RECEIVED

Docket copy SEP 26 1955

MF-200A
(Revised June 1954)

Docket No. DMEA - 2931
Commodity Platinum Group Metals

Contract No. Idm-E 579

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 Howard,

whose mailing address is 16351 Ashworth 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 Territory of Alaska, Goodnews 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 1953 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 ~~the day and year hereinabove written~~ this 7th day of September, 1955.

ALBERT LEIGHTON HOWARD
(Operator)

By Albert Leighton Howard
16351 Ashworth Ave
Seattle 33, Wash

THE UNITED STATES OF AMERICA

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

Putnam
Chamberlin
Hafland
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]

U. S. GOVERNMENT PRINTING OFFICE 16—70618-1

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

RECEIVED
SEP 26 1955

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 Fresdrmx, 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.

RECEIVED
SEP 26 1955

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-2579 (Docket No. DMEA-2931), dated August 10, 1953, executed on Form MF-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 MF-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-foot 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

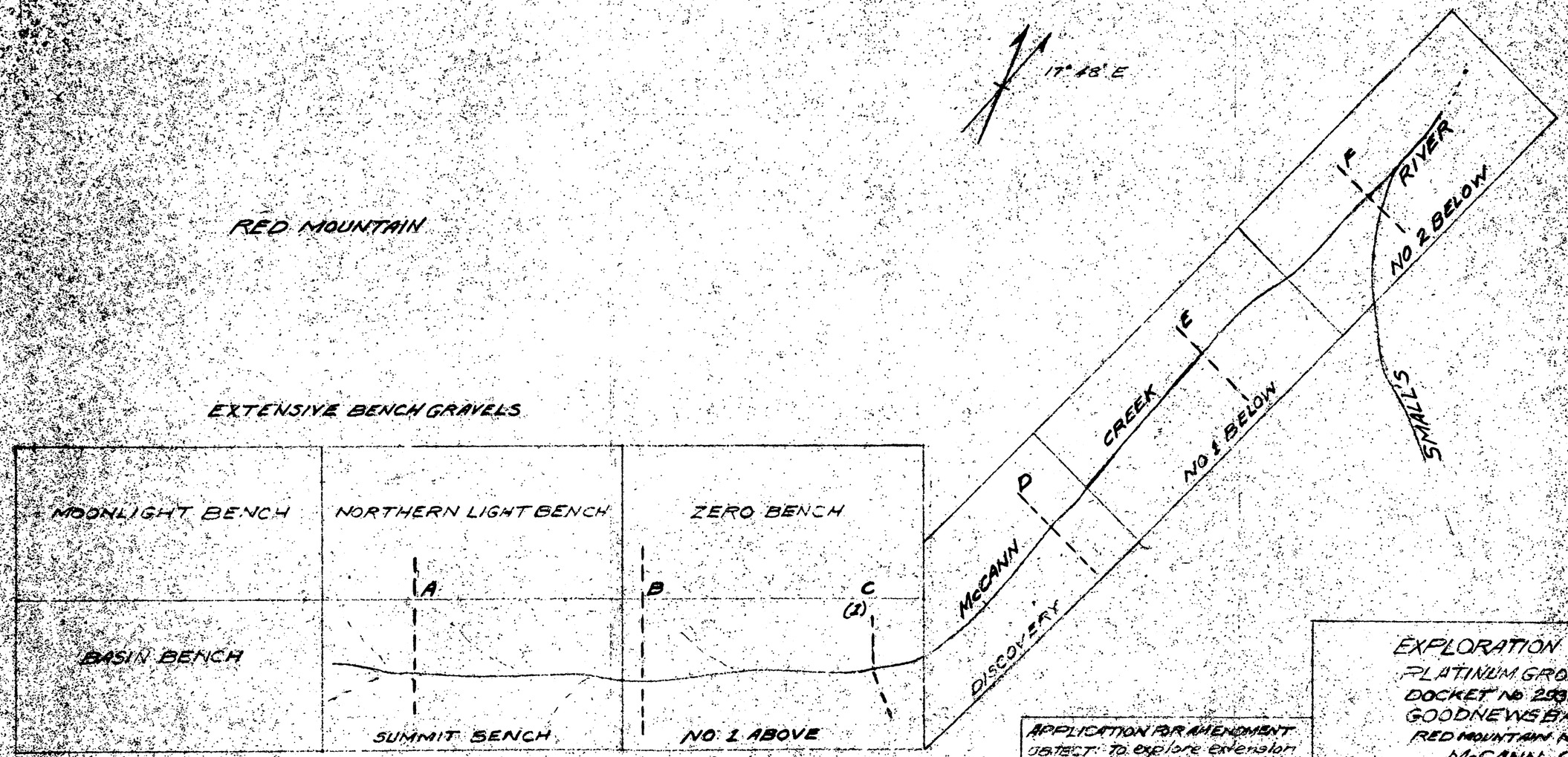
S U M M A R Y

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
OBJECT: To explore extension and delimit width of pay-rock discovered on line 1 October 1954
Additional footage requested 1500

EXPLORATION PROJECT
PLATINUM GROUP METALS
DOCKET No 2931 Idm-8379
GOODNEWS BAY MINING DIST.
RED MOUNTAIN MINING COMPANY
McCANN CREEK
SCALE 1" = 400' FEBRUARY 1955
A.L. HOWARD OPERATOR

FIGURE - 4

RECEIVED
SEP 2 6 1955

MF-203
Revised March 24, 1955

RECEIVED
SEP 26 1955

For Government's Use Only
EXPLORATION PROJECT CONTRACT
Operator_____
Docket No. DMEA-_____
Contract No. Idm-E_____
Contract Date_____

CONSENT TO LIEN

To the United States of America:

Referring to that certain land in the ~~County~~ Territory, ~~State~~ of Alaska, described as follows:1/

Goodnews Bay, Fourth Judicial Division: Thirty (30) unpatented placer mining claims situated on the eastern slopes of Red Mountain near Platinum, Goodnews Bay Mining District, Alaska, more fully described in the attachment to Owner's Consent to Lien and in Annex II, both attached hereto and made a part hereof.

which is the subject of a proposed exploration project contract, hereinafter called the "contract," with the United States of America, hereinafter called the "Government;" in consideration of the contract and as an inducement to the Government to enter into it, the undersigned hereby--

1. Undertakes and agrees that property in which the Government may acquire an interest or equity under the contract may be dismantled, severed from the land, and removed, as may be provided in the contract; and the Government's interest and equity in such property shall be prior and superior to any adverse right or claim of the undersigned;

2. Grants to the Government a lien upon all of the undersigned's right, title, and interest in the land and upon any production of minerals therefrom to secure the payment to the Government of a percentage royalty on production as may be provided for by the contract;2/ and represents and undertakes that there are no claims, liens, or encumbrances upon the undersigned's right, title, or interest in the land prior to that hereby granted to the Government other than the following:3/

None

3. Undertakes and agrees neither to commit any act nor assert any claim in conflict with the provisions of this Consent to Lien; and to give advance notice of the Government's rights under this Consent to Lien to any subsequent transferee, mortgagee, encumbrancer, or lessee of any of the undersigned's right, title, or interest in the land; and

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

3/ Write "none" if that is the case. Do not leave lines blank.

4. Consents to all amendments and assignments of the contract without notice thereof, and agrees that this Consent to Lien shall extend and apply thereto.

5. Added provision:

None

Dated this 7 day of SEPT, 1955

M. L. Russell Pres [Seal]

Chris Lewistad Treas [Seal]

[Seal]

I, Chris Lewistad certify that I am the Treasurer (Secretary, etc.) of the corporation named herein; that M. L. RUSSELL who signed this agreement was then President (President or Vice-President, etc.) of said corporation; that said agreement was duly signed for and in behalf of said corporation by authority of its governing body, and was within the scope of its corporate powers.

Chris Lewistad

[Corporate Seal]

Docket Copy

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 18, 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 suspended;
   (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 250 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 Mineral 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 O Mitchenor
Administrator, Defense Minerals Exploration Administration

Hoffman
Talbot

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

AMENDMENT NO. 1

It is agreed this 24 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 O Mitchenson
Administrator, Defense Minerals Exploration Administration

MF-200 (A)
(February 1952)

DOCKET NO. DMEA [illegible]

COMMODITY Platinum Group Metals

Docket Copy

Idm-E579

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

EXPLORATION PROJECT CONTRACT[1]
(Short Form)

IT IS AGREED this 10th day of August, 1953, 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 Howe
16301 Ashworth Avenue
Seattle 33, Washington

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 Territory of Alaska Goodnews Bay, county or Fourth Judicial Division, described as follows:[3] Twenty-nine (29) unpatented placer mining claims situated on the eastern slopes of Red Mountain near Platinum, Goodnews Bay Mining District, Alaska, more fully described in the attachment to Owner's Consent to Lien and in Annex II, both attached hereto and made a part hereof

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:

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

in or upon the described land; and shall bring the project to completion within a period of 24 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 90 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 $10,000.00, which is 90 percent of $12,000.00, the agreed, estimated total cost of the project in which the Government will participate: *Provided,* That until the Operator's final report and final accounting have been rendered to the Government and any final check or auditing required by the Government has been made, and a final settlement of the contract has been made, the Government may withhold from the last voucher or vouchers such sums as it sees fit not in excess of ten (10) percent of the maximum total which the Government might have been called upon to pay under the terms of the contract. The Government may, as it sees fit, make payments direct to the Operator's independent contractors, if any, for the account of the Operator, rather than to the Operator.

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

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

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

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

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

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

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

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

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

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

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

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

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

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

ARTICLE 9. *Changes and added provisions* Any property or interests in property which are contiguous to or in the vicinity of the property referred to in Article 2 of this Contract, owned or held by the Operator at the date of this Contract or acquired thereafter during the term of this Contract, shall be considered to be added to and included with the property referred to in said Article 2; and the Operator shall notify the Government in writing of any such property or interests in property.

Executed in sextuplicate the day and year first above written.

THE UNITED STATES OF AMERICA

By O. Mitterdorf
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

Deleted Information
Released

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.

DMA Form 1

DEFENSE MINERALS ADMINISTRATION
Control Slip

CONTROLLED DOCUMENT

DMA Docket No. 2931

DO NOT DETACH THIS SLIP

Action on this document is recorded and controlled in Reports and Records Branch. Any movement of this document between divisions or offices of DMA or movement outside DMA must be reported to the Reports and Records Branch. Actions taken that affect status of the case must also be reported.

This document has been recorded as

EXPLORATION ASSISTANCE

Any action taken to change the type of request for assistance must be promptly reported to the Reports and Records Branch. Use DMA Form 2 for submitting these reports.

One copy to USBM., to USGS. and to Region I.

Routing Slip

To:	Code 700, Room 4640	Date	3/18/53
To:	Oper Com	Date	4-8-53
To:	Oper Com	Date	6-26-53
To:	Mails + Files 4070	Date	8-26-53
To:	Oper Com	Date	4-30-54
To:		Date	
To:		Date	
To:		Date	
To:		Date	
To:		Date	
To:		Date	
To:		Date	
To:		Date	
To:		Date	
To:		Date	

DO NOT DETACH

CONTROLLED DOCUMENT

IN REPLY REFER TO:

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

June 26, 1957
Re: DMEA 2931 Idm-E579
A. L. Howard
Red Mountain Claims
Goodnews Bay, Alaska
Platinum

Memorandum

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

From: N. E. Nelson, U. S. Geological Survey

Subject: Review of Field Team Final Report

The contract, awarded August 10, 1953, authorized 1,000 feet of churn drilling to test possible platinum-bearing gravels.

The initial work was not successful, but an amendment approved an additional 1,500 feet of drilling of which 668 feet was done. Of the $21,000 approved expenditure, $20,016.00 was spent, of which the Government's share was $16,812. The second phase of the work, like the first, did not indicate a reserve worth calculating and no 'discovery' is claimed.

The author of the Final Report (no name is given) recommends that no further work on the project be authorized.

I concur with the recommendation.

N. E. Nelson

N. E. Nelson

OFFICIAL FILE COPY
DMEA
RECEIVED JUN 27 1957

DATE	INITIALS	CODE
6/27	C	220
		225

Surname copy

700

Murphy
Johnson
Selfridge

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

APR 23 1956

Mr. M. L. Bissell, President
Red Mountain Mining Company, Inc.
318 Medical Arts Building
Seattle, Washington

Re: Docket No. DMEA-2931 (Platinum)
Contract No. Idm-8579 (Amended)
Albert Leighton Howard
Red Mountain claims
Goodnews Bay Mining District, Alaska

Dear Mr. Bissell:

With respect to the captioned contract and the Owner's Consent to Lien, dated July 27, 1953, which was signed by officers of your Company, we are enclosing a copy of a letter to Mr. Albert Leighton Howard, for your information.

Sincerely yours,

C. O. Mittendorf

Administrator

FMMurphy/gla
4-23-56
cc to: Admr.'s Reading File
Mr. Johnson
Docket
James E. Bell, Rm. 3628
T. H. Kiilsgaard, Rm. 5224
Contract Adm. & Audit Division
DMEA Field Team, Region I, Alaska District (2)
Code 700
Mr. Murphy

Surname copy

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

Murphy 700
Chambers
Selfridge
Johnson

APR 23 1956

Mr. Albert Leighton Howard
16351 Ashworth Avenue
Seattle 33, Washington

Re: Docket No. DMEA-2931 (Platinum)
Contract No. Idm-2579 (Amended)
Red Mountain claims
Goodnews Bay Mining District, Alaska

Dear Mr. Howard:

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. Mitteadorf

Administrator

Copy to:
Red Mountain Mining Company, Inc.
M. L. Bissell, President
Christian Leivestad, Treasurer
318 Medical Arts Building
Seattle, Washington

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

R.C.G.

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

DOCKET COPY

Project Summary Report

By: F. M. Murphy April 17, 1956

1. Docket No. DMEA-2931 (Platinum)
Contract No. Idm-E579

Operator: Albert Leighton Howard
16351 Ashworth Avenue
Seattle 33, Washington

Operator's Property Rights:

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

The claims are located along the Salmon River and its tributaries, Boulder, Dowry, and Clara Creeks, and also along McCann Creek, a tributary of Smalls 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 Dowry 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~~ was 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 Goodnews 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.

F. M. Murphy

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

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

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-~~2~~579

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)

RECEIVED
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. DMEA-2931 (platinum)
Contract No. Idm-E579

RECEIVED
APR 9 - 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

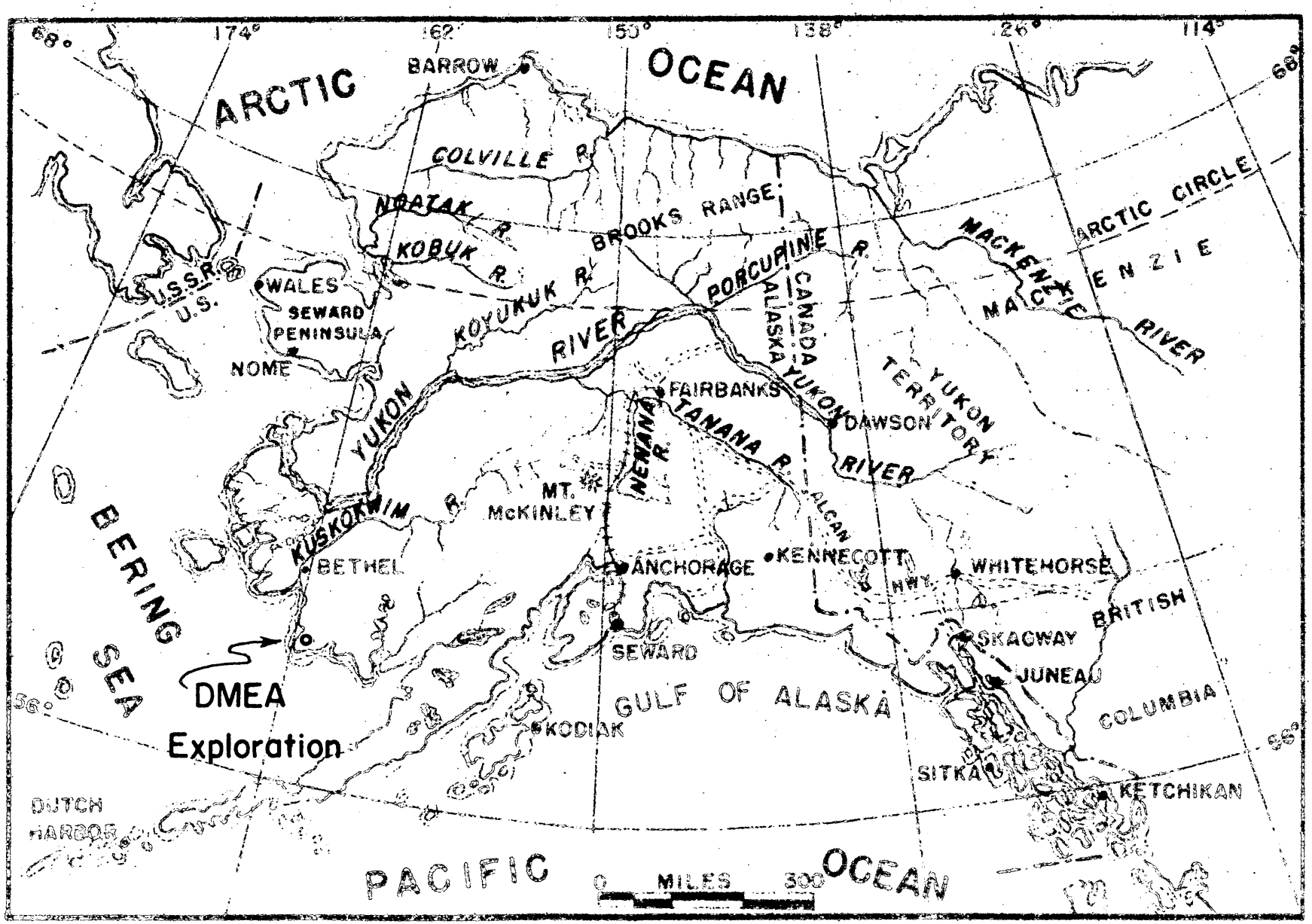


Figure 1.– Location Map, Red Mt. Mng. Co., Docket No. DMEA 29,31

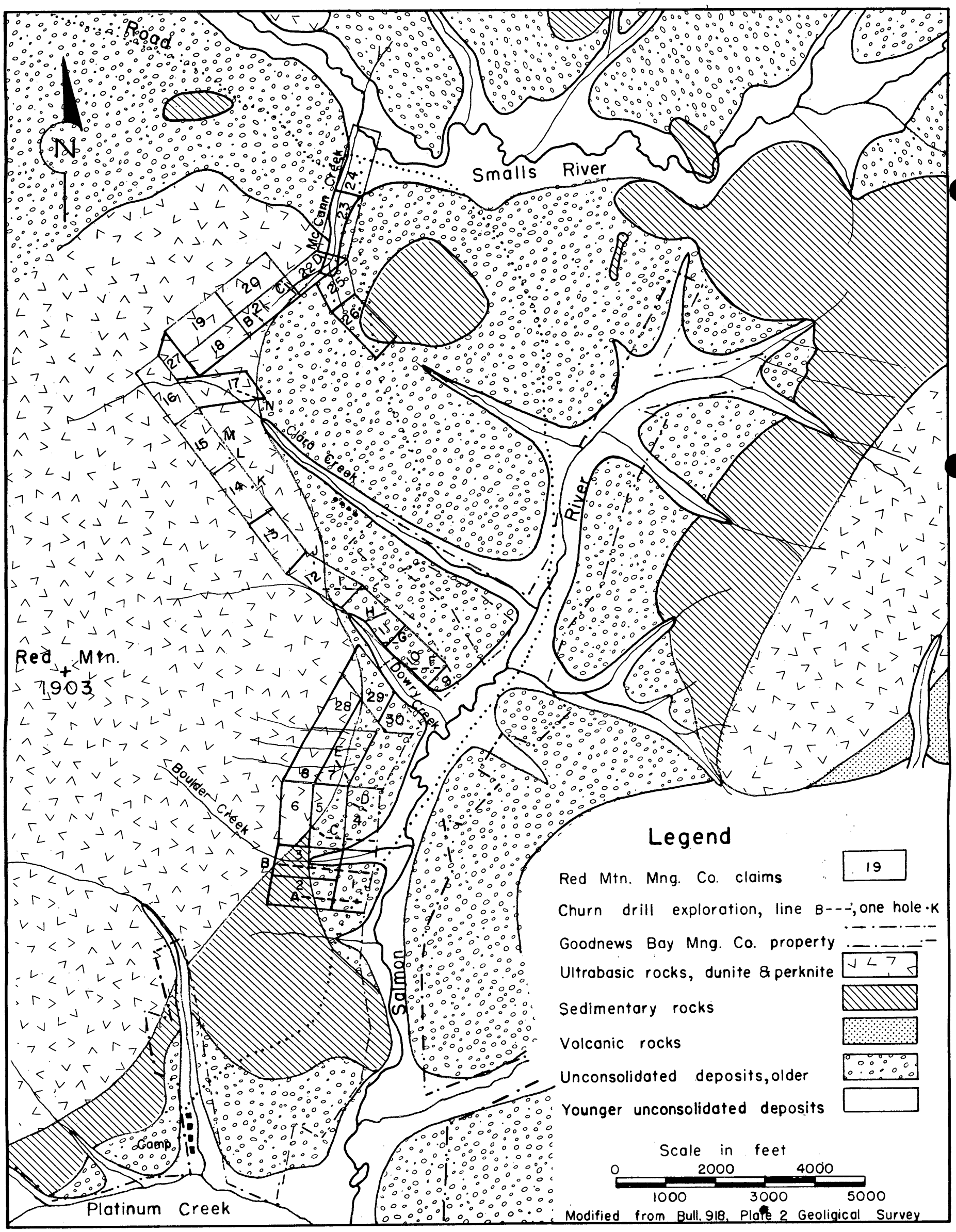


Figure 2.— Red Mountain Mining Co. Exploration, Contract Idm - E579

RECEIVED
APR 9 - 1956

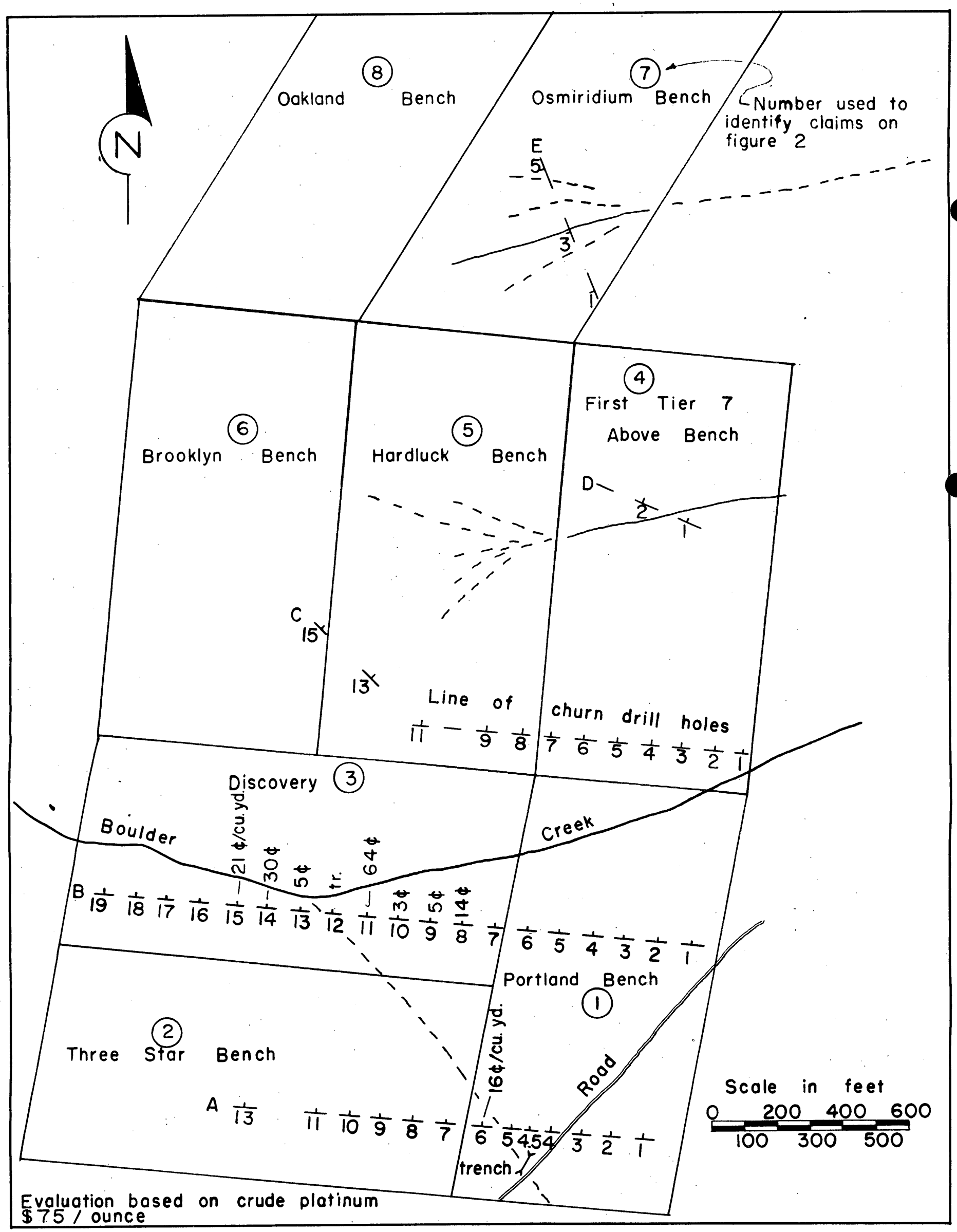


Figure 3.— Portland Bench Exploration, Salmon River

RECEIVED
APR 9 - 1956

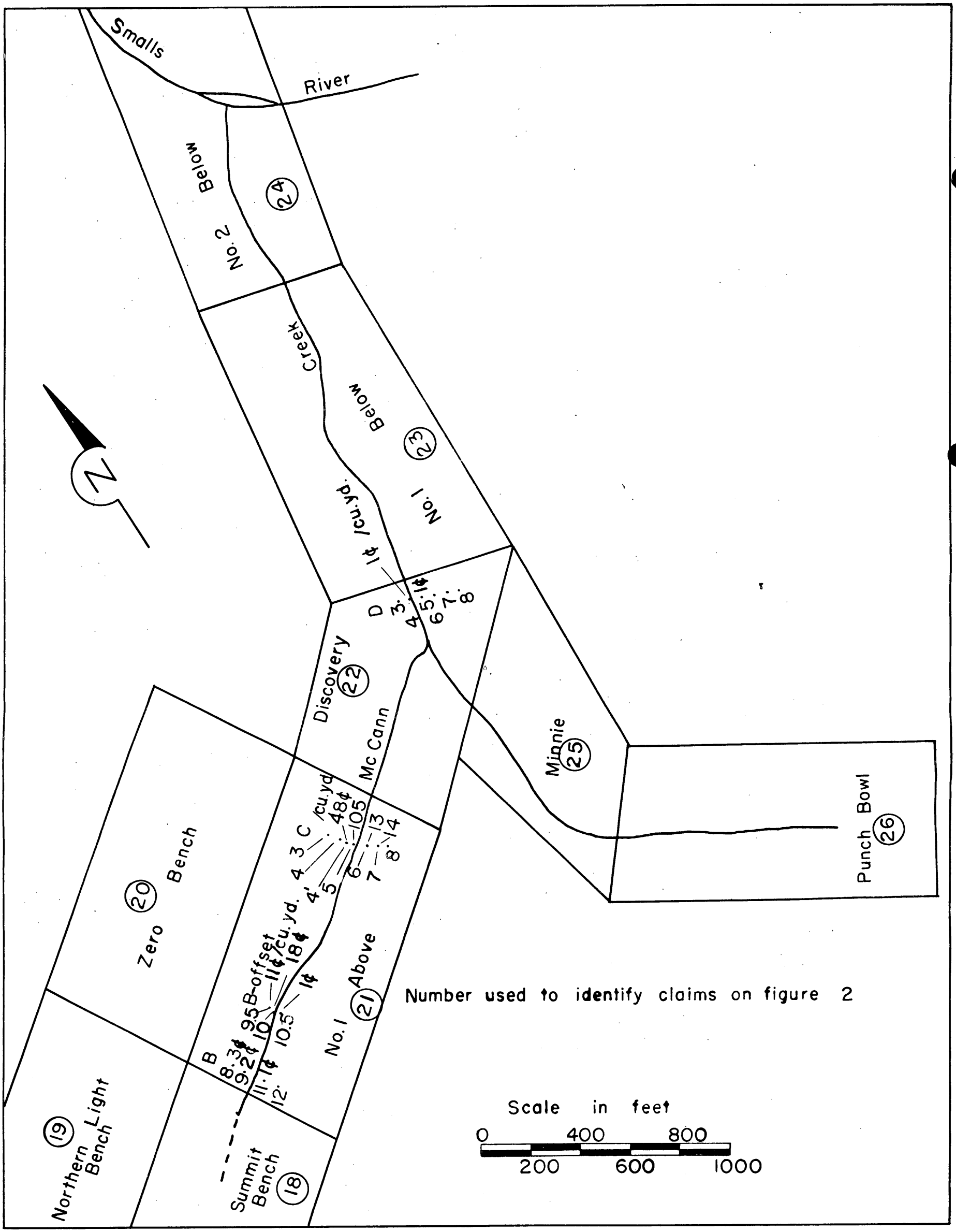


Figure 4.— Mc Cann Creek Exploration

RECEIVED
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-foot 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 "D" 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	Bedrock M.S.	M.S. ft.	Crude platinum Mg.	Crude platinum 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.	Vol. 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				

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, Dowry, Clara, and McCann 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
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 HDK.

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.

James E. Bell

James E. Bell

Talbert

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

FEB 28 1956

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

Re: Docket No. DMEA-2931
Albert Leighton Wescott
Contract No. Ida-2979

Dear Mr. Lorain:

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 2,668 feet of diamond 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

Jay L. Chambers, Chief
Contract Administration
and Audit Division

Enclosure

EDTalbert/wb
February 28, 1956

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

R.C.K.

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

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-2579

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. H. Lorain, Executive Officer
Alaska District, Region 1
P. O. Box 560
Juneau, Alaska

Subject: Platinum Metals
Exploration
McCann Creek
DMEA 2931 Idm-E579
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.

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

Final Report

EXPLORATION PROJECT CONTRACT

DMEA 2931 and DMEA 2931 AMENDED - Idm-E579

RECEIVED
FEB 27 1956

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 41¢ 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

Final Report

EXPLORATION PROJECT CONTRACT

IMEA 2931 and IMEA 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 41¢ 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

Final Report

EXPLORATION PROJECT CONTRACT

DMEA 2931 and DMEA 2931 AMENDED - Idm-8579

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 McCarm Creek	1954	
		Drilled	230 feet
Phase I		Balance	000
Phase II	in McCarm 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 41¢ 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

Alley
Talbert

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

FEB - 2 1956

Mr. Lawrence J. Wilcox
Certifying Officer
Bureau of Mines
P. O. Box 560
Juneau, Alaska

Re: Albert Leighton Howard
Contract No. Idm-E579
Docket No. DMEA-2931

Dear Mr. Wilcox:

It is noted that payment of a voucher in the amount of $6,012.00 for the above referenced contract is indicated on your December Supporting Schedule for Monthly Report, Strategic and Critical Minerals Exploration Program.

Since the Washington office has no record of the receipt of such voucher it will be appreciated if you will forward the usual two copies at your earliest convenience.

Sincerely yours,

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

AMAlley/ama
February 2, 1956

Copy to: Docket
Admr. Reading File
Mr. Chambers

UNITED STATES
DEPARTMENT OF THE INTERIOR
Defense Minerals Exploration Administration

P. O. Box 560
Juneau, Alaska

September 30, 1955

Mr. A. L. Howard,
Platinum, Alaska.

Re: Docket No. DMEA-2931 (Platinum Group Metals)
A. L. Howard
Contract No. Idm-2579 (amended)

Dear Mr. Howard:

I am sorry for the delay in replying to your letter of September 14 but all of the field team staff, including me, have been out of town trying to take advantage of what is left of the field season.

I note that you request permission to extend the drilling eastward on line D across the east side line of Discovery claim on to the Minnie Gulch claim.

The Minnie Gulch claim is listed in your contract but the ownership or lease status of the Minnie Gulch claim is not entirely clear to me. I gather that it is one of the claims covered by the "consent to lien" from the Red Mountain Mining Company. If this claim is either owned by you or is covered by the consent to lien I can see no objection to continuing the line on to it provided that the drilling results obtained to this time indicate the probability of finding a channel on it. If the Minnie Gulch claim is not owned by you or is not included in the consent to lien you may still continue on to it with a provision that you submit proper evidence of ownership or of option and, if you do not own it, a consent to lien from the owners.

I hope that the delay in replying has not interfered seriously with your work and, of course, I hope that you are getting good results.

Yours sincerely,

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

cc: Operating Committee
Velikanje
Wilcox

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

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-2931 (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. Velikanje
R. S. Velikanje
Acting Executive Officer
DMEA Field Team
Region I (Alaska District)

Encl.

cc: Gates

RECEIVED
SEP 26 1955

16351 Ashworth Ave.
Seattle 33, Wash.
September 7, 1955

Mr. S. H. Lorain
Executive Officer
Alaska District
Defense Minerals Exploration Administration
P. O. Box 560
Juneau, Alaska

Dear Mr. Lorain:

Re: Amended Contract No. Idm-E579,
Docket No. DMEA-2931 (platinum group metals),
Albert Leighton Howard

Enclosed please find 5 executed copies of the Amended Contract Agreement.

Also enclosed, herein, are 2 executed copies of Consent to Lien.

I expect to leave Seattle for Platinum, arriving in Platinum September 9th and drilling will commence as soon as possible after my arrival.

Hoping that your office will find everything in order, I am

Sincerely,

A. L. Howard

A. L. Howard

ALH:k
Enclosures

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

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 but 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. Thorne

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

700

Surname copy

Murphy
Ellis
Selfridge
Matthews

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. Idm-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 (JHB)

APPROVED:

P. F. Yopes (JHB)
Member, Bureau of Mines

Thor H. Kiilsgaard (JHB)
Member, Geological Survey

FMMurphy/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

R.C.L.

6/16/55 gla

UNITED STATES
DEPARTMENT OF THE INTERIOR
Defense Minerals Exploration Administration

XXXXXXXXXXXXXXXXXX

P. O. Box 560
Juneau, Alaska

RECEIVED
JUN 16 1955

June 9, 1955

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

Re: Amended Contract No. Idm-E579
Docket No. DMEA-2931 (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. Lorain,
Executive Officer,
Alaska District,
Region I.

cc: Operating Committee
Velikanje

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

P. O. Box 560
Juneau, Alaska

May 16, 1955

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

Re: Amended Contract No. Idm-E579,
Docket No. DMEA-2931 (platinum group metals),
Albert Leighton Howard.

Dear Mr. Howard:

Enclosed herewith are the original and five copies of a proposed amendment to the referenced contract and four blank copies of form MF-203 (Revised March 24, 1955) "Consent to Lien".

Because of your proposed increase in the total amount of the contract it will be necessary that you obtain new "Consent to Lien" from the owners of the claims listed in the contract. If the contract, as written, is acceptable to you, please have these consent to lien forms completed and return to us 2 copies.

When you have obtained the consent to lien please complete that part of Article 3 which states the date on which the work will commence, sign all copies, retain the copy marked "Operator's Copy" in the upper right-hand corner, and return all other copies to this office.

If you have any objections to the manner in which the contract is set up please let us know as promptly as possible and we will see what can be done about it.

Yours sincerely,

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

Enclosure-2
SHL:ma

cc: Operating Committee
Velikanje
File: Goodnews Bay - Platinum

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

Surname copy
Murphy
Ellis
Chandler
Martin
Johnson

MAY 1 0 1955

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

Re: Docket No. DMEA-2931 (Platinum Group Metals)
Contract No. Idm-E579 (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. Idm-E579, 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 (SHB)

Enclosures

FMMurphy/gla 5-9-55
cc to: Admr.'s Reading File
Operating Committee
Messrs. James E. Bell, Rm. 3628
T. H. Kiilsgaard, Rm. 5224
Code 700
Mr. Murphy

APPROVED:

/s/ C. H. Johnson (SHB)
Member, Bureau of Mines

/s/ R. D. Lane (SHB)
Member, Geological Survey

R.C.G.

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-E579, 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
Acting Assistant Solicitor
Defense Minerals

Attachments

Rubin

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-E579, 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.

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

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. [redacted], 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

Ernest Wm. Ellis

Surname Murphy Ellis

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

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. [redacted], 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
Ernest Wm. Ellis

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

Surname 700
Murphy

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

April 18, 1955

Memorandum

To: Acting Assistant Solicitor, DMEA

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

Subject: Docket No. DMEA-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.

FMurphy

Fred M. Murphy

Attachments

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

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

E. L. Newcomb

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

John D. Sargent

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 foot 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 a 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. S. 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-

Surname 700

F L Knouse
Selfridge
F Bruner

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

MAR 3 - 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. Idm-E579
Albert Leighton Howard
Red Mountain claims
Goodnews Bay District
Southwestern Alaska

Dear Mr. Lorain:

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 (2/6)

Enclosure

APPROVED:

J. H. Hedges (2/6)
Member, Bureau of Mines

E. L. Newcomb (2/6)
Member, Geological Survey

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

R.C.F.

Surname 700

FLKnouse
Ellis
Newcomb
Hedges
Selfridge
Johnson

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

MAR 3 - 1955

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

Re: Docket No. DMEA-2931
(Platinum Group Metals)
Contract No. Idm-E579
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. S. H. Lorain
Executive Officer
Alaska District
DMEA 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 (for)

Administrator

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

R.C.S.

16351 Ashworth Ave.,
Seattle 33, Wash.
February 22, 1955

Mr. C. O. Mittendorf, Administrator
Defense Minerals Exploration Administration,
United States Department ofInterior,
Washington, D. C.

Dear Mr. Mittendorf:

Enclosed herewith are an original and three copies of a request for an amendment to DMEA 2931 for the purpose of drilling additional footage on McCann Creek where a discovery was made of a bedrock concentrationoof Platinum Group Metals during October 1954.

One additional copy is being mailed direct to Mr. Lorain at the Juneau office.

Detailed drill logs and maps are appended.

Sincerely Yours,

A. L. Howard

A. L. Howard, Operator.

16351 Ashworth Avenue
Seattle 33, Washington
February 16, 1955

Mr. C. O. 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 8:30 P.M. 10-8-54
Commenced Drilling 8:30 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 [illegible] Creek-Howard Exploration-[illegible]
Claim No. 1 Above
Offset Face - Direction [illegible]

Depth Pump or Casing	CORE Before Pump	CORE After Pump	Meas. Vol. Loose	No. Colors	Est. Val. Wgt.	CHARACTER OF FORMATION
4	4	1	.033	-	-	Rock-cl.sand-sm.angular rock-tr.blk.sand
5	17	1	.033	-	-	Sharp angular rock-sand-sm.cl.-tr.flood gr.-sm.blk.
6	15	2	.131	-	-	Angular-flood gr.-sm.c-tr.cl-sm.blk.sand
7	19	2	.130	-	-	Gr.-sand-tr.cl-lk.sand-gr.round & angular
8	19	1	.164	-	-	Gr.-sand-tr.cl-lk.sand-gr.round & angular
9	18	1	.164	-	-	Gr.-sand-sm.cl.-lk.sand-
10	19	1	.164	-	-	Gr.-sand-sm.cl.-blk.sand-
11	17	1	.147	-	-	Gr.-sand-sm.cl.-lk.sand-
12	19	1	.164	-	-	Gr.-sand-sm.cl.-lk.sand-
13	17	1	.147	-	-	Gr.-sand-sm.cl.-lk.sand-
14	17	1	.147	-	-	Gr.-sand-sm.cl.-lk.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	18	0	.000	-	-	Boulder-sand-sm.cl.-sm.gr.-sm.blk.sand
19	17	1	.131	-	-	Gr.-sand-sm.cl.-lk.sand-light.color
20	19	1	.147	-	-	Gr.-sand-sm.cl.-lk.sand
21	18	0	.131	-	-	Boulder,sand-tr.cl.-tr.gr.-tr.blk.sand
22	17	0	.114	-	-	Boulder-sand-tr.cl.-no gr. tr.blk.sand
23	0	0	.000	-	-	Boulder-sand-pipe so out of line tools won't operate freely in hole.

Shot 1 box for this hole--quart jar--all blk.sand
Setting this hole for non-losing time on it-lighting crooked pipe
Have 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. today trying to straighten pipe - 1 hr. delay going to shop for new drive block bolt.

Time of Drilling	70 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	131	Bedrock	3 Ft.
Time Lost	2 hrs.	Total	MGS.	Total	23 Ft.
Total Time	109 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. Muller
Panner D. McCory
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 [illegible] Exploration-Oct.1954
Claim [illegible]
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	.100	-	-	r.cl.-sand-[illegible]-chunks of side hill rock
5	16	1	.131	-	-	[illegible]lar rock-sand-s.cl.
6	16	1	.147	-	-	[illegible]gular rock-sa[illegible]-s.cl.
7	15	0	.114	-	-	r.-sa[illegible]d-s.cl.-tr.[illegible].sa[illegible]d-[illegible]lar was[illegible]d gr.
8	17	1	.147	-	-	r.-sa[illegible]-s.cl.-sa.blk s[illegible]-angular wa[illegible]d r.
9	17	1	.144	-	-	r.-sa[illegible]-s.cl.-lk.sa[illegible]-angular wa[illegible]d r.
10	18	2	.104	-	-	
11	18	2	.104	-	-	
12	19	1	.100	-	-	
13	19	1	.104	-	-	
14	18	2	.104	-	-	-wa[illegible]ed 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	1VF	r.	
21	20	2	.104	3VF	r.	
22	16	1	.131	2VF	r.	
23	17	1	.137	2VF	r.	
24	18	1	.147	5VF	r.	
25	16	1	.147	4VF	r.	
26	18	1	.147	6VF	r.	-boulder
27	19	1	.100	?	1	-boulder
28	18	2	.131	4VF	r.	-slight increase in cl.
29	19	2	.137	3VF	r.	-boulder
30	19	1	.137	3VF	r.	-boulder
31	16	2	.131	3VF	r.	-boulder
32	19	1	.100	2VF	r.	-boulder
33	20	2	.100	4VF	r.	
34	17	2	.147	5VF	r.	
35	19	2	.104	15	6	-clay increase
36	18	1	.104	10	5	-boulder-still mule cl.
37	19	1	.147	7	15	-boulder
38	17	1	.137	2	7	
39	17	1	.114	?	5	-[illegible]r increase in cl.-s.blk.sand
40	29	2	.104	2VF	r.	cl.-s[illegible]-tr.r.-tr.blk.s[illegible]-rec[illegible] gr. cl.
41	16	2	.147	-	-	[illegible] gr. cl.-[illegible] sand-[illegible] frect.[illegible] rock [illegible] blk.s[illegible]-[illegible]tely [illegible]
	2 carb[illegible] [illegible]-values. [illegible] [illegible]ert [illegible]ar-ul the [illegible]ick 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		41 Ft.
Total Time	14-3/4 hrs.	Total	MGS.	Total	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

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

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

Started [illegible] [illegible]

Finished Moving [illegible] [illegible]

Commenced Drilling [illegible] [illegible]

Finished Drilling [illegible] [illegible]

Finished Pulling [illegible] [illegible]

Page No. [illegible] 1 [illegible] e

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
[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]	2V[illegible]	[illegible]	
[illegible]	[illegible]	[illegible]	[illegible]	3V[illegible]		
[illegible]	[illegible]	[illegible]	[illegible]	5VF		
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]ng	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	3VF	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]VF	[illegible]	
[illegible]	[illegible]	[illegible]	[illegible]	1VF	[illegible]	
[illegible]	[illegible]	[illegible]	[illegible]	3VF	[illegible]	
[illegible]	[illegible]	[illegible]	[illegible]	7	[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.
Time of Pulling [illegible] hrs.
Time of Moving [illegible] hrs.
Time Lost [illegible] hrs.
Total Time hrs.

