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MF-200A
(Revised June 1954)

Docket No. DMEA-291
Platinum Group Metals
Commodity

Contract No. Idm-E579
AMENDED

UNITED STATES OF AMERICA
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION
EXPLORATION PROJECT CONTRACT[1]
(Short Form)

It is agreed ~~this~~ as of the first day of May, 1955, between the United States of America, acting through the Department of the Interior, Defense Minerals Exploration Administration, hereinafter called the "Government," and [2] Albert Leighton Cowell,

whose mailing address is 1631 Nineteenth Avenue
Seattle 33, Washington,

hereinafter called the "Operator," as follows:

ARTICLE 1. *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 Exhibit "A," Annex I, and Annex II.

The Operator shall not transfer or assign this contract or any right thereunder without the written consent of the Government.

ARTICLE 2. *Operator's property rights.*—(a) The land which is the subject of this contract (hereinafter called "the land") is in the State ~~or Territory of Alaska~~ County of Occidental Bay, Fourth Judicial Division, and is described in Annex I.[3]

(b) The Operator represents and undertakes that:

(1) The Operator is the [4] lessee of [5] the mineral rights in the land, in possession and entitled to possession for all of the purposes of this contract, under and by virtue of a [6] lease, [7] ~~un~~recorded in Book ——, page ——, official records of said County; and

(2) The Operator's right, title, or interest (whether as owner, lessee, or otherwise) is subject only to the following claims, liens, or encumbrances: none

(c) 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: Consent to Lien of lessor.

[1] If sufficient space is not provided in any blank, use an extra sheet of paper and refer to it in the blank.
[2] Insert name, and if an organization, its nature (corporation and place of incorporation, partnership with names of partners, etc.).
[3] State on a separate sheet marked "Annex I" the legal description or enough to identify the property, particularly excluding any areas from which the production is not to be subject to the Government's percentage royalty.
[4] Insert "owner," "lessee," "contract purchaser," "locator," etc.
[5] Insert "the entire interest," "the mineral rights," "an undivided one-third," etc.
[6] Insert "deed," "lease," "contract," "location notice," "patent," etc.
[7] If not recorded, so indicate by inserting "un."

16—70618-1

(d) 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. Until the lapse of the time within which the Government may make a certification of discovery or development without any such certification having been made, and after any such certification has been made, 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. If the Government makes no certification of discovery or development within the time limited in Article 7, it shall thereafter have no claim against the land or any production therefrom except for any production referred to in Article 7(b)(1).

ARTICLE 3. *The exploration project.*—The project is a search for indicated or undeveloped deposits of platinum group metals. The work to be performed is described in Exhibit "A." The Operator on or before Sept. 15, 1955 shall commence the work, and on or before November 1, 1955 (unless the Operator's obligation to complete the work is terminated—see Article 8) shall complete the work.

ARTICLE 4. *Performance of the work.*—(a) *Operator's responsibility.*—The work shall be performed with reasonable diligence, efficiently, expertly, in a workmanlike manner, in accordance with good mining standards and State regulations for health and safety and for liability insurance covering employment; and with suitable and adequate equipment, facilities, materials, supplies, and labor, to bring it to completion within the time fixed.

(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 a 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 5. *Contribution by the Government.*—A fixed cost for each unit of work to be performed (per foot of drifting, per foot of drilling, per hour of operations, etc.) is hereby agreed upon, and is set forth in Exhibit "A" in connection with the estimated total cost of the project in the sum of $30,000.00. The Government will contribute 75 percent of the fixed unit costs as work is performed, in a total sum not in excess of $ See Exhibit "A": *Provided,* That until the Operator has rendered to the Government his final report, and any final auditing required by the Government has been made, and a final settlement of the contract has been made, the Government may withhold from the last voucher or vouchers such sums as it sees fit not in excess of 10 percent of the estimated total cost of the work. The Government will make its contribution on the basis of the monthly vouchers referred to in Article 6(b), but all payments by the Government are provisional only, subject to audit, until the account between the Operator and the Government is finally audited and settled. 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 may make payments directly to independent contractors and suppliers for the account of the Operator rather than to the Operator.

ARTICLE 6. *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 any pertinent books, documents, papers, and records of the Operator. All of the Operator's vouchers and records and accounts relating thereto and the Government's payments thereof remain subject to adjustment until final audit by the Government.

(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 7. *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 a sufficient final report and final account (see Article 6) has been rendered, may so certify in writing to the Operator. Such certification shall describe broadly or indicate the nature of the discovery or development.

(b) *Royalty on production.*—The Operator, as principal if the Operator is the producer, or as surety if the Operator is not the producer, shall pay to the Government a royalty on all minerals mined or produced from the land, as follows: (1) regardless of any certification of discovery or development, from the date of the contract until the lapse of the time within which the Government may make such certification, or until the total net amount contributed by the Government without interest is fully repaid, whichever occurs first; or (2) if the Government makes a certification of discovery or development, within a period of ten years from the date of the contract, or until the total net amount contributed by the Government without interest is fully repaid, whichever occurs first. See Article 11.

(c) *Basis for computation.*—The Government's royalty shall be a percentage of the gross proceeds (including any bonuses, premiums, allowances, or other benefits) from the production sold, in the form sold (ore, concentrates, metal, or equivalent), at the point of delivery (the f. o. b. point); *except,* that charges of *the buyer* arising in the regular course of business, and shown as deductions on the buyer's settlement sheets, on account of the cost of treatment processes performed by *the buyer,* sampling and assaying to determine the value of the production sold, and freight paid by *the buyer* to a carrier (not the Operator), shall be allowed as deductions in arriving at the "gross proceeds" as that term is used herein. Any costs of treatment processes, sampling or assaying, or transportation, performed or paid by the Operator or by anyone other than the buyer, are not deductible in arriving at the "gross proceeds" as that term is here used. The term "treatment processes," as here used, means those processes (such as milling, concentrating, smelting, refining, or equivalent) applied to the crude ore or other production after it is extracted from the ground, to put it into a commercially marketable form; excluding fabricating or manufacturing.

(d) *Unsold production.*—If any production (ore, concentrates, metal, or equivalent), after the lapse of six months from the date the ore was extracted from the ground, remains neither sold nor used by the Operator in integrated manufacturing or fabricating operations (for instance, if it is stockpiled), the Government, at its option, as long as it so remains, may require the computation and payment of its royalty on the value of such production in the form (ore, concentrates, metal, or equivalent) it is in when the Government elects to require computation and payment. If any production is used by the Operator in integrated manufacturing or fabricating operations before the Government makes its election, the Government's royalty on such production shall be computed on the value thereof in the form in which and at the time when it is so used. "Value" as here used means what is or would be gross income from mining operations for percentage depletion purposes in Federal income tax determination, or the market value, whichever is greater.

(e) *Percentages of royalty.*—The percentages of the Government's royalty shall be as follows:

One and one-half (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 8. *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 remedy provided for the Government in this paragraph "(b)" is in addition to any other remedy provided in this contract, and in addition to any other remedy the law may provide for breach of contract.

(c) The giving of any notice by the Government under the provisions of this Article 8 shall not affect the Government's rights as provided for in the contract with respect to a percentage royalty, and such rights shall be fully preserved.

ARTICLE 9. *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 his mailing address stated in this contract. If mailed, notices are deemed to have been delivered five days after the date of mailing.

ARTICLE 10. *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 11. *Changes and added provisions.*—
In Article 7(b)(2) the period eleven years is substituted for the period ten years.

Executed in sextuplicate this 7th day of September, 1955.

THE UNITED STATES OF AMERICA

ALBERT LEIGHTON HOWARD
(Operator)

By Frank E. Johnson
ACTING Administrator, Strategic Minerals Exploration Administration

By Albert Leighton Howard
10351 Aghnworth Ave
Seattle 33, Wash.

Rubin
Hafland
Chandler
Martin
Murphy
Ellis

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]

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AMENDED EXPLORATION PROJECT CONTRACT
ALBERT LEIGHTON HOWARD
DOCKET NO. DMEA-2931

ANNEX I

The land referred to in Article 2 of the contract was leased by Red Mountain Mining Company to the Operator in an instrument dated June 27, 1952, for a period of 25 years. It consists of 30 unpatented placer mining claims, which are recorded in the Bethel Recording District of Bremiuck, Fourth Judicial Division of the Territory of Alaska, as follows:

Claim	Volume	Page
Portland Bench	2	317
Three Star Bench	3	241
Discovery (Boulder Creek)	3	21
Brooklyn Bench	3	303
Hardluck Bench	2	230
First Tier - Seven above Bench	2	305
Oakland Bench	3	302
Osmiridium Bench	3	236
Frisco Bench	3	303
Benny Bench	2	95
Jenny Bench	3	235
Sugar Bench	2	73
Honey Bench	2	61
Surprise Bench	1	116
New York Bench	3	303
Boston Bench	3	304
Chicago Bench	3	305
Bessie Bench	3	305
Moonlight Bench	3	305
Northern Light Bench	3	241
Summit Bench	2	85
Zero Bench	3	242
No. 1 Above (McCann Creek)	3	236
Punch Bowl	3	21
Minnie Gulch	2	85
Discovery (McCann Creek)	2	274
No. 1 Below	2	275
No. 2 Below (McCann Creek)	3	237
M & C Fraction	2	73
Basin Claim		

Any property or interests in property which are contigious to or in the vicinity of the property referred

to in Article 2 of this Amended Contract or in this Annex I, owned or held by the Operator as of August 10, 1953, or acquired thereafter so long as royalty is due the Government, shall be considered as included in the land referred to in Article 2, and the Operator shall notify the Government in writing of any such property or interests in property acquired.

Some of the land is shown on the attached map, Figure 4.

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AMENDED EXPLORATION PROJECT CONTRACT
ALBERT LEIGHTON HOWARD
DOCKET NO. DMEA-2931

ANNEX II

The parties to this Amended Contract are also parties to Contract Idm-8579 (Docket No. DMEA-2931), dated August 10, 1953, executed on Form NF-200A (February 1952), as amended, hereinafter called the "Prior Contract." The work described in the Prior Contract is completed and the parties desire to increase the scope of the project, to increase the estimated total cost of the project, and to restate their agreement on Form NF-200A (Revised June 1954).

NOW THEREFORE, it is agreed that:

1. Effective May 1, 1955, the Prior Contract is superseded by this Amended Contract, which shall govern the Government's claim and lien for percentage royalty, and in which all the rights and obligations of the parties are fully merged, except that vouchers and claims for the Government's contribution to the work performed under the Prior Contract shall be made as provided therein.

2. The total amount of money 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 herein otherwise provided.

AMENDED EXPLORATION PROJECT CONTRACT
ALBERT LEIGHTON HOWARD
DOCKET NO. DMEA-2931

EXHIBIT "A"

Description of the Work

The project work is divided into two phases.

Phase I consists of the work completed under the Prior Contract.

Phase II consists of churn drilling six lines of placer churn drill holes, normal to the flow of McCann Creek, on lines marked "A" to "F" on the map entitled "Figure 4, Exploration Project, Platinum Group Metals, Docket No. 2931, Idm-E579, etc.," which is attached hereto and made a part hereof.

The drilling under this Phase II is divided into two stages. The Operator shall complete Stage 1 and shall perform so much of the second stage as is approved in advance by the Government.

Stage 1

Drill the required number of holes to complete lines "C," "B," and "D," in that order. The holes shall be drilled at 50-feet intervals on each line; however, at the indicated or inferred center of the channel, two (2) offset holes also may be drilled, not less than 25 feet from any other hole. The spacing of drill holes in Stage 1 also applies to the spacing of drill holes in Stage 2.

Not in excess of 750 feet of churn drilling shall be performed under Stage 1.

Stage 2

Drill on lines "A," "E," and "F," in that order, not in excess of 750 feet.

The specifications set forth in the last four paragraphs of the Exhibit "A" attached to the Prior Contract shall apply to all Phase II work.

No hole shall be started under either stage that cannot be completed within the maximum footage established for said stage.

Fixed Unit Costs - Phase II

Stage 1

750 feet of churn drilling @ $12.00/ft.	$ 9,000.00	

Stage 2

750 feet churn drilling @ $12.00/ft.	9,000.00	
Estimated Total Fixed Unit Costs, Phase II		$18,000.00

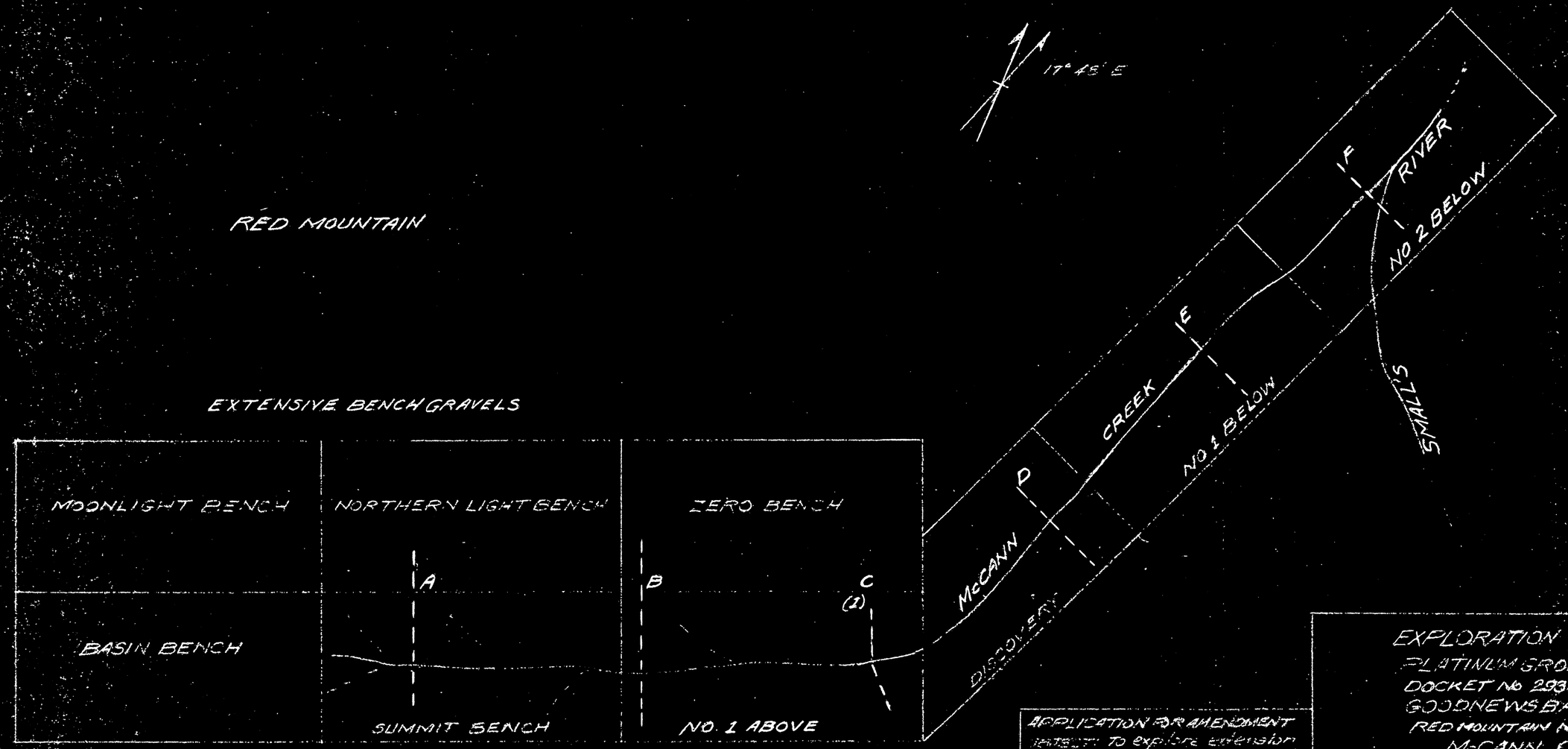
S U M M A R Y

Phase I

Total Agreed Unit Costs	$12,000.00	
Government Participation @ 90%		$10,800.00

Phase II

Estimated total Fixed Unit Costs	18,000.00	
Government Participation @ 75%		$13,500.00
Estimated Total Cost of the Project	$30,000.00	
Government Participation		$24,300.00



APPLICATION FOR AMENDMENT
Intent: To explore extension and delineate values of pay streak discovered in line 1 adit for 1054 additional footage requested 1500.

EXPLORATION PROJECT
PLATINUM GROUP METALS
DOCKET No 2931 Idm-E 3719
GOODNEWS BAY MINING DIST.
RED MOUNTAIN MINING COMPANY
McCANN CREEK
SCALE 1" = 400' FEBRUARY 1955
A.L. HOWARD OPERATOR

FIGURE - 4

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EXPLORATION PROJECT CONTRACT
A. L. HOWARD
DOCKET NO. DMEA-2931
CONTRACT NO. Idm-2579

AMENDMENT NO. 1

It is agreed this 27 day of April 1954, between the United States of America, acting through the Department of the Interior, Defense Minerals Exploration Administration, and A. L. Howard, each acting in consideration of the agreement of the other to the terms hereinafter set forth, that Exploration Project Contract Idm-2579, Docket No. DMEA-2931, dated August 10, 1953, between the parties hereto, be modified and amended as follows:

1. This amendment shall be effective November 1, 1953.

2. During the period from November 1, 1953 to May 1, 1954:
   (a) The project work shall be recessed;
   (b) The Government shall not contribute to any costs incurred by the Operator.

3. "Description of the Work" under "EXHIBIT A" shall be modified to permit the drilling of not to exceed 230 linear feet of churn drill hole on claim "No. 1 Above (McCann Creek)". The churn drilling shall be on McCann Creek above its confluence with Minnie Creek but below the prospect trenches on claim No. 1 Above; for the purpose of determining the existence of a pay channel on McCann Creek. The exact location of the holes shall be at the discretion of the Operator.

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 "Agreed Unit Cost" as set forth in "EXHIBIT A" of the contract.

THE UNITED STATES OF AMERICA

A. L. HOWARD

A. L. Howard

By C D Mittendorf
Administrator, Defense Minerals
Exploration Administration

Hoffleng
Talbut

MF-200 (A)
(February 1952)

DOCKET NO. DMEA [illegible]

COMMODITY Platinum Group Metals

Division Copy

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

Idm-E579

[illegible]

EXPLORATION PROJECT CONTRACT[1]
(Short Form)

IT IS AGREED this 10th day of August, 195 3, between the United States of America, acting through the Department of the Interior, Defense Minerals Exploration Administration, hereinafter called the "Government," and[2] [illegible]

hereinafter called the "Operator," as follows: as set forth in Annex I

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 [illegible], County of [illegible], described as follows:[3] [illegible]

the Operator represents and undertakes:[4]

(*a*) That the Operator is the owner, in possession and entitled to possession, and that the property is subject only to the following claims, liens, or encumbrances as to each of which the subordination agreement of the holder is attached: [illegible]

(*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 days from the date of this contract shall commence work on a project of exploration for[5] Platinum and Associate Platinum Group Metals (Placer)

in or upon the described land; and shall bring the project to completion within a period of 12 months from the date of this contract. The work to be performed is more fully described in Exhibit "A" attached hereto, which, with any maps or drawings thereto attached, are made a part of this contract. The Government will contribute to the cost of this work as hereafter provided. 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 $[illegible], which is 50 percent of $[illegible], 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.

(*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: [illegible]

(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.* [illegible]

Executed in sextuplicate the day and year first above written.

THE UNITED STATES OF AMERICA

By [illegible] Administrator, Defense Minerals Exploration Administration

(Operator)

By Albert Leighton Howard

Albert Leighton Howard, Operator

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

EXPLORATION PROJECT CONTRACT
ALBERT LEIGHTON HOWARD
DOCKET NO. DMEA-2931

ANNEX I

The following provisions are in lieu of all of paragraph (a) of Article 6 which precedes the colon:

If 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 a sufficient, complete, final report and final account referred to in the contract has been rendered, 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 described in Article 2, 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 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 (including any bonuses), in whatever form disposed of, including ore, concentrates, or metal, as follows:

EXPLORATION PROJECT CONTRACT
ALBERT LEIGHTON HOWARD
DOCKET NO. DMEA-2931

ANNEX II

NAMES OF CLAIMS AND KEY NUMBERS

1. Portland Bench
2. Three Star Bench
3. Discovery (Boulder Creek)
4. Brooklyn Bench
5. Hardluck Bench
6. First Tier - Seven above Bench
7. Oakland Bench
8. Osmiridium Bench
9. Frisco Bench
10. Benny Bench
11. Jenny Bench
12. Sugar Bench
13. Honey Bench
14. Surprise Bench
15. New York Bench
16. Boston Bench
17. Chicago Bench
18. Bessie Bench
19. Moonlight Bench
20. Basin Claim
21. Northern Light Bench
22. Summit Bench
23. Zero Bench
24. No. 1 Above (McCann Creek)
25. Punch Bowl
26. Minnie Gulch
27. Discovery (McCann Creek)
28. No. 1 Below
29. No. 2 Below (McCann Creek)

EXPLORATION PROJECT CONTRACT
ALBERT LEIGHTON HOWARD
DOCKET NO. DMEA-2931

EXHIBIT "A"

Description of the Work

The work will consist of churn drilling in the Portland Bench area and all the auxiliary operations necessary to explore and indicate the value of placer deposits of platinum group metals existing within the boundaries of the property more fully described in Article 2 of this contract and shown on the map attached hereto, made a part hereof, and entitled "Placer Platinum Claims - Red Mountain Mining Co. - Goodnews Bay District, Southwestern Alaska".

The work shall consist of a grid pattern of drill holes totaling 1,000 feet, with a minimum spacing of 50 feet, that will explore the bench gravel and also ascertain whether there is an older channel west of the Salmon River as shown on the aforesaid map.

In general, the churn drilling shall be done on lines located to cross the direction of flow of such present and/or ancient pay channels as may be indicated by surface topography or geological evidence.

Drilling shall be done with a standard type placer churn drill and tools capable of drilling holes not less than 4½ inches in diameter (uncased), and to a depth of not less than 100 feet. The drilling shall be done by experienced and reliable operators according to the best accepted practice for drilling either thawed or frozen ground, whichever may be encountered. All holes shall be drilled at least One (1) foot into bedrock or more if the bedrock horizon is uncertain.

The drillers shall keep accurate logs of a standard type for placer drilling, the logs to include such additional information as may be required by the Government. Four (4) copies of the log of each hole shall be forwarded to the DMEA Field Team, Region I, as soon as possible after the completion of each hole.

The indicated mining section of each hole shall be concentrated by capable panners and the platinum-group metals separated from the concentrate. Necessary samples shall be taken, and both the metal and the concentrate reject samples shall be properly dried, weighed, marked, and preserved. The samples shall be shipped for analyses and/or such further testing and checking to such laboratories and by such methods as shall be determined by mutual agreement between the Operator and the Field Team. Necessary assays shall be made but all assays shall be by ordinary accepted methods for determining combined platinum group metals except that one composite sample shall be separated into individual metals of the platinum group.

Surveys and engineering services shall be performed which are necessary to establish property lines, accurate controls for drilling and to permit full interpretation of the drilling results in terms of values and volume. These data shall be incorporated into the required comprehensive final report.

Agreed Unit Costs

1,000 feet churn drilling @ $12.00/ft. 1/	$12,000.00
Total Agreed Unit Costs	$12,000.00
Government Participation @ 90%	$10,800.00

1/ This covers all costs of the project including equipment, repairs, supplies, and personnel (including freight and transportation) and all freight and assaying charges on such samples as may be necessary to establish the total value of heavy mineral concentrate.

MF-203
(Revised July 1, 1953)

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
JUL 29 1953

OWNER'S CONSENT TO LIEN

WHEREAS, the undersigned, as owner, co-owner, lessor, or seller has an interest in certain property in the ~~State of~~ Territory of Alaska, ~~xxxxxxxxxxxxxxxxxxxx~~, described as follows:1/

Fourth Judicial Division
Bethel Recording District

Twenty Nine (29) unpatented placer mining claims situated on the eastern slopes of Red Mountain, near Platinum, Goodnews Bay Mining District, more fully described in attached sheets

which is the subject of a proposed exploration project contract, hereinafter called the "contract", between the United States of America, hereinafter called the "Government", and

2/ Albert Leighton Howard (Lessee)
16351 Ashworth Avenue
Seattle 33, Washington

hereinafter called the "Operator"; and

WHEREAS, under the provisions of said contract the Government is entitled to a percentage royalty on production (as set forth on the reverse side hereof) and to other rights and equities which do or may conflict with or be adverse to the rights of the undersigned:

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

1. The Government's equity in and right to dismantle, sever, take possession of, and remove and dispose of facilities, buildings, fixtures, equipment, or other items as provided in the contract, or any amendment thereof, shall prevail over and be prior and superior to any conflicting or adverse rights of the undersigned, and the Government is authorized to enter upon the land for such purposes.

2. To secure the payment to the Government of the percentage royalty on production3/ provided for under the terms of said exploration project contract, or any amendment thereof, there is hereby granted to the Government a lien upon the land above referred to and upon any production of minerals therefrom, until said royalty is fully paid or ten years have elapsed from the date of the contract, whichever occurs first.

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

4. Changes and added provisions _____

Dated this 27 day of July, 1953, 195__.

M. L. Bissell, President RED MOUNTAIN MINING CO. INC.
by Fred N. Bradt Acting President [Seal]
Fred N. Bradt Sec. [Seal]
Christian Leinwebel Treas. [Seal]

1/ Either (a) insert the legal description of the land, or (b) strike out the words "as follows" and insert "in a lease [or contract, deed, or other document] dated _____, and recorded in book _____ page _____ official records of said county." If (b) is used, the book and page of recordation cannot be dispensed with. If the space provided is insufficient, use an Annex, and refer to the Annex in the space.

2/ Insert the name of the Operator as it will appear in the exploration project contract.

3/ Mining or production from the land is not required, and in the absence of production there is no obligation to repay the Government.

RELEVANT CONTRACT PROVISIONS

Repayment by Operator.—a. Certification.—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, may so certify in writing to the Operator. Such certification shall describe broadly or indicate the nature of the discovery or development.

b. Percentage royalty.—The Operator, or his successor in interest, shall pay to the Government a royalty on all minerals mined or produced from the land described in Article 2,—(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:

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

(b) One and one-half (1½) per cent of any such net amounts, plus one-half (½) per cent 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) per cent 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) per cent; on a net amount of ten dollars ($10.00) per ton, three and one-half (3½) per cent.)

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

d. Lien for Payment.—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.

e. Notice to Purchasers.—The Operator shall notify any purchaser of the production of the Government's royalty interest, and shall authorize and direct the purchaser to pay the royalty directly to the Government and to furnish the Government with copies of the settlement sheets; but failure or refusal by the purchaser to comply shall not relieve the Operator of liability to pay any royalty falling due.

f. No Obligation to Produce.—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.

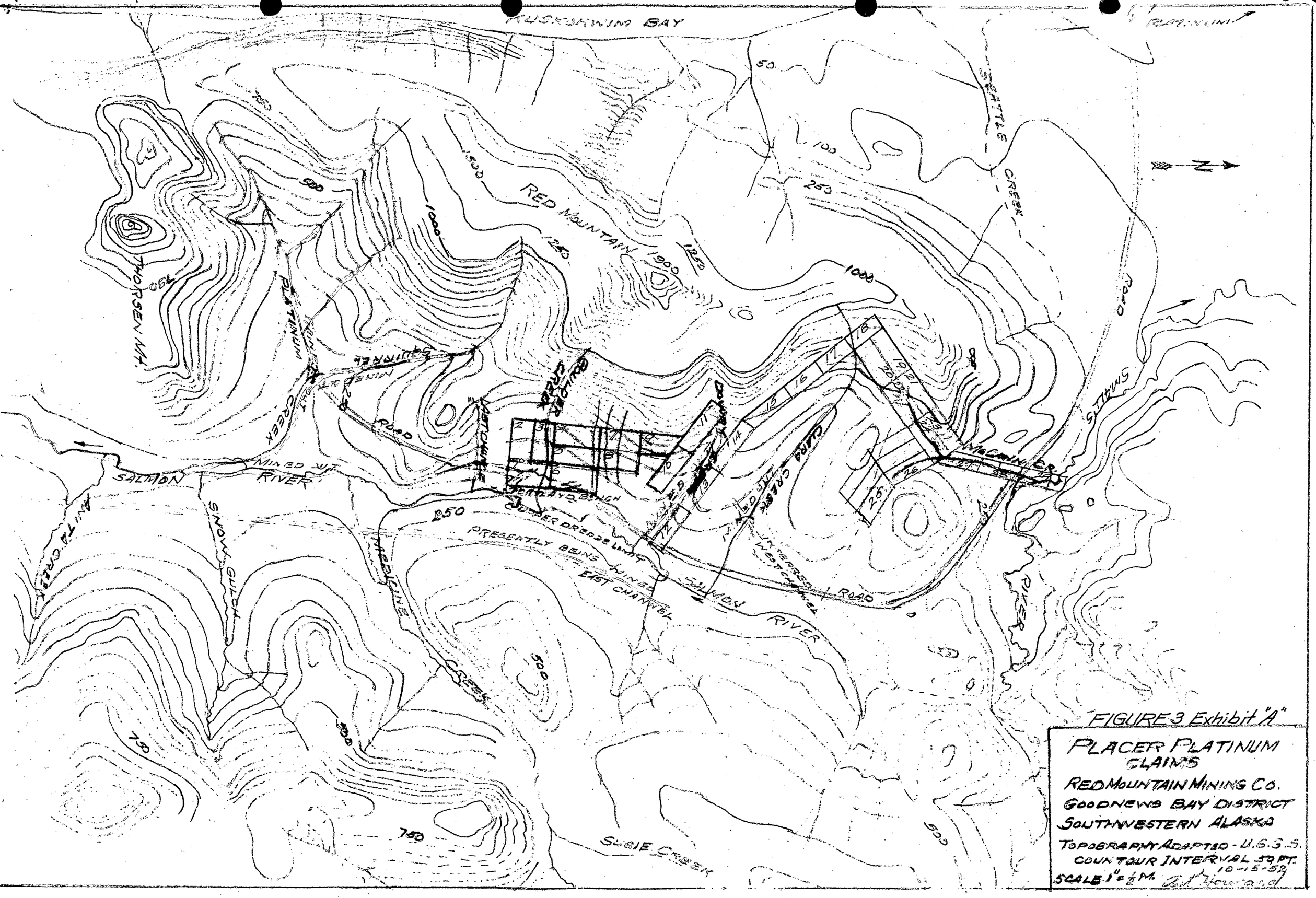

FIGURE 3 Exhibit "A"

PLACER PLATINUM CLAIMS

RED MOUNTAIN MINING CO.

GOODNEWS BAY DISTRICT

SOUTHWESTERN ALASKA

TOPOGRAPHY ADAPTED - U.S.G.S.

COUNTOUR INTERVAL 50 FT.

SCALE 1" = ½ M.

10-15-52

A. J. Howard

MF-103
(Revised April 1952)

UNITED STATES DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION

Form Approved.
Budget Bureau No. 42-R1035.2.

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
MAR 16 1953

APPLICATION FOR AID IN AN EXPLORATION PROJECT, PURSUANT TO DMEA ORDER 1, UNDER THE DEFENSE PRODUCTION ACT OF 1950, AS AMENDED

Not to be filled in by applicant

Docket No. dmea 21931
Metal or Mineral
Date Received 3-16-53
Estimated Cost
Participation (Government %)

INSTRUCTIONS

1. *Name of applicant.*—(*a*) State here your full legal name, in the form in which you will wish to contract, and your mailing address: A. L. Howard, Lessee. (Contract Form).
16351 Ashworth Ave., Seattle 33, Washington

(Albert Leighton Howard) Full Name.

(*b*) If other than an individual, add to your name above whether a corporation, partnership, etc., and the name of the State in which incorporated or otherwise organized.

(*c*) If a corporation, add to above statement, titles, names and addresses of officers.

(*d*) If a partnership, add to the above statement the names and addresses of all partners.

2. *General.*—Read DMEA Order 1, "Government Aid in Defense Exploration Projects," before completing this application. Submit this application and all accompanying papers in quadruplicate (four copies), with your name and address on each sheet of the application and on all accompanying papers. Where sufficient space is not provided on the form for all required information, state it on an accompanying paper, with a reference in each case to the instruction to which it refers by number. Comply with all applicable instructions; or, if not applicable, so state. File the application with Defense Minerals Exploration Administration, Department of the Interior, Washington 25, D. C., or with the nearest field executive officer thereof.

3. *Applicant's property rights.*—(*a*) State the legal description of the land upon which you wish to explore, including all land which you possess or control that may be benefited by the exploration, and excluding any land or interest in land which is not to be included in the exploration project contract Twenty Nine unpatented Placer Platinum Mining Claims situate on the Eastern slopes of Red Mountain near Platinum, Goodnews Bay Mining District, Bethel Recording District, 4th. Judicial Div. Territory of Alaska

(*b*) State any mine name by which the property is known. Red Mountain

(*c*) State your interest in the land, whether owner, lessee, purchaser under contract, or otherwise Lessee

(*d*) If you are not the owner, submit with this application a copy of the lease, contract, or other document under which you control the property. Copy of Lease attached

(*e*) If you own the land, describe any liens or encumbrances on it Not applicable.

(*f*) If the land consists of unpatented claims, add to the description above, the book and page numbers for each recorded location notice. Sheets attached

4. *Physical description.*—(*a*) Describe in detail any mining or exploration operations which have been or now are being conducted upon the land, including existing mine workings and production facilities. State your interest, if any, in such operations. Also describe accessibility of mine workings for examination purposes.

(*b*) State past and current production, and ore reserves, if any, giving quantities and grades. Report attached

(*c*) Describe the geologic features of the property, including mineralization, type of deposit (vein, bedded, etc.), and your reasons for wishing to explore. Illustrate with maps or sketches. Send with your application (but not necessarily as a part of it) any geologic or engineering report, assay maps, or other technologic information you may have, indicating on each whether you require its return to you. Report attached

(*d*) State the facts with respect to the accessibility of the project: Access roads, distances to shipping, supply and residence points.
Report attached

(*e*) State the availability of manpower, materials, supplies, equipment, water, and power.

16—66551-1

Please refer to sheets and report attached.

5. *The exploration proj*[illegible] (*a*) State the mineral or minerals for whic[illegible]u wish to explore Platinum and accompanying metals of the roup in placer gravels.

(*b*) Describe fully the proposed work, including a map or sketch of the property showing a plan (and cross sections if needed) of any present mine workings, and the location of the proposed exploration work as related to such features as contacts, veins, ore-bearing beds, etc. Report attached

(*c*) The work will start within 60 days and be completed within 15 months from the date of an exploration project contract.

(*d*) State the operating experience and background of the applicant with relation to the ability to carry out such exploration project, and also that of the person or persons who will supervise the operations. Statement attached

6. *Estimate of costs.*—Furnish a detailed estimate of the costs of the proposed work (you will have to use a separate sheet), under the following headings. Add the totals under all headings to give the estimated total cost of the project:

(*a*) *Independent contracts.*—(Note.—If the applicant does not intend to let any of the work to contractors, write "none" after this item. To the extent that the work is to be contracted, do not repeat the cost of the contract-work in subsequent items.) State the cost of any proposed independent contracts for the performance of all or any part of the work, expressed in terms of units of work (such as per foot of drilling, per foot of drifting, per hour of bulldozer operations, per cubic yard of material moved, etc.). None.

(*b*) *Labor, supervision, consultants.*—Include an itemized schedule of numbers, classes and rates of wages, salaries or fees for necessary labor, supervision and engineering and geological consultants. Sheets attached

(*c*) *Operating materials and supplies.*—Furnish an itemized list, including items of equipment costing less than $50 each, and power, water and fuel. Sheets attached

(*d*) *Operating equipment.*—Furnish an itemized list of any operating equipment to be rented, purchased, or which is owned and will be furnished by the Operator, with the estimated rental, purchase price, or suggested use-allowance based on present value, as the case may be. Sheets attached

(*e*) *Rehabilitation and repairs.*—Furnish a detailed list showing the cost of any necessary initial rehabilitation or repairs of existing buildings, installations, fixtures, and movable operating equipment, now owned by the Operator and which will be devoted to the exploration project. None

(*f*) *New buildings, improvements, installations.*—Furnish a detailed list showing the cost of any necessary buildings, fixed improvements, or installations to be purchased, installed or constructed for the benefit of the exploration project. None

(*g*) *Miscellaneous.*—Furnish a detailed list showing the cost of repairs to and maintenance of operating equipment (not including initial rehabilitation or repairs of the Operator's equipment), analytical work, accounting, workmen's compensation and employers' liability insurance, and payroll taxes. Sheets attached

(*h*) *Contingencies.*—Give an estimate of any necessary allowances for contingencies not included in the costs stated above. Sheets attached

NOTE.—No items of general overhead, corporate management, interest, taxes (other than payroll and sales taxes), or any other indirect costs, or work performed or costs incurred before the date of the contract, should be included in the estimate of costs.

7. (*a*) Are you prepared to furnish your share of the cost of the proposed project in accordance with the regulations on Government participation (Sec. 7, DMEA No. 1)? Yes, to extent of 10% of total cost.

(*b*) How do you propose to furnish your share of the costs?

[x] Money [ ] Use of equipment owned by you [ ] Other

Explain in detail on acompanying paper.

CERTIFICATION

The undersigned, whether as an individual, corporate officer, partner, or otherwise, both in his own behalf and acting for the applicant, certifies that the information set forth in this form and accompanying papers is correct and complete, to the best of his knowledge and belief.

Dated March 14, 1953, 195__

A. L. Howard, Lessee
(Applicant)

By A. L. Howard

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

U. S. GOVERNMENT PRINTING OFFICE 16—66551-1

To Accompany MF-103

A. L. Howard, 16351 Ashworth Ave.
Seattle 33, Washington

3. (d) Please refer to lease attached.
   (f) Attached.
4. (a) (b) (c) (d). Please refer to attached report.
   (e) Please refer to accompanying sheets and report.
5. (a) Platinum and associated metals of the platinum group.
   (b) Please refer to report.
   (c) Answered on MF-103.
   (d) Background and experience of Applicant.

Education: Graduate College of Engineering
University of Washington
Degree: Bachelor of Science

Experience: Ore testing, research, customs assaying, design, construction, engineering sales, cost accounting, mill superintendent, mine superintendent, general superintendent, general manager.
Examinations and Reports, both Lode and Placer.
Familiar with various methods of Placer mining, as well as Lode mining.

Positions Held:
Mill and General Superintendent, Alaska Palladium Co., including supervision of construction.
General Superintendent, Kasaan Gold Company.
General Manager, Alaska Gold & Metals Co.
Metallurgist Kennecott Copper Corporation.
Division Engineer, Hardinge Co. Inc.

Placer Examinations:
Beach Deposit, Southwestern Alaska
Post Glacial Placer Concentration, Raspberry Island, Alaska.
Placer Deposit, Confederate Gulch, Montana
Placer Deposit, Cottonwood River Bench Concentrations, near Quesnel, British Columbia.
Placer Platinum Deposit, Salmon River Bench and Stream Gravels, Goodnews Bay, Alaska.

Applicant expects to supervise operation.

To Accompany MF-103

A. L. Howard, 16351 Ashworth Ave.
Seattle 33, Washington

6. Estimate of Costs:

(a) Drilling and open cut exploration equipment, together with skilled operating personnel are available on a rental basis, in the District.

