same production.

Annex III further provides that in the event production from outside the boundaries of the land described in Article 2 is transported through the workings described above, and neither the Operator nor any subsidiary or affiliate thereof has any interest in said production, the Government shall be paid the fixed rate of 5 percent of the total transportation charges received by the Operator. There has been no production to date on which the Operator has received a toll charge.

The Polaris Mining Company was merged into Hecla Mining Company by action taken at a Special Meeting of Shareholders of the two companies held on October 10, 1958.

Mining operations at the property were suspended in April 1959. Exploration work at the company's expense is continuing in the area included in the DMEA contract. The Polaris Mill is currently milling ore from Bunker Hill's Crescent Mine under contract.

A prior royalty audit of this project, covered by royalty audit report and certificate dated May 20, 1958, covers the period November 1, 1953 through February 28, 1958. The present audit covers the period from the latter date through June 18, 1959.

During the period under review, the Operator's ore was milled at the Polaris Mill near Osburn, Idaho. The concentrates were sold to American Smelting and Refining Company. From March through November 1958, shipments were made to the Garfield, Utah smelter. Subsequently, the shipments were made to the El Paso, Texas smelter.

III. SCOPE OF AUDIT AND FINDINGS

A. Conference with the Examining Engineer

A conference with S. W. Zoldak, mining engineer, U. S. Bureau of Mines, Spokane, Washington, who is familiar with the project, disclosed the following:

(a) The Operator does not stockpile ore subject to royalty repayment.

(b) The Operator does commingle production subject to DMEA royalty with exempt production. Mr. Zoldok considers, and this auditor agrees, that the Operator maintains adequate records pertaining to commingled ore and that the allocation subject to DMEA royalty is equitable.

(c) The Operator does not stockpile mine or mill rejects that may have a potential value within the royalty repayment period because tailings are too low grade.

(d) Assay controls are deemed adequate.

(e) The manner of disposing of production is considered as giving the Government its fair royalty return.

(f) Periodic examinations indicate that the Operator has properly reported the production subject to DMEA royalty.

(g) The Operator does not buy from or sell to other operators.

B. Audit of Settlement Statements

A considerable amount of preaudit work was accomplished in the OME office, Region I, Spokane, Washington, prior to the on-site audit. This consisted of recomputation and tabulation of the monthly production reports submitted by the Operator in support of the royalty payments. Reconciliation was made with the amounts of royalty receipts deposited by the Finance Officer. The tabulation is filed as a part of my audit work papers.

The on-site audit included a comparison and reconciliation of the data compiled during the preaudit work with the Operator's production, sales, and general records in the company's main office at Wallace, Idaho.

During the on-site audit it was ascertained that all royalty due, except that for April 1959, the last month of mining operations at the property, had been paid. Complete data for making royalty computation for April 1959 were not available. In order that this audit may include the entire period to the date mining operations were suspended, an estimate of the value of DMEA production and royalty due to the Government for the latter month has been included in the tabulation in Section IV of this report.

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BATES NO. USGSP00000450

IV. CONCLUSION

A summary analysis of the Operator's production from the area (Rainbow Area) subject to DMMA royalty and the amount of such royalty follows:

Item	November 1, 1953 through February 28, 1958 Quantity	Value	March 1, 1958 through June 18, 1959 Quantity	Value	Totals Quantity	Value
Concentrates-S.D.T.	117.36		364.88		482.24	
Metal content:						
Gold - oz.	7.230	$ 231.50	20.494	$ 606.24	27.724	$ 837.74
Silver - oz.	105,038	90,733.75	270,329	234,153.82	375,367	324,887.57
Copper - pounds	48,476	12,088.96	140,916	31,936.73	189,392	44,025.69
Totals		$103,054.21		$266,696.79		$369,751.00
Deductions:						
Smelting and treatment		$ 4,142.06		$ 11,955.71		$ 16,097.77
Freight		2,028.61		6,733.82		8,762.43
Totals		$ 6,170.67		$ 18,689.53		$ 24,860.20
Net proceeds		$ 96,883.54		$248,007.26		$344,890.80
Royalty due @ 5%		$ 4,844.19		$ 12,400.38		$ 17,244.57
Royalty paid		4,844.19		10,480.38		15,324.57
Balance of royalty due		-0-		$ 1,920.00		$ 1,920.00

The above balance of royalty due includes estimated royalty applicable to sales of production during April 1959, computed as follows:

Concentrates	64.08 S.D.T.		
Metal content:			
Gold	3.579 oz.	$ 108.00	
Silver	42,313 oz.	37,800.00	
Copper	19,504 lbs.	3,730.00	$41,638.00
Deductions:			
Smelting and treatment		$ 2,048.00	
Freight		1,190.00	3,238.00
Estimated value of sales			$38,400.00
Estimated royalty due @ 5%			$ 1,920.00

The audit has confirmed the accuracy and propriety of the royalty payments ($15,324.57) received by the Regional Office through June 18, 1959. The royalty due for April 1959 (estimated at $1,920.00) will be paid by the Operator as soon as the actual amount due has been determined by analysis of smelter settlements and comparison with the Operator's production and metallurgical records.

C. E. Fisher

C. E. Fisher, OME Auditor

June 25, 1959

MME Form 22
April 59

DEPARTMENT OF THE INTERIOR
Office of Minerals Exploration

JUN 30 1959
O.M.E.

CHECK SHEET OF EXAMINING ENGINEER

Operator's Name **Polaris Mining Company**

Address **Wallace, Idaho**

Exploration Contract No. **Idm-E541**

Docket No. **DMEA-2879**

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

please copy

June 25, 1959
Date

S. W. Zoldok
Mining Engineer

53362

JUL 1 1959

Memorandum

To: Mr. Clarence E. Fisher, OME Auditor

From: E. D. Talbert, Acting Chief (Signed) E. D. Talbert
Contract Administration and Audit Division

Subject: Docket No. DMEA-2879 (Lead-Zinc-Copper-Antimony)
Hecla Mining Company
Contract No. Idm-8541

Your Royalty Audit Certificate and Report on the subject contract is acceptable and normal distribution is authorized.

EDTalbert/ama
June 30, 1959

Copy to: Docket
Director's Reading File
CA & A Division

Mr. Tolbert

EXTRA COPY O. M. E. RECEIVED JUL 20 1959		
DATE	INITIALS	CODE
		800

No. 157 Howard Street
Spokane 4, Washington

July 16, 1959

Hecla Mining Company
Wallace, Idaho

Re: Docket No. DMEA-2879 (lead-zinc-Cu-Sb)
Hecla Mining Company, Successor to
Polaris Mining Company
Silver Summit Mine (Polaris East)
Shoshone County, Idaho
Contract No. Ida-2541

Gentlemen:

Enclosed for your information and files is a copy of Royalty Audit Certificate and Royalty Audit Report dated June 25, 1959, pertaining to the sale of concentrates for the period March 1, 1958 through June 18, 1959.

The auditor estimated that the royalty applicable to sales of production during April would be $1,920 and shows that amount as being due. Your check No. 87076 dated June 25, 1959 for $1,897.91 has been received for the April settlement.

Sincerely yours,

A. E. Weissenborn
Executive Officer, OME
Field Team Region I

Enclosure

cc: OME (2)
CA&A(1)
USBM(2)
AD

[illegible] N. Division St.
Spokane 2, Washington

June 15, 1959

Mr. L. J. Randall, President
Hecla Mining Company
P. O. Box 320
Wallace, Idaho

Re: Docket No. DMEA-3406 (Pb-Zn-Cu)
Hecla-Silver Mountain Project
Shoshone County, Idaho
Contract No. Idm-5732
and
Docket No. DMEA-3879 (lead-zinc-copper-antimony)
Polaris Mining Company
Polaris East Exploration Project
Shoshone County, Idaho
Contract No. Idm-5761

Dear Mr. Randall:

Mr. Clarence E. Fisher, OME Auditor from Washington, D.C., is currently engaged in making audits of certain DMEA exploration projects in this region.

He expects to arrive in Wallace on Wednesday or Thursday of this week and will call on you for the purpose of performing an interim cost audit of the Silver Mountain project and a royalty audit of the Polaris project.

Sincerely yours,

Wing G. Agnew
Acting Executive Officer
OME Field Team, Region I

cc: OME (2)
USGS (2)
USBM (AD)
Fisher

FIRST ROYALTY

AUDIT REPORT

QUADRUPLICATE Treasury Department Circular No. 945 - Rev., Supp. 1 (Third Amendment). Promulgated Sept. 11, 1957 by Treasury Department, Fiscal Service.

CERTIFICATE OF DEPOSIT
Standard Form 219

5-11-59 (Date sent)

14-23-020-505 (Deposit No.)

Identification of Accountable Officer Affected

(1) Office Deposit Symbol: 9020

(2) For Consolidated Abstract of Treasury Regional Office at (city and state): Portland, Oregon

Deposited with Portland Branch Federal Reserve Bank of San Francisco, Portland, Oreg.
(Name and location of depositary)

(3) The Sum of $ 1,361.24

(4) Classification of Deposit

Account Symbol	Amount	Account Symbol	Amount
14X4401	$1,361.24		$

E 541

(6) Department or Agency and address whose accounts are credited, IF OTHER THAN depositing agency.

(5)
Dorothy F. Long, Authorized Collector
Office of Minerals Exploration
1201 N. Division Street
Spokane 2, Washington

Depositor's title, Department or Agency and address. If deposit is made for another accounting entity, identify in (6).

(7) SPACE BELOW TO BE USED BY DEPOSITARY ONLY. I certify that the above amount has been received for credit in the account of the Treasurer of the United States on the date shown, subject to adjustment for uncollectible items included therein.

(Authorized signature)

(Date of credit in Treasurer's account)

Depositary will date, sign and forward to depositor.

E781 Jennie M. Moore $ 129.78
E541 Polaris Mining Co. 1,231.46

OFFICIAL FILE COPY
O. M. E.
RECEIVED MAY 13 1959

DATE	INITIALS	CODE
		800

E-541

For Certificate of Deposit No. 509, dated June 10, 1959, giving royalty payment of $815.97, see E-152.

E-541

For Certificate of Deposit No. 501, dated April 3, 1959, giving royalty payment of $1,151.83 and $926.70, see E-152.

For Certificate of Deposit No. 496, dated March 2, 1959, giving royalty payment of $495.47, see E-184.

E-541

For Certificate of Deposit No. 490, dated January 14, 1959, giving royalty payment of $422.54, see E-152.

For Certificate of Deposit No. 485, dated December 3, 1958, giving royalty payment of $591.48, see E-539.

For Certificate of Deposit No1 481, dated November 10, 1958, giving royalty payment of $968.86, see E-539.

For Certificate of Deposit No. 476, dated October 7, 1958, giving royalty payment of $477.81, see E-484.

E781	Mrs. Jennie M. Moore	$ 121.92
E541	Polaris Mining Company	360.54

OFFICIAL FILE COPY
DMEA
RECEIVED SEP 3 1958
DATE INITIALS CODE
9/5 JJ. G. 225
800

QUADRUPLICATE Treasury Department Circular No. 945 - Rev., Supp. 1 (Third Amendment). Promulgated Sept. 11, 1957 by Treasury Department, Fiscal Service.

CERTIFICATE OF DEPOSIT
Standard Form 219

9/3/58 (Date sent)

14-23-020-4[redacted] (Deposit No.)

Identification of Accountable Officer Affected

(1) Office Deposit Symbol: 9020

(2) For Consolidated Abstract of Treasury Regional Office at (city and state): [redacted] Portland, Oregon

Portla[redacted]Branch

(3) The Sum of $ 482.46

Deposited with Federal Reserve Bank of San Francisco, Portland, Oreg.
(Name and location of depositary)

(4) Classification of Deposit

Account Symbol	Amount	Account Symbol	Amount
14X4401	$482.46		$

E-54-1

(6) Department or Agency and address whose accounts are credited, IF OTHER THAN depositing agency.

(5)
Dorothy F. Long, Authorized Collector
U. S. Bureau of Mines
1201 N. Division Street
Spokane 2, Washington

Depositor's title, Department or Agency and address. If deposit is made for another accounting entity, identify in (6).

(7) SPACE BELOW TO BE USED BY DEPOSITARY ONLY. I certify that the above amount has been received for credit in the account of the Treasurer of the United States on the date shown, subject to adjustment for uncollectible items included therein.

(Authorized signature)

(Date of credit in Treasurer's account)

Depositary will date, sign and forward to depositor.

For Certificate of Deposit No. 470, dated August 20, 1958, giving royalty payment of $459.53, see E-246.

For Certificate of Deposit No. 467, dated July 25, 1958, giving royalty payment of $780.35, see E-539.

For Certificate of Deposit No. 460, dated June 2, 1958, giving royalty payment of $547.52, see E-484.

E-541

For Certificate of Deposit No. 456, dated May 7, 1958, giving royalty payment of $873.69, see E-152.

For Certificate of Deposit No. 451, dated April 4, 1958, giving royalty payment of $376.63, see E-150.

E-541

For Certificate of Deposit No. 445, dated March 3, 1958, giving royalty payment of $308.18, see E-246.

For Certificate of Deposit No. 442, dated February 14, 1958, giving royalty payment of $236.33, see E-9.

For Certificate of Deposit No. 434, dated December 24, 1957, giving royalty payment of $667.87, see E-484.

For Certificate of Deposit No. 430, dated December 10, 1957, giving royalty payment of $572.51, see E-152.

E-541

For Certificate of Deposit No. 424, dated November 1, 1957, giving royalty payment of $936.28, see E-152.

E-541

For Certificate of Deposit No. 421, dated October 11, 1957, giving royalty payment of $190.94, see E-152.

For Certificate of Deposit No. 418, dated September 6, 1957, giving royalty payment of $83.00, see E-152.

For Certificate of Deposit No. 415, dated August 16, 1957, giving royalty payment of $177.13, see E-9.

For Certificate of Deposit No. 413, dated July 25, 1957, giving royalty payment of $16.87, see E-41.

For Certificate of Deposit No. 405, dated June 10, 1957, giving royalty payment of $801.25, see E-41.

For Certificate of Deposit No. 403, dated May 27, 1957, giving royalty payment of $678.96, see E-152.

DMEA

6/5 ① 220 800

DEFENSE MINERALS EXPLORATION ADMINISTRATION
CONTRACT ADMINISTRATION AND AUDIT DIVISION

ROYALTY AUDIT CERTIFICATE

I have examined the records and sales documents pertaining to the sale of gold, silver and copper for the period of November 1, 1953 to February 28, 1958 by the

POLARIS MINING COMPANY
Wallace, Idaho

produced from the Silver Summit Mine, located in Shoshone County, State of Idaho, under the terms of Amended Exploration Project Contract No. Idm E 541 (lead-zinc-copper-antimony), Docket No. DMEA 2879, dated as of November 1, 1953 including Amendment No. 1.

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

The audit established the total sales of gold, silver and copper from the DMEA exploration project for the period under audit to be $96,883.54. Royalty due the United States Government at the contract rate of 5 percent is $4,844.19. The royalty paid and balance due as of February 28, 1958 are as follows:

Total Royalty Due	$4,844.19
Total Royalty Paid	4,844.19
Balance Royalty Due	$ 0.00

release copy this pg thru pg 45

C A Turner

C. A. Turner, Auditor

May 20, 1958

DEFENSE MINERALS EXPLORATION ADMINISTRATION
CONTRACT ADMINISTRATION AND AUDIT DIVISION

ROYALTY AUDIT REPORT

I. INTRODUCTION

On April 10, 1958, an audit was made of the production, sales and royalty accounts and records of

POLARIS MINING COMPANY
Wallace, Idaho

pertaining to the sales of concentrates for the period of November 1, 1953 to February 28, 1958, produced from the Silver Summit Mine, located in Shoshone County, State of Idaho, on which royalties are due the United States Government under the terms of Amended Exploration Project Contract No. Idm E 541 (Lead-Zinc-Copper-Antimony), Docket No. DMEA 2879, dated as of November 1, 1953.

The Amended Contract superseded the prior Contract designated as Contract No. Idm E 541, Docket No. DMEA 2879, dated June 3, 1953 with an effective date of November 1, 1953, including Amendments Nos. 1 to 4 inclusive. The Amended Contract provided for the completion of incompleted work under the prior Contract, additional work to be added to the exploration project and included a Special Agreement concerning Royalty.

The original accounting records under this Contract are maintained under the direction of John R. Mathews, Secretary, and are in the custody of D. W. Morehouse, Assistant Secretary, and Lennis E. Hill, Chief Accountant; are located in the general office of the Polaris Mining Company, Wallace, Idaho.

During the on-site audit the following representatives of the Company and the United States Bureau of Mines were present and consulted as necessary:

Mr. John R. Mathews	Secretary
Mr. Dave Morehouse	Assistant Secretary and Office Manager
Mr. Lennis E. Hill	Chief Accountant
Mr. Fred Sayer	Accountant
Mr. J. D. Bardill	Metallurgist U.S. Bureau of Mines

The cooperation of all greatly facilitated the audit.

II. GENERAL INFORMATION

The Amended Contract provides for a total cost of exploration work amounting to $873,840.00, with the Government's contribution on a 50 percent basis being $436,920.00. An interim audit dated September 2, 1955 by C. A. Turner, DMEA Auditor for the period ending February 28, 1955, indicated the cost of exploration to be $339,452.95 with the Government's contribution on a 50 percent basis being $169,726.47. Since February 28, 1955 the exploration work has been continued on the basis of agreed unit costs of units of work completed. The Operator's total cost of exploration for the period ended April 30, 1958 is $839,538.76 (subject to audit) with the Government's contribution on a 50 percent basis being $419,769.38. The exploration has not been completed and is still in progress. The Contract completion date is June 1, 1958.

The Government has not made a certification of discovery or development, however; Annex III of the Amended Contract includes a Special Agreement concerning Royalty as follows:

> Notwithstanding the certification provisions of Article 6, and with no further action required on the part of the Government, the Operator, as principal if the Operator is the producer or as surety if the Operator is not the producer, shall pay the Government a royalty on any of its production, regardless of where it comes from, that is transported through any shaft, winz, raise, crosscut, drift or other workings to the cost of which the Government has contributed, or any portion of said workings for the same period as is described in Article 6 (b) (2) of the Contract (21 years from the effective date of the Prior Contract, November 1, 1953) and pursuant to the terms of Article 6 (c) et seq. However, in no event shall more than one royalty be due on or paid on the same production.
>
> In the event that production from outside the boundaries of the land described in Article 2 is transported through the workings described above, and neither the Operator nor any subsidiary or affiliate thereof has any interest in said production, the Government shall be paid the fixed rate of 5 percent of the total transportation charges received by the Operator.

The Operator maintains a complete set of records and accounts pertaining to mining operations, milling operations and the sales of concentrates which are supported by adequate records from the mine, the mill and the smelter returns.

The Operator is conducting mining and milling operations concurrently with the exploration work, including mining on land not subject to DMEA royalty. An adequate record is being made of the tonnage produced from each location with assays of the mineral content of the ores, from which an equitable allocation may be made between ore subject to DMEA royalty and ore not subject to DMEA royalty.

The ore is milled at the Polaris Mill near Osburn, Idaho. Concentrates have all been sold to the American Smelting and Refining Company. All of the concentrates were shipped to the East Helena, Montana, smelter, with the exception of two very small lots shipped in May, 1954, one of which went to the Tacoma, Washington smelter, and the other to the Garfield, Utah smelter.

III. SCOPE OF AUDIT AND FINDINGS

A. Conference With the Examining Engineer

A conference with the examining engineer, Mr. J. D. Bardill, Metallurgist, U. S. Bureau of Mines, disclosed the following:

(a) The Operator does not stockpile ore subject to royalty repayment.

(b) The Operator does commingle production subject to DMEA royalty with exempt production. The examining engineer considers, and this auditor agrees, that the Operator maintains adequate records pertaining to commingled ore and that the allocation subject to DMEA royalty is equitable.

(c) The Operator does not stockpile mine or mill rejects that may have a potential value within the royalty repayment period, because tailings are too low grade.

(d) Assay controls are deemed adequate.

(e) The manner of disposing of production is considered as giving the Government its fair royalty return.

(f) Periodic examinations of exploration operations indicate that the Operator is properly reporting the current production subject to DMEA royalty.

(g) The Operator does not buy from or sell to other operators.

B. Audit of Settlement Sheets

A considerable amount of pre-audit work was accomplished in the DMEA office, Region I, Spokane, Washington, prior to the on-site audit. This consisted of a recomputation of the monthly production reports submitted by the Operator in support of the royalty payments due on sales of concentrates from the Rainbow Area subject to DMEA royalties. This information was tabulated and a reconciliation was made with the amounts of royalty receipts indicated by the records of the Finance Officer. The tabulations are filed as a part of my audit working papers. A summary analysis of these statements is included in Section IV of this audit report.

The on-site audit included a comparison and reconciliation of the data compiled during the pre-audit work with the Operator's production records, sales records and general records, in the Company's main office at Wallace, Idaho.

The Operator maintains a Metallurgical Balance of Products Record for all production for the month. Production from the Rainbow Area which is subject to DMEA royalty, is shown under a separate caption and is a part of the total production. The record is adequately supported by daily and monthly reports from the mine and mill, to compute the data required to complete the record.

The Operator's monthly Final Production Report for the Rainbow Area is the basis of the monthly royalty payments. All of the monthly Final Production Reports for the period under audit were checked against the Metallurgical Balance of Products and the American Smelting and Refining Co. smelter settlement sheets.

IV. CONCLUSIONS AND RECOMMENDATIONS

A summary analysis of the Operator's Rainbow Area production and the sales of concentrates to the American Smelting and Refining Co. for the period of November 1, 1953 to February 28, 1958, with the amount subject to DMEA Royalty and Royalty paid, follows:

NON-PRIVILEGED DOCUMENT

TO BE PHOTOCOPIED AND PRODUCED

DO NOT CODE

BATES NO. USGSP0450

SUMMARY OF ROYALTY PAID ON PRODUCTION AND SALES FOR THE PERIOD OF NOVEMBER 1, 1953 TO FEBRUARY 28, 1958

Sale of Concentrates to American Smelting and Refining Co.

Concentrates Produced		117.36 Dry Tons	
Metal Content of Concentrates			
Gold		7.23 Ounces	$ 231.50
Silver		105,038.00 Ounces	90,733.75
Copper		48,476.00 Pounds	12,088.96
			103,054.21
Deductions:			
Smelting and Treatment	$4,142.06		
Freight	2,028.61		6,170.67
Net Proceeds Subject to Royalty			$ 96,883.54
Royalty Paid @ 5%			$ 4,844.19

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end

It was determined by the audit that the allowable deductions for freight paid by the American Smelting and Refining Co. for the period under audit, November 1, 1953 to February 28, 1958, amounted to $2,028.61.

The audit has confirmed the accuracy and propriety of the royalty payments received by the Regional Office applicable to the sales of concentrates for the period under audit, November 1, 1953 to February 28, 1958.

At the conclusion of the audit, the findings were discussed with Mr. Lennis Hill, Chief Accountant.

The audit report and findings were discussed with Mr. A. E. Weissenborn, Executive Officer, DMEA Field Team, Region I, May 20, 1958.

C. A. Turner, Auditor.

May 20, 1958

Check Sheet of Examining Engineer

Operator's Name Polaris Mining Company

Address Wallace, Idaho

Exploration Contract No. Idm-E541 Docket No. DMEA-2879 (lead-zinc-copper-antimony)

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

8. Comment on any item 2 (b) to 6 if answer is No.

3. (a) Tailings are too low grade to stockpile.

John D. Bardill
Mining Engineer

Date April 10, 1958

82448

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

Re: Idm-E541, DMEA-2879 (Lead-Zinc-Copper-Antimony)
Polaris Mining Company

Dear Mr. Turner:

Your Royalty Audit Certificate and Report on the above referenced project is acceptable and normal distribution is authorized.

Sincerely yours,

(Signed) J. L. Chambers

Jay L. Chambers, Director
Contract Administration
and Audit Division

AMAlley/ama
June 5, 1958

Copy to: Docket
Admr. Reading File
Mr. Chambers

MAY 26 1958

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

Re: IGN-F541, DMEA-2879 (Lead-Zinc-Copper-Antimony)
Polaris Mining Company

Dear Mr. Turner:

The Royalty Audit Certificate and Report, which I am returning for revision, state that your recent audit of the referenced project covered sales for the period of November 1, 1953, to April 10, 1958, and that the royalty paid as of April 10, 1958 amounted to $4,844.19. Our records, however, indicate that a Certificate of Deposit dated April 4, 1958 brought the cumulative royalty payments to $5,220.82. I believe that your audit actually covers sales and payments through February 28, 1958.

Please review and make the necessary revisions as to dates in paragraphs 1 and 3 of the certificate and in the report on page 1, par. 1; page 4, par. 4; page 5, heading; and page 6, par. 1 and 2.

Also, the word "termination" in the last sentence of par. 1 on page 2 should be corrected to "completion"; par. 2 on page 2 should be preceded by the following, or similar, statement: "The Government has not made a certification of discovery or development, however"; and item A(c) on page 3 should be amended by suffixing the statement "because tailings are too low grade".

Sincerely yours,

(Signed) J. L. Chambers

Jay L. Chambers, Director
Contract Administration
and Audit Division

Enclosures

EDTalbert/ema
May 26, 1958

Copy to: Docket
Admr. Reading File
Mr. Chambers

So. 157 Howard Street
Spokane 4, Washington

March 6, 1958

RECEIVED MAR 10 1958
DATE
CODE
820

Mr. C. A. Turner
DMEA Auditor, Region 1
1202 N. Division Street
Spokane 2, Washington

Dear Mr. Turner:

It would be appreciated if you would conduct a royalty audit of the properties listed below:

Docket No. DMEA	Operator and mine name	Contract No.
✓ 2879	Polaris Mining Co., Polaris East Exploration Project	Idm-E541
2719	Day Mines, Inc., Hercules Mine	Idm-E484 (Amended)
2764	Bunker Hill Co., Crescent Mine	Idm-E493

Sincerely yours,

A. Z. Weissenborn
Executive Officer, DMEA
Field Team, Region 1

cc: DMEA (3)
USBM (2)
USBM (AD)

For reply to letter dated May 7, 1956, requesting copy of C. D. No. 312, see E-510.