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

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

DRILL FIELD LOG

Started [illegible] Page No. [illegible]
Finished Moving [illegible] Line No. 1 Hole No. 6
Commenced Drilling [illegible] Creek [illegible]
Finished Drilling [illegible] Claim No. 1 Above
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
5	[illegible]	1	[illegible]	-	-	[illegible]
6	[illegible]	1	[illegible]	-	-	[illegible]
6	[illegible]	0	[illegible]	-	-	[illegible]
7	[illegible]	0	[illegible]	-	-	[illegible]
8	[illegible]	0	[illegible]	-	-	[illegible]
9	[illegible]	1	[illegible]	2VF	Tr.	[illegible]
10	[illegible]	1	[illegible]	1VF		[illegible]
11	[illegible]	1	[illegible]	2VF		[illegible]
12	[illegible]	1	[illegible]	3VF		
13	[illegible]	1	[illegible]	2VF		
14	[illegible]	1	[illegible]	1VF		
15	[illegible]	1	[illegible]	2VF		
16	[illegible]	1	[illegible]	-	-	
17	[illegible]	1	[illegible]	-	-	
18	[illegible]	0	[illegible]	-	-	
19	[illegible]	0	[illegible]	-	-	
20	[illegible]	0	[illegible]	-	-	
21	[illegible]	0	[illegible]	-	-	
22	[illegible]	1	[illegible]	-	Tr.	
23	[illegible]	1	[illegible]	-	-	
24	[illegible]	0	[illegible]	-	-	
25	[illegible]	1	[illegible]	-	-	
26	[illegible]	1	[illegible]	-	-	
27	[illegible]	1	[illegible]	-	-	
28	[illegible]	1	[illegible]	-	-	
29	[illegible]	0	[illegible]	-	-	
30	[illegible]	0	[illegible]	4VF	Tr.	
31	[illegible]	0	[illegible]	5VF		[illegible]
32	[illegible]	1	[illegible]	-	-	[illegible]
33	[illegible]	0	[illegible]	-	-	
34	[illegible]	0	[illegible]	-	-	
35	[illegible]	0	[illegible]	-	-	
36	[illegible]	0	[illegible]	-	-	
37	[illegible]	0	[illegible]	-	-	
38	[illegible]	0	[illegible]	-	-	
39	[illegible]	0	[illegible]	[illegible]	[illegible]	[illegible]
40	[illegible]	0	[illegible]	?	[illegible]	[illegible]
41	[illegible]	1	[illegible]	1VF	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 [illegible] [illegible] MGS.
From ____ to ____ ____ MGS.
Actual Weight
Total [illegible] MGS.

Muck [illegible] Ft.
Gravel [illegible] Ft.
Bedrock [illegible] Ft.
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 4:15 P.M. 10-11-54
Finished Moving 10:30 A.M. 10-12-54
Commenced Drilling 10:30 A.M. 10-12-54
Finished Drilling 2:30 P.M. 10-13-54
Finished Pulling 4:15 P.M. 10-13-54

Page No. 2 of 2 Pages
Line No. 1 Hole No. 6
Creek McCann-Howard Exploration -Oct. 1954
Claim
Offset 8:

Depth Pump or Casing	CORE Before Pump	CORE After Pump	Meas. Vol. Loose	No. Colors	Est. Val. Wgt.	CHARACTER OF FORMATION
42	20	1	.180	-	-	Highly fractured green rock-greenish white cl-tr.blk s.
43	19	1	.196	-	-	Greenish white cl.-definitely BR-highly fractured green rock-no gr.-greenish sand-no blk.sand
						A s.o.b. side-hill set-up
						2 hrs. delay (1 hr.re leveling up drill-1 hr.repairs to brake band)
						2 Jars for this hole; small jar-values; quart jar-blk.sand

Time of Drilling 9-1/2 hrs.
Time of Pulling 1-3/4 hrs.
Time of Moving 2 2/4 hrs.
Time Lost 2 hrs.
Total Time 16 hrs.

From 0 to 43 24 MGS.
From to MGS.
Actual Weight
Total 24 MGS.

Muck 4 Ft.
Gravel 37 Ft.
Bedrock 2 Ft.
Total 43 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 M. MacRory
Helper J. Bishop

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 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
[illegible]	-	[illegible]	[illegible]	-	-	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	-	-	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	-	-	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	-	-	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	2VF	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	2VF		[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	3VF		[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]VF		[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	2VF		[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]V[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]	5	1	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	VF	[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.
Time of Pulling [illegible] hrs.
Time of Moving hrs.
Time Lost [illegible] hrs.
Total Time hrs.

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

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

C r e w

Driller [illegible]
Panner [illegible]
Helper

DRILL FIELD LOG

Started 0:00 A.M. 10-14-54
Finished Moving 10:30 A.M. 10-14-54
Commenced Drilling 10:30 A.M. 10-14-54
Finished Drilling 12:00 Noon 10-15-54
Finished Pulling

Page No. 2 of 2 Pgs.
Line No. 1 Hole No. 7 Offset
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
41	19	1	.147	3VF	Tr.	Tr.-coarse-sand.-cl.-blk.sand
42	20	1	.147	1VF		Tr.-sand-sand.-cl.-blk.sand
43	17	1	.131	4VF		Tr.-sand-sand.-cl.-sand.-blk.sand (passed to boulder-blk.)
44	18	1	.164	3VF		Very little blk.-gr.boulder-sand-sand.-cl.-sand.-blk.sand
45	16	2	.139	9VF		Very little blk.med.sand-sand-cl.-a little blk.sand-boulder
46	17	1	.147	2VF		Lots gravel (gray) cl.-sand-[illegible] of boulder, Tr.a.-tr. gr.-a little blk.sand
47	16	1	.147	2VF		Lots gravel cl.-sand-slightly fract. rock [illegible] gr.-tr.blk.sand
48	16	1	.164	-	-	Lots gravel cl.-[illegible] sand-slightly fract. gravel [illegible] cl.-[illegible] blk.sand
						Very consolidated bedrock

Time of Drilling 2-1/2 hrs.
Time of Pulling 2 hrs.
Time of Moving 2-1/2 hrs.
Time Lost - hrs.
Total Time 4 hrs.

From 0 to 48 4 MGS.
From to MGS.
Actual Weight
Total MGS.

Muck 4 Ft.
Gravel 43 Ft.
Bedrock 1 Ft.
Total 48 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 11:45 A.M. 10-19-54

Page No. 1 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
4	24	0	.081	-	-	Muck-cl.-tundra-sm.sand-tr.angular gr.
6	19	1	.106	-	-	Cl.-sand-sm.angular rock-mucky-6'cl.& muck
7	14	1	.114	-	-	Gr.-sand-sm.cl.-a little blk.sand-gr.angular-flood
8	16	1	.131	-	-	Gr.-sand-sm.cl.-a little blk.sand-gr.angular-flood
9	15	0	.131	-	-	Gr.-sand-sm.cl.-blk.sand-washed & angular gr.
10	16	1	.131	-	-	Gr.-sand-sm.cl.-blk.sand-washed gr.
11	16	1	.147	-	-	Gr.-sand-sm.cl.-blk.sand-not much blk.sand
12	18	1	.164	2VF	Tr.	Gr.-sand-sm.cl.-blk.sand-not much blk.sand
13	17	2	.147	5VF	Tr.	Gr.-sand-sm.cl.-blk.sand-not much blk.sand
14	19	1	.180	3VF	Tr.	Gr.-sand-sm.cl.-blk.sand-not much blk.sand
15	21	1	.196	1VF	Tr.	Gr.-sand-sm.cl.-blk.sand-boulder-not much blk.sand
16	19	2	.164	2VF	Tr.	Gr.-sand-sm.cl.-blk.sand-very little blk.sand
17	21	2	.180	1VF	Tr.	Gr.-sand-sm.cl.-blk. sand
18	19	2	.164	3VF	Tr.	Gr.-sand-sm.cl.-blk sand
19	18	1	.164	2VF	Tr.	Gr.-sand-sm.cl.-blk.sand
20	18	1	.164	3VF	Tr.	Gr.-sand-sm.cl.-blk.sand
21	17	2	.147	1VF	Tr.	Gr.-sand-sm.cl.-sm.blk.sand
22	17	2	.139	2VF	Tr.	Gr.-sand-sm.cl.-sm.blk.sand
23	16	2	.131	1VVF	Tr.	Gr.-sand-sm.cl.-sm blksand
24	18	1	.147	2VF	Tr.	Gr.-sand-sm.cl.-sm.blk.sand
25	18	1	.147	3VF	Tr.	Gr.-sand-sm.cl.-sm.blk.sand
26	19	2	.147	5VF	Tr.	Gr.-sand-sm.cl.-sm.blk.sand
27	19	1	.164	2VF	Tr.	Gr.-sand-sm.cl.-sm.blk.sand
28	17	2	.147	1VF	Tr.	Gr.-sand-sm.cl.-sm.blk.sand
29	17	2	.147	2VF	Tr.	Gr.-sand-sm.cl.-sm.blk.sand
30	19	1	.164	-	-	Gr.-sand-sm.cl-sm.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.	Gr.-sand-sm.cl.-sm.blk.sand
32	16	2	.114	2VF	Tr.	Gr.-sand-sm.cl.-sm.blk.sand
33	17	2	.139	1VF	Tr.	Gr.-sand-sm.cl.-blk.sand(sm.)
34	17	1	.147	2VF	Tr.	Gr.-sand-sm.cl.-blk.sand
35	19	1	.164	3VF	Tr.	Gr.-sand-sm.cl.-blk sand
36	13	0	.098	1VF	Tr.	Boulder-sand-tr.cl.-sm.blk.sand-blk.boulder
6" below 37	16	1	.114	-	-	Boulder-sand-tr.cl.-tr.blk.sand-blk.boulder
38	17	1	.147	1VF	Tr.	Gr.-sand-sm.cl.-blk.sand-sm.bldr.chips
39	18	2	.147	3VF	Tr.	Gr.-sand-sm.cl.-blk.sand
40	17	1	.147	2VF	Tr.	Gr.-sand-sm.cl.-blk.sand

Time of Drilling 10 hrs.
Time of Pulling 1-3/4 hrs.
Time of Moving 2 hrs.
Time Lost 1-1/4 hrs.
Total Time 15 hrs.

From 0 to 46 Trace MGS.
From ____ to ____ MGS.
Actual Weight
Total ____ MGS.

Muck 4 Ft.
Gravel 41 Ft.
Bedrock ____ Ft.
Total ____ 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. Butl
Panner M. Mad
Helper G. Dis

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 11:45 A.M. 10-19-54

Page No. 2 of 2 Pages
Line No. 1 Hole No. 0
Creek McFann-Howard Exploration-Oct.1954
Claim No. 1 Above
Offset Dons: Direction: On Spot

Depth Pump.or Casing	CORE Before Pump	CORE After Pump	Meas. Vol. Loose	No. Col-ors	Est. Val. Wgt.	CHARACTER OF FORMATION
41	18	1	.164	4v	P Tr.	Cr.-sand-sm.cl.-blk.sand
42	18	1	.164	3v	P Tr.	Cr.-sand-sm.cl.-blk.sand-cl.increase
43	16	1	.114	-	-	Cl.-sand-sm.gr.-a little blk.sand
44	17	1	.147	1v	P 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.

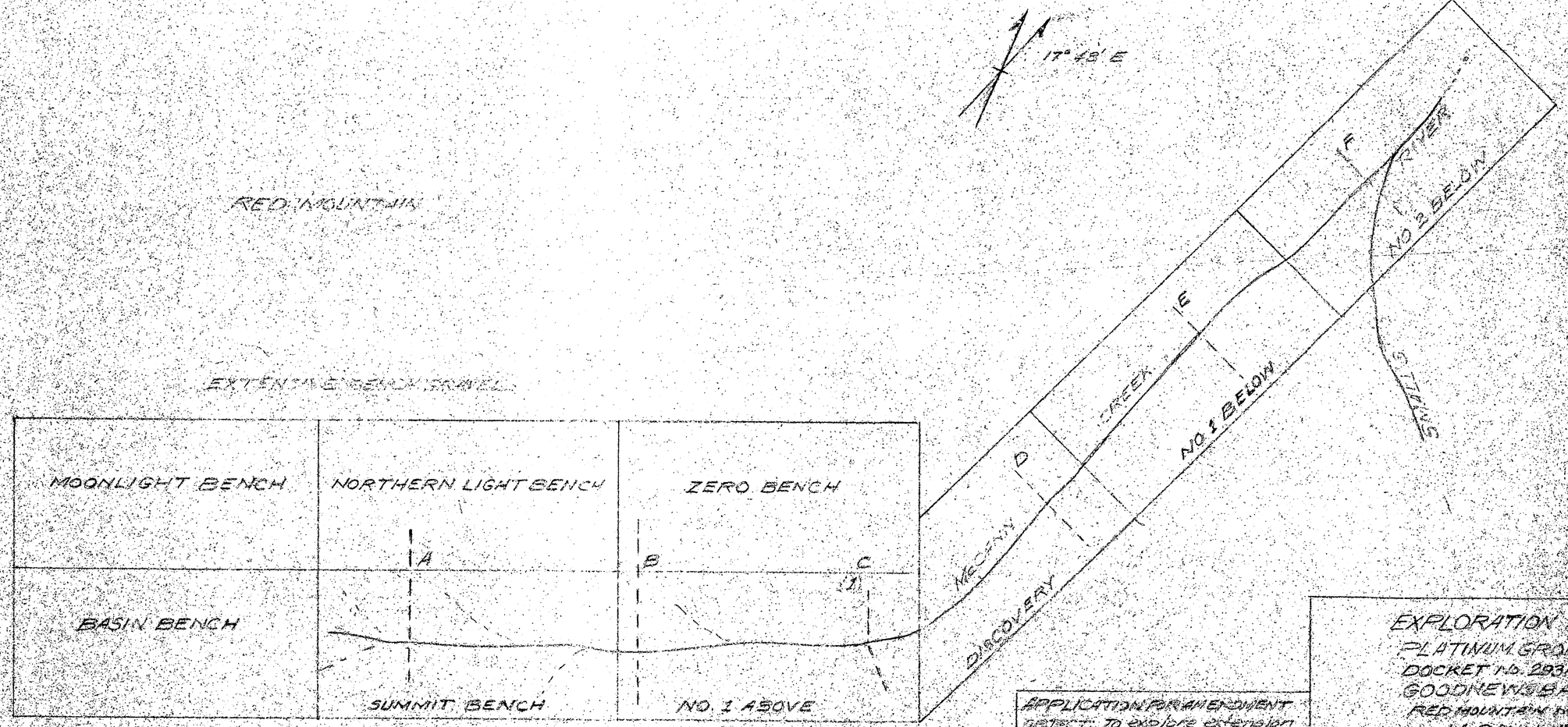
Muck 4 Ft.
Gravel 41 Ft.
Bedrock 1 Ft.
Total 46 Ft.

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

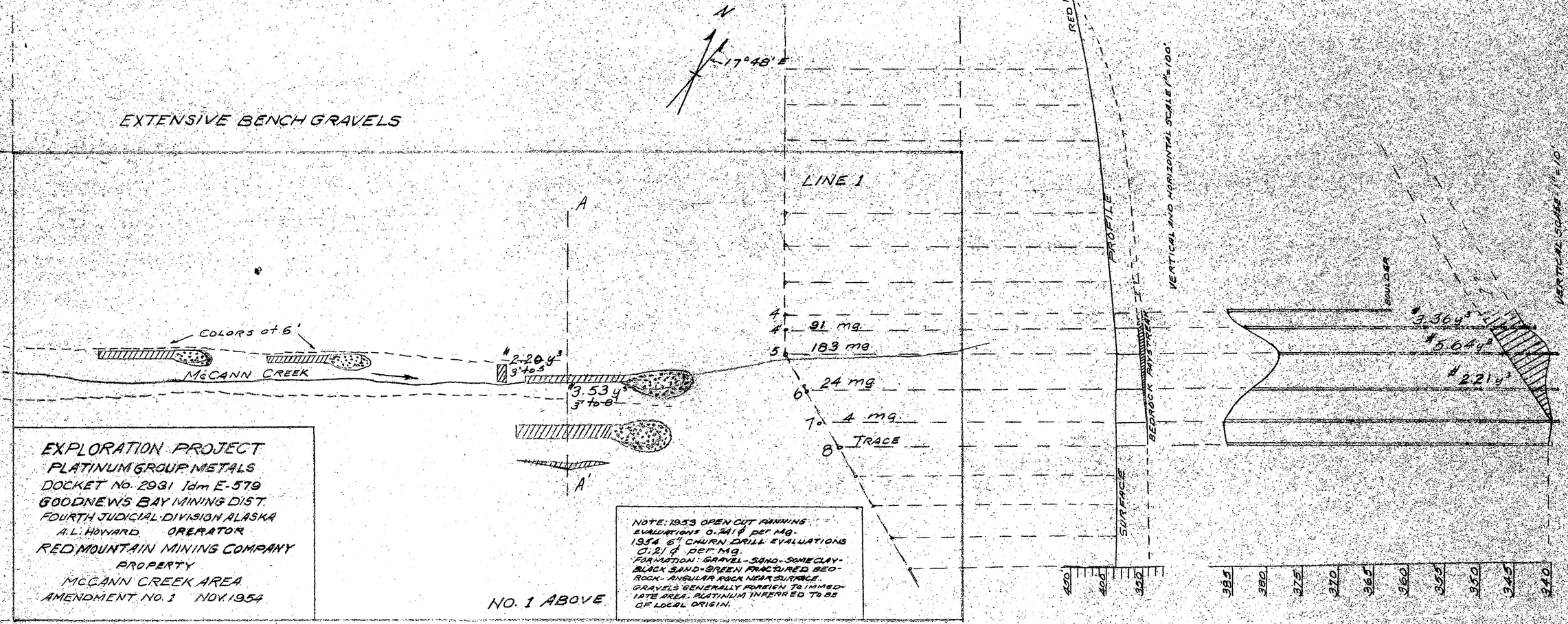
Crew

Driller R. Butler
Panner H. MacFory
Helper G. Bishop



APPLICATION FOR AMENDMENT
SUBJECT: to explore extension and lateral width of pay streak discovered on line 1 October 1954
Additional footage requested 1000.

EXPLORATION PROJECT
PLATINUM GROUP METALS
DOCKET No. 2931 Idm-2579
GOODNEWS BAY MINING DIST.
RED MOUNTAIN MINING COMPANY
McCANN CREEK
SCALE 1" = 400 FEBRUARY 1955
A.L. HOWARD OPERATOR



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

Docket
Surname

MAY 3 - 1954

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

Re: Docket No. DRA-2711
(Fletcher Group of Metals)
Contract No. Ida-2579
Red Mountain claims
Goodsman Bay District
Southeastern Alaska

Dear Mr. Howard:

Enclosed is the Operator's executed copy of Amendment No. 1 to the captioned contract, in accordance with Mr. C. H. Levein's letter to you of April 20, 1954.

Sincerely yours,

G. O. Mittendorf
(by EST)
Administrator

Filmcase/foc
Enclosure 1

4-29-54
cc to: Admr. Reading File
Operating Comm.
Docket
Messrs. James E. Ball, MGEM
Benjamin Gildersleeve, Rm. 242-A, GEA
Mr. Kamman
Code 700
DMEA Field Team, Region I

R.C.G.

700

Docket
Surname
J L Knowe
Ellis
Talbot
Martin
J H Johnson

MAY 3 - 1954

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

Re: Docket No. DMEA-2931
(Platinum Group of Metals)
Contract No. Ldm-1579
Albert Leighton Howard
Red Mountain claims
Goodnews Bay District
Southwestern Alaska

Dear Mr. Lorain:

Reference is made to copy of your letter dated April 20, 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 (JB)

Enclosures 2

APPROVED:

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

D. M. Larrabee (JB)
Member, Geological Survey

FILEnouse:foo 4-29-54
cc to: Admr. Reading File
Operating Comm.
Docket
Messrs. James E. Bell, USBM
Benjamin Gildersleeve, Rm.242-A,GSA
Mr. Knouse
Code 700
DMEA FIELD TEAM, REGION I

R.C.H.

4/26/54 gla

XXXXXXXXXXXXXXXXXX
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 satifactory to both parties; six copies are 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 as you have the Government signature you will be free to proceed with the work.

With best wishes,

Yours sincerely,

S. M. Lorain
Executive Officer, Region I

cc: Administrator, DMEA
C. L. Sainsbury

Surname
Docket copy

F. L. Knouse
Ellis
Mittendorf

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

MAR 31 1954

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

Re: Docket No. DMEA-2931
(Platinum Group of Metals)
Contract No. Idm-E579
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. C. O. Mittendorf, concerning your application to extend the subject exploration project into McGann-Minnie Gulch Creeks.

A communication was recently dispatched to Mr. S. H. Lorain, Executive Officer, DMEA 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 Wm. Ellis, Chief
Rare & Misc. Metals Division

FLKnouse/gla
3-31-54
cc to: Adm. Reading File
Docket
Code 700
FLKnouse
DMEA Field Team, Region I (2)

R.C.S.
3-31

DOCKET
SURNAME
FLKnouse
Selfridge
Mattendorf

MAR 29 1954

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

Re: Docket No. DMEA-1931
(Platinum group of metals)
Contract No. Ida-1679
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. Hamsch, and Mr. James E. Bell, both dated March 12, 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 (JHB)

Enclosures (4)

APPROVED:

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

D. M. Larrabee (JHB)
Member, Geological Survey

FLKnouse/foc 3-24-54
cc to: Adm. Reading File
Operating Comm.
Docket
Messrs. James E. Bell, Rm. 1349
A. R. Kinkel, Jr., Rm. B-242A-GSA
Code 700
FLKnouse
DMEA Field Team, Region I

R.C.S. 3-29-54

3/30/54 gla

DOCKET COPY

16351 Ashworth Ave.,
Seattle 33, Wash.
March 27, 1954.

Defense Minerals
RECEIVED
MAR 29 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:

Will you kindly advise me as to the present status of the amended application submitted under date of January 19?

Sincerely Yours,

A. L. Howard

A. L. Howard.

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

Administration
RECEIVED
MAR 22 1954

March 22, 1954

Memorandum

To: E. Wm. Ellis, DMEA
Through: M. H. Kline 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 this project 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.

James E. Bell

James E. Bell

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

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
MAR 9 1954

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.

James E. Bell

James E. Bell

3/9/54 gla

IN REPLY REFER TO:

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

March 8, 1954

Memorandum

To: Mr. E. Wm. Ellis

From: E. L. Newcomb

Subject: Recommendation for denial of proposed amendment

Re: IMEA-2931
Red Mountain Claims
Goodnews Bay District
Alaska
Platinum
Proposed amendment -
McCann-Minnie Gulch area

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 Culch 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.

E. L. Newcomb

E. L. Newcomb
Geologist

Department of the Interior
Defense Minerals Administration
RECEIVED
MAR 2 - 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 A ugust 10, 1953, which states: "Through conversations with Mr. F. A. Rutledge of DMEA and Mr. John B. Mertie 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. Mertie, 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. Velikanje

R. S. Velikanje
Geologist
U. S. Geological Survey

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

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
MAR 2 - 1954

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) Idm-E 579
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 918, 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 1¼ 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

709

Docket
Surname

F L Knouse
Ellis
Selfridge
R Jensen
O Whittredge

JAN 29 1954

Mr. S. E. Lorain
Executive Officer
DMEA Field Team, Region I
P. O. Box 550
Juneau, Alaska

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

Dear Mr. Lorain:

There is enclosed a copy of a proposal by the subject Operator to amend the captioned contract to allow a recess period for the winter and also charge and allow additional work under the terms of the contract.

Please furnish your comments and recommendations covering the proposal.

Sincerely yours,

George C. Selfridge (GHB)

Chairman, Operating Committee

Enclosure

FLKnouse/fox
1-25-54
cc to: Adm. Reading File
Operating Committee
Messrs. JEBell, Rm. 1349
ARKinkel, R. B-242- GSA
Ellis
Knouse
DMEA Field Team, Region I

ATTACHED:

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

s/ Philip W. Guild
Member, Geological Survey

R.C.B.
1-29-54

Surname
DOCKET COPY

700

FLKnouse
Ellis
Selfridge

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. Idm-E579
Red Mountain Claims
Goodnews Bay District
Southwestern Alaska

Dear Mr. Howard:

This acknowledges your proposal dated January 19, 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,

R. D. Mittenden (fw)

Administrator

FLKnouse/gla
1/28/54
cc to: Adm. Reading File
Docket
Messrs. ARKinkel, Jr., Rm. B-242A, GSA
James E. Bell, Rm. 1349
Ellis
Knouse
DMEA Field Team, Region I (2)

R.C.G. 1-29-54

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

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS ADMINISTRATION
~~WASHINGTON 25, D.C.~~
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-E579
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

Enclosures:

cc: C. L. Sainsbury
L. J. Wilcox

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 Tier 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	61	671
Sugar Bench L.L.	Berness	Aug. 10, 1940	2	73	661
M & C Fraction L.L.	Berness	Aug. 10, 1940	2	73	662

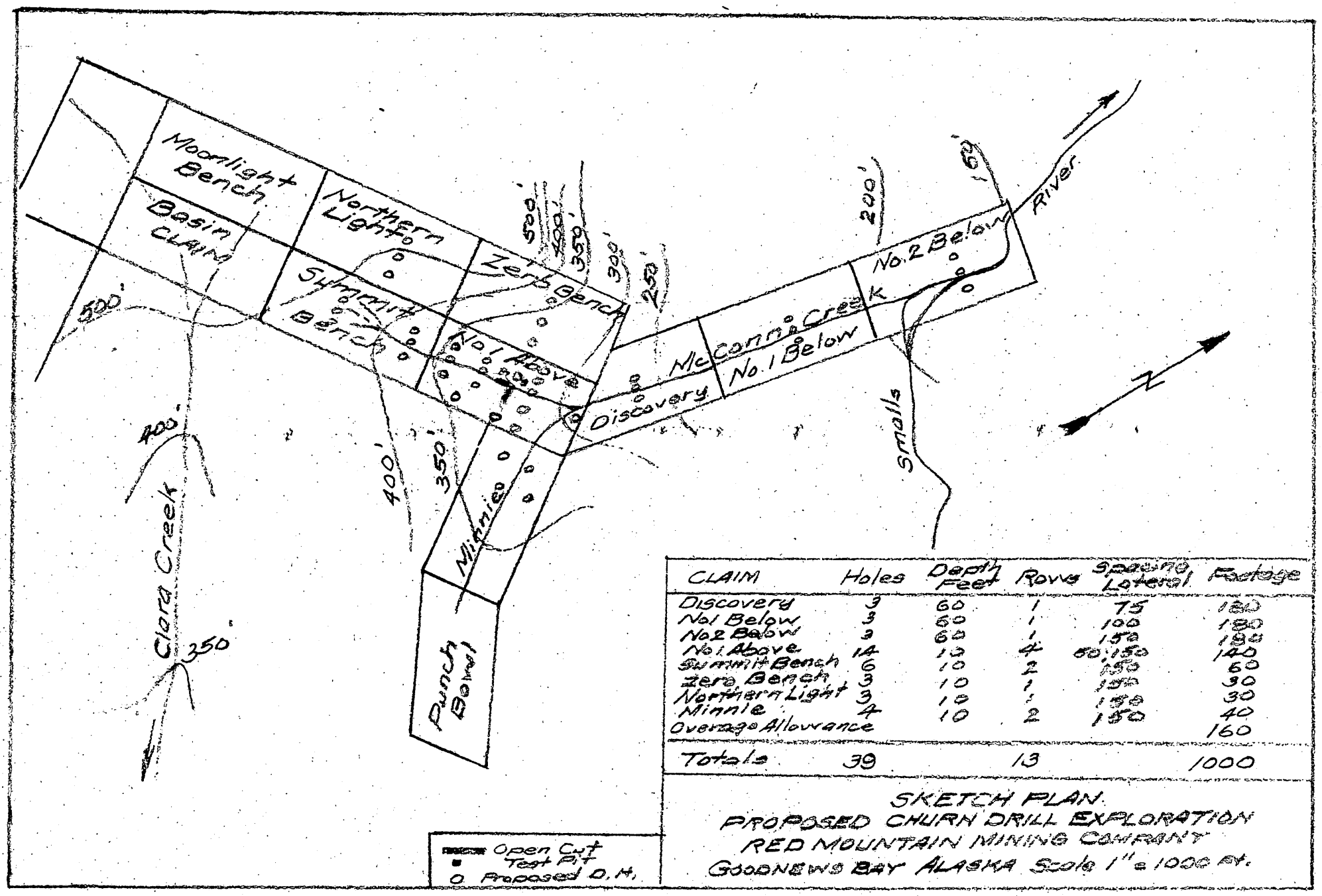
DEEDED TO RED MOUNTAIN MINING COMPANY

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

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) Aero Bench) 2 Below Discovery) Northern Light Bench)		May 2, 1947	3	244	1572
AREA BETWEEN McCANN & 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 & 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.



CLAIM	Holes	Depth Feet	Rows	Spacing Lateral	Footage
Discovery	3	60	1	75	180
No. 1 Below	3	60	1	100	180
No. 2 Below	3	60	1	150	180
No. 1 Above	14	10	4	60, 150	140
Summit Bench	6	10	2	150	60
Zero Bench	3	10	1	150	30
Northern Light	3	10	1	150	30
Minnie	4	10	2	150	40
Overage Allowance					160
Totals	39		13		1000

SKETCH PLAN
PROPOSED CHURN DRILL EXPLORATION
RED MOUNTAIN MINING COMPANY
GOODNEWS BAY ALASKA Scale 1" = 1000 FT.

Approved 2/9/31

MF-203
(Revised July 1, 1953)

OWNER'S CONSENT TO LIEN

DEPARTMENT OF THE INTERIOR
Mineral Minerals Administration
RECEIVED
JUL 28 1953

WHEREAS, the undersigned, as owner, co-owner, lessor, or seller has an interest in certain property in the ~~State~~ Territory of Alaska, ~~County~~, 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 H Bradt Acting President [Seal]
Fred H Bradt Sec. [Seal]
Christian Leinstad 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.

MF-203
(Revised July 1, 1953)

OWNER'S CONSENT TO LIEN

DEPARTMENT OF THE INTERIOR
Bureau of Mines Minerals Administration
RECEIVED
JUL 28 1953

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 Leinestad 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.

MF-203
(Revised July 1, 1953)

OWNER'S CONSENT TO LIEN

WHEREAS, the undersigned, as owner, co-owner, lessor, or seller has an interest in certain property in the ~~xxxxxx~~ Territory of Alaska, ~~xxxxxxxxxxxxxxxx~~, 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 Nintiaru, 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__.

RED MOUNTAIN MINING CO., INC.

M.L. Bissell, President by Fred H. Bradt Acting President [Seal]

Fred H. Bradt Secretary [Seal]

Christian Leinestad 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.

DEPARTMENT OF THE INTERIOR
Bureau of Land Management
RECEIVED
JUL 30 1952

THIS AGREEMENT, made and entered into this 27 day of June, 1952, by and between BIG MOUNTAIN MINING CO. INC., a Washington corporation, as Lessor, and A. L. HAMAND, 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
No. 1 Below
No. 2 Below
Summit Bench
No. 1 Above
Zero Bench
Northern Light Bench
Minnie Claim
Punch Bowl Claim

ON THE RIGHT LIMIT OF CHARA CREEK:

Moonlight Fraction
Bennie Bench
Chicago Bench
Boston Bench
New York Bench

ON THE LEFT LIMIT OF BERRY CREEK:

Surprise Bench
Honey Bench
Sugar Bench
N and C Fraction

ON THE RIGHT LIMIT OF BERRY CREEK:

Jerry Bench
Berry Bench

ON THE RIGHT LIMIT OF SALMON RIVER:

First Tier 7 Above
Bordlack Bench
Consolidation Bench
Frisco Bench
Oakland Bench
Brooklyn Bench
Discovery on Boulder Creek
Three Star Bench
Portland 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, are 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 to 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 be at all reasonable times 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 to 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 Clark 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)

WITNESS:

s/ Signe N. King

s/ H. S. Ellsbury

ACKNOWLEDGMENT
(Corporation)

STATE OF WASHINGTON,
County of KING } ss.

On this 27th day of June A. D. 1952

before me personally appeared M. L. Bissell and Christian Leivestad - - -

, to me known

to be the President and Treasurer, respectively, of the Red Mountain Mining Company, Inc.,

the corporation that executed the within and foregoing instrument, and acknowledged the said instrument to be the free and voluntary act and deed of said corporation, for the uses and purposes therein mentioned, and on oath stated that they were authorized to execute said instrument and that the seal affixed thereto is the corporate seal of said corporation.

IN WITNESS WHEREOF, I have hereunto set my hand and affixed my official seal the day and year first above written.

Signe M. Kruse

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

This blank is guaranteed against successful alteration, which alteration is insured in LLOYD'S, London - Pat. Pend.
Washington Legal Blank Co. (Acknowledgment - Corporation) Form No. 68 Printing Date 4/15/48

ACKNOWLEDGMENT
(Individual)

STATE OF WASHINGTON,
County of King } ss.

I, Signe N. King, Notary Public in and for the State of Washington, residing at Seattle do hereby certify that on this 27th day of June, 19 52, personally appeared before me A. L. Howard - - 16351 Ashworth Avenue, Seattle 33, Washington to me known to be the individual described in and who executed the within instrument and acknowledged that he signed and sealed the same as his free and voluntary act and deed for the uses and purposes herein mentioned.

Given under my hand and official seal this 27th day of June, 19 52.

Signe N. King
Notary Public in and for the State of Washington,
residing at Seattle

This blank is guaranteed against successful alteration, which guaranty is insured in LLOYD'S, London - Pat. Pend.
Washington Legal Blank Co., Seattle (Acknowledgment - Individual) Form No. 64

Printing Date 9/15/52

THIS AGREEMENT, made and entered into this 27 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
Osmoridium 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 to 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 be at all reasonable times 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 to 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)

WITNESS:

s/ Signe N. King

s/ H. S. Ellsbury

ACKNOWLEDGMENT
(Corporation)

STATE OF WASHINGTON, } ss.
County of [illegible]

On this 27th day of June A. D. 1952

before me personally appeared M. L. Blasell and Christian Jeiwerter - - -

, to me known

to be the President and Treasurer, respectively, of the Red Mountain Mining Company, Inc.,

of the corporation that executed the within and foregoing instrument, and acknowledged the said instrument to be the free and voluntary act and deed of said corporation, for the uses and purposes therein mentioned, and on oath stated that they were authorized to execute said instrument and that the seal affixed thereto is the corporate seal of said corporation.

IN WITNESS WHEREOF, I have hereunto set my hand and affixed my official seal the day and year first above written.

Irene M. Kay

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

This blank is guaranteed against successful alteration, which alteration is insured in LLOYD'S, London - Pat. Pend.
Washington Legal Blank Co. (Acknowledgment - Corporation) Form No. 68 Printing Date 4/15/48

ACKNOWLEDGMENT
(Individual)

STATE OF WASHINGTON,
County of King } ss.

I, Birne N. King, Notary Public in and for the State of Washington, residing at Seattle do hereby certify that on this 27th day of June, 19 52, personally appeared before me A. L. Howard - - 16351 Ashworth Avenue, Seattle 33, Washington to me known to be the individual described in and who executed the within instrument and acknowledged that he signed and sealed the same as his free and voluntary act and deed for the uses and purposes herein mentioned.

Given under my hand and official seal this 27th day of June, 19 52.

Birne N. King
Notary Public in and for the State of Washington,
residing at Seattle

This blank is guaranteed against successful alteration, which guaranty is insured in LLOYD'S, London - Pat. Pend.
Washington Legal Blank Co., Seattle (Acknowledgment - Individual) Form No. 64

Printing Date 9/15/52

ACKNOWLEDGMENT
(Individual)

STATE OF WASHINGTON,
County of King } ss.

I, Signe N. King, Notary Public in and for the State of Washington, residing at Seattle do hereby certify that on this 27th day of June, 19 52, personally appeared before me A. L. Howard - - 16351 Ashworth Avenue, Seattle 33, Washington to me known to be the individual described in and who executed the within instrument and acknowledged that he signed and sealed the same as his free and voluntary act and deed for the uses and purposes herein mentioned.

Given under my hand and official seal this 27th day of June, 19 52.

Signe N. King
Notary Public in and for the State of Washington,
residing at Seattle

This blank is guaranteed against successful alteration, which guaranty is insured in LLOYD'S, London - Pat. Pend.
Washington Legal Blank Co., Seattle (Acknowledgment - Individual) Form No. 64 Printing Date 9/15/52

Division of Mines
Mineral Information
RECEIVED
JUL 20 1959

THIS AGREEMENT, made and entered into this 27 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 OR 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 to 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 be at all reasonable times 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 to 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)

WITNESS:

s/ Signe N. King

s/ H. D. Ellsbury

ACKNOWLEDGMENT
(Corporation)

STATE OF WASHINGTON, }
County of KING } ss.

On this 27th day of June A. D. 19 52

before me personally appeared M. L. Bissell and Christian Leivestad - - -

, to me known

to be the President and Treasurer, respectively, of the Red Mountain Mining Company, Inc.,

the corporation that executed the within and foregoing instrument, and acknowledged the said instrument to be the free and voluntary act and deed of said corporation, for the uses and purposes therein mentioned, and on oath stated that they were authorized to execute said instrument and that the seal affixed thereto is the corporate seal of said corporation.

IN WITNESS WHEREOF, I have hereunto set my hand and affixed my official seal the day and year first above written.

Sigrid M. Kain

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

This blank is guaranteed against successful alteration, which alteration is insured in LLOYD'S, London - Pat. Pend.
Washington Legal Blank Co. (Acknowledgment - Corporation) Form No. 68 Printing Date 4/15/48

ACKNOWLEDGMENT
(Corporation)

STATE OF WASHINGTON, } ss.
County of King

On this 27th day of June A. D. 1952

before me personally appeared M. L. Bissell and Christian Leivestad - - -

, to me known

to be the President and Treasurer, respectively, of the Red Mountain Mining Company, Inc.,

the corporation that executed the within and foregoing instrument, and acknowledged the said instrument to be the free and voluntary act and deed of said corporation, for the uses and purposes therein mentioned, and on oath stated that they were authorized to execute said instrument and that the seal affixed thereto is the corporate seal of said corporation.

IN WITNESS WHEREOF, I have hereunto set my hand and affixed my official seal the day and year first above written.

Irene M. King

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

This blank is guaranteed against successful alteration, which alteration is insured in LLOYD'S, London - Pat. Pend.
Washington Legal Blank Co. (Acknowledgment - Corporation) Form No. 68 Printing Date 4/15/48

ACKNOWLEDGMENT
(Individual)

RECEIVED
JUL 2 1953

STATE OF WASHINGTON,
County of King } ss.

I, Signe N. King, Notary Public in and for the State of Washington, residing at Seattle do hereby certify that on this 27th day of June, 19 52, personally appeared before me A. L. Howard - - 16351 Ashworth Avenue, Seattle 33, Washington to me known to be the individual described in and who executed the within instrument and acknowledged that he signed and sealed the same as his free and voluntary act and deed for the uses and purposes herein mentioned.

Given under my hand and official seal this 27th day of June, 19 52.

Signe N. King
Notary Public in and for the State of Washington,
residing at Seattle

This blank is guaranteed against successful alteration, which guaranty is insured in LLOYD'S, London - Pat. Pend.
Washington Legal Blank Co., Seattle (Acknowledgment - Individual) Form No. 64

Printing Date 9/15/52

DEPARTMENT OF THE INTERIOR
Bureau of Land Management
RECEIVED
JUL 30 1953

THIS AGREEMENT, made and entered into this 27 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
Money Bench	M and C Fraction

ON THE RIGHT LIMIT OF DOWRY CREEK:

Jenny Bench
Sonny Bench

ON THE RIGHT LIMIT OF SALMON RIVER:

First Tier 7 Above	Brooklyn Bench
Hardluck Bench	Discovery on Boulder Creek
Cumeridium 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 to 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 be at all reasonable times 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 to 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.

HEE MOUNTAIN MINING CO. INC.,

By s/ M. L. Bissell
President

By s/ Christian Leivestad
Treasurer

(LESSOR)

By s/ A. L. Howard
(LESSEE)

WITNESS:

s/ Signe N. King

s/ H. S. Ellsbury

ACKNOWLEDGMENT
(Corporation)

STATE OF WASHINGTON,
County of KING } ss.

On this 27th day of June A. D. 1952

before me personally appeared M. L. Bissell and Christian Leivestad - - -

, to me known

to be the President and Treasurer, respectively, of the Red Mountain Mining Company, Inc.,

the corporation that executed the within and foregoing instrument, and acknowledged the said instrument to be the free and voluntary act and deed of said corporation, for the uses and purposes therein mentioned, and on oath stated that they were authorized to execute said instrument and that the seal affixed thereto is the corporate seal of said corporation.

IN WITNESS WHEREOF, I have hereunto set my hand and affixed my official seal the day and year first above written.

Signe M. King
Notary Public in and for the State of Washington, residing at Seattle

This blank is guaranteed against successful alteration, which alteration is insured in LLOYD'S, London - Pat. Pend.
Washington Legal Blank Co. (Acknowledgment - Corporation) Form No. 68 Printing Date 4/15/48

ACKNOWLEDGMENT
(Individual)

STATE OF WASHINGTON,
County of King } ss.

I, Signe N. King, Notary Public in and for the State of Washington, residing at Seattle do hereby certify that on this 27th day of June, 19 52, personally appeared before me A. L. Howard - - 16351 Ashworth Avenue, Seattle 33, Washington to me known to be the individual described in and who executed the within instrument and acknowledged that he signed and sealed the same as his free and voluntary act and deed for the uses and purposes herein mentioned.

Given under my hand and official seal this 27th day of June, 19 52

Signe N. King
Notary Public in and for the State of Washington,
residing at Seattle

This blank is guaranteed against successful alteration, which guaranty is insured in LLOYD'S, London - Pat. Pend.
Washington Legal Blank Co., Seattle (Acknowledgment - Individual) Form No. 64

Printing Date 9/15/52

THIS AGREEMENT, made and entered into this 27 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 to 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 to 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 indebted-

ness 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 M. L. Bissell
President

By Christian Lunstad
~~Secretary~~ Treas

(LESSOR)

WITNESS:

Diane N. King

A. L. Howard

A. L. Howard

(LESSEE)

FILE COPY
SURNAME:

Docket
Murphy
Ellis
Beck
Lefferdge
Richmond

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

Mr. T. H. Lorain
Executive Officer
DMEA Field Team, Region I
Bureau of Mines
P. O. Box 560
Juneau, Alaska

AUG 1 0 1953

Re: Docket No. DMEA-2931 (Platinum)
Red Mountain Platinum Placer Claims
A. L. Howard, Lessee
Goodnews Bay Mining District, Alaska

Dear Mr. Lorain:

Enclosed are the original and five copies of the captioned contract signed by the Government, with attachments.