Dragline with operator, per day	$160.00	
Estimated footage, per day	160.00	
Cost per lineal foot	1.00	
Cost per cubic yard	.25	
Estimated necessary slope of cut	1 to 1	
Average depth of ground	9 feet	
Estimated footage on Portland Bench and Boulder Creek area	4,000	
Between Portland Bench and Upper Clara Creek	11,000	
Total Footage	15,000	$15,000.00

Estimated cubic yardage to be explored:

Portland Bench and Boulder Creek Area	800,000
Portland Bench to McCann Creek Area	4,500,000
Total	5,300,000

Cost per cubic yard explored 00.28 cents

Names of Claims and Key Numbers (Please refer to Maps)

1. Portland Bench
2. Three Star Bench
3. Discovery (Boulder Creek)
4. Brooklyn Bench
5. Hardluck Bench
6. First Tier - Seven above Bench
7. Oakland Bench
8. Osmiridum Bench
9. Frisco Bench
10. Benny Bench
11. Jenny Bench
12. Sugar Bench
13. Honey Bench
14. Surprise Bench
15. New York Bench
16. Boston Bench
17. Chicago Bench
18. Bessie Bench
19. Moonlight Bench
20. Basin Claim

Estimated Drilling Cost:

McCann Creek - Minnie Gulch Area 1,000 feet at $8.00		$ 8,000.00
Estimated Footage per day, 8 hrs., including moving and setting up	30	
Drill, Tractor, crew per day	$240.00	
Estimated Cubic Yardage explored	3,450,000	
Cost per Cubic Yard explored	00.23 cents	
Carried Forward		$23,000.00

To Accompany MP-103

A. L. Howard, 16351 Ashworth Ave.
Seattle 33, Wash.

6. (a) Continued

Total Cubic Yardage explored	8,750,000
Open Cut and Drilling Costs	$23,000.00
Average cost per cubic yard	00.26 cents

Carried Forward $23,000.00

Names of Claims and Key Numbers:

21. Northern Light Bench
22. Summit Bench
23. Zero Bench
24. No. 1 Above (McCann Creek)
25. Punch Bowl
26. Minnie Gulch
27. Discovery (McCann Creek)
28. No. 1 Below
29. No. 2 Below (McCann Creek)

(b) Labor, Supervision, Consultants

Brought Forward		$23,000.00
Engineer and Supervisor, 3 mos. @ $1,000	$3,000.00	
Assistant, 3 mos. @ $600	1,800.00	
2 Laborers @ $20 per shift, 156 shifts	3,120.00	
Board and Lodging, 4 men @ $9 per day 4x$9 - 90 days	3,240.00	
Travel Expense, Seattle-Platinum and return - 4x$348.45	1,393.80	
	$12,553.80	12,553.80
Per Cubic Yard explored	00.145 cents	

(c) Operating Supplies and Materials
Freight allowed to Platinum, Alaska

Gas and Oil for Truck, 1,200 mi. @ 4¢		$ 48.00	
Gas and Oil, Pan Concentrator 500 hr. @ 5¢		25.00	
Gold Pans, 16 inch	4 @ $2.50	10.00	
Shovels	4 @ 5.00	20.00	
Picks	4 @ 5.00	20.00	
Lumber, 1,000 ft.B.M. @ $140.00 M		140.00	
Handsaws	2 @ 4.50	9.00	
Hammers	2 @ 2.50	5.00	
Pails	4 @ 2.50	10.00	
Tubs	4 @ 5.00	20.00	
Nails	100 lb. @ 20¢	20.00	
Block and Tackle, triple sheave with rope		25.00	
Tarpaulin, 10'x12', best grade		25.00	
Tent, 11x14		70.00	
Axes	2 @ 4.00	8.00	
Wrecking Bar		1.50	
Heavy Crowbar		6.00	
Wheelbarrow, Heavy Duty		33.00	
Wrenches: pipe, combination & adjustable		25.00	
1½" plastic pipe, 100', adapter, couplings		55.00	
Lunch Kits	4 @ 3.00	12.00	
One Portable Camp Stove		23.00	
		$ 610.50	610.50
Per Cubic Yard explored		00.007 cents	

Brought Forward $36,144.30

To Accompany MF-103

A. L. Howard, 16351 Ashworth Ave.
Seattle 33, Washington

		Brought Forward	$36,144.30
6. (d) Operating Equipment			
One Simplex Mechanical Concentrating Pan		$ 525.00	
Denver Equipment Co.			
Freight and Wharf		95.00	
Spare Parts, allow		50.00	
		$ 670.00	
Allow for Grizzly and Screens ahead of Pan		$ 100.00	
One Truck (used)	$1,000.00		
Freight Allowance	340.00	1,340.00	
		$2,110.00	2,110.00
Per Cubic Yard explored		00.023 cents	
(e) None			
(f) None			
(g) Workmen's Compensation and Employer's Liability Insurance @ .06x4,920		$ 295.20	
Payroll Taxes @ .045		221.40	
Accounting and Auditing		650.00	
		$ 1,166.60	1,166.60
Per Cubic Yard explored		00.013 cents	
Contingent Expense			
(h) For emergency air freight in case of missing June boat sailing date -1,000 lbs. @ 51¢		$ 510.00	
For exploration by drilling possible deeper channel uncovered in open cut operations on Portland Bench and northward -1,000 ft.@ $8.00		8,000.00	
		$ 8,510.00	8,510.00
Plus 5% for possible underestimates			2,396.55
			$50,327.45
Cost per Cubic Yard explored	$50,327.45 / 8,750,000		$ 00.00575

McCANN CREEK CLAIMS

Claim	Locator	Date	Filed for Record Vol.	Page	Inst.
2 Below Disc.	Berness	Aug.11, 1946	3	237	1531
1 Below Disc.	Berness	Aug.23, 1941	2	275	969
Discovery	Berness	Aug.23, 1941	2	274	967
1 Above Disc.	Berness	Aug.11, 1946	3	236	1530
Zero Bench	Berness	Oct.25, 1946	3	242	1540
Northern Light B.	Berness	Oct.25, 1946	3	241	1539
Summit Bench	Berness	Aug.22, 1940	2	85	679
Minnie	Berness	Aug.22, 1940	2	85	680
Punch Bowl	Berness	June 6, 1942	3	21	1020
DEEDED TO RED MOUNTAIN MINING COMPANY					
Discovery 1 below Disc. Summit Bench Punch Bowl Minnie		May 31, 1946	3	211	1496
1 Above Discovery Zero Bench 2 Below Discovery Northern Light Bench		May 2, 1947	3	244	1572
AREA BETWEEN McCANN AND DOWRY CREEKS					
New York Bench	Berness	May 10, 1948	3	303	1694
Boston Bench	Berness	May 19, 1948	3	304	1696
Chicago Bench	Berness	May 10, 1948	3	305	1697
Bessie Bench	Berness	May 10, 1948	3	305	1698
Moonlight Fr.	Berness	May 10, 1948	3	305	1699
AREA BETWEEN BOULDER AND DOWRY CREEKS					
Oakland Bench	Berness	May 10, 1948	3	302	1692
Frisco Bench	Berness	May 10, 1948	3	303	1693
Brooklyn Bench	Berness	May 10, 1948	3	303	1695

Recording Office formerly at Platinum is now established at Bethel, Alaska, where records are now kept.

RED MOUNTAIN COMPANY CLAIMS

BOULDER CREEK AREA

Claim	Locator	Date	Vol.	Page	Inst.
Portland Bench	Berness	Oct. 7, 1941	2	317	1040
1st Tier Above	Berness	Oct. 2, 1941	2	305	1014
Three Star Bench	Berness	Oct. 25,1941	3	241	1538
Discovery	Berness	June 6, 1942	3	21	1021
Hardluck Bench	Roslund	June 18,1941	2	230	919
Osmiridium Bench	Berness	Aug. 11,1946	3	236	1529

DEEDED TO RED MOUNTAIN MINING COMPANY

Hardluck Bench	May 31, 1946	3	210	1495
Portland Bench) Discovery) 1st Tire 7 above)	May 31, 1946	3	211	1496
Three Star Bench) Osmiridium Bench)	May 2, 1947	3	244	1572

DOWRY CREEK CLAIMS

Jenny Bench R.L.	Berness	Aug. 11,1946	3	235	1528
Benny Bench R.L.	Leivestad	Aug. 27,1940	2	95	695
Surprise Bench L.L.	Roslund	Aug. 10,1939	1	116	153
Honey Bench,L.L.	Roslund	Aug. 20,1940	2	81	671
Sugar Bench L.L.	Berness	Aug.10,1940	2	73	661
M&C Fraction L.L.	Berness	Aug.10,1940	2	73	662

DEEDED TO RED MOUNTAIN MINING COMPANY

Surprise Bench) Honey Bench)	May 31, 1946	3	210	1495
Benny Bench	May 31, 1946	3	95	695
Jenny Bench	May 2, 1947	3	244	1572
M&C Fraction) Sugar Bench)	May 31, 1946	3	211	1496

THIS AGREEMENT, made and entered into this 27th day of June ,1952, by and between RED MOUNTAIN MINING CO. INC., a Washington corporation, as Lessor, and A. L. HOWARD, of Seattle, Washington, as Lessee,

W I T N E S S E T H:

WHEREAS, Lessor is the owner of certain mining claims and mining ground situate in the Platinum Area, near Goodnews Bay, in the Bethel Recording District of Precinct, Fourth Judicial Division of the Territory of Alaska, and described as follows:

ON AND NEAR McCANN CREEK:

Discovery	Summit Bench	Northern Light Bench
No. 1 Below	No. 1 Above	Minnie Claim
No. 2 Below	Zero Bench	Punch Bowl Claim

ON THE RIGHT LIMIT OF CLARA CREEK:

Moonlight Fraction	Boston Bench
Bessie Bench	New York Bench
Chicago Bench	

ON THE LEFT LIMIT OF DOWRY CREEK:

Surprise Bench	Sugar Bench
Honey Bench	M and C Fraction

ON THE RIGHT LIMIT OF DOWRY CREEK:

Jenny Bench
Benny Bench

ON THE RIGHT LIMIT OF SALMON RIVER:

First Tier 7 above Brooklyn Bench	
Hardluck Bench Discovery on Boulder Creek	
Osmeridium Bench	Three Star Bench
Frisco Bench	Portland Bench
Oakland Bench	

TOGETHER WITH all water and water rights upon or appurtenant to the above-described mining claims;
and;

WHEREAS, Lessee desires to lease from Lessor the said mining claims, water and water rights, and other mining ground hereinafter referred to;

NOW, THEREFORE, it is agreed between the parties hereto as follows:

That for and in consideration of the sum of Ten Dollars ($10.00) paid to Lessor, and other valuable considerations, the receipt of all of which is hereby acknowledged by Lessor, and in consideration of the covenants and agreements hereinafter contained by Lessee to be kept and performed, Lessor does by these presents lease and let unto Lessee, his successors and assigns, the said mining claims and premises, together with such water and water rights as Lessor may own or have the right to use in connection with the mining or other use of said mining claims and premises, for the purpose of mining the same and extracting therefrom and retaining, the valuable minerals and metals therein contained, to have and to hold the same hereafter for a period of twenty-five (25) years from the date of this agreement, and thereafter until said mining claims and premises, and other mining ground hereinafter referred to and described, can no longer in the opinion of Lessee be mined by Lessee at a profit to Lessee; and

IT IS FURTHER MUTUALLY AGREED AS FOLLOWS:

1. Lessee will, on or before the 31st day of July, 1952, enter upon said mining claims and premises, or a portion thereof, and begin prospecting for platinum, gold, and other valuable minerals and metals, by the use of such method or methods as Lessee may elect, and Lessee will continue such prospecting until Lessee shall have determined to his own satisfaction that said mining claims and premises, or some portion thereof, are or are not suitable for further prospecting or mining operations, as to which determination Lessee will give Lessor written notice on or before the 31st day of December, 1952. Failure of Lessee to give such written notice to the effect that Lessee has decided that said mining claims and premises are or are not suitable for further prospecting, or for mining operations, shall be conclusive evidence that Lessee has elected to forego further prospecting or mining operations on said mining claims and premises, whereupon all rights of Lessee hereunder shall terminate, and this agreement shall be terminated and no longer be binding upon or enforceable against any of the parties hereto. If, however, as a result of his prospecting of said mining claims and premises Lessee shall elect to continue to prospect or to mine the same, and shall so notify Lessor in writing, Lessee may then proceed to further prospect or mine hereunder in accordance with the terms, conditions and provisions hereof.

2. If Lessee gives to Lessor written notice of his election to conduct further prospecting or mining operations hereunder Lessee will, on or before the 31st day of December, 1953, notify Lessor in writing of the determination of Lessee to prospect or mine, or not to prospect or mine, the said mining claims and premises hereunder, and if such notice is given that Lessee will further prospect or mine the said mining claims and premises hereunder Lessee will, on or before the first day of November, 1954, install upon said mining claims and premises, or some portion thereof, suitable equipment for mining, the character and extent of such equipment to be entirely at the discretion of Lessee.

3. After such installation mining will commence hereunder and continue until this lease is terminated. Cessation of mining for not more than six (6) months, after initiation of mining in any calendar year will not be considered as a violation of continuous mining, and failure to mine hereunder due to acts of God, lack of water, strikes, laws, or Governmental rules and regulations, scarcity of labor, weather conditions, war or other causes beyond the reasonable control of Lessee, will likewise not be considered as a violation of the provision for continuous mining, and nothing herein contained shall obligate Lessee to work or mine any of said claims or premises which in the judgment of Lessee cannot be mined at a profit to Lessee.

4. Lessee will pay to Lessor as rent and royalty, and for the use and privilege of mining said mining claims and premises, ten and one-half per cent (10.1/2%) of the net proceeds of sale of all platinum, gold, or other valuable minerals or metals recovered from said mining claims and premises by Lessee, the said royalty payments to be made within fifteen (15) days after the receipt by Lessee of the proceeds of sale of said products. Lessee may deduct from any royalty payments made hereunder the amounts of any advances theretofore made to Lessor on account of royalty or otherwise, and shall, contemporaneously with each such payment, furnish the Lessor a copy of the returns of the United States Mint, or smelter, or other purchaser of said platinum, gold, or other valuable minerals or metals.

If any mining ground not hereinbefore described and contiguous to the lands herein described, is secured for mining by lease, location, or otherwise, by either of the parties hereto, such ground may be mined by Lessee at Lessee's option, and to such extent as Lessee may desire, and, if so mined by Lessee, Lessee will pay to Lessor an overriding royalty of two per cent (2%) of the net proceeds of sale of all platinum, gold, or other valuable minerals or metals recovered by Lessee from any such mining ground, except that ground acquired by location shall not be subject to any overriding royalty.

5. All payments made by Lessee to Lessor hereunder shall be made by depositing same to the credit of Lessor in the _____ _____ Bank, later designated.

6. For the purposes of this agreement the term "net proceeds" is defined to be the amount received by Lessee from the United States Mint, or smelter, or other purchaser of platinum, gold, or other valuable minerals or metals.

7. Lessee will do and perform, and file the necessary affidavits in respect to, annual labor or assessment work upon said leased mining claims from and after July 1, 1953, and will pay to Lessor the sum of TWO HUNDRED DOLLARS ($200.00) per month during the calendar year commencing July 1, 1953, and, if Lessee desires to hold said mining claims and premises hereunder, Lessee will pay to Lessor the sum of THREE HUNDRED DOLLARS ($300.00) per month commencing with the month of January, 1954, and until actual mining is commenced hereunder, said monthly payments to be and to be considered to be, payments in advance on account of royalty payments hereinafter provided for which may be earned under

this agreement, said advance royalty payments, and all other advance payments made hereunder, to be deducted from any and all royalties earned hereunder as such royalties are earned. Above payments to be suspended under conditions set forth in Paragraph "3" covering failure to mine under stated conditions.

8. Lessee shall keep a careful and accurate record of the minerals and metals recovered from said lands hereunder, and such record shall at all reasonable times be available for inspection by Lessor.

9. When Lessee has completed and permanently abandoned his mining operations on said leased mining claims and premises herein referred to, this lease shall terminate, and after the completion of said mining operations on said leased mining claims and premises Lessee will deliver to Lessor a good and sufficient quitclaim deed releasing the Lessor all of the right, title and interest of Lessee in and to the said leased mining claims and premises.

10. Lessor shall have access at all times to said mining claims and premises for the purpose of inspecting the work being done hereunder, and for the purpose of posting non-liability notices, or for any other lawful purpose, and Lessor shall have the right to be present at any and all clean-ups.

11. Lessee shall pay before delinquency all taxes and assessments levied and assessed upon the buildings and improvements, and personal property, placed upon said mining claims and premises by Lessee. In the event that the mineral rights to said mining claims and premises shall be taxed, or in the event that any tax or taxes shall be levied on the rights conferred by this lease and agreement, or in the event that any tax or taxes shall be imposed upon any platinum, gold, or other valuable minerals or metals produced hereunder, then in any or all of said events, Lessor shall bear (and Lessee is hereby expressly permitted, but not obligated, to pay for the account of Lessor, and deduct from the settlement for royalties) that proportion of the whole of such tax or taxes which the royalty accruing in favor of Lessor during the incidence of such tax or taxes bears to the whole value upon which such royalty is based, and Lessee shall pay the balance of such tax or taxes when the same shall become due and payable.

12. All notices, demands or communications herein provided to be given, or which either party hereto may deem it desirable or necessary to give, and all agreements between the parties hereto shall be in writing. All such notices, demands or communications may be served by personal service, or by mailing the same by registered mail in a United States Post Office, postage thereon fully prepaid, and directed to Lessor at Seattle, Washington, and to Lessee at 16351 Ashworth Avenue, Seattle 33, Washington, until a different party and/or place is designated in writing by either of the parties hereto.

13. At any time within five (5) years after the termination of this agreement Lessee may remove all buildings, structures, machinery and dredging machines, and other personal property placed by him upon the lands leased hereunder, and may before removal service and care for same provided said right of removal shall be suspended as long as Lessee is in default in the making of any payment due hereunder.

14. All buildings, structures, dredging machines and other machinery placed upon or used by Lessee on said leased lands will be, and will be considered to be, personal property belonging to Lessee.

15. If Lessee fails for a period of sixty (60) days after receiving written notice of any default of Lessee under the terms of this agreement to correct such default, then Lessor shall have the right to terminate this agreement, and thereafter Lessee shall forfeit all rights in and to this agreement, and to the property referred to herein, excepting the right conferred by Paragraph "13" of this agreement to service, care for, and remove all personal property and equipment from said lands, Lessor in such case to retain all sums theretofore paid to it by Lessee pursuant to this agreement as liquidated damages; provided, however, that any accrued right or rights, or claims by the Lessor against the Lessee, or Lessee against Lessor, shall not be impaired by such a forfeiture.

16. If said leased lands or any part thereof are encumbered by any mortgage or other lien, Lessee is hereby given the right to pay (but is not obligated to pay) to the owners and holders of such mortgage or other lien, such amounts as Lessee may desire to secure releases from the encumbrance of any such mortgage or other lien on lands mined or to be mined by Lessee hereunder, and all such payments shall be advance payments on the royalty payments to be made hereunder as the said royalty payments are earned. All payments made by Lessee hereunder to remove said liens or encumbrances will bear interest at the same rate as that of the indebtedness secured by such liens or encumbrances, and the amount of such interest will be considered as an advance on said royalties, chargeable to said royalties in the same manner as are said payments to remove said liens or encumbrances.

17. This agreement and lease may be terminated at any time by Lessee by giving and delivering to Lessor a written notice of such termination, such notice to fix the time for such termination, which will be not less than sixty (60) days from the time such notice is delivered, but in case of any such termination the consequences thereof shall be those specified in Paragraph "13" hereof.

18. Lessor hereby consents and agrees with Lessee that Lessee may store and deposit upon any ground mined by Lessee hereunder, muddy water and debris resulting from such mining operations; provided, however, that Lessee shall hold Lessor harmless from any damage to lands of owners other than the parties hereto resulting from the discoloration of the water or accumulation of the debris resulting from the mining operations of Lessee.

19. Lessor will undertake to secure for Lessee the right to occupy as quarters for Lessee and Lessee's employees, suitable buildings located on Clara Creek and known as the Strandberg buildings, or will secure for Lessee the right to use other suitable quarters for such purposes, at a reasonable rental, or purchase agreement for the mining season of 1952. Lessor also agrees to furnish to Lessee for use in prospecting during the mining season of 1952, and the mining season of 1953, the Ford 1935 Sedan and any other machinery or equipment belonging to the Red Mountain Mining Co. Inc.

20. It is understood between the parties hereto that Lessee contemplates securing from the United States Government money with which to carry on the operations of Lessee hereunder, and if such money is secured from the U. S. Government, Lessor agrees that, if the Government so requires, the payment of any royalties to Lessor may be postponed until repayment to the Government of any moneys loaned or advanced by it to Lessee for use in operating under this lease.

21. It is expressly agreed that Lessee may assign this lease as a whole, and all of his right, title and interest therein, to a corporation to be organized for the purpose of accepting such assignment, and upon such assignment, the said Lessee, A. L. Howard, shall and will be released and discharged from all and every responsibility or liability hereunder to Lessor, and the said assignee to whom the said lease is so assigned as an entirety shall, in the place and stead of the said Lessee, A. L. Howard, become liable and responsible as the Lessee hereunder.

22. Time is of the essence of this agreement, and this agreement shall inure to the benefit of and be binding upon the heirs, executors, administrators, successors and assigns, of the respective parties hereto.

IN WITNESS WHEREOF, Lessor has caused this agreement to be executed by its proper officers thereunto duly authorized, and Lessee has hereunto set his hand, the day and year first hereinabove written.

RED MOUNTAIN MINING CO. INC.

By /s/ M. L. Bissell
President

By /s/ Christian Leivestad
Treasurer

(LESSOR)

By /s/ A. L. Howard

(LESSEE)

dmes 2931

PLACER PLATINUM CLAIMS

in

SALMON RIVER VALLEY

Goodnews Bay Mining District
Southwestern Alaska

The Property of

RED MOUNTAIN MINING COMPANY

A Report by

January 1953

A. L. Howard
Seattle, Washington

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INTRODUCTION AND ACKNOWLEDGMENT:

The twenty-nine unpatented placer claims subject of this report, comprising about five hundred and fifty acres, are the holdings of Red Mountain Mining Company, whose home office address is 318 Medical Arts Bldg., Seattle, Washington.

The claims are situated in the Goodnews Bay Mining area, Bethel Recording District, Southwestern Alaska, adjacent to Kuskokwim Bay.

An unusually complete report on the District is the subject of Bulletin 918, United States Geological Survey, by J. B. Mertie, Jr., published in 1940. The data included herein as the portion of the present report relating to geology has been largely extracted from Mertie's report.

Access has also been had to a report written by William A. O'Neill of Anchorage, Alaska, under date of October 19, 1948.

Officials and Staff of the Goodnews Bay Mining Company extended many courtesies, which I gratefully acknowledge.

The month of July 1952 was spent by me upon the property. Gus Berness of Platinum, Alaska, was an able assistant.

HISTORY:

In 1914, prospectors reported the existence of a white metal in creek gravels draining the east slope of Red Mountain. In 1926 the discovery of placer platinum was announced and the District has been active since that time.

Larger scale operations, consisting of drag lines, bulldozers and washing plants were installed in 1934. During 1937, the first and only dredge in the District was erected. It has since been in operation during each successive season, which lasts from about May to November.

Strandberg and Sons worked out the main channels of Clara and Dowry Creeks prior to World War 11.

The only present operator in the Salmon River Valley is the Goodnews Bay Mining Company, which operates with pumps, bulldozers, stripping and tailings disposal draglines at a rate of about 1,500 cubic yards of gravel a day and a dredge with a daily capacity of approximately 6,500 cubic yards.

Possibly twenty to twenty-five million cubic yards of gravel has been stripped and mined to date in Salmon River Valley. The additional proved, indicated and inferred cubic yardage may total a like amount.

Production to date may total 300,000 ounces.

LOCATION:

Goodnews Mining District takes its name from Goodnews Bay, which lies about 100 miles south from the mouth of Kuskokwim River, which in turn empties into Kuskokwim Bay, being a part of Bering Sea.

Platinum townsite, the supply point for the area, is positioned on the south end of the south spit which, together with the north spit, form the outer shores of the harbor of Goodnews Bay. The Bay has a length of ten miles, a width ranging from two to seven miles, and an average depth of about three fathoms or less.

Access to the harbor is had by means of a narrow channel through which ships of considerable displacement may enter. However, freight is generally lightered outside the entrance to the harbor to barges which are taken inside the Bay for unloading.

Facilities have been installed for handling freight within the southern spit near its northern extremity. A road leads from the terminal to Platinum and beyond via the Salmon River Valley to the camp, shops and power plant of the Goodnews Bay Mining Company, situated about ten miles from Platinum. The road crosses the claims of the Red Mountain Mining Company at both the northernmost and southernmost end.

The placer concentrations in the Salmon River Valley lie generally from five to twelve miles southeast from Platinum. The claims belonging to Red Mountain Mining Company extend for a distance of about two and three quarters miles from the mouth of McCann Creek at Small's River, five miles from Platinum, southward to but not including Last Chance Creek.

The claims are situated on the eastern slope of Red Mountain and include bench and creek gravels extending to Salmon River on the east and Small's River on the north.

Red Mountain is the source of the platinum recovered in Salmon River Valley.

TRANSPORTATION AND SERVICE:

During the operating season, which may extend from May until November for dredges, and a somewhat shorter season for dragline operations, depending upon weather conditions, regular air service is maintained between Platinum and Anchorage via Bethel and McGrath. The round trip fare is $175.95. Additionally, the round trip fare between Seattle and Anchorage is $172.50. Stopovers and delays, due to weather or other conditions, may entail an additional expense of $100.00.

Freight boats from Seattle, operated by the Alaska Steamship Company, call at Platinum in June and August. Freight costs, plus lighterage and handling, total about $40.00 a ton.

A cold storage plant, general store, U. S. Post Office, and roadhouse are at Platinum. Lighterage and transportation facilities are maintained by Goodnews Bay Mining Company or its subsidiary, Platinum Commercial Co.

Transportation and Service (Cont'd):

Standard Oil Company of California maintains storage tanks at Platinum for diesel and stove oils, gasoline and other necessary oils and lubricants.

Diesel oil costs about 18¢ a gallon delivered in quantity. Stove oil is priced at 21.5¢ a gallon. Gasoline and lubricating oil prices were not ascertained, but are in line with other products.

Retail grocery costs average possibly one-fourth to one-third higher than in Seattle. Fruit, green vegetables and other perishables are usually brought in by air freight at a cost of 20¢ a pound from Anchorage. Air express on items such as eggs is 37¢ a pound.

Goodnews Bay Mining Company maintains complete shops for service and repair of its machinery and equipment. The policy of the Company is one of cooperation with others who may be in the District.

CLIMATE:

The climate in the vicinity of Platinum and Salmon River Valley is generally disagreeable, due to the proximity of Bering Sea.

There is considerable fog and rain during the summer months. However, interspersed throughout the season and reportedly for periods of several days duration there are overcast and also sunny days during which the temperature may reach 80 degrees in sheltered valleys.

The average summer temperature is about 50 degrees, the mean winter temperature 28 degrees with an annual average mean of 35 degrees Fahrenheit.

The annual precipitation is about 35 inches, including 40 inches of snow.

WATER:

Salmon River Valley drainage area provides generally sufficient water for mining purposes though booster pumps are necessary to maintain sufficient head for combination dragline and washing plant operations.

There may be insufficient water for efficient dredge operation during the early part of the season until moderating weather promotes increased flow from melting snow. Additional water could be made available by pumping from the Small's River drainage basin if required.

TIMBER AND PLANT LIFE:

There is no timber in the area. There is a sparse growth of willow in favored areas, such as creek beds. Grass grows luxuriantly. Many varieties of flowers occur.

GAME BIRDS AND ANIMAL LIFE:

Ptarmigan appear to be fairly abundant. Ducks and geese are to be found in favorable nesting areas. Bears are rarely seen. Reindeer and Caribou once prevalent have largely disappeared. Salmon enter principal streams during spawning season. Grayling and trout are reportedly plentiful in the area.

GEOLOGY:

Red Mountain, the bedrock source of the crude placer platinum, is an elongate mass of ultrabasic rocks, five miles in length with a maximum width of two miles. It lies between Salmon River Valley to the east and Kuskokwim Bay to the west. The longer mountain axis generally parallels the Valley and the shoreline.

The western slope of Red Mountain is precipitous in places and generally steeper than the valley side.

Dunite, which makes up the principal rock mass of the mountain, is a variety of Perodotite. The fresh dunite is a greenish black rock composed almost entirely of olivine more or less altered to serpentine and containing small amounts of iron oxides and monoclinic pyroxene. Most dunite crystals are readily visible. The pyroxene is colorless augite.

There are two types of serpentine (1) an older, greenish yellow in thin section, resulting from the alteration of olivine of which about twenty-five percent has been so transformed and, (2) a younger, nearly colorless serpentine intersecting the older serpentine in veinlet form.

Fragments of serpentine are also seen on Red Mountain showing complete serpentization of the dunite. One variety of this serpentization is light green and banded, and appears to have formed in veins, seams and crevices. A more common variety is dark green and commonly shows shearing striae suggesting zones of faulting. A small amount of low grade asbestos has also been noted in the talus from the mountain.

Pebbles of magnetite, ilmenite and chromite are found in the placer concentrates, suggesting that these in considerable part come from basic segregations within or along the borders of the ultrabasic rocks.

Dunite grades into wehrlite with an increase in the amount of monoclinic pyroxene and a corresponding decrease in the amount of olivine as for example in the central part of the Susie Mountain mass which lies across the valley from Red Mountain. This condition also occurs at the southern end of Red Mountain just north of the saddle at the head of Platinum Creek.

Dikes of several special types occur in the principal ultrabasic rocks. They are both coarse and fine grained and most of them contain varying amounts of hornblende. Iron oxides are fairly plentiful and some apatite also occurs.

In Platinum Creek, the site of the original operations by the Goodnews Bay Mining Company, the ultrabasic rocks are separated from the country rock by narrow bands of specialized intrusive rocks containing coarse grains of dark green hornblende intergrown with smaller crystals of albite. They are classified as gabbro pegmatites, differentiates from the ultrabasic mass.

GEOLOGY, Cont'd:

The country rock is believed to be of late paleozoic age with a subsequent injection of the ultrabasic rocks later than mid-mesozoic time.

Granite rocks also occur as dikes of specialized character. Also, there is an area about one by four and one-half miles forming an intrusive ridge southeast of the headwaters of Small's River.

GEOMORPHOLOGY:

In past time there has probably been a subsidence of land levels, an absolute elevation of the sea level, the reverse of the above or a combination of both, in the general area.

In preglacial time the valleys of the Salmon and Small's Rivers were, according to Mertie, fairly wide and open and it is probable that a long period of relative stability of the base level of erosion had resulted in a mature type of topography.

The ocean strand line at the end of this period lay further to the west than it does at the present time. There followed at the end of this period a great lowering of the base level of erosion which resulted in the rejuvenation of the streams entering the ocean.

The movements which produced this lowering of the base level are not definitely known, but a lowering of the sea level alone might have produced regional lowering without causing local rejuvenation of streams. Mertie finally concludes that the local rejuvenation above described was due to an upward movement of the land with or without concurrent lowering of the sea level.

Mertie further suggests that the abrupt declivity extending along the west side of Red Mountain and for 60 miles or so to the north to the mouth of the Arolic River corresponds to an ancient fault zone along which such movement took place that the land east of the fault, including Red Mountain and Salmon River Valley was elevated with respect to that west of the fault, thus producing the lowering of the base level of erosion and resulting in the rejuvenation of streams like the Salmon River.

The streams began to incise their old channels into bedrock. This action may have disturbed and reworked some pre-existing placers, but did not dissipate or destroy them.

The rejuvenation was interrupted before the new erosion cycle was completed so that the bedrock vee cuts or gorges were not developed to the extreme head of the streams. On Salmon River this bedrock gorge has been traced up its tributaries, Medicine and Platinum Creeks, for distances of two miles and one-half mile respectively.

Aggradation or building up of stream beds during the final stage of glaciation resulted from local elevation of the base level of erosion or from other causes acting more or less concurrently with glaciation. The net result was an extensive westward migration of the strand line.

GEOMORPHOLOGY: (Cont'd)

A general elevation of the erosion base level then followed, which resulted in an extensive eastward migration of the strand line. This latest geomorphic process resulted in the drowning of the lower reaches of the larger valley, such as the valleys of the Goodnews and Kinegnak Rivers. This process also resulted in the formation of Goodnews and Chagvan Bays.

Data deduced from drill holes indicates that at the mouth of Salmon River the bedrock floor may be one hundred feet or more below the present ocean level.

GLACIATION:

The valley of Goodnews River, lying several miles to the north from Salmon River Valley, was once the site of a glacier, the southwest lobe of which, invaded the valley of Tundra Creek which enters Small's River about two miles northwest from the mouth of McCann Creek.

A portion of this glacial lobe impinged directly on the north end of Red Mountain and dammed upper Small's River valley. Quantities of glacial derived gravels were also brought to the upper Salmon Valley.

Augmented stream flows in ensuing time, resulting from melting ice which did not itself enter the valley except at the uppermost end, served as the vehicle for the distribution of the glacial derived gravels from without the valley proper, throughout much of its length.

However, the underlying preglacial formed placer platinum concentrations were apparently disturbed to a minor degree only, and in most places not at all.

In recent years and since Mertie's report was written, it has been determined that an older channel east of the present Salmon River and presently being worked by the Goodnews Bay Mining Company has been cut off or destroyed at a point opposite the mouth of Clara Creek near the upper end of the Salmon Valley. This may indicate the southern limit of the erosional influence of glacial ice.

OLDER CHANNELS:

The Goodnews Bay Mining Company has for some time past centered its mining activities in an older channel lying about one-fourth to one-third mile east from and parallel to the southerly course of Salmon River. This old channel has been traced down stream from the site of present operations, directly opposite the southernmost holdings of Red Mountain Mining Company for a distance of about five miles.

The channel has produced and will probably continue to produce major quantities of platinum and minor amounts of the other metals of the platinum group for years to come. Platinum constitutes about 85% of the crude metal recovered. Iridium comprises about 4%, while ruthenium, rhodium, osmium and palladium combined account for about 1%. Iron, copper and nickel are present as impurities to the extent of about 10%. Placer gold accounts for about 2% of recovered values.

OLDER CHANNELS: (Cont'd)

In places, the channel is 600 feet in width, with an average workable width of 400 feet or more. The upper northern end is being presently worked by dragline and bedrock sluice. The dredge is operating immediately to the south and opposite Platinum Creek in the Medicine Creek area.

Deeper gravels indicating a possible channel were encountered by Strandberg and Sons while mining Clara Creek on the west side of the valley at an altitude of about 300 feet or about 40 feet above and one-half mile west from Salmon River.

There appears to be no geological reason why a considerable volume of water could not have derived from the upper valley of Small's River in both glacial and preglacial time. It is possible that in preglacial time upper Small's River valley was a part of the Salmon River drainage system. There is, in fact, an abandoned channel through the present divide between Small's and Salmon valleys, cut at an altitude of about 325 feet and in line with the upper reaches of Salmon River.

It is suggested that waters entering the upper Salmon Valley may at one time have had a ccurse some distance west of the older east channel and even somewhat west from the present Salmon River. The evidence encountered of deeper gravels on the south bench of Clara Creek about one-half mile west from the mouth of Clara Creek supports this conclusion.

Further indications in support of this theory are two drill holes 45 and 32 feet deep respectively, about one and one-half miles south from Clara Creek and 700 feet west from Salmon River.

Salmon River has been dredged up-stream to a point opposite the south end of Portland bench, a portion of the holdings of Red Mountain Mining Co. It has been reported that the dredge did not proceed further upstream because of lack of sufficient values.

However, Clara Creek, about one and one-half miles further north was productive and the older East Channel was and is productive to a point opposite the mouth of Clara Creek.

It is inferred, therefore, that the present upper Salmon is lacking in values because platinum concentrations were trapped on bench gravels and also in a possible deeper west channel and also in earlier times in the older east channel, before Salmon River was established in its present bed.

The surmised west channel would join the present Salmon River downstream at about the place that upstream dredging ceased, or a short distance south therefrom.

BENCH GRAVELS:

There are rather extensive bench gravel deposits on the lower eastern slopes of Red Mountain embraced in the holdings of Red Mountain Mining Co. The gravels extend to altitudes of 450 feet or 200 feet above the valley floor.

Generally the streams which produced these gravels were probably southerly flowing and in fairly large volume. The present easterly flowing creeks which drain Red Mountain have cut across these gravels and have had some local enrichment effect.

BENCH GRAVELS: (Cont'd)

It is noteworthy that the streams rather than the benches have been worked, which might indicate that the stream beds are of higher grade. This should not rule out, however, the possibility of workable placer concentrations on the benches resulting from larger volumes of water flowing down the valley at different elevations in past geologic time.

The bedrock floor underlying these gravels is believed to be the eastward extension of Red Mountain from Clara Creek south. Dunite and associated basic rocks form portions at least of the bed rock at the site of present bedrock strippings on the east side of the valley and directly across from the bench area being discussed.

DISTRIBUTION OF PLATINUM BEARING GRAVELS:

Platinum is widespread in its occurrence throughout most of the length of Salmon Valley. It occurs as concentrations in present stream beds, in at least one older channel and also in varying amounts concentrated in bench gravels.

The eastern slope of Red Mountain is drained by the following creeks: Commencing with Platinum Creek and its tributaries Fox and Dry Gulch, in order northward are Squirrel, Last Chance, Boulder, Dowry, Clara and the northerly-flowing McCann on the northeast slope of the mountain.

Platinum Creek and its tributaries have been mined out. Platinum Creek is lacking in platinum concentrations above the mouth of Fox Gulch, apparently because of the lack of a bed rock source.

Boulder and McCann Creek beds contain platinum concentrations. Last Chance Creek, one-half mile south from Boulder Creek, is reportedly without platinum concentrations because here again, as in upper Platinum Creek, the bed rock differs from the dunite of Red Mountain which is the accepted source of the platinum.

Between Boulder and Dowry Creek there are three small drainages which have presumably made minor contributions to platinum concentrations. Dowry and Clara Creeks have been worked out.

RED MOUNTAIN MINING COMPANY CLAIMS:

Commencing at the southern end of the holdings and proceeding generally northward, the territory is divided into three principal areas as follows:

1. The Boulder Creek - Portland Bench Section
2. The Dowry - Clara Creek Section
3. The McCann Creek - Minnie Gulch Section

Boulder Creek is a small stream flowing easterly from its source at an altitude of 1,000 feet on the eastern slope of Red Mountain, with a gradient of about 30 percent until it reaches the bench area about 1,500 feet downstream. The average gradient across the benches descreases from 15 to 6 percent as the lower reaches of the creek are reached in the course of a further stream flow

of 2,000 feet. The altitude at the juncture with Salmon River is about 225 feet. The stream is 3,500 feet in length with the lower 2,000 feet considered to be suitable for mining.

VALUES:

The platinum bearing gravel near the upper mineable reaches of the creek contains values as determined by panning as follows:

Altitude:	400 feet
No. of Pans	12 (includes 6 trace pans..)
Total Weight	102 milligrams
Average a Pan	8.5 milligrams
Assigned Value	0.233¢ a milligram
Pans a Cubic Yard	100
Value a Cubic Yard	$1.98
Largest Grain, weight	40 milligrams

Assigned Value, $72.50 per troy ounce crude platinum

Altitude	300 feet
No. of Pans	19 (includes 6 trace pans)
Total Weight	91.2 milligrams
Average a Pan	4.8
Pans a Cubic Yard	100
Value a Cubic Yard	$1.12

Mr. O'Neill pan-sampled a cut a short distance upstream from this 300 foot altitude and obtained values of $1.73 a cubic yard with a platinum valuation of $35.00 an ounce.

Boulder Creek appears to be too small to have played anything but a minor role in the concentration of platinum values. Rather, it would appear that pre-existing gravels may have been worked by this agency to a limited extent only, thus calling to attention the existence of platinum concentrations in the area traversed.

In its lower reaches, Boulder Creek has been diverted in recent time, from its present course southward to juncture with Salmon River about 1,000 feet south at which time the creek apparently flowed across the southern end of Portland Bench which is adjacent and parallel to Salmon River.

The Creek presently flows across the northern corner of the Portland Bench claim. It may have occupied intermediate meandering positions across the Bench at various times. Its average width is normally about three to six feet.

PORTLAND BENCH:

A considerable amount of drilling, open cutting and limited test pitting has been centered around the southern end of Portland Bench. Results of the drilling were reportedly not made known to the owners of the property. Gus Berness, one of the owners, saw the prospects from many of the holes and reports by visual inspection that the values ranged from traces to excellent.

PORTLAND BENCH: (Cont'd)

The drill holes include an area of about 12 acres and are 24 in number. They indicate only that the area is platinum bearing. These holes are in the western half of the claim.

In the southeastern section of the claim and adjacent to Salmon River and adjacent also to former dredging operations limited information is available from pits excavated in which to set power transmission poles. According to Mr. Berness, some of these holes contained excellent prospects.

Open Cuts - Portland Bench:

Directly west from the road which traverses Portland Bench and near the south central end, a considerable amount of pan testing and some shoveling in operations have been carried on. This work was done by Berness.

The cut was resampled by Berness and myself with the following result:

Altitude	250 feet
No. of Pans	40 (includes 15 trace pans)
Total Weight	240 milligrams
Average a Pan	6 milligrams
Pans a Cubic Yard	150 (Gravel relatively fine)
Value a Cubic Yard	$2.10
Reduce 30% for overburden	Net value $1.47
Largest Grain	35 milligrams

Bed rock not reached.

Mr. O'Neill reports values of $1.24 a cubic yard with platinum valued at $35.00 an ounce. These average results were obtained from five pans over a depth of 30 inches from the surface. If the liberty is taken of reducing his figure by 30%, and with a valuation of $72.50 an ounce, we arrive at a figure of $1.74 a cubic yard.

Mr. O'Neill also cleaned up the first 12 feet of boxes from a measured 4 cubic feet of gravel. The calculated yield was $1.11 a cubic yard, with a valuation of $35.00 an ounce for platinum, equivalent to $2.30 a cubic yard on a valuation of $72.50 an ounce. If this valuation is reduced by 30% in conformity with my calculations we arrive at a comparative figure of $1.55 a cubic yard.

Apparently the limited area tested will yield not less than 0.02 troy ounces of crude platinum group metals a cubic yard, equivalent to $1.45 net recovery.

During July 1953, an open cut was excavated in the eastern margin of Portland Bench which lies at an altitude about 15 feet above the next lower bench which lower bench consists of gravels about 100 feet in width, immediately contiguous to the present bed of Salmon River. This lower bench is unworked. It could be used as dumping ground for gravels washed from Portland Bench.

This lower bench may be the southward continuation of the deeper channel which is inferred on the west side of the valley and which was first noted on the lower right (south) limit of Clara Creek, one and one-half miles to the north. Or it may have been occupied in recent time by the present Salmon River for some lesser distance upstream, or both.

PORTLAND BENCH: (Cont'd)

Open Cuts - East Margin Cut:

Altitude	235 feet
Width	2.5 feet
Depth	6 feet
Length	12 feet
Depth of Pit at inner end	4 feet
Total Depth	10 feet
Largest Grain	14 milligrams
No. of Pans	30 (includes 10 trace pans)
Total weight	100 milligrams
Average a Pan	3.33 milligrams
Pans a Cubic Yard	150
Value a Cubic Yard	$1.16
Reduce 20% for overburden	Net Value $0.92

Bedrock not reached because of sloughing due to rain and water in pit.

The values where tested on Portland Bench do not appear to be concentrated on bedrock but are generally distributed with values increasing toward bedrock.

Including the indicated values found in drill holes in the western section of Portland Bench, taken together with values recovered near the road in the south central section and also about 300 feet east on the east margin of the bench and including too the evidence of platinum as disclosed by excavations for power poles near the east margin, it is believed that the entire width of Portland Bench Claim and extensions westward into upper Boulder Creek warrant intensive exploration.

Value Summation:

Crude Platinum Group Metals $72.50 a troy ounce

Upper Boulder Creek:

Value a Cubic Yard derived from 31 pans with assumed 100 pans a cubic yard $1.55

Portland Bench:

Value a Cubic Yard derived from 70 pans with assumed 150 pans a cubic yard $1.20

Mr. O'Neill's values (weighted):

Upper Boulder Creek: (Open Cut) $2.45

Portland Bench: (Open Cut) $1.55

From drill hole data, pits and open cuts it is inferred that the average depth of gravels in upper Boulder Creek is six feet and the average depth on Portland Bench nine feet.

The inferred cubic yardage from the limited testing to date is:

On upper Boulder Creek - 300 x 20 x 2	12,000 cu. yds.
Portland Bench (southern end) 200 x 100 x 3	60,000 cu. yds.

THE DOWRY CREEK - CLARA CREEK AREA:

Dowry and Clara Creeks, one mile and one and one-half miles respectively, north from Boulder Creek and roughly parallel thereto, also head on the east side of Red Mountain. These creeks have been worked out.

The creeks were worked when the prevailing price for platinum was about $30.00 a troy ounce. It is my understanding that the operation was not profitable, that is including the amortization of equipment. It is known, however, that Jack Haroldson and partner recovered 169 ounces of crude platinum in one season in the vicinity of the upper central section of Clara Creek. Assuming a season of 150 days and a duty of 6 cubic yards a man shift, the recovered values were 0.09 oz. a cubic yard, equivalent to $6.52 at present prices.

During July 1952 I obtained pans from upper Clara Creek unworked gravels which by visual inspection would be considered good "pay dirt".

The average of the creek as mined may have been as much as 0.02 oz.

The bench gravels in this area are largely the holdings of Red Mountain Mining Company. They are virtually unexplored.