For Certificate of Deposit No. 312, dated April 26, 1956, giving royalty repayment of $174.87, see E-510.

MAY 7 1956

Mrs. Myrtle Purdy
Authorized Certifying Officer
Bureau of Mines
1201 North Division Street
Spokane 2, Washington

Dear Mrs. Purdy:

It is noted that the following two royalty payments indicated on your April Supporting Schedule for Monthly Report, Strategic and Critical Minerals Exploration Program, have not been received by the Washington office:

Contract No.	Docket No.	Operator	Amount
E-510	DMEA-2920	Bonanza Oil & Mine Corporation	$ 39.20
E-541	DMEA-2879	Polaris Mining Company	174.87

Please forward our copies of these certificates of deposit at your earliest convenience.

Sincerely yours,

(Signed) J. L. Chambers

Jay L. Chambers, Chief
Contract Administration
and Audit Division

AMAlley/ama
May 7, 1956

Copy to: Docket - DMEA-2920
DMEA-2879
Admr. Reading File
Mr. Chambers

So. 157 Howard Street
Spokane 4, Washington
June 25, 1958

800

Mr. L. J. Randall, President
Polaris Mining Company
P. O. Box 520
Wallace, Idaho

Re: Docket No. DMEA-2879 (Copper-Lead-Antimony)
Polaris East Exploration Project
Shoshone County, Idaho
Amended Contract No. Idm-E541

Dear Mr. Randall:

Enclosed for your information and files are one copy each of Royalty Audit Certificate and Royalty Audit Report dated May 20, 1958, by C. A. Turner, DMEA Auditor. This certificate and report covers the period November 1, 1953, to February 28, 1958.

Sincerely yours,

Donald R. Maclaren
For: A. E. Weissenborn
Executive Officer, DMEA
Field Team, Region I

Enclosures

cc: DMEA(5)
[illegible](2)
[illegible](A[illegible])
[illegible]

OFFICE OF MINERALS EXPLORATION
CONTRACT ADMINISTRATION AND AUDIT DIVISION

OFFICIAL FILE COPY
O. M. E.
RECEIVED DEC 19 1958

DATE	INITIALS	CODE
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REPORT OF REVIEW

I have reviewed the Monthly Reports of:

Polaris Mining Company
P. O. Box 320
Wallace, Idaho

pertaining to Exploration Contract No. Idm-X341, Docket No. [illegible]-2879, dated June 3, 1953, including Amendment Nos. 1 to 4, inclusive, and Amended Contract No. Idm-X341, Docket No. [illegible]-2879, dated November 1, 1953, including Amendment Nos. 1 and 2, for the months of October 1953 to September 1958, inclusive, covering a project for the exploration of Lead-Zinc-Copper-Antimony, on property known as Polaris East Exploration Project, located in Shoshone County, Idaho.

My review included an examination of the Monthly Reports (Forms MF-104) and supporting documents attached thereto, comparison of the costs claimed with the contract and pertinent schedules, verification of work performed by reference to Field Team Reports and correspondence, and a determination of the reasonableness and propriety of the costs.

This review was made in lieu of a final audit of the Operator's accounts and records for the reasons given on the attachment to this report.

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

Total cost as billed by the Contractor		$873,838.95
Exceptions:		
Prior to this review	$ -0-	
Herewith	-0-	-0-
Total Accepted Cost (Summary attached)		$873,838.95

The contract calls for a 50 percent participation of exploration ~~of exploration~~ expenses by the United States Government. Therefore, payment to the contractor by the Government in the amount of Four Hundred Thirty Six Thousand Nine Hundred Nineteen and 48/100 Dollars is valid and proper, provided that the Regional Executive Officer, The Director, or other competent official has accepted or will accept the project as having otherwise met the terms of the contract.

Amount payable to Operator	$436,919.48
Amount paid to date	434,444.35
Balance due Operator	$ 2,475.13

December 16, 1958

George Naver
George Naver, OME Auditor

Reasons for a Report of Review in lieu of a final audit

(a) a large portion ($339,452.95) of accepted costs was covered by an Interim Audit Report dated September 2, 1955, issued by G. A. Turner, NMBA Auditor:

(b) the balance (534,386.00) of the accepted costs was under a contract provision for payment by the Government on the basis of agreed unit costs of work actually performed: and

(c) the administrative cost to the Government of an audit would be excessive in relation to the estimated amount of possible further disallowances thereunder.

Summary of Accepted Costs

Polaris Mining Company

Idm-3541 DMEA-2679

	Totals Sept., NF-104	Accepted Costs Total	Stage I	Stage II
(1) Agreed Unit Costs				
Diamond Drilling	$111,546.00	$111,546.00	$ 89,046.00	$ 22,500.00
Raising	30,248.86	30,248.86	30,248.86	-0-
Crosscutting	83,432.06	83,432.06	45,578.78	37,853.28
Drifting	616,100.13	616,100.13	532,003.40	84,096.73
Sidewipes	32,512.50	32,512.50	29,962.50	2,550.00
Totals	$873,838.95	$873,838.95	$726,838.94	$147,000.01

EXTRA COPY O. M. E. RECEIVED JAN 26 1959		
DATE	INITIALS	CODE
		800

So. 157 Howard Street
Spokane 4, Washington

January 20, 1959

Polaris Mining Company
P. O. Box 320
Wallace, Idaho

Re: Docket No. DMEA-2879 (Lead-Zinc-Copper-Antimony)
Polaris Mining Company
Polaris East Exploration Project
Shoshone County, Idaho
Contract No. Idm-E541

Gentlemen:

Enclosed for your information and files is a copy of a Report of Review dated December 16, 1958, for the period October 1953 to September 1958, inclusive.

The audit discloses that there is a balance of $2,475.13 due you. This amount has been scheduled for payment and you should be receiving a check in a few days.

Sincerely yours,

A. E. Weissenberg
Executive Officer, OME
Field Team Region I

cc: OME (2)
USBM (2)
USBM(AD)

UNITED STATES
DEPARTMENT OF THE INTERIOR
OFFICE OF MINERALS EXPLORATION
420 Custom House, 555 Battery Street
San Francisco 11, California

OFFICIAL FILE COPY O. M. E. RECEIVED JAN 13 1959		
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		800

January 7, 1959

Certified Mail

Mrs. Dorothy F. Long
Authorized Certifying Officer
1201 N. Division Street
Spokane 2, Washington

Re: Docket No. [illegible]-2879
(Copper-[illegible]-Antimony)
Polaris Mining Company
Amended Contract No.
Ida-[illegible]41

Dear Mrs. Long:

Reference is made to your letter dated December 9, 1958, in connection with audit of subject contract. Audit is now complete, and I am enclosing herewith one original and 3 copies of Report of Review for further distribution by your office. The report shows a balance due the Operator in amount of $2,475.13, and the report was approved by the Washington Office December 23, 1958.

I am also enclosing the following material previously submitted by you.

1. Contract and Correspondence File (Includes original contract, annex I, II, III, IV, Exhibit "A", Exhibit "B", and Amendment Nos. 1 thru 4, Amended Contract Annex I, II and III, Exhibit "A", and amendment Nos. 1 and 2)

2. Voucher Files (3)
(MF-104's and 104A's, with attachments)

The file of pre-audit papers, prepared by Mr. C. A. Turner, I have retained for my audit file of subject contract.

Sincerely yours,

Enclosures:

"(SIGNED) GEORGE MAVOR"

George Mavor, OME Auditor

Copy to: Jay L. Chambers ✓

DEC 23 1958

Mr. George Maver
OME Auditor
420 Custom House
555 Battery Street
San Francisco 11, California

Re: Docket No. DMEA-2879
(Lead-Zinc-Copper-Antimony)
Polaris Mining Company
Contract No. 16m-E341

Dear Mr. Maver:

Your Report of Review covering the referenced project is acceptable and normal distribution is authorized after deletion of the second phrase "of exploration" in the last paragraph.

Sincerely yours,

(Signed) J. L. Chambers

Jay L. Chambers
Contract Administration
and Audit Division

CEFisher/GMcC
December 22, 1958

cc: Docket
Mr. Chambers
Director's Reading File

EXTRA COPY O. M. E. RECEIVED DEC 16 1958		
DATE	INITIALS	CODE
		8A-0

1201 N. Division St.
Spokane 2, Washington

December 9, 1958

CERTIFIED MAIL

Mr. George Mavor, OME Auditor
Room 420, Custom House
555 Battery Street
San Francisco 11, California

Re: Docket No. DMEA-2879 (copper-lead-antimony)
Polaris Mining Company
Polaris East Exploration Project
Amended Contract No. Idm-2541

Dear Mr. Mavor:

Enclosed herewith is a memorandum from the Field Team, Region I, requesting a Report of Review in lieu of a final audit of the subject contract. In addition, we are transmitting the following material needed to complete your review:

1. Contract and Correspondence File (Includes original contract, Annex I,II,III,IV, Exhibit "A", Exhibit "B", and Amendments 1 through 4; Amended Contract, Annex I, II and III, Exhibit "A", and Amendments 1 and 2.
2. Voucher Files (3) (Mf-104's and 104A's, with attachments).
3. File of pre-audit work papers prepared by Mr. C. A. Turner.

The August and September 1958 vouchers were withheld, pending final audit.

Sincerely yours,

Dorothy F. Long
Authorized Certifying Officer

Enclosures
cc: Mr. Chambers✓
OME (2)
USGS (2)
USBM (AD)

NON-PRIVILEGED DOCUMENT

TO BE PHOTOCOPIED AND PRODUCED

DO NOT CODE

BATES NO. USGSP00000450

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

Budget Bureau No. 42-R1036.5

Final Report

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION

~~Stage II~~

OPERATOR'S MONTHLY REPORT AND VOUCHER

JAN. 19 1959 O.M.E.

Month of September, 1958 Docket No. DMEA-2879 Contract No: IIM-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 / Short Form Contracts:						
Drilling Coral 85.20 4.50	$ 833.40	$ 21666.60	$ 22500.00	833.40	21666.60	22500.00
Bulldozing						
Crosscutting		37853.28	37853.28		37853.28	37853.28
Drifting	84,096.73	~~79979.70~~	84096.73		84096.73	84096.73
Sidewipe		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
		146166.61				
TOTALS	$ 833.40	$ ~~142049.58~~	$ ~~147000.01~~	833.40	873005.55	873838.95

withhold do not copy

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

Date 10-3-58 *Payee Polaris Mining Company

Per John R. Murdock 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)

416.70
-.08
adj. to Audit 416.62

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

$ 416.62

Signature Dorothy F. Long
(Authorized Certifying Officer)

Date 1/15/59 Vou. No. 2271
(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 Lt John D. Lardill Title Metallurgist Date Oct. 29, 1958

APPROVAL BY ~~DMEA~~ OME EXECUTIVE OFFICER OR ALTERNATE:

Signature H. A. E. Weissenborn Title Exec. Officer Date Jan. 13, 1959

MONTHLY REPORT OF OPERATOR

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

Form MF-104A
(April 1952)

Final Report

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

Month of September 1958 Docket No. DMEA 2879 Contract No. [illegible]

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			$ 84086.73	1724.0	$ 48.78	2500	$ 48.78 *
Crosscutting				37853.28	776.0			
Raising								
Sidesuipe	"			2550.00	100.0	25.50	100	25.50 *
Winzes								
Drilling: Core	"	$ 833.40	185.2	22500.00	5000.0	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 10-3-58 Operator Polaris Mining Company

Per John R. Marchant 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 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

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

October 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
September - 1958
Docket No. DMEA 2879
Contract No. IDM-E541

Gentlemen:

Progress in the Polaris East Exploration Project during the month of September included 185.2 feet of diamond drilling to complete the DMEA contract and 824.1 feet of drilling which was not under DMEA. All exploration under the DMEA contract has now been completed in this project and a final report will be prepared within a few weeks.

As shown on the attached progress map, Hole No. 3513 was drilled 170.3 feet northwesterly from 347 East drift to explore the extensions of the two veins exposed in the drift during the month of July. No significant mineralization was encountered in this hole.

Hole No. 3514 was started easterly from the east face of 347 East drift and had reached a depth of 554.0 feet by the end of the month. The first 14.9 feet of this hole completed the DMEA contract for diamond drilling.

Hole No. 3512 which was drilled southerly from 329 Southwest drift advanced 285.0 feet to a completed depth of 1006.0 feet. Logs of holes 3512 and 3513 are included with this report and the log of Hole No. 3514 will be submitted with the final report.

No. 331-A Raise from 329 Southwest drift was driven 33.0 feet to a point 124.9 feet above 3000 level and was still in ore at the end of September.

Yours very truly,

M. W. Hutchinson

M. W. Hutchinson
Geologist

MWH/hdh/dv

Encs.

W

POLARIS MINING COMPANY

P. O. Box 320
WALLACE, IDAHO

EXTRA COPY
O. M. E.
RECEIVED JAN 19 1959

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Aug + Sept 104's

November eleventh
1958

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

Re: Polaris East Exploration Project
Docket No. DMEA 2879
Contract No. IDM-E541

Gentlemen:

Enclosed herewith are 5 plain copies of the larger 50-scale sheets No. 6, 7 and 8 of the Polaris East Exploration Project and 5 copies of the log of diamond drill Hole No. 3514.

With these maps and log, a complete set of 50-scale prints from which the small monthly progress maps were made, has been submitted, as have the logs of all holes drilled under the DMEA contract.

Yours very truly,

M. W. Hutchinson

M. W. Hutchinson
Geologist

Release
Copy

MWH/hdh/dv

Encs.

OFFICIAL FILE COPY O. M. E. RECEIVED JAN 19 1959		
DATE	INITIALS	CODE
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1801 N. Division St.
Spokane 8, Washington

January 13, 1959

Mrs. Dorothy Long, Certifying Officer
OME Field Team, Region I
1801 N. Division Street
Spokane 8, Washington

Re: Docket No. DMA-6879 (copper-lead-zinc)
Polaris Mining Company
Polaris Dust Exploration Project
Amended Contract No. DMc-2961

Dear Mrs. Long:

The work completed under the contract was done to the satisfaction of the Government. The work authorized under the referenced contract was completed on September 19, 1958. A final report evaluating the results of the exploration program has been presented by the Operator and accepted by the Executive Officer.

The Government has no interest in supplies or equipment purchased for use on the project.

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

A Final Report of Review dated December 16, 1958 by OME Auditor Eugene Moyer has been received.

As all contract requirements have been met, it is requested that Final settlement of our account with the Operator be made.

Sincerely yours,

A. E. Weissenborn, Exec. Officer
OME Field Team, Region I

cc: OME (2)
DMA (2)
Contract Admin. & Audit Div. (2)
Docket

EXTRA COPY DMEA RECEIVED JUN 23 1958		
DATE	INITIALS	CODE
		900

So. 157 Howard Street
Spokane 4, Washington

June 18, 1958

Mr. David Morehouse
Polaris Mining Company
P. O. Box 320
Wallace, Idaho

Re: Docket No. DMEA-2879 (Lead-Zinc-Copper-Antimony)
Polaris East Exploration Project
Shoshone County, Idaho
Amended Contract No. Idm-E541

Dear Mr. Morehouse:

Referring to our telephone conversation regarding nonpayment of your April voucher, I find that this has been held up because of the expiration of the contract on June 1. Now that your May voucher has been received it can be paid but, unfortunately, payment will have to be delayed a short time because of the absence of Mrs. Long, the Certifying Officer. It will be paid immediately upon her return.

Meanwhile, we have teletyped DMEA asking them to put through the amendment to extend the contract so that payment of your May voucher can be made.

I regret that there has been this delay.

Sincerely yours,

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

cc: DMEA (3)
USBM (2)
Mrs Long, USBM

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TO BE PHOTOCOPIED AND PRODUCED

DO NOT CODE

BATES NO. USGSP00000450

DMEA Field Team, Region I, NW District December 27, 1955

DMEA Certifying Officer, Region I

Polaris Mining Company, Contract Idm-E541. 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

XXXXXXXXXXXXXXXXXX
1201 N. Division Street
Spokane 2, Washington
December 27, 1955

Polaris Mining Company
Box 320
Wallace, Idaho

Re: Docket No. DMEA-2879
Contract Idm-E541
Monthly operating reports
May 1955 through November 1955

Gentlemen:

The vouchers for September, October, and November 1955 have been processed and forwarded to our Disbursing Officer in Portland, Oregon, for payment.

Adjustments made are explained in the attached copy of a memorandum to the Field Team, Region I, from the Certifying Officer.

By Field Team, Region I, NW District

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

cc: DMEA (2)
USGS (2)
AD

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

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BATES NO. USGSP00000450

DEFENSE MINERALS EXPLORATION ADMINISTRATION
CONTRACT ADMINISTRATION AND AUDIT DIVISION

INTERIM AUDIT CERTIFICATE

I have examined the records and transactions of the:

Polaris Mining Company
Wallace, Idaho

pertaining to Exploration Project Contract No. Idm-E541, Docket No. DMEA-2879, dated June 3, 1953, covering a project for the exploration of copper, lead, antimony and incidental silver on property known as the Silver Summit Mine, located in Shoshone County, State of Idaho, for the period of June 3, 1953, to February 28, 1955, inclusive.

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

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

Total cost as billed by contractor	$337,536.89
Additional cost allowed by audit	1,916.06
Net Cost	339,452.95
Exceptions (see Audit Report for details)	None
Total Accepted Cost	$339,452.95

The contract calls for a 50 percent participation of exploration expenses by the United States Government. Therefore, payment to the Contractor by the Government in the amount of One hundred sixty nine thousand seven hundred twenty six and 47/100 Dollars,

$169,726.47

is valid and proper.

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

C. A. Turner

C. A. TURNER, Auditor

September 2, 1955

INTERIM AUDIT REPORT

I. Introduction

During the periods of June 27, 1955, to June 30, 1955, inclusive and July 12, 1955, to July 15, 1955, inclusive an interim audit (covering operations for the period of June 3, 1953, to February 28, 1955,) was made of the records and transactions pertaining to Exploration Project Contract No. Idm-E541, Docket No. DMEA-2879, dated June 3, 1953, with the:

Polaris Mining Company
Wallace, Idaho

covering a project for the exploration of copper, lead, antimony and incidental silver on property known as the Silver Summit Mine, located in Shoshone County, State of Idaho.

The original accounting records under this contract are maintained under the direction of John R. Matthews, Secretary and Treasurer, are in the custody of D. W. Morehouse, Assistant Secretary, and Lennis E. Hill, Chief Accountant, and are located in the Polaris Mining Company general office, Wallace, Idaho.

L. J. Randall, President, Robert E. Sorenson, Geologist, George M. Grismer, Mine Superintendent, and Herb Wellman, Mine Clerk and Warehouseman, were consulted as required during the course of the audit. All employees of the Company were most cooperative at all times.

E. G. Erickson, Mining Engineer, Bureau of Mines, Region I, Northwest District, as representative of the DMEA Field Team, was available for consultation as needed.

The actual on-site audit was preceded by a considerable amount of pre-audit analysis and audit preparatory work in Spokane, Washington, Office of the DMEA, Region I, Northwest District. A large portion of the summarizing of the audit findings was completed in Spokane subsequent to the actual on-site audit.

II. General Information On Records

The Polaris Mining Company maintain a complete and comprehensive set of records to cover the various departmentalized operations pertaining to the mining activities as well as the exploration project. The records consist of a general ledger, general journal, cash receipts and check voucher and distribution record, all of which are properly supported by the required items of original entry.

Monthly work sheets are maintained, covering every phase of the exploration project costs. These work sheets are properly supported by the necessary items of original entry which are a part of the Operator's permanent records. The actual cost statement prepared for the use of the management and the department heads is based on the monthly work sheets.

The Company records are audited annually by A. Wade Strowger, Certified Public Accountant, Portland, Oregon.

III. Scope of Audit and Findings

The first stage of this audit is limited to ascertaining the accuracy, propriety and validity of the costs shown in the "Totals to Date" Column of the Operator's Monthly Report and Voucher, Form MF-104, dated February 28, 1955.

Analysis of the actual costs as shown by the Operator's work sheets follows in Appendix "A" attached to this report.

(1) Agreed Unit Costs

Costs allowed to the Operator for work performed under the contract provision for payment by the Government on the basis of agreed estimated costs of units of work actually performed are as follows:

Drifting	5,308.7 ft.	@ $50.4499	$267,823.56
Crosscutting	218.5 ft.	@ 50.9719	11,137.38
Sideswiping	753.2 ft.	@ 25.50	19,206.60
Raising	324.1 ft.	@ 93.33	30,248.26
Diamond Drilling	2,452.7 ft.	@ 4.50	11,037.15
Accepted Costs			$339,452.95

See Schedule No. 1 which is a part of the basic section of this report.

The accepted costs $339,452.95 allowed by this audit exceed the Operator's claim $337,536.89 by $1,916.06.

The difference of $1,916.06 is made up of errors in the computation of the "Joint Cost of Operation" portion of the cost per unit allowed by the contract.

The cost per unit of drifting and crosscutting ($51.00) by the terms of the contract includes an allowance of ($16.23) as the project's share of joint costs for the use of certain facilities and labor in conjunction with other operations of the Operator.

The "Joint Cost of Operation" portion of the unit cost as applied to drifting and crosscutting is limited by an allowable maximum of $6,329.70 per month, which is computed on the basis of the total footage of advance made as follows:

When the combined footage advanced, consisting of drifting and crosscutting, is 390 feet or less, the rate is $16.23 per foot. However, when the footage advanced is more than 390 feet the rate per foot is decreased proportionately to keep within the allowable maximum of $6,329.70 per month. During the four months period (August, September, October and November 1954) when the Operator is engaged in raising as well as drifting and crosscutting, the joint cost of operation portion of the unit cost will remain at $16.23 per foot for drifting and crosscutting as the allowable maximum is not in effect during this period.

The terms of the contract do not provide for an adjustment on account of joint costs of operation in the agreed unit costs of sideswiping, raising and diamond drilling.

The following categories of cost are not applicable to this contract.

(2) Labor and Supervision
(3) Operating Materials and Supplies
(4) Operating Equipment
(5) Initial Rehabilitation and Repairs
(6) New Buildings, Improvements, Etc.
(7) Contingencies

IV. Conclusions

The audit disclosed that all costs charged to this project, as itemized in Section III of this report including the allowance of $1,916.06 as itemized in the preceding section of this report, are reasonable and proper under the terms of the contract.

The adjustments between "Items of Cost" as shown on February 28, 1955, MF-104, the allowances made by the audit, and the accepted costs as disclosed by this audit are summarized as follows:

	Totals Feb. 28, 1955 MF-104	Corrected Distribution	Additional Allowances By Audit	Accepted Costs
1. Unit Costs				
Drifting	$266,340.75	$266,340.75	$1,482.81	$267,823.56
Crosscutting	11,087.09	11,087.09	50.29	11,137.38
Sideswiping	18,999.41	18,999.41	207.19	19,206.60
Raising	30,072.49	30,072.49	175.77	30,248.26
Diamond Drilling	11,037.15	11,037.15	-	11,037.15
Total	$337,536.89	$337,536.89	$1,916.06	$339,452.95

Progress On Contract

Units Authorized By Contract					
Drifting	9,225'	@	$51.00	$470,475.00	
Crosscutting	1,500'	@	51.00	76,500.00	
Sideswiping	1,560'	@	25.50	39,780.00	
Raising	330'	@	93.33	30,800.00	
Diamond Drilling	15,200'	@	4.50	68,400.00	
Total Authorized					$685,955.00
Units Completed					
Drifting	5,308.7'	@	$50.4499	$267,823.56	
Crosscutting	218.5'	@	50.9719	11,137.38	
Sideswiping	753.2'	@	25.50	19,206.60	
Raising	324.1'	@	93.33	30,248.26	
Diamond Drilling	2,452.7'	@	4.50	11,037.15	
Total Completed					$339,452.95
Units Remaining to be Completed					
Drifting	3,916.3'	@	$48.78	$191,037.11	
Crosscutting	1,281.5'	@	48.78	62,511.57	
Sideswiping	806.8'	@	25.50	20,573.40	
Raising	5.9'	@	93.33	550.65	
Diamond Drilling	12,747.3'	@	4.50	57,362.85	
Total Remaining					$332,035.58

At the conclusion of the on-site audit July 15, 1955, the findings were discussed with John R. Matthews, Secretary and Treasurer, and Lennis E. Hill, Chief Accountant. L. J. Randall, President, was temporarily away from the office.

The final summarization of facts and findings was discussed with Wing G. Agnew, Acting Executive Officer, DMEA Field Team, Region I, Northwest District.