If the terms and conditions of this proposed contract meet with the approval of your office and the Applicant, insert in Article 3 of each copy of the contract the period of time within which the Operator will be required to begin this work.

If any part of this proposed contract does not meet with the approval of your office or the Applicant, the original and all copies are to be returned to this office with the proposed changes for consideration.

The Applicant requested exploration aid in the amount of $50,327.[illegible], to cut 15,000 feet of trench by use of a dragline shovel and also to churn drill a total of 1000 feet of holes in the McCann-Minnie Gulch area and 1000 feet in the Portland Bench area. A counter proposal was made by the Field Team and agreed to by the Operator, to explore the above two areas by churn drilling alone. This proposal submitted by the Field Team was set up in two stages, the second stage to be justified by results obtained during the first stage, the total cost of both stages was estimated at $36,000.00.

Through conversations with Mr. F. A. Rutledge of DMEA and Mr. John B. Mertie of the U. S. G. S., 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; however, it was possible that sufficient yardage for a mining operation might be found in the Portland Bench area, especially if an older channel was proven to exist west of the

Salmon River. Therefore the attached proposed contract has been prepared to cover drilling in the Portland Bench area only. This contract is for a total of 1000 feet of churn drill holes at a total cost of $12,000.00.

Sincerely yours,

George C. Selfridge
ESF

Chairman, Operating Committee

MDM 8-10-53

Enclosures

APPROVED:

E. H. Hedges
ESF

Member, Bureau of Mines

A. R. Kinkel, Jr.
ESF

Member, Geological Survey

DMMurphy/db
8/6/53
cc to: Adm. Reading File
Docket
Operating Committee
Messrs: J. E. Bell, Rm. 1349
A.R.Kinkell, Rm. B-242A, GSA
Ellis
Murphy

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.

Albert E. Lane
for J. L. Hofflund
Chief Counsel

Attachments

FILE COPY
SURNAME: 915

140

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

August 5, 1953

N.S. in R.R.

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.

J. L. Hofflund
Chief Counsel

Attachments

AEKane/ema/8xxx53
cc: Mails & Files
J. L. Hofflund
A. E. Kane
Chron.

8/3/53 gla

IN REPLY REFER TO:

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

August 3, 1953

Memorandum

To: Mr. E. Wm. Ellis

From: A. R. Kinkel, Jr.

Subject: Recommendation for approval

Re: DMEA-2931
Red Mountain Claims
Goodnews Bay District
Alaska
$50,327.45
Platinum

The field team recommends a two-stage project in the Portland Bench and Minnie-McCann Creeks areas for approval. A single line of 15-foot holes will be drilled across each of these areas as an initial stage of exploration. Additional drilling will be done only if favorable results are obtained from the limited, preliminary lines of holes.

As the proposed areas for exploration represent the best remaining unworked and untested gravels in the Red Mountain district, a prospecting project is warranted for the applicant's claims. However, I would suggest that a more limited program be approved and that the drilling be restricted to the Portland Bench area. The contract should include the provision that some holes, at least, be extended to bedrock.

A R Kinkel Jr.

A. R. Kinkel, Jr.

IN REPLY REFER TO:

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

August 3, 1953

Memorandum

Re: DMEA-2931
Red Mountain Claims
Goodnews Bay District
Alaska
$50,327.45
Platinum

To: Mr. L. Wm. Ellis

From: A. R. Kinkel, Jr.

Subject: Recommendation for approval

The field team recommends a two-stage project in the Portland Bench and Minnie-McCann Creeks areas for approval. A single line of 15-foot holes will be drilled across each of these areas as an initial stage of exploration. Additional drilling will be done only if favorable results are obtained from the limited, preliminary lines of holes.

As the proposed areas for exploration represent the best remaining unworked and untested gravels in the Red Mountain district, a prospecting project is warranted for the applicant's claims. However, I would suggest that a more limited program be approved and that the drilling be restricted to the Portland Bench area. The contract should include the provision that some holes, at least, be extended to bedrock.

A. R. Kinkel, Jr.

IN REPLY REFER TO:

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

August 3, 1953

Memorandum

Re: IM-A-2931
Red Mountain Claims
Goodnews Bay District
Alaska
50,327.45
Platinum

To: Mr. L. Wm. Ellis

From: A. R. Kinkel, Jr.

Subject: Recommendation for approval

The field team recommends a two-stage project in the Portland Bench and Minnie-McCann Creeks areas for approval. A single line of 15-foot holes will be drilled across each of these areas as an initial stage of exploration. Additional drilling will be done only if favorable results are obtained from the limited, preliminary lines of holes.

As the proposed areas for exploration represent the best remaining unworked and untested gravels in the Red Mountain district, a prospecting project is warranted for the applicant's claims. However, I would suggest that a more limited program be approved and that the drilling be restricted to the Portland Bench area. The contract should include the provision that some holes, at least, be extended to bedrock.

A. R. Kinkel, Jr.

7/30/53 gla

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
JUL 29 1953

16351 Ashworth Ave.,
Seattle 33, Wash.
July 28, 1953.

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

D. M. E. A. 2931
Platinum Group Metals.

Gentlemen:

In accordance with instructions from DMEA Field Team, Region I, I enclose the original and four copies of completed Exploration Project Contract MF- 200(A).

It is my belief that everything will be found in order. However, should any questions arise which might cause delay in processing the contract may I suggest that the Operating Committee telephone or wire collect in order to save time as operations are seasonal in the area to be explored.

Sincerely Yours,

A. L. Howard, Lessee

A. L. Howard.

Copy to Alaska Field Office.

Mx. Fraction in lease on Dowry Creek but not shown on attached map.

20 Basin claim shown on map on McCann Creek but not in lease (Will not be explored under this contract)

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
JUL 20 1953

Annex II

~~EXHIBIT "A"~~

~~(PLEASE REFER TO CONTOUR AND CLAIM MAP)~~

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. 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
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)

E X H I B I T "A"

(PLEASE REFER TO CONTOUR AND CLAIM MAP)

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

E X H I B I T "A"

(PLEASE REFER TO CONTOUR AND CLAIM MAP)

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. Osmiridum Bench
9. Frisco Bench
10. Penny 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)

E X H I B I T "A"

(PLEASE REFER TO CONTOUR AND CLAIM MAP)

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

E X H I B I T "A"

(PLEASE REFER TO CONTOUR AND CLAIM MAP)

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. Omniridum 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. Peoria 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)

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
JUL 20 1953

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 Tier 7 above)	May 31, 1946		3	211	1496
Three Star Bench) Osmiridium Bench)	May 2, 1947		3	244	1572

DOWRY CREEK CLAIMS

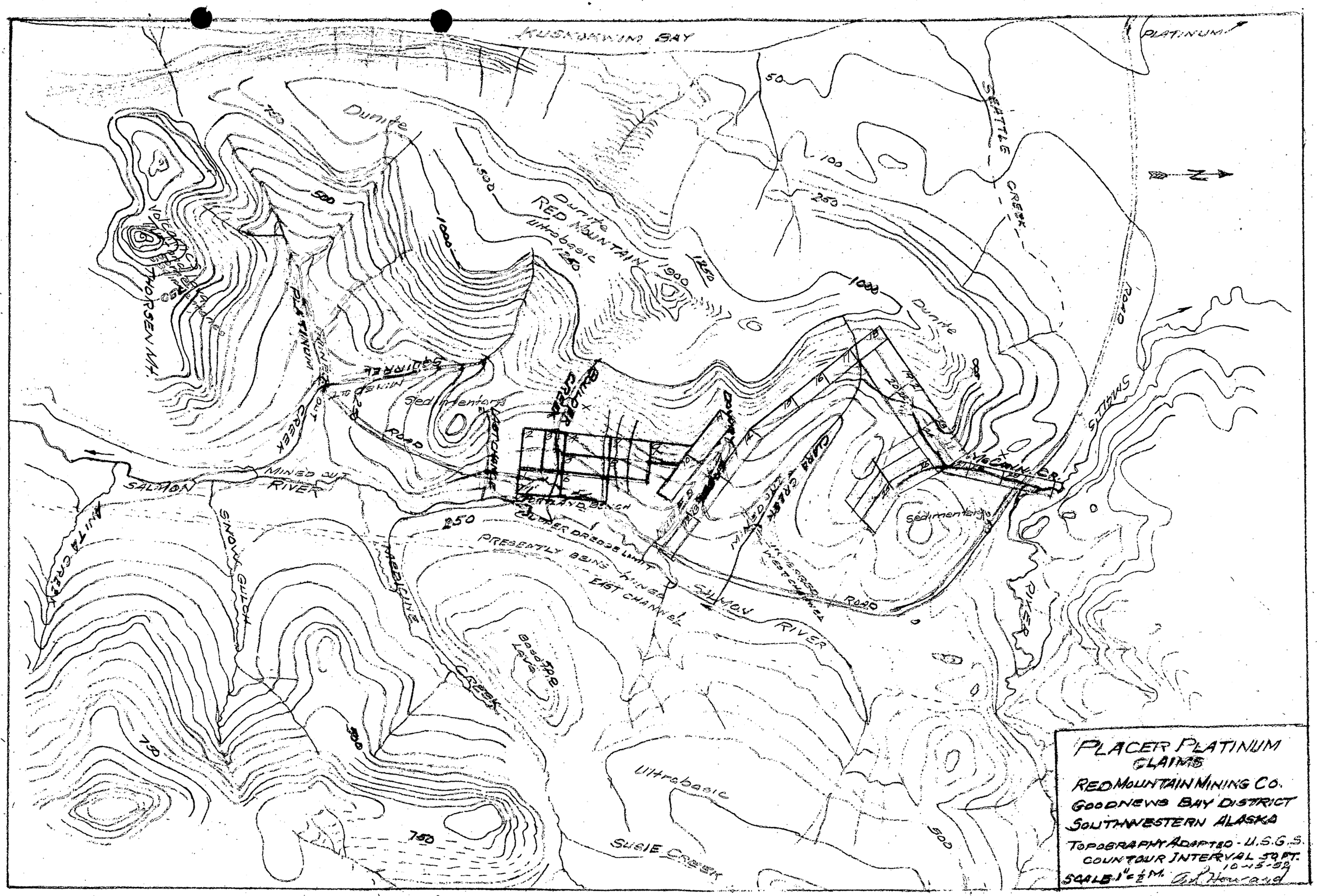
Jenny Bench R.L.	Berness	Aug. 11, 1946	3	235	1528
Benny Bench R.L.	Leivestad	Aug. 27, 1940	2	95	695
Surprise Bench L.L.	Roslund	Aug. 10, 1939	1	116	153
Honey Bench L.L.	Roslund	Aug. 20, 1940	2	61	671
Sugar Bench L.L.	Berness	Aug. 10, 1940	2	73	661
M & C Fraction L.L.	Berness	Aug. 10, 1940	2	73	662
	DEEDED 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

DEPARTMENT OF THE INTERIOR
Bureau of Mines Administration
RECEIVED
JUL 23 1953

McCANN CREEK CLAIMS

Claim	Locator	Date	Vol.	Page	Filed for Record 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) Z Aero Bench) 2 Below Discovery) Northern Light Bench)		May 2, 1947	3	244	1572
AREA BETWEEN McCANN & 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 & 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.


KUSKOKWIM BAY
PLATINUM
SEATTLE CREEK
ROAD
SHALLS
N
Dunite
RED MOUNTAIN
Ultrabasic
Dunite
THORSEN MT.
PLATINUM
CREEK
Gravel
Sed. Intercalations
ROAD
MINED OUT
RIVER
SALMON
ANITA CREEK
SNOW GULCH
MACHINE
CREEK
MINED OUT
GRAVEL
PRESENTLY BEING MINED
EAST CHANNEL
SALMON
RIVER
ROAD
RIVER
Basaltic Lava
Ultrabasic
SUSIE CREEK
Sedimentary
50
100
250
500
750
1000
1250
1500
1750
2000
PLACER PLATINUM CLAIMS
RED MOUNTAIN MINING CO.
GOODNEWS BAY DISTRICT
SOUTHWESTERN ALASKA
TOPOGRAPHY ADAPTED - U.S.G.S.
COUNTOUR INTERVAL 50 FT.
10-15-58
SCALE 1" = ¼ M.

7/24/53 gla

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
JUL 24 1953

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

1039

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.

C. L. Sainsbury

C. L. Sainsbury, Actg. Exec. Officer
Field Team, Region I

J. A. Herdlick

J. A. Herdlick, U. S. Bureau of Mines

OFFICE OF THE ADMINISTRATOR.

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

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
JUL 24 1953

July 20, 1953

gcl 8/7/53

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 $50,327.45, has been revised to a two-stage program consisting of

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):

Mertie 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 aluvium 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
DMEA Docket-824X	(Tin City)	$13.07	Partly cased, and favorable drilling.
DMEA Docket-2453	(Tozimoran)	$25.05	Cased, unit cost high owing to small amount of drilling.
DMEA Docket-2942	(Ear 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

J. A. Hudlow

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

C. L. Sainsbury

C. L. Sainsbury
Geological Survey Member

UNITED STATES
DEPARTMENT OF THE INTERIOR
Defense Minerals Administration

P. O. Box 560
Juneau, Alaska

July 21, 1953

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

Dear Mr. Howard:

Enclosed are the original and 4 copies of the proposed contract for the exploration of the Red Mountain platinum placer deposits.

Please attache the following and forward all copies to Washington.

1. Prints of contour and claim map titled "Placer Platinum Claims". Attach this map to Exhibit "A". It will be the third map of 3 in Exhibit "A".

2. Original (signed copy), and 4 copies of "Owner's Consent to Lien" attached to corresponding copies of the contract.

3. Original (signed copy) and 4 copies of your lease attached to corresponding copies of the contract.

Forward the original and all copies to:

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

Very truly yours,

DMEA Field Team, Region I

cc: Operating Comm.
DMEA - 2

C. L. Sainsbury
C. L. Sainsbury, Actg. Exec. Officer

J. A. Hardick, U. S. Bureau of Mines

UNITED STATES
DEPARTMENT OF THE INTERIOR
Defense Minerals Administration

P. O. Box 560
Juneau, Alaska

July 21, 1953

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

Dear Mr. Howard:

Enclosed are the original and 4 copies of the proposed contract for the exploration of the Red Mountain platinum placer deposits.

Please attache the following and forward all copies to Washington.

1. Prints of contour and claim map titled "Placer Platinum Claims". Attach this map to Exhibit "A". It will be the third map of 3 in Exhibit "A".

2. Original (signed copy), and 4 copies of "Owner's Consent to Lien" attached to corresponding copies of the contract.

3. Original (signed copy) and 4 copies of your lease attached to corresponding copies of the contract.

Forward the original and all copies to:

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

Very truly yours,

DMEA Field Team, Region I

cc: Operating Comm.
DMEA - 2

C. L. Sainsbury

S. L. Sainsbury, Actg. Exec. Officer

J. A. Kordlick, U. S. Bureau of Mines

MF-200 (A)
(February 1952)

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
JUL 24 1953

DOCKET NO. DMEA 2931

COMMODITY Platinum Group Metals

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

EXPLORATION PROJECT CONTRACT[1]
(Short Form)

IT IS AGREED this _____ day of _____, 195__, between the United States of America, acting through the Department of the Interior, Defense Minerals Exploration Administration, hereinafter called the "Government," and[2] Albert Leighton Howard (Lessee)
16351 Ashworth Ave.
Seattle 33, Washington

hereinafter called the "Operator," as follows:

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

ARTICLE 2. *Operator's property rights.*—With respect to that certain land situated in the ~~State~~ Territory of Alaska, Goodnews Bay, ~~county~~ of Fourth Judicial Division, described as follows:[3] Twenty-nine (29) unpatented placer mining claims situated on the eastern slopes of Red Mountain near Platinum, Goodnews Bay Mining District, Alaska more fully described in the attachment to Owner's consent to lein, attached to this contract.

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: _____

(*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 Associated Platinum Group Metals (Placer)

in or upon the described land; and shall bring the project to completion within a period of 18 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 90 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 $32,400.00, which is 90 percent of $36,000.00, the agreed, estimated total cost of the project in which the Government will participate: *Provided,* That until the Operator's final report and final accounting have been rendered to the Government and any final check or auditing required by the Government has been made, and a final settlement of the contract has been made, the Government may withhold from the last voucher or vouchers such sums as it sees fit not in excess of ten (10) percent of the maximum total which the Government might have been called upon to pay under the terms of the contract. The Government may, as it sees fit, make payments direct to the Operator's independent contractors, if any, for the account of the Operator, rather than to the Operator.

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

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

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

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

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

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

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

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

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

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

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

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

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

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

ARTICLE 9. *Changes and added provisions* ~~Any property or interests in property which are contiguous to or in the vicinity of the property referred to in Article 2 of this Contract, owned or held by the operator at the date of this Contract or acquired thereafter during the term of this Contract, shall be considered to be added to and included with the property referred to in said Article 2; and the Operator shall notify the Government in writing of any such property or interests in property.~~

Executed in sextuplicate the day and year first above written.

THE UNITED STATES OF AMERICA

~~A. L. Ravari, Lessee~~
(Operator)

By _____

By _____

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

NF-200(A)

EXHIBIT "A"

Exploration Project Contract
(Short Form)
A. L. Howard, Lessee

Red Mountain Platinum Placer Claims
Goodnews Bay Mining District, Alaska
Docket No. DMA-2931

Description of the Work

General

The work will consist of churn drilling in the Portland Beach and Mahamudunuk areas and all the auxiliary operations necessary to explore and indicate the value of platinum group metals placer deposits existing within the boundaries of the property more fully described in Article 2 of this Contract and shown on the map attached to and made a part of this exhibit.

The exploration shall be done in 2 stages, as described later. If at any time the results of the work being done under Stage 1 indicate a discovery, or the imminence of a discovery, Stage 2 may be started immediately after approval in writing by the Field Team. If such approval by the Field Team is given prior to the completion of Stage 1, the uncompleted footage (if any) allowed for Stage 1 shall be included under Stage 2.

OUT

INSERT.

In general, the churn drilling shall be done on lines located to cross the direction of flow of each 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 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 copies of the log of each hole shall be forwarded to the DMA 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. 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.

STOP

Stage 1

Portland Bench: The work shall be started on the lower side of Portland Bench and proceed along a line located approximately as shown on Fig. 1 attached to this exhibit. The exact location of the line shall depend on geologic and topographic indications and may be changed with prior approval of the Field Team. Hole spacing on the line shall be at intervals of not less than 50 feet. The spacing of holes may be shortened by prior Field Team approval if special conditions indicate the need for closer spacing in favorable areas. It is estimated that a line of 40 holes averaging 15 feet in depth will demonstrate whether or not additional exploration is justified in the Portland Bench area. Preliminary exploration in this area under Stage 1 shall be limited to 600 feet of shown drilling.

McKeen Creek: The drilling in this area shall be done approximately as shown on Fig. 2 attached to this Exhibit. The drilling shall be done subject to the same provisions and reservations specified above for work on Portland Bench. Most of the work shall be done above the confluence of Minnie Gulch and upper McKeen Creek but approximately 100 feet of drilling shall be specifically reserved for at least 1 hole in the reported duty ground on the Discovery claim below the confluence of these streams.

Summary of Stage 1 Exploration:

Portland Bench Area:	
Estimated 40 holes @ 15 ft. (average)	600 feet
Upper McKeen Creek-Minnie Gulch Area:	
Estimated 20 holes @ 15 ft. (average)	300
Below Confluence of Minnie Gulch and McKeen Creek; estimated 1 hole @ 100 ft.	100
Total	1,000 feet

Stage 2

If justified by results obtained during Stage 1, the Field Team may at any time during this Stage authorize additional exploration in either or both of the specified areas of not to exceed 2,000 feet of additional shown drilling. Such authorization shall be in writing and be prior to any additional work by the Operator.

If Stage 1 exploration on Portland Bench justifies Stage 2 drilling inthis area and such is authorized by the Field Team, 400 feet of the

total footage authorized under Stage 2 shall be reserved for completion of the work on Medium Creek as specified under Stage 1.

Stage 2 drilling shall be done at such locations as are indicated by the results of Stage 1 and as approved by the Field Team. In general, lines shall be at intervals of not less than 500 feet until the direction of a pay channel is established; thereafter, lines shall be spaced at not less than 1,000-foot intervals. Hole spacing shall be not less than 50 feet unless approved by the Government.

~~Cost of Project~~
(~~* Allowable Maximum~~) AGREED UNIT COST

The churn drilling authorized under both Stages shall be performed by the Operator for a unit price of $12.00 per foot which shall include the following:

1. All equipment, repairs, supplies, and personnel (including freight and transportation) necessary to carry on the drilling project efficiently and diligently.

2. Such surveying and other engineering services as 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 to be incorporated into a comprehensive final report as required under Article 5(b) of the Contract.

3. All freight and assaying charges on such samples as may be necessary to establish the total value of metallics and heavy mineral concentrate rejects except that the Operator's liability for analyses requiring the complete separation of platinum group metals shall be limited to one composite sample each of metallics and heavy mineral concentrate rejects; all other assays performed at the Operator's expense shall be by ordinary accepted methods for determining combined platinum group metals.

Summary

Stage 1:

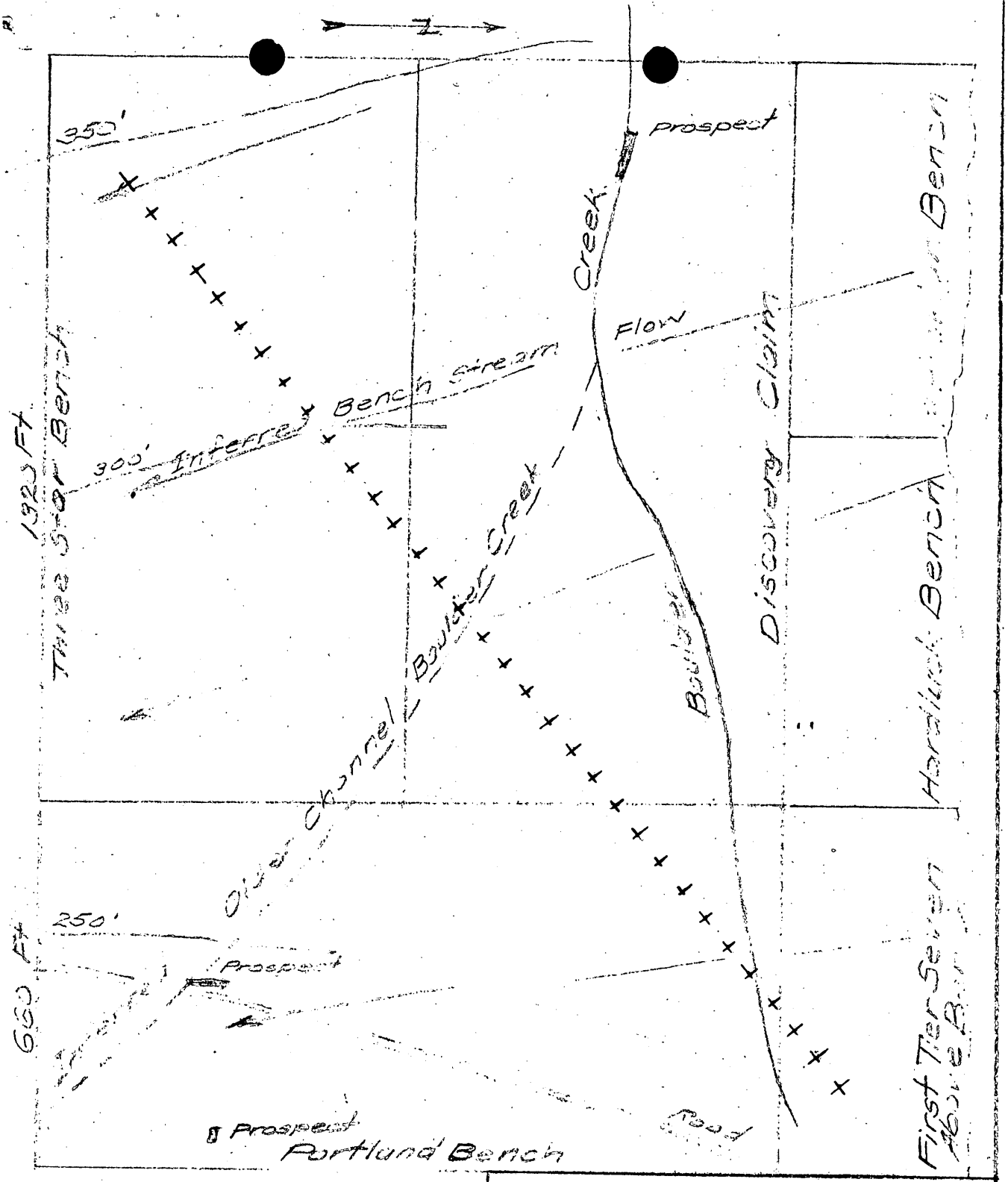
1,000* ft. churn drilling @ $12.00 (unit cost)	$12,000.00*

Stage 2:

2,000* ft. churn drilling @ $12.00 (unit cost)	24,000.00*

Total Project:

3,000* ft. churn drilling @ $12.00 (unit cost)	$36,000.00*
Government's contribution (90%)	$32,400.00*



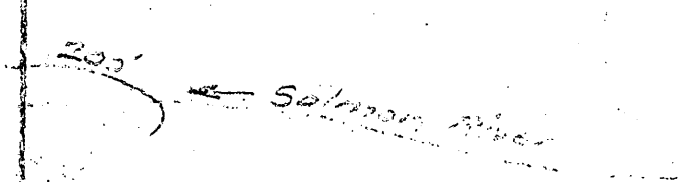


FIGURE 1
Exhibit "A" of Short Form Contract
Red Mountain-Pt. Group Metals
Docket No. DMEA-2931, A.L. Howard
Approx. Location of Stage 1 Drilling +
Portland Bench Area
Scale: 1" = 250' (Approx.)

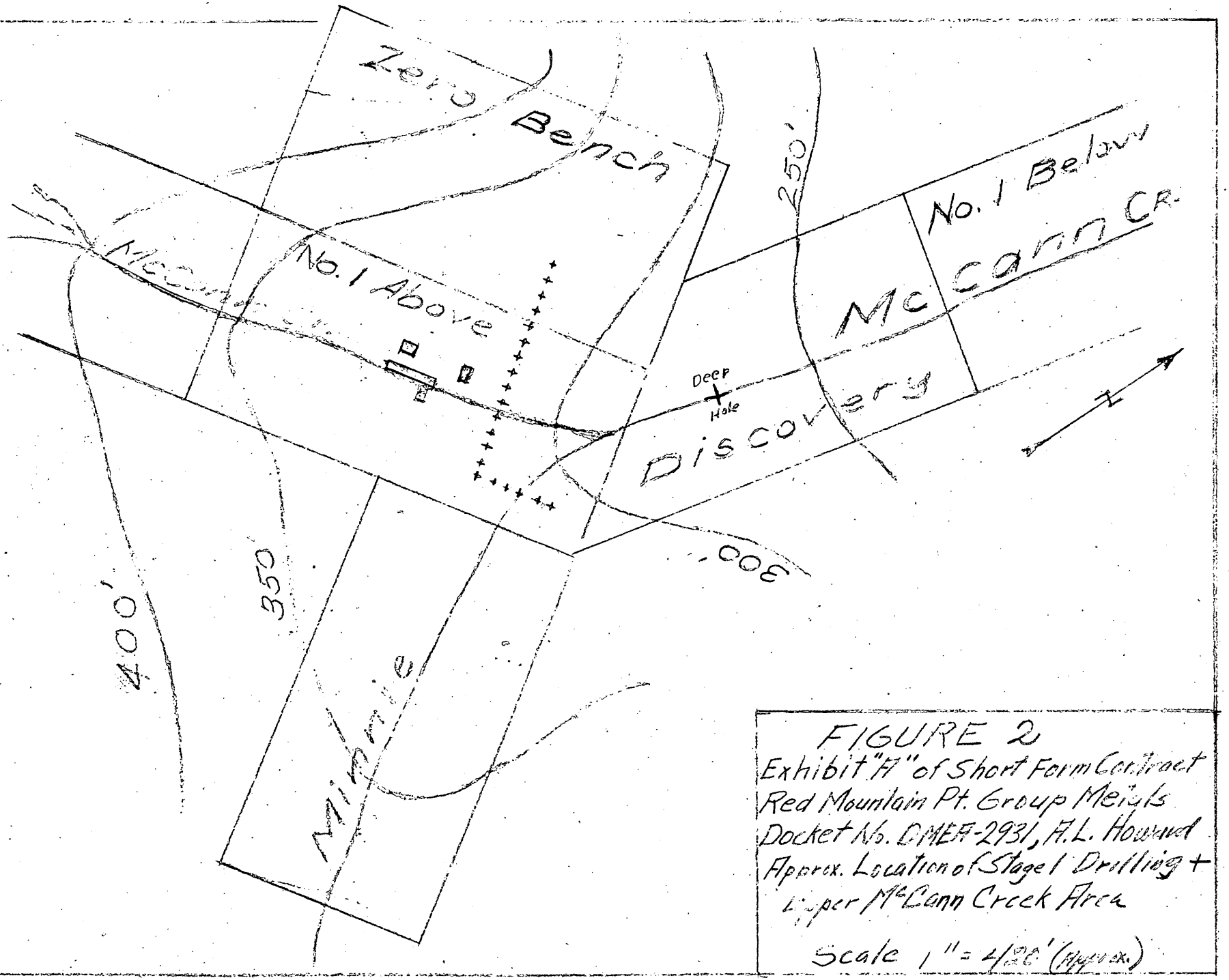


FIGURE 2
Exhibit "A" of Short Form Contract
Red Mountain Pt. Group Metals
Docket No. DMEF-2931, A.L. Howard
Approx. Location of Stage 1 Drilling +
Upper McCann Creek Area

Scale 1" = 420' (Approx.)

EWEllis/db

FILE COPY
SURNAME:

Docket

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

DMEA

11X3923.970 Working Fund
DMEA, Interior

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 DISTRACTED ON JUNE 26 TO CONTACT YOU RE FURTHER ACTION YOUR APPLICATION

C. O. Mittendorf

C. O. MITTENDORF, ADMINISTRATOR

mDS
6-29-53

EWEllis/db
6-29-53
cc to: Adm. Reading File
Docket
Messrs:Ellis
Confirmation to Applicant

6/26/53 gla

CLASS OF SERVICE

This is a full-rate Telegram or Cablegram unless its deferred character is indicated by a suitable symbol above or preceding the address.

WESTERN UNION

W. P. MARSHALL, PRESIDENT

FX-1201

SYMBOLS
DL=Day Letter
NL=Night Letter
LT=Int'l Letter Telegram
VLT=Int'l Victory Ltr.

The filing time shown in the date line on telegrams and day letters is STANDARD TIME at point of origin. Time of receipt is STANDARD TIME at point of destination

1953 JUN 25 PM 8 16

CTA643 PRA510

PR SEE289 NL PD=SEATTLE WASH 25=

RARE AND MISCELLANEOUS METALS DIV=

DEFENSE MINERALS EXPLORATION ADMINISTRATION US

DEPT OF INTERIOR WASH DC=

=PLEASE ADVISE COLLECT DATE OF EARLIEST POSSIBLE

DISPOSITION DMEA TWO NINE THREE ONE RED MOUNTAIN PLACER

PLATINUM EXPLORATION ASSISTANCE APPLICATION DATED MARCH

FOURTEENTH=

=A L HOWARD=

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
JUN 26 1953

THE COMPANY WILL APPRECIATE SUGGESTIONS FROM ITS PATRONS CONCERNING ITS SERVICE

700 FILE COPY
SURNAME:

Ellis
Selfridge
Mr. Lemon
Motheson

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

Mr. E. M. Lorain
Executive Officer
DMA Field Team, Region I
P. O. Box 560
Juneau, Alaska

JUN 2 6 1953

Re: Docket No. DMA-2931
(Platinum Group Metals)
A. L. Howard
Red Mountain Claims
Goodnews Bay District
Southwestern Alaska

Dear Mr. Lorain:

With further reference to the above-captioned application, it is the consensus of opinion that the application, in its present form, should be denied. It is suggested that you contact the Applicant and ascertain if he would be interested in a modified exploration program along the lines recommended by the Field Team and the commodity members.

Copies of memoranda from Mr. E. L. Newcomb, dated June 5, Mr. James E. Bell, dated June 10, and Mr. F. M. Sutledge, dated June 22, 1953, are enclosed.

If Mr. Howard is interested in such a revised program, kindly submit a breakdown of the estimated costs, keeping in mind the recommendation that the work be done in stages and on a unit cost basis, if possible.

Sincerely yours,

George C. Selfridge

Chairman, Operating Committee

S.N.
6-26-53
(JHB)

Enclosures 3

EWEllis/gla 6-24-53
cc to: Adm. Reading File
Operating Committee
Messrs. James E. Bell, Rm. 1349
A. R. Kinkel, Jr., B-242A, GSA
Ellis
DMA Field Team, Region I

Approved:
J. H. Hedges
Member, Bureau of Mines (JHB)
A. R. Kinkel, Jr.
Member, Geological Survey (JHB)

6/22/53 gla

Memorandum

To: Mr. E. Wm. Ellis, Chief, Rare and Misc. Metals Div.

From: F. A. Rutledge

Subject: Recommendation for approval of a limited exploration project written in stages.
Docket No. DMEA 2931 - Platinum
A. L. Howard
Red Mountain claims
Goodnews Bay District, Alaska

It is recommended that the Field Team be advised that this Administration concurs with the Field Team's recommendations that the subject application for exploration assistance be denied. It is further recommended that the Field Team be advised to contact the applicant, Mr. Howard, and ascertain if he will be interested in a smaller program of exploration by churn drilling on an unit cost basis. The estimated unit cost to include all costs.

The exploration program should be set up as outlined by the Field Team with Stage I to consist of a line of drill holes across the Portland Bench. Stage II to consist of additional drilling on the Portland Bench if warranted by the results of Stage I. Stage III to consist of a limited amount of drilling on McCann Creek only if the results of Stages I and II are favorable.

If Mr. Howard is interested in such a program, he should be informed that a revised application embodying such a program should be submitted.

F. A. Rutledge

F. A. Rutledge
Iron and Ferro-Alloys Division

6/15/53 gla

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

June 10, 1953

Memorandum

To: Ernest Wm. Ellis, Chief Rare & Misc. Metals Division, DMEA
Through: M. H. Kline MHK.

From: James E. Bell, Commodity-Industry Analyst, Platinum-Group Metals, Rare and Precious Metals Branch

Subject: Docket No. DMEA-2931 (Platinum Group Metals), A. L. Howard, Red Mountain Claims, Goodnews Bay District, Southwestern Alaska.

Based on a careful study of the data submitted, I am in agreement with the Conclusions and Recommendations set forth in the Field Team report dated May 25, 1953 on the subject docket.

James E. Bell

James E. Bell

Attachments 2

IN REPLY REFER TO:

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

June 5, 1953

Re: IMEA-2931
Red Mountain Claims
Goodnews Bay District
Alaska
$50,427.45
Platinum

Memorandum

To: Mr. E. Wm. Ellis

From: E. L. Newcomb

Subject: Recommendation for approval of a limited exploration project.

The extensive dragline and churn drilling program requested by the applicant is not justified on the basis of present limited data. Most of the work is considered to be primarily development in preparation for mining rather than exploratory testing.

The field team recommends the applicant's proposal be denied, but proposes an alternative project involving limited test drilling across the Portland Bench and upper McCann Creek. They suggest the applicant submit a revised application including the following items:

1). Eliminate dragline trenching and confine work entirely to churn drilling.

2). Arrange for churn drilling to be done by competent operators and samplers, and preferably on a contract basis.

3). The initial stage of work is to be limited in each area to a single line of holes (50-foot intervals) at right angles to assumed direction of the old channels.

4). Additional drilling would be allowed as a second stage only if favorable results are obtained from the initial lines of holes.

I concur with the field team's recommendation that applicant's present proposal be denied. If applicant is interested in participating in a limited amount of exploratory work, then a two-stage contract could be prepared. However, before a second stage of work is allowed, the field team should carefully review the results of Stage I. The location of the initial lines of holes should be left to the discretion of the field team.

E. L. Newcomb

E. L. Newcomb
Geologist

IN REPLY REFER TO:

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

June 5, 1953

Re: IMBA-2931
Red Mountain Claims
Goodnews Bay District
Alaska
$50,427.45
Platinum

Memorandum

To: Mr. E. Wm. Ellis

From: L. L. Newcomb

Subject: Recommendation for approval of a limited exploration project.

The extensive dragline and churn drilling program requested by the applicant is not justified on the basis of present limited data. Most of the work is considered to be primarily development in preparation for mining rather than exploratory testing.

The field team recommends the applicant's proposal be denied, but proposes an alternative project involving limited test drilling across the Portland Bench and upper McCann Creek. They suggest the applicant submit a revised application including the following items:

1). Eliminate dragline trenching and confine work entirely to churn drilling.

2). Arrange for churn drilling to be done by competent operators and samplers, and preferably on a contract basis.

3). The initial stage of work is to be limited in each area to a single line of holes (50-foot intervals) at right angles to assumed direction of the old channels.

4). Additional drilling would be allowed as a second stage only if favorable results are obtained from the initial lines of holes.

I concur with the field team's recommendation that applicant's present proposal be denied. If applicant is interested in participating in a limited amount of exploratory work, then a two-stage contract could be prepared. However, before a second stage of work is allowed, the field team should carefully review the results of Stage I. The location of the initial lines of holes should be left to the discretion of the field team.

L. L. Newcomb
Geologist

6/4/53-dl.

DEPARTMENT OF [illegible]
Defense Minerals Administration
JUN 1 1953

XXXXXXXXXXXXXXX
P. O. Box 560
Juneau, Alaska

May 27, 1953

Mr. George C. Selfridge
Chairman, Operating Committee
Defense Minerals Exploration Administration
Washington 25, D. C.

Re: Docket No. DMEA-2931
(Platinum Group Metals)
A. L. Howard
Bald Mountain Claims
Goodnews Bay District
Southwestern, Alaska

Dear Mr. Selfridge:

Enclosed is the Field Team report and recommendations on the subject docket as requested by your letter of April 9, 1953.

As a field examination at this time of the year would yield little or no additional information, the report is based on data available at Juneau and also obtained from outside sources familiar with the district and operations. Obtaining the additional data took more time than was expected.

The following reports in support of the Field Team analysis are enclosed:

William A. O'Neill, Report	(only 1 copy available, attached to original Field Team report.)
Charles Johnson, Letter	4 copies
R. S. Velikanje, Report	4 copies
R. L. Thorne, Report	4 copies

Very truly yours,

J. A. Herdlick

J. A. Herdlick, for and in the absence of S. H. Lorain, Executive Officer, Field Team, Region I.

Reviewed by
DMEA OPERATING COMMITTEE
6-5-53
(date)

XXXXXXXXXXXXXX
P. O. Box 960
Juneau, Alaska

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
JUN 1 1953

REGION I
FIELD TEAM REPORT
May 25, 1953

Application: Docket No. DMEA-2931
(Platinum Group Metals)
Red Mountain Claim
Goodnews Bay District
Southwestern Alaska

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

Field Team Investigations: A copy of the above Docket was received in Juneau on March 27, 1953. On April 13, a request was received from the Operating Committee for a Field Team examination or for recommendations based on information available at Juneau. The applicant's report mentioned an examination of the property made in October 1946 by William A. O'Neill, Consulting Mining Engineer, Anchorage, Alaska. Mr. O'Neill is well known to the Field Team; he is a reliable engineer with broad experience in Alaska. His report on the Red Mountain placer deposits was requested and received after some delay. Mr. O'Neill's report indicated that considerable information on the applicant's claims might be obtainable from the Goodnews Bay Mining Company, the principal operator in the district. A letter to the Company requesting such information resulted in a somewhat non-committal reply. A copy of Mr. O'Neill's report (only one available) and copies of the letter from the Goodnews Bay Mining Company are attached.

The platinum placer deposits at Goodnews Bay are described in detail in Geol. Survey Bulletin 918. Platinum production from the district is of record but detailed data on individual operations are not available. The Red Mountain property was examined by Mr. Franklin Rutledge, a Bureau of Mines engineer, in July 1946. Mr. Rutledge is currently with the Ferrous Branch, DMEA and is available for consultation in Washington. Because of the complete information available and because weather conditions in the Goodnews Bay area are unfavorable at this season, the Field Team concluded that nothing could be gained by an on-site examination at this time.

The applicant's exploration proposal and all available information was reviewed separately by R. S. Velikanje, Geological Survey, and

Reviewed by
DMEA OPERATING COMMITTEE
6-5-53
(date)

R. L. Thorne, Bureau of Mines. Their separate reports are in essential agreement and form the basis for the Field Team conclusions and recommendations contained herein. Copies of the geological and engineering reports are attached.

Summary of Applicant's Proposal: The applicant proposes to explore for platinum placer deposit on 29 unpatented claims by dragline trenching and churn drilling. The areas to be explored, method and estimated costs are summarized as follows:

Portland Beach and Boulder Creek:	
Estimated cu. yd. to be explored, 600,000	
Dragline trenches, 4,000 ft. @ $1.00	$4,000.00
Between Portland Beach and Upper Clara Creek:	
Estimated cu. yd. to be explored, 1,500,00	
Dragline trenches, 11,000 ft. @ $1.00	11,000.00
Nugget Creek - Minnie Gulch Area:	
Estimated cu. yd. to be explored, 3,450,000	
Churn drilling, 1000 ft. @ $8.00	8,000.00
All Areas:	
Additional drilling if indicated, 1000 ft. @ $8.00	8,000.00
Overhead Costs:	
Labor, Supervision, Consultants	12,553.80
Operating Supplies and Materials	610.90
Operating Equipment	2,110.00
Miscellaneous	1,676.60
Contingencies	2,326.55
Total	$50,387.45
Total estimated cu. yd. to be explored, 5,750,000	

The applicant holds the 29 claims under a 25-year lease agreement with the Red Mountain Mining Co. Inc. Royalty is 10½ percent of net proceeds and/or monthly payments starting July 1, 1953. The applicant has informed in correspondence that he will apply for a DMPA loan if the exploration program is successful.

Geology and Operations: The geology and placer operations in the Goodnews Bay district has been described in detail by the applicant and in the various reports by the Geological Survey. The district has been in continuous production since discovery of the deposits in 1926; total production through 1951 was over 300,000 troy ounces of platinum group metals.

Most of the platinum was produced from operations by the Clara Creek Mining Company (Strandberg) and the Goodnews Bay Mining Company.

The Clara Creek Mining Company conducted a dragline placer operation from 1936 to 1941. The equipment has been sold and no attempt has been made to resume production. The Goodnews Bay Mining Company has been in operation since 1936. Present capacity of the dragline and dredge operations is approximately 8,000 cubic yards per day. Average recovery of platinum group metals for the period 1948-51 (incl.) was 0.0149 troy ounces per cubic yard.

The Goodnews Bay Mining Co. is an aggressive, well managed organization with good engineering personnel and facilities. The principals of the Clara Creek Mining Company are successfully operating two dragline gold placer plants in other parts of Interior Alaska under the name of Strandberg & Sons. Presumably, both operating organizations could have obtained the Red Mountain claims on terms similar to those obtained by the applicant. However, there may have been extenuating circumstances not known to the Field Team.