McCANN CREEK - MINNIE GULCH AREA:

The drainage from this section along the northeast slope of Red Mountain is to the north rather than to the east, as is the case of the creeks previously discussed.

Upper McCann Creek is the site of a discovery by Berness in 1948 and subsequent to the O'Neill examination of the area. This creek is of apparently recent origin, has cut into pre-existing gravels of considerable extent to a depth of about eight feet, and thus has effected a further concentration of values existing in the older gravels. The present creek channel is about sixty feet in width though the creek itself is four to six feet wide and shallow.

A short distance to the south and separated from the headwaters of McCann Creek by a low gravel covered divide, the drainage from Red Mountain enters the Clara Creek basin area and these waters ultimately enter the southward flowing Salmon River.

McCann Creek and its right limit or eastern tributary, Minnie Gulch Creek, of limited extent also, drain into Small's River which in turn flows northwesterly, entering Goodnews Bay at the townsite of Platinum about five miles distant.

Values - McCann Creek:

An open cut with a length of 100 feet, a width of two feet and a depth of five feet was excavated along the course of upper McCann Creek by Gus Berness and associates in 1949.

Between three and four ounces of crude platinum and a small amount of gold were recovered from this cut. Assuming a recovery of three ounces of platinum from a calculated thirty-seven cubic yards of gravel, the amount a cubic yard was 0.08 oz. equivalent to $5.80 at $72.50 a troy ounce.

Values - McCann Creek: (Cont'd)

The crude platinum assays 85% platinum, 4% iridium, 1% combined osmium, ruthenium, palladium and rhodium and 10% base metal impurities. Gold values in separate nugget form amount to an estimated 2%.

Values obtained by me were somewhat lower, averaging $2.81, $2.23 and $3.07 a cubic yard from test pits numbers 1 and 2 on the left or westerly limit of the creek channel and from the creek bed cut previously mentioned. The false bedrock upon which values largely occur was not reached on account of water. Values up to 15¢ a pan were encountered. The largest grain weighed 40 milligrams. The platinum is chunky and has not been subjected to much stream and gravel erosion.

An open cut was extended into the easterly bench gravels on the right limit of the creek in the immediate vicinity of the test pits and creek bed open cut. The bench cut was extended for a distance of 40 feet from the creek and about 20 feet into the bench proper including the bench slope. The average depth of the cut in the bench was eight feet.

The excavated gravel contains a considerable amount of angular and sub-angular dunite, as well as well rounded gravel derived from without the immediate drainage system. There is a considerable concentration of black sand throughout the gravel.

About six feet greater depth is required to reach the possible lateral extension of the false bedrock pay streak in McCann Creek bed.

Both this bench and the westerly or left limit bench lying between the creek and adjacent Red Mountain warrant exploration.

The inferred area of gravels in upper McCann Creek-Minnie Gulch basin is 80 acres equivalent to about 1,900,000 cubic yards, with an average assumed depth of 15 feet. How much of this volume contains commercially valuable concentrations of platinum remains to be determined.

MINNIE GULCH:

Minnie Gulch, the right limit eastern tributary of McCann Creek, was at one time occupied by a stream of considerable magnitude flowing northward. The channel is about 200 feet or more in width and possibly at one time occupied by glacial waters. The length of this channel is, to its confluence with McCann Creek, about one-half mile. The area between Minnie Gulch and the head of the McCann Creek is occupied by bench gravels.

Colors of platinum have recently (August 1952) been found by Gus Berness in the gravels of Minnie Gulch, but bedrock was not reached because of water.

Eastward from the head of Minnie Gulch, the ground slopes toward Salmon River valley and the contour suggests the former presence of a since-abandoned stream. This area is believed to lie east and north of the bedrock source of possible platinum concentrations.

At the juncture of McCann and Minnie Gulch Creeks, a hole was reportedly sunk by Goodnews Bay Mining Company several years ago, and reached bedrock at a depth variously reported as being anywhere from 40 to 70 feet. It has also been reported that platinum values were and were not encountered. In any event, results from one hole would not be taken as conclusive evidence, even if negative, in view of the excellent prospects since discovered a few hundred feet upstream.

MINNIE GULCH: (Cont'd)

Between the spot where this hole was drilled and the juncture of the combined McCann and Minnie Gulch Creeks flow into Small's River, the gravels are untested, so far as I am aware.

In my opinion, the entire area from the headwaters of Minnie Gulch and McCann Creek to Small's River warrants exploration. It has been assumed that the lobe of the glacier which impinged against the north end of Red Mountain destroyed pre-existing placer platinum concentrations and this appears to be true in upper Salmon River valley.

However, the existence of potential commercial concentrations in upper McCann Creek suggests that the valley occupied by this stream may have escaped at least in part the glacial erosional effect.

The inferred volume of gravel in McCann Creek in the lower half mile above its mouth can only be surmised as the depth to bedrock is not certainly known but assuming an average depth of 60 feet and a width of 300 feet the amount of gravel contained is 1,750,000 cubic yards.

The inferred volume of gravel in upper McCann Creek is 20,000 cubic yards with an average value of $2.70 a cubic yard. It is to be understood that this is not a proved, that is, measured, volume, and the limited testing has not established the values for the entire yardage.

TOTAL VOLUME OF GRAVELS:

The total volume of gravels inferred and comprising the holdings of Red Mountain Mining Company is 10,000,000 cubic yards. Only intensive exploration will prove or disprove the existence of valuable platinum concentrations. Because of the known deposits and the favorable location of the property on the slopes of Red Mountain I believe that this exploration is warranted.

SUMMARY AND CONCLUSIONS:

The placer platinum claims, twenty-nine in number, belonging to Red Mountain Mining Company, 318 Medical Arts Bldg., Seattle, Washington, are situated on the west side of Salmon River Valley, Goodnews Bay Mining District, adjacent to Kuskokwim Bay, southwestern Alaska.

The claims are situated on the eastern and northeastern slopes of Red Mountain, which is the source of the platinum. The claims extend to Salmon River in the vicinity of Boulder Creek, northward along bench gravels for a distance of about two and one-half miles to and including McCann Creek, which empties into Small's River.

Production of the District to date, which comprises mining operations past and present is about 300,000 ounces crude placer platinum metals. The District has been active since 1926, with an inferred future life of 20 years.

Present operations as conducted by Goodnews Bay Mining Company by dragline and dredge is at the rate of about 8,000 cubic yards a day. The season runs from about mid-May to November. All production comes from an ancient channel immediately east of the present Salmon River and parallel thereto.

SUMMARY AND CONCLUSIONS: (Cont'd)

The southernmost holdings of Red Mountain Mining Company are directly opposite the site of present operations and on the west side of Salmon Valley.

Potential production is inferred from testing carried out in stream beds and benches. There is also limited evidence of an ancient west channel but nothing is known as to presence or absence of values.

The exploration so far accomplished yields indicated values of...

$1.55 a cubic yard on upper Boulder Creek
$1.47 a cubic yard on Portland Bench
$2.70 a cubic yard on upper McCann Creek

with crude platinum valuation at $72.50 a troy ounce.

The total volume of inferred gravels included in the holdings of Red Mountain Mining Co. is 10,000,000 cubic yards. Only exploration can determine the extent of platinum concentrations of commercial value within this area.

Bench gravels produced and concentrated by inferred generally southward flowing streams are considered to be potentially more important than concentrations which may be found in present creek beds.

That portion of Salmon River valley lying north of Clara Creek has been invaded in varying degree by glacial action. This action probably destroyed pre-existing placer concentration north of this point.

Upper McCann Creek is an apparent exception. It flows north and is favorably situated to effect concentration along the northeast spur of Red Mountain.

The upper Clara Creek Basin appears to be favorably situated with respect to platinum concentration.

Water is available from the headwaters of Boulder, Dowry and Clara Creeks by ditching, impounding and pumping.

Dragline mining and washing costs should not exceed $0.70 a cubic yard.

Because of the activities of Goodnews Bay Mining Company, the District is readily accessible by road. Also, services of supply and distribution are established in the area. The policy of the Company is one of friendly cooperation with others who may be interested in the District.

The holdings of Red Mountain Mining Company are favorably situated for the occurrence and profitable production of platinum. The extent and scope of any proposed operation can only be determined by intensive exploration.

RECOMMENDATION:

Exploration should be undertaken in both Boulder Creek-Portland Bench and McCann Creek areas. This exploration should preferably take the form of dragline excavations to bedrock continuously from the neighborhood of Salmon River westward crosscutting all bench gravels on the eastern slope of Red Mountain.

RECOMMENDATION: (Cont'd)

Initially, this crosscutting should be undertaken at a point near the south end of Portland Bench and extended into the upper Boulder Creek area, with local interval north and south excavations to determine if pay streaks are localized within the recent channel or channels of Boulder Creek.

Should these excavations prove the existence of potentially valuable platinum metal concentrations, it is then recommended that a similar parallel crosscut be undertaken a few hundred feet to the north to determine the presence or absence of a continuous pay streak or streaks northerly along the benches.

The estimated cost of this work will not exceed two dollars a foot to an average depth of nine feet which is the indicated average depth of gravel.

Should a deeper channel be found, then drilling would be indicated as the preferred method of determining the presence or absence of platinum concentrations. The estimated cost of drilling is eight dollars a foot.

A similar program of excavation could be carried out in the upper McCann Creek and Minnie Gulch channels though the inferred depth of bench gravels in the upper basin may necessitate drilling rather than dragline crosscutting to bedrock.

If commercial concentrations are found in the upper basin of these creeks then deeper drilling would be indicated in lower McCann Creek.

The cost of the above program would be as follows:

Initial crosscut across Portland Bench and extending to upper Boulder Creek...

4,000 feet at $2.00	$8,000.00
Upper McCann and Minnie Gulch Creeks	
1,000 feet Churn Drill Holes at $8.00	8,000.00
	$16,000.00
Administrative and overhead expense @ 20%	3,200.00
	$19,200.00

The results of this exploration should determine the advisability of proceeding with exploration of intervening ground between the two areas tested.

Also the advisability of initiating an operation as a result of the above expenditures would be determined.

Respectfully submitted,

A. L. Howard

A. L. Howard

☒ Audited

☐ Certified

Name A. L. Howard

State Alaska

WORK ANALYSIS SHEET - DMEA PROJECT

Analysis as of April 17, 1956

Incl. Voucher for October, 1955

Commodity Uranium

☐ Actual Cost

☒ Agreed Unit Costs

Docket No. 2931

Idm-E No. 579

OPERATION	AUTHORIZED Units	AUTHORIZED Cost	COMPLETED Units	COMPLETED Cost	NET COST
Drifting & Crosscutting					
Raising					
Shafts					
Winzes					
Drilling (Specify) 6" churn	2500'	$30,000.00	1668'	$20,016.00	$20,016.00
Surface Excavation					
Underground Excavation					
Roads and Trails					
Operating Equipment Purchased					
Surface Rehabilitation & Repairs					
Underground Rehabilitation					
New Building, Improvements, etc.					
Other (Specify)					
Totals		$30,000		$20,016.00	$20,016.00

Prepared by F. M. Murphy

71-626

Project Summary Report

By: F. M. Murphy April 17, 1956

1. Docket No. DFEA-2931 (Platinum)
Contract No. Ldm-3579

Operator: Albert Leighton Rossard
1633 Ashworth Avenue
Seattle 11, Washington

Operator's Property Rights:

Lessee of 30 unpatented placer mining claims owned by Red Mountain Mining Company, Inc., M. L. Bissell, President, 318 National Arts Building, Seattle, Washington.

The claims are located along the Salmon River and its tributaries, Boulder, Dewey, and Clara Creeks, and also along McCann Creek, a tributary of Shells River, at approximately latitude 58° 58' N. and longitude 161° 41' W. The claims lie on the eastern slope of Red Mountain, Goodnews Bay Mining District, Alaska.

Work Authorized:

Phase I

1,000 feet churn drilling @ $12.00/ft.	$12,000.00

Phase II

Stage 1 - 750 feet of churn drilling @ $12.00/ft.	9,000.00
Stage 2 - 750 feet of churn drilling @ $12.00/ft.	9,000.00
Total Estimated Cost of Project	$30,000.00

Work Completed:

Phase I

1,000 feet churn drilling @ $12.00/ft.	$12,000.00

Phase II

668 feet churn drilling @ $12.00/ft.	8,016.00
Total Cost of Project	$20,016.00

Government Participation:

90% of Phase I costs	$10,800.00
75% of Phase II costs	6,012.00
Total Government Participation	$16,812.00

3. Audit Report of Review: February 28, 1956.

Total cost as billed by Contractor	$20,016.00
Exceptions: None	
Total Accepted Cost	$20,016.00
Government Participation	$16,812.00

4. Certification - None

5. Excerpts from Final Field Team report, dated April 4, 1956.

The Portland Bench area on the west bank of the Salmon River, near the confluence of Boulder and Dewey Creeks, was explored by churn drilling 69 holes, totaling 770 feet. Although some platinum-bearing gravel was found, no minable reserves were indicated.

After completing this drilling with negative results, the Operator requested that the 230 feet of drilling remaining in the contract be used to test a section on McCann Creek. The request was granted in Amendment No. 1. This drilling indicated moderate platinum values in the section drilled. Phase I drilling started in September, 1953, and completed in October, 1954.

Based on the results of Phase I drilling, an Amended Contract was approved to further explore McCann Creek. The drilling completing line C and new lines B and D was continued from September 14 to October 18, 1955, and consisted of drilling 14 holes totaling 668 feet.

In the drilling on McCann Creek only two holes, Nos. 4 and 5 on line C, encountered pay gravel. Line B above, and line D downstream from line C did not encounter minable gravel. Consequently the project was terminated without approval of Stage 2 of Phase II under the amended contract.

The drilling was done in thawed ground using 6" casing and a 7½" drive shoe. The drilling was sublet to the Goodman Bay Mining Company, who operate a dredge on Salmon River. The equipment was the same as the Company used and because one of the Company's trained crews operated the drill, it is believed the best possible results were obtained.

The Field Team and field examiners recommend that no certification of discovery be issued and that no further work on this project be authorized.

This Division concurs in the Field Team's recommendation.

/s/ F. M. Murphy

F. M. Murphy, Mining Engineer
Rare and Miscellaneous
Metals Division

FMMurphy/gla
4-17-56
cc to: Admr.'s Reading File
Mr. Johnson
Docket (original)
Code 700
Mr. Murphy

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

APR 23 1956

Mr. Albert Leighton Hammond
[illegible] Ashworth Avenue
Seattle 33, Washington

Re: Docket No. [illegible]-4932 (Platinum)
Contract No. [illegible]-2579 (Amended)
Red Mountain claims
Goodnews Bay Mining District, Alaska

Dear Mr. Hammond:

Reference is made to your exploration contract with the Government.

We sincerely regret that the work performed did not result in a certification of discovery or development under the provisions of the contract. In the absence of such certification, the Government retains no claim or lien against the property subject to the contract or any future production therefrom. We, therefore, are closing our books and records on this project. Your attention, however, is called to the provisions of the contract which require the operator to keep and preserve certain records for the period indicated.

Your interest in the DMEA exploration program and participation therein are fully appreciated.

Sincerely yours,

C. O. Mittendorf
Administrator

Copy to:
Red Mountain Mining Company, Inc.
M. L. Bingell, President
Christian Lofvestad, Treasurer
318 National Arts Building
Seattle, Washington

cc: Admr.'s Reading File
Docket
James E. Bell, Rm. 3628
T. N. Kiilsgaard, Rm. 5224
Contract Adm. & Audit Division
DMEA Field Team, Region I, Alaska District (2)
Code 700
Mr. Murphy
Mr. Johnson

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

APR 23 1956

Mr. M. L. Wenzell, President
Red Mountain Mining Company, Inc.
[illegible] National Arts Building
Seattle, Washington

Re: Docket No. DMA-[illegible] (Platinum)
Contract No. DMe-[illegible] (Amended)
Albert Leighton Renard
Red Mountain claims
Cachinna Bay Mining District, Alaska

Dear Mr. Wenzell:

With respect to the captioned contract and the Owner's Consent to Lien, dated July [illegible], 195[illegible], which was signed by officers of your Company, we are enclosing a copy of a letter to Mr. Albert Leighton Renard, for your information.

Sincerely yours,

C. O. Mitteadorf

Administrator

Fitzpatrick/gla
4-23-56

cc to: Admr.'s Reading File
Mr. Johnson
Docket
James E. Bell, Rm. 3[illegible]
T. H. Kilingsmed, Rm. 52[illegible]
Contract Adm. & Audit Division
DMEA Field Team, Region X, Alaska District (2)
Code 700
Mr. Murphy

4-17-56

UNITED STATES
DEPARTMENT OF THE INTERIOR
Bureau of Mines
Washington 25, D. C.

RECEIVED
APR 17 1956

April 16, 1956

Memorandum

To: E. Wm. Ellis, Director, Rare and Miscellaneous Metals Division, DMEA

Through: H. D. Keiser, Chief, Branch of Rare and Precious Metals

From: Commodity-Industry Analyst
Branch of Rare and Precious Metals

Subject: Final Field Team Report Docket No. DMEA-2931 (platinum)
A. L. Howard
Contract No. Idm-2579

I concur with the findings of the Field Team that no further work should be done on the subject project, and that no certification of discovery should be issued.

J. E. BELL

James E. Bell

JEBell:km

Copy to: J. E. Bell
Branch of Rare & Precious Metals
Division of Minerals
R. W. Geehan
DMEA (3)
Files

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DEPARTMENT OF THE INTERIOR
Bureau of Mines
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4-16-56

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEfense Minerals Exploration Administration

RECEIVED
APR 9 - 1956

P. O. Box 2688
Juneau, Alaska

April 4, 1956

Memorandum

To: Operating Committee, Defense Minerals Exploration Admin., Department of the Interior, Washington 25, D.C.

From: Executive Officer, Alaska District, Region I.

Subject: Final Field Team report.
Docket No. DMEA-2931 (platinum)
A. L. Howard
Contract No. Idm-5579

Enclosed is the original, with three copies, of a Field Team report which was prepared by R. L. Thorne, mining engineer of the local Bureau of Mines staff. The report has been reviewed by Mr. Velikanje and by me; we agree that the data have been presented adequately and that the conclusions are sound.

We do not recommend that a certificate of discovery be issued.

S. H. Lorain

Enclosures-1

cc: Velikanje
Wilcox

Reviewed by
DMEA OPERATING COMMITTEE
4-13-56
(date)

Final Field
Team Report

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APR 9 - 1956

FINAL REPORT

DOCKET NO. DMEA-2931 (Platinum)

Contract No. Idm-E579

OPERATOR: A. L. HOWARD
16351 Ashworth Avenue
Seattle 33, Washington

Reviewed by
DMEA OPERATING COMMITTEE
4-13-56
(date)

FINAL REPORT
Docket No. BMEA-2931 (platinum)
Contract No. Idm-E579

RECEIVED
APR 0 - 1956

Operator: A. L. Howard
16351 Ashworth Avenue
Seattle 33, Washington

Red Mountain Platinum Placer Claims

The Red Mountain claims are situated on the east and north slopes of Red Mountain from 4 to 5 miles south of Goodnews Bay at latitude 58°58' N. and longitude 161°41' W. Goodnews Bay is a relatively small indentation in the extreme southeastern coast of Kuskokwim Bay which extends south and west from the mouth of the Kuskokwim River. The location is shown on figure 1.

The Portland Bench claim, on which the exploration started, is a right limit bench claim on Salmon River; it is west of and adjacent to No. 6 above (Discovery at the mouth of Platinum Creek) as shown on plate 8 of the Geological Survey Bulletin 918. The claims, shown on figure 2, are identified by the numbers on the property list that follows: The key claims in the Boulder Creek and in the McCann Creek areas are shown with more detial in figures 3 and 4 respectively.

Claim List

Identification No.	Name
1	Portland Bench
2	Three Star Bench
3	Discovery (Boulder Creek)
4	First Tier - 7 above Bench
5	Hardluck Bench
6	Brooklyn Bench
7	Osmiridium Bench
8	Oakland Bench
9	M & C Fraction
10	Sugar Bench
11	Honey Bench
12	Surprise Bench
13	New York Bench
14	Boston Bench

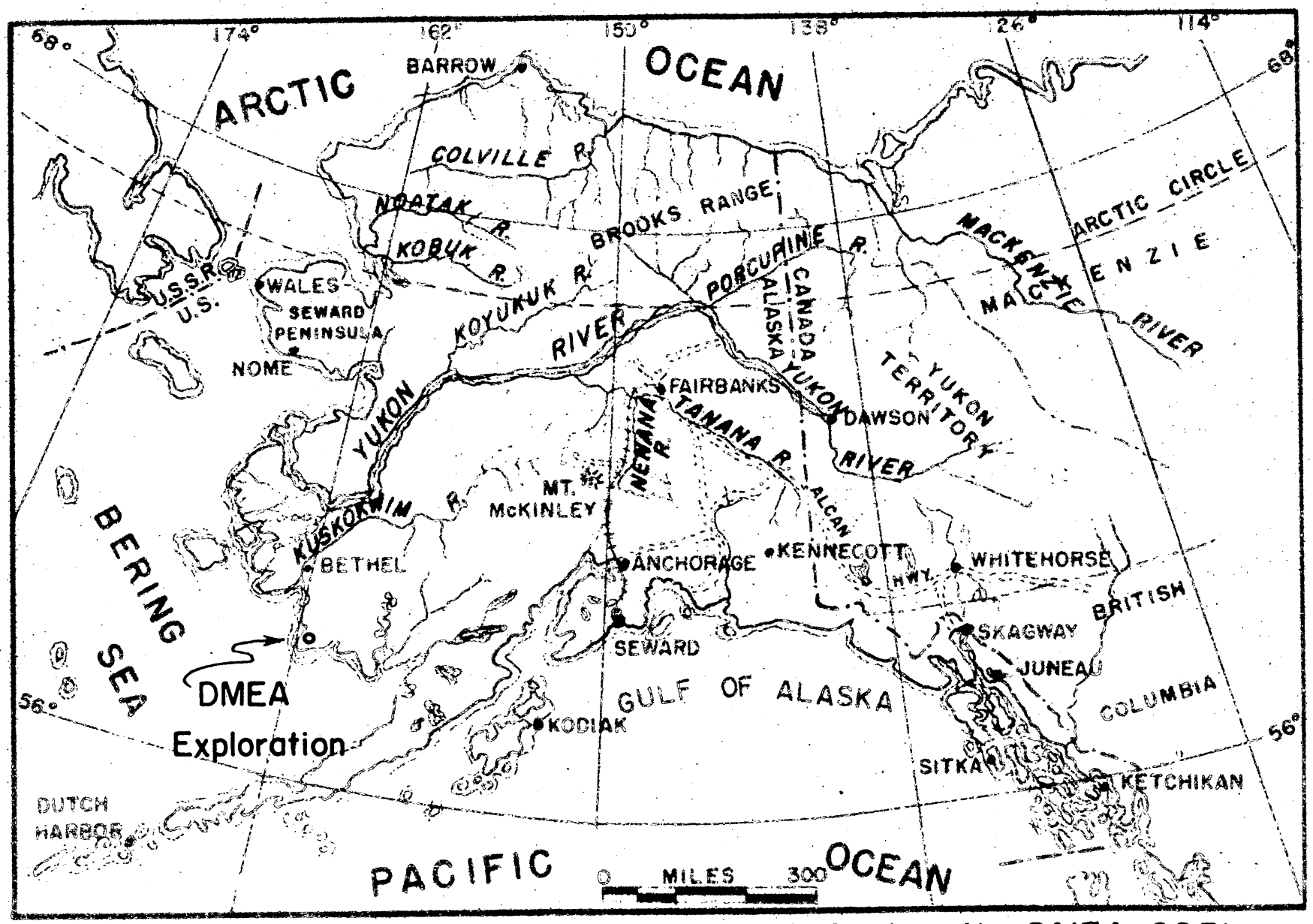

Figure I.– Location Map, Red Mt. Mng. Co., Docket No. DMEA 2931

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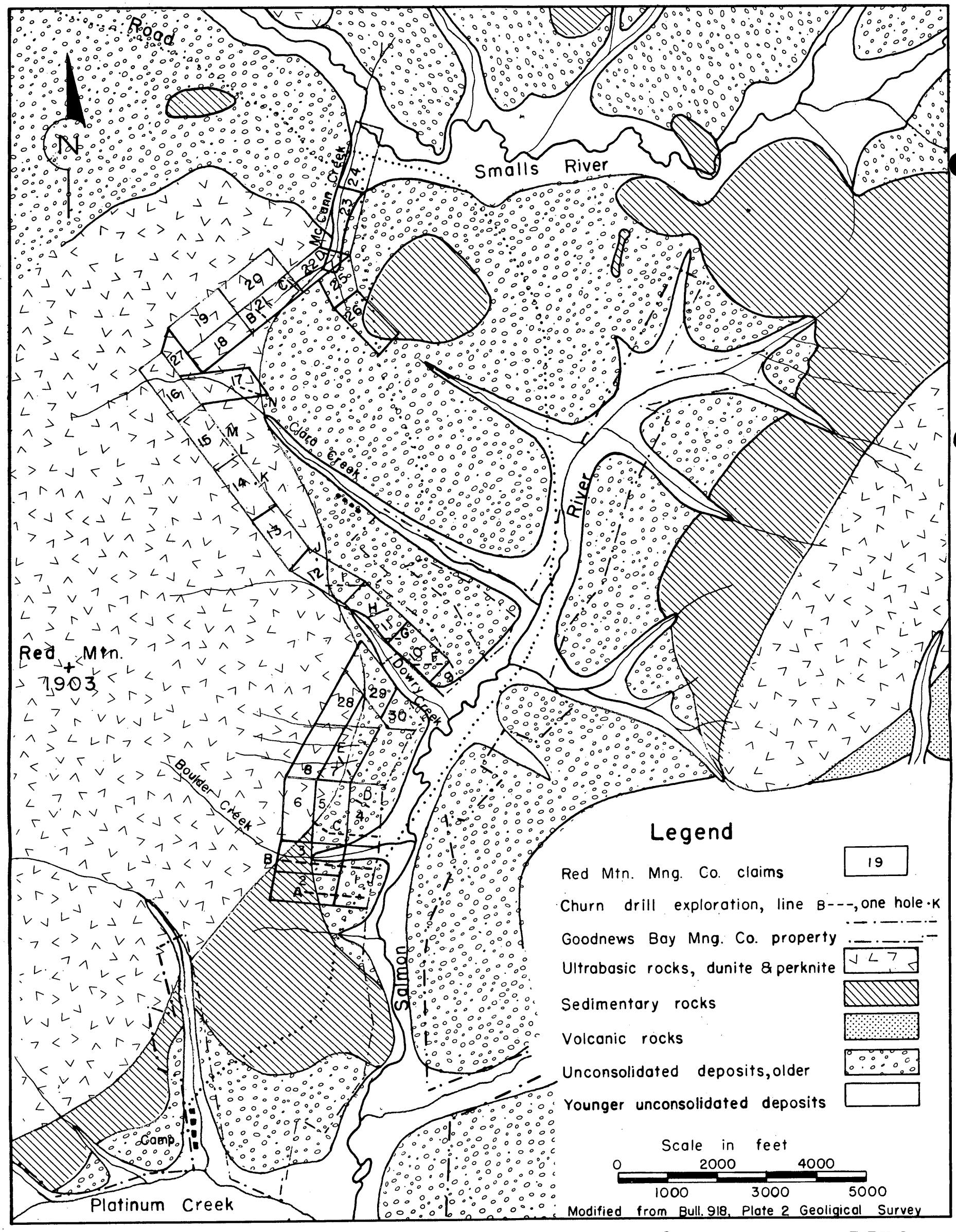

Figure 2.— Red Mountain Mining Co. Exploration, Contract Idm - E579

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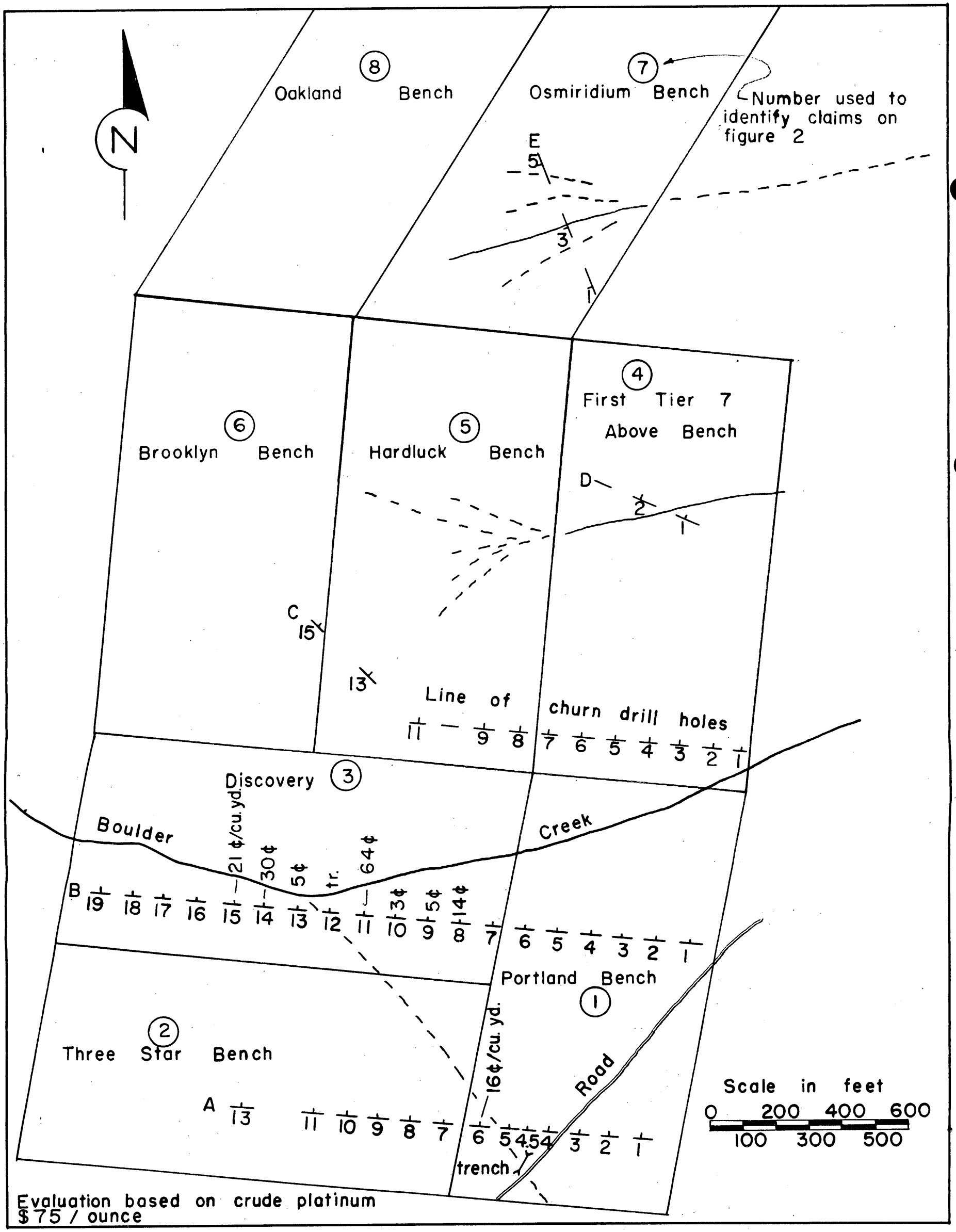

Figure 3.— Portland Bench Exploration, Salmon River

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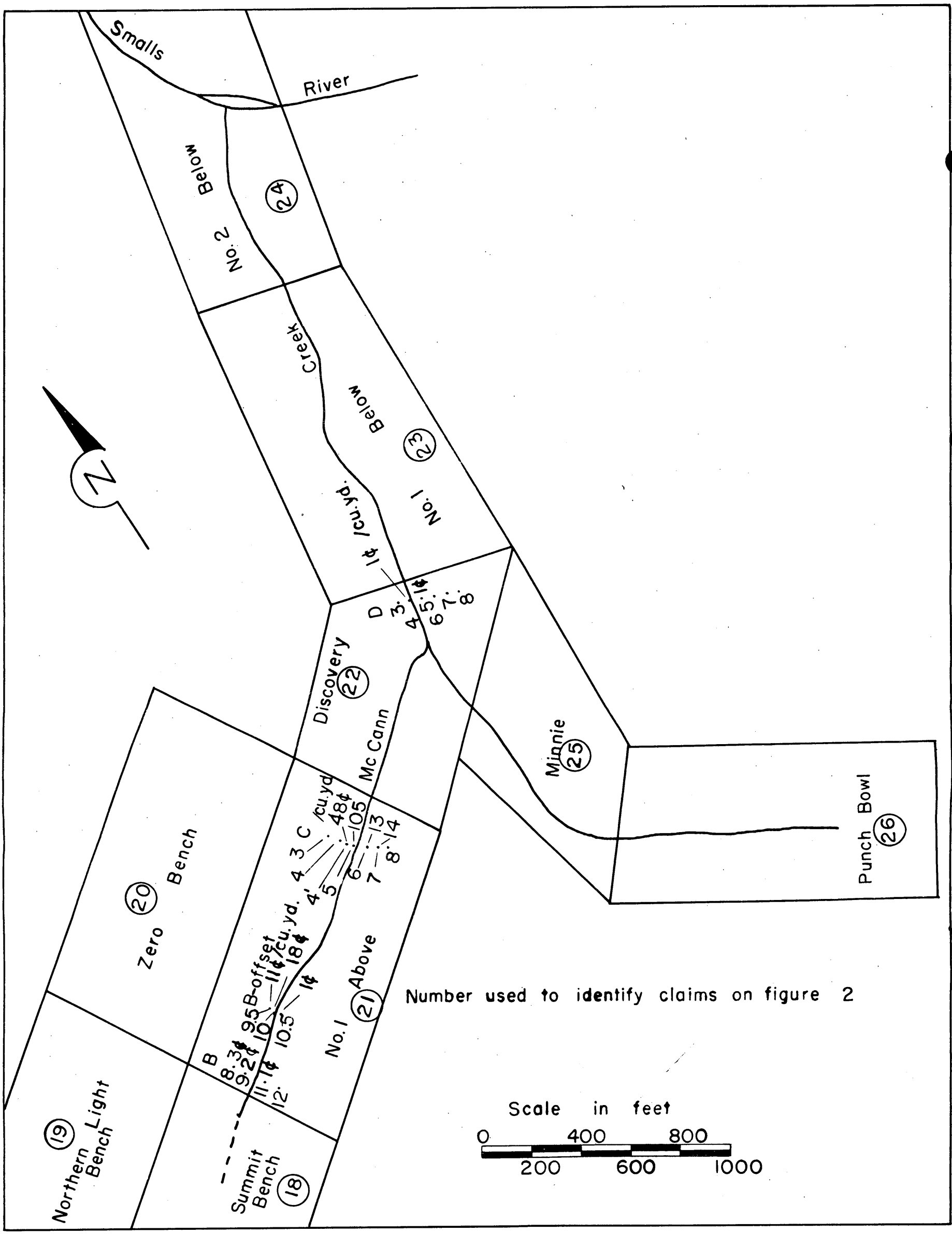

Figure 4.— Mc Cann Creek Exploration

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APR 9 - 1956

Identification No.	Name
15	Chicago Bench
16	Bessie Bench
17	Basin Bench
18	Summit Bench
19	Northern Light Bench
20	Zero Bench
21	No. 1 Above (McCann Creek)
22	Discovery (McCann Creek)
23	No. 1 Below (McCann Creek)
24	No. 2 Below (McCann Creek)
25	Minnie Gulch
26	Punch Bowl
27	Moonlight Bench
28	Frisco Bench
29	Jenny Bench
30	Benny Bench

Summary

The right limit bench area of Salmon River, in the vicinity of Boulder and Dowry Creeks, was explored to determine whether platinum-bearing gravels existed in a former river channel; in addition, some spot drilling was done in the area between Clara and Dowry Creeks. Although some platinum-bearing gravel was found, no indication of the existence of minable reserves was found in either area. The exploration was performed by 770 linear feet of churn drilling in 69 holes at a total cost of $9,240.00.

By contract amendment, the remaining 230 feet of the 1,000 feet of churn drilling originally authorized was drilled to explore the channel of McCann Creek where some preliminary test pitting by the Operator had disclosed the existence of platinum-bearing gravels. This work partly completed the drilling of one section across the channel near the original discovery; it indicated the existence of platinum-bearing gravels at a greater depth than had been expected. For this reason an additional 1,500 feet of drilling was set up in two 750-feet stages. Authority for the drilling of the 750 feet in stage 1 is a part of the amended contract which states,

"The operator shall complete Stage 1 and shall perform so much of the second stage as is approved in advance by the Government." During the next season the first section was completed and two additional sections, one section above and one section below, were drilled but no appreciable amount of platinum was found; consequently the project was terminated without approval of the additional 750-feet setup in Stage 2. The McCann Creek channel was explored by 908 feet of churn drilling 20 holes at a cost of $10,896.

The Government participated the amount of 90 percent of the cost of the first 1,000 feet of drilling and in the amount of 75 percent of the last 668 feet of drilling; payment for 10 feet of the drilling on McCann Creek was not claimed. The total cost of the Government participation was $16,812.

Conclusions and Recommendations

The work failed to prove the existence of, or to indicate the probable existence of commercial or strategic reserves of platinum in the area explored. Although it is possible that Section "B" was not extended far enough to reach the deepest part of the channel on lower McCann Creek, the failure to find rich gravels in the narrow upper channel, combined with the rapidly increasing depth of gravels downstream, forces the conclusion that the ratio of gravel depth to platinum content would be too great to permit successful exploitation.

It is recommended that no certification of discovery be issued and that no further work on this project be authorized.

Description of the Work Completed

Platinum-bearing placer gravels on the left limit of the Salmon River in the vicinity of Boulder and Dowry Creeks were explored by 770 feet of

churn drilling in 69 holes. This initial drilling on contract Idm-E579 was done in the month of September 1953 under Docket No. DMEA-2931 which bears the date August 10, 1953. Drilling was on a unit basis at $12.00 per foot of churn drill hole; the Government's participation was 90 percent of $9,240 or $8,316.

The actual drilling was sublet to the Goodnews Bay Mining Company whose employees and equipment performed the work. Because the equipment was the same as used by the Company in its exploration and because one of the Company's trained drill crews operated the equipment, it is believed that the best possible results were obtained. Table 1 contains the details of the results of this drilling. The work was in thawed ground where 6-inch casing with a 7½-inch diameter drive shoe was used. The value of the ground is computed by calculating the volume of gravel plus one foot of bedrock intercepted by the 7½-inch shoe size; from this basis the cubic yard evaluation was determined by proportional increase of the crude platinum recovery to the equivalent of one cubic yard and by giving the crude platinum family metals recovered a value of $75 per ounce.

$$\frac{27(\text{Pt oz.})\ 75}{\text{Cu.ft. Mng. Sec.}} =$$ Value in dollars per cubic yard (multiplied by 100 and shown as cents per cubic yard on figures 3 and 4).

After the work on the Portland Bench area had been proved to be unproductive, the Operator requested that the 230 feet of drilling remaining in the contract be used to test a section below an open pit discovery on McCann Creek. The request was granted in Amendment No. 1 to contract No. Idm-E579. The 230 feet of churn drilling permitted by the amendment was completed in October 1954; the Government's 90 percent participation in the $2,760 cost

was $2,484, but 10 percent or $1,080 was held back pending final audit and final reports.

The drilling completed on McCann Creek during 1954 consisted of five holes in line C and one lost when the casing moved out of line on a boulder. The results obtained on a partially completed section with holes 4, 5, and 6 indicated a mining section of nearly 40 feet and moderate values. The Operator submitted a new application based on this work and an "Amended Exploration Project Contract, Albert Leighton Howard, Docket No. DMEA-2931" was approved on May 1, 1955. The new contract included the work performed under the prior contract as Phase I and set up a two-stage program under Phase II. The second phase of the contract called for 750 feet of drilling in each of the two stages but the second stage was not to start without prior approval of the Government. The Government's participation was reduced to 75 percent on the second phase of the amended contract.

The McCann Creek exploration was continued from September 14 to October 18, 1955 with 668 feet drilled during the period. The results of all drilling on McCann Creek are shown in table 2 and on figure 4.

The mining section is arbitrarily taken as the gravel encountered in the drilling and one foot of bedrock. This mining section would not be realistic unless separate mining costs were added for removal of any heavy cover of silt-overburden or if the bedrock section were not increased when drilling indicates hard, blocky bedrock. The general location of this drilling is shown on figure 2 and the details are shown on figure 3.

Maximum values of 64 cents per cubic yard encountered practically in the present channel of Boulder Creek and 16 cents per cubic yard from one hole in a probable former course of the creek does not indicate a reserve worth calculating nor does it constitute a valid discovery.