C. A. TURNER, Auditor

September 2, 1955

Schedule I Basic Section of Report

Units of Work Completed

	Drifting			Crosscutting			Sideswiping			Raising			Diamond Drilling			Total
1953	Feet	Rate	Amount	Feet	Rate	Amount	Feet	Rate	Amount	Feet	Rate	Amount	Feet	Rate	Amount	
Oct.	179.4	$51.0000	$ 9,149.40	-			-			-						$ 9,149.40
Nov.	306.0	51.0000	15,606.00	-			211.0	$25.50	$ 5,380.50	-						20,986.50
Dec.	377.4	51.0000	19,247.40	-			23.0	25.50	586.50	-						19,833.90
1954																
Jan.	406.0	50.3604	20,446.32	-			8.0	25.50	204.00	-			377.6	$4.50	$ 1,699.20	22,349.52
Feb.	367.3	50.9131	18,700.38	24.8	$50.9131	$ 1,262.64	34.0	25.50	867.00	-			593.1	4.50	2,668.95	23,498.97
Mar.	469.3	48.2575	22,647.25	-			8.0	25.50	204.00	-			309.0	4.50	1,390.50	24,241.75
Apr.	466.5	48.3385	22,549.91	-			8.0	25.50	204.00	-			462.0	4.50	2,079.00	24,832.91
May	393.7	50.8475	20,018.66	-			28.0	25.50	714.00	-			259.5	4.50	1,167.75	21,900.41
June	346.8	51.0000	17,686.80	-			60.0	25.50	1,530.00	-			203.0	4.50	913.50	20,130.30
July	357.2	50.8884	18,177.34	35.5	50.8884	1,806.54	49.0	25.50	1,249.50	-						21,233.38
Aug.	142.7	51.0000	7,277.70	104.6	51.0000	5,334.60	121.6	25.50	3,100.80	27.3	$93.33	$ 2,547.91	248.5	4.50	1,118.25	19,379.26
Sep.	175.1	51.0000	8,930.10	-			102.0	25.50	2,601.00	105.9	93.33	9,883.65				21,414.75
Oct.	223.4	51.0000	11,393.40	-			78.6	25.50	2,004.30	110.6	93.33	10,322.30				23,720.00
Nov.	211.7	51.0000	10,796.70	-			10.0	25.50	255.00	80.3	93.33	7,494.40				18,546.10
Dec.	332.8	51.0000	16,972.80	-			12.0	25.50	306.00	-						17,278.80
1955																
Jan.	247.2	51.0000	12,607.20	53.6	51.0000	2,733.60	-	-	-	-						15,340.80
Feb.	306.2	51.0000	15,616.20	-			-	-	-	-						15,616.20
Total	5,308.7	$50.4499	$267,823.56	218.5	$50.9719	$11,137.38	753.2	$25.50	$19,206.60	324.1	$93.33	$30,248.26	2,452.7	$4.50	$11,037.15	$339,452.95

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APPENDIX A

Operator's Actual Cost of Units of Work Completed

Exploration Project Contract No. Idn-#541, Docket No. DMEA 2879, provides that the Government will contribute to the cost of the work specified in the contract on the basis of agreed unit costs as they accrue in lieu of actual costs for the first period of the contract, which is eighteen months from the date of the contract.

Prior to the date of the on-site audit the Operator submitted to the DMEA Field Team, Region I, Northwest District, a statement of the actual costs to February 28, 1955, of the exploration project work.

An audit and analysis of the costs pertaining to the Operator's actual costs of units of work completed was made. This audit consisted of an analysis of the exploration project Direct Costs of Operation and a verification of the applicable share of the Joint Costs of Operation to the exploration project.

Direct Costs of Operation are those charges made direct to the exploration project including (1) the direct exploration labor, (2) supplies consisting of bits and rods, drill repairs, explosives, timber, ventilation expense, and miscellaneous supplies, (3) depreciation, (4) Workmen's Compensation insurance, (5) payroll taxes, and (6) fringe benefits.

Joint Costs of Operation are those items of cost which are to be allocated to the exploration project and the Operator's other mining activities on the basis of direct labor used on the exploration project and the direct labor used on other mining activities.

The Operator's records do not provide a breakdown in labor and other direct costs between drifting, crosscutting and sidesniping. The costs of all three items are carried under the single caption of drifting and crosscutting. One lineal foot of sidesniping is considered the equivalent of one-half foot of either drifting or crosscutting.

(1) Independent Contracts

Items in this category do not apply to the Operator's actual cost of units of work completed.

(2) Labor and Supervision

Labor is recorded on a daily time card made out by each employee and approved by the shift boss. The time card includes date and shift worked, hours worked and contract work completed, rates of pay and the location in which the work was performed. The approved time card goes to the timekeeper or mine clerk who accumulates the employee's earnings for the period and posts the distribution record. Costs are recorded in the cost ledger from the distribution and voucher record.

Payrolls are for the periods of 1st to 15th and 16th to end of month. Pay days are 25th and 10th of the month. Employees are paid by checks drawn on the First National Bank of Wallace, Idaho. Payroll checks require two signers. The authorized signers are R. G. Hull, L. J. Randall and John Matthews.

A complete analysis was made of the payroll charges against the exploration project for the months of October 1953, May 1954, and October 1954. This analysis included checking the employee daily time cards, employee's accumulation time record and distribution and voucher records. Rates used were examined and found to be in agreement with the regular wage schedule which is in force in the Coeur d'Alene Mining District. Computations and distributions were all checked for October 1953 and May and October 1954. Payroll charges for the balance of the period under review were checked only as to totals and distributions made to the exploration project.

Labor charged to the exploration project was paid at the following shift rates:

Wages Per Shift	Wage Schedule Effective 2-1-53	Wage Schedule Effective 7-1-54
Miners	$14.82	$14.93
Raise and Drift Miners	15.02	15.77
Shoveler	13.42	14.09
Timberman	15.02	15.77
Repair Timberman	15.42	16.19
Timber Helpers	13.82	14.51
Shaft Miners	15.82	16.61
Trackman	15.02	15.77
Track Helper	13.82	14.51
Nipper	13.82	14.51
Shift differential		
Afternoon	.32	.32
Graveyard	.64	.64

Contract Rates of Pay		
Drifting and Crosscutting	$10.00 per foot	$10.00 per foot
Sideswiping	5.00	5.00
Raising	40.00	40.00

Plus shift differential, overtime and pusher allowance and the Operator furnishes all supplies and materials

The Polaris Mining Company employees do not have an affiliation with the Union. The Company wage schedule is comparable to the wage schedules in effect in the Coeur d'Alene Mining District.

Contract wage earners are entered on the payroll at a daily wage rate, which is computed from their earnings on a footage basis. This practice eliminates the necessity of a bonus payment.

The mine operated on a six day a week basis until October 25, 1954, when a five day a week basis went into effect.

The direct labor applicable to drifting, crosscutting and sidesniping was combined and shown under the caption of drifting and crosscutting.

Labor costs applicable to the exploration project were found to be as follows:

Drifting, Crosscutting and Sidesniping		$74,244.41
Raising		16,926.10
Diamond Drilling		
Direct Labor	$6,302.88	
Other Labor	127.47	6,430.35
Accepted Costs		$97,600.86

See Schedules Nos. 1, 2, 3, 4 and 5

The labor was found to be in agreement with the Operator's actual cost statement with the exception of Diamond Drilling labor which was reduced $150.50, as follows:

Labor on Hole #3225	Reduced	$170.15
3252	"	.20
		170.35
Labor on Hole #3254	Increased	19.85
Net Reduction		$150.50

(3) Operating Materials and Supplies

A stores account and warehouse facilities is maintained by the Operator for items of (1) supplies purchased in car load lots, (2) supplies purchased in less than carloads but more than the immediate mining and milling needs, to secure quantity trade discounts, and (3) diamond drill bits.

The stores account (or inventory of supplies on hand) is maintained by Herb Wellman, Mine Clerk, who makes the necessary entries for supplies received and supplies consumed by the mining and milling operations. Supplies are charged to the exploration project and the Operator's other mining and milling activities at the same unit price, which is cost without any markup. Herb Wellman's salary is charged to the mine office, and any incidental labor is absorbed in mining or milling operations. The remainder of supplies on hand is checked and tested monthly for accuracy.

The majority of the supplies consumed by the exploration project and the Operator's other mining and milling operations are purchased as they are needed and charged direct to the operation applicable on the check and voucher distribution record.

A complete audit and analysis was made of the store records and supply purchases for the months of October 1953 and May and October 1954. Stores issues were checked against requisitions for disposition and invoices for unit prices. Vendor's invoices were traced through the voucher record to the cost ledger and prices and computations checked. Charges for the other months were checked only as to entries and the totals from the voucher distribution record.

Direct Operating supplies and materials were found to be as follows:

	Drifting & Crosscutting	Raising	Diamond Drilling	Total
Bits and Rods	$18,193.81	$2,094.74	$1,836.61	$22,124.16
Drill Repairs	13,961.60	706.70	1,408.62	16,076.92
Explosives	30,010.67	2,265.07	-	32,275.74
Pipe and Track	20,629.96	-	-	20,629.96
Timber	196.41	6,902.64	-	7,099.05
Ventilation	8,978.42	221.81	-	9,200.23
Power Line	2,998.36	-	-	2,998.36
Miscellaneous	-	626.49	-	626.49
Core Boxes	-	-	603.38	603.38
Total	$94,969.23	$12,817.45	$3,847.61	$111,634.29

See Schedules Nos. 1, 2, 3, 4 and 5.

Actual costs were found to be in agreement with the Operator's cost statement with the exception of a diamond drilling bit charge which increased the Operator's cost $3.86.

(4) Operating Equipment

Rental

This category of cost not applicable to this contract.

Purchases

This category of cost not applicable to this contract.

Depreciation

Direct Costs of Operation including depreciation on equipment used in the drifting and raising operation are as follows:

Equipment Used Drifting, Crosscutting and Sideswiping

1	Drilling Jumbo - Cleveland	$ 2,100.00
5	DA 35 Drifters with Power Feed	5,750.00
1	B 21 Eimco Mucking Machine	5,000.00
1	Westinghouse Battery Locomotive 18" Gauge 5 Ton	15,000.00
20	40 cu. ft. Side Dump Cars	9,000.00
3	Joy Fans 13000 cu. ft. capacity	2,500.00
1	HUL Air Hoist	911.00
2	R 48 Stopers	1,340.00
3500'	#2 3 Cond. 2300 Volts Cable	3,087.00
3	25 KVA Transformers	1,000.00
4000'	440 Volt 3 Cond. #6 Rubber Covered Cable	3,500.00
	Total	$49,188.00

Depreciation Charges

16½ months @ $820.00 per month $13,530.00

Allocation of Depreciation to Drifting and Crosscutting and Raising

Based on Cubic Feet of Material Removed

	Lineal Feet	Size	Cubic Feet	Percentage	Depreciation
Drifting	5,308.7'				
Crosscutting	215.5'				
Sideswiping (Equivalent ½ of 753.2)	376.6'				
Total Drifting and Crosscutting	5,903.8'	8'x8'	377,843.2'	91.52158%	$12,382.87
Raising	324.1'	9'x12'	35,002.8'	8.47842	1,147.13
Total			412,846.0'	100.00000%	$13,530.00

See Schedules Nos. 1, 2, and 5.

Depreciation was prorated between drifting and crosscutting and raising on the basis of cubic feet of material removed from the drift and raise. The Operator, however, had charged all of the depreciation to drifting and crosscutting on his cost statement and none to raising, which resulted in an overcharge of $1,147.13 to drifting and crosscutting and an undercharge of $1,147.13 to raising on his cost statement.

Depreciation was not included in the Operator's Cost of Diamond Drilling. Two used drilling machines with an expected life of two years were purchased and used on the exploration project and the Operator's other mining activities. Depreciation was prorated between exploration project and the other mining activities on the basis of footage drilled on the exploration project and footage drilled on the other mining activities. The Operator's rate of depreciation has been accepted by this audit, since the agreed unit costs for diamond drilling are not subject to change under the terms of the contract.

Equipment Used Diamond Drilling

1	Boyles Bros. BBUP Drill Serial No. 40-38 (Used)	$1,200.00
1	Chicago Pneumatic C.P.5. Drill Serial No. 205739 (Used)	1,176.80
	Total	$2,376.80

Depreciation

1 year ½ of $2,376.80 $1,188.40

These drills were second hand when purchased. The useful life is expected to be two years.

Allocation of Depreciation to Exploration and Other Mining Activities

Depreciation is prorated between the Operator's mining activities and the exploration project on the basis of footage drilled.

	Footage Drilled	Percent	Depreciation
Other Mining Activities	6,622.8'	72.97449	$ 867.23
Exploration Project	2,452.7'	27.02551	321.17
Total	9,075.5'	100.00000	$1,188.40

See Schedules Nos. 3, 4, and 5

The Operator's Diamond Drilling Cost Statement was increased $321.17 for depreciation.

(5) Initial Rehabilitation and Repairs

This category of cost not applicable to this contract. However, it was necessary for the Operator to rehabilitate and repair the Marger Drift prior to commencing the exploration project at his own expense and without any contribution from the Government. The work consisted of track and track repairs, air lines, water lines, vent pipe, power cable and some slabbing in the drift.

The following items of cost taken from the Operator's Cost of Development ledger, without verification by audit, are listed:

Rehabilitation of Marger Drift

Direct Labor		$4,122.51
Direct Supplies		
Bits and Rods	$87.57	
Drill Repairs	19.02	
Explosives	58.00	
Pipe and Track	3,362.33	
Ventilation	2,833.66	
Haulage	45.82	
Timber	33.92	6,440.32
Depreciation		1,729.80
Other Costs of Mining		8,565.25
Total		$20,857.88

Depreciation and Other Costs of Mining were the applicable share of the total depreciation charge and the total other cost of mining charge (Joint Cost of Operation) which the Operator had prorated on the basis of direct rehabilitation labor and the mine's total direct labor.

(6) New Buildings, Improvements, Etc.

This category of cost not applicable to this contract.

(7) Miscellaneous

Payroll Taxes

Payroll taxes were verified by inspection of the Operator's various State of Idaho and Federal Reports, as follows:

Employer's Quarterly Federal Tax Return, Identification Number 82-0152325
Annual Federal Tax Return Form 940
Employer's Contribution Report
Employment Social Security State of Idaho Firm Number (110) 1041-00030

Payroll tax rates were found to be as follows:

	1953	1954	1955
F.I.C.A.	1.5%	2.0%	2.0%
Idaho Unemployment Ins.	.9	.9	1.1
Federal Unemployment Ins.	.3	.3	.3
Total	2.7%	3.2%	3.4%

Payroll taxes were allocated to the exploration project in the same ratio as the exploration project payroll was to the Operator's entire payroll, as follows:

Year of 1953	Payroll	Percent	Payroll Taxes
Exploration			
Drifting and Crosscutting	$ 12,217.30	2.11749%	$ 241.47
Other Mining Activities	564,753.03	97.88251	11,161.69
Total	$576,970.33	100.00000%	$11,403.60
Year of 1954			
Exploration			
Drifting and Crosscutting	$ 54,617.35	7.93895%	$ 1,240.14
Raising	16,926.10	2.46031	384.32
Diamond Drilling	6,430.35	.93468	146.00
Other Mining Activities	609,992.53	88.66606	13,850.63
Total	$687,966.33	100.00000%	$15,621.09
Year of 1955 To 2-28-55			
Exploration			
Drifting and Crosscutting	$ 7,409.76	7.46736%	$ 251.93
Other Mining Activities	91,818.86	92.53264	3,121.84
Total	$ 99,228.62	100.00000%	$ 3,373.77

Payroll Taxes were allocated as follows:

Drifting and Crosscutting	$1,733.54
Raising	384.32
Diamond Drilling	146.00
Total	$2,263.86

See Schedules Nos. 1, 2, 3, 4 and 5.

Payroll Taxes were increased over the Operator's Cost Statement as follows:

Drifting	$18.49
Diamond Drilling	24.51
Total	$43.00

Workmen's Compensation

Workmen's Compensation or liability insurance is made up of premiums paid to the Western Pacific Insurance Co., policy W. C. 10089, from October 1, 1953, to November 12, 1954, and the Tri-State Insurance Co., policy W. C. 24948, from November 12, 1954, to February 28, 1955.

Rates were found to be as follows:

Underground	$4.00 per $100.00 payroll
Surface	3.40
Ore Milling	1.55
Mining engineers	.75

Hospital contracts were in force with Drs. Fitzgerald and Revelli, Wallace, Idaho, and Drs. Bernbrake and Hunter, Wallace, Idaho, whose rates are

$2.55 per employee per month paid by the employer and
$1.45 per employee per month paid by the employee.
Physical examinations $8.50 each and
Ambulance Fees (varying according to distance)

The audit disclosed premiums and fees paid by the Operator on the entire payroll to be as follows:

	1953	1954	1955	Total
Workmen's Compensation	$18,[illegible].11	$23,[illegible].76	$3,[illegible].28	$45,[illegible].15
Hospital Contracts	3,397.49	3,958.40	663.89	8,019.78
Physical Examinations	645.50	641.50	140.00	1,427.00
Ambulance Fees	44.59	336.51	-	381.10
Total	$22,133.69	$28,558.17	$4,344.17	$55,236.03

Workmen's Compensation was allocated to the exploration project in the same ratio as the exploration project payroll was to the Operator's entire payroll and prorated to the various phases of exploration project costs by using the same percentages as used on payroll taxes resulting in a distribution as follows:

	1953	1954	1955	Total
Drifting and Crosscutting	$472.91	$2,337.22	$324.40	$3,084.53
Raising	-	702.62	-	702.62
Diamond Drilling	-	266.92	-	266.92
Total	$472.91	$3,236.76	$324.40	$4,034.07

See Schedules Nos. 1, 2, 3, 4 and 5.

Costs determined by the audit indicate that Workmen's Compensation should be $44.79 more than the Operator's Cost Statement.

Fringe Benefits

Fringe benefit costs are made up of premiums on Group Insurance, Retirement Plan expense and Vacation Pay.

Group insurance cost is made up of premiums paid to the following insurance companies:

Lincoln National Life Ins. Co.
Policy GL 1957 and GL 1957A

which pays benefits after the fourth month of service ranging from $500.00 to a maximum of $2000.00 depending on theemployee's income and length of service. Rate is based on each individual's pay and length of service.

Aetna Life Insurance Co.
Group policy No. H 40180

covers hospitalization expense for dependents. Employee pays $2.04 for himself and one dependent, $3.56 for himself and two or more dependents. Employer pays $2.11 for employee and one dependent, $3.76 for employee and two or more dependents.

Aetna Life Insurance Co.
Sick or off the job policy No. GS 40180

pays benefits while off the job sick.
Employee pays $1.10 per month.
Employer pays $1.76 per month.

Retirement Plan Cost is the expense in creating a fund to pay employees retirement pensions. This expense is all paid by the employer. Payments to the fund are determined by an actuary who considers the ages and length of employment of the employees.

Vacations are paid all employees who can meet the service requirements. The Operator accumulates this expense in his costs monthly.

Fringe benefit expense for the entire payroll was found to be as follows:

	1953	1954	1955	Total
Group Insurance	$ 5,714.34	$ 8,744.03	$1,498.45	$15,956.82
Retirement Plan	14,612.44	21,221.99	3,560.18	39,394.61
Vacation Pay	8,750.38	11,210.35	2,300.00	22,260.73
Total	$29,077.16	$41,176.37	$7,358.63	$77,612.16

Fringe benefits were allocated to the exploration project in the same ratio as the exploration project payroll was to the Operator's entire payroll and prorated to the various phases of the exploration project costs by using the same percentages as used on the payroll taxes, resulting in a distribution as follows:

	1953	1954	1955	Total
Drifting and Crosscutting	$615.70	$3,268.97	$549.50	$4,434.17
Raising	-	1,013.07	-	1,013.07
Diamond Drilling	-	384.86	-	384.86
Total	$615.70	$4,666.90	$549.50	$5,832.10

See Schedules Nos. 1, 2, 3, 4 and 5.

Determination of the actual costs increased the costs shown on the Operator's Cost Statement as follows:

Raising	$ .01
Diamond Drilling	64.58
Total	$64.59

See Schedule No. 5.

Joint Costs of Operation

The joint costs of operation listed in the contract, Schedule C-1, are those indirect costs of operation which are applicable to both the exploration project and the Operator's other mining activities in the ratio of direct labor used on the exploration project and direct labor used on the Operator's other mining activities.

A complete analysis was not made of the accounts which make up the joint costs of operation. However, the accounts were examined in the cost ledger and the source of the charges determined. Test checks were made to establish the validity of the costs included. In cases where ledger balances were different than the Operator's Cost Statement, work papers which had been prepared by the Operator were scrutinized to determine the reason for the difference. In many cases items not related to exploration had been deleted by the Operator.

The hoisting operation cost included depreciation on the hoist at the rate of $729.00 per month.

Joint Costs of Operation were found to be as follows:

Joint Cost of Operation	1953	1954	1955 To [illegible]	Total
Compressors	$ 1,778.69	$ 2,505.56	$ [illegible]	$ 4,665.26
Haulage	72,[illegible]	87,798.77	19,[illegible].45	179,[illegible].56
Hoisting	107,[illegible]	76,[illegible].18	10,[illegible].97	195,500.39
Pumping	1,[illegible]	4,[illegible]	178.39	5,797.97
Shift Boss and Foreman	30,002.[illegible]	31,[illegible]	5,[illegible]	66,[illegible].08
Ventilation	7,[illegible]	15,[illegible].67	1,[illegible]	24,613.86
Repairs Mine Machinery	[illegible]	40,[illegible].67	4,[illegible].40	75,190.52
Sunbeam	15,[illegible]	21,[illegible]	2,[illegible].00	39,505.90
Assaying	[illegible]	5,784.[illegible]	694.70	10,319.92
Electric Power	[illegible]	41,[illegible]	5,908.[illegible]	75,075.61
Engineering & Surveying	19,[illegible].99	26,[illegible]	3,947.58	50,777.85
Heating	3,[illegible].14	[illegible]	677.04	7,708.19
Maintenance and Repairs	-	2,853.47	-	2,853.47
Shop and Outside Labor	4,697.06	4,087.45	697.06	11,481.57
Texas Social Security	10,[illegible]	12,[illegible]	2,[illegible].51	25,436.95
Vacation Pay - Wage earners	7,[illegible].75	8,116.74	1,928.25	17,768.76
Workmen's Compensation	15,[illegible].53	23,993.96	3,540.76	46,472.25
Mine Office	6,[illegible]	5,509.46	755.13	13,854.44
Employee Group Insurance	5,[illegible]	6,[illegible]	1,[illegible]	13,353.17
Retirement Plan	[illegible]	17,[illegible]	2,[illegible]	[illegible]
Total	$309,755.21	$437,894.44	$70,105.94	$897,755.59
Less Joint Costs Allocated to Diamond Drilling on the Basis of Direct Labor				
Shift Boss & Foreman $ 536.[illegible]				
Engineering [illegible]				
[illegible]	-	1,005.20	-	1,005.20
Balance Joint Costs	[illegible]	[illegible]	[illegible]	[illegible]

Allocation of Joint Costs of Operation

Drifting, Crosscutting, Sidescaping and Raising

Proration of the Joint Costs of Operation based on the direct labor applicable to the exploration project and the direct labor applicable to the Operator's other mining activities

Total Direct Labor	1953	$269,806.98	
	1954	364,310.48	
	1955 to 2-28-55	50,996.56	$685,114.02
Exploration Project Direct Labor	1953	$ 12,217.30	
	1954	71,543.45	
	1955 to 2-28-55	7,409.76	$ 91,170.51
Exploration Project Percentage			13.30736%
Total Joint Costs of Operation		$897,755.59	
Less Portion Applicable to Diamond Drilling		1,005.20	
Balance Subject to proration			$896,750.39
Exploration Project Portion 13.30736% of $896,750.39			$119,333.62

Distribution	Labor	Percentage	Joint Costs
Drifting, Crosscutting and Sidescaping	$74,244.41	81.4346%	$ 97,178.94
Raising	16,926.10	18.5654	22,154.68
Total	$91,170.51	100.0000%	$119,333.62

Schedules Nos. 1 and 2

Diamond Drilling

Total Direct Labor year of 1954			$364,310.48
Exploration Project Direct Labor - Diamond Drilling			6,302.88
Exploration Project Percentage			1.73008%
Joint Cost of Operation Applicable			
1954 Shift Boss and Foreman	$31,133.40 @	1.73008%	$ 538.64
Engineering	26,987.68	1.73008	466.56
Total	$58,121.08	1.73008%	$ 1,005.20

Schedule No. 3

Joint Cost of Operation charges were increased as follows:

	Operator's Cost Statement	Actual Costs	Increase
Drifting and Crosscutting	$ 93,684.27	$ 97,178.94	$3,494.67
Raising	20,344.84	22,154.68	1,809.84
Diamond Drilling	-	1,005.20	1,005.20
Total	$113,029.11	$120,338.82	$6,309.71

See Schedules Nos. 1, 2, 3, 4 and 5.