Conclusions: Based on a review of the geological and engineering reports submitted and all other available information, the Field Team concludes that:

1. The applicant has demonstrated that platinum group metals may exist in commercial quantity in the limited areas prospected. The method of prospecting and the data submitted do not justify the large ~~patented~~ reserves estimated by the applicant.

2. Dragline trenching, as proposed by the applicant, is not considered to be a practical and economical method of placer exploration.

3. On the basis of present information, exploration of the area between Portland Branch and upper Clara Creek is not justified. The known creek channels in these areas have been worked out. The applicant suggests but has no positive evidence to prove the existence of other pay channels. Work in this area would be strictly prospecting unless such older channels could be traced to the ground from known discoveries.

4. The proposed concentration of drilling on upper McCann Creek does not appear to be justified by the limited yardage which the applicant estimates for that area. Because of the high values reported by the applicant, an attempt to expand the area by drill exploration downstream does appear to be justified. The apparent absence of values in Smalls River indicates that the McCann Creek deposit may be limited. However, because of the high values reported from the single trench on upper McCann Creek, the area may have a small production potential.

5. The cost of the proposed exploration program is out of line with the information to be gained. The heavy supervision, sampling and overhead charges, in addition to the fixed price per foot of trench and drill hole, appears to be excessive. It is believed that the desired results could better be obtained by a well engineered drilling program, preferably on a contract basis.

Recommendations: The Field Team recommends the applicant be advised that his proposed program of exploration is not acceptable in its present form. A revised application will be considered if:

(a) Dragline trenching is eliminated and the program confined to churn drill exploration with a suitable drill and competent drill operators and samplers, preferably on a contract basis.

(b) The initial line of churn drill holes on Portland Bench be so located that it will be at right angles to the direction of old channels as assumed by the applicant. The holes should be spaced at no more than 50-foot intervals across the bench. If an old pay channel is located by the initial line, additional lines can be drilled at 1200 foot intervals along the projection of the old channel. If no values are located, the drilling on Portland bench would be ended with the drilling of the initial line.

(c) The same procedure described above be applied to upper McCann Creek.

(d) The maximum overall cost of the exploration be limited to approximately $20,000.00.

J. A. Hardlick

J. A. Hardlick, for and in the absence of

S. M. Lerain, Executive Officer,
Field Team, Region I

R. S. Velikanje

R. S. Velikanje, for and in the absence of

C. L. Sainsbury, Field Team, Region I

GOODNEWS BAY MINING CO.
423 White Building
Seattle 1, Washington

May 14, 1953

Mr. Alfred L. Ransome, Acting Chief
Mineral Industry Division, Region I
Bureau of Mines, Department of Interior
P.O. Box 560 Juneau, Alaska

Dear Mr. Ransome:

I have read with interest your letter of May 4th regarding Mr. Howard's Application for a DMEA exploration loan on the placer ground held by the Red Mountain Mining Company. I am somewhat handicapped by the fact that our maps and drilling records are with Spencer at Platinum but in so far as my memory serves me I do not believe that any of the Mining Company drilling would give relevant information on the two areas with which Mr. Howard seems to be chiefly concerned, namely the Portland Bench and upper McCann Creek. We have done considerable drilling on the right and left benches of Clara Creek and on Dowery Creek. In 1937 we drilled one hole in the lower part of McCann Creek in connection with the drilling program on Small River, which program tended to confirm Mertie's theory that the Small River Area had been scoured out by glacier. However, we have done no drilling on the upper part of McCann Creek where Berness and Howard have prospected and no drilling on the Portland Bench.

As far as I can tell from my discussions with Mr. Howard, he believes there is a possibility of an old channel on the Right Limit Bench of Upper Salmon. None of the drilling that we have done would tend to either prove or disprove his theory.

The Mining Company would like to see a prospecting program undertaken to either prove or disprove Mr. Howard's theory and we have long urged the owners of the Red Mountain Mining Company to undertake such a program. We do not want to do the work ourselves because we know from past experience that unless the results were favorable, the ground owners would be suspicious of the accuracy of our work.

Govt. 90% Participation?

I hope that you will understand the Mining Company's position in this matter.

G.B.M. have 12 years ore reserves at present mining rate?

Very truly yours,

COPY

GOODNEWS BAY MINING CO.

/s/ CHARLES JOHNSTON

Charles Johnston
Treasurer

CJ:t

UNITED STATES
DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
P. O. Box 560
Juneau, Alaska

April 30, 1953

DMEA Field Team, Region I
P. O. Box 560
Juneau, Alaska

Re: DMEA Docket No. 2931
(Platinum Group Metals)
A. L. Howard
Red Mountain Claims
Goodnews Bay District
Southwestern Alaska

Dear Sirs:

Enclosed is a Geologic Report on the Red Mountain Platinum Claims as analyzed from available literature.

Very truly yours,

C
O
P
Y

/s/ R. S. VELIKANJE

R. S. Velikanje
Geologist

cc: Lorain
Sainsbury

REPORT

ON

DMEA APPLICATION BY A. L. HOWARD

CMEA Docket No. 2931
(Platinum Group Minerals)
A. L. Howard
Red Mountain Claims
Goodnews Bay District
Southwestern Alaska

Having reviewed the application and all available literature pertaining to the area involved, I list my findings and conclusions below.

I. Portland Bench and Vicinity.

1. The proposed trenching as set up is a development and mining project and difficult to class as exploration.

2. No written evidence available but it has been reported that operating companies in the area have done extensive sampling of the bench gravels and have found them to be non-economical. At least they didn't take the ground when they had the opportunity.

II. McCann Creek - Minnie Gulch.

1. J. B. Mertie (U. S. Geological Survey Bull. 918) indicates that this area was subjected to glaciation. As glaciation tends to dispurse placer concentrations it is doubtful that other than small "pockets" will be found.

2. As the Minnie Gulch channel does not head in the intrusive and McCann Creek appears to head in the pyroxenite outer zone of the intrusive it is doubtful that either one of them could have built up commercial placer concentrations.

3. There is not a sufficient volume of gravels in upper McCann Creek to warrant large scale mining methods.

COPY

III. Overall

1. Applicants cost estimates appear to be excessive and some are contradictory.
   (a) $9.00 per day, per man for board and lodging is very high.
   (b) Supervision, labor, etc., should come under the $8.00 per foot for drilling and not as a separate item.
   (c) The possibility of hiring local labor should be investigated to save the cost of round trip plane fares from Seattle.
   (d) Under Item 6 of application the cost for trenching is estimated at $1.00 per running foot and on page 26 of the report accompanying the application the cost is listed as being $2.00 per foot.

2. The Applicant assumes gravel depths so his volumes are guesses and not reasonable estimates or calculated amounts.

3. The Applicant has a tendency to confuse exploration with prospecting, development, and mining.

4. The area needs more systematic prospecting to localize and outline possible pay zones before a satisfactory exploration can be set up.

IV. Conclusion.

Although McGann Creek is a new discovery and can not be condemned without thorough investigation, all evidence indicates there will not be extensive enough placer concentrations to warrant large scale mining operations. Further prospecting is necessary on the ground to prove or disprove the advisability for a small scale exploration project.

It is my belief the beach gravels have been proven non-economical by previous exploration and do not warrant further expenditures.

In a report on the property prepared in 1948 for the Red Mountain Mining Company by William A. O'Neill, Consulting Mining Engineer, Anchorage, Alaska, Mr. O'Neill states:

"Prospect drilling is the only way in which this ground could be developed. A few shafts at separated locations on the area may be necessary to properly ascertain the character of the ground for mining.

An estimated cost for such a program would be from $10,000 to $12,000."

A copy of Mr. O'Neill's conclusions and recommendations is attached.

The ground probably warrants some localised small scale exploration by drilling, but as the application now stands I recommend that it be denied.

/s/ R. S. VELIKANJE

April 30, 1953

R. S. Velikanje
Geologist

COPY

MINING:

A mining setup could not be planned until the drilling proved whether or not sufficient yardage would be available.

In the past both the other companies have used draglines to hoist the dirt into elevated sluice boxes, with bulldozers for distributing the tailing and cleaning bedrock. Some of the ground in question might possibly be worked by using dozers to push directly into boxes on bedrock, with a dragline for stacking tailings. In my opinion this is not ground suitable for dredging operations.

CONCLUSIONS:

The foregoing facts and information lead to the following conclusions:

1. The McCann Creek ground would warrant a few drill holes if the other ground showed enough valuable yardage to work.

2. All the claims except those on McCann Creek are more or less surrounded by claims of other ownership.

3. There is little chance of an extensive channel on the Boulder-Dowry ground like there is on the left limit of Salmon River.

4. In any development program the value of ppatinum should be taken at $35.00 per ounce for the purpose of calculating the drill holes.

5. Sufficient water for mining could be obtained by ditching the pumping to get recirculation of the available water.

6. Some of the area now covered by claims would prove unprofitable to work. There is a possibility that not enough yardage could be developed to warrant the expense of a new installation.

7. The Clara Creek Mining Co. (Strandberg & Sons) do not seem disposed to remove operations in this area, even though it is understood that they have equipment available and already paid for from other operations which they could move on the ground.

8. Both the Goodnews Bay Co. and Strandbergs have information pertaining to this ground that would be very valuable to have.

9. The concentration of platinum in the Boulder-Dowry area could not be expected to be as great as that previously found in the Clara and Dowry Creek channels.

10. Congress may not waive the assessment work for 1949.

C O P Y

11. The results of the pan sampling done on this ground, during the examination, are alone important enough to warrant further investigation of this ground under the following recommendations.

RECOMMENDATIONS:

1. Negotiate with the Goodnews Bay Mining Co. and Strandberg and Sons for a reasonable lease, option or working agreement on the surrounding claims which they control. This would include Last Chance Creek, Annie Creek and the Bench claims on the right limit of Clara Creek.

2. Included in the above negotiations should be the divulging of the information which these companies now have of the area in question.

3. If reasonable arrangements can be made, then a drilling program should be started.

4. If it is not possible to make the above arrangements, then I recommend that a good driller be employed to work with Mr. Berness to put down a few well spaced holes, to try and determine the extent of the platinum concentration, as cheaply as possible. This will take care of the assessment work and give a fair idea as to what values are in the ground in case the Goodnews Bay Mining Co. would want to buy the ground rather than permit leasing of the ground they hold.

October 19, 1948 signed William A. O'Neill

C O P Y

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF MINES
REGION I

OFFICE OF
REGIONAL DIRECTOR

560
P. O. BOX 2990
JUNEAU, ALASKA

May 26, 1953

DMEA Field Team, Region I
P.O. Box 560
Juneau, Alaska

Re: DMEA Docket No. 2931
(Platinum Group Metals)
A. L. Howard
Red Mountain Claims
Goodnews Bay District
Southwestern Alaska

Dear Sirs:

Enclosed is a review of the subject application made in conjunction with a study of William A. O'Neill's report on the Red Mountain Mining Co. property.

Yours very truly,

Robert L. Thorne
Mining Engineer

RLT:ew

Report on DMEA application by A. L. Howard

DMEA Docket No. 2931
(Platinum Group Minerals)
A. L. Howard
Red Mountain Claims
Goodnews Bay District
Southwestern Alaska

The following are conclusions based on a study of the applications and a review of available reports on the area involved.

A - The plan of exploration, with particular regard to the dragline trenching, is not considered suitable for placer evaluation and cannot be recommended. Churn drilling is an accepted method of placer exploration when planned as progressing from a known discovery at a specific interval between lines and a definite spacing of holes on the lines. Drilling of benches on which there has been no definite, evaluated discovery is prospecting not exploration.

B - As certain discoveries have been made and roughly evaluated and because the production record of the area is known to be good, the following is recommended:

(1) That a two stage program of churn drill exploration be set up for both the Portland bench area and the McGann Creek area.

In the Portland Bench area the major premise for a good yardage of platinum bearing gravel is set forth in a theoretical western channel of Salmon River. As an initial step in an exploration one line of drill holes, with 50' spacing, should be run normal to the assumed flow of the old Salmon River. The line of holes should be on Portland Bench but should avoid present and old Boulder Creek channels where local concentrations are possible. The location of this line should be selected so that additional lines at 1200' intervals would also avoid other easterly lines of drainage causing local enrichment. If stage one establishes a pay channel 3 more lines at 1200' intervals could be set up with continuation depending on the location of a pay channel on each new line and projection of the next channel-cutting-line onto ground controlled by the applicant.

In the upper McGann Creek area only 20,000 cubic yards are inferred. This volume of gravel is not great enough to support extensive exploration; hence only one line of holes, located 1200' below the discovery pit, is proposed as the initial step. If a pay channel is established by the initial line of holes two additional lines at the same interval would check the ground down to

the Smalls River. If this drilling indicates a pay channel, limit drilling on the discovery and an additional line upstream would seem justified. Since there is no evaluated discovery on Minnie Gulch or the upper bench claims on McCann Creek their exploration is not justified.

(2) The accuracy of results in a churn-drill exploration are directly related to the type of equipment used and the ability of the operators. The most accurate results would be expected by contracting the drilling to the Goodnews Bay Mining Co. This procedure would assure the use of equipment suitable for the work and would provide operators capable of properly evaluating the drilling results. A capable, on the job, supervisor should be provided to lay out the drilling, survey and map the exploration and calculate the results.

Robert L. Therne
Mining Engineer

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF MINES
REGION I

OFFICE OF
REGIONAL DIRECTOR

560
P. O. BOX ~~2990~~
JUNEAU, ALASKA

May 26, 1953

DMEA Field Team, Region I
P.O. Box 560
Juneau, Alaska

Re: DMEA Docket No. 2931
(Platinum Group Metals)
A. L. Howard
Red Mountain Claims
Goodnews Bay District
Southwestern Alaska

Dear Sirs:

Enclosed is a review of the subject application made in conjunction with a study of William A. O'Neill's report on the Red Mountain Mining Co. property.

Yours very truly,

Robert L. Thorne

Robert L. Thorne
Mining Engineer

Report on DMEA application by A. L. Howard

DMEA Docket No. 2931
(Platinum Group Minerals)
A. L. Howard
Red Mountain Claims
Goodnews Bay District
Southwestern Alaska

The following are conclusions based on a study of the application and a review of available reports on the area involved.

A - The plan of exploration, with particular regard to the dragline trenching, is not considered suitable for placer evaluation and cannot be recommended. Churn drilling is an accepted method of placer exploration when planned as progressing from a known discovery at a specific interval between lines and a definite spacing of holes on the lines. Drilling of benches on which there has been no definite, evaluated discovery is prospecting not exploration.

B - As certain discoveries have been made and roughly evaluated and because the production record of the area is known to be good, the following is recommended:

(1) That a two stage program of churn drill exploration be set up for both the Portland bench area and the McCann Creek area.

In the Portland Bench area the major premise for a good yardage of platinum bearing gravel is set forth in a theoretical western channel of Salmon River. As an initial step in an exploration one line of drill holes, with 50' spacing, should be run normal to the assumed flow of the old Salmon River. The line of holes should be on Portland Bench but should avoid present and old Boulder Creek channels where local concentrations are possible. The location of this line should be selected so that additional lines at 1200' intervals would also avoid other easterly lines of drainage causing local enrichment. If stage one establishes a pay channel 3 more lines at 1200' intervals could be set up with continuation depending on the location of a pay channel on each new line and projection of the next channel-cutting-line onto ground controlled by the applicant.

In the upper McCann Creek area only 20,000 cubic yards are inferred. This volume of gravel is not great enough to support extensive exploration; hence only one line of holes, located 1200' below the discovery pit, is proposed as the initial step. If a pay channel is established by the initial line of holes two additional lines at the same interval would check the ground down to

the Smalls River. If this drilling indicates a pay channel, limit drilling on the discovery and an additional line upstream would seem justified. Since there is no evaluated discovery on Minnie Gulch or the upper bench claims on McCann Creek their exploration is not justified.

(2) The accuracy of results in a churn-drill exploration are directly related to the type of equipment used and the ability of the operators. The most accurate results could be expected by contracting the drilling to the Goodnews Bay Mining Co. This procedure would assure the use of equipment suitable for the work and would provide operators capable of properly evaluating the drilling results. A capable, on the job, supervisor should be provided to lay out the drilling, survey and map the exploration and calculate the results.

Robert L. Thorne

Robert L. Thorne
Mining Engineer

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

REGION I
FIELD TEAM REPORT
May 25, 1953

Application: Docket No. DMEA-2931
(Platinum Group Metals)
Red Mountain Claim
Goodnews Bay District
Southwestern Alaska

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

Field Team Investigations: A copy of the above Docket was received in Juneau on March 27, 1953. On April 13, a request was received from the Operating Committee for a Field Team examination or for recommendations based on information available at Juneau. The applicant's report mentioned an examination of the property made in October 1948 by William A. O'Neill, Consulting Mining Engineer, Anchorage, Alaska. Mr. O'Neill is well known to the Field Team; he is a reliable engineer with broad experience in Alaska. His report on the Red Mountain placer deposits was requested and received after some delay. Mr. O'Neill's report indicated that considerable information on the applicant's claims might be obtainable from the Goodnews Bay Mining Company, the principal operator in the district. A letter to the Company requesting such information resulted in a somewhat noncommittal reply. A copy of Mr. O'Neill's report (only one available) and copies of the letter from the Goodnews Bay Mining Company are attached.

The platinum placer deposits at Goodnews Bay are described in detail in Geol. Survey Bulletin 918. Platinum production from the district is of record but detailed data on individual operations are not available. The Red Mountain property was examined by Mr. Franklin Rutledge, a Bureau of Mines engineer, in July 1948. Mr. Rutledge is currently with the Ferrous Branch, DMEA and is available for consultation in Washington. Because of the complete information available and because weather conditions in the Goodnews Bay area are unfavorable at this season, the Field Team concluded that nothing could be gained by an on-site examination at this time.

The applicant's exploration proposal and all available information was reviewed separately by R. S. Velikanje, Geological Survey, and

R. L. Thorne, Bureau of Mines. Their separate reports are in essential agreement and form the basis for the Field Team conclusions and recommendations contained herein. Copies of the geological and engineering reports are attached.

Summary of Applicant's Proposal: The applicant proposes to explore for platinum placer deposit on 29 unpatented claims by dragline trenching and churn drilling. The areas to be explored, method and estimated costs are summarized as follows:

Portland Bench and Boulder Creek:	
Estimated cu. yd. to be explored, 800,000	
Dragline trenching, 4,000 ft. @ $1.00	$4,000.00
Between Portland Beach and Upper Clara Creek:	
Estimated cu. yd. to be explored, 4,500,00	
Dragline trenching, 11,000 ft. @ $1.00	11,000.00
McCann Creek - Minnie Gulch Area:	
Estimated cu. yd. to be explored, 3,450,000	
Churn drilling, 1000 ft. @ $8.00	8,000.00
All Areas:	
Additional drilling if indicated, 1000 ft. @ $8.00	8,000.00
Overhead Costs:	
Labor, Supervision, Consultants	12,553.80
Operating Supplies and Materials	610.50
Operating Equipment	2,110.00
Miscellaneous	1,676.60
Contingencies	2,396.55
Total	$50,347.45
Total estimated cu. yd. to be explored, 8,750,000	

The applicant holds the 29 claims under a 25-year lease agreement with the Red Mountain Mining Co. Inc. Royalty is 10½ percent of net proceeds and/or monthly payments starting July 1, 1953. The applicant has inferred in correspondence that he will apply for a DMPA loan if the exploration program is successful.

Geology and Operations: The geology and placer operations in the Goodnews Bay district has been described in detail by the applicant and in the various reports by the Geological Survey. The district has been in continuous production since discovery of the deposits in 1926; total production through 1951 was over 300,000 troy ounces of platinum group metals.

Most of the platinum was produced from operations by the Clara Creek Mining Company (Strandbergs) and the Goodnews Bay Mining Company.

The Clara Creek Mining Company conducted a dragline placer operation from 1936 to 1941. The equipment has been sold and no attempt has been made to resume production. The Goodnews Bay Mining Company has been in operation since 1936. Present capacity of the dragline and dredge operations is approximately 8,000 cubic yards per day. Average recovery of platinum group metals for the period 1948-51 (incl.) was 0.0149 troy ounces per cubic yard. 1.24 to 10 lbs.

The Goodnews Bay Mining Co. is an aggressive, well managed organization with good engineering personnel and facilities. The principals of the Clara Creek Mining Company are successfully operating two dragline gold placer plants in other parts of Interior Alaska under the name of Strandberg & Sons. Presumably, both operating organizations could have obtained the Red Mountain claims on terms similar to those obtained by the applicant. However, there may have been extenuating circumstances not known to the Field Team.

Conclusions: Based on a review of the geological and engineering reports submitted and all other available information, the Field Team concludes that:

1. The applicant has demonstrated that platinum group metals may exist in commercial quantity in the limited areas prospected. The method of prospecting and the date submitted do not justify the large ~~patented~~ reserves estimated by the applicant.

2. Dragline trenching, as proposed by the applicant, is not considered to be a practical and economical method of placer exploration.

3. On the basis of present information, exploration of the area between Portland Bench and upper Clara Creek is not justified. The known creek channels in these areas have been worked out. The applicant suggests but has no positive evidence to prove the existence of other pay channels. Work in this area would be strictly prospecting unless such older channels could be traced to the ground from known discoveries.

4. The proposed concentration of drilling on upper McCann Creek does not appear to be justified by the limited yardage which the applicant estimates for that area. Because of the high values reported by the applicant, an attempt to expand the area by drill exploration downstream does appear to be justified. The apparent absence of values in Smalls River indicates that the McCann Creek deposit may be limited. However, because of the high values reported from the single trench on upper McCann Creek, the area may have a small production potential.

5. The cost of the proposed exploration program is out of line with the information to be gained. The heavy supervision, sampling and overhead charges, in addition to the fixed price per foot of trench and drill hole, appears to be excessive. It is believed that the desired results could better be obtained by a well engineered drilling program, preferably on a contract basis.

Recommendations: The Field Team recommends the applicant be advised that his proposed program of exploration is not acceptable in its present form. A revised application will be considered if:

(a) Dragline trenching is eliminated and the program confined to churn drill exploration with a suitable drill and competent drill operators and samplers, preferably on a contract basis.

(b) The initial line of churn drill holes on Portland Bench be so located that it will be at right angles to the direction of old channels as assumed by the applicant. The holes should be spaced at no more than 50-foot intervals across the bench. If an old pay channel is located by the initial line, additional lines can be drilled at 1200 foot intervals along the projection of the old channel. If no values are located, the drilling on Portland bench would be ended with the drilling of the initial line.

(c) The same procedure described above be applied to upper McCann Creek.

(d) The maximum overall cost of the exploration be limited to approximately $20,000.00.

J. A. Herdlick

J. A. Herdlick, for and in the absence of

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

R. S. Velikanje

R. S. Velikanje, for and in the absence of

C. L. Sainsbury, Field Team, Region I

OFFICE OF THE ADMINISTRATOR

UNITED STATES
DEPARTMENT OF THE INTERIOR

DEFENSE MINERALS ADMINISTRATION

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

April 30, 1953

DMEA Field Team, Region I
P. O. Box 560
Juneau, Alaska

Re: DMEA Docket No. 2931
(Platinum Group Metals)
A. L. Howard
Red Mountain Claims
Goodnews Bay District
Southwestern Alaska

Dear Sirs:

Enclosed is a Geologic Report on the Red Mountain Platinum Claims as analyzed from available literature.

Very truly yours,

R. S. Velikanje

R. S. Velikanje
Geologist

cc: Lorain
Sainsbury

REPORT

ON

DMEA APPLICATION BY A. L. HOWARD

DMEA Docket No. 2931
(Platinum Group Minerals)
A. L. Howard
Red Mountain Claims
Goodnews Bay District
Southwestern Alaska

Having reviewed the application and all available literature pertaining to the area involved, I list my findings and conclusions below.

I. Portland Bench and Vicinity.

1. The proposed trenching as set up is a development and mining project and difficult to class as exploration.

2. No written evidence available but it has been reported that operating companies in the area have done extensive sampling of the bench gravels and have found them to be non-economical. At least they didn't take the ground when they had the opportunity.

II. McCann Creek - Minnie Gulch.

1. J. B. Mertie (U. S. Geological Survey Bull. 918) indicates that this area was subjected to glaciation. As glaciation tends to dispurse placer concentrations it is doubtful that other than small "pockets" will be found.

2. As the Minnie Gulch channel does not head in the intrusive and McCann Creek appears to head in the pyroxenite outer zone of the intrusive it is doubtful that either one of them could have built up commercial placer concentrations.

3. There is not a sufficient volume of gravels in upper McCann Creek to warrant large scale mining methods.

III. Overall.

1. Applicants cost estimates appear to be excessive and some are contradictory.
   (a) $9.00 per day, per man for board and lodging is very high.
   (b) Supervision, labor, etc.,should come under the $8.00 per foot for drilling and not as a separate item.
   (c) The possibility of hiring local labor should be investigated to save the cost of round trip plane fares from Seattle.
   (d) Under Item 6 of application the cost for trenching is estimated at $1.00 per running foot and on page 26 of the report accompanying the application the cost is listed as being $2.00 per foot.

2. The Applicant assumes gravel depths so his volumes are guesses and not reasonable estimates or calculated amounts.

3. The Applicant has a tendency to confuse exploration with prospecting, development, and mining.

4. The area needs more systematic prospecting to localize and outline possible pay zones before a satisfactory exploration can be set up.

IV. Conclusion.

Although McCann Creek is a new discovery and can not be condemmed without thorough investigation, all evidence indicates there will not be extensive enough placer concentrations to warrant large scale mining operations. Further prospecting is necessary on the ground to prove or disprove the advisability for a small scale exploration project.

It is my belief the bench gravels have been proven non-economical by previous exploration and do not warrant further expenditures.

In a report on the property prepared in 1948 for the Red Mountain Mining Company by William A. O'Neill, Consulting Mining Engineer, Anchorage, Alaska, Mr. O'Neill states:

"Prospect drilling is the only way in which this ground could be developed. A few shafts at separated locations on the area may be necessary to properly ascertain the character of the ground for mining.

An estimated cost for such a program would be from $10,000 to $12,000."

A copy of Mr. O'Neill's conclusions and recommendations is attached.

The ground probably warrants some localized small scale exploration by drilling, but as the application now stands I recommend that it be denied.

R. S. Velikanje

April 30, 1953

R. S. Velikanje
Geologist

C O P Y

MINING:

A mining setup could not be planned until the drilling proved whether or not sufficient yardage would be available.

In the past both the other companies have used draglines to hoist the dirt into elevated sluice boxes, with bulldozers for distributing the tailing and cleaning bedrock. Some of the ground in question might possibly be worked by using dozers to push directly into boxes on bedrock, with a dragline for stacking tailings. In my opinion this is not ground suitable for dredging operations.

CONCLUSIONS:

The foregoing facts and information lead to the following conclusions:

1. The McCann Creek ground would warrant a few drill holes if the other ground showed enough valuable yardage to work.

2. All the claims except those on McCann Creek are more or less surrounded by claims of other ownership.

3. There is little chance of an extensive channel on the Boulder-Dowry ground like there is on the left limit of Salmon River.

4. In any development program the value of platinum should be taken at $35.00 per ounce for the purpose of calculating the drill holes.

5. Sufficient water for mining could be obtained by ditching the pumping to get recirculation of the available water.

6. Some of the area now covered by claims would prove unprofitable to work. There is a possibility that not enough yardage could be developed to warrant the expense of a new installation.

7. The Clara Creek Mining Co. (Strandberg & Sons) do not seem disposed to renew operations in this area, even though it is understood that they have equipment available and already paid for from other operations which they could move on the ground.

8. Both the Goodnews Bay Co. and Strandbergs have information pertaining to this ground that would be very valuable to have.

9. The concentration of platinum in the Boulder-Dowry area could not be expected to be as great as that previously found in the Clara and Dowry Creek channels.

10. Congress may not waive the assessment work for 1949.

11. The results of the pan sampling done on this ground, during the examination, are alone important enough to warrant further.

investigation of this ground under the following recommendations.

RECOMMENDATIONS:

1. Negotiate with the Goodnews Bay Mining Co. and Strandberg and Sons for a reasonable lease, option or working agreement on the surrounding claims which they control. This would include Last Chance Creek, Annie Creek and the Bench claims on the right limit of Clara Creek.

2. Included in the above negotiations should be the divulging of the information which these companies now have of the area in question.

3. If reasonable arrangements can be made, then a drilling program should be started.

4. If it is not possible tomake the above arrangements, then I recommend that a good driller be employed to work with Mr. Berness to put down a few well spaced holes, to try and determine the extent of the platinum concentration, as cheaply as possible. This will take care of the assessment work and give a fair idea as to what values are in the ground in case the Goodnews Bay Mining Co. would want to buy the ground rather than permit leasing of the ground they hold.

October 19, 1948 signed William A. O'Neill

GOODNEWS BAY MINING CO.
423 White Building
Seattle 1, Washington

May 14, 1953

Mr. Alfred L. Ransome, Acting Chief
Mineral Industry Division, Region I
Bureau of Mines, Department of Interior
P.O. Box 560 Juneau, Alaska

Dear Mr. Ransome:

I have read with interest your letter of May 4th regarding Mr. Howard's Application for a DMEA exploration loan on the placer ground held by the Red Mountain Mining Company. I am somewhat handicapped by the fact that our maps and drilling records are with Spencer at Platinum but in so far as my memory serves me I do not believe that any of the Mining Company drilling would give relevant information on the two areas with which Mr. Howard seems to be chiefly concerned, namely the Portland Bench and upper McCann Creek. We have done considerable drilling on the right and left benches of Clara Creek and on Dowery Creek. In 1937 we drilled one hole in the lower part of McCann Creek in connection with the drilling program on Small River, which program tended to confirm Mertie's theory that the Small River Area had been scoured out by glacier. However, we have done no drilling on the upper part of McCann Creek where Berness and Howard have prospected and no drilling on the Portland Bench.

As far as I can tell from my discussions with Mr. Howard, he believes there is a possibility of an old channel on the Right Limit Bench of Upper Salmon. None of the drilling that we have done would tend to either prove or disprove his theory.

The Mining Company would like to see a prospecting program undertaken to either prove or disprove Mr. Howard's theory and we have long urged the owners of the Red Mountain Mining Company to undertake such a program. We do not want to do the work ourselves because we know from past experience that unless the results were favorable, the ground owners would be suspicious of the accuracy of our work.

I hope that you will understand the Mining Company's position in this matter.

C
O
P
Y

Very truly yours,

GOODNEWS BAY MINING CO.

/s/ CHARLES JOHNSTON

Charles Johnston
Treasurer

CJ:t

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

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
JUN 1 1953

May 27, 1953

Mr. George C. Selfridge
Chairman, Operating Committee
Defense Minerals Exploration Administration
Washington 25, D. C.

Re: Docket No. DMEA-2931
(Platinum Group Metals)
A. L. Howard
Red Mountain Claims
Goodnews Bay District
Southwestern, Alaska

Dear Mr. Selfridge:

Enclosed is the Field Team report and recommendations on the subject docket as requested by your letter of April 9, 1953.

As a field examination at this time of the year would yield little or no additional information, the report is based on data available at Juneau and also obtained from outside sources familiar with the district and operations. Obtaining the additional data took more time than was expected.

The following reports in support of the Field Team analysis are enclosed:

* William A. O'Neill, Report	(only 1 copy available, attached to original Field Team report.)
Charles Johnson, Letter	4 copies *
R. S. Velikanje, Report	4 copies *
R. L. Thorne, Report	4 copies *

Very truly yours,

J. A. Herdlick

J. A. Herdlick, for and in the absence of S. H. Lorain,
Executive Officer,
Field Team, Region I.

* Given to Ed Nyrcomb 6-4-53
EWR

6-5-53
* Bureau of Mines Commodity Member has not rec'd. his copy of these reports as of date. Perhaps Mr. Hedges or Mr. Robinson has the copies.

FILE COPY
SURNAME:

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

Mr. S. . Lorain
Executive Officer
DMEA Field Team, Region I
P. O. Box 500
Juneau, Alaska

APR 9 1953

Re: Docket No. DMEA-2931
(Platinum Group Metals)
A. L. Howard
Red Mountain Claims
Goodnews Bay District
Southwestern Alaska

Dear Mr. Lorain:

The captioned application is referred to your office for either a field examination or your recommendation based on information available to your office.

Copies of memoranda are enclosed from Mr. James E. Bell, dated March 20, 1953, and Mr. A. L. Newcomb, dated March 23, 1953. We wish to draw your attention especially to paragraph four of Mr. Newcomb's memorandum.

One copy of the application was forwarded to your office on March 18.

Sincerely yours,

George C. Selfridge

Chairman, Operating Committee (246)

Enclosures 3

EWEllis/gla 4-7-53
cc to: Adm. Reading File
Operating Committee
Docket
Messrs. A.R.Kinkel, Jr., Rm. 4234 GSA
James E. Bell, Rm. 1349
Ellis
DMEA Field Team, Region I (2)

J.C. 4/9/53

A.R.Kinkel:

J. H. Hedges (246)
Member, Bureau of Mines

A. R. Kinkel, Jr. (246)
Member, Geological Survey

700 FILE COPY
SURNAME:

Ellis
Hedges
Sedgwick
Fleischer

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

APR 9 1953

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

Re: Docket No. DMEA-2931
(Platinum Group Metals
Red Mountain Claims
Goodnews Bay District
Southwestern Alaska

Dear Mr. Howard:

The application for assistance in exploring your property, above-named, has been reviewed by the Rare and Miscellaneous Metals Division of the Defense Minerals Exploration Administration. It has been referred to the Executive Officer of Region I at the following address:

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

The Regional Office will communicate with you if they require additional information.

Sincerely yours,

C. O. Mittenderf

Administrator

GLAult/gla
4-7-53
cc to: Adm. Reading File
Docket ✓
Mr. Ellis
DMEA FT, Region I (2)

J. C. 4/9/53

3/24/53 gla

IN REPLY REFER TO:

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

March 23, 1953

Memorandum

To: Mr. E. Wm. Ellis

From: E. L. Newcomb

Subject: Recommendation for field referral

Re: DMEA-2931
Red Mountain Claims
Goodnews Bay District
Alaska
$50,327.45
Platinum

The applicant requests assistance to explore 29 unpatented placer claims on the eastern and northern slopes of Red Mountain. The proposal involves 15,000 feet of trenching in the Boulder Creek-Portland Bench area and between Portland Bench and Clara Creek, and 1,000 feet of drilling in the McCann Creek-Minnie Gulch area. An additional 1,000 feet of drilling would be done on the Portland Bench if trenching indicates the need for further drilling.

The applicant's property is not in production, but many of the creek and bench gravels in the area have been worked by small operations. The largest producer in the district is the Goodnews Bay Mining Company which currently is handling about 8,000 cubic yards per day. This Company is reported to be the largest U. S. producer of platinum. Total production from the district to date may total about 300,000 ounces of platinum metals.

The primary source of the platinum in the placer gravels is dunite of Red Mountain which contains minute amounts of platinum in association with chromite. According to J. B. Mertie, Jr., Platinum Deposits of Goodnews Bay, Alaska, USGS Bull. 910, about 0.05 ounces of platinum are contained in a ton of chromite. The average grade of dunite is about 0.4% chromite.

Most of the gravels in creeks tributary to the Salmon River have been mined. Squirrel, Dowry and Clara Creeks have been entirely mined out and hand operations may have removed most of the promising parts of Boulder Creek and the McCann-Minnie Gulch area. Mr. Rutledge, Ferrous Branch, DMEA, examined a part of Red Mountain in 1948 for the Bureau of Mines. Although he was primarily interested in the dunite source rock, he reported verbally to the writer that most of the applicant's claims have either been worked or are located in non-economic high bench gravels. A part of the Portland Bench may contain minable platinum values, but this unmined area probably is too small to justify the project proposed by the applicant.

The field team should obtain the William A. O'Neil report, which was available to the applicant. Information in this report could have an important bearing on the consideration of the application.

I recommend the application be referred to the field team for their review and recommendations. Our available information indicates that the proposed project may not be warranted. The O'Neil report and other data available in the Bureau and Survey offices in Alaska may clarify the merits of the proposal without an actual examination of the property being required.

E. L. Newcomb

E. L. Newcomb
Geologist

IN REPLY REFER TO:

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

March 23, 1953

Memorandum

To: Mr. E. Wm. Ellis

From: M. L. Newcomb

Subject: Recommendation for field referral

Re: IMEA-2931
Red Mountain Claims
Goodnews Bay District
Alaska
$50,327.45
Platinum

The applicant requests assistance to explore 29 unpatented placer claims on the eastern and northern slopes of Red Mountain. The proposal involves 15,000 feet of trenching in the Boulder Creek-Portland Bench area and between Portland Bench and Clara Creek and 1,000 feet of drilling in the McCann Creek-Minnie Gulch area. An additional 1,000 feet of drilling would be done on the Portland Bench if trenching indicates the need for further drilling.

The applicant's property is not in production, but many of the creek and bench gravels in the area have been worked by small operations. The largest producer in the district is the Goodnews Bay Mining Company which currently is handling about 8,000 cubic yards per day. This Company is reported to be the largest U. S. producer of platinum. Total production from the district to date may total about 300,000 ounces of platinum metals.

The primary source of the platinum in the placer gravels is dunite of Red Mountain which contains minute amounts of platinum in association with chromite. According to J. B. Mertie, Jr., Platinum Deposits of Goodnews Bay, Alaska, USGS Bull. 910, about 0.05 ounces of platinum are contained in a ton of chromite. The average grade of dunite is about 0.4% chromite.

Most of the gravels in creeks tributary to the Salmon River have been mined. Squirrel, Dowry and Clara Creeks have been entirely mined out and hand operations may have removed most of the promising parts of Boulder Creek and the McCann-Minnie Gulch area. Mr. Rutledge, Ferrous Branch, IMEA, examined a part of Red Mountain in 1948 for the Bureau of Mines. Although he was primarily interested in the dunite source rock, he reported verbally to the writer that most of the applicant's claims have either been worked or are located in non-economic high bench gravels. A part of the Portland Bench may contain minable platinum values, but this unmined area probably is too small to justify the project proposed by the applicant.

The field team should obtain the William A. O'Neil report, which was available to the applicant. Information in this report could have an important bearing on the consideration of the application.

I recommend the application be referred to the field team for their review and recommendations. Our available information indicates that the proposed project may not be warranted. The O'Neil report and other data available in the Bureau and Survey offices in Alaska may clarify the merits of the proposal without an actual examination of the property being required.

E. L. Newcomb
Geologist

3/24/53 gla

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

March 20, 1953

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
MAR 23 1953

Memorandum

To: Ernest W. Ellis, DMEA

From: James E. Bell, Rare & Precious Metals Branch
Through: M. H. Kline

Subject: DMEA Project 2931 (Platinum) near Platinum, Goodnews Bay Mining District, Alaska.

The applicant proposes an exploration project in an area situated in the only known platinum-producing district of consequence in the United States — a district having a record of considerable production, and a potential of important further production from indicated reserves. Platinum, of course, is on the strategic list and is being stockpiled; most of the domestic supply of platinum is imported.

Judging by the report submitted, the area in question appears to have possibilities, and the application well merits referral to the Field.

James E. Bell

James E. Bell

Attachment

March 18, 1953

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

Subject: DMEA-2931
Re: Exploration Assistance
Red Mountain

My dear Mr. Howard:

The receipt of your application dated March 14, 1953 for exploration assistance under the Defense Production Act of 1950, as amended, is hereby acknowledged.

Your application has been assigned Docket Number DMEA-2931 and referred to the Rare and Miscellaneous Metals Division.

Kindly refer to DMEA-2931 in any future correspondence relating to your application.

Sincerely yours,

ROBERT E. ADAMS

Robert E. Adams
Chief, Operations Control
and Statistics Division

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 17 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 2931
Metal or Mineral
Date Received 3-17-53
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. Reprt 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 project.*—(*a*) State the mineral or minerals for which you will explore Platinum and accompanying metals of the group 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.

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. Sheets attached

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 MF-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) Aero 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 nanner 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)

dmea 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

I N D E X

SUBJECT	PAGE
Introduction	1
History	1
Location	2
Transportation	2 & 3
Climate	3
Water	3
Timber	3
Game	4
Geology	4 & 5
Geomorphology	5 & 6
Glaciation	6
Older Channels	6 & 7
Bench Gravels	7 & 8
Distribution of Platinum	8
Red Mountain Claims	8 & 9
Values:	
Boulder Creek	9
Portland Bench	9,10,11
Summation	11
Dowry and Clara Creeks	12
McCann Creek - Minnie Gulch	12
Values	12,13,14
Volume of Gravels	14
Summary	14 & 15
Recommendation	15 & 16
Appendix, Maps, etc.	

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 1952, 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

16351 Ashworth Ave.
Seattle 33, Washington
April 21, 1953.

Alaska Field Team, Region I,
Defense Minerals Administration,
U. S. Department of Interior,
P. O. Box 560,
Juneau, Alaska.

Attention of
Mr. C. L. Sainsbury
Mr. J. A. Herdlick

Gentlemen:

Herewith please find the original copy of a report by William A. O'Neill which the Red Mountain Mining Company was kind enough to lend to me for the purpose of forwarding in compliance with your request under date of April 15, 1953.

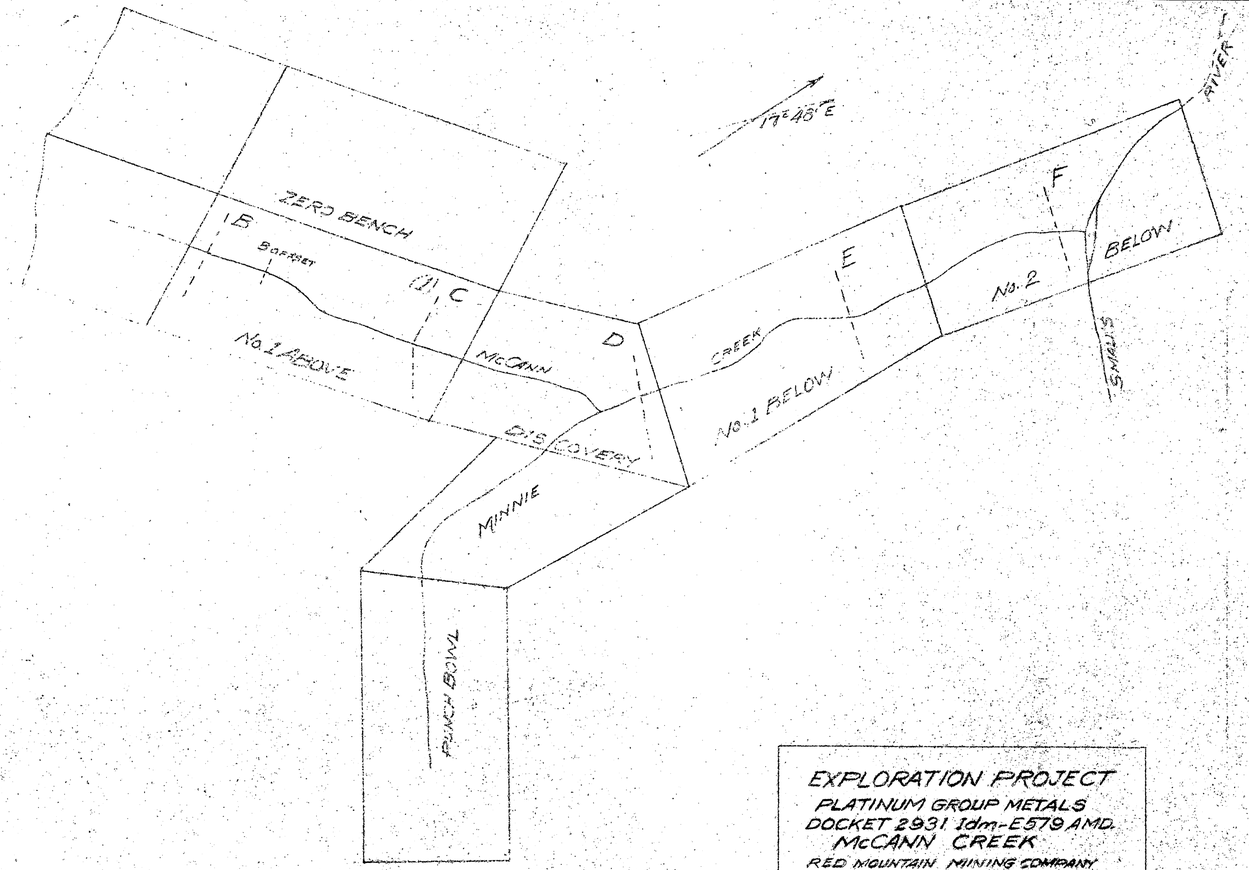
Because this is the original report I have been requested to return it . Therefor I should appreciate having your office return it to me as soon as youhave finished with it.