Table 1 showing the results of the drilling follows:

TABLE 1. - Summary of left limit bench, Salmon River, churn drilling

Line No.	Hole No.	Total depth ft.	Over-burden ft.	Gravel ft.	Bedrock Drilled	M.S.	M.S. ft.	Crude platinum Mg.	Oz.	Vol. M.S. Cuft.	Oz.Pt/ CuYd M.S.	Value/ CuYd @ $75/oz.CrPt
A	1	9.5	2	6.75	0.75	1	8	-				
A	2	8	2	5	1	1	6	-				
A	3	9	2	3	4	1	4	-				
A	4	22	2	16	4	1	17	Tr	-			
A	4.5	17	2	5	10	1	6	Tr	-			
A	5	15	2	7	5	1	8	Tr	-			
A	6	18	2	12	4	1	13	10	0.00032	3.988	0.0022	0.165
A	7	11	2	5	4	1	6	Tr	-			
A	8	8	2	5	1	1	6	Tr	-			
A	9	10	2	6	2	1	7	Tr	-			
A	10	6	2	3	1	1	4	-	-			
A	11	6	1	3	2	1	4	-				
A	13	5	1	2	2	1	3	-				
B	1	10	3	6	1	1	7	Tr	-			
B	2	8	2	5	1	1	6	Tr	-			
B	3	9	0	8	1	1	9	Tr	-			
B	4	10	0	9	1	1	10	0.5	.00002	3.068	.0002	.015
B	5	9	1	7	1	1	8	Tr	-			
B	6	11	3	6	2	1	7	Tr	-			
B	7	9.5	1	7	1.5	1	8.5	Tr	-			
B	8	10	1	8	1	1	9	6	.00019	2.761	.0019	.143
B	9	9	1	7	1	1	8	2	.00006	2.454	.0007	.053
B	10	8	1	6	1	1	7	1	.00003	2.148	.0004	.030
B	11	9.5	3	5	1.5	1	6	18	.00058	1.841	.0085	.638
B	12	8	0	5	3	1	6	Tr	-			
B	13	9	0	7	2	1	8	2	.00006	2.454	.0007	.053

Line No.	Hole No.	Total depth ft.	Over-burden ft.	Gravel ft.	Bedrock Drilled	Bedrock M.S.	M.S. ft.	Crude platinum Mg	Crude platinum Oz.	Vol. M.S. Cu.Ft.	Oz.Pt/ CuYd MS.	Value/ CuYd @ $75/Oz. Cr.Pt
B	14	8	0	6	2	1	7	10	0.00032	2.148	0.0040	0.300
B	15	9.5	0	8	1.5	1	9	9	.00029	2.761	.0028	.210
B	16	10	1	6	3	1	7	Tr	-			
B	17	8	0	7	1	1	8	Tr	-			
B	18	11	1	8	2	1	9	Tr	-			
B	19	12	1	8	3	1	9	Tr	-			
C	1	51	2	48	1	1	49	7	.00023	15.033	.0004	.030
C	2	25	3	19	3	1	20	Tr	-			
C	3	19	2	15	2	1	16	2	.00006	4.909	.0003	.023
C	4	17	2	13	2	1	14	Tr	-			
C	5	14	2	10	2	1	11	Tr	-			
C	6	12	3	7	2	1	8	Tr	-			
C	7	15	3	9	3	1	10	Tr	-			
C	8	11	3	6	2	1	7	Tr	-			
C	9	11	2	7	2	1	8	Tr	-			
C	11	11	2	6	3	1	7	Nil				
C	13	8	3	3	2	1	4	Nil				
C	15	10	2	7	1	1	8	Nil				
D	1	22	2	19	1	1	20	Tr	-			
D	2	14	2	11	1	1	12	Tr	-			
E	1	9	1	7	1	1	8	Tr	-			
E	3	6	0	5	1	1	6	Tr	-			
E	5	5	0	4	1	1	5	Nil				
F	1	17	0	15	2	1	16	Nil				
F	3	9	0	8	1	1	9	Tr	-			
F	5	8	0	5	3	1	6	Nil				
F	7	6	0	5	1	1	6	Nil				
G	9	5	0	3	2	1	4	Nil				
G	11	5	0	3	2	1	4	Nil				

Line No.	Hole No.	Total depth ft.	Over-burden Ft.	Gravel ft.	Bedrock Drilled	Bedrock M.S.	M.S. ft.	Crude platinum Mg	Crude platinum Oz.	Wol. M.S. Cu.Ft.	Oz/Pt/ CuYd M.S.	Value/ CuYd@$75/ Oz. Cr.Pt
H	7	6	0	4	2	1	5	Nil				
H	11	6	0	4	2	1	5	Nil				
I	1	6	0	5	1	1	6	Nil				
I	3	8	0	5	3	1	6	Nil				
I	5	7	2	3	2	1	4	Nil				
I	7	7	0	4	3	1	5	Nil				
I	9	6	1	4	1	1	5	Nil				
J		9	2	5	2	1	6	Nil				
K		5	0	4	1	1	5	Nil				
L		36	3	33	3	1	34	Nil				
M		15	2	10	3	1	11	Nil				
N	1	6	2	3	1	1	4	Nil				
N	3	9	2	6	1	1	7	0.7	0.00002	2.148	0.0003	0.022
N	5	11	2	8	1	1	9	Tr				

TABLE 2. - Summary of McCann Creek churn drilling

Line No.	Hole No.	Total depth ft.	O.B. ft.	Gravel ft.	Bedrock Drld	Bedrock M.S.	M.S. ft.	Crude platinum Mg.	Crude platinum Oz.	Vol. M.S. Cu.ft.	Oz. Pt/ CuYd M.S.	Value/ CuYd@$75/ Oz.Cr. Pt
C/1	3	46	0	45	1	1	46	Tr				
C/1	4	23	1	22	-	-						
C/1	4'	41	1	39	1	1	40	91	0.00293	12.272	0.00645	0.4838
C/1	5	39	1	36	2	1	37	183	.00588	11.352	.01399	1.0493
C/1	6	43	4	37	2	1	38	24	.00077	11.658	.00178	.1335
C/1	7	48	4	43	1	1	44	4	.00013	13.499	.00011	.0083
C/1	8	46	4	41	1	1	42	Tr				
B	8	45	2	41	2	1	42	6	.00019	12.886	.00040	.0300
B	9	47	2	43	2	1	44	5	.00016	13.499	.00032	.0240
B	9½	35	1	33	1	1	34	18	.00058	10.431	.00150	.1125
B	10	36	0	35	1	1	35	29	.00093	10.738	.00234	.1755
B	10½	36	0	35	1	1	36	2	.00006	11.045	.00015	.0113
B	11	42	2	39	1	1	40	2	.00006	12.272	.00013	.0098
B	12	27	3	23	1	1	24	Tr				
D	3	27	1	17	9	1	18	Tr				
D	4	31	2	27	2	1	28	2	.00006	8.590	.00019	.0143
D	5	53	2	49	2	1	50	2	.00006	15.340	.00011	.0083
D	6	75	4	69	2	1	70	Tr				
D	7	80	4	74	2	1	75	Tr				
D	8	88	5	82	1	1	83	Tr				

666

Completion of section C limited the paystreak and did not add to it, (table 2). The drilling of line B indicated the presence of platinum but the quantity was not encouraging. On line D, deep ground and very limited values were encountered. The deep ground would require a heavy concentration of platinum on bedrock to make "pay" and an analysis of present results does not indicate its existence.

The cost of the work in stage 1 of Phase II was $8,016 in which the Government's participation at 75 percent is $6,012. Drilling was stopped by seasonal conditions and depth of ground at 668 feet in stage 1 of Phase II, 82 feet short of the 750-foot maximum.

Geology

The geology of this area is covered in considerable detail by J. B. Mertie in Geological Survey Bulletins 910-B and 918. The general geology shown on figure 2 was transposed from plate 2, Bulletin 918.

The source of the placer platinum sought by this exploration is believed to be the dunite which forms the bulk of Red Mountain where Boulder, Dewry, Clara, and McQann Creeks have their source. All of these creeks have some platinum in their gravels; Clara Creek has been mined extensively.

The platinum in some of the larger nuggets recovered is intergrown with chromite. Chromite constitutes about 0.4 percent of the dunite of Red Mountain. Analyses of pebbles of chromite from the placer gravels show them to contain about 0.05 ounce of platinum to the ton.

Crude platinum in this report refers to the platinum-group metals probably in the following composition as found on Clara Creek.

Platinum	73.3 percent
Iridium	5.9 percent
Osmium	.7 percent
Ruthenium	.1 percent
Rhodium	.4 percent
Palladium and	.6 percent
Gold	1.0 percent
Impurities	18.0 percent

Bureau of Mines analyses indicate the metallics recovered from holes 4, 5, and 6 on line C, McCann Creek to be:

	Milligrams	Percent
Platinum-Group Metals	273.28	90.4
Gold	4.01	1.33
Silver	24.89	8.24

In evaluating drill holes the crude platinum, including gold and other impurities, was assigned a value of $75.00 a troy ounce.

Efficiency of Operations

The field operation was well done, reports are adequate and were submitted promptly.

The operation was handled in a very satisfactory manner.

Expenditures

Total approved: $21,000.00.

The initial contract, Idm-E579 approved 1,000 feet of churn drilling at the unit price of $12.00 per foot or $12,000. Amendment Number 1 changed the location of 230 feet of drilling but did not change the amount of the contract. In May 1955, the contract was amended to provide a Phase II in two stages of 750 feet of churn drilling each. Stage 2 was not to start without prior approval of the Government, hence only stage 1 containing 750 feet of drilling at $12.00 a foot or $9,000 can be shown as approved.

Total cost of project: $20,016.00.

This cost includes the $12,000 expended in Phase I of the contract and $8,016.00 expended in drilling 668 feet at $12.00 per foot in stage 1 of Phase II. Ten feet were drilled in excess of the contract in Phase I but no claim was made for reimbursement.

Government's share of the cost: $16,812.00

Phase I	90% of $12,000 -	$10,800.00
Phase II	75% of $ 8,016 -	6,012.00

Government's share unexpended: $ 738.00 in Phase II, stage 1 (representing 82 ft. not used)

There has been no production from the property.

Stage 2 of Phase II was not authorized.

Equipment

All work was on a unit basis and the Government has no share in any equipment used.

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

FEB 28 1956

Mr. S. N. Lerwin
Executive Officer, Alaska District
DMEA Field Team, Region I
P. O. Box 560
Juneau, Alaska

Re: Docket No. DMEA-2931
Albert Leighton Hazard
Contract No. Ida-1579

Dear Mr. Lerwin:

Enclosed are the original and two copies of a Report of Review, in lieu of a final audit of the referenced project, prepared in accordance with the request contained in your letter of February 24, 1956, addressed to the Operating Committee.

If you concur with the facts stated therein and, also, that the Operator has completed satisfactorily 1,668 feet of core drilling conforming with the specifications set forth in the contract, the original and one copy of the Report of Review should be forwarded to the Finance Officer and one copy should be retained in your files. If, for any reason, the Report of Review does not have your concurrence please return all copies to this Division.

Sincerely yours,

(Signed) J. L. Chambers

Joy L. Chambers, Chief
Contract Administration
and Audit Division

Enclosures

EDTalbert/wb
February 28, 1956

Copy to: Docket
Admr. Reading File
Mr. Chambers
Mr. Wilcox
Mr. Ellis

3-1-56 dfm

DEFENSE MINERALS EXPLORATION ADMINISTRATION
CONTRACT ADMINISTRATION AND AUDIT DIVISION

REPORT OF REVIEW

I have reviewed the Monthly Reports of:

Albert Leighton Howard
14351 Ashworth Avenue
Seattle 33, Washington

pertaining to Exploration Project Contract No. Idm-2579, Docket No. DMEA-2931, including amendment No. 1 and an Amended Contract dated May 1, 1955, for the period of August 26, 1953, to October 18, 1955, inclusive, covering a project for the exploration of platinum group metals on property, on the eastern slopes of Red Mountain located in Goodnews Bay Mining District of Southwestern Alaska.

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 drill logs, and a determination of the reasonableness and propriety of the costs.

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

all of the costs incurred were under a contract provision for payment by the Government on the basis of fixed unit costs of diamond drilling work actually performed.

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

Total cost as billed by Contractor		$20,016.00
Exceptions:		
By DMEA Finance Officer	$ -0-	
Herewith	-0-	-0-
Total Accepted Cost		$20,016.00

The contract calls for a 90 percent participation in the first $12,000.00 and 75 percent participation in the balance of exploration expenses by the United States Government. Therefore, payment to the contractor by the Government in the amount of Sixteen thousand eight hundred twelve and no/100 Dollars

$16,812.00

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

E. D. Talbert

February 26, 1956 E. D. Talbert, Auditor

Audit Report
of Review

2-27-56.

UNITED STATES
DEPARTMENT OF THE INTERIOR
Defense Minerals Exploration Administration

RECEIVED
FEB 27 1956

P. O. Box 560
Juneau, Alaska

February 24, 1956

Memorandum

To: Operating Committee, Defense Minerals Exploration Admin., Department of the Interior, Washington 25, D.C.

From: Executive Officer, Alaska District, Region I.

Subject: Final audit and payment,
Docket No. DMEA-2931 (platinum)
A. L. Howard,
Contract No. Idm-1579

Enclosed are two copies of Mr. Howard's last progress report, with maps and drill logs covering last season's work. Early this month we sent to Mr. Talbert copies of Mr. Howard's last MF-104s after payments less ten percent withholding had been made.

Today I have received Mr. Howard's final report and I am enclosing 4 copies. I request a final audit, or a final review in lieu of audit, so that we can make the final payment and close out the project. Inasmuch as this has been a "unit cost" project throughout, no disposal of equipment or supplies is involved.

Until we received Mr. Howard's report today we did not have enough data for a final Field Team report. The Field Team report will be prepared as quickly as other priorities permit but I cannot, at this moment, state a definite time. The pressure on us for Lost River reports prevents much other work on DMEA. We will recommend against any additional work on the subject project. We do not consider that a certifiable discovery has been made.

S. H. Lorain

Enclosure-2

cc: Velikanje
Wilcox

16351 Ashworth Avenue
Seattle 33, Wash.
November 1, 1955

Mr. S. M. Lorain, Executive Officer
Alaska District, Region 1
P. O. Box 560
Juneau, Alaska

Subject: Platinum Metals
Exploration
McCann Creek
DMEA 2931 Idm-8579
Amended

Dear Mr. Lorain:

In compliance with the provisions of the amended contract, 668 feet of churn drill holes were driven on Lines C (1), B and D respectively. Results are detailed on the accompanying map.

Drilling and accessory equipment were moved to the site on September 14, drilling commenced on September 15, was completed on October 16 and equipment moved out on the 17th of October.

One Hole 3 Line C (1) was driven to a depth of 46 feet. No values were recovered.

On Line B four holes were driven - 8, 9, 11 and 12, to depths of 45, 47, 42 and 27 feet respectively. Negligible values of 6, 5, 2 and trace milligrams were recovered.

It was necessary to take an offset 284 feet downstream (NE) to obtain operating room on the creek bed. Three holes - 9½, 10 and 10½ - were driven on 25 feet spacings. Mgs. 18, 29 and 2 were recovered, yielding cubic yard values 13¢, 19¢ and 1.5¢ respectively from the surface to bedrock. There is no marked concentration on bedrock.

On Line D increasing depth of ground was encountered as drilling progressed eastward at 50 feet interval spacing from the initial Hole 3 to Hole 8 inclusive. The depths to bedrock were consecutively 18, 30, 51, 73, 79 and 87 feet. The bedrock in all holes is igneous and essentially dunitic in character. No values were encountered which could be weighed except 2 mg. in each of Holes 4 and 5, which are in the immediate vicinity of the combined Minnie and McCann creeks.

There is much evidence of glacial activity disclosed by drilling across the valley from west to east. The evidence is in the form of clay, sand and gravel beds. Some silt also occurs. Very fine colors of platinum occur throughout the sand and gravel. Black sand is also generally present but not in marked concentrations.

The lowest elevation of the valley floor lies an unknown distance ahead on Line D. The gravel immediately above bedrock on Hole 8 appears to be generally more compact and 'tight' than previously encountered. Small brown clay balls are becoming more abundant.

In order to definitely determine the presence or absence of a continuation of the paystreak which occurs on bedrock Line C (1) it would appear to be advisable to continue drilling eastward on Line D. It does not appear that drilling on Line A at the head of McCann creek drainage is warranted in view of the results obtained along Line B.

Operator's
Final report

Final Report

EXPLORATION PROJECT CONTRACT

DMEA 2931 and DMEA 2931 AMENDED - Idm-E579

A Placer Platinum Group Metals Exploration Project was carried out during a portion of each of the 1953, 1954 and 1955 operating seasons on the property of Red Mountain Mining Company, situated along the eastern and northeastern slopes of Red Mountain, Goodnews Bay Mining District, Southwestern Alaska.

THE PROJECT

The Project developed into two phases:

Phase I	in the Portland Bench Area	1953	1,000 feet
		Drilled	770 feet
		Balance	230 feet
Phase I	amended - transferred to McCann Creek	1954	
		Drilled	230 feet
Phase I		Balance	000
Phase II	in McCann Creek Area	1955	1,500 feet

Stage I	750 feet	
Drilled	668 feet	
Balance	82	
Stage II	750 feet	
Drilled	000 feet	
Balance	750 feet	
Total Drilled		668 feet

Balance of Contract unused . . . . . 832 feet

Contract authorization expired November 1, 1955.

PORTLAND BENCH AREA

A concentration of crude platinum was discovered along Line B for a distance of 700 feet at an average distance 110 feet south from and approximately parallel to the central section of Boulder Creek in the Portland Bench Area.

The average weighted values recovered from gravel lying on bedrock and with an average thickness of 6.9 feet, is 20¢ a cubic yard, with crude placer platinum return of $85 a troy ounce.

PORTLAND BENCH AREA (Contd)

Volume and Value of Gravel

The inferred volume of gravel in the Boulder Creek drainage area is 65,000 cubic yards. The inferred value a cubic yard is 34¢ obtained by averaging in a width of 15 feet of gravel averaging by panning $1.45 a cubic yard in the immediate creek drainage. The indicated width of platinum bearing ground is 130 feet and the overall length is an inferred 1950 feet. There is insufficient information to calculate proved volume and values.

No additional concentration is indicated in the area with the exception of 10 mg. recovered from Hole No. 6 Line A on Portland Bench Claim 150 feet west from open cuts contiguous to the west side of the road leading to Goodnews Bay Mining Co. Camp. The value is 19¢ a cubic yard.

Hole No. 1, Line C returned 7 mg. at 48 to 50 feet depth on bedrock in what is apparently a recently abandoned area of the present Salmon River drainage channel. The value is 3¢ a cubic yard, from surface to bedrock.

No evidence of a deep channel paralleling Salmon river valley on the west side was found.

McCANN CREEK

A paystreak on Line 1, later designated C, was discovered on bedrock in 1954. The platinum concentration has an average thickness of 4.33 feet, and a width of 120 feet, of which 20 feet is inferred. The depth to bedrock averages 40 feet. The average value is $5.24 a cubic yard overlain by 36 feet of gravel wash.

Surface pits and open cuts 300 feet upstream from Line 1 (c) yield by panning an adjusted value of $1.70 a cubic yard from the surface to a depth of 8 feet. This immediate area has produced about $6.50 a cubic yard from a limited shoveling in operation. This surface concentration apparently does not persist downstream to Line 1 (c).

On Line B offset 400 feet further upstream and 700 feet above Line 1 (c), average values of 14¢ a cubic yard between the surface and bedrock at a depth of 35 feet were recovered.

Deep ground was encountered on Line D, 1000 feet downstream from Line 1 (C). The bedrock profile shows decreasing elevations progressing eastward at 50 foot intervals drilling from a contiguous outcropping spur of Red Mountain. Hole 8, sixth in a series commencing with Hole 3, reached bedrock at a depth of 87 feet. No weighable values were recovered though many very fine colors occur.

Ten feet of compact gravel wash lies on bedrock in this hole, which is also noteworthy for an increase in the amount of low plasticity brown clayey material.

The lowest elevation of the valley floor has not been reached. The bedrock is dunite.

McCANN CREEK (Cont'd)

Volume and Value of Gravel

The inferred volume of gravel on McCann Creek extending upstream from Line 1 (C) 450 feet and 500 feet downstream, a total length of 950 feet is 195,000 cubic yards, with an inferred average value of 44¢ a cubic yard.

The volume and value figures include a 1 to 1 slope calculation of assumed barren gravel which accounts for about 25% of the total given above.

It is also assumed that the surface paystreak 300 feet upstream extends to a depth of 8 feet with an additional 30 feet to bedrock inferred as averaging 14¢ a cubic yard.

There is no surface configuration to indicate that the bedrock concentration will not extend upstream for a distance of at least 200 feet and downstream for 500 feet or more.

The surface concentration has a measured length of 200 feet and an indicated width of 60 feet, containing 3,500 cubic yards. The average value as determined by panning is $1.70 a cubic yard, 0 to 8 ft. depth.

The section on Line B offset, width 50 feet, contains 14¢ a cubic yard, surface bedrock 0 to 35.

The inferred section at the open cuts 400 feet downstream contains 36¢ a cubic yard, 0 to 38 ft.

The section on Line 1 (C) contains 43¢ a cubic yard, surface to bedrock, 0 to 40 ft.

Contact Zone

Upper McCann Creek apparently flows directly above a contact zone between dunite and metamorphic rocks for most of its length.

The contact has not been reached along Line D, all of the holes drilled bottoming in dunite. The slope of the bedrock is lessening eastward, but there is no way of determining the distance ahead to the contact or to the lowest elevation on the valley floor which may be at the contact.

Metamorphic rocks outcrop about 1000 feet downstream from Line D on the west side of and immediately contiguous to lower well-defined Minnie-McCann Creek valley. It is inferred that the contact will cross the valley at some place between Line D and the outcrop.

GLACIATION

There has been considerable deposition of glacial drift in the combined McCann-Minnie Creeks valley, resulting in sand, gravel and clay beds with some degree of stratification, disclosed by drill cores on Line D.

Additionally, there is a surface mantle of angular, subangular, together with some washed gravel, together with an admixture of clayish material with little plasticity.

A creeping flow of such material from the east has apparently effected a change in recent time of the combined Minnie-McCann Creeks' flow, with the result that the combined stream has been forced westward close to the aforementioned spur of Red Mountain. For this reason, there is no concentration of platinum directly below the present combined flow which is directly above a sloping bedrock floor, on Line D.

There is a reasoned possibility that the paystreak found on Line C (1) extends undisturbed into the lower valley, crossing Line D at an undetermined distance east from Hole No. 8. However, the ground is deep, due to a surface cover of glacial material described above. Values, therefore, would have to be much higher and with a much greater volume of paystreak gravel to justify a possible dredging operation in the lower valley.

COST

The cost of the project to the date of expiration of the contract authorization, November 1, 1955, is $20,016.00.

The inferred volume of gravel containing a degree of platinum group metal concentration is:

On Portland Bench	65,000 cubic yards	- 34¢ per cu.yd.
On McCann Creek	195,000 " "	- 41¢ " "
	260,000 " "	

The combined cost per cubic yard is 7.7¢

Respectfully submitted,

A. L. Howard

February 8, 1956

A. L. Howard, Operator

Instead, I suggest that footage be drawn from Stage 2 to be added to what remains in Stage 1, 82 feet, and Line D to be continued eastward until the lowest point in the bedrock floor is reached.

However, if this drilling is agreed to by the Government, it would be necessary to obtain an amendment to extend the time of the present contract authorization which expires November 1, 1955.

Sincerely yours,

A. L. Howard

A. L. Howard, Operator

ALH:k

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FEB 27 1956

DRILL FIELD LOG

Started
Finished Moving 10:30 AM 5-10-55
Commenced Drilling 2:30 PM 5-10-55
Finished Drilling 8:30 PM 5-10-55
Finished Pulling 4:30 PM 5-10-55

Page No.
Line No. Hole No. 1 - Original
Creek D 6
Claim [illegible]
Offset [illegible]

Depth Pump.or Casing	CORE Before Pump	After Pump	Meas. Vol. Loose	No. Col-ors	Est. Val. Wgt.	CHARACTER OF FORMATION
5	3	2	.133	x	x	Blue Cl., Sand, Angular Rock, Co Bl-Sand.
6	10	3	.331	4	Tr	Angular Rock, Sand, Cl., Bl-Sand.
10	30	2	.215	3	Tr	Angular, Rounded Cr., Sand, Cl., Bl-Sand.
15	42	2	.237	5	Tr	Cr., Sand, Cl., Bl-Sand, Angular & Rounded Cr.
15	31	2	.215	3	Tr	Cr., Sand, Cl., Bl-Sand, Cr., Angular Rock
20	4	2	.133	x	x	Cl., Angular Rock, Sand, Bl-Sand.
20	20	2	.220	2	Tr	Cl., V Angular Rock, Sand, Bl-Sand.
23	42	1	.204	3	9	Cl., Cr., Sand, Bl-Sand.
25	32	2	.327	4	Tr	Cr., Sand, Cl., Bl-Sand.
27	36	1	.311	5	Tr	Cr., Sand, Cl., Bl-Sand.
30	4	3	.165	2	Tr	Cr., Sand, Cl., Bl-Sand.
32	31	2	.275	3	Tr	Cr., Sand, Cl., Bl-Sand.
35	32	2	.215	4	Tr	Cr., Sand, Cl., Bl-Sand.
37	32	2	.215	2	Tr	Cr., Sand, Cl., Bl-Sand.
40	32	1	.209	6	Tr	Cr., Sand, Cl., Bl-Sand, Cl.-Cement.
42	27	1	.164	5	Tr	Cr., Sand, Cl., Bl-Sand, Colored Cl., Blue-Gray Cl.
42	26	1	.164	5	Tr	Blue Cr., Cl., Sand Cr. Bl-Sand, A chunk. Looks like plaster Capsule.
D.H.43	26	1	.117	x	x	Blue Cl., Purple Clay. Highly Sheared Cl. Rock. Sand & rock, purple clay.
45	20	2	.164	x	x	Blue Gray Cl., Highly Sheared Cl. rock with quartz like Malagar sand, Cl. & rock have a purple tint. Co Cr.
Ho 3 [illegible]						[illegible]
				2 [illegible]		
						D.H. [illegible] 40'. Co P. colors [illegible]
			6 or 7 [illegible]			

Time of Drilling	30 hrs.	From 0 to 45	6 MGS.	Muck	2 Ft.
Time of Pulling	4 hrs.	From [illegible] to [illegible]	6 MGS.	Gravel	[illegible] Ft.
Time of Moving	1 hrs.	Actual Weight		Bedrock	[illegible] Ft.
Time Lost	2 hrs.	Total	6 MGS.	Total	45 Ft.
Total Time	37 hrs.				

Abbreviations to be Used

TH. -Thawed	S. -Sand	C. -Coarse
FT. -Frozen	MK. -Muck	ST. -Sticky
B. -Boulder	CL. -Clay	V. -Very
BR. -Bedrock	GR. -Gravel	M. -Much
TLS.-Tailings	F. -Fine	SM. -Some
AN. -Angular	M. -Medium	TR. -Trace

Crew

Driller [illegible]
Panner [illegible]
Helper [illegible]
Up [illegible]

[illegible] 2331 Contract No. [illegible] - 1579 Aurora

RECEIVED
FEB 27 1956

DRILL FIELD LOG

Started 8:00 AM 9-17-55
Finished Moving 1:30 PM 9-17-55
Commenced Drilling 1:30 AM 9-17-55
Finished Drilling 4:00 PM 9-18-55
Finished Pulling 10:30 AM 9-19-55

Page No. 1 of page 1, Original
Line No. B Hole No. 9
Creek McCann (L. Howard, Prospect)
Claim No. 1 Above
Offset Amount - None Direction x

Depth Pump.or Casing	CORE Before Pump	CORE After Pump	Meas. Vol. Loose	No. Col-ors	Est. Val. Wgt.	CHARACTER OF FORMATION
5	?	2	.180	x	x	Muck, Cl. Sand, Angular Gr., Sm Blk-Sand.
8	42	1	.278	7VYF	Tr	Angular Gr., Sand, Sm Cl., Sm Washed Gr., Blk-Sand.
10	30	2	.229	5VYF	Tr	Angular Gr., Sand, Washed Gr., Sm Cl., Blk-Sand.
13	38	2	.327	11	1	Angular Gr., Sand, Washed Gr., Cl., Blk-Sand.
15	33	2	.286	4YF	Tr	Gr., Sand, Cl., Blk-Sand.
18	40	3	.327	3VF	Tr	Gr., Sand - Cl., Blk-Sand.
20	42	2	.294	2YF	Tr	Gr., Sand, Cl., Blk-Sand.
23	45	1	.196	7YF	Tr	Gr., Sand, Cl., Blk-Sand, Cl-increase, Brn. Cl.
25	36	1	.180	2YF	Tr	Gr., Sand, Cl., Blk-Sand, Brn. Cl.
27	34	2	.164	1YF	Tr	Gr., Sand, Cl., Blk-Sand
30	44	3	.229	3YF	Tr	Gr., Sand, Cl., Blk-Sand.
32	31	2	.147	2YF	Tr	Gr., Bldr. Chips, Sand, Sm Cl., Blk-Sand.
35	41	2	.245	x	x	Mostly Bldr. Sand, Sm Gr., Sm Blk-Sand, Green Bldr.
37	33	2	.180	2YF	Tr	C. An-Gr. Sand, Sm Washed Gr., Sm Cl., Blk-Sand.
40	42	2	.213	3YF	Tr	Gr. Sand, Sm. Cl., Blk-Sand.
42	32	1	.196	x	x	Highly fractured greenish rock, Sand Lots Cl., Blk-Sand No Gr.
45	42	1	.164	33	Tr	Cl. S and Sm Highly Fractured greenish rock. No Gr. Sm Blk-Sand.
47	33	1	.278	x	x	Cl. Sand. No Gr. Sm Highly fractured green rock. Tr. Blk-Sand.
						Values so-so fine can't estimate them in mgs.

Time of Drilling 10½ hrs.
Time of Pulling 3 hrs.
Time of Moving 5 hrs.
Time Lost x hrs.
Total Time 18½ hrs.

From 0 to 47 5 MGS.
From 8 to 42 5 MGS.
Actual Weight
Total 5 MGS.

Muck 2 Ft.
Gravel 43 Ft.
Bedrock 2 Ft.
Total 47 Ft.

Abbreviations to be Used

TH. -Thawed	S. -Sand	C. -Coarse
FT. -Frozen	MK. -Muck	ST. -Sticky
B. -Boulder	CL. -Clay	V. -Very
BR. -Bedrock	GR. -Gravel	M. -Much
TLS.-Tailings	F. -Fine	SM. -Some
AN. -Angular	M. -Medium	TR. -Trace

Crew

Driller R. Butler
Panner H. MacRory
Helper W. Harnedy
Operator: A. L. Howard
D.M.E.A. 2931 Contract No. Idn.-E579 Amended

D R I L L F I E L D L O G

Started 2:15 PM 9-26-55
Finished Moving 4:00 PM 9-26-55
Commenced Drilling 4:00 PM 9-26-55
Finished Drilling 9:30 AM 9-27-55
Finished Pulling 11:30 AM 9-27-55

Page No. 1 of 1, Original
Line No. 0 Hole No. 9½ offset
Creek [illegible] (L. Mineral)
Claim No 1 Above
Offset

Depth Pump.or Casing	CORE Before Pump	CORE After Pump	Meas. Vol. Loose	No. Col-ors	Est. Val. Wgt.	CHARACTER OF FORMATION
5	2	2	.291	x	x	Rock - Gl., Sand, Sm Silt, Mica, clear rock, Sm Silt Sand
8	30	3	.450	4½	3½	Angular rock, Sand, Sm Gl., Silt-Sand
10	36	2	.425	5	1	Angular, Cr. Sand Gl., Sm Varied Cr. Silt-Sand Mica.
15	41	2	.392	3½	Tr	Mica Chips - Sand - Sm Gl., Sm Silt-Sand.
16	39	2	.465	4½	Tr	Cr. Sand - Gl - Silt-Sand.
18	42	3	.392	7½	Tr	Cr. Sand - Gl. - Silt-Sand.
20	36	2	.327	5½	Tr	Cr. Sand - Gl. - Silt-Sand, Dirty.
22	38	2	.337	6	1	Cr. Sand - Gl. - Silt-Sand. Dirty.
25	52	2	.476	7	Tr	Cr. Sand - Gl. - Silt-Sand
27	34	2	.262	6½	Tr	Cr. Sand - Gl - Silt-Sand
30	34	2	.356	5½	Tr	Cr. Sand - Gl - Silt-Sand
32	38	2	.245	7	2	Cr. Sand - Gl - Silt-Sand. Gl. Increase, Blue Gray Gl.
33	19	2	.164	9½	Tr	Blue Gr Gl. Sand - Silt-Sand, Sm Cr. Sm Highly fract-green rock, sand has purple tint, sm purple rock.
34	20	2	.170	1½	Tr	Blue Gray Gl-Highly fractured greenish rock-sand - No Cr Sm Silt-Sand.
35	10	1	.147	x	x	Gray Gl. highly fractured greenish rock-with sm white opaque rock quartz. Sand, No Cr. Sm Purple Rock. All sand and Gl have purple tint, here trace silt-sand.
Reader					5	

Time of Drilling 10 hrs.	From 0 to 35	10 MGS.	Muck	1	Ft.
Time of Pulling 2 hrs.	From 8 to 34	18 MGS.	Gravel	33	Ft.
Time of Moving 1-3/4 hrs.	Actual Weight		Bedrock	1	Ft.
Time Lost x hrs.	Total	18 MGS.	Total	35	Ft.
Total Time 13-3/4 hrs.					

Abbreviations to be Used

TH. -Thawed	S. -Sand	C. -Coarse
FT. -Frozen	MK. -Muck	ST. -Sticky
B. -Boulder	CL. -Clay	V. -Very
BR. -Bedrock	GR. -Gravel	M. -Much
TLS.-Tailings	F. -Fine	SM. -Some
AN. -Angular	M. -Medium	TR. -Trace

C r e w

Driller [illegible]
Panner [illegible]
Helper [illegible]
Operator: A. L. Howard

D.N.R.A. 2931 Contract No. Idn. - 3579 Amended

DRILL FIELD LOG

Started [illegible]
Finished Moving [illegible]
Commenced Drilling [illegible]
Finished Drilling [illegible]
Finished Pulling [illegible]

Page No. [illegible]
Line No. [illegible] Hole No. [illegible]
Creek [illegible]
Claim [illegible]
Offset

Depth Pump.or Casing	CORE Before Pump	CORE After Pump	Meas. Vol. Loose	No. Col-ors	Est. Val. Wgt.	CHARACTER OF FORMATION
5	0	2	[illegible]	[illegible]	1	[illegible]
8	[illegible]	1	[illegible]	[illegible]	1	[illegible]
10	[illegible]	3	[illegible]	[illegible]	1	[illegible]
15	[illegible]	2	[illegible]	[illegible]	[illegible]	[illegible]
25	[illegible]	2	[illegible]	[illegible]	[illegible]	[illegible]
30	[illegible]	2	[illegible]	[illegible]	[illegible]	[illegible]
20	[illegible]	2	[illegible]	[illegible]	[illegible]	[illegible]
22	[illegible]	2	[illegible]	[illegible]	[illegible]	[illegible]
23	[illegible]	3	[illegible]	[illegible]	1	[illegible]
25	[illegible]	3	[illegible]	7	2	[illegible]
27	[illegible]	2	[illegible]	11	1	[illegible]
29	[illegible]	2	[illegible]	[illegible]	[illegible]	[illegible]
30	[illegible]	2	[illegible]	[illegible]	[illegible]	[illegible]
31	[illegible]	2	[illegible]	[illegible]	[illegible]	[illegible]
32	[illegible]	2	[illegible]	13	[illegible]	[illegible]
33	[illegible]	1	[illegible]	[illegible]	[illegible]	[illegible]
34	[illegible]	2	[illegible]	[illegible]	[illegible]	[illegible]
Bot. 35	[illegible]	3	[illegible]	[illegible]	[illegible]	[illegible]
36	[illegible]	1	[illegible]	[illegible]	[illegible]	[illegible]
Bedrock					20	

Time of Drilling [illegible] hrs.
Time of Pulling [illegible] hrs.
Time of Moving [illegible] hrs.
Time Lost [illegible] hrs.
Total Time [illegible] hrs.

From [illegible] to [illegible] [illegible] MGS.
From 0 to 35 29 MGS.
Actual Weight
Total 29 MGS.

Muck 0 Ft.
Gravel 35 Ft.
Bedrock 1 Ft.
Total 36 Ft.

Abbreviations to be Used

TH. -Thawed	S. -Sand	C. -Coarse
FT. -Frozen	MK. -Muck	ST. -Sticky
B. -Boulder	CL. -Clay	V. -Very
BR. -Bedrock	GR. -Gravel	M. -Much
TLS.-Tailings	F. -Fine	SM. -Some
AN. -Angular	M. -Medium	TR. -Trace

D. Crew

Driller [illegible]
Panner [illegible]
Helper [illegible]
Operator [illegible]
[illegible]

RECEIVED

FEB 27 1956

DRILL FIELD LOG

Started [illegible]
Finished Moving [illegible]
Commenced Drilling [illegible]
Finished Drilling [illegible]
Finished Pulling [illegible]

Page No. [illegible]
Line No. [illegible] Hole No. [illegible]
Creek [illegible]
Claim [illegible]
Offset [illegible]

Depth Pump.or Casing	CORE Before Pump	CORE After Pump	Meas. Vol. Loose	No. Col-ors	Est. Val. Wgt.	CHARACTER OF FORMATION
5	2	2	[illegible]	[illegible]	[illegible]	[illegible]
8	39	2	[illegible]	[illegible]	[illegible]	[illegible]
10	[illegible]	2	[illegible]	[illegible]	1	[illegible]
19	36	2	[illegible]	[illegible]	[illegible]	[illegible]
25	10	2	[illegible]	[illegible]	[illegible]	[illegible]
27	36	1	[illegible]	[illegible]	[illegible]	[illegible]
6" casing 29	10	2	[illegible]	[illegible]	[illegible]	[illegible] 6" casing in bottom
32	33	1	.125	[illegible]	[illegible]	[illegible]
35	37	2	.327	[illegible]	[illegible]	[illegible]
37	53	2	[illegible]	[illegible]	[illegible]	[illegible]
39	60	2	.310	[illegible]	[illegible]	[illegible]
31	26	2	[illegible]	[illegible]	[illegible]	[illegible]
32	21	1	[illegible]	[illegible]	[illegible]	[illegible]
33	19	2	.106	[illegible]	[illegible]	[illegible]
34	21	1	[illegible]	[illegible]	[illegible]	[illegible]
B. R. 35	22	2	.317	x	x	[illegible]
36	22	1	.317	x	x	[illegible]
						[illegible]

Time of Drilling [illegible] hrs.	From 0 to 36	0 MGS.	Muck	0	Ft.
Time of Pulling [illegible] hrs.	From 0 to 35	2 MGS.	Gravel	35	Ft.
Time of Moving [illegible] hrs.	Actual Weight		Bedrock	1	Ft.
Time Lost [illegible] hrs.	Total	2 MGS.	Total	36	Ft.
Total Time [illegible] hrs.					

Abbreviations to be Used

TH. -Thawed	S. -Sand	C. -Coarse
FT. -Frozen	MK. -Muck	ST. -Sticky
B. -Boulder	CL. -Clay	V. -Very
BR. -Bedrock	GR. -Gravel	M. -Much
TLS. -Tailings	F. -Fine	SM. -Some
AN. -Angular	M. -Medium	TR. -Trace

Crew

Driller [illegible]
Panner [illegible]
Helper [illegible]
[illegible]
[illegible]

D R I L L F I E L D L O G

Started [illegible]
Finished Moving [illegible]
Commenced Drilling [illegible]
Finished Drilling [illegible]
Finished Pulling

Page No. [illegible]
Line No. [illegible] Hole No. [illegible]
Creek [illegible]
Claim
Offset [illegible]

Depth Pump. or Casing	CORE Before Pump	After Pump	Meas. Vol. Loose	No. Col-ors	Est. Val. Wgt.	CHARACTER OF FORMATION
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	0	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	0	[illegible]	[illegible]	[illegible]	[illegible]
B.R. [illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
						[illegible]
		[illegible]				[illegible]

Time of Drilling [illegible] hrs.
Time of Pulling [illegible] hrs.
Time of Moving [illegible] hrs.
Time Lost [illegible] hrs.
Total Time [illegible] hrs.

From 0 to [illegible] 0 MGS.
From [illegible] to 42 2 MGS.
Actual Weight
Total 2 MGS.

Muck 2 Ft.
Gravel [illegible] Ft.
Bedrock 1 Ft.
Total 42 Ft.

Abbreviations to be Used

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AN. -Angular	M. -Medium	TR. -Trace

Crew
Driller [illegible]
Panner [illegible]
Helper [illegible]
[illegible]
[illegible]

DRILL FIELD LOG

Started [illegible]
Finished Moving [illegible]
Commenced Drilling [illegible]
Finished Drilling [illegible]
Finished Pulling [illegible]

Page No. [illegible]
Line No. D Hole No. [illegible]
Creek [illegible]
Claim [illegible]
Offset [illegible]

Depth Pump.or Casing	CORE Before Pump	CORE After Pump	Meas. Vol. Loose	No. Colors	Est. Val. Wgt.	CHARACTER OF FORMATION
5	[illegible]	1	[illegible]	x	x	[illegible]
8	[illegible]	1	[illegible]	x	x	[illegible]
10	[illegible]	1	[illegible]	[illegible]	[illegible]	[illegible]
12	[illegible]	1	[illegible]	[illegible]	[illegible]	[illegible]
14	[illegible]	1	[illegible]	[illegible]	[illegible]	[illegible]
16	[illegible]	1	[illegible]	[illegible]	[illegible]	[illegible]
19	[illegible]	2	[illegible]	[illegible]	[illegible]	[illegible]
21	[illegible]	1	[illegible]	x	x	[illegible]
24	[illegible]	2	[illegible]	x	x	[illegible]
D.S.26	[illegible]	1	[illegible]	x	x	[illegible]
27	[illegible]	1	[illegible]	x	x	[illegible]

[illegible] 1 hr. [illegible] 2 [illegible] 3 hr. "[illegible] [illegible]".

Time of Drilling [illegible] hrs.	From 0 to [illegible] MGS.	Muck 3 Ft.
Time of Pulling [illegible] hrs.	From 0 to 27 [illegible] MGS.	Gravel 23 Ft.
Time of Moving 1 hrs.	Actual Weight	Bedrock 1 Ft.
Time Lost [illegible] hrs.	Total [illegible] MGS.	Total 27 Ft.
Total Time [illegible] hrs.		

Abbreviations to be Used

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AN. -Angular	M. -Medium	TR. -Trace

Crew

Driller [illegible]
Panner [illegible]
Helper [illegible]
[illegible] A. L. [illegible]
D.F.L.A. [illegible] Contract No. [illegible] [illegible]

DRILL FIELD LOG

Started	[illegible]	Page No.	[illegible]
Finished Moving	[illegible]	Line No. [illegible] Hole No.	[illegible]
Commenced Drilling	[illegible]	Creek	[illegible]
Finished Drilling	[illegible]	Claim	[illegible]
Finished Pulling	[illegible]	Offset	

Depth Pump. or Casing	CORE Before Pump	CORE After Pump	Meas. Vol. Loose	No. Colors	Est. Val. Wgt.	CHARACTER OF FORMATION
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
						[illegible]
[illegible]						[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
						[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
						[illegible]
						[illegible]
						[illegible]

Time of Drilling [illegible] hrs.	From [illegible] to [illegible]	[illegible] MGS.	Muck	[illegible]	Ft.
Time of Pulling [illegible] hrs.	From [illegible] to [illegible]	[illegible] MGS.	Gravel	[illegible]	Ft.
Time of Moving [illegible] hrs.	Actual Weight		Bedrock	1	Ft.
Time Lost [illegible] hrs.					
Total Time hrs.	Total	[illegible] MGS.	Total	[illegible]	Ft.