Schedule No. 1

Drifting, Crosscutting and Sideswiping - Cost Per Unit

		Feet	Cost Per Foot	Amount
Footage Advance				
Drifting	5,308.7'			
Crosscutting	218.5			
Sideswiping (Equivalent ½ of 753.2')	376.6			
Total Advance		5,903.8'		
Direct Cost of Operation				
Labor		5,903.8'	@ $12.58	$ 74,244.41
Supplies				
Bits and Rods		5,903.8'	@ $ 3.08	$ 18,193.81
Drill Repairs			@ 2.36	13,961.60
Explosives			@ 5.08	30,010.67
Pipe and Track			@ 3.49	20,629.96
Ventilation			@ 1.52	8,978.42
Timber			@ .03	196.41
Power Line			@ .51	2,998.36
Total Supplies		5,903.8'	@ $16.08	$ 94,969.23
Depreciation		5,903.8'	@ $ 2.10	$ 12,382.87
Miscellaneous				
Workmen's Compensation		5,903.8'	@ $ .52	$ 3,064.53
Payroll Taxes			@ .29	1,733.54
Fringe Benefits			@ .75	4,434.17
Total Miscellaneous		5,903.8'	@ $ 1.56	$ 9,232.24
Total Direct Cost of Operation		5,903.8'	@ $32.32	$190,828.75
Joint Cost of Operation		5,903.8'	@ $16.46	$ 97,178.94
Operator's Cost of Units		5,903.8'	@ $48.78	$288,007.69

* * * * *

Units Completed - Contract Unit Value				
Drifting		5,308.7'	@ $50.4499	$267,823.56
Crosscutting		218.5'	@ 50.9719	11,137.38
Sideswiping		753.2'	@ 25.50	19,206.60
Total				$298,167.54

* * * * *

Units To Be Completed				
Drifting		3,916.3'	@ $48.78	$191,037.11
Crosscutting		1,281.5'	@ 48.78	62,511.57
Sideswiping		806.8'	@ 25.50	20,573.40
Total				$274,122.08

Schedule No. 2

Raising - Cost Per Unit

	Feet	Cost Per Foot	Amount
Footage Advance			
Raising	324.1		
Direct Cost of Operation			
Labor	324.1 @	$ 52.22	$16,926.10
Supplies			
Bits and Rods	324.1 @	$ 6.46	$ 2,094.74
Drill Repairs	@	2.18	706.70
Explosives	@	6.99	2,265.07
Timber	@	21.30	6,902.64
Ventilation	@	.68	221.81
Miscellaneous	@	1.93	626.49
Total Supplies	324.1 @	$ 39.55	$12,817.45
Depreciation	324.1 @	$ 3.54	$ 1,147.13
Miscellaneous			
Workmen's Compensation	324.1 @	$ 2.17	$ 702.62
Payroll Taxes	@	1.19	384.88
Fringe Benefits	@	1.12	1,013.07
Total Miscellaneous	324.1 @	$ 4.48	$ 2,100.01
Total Direct Cost of Operation	324.1 @	$101.79	$32,990.69
Joint Cost of Operation	324.1 @	$ 68.36	$22,154.68
Operator's Cost of Units	324.1 @	$170.15	$55,145.37

* * * * *

Units Completed - Contract Unit Value	324.1 @	$ 93.33	$30,248.26

* * * * *

Units To Be Completed			
Raising	5.9' @	$ 93.33	$ 550.65

* * * * *

Schedule No. 3

Diamond Drilling - Cost Per Unit

	Feet	Cost Per Foot	Amount
Footage Drilled			
Diamond Drilling	2,452.7'		
Direct Cost of Operation			
Labor			
Direct	2,452.7'	@ $2.57	$ 6,302.88
Other		.05	127.47
Total		@ $2.62	$ 6,430.35
Supplies			
Bits	2,452.7	@ $ .67	$ 1,649.27
Rods and Parts		@ .08	186.34
Core Boxes		@ .25	603.38
Repairs		@ .57	1,408.69
Total Supplies	2,452.7'	@ $1.57	$ 3,847.68
Depreciation			
Drilling Machines	2,452.7'	@ $ .13	$ 321.17
Miscellaneous			
Workmen's Compensation	2,452.7'	@ $ .11	$ 266.92
Payroll Taxes		.06	146.00
Fringe Benefits		.16	384.86
Total Miscellaneous	2,452.7'	@ $ .33	$ 797.78
Total Direct Cost of Operation	2,452.7'	@ $4.65	$11,396.91
Joint Cost of Operation	2,452.7'	@ $ .41	$ 1,005.20
Operator's Cost of Units	2,452.7'	@ $5.06	$12,402.11

* * * * *

Units Completed - Contract Value	2,452.7'	@ $4.50	$11,037.15

* * * * *

Units To Be Completed	12,747.3'	@ $4.50	$57,362.85

* * * * *

Schedule No. 4

Diamond Drilling - Cost per Hole

Hole Number	Labor Direct	Labor Other	Supervision*	Bits	Rods & Parts	Core Boxes	Depreciation	Repairs	Workmen's Compensation	Payroll Taxes	Fringe Benefits	Total	Footage	Cost Per Foot
3225	$ 646.34	$34.88	$ 106.49	$ 111.57	$ 20.20	$ 38.87	$ 34.02	$ 62.97	$ 28.27	$ 15.47	$ 40.77	$ 1,139.85	158.0	$7.21
3228	430.04	43.13	73.96	192.75	30.95	40.84	23.63	142.55	19.64	10.74	28.32	1,036.55	166.0	6.24
3229	129.35	13.51	22.33	39.76	9.70	12.79	7.14	44.66	5.93	3.24	8.55	296.96	52.0	5.71
3233	255.80	3.80	40.58	55.65	19.74	24.60	12.96	43.36	10.76	5.89	15.54	488.68	100.0	4.88
3234	264.19	3.91	41.91	131.41	20.34	25.34	13.39	44.66	11.13	6.08	16.05	578.41	103.0	5.62
3250	476.72	9.22	75.96	125.42	-	54.22	24.27	78.71	20.19	11.03	29.08	904.82	220.4	4.11
3251	346.65	6.71	55.24	114.87	-	47.36	17.65	70.65	14.67	8.02	21.15	702.97	192.5	3.65
3252	390.92	.20	61.14	113.46	1.51	48.46	19.53	80.93	16.23	8.88	23.41	764.67	197.0	3.88
3253	398.00	-	62.21	95.49	1.64	52.40	19.88	87.50	16.52	9.04	23.82	766.50	213.0	3.60
3254	2,334.52	1.04	365.09	566.71	55.46	197.37	116.67	639.50	96.95	53.04	139.78	4,566.13	802.3	5.69
3255	203.54	3.69	32.39	27.86	8.41	19.19	10.35	35.51	8.61	4.71	12.40	366.66	78.0	4.70
3256	105.72	1.64	16.78	17.34	5.45	12.42	5.36	22.99	4.45	2.44	6.43	201.02	50.5	3.98
3257	163.18	3.28	26.02	31.47	5.93	13.53	8.31	25.04	6.91	3.78	9.96	297.41	55.0	5.41
3258	157.91	2.46	25.10	25.51	7.01	15.99	8.01	29.59	6.66	3.64	9.60	291.48	65.0	4.48
Total	$6,302.88	127.47	$1,005.20	$1,649.27	$186.34	$603.38	$321.17	$1,408.62	$266.92	$146.00	$384.86	$12,402.11	2,452.7	$5.06

* Joint Cost of Operation

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SEP 14 1955

Schedule No. 5

Reconciliation Operator's Cost Statement with Actual Costs

	Operator's Cost Statement	Adjustments	Actual Costs
Drifting and Crosscutting			
Labor	$ 74,244.41	$ -	$ 74,244.41
Supplies			
Bits and Rods	16,193.81	-	16,193.81
Drill Repairs	13,961.60	-	13,961.60
Explosives	30,010.67	-	30,010.67
Pipe and Track	20,629.76	-	20,629.76
Ventilation	8,970.62	-	8,970.62
Timber	196.41	-	196.41
Power Line	2,998.36	-	2,998.36
Depreciation	13,530.00	(1,147.13)	12,382.87
Miscellaneous			
Workmen's Compensation	3,064.53	-	3,064.53
Payroll Taxes	1,715.05	18.49	1,733.54
Fringe Benefits	4,434.17	-	4,434.17
Joint Cost of Operation	93,484.27	3,694.67	97,178.94
Total	$285,441.66	$2,566.03	$288,007.69
Raising			
Labor	$ 16,926.10	$ -	$ 16,926.10
Supplies			
Bits and Rods	2,094.74	-	2,094.74
Drill Repairs	706.70	-	706.70
Explosives	2,265.07	-	2,265.07
Timber	6,902.64	-	6,902.64
Ventilation	221.81	-	221.81
Miscellaneous	626.49	-	626.49
Depreciation	-	1,147.13	1,147.13
Miscellaneous			
Workmen's Compensation	702.62	-	702.62
Payroll Taxes	304.32	-	304.32
Fringe Benefits	1,013.06	.01	1,013.07
Joint Cost of Operation	20,344.84	1,809.84	22,154.68
	$ 52,188.39	$2,956.98	$ 55,145.37
Diamond Drilling			
Labor			
Direct	$ 6,453.33	$ (150.50)	$ 6,302.83
Other	127.47	-	127.47
Supplies			
Bits	1,645.41	3.86	1,649.27
Rods and Parts	186.34*	-	186.34
Core Boxes	603.36*	-	603.36
Repairs	1,408.62*	-	1,408.62
Other			
Depreciation	-	321.17	321.17
Miscellaneous			
Workmen's Compensation	222.13*	44.79	266.92
Payroll Taxes	121.49*	24.51	146.00
Fringe Benefits	320.28*	64.58	384.86
Joint Cost of Operation	-	1,005.20	1,005.20
	$ 11,088.50	$1,313.61	$ 12,402.11
Total	$348,718.55	$6,836.62	$355,555.17

*Other Total $2,262.24

Mr. Chambers

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

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

SEP 2 0 1955

Re: Idm-E541, DMEA-2879
Polaris Mining Company

Dear Charlie:

It is with considerable regret that I find it necessary to return for revision the Interim Audit Report and Certificate covering the referenced project. The report, and particularly the Appendix A, indicates a thorough audit job. Unfortunately, however, you have made an error in interpretation of the contract which results in erroneous findings insofar as your basic report and the certificate are concerned.

The contract provides for four items of work and four corresponding estimates of costs, i. e., (1) drifts and crosscuts, (2) sideswipes, (3) diamond drilling and (4) raising. Annex II of the contract pertains only to "drifting and crosscutting" and specifically provides the basis for determining the allowable adjusted unit cost for such "drifting and crosscutting" during both the first and second periods. Annex II does not provide for any adjustment in the unit cost of sideswiping, diamond drilling or raising. In fact these items of work are not mentioned therein. However, in your audit you have assumed that the sideswiping unit cost is subject to adjustment and that one-half of the sideswiping footage is for consideration in determining the applicable total advance within a month.

Your assumption is not in accord with the contract. According to the contract the Operator must be allowed the agreed unit cost of $25.50 for each foot of sideswiping performed during both the first and second period. Also, during the first period, he must be allowed $51.00 for each foot of drifting and crosscutting, except during those months (January, February, March, April, May, and July, 1954, according to your Schedule I) when "the advance of drifting and/or crosscutting is more than 390 feet in any month". During the second period he must be allowed the actual cost per foot during the first period ($48.78 according to your Appendix A) for each foot of drifting and crosscutting, except during those months when "the advance of drifting and/or crosscutting is more than 390 feet in any month".

The following revisions and corrections are required in the Audit Certificate and the basic Audit Report:

(1) The certificate should be entitled "Interim Audit Certificate";

(2) The words "including Amendment No. 1" should be deleted from the first paragraph of both the certificate and the report because it was both dated and effective subsequent to the period covered by your audit;

(3) In the certificate the "Additional cost allowed by audit", "Net Cost", "Total Accepted Cost" and the amount certified will be changed in accordance with the third paragraph of this letter;

(4) In the 4th paragraph of page 2 of the report delete all of the sentence following "to this report";

(5) In the 5th paragraph change the words "Costs claimed by" to "Costs allowed to", change the average unit costs and total costs for drifting, crosscutting and sidesniping and the "Accepted Costs" in accordance with the third paragraph of this letter;

(6) Change the seventh and eighth paragraphs in accordance with your revised findings;

(7) Rewrite the ninth paragraph (and its continuation on the page 3) to read "The cost per unit of drifting and crosscutting ($51.00) by the terms of the contract includes an allowance ($16.23) as the project's share of joint costs for the use of certain facilities and labor in conjunction with other operations of the Operator";

(8) Eliminate the first full paragraph on page 3;

(9) In the next paragraph insert "and" between "drifting" and "crosscutting" (in two places), and eliminate the words "and one-half the footage of sidesniping (one foot sidesniping is considered to be equivalent of one-half a foot of drifting or crosscutting", "and sidesniping" and "and $6.115 per foot for a sidesniping";

(10) In the same paragraph change the year after "November" to "1954";

(11) Delete the next two single sentence paragraphs and, in lieu thereof, insert a single paragraph stating "The terms of the contract do not provide for an adjustment on account of joint costs of operation in the agreed unit costs of sidesniping, raising and diamond drilling";

(12) Delete single sentence paragraph referring to Schedules E e. 1 and 2 as this is a duplication of the same statement on page 2;

(13) Change the amount in the last paragraph on page 3 in accordance with your revised findings;

(14) In the first table on page 4 change the columnar title "Allowed by Audit" to "Additional Allowances by Audit", and correct the amounts in the last two columns for drifting, crosscutting and sidescaping and the totals of the columns in accordance with your revised findings;

(15) Under "Units Completed" revise the unit costs, the total costs for drifting, crosscutting and sidescaping and the grand total in accordance with your revised findings;

(16) Under "Units Remaining to be Completed" change the estimated unit costs for drifting and crosscutting to "$48.78" (per your findings in Appendix A) and revise the total estimated costs and the grand total accordingly; and

(17) Revise Schedules 1 and 2 in accordance with your revised findings. (Note: Schedule 2 could be eliminated, as it will not be important with the deletion of sidescaping from the calculations.)

The Appendix A covering your audit of the actual costs is excellently prepared and only three areas require revision, i. e.:

(1) Continue the last paragraph on page v with the sentence "The Operator's rate of depreciation has been accepted by this audit, since the agreed unit costs for diamond drilling are not subject to change under the terms of the contract";

(2) On page vii change to 1955 total tax rate to "3.45"; and

(3) On page xiv under "Units to be Completed" change the estimated unit costs for drifting and crosscutting to "$48.78" (per your audit findings) and revise the total estimated costs and the grand total accordingly.

It is suggested that you invite the attention of the Authorized Certifying Officer to the last sentence of paragraph 1 and paragraph 4 of Annex II to the contract. The Government's contribution for drifting and crosscutting subsequent to the first period (covered by your audit) accordingly should be at the agreed unit cost of $48.78 except for such months that "the advance of drifting and/or crosscutting is more than 990 feet in any month".

The matter of interpretation of this contract as discussed in the second and third paragraph of this letter has the concurrence of the Base Metals Division.

Sincerely yours,

(Signed) E. D. Talbert

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

Enclosure

EDTalbert/wb
September 20, 1955

Copy to: Docket
Admr. Reading File
Mr. Griswold
Mr. Chambers

Mr. Chambers

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

AUG - 9 1955

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

Re: Docket No. DMEA-2879
Contract Idm-E541
Polaris Mining Company

Dear Mr. Turner:

Reference is made to your letter of July 27, 1955, requesting advice relative to your audit of the subject Exploration Project Contract.

I concur with you that certain provisions are not clear. Accordingly, I referred your letter to the Base Metals Division, to which this contract was assigned upon the transfer of copper from the Rare and Miscellaneous Metals Division. For your information and guidance there is enclosed a memorandum dated August 5, 1955, from the Chief, Base Metals Division, with reference to your letter.

In an endeavor to more fully appreciate your audit problem I have reviewed the contract and the paid forms MF-104. My comments, which follow, are premised on your audit falling into two separate parts, i. e.:

I. The basic audit report covering the agreed unit costs set forth in Exhibit "A" to the contract; and

II. An appendix covering the actual costs of performing the drifting and crosscutting during the first period of the contract.

The audit of I, the agreed unit costs, is governed by paragraph 2 of Annex II. This, as you indicate does establish in effect, an allowable maximum of $6,329.70 (390 x $16.23) for any month's charge for the joint costs, except for the period (August 1954 to November 1954) when the raising operation was being performed. (Note: The $6,332.12 indicated in the attached memorandum was taken from the application.)

Accordingly, the agreed unit costs of $51.00 per foot for drifting and crosscutting are applicable, without adjustment, for each of the four months, in which the raise work was performed concurrently with such project drifting and crosscutting, and, also, for each of such other months that the project drifting and crosscutting did not

exceed 390 feet of advance. For those months that the project drifting and crosscutting did exceed 390 feet Annex II requires that the agreed unit cost of $51.00 per foot "shall be decreased by that proportion of $16.23 that the monthly increase in advance bears to the total advance in that month."

The intent of this quoted clause is best shown by an example. Presume 400 feet of drifting and crosscutting during a month. The increase over 390 feet is 10 feet and 10/400ths of $16.23 is $.40575, which deducted from $51.00 results in an adjusted unit cost of $50.59425 for that month.

From the forms MP-204 it appears that the Operator (1) has billed on an actual cost basis for the drifting and crosscutting in some months when such actual costs were less than the agreed unit costs, for example, during November 1953, and (2) has billed, during October 1954, at rates less than the agreed unit costs stipulated in Exhibit "A" not only for the drifting and crosscutting but, also, for the raising and sinking. Accordingly, it appears that your audit should allow additional costs over the amount claimed by the Operator for the first period.

<u>The audit of II, the actual costs of drifting and crosscutting, is governed by paragraph 3 of Annex II</u>. These costs fall into two categories:

(1) The <u>actual</u> direct costs of the twelve items of labor (and related taxes and insurance), supplies and depreciation (at the rate of $820.00 per month), for which estimated costs are shown in Exhibit "B" attached to the contract. The depreciation, as well as any other costs not distributed in the Operator's accounts, should be prorated as indicated in the attached memorandum from the Chief, Base Metals Division.

(2) The applicable share of the Operator's <u>actual</u> joint costs, limited to the twenty items for which estimates are shown in the last column of Schedule C-1 attached to the contract, <u>plus</u> hoist depreciation at the rate of $729.17 per month (1/240 of $175,000). The applicable share of these joint costs is to be determined on the basis of "the ratio that the direct cost of the labor for <u>project drifting and crosscutting</u> bears to the direct cost for labor for <u>all</u> drifting, crosscutting, and stoping performed by the Operator."

It is not expected that your audit will include a detailed analysis and check of the Operator's joint costs. This would be impractical. Such audit should be limited to (1) a confirmation that

the costs, as reported by the Operator in accordance with paragraph 1 of Annex II, are based factually on the Operator's accounts, (2) a determination that such costs are limited to those specified in Schedule C-1 plus the hoist depreciation, and (3) a verification that the project's share of such costs has been correctly computed.

The audit of the direct costs, limited to the items listed on Exhibit "B", however, should include a complete detailed analysis and verification of all charges, as well as a determination that such costs are properly applicable to the project drifting and crosscutting.

An audit of the actual costs of raising, sidesniping, and drilling is not required under this contract since the agreed unit costs for such work are not subject to adjustment. It is suggested, however, that any information on the actual costs of such work as may have come to your attention during or as the result of your audit be reported in appropriate appendices to your audit report.

It is hoped that the foregoing, which has the approval of the Base Metals Division, will be of some assistance in settling your audit problem.

Sincerely yours,

(Signed) E. D. Talbert

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

Enclosure-1

EDTalbert/wb
August 9, 1955

Copy to: Docket
Admr. Reading File
Mr. Chambers
Mr. Selfridge
Mr. Griswold

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

500

August 5, 1955

Memorandum

To: Contract Administration and Audit Division, Defense Minerals

From: Chief, Base Metals Division

Subject: Docket No. DMEA-2879, Polaris Mining Company, Contract No. Idm-E541, Wallace, Idaho, Copper.

Reference of letter from Mr. C. A. Turner to Mr. Jay L. Chambers dated July 27, 1955.

Depreciation of Equipment

In the first paragraph: The $820.00 per month depreciation charge should have been prorated between Drifting & Crosscutting and Raising but this was not done in the estimates. In Exhibit "B" the depreciation of equipment taken from Exhibit "E" of $820.00 per month was all charged to Drifting & Crosscutting and no depreciation was charged to Raising in Exhibit "D".

In the actual costs, the depreciation should be prorated as follows:

Each linear foot of the raise contains 60 cubic feet of rock whereas the drifts and crosscuts contain 48 cubic feet of rock per linear foot.

It is quite true that some of the items might not be used in the raising operation but, to make an exact distribution would only tend to complicate matters and the difference would be small.

Joint Costs of Operation

Paragraph 1 is correct as stated.

Paragraph 3. It was not intended to bring the raising under the allowable maximum footage per month rule as stated in paragraph 2 of Annex II. It was assumed that while the raising operation was being carried on, they would not exceed 390 feet per month of drifting and crosscutting. However, the Polaris Mining Company did not understand it this way and during the month of October 1954, they made a correction for the raising using as a proportion of the Indirect Costs, the figure $22.96 per foot for raising (cost per foot of joint costs) which was derived in Exhibit "C".

The drifting and crosscutting at $16.23 per foot plus the side-swipes at half of $16.23 per feet or $8.125 plus the raising at $22.96 per foot exceeded the allowable maximum of $6,332.12.

Paragraph 6. The project's share of the joint cost (for audit purposes) means a proration of all the joint costs based on the direct labor of the project, during the eighteen months of the first period, and the direct labor of the Operator's other mining activities, as it was calculated in Exhibit "C".

W. R. Griswold

W. R. Griswold

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION
~~WASHINGTON 25, D. C.~~
1201 N. Division Street
Spokane 2, Washington
July 27, 1955

RECEIVED

Mr. Jay L. Chambers, Chief
Contract Administration and Audit Division
Defense Minerals Exploration Administration
Department of the Interior
Washington 25, D. C.

Re: Polaris Mining Co.
Contract No. Idm-E541
Docket No. DMEA 2879
Wallace, Idaho

Dear Mr. Chambers:

The Polaris contract, No. Idm-E541, is not clear on certain provisions regarding depreciation and joint costs of operation, on which I would appreciate your advice very much.

Depreciation on Equipment

Exhibit "B", which is a part of the contract, includes depreciation of $820.00 per month charged to drifting and cross-cutting. Upon examination of the application this depreciation was found to be on equipment valued at $49,188.00. In a discussion with the operator and E. G. Erickson, mining engineer, it was learned that at least part of this equipment was used in the raise as well as the drift. The operator has charged drifting and cross-cutting with depreciation of $820.00 per month and raising with no depreciation. It would seem that the $820.00 per month should be prorated between drifting and raising on a basis of the cubic feet of material taken from the drift and the raise. An actual cost statement of the operator's raising costs which do not include any depreciation seems ridiculous.

I would appreciate your opinion as to whether or not this depreciation of $820.00 should be prorated between drifting and raising and if so what basis is to be used. ?

Joint Costs of Operation

Joint costs as shown in Schedule C-1 attached to the contract are to be charged to the operator's units of cost at the rate of $16.23 per foot provided the lineal feet of drifting and crosscutting are 390 feet or less.. In the event that the monthly advance exceeds 390 feet a formula is provided to reduce the footage charge of $16.23 proportionately. This virtually establishes an allowable maximum of $6,329.70 for any month's charge of joint operating costs.

Paragraph 2 of Annex II states that this method will be used except for a four months period, during which raising will be done as well as drifting and crosscutting.

No provision is made for the four months period, but it would seem that the operator is limited to a monthly joint Cost of Operation charge of $6,329.70. ?

Mr. E. G. Erickson, mining engineer, worked out a formula for staying within the $6,329.70 by using the following charges for joint costs of operation, drifting and crosscutting $16.23 per foot and raising $22.96 per foot, which were reduced proportionately by percentages to come within the total charge of $6,329.70. An example of this is October 1954 MF-104.

Paragraph 3 Annex II states that in determining the actual cost of the project, that the project's share of joint costs (including depreciation on the hoist) shall be allowed.

Does project's share mean a proration of all joint costs based on the direct labor of the project and the direct labor of the operator's other mining activities, or does it mean that we should limit the audited costs to $6,329.70 per month. ?

I am trying to write this report and would appreciate your advice as soon as possible.

Yours very truly,

C. A. Turner, Auditor

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION

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

Department of the Interior
Defense Minerals Administration
RECEIVED
MAY 23 1955

May 19, 1955

Polaris Mining Company
P. O. Box 320
Wallace, Idaho

Re: Docket No. DMEA-279 (lead-zinc-copper)
Polaris East Exploration Project
Shoshone County, Idaho
Contract No. Ida-541

Gentlemen:

Because of an urgent audit to which we have to give priority, we are forced to defer the scheduled visit of Mr. Charles Turner to audit the Polaris contract. Mr. Turner probably will not be able to make this audit until shortly before the middle of June.

Sincerely yours,

A. C. Weissenborn
Executive Officer, DMEA
Field Team, Region I
Northwest District

cc: DMEA (2)
USBM (2)
USBM(AD)
Turner (2)
Fryklund

Release
Copy

NON-PRIVILEGED DOCUMENT

TO BE PHOTOCOPIED AND PRODUCED

DO NOT CODE

BATES NO. USGSP0000045 D

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

Mr. Charles A. Turner
DMEA Auditor
1301 South Division Street
Spokane 2, Washington

AUG 24 1954

E 511

Dear Mr. Turner:

While discussing your audit program with Mr. Talbert during our recent Denver meeting, you requested advice as to the contracts in Region II which required interim audits at specified times for "renegotiation" purposes.

The four contracts involved are as follows:

1-9, DMA-12, Taylor-Shaw

Amended contract dated February 1, 1954, provides for contribution by the Government on the basis of agreed unit costs "for a period of one year from the date of this Amended Contract, and thereafter unless and until the Government, at its option, notifies the Operator that from the time fixed by the notice the Government will contribute to the incompleted portions of any of these work requirements on the basis of actual costs as set forth in Article 6(a) of the Contract Form".

Therefore, it will be necessary to perform an audit of the Operator's actual costs on February 1, 1955, and to expedite the preparation and submission of the audit report in order that any benefit by conversion to an actual cost basis may be promptly secured by the Government.

1-493, DMA-2764, Dunker Hill & Sullivan

Contract dated February 25, 1953, provides for contribution by the Government to the costs of exploration work (as distinguished from rehabilitation and preparatory work) on the basis of agreed unit costs "until two years from the date of this contract or until the drift on the 3,200 foot level has reached the point of departure of the crosscut referred to in Item VI of said exploration work, whichever occurs first, and thereafter unless and until the Government at its option, notifies the Operator that from the time fixed by the notice the Government will contribute to any uncompleted work, in whatever category, only on the basis of actual costs".

Accordingly, it will be necessary for you to keep currently advised as to the progress of the drifting on the 3,200 foot level and to schedule an audit when the drifting reaches the point referred to above or, at the latest, on February 25, 1955. This audit report also must be expedited.