There is of course no objection to your office having a copy made if you desire or if necessary a copy can be made here and forwarded to you.

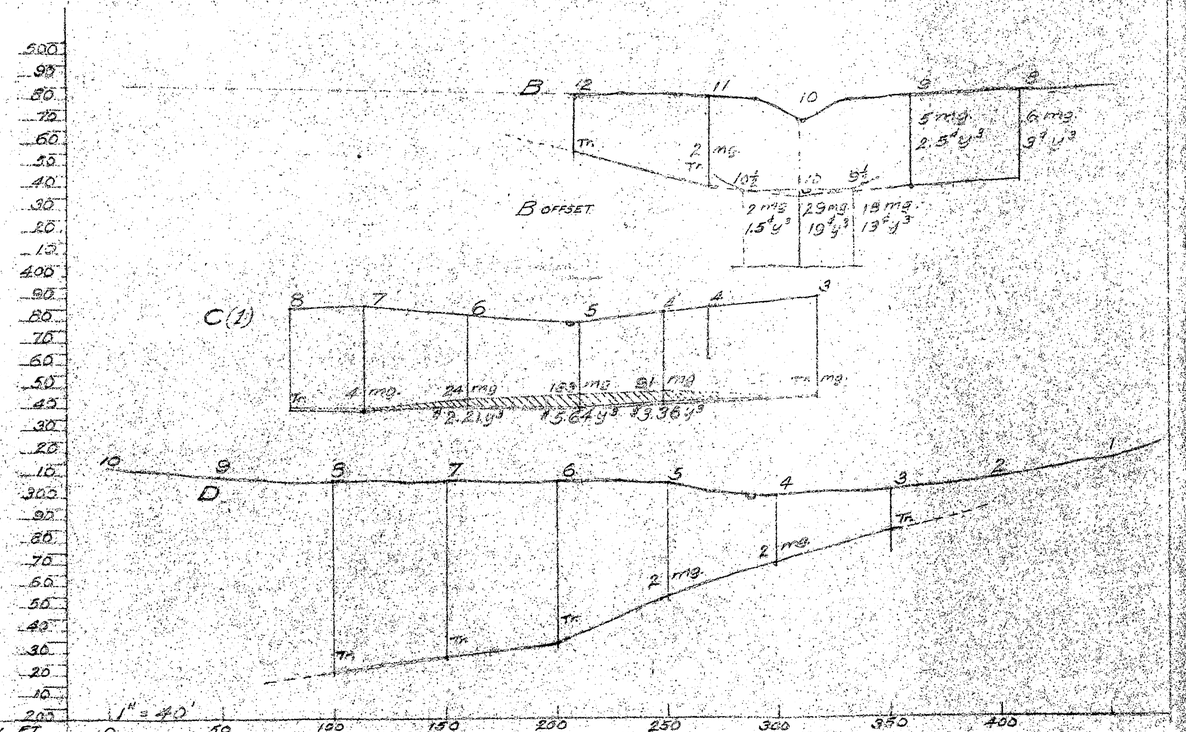
Yours very truly,

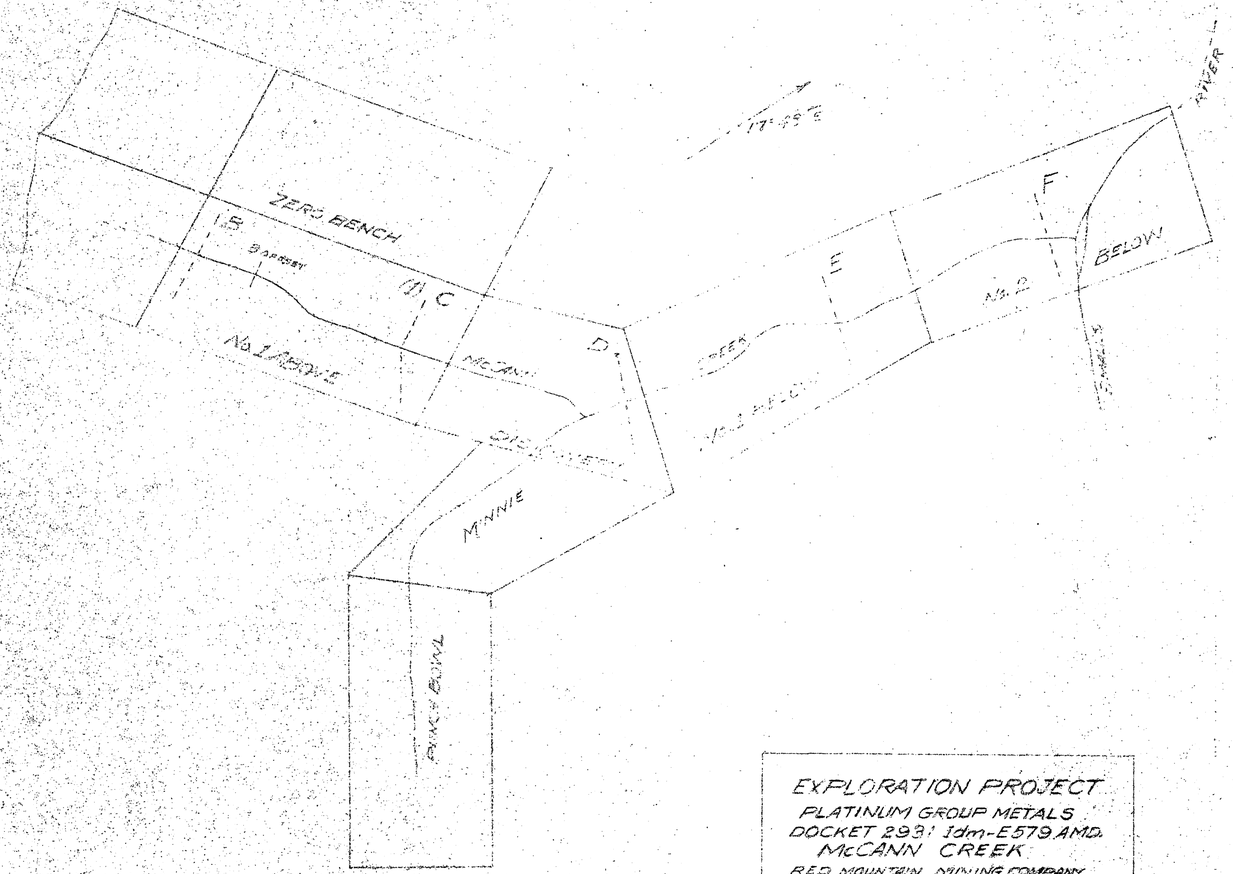
A. L. Howard.

A. L. Howard.

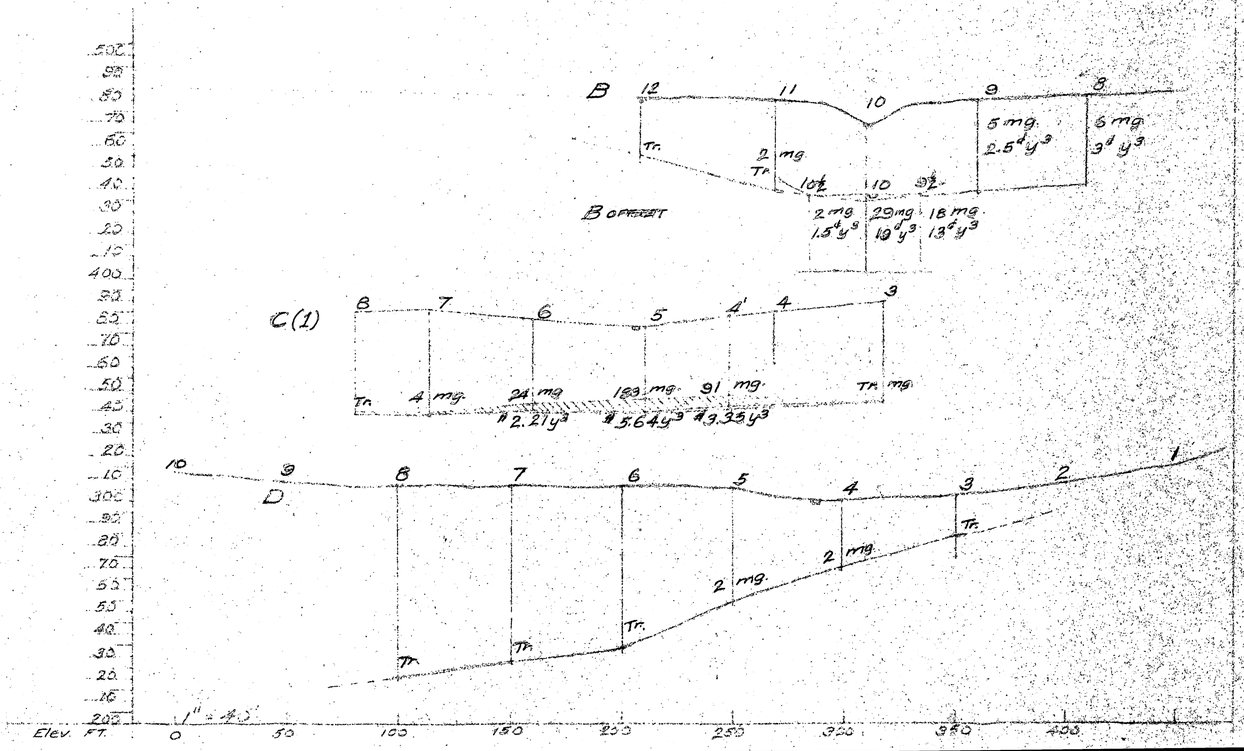


EXPLORATION PROJECT
PLATINUM GROUP METALS
DOCKET 2931 Idm-E579 AMD.
McCANN CREEK
RED MOUNTAIN MINING COMPANY
GOODNEWS BAY MINING DISTRICT
SOUTHWESTERN ALASKA
SCALE 1 INCH = 400 FT. SEPT.-OCT. 1955
A.L. HOWARD OPERATOR





EXPLORATION PROJECT
PLATINUM GROUP METALS
DOCKET 293: Jdm-E579 AMD.
McCANN CREEK
RED MOUNTAIN MINING COMPANY
GOODNEWS BAY MINING DISTRICT
SOUTHWESTERN ALASKA
SCALE: 1 inch = 200 FT. SEPT-OCT 1955
A.L. HOWARD OPERATOR



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]	2	[illegible]	[illegible]
10	10	3	[illegible]	[illegible]	[illegible]	[illegible]
20	[illegible]	2	[illegible]	[illegible]	[illegible]	[illegible]
23	[illegible]	2	[illegible]	[illegible]	[illegible]	[illegible]
25	[illegible]	2	[illegible]	[illegible]	[illegible]	[illegible]
30	[illegible]	2	[illegible]	[illegible]	[illegible]	[illegible]
35	[illegible]	2	[illegible]	[illegible]	[illegible]	[illegible]
35	12	1	[illegible]	3	2	[illegible]
35	[illegible]	2	[illegible]	4	[illegible]	[illegible]
37	[illegible]	1	[illegible]	[illegible]	[illegible]	[illegible]
38	[illegible]	3	[illegible]	[illegible]	[illegible]	[illegible]
39	[illegible]	2	[illegible]	[illegible]	[illegible]	[illegible]
35	[illegible]	2	[illegible]	[illegible]	[illegible]	[illegible]
37	12	2	[illegible]	9	[illegible]	[illegible]
40	[illegible]	1	[illegible]	6	[illegible]	[illegible]
41	[illegible]	1	[illegible]	[illegible]	[illegible]	[illegible]
42	[illegible]	1	[illegible]	[illegible]	[illegible]	[illegible]
D.D.43	[illegible]	1	[illegible]	[illegible]	[illegible]	[illegible]
						Rock, [illegible]
45	[illegible]	2	[illegible]	[illegible]	5	[illegible]
						[illegible]
						Co.
The 3 colors collected at 9-7 [illegible] are not collected; after leaving them one [illegible] don't [illegible]						
				25	[illegible]	Clay.
			6 or 7	[illegible]		

D.D. really one foot depth of 42'. [illegible] colors in that [illegible].

Time of Drilling	[illegible] hrs.	From 0 to [illegible]	6 MGS.	Muck	2 Ft.
Time of Pulling	[illegible] hrs.	From 20 to 25	6 MGS.	Gravel	41 Ft.
Time of Moving	[illegible] hrs.	Actual Weight		Bedrock	2 Ft.
Time Lost	[illegible] hrs.	Total	6 MGS.	Total	45 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] Contract No. [illegible] - 579 [illegible]

DRILL FIELD LOG

Started 8:00 AM 9-17-55
Finished Moving 1:30 PM 9-17-55
Commenced Drilling 1:30 AM 9-18-55
Finished Drilling 4:30 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 Nelson (L. Bonard, 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	.100	x	x	Muck, Gl. Sand, Angular Gr., Sm Blk-Sand.
8	42	1	.278	7VF	Tr	Angular Gr., Sand, Sm Gl., Sm Washed Gr., Blk-Sand.
10	30	2	.229	5VF	Tr	Angular Gr., Sand, Washed Gr., Sm Gl., Blk-Sand.
13	28	2	.327	11	1	Angular Gr., Sand, Washed Gr., Gl., Blk-Sand.
15	33	2	.206	4VF	Tr	Gr., Sand, Gl., Blk-Sand.
18	40	3	.327	3VF	Tr	Gr., Sand - Gl., Blk-Sand.
20	42	2	.224	3VF	Tr	Gr., Sand, Gl., Blk-Sand.
23	45	1	.196	7VF	Tr	Gr., Sand, Gl., Blk-Sand. Gl-Orange. Dm. Gl.
25	36	1	.180	2VF	Tr	Gr., Sand, Gl., Blk-Sand, Dm. Gl.
27	31	2	.164	1VF	Tr	Gr., Sand, Gl., Blk-Sand
30	44	3	.229	3VF	Tr	Gr., Sand, Gl., Blk-Sand.
32	31	2	.147	2VF	Tr	Gr., Dkr. Gldn, Sand, Sm Gl., Blk-Sand.
35	41	2	.245	x	x	Mostly Dkr. Sand, Sm Gr., Sm Blk-Sand. Green Dkr.
37	33	2	.180	2YF	Tr	G. Ag-Gr. Sand, Sm Washed Gr., Sm Gl., Blk-Sand.
40	42	2	.213	3VF	Tr	Gr. Sand, Sm Gl., Blk-Sand.
42	32	1	.306	x	x	Highly fractured greenish rock, Sand Lots Gl. Blk-Sand No Gr.
45	42	1	.164	33	Tr	Gl. Sand. Sm Highly fractured greenish rock. No Gr. Sm Blk-Sand.
47	33	1	.278	x	x	Gl. Sand. No Gr. Sm Highly fractured green rock. Tr. Blk-Sand.
						Values co-ce Sico can't estimate them in mgs.

Time of Drilling	10½ hrs.	From 0 to 47	5 MGS.	Muck	2 Ft.
Time of Pulling	3 hrs.	From 5 to 42	5 MGS.	Gravel	43 Ft.
Time of Moving	5 hrs.	Actual Weight		Bedrock	2 Ft.
Time Lost	x hrs.	Total	5 MGS.	Total	47 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 B. Butler
Panner N. Rathbony
Helper W. Barnsby
Operator: A. L. Bonard
D.M.E.A. 2931 Contract No. Ic.-1579 Amended

RECEIVED
FEB 27 1956

DRILL FIELD LOG

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 9-28-55
Finished Pulling 11:30 AM 9-28-55

Page No. 1 of 1, Original
Line No. B Hole No. 9½ offset
Creek McGann (L. Howard)
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	.131	x	x	Muck - Cl. Sand , Sm Side hill, sluff rock, Sm Blk Sand
8	38	3	.458	All 7VF	Tr Tr	Angular rock, Sand, Sm Cl., Blk-Sand
10	36	2	.425	5	1	Angular, Gr. Sand Cl. Sm Washed Gr. Blk-Sand Bldr.
13	41	2	.392	3VF	Tr	Bldr Chips - Sand - Sm Cl. Sm Blk-Sand.
15	39	2	.425	4VF	Tr	Gr. Sand - Cl - Blk-Sand.
18	42	3	.392	7VF	Tr	Gr. Sand - Cl. - Blk-Sand.
20	36	2	.327	5VF	Tr	Gr. Sand - Cl. - Blk-Sand, Bldry.
22	38	2	.327	6	1	Gr. Sand - Cl. - Blk-Sand. Bldry.
25	52	2	.476	7	Tr	Gr. Sand - Cl. - Blk-Sand
27	34	2	.262	6VF	Tr	Gr. Sand - Cl - Blk-Sand
30	54	2	.556	5VF	Tr	Gr. Sand - Cl - Blk-Sand
32	38	2	.245	7	2	Gr. Sand - Cl - Blk-Sand, Cl. increase. Blue Gray Cl.
33	19	2	.164	9VF	Tr	Blue Gr Cl. Sand - Blk-Sand, Sm Gr. Sm highly fract- green rock, sand has purple tint, sm purple rock.
34	20	2	.180	1VYF	Tr	Blue Gray Cl-Highly fractured greenish rock-sand-No Gr Sm Blk-Sand.
35	18	1	.147	x	x	Gray Cl. highly fractured greenish rock-with sm white specks not quartz. Sand. No Gr. Sm Purple Rock. All sand and Cl have purple tint, more trace blk-sand.
Rocker					5	

Time of Drilling	10 hrs.	From 0 to 35	18 MGS.	Muck	1 Ft.
Time of Pulling	2 hrs.	From 0 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

Crew

Driller R. Butler
Panner H. MacRory
Helper W. Harnedy
Operator: A. L. Howard
D.M.E.A. 2931 Contract No. Idm. - B579 Amended

DRILL FIELD LOG

Started 2:30 9-24-55
Finished Moving 9:00 AM 9-25-55
Commenced Drilling 9:00 AM 9-25-55
Finished Drilling 11:30 AM 9-26-55
Finished Pulling 2:15 PM 9-26-55

Page No. 1 of 1 page, Original
Line No. B Hole No. 10
Creek McCann Creek
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	.147	12	1	Gr. - Sand, Tr Cl., Blk-Sand.
	8	29	1	.114	14	1	Gr. - Sand - Tr.Cl. - Blk-Sand.
	10	26	3	.196	11	1	Gr. - Sand - SmCl. - Blk-Sand.
	13	39	2	.360	2YF	Tr	Gr., - Sand - Cl. - Blk-Sand.
	15	37	2	.229	x	x	Gr., Sand - Cl., Blk-Sand.
	18	50	2	.458	2YF	Tr	Bldr. Gr., Sand, Sm Cl., Blk-Sand.
	20	30	2	.262	4YF	Tr	Slide Rock - Sand - Sm F Gr., Tr Cl., Blk-Sand - Bldr Chips.
	21	20	2	.180	2YF	Tr	Gr. Sand - Sm Cl - Blk-Sand.
	23	27	3	.229	9	1	Gr. Sand - SmCl - Blk-Sand.
	25	44	3	.507	7	2	Gr. Sand - SmCl - Blk-Sand.
	27	35	2	.229	11	1	Gr. Sand - Sm Cl - Blk-Sand.
	29	36	2	.245	3YF	Tr	Gr. Sand - SmCl - Blk-Sand.
	30	20	2	.213	3YF	Tr	Gr. Sand - SmCl - Blk-Sand.
	31	22	2	.180	3F 9YF	Tr	Gr. Sand - SmCl - Blk-Sand.
	32	21	2	.164	13	Tr	Gr. Sand - SmCl - Blk-Sand.
	33	19	1	.155½	6YF	Tr	Gr. Sand - SmCl - Blk-Sand.
	34	21	2	.164	7YF	Tr	Gr. Sand - Cl - Blk-Sand. Cl-increase, Blue Gray Cl.
B.R.	35	19	3	.147	5YF	Tr	Highly fractured greenish rock, Blue Gr Cl., Tr Gr. Sm Blk-Sand.
	36	20	1	.131	x	x	Blue Gray Cl., Sand, Purple tint - Sm Highly fractured greenish rock., No Gr. mere tr blk-sand.
	Rocker					10	

Time of Drilling 10½ hrs.
Time of Pulling 2¾ hrs.
Time of Moving 3 hrs.
Time Lost hrs.
Total Time 15-3/4 hrs.

From 0 to 36' 29 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

Crew

Driller R. Butler
Panner H. MacRory
Helper W. Harnedy
Operator: A. L. Howard

D.M.E.A. 2931 Contract No. Idm.-E579 Amended

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

Drill No. 2

Started 11:30 AM 9-28-55
Finished Moving 1:00 PM 9-28-55
Commenced Drilling 2 PM 9-28-55
Finished Drilling 4:30 P.M. 9-29-55
Finished Pulling 10:30 AM 9-30-55

Page No. 1 of 2 pages (amended)
Line No. B Hole No. 102
Creek Nelson (L. Nelson)
Claim No. 1 Above
Offset 20ft Direction N.E.

Depth Pump.or Casing	CORE Before Pump	After Pump	Meas. Vol. Loose	No. Col-ors	Est. Val. Wgt.	CHARACTER OF FORMATION
5	2	2	.220	3WP	Tr	Gr. Sand - Grel - Blk-Sand.
8	39	2	.196	6 PP	Tr	Gr. Sand - Tr Cl - Blk-Sand.
10	24	2	.196	1½WP	1	Gr. Sand - Tr Cl - Blk-Sand.
13	36	2	.180	7WP	Tr	Bldr Sand - No Gr. Sn Cl. Blk-Sand. Bldry. Formation
15	28	1	.229	3WP	Tr	Angular Gr. Sand Sn Cl. Blk-Sand Sn Boulder Chips
17	36	1	.262	2WP	Tr	Gr. Sand Sn Cl - Blk-Sand. Stopped on a Boulder
6" ahead 20	40	2	.450	½WP	Tr	Into Bldr. Sand. Sn Cl., Sn Gr., Blk-Sand. Drilled 6" ahead on Bldr.
22	33	1	.425	3WP	Tr	Gr. Sand - Cl - Blk-Sand. Into Cl. On Bldr Chips
25	57	2	.327	2WP	Tr	Cl., Gr., Sand, Blk-Sand, Much Blk-Sand.
27	53	2	.392	4WP	Tr	Gr. Sand, Cl, Blk-Sand - Much Blk-Sand.
30	50	2	.540	½WP	Tr	Gr. Sand, Cl, Blk-Sand - Much Blk-Sand.
31	24	2	.213	3WP	Tr	Gr. Sand - Cl. - Blk-Sand - Much Blk-Sand.
32	22	1	.245	4WP	Tr	Gr. Sand - Cl. - Blk-Sand - Much Blk-Sand.
33	19	2	.196	2WP	Tr	Gr. Sand - Cl. - Blk-Sand - Much Blk-Sand.
34	21	1	.147	5WP	Tr	Cl. Sand, Sn P Gr., - Blk-Sand - Much Blue Gray Cl.
D. R. 35	22	2	.147	x	x	Blue Gray Cl - Highly fractured greenish rock-dotted with white rock, sand, sn purple rock, Tr Cl. Decrease Blk-Sand.
36	22	1	.147	x	x	Cl. Highly fractured green rock with white specks. Sand Sn Purple rock, Purple sand, No Gr, Zero Tr. Blk Sand.
						9-29-55 1 Hr. delay 1 to 112 PM Pump for water acted up.

Time of Drilling	10½ hrs.	From 0 to 36	2 MGS.	Muck	0 Ft.
Time of Pulling	2½ hrs.	From 0 to 35	2 MGS.	Gravel	35 Ft.
Time of Moving	1 hrs.	Actual Weight		Bedrock	1 Ft.
Time Lost	1 hrs.	Total	2 MGS.	Total	36 Ft.
Total Time	15 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 H. McCluey
Helper W. Kennedy
Operator: A. L. Howard

D.N.R.A. 2931 Contract No. Idm-2579 Amended

DRILL FIELD LOG

Started 12:30 PM 9-21-55
Finished Moving 4:00 PM 9-21-55
Commenced Drilling 4:00 PM 9-21-55
Finished Drilling 9:45 AM 9-22-55
Finished Pulling

Page No. Page 1 of page 1 - Original
Line No. D Hole No. 11 Offset
Creek Hudson L. Howard
Claim Hook No. 1 above
Offset 10' Direction 4.27 W

Depth Pump.or Casing	CORE Before Pump	After Pump	Meas. Vol. Loose	No. Col-ors	Est. Val. Wgt.	CHARACTER OF FORMATION
5	2	2	.22	x	x	Thick Cl., Sand, F. Angular Rock
8	32	2	.245	BH 3XXP	Tr	Angular Gr. Sand Cl. Sr F-Gr. Blk-Sand.
10	31	2	.245	4XXP	Tr	Ang. Gr. Sand, Cncl., Sr/Gr, Blk-Sand.
13	35	2	.236	7XP	Tr	Gr. Sand - Cl. - Blk-Sand.
15	37	2	.294	3XXP	Tr	Gr. Sand - Cl. - Blk-Sand.
18	40	3	.425	2XP	Tr	Gr. Sand - Cl. - Blk-Sand.
20	39	2	.236	5XXP	Tr	Gr. Sand - Cl. - Blk-Sand.
22	29	1	.196	3XP	Tr	Gr. Sand - Cl. - Blk-Sand.
25	47	1	.327	4XP	Tr	Gr. Sand - Cl. - Blk.-Sand, Cl-increase.
27	34	0	.160	2XP	Tr	Gr. Sand - Cl. - Blk-Sand.
30	39	2	.245	3XXP	Tr	Gr. Sand - Cl. - Blk-Sand.
32	37	1	.245	6XXP	Tr	Gr. Sand - Cl - Blk-Sand.
35	36	1	.237	7XP	Tr	Gr. Sand - Cl - Blk-Sand
37	31	1	.130	9XP	Tr	Gr. Sand - Cl - Blk-Sand, Cl. - increase.
39	23	0	.206	16XP	1	Gr. Sand - Cl - Blk-Sand, Lots Blue Gr. Cl.
B.H.41	25	1	.100	12XP	Tr	Blue Gray Cl. - Sand - Sm Gr. - Sr. Blk-Sand.
42	39	2	.114	x	x	Blue Gray Cl. Sand, Highly Fractured greenish rock Sand has purple tint, Tr Blk-Sand.
		A.M.	9-22-55	1/4 Hr.		delay at shop held broken ring on top puller.

Time of Drilling	10 hrs.	From 0 to 42	2 MGS.	Muck	2 Ft.
Time of Pulling	2 hrs.	From 0 to 42	2 MGS.	Gravel	39 Ft.
Time of Moving	3 hrs.	Actual Weight		Bedrock	1 Ft.
Time Lost	hrs.	Total	2 MGS.	Total	42 Ft.
Total Time	16 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 H. Boulter
Panner H. MacFarg
Helper W. Hornsby
Operator: A. L. Howard
D.N.S.A. 2931 Contract No. Idn - B579 Amended

DRILL FIELD LOG

Started 12:30 PM - 9-23-55
Finished Moving 2:00 PM - 9-23-55
Commenced Drilling 3:00 PM - 9-23-55
Finished Drilling 1:00 PM - 9-24-55
Finished Pulling 2:30 PM - 9-24-55

Page No. Page 1 of 1 page.
Line No. B Hole No. 12
Creek McCann Creek (L. Howard)
Claim No 1 Above
Offset None

Depth Pump.or Casing	CORE Before Pump	After Pump	Meas. Vol. Loose	No. Col-ors	Est. Val. Wgt.	CHARACTER OF FORMATION
5	7	1	.164	x	x	Muck, Cl., Sand, Blood Rock, Small Black Sand
8	28	1	.180	x	x	Angular Rock, Cl., Sand, Black Sand.
10	30	1	.196	1XF	Tr.	~~Tr~~ Angular Rock, Sand, SmCl., Blk. Sand
12	34	1	.213	3XF	Tr.	~~Tr~~ Gr., Sand, Cl., Black Sand
14	33	1	.213	2XF	Tr.	Gr. Sand, Cl., Blk. Sand
16	32	1	.213	1XF	Tr.	Gr. Sand, Cl., Blk. Sand
19	40	2	.327	2XF	Tr.	Gr. Sand, Cl., Blk. Sand
21	28	1	.196	x	x	Gr. Sand, Cl., Blk. Sand
24	45	2	.294	x	x	Gr. Sand, Cl., Blk. Sand
B. R. 26	31	1	.180	x	x	Cl. Sand, Tr. Gr., Sm. Blk. Sand, Bedrock Cl.
27	19	1	.164	x	x	Whitish Gray Cl., Highly fractured greenish rock, No Gr, Tr Blk-Sand
	9-23-55	1 Hr.	delay 2	till	3 PM,	"Got wired down".

Time of Drilling	6 hrs.	From 0 to 27	TR MGS.	Muck	3 Ft.
Time of Pulling	1½ hrs.	From 0 to 27	TR MGS.	Gravel	23 Ft.
Time of Moving	1½ hrs.	Actual Weight		Bedrock	1 Ft.
Time Lost	1 hrs.				
Total Time	10 hrs.	Total	TR MGS.	Total	27 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 E. MacRory
Helper W. Darnedy
Operator: A. L. Howard

D.M.E.A. 2931 Contract No. Idm-579 Amended

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

Started 8:00 AM 9-14-55
Finished Moving 10:30 AM 9-15-55
Commenced Drilling 10:30 AM 9-15-55
Finished Drilling 2:00 PM 9-16-55
Finished Pulling 4:30 PM 9-16-55

Page No. 1 of 1 page (original)
Line No. 1 Hole No. 3
Creek Kodiann (Howard, prospect)
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	.114	3VVF	Tr	Flood Gr., Sand, Sm Cl., Blk-Sand. Values very, very fine.
No measurement for first drive core. Drive blocks are on first square. Bit punctures core.						
3	35	2	.229	5VF	Tr	Gr. Sand, Sm Cl., Blk-Sand. Values very fine.
10	37	2	.327	7VVF	Tr	Gr. Sand, Sm Cl., Blk-Sand. Value very, very fine.
13	46	2	.327	6VVF	Tr	Gr. Sand, SmCl., Blk-Sand.
15	35	2	.311	4VF	Tr	Gr. Sand, SmCl., Blk-Sand.
18	35	2	.311	5VVF	Tr	Gr. Sand, SmCl., Blk-Sand
20	32	2	.204	3VVF	Tr	Gr. Sand, SmCl., Blk-Sand.
22	17	1	.100	1VF	Tr	Boulder, Sand, Sm Gr., Blk-Sand. Fair sized Bldr. (Black
25	50	2	.507	7VF	Tr	Gr. Sand, Bldr. Chips, SmCl., Blk-Sand.
27	32	2	.213	5VF	Tr	Gr. Sand, SmCl., Blk-Sand, Real tight formation.
30	51	2	.507	12VF	Tr	Gr. Sand, SmCl., Blk-Sand, Real tight formation.
32	32	1	.245	10VF	Tr	Gr., Sand, SmCl., Blk-Sand. Real tight formation.
34	41	3	.278	6VF	Tr	Gr., Sand, SmCl., Blk-Sand, Real tight formation
36	40	2	.270	5VF	Tr	Gr., Sand, SmCl., Blk-Sand. " " "
38	30	2	.213	5VF	Tr	Gr., Sand, SmCl., Blk-Sand. " " "
40	30	2	.425	7VF	Tr	Bldr Sand, Sm Gr., TrCl, Blk-Sand. Drove very hard.
42	46	2	.441	4VF	Tr	Bldr. Sand, SmCl., Blk-Sand. Large Blk-Bldr.
43	17	1	.100	16VVF	Tr	Gr., Sand, Bldr Chips, SmCl., Blk-Sand.
B.R.45	32	2	.131	21	1	Whitish Cl., Greenish sand, No Gr., Sm. Blk-Sand. Decrease Blk-Sand.
46	20	2	.114	x	x	Whitish Cl., Highly fractured greenish rock. No Gr., More Tr. Blk-Sand. Definitely Bedrock. Values so fine its impossible to estimate them without weighing. (Panner)

Time of Drilling 11 hrs.
Time of Pulling 2 hrs.
Time of Moving 10½ hrs.
Time Lost None hrs.
Total Time 24 hrs.

From 0 to 46 TR MGS.
From 0 to 46 TR MGS.
Actual Weight
Total TR MGS.

Muck 0 Ft.
Gravel 45 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

Driller D. Crider
Panner H. MacRory
Helper U. Hornady
Operator: A. E. Howard
D.N.R.A. 2931 Contract No. Kin. - 9579 Amended

DRILL FIELD LOG

Started 10:30 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 10:00 A.M. 10-2-55

Page No. 1 of 1 page (original)
Line No. D Hole No. 3
Creek McCann (L. Howard)
Claim Discovery
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	.114	x	x	Muck, Cl., S and, Sm Angular Gr., Sm. Blk-Sand.
8	36	3	.408	x	x	F Gr., Angular Flood Rock, Sand, Cl., Sm Blk-Sand.
10	30	1	.415	30W 5W	Tr Tr	Gr., Sand, Cl., Blk-Sand.
13	49	2	.564	24W 6W	Tr Tr	Gr., Sand, Sm Cl., Blk-Sand.
15	32	2	.311	7W	Tr	Gr., Sand, Sm Cl., Blk-Sand. Bldr Chips.
Top of BR 18	55	2	.425	2W	Tr	Mostly Boulder, Sand, Tr. Cl., Sm. Blk-Sand. Sm F Gr.
"24" Ahead 20	36	1	.458	x	x	Poke sized chunks of slide rock. Sm-Sand, Tr.Cl.,Sm. Blk-Sand. No Gr.
"36" Ahead 23	46	1	.491	x	x	Ex Rock, Chunks fine, Tr Cl., No Gr., Sm Blk-Sand. Either slide or hard BR.
"24" Ahead 25	36	2	.638	x	x	Dark Rock-Greenish tint, All sand Blk. Tr. Cl., No Gr. Either a slide or Hard B.R. How can one tell? Lots blk-sand.
"24" Ahead 27	40	0	.785	x	x	Dark Rock with greenish tint, Tr. Blue Gray Cl., No Gr. Blk-Sand. Lots white sand with purple tint. Not a slide. Bedrock had to go from 18' to 27' before being sure it was bedrock.

A slow-sloppy move; going bad, heavy rains past 3 days.
10-1-55 10 AM - 11 AM 1 hr. delay. Bolt broke, stiff legs and "A" frame on drill parted.

Time of Drilling	7½ hrs.	From 0 to 27	Tr MGS.	Muck	1 Ft.
Time of Pulling	2½ hrs.	From 0 to 18	TR MGS.	Gravel	17 Ft.
Time of Moving	4½ hrs.	Actual Weight		Bedrock	9 Ft.
Time Lost	1 hrs.	Total	TR MGS.	Total	27 Ft.
Total Time	15½ 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 R. MacRory
Helper W. Hornady
Operator: A.L. Howard
D.M.E.A. 2931 Contract No. Idm-5579 amended.

DRILL FIELD LOG

Started 10:00 AM 10-2-55
Finished Moving 10:30 AM 10-2-55
Commenced Drilling 10:30 AM 10-2-55
Finished Drilling 8:30 AM 10-3-55
Finished Pulling 10:30 AM 10-3-55

Page No. Page 1 of 1 page (original)
Line No. D Hole No. 4
Creek McCann (L. Howard)
Claim Recovery
Offset Amount - 15' Direction - South

Depth Pump.or Casing	CORE Before Pump	After Pump	Meas. Vol. Loose	No. Col-ors	Est. Val. Wgt.	CHARACTER OF FORMATION
5	?	2	.131	x	x	Muck, cl., sand, sm. angular rock, tr. black-sand.
8	39	2	.150	x	x	Cl., sand, angular flood rock, tr. blk-sand.
10	34	3	.164	1VF	Tr	Cl., Angular rock, sand, sm blk-sand.
13	39	2	.311	3VF	Tr	Angular rock, sand, washed gr., sm cl., blk-sand.
15	34	2	.270	2VF	Tr	Gr., sand, cl., sm angular bldr chips, blk-sand.
18	44	1	.131	1VF	Tr	much sticky gray cl., sand, sm gr., sm. blk-sand.
20	35	1	.092	x	x	Cl., sand, sm gr., blk-sand, lots gray cl.
22	34	1	.147	x	x	Angular gr., cl., sand, sm washed gr., sm blk-sand.
24	36	2	.164	1VF	Tr	Gr., sand, sm cl., blk-sand.
26	31	1	.213	1VF	Tr	Gr., sand, sm cl., blk-sand.
29	46	2	.425	x	x	Gr., sand, cl., blk-sand, bldr drove hard.
"12" ahead 31	30	2	.458	x	x	All bedrock. A dark rock with both brn & greenish cast. Seams of blue gray cl., sand a blue black and very fine. No gr.

Time of Drilling	6 hrs.	From 0 to 31	2 MGS.	Muck	2 Ft.
Time of Pulling	2 hrs.	From 10 to 29	2 MGS.	Gravel	27 Ft.
Time of Moving	3 hrs.	Actual Weight		Bedrock	2 Ft.
Time Lost	- hrs.	Total	2 MGS.	Total	31 Ft.
Total Time	8½ 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 B. Butler
Panner B. MacKenzy
Helper W. Hamedy
Operator: A. L. Howard
B.M.P.A. 2931 Contract No. Km. 3579 amended.

DRILL FIELD LOG

10:30 AM 10-3-55 1 of 1 page (original)

RECEIVED FEB 27 1956

Started Oct. 11:30 AM 10-3-55
Finished Moving 11:30 AM 10-3-55
Commenced Drilling 12:00 AM 10-5-55
Finished Drilling 3:00 AM 10-5-55
Finished Pulling

Page No. 5
Line No. Hole No. (2. Moved)
Creek
Claim Discovery
Offset Amount - core.

Depth Pump.or Casing	CORE Before Pump	CORE After Pump	Meas. Vol. Loose	No. Colors	Est. Val. Wgt.	CHARACTER OF FORMATION
5	7	2	.049	[illegible]	[illegible]	Rock, cl., sand, tr. angular lime rock. More tr. blk-sand.
8	26	2	.164	[illegible]	[illegible]	Angular rock, sand, cl. and, blk-sand. A blue gray cl., sand.
10	30	2	.191	[illegible]	[illegible]	Blue-gray cl., lrg. gr., sand, sm f., washed gr., blk-sand.
13	34	2	.160	[illegible]	[illegible]	Lrg. rock, sand, cl., sm. f. gr., blk-sand, blue-gray cl.
15	27	2	.147	[illegible]	[illegible]	Gr., Angular rock, sand, cl., blk-sand, blue-gray cl.
18	36	2	.160	[illegible]	[illegible]	Gr., sand, brn. cl., blk-sand.
20	34	2	.081	[illegible]	[illegible]	Sticky blue gray cl., fn sand, sm f. gr., more tr. blk-sand.
Heavy 22 water pressure	28	1	.049	x	x	Sticky light brn. cl., sand, tr. VV gr., Point tr. blk-sand. Sticky.
25	47	3	.270	[illegible]	[illegible]	Gr., sand sand, tr. cl., blk-sand, very heavy water pressure.
27	57	3	.578	[illegible]	[illegible]	Gr. sand, tr., cl., blk-sand.
30	62	5	.613	[illegible]	[illegible]	Gr., sand, tr. cl., blk-sand.
Excess 32	65	84	.654	[illegible]	[illegible]	Gr., sand, clear sludge, blk-sand. Excess "running" ground. Heavy water pressure.
5 drive 37	135	70	1.259	x	x	Gr. sand, no cl., blk-sand, lots water. Clear sludge. Gr. fine & well polished, looks like fine beach gr. or glacial.
5' drive 42	133	43	1.389	x	x	Very fine, well polished gr., No cl., sand, sm blk-sand. Clear sludge.
6' drive 48	87	5	.752	x	x	Gr., sand, sm cl. blk-sand, much tighter.
3' drive 51	76	3	.630	x	x	Shattered dk-rock, sand, tr cl., sm blk-sand. No gr. much water.
24" chsed 53	46	0	.554	x	x	Shattered hard bedrock, tr. cl., no gr. formation so hard, can't drive without drilling chsed.

5 hrs. delay - camp, had to go to shop, repairs to drill cable release brake.