Abbreviations to be Used

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TLS.-Tailings	F. -Fine	SM. -Some
AN. -Angular	M. -Medium	TR. -Trace

Crew

Driller [illegible]

Panner [illegible]

Helper [illegible]

[illegible]

DRILL FIELD LOG

Started [illegible] A.M. 9-30-55
Finished Moving 3:30 P.M. 9-30-55
Commenced Drilling 3:30 P.M. 9-30-55
Finished Drilling 4:00 P.M. 10-1-55
Finished Pulling

Page No. 1 of page 1 (Original)
Line No. D Hole No. 3
Creek [illegible] (R. [illegible])
Claim [illegible]
Offset

Depth Pump or Casing	CORE Before Pump	CORE After Pump	Meas. Vol. Loose	No. Colors	Est. Val. Wgt.	CHARACTER OF FORMATION
5	7	2	.114	x	x	Muck, Cl., Sand, Gr., Angular Gr., Lo. Dil-Sand.
8	36	3	.403	[illegible]	[illegible]	B. Gr., Angular Fluid Rock, Sand, Cl., Lo. Dil-Sand.
10	30	1	.335	[illegible]	[illegible]	Gr., Sand, Cl., Dil-Sand.
13	49	2	.504	[illegible]	[illegible]	Gr., Sand, Gr., Cl., Dil-Sand.
15	32	2	.322	[illegible]	Tr	Gr., Sand, Gr., Cl., Dil-Sand. Bldr. Gravel
Stop D.R. 18	55	2	.625	[illegible]	Gr.	Tooth Boulder, Sand, Gr., Cl., Gr., Dil-Sand, Lo F Gr.,
"21" Ahead 20	24	1	.250	x	x	Dole ahead Sample of slide rock, Lo Sand, Gr. Cl., Gr. Dil-sand, Lo. Gr.,
"36" Ahead 23	46	1	.471	x	x/	Gr. Rock, Granite Bldr., Gr. Cl., Lo Gr., Lo Dil-sand,
(See 2 Hole below for above description)					(	Lower slide or Bed Gr.
"24" Ahead 25	30	2	.630	x	x	Bank Rock, Granitic Bldr. All sand Dil., Gr. Cl., Lo Gr. Lower a slide or Bed R.R. Low ess and Solid Rock Dil. Sand.
"24" Ahead 27	40	0	.705	x	x	Bank Rock-Granitic gravelly Bldr, Gr. Lots Gray Cl., Lo Gr. Dil-sand. Lots white sand - with purple Bldr. Lot a slide, Bldrs. had to go from 19' to 27' before being able to see bedrock.

A clay clayey zone (Cl.) Bldr. Very water part 3 days.
10-1-55 - 10 AM - Dill - 3 hr. Cont. Lots water; Dill Rock. "B" Hole on drill-period.

Time of Drilling	7½ hrs.	From 0 to 27	MGS.	Muck	1 Ft.
Time of Pulling	1½ hrs.	From 10 to 19	TR MGS.	Gravel	17 Ft.
Time of Moving	½ hrs.	Actual Weight		Bedrock	9 Ft.
Time Lost	1½ hrs.	Total	TR MGS.	Total	27 Ft.
Total Time	10½ hrs.				

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AN. -Angular	M. -Medium	TR. -Trace

Driller R. Carlow
Panner [illegible]
Helper [illegible]
[illegible] A. [illegible] Contract No. [illegible] [illegible]

RECEIVED
FEB 27 1956

DRILL FIELD LOG

Started [illegible]
Finished Moving [illegible]
Commenced Drilling [illegible]
Finished Drilling [illegible]
Finished Pulling [illegible]

Page No. Page 1 of 1 page (original)
Line No. [illegible] Hole No. 4
Creek [illegible] (L. Fork)
Claim [illegible]
Offset [illegible]

Depth Pump.or Casing	CORE Before Pump	CORE After Pump	Meas. Vol. Loose	No. Col-ors	Est. Val. Wgt.	CHARACTER OF FORMATION
5	2	2	.322	x	x	[illegible]
8	37	2	.320	x	x	[illegible]
10	34	3	.304	MV	Sp	[illegible]
20	39	2	.322	MV	Sp	[illegible]
15	34	2	.270	MV	Sp	[illegible]
20	44	1	.322	MV	Sp	[illegible]
25	35	1	.020	x	x	[illegible]
22	34	1	.317	x	x	[illegible]
24	36	2	.324	MV	Sp	[illegible]
26	31	2	.029	MV	Sp	[illegible]
29	46	0	.405	x	x	[illegible]
"22" about 31	30	2	.450	x	x	[illegible]

Time of Drilling	6 hrs.	From 0 to 31	2 MGS.	Muck	2 Ft.
Time of Pulling	2 hrs.	From [illegible] to [illegible]	[illegible] MGS.	Gravel	[illegible] Ft.
Time of Moving	[illegible] hrs.	Actual Weight		Bedrock	[illegible] Ft.
Time Lost	[illegible] hrs.	Total	[illegible] MGS.	Total	[illegible] Ft.
Total Time	hrs.				

Abbreviations to be Used

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Driller D. Crew
Panner [illegible]
Helper [illegible]
Contractor [illegible]
[illegible] Contract No. [illegible] [illegible]

DRILL FIELD LOG

[illegible] 1 of 2 pgs (original)

Started [illegible] 10:30 AM 10-3-55
Finished Moving [illegible] 10:30 AM 10-3-55
Commenced Drilling [illegible] 10:00 AM 10-3-55
Finished Drilling [illegible] 10-3-55
Finished Pulling [illegible] 10-3-55

Page No. [illegible]
Line No. [illegible] Hole No. 5
Creek [illegible]
Claim [illegible]
Offset [illegible]

Depth Pump.or Casing	CORE Before Pump	CORE After Pump	Meas. Vol. Loose	No. Colors	Est. Val. Wgt.	CHARACTER OF FORMATION
5	2	3	.019	[illegible]	[illegible]	[illegible]
10	6	2	.004	[illegible]	[illegible]	[illegible]
20	30	2	.132	[illegible]	[illegible]	[illegible]
25	24	2	.150	[illegible]	[illegible]	[illegible]
25	27	2	.142	[illegible]	[illegible]	[illegible]
30	36	2	.170	[illegible]	[illegible]	[illegible]
40	34	2	.002	[illegible]	[illegible]	[illegible]
Heavy water 50	Pressure 30	1	.140	[illegible]	[illegible]	[illegible]
55	47	3	.220	[illegible]	[illegible]	[illegible]
57	57	3	.272	[illegible]	[illegible]	[illegible]
60	65	3	.245	[illegible]	[illegible]	[illegible]
Excess 62	55	04	.324	[illegible]	[illegible]	[illegible]
5 drive 67	135	70	1.259	[illegible]	[illegible]	[illegible]
5' drive 72	200	10	1.500	[illegible]	[illegible]	[illegible]
5' drive 80	97	5	.732	[illegible]	[illegible]	[illegible]
5' drive 85	55	5	.550	[illegible]	[illegible]	[illegible]
24" shoot 53	16	0	.003	[illegible]	[illegible]	[illegible]

5 [illegible] - [illegible], [illegible] to [illegible] [illegible], [illegible] to [illegible] [illegible] [illegible].

Time of Drilling 23 hrs.	From 2 to 51	4 MGS.	Muck 7	Ft.
Time of Pulling 1 hrs.	From ____ to ____	MGS.	Gravel 49	Ft.
Time of Moving 5 hrs.	Actual Weight	2	Bedrock 53	Ft.
Time Lost 20 hrs.	Total	MGS.	Total	Ft.
Total Time ____ hrs.				

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Crew

Driller [illegible]
Panner [illegible]
Helper [illegible]
[illegible]

DRILL FIELD LOG

Started [illegible]
Finished Moving [illegible]
Commenced Drilling [illegible]
Finished Drilling [illegible]
Finished Pulling [illegible]

Page No. 1 of 2 pages (original)
Line No. [illegible] Hole No. 6
Creek [illegible]
Claim [illegible]
Offset

Depth Pump or Casing	CORE Before Pump	CORE After Pump	Meas. Vol. Loose	No. Colors	Est. Val. Wgt.	CHARACTER OF FORMATION
5	7	2	.152	x	x	[illegible]
8	10	1	.022	[illegible]	[illegible]	[illegible]
11	29	2	.[illegible]	x	x	[illegible]
14	36	2	.029	x	x	[illegible]
16	50	2	.040	x	x	[illegible]
20	47	2	.023	x	x	[illegible]
22	28	x	x	x	x	[illegible]
22'10"	28	2	.134	x	x	[illegible]
28	57	3	.055	x	x	[illegible]
29	60	2	.022	x	x	[illegible]
31	52	2	.022	x	x	[illegible]
34	35	2	.278	[illegible]	1	[illegible]
36	39	2	.150	[illegible]	[illegible]	[illegible]
38	36	2	.130	[illegible]	[illegible]	[illegible]
42	47	2	.254	[illegible]	[illegible]	[illegible]
44	36	2	.[illegible]	x	x	[illegible]
46	56	3	.[illegible]	[illegible]	[illegible]	[illegible]
48	34	2	.320	[illegible]	[illegible]	[illegible]
51	45	3	.376	[illegible]	[illegible]	[illegible]
54	46	-	-	-	-	[illegible]
59	133	63	[illegible]	[illegible]	[illegible]	[illegible]
62	110	3	1.025	[illegible]	[illegible]	[illegible]
64	35	2	.257	[illegible]	[illegible]	[illegible]
67	44	3	.157	[illegible]	[illegible]	[illegible]
70	75	3	.100	[illegible]	[illegible]	[illegible]
D.D. 73	70	2	.003	x	x	[illegible]
24 about 75	46	2	.150	x	x	[illegible]

Time of Drilling [illegible] hrs.
Time of Pulling [illegible] hrs.
Time of Moving [illegible] hrs.
Time Lost [illegible] hrs.
Total Time [illegible] hrs.

From 0 to 75 [illegible] MGS.
From [illegible] to [illegible] [illegible] MGS.
Actual Weight
Total [illegible] MGS.

Muck [illegible] Ft.
Gravel [illegible] Ft.
Bedrock [illegible] Ft.
Total [illegible] Ft.

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Crew

Driller [illegible]
Panner [illegible]
Helper [illegible]
[illegible]
[illegible]

DRILL FIELD LOG

Started 9:00 AM 10-9-55
Finished Moving [illegible] 10-9-55
Commenced Drilling 10:00 AM 10-9-55
Finished Drilling 4:30 PM 10-11-55
Finished Pulling 12:00 AM 10-12-55

Page No. Page 2 of 2 pages (original)
Line No. [illegible] Hole No. 7
Creek Bolcan 1, Herard
Claim Monarchy
Offset Around - Flow

Depth Pump or Casing	CORE Before Pump	CORE After Pump	Meas. Vol. Loose	No. Colors	Est. Val. Wgt.	CHARACTER OF FORMATION
5	2	2	.003	SW	Tr	Muck, Sand, Angular and rounded Gr., Cl., No Bit-cont.
10	20	1	.114	SW	Tr	Ang. & rounded Gr., Sand, Cl., Bit-cont.
20	33	2	.125	S	S	Angular & rounded Gr., Cl., Sand, No Bit-cont.
19	39	3	.147	SW	Tr	Gr., Sand, Cl., Bit-cont.
25	20	1	.121	SW	Tr	Gr., Sand, Cl., Bit-cont.
30	40	1	.002	SW	Tr	Blue Cl., Glacial Till, No Green sand, Ang. & rounded Gr. Bit-cont.
31	30	2	.010	-	-	Blue-gray-glacial Cl., no colors only on green sand. Some Gr. Bit-cont.
34	10	2	.114	-	-	Glacial Cl., Angular rounded Gr., Sand, No bit-cont.
37	16	2	.202	SW	Tr	Gr., Sand Cl., Bit-cont.
40	47	2	.010	-	-	Blue-gray glacial silt, sand, few pieces angular rock, Tr. Bit-cont.
42	35	2	.016	-	-	Cl. Silt, No Sand, 2 pieces rock, Tr. Bit-cont, blue gray silt.
45	52	2	.016	-	-	Cl., a little sand, no colors, very oily cl., some Tr. Bit-cont.
47	28	3	.033	-	-	Cl., with angular silt. No sand, no angular rock, a little Bit-cont.
50	16	2	.219	SW	Tr	Gr., sand, Cl., bit-cont.
52	20	3	.120	[illegible]	[illegible]	Gr., sand, no cl., bit-cont.
55	14	2	.311	SW	Tr	Gr., sand, no cl., bit-cont.
60	43	3	.264	SW	Tr	Gr., sand, no cl., bit-cont.
61	70	70	-	-	-	No sample - drive cycle - sandgravel.
64	168	64	.016	SW	Tr.	F. Gr., Much sand, Tr Cl., Tr Bit-cont possibly-very little bit-cont.
5" Casing 69	120	24	.327	SW	Tr	Much sand, W Gr., tr. cl., last sample. No bit-cont. Some lignite.
72	57	3	.025	MW	Tr	F. Gr., sand, Tr. cl., No bit-cont.
74	51	62	-	-	-	No sample - lumber and drive cycle.
6" Casing 78	127	300'	2.0	-	-	No sample - all collected was oily sand - drive cycle.
79	154	4	2.147	17MW	Tr	Sand, F. Gr., No Bit Cl., last 2', No bit-cont. Colors V. L.
78	45	4	.210	SW	Tr	F. Gr., Sand, No Mighy "Gr rock, Some Bit. Coarsish sand. Tr. Cl. No bit-cont.
80	45	2	.057	-	-	Highly fractured Gr. rock, Few bit, no Tr. Cl. Bit-cont. Tr. Blue Cl., B.H. end at 80'.
10-11-55	93	Ave.	Clay -	Small	cover -	rock wedge.

Time of Drilling	20½ hrs.	From 0 to 00	20 MGS.	Muck	4 Ft.
Time of Pulling	4 hrs.	From to	MGS.	Gravel	74 Ft.
Time of Moving	1 hrs.	Actual Weight		Bedrock	2 Ft.
Time Lost	2½ hrs.	Total	70 MGS.	Total	80 Ft.
Total Time	27 hrs.				

Abbreviations to be Used

TH. -Thawed	S. -Sand	C. -Coarse
FT. -Frozen	MK.-Muck	ST.-Sticky
B. -Boulder	CL.-Clay	V. -Very
BR. -Bedrock	GR.-Gravel	M. -Much
TLS.-Tailings	F. -Fine	SM.-Some
AN. -Angular	M. -Medium	TR.-Trace

Crew

Driller R. Butler
Panner [illegible] Hackney
Helper [illegible] Hackney
Operator [illegible] Herard
[illegible] Drill Company Inc. - 1570 Arnold.

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FEB 27 1956

DRILL FIELD LOG

Started 12:20 PM 10-12-55
Finished Moving 1:45 PM 10-12-55
Commenced Drilling 2:45 PM 10-12-55
Finished Drilling 11:30 PM 10-12-55
Finished Pulling

Page No. [illegible] (continued)
Line No. D Hole No. 0
Creek [illegible] (L. Bench)
Claim Discovery
Offset [illegible]

Depth Pump or Casing	CORE Before Pump	CORE After Pump	Meas. Vol. Loose	No. Colors	Est. Val. Wgt.	CHARACTER OF FORMATION
20'	2	4	.120	-	-	Sand, Gl., Sand, Gn Angular Blood Red, Gr. Blk-Sand.
23	41	2	.009	2VF	Tr	Stained Gr., Sand, Gn Gl., Blk-Sand.
25	43	-	-	-	-	Pipe Cobbled 0', cable cobbling and core. Sample in line below.
27	43	-	-	-	-	Blue-gray Gl. Sand.
30	44	3	.100	4VF	Tr	Blue-gray Gl. Sand, Gravel, Blk-Sand.
32	33	2	.147	1VF	Tr	Blue Gl., Gr., Sand, Gn Blk-Sand.
35	44	3	.106	2VF	Tr	Gr., Sand, Gn Gl., Gn Blk-Sand.
37	30	3	.122	4VF	Tr	Gr., Sand, Gn Gl., Gn Blk-Sand.
40	40	2	.049	-	-	Greenish milky oilcoy Gl., Sand, Gr Gr., Gr. Blk-Sand.
42	34	2	.036	-	-	Greenish milky oilcoy Gl., Gn sand, Gr. F. Angular rock, Gr. Blk-Sand.
5' drive 47	70	3	.090	-	-	Greenish oilcoy Gl., Sand, Gn V.F. Gr., Gr. Blk-Sand, V.F. Milky Sand.
50	41	2	.204	-	-	F. Gr., Sand, Gn Gl., Blk-Sand.
52	40	3	.311	1VF	Tr	Gr., Sand, Gn Gl., Blk-Sand.
55	43	2	.327	5VF	Tr	Gr., Sand, Gn Gl., Blk-Sand.
57	33	3	.229	3VF	Tr	Gr., Sand, Gn Gl., Blk-Sand.
60	44	1	.016	-	-	Gl., Blue-Milky Gl., Gn Sand, 1 piece F. Gr., Blk-Sand.
62	32	2	.033	2VF	Tr	F. Gl., with Dark Red. Sand, Gr. V.F. Gr., Gn. Blk-Sand.
5' drive 67	75	2	.229	6VF	Tr	Gr., Sand, Gn Gl., Blk-Sand, Pottersville Gl.
69	33	3	.214	1VF	Tr	Gr., Sand, Gn. Gl., Blk-Sand, Pottersville Gl.
72	42	2	.106	3VF	Tr	Gr., Sand, Gn. Gl., Blk-Sand.
74	34	2	.278	5VF	Tr	Gr., Sand, Gn Gl., Blk-Sand.
77	50	6	.460	11VF	Tr	Much milky sand, V.F. Gr., Gn Gl., Clear Glass, Gn Blk-Sand. Very Loose.
79	40	40	-	-	-	No sample. Running gravel-water pressure. Pump again.
1' drive 78	102	2	0.350	9VF	Tr	Much sand, Gran Rock 2' F.F. & G. Gr., Gn Blue Gl., Gn Blk-Sand.
1' drive 79	22	2	.170	5VF	Tr	Gr., sand, Blue-gray Gl., Gn Blk-Sand.
80	21	1	.200	3VF	Tr	Gr., sand, Gn Gl., Blk-Sand, F. Ang. & G. Gr.
81	19	2	.172	2VF	Tr	Gr., Sand, Very small Gn Gl. Bells, Gn Blk-Sand, F. & F. Gr.
8 Hrs.	Colcy	20-25-35.	Grave	Cold		Small - 15° above.

Time of Drilling 22½ hrs.	From 0 to 88 Gr MGS.	Muck 5 Ft.
Time of Pulling hrs.	From to MGS.	Gravel 82 Ft.
Time of Moving 1½ hrs.	Actual Weight	Bedrock 1 Ft.
Time Lost hrs.	Total 72 MGS.	Total 88 Ft.
Total Time hrs.		

Abbreviations to be Used

TH. -Thawed	S. -Sand	C. -Coarse
FT. -Frozen	MK. -Muck	ST. -Sticky
B. -Boulder	CL. -Clay	V. -Very
BR. -Bedrock	GR. -Gravel	M. -Much
TLS. -Tailings	F. -Fine	SM. -Some
AN. -Angular	M. -Medium	TR. -Trace

Crew

Driller [illegible]
Panner [illegible]
Helper [illegible]
Operator [illegible]

D.M.E.A. 2931 Contract No. 20, - D570 amended.

DRILL FIELD LOG

Started
Finished Moving
Commenced Drilling
Finished Drilling
Finished Pulling

Page No. [illegible] (continued)
Line No. [illegible] Hole No. [illegible]
Creek [illegible] (L. [illegible])
Claim **Discovery**
Offset [illegible]

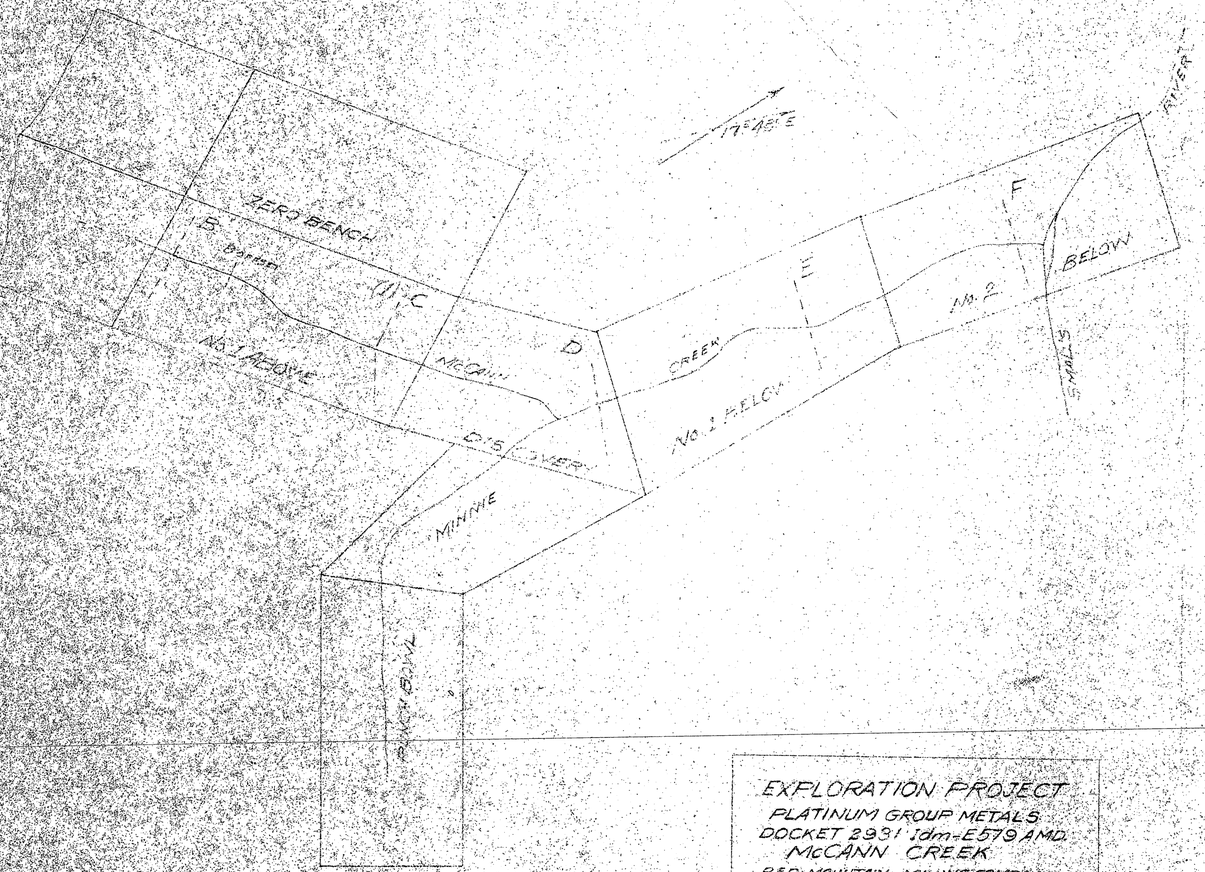
Depth Pump or Casing	CORE Before Pump	CORE After Pump	Meas. Vol. Loose	No. Col-ors	Est. Val. Wgt.	CHARACTER OF FORMATION
02	19	3	.172	[illegible]	Tr	Gr., Sand, Tr. Cl., Tr. Silt-Sand.
03	20	3	.164	[illegible]	Tr	Gr., Cl. - [illegible], Sand, Tr. Silt-Sand, Tr. Cl., [illegible] Cl.
04	20	3	.164	[illegible]	Tr	Gr., Sand, Tr. Cl., Tr. Silt-Sand.
05	20	3	.164	[illegible]	Tr	Gr., Sand, Tr. Cl., Tr. Silt-Sand.
06	19	2	.147	[illegible]	Tr	Gr., Sand, Cl., Tr. Silt-Sand, [illegible] increase in Cl.
D.Q. 07	20	0	.160	-	-	Muddy Gravel - Gr., Sand, Tr. Silt, Tr. Cl., Tr. C., Tr., Tr. Silt-Sand.
08	22	1	.176	-	-	Muddy Gravel Sand with [illegible] Gr., Tr. [illegible] sand, Tr. Silt-Sand.

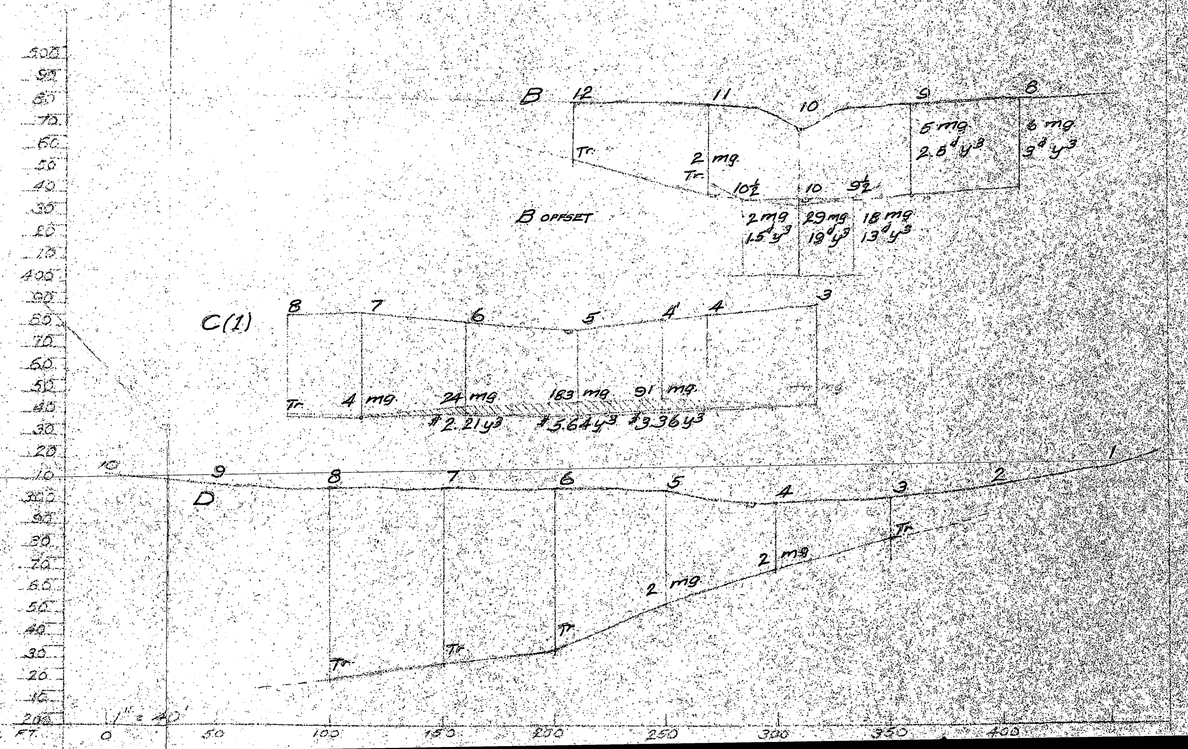
Time of Drilling ..... hrs.	From 0 to 08	Tr MGS.	Muck	5	Ft.
Time of Pulling ..... hrs.	From ..... to	MGS.	Gravel	82	Ft.
Time of Moving ..... hrs.	Actual Weight		Bedrock	1	Ft.
Time Lost ..... hrs.	Total	TR MGS.	Total	88	Ft.
Total Time ..... hrs.					

Abbreviations to be Used

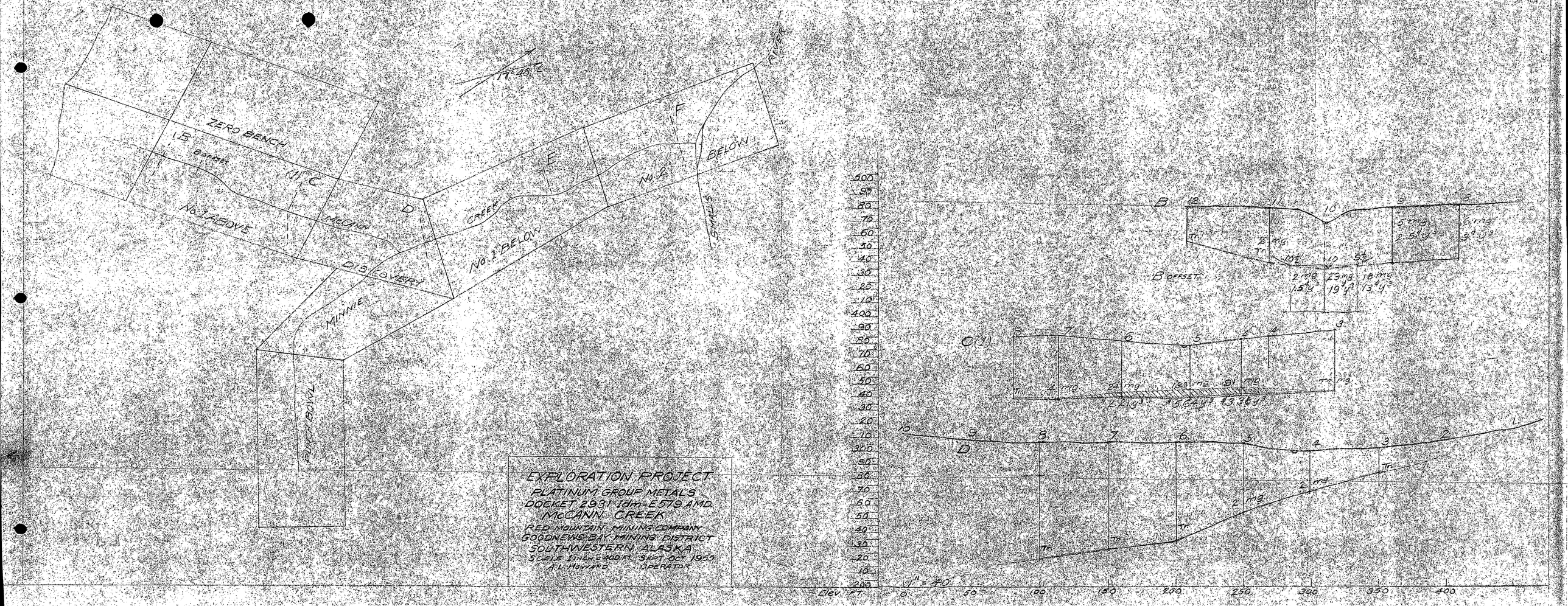
TH. -Thawed	S. -Sand	C. -Coarse
FT. -Frozen	MK. -Muck	ST. -Sticky
B. -Boulder	CL. -Clay	V. -Very
BR. -Bedrock	GR. -Gravel	M. -Much
TLS.-Tailings	F. -Fine	SM. -Some
AN. -Angular	M. -Medium	TR. -Trace

Crew
Driller [illegible]
Panner [illegible]
Helper [illegible]
Operator, A. [illegible]
[illegible] 0931 Contract No. [illegible] - B 570 [illegible]





EXPLORATION PROJECT
PLATINUM GROUP METALS
DOCKET 2931 Idm-E579 AMD
McCANN CREEK
RED MOUNTAIN MINING COMPANY
GOODNEWS BAY MINING DISTRICT
SOUTHWESTERN ALASKA
SCALE 1 INCH = 400 Ft. SEPT. OCT. 1959
A.L. HOWARD OPERATOR


ZERO BENCH
1.5 Barren
17°C
No. 1 ABOVE
McCANN
DISCOVERY
MINNIE
PARK BENCH
D
E
F
CREEK
No. 1 BELOW
No. 2
BELOW
STUMPS
RIVER
17° 49' E
EXPLORATION PROJECT
PLATINUM GROUP METALS
DOCKET 2931 Idm-E 579 AMD.
McCANN CREEK
RED MOUNTAIN MINING COMPANY
GOODNEWS BAY MINING DISTRICT
SOUTHWESTERN ALASKA
SCALE 1 INCH = 400 FT. SEPT OCT 1955
A. L. HOWARD OPERATOR
B
B OFFSET
C (1)
D
Tr.
2 mg.
10¢
10
8½¢
2.1 mg
1.5 g
23 mg.
19 g
18 mg
13 g
9 mg
5 g
6 mg
3 g
4 mg
24 mg
2.2 g
(28 mg
5.64 g
21 mg
13.36 g
Elev. FT.
1" = 40'
0
50
100
150
200
250
300
350
400

RECEIVED
SEP 26 1955

P. O. Box 2659
Juneau, Alaska
September 21, 1955

Memorandum

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

From: R. S. Velikanje, Acting Executive Officer, DMEA Field Team, Region I (Alaska District)

Subject: Docket No. DMEA-2031 (Platinum Group Metals)
Contract No. Idm-E579 (Amended)
Albert Leighton Howard
Red Mountain Claims
Goodnews Bay District
Southwestern Alaska

Enclosed are the signed "Government's Copy", "Division Copy" and the "Docket Copy" of the subject contract. The "Field Team Copy" and "Finance Office Copy" are being retained in Juneau.

Also enclosed is the Operator's letter of transmittal and two copies of new Consent to Lien.

R.S.V.
R. S. Velikanje
Acting Executive Officer
DMEA Field Team
Region I (Alaska District)

Encl.

cc: Gates

2/10/56 lgm

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

Budget Bureau No. 42-R1036.4
Approval Expires 6-30-53.

RECEIVED
FEB 10 1956

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

PHASE II

Amended

Month of 9/14 to 10/18, 1955 Docket No. DMEA 2931 Contract No. Idm-8579

Operator's Name

Minerals Platinum Group Metals

Address

Contract Amount, $18,000 Government Participation: 75% Amount, $13,500

ITEMS OF COSTS	FOR OPERATOR'S USE			FOR GOVERNMENT USE ONLY		
	Monthly Total	Totals Previously Reported	Totals To Date	Approved Monthly Total	Approved Totals Previously Reported	Approved Totals To Date
(1) Independent / Short Form Contracts:						
Drilling	$8,016	None	$8,016	8016.00	12000.00	20016.00
Bulldozing						
Crosscutting						
Drifting						
(2) Labor and Supervision:						
Labor						
Supervision						
Technical Services						
(3) Operating Mat'ls. and Supplies:						
Timber						
Explosives						
Pipe						
Track						
(4) Operating Equipment:						
Rental						
Purchase						
Depreciation						
(5) Initial Rehabilitation and Repairs						
(6) New Bldgs., Improvements, etc.						
(7) Miscellaneous:						
Repairs to Equipment						
Sampling and Analysis						
Payroll Taxes						
Liability Insurance						
(8) Contingencies (specify):						
TOTALS	$8,016	None	$8,016	8016.00	12000.00	20016.00

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

Date Nov. 8, 1955 *Payee A. F. Howard

Per Title

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

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

(Instructions on reverse)

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

$ 6012.00

Signature Lawrence J. Wilcox (Authorized Officer)

Date 12/13/55 Vou. No. 40

(See other side)

(For Government use only)

CERTIFICATION BY GOVERNMENT REPRESENTATIVE:

I certify that to the best of my knowledge and belief the contractor submitting this voucher is operating a Defense Minerals Exploration Administration project under Contract No. Idm-E579 in accordance with the terms of the contract.

Signature _____ Title Exam. Officer Date 12/13/55

APPROVAL BY DMEA EXECUTIVE OFFICER OR ALTERNATE:

Signature _____ Title Exec. Officer Date 12/13/55

MONTHLY REPORT OF OPERATOR

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

GPO 83-38476

Form MF-104A
(April 1952)

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

UNITED STATES
DEPARTMENT OF THE INTERIOR

DEFENSE MINERALS EXPLORATION ADMINISTRATION

RECEIVED
FEB 10 1956

OPERATOR'S UNIT COST AND PROGRESS REPORT

PHASE II

Amended

Month of 9/14 to 10/18 95 5 Docket No. DMEA 2931 Contract No. Idm-E579

Operator's Name Albert Leighton Howard Minerals Platinum

Address 16351 Ashworth Ave. Seattle 33, Wash Group Metals

OPERATION	UNIT	COSTS THIS MONTH	UNITS THIS MONTH	COSTS TO DATE	UNITS TO DATE	UNIT COSTS TO DATE	AUTHORIZED BY CONTRACT	
							Units	Unit Costs
Drifting								
Crosscutting								
Raising								
Shafts								
Winzes								
Drilling: Core								
Churn	Foot	$8,016	668	$8,016	668	$12.00	1500	$12.00
Auger								
Stripping								
Trenching								
Test Pits								
Roads and Trails								
TOTAL DISTRIBUTED COSTS								TOTAL COSTS AUTHORIZED BY CONTRACT
Operating Equipment Purchased								None
Initial Rehabilitation and Repairs								None
New Buildings, Improvements, etc.								None
TOTAL COSTS								$18,000

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

Date Nov. 8, 1955 Operator A. L. Howard

Per _____ Title _____

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

REMARKS:

(Instructions on reverse)

(For Government use only)

INSTRUCTIONS

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

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

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

GPO 83-38475

9/6/55 gla

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION

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

RECEIVED
SEP - 6 1955

September 1, 1955

Geo. C. Selfridge, Chairman
Operating Committee
Defense Minerals Explor.Admin.
Washington 25, D. C.

Re: Docket No. DMEA-2931
(Platinum Group Metals)
Contract No. Idm-2579 (Amend)
A. L. Howard
Red Mountain claims
Goodnews Bay District
Southwestern Alaska

Dear Mr. Selfridge:

Concerning your letter referring to Mr. Lorain's inquiry June 9, 1955 on Howard's receipt of the proposed Amended Contract, no direct answer has been received. In a note largely concerned with his copper-iron properties on Prince of Wales Island, Mr. Howard indicated he expected to resume drilling in the Red Mountain area in late August.

In a letter of August 25, dealing chiefly with Prince of Wales Island copper-iron the following paragraph was inserted as a reminder.

"I note that you expect to leave for Goodnews Bay in the near future bit I note that you have not returned the signed copies of the contract which I sent to you a month or two ago. I am wondering if you have not decided whether you would go ahead with it. Please let us know about this."

Mr. Lorain will be in Washington in mid-September.

Yours sincerely,

Robert L. Therne for
S. H. Lorain, Executive Officer
DMEA Field Team, Region I

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

AUG 29 1955

Mr. S. H. Lorain
Executive Officer, Alaska District
DMEA Field Team, Region I
P. O. Box 560
Juneau, Alaska

Re: Docket No. DMEA-2931 (Platinum Group Metals)
Contract No. Ida-8579 (Amended)
Albert Leighton Howard
Red Mountain claims
Goodnews Bay District
Southwestern Alaska

Dear Mr. Lorain:

Reference is made to your letter dated June 9, 1955, to the subject Operator in which you inquired whether or not he had received the proposed Amended Contract which you forwarded to him under date of May 16. We would appreciate being advised whether Mr. Howard responded to your inquiry. If not, kindly advise what further action you expect to take in this matter.

Sincerely yours,

George C. Selfridge

Chairman, Operating Committee

APPROVED:

P. F. Yopes

Member, Bureau of Mines

Thor H. Kiilsgaard

Member, Geological Survey

FTMurphy/gla
8-25-55
cc to: Admr.'s Reading File
Operating Committee
Docket
Messrs. James E. Bell, Rm. 3628
T. H. Kiilsgaard, Rm.5224
Code 700
Mr. Murphy

June 9, 1955

Mr. A. L. Howard
16351 Ashworth Street,
Seattle 33, Washington

Re: Amended Contract No. Idm-E579
Docket No. DMEA-3931 (platinum)
A. L. Howard

Dear Mr. Howard:

On May 16 I mailed you the original and five copies of a proposed amendment to your DMEA contract. Inasmuch as I have not had a reply I am wondering if my letter, with contract, or your reply may have gone astray. Will you please let me know what has happened.

Your letter of May 18 was received a few days after I mailed the contract; therefore I did not reply. However it must be approaching the time for you to get started with the season's operations so I thought that I had better check to find out whether anything has gone wrong.

Yours sincerely,

S.H.L.

S. H. Lorain
Executive Officer,
Alaska District,
Region I.

cc: Operating Committee
Velikanje

c
o
p
y

MAY 10 1955

Mr. S. H. Lorain
Executive Officer
DPSA Field Team, Region I, Alaska District
P. O. Box 560
Juneau, Alaska

Re: Contract No. DPSA-6931 (Platinum Group Metals)
Contract No. Ida-6579 (Amended)
Albert Leighton Howard
Red Mountain Claims
Goodnews Bay District
Southwestern Alaska

Dear Mr. Lorain:

Enclosed are the original and five copies of a proposed Amended Contract No. Ida-6579, which provides for a Phase II. The original contract has been considered as Phase I and completed.

You will note that the government participation has been reduced from the figure 90 percent, applicable in Phase I, to 75 percent in Phase II. Furthermore, prior to the execution of the proposed Amended Contract, new Owners' Consents to Lien Forms must be executed and attached. The increase in the total cost of the project makes this necessary. The latest forms (March 1955) should be used.

After the above has been complied with, if you and the Operator find the proposed Amended Contract in order, please insert in Article 3 of the contract form the date work shall commence. Then have the Operator sign the original and all copies; thereafter kindly make the usual distribution.

Sincerely yours,

W. S. Martin
ACTING Chairman, Operating Committee

Enclosures

F/Murphy/gla 5-9-55
cc to: Adv.'s Reading File
Operating Committee
Messrs. James E. Ball, Rm. 3628
T. E. Killingsard, Rm. 5228
Code 700
Mr. Murphy

A TRUE COPY:

/s/ C. H. Johnson
Secretary, Bureau of Mines

/s/ R. D. Trace
Bureau, Continental Shelf

5/5/55 fa

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

MAY 4 1955

Memorandum

To: The Administrator, DMEA
Attention: Mr. E. W. Ellis

From: Acting Assistant Solicitor, Defense Minerals

Subject: Docket No. DMEA-2931, Contract Idm-2579, Amended
A. L. Howard (Platinum Group Metals)

Pursuant to Mr. Murphy's memorandum of April 18, we have drafted the attached Amended Contract, subject to the attachment of the map, Figure 4, mentioned in Exhibit "A," which we did not have before us in preparing this Amended Contract, and subject to the attachment of the Consent to Lien from the landowner, on the latest form.

J. L. Hofflund

J. L. Hofflund
Acting Assistant Solicitor
Defense Minerals

Attachments

HCRubin/emd
Copy to: DMEA Docket
Solicitor's Docket
E. W. Ellis
J. L. Hofflund
H. C. Rubin
chron.

April 18, 1955

Memorandum

To: Acting Assistant Solicitor, DMSA

From: Fred M. Murphy, Mining Engineer
Rare and Miscellaneous Metals Division

Subject: Docket No. DMSA-2931 (Platinum)
Contract No. Idm-E579
Proposed Amendment No. 2
A. L. Howard
Red Mountain claims
Goodnews Bay District
Southwestern Alaska

Will you kindly prepare the proposed Amendment No. 2, to the subject contract in accordance with the attached draft.