E-541, DTA-2870, Polaris

Short Form (Unit Cost) contract dated June 3, 1953, provides that upon the expiration of a first period (18 months from the first day of the calendar month next succeeding the date of commencement of the work) "the Operator shall provide the Government with a detailed computation of the actual unit cost of drifting and crosscutting (treated as one operation) performed under this contract during said period. The Government may audit said computations to the extent it sees fit, and shall have access to the Operator's books and records for this purpose. If the actual unit cost of drifting and crosscutting for the first period is less than $51.00 per foot, the actual cost for drifting and crosscutting shall be and become the agreed unit cost for drifting and crosscutting for the second period".

Nov. 1?

Since it appears that work started on this contract on October 16, 1953, the first period would expire on May 1, 1955. An audit should be scheduled promptly upon receipt from the Operator of the detailed computation required by the Contract.

E-645, DTA-2143, Calera

Contract dated December 9, 1953, provides for the Government to contribute on the basis of agreed unit costs "for a period of one year from the date of this contract, and thereafter——unless and until the Government, at its option, notifies the Operator that the Government will contribute to the incompleted portions of any of the work on the basis of actual costs as set forth in Article 6(c) of the contract".

Accordingly, an audit should be scheduled for performance shortly after December 9, 1954, and the audit report, of course, should be expedited.

It is suggested that you appropriately "flag" these contracts so that the dates, on which audits will be required, will not be overlooked. I think you also will find it beneficial to currently maintain pre-audit work sheets for these projects.

Sincerely yours,

(Signed) J. L. Chambers

Jay L. Chambers, Chief
Contract Administration
and Audit Division

EHTalbert/ama
August 24, 1954

Copy to: Mails and Files
Admr. Reading File
Mr. Chambers
Contract Idm-E9, Taylor-Knapp
Contract Idm-E493, Bunker Hill & Sullivan
Contract Idm-E541, Polaris
Contract Idm-E645, Calera

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

OCT 7 - 1955

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

Re: Idm-8541, DMEA-2879
Polaris Mining Co.

Dear Charlie:

Receipt is acknowledged of the Washington copies of your revised interim audit report and certificate covering the referenced project.

This report and certificate are now acceptable and normal distribution is authorized. In forwarding copies to the regional Executive Officer and the Certifying Officer, attention should be invited to the last sentence of paragraph 1, the audit findings relative thereto, and the complete paragraph 4 of Annex II to the contract.

Sincerely yours,

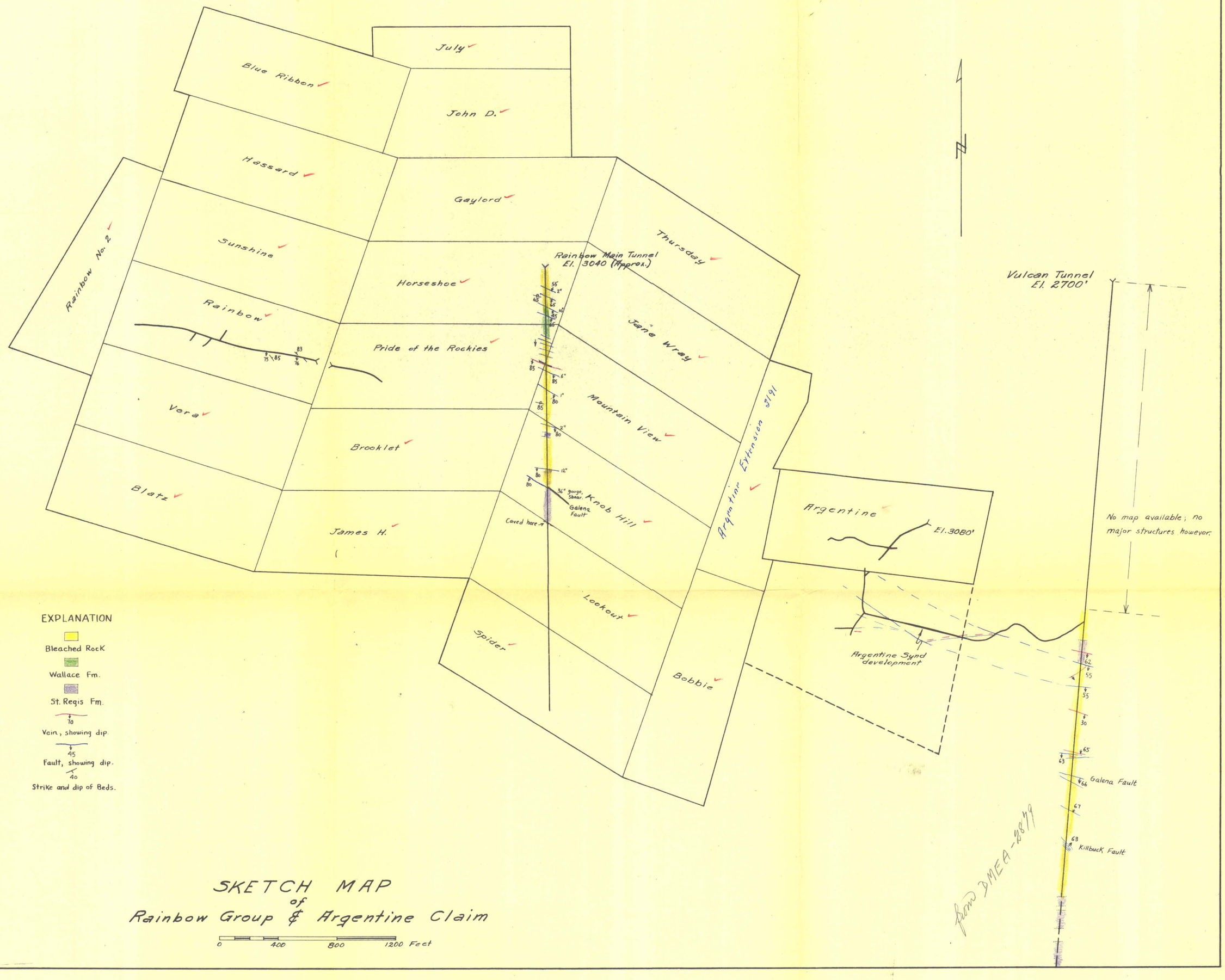
Jay L. Chambers, Chief
Contract Administration
and Audit Division

EDTalbert/wb
October 6, 1955

Copy to: Docket
Admr. Reading File
Mr. Chambers

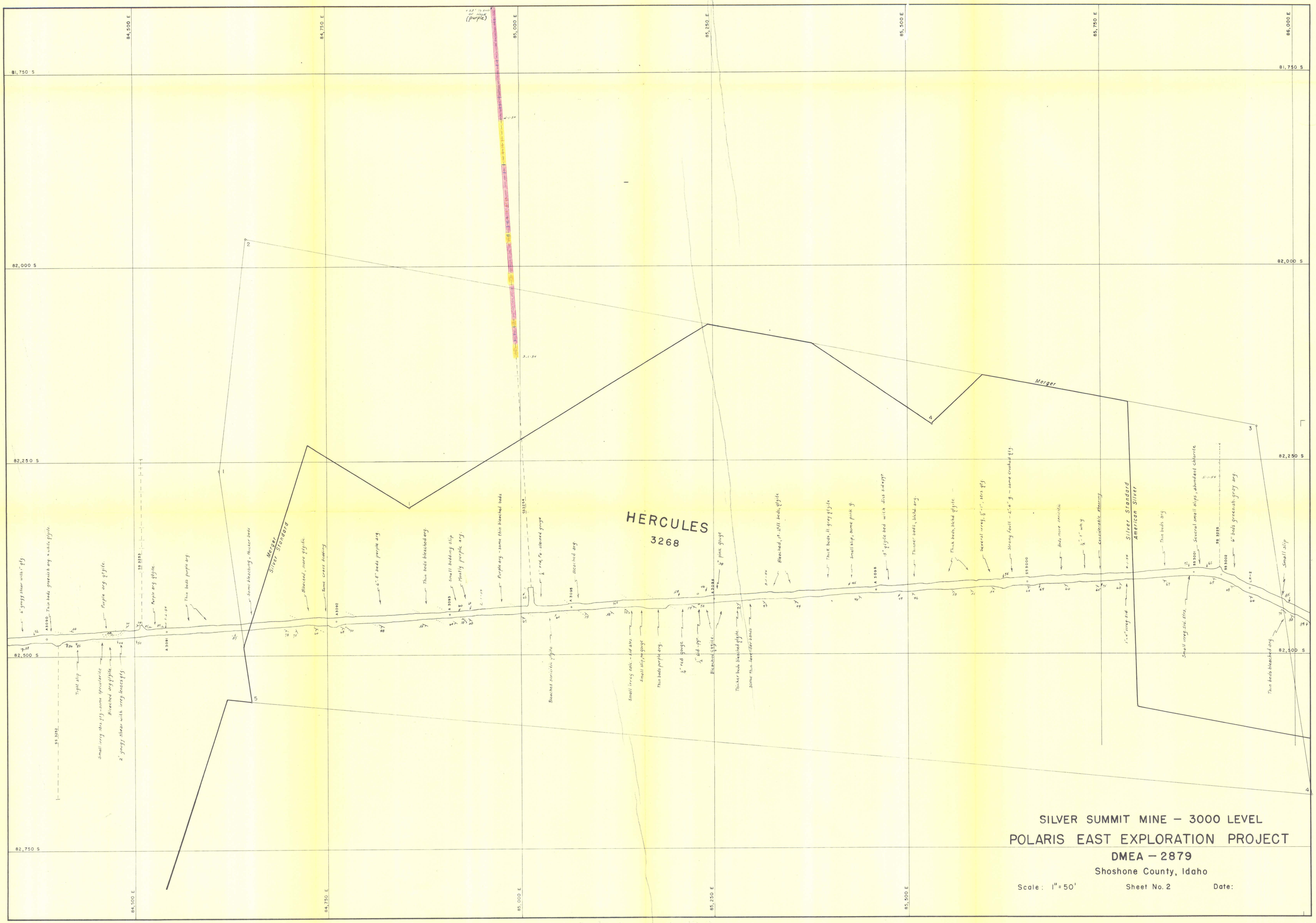
Map 4

Docket No. DMEA 2679



SKETCH MAP
of
Rainbow Group & Argentine Claim

Form DMEA-2879



SILVER SUMMIT MINE — 3000 LEVEL

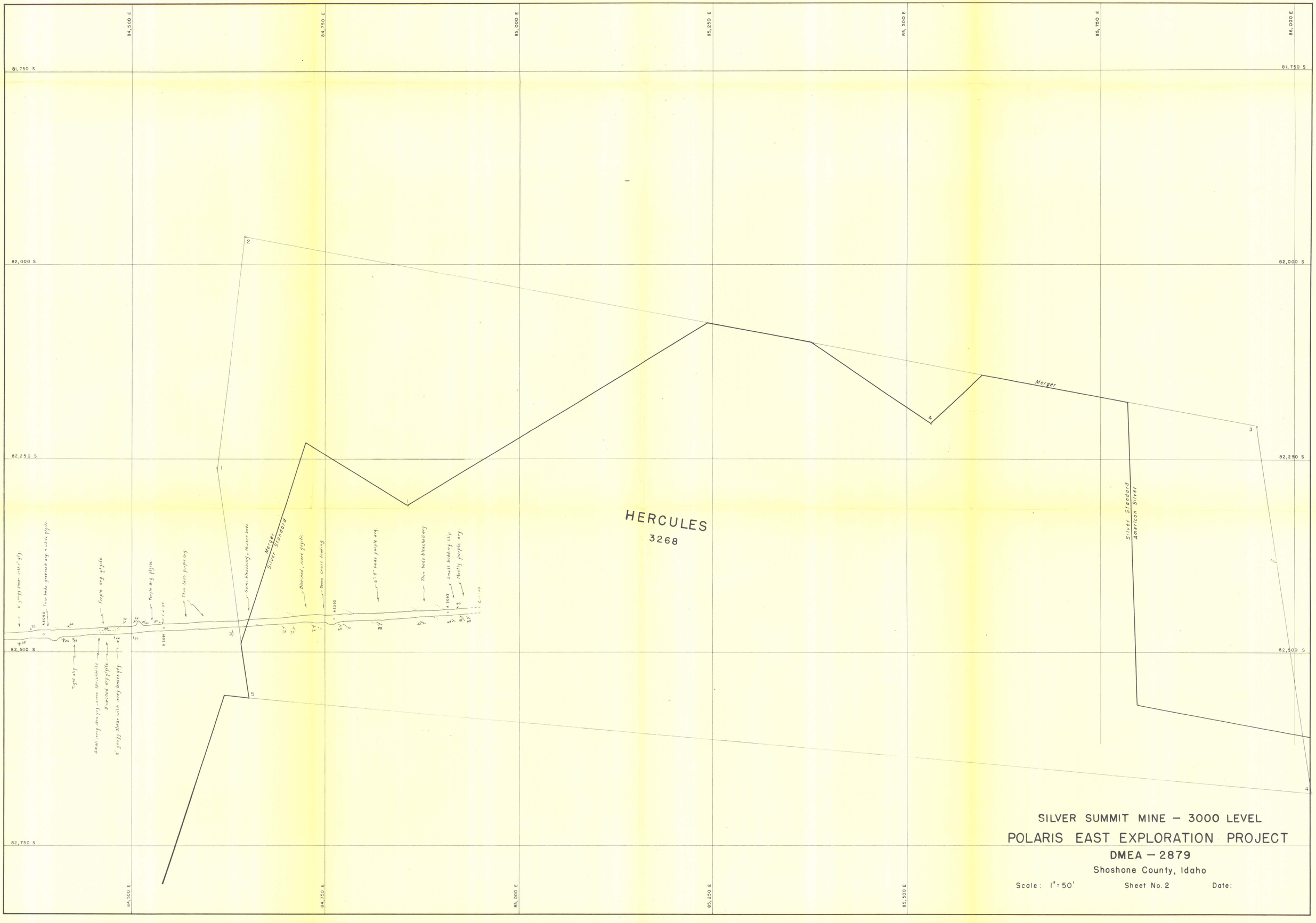
POLARIS EAST EXPLORATION PROJECT

DMEA — 2879

Shoshone County, Idaho

Scale: 1" = 50' Sheet No. 2 Date:

AG-19



SILVER SUMMIT MINE — 3000 LEVEL

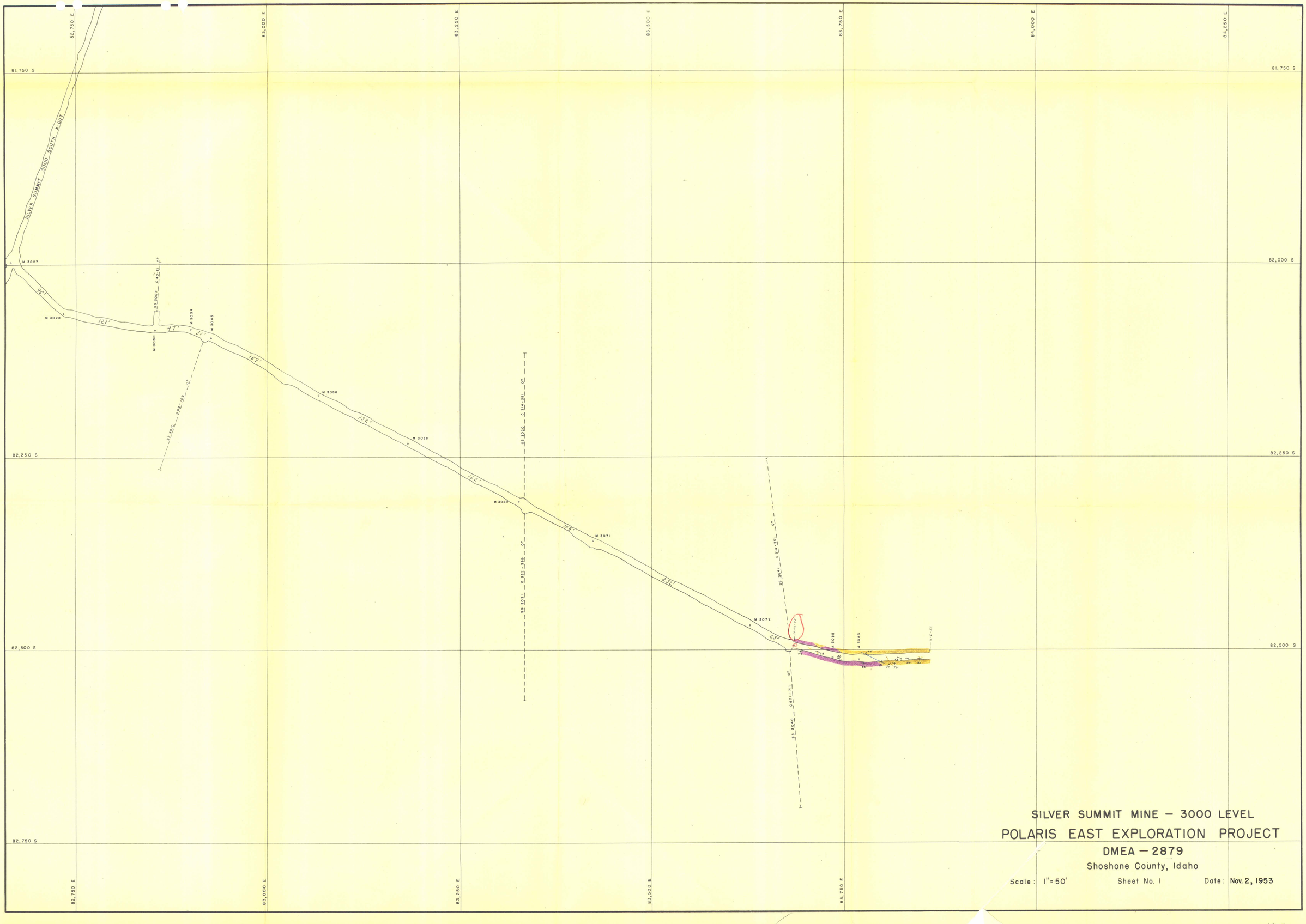
POLARIS EAST EXPLORATION PROJECT

DMEA — 2879

Shoshone County, Idaho

Scale: 1" = 50' Sheet No. 2 Date:

AG-19


82,750 E
83,000 E
83,250 E
83,500 E
83,750 E
84,000 E
84,250 E
81,750 S
82,000 S
82,250 S
82,500 S
82,750 S
SILVER SUMMIT 3000 SOUTH X-CUT
M 3027
M 3028
M 3030
M 3034
M 3046
M 3056
M 3058
M 3060
M 3071
M 3072
A 3082
A 3083
47'
121'
47'
37'
167'
172'
162'
109'
237'
63'
SS 3007 — C 62-61 — 0°
SS 3010 — C 642-109 — 0°
SS 3020 — C 514-291 — 0°
SS 3021 — C 252-392 — 0°
SS 3041 — C 314-381 — 0°
SS 3040 — C 871-711 — 0°
SILVER SUMMIT MINE — 3000 LEVEL
POLARIS EAST EXPLORATION PROJECT
DMEA — 2879
Shoshone County, Idaho
Scale: 1" = 50'
Sheet No. 1
Date: Nov. 2, 1953

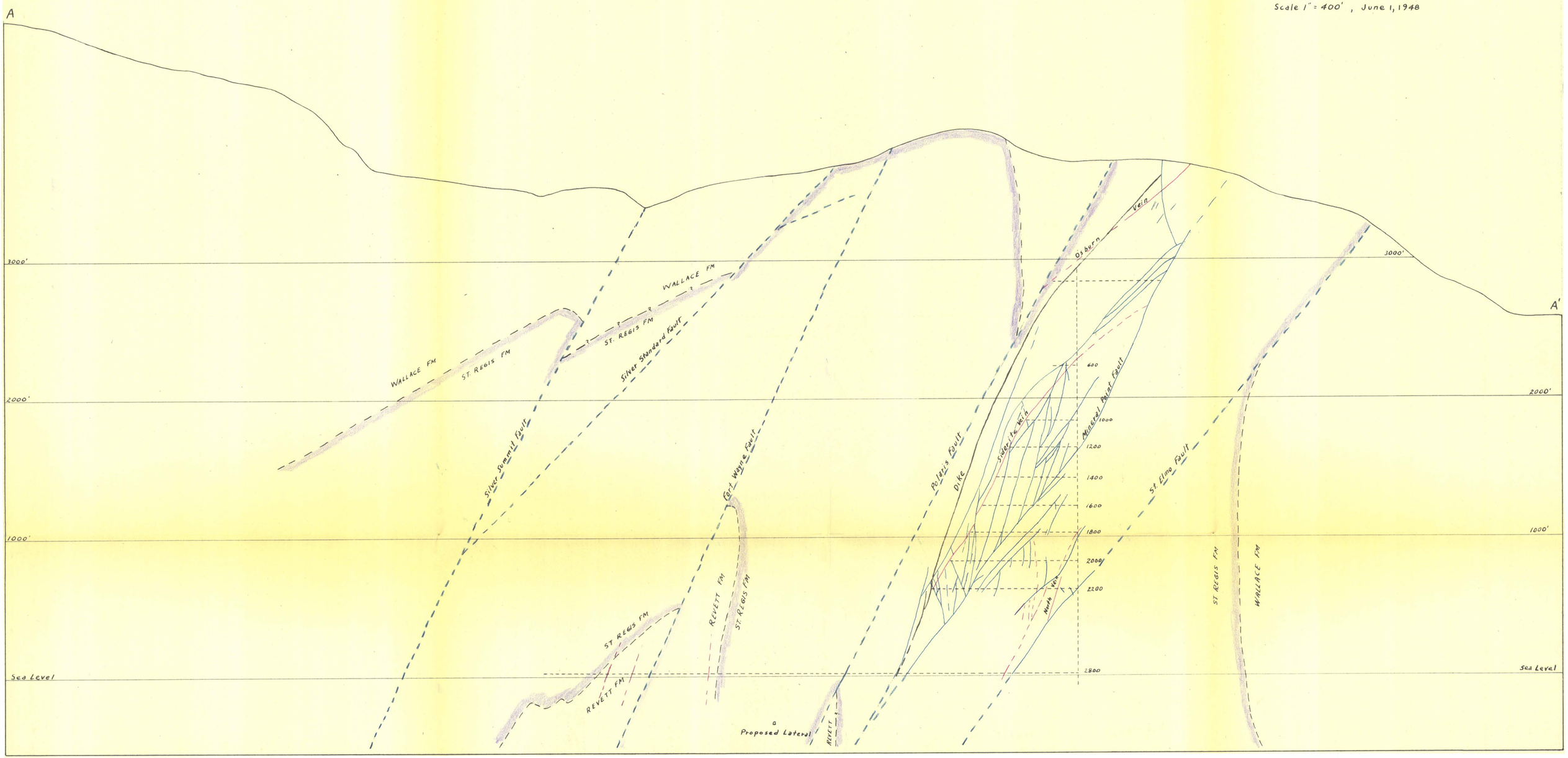
AG-18

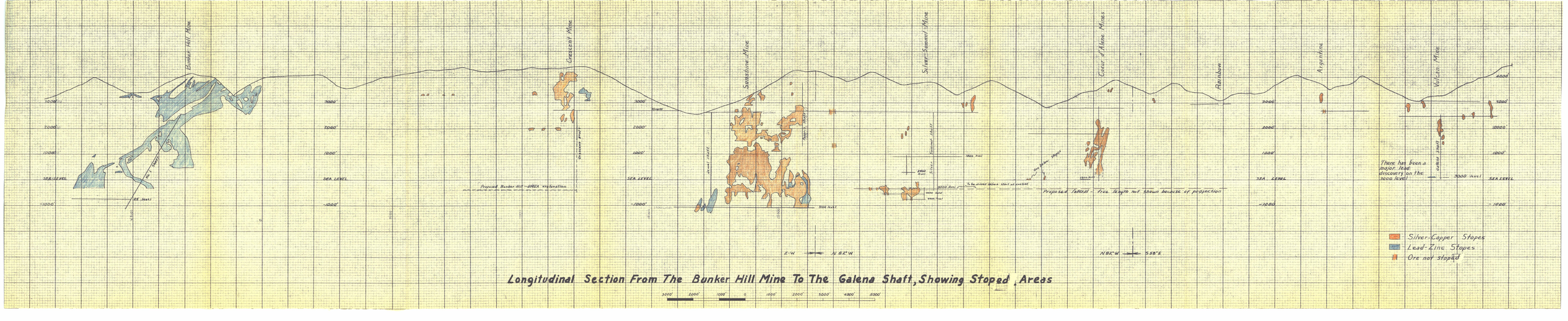
COEUR D'ALENE MINES

SECTION AA'