Time of Drilling	11½ 23 hrs.	From 0 to 53	2 ~~4~~ MGS.	Muck	2 49 Ft.
Time of Pulling	1 hrs.	From 1 to 51	2 MGS.	Gravel	2 Ft.
Time of Moving	5 hrs.			Bedrock	53 Ft.
Time Lost	20 hrs.	Actual Weight	2		
Total Time	hrs.	Total	MGS.	Total	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

R. Butler e w
Driller R. Mallory
Panner J. Barnaby
OpHelper: A. L. Howard
D.F.D.A. 2031 Contract No. Idm. 8 579 amended.

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

Started 3:00 PM 10-5-55
Finished Moving 4:30 PM 10-5-55
Commenced Drilling 8:00 AM 10-6-55
Finished Drilling 11:30 AM 10-8-55
Finished Pulling 9:00 AM 10-8-55

Page No. 1 of 1 page (original)
Line No. B Hole No. 6
Creek Bolgna (L. Howard)
Claim Discovery
Offset

Depth Pump or Casing	CORE Before Pump	CORE After Pump	Meas. Vol. Locse	No. Colors	Est. Val. Wgt.	CHARACTER OF FORMATION
5	2	2	.191	x	x	Muck, frozen, Sm sand, Sm Cl. flood gr.
8	18	1	.088	2VW	Tr	Silt, sand, sm rusty cl., L. flood gr., sm blk-sand.
11	39	2	.124	x	x	Blue Gr., Cl. sm glacial mud, sand, sticky sand, Sm F. Gr., sand.
14	36	2	.033	x	x	Blue gray cl., glacial mud, V. sticky, sm sand, Tr. flood rock, tr. blk-sand.
16	33	2	.016	x	x	Glacial Cl., V.V. sticky, Sm green sand, Tr. flood rock, No gr., No blk-sand.
19	47	2	.033	x	x	Glacial Cl., real sticky, sm green sand, Tr. angular rock, No gr., sm blk-sand.
21	28	x	x	x	x	Pipe detached 30' back to get on pipe. Sample 19' to 22'6" blue bolder.
22'6"	28	2	.164	x	x	Angular & rounded gr., sand, sm blue cl., blk-sand.
26	57	3	.065	x	x	Very sticky cl., sm sand, No gr., tr. blk-sand.
29	48	2	.016	x	x	Sticky cl., sm sand, no gr., tr. blk-sand.
31	32	2	.081	x	x	Sticky cl., sand, sm angular rock, sm v.f. gr., very little sand.
34	35	2	.278	2W	1	Gr., sand, sm brn cl., blk-sand.
36	39	2	.198	2VW	Tr	Gr., sand, cl., blk-sand, sm blue chips, a little more cl.
38	36	2	.100	7VW	Tr	Gr., sand, cl., blk-sand.
41	47	2	.294	1VW	Tr	Gr., sand, cl., blk-sand.
44	36	2	.289	x	x	Gr., sand, cl., blk-sand.
46	56	3	.400	20VW	Tr	Gr., sm cl., sand, sm blk-sand.
48	34	2	.320	1VW 16VW	Tr	" " " " " " "
51	45	3	.376	8W	Tr	" " " " " " "
54	46	-	-	-	-	No sample. Running ground. Much sand and water.
59	133½	63	1.245	20VW 2VW	Tr	C. Gr., M. sand, No cl., sm. blk-sand.
62	110	3	2.025	1VW	Tr	M. Gr., sand, sm cl., sm blk-sand, cl. sticky dk. brown.
64	35	2	.257	1W	Tr	Gr., sand, sm cl., sm blk-sand.
67	44	3	.167	1W	Tr	" " " " " " "
70	75	3	.490	2VW	Tr	Gr. sand, Tr Cl., Sm blk-sand, VW gr.
D.B. 73	70	2	.003	x	x	Chunks of angular rock. Highly fractured angular rock. No cl., Sm green sand, sm blk-sand.
24 ahead 75	46	2	.450	x	x	Highly fractured dk. rock, brn tint, no gr., sm blk-sand. Have to, sl., thought it was a boulder, but getting so hard, can't drive without drilling ahead.

Time of Drilling 19½ hrs.
Time of Pulling 5½ hrs.
Time of Moving 1½ hrs.
Time Lost - hrs.
Total Time 26½ hrs.

From 0 to 75 Tr MGS.
From 24 to 72 TR MGS.
Actual Weight
Total TR MGS.

Muck 4 Ft.
Gravel 69 Ft.
Bedrock 2 Ft.
Total 75 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 R. MacRae
Helper M. Kennedy
Operator: A. L. Howard
D.M.S.L. 2931 Contract No. Km.-2579 amended.

RECEIVED
FEB 27 1956

DRILL FIELD LOG

Started 9:00 AM 10-9-55
Finished Moving 10:00 AM 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 1 of 1 page (original)
Line No. D Hole No. 7
Creek McGann L. Hazard
Claim Discovery
Offset Amount - None

Depth Pump or Casing	CORE Before Pump	CORE After Pump	Meas. Vol. Loose	No. Colors	Est. Val. Wgt.	CHARACTER OF FORMATION
5	2	2	.098	3WP	Tr	Muck, Sand, Angular and washed Gr., Cl., Sm Blk-Sand.
8	20	1	.124	1WP	Tr	Ang. & washed Gr., Sand, Cl., Blk-Sand.
10	33	2	.191	-	-	Angular & washed Gr., Cl., Sand, Sm Blk-Sand.
13	39	3	.147	2WP	Tr	Gr., Sand, Cl., Blk-Sand.
15	28	1	.131	1WP	Tr	Gr., Sand, Cl., Blk-Sand.
18	40	1	.001	3WP	Tr	Blue Cl., Glacial Mud, Sm Green sand, Ang. & washed Gr. Blk-sand.
21	38	2	.016	-	-	Blue-gray-glacial Cl., no solids only sm green sand. Here Tr. blk-sand.
24	40	2	.114	-	-	Glacial Cl., Angular washed gr., Sand, Sm blk-sand.
27	46	2	.229	2WP	Tr	Gr. Sand Cl., Blk-Sand.
30	47	2	.016	-	-	Blue-gray glacial mud, sand, few pieces angular rock. Tr. blk-sand.
32	35	3	.016	-	-	Cl. Mud, Sm Sand, 1 piece rock, Tr. blk-sand, blue gray sand.
35	52	2	.016	-	-	Cl., a little sand, no solids, very sticky cl., zero tr. blk-sand.
37	28	3	.033	-	-	Cl., with greenish tint. Sm sand, sm angular rock, a little blk-sand.
40	45	2	.213	3WP	Tr	Gr., sand, Cl., blk-sand.
42	38	3	.100	1WP	Tr	Gr., sand, sm cl., blk-sand.
45	44	2	.311	9WP	Tr	Gr., sand, sm cl., blk-sand.
48	43	3	.294	4WP	Tr	Gr., sand, sm cl., blk-sand.
51	78	78	-	-	-	No sample - drive again - running ground.
54	128	64	.016	5WP	Tr.	P. Gr., Fresh sand, Tr Cl., in first sampling-very little blk-sand.
5' drive 59	130	44	.067	1WP	Tr	Fresh sand, VF gr., tr. cl., last sampling. Sm blk-sand. Note blocker.
62	57	3	.425	4WP	Tr	P. Gr., sand, Tr. cl., Sm blk-sand.
64	53	62	-	-	-	No sample - Another run drive again.
6' drive 70	197	150"	2.0	-	-	No sample - All material fine silty sand - drive again.
75	104	4	2.147	17WP	Tr	Sand, P. Gr., Sm Brn Cl., last 2', Sm blk-sand. Colors V.F.S.
78	45	4	.278	3WP	Tr	P. Gr., Sand, Sm highly ?? rock, Brn tint, Greenish sand. Tr. Cl. Sm Blk-sand.
80	45	2	.667	-	-	Highly fractured dk. rock, Brn tint, no gr. Sm. Blk-sand. Tr. Blue Cl., E.H. end of 78'.
10-10-55	3½ hrs. delay - drill motor - cold weather.					

Time of Drilling	10½ hrs.	From 0 to 80	TR 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	3½ hrs.	Total	TR 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 R. Mallory
Helper W. Hannaty
Operator L. A. L. Hazard
D.M.S.A. 2031 Contract No. Ken. - 1679 Amended.

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

Started 12:30 PM 10-12-55
Finished Moving 1:45 PM 10-12-55
Commenced Drilling 1:45 PM 10-12-55
Finished Drilling 11:30 AM 10-16-55
Finished Pulling

Page No. Page 1 of 2 pages (original)
Line No. D Hole No. 8
Creek McCann (L. Howard)
Claim Discovery
Offset Amount - None

Depth Pump.or Casing	CORE Before Pump	After Pump	Meas. Vol. Loose	No. Col-ors	Est. Val. Wgt.	CHARACTER OF FORMATION
10'	7	4	.131	-	-	Muck, Cl., Sand, Sm Angular Wood Rock, Tr. Blk-Sand.
13	41	2	.229	2VF	Tr	Washed Gr., Sand, Sm Cl., Blk-Sand.
15	43	-	-	-	-	Pipe Settled 2', while drilling out core. Sample in line below.
17	43	-	-	-	-	Blue-gray Cl. Sand.
20	44	3	.160	4VF	Tr	Blue-gray Cl. Sand, Gravel, Blk-Sand.
22	33	2	.147	1VF	Tr	Blue Cl., Gr., Sand, Sm Blk-Sand.
25	44	3	.106	2VVF	Tr	Gr., Sand, Sm Cl., Sm Blk-Sand.
27	30	3	.131	4VVF	Tr	Gr., Sand, Sm Cl., Sm Blk-Sand.
30	48	2	.049	-	-	Greenish muddy sticky Cl., Sand, Sm Gr., Tr. Blk-Sand.
32	34	2	.016	-	-	Greenish muddy sticky Cl., Sm sand, Tr. F. Angular rock, Tr. Blk-Sand.
5' drive 37	78	3	.058	-	-	Greenish sticky Cl., Sand, Sm V.F. Gr., Tr. Blk-Sand, V.F. Silty Sand.
40	41	2	.164	-	-	F. Gr., Sand, Sm Cl., Blk-Sand.
42	40	3	.311	1VVF	Tr	Gr., Sand, Sm Cl., Blk-Sand.
45	43	2	.327	5VVF	Tr	Gr., Sand, Sm Cl., Blk-Sand.
47	33	3	.229	2VVF	Tr	Gr., Sand, Sm Cl., Blk-Sand.
50	44	1	.016	-	-	Cl., Blk-Sticky Cl., Sm Sand, 1 piece F. Gr., Blk-Sand.
52	32	2	.033	2VVF	Tr	Blk. Cl., with brn'ish tint. Sand, Sm. V.F. Gr., Tr. Blk-Sand.
5' drive 57	75	2	.229	6VVF	Tr	Gr., Sand, Brn Cl., Blk-Sand, Noticeable Cl.
59	33	3	.164	1VVF	Tr	Gr., Sand, Brn. Cl., Blk-Sand, Noticeable Cl.
62	42	2	.196	3VVF	Tr	Gr., Sand, Brn. Cl., Blk-Sand.
64	34	2	.278	5VVF	Tr	Gr., Sand, Sm Cl., Blk-Sand.
67	50	6	.458	11VVF	Tr	Much silty sand, V.F. Gr., No Cl., Clear Sludge, Sm Blk-Sand. Very loose.
69	48	48	-	-	-	No sample. Running ground-water pressure. Drive again.
1' drive 78	192	2	2.358	9VVF	Tr	Much sand, Brn last 2' F.M. & C. Gr., Sm Blue Cl., Sm Blk-sand.
1' drive 79	22	2	.180	5VF	Tr	Gr., sand, blue-gray cl., sm blk-sand.
80	21	1	.180	3VVF	Tr	Gr., sand, brn cl., blk-sand, F. Med. & C. Gr.
81	19	2	.172	2VVF	Tr	Gr., Sand, lots small brn Cl. balls, Sm Blk-Sand, F. & M. Gr.
8 Hrs. delay 10-15-55. Severe cold spell - 15° above.						

Time of Drilling 22½ hrs.
Time of Pulling ____ hrs.
Time of Moving 1½ hrs.
Time Lost ____ hrs.
Total Time ____ hrs.

From 0 to 88 Tr MGS.
From ____ to ____ MGS.
Actual Weight
Total 77 MGS.

Muck 4 Ft.
Gravel 82 Ft.
Bedrock 1 Ft.
Total 88 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. MacTosy
Helper W. Barnedy
Operator: A. L. Howard

D.M.E.A. 2931 Contract No. Rdm. - 1579 amended.

DRILL FIELD LOG

Started
Finished Moving
Commenced Drilling
Finished Drilling
Finished Pulling

Page No. [illegible]
Line No. [illegible] Hole No. 0
Creek [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	[illegible]	[illegible]	[illegible]	[illegible]
03	20	3	[illegible]	[illegible]	[illegible]	[illegible]
04	20	3	[illegible]	[illegible]	[illegible]	[illegible]
05	20	3	[illegible]	[illegible]	[illegible]	[illegible]
06	19	2	[illegible]	[illegible]	[illegible]	[illegible]
D.D. 07	22	2	[illegible]	-	-	[illegible]
08	22	1	[illegible]	-	-	[illegible]

Time of Drilling ..... hrs.
Time of Pulling ..... hrs.
Time of Moving ..... hrs.
Time Lost ..... hrs.
Total Time ..... hrs.

From 0 to 08 [illegible] MGS.
From ..... to ..... MGS.
Actual Weight
Total [illegible] MGS.

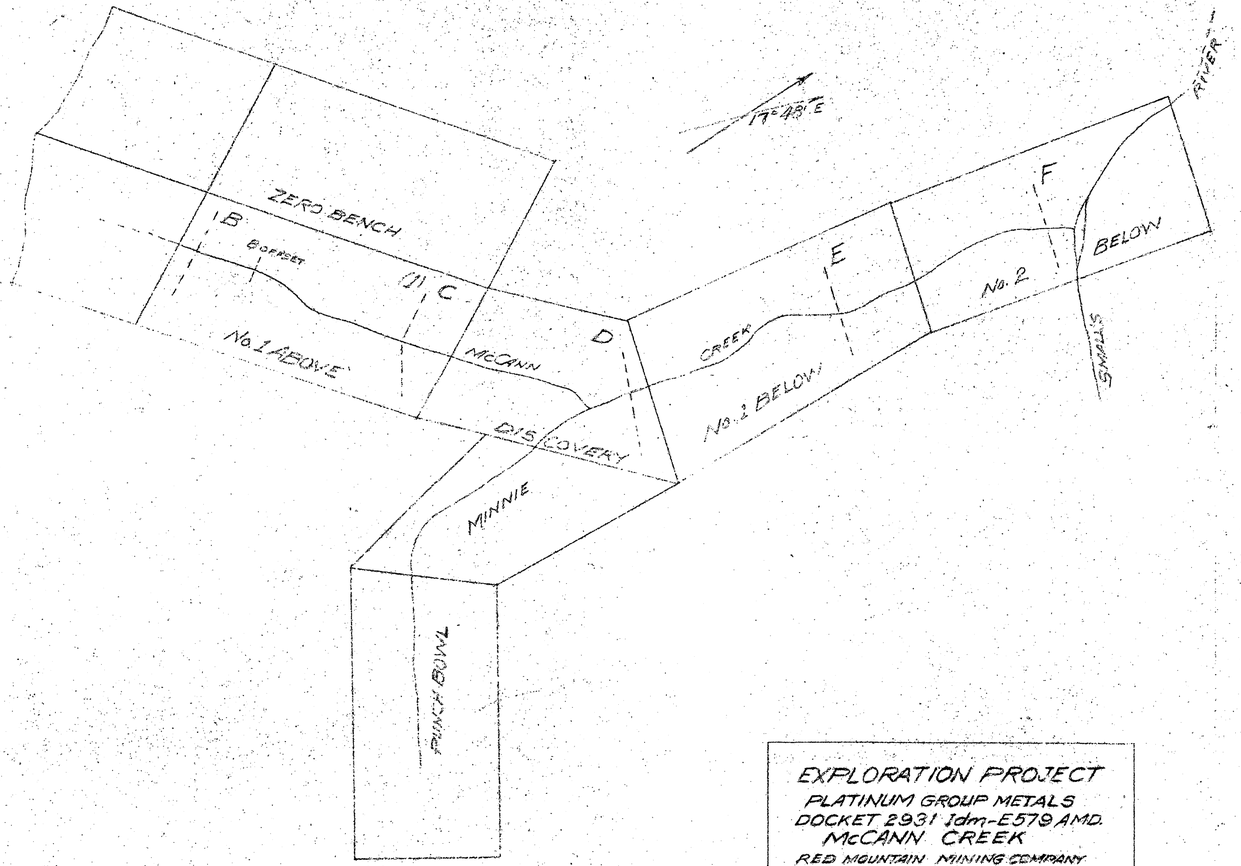
Muck 5 Ft.
Gravel 02 Ft.
Bedrock 1 Ft.
Total 08 Ft.

Abbreviations to be Used

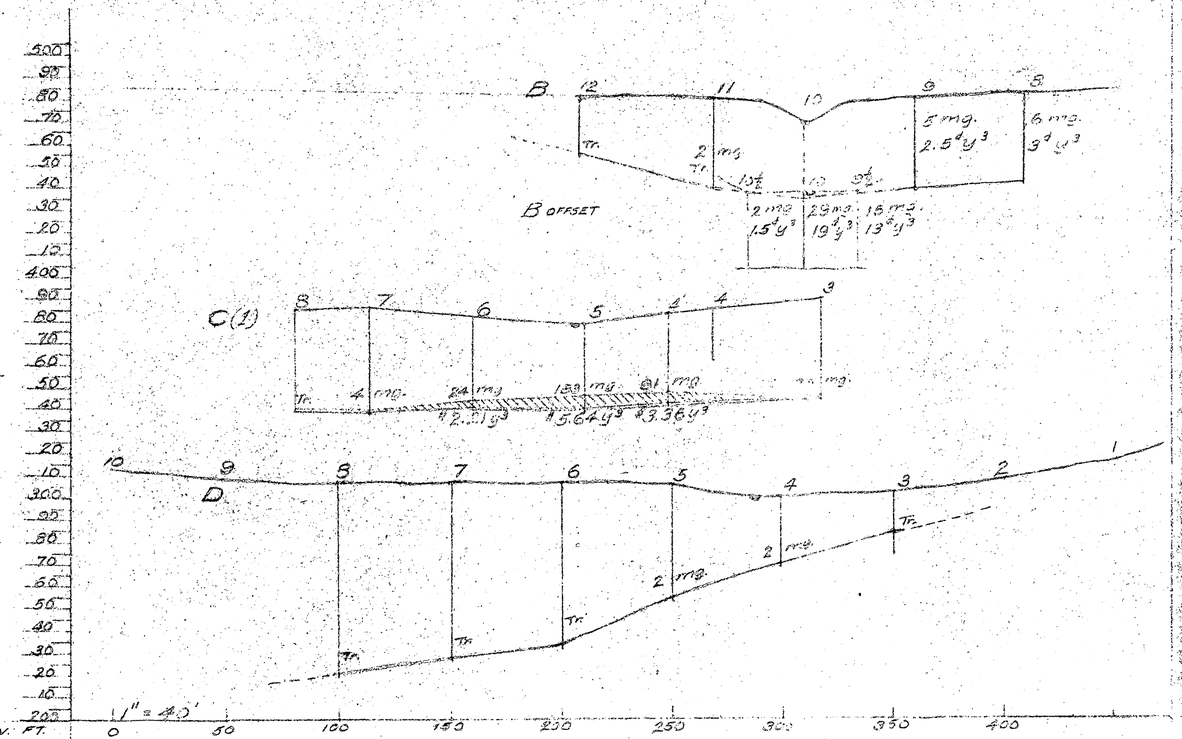
TH. -Thawed	S. -Sand	C. -Coarse
FT. -Frozen	MK. -Muck	ST. -Sticky
B. -Boulder	CL. -Clay	V. -Very
BR. -Bedrock	GR. -Gravel	M. -Much
TLS.-Tailings	F. -Fine	SM. -Some
AN. -Angular	M. -Medium	TR. -Trace

Crew

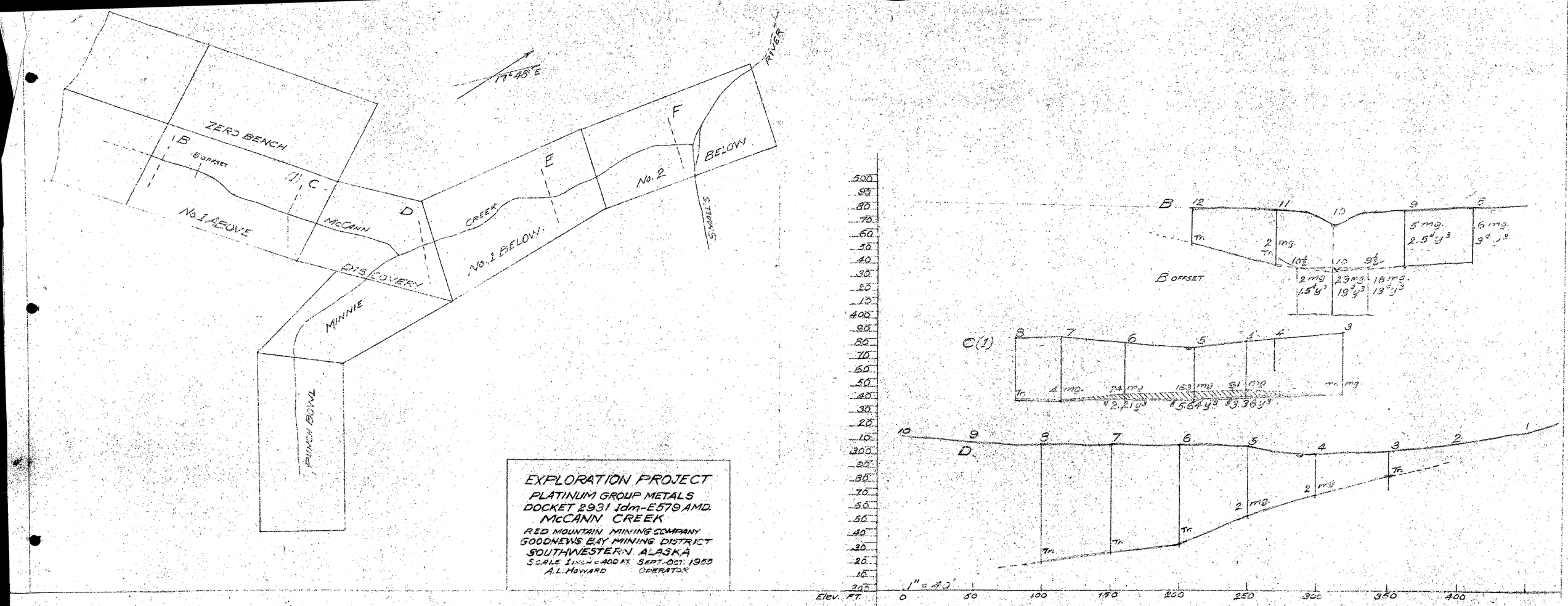
Driller [illegible]
Panner [illegible]
Helper [illegible]
Contractor: [illegible]
D.D.D. 8031 Contract No. [illegible] - 5579 [illegible]



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. 1955
A.L. HOWARD OPERATOR



RECEIVED
FEB 27 1956


ZERO BENCH
B
B OFFSET
C
No. 1 ABOVE
McCANN
D
DISCOVERY
MINNIE
PUNCH BOWL
CREEK
No. 2 BELOW
E
F
No. 2
BELOW
SMALLS
RIVER
PREABLE
B
B OFFSET
C(1)
D
1" = 40'
Elev. FT.
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. 1955
A.L. Howard OPERATOR

RECEIVED
FEB 27 1956

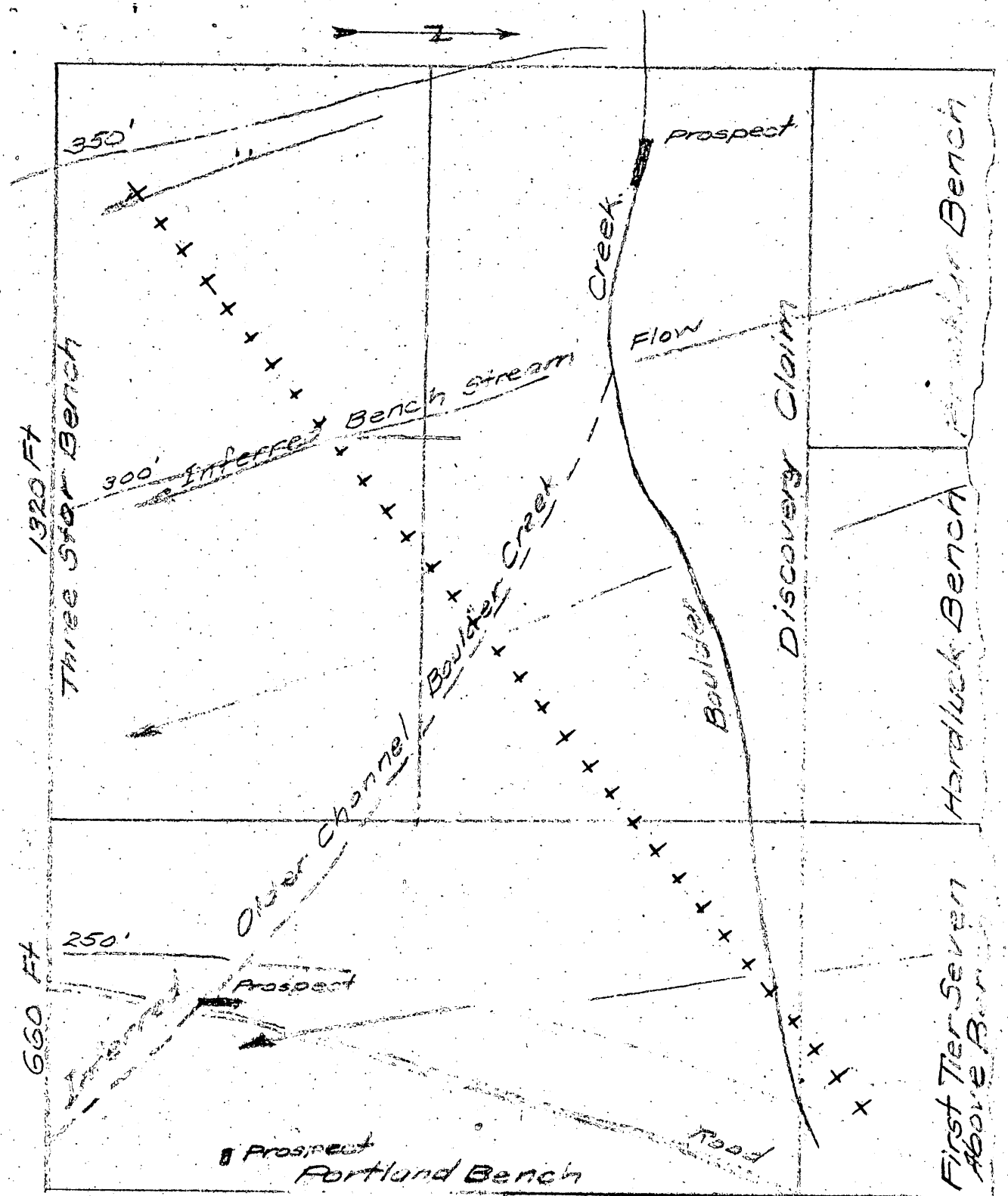


FIGURE 1
Exhibit "A" of Short Form Contract
Red Mountain-Pt. Group Metals
Docket No. DMEA-2931, A.L. Howard
Approx. Location of Stage 1 Drilling +
Portland Bench Area
Scale: 1" = 250' (Approx.)

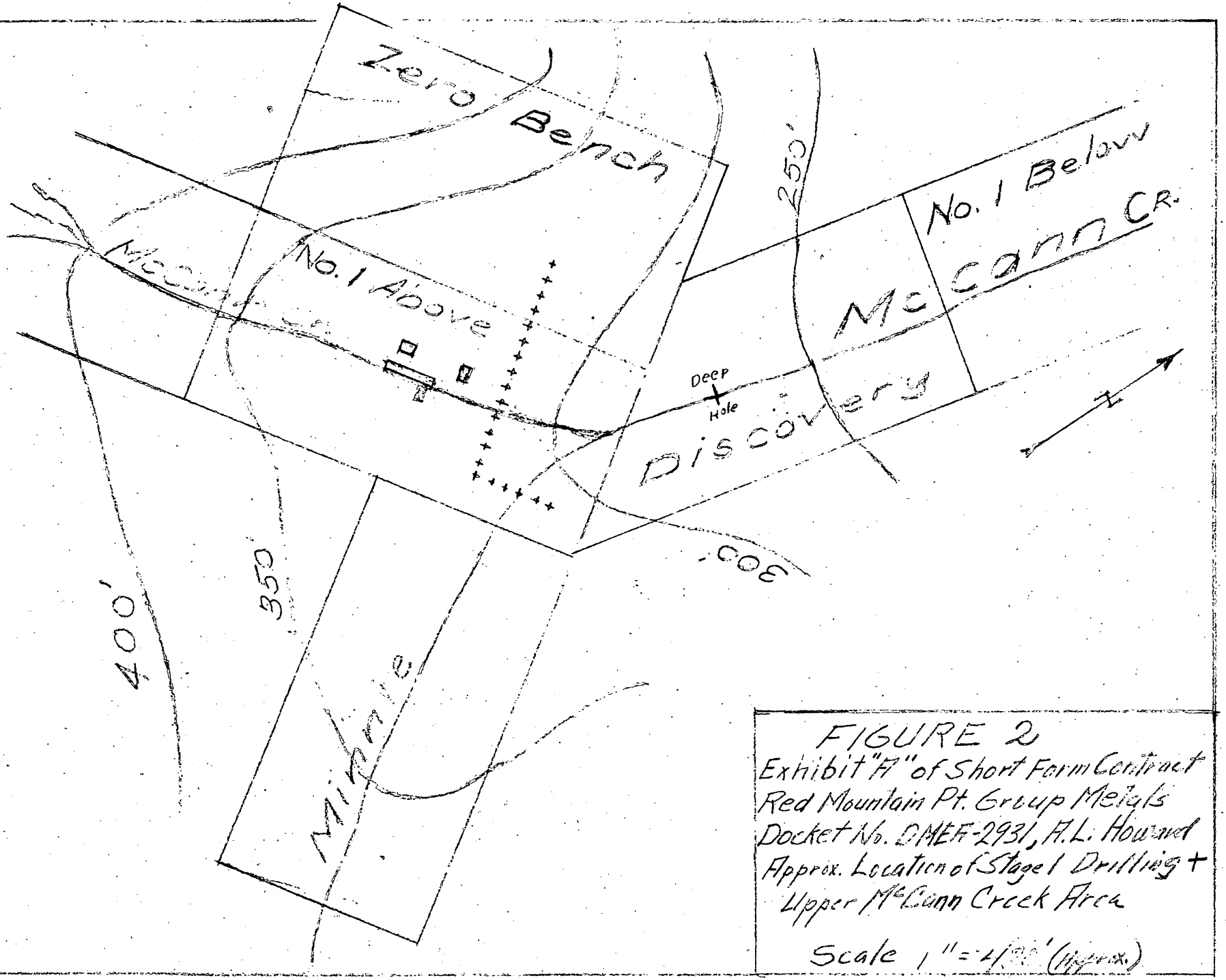


FIGURE 2
Exhibit "A" of Short Form Contract
Red Mountain Pt. Group Metals
Docket No. DMEF-2931, A.L. Howard
Approx. Location of Stage 1 Drilling +
Upper McCann Creek Area

Scale 1" = 4/[illegible]' (Approx.)

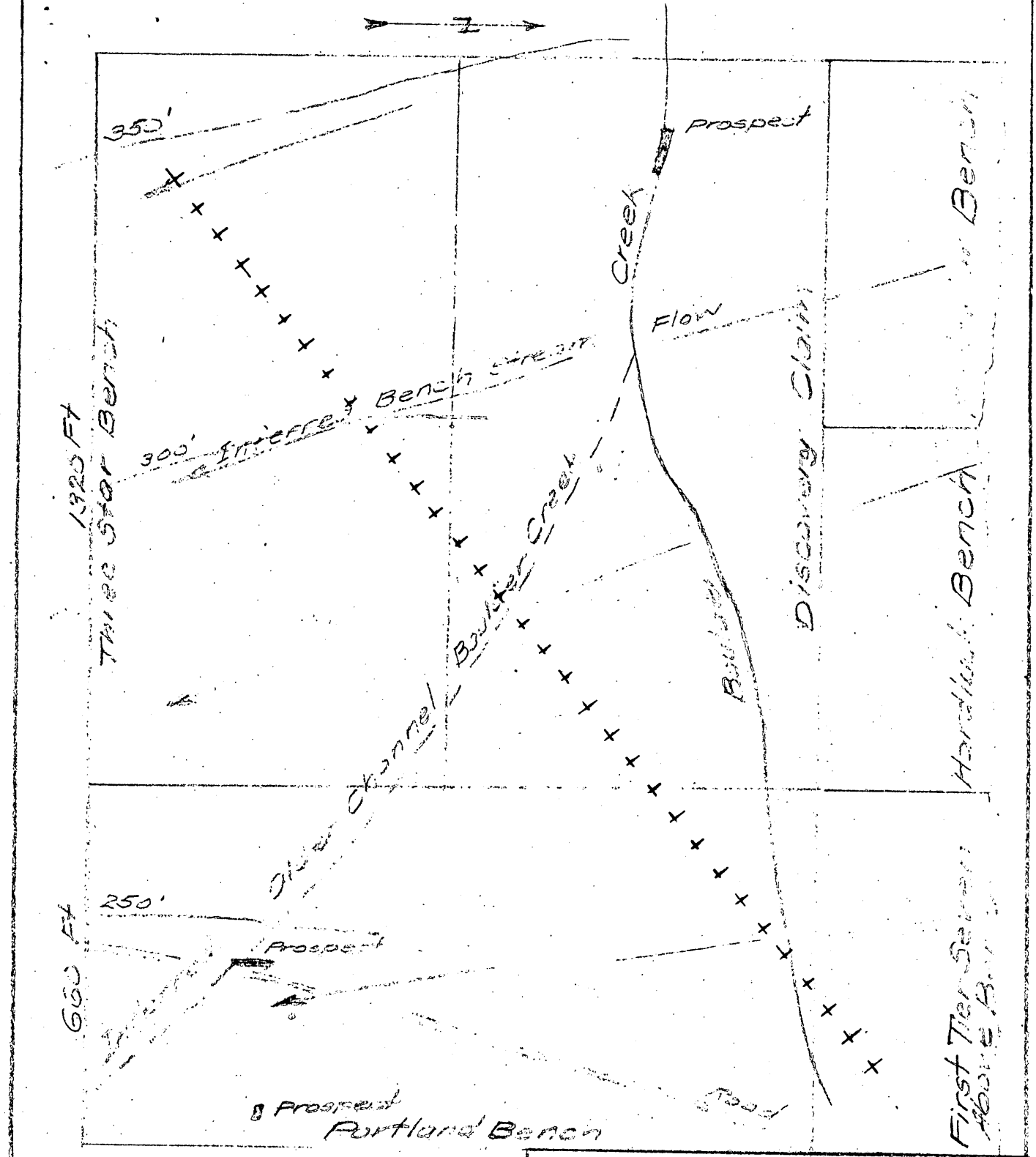


FIGURE 1
Exhibit "A" of Short Form Contract
Red Mountain-Pt. Group Metals
Docket No. DMEA-2931, A.L. Howard
Approx. Location of Stage 1 Drilling +
Portland Bench Area
Scale: 1" = 250' (Approx.)

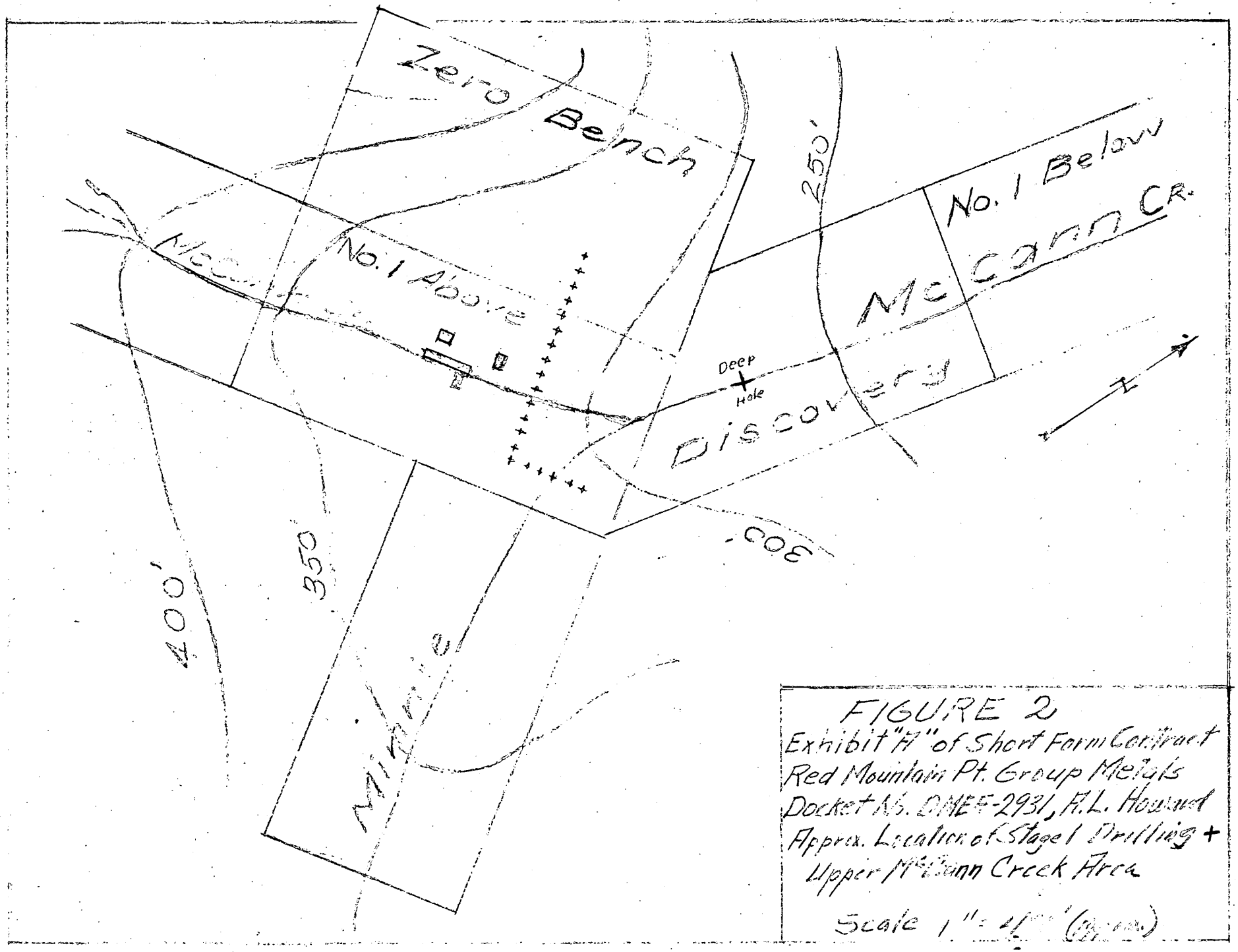


FIGURE 2
Exhibit "A" of Short Form Contract
Red Mountain Pt. Group Metals
Docket No. 2MEF-2931, A.L. Howard
Approx. Location of Stage 1 Drilling +
Upper McCann Creek Area

Scale 1" = 4[illegible]' (Approx.)

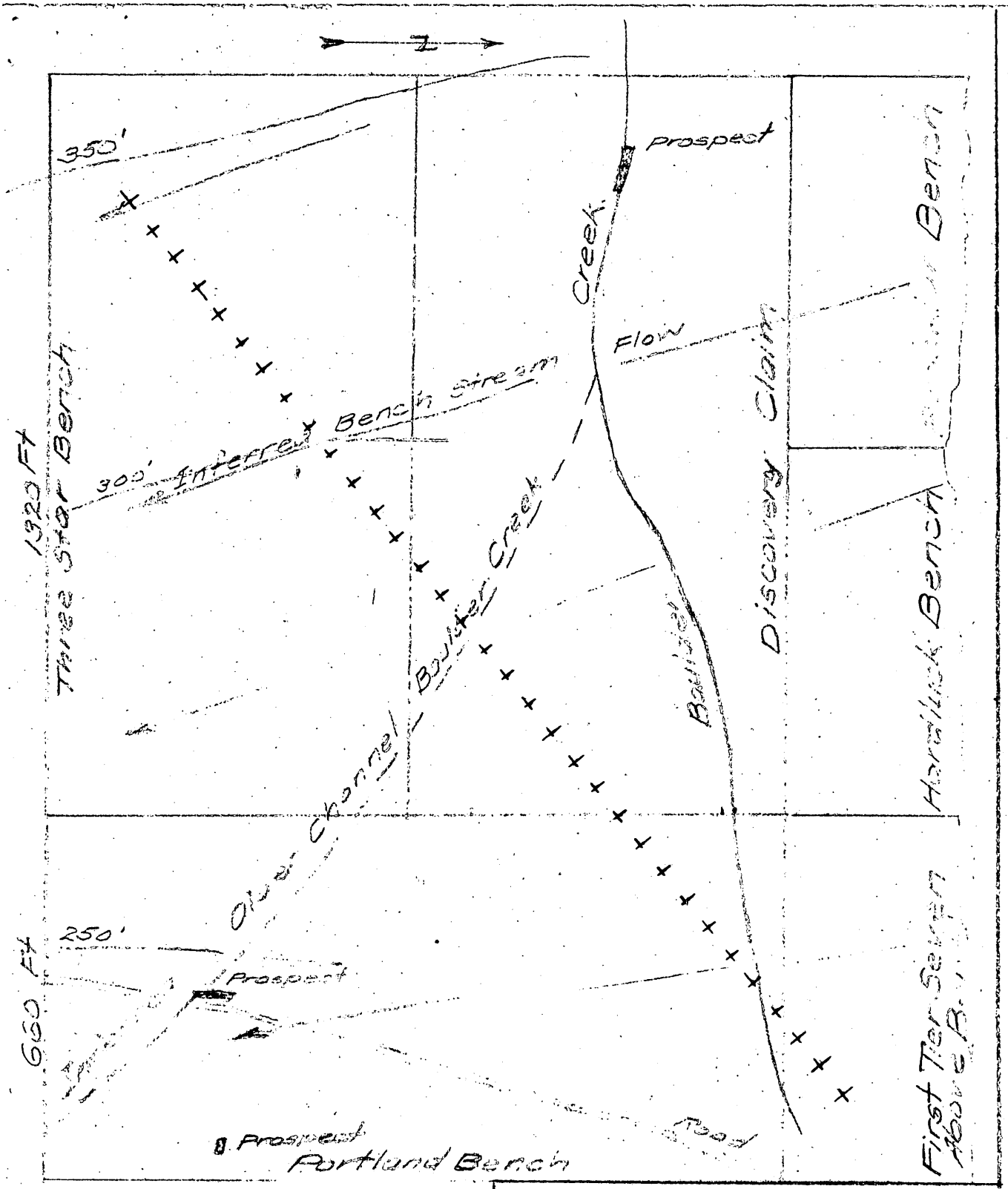


FIGURE 1
Exhibit "A" of Short Form Contract
Red Mountain-Pt. Group Metals
Docket No. DMEA-2931, A.L. Hound
Approx. Location of Stage 1 Drilling +
Portland Bench Area
Scale: 1" = 250' (Approx.)