We have sent a copy of map "Figure 4," mentioned in the amendment, to be photostated. Copies of this map should be available by the time you complete your draft of the proposed amendment and will be attached to each copy of the amendment by the writer.

Fred M. Murphy

Attachments

FMuphy:am
4-18-55
cc to: Docket
Code 700
Mr. Murphy

April 18, 1955

Memorandum

To: The Administrator

From: Ernest Wm. Ellis, Chief
Rare and Miscellaneous Metals Division

Subject: Proposed Amendment No. 1
Docket No. DMEA-2931 (Platinum)
Contract No. Idm-E579
A. L. Howard
Red Mountain claims
Goodnews Bay District
Southwestern Alaska

JUSTIFICATION

The original Contract for $12,000 is a short-form instrument with Government participation at 90 percent, or $10,800.00. It authorized 1,000 feet of churn drilling to explore the area west of Salmon River for ancient river channels which might contain concentrations of platinum group metals. One such channel on the east side of Salmon River has been exploited for many years by the Goodnews Bay Platinum Dredging Company.

770 feet of drilling was done in the Portland Bench area on the west side of the Salmon River (opposite the upper limit of the east channel which is being dredged), however, no pay streak was found. By Amendment No. 1, dated April 24, 1954, the remaining 230 feet of drilling was authorized to be used in exploring McCann Creek, to the north of the Salmon River channel.

McCann Creek is a tributary of Smalls River, which flows eastward to the sea. It lies higher up on Red Mountain which contains considerable exposed areas of "Dunite" rock, the inferred source of the platinum metals.

Only part of one line of churn drill holes could be completed with the funds remaining in the contract, however, three of the five holes drilled encountered platinum with assay values of $0.13 to $1.05 per cubic yard of gravel, in a channel inferred to be 100-150 feet wide. Therefore, the Operator submitted a request for the further exploration of McCann Creek by 6 lines of drill holes, aggregating 1,000 feet of churn drilling.

The Field Team, S. H. Lorain and R. S. Velikanje, members from the U. S. Bureau of Mines and the Geological Survey respectively, did not believe 1,000 feet of drilling was sufficient to explore the

area contemplated (approximately a mile in length along the creek), and therefore recommended that 1,500 feet of drilling be authorized, the work to be done in two stages of 750 feet each, the second stage to be dependent on results obtained in the first stage.

Mr. J. D. Sargent, commodity member U. S. Bureau of Mines in a memorandum, dated April 12, 1955, concurs with the Field Team's recommendation. However, E. L. Newcomb, the Geological Survey commodity member, in a memorandum dated April 14, 1955, recommends that additional drilling be done on the McCann Creek channel, however, he recommends that only 1,000 feet of drilling be done in two stages of 500 feet each. Furthermore, he recommends a slight change in the sequence of drilling than that proposed by the Field Team. In the proposed Amendment No. 2, we have followed Mr. Newcomb's recommendation as to the order in which the lines of holes should be drilled.

Although, this Division agrees with Mr. Newcomb in part, we believe that the Field Team's recommendation for 1,500 feet of churn drilling in two stages of 750 feet each should be authorized because:

1. The Field Team's examiners have been on the property recently and are familiar with the recent work and the terrain.

2. The project will be visited by the Field Team's examiners about the time the first stage drilling is completed, and if they do not believe a significant discovery is possible the second stage work will not be authorized.

3. The property is isolated and considerable time is required to move drilling equipment to the property, therefore, we consider that it is best to authorize sufficient drilling at this time to complete all the exploration work recommended by the Field Team. Thus if a significant discovery is made by the initial drilling a new amendment will not be required to further explore the area.

Ernest Wm. Ellis

FMMurphy
cc to: Docket
Operating Committee
Code 700
Mr. Murphy

4/18/55 gla

IN REPLY REFER TO:

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

April 14, 1955

Re: DMEA-2931
A. L. Howard
Red Mountain Claims
Goodnews Bay
District, Alaska
$12,000 - Platinum

Memorandum

To: E. W. Ellis, Defense Minerals Exploration Administration

From: E. L. Newcomb, U. S. Geological Survey

Subject: Review of proposed amendment

The Field Team has recommended additional exploration be approved on claims located on McCann Creek. Results of drilling 5 holes to a total depth of 217 feet have indicated a possible platinum-bearing channel. However, further holes are needed to delineate the northern limit of the channel width. A staged project is advisable, but I recommend the total allowed footage be limited to 1,000 feet. Stage I would consist of 500 feet and include drilling on remainder of line "c", line "b", and line "d." If this work continues to be successful, then two more lines of holes are to be drilled under a second stage. Results of holes on line "b" will determine the feasibility of drilling on line "a." From "c" to "a", the ground is rising in elevation and the thickness of gravels may diminish very rapidly. If lack of gravels is indicated by line "b" drilling, then lines "e" and "f" should be drilled in the second stage. The matter of spacing the holes is important, especially for the first one or two lines. I have no objection to 25 foot spacing where it is necessary.

I recommend an amendment be approved for two stages of drilling with Stage II contingent upon favorable results from Stage I.

E. L. Newcomb

ELNewcomb:hlm
G-4/14/55

Copy to: Director's reading, 4212
Branch reading, 4212
DMEA (3)
Docket file
J. E. Bell, 3628 Interior

IN REPLY REFER TO:

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

April 14, 1955

Re: DMEA-2931
A. L. Howard
Red Mountain Claims
Goodnews Bay
District, Alaska
$12,000 - Platinum

Memorandum

To: E. W. Ellis, Defense Minerals Exploration Administration

From: E. L. Newcomb, U. S. Geological Survey

Subject: Review of proposed amendment

The Field Team has recommended additional exploration be approved on claims located on Mohave Creek. Results of drilling 5 holes to a total depth of 217 feet have indicated a possible platinum-bearing channel. However, further holes are needed to delineate the northern limit of the channel width. A staged project is advisable, but I recommend the total allowed footage be limited to 1,000 feet. Stage I would consist of 500 feet and include drilling on remainder of line "d", line "b", and line "d." If this work continues to be successful, then two more lines of holes are to be drilled under a second stage. Results of holes on line "b" will determine the feasibility of drilling on line "a." From "e" to "a", the ground is rising in elevation and the thickness of gravels may diminish very rapidly. If lack of gravels is indicated by line "b" drilling, then lines "e" and "f" should be drilled in the second stage. The matter of spacing the holes is important, especially for the first one or two lines. I have no objection to 25 foot spacing where it is necessary.

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E. L. Newcomb

ELNewcomb:hlm
G-4/14/55

Copy to: Director's reading, 4212
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DMEA (3)
Docket file
J. E. Bell, 3628 Interior

IN REPLY REFER TO:

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

April 14, 1955

Re: DMEA-2931
A. L. Howard
Red Mountain Claims
Goodnews Bay
District, Alaska
$12,000 - Platinum

Memorandum

To: E. W. Ellis, Defense Minerals Exploration Administration

From: E. L. Newcomb, U. S. Geological Survey

Subject: Review of proposed amendment

The Field Team has recommended additional exploration be approved on claims located on McCann Creek. Results of drilling 5 holes to a total depth of 217 feet have indicated a possible platinum-bearing channel. However, further holes are needed to delineate the northern limit of the channel width. A staged project is advisable, but I recommend the total allowed footage be limited to 1,000 feet. Stage I would consist of 500 feet and include drilling on remainder of line "c", line "b", and line "d." If this work continues to be successful, then two more lines of holes are to be drilled under a second stage. Results of holes on line "b" will determine the feasibility of drilling on line "a." From "c" to "a", the ground is rising in elevation and the thickness of gravels may diminish very rapidly. If lack of gravels is indicated by line "b" drilling, then lines "e" and "f" should be drilled in the second stage. The matter of spacing the holes is important, especially for the first one or two lines. I have no objection to 25 foot spacing where it is necessary.

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E. L. Newcomb

ELNewcomb:hlm
G-4/14/55

Copy to: Director's reading, 4212
Branch reading, 4212
DMEA (3)
Docket file
J. E. Bell, 3628 Interior

4/12/55 gla

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

April 12, 1955

Memorandum

To: E. Wm. Ellis, DMEA
Through: Chief, Branch of Rare and Precious Metals

From: Commodity-Industry Analyst, Branch of Rare and Precious Metals

Subject: Application for amendment to authorize additional work. Docket No. DMEA 2931 Idm-E579

I concur with the recommendation of the field team that additional work should be authorized to further delineate the platinum "pay streak" discovered in October 1954 on McCann Creek, Goodnews Bay Mining District, Alaska.

John D. Sargent

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

April 12, 1955

Memorandum

To: E. Wm. Ellis, DMEA
Through: Chief, Branch of Rare and Precious Metals

From: Commodity-Industry Analyst, Branch of Rare and Precious Metals

Subject: Application for amendment to authorize additional work. Docket No. DMEA 2931 Idm-E579

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

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John D. Sargent

4/5/55 gla

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

P. O. Box 560
Juneau, Alaska

March 31, 1955

Memorandum

To: Operating Committee, Defense Minerals Exploration Admin., Department of the Interior, Washington 25, D. C.

From: Field Team, Alaska District, Region I.

Subject: Application for amendment to authorize additional work. Docket No. DMEA-2931 (platinum) A. L. Howard.

Action on your letter of March 3, and the letter from Mr. Howard that was attached thereto, has been delayed pending Mr. Velikanje's return from a trip to the states. In the meantime we have discussed the proposals with Mr. Howard and have received from him a request for a small increase of drill footage but on a two-stage basis; four copies of Mr. Howard's letter are enclosed herewith.

Analysis of last season's results

A computation of the data obtained from the five holes that were completed last season indicates metal values per cubic yard as follows:

Hole	Total Depth	Depth D. B.	Depth Gravel	Depth B. R.	Mining Section	Pt. Mgs.	Oz. Pt. Cu. Yd.	Value Cu. Yd.*
4	41'	1'	39'	1'	40'	91	0.00645	$0.4838
5	39'	1'	36'	2'	37'	183	0.01399	1.0493
6	43'	4'	37'	2'	38'	24	0.00178	0.1335
7	48'	4'	43'	1'	44'	4	- - - -	- - - -
8	46'	4'	41'	1'	42'	tr.	- - - -	- - - -

* At $75 an ounce of crude platinum group metals.

The data and the computed results listed in the preceding paragraph appear to indicate the existence of a "pay channel" which is at least 100 to 150 feet wide; its full width can be determined only by additional exploration. The platinum content appears to be high enough to indicate the possibility of commercial exploitation.

The data indicates that this probably is a "normal" stream channel rather than a local concentration from side-hill creep as might be suggested by the applicant's exaggerated vertical scale section. Although the data presented for the trenches that have been dug on claim "No. 1 Above" appear to suggest that the trenches were sunk to bedrock, the data obtained from the churn drill holes a short distance down stream from the trenches indicates very strongly that the trenches did not reach bedrock; therefore the channel may be expected to extend some distance upstream from the line of drill holes.

The gravel "mining section" is approximately 40 feet thick at the section tested last season; it may be expected to be at least 40 feet thick downstream to the confluence with Smalls River. Upstream from the test section the thickness of the mining section may be expected to decrease gradually but should maintain a substantial thickness for at least 1,500 to 3,000 feet; therefore the mining channel on McCann Creek could be about one mile long. There is no apparent reason (except possible diminution of platinum content) why the mining channel could not continue an indeterminate distance down Small's River.

The foregoing data indicate the possibility of about 1,000,000 yards of gravel containing 7,000 to 8,000 ounces of platinum on McCann Creek and a further possibility of additional mining ground on Small's River.

Proposal

The Operator's first proposal requested authorization for the exploration of McCann Creek by 6 lines of drill holes at approximately 1,000 feet intervals from near the upper end of his "Summit Bench" claim to the intersection of McCann Creek with Small's River. The Field Team pointed out to him that, if the average depth of the ground proves to be 40 or 50 feet (as indicated by last season's work) he would have not more than three to four holes per line; this would not be enough to bracket the pay channel. It was suggested that he either decrease the area to be explored or increase the footage but that, if the latter alternative were to be selected, it should be on a two-stage basis. The Operator was much averse to decreasing the length of channel to be explored; therefore he requested that the total footage be increased to 1,500 feet but that the project be set up in two stages of 750 feet each.

Conclusions and Recommendations

The Field Team is of the opinion that the potentialities indicated in the first section of this memorandum are enough to justify the additional work if the work be done in two 750 foot stages (at $9,000 each) and if commencement of the second stage be made contingent upon positive results from the first stage. We think that it is most important that the Field Team be given authority to authorize (or to deny) the second stage on the spot because, as the Operator points out, he cannot afford to hold a crew on the ground while waiting approval from Washington. This is a more conservative approach than was the original proposal for 1,000 feet.

The Field Team recommends also that the Operator be permitted a choice between 25 foot hole intervals and 50 foot hole intervals while drilling the first 750 feet. The proper choice of hole interval will depend upon the width and regularity of the pay channel but this will not be known until the first two or three lines have been completed. Because of the remote location it would not be practical to maintain the close supervision necessary for day-to-day Field Team decisions. By the time the first stage is nearing completion enough data will be available to permit a Field Team decision as to the proper interval for the second stage. This decision can be made simultaneously with the decision as to whether the second stage may be undertaken, consequently only one mid-season inspection would be necessary. This is about all that will be possible if other projects are to be given the necessary attention.

The Field Team recommends also that the Operator be required to complete the drilling of Line "C" (old line "1") before starting a new line; he then should proceed with Lines "B", "A", "D", "E", and "F" in the order named.

FIELD TEAM, ALASKA DISTRICT, REGION I

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

R. J. Velikanje, Member
Geological Survey

Enclosure-1

-C-O-P-Y-

16351 Ashworth Ave.
Seattle 33, Wash.
March 15, 1955

Mr. S. H. Lorain
Executive Officer
Alaska District No. 1
D. M. E. A.
P. O. Box 560
Juneau, Alaska

Subject: Exploration Project DMEA 2931 Idm.-E579
Platinum Group Metals
Proposal to Increase Footage

Dear Mr. Lorain:

Under date of February 16, 1955 application was made for additional footage in the amount of 1,000 ft., to explore the paystreak discovered on McCann Creek in October 1954.

Further study indicates that the above requested footage should be increased to 1,500, to make provision for adequately bracketing the up and down stream extensions of the paystreak.

If your office wishes to break the footage into two stages it will be satisfactory to me, provided that drilling proceeds as indicated on the map submitted in the proposal of February 16, 1955.

Also, continuity of drilling should not be interrupted between stages, as costs continue whether crew and equipment are working or not.

Yours sincerely,

/s/ A. L. Howard
A. L. Howard, Operator

ALH;k

-C-O-P-Y-

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

P. O. Box 560
Juneau, Alaska

March 31, 1955

Memorandum

To: Operating Committee, Defense Minerals Exploration Admin., Department of the Interior, Washington 25, D. C.

From: Field Team, Alaska District, Region I.

Subject: Application for amendment to authorize additional work. Docket No. DMEA-2931 (platinum) A. L. Howard.

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The Field Team recommends also that the Operator be permitted a choice between 25 foot hole intervals and 50 foot hole intervals while drilling the first 750 feet. The proper choice of hole interval will depend upon the width and regularity of the pay channel but this will not be known until the first two or three lines have been completed. Because of the remote location it would not be practical to maintain the close supervision necessary for day-to-day Field Team decisions. By the time the first stage is nearing completion enough data will be available to permit a Field Team decision as to the proper interval for the second stage. This decision can be made simultaneously with the decision as to whether the second stage may be undertaken, consequently only one mid-season inspection would be necessary. This is about all that will be possible if other projects are to be given the necessary attention.

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FIELD TEAM, ALASKA DISTRICT, REGION I

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

R. J. Velikanje, Member
Geological Survey

Enclosure-1

-C-O-P-Y-

16351 Ashworth Ave.
Seattle 33, Wash.
March 15, 1955

Mr. S. H. Lorain
Executive Officer
Alaska District No. 1
D. M. E. A.
PL O. Box 560
Juneau, Alaska

Subject: Exploration Project DMEA 2931 Idm.-E579
Platinum Group Metals
Proposal to Increase Footage

Dear Mr. Lorain:

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Further study indicates that the above requested footage should be increased to 1,500, to make provision for adequately bracketing the up and down stream extensions of the paystreak.

If your office wishes to break the footage into two stages it will be satisfactory to me, provided that drilling proceeds as indicated on the map submitted in the proposal of February 16, 1955.

Also, continuity of drilling should not be interrupted between stages, as costs continue whether crew and equipment are working or not.

Yours sincerely,

/s/ A. L. Howard
A. L. Howard, Operator

ALH;k

-C-O-P-Y-

MAR 3 - 1955

Mr. S. M. Lorwin
Executive Officer
Alaska District
DMEA Field Team, Region I
P. O. Box 560
Juneau, Alaska

Re: Docket No. DMEA-[illegible]
(Platinum Group Metals)
Contract No. [illegible]-[illegible]579
Albert Leighton Howard
Red Mountain claims
Goodnews Bay District
Southwestern Alaska

Dear Mr. Lorwin:

The enclosed request of the Operator for additional Government aid to extend the exploration program of the subject property is referred to your office for comments and recommendations.

Since the Operator did not mention sending a copy of his proposal to your office, the enclosed is to be returned if one was sent to you.

Sincerely yours,

George C. Selfridge

Chairman, Operating Committee

FLAnewsoism
3-1-55
cc to: Admr. Reading File
Operating Committee
Docket
Messrs. T. H. Aillegaard, Rm. 5224
J. E. Bell, Rm. 3628
Code 700
Mr. Knouse

Enclosure

APPROVED:

J. H. Hedges

Member, Bureau of Mines

E. L. Newcomb

Member, Geological Survey

MAR 3 - 1955

Mr. A. L. Howard
16351 Ashworth Avenue
Seattle 33, Washington

Re: Docket No. DMSA-2931
(Platinum Group Metals)
Contract No. Idm-2579
Red Mountain claims
Goodnews Bay District
Southwestern Alaska

Dear Mr. Howard:

This will acknowledge receipt of your letter dated February 16, 1955, which transmitted, with other data, a request for additional Government aid to extend the exploration program of the subject property. Your proposal has been referred to the Executive Officer of the Alaska Division, Region I, at the following address:

Mr. B. H. Lorrain
Executive Officer
Alaska District
DMSA Field Team, Region I
P. O. Box 560
Juneau, Alaska

The Regional Office will contact you in regard to your proposal if additional information is required.

Sincerely yours,

C. O. Mittendorf

Administrator

FLKnouse:sm
3-1-55
cc to: Admr. Reading File
Docket
Code 700
Mr. Knouse
DMSA Field Team, Region I (2)

16351 Ashworth Avenue
Seattle 33, Washington
February 16, 1955

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

Subject: Exploration Project DMEA 2931 Idm-E579
Platinum Group Metals.
Application for Amendment.

Dear Mr. Mittendorf:

During October 1954, 240 feet of churn drilling was completed on McCann Creek to prove the existence or absence of a pay streak. The results of this exploration were detailed under date of November 26, 1954. The work was done under Amendment No. 1 to the original Contract dated August 10, 1953.

Request is herewith made for additional footage in the amount of 1,000 feet to adequately explore McCann Creek from its source to Small's River.

The object of additional exploration is not only to determine the values and extent of the pay streak indicated in the McCann Creek Valley but also to determine if it extends onto the bedrock floor of Small's River.

Small's River flows seaward from its juncture with McCann Creek. The valley floor at this point is upwards of 1,000 feet in width where Small's River flows through an inferred gap in Red Mountain. The bedrock floor of this drainage area which extends three miles westward to the sea has not been explored. Although a mantle of postglacial gravels covers this area, it is possible that a transverse preglacial channel with accompanying placer platinum concentration would not be disturbed, if already entrenched in a bedrock cut.

Postglacial gravels have invaded upper Salmon River Valley and also the McCann Creek and Clara Creek Valleys without destroying preexisting placer concentrations and the same condition may prevail seaward from the northerly end of Red Mountain.

A Map, showing the proposed layout of drill hole lines on McCann Creek accompanies this application. Lines approximately 1,000 feet apart and with minimum hole spacing of 25 feet where warranted as drilling progresses, is suggested.

Drill logs showing the results of the drilling on McCann Creek during October 1954 are enclosed.

Sincerely yours,

A. L. Howard

A. L. Howard

Operator

ALH:k

DRILL FIELD LOG

Started 8:00 A.M. 10-8-54
Finished Moving 2:30 P.M. 10-8-54
Commenced Drilling 2:30 P.M. 10-8-54
Finished Drilling 9:30 A.M. 10-10-54
Finished Pulling 10:30 A.M. 10-10-54

Page No. 1 of 1 Page
Line No. 1 Hole No. 4
Creek Miami Creek-Howard Exploration-Ct.#4
Claim No. 1 Above
Offset None - Direction: On Spot

Depth Pump or Casing	CORE Before Pump	CORE After Pump	Meas. Vol. Loose	No. Colors	Est. Val. Wgt.	CHARACTER OF FORMATION
4	24	1	.033	-	-	Muck-cl.sand-sm.angular rock-tr.blk.sand
5	17	1	.005	-	-	Sharp angular rock-sand-sm.cl.-tr.flood gr.-sm.blk s.
6	15	2	.131	-	-	Angular-flood gr.-sand-tr.cl-sm.blk.sand
7	19	2	.150	-	-	Gr.-sand-tr.cl-blk.sand-gr.rough & angular
8	18	1	.164	-	-	Gr.-sand-tr.cl-blk.sand-gr.rough & angular
9	18	1	.164	-	-	Gr.-sand-sm.cl.-blk.sand-
10	19	1	.164	-	-	Gr.-sand-sm.cl.-blk.sand-
11	17	1	.147	-	-	Gr.-sand-sm.cl.-blk.sand-
12	19	1	.164	-	-	Gr.-sand-sm.cl.-blk.sand-
13	17	1	.147	-	-	Gr.-sand-sm.cl.-blk.sand-
14	17	1	.147	-	-	Gr.-sand-sm.cl.-blk.sand-
15	18	1	.164	-	-	Gr.-sand-sm.cl.-blk.sand-
16	17	2	.139	-	-	Gr.-sand-sm.cl.-blk.sand
17	18	1	.164	-	-	Gr.-sand-sm.cl.-blk.sand
18	12	0	.090	-	-	Boulder-sand-sm.cl.-sm.gr.-sm.blk.sand
19	17	1	.131	-	-	Gr.-sand-sm.cl.-blk.sand-blk.chips
20	19	1	.147	-	-	Gr.-sand-sm.cl.-blk.sand
21	18	0	.131	-	-	Boulder,sm.sand-tr.cl.-tr.gr.-tr.blk.sand
22	17	0	.114	-	-	Boulder-sm.sand-tr.cl.-no gr. tr.blk.sand
23	6	0	.016	-	-	Boulder-sm.sand-pipe so out of line tools won't operate freely in hole.

Just 1 day for this hole--quart for--all blk.sand
Quitting this hole for now-losing time on it-fighting crooked pipe
Made 3 trips to straighten it up-no good. It will have to be blasted, under-reamed, or start a new hole.
Will move to hole #5 for now
3 hrs. delay trying to straighten pipe - 1 hr.delay going to shop for new drive block bolt.

Time of Drilling	7½ hrs.	From ____ to ____	____ MGS.	Muck	1 Ft.
Time of Pulling	1 hrs.	From ____ to ____	____ MGS.	Gravel	19 Ft.
Time of Moving	6 hrs.	Actual Weight		Bedrock	3 Ft.
Time Lost	4 hrs.	Total	811 MGS.	Total	23 Ft.
Total Time	18½ hrs.				

Abbreviations to be Used

TH. -Thawed	S. -Sand	C. -Coarse
FT. -Frozen	MK.-Muck	ST.-Sticky
B. -Boulder	CL.-Clay	V. -Very
BR. -Bedrock	GR.-Gravel	M. -Much
TLS.-Tailings	F. -Fine	SM.-Some
AN. -Angular	M. -Medium	TR.-Trace

Crew

Driller R. Butler
Panner P. Mackory
Helper J. Bishop

DRILL FIELD LOG

Started 2:30 p.m. 10-16-54
Finished Moving 10:00 A.M. 10-16-54
Commenced Drilling 10:00 A.M. 10-16-54
Finished Drilling 11:00 A.M. 10-17-54
Finished Pulling 1:15 P.M. 10-17-54

Page No. 1 of 1 pages
Line No. 1 Hole No. 4 Drill-Offset
Creek McCann-Omard Exploration-Oct.1954
Claim
Offset Yes

Depth Pump or Casing	CORE Before Pump	CORE After Pump	Meas. Vol. Loose	No. Colors	Est. Val. Wgt.	CHARACTER OF FORMATION
4	29	0	.139	-	-	Gr.cl.-sand-sand-chunks of side hill rock
5	16	1	.131	-	-	Angular rock-sand-sa.cl.
6	16	1	.147	-	-	Angular rock-sand-sa.cl.
7	15	0	.114	-	-	gr.-sand-sa.cl.-tr.lt.sand-smaller washed gr.
8	17	1	.147	-	-	gr.-sand-sa.cl.-sa.blk sand-smaller washed gr.
9	17	1	.144	-	-	gr.-sand-sa.cl.-blk.sand-smaller washed gr.
10	19	2	.104	-	-	" " " " " "
11	18	2	.104	-	-	" " " " " "
12	19	1	.150	-	-	" " " " " "
13	18	1	.104	-	-	" " " " " "
14	18	2	.104	-	-	" " " " -washed gr.
15	16	1	.147	-	-	" " " "
16	17	1	.147	-	-	" " " "
17	19	1	.104	-	-	" " " "
18	18	2	.147	-	-	" " " "
19	15	1	.137	-	-	" " " "
20	17	2	.147	1V	Tr.	" " " "
21	20	2	.104	3V	Tr.	" " " "
22	15	1	.131	1V	Tr.	" " " "
23	17	1	.139	2V	Tr.	" " " "
24	15	1	.147	2V	Tr.	" " " "
25	18	1	.147	2V	Tr.	" " " "
26	15	1	.147	2VF	Tr.	" " " " -boulder
27	19	1	.150	7	1	" " " " -boulder
28	18	2	.131	1V	Tr.	" " " " -slight increase in cl.
29	19	2	.139	3V	Tr.	" " " " -boulder
30	19	1	.139	3V	Tr.	" " " " -boulder
31	18	2	.131	3V	Tr.	" " " " -boulder
32	19	1	.150	2V	Tr.	" " " " -boulder
33	20	2	.150	1VF	Tr.	" " " "
34	17	2	.147	5VF	Tr.	" " " "
35	19	2	.104	10	0	" " " " -clay increase
36	15	1	.104	40	25	" " " " -boulder,-considerable cl.
37	19	1	.147	7	15	" " " " -boulder
38	17	1	.139	9	7	" " " "
39	17	1	.114	7	5	" " " " -another increase in cl.-sa.blk.sand
40	19	2	.104	2V	Tr.	" " " " cl.-sand-tr.gr.-tr.blk.sand-greenish gray cl.
41	16	2	.147	-	-	" " " " Greenish gray cl.-greenish sand-highly fract.green rock out of blk.sand-definitely gr.
	2 bars:		61-values.	1/2	part	Per-all the black sand

Time of Drilling	9 hrs.	From 0 to 41	91 MGS.	Muck	1 Ft.
Time of Pulling	1-3/4 hrs.	From to	MGS.	Gravel	39 Ft.
Time of Moving	4 hrs.			Bedrock	1 Ft.
Time Lost	- hrs.	Actual Weight	91		
Total Time	14-3/4 hrs.	Total	MGS.	Total	41 Ft.

Abbreviations to be Used

TH. -Thawed	S. -Sand	C. -Coarse
FT. -Frozen	MK.-Muck	ST.-Sticky
B. -Boulder	CL.-Clay	V. -Very
BR. -Bedrock	GR.-Gravel	M. -Much
TLS.-Tailings	F. -Fine	SM.-Some
AN. -Angular	M. -Medium	TR.-Trace

Crew

Driller B. Butler
Panner B. McCory
Helper J. Bishop

DRILL FIELD LOG

Started [illegible] Page No. [illegible]
Finished Moving [illegible] Line No. 1 Hole No. 5
Commenced Drilling [illegible] Creek [illegible]
Finished Drilling [illegible] Claim [illegible]
Finished Pulling [illegible] Offset [illegible]

Depth Pump or Casing	CORE Before Pump	CORE After Pump	Meas. Vol. Loose	No. Colors	Est. Val. Wgt.	CHARACTER OF FORMATION
1	10	1	.[illegible]	-	-	[illegible]
5	16	1	.[illegible]	-	-	[illegible]
6	17	2	.[illegible]	-	-	[illegible]
7	18	1	.[illegible]	-	-	[illegible]
8	20	1	.[illegible]	-	-	[illegible]
9	16	1	.[illegible]	-	-	[illegible]
10	17	1	.[illegible]	[illegible]	[illegible]	[illegible]
11	18	0	.[illegible]	3	r.	[illegible]
12	23	0	.[illegible]	2	r.	[illegible]
13	17	1	.[illegible]	1	r.	[illegible]
14	17	1	.[illegible]	2	r.	[illegible]
15	17	1	.[illegible]	3	r.	[illegible]
16	17	2	.[illegible]	-	-	[illegible]
17	16	2	.[illegible]	-	-	[illegible]
18	16	1	.[illegible]	-	-	[illegible]
19	16	1	.[illegible]	-	-	[illegible]
20	16	1	.[illegible]	-	-	[illegible]
21	16	1	.[illegible]	-	-	[illegible]
22	16	1	.[illegible]	-	-	[illegible]
23	17	1	.[illegible]	-	-	[illegible]
24	16	1	.[illegible]	-	-	[illegible]
25	20	1	.[illegible]	-	-	[illegible]
26	18	1	.[illegible]	3V	r.	[illegible]
27	20	1	.[illegible]	3V	[illegible]	[illegible]
28	19	2	.[illegible]	3V	[illegible]	[illegible]
29-30	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
29	18	1	.[illegible]	3V	r.	[illegible]
30	19	1	.[illegible]	3V	r.	[illegible]
31	18	1	.[illegible]	1V	r.	[illegible]
32	17	2	.[illegible]	3VF	r.	[illegible]
33	18	1	.[illegible]	7	0	[illegible]
34	18	1	.[illegible]	12	0	[illegible]
35	17	1	.[illegible]	0	0	[illegible]
36	19	2	.[illegible]	[illegible]	[illegible]	[illegible]
37	18	1	.[illegible]	15	0	[illegible]
38	19	1	.[illegible]	0	5	[illegible]
39	21	1	.[illegible]	-	-	[illegible]

[illegible]

Time of Drilling	9 hrs.	From 0 to 30	203 MGS.	Muck	2 Ft.
Time of Pulling	[illegible] hrs.	From ... to ...	... MGS.	Gravel	30 Ft.
Time of Moving	1 hrs.	Actual Weight		Bedrock	0 Ft.
Time Lost	1-1/2 hrs.	Total	203 MGS.	Total	32 Ft.
Total Time	13-1/2 hrs.				

Abbreviations to be Used

TH. -Thawed	S. -Sand	C. -Coarse
FT. -Frozen	MK.-Muck	ST.-Sticky
B. -Boulder	CL.-Clay	V. -Very
BR. -Bedrock	GR.-Gravel	M. -Much
TLS.-Tailings	F. -Fine	SM.-Some
AN. -Angular	M. -Medium	TR.-Trace

Crew

Driller [illegible]
Panner [illegible]
Helper [illegible]

DRILL FIELD LOG

Started [illegible] 10-11-[illegible]
Finished Moving 10:30 A.M. 10-12-[illegible]
Commenced Drilling 10:30 A.M. 10-12-[illegible]
Finished Drilling 8:30 P.M. 10-13-[illegible]
Finished Pulling [illegible] 10-13-[illegible]

Page No. 1 of 2 pages
Line No. [illegible] Hole No. [illegible]
Creek [illegible]
Claim No. 1 Above
Offset [illegible]

Depth Pump or Casing	CORE Before Pump	CORE After Pump	Meas. Vol. Loose	No. Colors	Est. Val. Wgt.	CHARACTER OF FORMATION
[illegible]	[illegible]	1	.13	-	-	[illegible]
5	17	1	.147	-	-	[illegible]
6	18	2	.14	-	-	[illegible]
7	16	2	.147	-	-	[illegible]
8	16	2	.142	-	-	[illegible]
9	17	1	.139	2V	Tr.	[illegible]
10	19	1	.14	1V	[illegible]	[illegible]
11	18	1	.14	2V	[illegible]	[illegible]
12	18	1	.14	2V	[illegible]	[illegible]
13	17	1	.14	2V	[illegible]	[illegible]
14	18	1	.14	1V	[illegible]	[illegible]
15	16	1	.142	2V	[illegible]	[illegible]
16	16	1	.147	-	-	[illegible]
17	18	1	.14	-	-	[illegible]
18	16	2	.139	-	-	[illegible]
19	17	2	.139	-	-	[illegible]
20	17	2	.147	-	-	[illegible]
21	18	2	.142	-	-	[illegible]
22	19	1	.140	1V	Tr.	[illegible]
23	18	1	.14	-	-	[illegible]
24	18	2	.14	-	-	[illegible]
25	20	1	.14	-	-	[illegible]
26	18	1	.14	-	-	[illegible]
27	17	1	.142	-	-	[illegible]
28	19	1	.14	-	-	[illegible]
29	20	1	.140	-	-	[illegible]
30	18	1	.14	1V	Tr.	[illegible]
31	14	0	.098	5V	[illegible]	[illegible]
32	21	1	.140	-	-	[illegible]
33	20	2	.14	-	-	[illegible]
34	18	2	.14	-	-	[illegible]
35	18	2	.14	-	-	[illegible]
36	18	2	.14	-	-	[illegible]
37	22	2	.172	-	-	[illegible]
38	20	2	.140	-	-	[illegible]
39	19	2	.147	25	15	[illegible]
40	17	2	.131	7	3	[illegible]
41	21	1	.140	1V	Tr.	[illegible]

Time of Drilling [illegible] hrs.
Time of Pulling [illegible] hrs.
Time of Moving [illegible] hrs.
Time Lost [illegible] hrs.
Total Time [illegible] hrs.

From 0 to 13 [illegible] MGS.
From ____ to ____ ____ MGS.
Actual Weight
Total [illegible] MGS.

Muck [illegible] Ft.
Gravel [illegible] Ft.
Bedrock ____ Ft.
Total 13 Ft.

Abbreviations to be Used

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BR. -Bedrock	GR.-Gravel	M. -Much
TLS.-Tailings	F. -Fine	SM.-Some
AN. -Angular	M. -Medium	TR.-Trace

Crew

Driller [illegible]
Panner [illegible]
Helper [illegible]

DRILL FIELD LOG

Started [illegible]
Finished Moving [illegible]
Commenced Drilling [illegible]
Finished Drilling [illegible]
Finished Pulling [illegible]

Page No. [illegible]
Line No. [illegible] Hole No. [illegible]
Creek [illegible]
Claim [illegible]
Offset [illegible]

Depth Pump or Casing	CORE Before Pump	CORE After Pump	Meas. Vol. Loose	No. Colors	Est. Val. Wgt.	CHARACTER OF FORMATION
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]

Time of Drilling [illegible] hrs.	From [illegible] to [illegible]	[illegible] MGS.	Muck [illegible] Ft.
Time of Pulling [illegible] hrs.	From [illegible] to [illegible]	[illegible] MGS.	Gravel [illegible] Ft.
Time of Moving [illegible] hrs.			Bedrock [illegible] Ft.
Time Lost [illegible] hrs.	Actual Weight		
Total Time [illegible] hrs.	Total [illegible]	MGS.	Total [illegible] Ft.

Abbreviations to be Used

TH. -Thawed	S. -Sand	C. -Coarse
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BR. -Bedrock	GR.-Gravel	M. -Much
TLS.-Tailings	F. -Fine	SM.-Some
AN. -Angular	M. -Medium	TR.-Trace

Crew

Driller [illegible]
Panner [illegible]
Helper [illegible]

DRILL FIELD LOG

Started [illegible] 10-14-54 Page No. 1 of 2 pgs
Finished Moving 10:30 A.M. 10-14-54 Line No. 1 Hole No. 7 [illegible]
Commenced Drilling 10:30 A.M. 10-14-54 Creek [illegible] Exploration Co. 1954
Finished Drilling 10:00 Noon 10-15-54 Claim No. 1 Above
Finished Pulling Offset

Depth Pump or Casing	CORE Before Pump	CORE After Pump	Meas. Vol. Loose	No. Colors	Est. Val. Wgt.	CHARACTER OF FORMATION
4	-	0	.000	-	-	uc.-cl.sand-bedrock-tr.flood gr.
6	20	1	.106	-	-	bol-cl.-sand-s.flood gr.
7	16	1	.131	-	-	r.-sand-cl.-sm.blk.sand-angular flood gr.
8	20	1	.104	-	-	r.-sand-cl.-sm.blk.sand-angular flood gr.
9	17	1	.147	2V	Gr.	r.-sand-cl.-blk.sand-angular flood gr.
10	17	1	.147	2V	[illegible]	r.-sand-sm.cl.-blk.sand-angular flood angular gr.
11	19	1	.160	3V	[illegible]	r.-sand-sm.cl.-blk sand-washed gr.-sm.angular
12	18	2	.104	1V	[illegible]	r.-sand-sm.cl.-blk.sand
13	18	2	.164	2V	[illegible]	r.-sand-sm.cl.-blk.sand
14	17	1	.104	1V	[illegible]	r.-sand sm.cl.-blk.sand
15	18	2	.104	-	-	r.-sand-sm.cl.-blk.sand
16	18	1.	.147	-	-	r.-sand-sm.cl.-blk.sand
17	17	1	.104	-	-	r.-sand-sm.cl.-blk.sand-not much blk.sand
18	19	1	.130	-	-	r.-sand-sm.cl.-blk.sand-not much blk.sand
19	17	1	.104	-	-	r.-sand-sm.cl.-blk.sand-not much blk.sand
20	17	1	.104	-	-	r.-sand-sm.cl.-blk.sand-not much blk.sand
21	19	2	.104	-	-	r.-sand-sm.cl.-blk.sand-not much blk.sand
22	18	2	.147	-	-	r.-sand-sm.cl.-blk.sand-not much blk.sand
23	16	2	.130	-	-	r.-sand-sm.cl.-blk.sand-very little blk.sand
24	17	1	.147	-	-	r.-sand-sm.cl.-blk.sand-very little blk.sand
25	17	1	.147	-	-	r.-sand-sm.cl.-blk.sand-very little blk.sand
26	17	1	.147	-	-	r.-sand-sm.cl.-blk.sand-very little blk.sand
27	16	1	.147	-	-	r.-sand-sm.cl.-blk.sand-very little blk.sand
28	17	1	.147	-	-	r.-sand-sm.cl.-blk.sand
29	17	1	.147	-	-	r.-sand-sm.cl.-blk.sand-occasional sm.blk.sand
30	18	1	.147	5	1	r.-sand-sm.cl.-blk.sand
31	18	1	.147	1VF	Gr.	r.-sand-sm.cl.-blk.sand
32	16	1	.131	-	-	r.-sand-sm.cl.-blk.sand
33	16	1	.131	-	-	r.-sand-sm.cl.-blk.sand
34	17	2	.131	-	-	r.-sand-sm.cl.-blk.sand
35	17	1	.147	-	-	r.-sand-sm.cl.-blk.sand
36	18	1	.147	-	-	r.-sand-sm.cl.-blk.sand
37	18	1	.104	-	-	r.-sand-sm.cl.-blk.sand
38	17	1	.147	-	-	r.-sand-sm.cl.-blk.sand
39	17	1	.147	-	-	r.-sand-sm.cl.-blk.sand
40	17	2	.131	-	-	r.-sand-sm.cl.-blk.sand

Time of Drilling 9-1/2 hrs.
Time of Pulling 2 hrs.
Time of Moving 1-1/2 hrs.
Time Lost 0 hrs.
Total Time 14 hrs.

From 0 to 40 4 MGS.
From ____ to ____ ____ MGS.
Actual Weight
Total 4 MGS.

Muck 4 Ft.
Gravel 40 Ft.
Bedrock 1 Ft.
Total 45 Ft.

Abbreviations to be Used

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BR. -Bedrock	GR.-Gravel	M. -Much
TLS.-Tailings	F. -Fine	SM.-Some
AN. -Angular	M. -Medium	TR.-Trace

Crew

Driller [illegible]
Panner [illegible]
Helper [illegible]

DRILL FIELD LOG

Started [illegible]
Finished Moving [illegible]
Commenced Drilling [illegible]
Finished Drilling [illegible]
Finished Pulling

Page No. [illegible]
Line No. 1 Hole No. 7 [illegible]
Creek [illegible]
Claim No. 1 Above
Offset

Depth Pump or Casing	CORE Before Pump	CORE After Pump	Meas. Vol. Loose	No. Colors	Est. Val. Wgt.	CHARACTER OF FORMATION
[illegible]	[illegible]	1	.147	9V	[illegible]	[illegible]
[illegible]	[illegible]	1	.107	1V		[illegible]
[illegible]	17	1	.191	4VF		[illegible]
[illegible]	20	1	.1[illegible]	3VF		[illegible]
[illegible]	1[illegible]	[illegible]	.13[illegible]	9V		[illegible]
[illegible]	17	1	.147	2V		[illegible]
[illegible]	1[illegible]	1	.147	2VF		[illegible]
[illegible]	1[illegible]	1	.1[illegible]	-	-	[illegible]
						[illegible]

Time of Drilling [illegible] hrs.	From [illegible] to [illegible] [illegible] MGS.	Muck [illegible] Ft.
Time of Pulling [illegible] hrs.	From to MGS.	Gravel [illegible] Ft.
Time of Moving [illegible] hrs.		Bedrock [illegible] Ft.
Time Lost [illegible] hrs.	Actual Weight	
Total Time [illegible] hrs.	Total MGS.	Total [illegible] Ft.