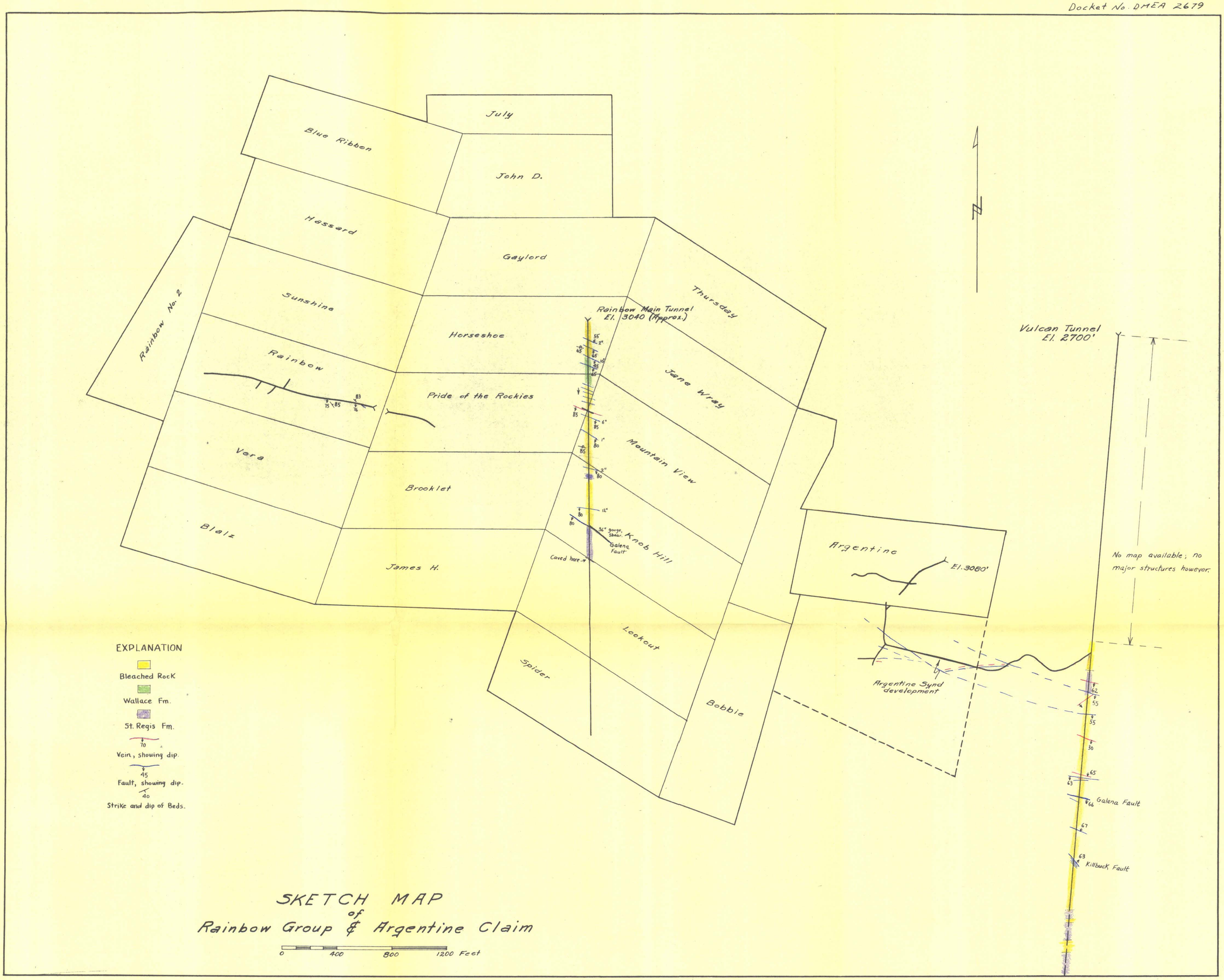
SECTION BEARS N33°E - LOOKING WESTERLY

Scale 1" = 400', June 1, 1948



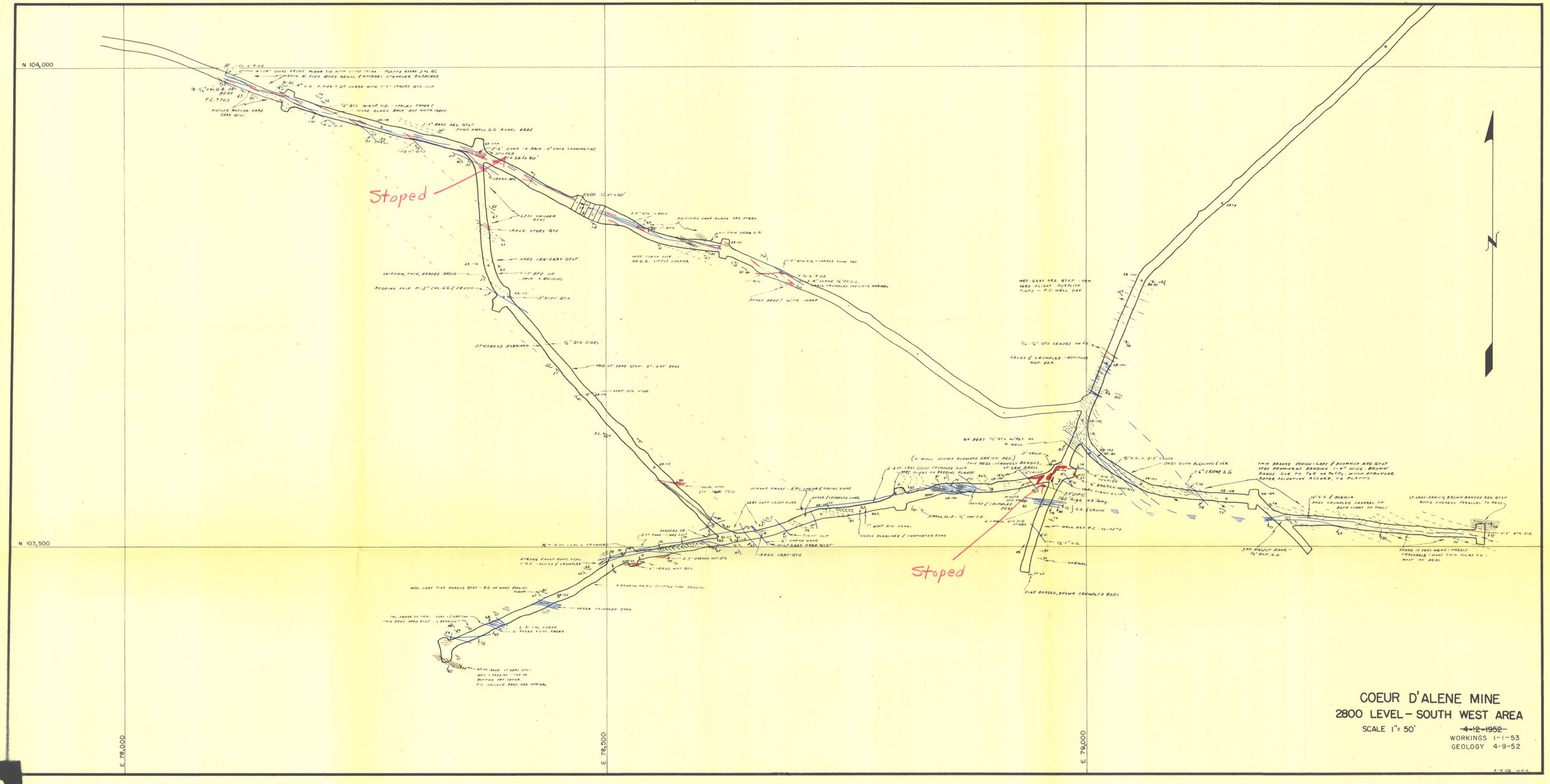

Bunker Hill Mine
Crescent Mine
Sunshine Mine
Silver Summit Mine
Coeur d'Alene Mines
Rainbow
Argentine
Vulcan Mine
Proposed Bunker Hill - ONEA exploration
Proposed Tactical - Free Tangle not shown because of projection
There has been a major lode discovery on the 3000 level
3000 level
SEA LEVEL
E-W
N 82° W
S 58° E
Silver-Copper Stopes
Lead-Zinc Stopes
Ore not stoped
Longitudinal Section From The Bunker Hill Mine To The Galena Shaft, Showing Stoped Areas

Docket No. DMEA 2679

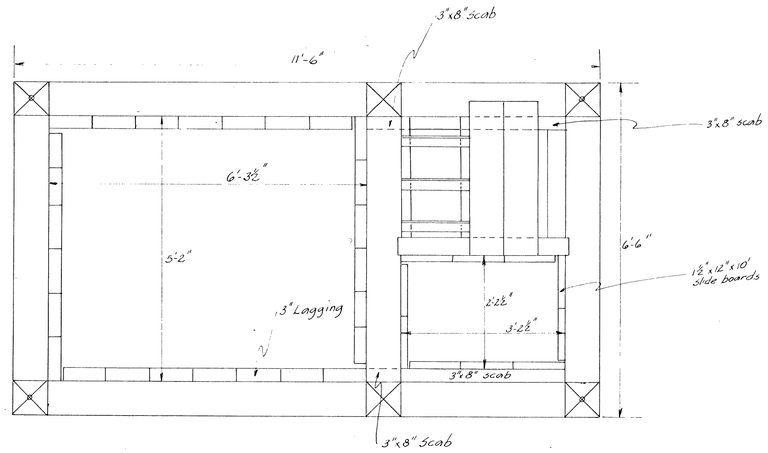


SKETCH MAP
of
Rainbow Group & Argentine Claim

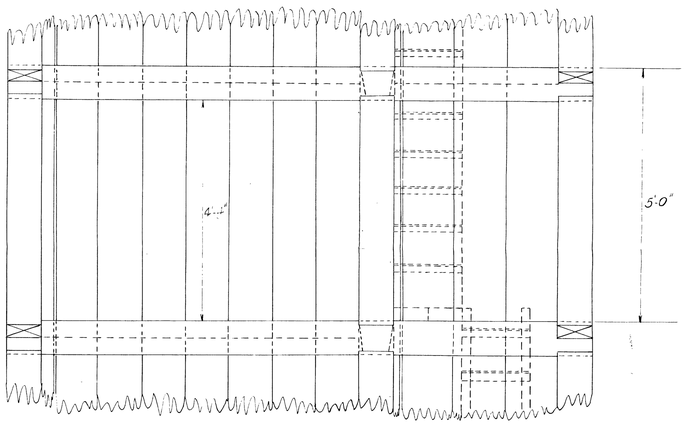
Map 2



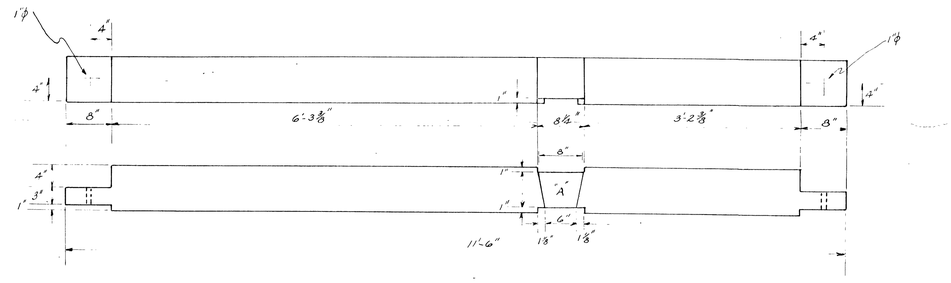
COEUR D'ALENE MINE
2800 LEVEL – SOUTH WEST AREA
SCALE 1" = 50'
~~4-12-1952~~
WORKINGS 1-1-53
GEOLOGY 4-9-52



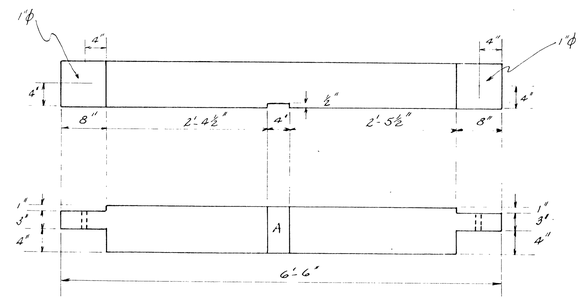
PLAN



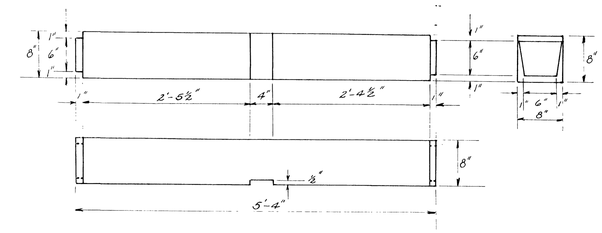
SIDE ELEVATION



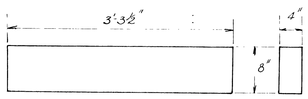
Wall Plates
Make 1 as shown
Make 1 - Oap "A" on Opp Side



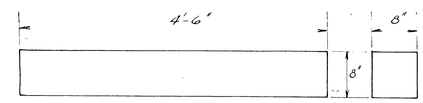
End Plates
Make 1 with Oap "A"
Make 1 without Oap "A"



Girt
Make 1



Spreader
Make 1



Posts
Make 6

TIMBER PER SET

No Pieces	Size	Board Feet	Use
3½	8"x8"x18'	335.98	2 Wall Plates - 2 End Plates - 6 Posts
⅓	8"x8"x16'	28.44	1 Girt
1	4"x8" x 3'-3½"	8.89	1 Spreader
2	3"x8" x 3'-2⅜"	12.83	2 Scabs
2	3"x8"x 4'-4"	17.33	2 Scabs
5	1½"x12"x10'	75.00	Slide boards
1	3"x8"x3'-0"	6.00	Landing boards
22	3"x10"x5'-0"	275.00	Chute Lining
4	3"x8"x5'-0"	40.00	Chute Lining
	Total	799.47	

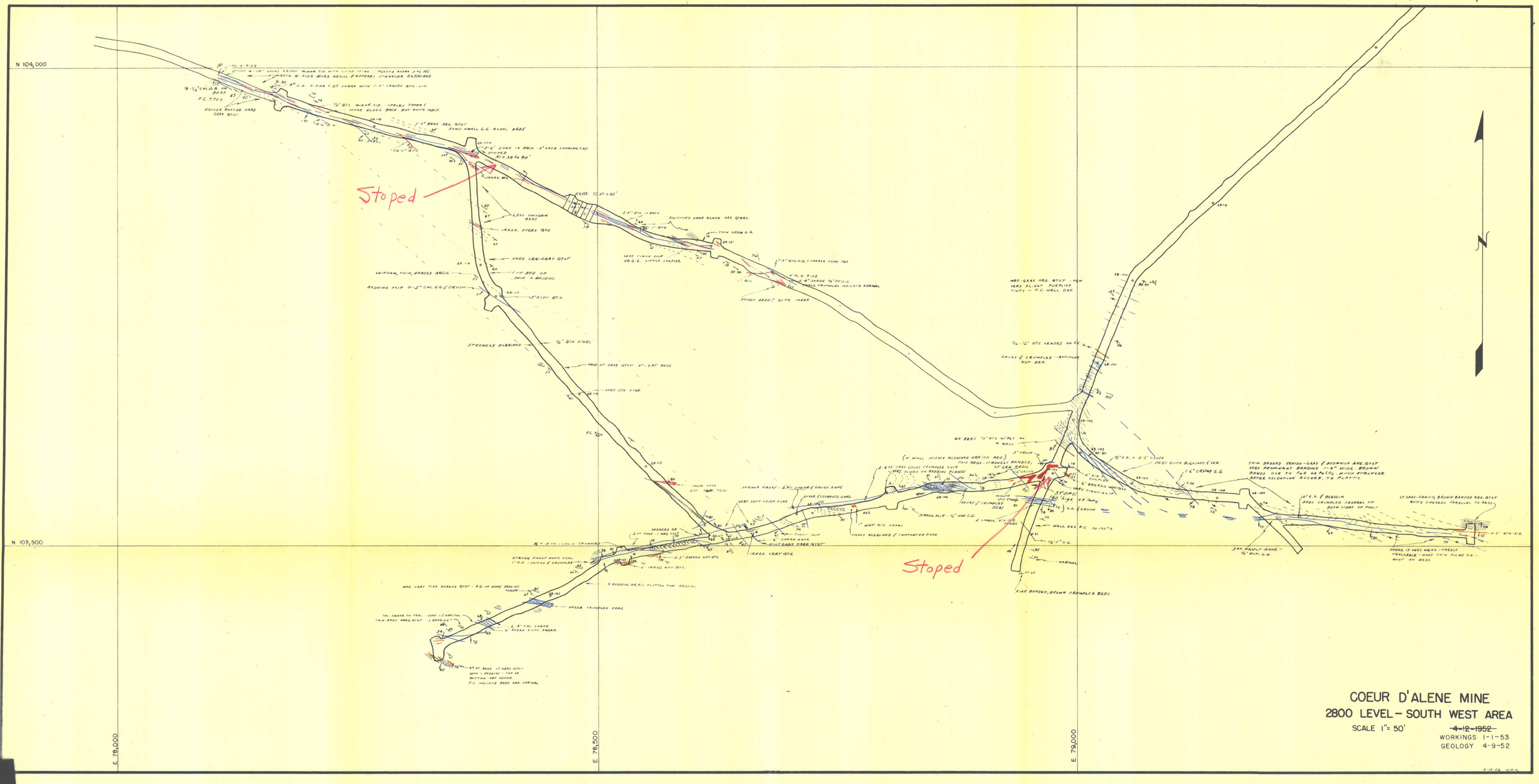
SILVER SUMMIT MINING CO.

VENTILATION RAISE TIMBER

SCALE ¾" - 1" = 1'

12-15-49

Map 2



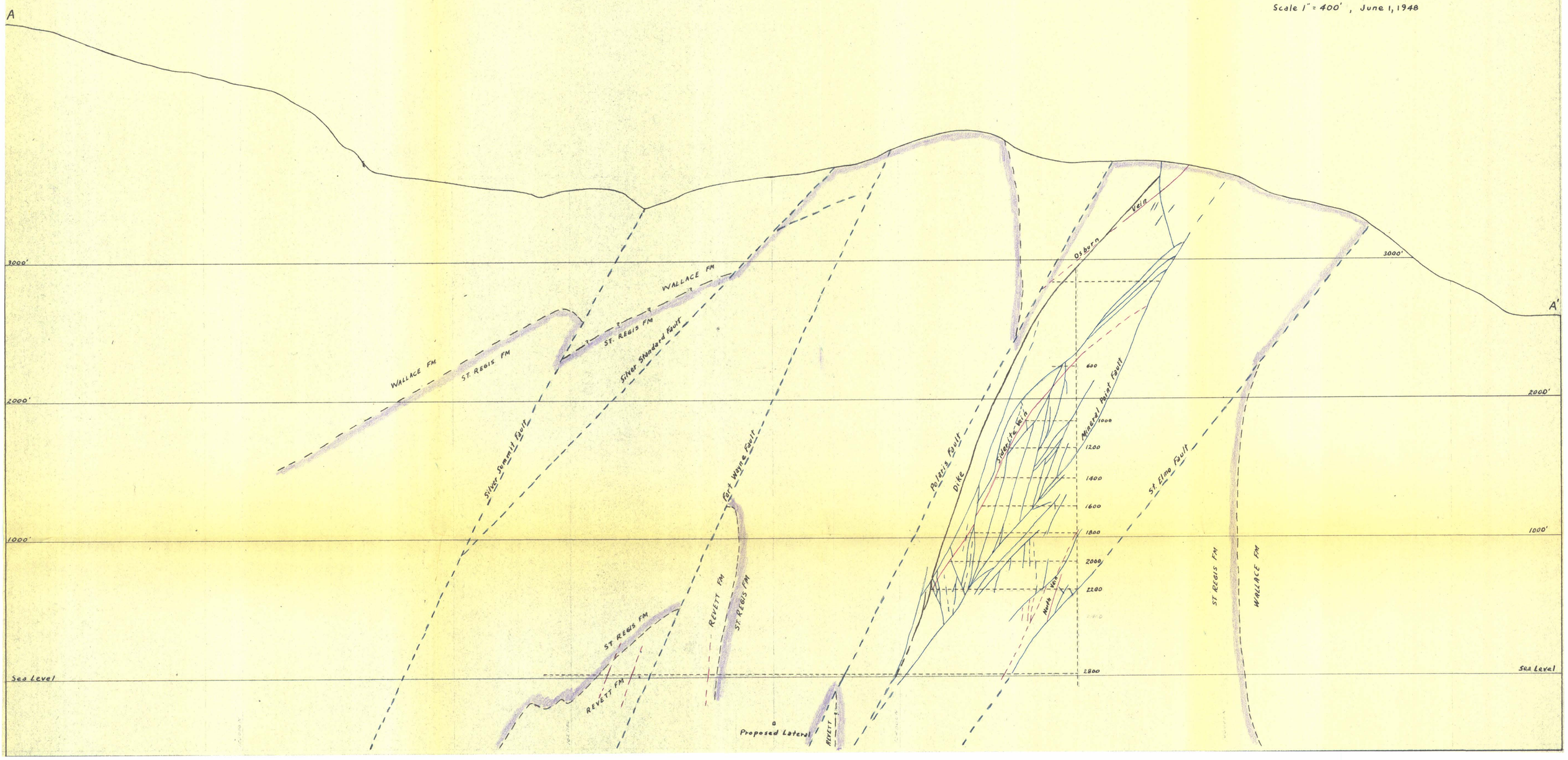
COEUR D'ALENE MINE
2800 LEVEL – SOUTH WEST AREA
SCALE 1" = 50'
~~4-12-1952~~
WORKINGS 1-1-53
GEOLOGY 4-9-52

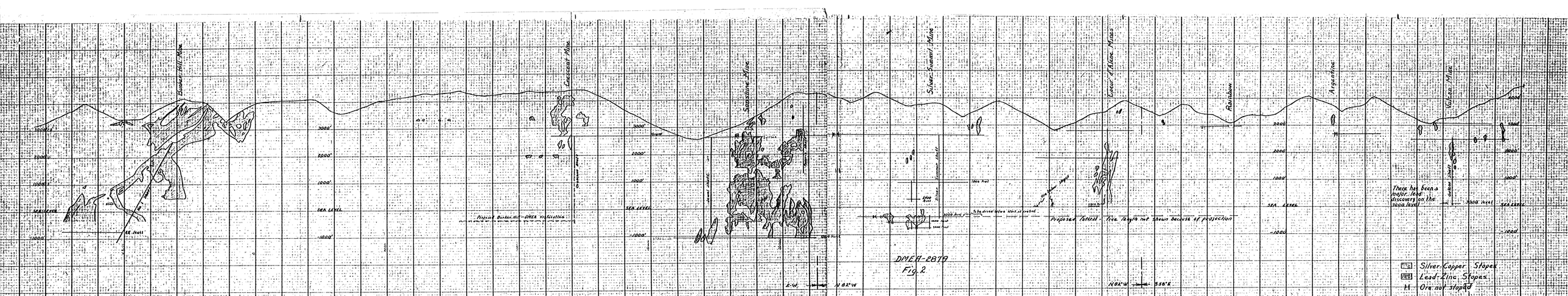
COEUR D'ALENE MINES

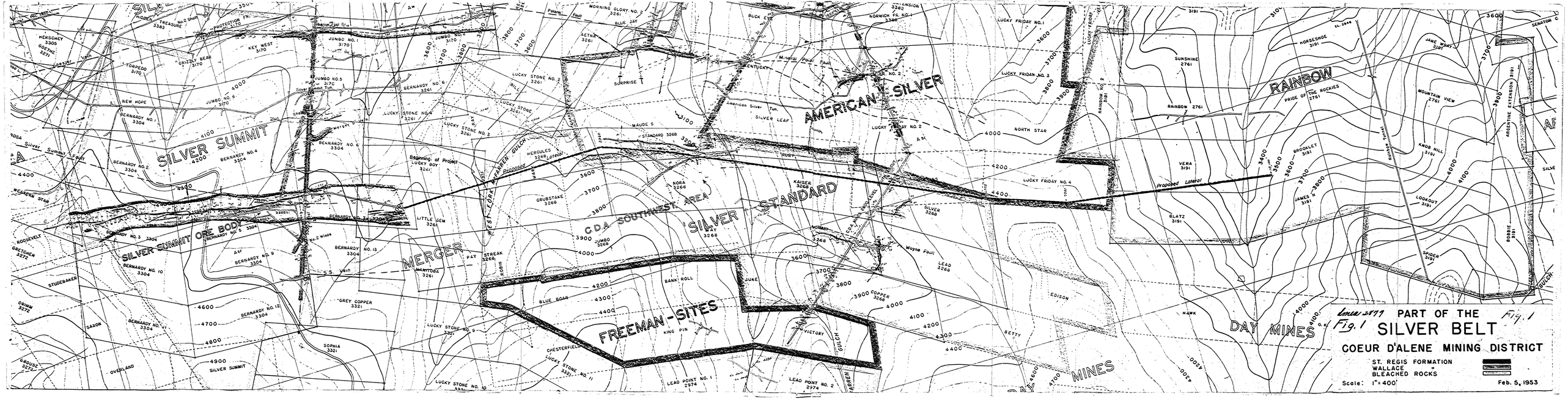
SECTION AA'