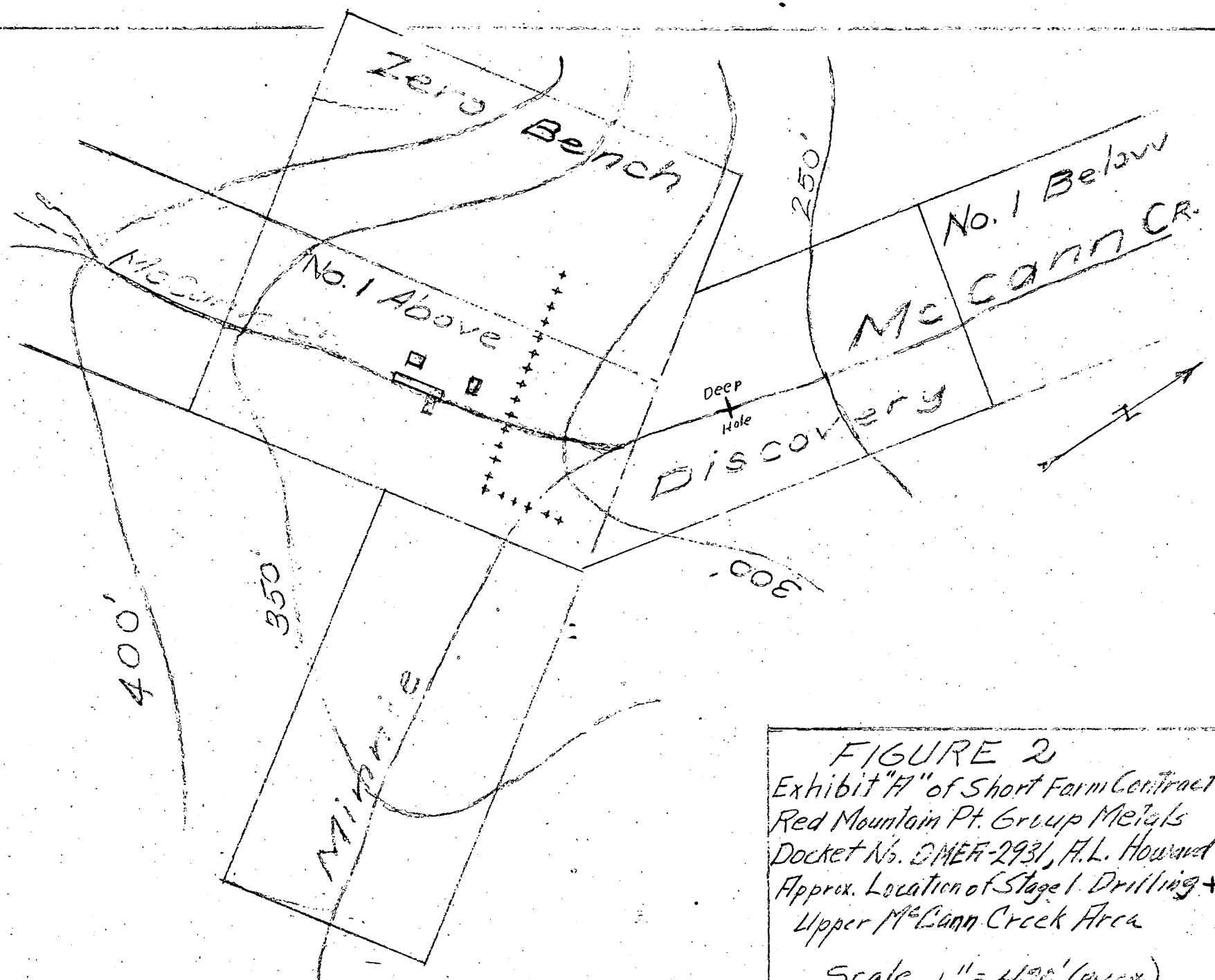


FIGURE 2
Exhibit "A" of Short Form Contract
Red Mountain Pt. Group Metals
Docket No. 2MEF-2931, A.L. Howard
Approx. Location of Stage 1 Drilling +
Upper McCann Creek Area

Scale 1" = 400' (Approx.)

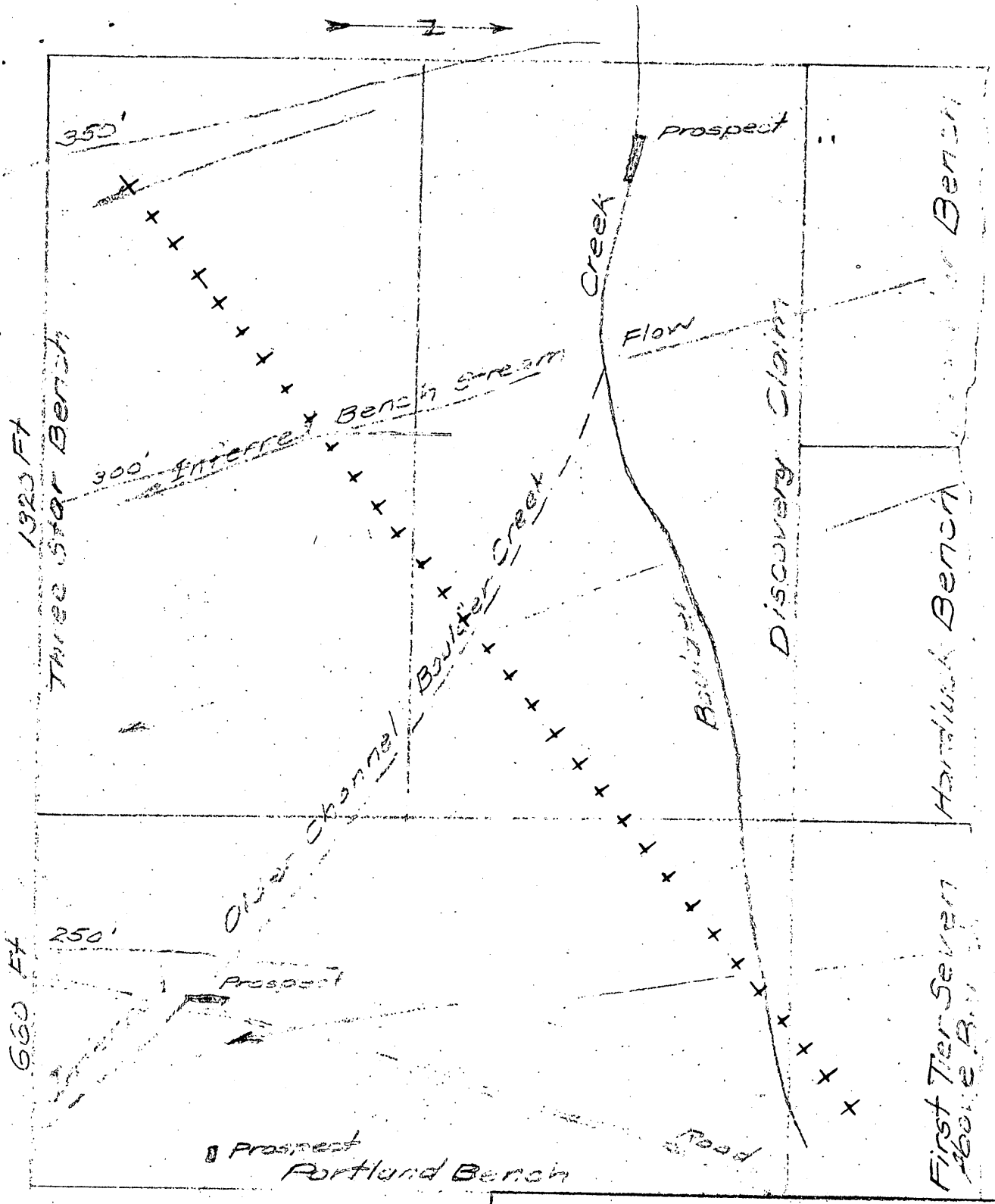


FIGURE 1
Exhibit "A" of Short Form Contract
Red Mountain-Pt. Group Metals
Docket No. DMEA-2931, A.L. Howard
Approx. Location of Stage 1 Drilling +
Portland Bench Area
Scale: 1" = 250' (Approx.)

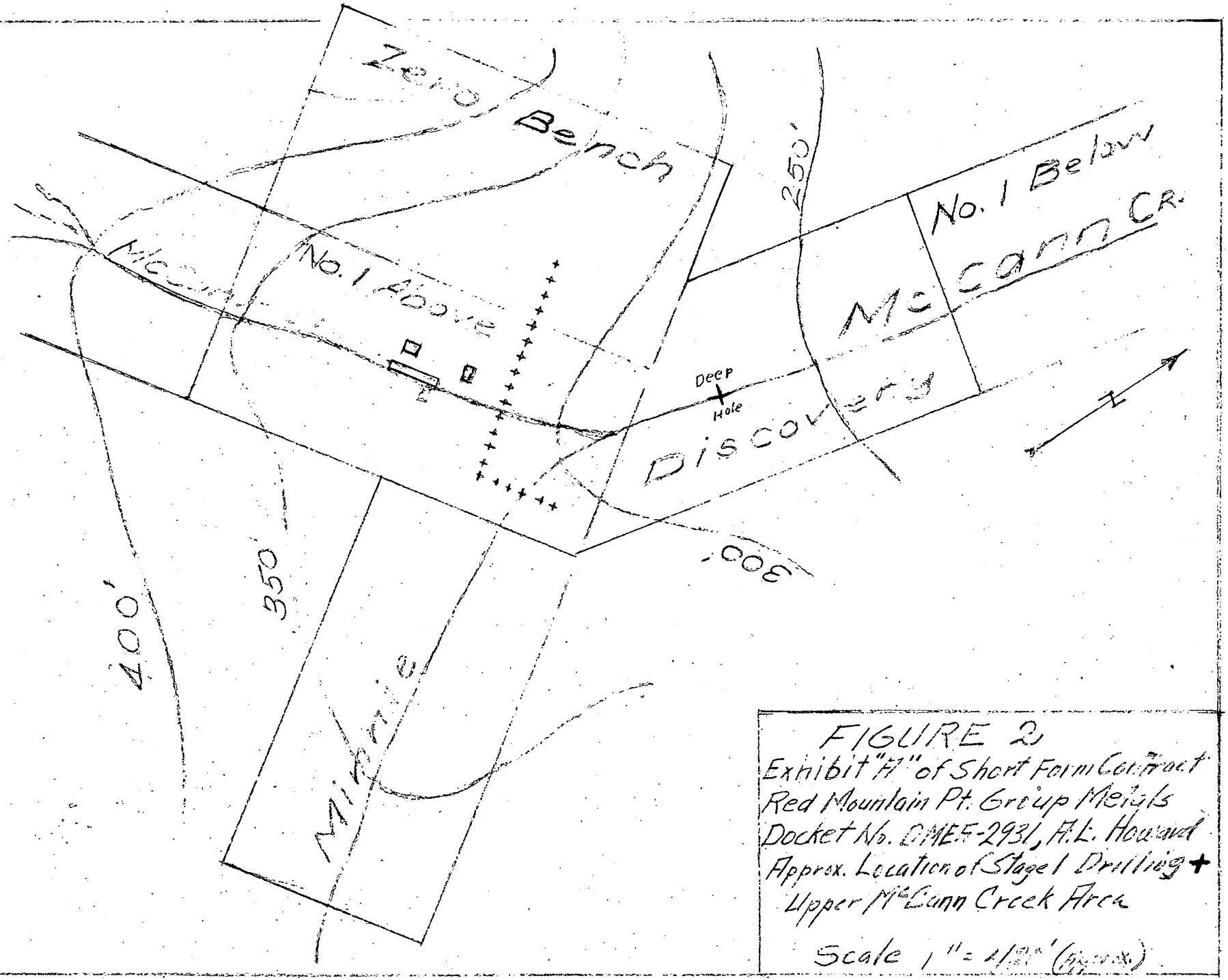
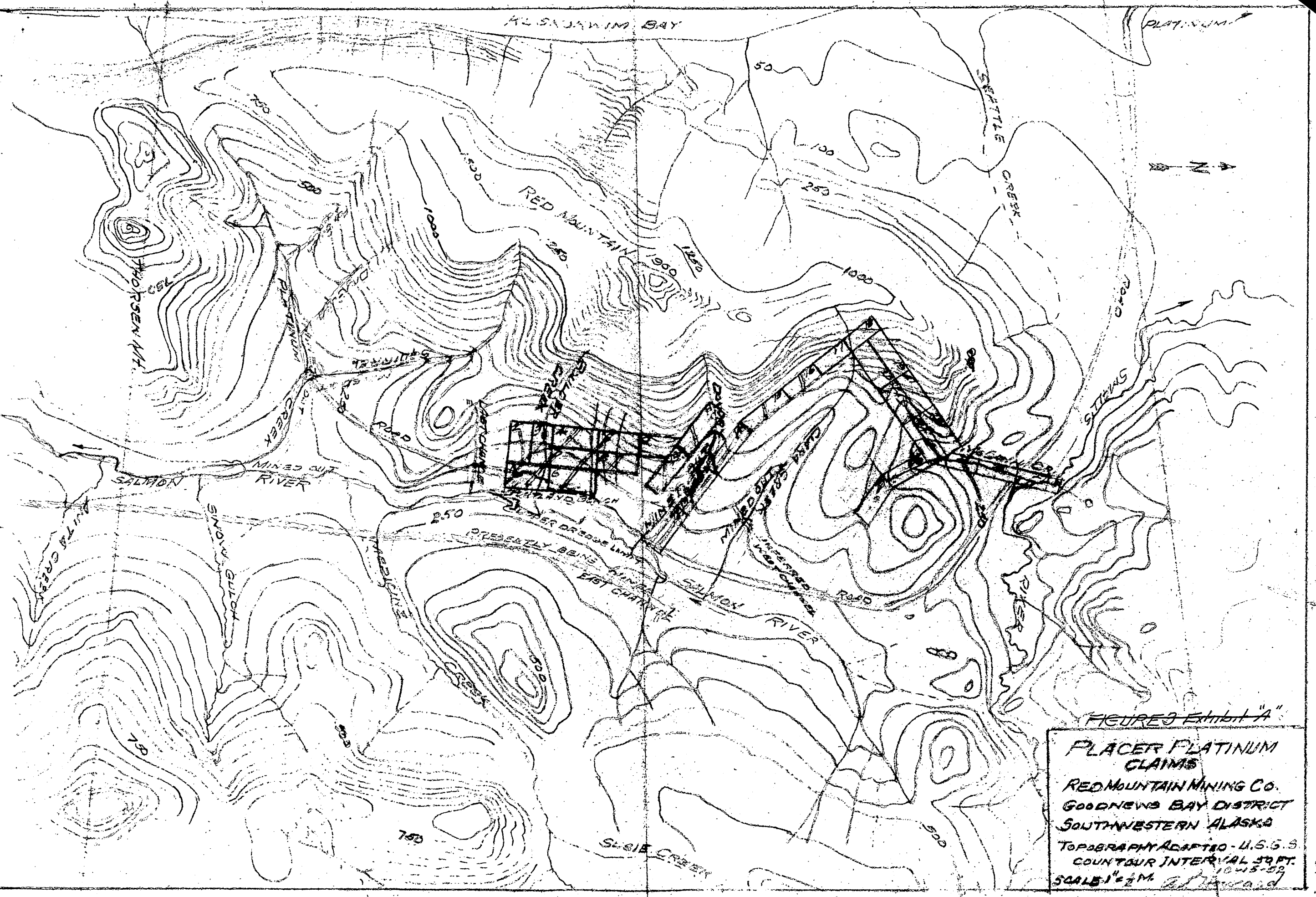


FIGURE 2
Exhibit "A" of Short Form Contract
Red Mountain Pt. Group Metals
Docket No. OMEF-2931, A.L. Howard
Approx. Location of Stage 1 Drilling +
Upper McCann Creek Area

Scale 1" = 4[illegible]' (approx.)



~~FIGURE 3 Exhibit "A"~~

PLACER PLATINUM CLAIMS

RED MOUNTAIN MINING CO.

GOODNEWS BAY DISTRICT

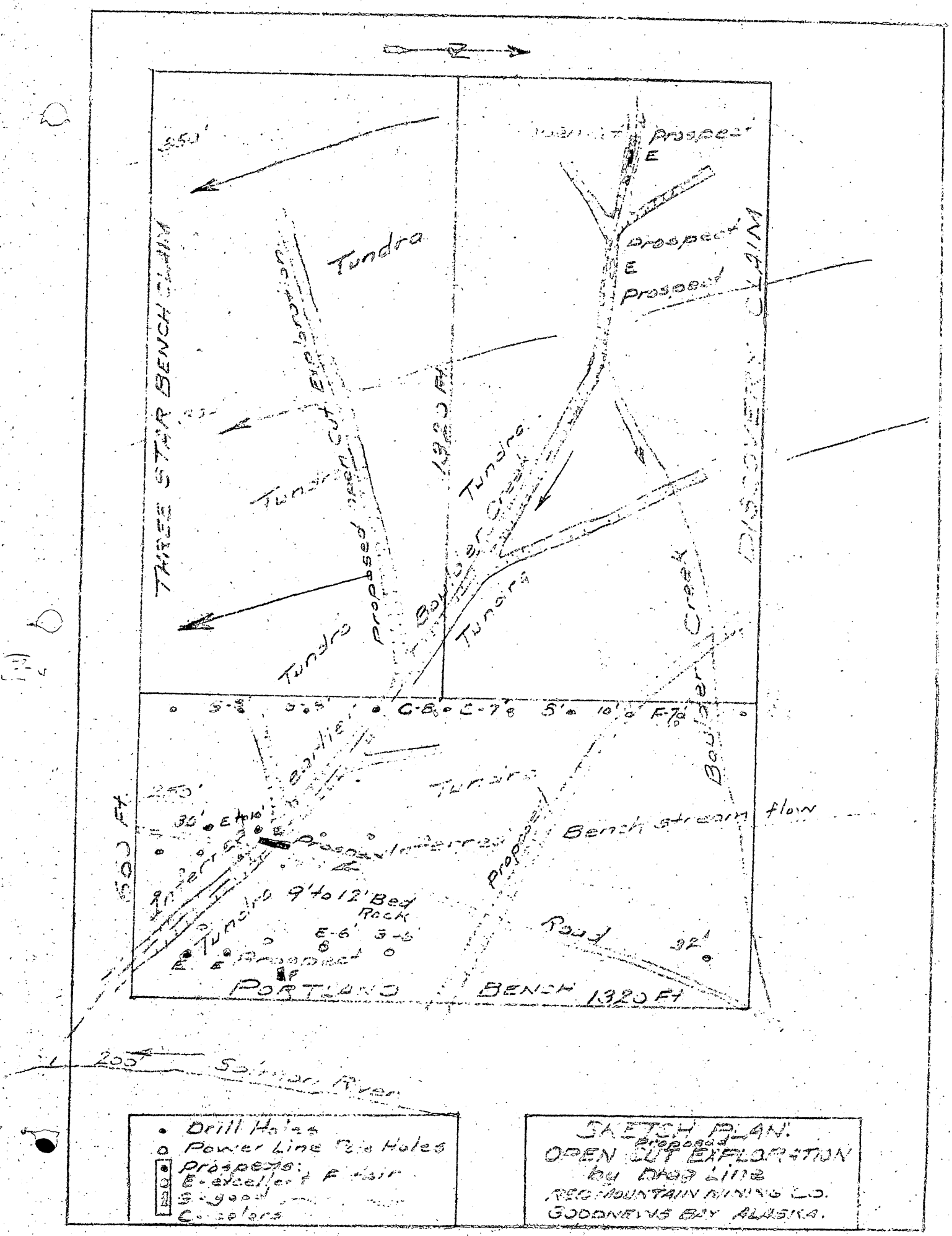
SOUTHWESTERN ALASKA

TOPOGRAPHY ADAPTED - U.S.G.S.

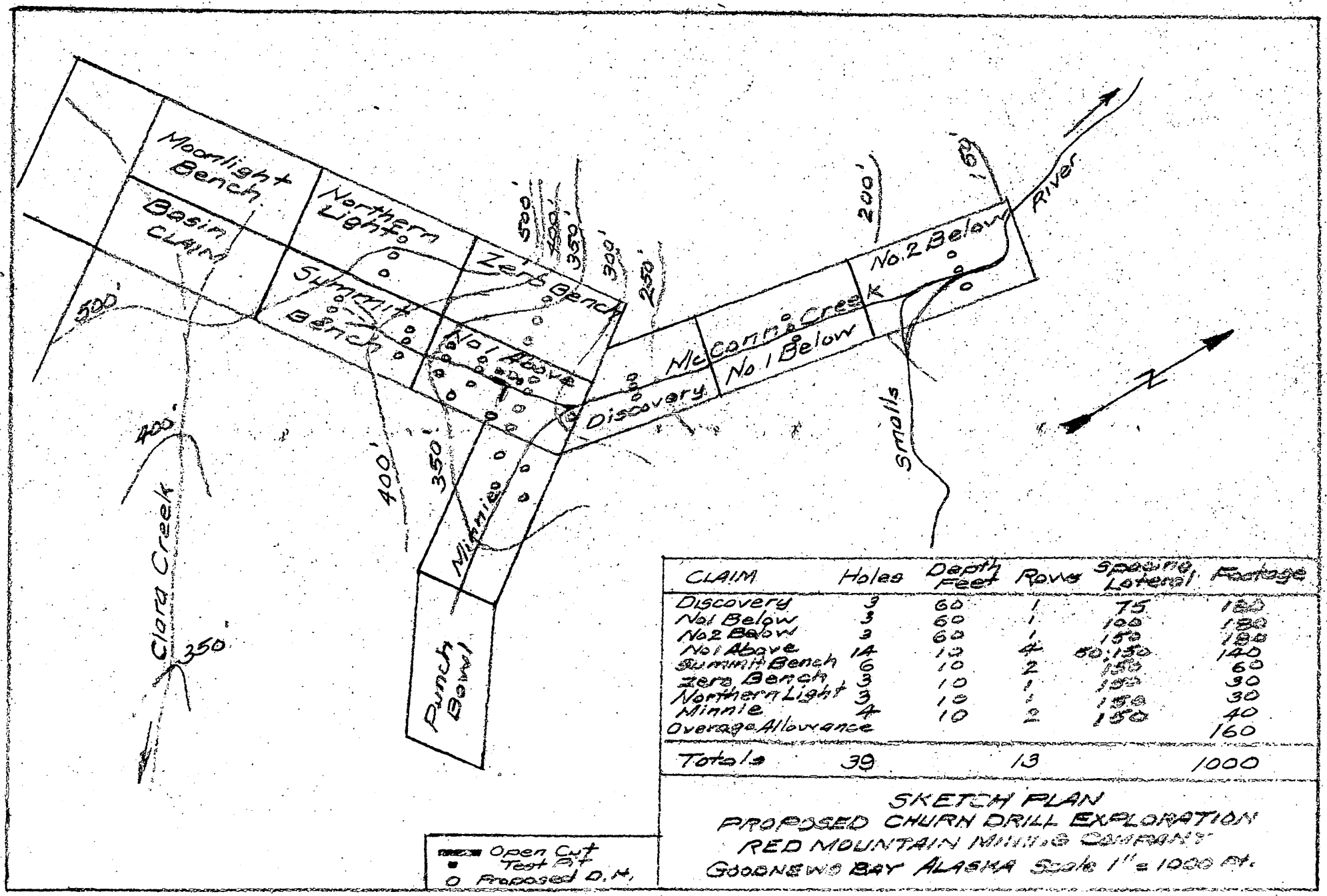
COUNTOUR INTERVAL 50 FT.

SCALE 1" = ½ M.

10-15-52

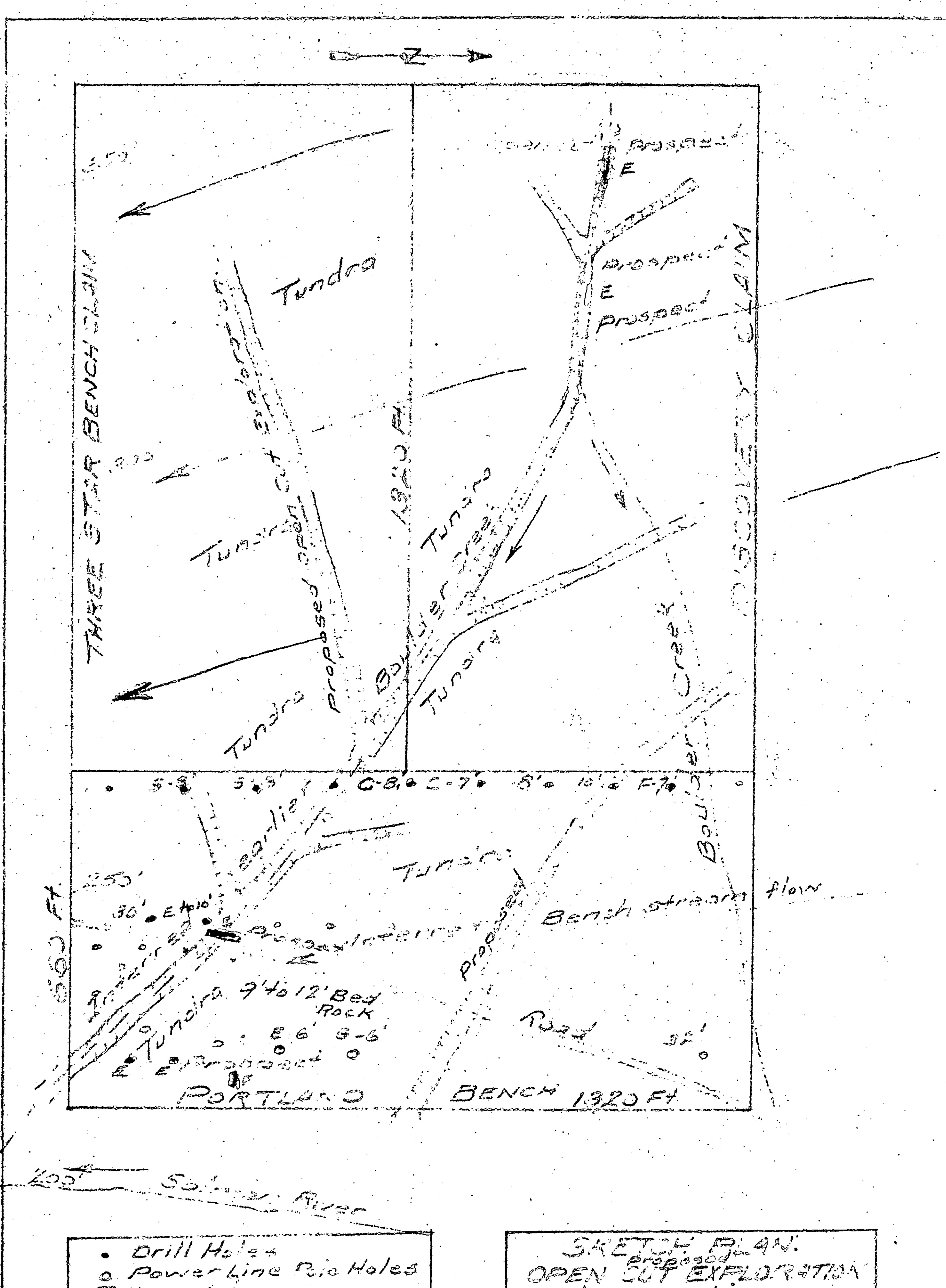

Prospect
E
Prospect
E
Prospect
Tundra
THREE STAR BENCH CLAIM
Tundra
Tundra
Proposed
Boulder Creek
1320 Ft.
Tundra
Tundra
Boulder Creek
C-8
C-7
5'
10'
F-7
Tundra
Bench stream flow
Tundra 9' to 12' Bed Rock
E-6
3-6
Road
PORTLAND BENCH 1320 Ft
Solomon River
Drill Holes
Power Line Test Holes
Prospects:
E-excellent F-fair
G-good
C-colors
SKETCH PLAN:
Proposed
OPEN CUT EXPLORATION
by Drag Line
REG MOUNTAIN MINING CO.
GOODNEWS BAY ALASKA.

dmea 2931



CLAIM	Holes	Depth Feet	Rows	Spacing Lateral	Footage
Discovery	3	60	1	75	180
No1 Below	3	60	1	100	180
No2 Below	3	60	1	150	180
No1 Above	14	10	4	80-150	140
Summit Bench	6	10	2	150	60
Zero Bench	3	10	1	150	30
Northern Light	3	10	1	150	30
Minnie	4	10	2	150	40
Overage Allowance					160
Totals	39		13		1000

dmia 2931



SKETCH PLAN
Proposed
OPEN CUT EXPLORATION
by Drag Line
RED MOUNTAIN MINING CO.
GOODNEWS BAY ALASKA.

dmea 2931

WILLIAM A. O'NEILL
REGISTERED
CONSULTING MINING ENGINEER
ANCHORAGE, ALASKA

Placer exploration
Red Mountain Goodnews Bay
Record 4648
Inactive
DOOEA-

EXAMINATION OF PLATINUM PLACER CLAIMS

Goodnews Bay District

For

RED MOUNTAIN MINING CO.

WILLIAM A. O'NEILL
REGISTERED
CONSULTING MINING ENGINEER
ANCHORAGE, ALASKA

EXAMINATION OF PLATINUM PLACER CLAIMS

Goodnews Bay District

For

RED MOUNTAIN MINING CO.

The examination of this ground was made between August 24, and September 1, 1948. It was undertaken on authority of a letter dated August 2, signed by Mr. Fred H. Pradt, Secretary, Red Mountain Mining Company.

Travel to the property was made by plane, leaving Anchorage, Alaska, on August 24, and returning to Anchorage early on the morning of September 1.

Five days were spent on the property and adjacent areas, which included a trip over the operations of the Goodnews Bay Company, the only operating company in the district. Foul weather and plane connections did not permit leaving the area until late afternoon of August 30.

SUMMARY

The Red Mountain Mining Company has under their control a total of 29 claims, comprising approximately 544 acres. Eight of these claims were recently staked by their representative, Mr. Berness, and are recorded in his name. A complete list of the claims is a part of this report. A search of the records in the recording office at Platinum, Alaska, revealed one claim belonging to a previous claimant. This claim is No. 1 above discovery on Last Chance Creek. It is owned by the Goodnews Bay Mining Co.

Mr. Berness staked the eight claims around the base of the mountain, primarily to join the previous claims into two contiguous groups, and at the same time to secure additional ground. For practical purposes the ground can be divided into four groups of claims (see sketch) as follows:

McCann Creek -- 9 claims all contiguous

Dowry Creek --- 6 claims on both benches

Boulder Creek - 6 claims all contiguous

Miscellaneous - 8 claims, recorded by Berness

WILLIAM A. O'NEILL
REGISTERED
CONSULTING · MINING ENGINEER
ANCHORAGE, ALASKA

With the exception of the claims on McCann Creek, each group of claims is bounded by claims of other owners. The bench claims of Dowry Creek are separated by other ownership of the main creek.

All the ground is located on the North and East flanks or watershed of Red Mountain. This basic intrusive was the source of the platinum bearing gravels of this area.

For many years the ground adjacent to these claims has been mined for its platinum content. The main portions of such creeks as Dowry, Clara, Squirrel and Platinum have been worked out. Therefore, the ground under consideration has considerable possibility. This opinion is further strengthened by the prospecting results to date, although such prospecting is by no means conclusive, nor does it give any definite value to any portion of the ground.

Ultimate systematic prospecting of the ground by shafts or drill would probably prove sections of this ground valuable enough to mine. The question in this case may not, perhaps, be one of ground values, but one of operation, the ground being surrounded by claims of other owners.

Considerable information on this ground is no doubt in the hands of the Goodnews Bay Mining Co. and the Clara Creek Mining Co., as a result of their previous operations and prospecting on the adjacent areas and on some portions of the claims in question.

HISTORY:

The first discovery of platinum was made in this district about 1926 on one of the western tributaries of Salmon River. Only small scale mining operations were carried on until 1934. At this time the Goodnews Bay Mining Co. commenced large scale mining operation on Squirrel Creek with a dragline, bulldozers and washing plant. The operations on Clara Creek were started about the same time, and with the same type of equipment.

In the fall of 1936 a false report, of the discovery of platinum on the west or beach side of Red Mountain, caused considerable exitement, which resulted in a stampede to that section during the following spring and summer. At this time the whole country for miles around was covered by claims staked by individuals and various companies, who had sent their representatives into the field.

After the first boat arrived in Goodnews Bay in June of 1937, several drilling crews were at work, testing various locations, on the periphery of the Salmon River Basin. By September of that year no new platinum finds had been made, and the report which caused the stampede had been proven false. It was then obvious that all the platinum bearing ground was located on the east side of Red Mountain in the

WILLIAM A. O'NEILL
REGISTERED
CONSULTING MINING ENGINEER
ANCHORAGE, ALASKA

Salmon River basin. The majority of this ground was controlled by the two operating companies.

Previous to 1937, while the Goodnews Bay Mining Co. were operating on Squirrel and Platinum Creeks, they were also doing extensive drill prospecting in the main Salmon River. By 1937 a considerable yardage had been proven for its value. As a result, a 9 cubic foot steel dredge was under construction near the mouth of Platinum Creek on the Salmon River, during the summer of 1937. This dredge has been operating for about nine months each year for the past eleven years, and has many more years of life ahead of it.

The Clara Creek Mining Co., owned by Strandberg Sons, had worked out the main channels of Clara Creek and Dowry Creek shortly after the war started. The Strandberg boys went into war work, and the equipment was sold to the Army. To date they have not attempted to resume operations.

LOCATION:

The general district is approximately one hundred miles south of where the Kuskokwim River enters Kuskokwim Bay. Goodnews Bay, from which this district borrows its name, is located at the mouth of Goodnews River, and is ten miles north of the platinum bearing gravels of the Salmon River basin.

The town of Platinum is situated on the low lying spit near the mouth of Platinum River, which empties into the south side of Goodnews Bay. This town consists of a roadhouse, store, radio station, recording office and post office, and a half-dozen dwellings.

The claims are located on the north and east slopes of [illegible] Mountain, and five to seven miles from the town of Platinum.

McCann Creek is a left limit tributary of Platinum River, and five miles southeast of the town.

Boulder Creek and Dowry Creek enter the Salmon River some seven miles to the north of its confluence with Kuskokwim Bay, and eight miles from the town.

TRANSPORTATION:

All the heavy freight for this district is handled by ships of the Alaska Steamship Company from the port of Seattle, Washington. The ships are usually here at Goodnews Bay during the summer. There are in early June, and late August or early September. Therefore, all supplies, equipment and repair parts must be well planned for in advance, so that no serious shortages occur during the winter season of nine months.

WILLIAM A. O'NEILL
REGISTERED
CONSULTING MINING ENGINEER
ANCHORAGE, ALASKA

Power barges of the Goodnews Bay Mining Co. are used to lighter the freight ashore from the ships. Several years ago this lighter service was privately owned, but as the district has reverted to only one operating company, they have gradually acquired all the services connected with maintaining their operation.

A good truck road extends for a distance of ten miles from the lighter landing on the South Spit of Goodnews Bay to the site of operations.

At present the freight rate via ship from Seattle for general freight is from $1.15 to $1.35 per hundred pounds exclusive of wharfage and handling charges. The freight rate for heavy equipment is probably somewhat higher. The previous cost of lightering, when privately owned, was about $10.00 per ton. The minimum cost of landing freight from Seattle on the beach would probably be about $20.00 per ton.

Mail, express and small lots of freight are handled by plane from Anchorage. This service is provided by Northern Consolidated Airlines, using large DC-3's as far as Telida on the Kuskokwim River. From this point to Platinum they have small plane feeder service. Packages under twenty pounds are shipped express, which costs thirty six cents per pound. Larger shipments go by freight, and cost twenty cents per pound.

The round trip fare for passengers is $175.95.

PROSPECTING & MINING:

The claims controlled by the Red Mountain Mining Co. have been variously prospected by shafts and drill holes. To date this prospecting has only given the assurance of the presence of platinum in interesting amounts at various points.

The most recent prospecting has been done by Mr. Harness through means of shafts and open-cut to try and obtain some idea as to the value of the ground. This cut (picture No. 1) was opened up for investigation during the examination, and it afforded an excellent place to pan sample.

During the summer of 1946, Mr. Harness, with the help of one man and using a small airplane drill, sunk 24 holes on the Boulder Creek group of claims, principally on the Portland Bench claim. Through some misunderstanding or confusion, the results of these drill holes were never calculated. Therefore, there is no way in which these holes can be used toward estimating the value of the ground in vicinity.

For the past fourteen years the Goodnews Bay Mining Co. have

WILLIAM A. O'NEILL
REGISTERED
CONSULTING MINING ENGINEER
ANCHORAGE, ALASKA

had one or more prospect drills busy during the operating season. As a result many thousand feet of drill hole has been completed. There is no question but that the area of placer ground which they own is the most thoroughly prospected area in Alaska. Some of this drilling was done on the claims adjacent to the Boulder and Dowry Creek groups of claims. At one time, through an arrangement with Mr. Berness, for Assessment work convenience, they put thirteen holes down on the left limit bench claims of Dowry. The results were not made known to Mr. Berness, and they are not now available.

A small "shoveling-in" operation is the only attempt at mining on any of the claims. This was on the upper end of Discovery Claim (picture No. 2) on Boulder Creek. Only a few yards of dirt were moved, but it afforded an open cut which could be pan sampled.

Mining on a considerable scale has been carried on in the immediate vicinity by the Clara Creek Mining Co. and the Goodnews Bay Mining Co. The Clara Creek Mining Co. worked out the main stream channels of both Dowry and Clara Creeks, one mile, and a mile and one-half respectively north of Boulder Creek.

The Goodnews Bay Mining Co. has mined out the creek beds of both Squirrel and Platinum Creeks about a mile to the south of Boulder Creek. Mining on these creeks as with Clara Creek has been done with draglines, bulldozers, and washing plants. Mining on the Salmon River has been carried on with the nine cubic foot dredge. When the operations ceased in the fall of 1947, this dredge was working along the southern half of the eastern boundary of the Portland Bench claim. Early in the spring of 1948 the dredge was turned around and headed down stream. It is reported that this maneuver was carried out because of the low grade of ground at this point in the Salmon River.

The draglines formerly used in the mining of Squirrel and Platinum Creeks are now being used to mine an older channel on the left limit of the present Salmon Creek channel (pictures No. 3 & 4). Exceptional rich sections have been reported to be uncovered in this older channel. The present operations in this channel are opposite Dowry and Boulder Creeks.

CLAIMS:

The scope of this report did not warrant spending time to locate all the claim corners, nor to make a brunton pace survey of the entire area. However, a search was made of the records in the recording office at Platinum. This search resulted in finding one claim -- No. 1 above discovery, Last Chance Creek -- belonging to the Goodnews Bay Co. previous to staking by Mr. Berness on September 12, 1941. The Goodnews Bay Mining Co. had purchased one-half interest in this claim from Mr. Harry Shippey by a lease dated July 21, 1939. Since that time they have been recording the assessment work or filing affidavit of intention to hold.

WILLIAM A. O'NEILL
REGISTERED
CONSULTING MINING ENGINEER
ANCHORAGE, ALASKA

The sketch included in this report was prepared partly from Brunton pace survey; only a few corners were located in this manner, the rest are merely sketched.

Except for the fractions mentioned, all the claims are assumed to be a full 20 acres.

McCANN CREEK:

The nine claims listed in this group also include two claims on Minnie Gulch. The claims cover practically the entire area of the creek and hillside from the confluence of McCann and Smalls River, over into the head of Clara Creek at the base of the mountain. It is a small drainage from the most northerly exposure of the basic intrusive, and is apparently on the contact between the intrusive and the sedimentary rocks.

A few years ago the Goodnews Bay Co. had this ground under their control. They put down a hole near the mouth of Minnie Gulch, which is reported to be anywhere from 40 to 70 feet deep. Since only one hole was put down it is assumed the results were poor.

Mr. Berness put a hole down to a depth of 25 feet near the summit on the Northern Light claim, and reports some platinum. He also reports traces of platinum on the surface near the head of the creek.

There are no open pits or cuts that could be pan sampled. There is small possibility of any appreciable concentration of platinum in this creek.

DOWRY CREEK:

The five claims and one fraction making up this group are on either bench. Two claims are on the right limit bench and the other three claims and one fraction are on the left limit bench.

The main stream bed for a width of 100 to 150 feet has been worked out by Strandberg & Sons. Most of the ground was worked by lease from the Goodnews Bay Mining Co. who own most of the creek claims.

Thirteen drill holes were put down a few years ago on the left limit claims by the Goodnews Bay Mining Co. under an assessment agreement with Mr. Berness. The results of those holes are not available.

All the claims of this group are bounded by claims of the Goodnews Bay Co. or Strandberg and Sons. They are therefore, unworkable unless the surrounding claims can be acquired by lease or working agreement.

WILLIAM A. O'NEILL
REGISTERED
CONSULTING MINING ENGINEER
ANCHORAGE, ALASKA

There are no open pits or cuts by which these claims could be pan sampled.

BOULDER CREEK:

The claims grouped under this creek also include the bench claims on the right toward Last Chance Creek and on the left toward Dowry Creek. Of the four groups of claims, this can be considered the most important.

The present flow of water in this creek is very small, and the surface indentation is very slight. It is much less well defined than either Dowry or Clara. The prospecting on the claims has been mostly confined to the Portland Bench claim. It is the only claim of all the groups upon which any amount of prospecting has been done.

Twenty-four drill holes were put down on the western half of this claim in 1947. Unfortunately the results were never calculated. From the sketch map made at that time the holes show an average depth of 11 feet. Drill holes previously put down on the east side of Portland Bench and First Tier Bench show a depth of 32 and 45 feet. This indicates an old, but possibly narrow, channel on the right limit of the present Salmon River stream.

Three sets of samples were taken from this ground. For the purpose of calculations the price of platinum was taken at $35.00 per ounce. The results are as follows:

Sample No. 1 From the open cut on the upper end of Discovery claim (picture No. 2). Four pans over a depth of four feet from the surface to bedrock, reduced by 20% because the surrounding area was at least two feet higher, gave a value of $1.73 per cubic yard.

Sample No. 2 From the Berness cut (picture No. 1). Five pans over a depth of 30 inches from the surface gave a value of $1.24 per cubic yard. The false bedrock above which the pay is supposed to lay is six feet deeper than this cut.

Sample No. 3 The boxes which Mr. Berness had been shoveling into were cleaned up for the first 12 feet of their length. The pit was measured and showed that he had shoveled in four cubic feet of material. The platinum from this first 12 feet of boxes for the amount of ground calculated out at $1.11 per cubic yard. This is conservative, as some of the platinum could not be separated from the black sand by panning.

WILLIAM A. O'NEILL
REGISTERED
CONSULTING MINING ENGINEER
ANCHORAGE, ALASKA

It is interesting to note that these three separate samples checked out close to each other. The average for the three is $1.36 per cubic yard.

There is no way in which one can judge the amount of yardage of this value. The original samples from the 24 holes drilled would have given considerable information.

GENERAL:

The Goodnews Bay Co. are now mining an older channel of Salmon River on the left limit bench of the present stream (pictures No. 3 & 4) opposite Dowry and Boulder Creeks. Mining of this channel requires an extensive drainage system into Salmon River. This is possible at this point due to its slightly higher elevation.

Further down stream they will have to work this channel with dredge, as the bedrock of this older channel has a steeper gradient than the present stream.

The supposed channel on the east side of Portland Bench and First Tier Bench may be impossible to mine because its depth is apparently near a level with the bedrock of Salmon River.

During the last year of operations on Clara Creek the Strandbergs encountered a deeper channel on the right limit of Discovery claim. Due to the depth of ground and the lack of drainage it was necessary for them to discontinue this cut. It is quite possible that this could be an older channel from Dowry Creek.

From all indications it seems probable that one could pan platinum at most any place along the east flank of Red Mountain.

PROSPECTING:

Prospect drilling is the only way in which this ground could be developed. A few shafts at separated locations on the area may be necessary to properly ascertain the character of the ground for mining.

The small drill used by Mr. Berness in 1947 could be utilized for the preliminary drilling program. It would be more satisfactory if a larger self-propelled drill of the Goodnews Bay Co. could be rented.

A two or three months drilling program would be sufficient to determine the possible extent of the platinum concentration and whether further drilling would be necessary.

An estimated cost of such a program would be from ten to twelve thousand dollars. The crew would consist of three men on the drill and a cook.

WILLIAM A. O'NEILL
REGISTERED
CONSULTING MINING ENGINEER
ANCHORAGE, ALASKA

MINING:

A mining setup could not be planned until the drilling proved whether or not sufficient yardage would be available.

In the past both the other companies have used draglines to hoist the dirt into elevated sluice boxes, with bulldozers for distributing the tailing and cleaning bedrock. Some of the ground in question might possibly be worked by using dozers to push directly into boxes on bedrock, with a dragline for stacking tailings. In my opinion this is not ground suitable for dredging operations.

CONCLUSIONS:

The foregoing facts and information lead to the following conclusions:

1. The McCann Creek ground would warrant a few drill holes if the other ground showed enough valuable yardage to work.

2. All the claims except those on McCann Creek are more or less surrounded by claims of other ownership.

3. There is little chance of an extensive channel on the Boulder-Dowry ground like there is on the left limit of Salmon River.