Abbreviations to be Used

TH. -Thawed	S. -Sand	C. -Coarse
FT. -Frozen	MK.-Muck	ST.-Sticky
B. -Boulder	CL.-Clay	V. -Very
BR. -Bedrock	GR.-Gravel	M. -Much
TLS.-Tailings	F. -Fine	SM.-Some
AN. -Angular	M. -Medium	TR.-Trace

Crew

Driller [illegible]
Panner [illegible]
Helper [illegible]

DRILL FIELD LOG

Started 1:15 P.M. 10-17-54
Finished Moving 4:30 P.M. 10-17-54
Commenced Drilling 8:00 A.M. 10-18-54
Finished Drilling 10:00 A.M. 10-19-54
Finished Pulling 11:15 A.M. 10-19-54

Page No. 1 of 2 Pages
Line No. 1 Hole No. 0
Creek [illegible]ann- [illegible]ward [illegible]xploration-Oct.1954
Claim No. 1 Above
Offset [illegible] [illegible]irection [illegible] Spot

Depth Pump or Casing	CORE Before Pump	CORE After Pump	Meas. Vol. Loose	No. Colors	Est. Val. Wgt.	CHARACTER OF FORMATION
4	24	0	.031	-	-	[illegible]uck-cl.-tr.[illegible]ra-sa.sa[illegible]-tr.angular gr.
6	19	1	.106	-	-	[illegible]l.-sa[illegible]-sa.angular [illegible]-sticky-cl. [illegible]uck
7	14	1	.114	-	-	r.-sa[illegible]-sa.cl.-a little blk.sand-r.angular-flood
8	16	1	.131	-	-	r.-sa[illegible]-sa.cl.-a little blk.sand-r.angular-flood
9	15	0	.151	-	-	r.-sand-sa.cl.-blk.sand-washed [illegible] angular gr.
10	16	1	.131	-	-	r.-sand-sa.cl.-blk.sand-washed gr.
11	16	1	.147	-	-	r.-sand-sa.cl.-blk.sand-not [illegible]ch blk.sand
12	18	1	.164	2VF	Tr.	r.-sand-sa.cl.-blk.sand-not [illegible]ch blk.sand
13	17	2	.147	5VF	Tr.	r.-sa[illegible]d-sa.cl.-blk.sand-not [illegible]ch blk.sand
14	19	1	.158	3VF	Tr.	r.-sand-sa.cl.-blk.sand-not [illegible]ch blk.sand
15	21	1	.196	4VF	Tr.	r.-sa[illegible]-sa.cl.-blk.sand-coal(?)-r.-not [illegible]ch blk.sand
16	19	2	.164	2VF	Tr.	r.-sand-sa.cl.-blk.sand-very little blk.sand
17	21	2	.180	1VF	Tr.	r.-sand-sa.cl.-blk. sand
18	19	2	.164	3VF	Tr.	r.-sand-sa.cl.-blk sand
19	18	1	.164	2VF	Tr.	r.-sand-sa.cl.-blk.sand
20	19	1	.164	3VF	Tr.	r.-sand-sa.cl.-blk.sand
21	19	2	.147	1VF	Tr.	r.-sand-sa.cl.-sa.blk.sand
22	17	2	.139	2VF	Tr.	r.-sand-sa.cl.-sa.blk.sand
23	16	2	.131	1VVF	Tr.	r.-sand-sa.cl.-sa blksand
24	18	1	.147	2VF	Tr.	r.-sand-sa.cl.-sa.blk.sand
25	18	1	.147	3VF	Tr.	r.-sand-sa.cl.-sa.blk.sand
26	19	2	.147	5VF	Tr.	r.-sand-sa.cl.-sa.blk.sand
27	19	1	.164	2VF	Tr.	r.-sand-sa.cl.-sa.blk.sand
28	17	2	.147	1VF	Tr.	r.-sand-sa.cl.-sa.blk.sand
29	17	2	.147	2VF	Tr.	r.-sand-sa.cl.-sa.blk.sand
30	19	1	.164	-	-	r.-sand-sa.cl-sa.blk.sand
1-1/4 hrs. delay - 1:15-2:30 P.M. - 10-17-54. Broke cat line on side hill pull.						
31	18	2	.139	1VF	Tr.	r.-sand-sa.cl.-sa.blk.sand
32	16	2	.114	2VF	Tr.	r.-sand-sa.cl.-sa.blk.sand
33	17	2	.139	1VF	Tr.	r.-sand-sa.cl.-blk.sand(sa.)
34	17	1	.147	2VF	Tr.	r.-sand-sa.cl.-blk.sand
35	19	1	.164	3VF	Tr.	r.-sand-sa.cl.-blk sand
36	15	0	.098	1VF	Tr.	cobbler-sand-tr.cl.-sa.blk.sand-blk.cobbler
(Below) 37	16	1	.114	-	-	cobbler-sand-tr.cl.-tr.blk.sand-blk.cobbler
38	17	1	.147	1VF	Tr.	r.-sand-sa.cl.-blk.sand-sa.cobbr.chips
39	18	2	.147	3VF	Tr.	r. sand-sa.cl.-blk.sand
40	17	1	.147	2VF	Tr.	r.-sand-sa.cl.-blk.sand

Time of Drilling 10 hrs.
Time of Pulling 4-3/4 hrs.
Time of Moving 2 hrs.
Time Lost 1-1/4 hrs.
Total Time 15 hrs.

From 0 to 40 Trace MGS.
From ____ to ____ MGS.
Actual Weight
Total ____ MGS.

Muck 4 Ft.
Gravel 31 Ft.
Bedrock 1 Ft.
Total 40 Ft.

Abbreviations to be Used

TH. -Thawed	S. -Sand	C. -Coarse
FT. -Frozen	MK.-Muck	ST.-Sticky
B. -Boulder	CL.-Clay	V. -Very
BR. -Bedrock	GR.-Gravel	M. -Much
TLS.-Tailings	F. -Fine	SM.-Some
AN. -Angular	M. -Medium	TR.-Trace

Crew

Driller R. Cutler
Panner R. [illegible]
Helper [illegible]

D R I L L F I E L D L O G

Started 1:15 P.M. 10-17-54
Finished Moving 4:30 P.M. 10-17-54
Commenced Drilling 8:00 A.M. 10-18-54
Finished Drilling 10:00 A.M. 10-19-54
Finished Pulling 11:45 A.M. 10-19-54

Page No. 2 of 2 Pages
Line No. 1 Hole No. 8
Creek McCann-Howard Exploration-Oct.1954
Claim No. 1 Above
Offset None: Direction: On Spot

Depth Pump or Casing	CORE Before Pump	CORE After Pump	Meas. Vol. Loose	No. Colors	Est. Val. Wgt.	CHARACTER OF FORMATION
41	18	1	.164	4VF	Tr.	Gr.-sand-sm.cl.-blk.sand
42	18	1	.164	BVF	Tr.	Gr.-sand-sm.cl.-blk.sand-cl.increase
43	16	1	.114	-	-	Cl.-sand-sm.gr.-a little blk.sand
44	17	1	.147	1VF	Tr.	Cl.-sand-tr.gr.-a little blk.sand-Greenish gray cl.
45	18	1	.164	-	-	Cl-sand-tr.gr.-tr.blk.sand- " " " "
46	17	1	.164	-	-	Cl.-sand-highly fractured green rock-more tr.blk.sand

Time of Drilling 10 hrs.
Time of Pulling 1-3/4 hrs.
Time of Moving 2 hrs.
Time Lost 1 hrs.
Total Time 15 hrs.

From 0 to 46 Trace MGS.
From to MGS.
Actual Weight
Total Trace MGS.

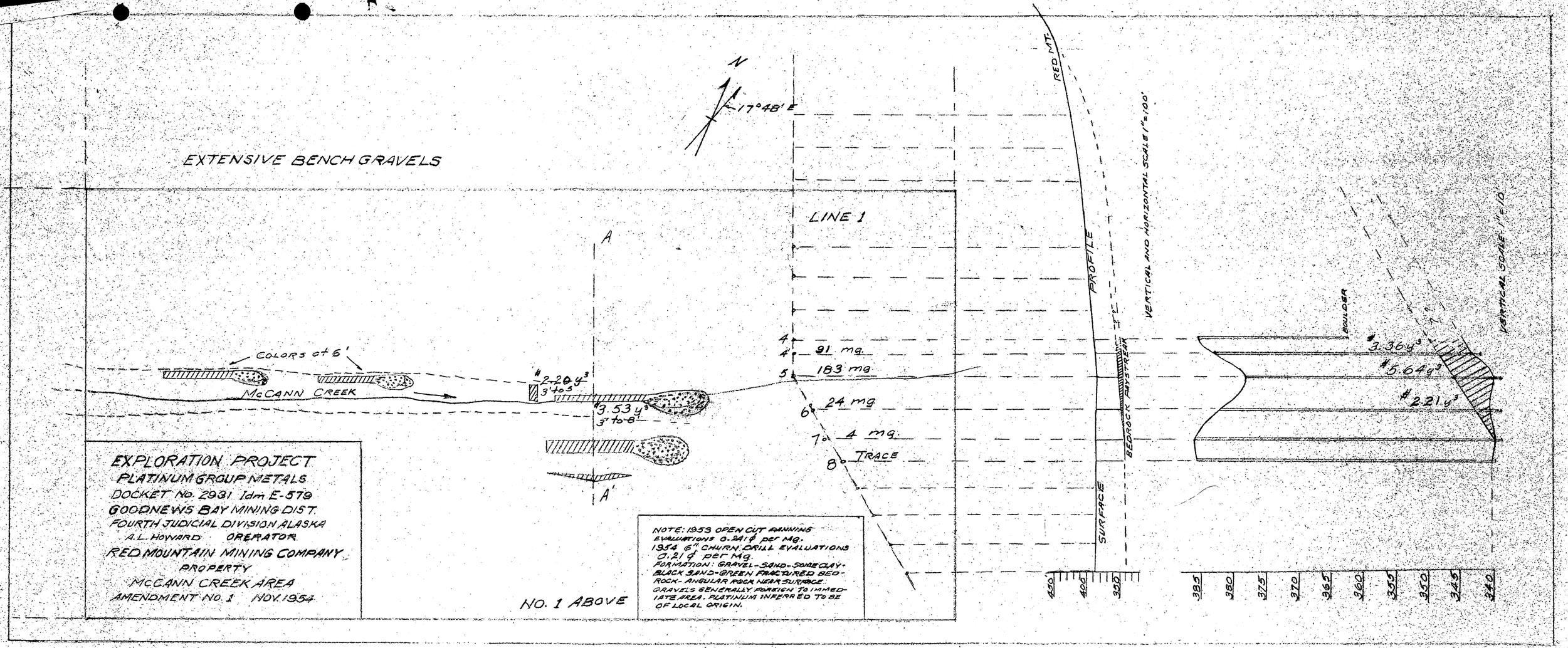
Muck 4 Ft.
Gravel 41 Ft.
Bedrock 1 Ft.
Total 46 Ft.

Abbreviations to be Used

TH. -Thawed	S. -Sand	C. -Coarse
FT. -Frozen	MK.-Muck	ST.-Sticky
B. -Boulder	CL.-Clay	V. -Very
BR. -Bedrock	GR.-Gravel	M. -Much
TLS.-Tailings	F. -Fine	SM.-Some
AN. -Angular	M. -Medium	TR.-Trace

Crew

Driller R. Butler
Panner H. MacRory
Helper G. Bishop


N
17°48' E
EXTENSIVE BENCH GRAVELS
LINE 1
A
A'
COLORS at 6'
McCANN CREEK
#2.20 y³
3' to 5'
#3.53 y³
3' to 8'
4
4 91 mg.
5 183 mg.
6 24 mg.
7 4 mg.
8 TRACE
NO. 1 ABOVE
NOTE: 1953 OPEN CUT RANNING EVALUATIONS 0.241 ¢ per Mg.
1954 6" CHURN DRILL EVALUATIONS 0.21 ¢ per Mg.
FORMATION: GRAVEL-SAND-SOME CLAY-BLACK SAND-GREEN FRACTURED BEDROCK-ANGULAR ROCK NEAR SURFACE.
GRAVELS GENERALLY FOREIGN TO IMMEDIATE AREA. PLATINUM INFERRED TO BE OF LOCAL ORIGIN.
EXPLORATION PROJECT
PLATINUM GROUP METALS
DOCKET No. 2931 Idm E-579
GOODNEWS BAY MINING DIST.
FOURTH JUDICIAL DIVISION ALASKA
A.L. HOWARD OPERATOR
RED MOUNTAIN MINING COMPANY
PROPERTY
McCANN CREEK AREA
AMENDMENT No. 1 NOV. 1954
RED MT.
PROFILE
VERTICAL AND HORIZONTAL SCALE 1"=100'
SURFACE
BEDROCK PASTREAM
420'
400
300
BOULDER
#3.36 y³
#5.64 y³
#2.21 y³
VERTICAL SCALE 1"=10'
385
380
375
370
365
360
355
350
345
340

1/18/55 gla

UNITED STATES
DEPARTMENT OF THE INTERIOR
Defense Minerals Exploration Administration

P. O. Box 560
Juneau, Alaska

January 14, 1955

Memorandum

To: Operating Committee, Defense Minerals Exploration Admin., Department of the Interior, Washington 25, D.C.

From: S. H. Lorain, Executive Officer, Field Team, Alaska District.

Subject: Operator's Report
Docket No. DMEA-2931 (platinum)
A. L. Howard

Enclosed herewith are two copies each of MF-104, MF-104A, operator's narrative report and operator's progress map. These data cover all of the operations performed last season.

It appears that Mr. Howard has discovered a paystreak of undetermined size; he plans to apply for a contract extension which will permit more nearly adequate determination of its size and value.

S. H. Lorain,
Executive Officer,
Field Team, Alaska District.

Encl. (4) - (in dup.)

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

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

Budget Bureau No. 42-R1036.4
Approval expires 6-30-53

RECEIVED
OCT 7 1955

Month of October, 1954 Docket No. DMEA 31 Contract No. 10[illegible]579
Operator's Name Albert Leighton Howard Minerals Platinum
Address 1631 Ashworth Ave., Seattle 33, Wash. Group Metals
Contract Amount, $ 12,000.00 Government Participation: 50 % Amount, $ 10,000.00

ITEMS OF COSTS	FOR OPERATOR'S USE			FOR GOVERNMENT USE ONLY		
	Monthly Total	Totals Previously Reported	Totals To Date	Approved Monthly Total	Approved Totals Previously Reported	Approved Totals To Date
(1) Independent Short Form Contracts:						
Drilling 230 ft	2,760	9,240	12,000	2760.00	9240.00	12000.00
Bulldozing						
Crosscutting						
Drifting						
(2) Labor and Supervision:						
Labor						
Supervision						
Technical Services						
(3) Operating Mat'ls. and Supplies:						
Timber						
Explosives						
Pipe						
Track						
(4) Operating Equipment:						
Rental						
Purchase						
Depreciation						
(5) Initial Rehabilitation and Repairs						
(6) New Bldgs., Improvements, etc.						
(7) Miscellaneous:						
Repairs to Equipment						
Sampling and Analysis						
Payroll Taxes						
Liability Insurance						
(8) Contingencies (specify):						
TOTALS	2,760	9,240	12,000	2760.00	9240.00	12000.00

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

Date Nov. 29 '54 *Payee A. L. Howard

Per _____ Title _____

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

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

(Instructions on reverse)

Pursuant to authority vested in me, I certify that this account is correct and proper for payment in the amount of: 2484.00 less 10% hold back $1404.00

Signature _____ (Authorized Certifying Officer)

Date _____ Vou. No. _____

(See other side)

(For Government use only)

CERTIFICATION BY GOVERNMENT REPRESENTATIVE:

I certify that to the best of my knowledge and belief the contractor submitting this voucher is operating a Defense Minerals Exploration Administration project under Contract No. IdW-E-179 in accordance with the terms of the contract.

Signature ..... Title Examining Engineer Date 1/12/55

APPROVAL BY DMEA EXECUTIVE OFFICER OR ALTERNATE:

Signature ..... Title Executive Officer Date 1/12/55

MONTHLY REPORT OF OPERATOR

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

GPO 83-38476

Form MF-104A
(April 1952)

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

UNITED STATES
DEPARTMENT OF THE INTERIOR

DEFENSE MINERALS EXPLORATION ADMINISTRATION

OPERATOR'S UNIT COST AND PROGRESS REPORT

Month of October 195 4 Docket No. DMEA 2931 Contract No. 14n-579

Operator's Name Albert Leighton Howard Minerals Platinum

Address 15361 Ashworth Ave., Seattle 33, Wash. Group Metals

OPERATION	UNIT	COSTS THIS MONTH	UNITS THIS MONTH	COSTS TO DATE	UNITS TO DATE	UNIT COSTS TO DATE	AUTHORIZED BY CONTRACT	
							Units	Unit Costs
Drifting								
Crosscutting								
Raising								
Shafts								
Winzes								
Drilling: Core								
Churn	foot	2,760	230	12,000.00	1000	12.00	1000	12.00
Auger								
Stripping								
Trenching								
Test Pits								
Roads and Trails								
TOTAL DISTRIBUTED COSTS								TOTAL COSTS AUTHORIZED BY CONTRACT
Operating Equipment Purchased								None
Initial Rehabilitation and Repairs								None
New Buildings, Improvements, etc.								None
TOTAL COSTS		2,760		12,000.				12,000.00

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

Date Nov. 29 '54 Operator A. L. Howard

Per Title

REMARKS:

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

(Instructions on reverse)

(For Government use only)

INSTRUCTIONS

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

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

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

GPO 83-38475

January 13, 1955

xxx 560

Mr. Albert Leighton Howard
16351 Ashworth Ave.
Seattle 33, Washington

Dear Sir:

Your voucher for final payment under DMEA Contract No. Idm - F379 has been cleared for payment.

In accordance with the provisions of the contract (Art. 4) 10% of the Government participation amount, $1,080.00, has been withheld pending final clearance from the DMEA Administrator in Washington, D.C.

Very truly yours,

L. J. Wilcox
Administrative Assistant

16351 Ashworth Avenue
Seattle 33, Washington
November 26, 1954

OF THE INTERIOR
Mines Administration
RECEIVED

Mr. S. H. Lorain, Executive Officer
Alaska Field Team, Region 1
D. M. E. A.
P. O. Box 560
Juneau, Alaska

Subject: Churn Drilling
McCann Creek
DMEA 2931. Idm-E579
October, 1954.

Dear Mr. Lorain:

In compliance with Amendment No. 1 of the above contract, 240 feet of six inch churn drill holes were driven between October 8th and October 20th.

The holes, six in number, disclosed a platinum metals paystreak on bedrock not less than 100 feet in width with an average thickness of 4.33 feet and an average weighted value of $4.00 a cubic yard.

In detail the results of drilling were:

LINE 1	Hole Number	Depth Feet	Milligrams Crude Pt.	Thickness Paystreak Ft.	Values Cu. Yd.
	4	23	Hole abandoned.	Bent Pipe.	Boulder.
Redrill	4'	41	91	5	$ 3.36
	5	39	183	6	5.64
	6	43	24	2	2.21
	7	48	4	0 (7)	.10
	8	46	Trace	0 (34)	Trace
Totals	6	240 40	302	Weighted Av.	$ 4.00

(7) Indicates thickness through which very fine colors occur.

(34) Same as above. Assigned pt. value 0.21¢ a mg.

Holes 1,2,3,9,10,11 and 12 not drilled, but locations shown for map profile.

The paystreak width has not been delimited to the northwest, that is toward Red Mountain, thought to be the source of all platinum in the district.

Formula for deriving values:

6 in. casing. 7½ in. drive shoe

$$V\ (¢ \text{ a cubic yd.}) \text{ equals } \frac{\text{Mg.Pt.} \times 0.21¢ \times 27}{\text{Depth (ft.)} \times 0.3068 \text{ (sq. ft.)}}$$

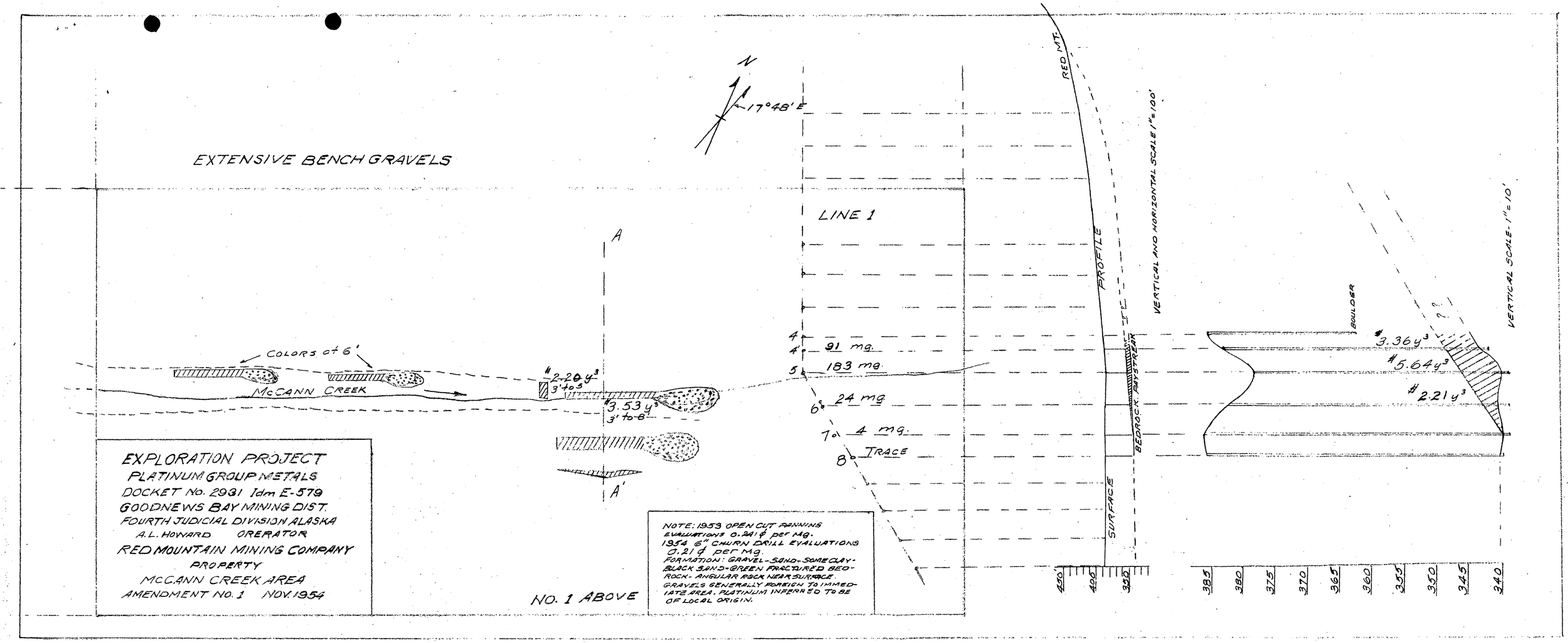
Results of drilling indicate a possible older undisturbed concentration of crude platinum on bedrock covered by a blanket of gravels derived from without the immediate area by later stream action.

The extent of the concentration of placer platinum has not been determined.

Sincerely yours,

A. L. Howard

A. L. Howard, Operator.


N
17°48' E
EXTENSIVE BENCH GRAVELS
LINE 1
A
A'
COLORS at 6'
McCANN CREEK
#2.20 y³
3' to 5'
#3.53 y³
3' to 8'
4
4' 91 mg.
5 183 mg.
6 24 mg
7 4 mg.
8 TRACE
NO. 1 ABOVE
EXPLORATION PROJECT
PLATINUM GROUP METALS
DOCKET No. 2931 Idm E-579
GOODNEWS BAY MINING DIST.
FOURTH JUDICIAL DIVISION ALASKA
A.L. HOWARD OPERATOR
RED MOUNTAIN MINING COMPANY
PROPERTY
McCANN CREEK AREA
AMENDMENT NO. 1 NOV. 1954
NOTE: 1953 OPEN CUT PANNING EVALUATIONS 0.241¢ per MG.
1954 6" CHURN DRILL EVALUATIONS 0.21¢ per MG.
FORMATION: GRAVEL-SAND-SOME CLAY-BLACK SAND-GREEN FRACTURED BEDROCK-ANGULAR ROCK NEAR SURFACE.
GRAVELS GENERALLY FOREIGN TO IMMEDIATE AREA. PLATINUM INFERRED TO BE OF LOCAL ORIGIN.
RED MT.
PROFILE
VERTICAL AND HORIZONTAL SCALE 1" = 100'
BEDROCK PAY STREAK
SURFACE
420
400
320
BOULDER
#3.36 y³
#5.64 y³
#2.21 y³
VERTICAL SCALE - 1" = 10'
385
380
375
370
365
360
355
350
345
340

MAY 3 - 1954

Mr. A. L. Howard
16351 Ashworth Avenue
Seattle 33, Washington

Re: Docket No. DMEA-2931
(Platinum Group of Metals)
Contract No. 14m-2579
Red Mountain claims
Goodnews Bay District
Southwestern Alaska

Dear Mr. Howard:

Enclosed is the Operator's executed copy of Amendment No. 1 to the captioned contract, in accordance with Mr. S. H. Lorain's letter to you of April 20, 1954.

Sincerely yours,

G. O. Mittendorf

Administrator

FLKnauss/fcc
Enclosure 1

4-29-54
cc to: Admr. Reading File
Operating Comm.
Docket
Messrs. James A. Hall, USBM
Benjamin Gildersleeve, Rm. 242-A, GSA
Mr. Knauss
Code 700
DMEA Field Team, Region I

MAY 3 - 1954

Mr. [illegible] K. Lounsin
Executive Officer
DMEA Field Team, Region I
Bureau of Mines
P. O. Box [illegible]
Juneau, Alaska

Re: Docket No. DMEA-4931
(Platinum Group of Metals)
Contract No. Ide-2579
Albert Leighton Howard
Red Mountain claims
Goodnews Bay District
Southwestern Alaska

Dear Mr. Lounsin:

Reference is made to copy of your letter dated April 29, 1954, to Mr. A. L. Howard enclosing six copies of Amendment No. 1 to the captioned contract for his signature. Mr. Howard signed all of the copies and forwarded them directly to this office.

Attached are the Field Team's and Finance Office copies of this amendment, signed by the Administrator. By the attached copies of transmittal letter you will note that we have forwarded the executed original copy to Mr. Howard in Seattle, Washington.

Sincerely yours,

W. S. Martin
ACTING Chairman, Operating Committee

Enclosures 2

APPROVED:

J. H. Hedges
Member, Bureau of Mines

D. M. Larrabee
Member, Geological Survey

FILEnote:for 4-29-54
cc to: Admr. Reading File
Operating Comm.
Docket
Messrs. James E. Bell, USBM
Benjamin Gildersleeve, Rm.242-A,GSA
Mr. Kunze
Code 700
DMEA FIELD TEAM, REGION I

c
o
p
y

Juneau, Alaska

April 20, 1954

DMEA-2931

Mr. A. L. Howard
16351 Ashworth Ave.
Seattle 33, Washington

Dear Mr. Howard:

I was pleased to learn from your letter of April 8 that you will agree to the DMEA modification of your recent application for churn drilling on McCann Creek.

At the request of our Washington office I have prepared an amendment which will, I think, be satisfactory to both parties; six copiesare enclosed herewith.

If the amendment is satisfactory to you, please sign all copies and forward to Mr. C. O. Mittendorf, Administrator DMEA. He will sign and return your copy or, if he desires some changes, a revised and signed copy.

As soon asyou have the Government signature you will be free to proceed with the work.

With best wishes,

Yours sincerely,

/s/ S. H. Lorain

S. H. Lorain
Executive Officer, Region I

cc: Administrator, DMEA
C. L. Sainsbury

Original carbon recd. sent to M&F

MAR 3 1 1954

Mr. A. L. Howard
[illegible] Ashworth Avenue
Seattle 33, Washington

Re: Docket No. DMA-[illegible]
(Platinum Group of Metals)
Contract No. Ion-1579
Red Mountain claims
Goodnews Bay District
Southwestern Alaska

Dear Mr. Howard:

This is in response to your letter dated March 27, 1954, addressed to Mr. S. [illegible] Mittenzwei, concerning your application to extend the subject exploration project into McCann-Mundis Gulch Creek.

A communication was recently dispatched to Mr. S. H. Lorain, Executive Officer, DMA Field Team, Region I, P. O. Box 560, Juneau, Alaska, advising him to discuss with you a limited exploration drilling program of the area concerned and you will no doubt hear from him at an early date.

Sincerely yours,

SIGNED

Ernest Ian. Mills, Chief
Bauxite & Misc. Metals Division

FLKnowse/gla
3-31-54
cc to: Adm. Reading File
Docket
Code 700 ✓
FLKnowse
DMA Field Team, Region I (2)

MAR 29 1954

Mr. S. M. Lorain, Executive Officer
DMEA Field Team, Region I
P. O. Box 560
Juneau, Alaska

Re: Docket No. DMEA-5931
(Platinum group of metals)
Contract No. Ldm-1579
Albert Leighton Howard
Red Mountain claims
Goodnews Bay District
Southwestern Alaska

Dear Mr. Lorain:

This is with reference to your memorandum dated February 26, 1954, concerning the Operator's request for additional funds to extend the subject exploration project to include the gravel deposits along the McCann-Minnie Gulch Creeks.

There are enclosed copies of memoranda from Mr. E. L. Kennedy, and Mr. James E. Bell, both dated March 22, 1954, covering this question.

The Operator should be advised that the remaining 230 feet of drilling allowed in the contract to explore the Portland Bench area may be used to drill one or two exploratory holes above the confluence of Minnie-McCann Creeks. The locations and depths of these holes are to have the approval of the Field Team. If the Operator agrees to do this limited amount of drilling an amendment should be executed by your office permitting this change in the work and allowing the required winter recess period.

Sincerely yours,

George C. Selfridge

Chairman, Operating Committee

Enclosures (4)

APPROVED:

J. H. Hedges

Member, Bureau of Mines

D. M. Larrabee

Member, Geological Survey

FLKennon/fcc 3-24-54
cc to: Adm. Reading File
Operating Comm.
Docket
Messrs. James E. Bell, Rm. 1349
A. R. Kinkel, Jr., Rm. B-2424-GSA
Code 700
FLKennon
DMEA Field Team, Region I

3/23/54 gfw

UNITED STATES
DEPARTMENT OF THE INTERIOR
Bureau of Mines
Washington, D. C.

March 22, 1954

Memorandum

To: E. Wm. Ellis, DMEA
Through: M.H. Kline - (/s/ MHK)

From: James E. Bell, Rare and Precious Metals Branch

Subject: DMEA-2931 (Platinum), Red Mountain Claims, Goodnews Bay District, Southwestern Alaska

Referring to the meeting on thisproject held on March 19 in Room 4640 of the Interior Building, I am in agreement that the 230 feet of drilling remaining to be driven under contract No. Idm-E579 should be utilized to put down one or more holes to bedrock in the McCann Creek-Minnie Gulch Basin area above the confluence of McCann Creek and Minnie Creek, as shown on the maps submitted by the applicant.

/s/ JamesE. Bell

James E. Bell

c
o
p
y

3/22/54 gla

IN REPLY REFER TO:

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

March 22, 1954

Re: IMEA-2931
Red Mountain Claims
Goodnews Bay District
Alaska
$12,000
Platinum

Memorandum

To: Mr. E. Wm. Ellis

From: E. L. Newcomb

Subject: Proposed drilling in Minnie-McCann Creeks area

On March 19, the proposed drilling in the Minnie-McCann Creeks area was discussed at a meeting which was attended by Messrs. P. Sainsbury, J. Bell, F. L. Knouse, and E. L. Newcomb.

Insomuch as there are 230 feet of drilling left over from the Portland Bench project, it was mutually decided to recommend that this 230 feet be used to test for a deep channel along the confluence of the Minnie-McCann Creeks. Two holes probably could be drilled with this footage in order to prove or disprove the existence of a deep channel. The single hole previously drilled to about 80 feet did not reach bedrock, but the depth suggests the possibility of a deep channel.

I recommend that an amendment be prepared which would allow the operator to use the remaining 230 feet of drilling allotted for the Portland Bench in the Minnie-McCann Creeks area. Selection of hole locations should be left to the discretion of the field team.

In the event that favorable results are obtained by this drilling some further consideration of additional drilling may be warranted.

E. L. Newcomb

E. L. Newcomb
Geologist

3/18/54 gla

Defense Minerals Administration
RECEIVED
MAR 18 1954

WESTERN UNION

O.SEA900 25 NL PD 2 EXTRA-ANCHORAGEALASKA Mar. 17 * PM 10 31
US BUREAU OF MINES-
WASHDC-

I ASK, THAT YOU GIVE NO MORE LOANS TO A L HOWARD,
BEFORE COMPLETE INVESTIGATION IS MADE. WILL EXPLAIN IN
LETTER WHICH FOLLOWS.-
GUS B FERNESS PLATINUM ALASKA..

3/10/54 gla

UNITED STATES
DEPARTMENT OF THE INTERIOR
Bureau of Mines
Washington 25, D. C.

March 8, 1954

Memorandum

To: E. Wm. Ellis, DMEA

From: James E. Bell, Rare and Precious Metals Branch

Subject: DMEA-2931 (Platinum), Red Mountain Claims, Goodnews Bay District, Southwestern Alaska

Reference: Mr. A. L. Howard's letter of January 19, 1954 to Mr. C. O. Mittendorf, proposing certain operations for 1954; Mr. R. S. Velikanje's comments of February 12, 1954, and Mr. S. H. Lorain's recommendation of February 26, 1954 on this proposal.

It is my reaction to this correspondence that the 230 feet of drilling remaining to be driven under contract No. Idm.-E579 may reasonably be authorized for the McCann Creek-Minnie Gulch Basin area, as proposed by Mr. Howard. This phase could be followed by the additional drilling requested by Mr. Howard only if warranted, under a supplementary contract.

/s/ James E. Bell

James E. Bell

c
o
p
y

IN REPLY REFER TO:

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

March 8, 1954

Re: IMEA-2931
Red Mountain Claims
Goodnews Bay District
Alaska
Platinum
Proposed amendment -
McCann-Minnie Gulch area

Memorandum

To: Mr. L. Wm. Ellis

From: F. L. Newcomb

Subject: Recommendation for denial of proposed amendment

The operator requests additional funds for exploration drilling in the McCann-Minnie Gulch area.

A similar proposal was included in the original application. A review of the available data and the recommendation of persons familiar with the area indicated that the proposed exploration in the McCann-Minnie Gulch area was not justified. However, a limited amount of work was recommended for the Portland Bench. Drilling in this area has essentially been completed. The gravels on the Portland Bench do not contain sufficient platinum to justify a certificate of discovery.

There is no new evidence which suggests that the McCann-Minnie Gulch area is now a more promising prospect than it was at the time the application was originally reviewed.

I recommend the proposed amendment be denied and the contract work on the Portland Bench be considered as ready for termination.

F. L. Newcomb
Geologist

3/3/54 gla

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
MAR 2 - 1954

UNITED STATES
DEPARTMENT OF THE INTERIOR

Defense Minerals Exploration Administration

P. O. Box 560
Juneau, Alaska

February 26, 1954

Memorandum:

To: Operating Committee, Defense Minerals Exploration Administration

From: Executive Officer, Field Team, Region I

Subject: Application for Amendment and increase,
Docket No. DMEA-2931 (platinum) Adm-E579
Albert Leighton Howard

Mr. Howard's proposal was received here, from your office, on February 2 and was referred to Mr. Sainsbury for his comments. Mr. Velikanje (for Sainsbury) has prepared some comments which are enclosed in quadruplicate; his recommendations are not specific, but the impression given is that he is not in favor of the amendment. Mr. Sainsbury tells me, however, that their opinion has been influenced considerably by previous firm objections by the Washington staff. In other words, he did not think there was much use in arguing the case.

After some verbal discussion with Velikanje and Sainsbury and a re-analysis of the proposal, I cannot help but think that the proposal is a reasonable exploration risk. My own (Bureau of Mines) staff has, independently reached the same conclusion.

You will recall that some drilling on McCann Creek was recommended by our Field Team report of May 25, 1953 but was disapproved in Washington. I will list and discuss the various objections that have been raised:

1. Not enough prospecting by the applicant: My reaction to this objection is that he has demonstrated the existence of good platinum values in one place; that certainlyconstitutes a "discovery". It seems to me that, from there out, an exploration project is in logical order.

2. Not enough gravel: According to the map (Plate 2) in U.S.G.S. Bulletin 915, McCann Creek proper is about 2,000 feet long; the width of "younger unconsolidated deposits" ranges from 500 to 1,000 feet; depth to bedrock where the one hole was drilled just below Minnie Gulch was more than

70 feet. These dimensions indicate 80,000 cubic yards per foot of depth or about 4,000,000 yards if we assume an average depth of 50 feet. (Howard estimates 3,650,000 yards). Obviously we cannot hope that more than a fraction of this will be pay gravel, but until some exploration has been done, we cannot say how large that fraction may be. In connection with the foregoing it should be pointed out that, although the present stream channel is narrow, Mertie deduced at least one period of rejuvenated erosion which might well have left pay channels on the benches.

I would point out further that Mertie states (Bull. 918) that during the glacial period when Smalls River was dammed by the ice, the drainage was easterly into Salmon River valley; this seems to be confirmed by the topography as shown on Plate 2, Bull. 918. Therefore I would think that an old channel leading eastward all the way to the Salmon River valley might be possible; this channel could be about 1½ miles long beyond the mouth of McCann Creek and up to one-quarter mile wide.

3. Platinum bearing gravels would have been removed by glaciation: Mertie states that the glaciers came down Tundra Creek valley from the northeast, were deflected by the north end of Red Mountain and continued westerly to the sea; he states that some ice piled up high on Red Mountain and that some came over in to the Salmon River valley but he does not give any evidence to the effect that scouring was deep and strong in the upper Smalls River-McCann Creek area. I would think that the fact that upper Smalls River flowed easterly during at least part of the glacial period would be good evidence that its channels were not subjected to scouring by the main glacier. Sainsbury presented somewhat similar arguments during our original consideration of this project.

On the basis of the foregoing analysis, I cannot see that the element of reasonable doubt has been removed by any of the principal objections. On the other side of the argument we have the fact that McCann Creek does drain from the platinum-bearing instrusives and that platinum has been found in the McCann Creek gravels, in amounts that would be commercial if enough yardage could be proved.

Unless more fully substantiated objections can be brought forth, I recommend that the proposal be approved subject to the condition that the holes be spaced at 50-foot intervals (instead of 100 feet as proposed) until the size and direction of a pay channel has been proved. I suggest also that the first lines be drilled on No. 1 Above and on Discovery instead of on No. 2 Above.

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

Encl:
cc: USGS-Sainsbury

DEPARTMENT OF THE INTERIOR
Minerals Administration
RECEIVED
FEB 12 1954

February 12, 1954

Comments on Proposed Amendment by A. L. Howard

DMEA Docket No. 2931, Contract Idm-E579
Platinum Group Minerals
Goodnews Bay District, Alaska
A. L. Howard, Operator

The Operator's letter requesting amendment to the contract, dated January 19, 1954, states: "McCann Creek - Minnie Gulch Basin area is included in present contract authorization."

This is in contradiction to a letter from the Operating Committee dated August 18, 1953, which states: "Through conversations with Mr. F. A. Rutledge of DMEA and Mr. John B. Martin of the U. S. Geological Survey, who have both examined the subject area, it has been concluded that only a small yardage of commercial platinum bearing gravel could be found in the McCann-Minnie Gulch area . . . . . Therefore, the attached proposed contract has been prepared to cover drilling in the Portland Bench area only."

From observations at minor trenches and one incomplete drill hole the operator obtains an inferred yardage of 3,650,000 cubic yards in the basin. From the data available, all of which in itself is incomplete and meager, the 3,650,000 yards is not inferred but is a wild "out of thin air" figure.

It also makes one wonder if the $2.20 cu/yd and $3.53 cu/yd figures were perhaps arrived at in much the same manner as the inferred yardage figure.

It is certain that Mr. Rutledge and Mr. Martin, who have examined the property and have recommended denial of any exploration drilling in this area are in a much better position to advise than the writer, who has never been on the property.

There is no doubt some platinum in the gravels of Upper McCann Creek but the writer believes that further prospecting of the area is necessary to obtain sufficient data on which to base a drilling program.

No discovery was made by the exploration on Portland Bench. If the final decision is a denial of the requested McCann Creek-Minnie Gulch drilling there should be no need for an amendment for a winter recess. The contract can be declared completed and without a discovery, provided the Operator does not intend to use the remaining 230 feet of drilling authorized for Portland Bench.

R.S.V.

R. S. Velikanje
Geologist
U. S. Geological Survey

JAN 2 0 1954

Mr. C. L. Lomain
Executive Officer
DMEA Field Team, Region I
P. O. Box 540
Juneau, Alaska

Re: Docket No. DMA 2931 (Platinum Group of Metals)
Contract IDm-579
Albert Leighton Howard
Red Mountain Claims
Goodnews Bay District
Southwestern Alaska

Dear Mr. Lomain:

There is enclosed a copy of a proposal by the subject Operator to amend the captioned contract to allow a remote period for the winter and also change and allow additional work under the terms of the contract.

Please furnish your comments and recommendations concerning the proposal.

Sincerely yours,

George C. Selfridge

Chairman, Operating Committee

Enclosure

FEKnouse/fcc
1-25-54
cc to: Adm. Reading File
Operating Committee
Messrs. JEHall, Rm.1349
AR. Kirkal, R. P-242- GSA
Ellis
Knouse
DMEA Field Team, Region I

Also with:

J. H. Hedges
Director, Bureau of Mines

s/ Philip W. Smith
Director, Geological Survey

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

JAN 29 1954

Mr. A. L. Howard
16351 Ashworth Avenue
Seattle 33, Washington

Re: Docket No. DMEA-2931
(Platinum Group of Metals)
Contract No. DMC-7579
Red Mountain Claims
Goodnews Bay District
Southwestern Alaska

Dear Mr. Howard:

This acknowledges your proposal dated January 17, 1954, to amend the captioned contract to allow a recess period for the winter and also change and allow additional work under the terms of the contract.

We have forwarded a copy of your proposal to the Executive Officer, Region I, for review and recommendations. You will be advised as soon as possible regarding the action taken with regard to your request.

Sincerely yours,

C. O. Mittendorf

Administrator

Filmouse/rla
1/28/54
cc to: Adm. Reading File
Docket
Messrs. A. Winkel, Jr., Rm. 3-242A, GSA
James E. Bell, Rm. 1349
Ellis
Knouse
DMEA Field Team, Region I (2)

MF-500

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS ADMINISTRATION

REFERENCE SLIP

DATE 11/13/53

REFERRED TO:

1. ~~Code 110~~
2. Code 700
3. Mr. Murphy
4. Div. contract file

FOR:

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

REMARKS: Mr. Howard visited office Nov. 30 - wants to transfer drilling to McCann creek. Told him to last for recess and submit new proposal in writing

Nov. 30, 1953

Check (X) before the items needing attention.

Murphy

ROBERT E. ADAMS

Initials of sender.

GPO 16—63815-1

RECEIVED
1953

xxxxxxxxxxxxxxxxx

P. O. Box 560
Juneau, Alaska
November 6, 1953

MEMORANDUM

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

From: S. H. Lorain

Subject: Operator's monthly report, Docket No. DMEA-2931
Albert Leighton Howard

Enclosed herewith are two copies each of form MF-104, form MF-104A, operator's narrative report and profile sketches for the month of September 1953.