SECTION BEARS N33°E - LOOKING WESTERLY

Scale 1" = 400', June 1, 1948



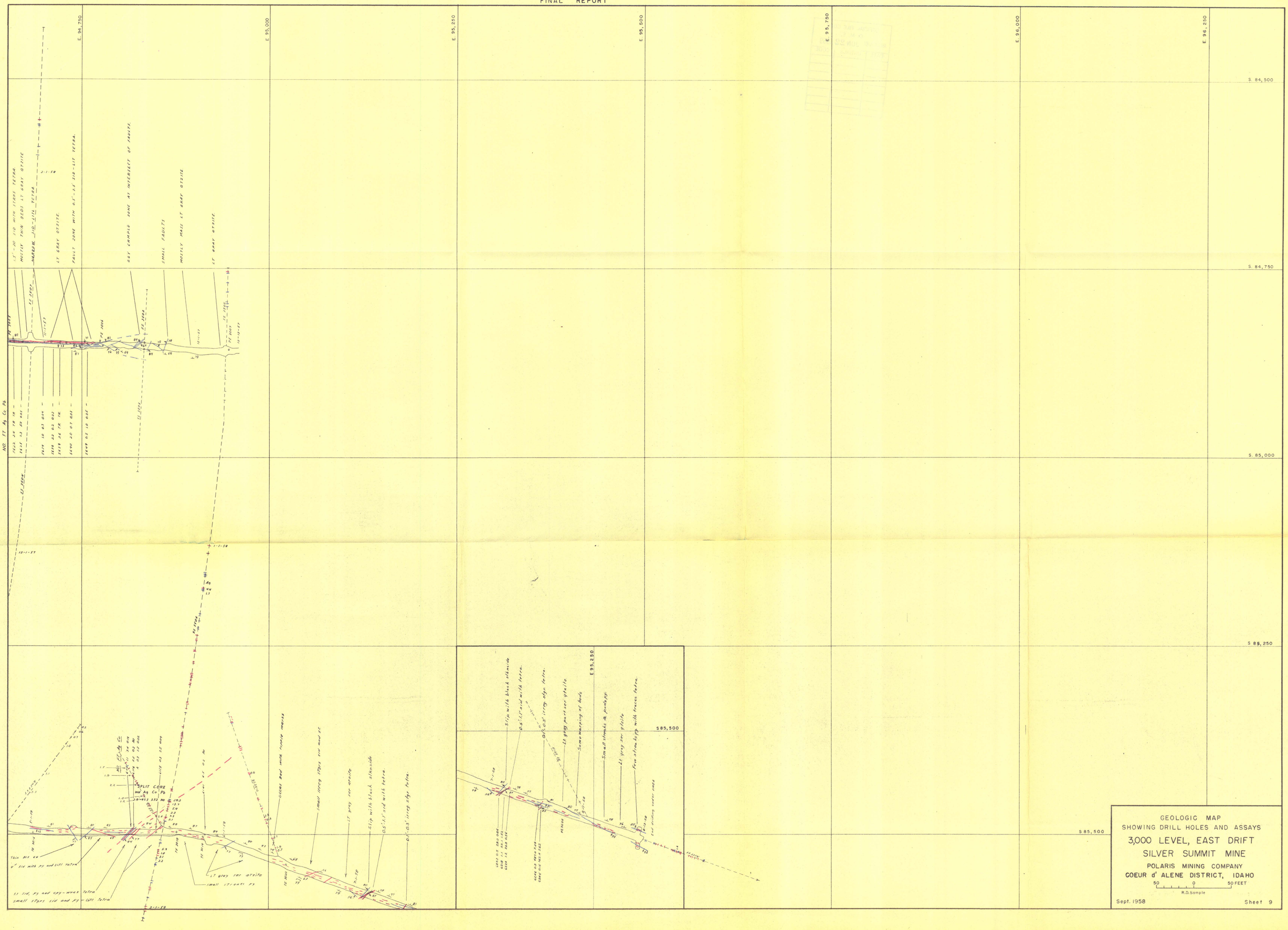

Bunker Hill Mine
Crescent Mine
Sunshine Mine
Silver Summit Mine
Coeur d'Alene Mines
Rainbow
Argentine
Vulcan Mine
3000'
2000'
1000'
SEA LEVEL
-1000'
Project Bunker Hill - DMEA exploration
Proposed Tailrail - Five Tanks not shown because of projection
These has been a major lead discovery on the 3000 level
N 82°W
N 82°W
S 56°E
DMEA-2879
Fig. 2
Silver-Copper Stopes
Lead-Zinc Stopes
H Ore not stoped
Longitudinal Section From The Bunker Hill Mine To The Galena Shaft, Showing Stoped Areas


PART OF THE
Fig. 1
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
PRIDE OF THE ROCKIES
DAY MINES
Proposed Lateral
Beginning of Project
Wayne Fault
Mineral Point Fault
Surprise Fault
Henschey 3305
Goethe 3271
Treasure 3383
Protection Fr. 3370
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. 6 3304
Bernardy No. 8 3261
Bernardy No. 9 3304
Bernardy No. 10 3304
Bernardy No. 11 3304
Bernardy No. 12 3304
Bernardy No. 13 3304
Lucky Stone No. 1 3261
Lucky Stone No. 2 3261
Lucky Stone No. 3 3261
Lucky Stone No. 4 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 3268
Grubstake 3268
Hercules 3268
Maude S
Standard 3268
Surprise
Buck Eye
Kentucky
Silver Leaf
Lucky Friday No. 1
Lucky Friday No. 2
Lucky Friday No. 3
Lucky Friday No. 4
North Star
Kaiser 3268
Silver 3268
Lead 3268
Jumbo 3268
Bank Roll
Blue Boar
King Pin
Chesterfield
Lead Point No. 1 2974
Lead Point No. 2 2974
Victory
Copper 3268
Edison
Betty
Hawk
Grey Copper 3321
Sophia 3321
Silver Summit
Overland
Saxon
Studebaker
Grimm 3272
Grouse 3272
Roosevelt
Gretchen 3272
Sunshine 2761
Rainbow 2761
Horseshoe 3191
Jane Gray 3191
Mountain View 2761
Argentine Extension 3191
Knob Hill 3191
Brooklet 3191
James P. 3191
Lookout 3191
Vera 3191
Blatz 3191
Spider 3191
Bobbie 3191
Senator
Rainbow No. 2 3191
Lucky Friday 3191
Morning Glory No. 2 3261
Blue Jay
Betna 3261
Norwich Fr. No. 1 3390
Mansion 3392
Silver Summit Fault
Western Star
Rosa
Gulch
Warren
Hawk
Betty
Edison
Lucky Friday
Rainbow
Senator

UNITED STATES
DEPARTMENT OF THE INTERIOR

PREPARED FOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION
FINAL REPORT

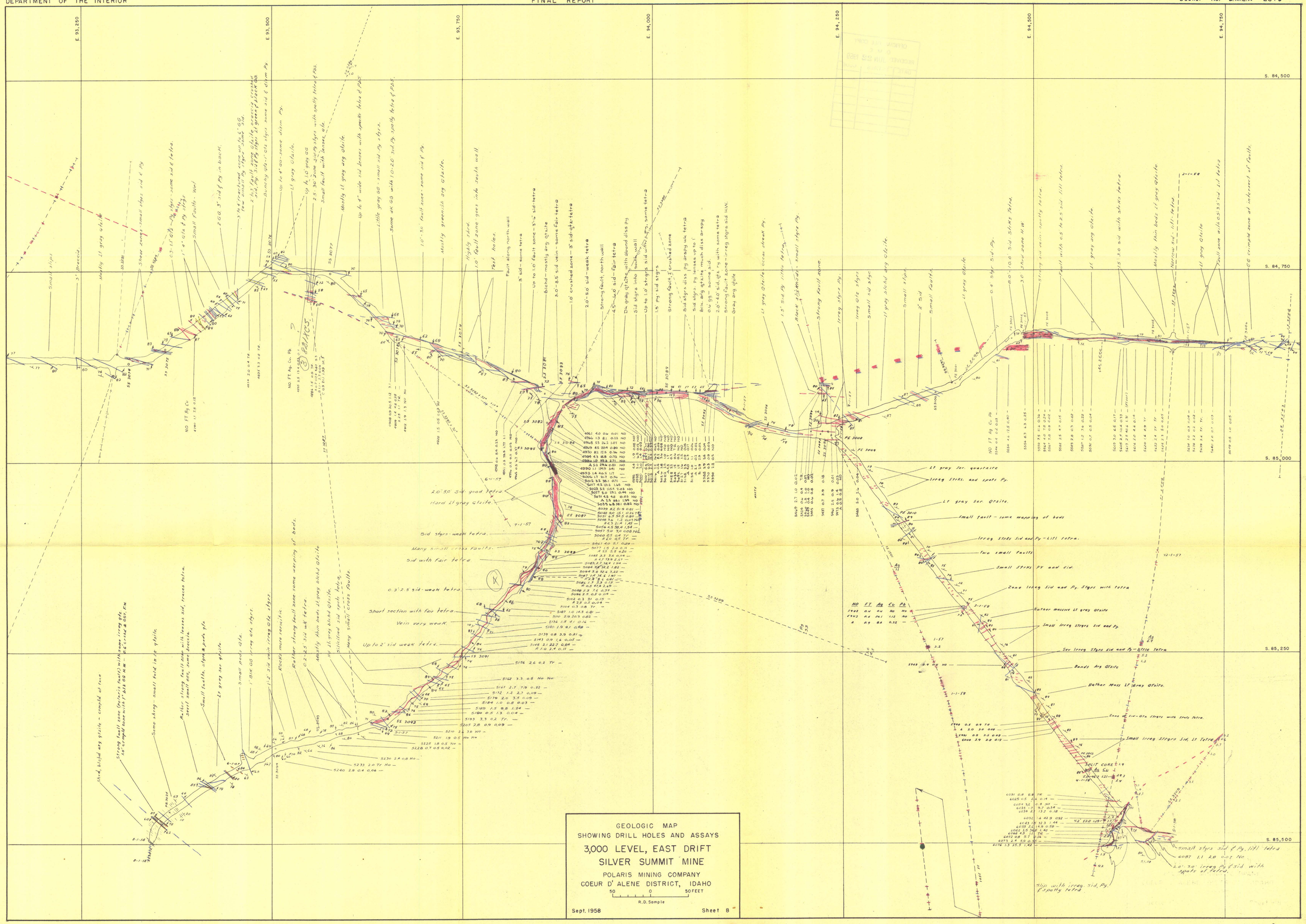
Docket No. D.M.E.A. 2879



UNITED STATES
DEPARTMENT OF THE INTERIOR

PREPARED FOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION
FINAL REPORT

Docket No. D.M.E.A 2879

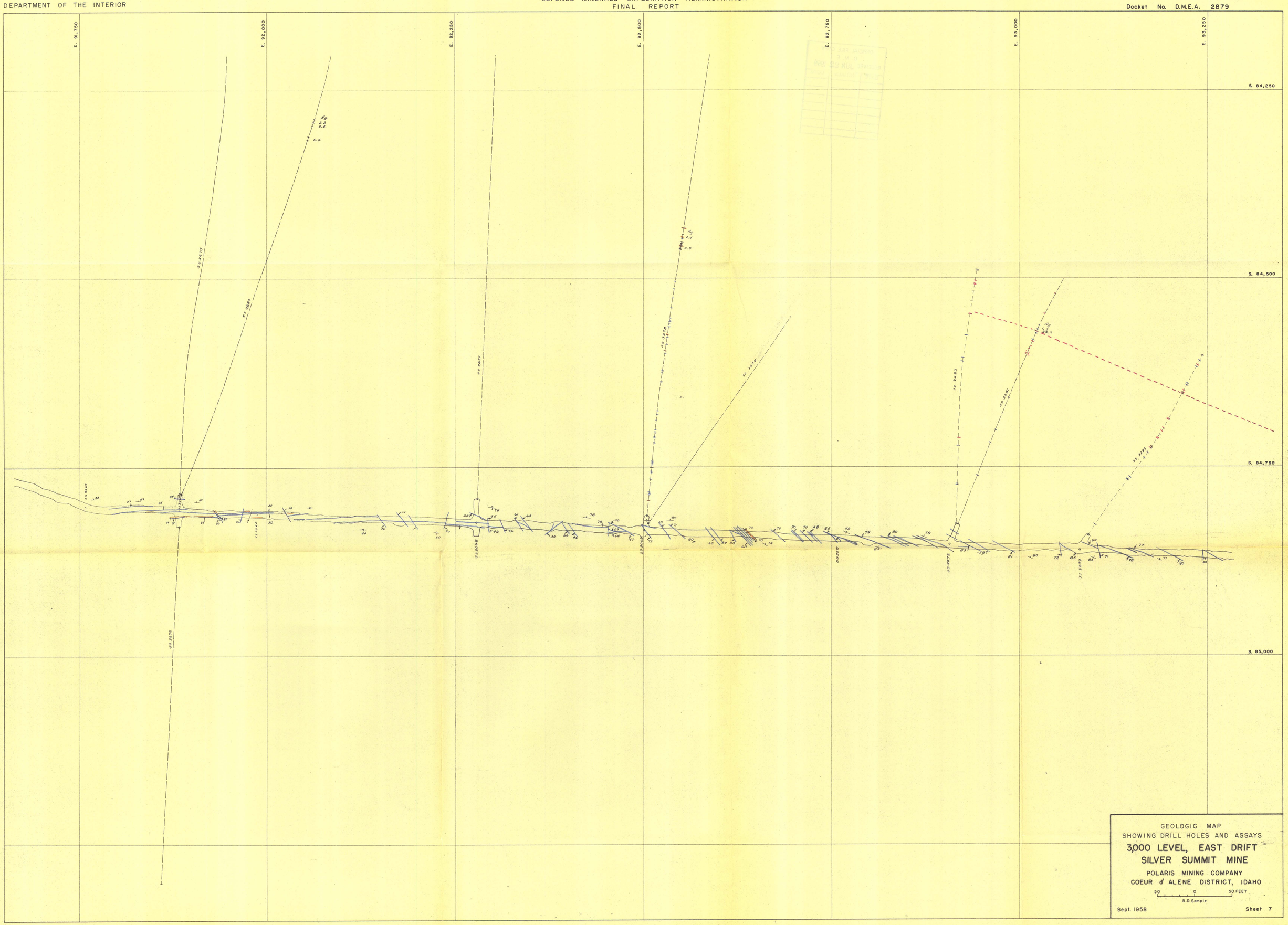


Sheet 8

UNITED STATES
DEPARTMENT OF THE INTERIOR

PREPARED FOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION
FINAL REPORT

Docket No. D.M.E.A. 2879



UNITED STATES
DEPARTMENT OF THE INTERIOR

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DEFENSE MINERALS EXPLORATION ADMINISTRATION
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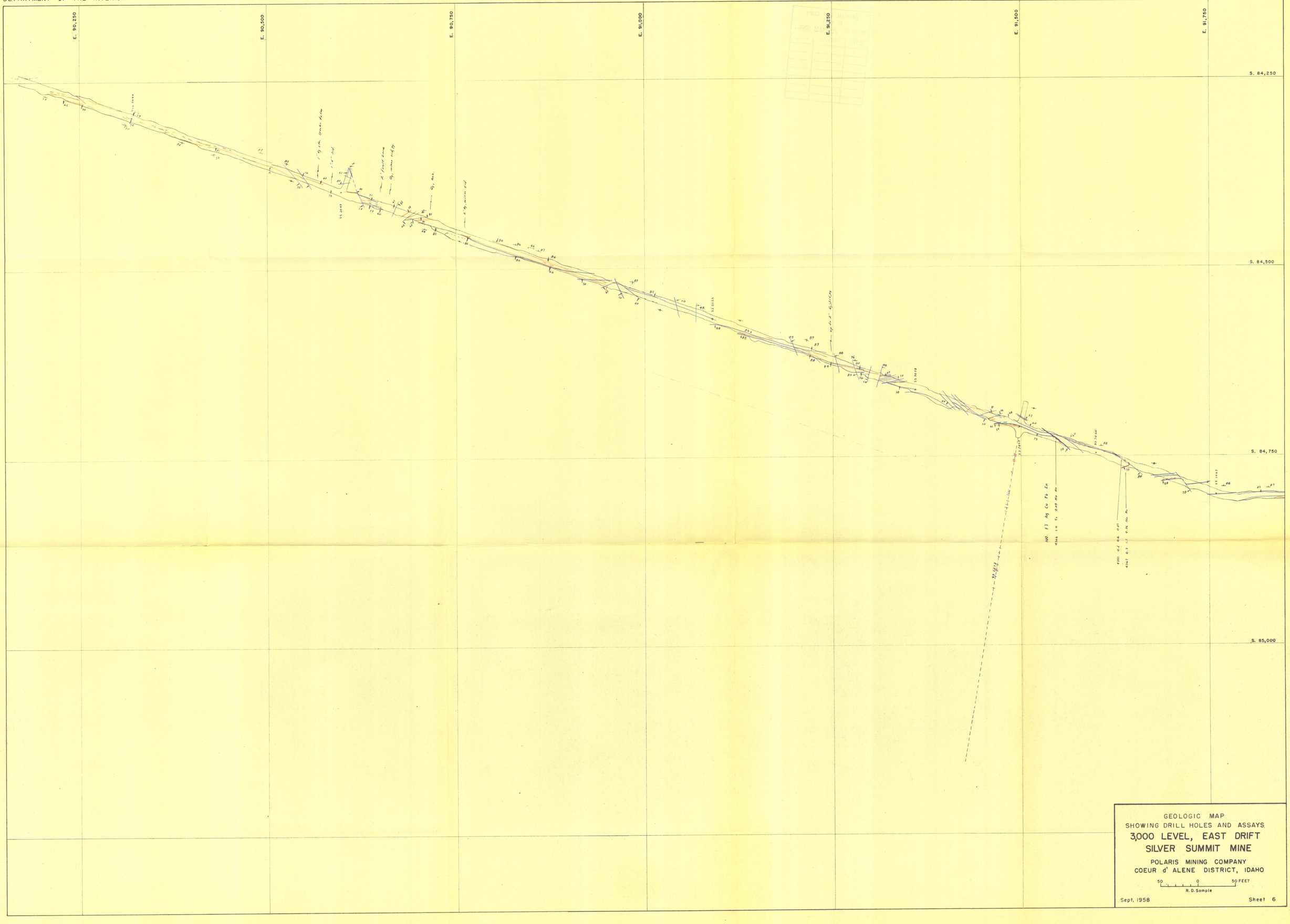

UNITED STATES
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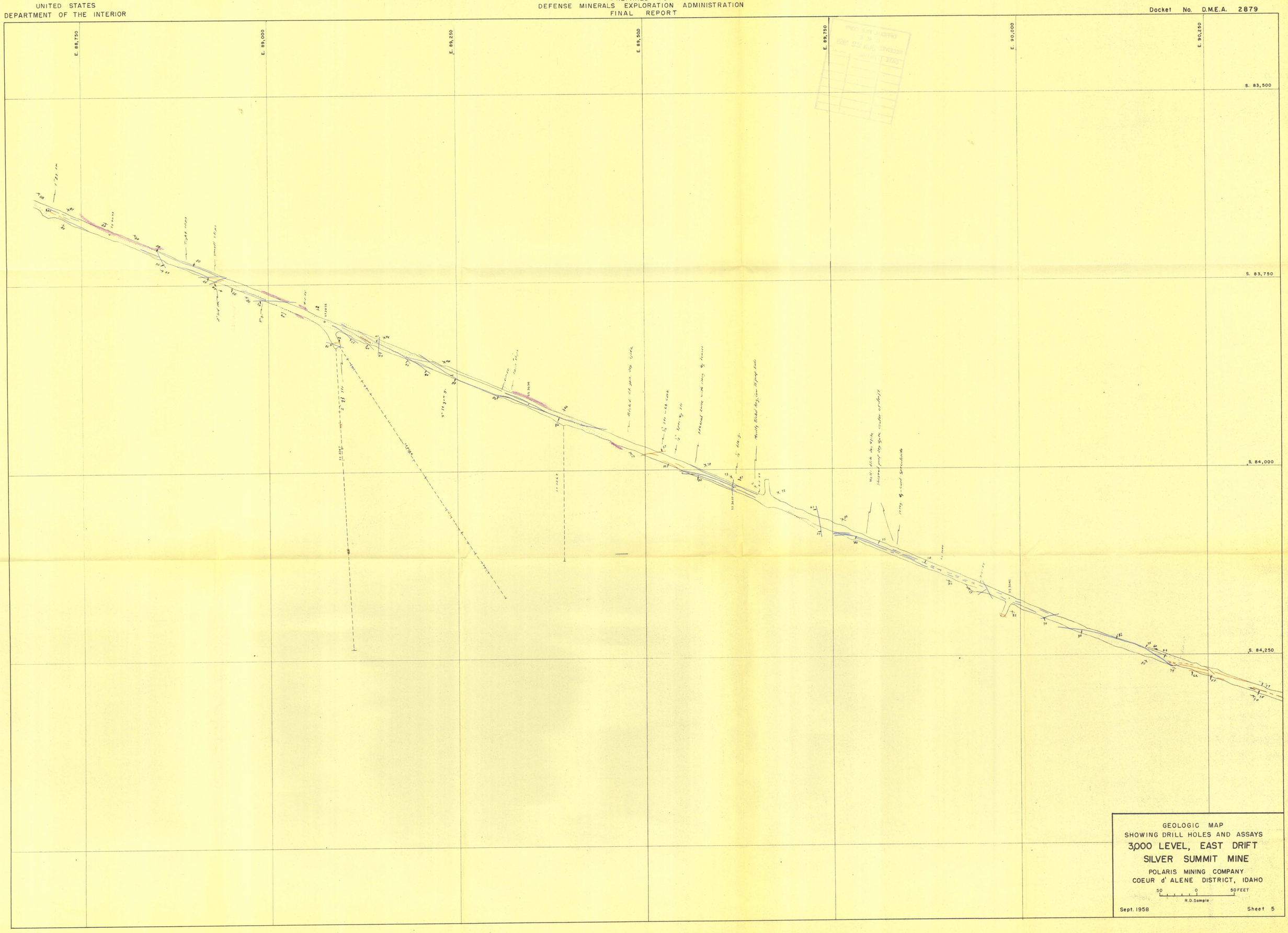

UNITED STATES
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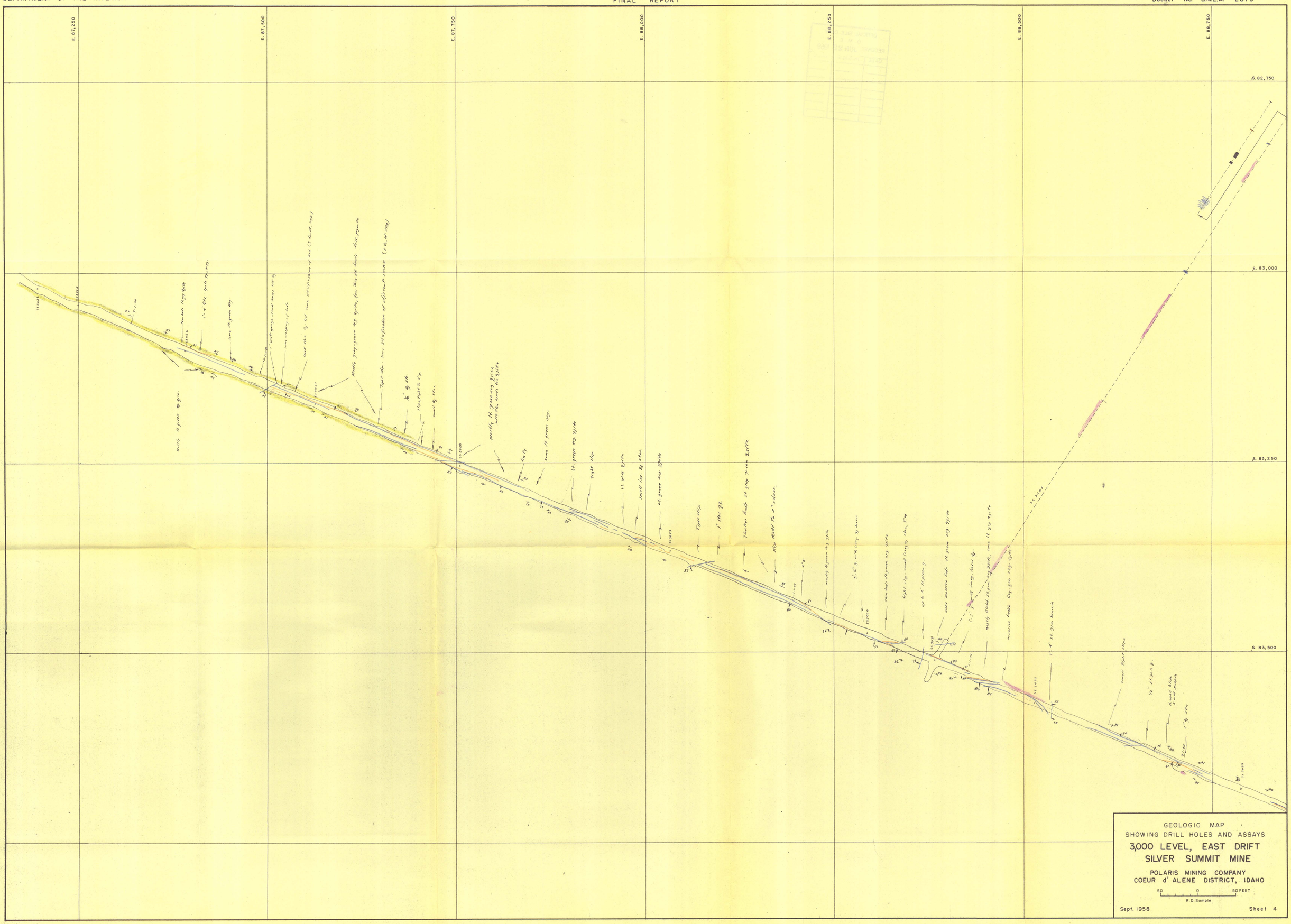