The operator completed his exploration of the "Portland Bench area" without making a discovery of importance. Approximately $1,600 of the authorized contract amount was unexpended. The operator is preparing a final report and a request for an amended contract to permit work in the McCann Creek area.

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

Enclosures 4

cc: C.L.Sainsbury

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

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

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

Month of September, 195[illegible] Docket No. DMEA [illegible] Contract No. [illegible]
Operator's Name Albert Leighton Howard Minerals [illegible]
Address 16[illegible] Ashworth Ave., Seattle 22, Washington.
Contract Amount, $ [illegible] Government Participation: 96 % Amount, $

ITEMS OF COSTS	FOR OPERATOR'S USE: Monthly Total	Totals Previously Reported	Totals To Date	FOR GOVERNMENT USE ONLY: Approved Monthly Total	Approved Totals Previously Reported	Approved Totals To Date
(1) Independent / Short Form Contracts:						
Drilling	9,240	None	9,240	9,240	None	9,240
Bulldozing						
Crosscutting						
Drifting						
(2) Labor and Supervision:						
Labor						
Supervision						
Technical Services						
(3) Operating Mat'ls. and Supplies:						
Timber						
Explosives						
Pipe						
Track						
(4) Operating Equipment:						
Rental						
Purchase						
Depreciation						
(5) Initial Rehabilitation and Repairs						
(6) New Bldgs., Improvements, etc.						
(7) Miscellaneous:						
Repairs to Equipment						
Sampling and Analysis						
Payroll Taxes						
Liability Insurance						
(8) Contingencies (specify):						
TOTALS	9,240	None	9,240	9,240	None	9,240

I certify that the above bill is correct and just and that payment therefor has not been received.
Date October 29, 1953 *Payee A. L. Howard

Per _____ Title _____

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

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

(Instructions on reverse)

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

$ 8,316.00

Signature [illegible] (Authorized Certifying Officer)
Date 10/29/53 Vou. No. DMEA #24

(See other side)

(For Government use only)

CERTIFICATION BY GOVERNMENT REPRESENTATIVE:

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

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

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

Signature ..... Title ..... Date 10/29/53

MONTHLY REPORT OF OPERATOR

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

GPO 83-38476

Form MF-104A
(April 1952)

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

UNITED STATES
DEPARTMENT OF THE INTERIOR

DEFENSE MINERALS EXPLORATION ADMINISTRATION

OPERATOR'S UNIT COST AND PROGRESS REPORT

Month of September 1953 Docket No. DMEA 2931 Contract No. Ida-1579
Operator's Name Albert Leighton Howard Minerals Platinum Group
Address 16751 Aurora Ave., Seattle 33, Washington Metals

OPERATION	UNIT	COSTS THIS MONTH	UNITS THIS MONTH	COSTS TO DATE	UNITS TO DATE	UNIT COSTS TO DATE	AUTHORIZED BY CONTRACT	
							Units	Unit Costs
Drifting								
Crosscutting								
Raising								
Shafts								
Winzes								
Drilling: Core								
Churn	foot	$9,240	770	$9,240.	770	$12.00	1000	$12.00
Auger								
Stripping								
Trenching								
Test Pits								
Roads and Trails								
TOTAL DISTRIBUTED COSTS							TOTAL COSTS AUTHORIZED BY CONTRACT	
Operating Equipment Purchased							None	
Initial Rehabilitation and Repairs							None	
New Buildings, Improvements, etc.							None	
TOTAL COSTS							$12,000.00	

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

Date Oct. 27, 1953 Operator A. L. Howard

Per ..... Title .....

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

REMARKS:

(Instructions on reverse)

(For Government use only)

INSTRUCTIONS

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

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

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

GPO 83-38475

PROPERTY OF THE NATION
Licensed under 3 Commission
Released
[illegible] 1959

Mr. G. E. Lorain, Executive Director.
Alaska Field Team,
Region I, Juneau, Alaska.

Re Accompany [illegible]
Docket No. [illegible] 2931
Item 599

Dear Mr. Lorain:

A program of Platinum group metals exploration in the Goodnews Bay Mining District was initiated under [illegible] authorization, on the claims of the Red Mountain Mining Company, situated on the eastern slopes of Red Mountain.

Operations commenced on August 23 and ceased October 2. 69 cased holes, all in thawed ground were driven. The total footage amounted to 770 with an average depth of 11.16 feet per hole. The inside diameter of the casing was 6 inches and the outside diameter of the drive shoe was 7[illegible] inches.

A grid pattern of drilling was adhered to with modifications suggested by topographic features. The spacing between the lines of holes was generally 600 feet with holes spaced at 100 feet intervals. As drilling progressed hole intervals were in some cases increased and in one case, on line A, decreased to 50 feet.

The line A series of holes was drilled parallel to the south end of Portland Bench Claim at a distance of 330 feet from the end line. Prospects had been previously found in an open cut immediately contiguous to the road leading to Platinum. Hole No. 6 above the road yielded 16 milligrams of crude placer platinum. The calculated value a cubic yard in gravels 12 feet in depth, was 10¢. A slight depression of bench is indicated here.

A concentration of platinum was found along line B approximately paralleling the right(south) limit of Boulder Creek at an average distance of 100 feet from the present stream. The average content per hole was 6 mg. commencing with hole 8 to 15 inclusive, 800 feet to 1500 feet westward from the intersection of line B with the east side line of Portland Bench Claim. The calculated average value a cubic yard of gravel is 29¢ for a depth of 6.5 feet and a net platinum group metals valuation of 0.2811¢ a milligram. Values are concentrated in the three feet of gravels immediately above bed rock. No coarse colors were recovered though fairly common in the immediate creek vicinity.

Evidence of deeper ground was found in hole No. 1, line C, 600 feet north from and parallel to line B. This hole immediately west from the side line on first tier 7 above Claim, penetrated bedrock at a depth of 50 feet. Three feet immediately above bedrock yielded 7 mg. of platinum with a negligible value of 1.09¢. This area was undoubtedly occupied in recent time by the present Salmon River now having its bed a few hundred feet to the east.

No evidence was found of the southward continuance of the older channel inferred as having crossed Clara Creek some distance to the north. It is thought that this channel may have an extension upstream paralleling mined out Clara Creek on the latter's right (south) limit and a possible down stream extension into the Annie Gulch area.

The searched for channel may have crossed the present Salmon stream bed section before the latter was established and been an upstream extension into Clara Creek valley of the ancient East channel which disappears at a point opposite the mouth of Annie Gulch.

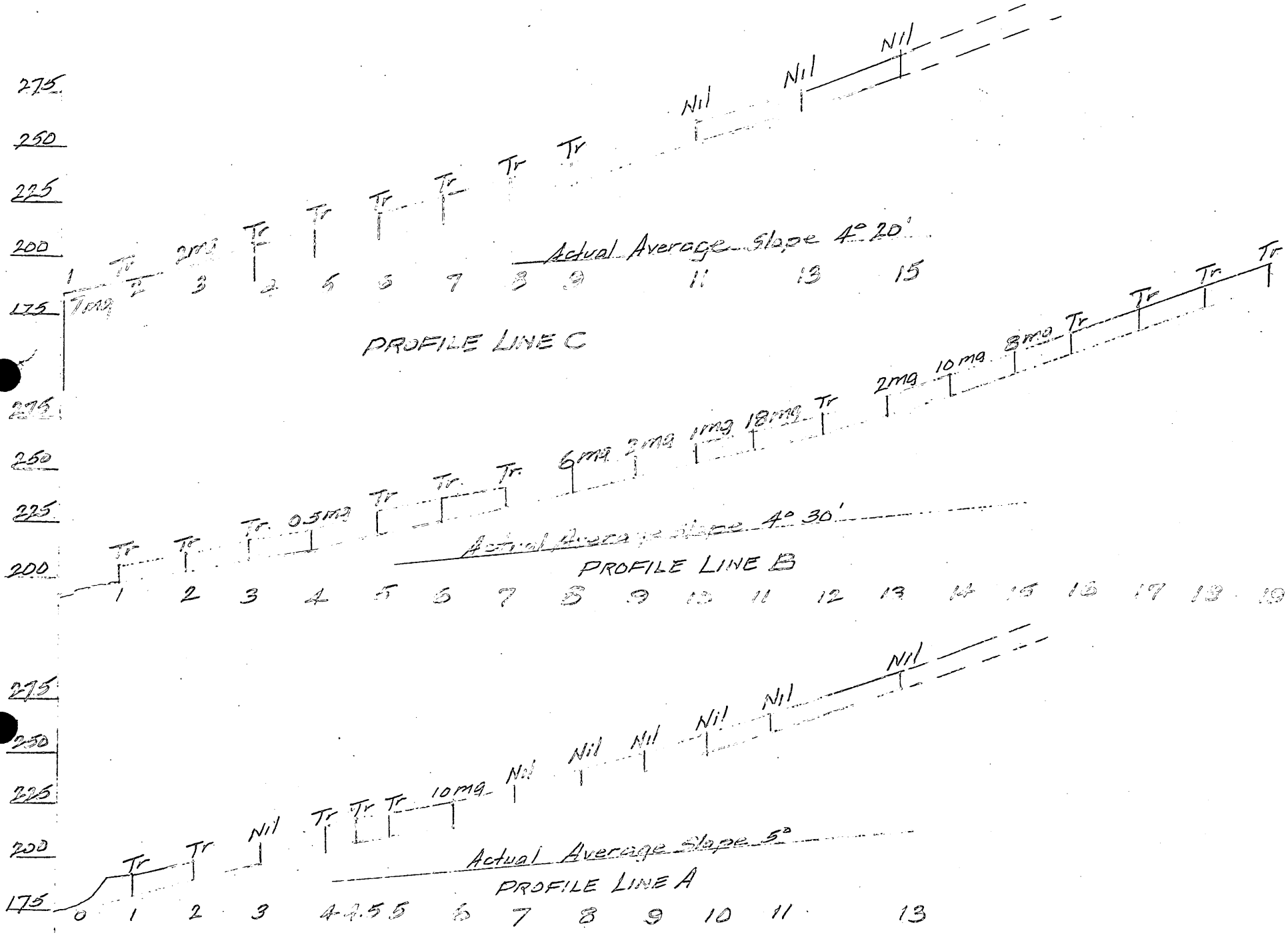
A few shallow holes between Clara Creek and Lowry Creek prove that the channel does not extend south of Annie Gulch on the West side of Salmon River. Nor is it apparently a part of a postulated former Lowry Creek drainage.

Seasonal drilling ceased on October 1 with 230 feet remaining in the present contract authorization.

Respectfully submitted,

A. L. Howard

A. L. Howard, Operator



SCALE HORIZONTAL 1" = 200'
VERTICAL 1" = 50'

DMEA 2931
Idm – E 579

1/21/54 gla

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
JAN 20 1954

16351 Ashworth Avenue
Seattle 33, Washington
January 19, 1954

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

Subject: Platinum Group Metals
DMEA 2931 Idm.-E579

Dear Mr. Mittendorf:

The above contract, authorizing a total churn drill footage amounting to 1,000 feet, has been 77% completed with 230 feet remaining to be driven. Since all operations have ceased for the season in this, the Goodnews Bay District, Southwestern Alaska, a recess from drilling operations is requested until the summer of 1954, which is within the time limit of the present project authorization.

It is proposed to carry on the coming season's operation in the McCann Creek-Minnie Gulch Basin, which area is included in the present contract authorization. Since, however, the 230 feet remaining is considered inadequate for exploration of the area, an additional footage amounting to 770 feet is herewith requested.

The map accompanying this application shows in detail the proposed drilling program, together with additional results from testing by open cut, in October 1953.

The platinum in this area is relatively coarse, with approximately one-half the values occurring in grains with an average weight of 40 milligrams equivalent to 9.64¢ each. The remaining values grade down to 0.5 mg. in weight. Total values a cubic yard based upon 150 pans to the yard is $2.86 (October 1953).

The inferred yardage in the basin to junction with Smalls River is 3,650,000.

Sincerely yours,

A. L. Howard

A. L. Howard, Operator

ALH:k

8/10/53 gla

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

Department of the Interior
Bureau of Mines Administration
RECEIVED
AUG 6 1953

August 6, 1953

Memorandum

Howard, a L

To: Mr. E. Wm. Ellis, DMEA

From: Mr. James E. Bell, Rare and Precious Metals Branch

Subject: DMEA-2931 (Platinum), Red Mountain Claims, Goodnews Bay District, Alaska

The field team recommends drilling in the Portland Bench and Minnie-McCann areas, which are believed to contain the best unexplored gravels in the Goodnews Bay district. A single line of 15-foot holes on each of these areas is proposed as a first stage of exploration, to be followed by a second stage of additional drilling if favorable results are obtained in the first stage.

It seems logical to me to restrict the Government's commitment in this project to a more limited program of say 1,000 feet of drilling in the (apparently) more promising Portland Bench area, with at least a few holes to be drilled to bedrock. This phase can be followed by a second commitment if warranted.

James E. Bell

8/10/53

~~Mr. Murphy~~:

Yes. Fayn.

Did Mr. Bell surname the letter transmitting the contract to Region I? It was my understanding he would sumame in lieu of comments. The contract and letter went to the Operating Committee on Friday and I think it was approved.

gla

FILE COPY
SURNAME:

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

5295

Murphy
Ellis
Hedges
Lowell
Selfridge
Fitzpatrick

1h13923.970 Working Fund, Interior, DMEA
August 6, 1953

S. H. LORAIN, EXECUTIVE OFFICER, DMEA FIELD TEAM, REGION I,
BUREAU OF MINES, P. O. BOX 560, JUNEAU, ALASKA.
RED MOUNTAIN PLATINUM PLACER CLAIMS
A.L.HOWARD, LESSEE
GOODNEWS BAY MINING DISTRICT, ALASKA
DOCKET NO. DMEA-2931

GOVERNMENT SIGNED EXPLORATION CONTRACT MAILED TO YOUR OFFICE THIS DATE. ONE THOUSAND FEET DRILLING ALLOWED TO EXPLORE PORTLAND BENCH AND SUPMISED WEST CHANNEL IN THIS AREA. NO PROPOSED SECOND STAGE WORK INCLUDED.

C. O. Mittendorf (for)

C. O. MITTENDORF, ADMINISTRATOR

FMMurphy/db
8-6-53
cc to: Adm. Reading File
Docket
Messrs: Ellis
Murphy
Confirmation to Region I

R.C.H.
8-10-53

Keep for Division Contract file. Copies in Docket

UNITED STATES
DEPARTMENT OF THE INTERIOR 140
DEFENSE MINERALS EXPLORATION ADMINISTRATION
WASHINGTON 25, D. C.

August 6, 1953

Memorandum

To: The Administrator

Through: E. W. Ellis

From: Chief Counsel

Subject: Albert Leighton Howard - Docket No. DMEA-2931

There is attached in satisfactory legal form for execution, a contract covering the above-described project, subject to a check of the claims referred to in Article 2 of the contract.

The M. & C. Fraction on Dowry Creek is mentioned in the lease but is not shown on the attached map. Claim #20, the Basin Claim, on McCann Creek is shown on the map but is not mentioned in the lease. This claim does not appear to be too important because it is not to be explored under the contract, although it is not far from the project work. If both the M. & C. Fraction and the Basin Claim are to be mentioned in the contract, then Article 2 should refer to 30 instead of 29 claims.

for J. L. Hofflund
Chief Counsel

Attachments

7/30/53 gla

UNITED STATES
DEPARTMENT OF THE INTERIOR
Defense Minerals Administration

P. O. Box 560
Juneau, Alaska

Defense Minerals Administration
RECEIVED
JUL 24 1953

July 21, 1953

Memorandum:

To: Operating Committee, Defense Minerals Exploration Administration

From: Field Team, Region I

Subject: DMEA Docket No. 2931, Red Mountain Platinum, A. L. Howard.

As suggested in the letter from the Operating Committee dated June 26, 1953, the above applicant was advised to submit a revised application along the lines suggested by all who reviewed the original application. Mr. Howard made a trip to Juneau for this purpose. He readily agreed to the proposed changes in his application.

Rather than submit a revised application, the Field Team prepared Exhibit "A" for a proposed contract which is acceptable to the Field Team and to Mr. Howard. In order to save time, he was advised to obtain all the documents necessary to complete a contract and to submit these as a unit with the proposed contract as prepared by the Field Team. Accordingly, Mr. Howard will forward the original and 4 copies of a complete proposed contract with attachments direct to Washington as per the enclosed copy of a letter on that subject.

Enclosed herewith are the following documents:

Original and 4 copies of a report prepared by the Geological Survey member of the Field Team in support of the proposed contract.

One copy of the proposed contract and Exhibit "A". Additional signed copies of the contract and supporting documents will be furnished by Mr. Howard.

Reviewed by
DMEA OPERATING COMMITTEE

7-29-53
(date)

C. T. Sainsbury

C. T. Sainsbury, Actg. Exec. Officer
Field Team, Region I

H. A. Hardlick

H. A. Hardlick, U. S. Bureau of Mines

RECEIVED
JUL 2 1953

P. O. Box 560
Juneau, Alaska

July 20, 1953

REGION I
FIELD TEAM REPORT, REVISED APPLICATION

Application: DMEA Docket No. 2931 (as revised)
Platinum Group Metals
Red Mountain Claims, Goodnews Bay District
Southwestern Alaska

Applicant: A. L. Howard
16351 Ashworth Avenue
Seattle 33, Washington

Summary and Conclusions

The subject application was received in Juneau, March 27, 1953, and a request for a field examination or recommendation on April 13, 1953. A field examination was not made because of the volume of information available to the Field Team from Government reports, and reports of private individuals and mining companies. A Field Team report, with attached geological and engineering analysis by R. S. Velikanje, Geologist, and R. L. Thorne, Mining Engineer, was forwarded to Washington, May 25, 1953. The Field Team report recommended extensive revision and paring of the applicant's proposal, or denial if the applicant insisted on his original exploration proposal.

Subsequently, Mr. Howard indicated his willingness to revise his application as recommended, and flew to Juneau on July 16 to assist the Field Team in revising his application. The attached short-form contracts have been prepared to expedite Washington processing of the revised application - it embodies the recommendations of Washington commodity men, and field engineers and geologist of Region I; consequently, it has the wholehearted approval of the Field Team.

The original proposal, calling for extensive trenching and drilling of Portland Bench and McCann Creek - Minnie Creek, at a total cost of $90,327.45, has been revised to a two-stage program consisting of

Reviewed by
DMEA OPERATING COMMITTEE
7-29-53
(date)

a single line of drill holes across Portland Bench, and a single line as shown on Exhibit A across McCann and Minnie Creeks. Stage II will become operative only if Stage I drilling indicates platinum-bearing gravels of sufficient size and grade to justify further drilling. The entire contract has been drawn up on a unit-cost basis of $12.00/foot, which will greatly facilitate bookkeeping, etc., in the Field and in Washington. This unit cost-per-foot includes the cost of a supervisor-engineer who will be required to prepare an adequate engineering and geological report of the drilling, including reserve computations; it includes the cost of assaying for the platinum-group metals, and also all costs incidental to setting up camp, transportation of men, etc.

The Field Team understands that the Goodnews Bay Mining Company has agreed orally to do the drilling for the applicant, which means that competent drillers, panners, etc., will be used, and drilling results will be dependable and accurate.

Recommendations

The Field Team recommends the attached short form contracts, presently signed by the Applicant, and with attached Owner's Consent to Lien, be approved in Washington; and that a contract be entered into with Mr. Howard to do the work specified in Exhibit "A" of the short-form contract.

General Considerations

A thorough study of Bulletin 918 by the Geological Survey Field Team member leads to certain inferences regarding the potentialities of McCann Creek not entirely in agreement with previous reports that indicate McCann and Minnie Creeks will not contain placer concentrations because their valleys have been glaciated (please refer to Applicants topographic map accompanying original application):

Martin points out that the southernmost lobe of Goodnews Glacier left terminal moraines just south of the divide between Smalls River and Salmon River, and that this lobe evidently flowed up the valley of Small River, against the existing bedrock gradient. The Smalls River drainage was diverted across the divide into Salmon River, which means that any stream entering Smalls River also must have gradually lost its gradient, then became gravel choked, and finally have reversed its flow as the southeastern lobe of ice from Goodnews Glacier slowly crept up Smalls River. This means that any pre-existing placer deposit would have been buried under many feet of alluvium prior to the encroachment of the ice, and it seems unlikely that a relatively thin glacier riding upslope over McCann and Minnie Creeks would scour out the previously-buried channels. It is a well known fact (often seen yet in Alaska)

that a thin glacier can over-ride earlier gravel deposits for considerable distances with very little disturbance of such earlier deposits.

It is entirely possible, then, that a pre-glacial channel may exist beneath the present alluvium of McCann Creek. This is borne out by the fact that the Goodnews Bay Mining Company reportedly drilled a hole 70 feet deep into gravels just below the confluence of McCann and Minnie Creeks without penetrating bedrock. Therefor, one hole is planned to test this deep channel.

Costs

The Operating Committee has requested that any unit-cost figure arrived at by the Field Team be broken down into components, so that the method of calculation of the unit cost is apparent. The Field Team has done this in the past, but actual costs have differed so much from estimated costs that we feel the best yard-stick is to compare actual cost-per-foot figures of operating placer drilling exploration projects with the $12.00/foot unit-cost proposed for the applicant. This is done below:

Table of Actual Drilling Costs

Docket No.	Location	Cost/foot	Remarks
DMGA Docket-824X	(Tin City)	$13.07	Partly cased, and favorable drilling.
DMGA Docket-2453	(Tozimoran)	$25.05	Cased, unit cost high owing to small amount of drilling.
DMGA Docket-2942	(Bar Mtn.)	$15.00 (Calculated)	Not completed.

The Bureau of Mines contract for churn drilling through overburden and conglomerate at a coal exploration project near Palmer, Alaska is:

1948 - 51 . . . . . $16.00/foot
1952 (by Amendment) $24.00/foot

At a unit cost of $12.00/foot, no profit will accrue to the applicant, even though the actual drilling will be sub-contracted to the Goodnews Bay Mining Company.

Time Element

Because of the limited time left in this year's operating season in the Goodnews Bay area, it is recommended that this application be acted upon as quickly as possible.

Very truly yours,

ALASKAN FIELD TEAM, REGION I

For J. A. Herdlick

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

C. L. Sainsbury

C. L. Sainsbury
Geological Survey Member

JUL 2 1953

P. O. Box 560
Juneau, Alaska

July 20, 1953

REGION I
FIELD TEAM REPORT, REVISED APPLICATION

Application: DMEA Docket No. 2931 (as revised)
Platinum Group Metals
Red Mountain Claims, Goodnews Bay District
Southwestern Alaska

Applicant: A. L. Howard
16951 Ashworth Avenue
Seattle 33, Washington

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Martin points out that the southernmost lobe of Goodnews Glacier left terminal moraines just south of the divide between Snalls River and Salmon River, and that this lobe evidently flowed up the valley of Snall River against the existing bedrock gradient. The Snalls River drainage was diverted across the divide into Salmon River, which means that any stream entering Snalls River also must have gradually lost its gradient, then became gravel choked, and finally have reversed its flow as the southeastern lobe of ice from Goodnews Glacier slowly crept up Snalls River. This means that any pre-existing placer deposit would have been buried under many feet of alluvium prior to the encroachment of the ice, and it seems unlikely that a relatively thin glacier riding upslope over McCann and Minnie Creeks would scour out the previously-buried channels. It is a well known fact (often seen yet in Alaska)

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Time Element

Because of the limited time left in this year's operating season in the Goodnews Bay area, it is recommended that this application be acted upon as quickly as possible.

Very truly yours,

ALASKAN FIELD TEAM, REGION I

For J. A. Kendrick

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

C. L. Sainsbury

C. L. Sainsbury
Geological Survey Member

Re: Docket No. DMEA-2931 (Uranium)
Red Mountain Claims
Good News Bay District
Southwestern Alaska

I recommend denial of this contract as presented for the reasons, as follows:

1) All known good platinum bearing gravel on Downey and Clara Creeks has been mined out by Strandberg & Sons. They did not seem disposed to ~~renew~~ continue operations on these claims although they had equipment available, and while operating there they could have denounced the ground on which the Red Mountain Mining latter placed claims. Also, the Goodnews Bay Mining Co., who have a dredge in the same area did not find commercial plantinum bearing gravel above the junction of Clara Creek and the Salmon River.

2) ~~The~~ From data available and also from the opinion of Mr. F. A. Rutledge, it is unlikely that sufficient yardage could be developed on this project to warrant the expense of a new ~~installation~~ plant to work this property. In case a limited yardage of platinum bearing gravel was developed, it probably could be mined at a latter date by the Goodnews Bay Mining Co. However, this company presently has ore reserves for 12 years, so any equity held on the property, from a Government assisted exploration project, on a ten year royalty basis, would be terminated before they got around to mining the proposed project area. Also, we do not know if applicant is able to finance a mining operation if ore is discovered (see Charles Johnston's letter dated May 14, 1953, in docket) shows GB are interested.

3) The contract as written does not follow the recommendations submitted

by Mr. F. A. Rutledge, dated June 6, 1953. Mr. Rutledge has examined this area and also has been on the Applicants property. His recommendation was for a 3 stage program - I. one line of holes on Portland Bench. II, additional holes on Portland Bench if warranted. III, a limited amount of drilling on McCann Creek only if results of Stage I and II are favorable, as only a small yardage can be developed on McCann Creek.

4) The estimated cost of the contract signed by the applicant for $32,400.00 is too high for exploration of workedout ground. The Government would never receive return of their capital investment even if new channels were found.

Mr. R. Thorne of the Bureau of Mines states probable yardage is 20,000, the applicant states 3,450,000 cu. yds. (on McCann Creek)

STANDARD FORM No. 14
APPROVED BY THE PRESIDENT
MARCH 10, 1926

TELEGRAM

OFFICIAL BUSINESS—GOVERNMENT RATES

FROM [illegible]/db

BUREAU DMEA

CHG. APPROPRIATION 14X3923.970 Working Fund

DMEA, Interior

10—1723 U. S. GOVERNMENT PRINTING OFFICE

MR. A. L. HOWARD
16351 ASHWORTH AVENUE
SEATTLE 33, WASHINGTON

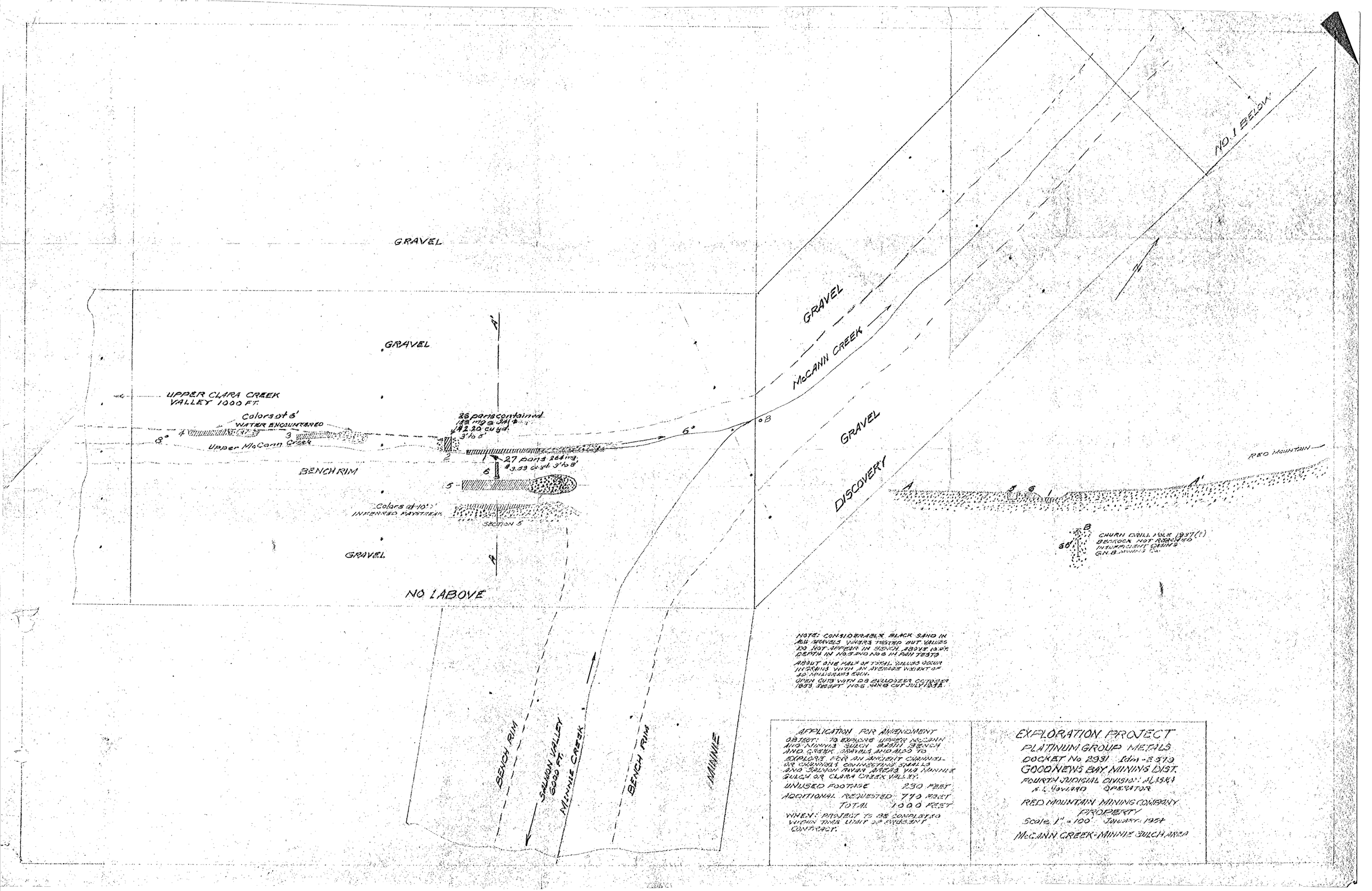
JUN 29 1953

REURTEL JUNE 25 DOCKET DMEA 2931 LORAIN EXECUTIVE OFFICER REGION I WAS INSTRUCTED ON JUNE 26 TO CONTACT YOU RE FURTHER ACTION YOUR APPLICATION

C. O. Mittendorf

Extra Copy

C. O. MITTENDORF, ADMINISTRATOR



NOTE: CONSIDERABLE BLACK SAND IN ALL GRAVELS WHERE TESTED BUT VALUES DO NOT APPEAR IN BENCH ABOVE 10 FT. DEPTH IN HOLES NO 8 IN PAN TESTS

ABOUT ONE HALF OF TOTAL VALUES OCCUR IN GRAINS WITH AN AVERAGE WEIGHT OF 10 MILLIGRAMS EACH.

OPEN CUT WITH D8 BULLDOZER OCTOBER 1953 BREAKT HOLE MINED OUT JULY 1952.

APPLICATION FOR AMENDMENT

OBJECT: TO EXPLORE UPPER McCANN AND MINNIE GULCH BENCH AND CREEK GRAVELS AND ALSO TO EXPLORE FOR AN ANCIENT CHANNEL OR CHANNELS CONNECTING SMALLS AND SALMON RIVER AREAS VIA MINNIE GULCH OR CLARA CREEK VALLEY.

UNUSED FOOTAGE 230 FEET
ADDITIONAL REQUESTED 770 FEET
TOTAL 1000 FEET

WHEN: PROJECT TO BE COMPLETED WITHIN TIME LIMIT OF EXISTANT CONTRACT.

EXPLORATION PROJECT
PLATINUM GROUP METALS
DOCKET No 2931 Idm-8519
GOODNEWS BAY MINING DIST.
FOURTH JUDICIAL DIVISION: ALASKA
S. L. Gaylord OPERATOR
RED MOUNTAIN MINING COMPANY PROPERTY
Scale 1" = 100' JANUARY 1954
McCANN CREEK-MINNIE GULCH AREA

XXXXXXXXXXXXXXX
P. O. Box 560
Juneau, Alaska
August 20, 1953

MEMORANDUM:

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

From: Alaska Field Team, Region I

Subject: Completion of contract Idm-B579
Docket No. DMEA-2931
A. L. Howard

Enclosed herewith are the "Government", "Division", and "Docket" copies of the subject contract; all copies have been signed by Mr. Howard. The number of days allowed for commencement of work has been inserted in Article 3.

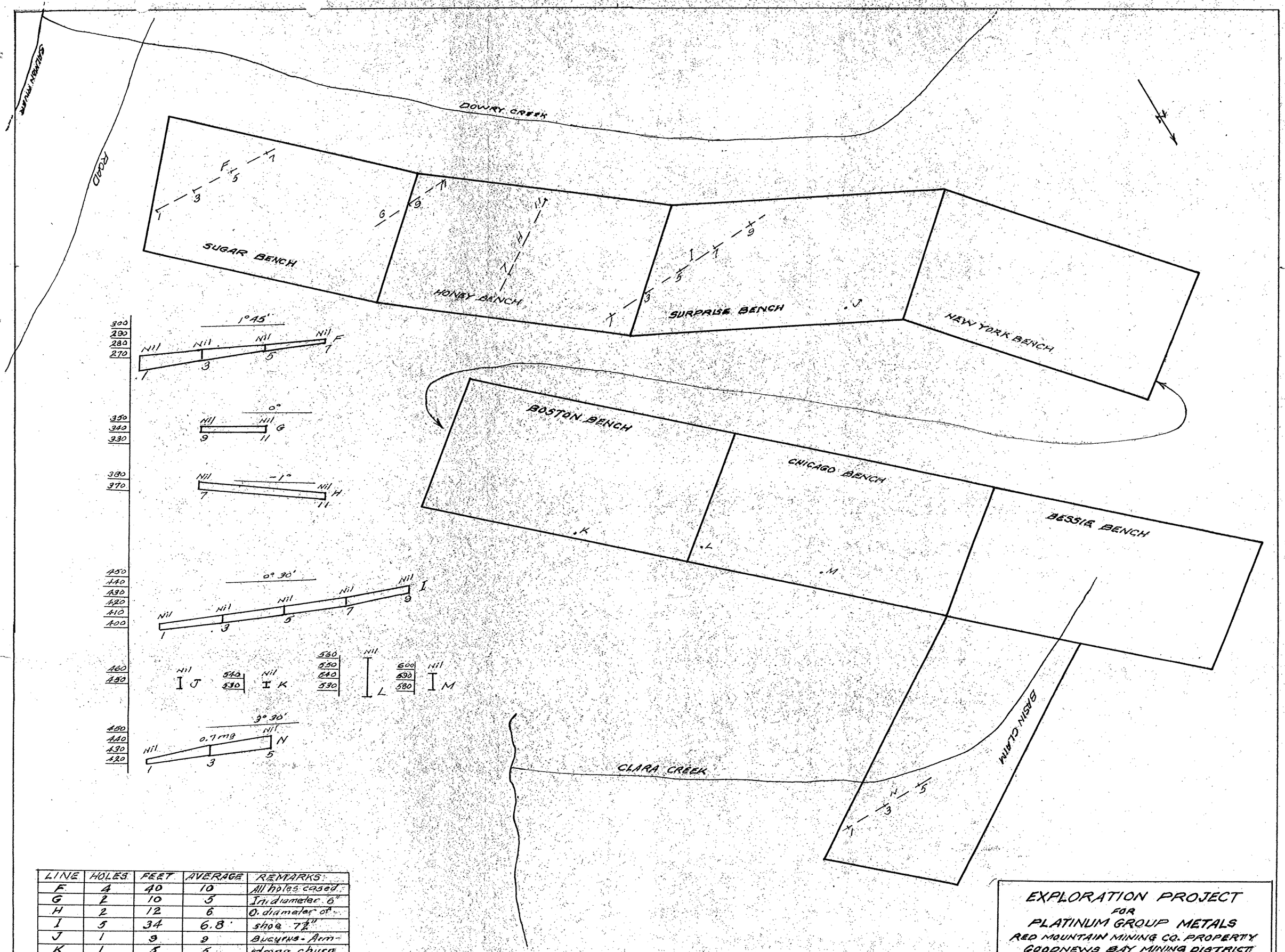
The "Field Team" and "Finance Officer" copies have been retained in this office; Mr. Howard has retained the "Operator's" copy.

Mr. Howard has wired that he is passing through Juneau today on his way to the property; he states also that all preliminary arrangements have been made.

ALASKA FIELD TEAM, REGION I

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

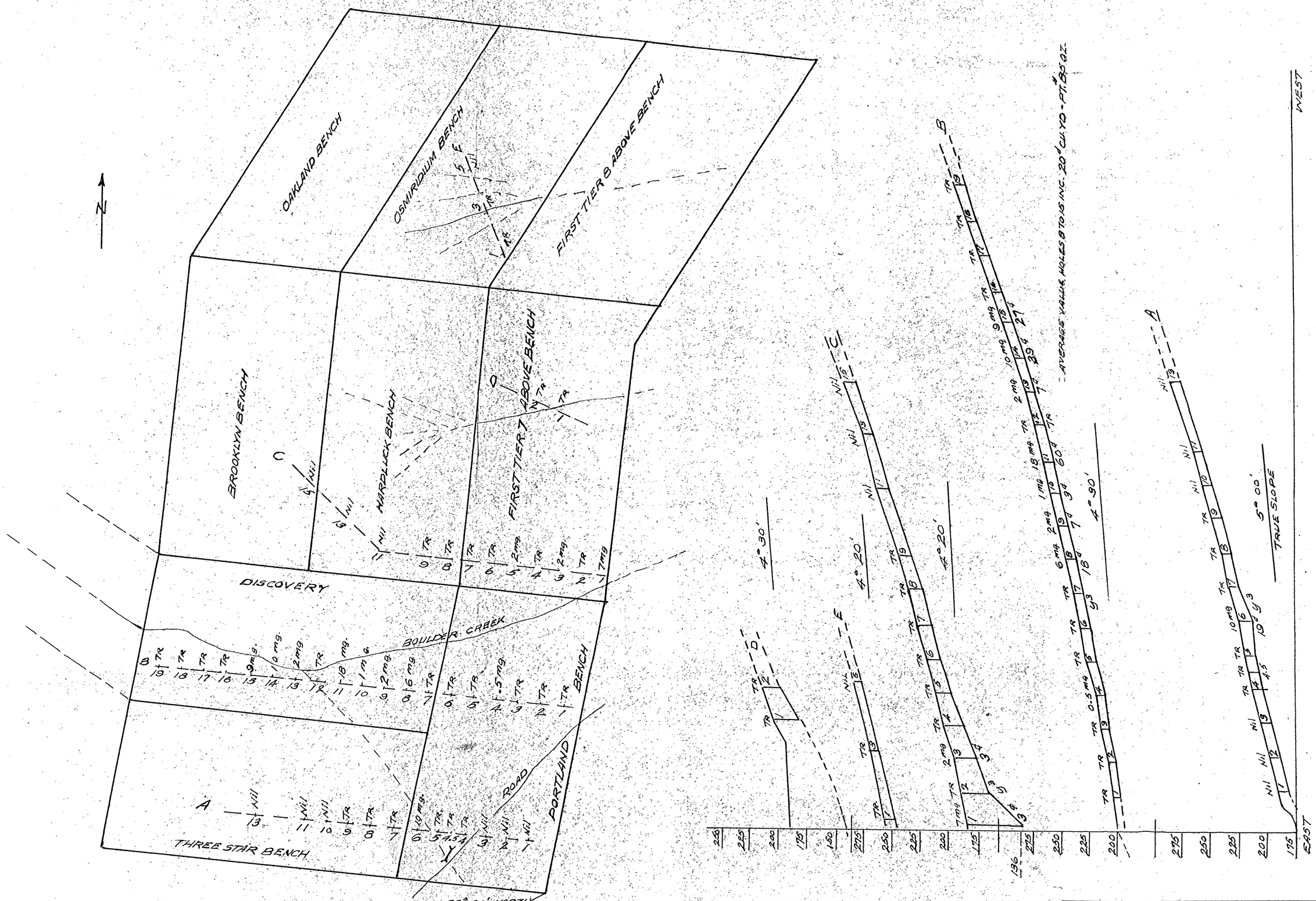
cc: C. L. Sainsbury
L. J. Wilcox



LINE	HOLES	FEET	AVERAGE	REMARKS
F	4	40	10	All holes cased
G	2	10	5	In. diameter 6"
H	2	12	6	O. diameter of
I	5	34	6.8	shoe 7½"
J	1	9	9	Bucyrus-Arm-
K	1	5	5	strong churn
L	1	36	36	drill
M	1	15	15	
N	3	25	8.67	
Totals	20	187	9.35	

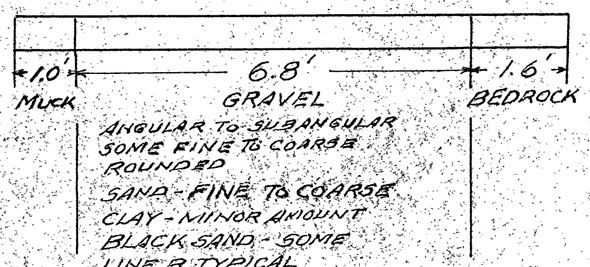
PLAN SCALE 1" = 300' PROFILE - VERT. 1" = 60' HOR. 1" = 200'

EXPLORATION PROJECT
FOR
PLATINUM GROUP METALS
RED MOUNTAIN MINING CO. PROPERTY
GOODNEWS BAY MINING DISTRICT
SOUTHWESTERN ALASKA
DOCKET No. 2931 IDM-E479
A.L. HOWARD - OPERATOR - OCTOBER 1953



LINE	HOLES	FEET	AVERAGE	REMARKS
A	13	144.5	11.115'	All holes cased
B	19	178.5	9.395	In. Dia. Casing 6"
C	12	204.0	17.00	O. Dia. Shoe 7½"
D	2	36.0	18.00	Churn Drill
E	3	20.0	6.67	
TOTALS	49	583.0	11.90	

PLAN SCALE 1" = 300'



ANGULAR TO SUBANGULAR
SOME FINE TO COARSE
ROUNDED
SAND - FINE TO COARSE
CLAY - MINOR AMOUNT
BLACK SAND - SOME
LINE B TYPICAL

EXPLORATION PROJECT
FOR
PLATINUM GROUP METALS

DOCKET No. 2931 Idm - E.579
GOODNEWS BAY MINING DISTRICT
FOURTH JUDICIAL DIVISION ALASKA
RED MOUNTAIN MINING COMPANY
A. L. HOWARD OPERATOR
OCTOBER 1953