UNITED STATES
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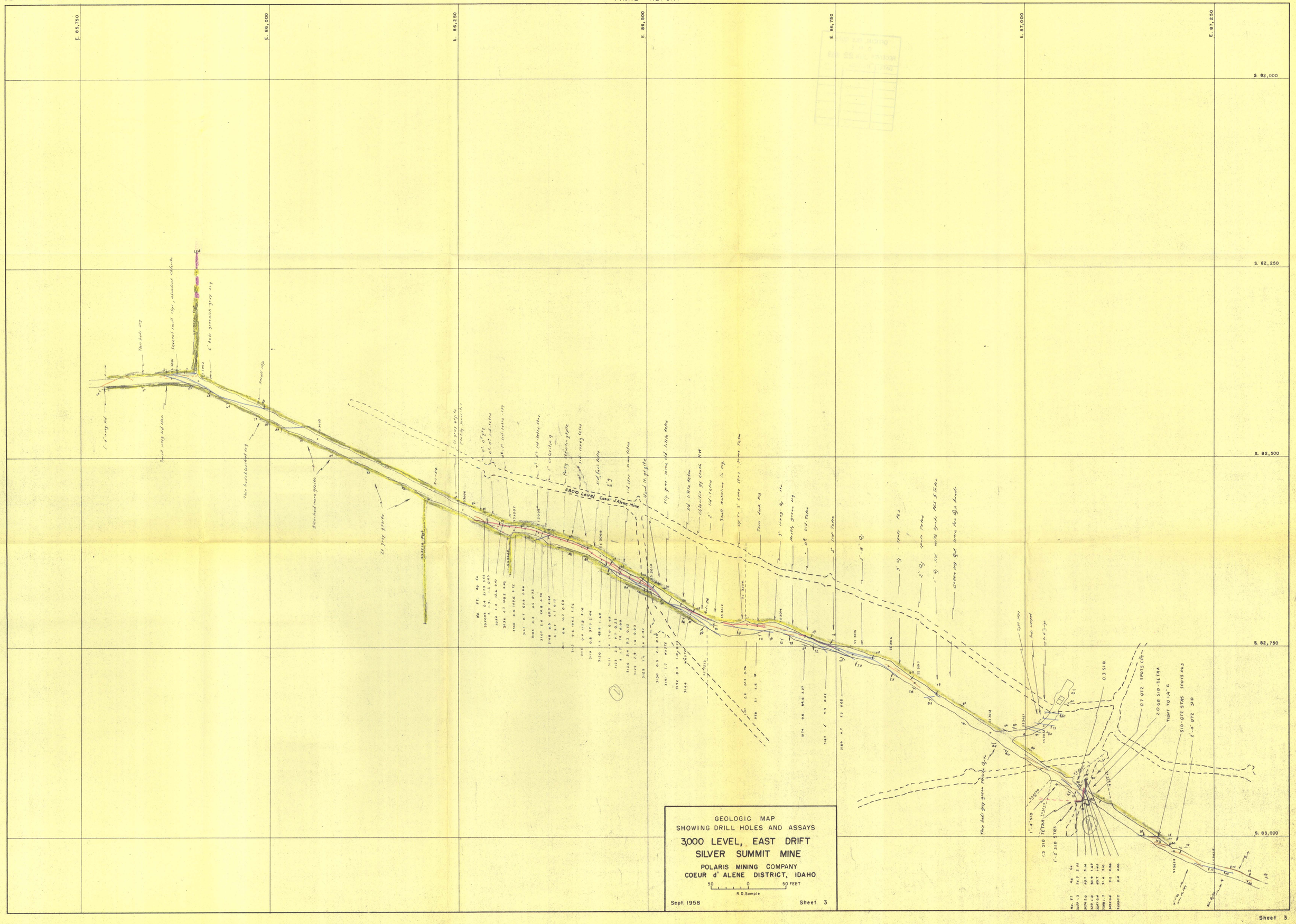
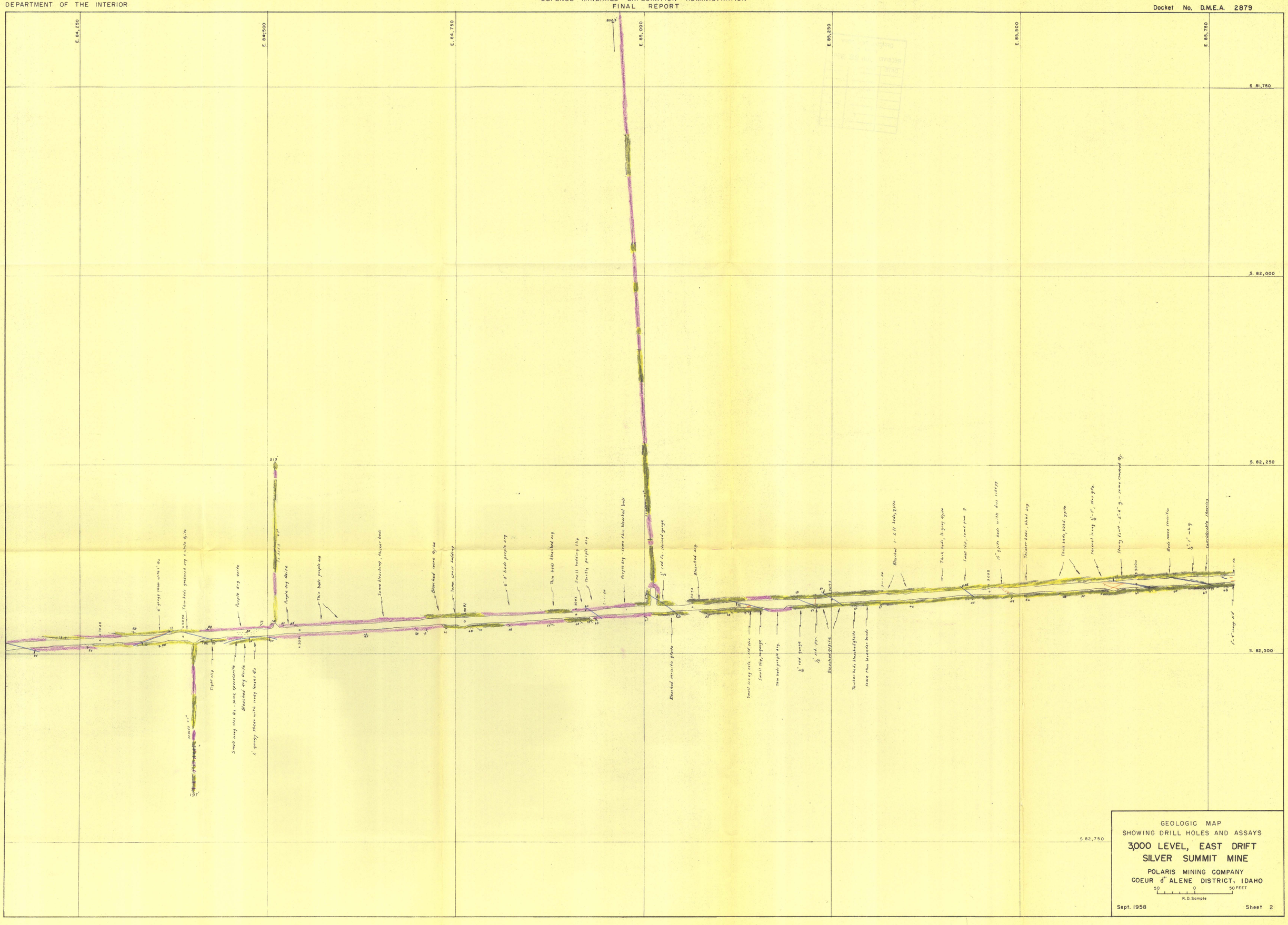


Sheet 3

UNITED STATES
DEPARTMENT OF THE INTERIOR

PREPARED FOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION
FINAL REPORT

Docket No. D.M.E.A. 2879



UNITED STATES
DEPARTMENT OF THE INTERIOR

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DEFENSE MINERALS EXPLORATION ADMINISTRATION
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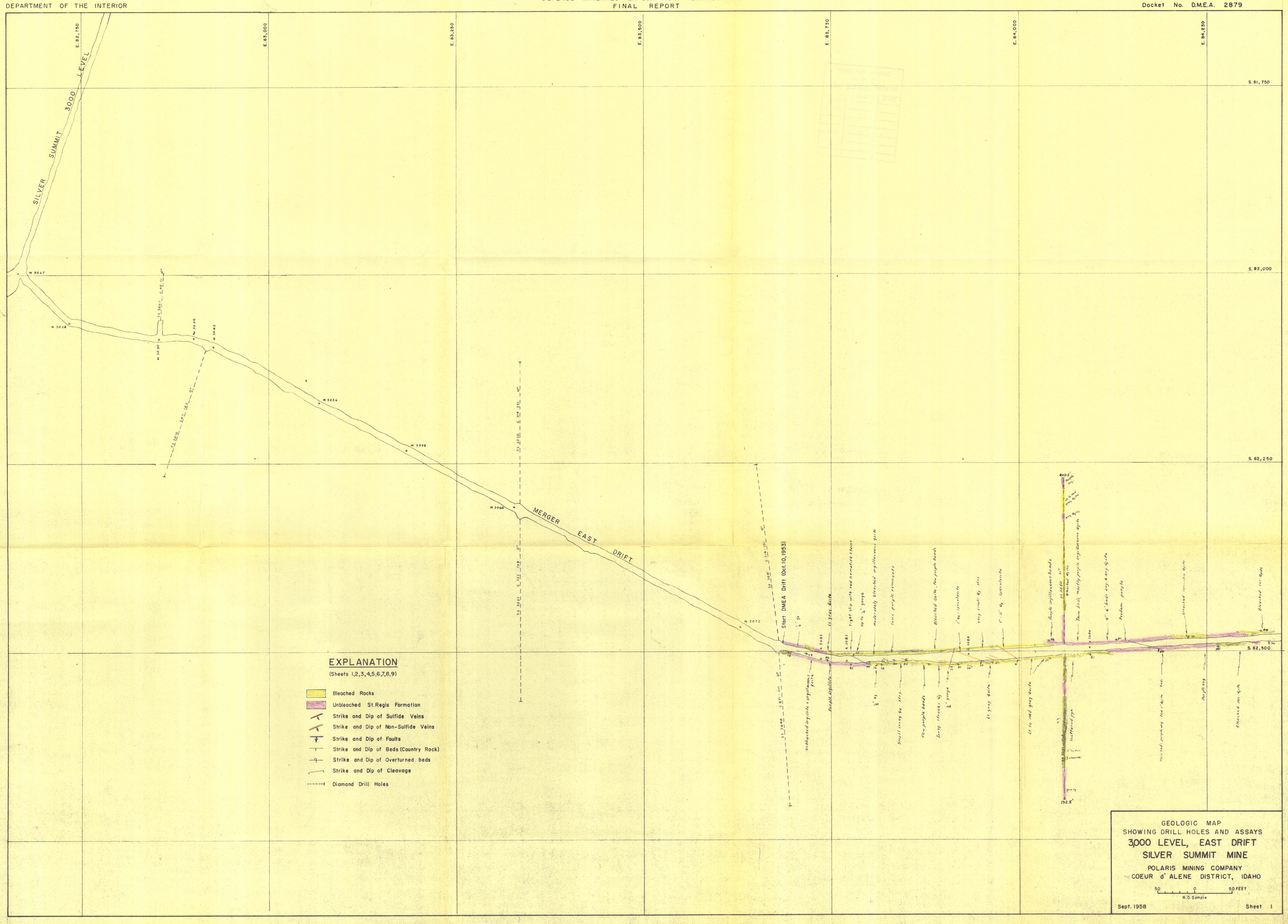
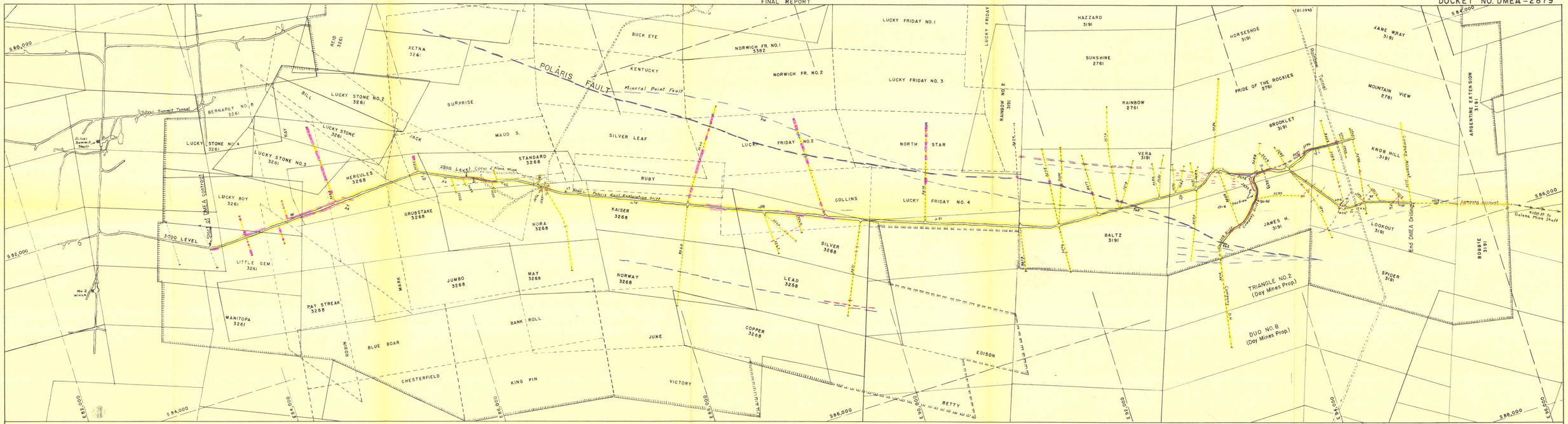


UNITED STATES
DEPARTMENT OF THE INTERIOR

PREPARED FOR
OFFICE OF MINERALS EXPLORATION
FINAL REPORT

DOCKET NO. DMEA-2879


POLARIS FAULT
Mineral Point Fault
Silver Summit Tunnel
Silver Summit Shaft
3000 LEVEL
DMEA contract
2800 Level Coeur d'Alene Mine
Polaris West Exploration Drift
Company Account
Raises
Tunnel
Contact Drilling
End DMEA Drilling
Ore
Stopes
Winze
Raise
Drift
Cross Cut
Adit
Shaft
Stope
Footwall
Hanging Wall
Vein
Fault
Shear
Fracture
Joint
Bedding
Foliation
Strike
Dip
Vertical
Horizontal
Sample
Diamond Drill Hole
Rock Bolt
Timber
Ladder
Manway
Chute
Pillar
Stulls
Cribbing
Gallery
Stope Fill
Waste Dump
Ore Bin
Compressor
Pump
Water Line
Air Line
Electric Line
Telephone Line
Road
Trail
Bridge
Culvert
Fence
Gate
Building
Mill
Assay Office
Camp
Mine Office
Warehouse
Shop
Garage
Power Plant
Transformer
Switch
Meter
Gauge
Valve
Hose
Nozzle
Bucket
Scraper
Loader
Truck
Locomotive
Car
Rail
Tie
Spike
Bolt
Nut
Washer
Screw
Nail
Wire
Cable
Pipe
Tank
Barrel
Bag
Box
Crate
Tool
Hammer
Pick
Shovel
Axe
Saw
Drill
Bit
Steel
Chisel
Wedge
Jack
Hoist
Winch
Pulley
Block
Rope
Chain
Hook
Eye

UNITED STATES
DEPARTMENT OF THE INTERIOR

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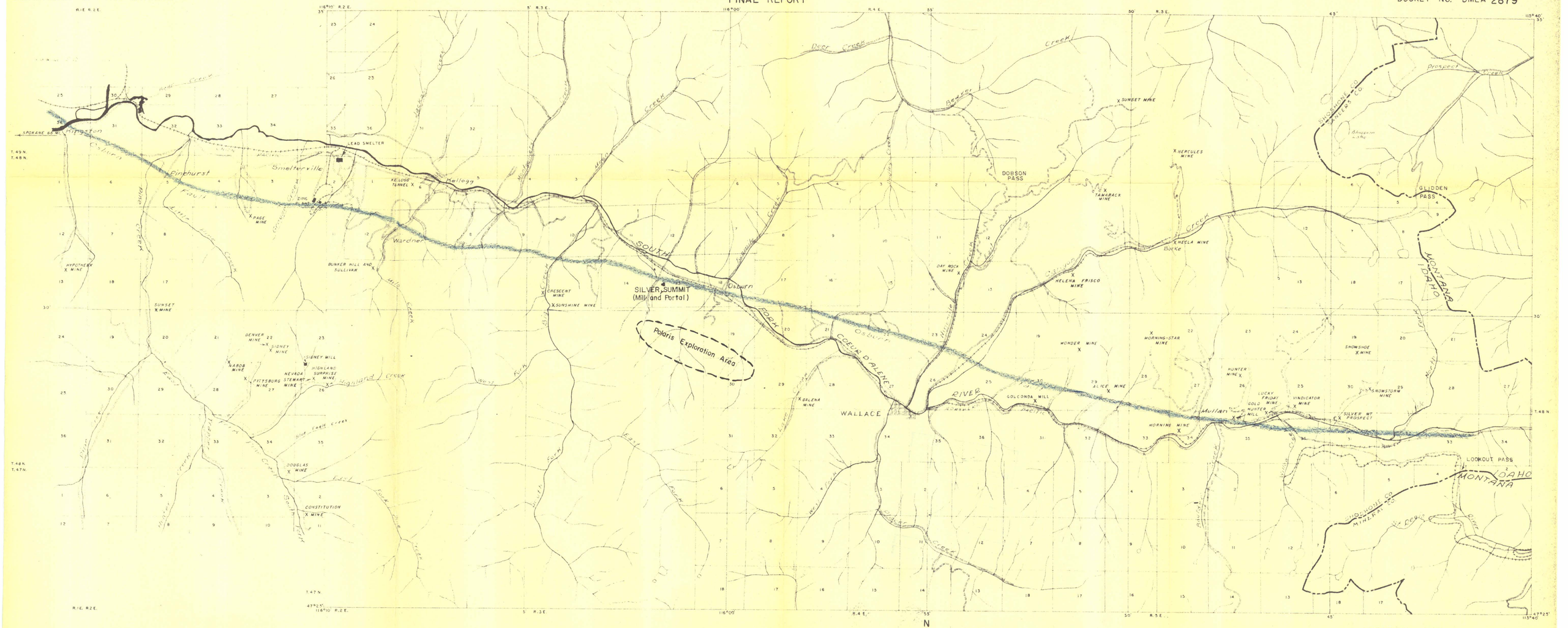
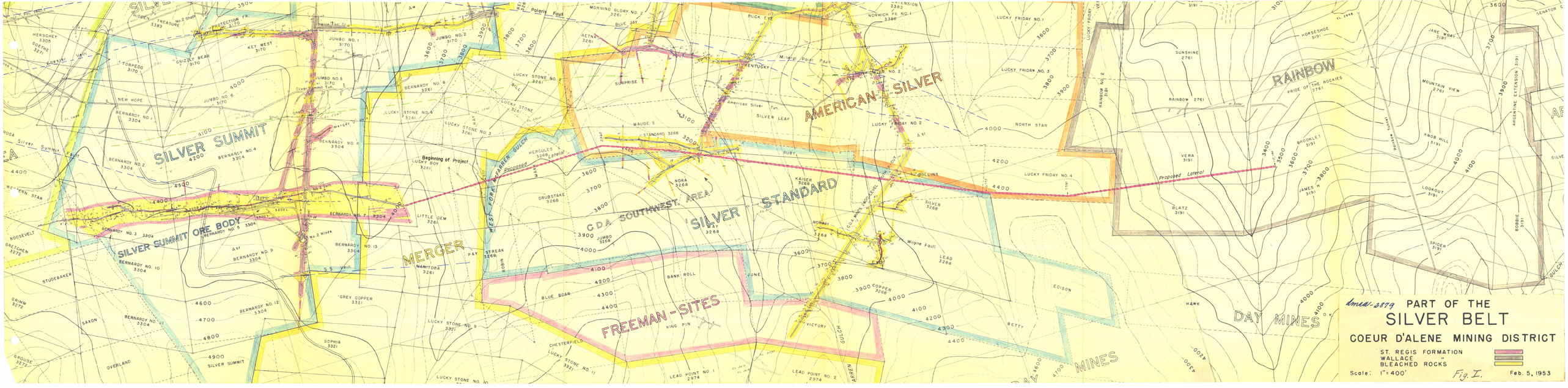
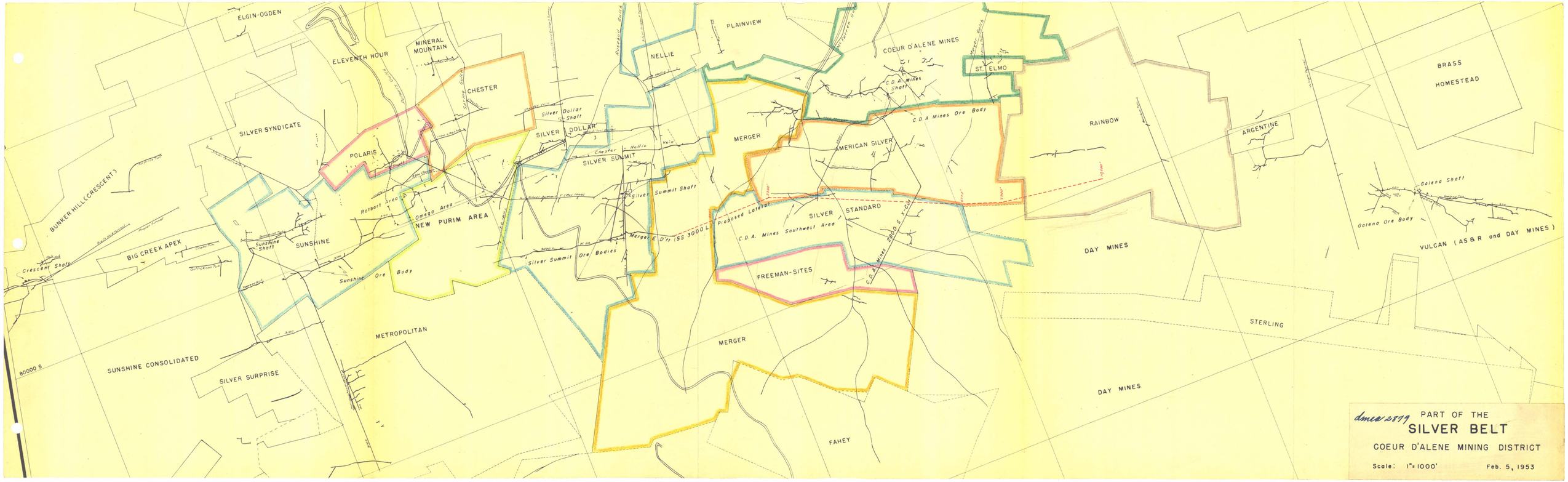

SPOKANE 68 MI.
Pinehurst
Smelterville
LEAD SMELTER
ZINC MILL
KELLOGG TUNNEL
Kellogg
Wardner
BUNKER HILL AND SULLIVAN
PAGE MINE
HYPOTHEKA MINE
SUNSET MINE
DENVER MINE
SIDNEY MINE
SIDNEY MILL
NABOB MINE
PITTSBURG STEWART MINE
NEVADA
HIGHLAND SURPRISE MINE
Highland Creek
DOUGLAS MINE
CONSTITUTION MINE
CRESCENT MINE
SUNSHINE MINE
SILVER SUMMIT
(Mill and Portal)
Polaris Exploration Area
Osburn
SOUTH FORK
COEUR D'ALENE RIVER
GALENA MINE
WALLACE
DAY ROCK MINE
DOBSON PASS
SUNSET MINE
HERCULES MINE
TAMARACK MINE
HECLA MINE
Burke
HELENA FRISCO MINE
WONDER MINE
MORNING-STAR MINE
ALICE MINE
GOLCONDA MILL
MORNING MINE
Mullan
HUNTER MINE
LUCKY FRIDAY MINE
GOLD HUNTER MILL
VINDICATOR MINE
SILVER MT PROSPECT
SNOWSHOE MINE
SNOWSTORM MINE
GLIDDEN PASS
LOOKOUT PASS
MONTANA
IDAHO
SHOSHONE CO
MINERAL CO
Prospect Creek
Bluegrass Lake
Deer Creek
Beaver Creek
Jackson Creek
Wallace Creek
Lawlor Creek
Ninemile Creek
Pine Creek
Big Creek
Mill Creek
Ohio Creek
Gold Creek
Canyon Creek
Placer Creek
Moon Creek
Blue Lake Creek
Pine Creek
Hayden Creek
Ninemile Creek
Pinehurst Fault
Larkin Fault
Wallace Fault
Mullan Fault
Mullan Creek
Prichard Creek
Pritchard Creek
Nine Mile Creek
Big Creek
Big Creek
Big


dmed-2879
PART OF THE
SILVER BELT
COEUR D'ALENE MINING DISTRICT
ST. REGIS FORMATION
WALLACE "
BLEACHED ROCKS
Scale: 1" = 400'
Fig. I.
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
Polaris Fault
Silver Summit Fault
Wayne Fault
Mineral Point Fault
WEST FORK CARBON GULCH
ARGENTINE EXTENSION
JEFFERSON AVENUE
KEY WEST
TORPEDO
GRIZZLY BEAR
NEW HOPE
JUMBO NO. 1
JUMBO NO. 2
JUMBO NO. 5
JUMBO NO. 6
BERNARDY NO. 1
BERNARDY NO. 2
BERNARDY NO. 4
BERNARDY NO. 6
BERNARDY NO. 7
BERNARDY NO. 9
BERNARDY NO. 10
BERNARDY NO. 12
BERNARDY NO. 13
LUCKY STONE NO. 1
LUCKY STONE NO. 3
LUCKY STONE NO. 4
LUCKY STONE NO. 9
LUCKY STONE NO. 11
LUCKY STONE NO. 10
LUCKY BOY
LITTLE GEM
MANITOBA
GREY COPPER
SOPHIA
SILVER SUMMIT
OVERLAND
STUDEBAKER
SAXON
GRIMM
GROUSE
ROOSEVELT
GRETCHEN
HERSCHEY
GOETHE
MORNING GLORY NO. 2
BLUE JAY
RETNA
BUCK EYE
KENTUCKY
SURPRISE
MAUDE S
STANDARD
HERCULES
GRUBSTAKE
NORA
KAISER
RUBY
COLLINS
SILVER
NORWAY
LEAD
COPPER
BLUE BOAR
BANK ROLL
KING PIN
JUNE
VICTORY
CHESTERFIELD
LEAD POINT NO. 1
LEAD POINT NO. 2
NORWICH FR. NO. 1
LUCKY FRIDAY NO. 1
LUCKY FRIDAY NO. 2
LUCKY FRIDAY NO. 3
LUCKY FRIDAY NO. 4
NORTH STAR
SILVER LEAF
EDISON
BETTY
HAWK
SUNSHINE
RAINBOW
VERA
BLATZ
HORSESHOE
PRIDE OF THE ROCKIES
JANE GRAY
MOUNTAIN VIEW
KNOB HILL
LOOKOUT
BROOKLET
JAMES H.
SPIDER
BOBBIE
SENATOR C



dmea 2819

PART OF THE
SILVER BELT
COEUR D'ALENE MINING DISTRICT

Scale: 1" = 1000' Feb. 5, 1953