4. In any development program the value of platinum should be taken at $35.00 per ounce for the purpose of calculating the drill holes.

5. Sufficient water for mining could be obtained by ditching and pumping to get recirculation of the available water.

6. Some of the area now covered by claims would prove unprofitable to work. There is a possibility that not enough yardage could be developed to warrant the expense of a new installation.

7. The Clara Creek Mining Co. (Strandberg & Sons) do not seem disposed to renew operations in this area, even though it is understood that they have equipment available and already paid for from other operations which they could move on to the ground.

8. Both the Goodnews Bay Co. and Strandbergs have information pertaining to this ground that would be very valuable to have.

9. The concentration of platinum in the Boulder-Dowry area could not be expected to be as great as that previously found in the Clara and Dowry Creek channels.

10. Congress may not waive the assessment work for 1949.

11. The results of the pan sampling done on this ground, during the examination, are alone important enough to warrant further

WILLIAM A. O'NEILL
REGISTERED
CONSULTING MINING ENGINEER
ANCHORAGE, ALASKA

investigation of this ground under the following recommendations.

RECOMMENDATIONS:

1. Negotiate with the Goodnews Bay Mining Co. and Strandberg and Bone for a reasonable lease, option or working agreement on the surrounding claims which they control. This would include Last Chance Creek, Annie Creek and the Bench claims on the right limit of Slate Creek.

2. Included in the above negotiations should be the divulging of the information which these companies now have of the area in question.

3. If reasonable arrangements can be made, then a drilling program should be started.

4. If it is not possible to make the above arrangements, then I recommend that a good driller be employed to work with Mr. Berness to put down a few well spaced holes, to try and determine the extent of the platinum concentration, as cheaply as possible. This will take care of the assessment work and give a fair idea as to what values are in the ground in case the Goodnews Bay Mining Co. would want to buy the ground rather than permit leasing of the ground they hold.

October 19, 1948

William A. O'Neill

WILLIAM A. O'NEILL
REGISTERED
CONSULTING MINING ENGINEER
ANCHORAGE, ALASKA

Boulder Creek Claims

CLAIM	Locator	Date	Filed for Record Vol.	Page	Inst.
Portland Bench	Berness	Oct. 7,'41	2	317	1040
1st Tier 7 Above	Berness	Oct. 2,'41	2	305	1014
Three Star Bench	Berness	Oct. 25,'41	3	241	1538
Discovery	Berness	June 6,'42	3	21	1021
Hardluck Bench	Roslund	June 18,'41	2	230	919
Osmeridium Bench	Berness	Aug. 11,'46	3	236	1529
	Deeded to Red Mountain Mining Co.				
Hardluck Bench		May 31,'46	3	210	1495
Portland Bench) Discovery) 1st Tier 7 Above)		May 31,'46	3	211	1496
Three Star Bench) Osmeridium Bench)		May 2,'47	3	244	1572

WILLIAM A. O'NEILL
REGISTERED
CONSULTING MINING ENGINEER
ANCHORAGE, ALASKA

Dowry Creek Claims

Claim	Locator	Date	Filed for Record Vol.	Page	Inst.
Jenny Bench R. L.	Berness	Aug. 11,'46	3	235	1528
Benny Bench R. L.	Leivstad	Aug. 27,'40	2	95	695
Suprise Bench L. L.	Roslund	Aug. 10,'39	1	116	153
Honey Bench L. L.	Roslund	Aug. 20,'40	2	81	671
Sugar Bench L. L.	Berness	Aug. 10,'40	2	73	661
M & C Fraction L. L.	Berness	Aug. 10,'40	2	73	662

Deeded to Red Mountain Mining Co.

Suprise Bench) Honey Bench)	May 31,'46	3	210	1495
Benny Bench	May 31,'46	2	95	695
Jenny Bench	May 2,'47	3	244	1572
M & C Fraction) Sugar Bench)	May 31,'46	3	211	1496

WILLIAM A. O'NEILL
REGISTERED
CONSULTING MINING ENGINEER
ANCHORAGE, ALASKA

McCann Creek Claims

Claim	Locator	Date	Filed for Record Vol.	Page	Inst.
2 Below Discovery	Berness	Aug. 11,'46	3	237	1531
1 Below Discovery	Berness	Aug. 23,'41	2	275	969
Discovery	Berness	Aug. 23,'41	2	274	967
1 Above Discovery	Berness	Aug. 11,'46	3	236	1530
Zero Bench	Berness	Oct. 25,'46	3	242	1540
Northern Light B	Berness	Oct. 25,'46	3	241	1539
Summit Bench	Berness	Aug. 22,'40	2	85	679
Minnie	Berness	Aug. 22,'40	2	85	680
Punch Bowl	Berness	June 6,'42	3	21	1020

Deeded to Red Mountain Mining Co.

Discovery) 1 Below Discovery) Summit Bench) Punch Bowl) Minnie)	May 31,'46	3	211	1496
1 Above Discovery) Zero Bench) 2 Below Discovery) Northern Light Bench)	May 2,'47	3	244	1572

WILLIAM A. O'NEILL
REGISTERED
CONSULTING MINING ENGINEER
ANCHORAGE, ALASKA

Miscellaneous Claims

Between Boulder and Dowry Creeks

Claim	Locator	Date	Filed for Record Vol.	Page	Inst.
Oakland Bench	Berness	May 10,'48	3	302	1692
Frisco Bench	Berness	May 10,'48	3	303	1693
Brooklyn Bench	Berness	May 10,'48	3	303	1695

The above claims were staked around the base of Red Mountain to connect the claims of the Boulder group with the claims on Right Limit of Dowry Creek. This makes eleven claims contiguous for convenience of assessment work.

Between Dowry and McCann Creeks

New York Bench	Berness	May 10,'48	3	303	1694
Boston Bench	Berness	May 10,'48	3	304	1696
Chicago Bench	Berness	May 10,'48	3	305	1697
Bessie Bench	Berness	May 10,'48	3	305	1698
Moonlight Fraction	Berness	May 10,'48	3	305	1699

These claims were staked around the base of Red Mountain for the purpose of connecting the Left Limit Dowry claims with the group of claims on McCann Creek.

With the exception of the M & C Fraction and the Moonlight Fraction, all the claims are assumed to be a standard 20 acres. A compilation shows the following:

Boulder Creek	6 claims	120 acres
Dowry Creek	6 claims	104 acres
McCann Creek	9 claims	180 acres
Miscellaneous	8 claims	140 acres
Total	29	544

UPPER McCANN CREEK
LOOKING NORTHEAST

Three [illegible]
recovered [illegible] at [illegible]
years

Lmw 2931

Looking down McCann Creek toward Smalls River valley in background

Minnie gulch creek enters from right in middle ground

Northeast spur of Red Mountain in left middle ground

dmea 2931

Looking northerly down Medicine

Note beach gravels in right hand

dmea 2931

Bench gravels on eastern slope of Red Mountain

Dowry creek (worked out) in middle ground

Clara creek basin in distance to right (north)

dmea 2931

Near upper reach of Boulder Creek showing character of upper bench gravel

dmea 2931

Looking toward Red Mountain
from lower Portland bench
Headwaters of Boulder creek in
upper right corner
Squirrel Creek basin upper left

dmea 2931

Goodnews Bay Mining Co upper East channel bench operations as viewed from claims of Red Mountain Mining Company

Looking toward Kemuk-Susie Mountains area.

dmea 2931

Dredge operating on Salmon River immediately east from south end of Portland bench claim

dmea 2931

UPPER McCANN CREEK
LOOKING WEST
TAKEN [illegible]
FROM 37 [illegible]
SMALLS RIVER VALLEY IN BACKGROUND

tmia 2931

Looking down McCann Creek toward Smalls River valley in background.

Minnie gulch creek enters from right in middle ground

o Northeast spur of Red Mountain on left middle ground

dmcw 2931

1 2

looking northerly down McCann Creek
note cement gravels on right hand

dmea 2931

Dredge operating on Salmon River immediately east from south end of Portland bench

dmea 2931

Bench gravels on eastern slope
of Red Mountain

Downy Creek worked in
middle ground

Slate Creek basin in distance
to the right (north)

dmea 2931

Looking toward Kemuk-Susie Mountains Area

Goodnews Bay Mining Company upper East channel bench operations as viewed from claims of Red Mountain Mining Company

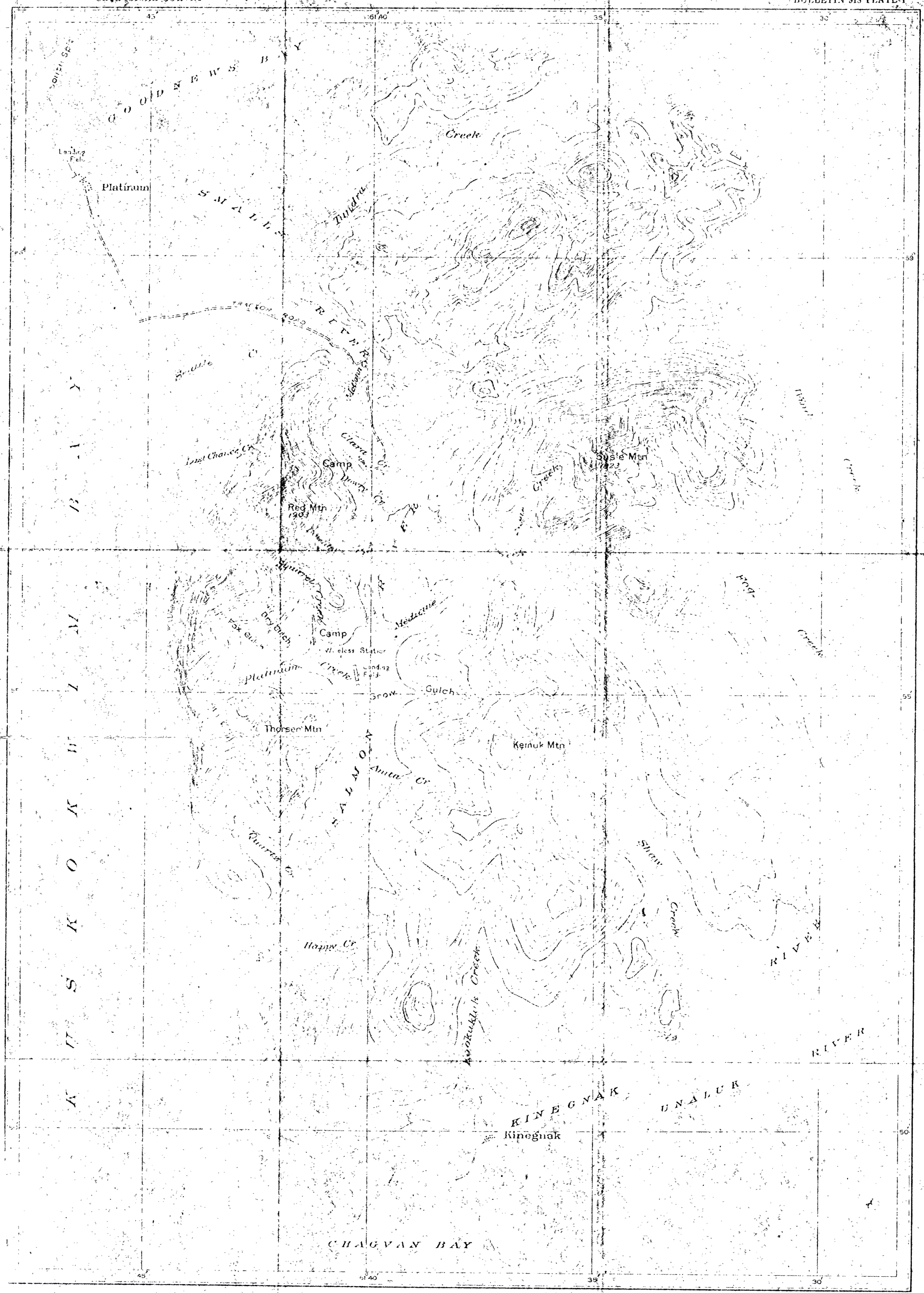
dmer 2931

Looking toward Red Mountain
from lower Portland bench
headwaters of Boulder Creek
in upper right corner
Squirrel Creek basin upper left

dmea 2931

Near upper reach of
Boulder Creek showing
character of bench gravel

dmea 2931



Prepared by Alaska Branch
Topography by Gerald FitzGerald
Areas not surveyed in detail indicated by broken lines
Surveyed in 1937

TOPOGRAPHIC MAP OF PLATINUM AND VICINITY, ALASKA

Scale 1/62,500

1 ½ 0 1 2 3 4 Miles

5,000 0 5,000 10,000 15,000 Feet

1 ½ 0 1 2 3 4 Kilometers

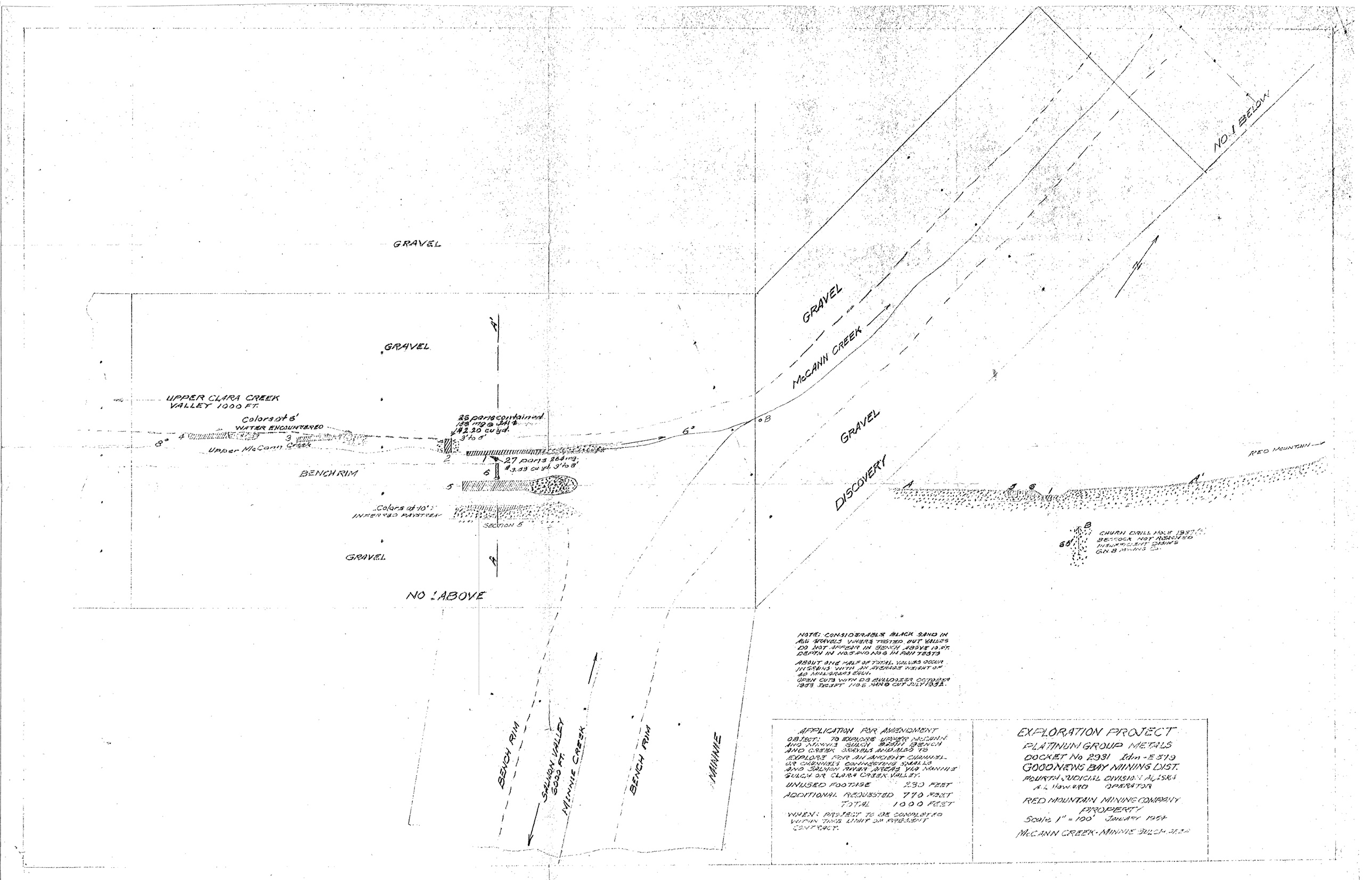
Contour interval 50 feet

Datum is approximate mean sea level

1910

19°
TRUE NORTH
MAGNETIC NORTH
APPROXIMATE MEAN DECLINATION, 1938

WILLIAMS & HEINTZ CO. WASH. D. C.



NOTE: CONSIDERABLE BLACK SAND IN ALL GRAVELS WHERE TESTED BUT VALUES DO NOT APPEAR IN BENCH ABOVE 13 FT. DEPTH IN NO. 5 AND NO. 6 IN PAN TESTS

ABOUT ONE HALF OF TOTAL VALUES OCCUR IN GRAINS WITH AN AVERAGE WEIGHT OF 40 MILLIGRAMS EACH.

OPEN CUTS WITH D8 BULLDOZER OCTOBER 1959 SKEFT 1106 MINE OFF JULY 1962.

APPLICATION FOR AMENDMENT

OBJECT: TO EXPLORE UPPER McCANN AND MINNIE GULCH BENT 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 PRESENT CONTRACT.

EXPLORATION PROJECT

PLATINUM GROUP METALS

DOCKET No 2931 Idn - E 319

GOODNEWS BAY MINING DIST.

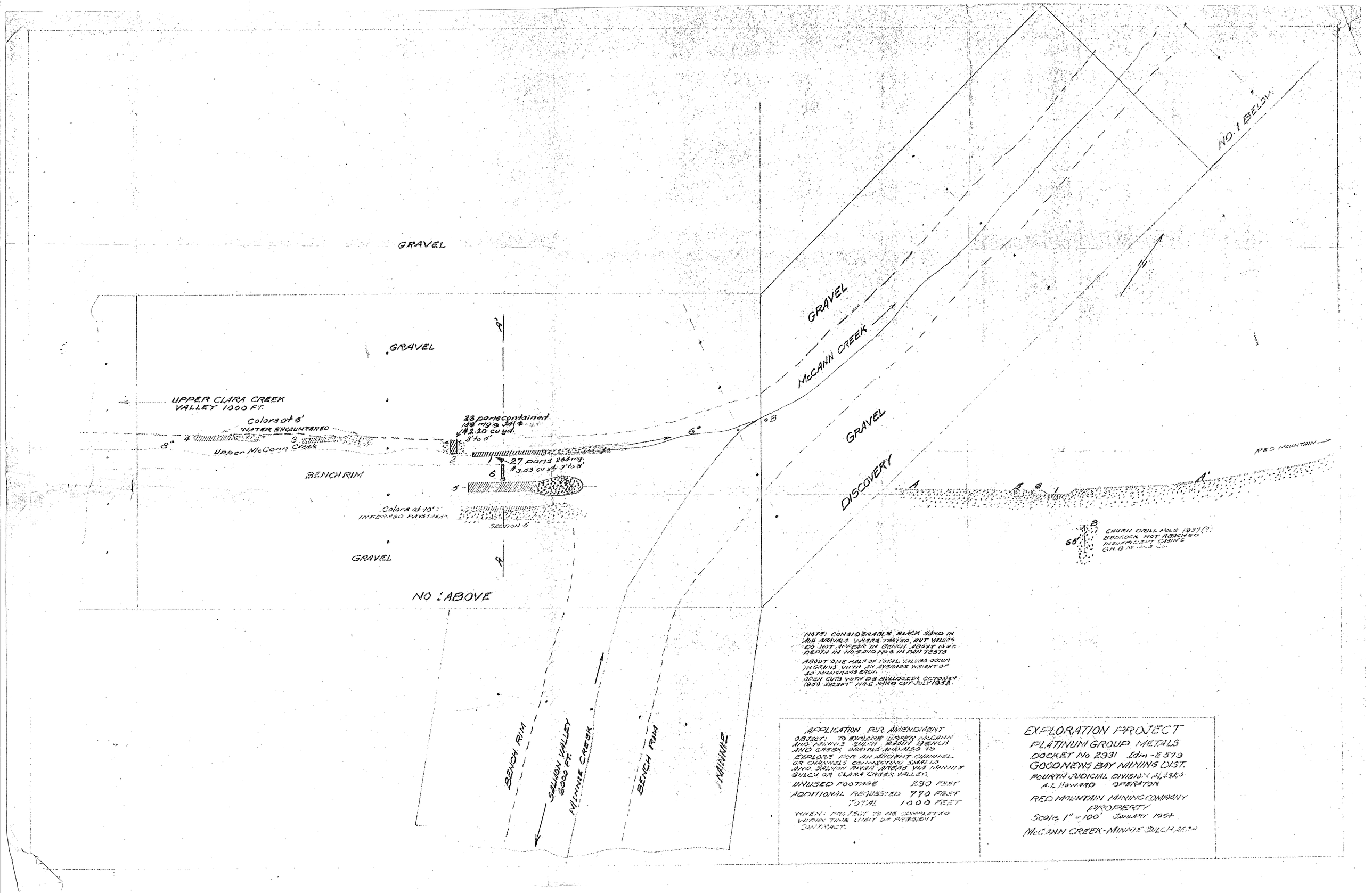
FOURTH JUDICIAL DIVISION ALASKA

A. L. Howard OPERATOR

RED MOUNTAIN MINING COMPANY PROPERTY

Scale 1" = 100' January 1964

McCANN CREEK - MINNIE GULCH AREA



NOTE: CONSIDERABLE BLACK SAND IN ALL GRAVELS WHERE TESTED, BUT VALUES DO NOT APPEAR IN BENCH ABOVE 13 FT. DEPTH IN NO 5 AND NO 6 IN PAN TESTS

ABOUT ONE HALF OF TOTAL VALUES OCCUR IN GRAVEL WITH AN AVERAGE WEIGHT OF 40 MILLIGRAMS EACH.

GRAV CUTS WITH D8 BULLDOZER OCTOBER 1973 SKEIFF HOLE WAS CUT JULY 1972.

APPLICATION FOR AMENDMENT

OBJECT: TO EXPLORE UPPER McCANN AND MINNIE GULCH BASIN 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 PRESENT CONTRACT.

EXPLORATION PROJECT

PLATINUM GROUP METALS

DOCKET No 2931 Idn-E 313

GOODNEWS BAY MINING DIST.

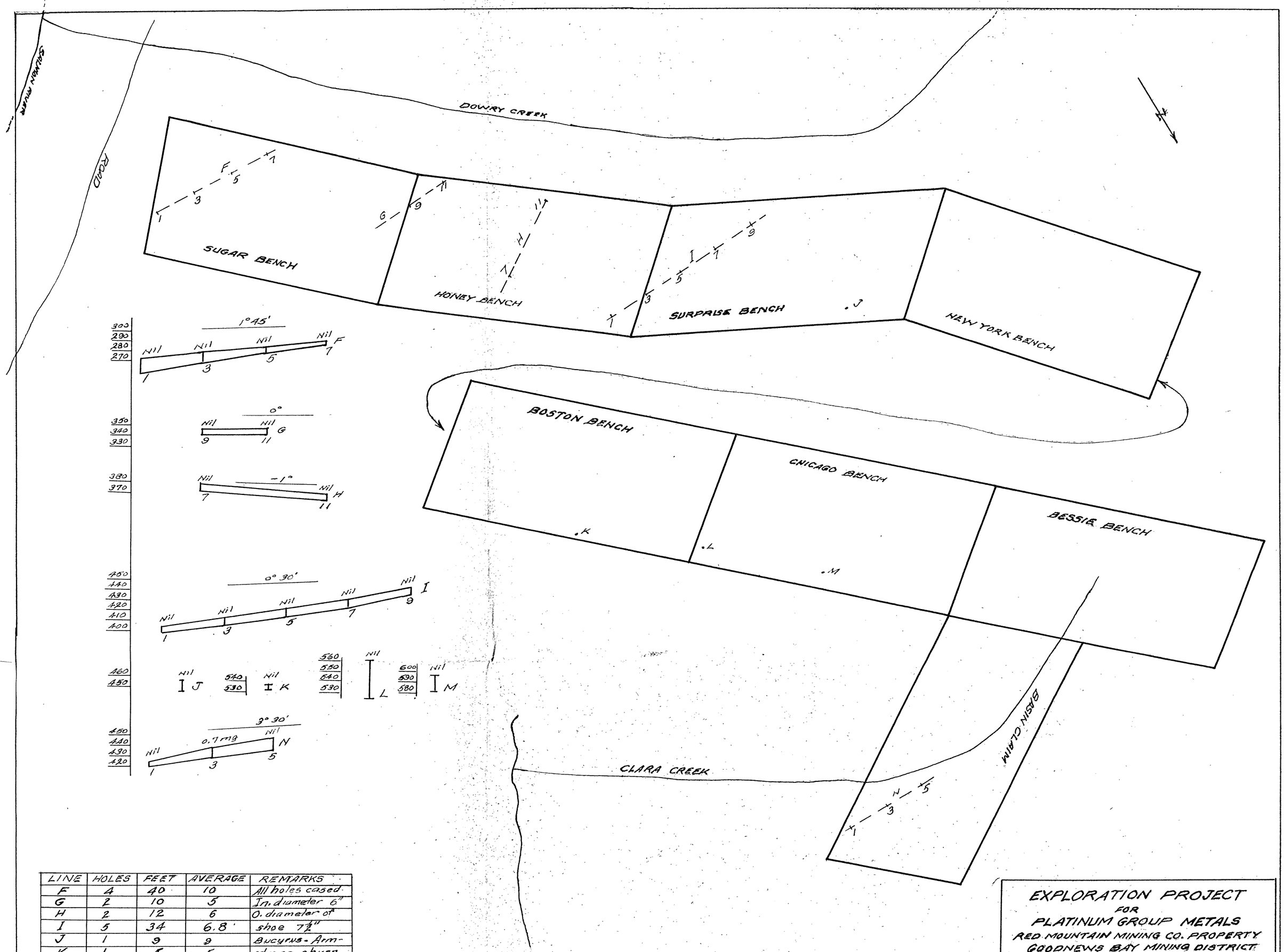
FOURTH JUDICIAL DIVISION ALASKA

A.L. Howard OPERATOR

RED MOUNTAIN MINING COMPANY PROPERTY

Scale 1" = 100' January 1954

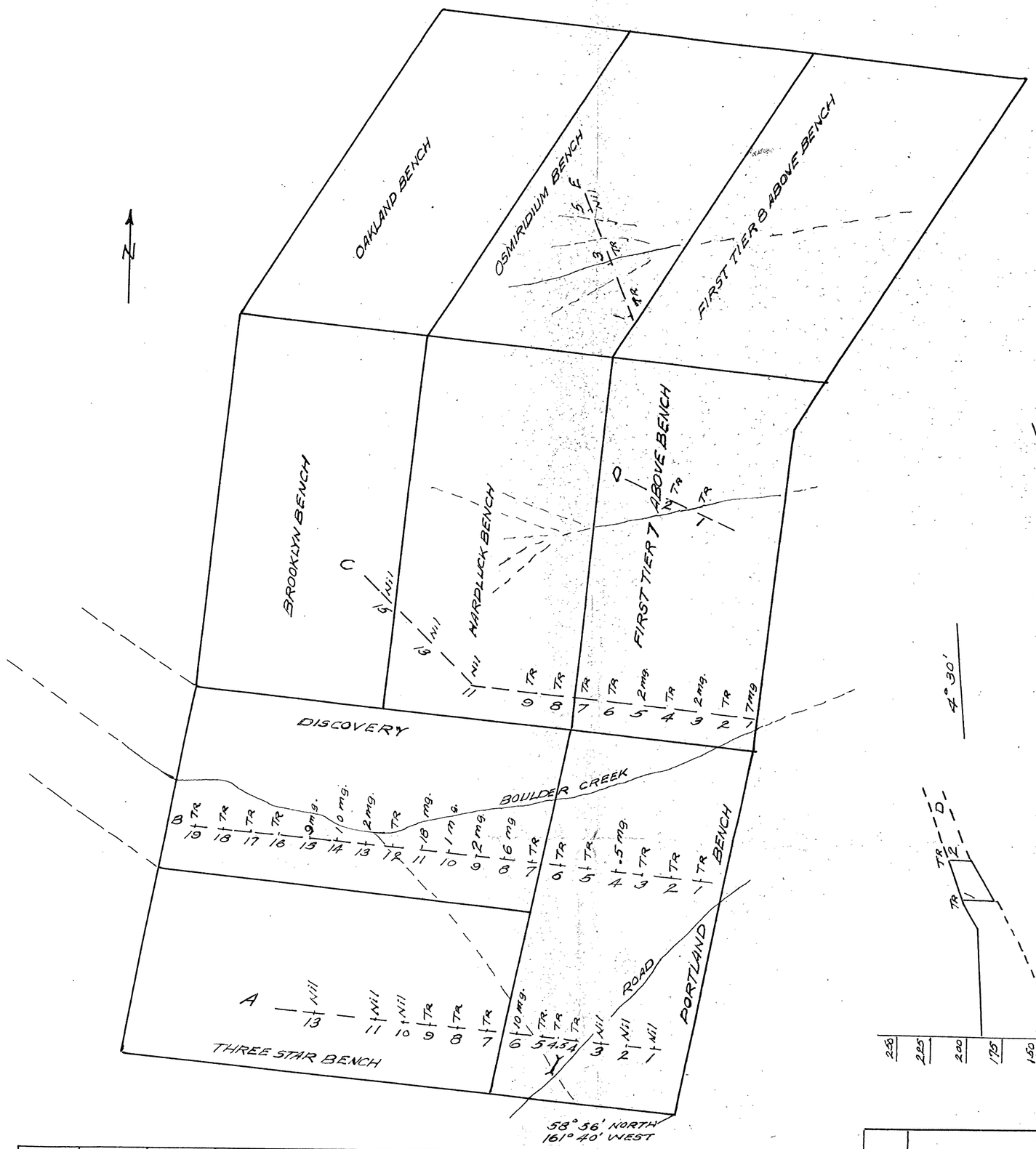
McCANN CREEK-MINNIE GULCH AREA

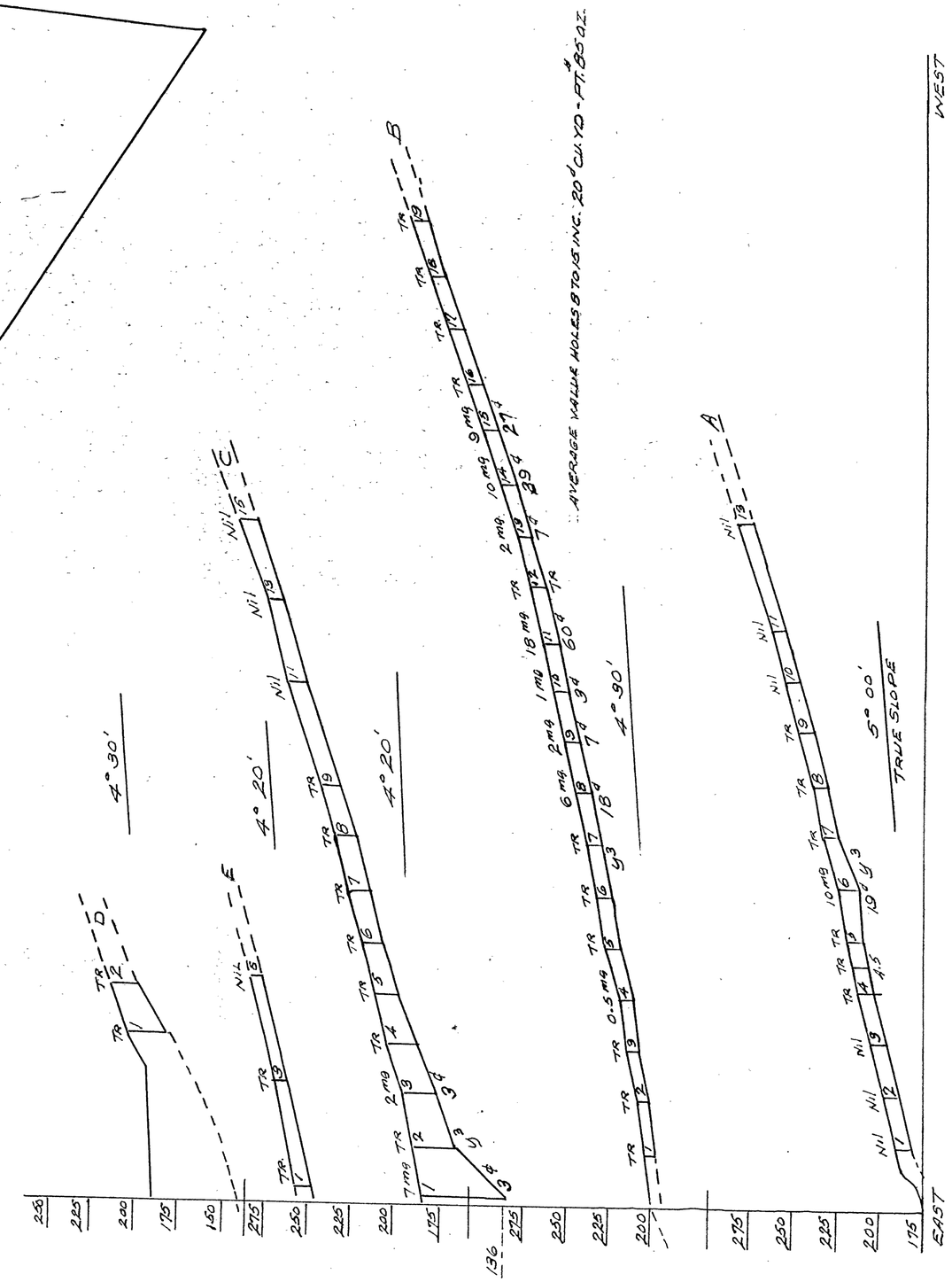


LINE	HOLES	FEET	AVERAGE	REMARKS
F	4	40	10	All holes cased
G	2	10	5	In. diameter 6"
H	2	12	6	O. diameter 8"
I	5	34	6.8	shoe 7½"
J	1	9	9	Bucyrus-Arm-
K	1	5	5	strong churn
L	1	36	36	drill
M	1	15	15	
N	3	26	8.67	
Totals	20	187	9.35	

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-E 879
A.L. HOWARD - OPERATOR - OCTOBER 1953

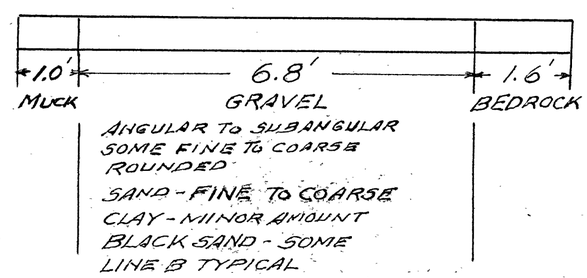




LINE	HOLES	FEET	AVERAGE	REMARKS
A	13	144.5	11.115'	All holes cased
B	19	178.5	9.395	In. Dia. Casing 6"
C	12	204.0	17.00	O. Dia. shoe 7½"
D	2	36.0	18.00	Churn Drill
E	3	20.0	6.67	
TOTALS	49	583.0	11.90	

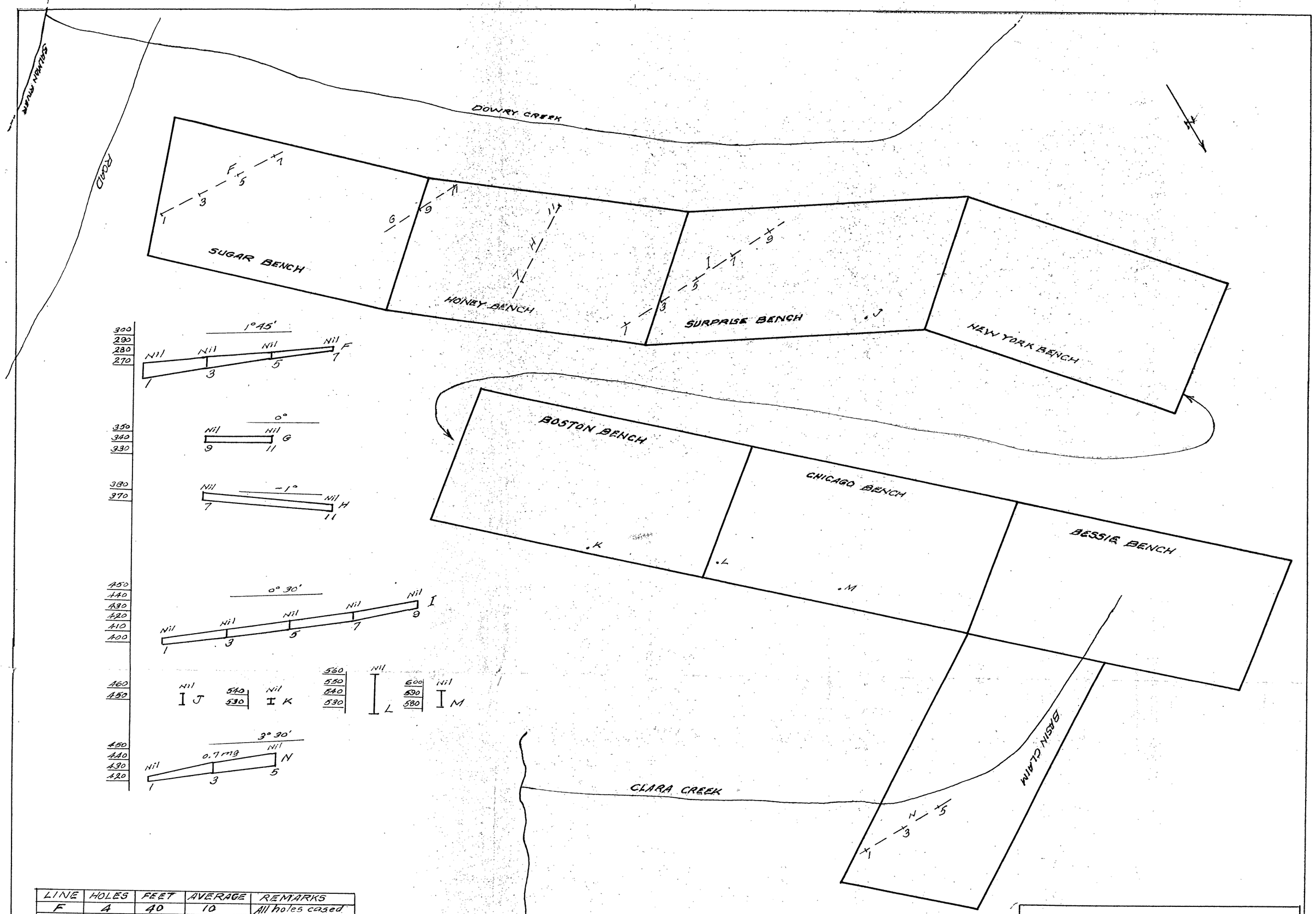
PLAN SCALE 1" = 300'

AVERAGE VALUE HOLES B TO 18 INC. 20 ¢ CU. YD - PT. 85 OZ.



ANGULAR TO SUBANGULAR
SOME FINE TO COARSE
ROUNDED
SAND - FINE TO COARSE
CLAY - MINOR AMOUNT
BLACK SAND - SOME
LINE B TYPICAL

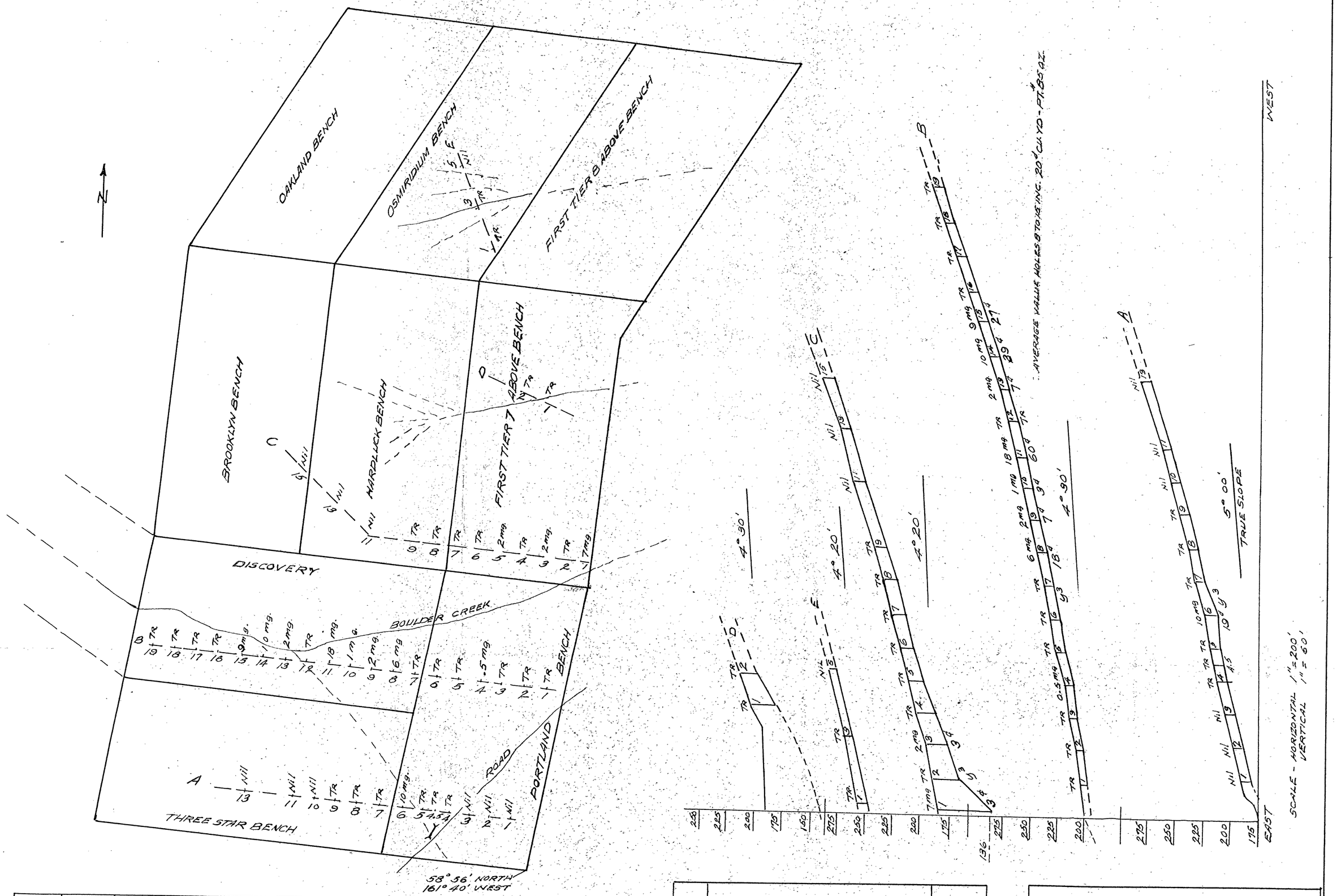
EXPLORATION PROJECT
FOR
PLATINUM GROUP METALS
DOCKET No 2931 Idm-E579
GOODNEWS BAY MINING DISTRICT
FOURTH JUDICIAL DIVISION ALASKA
RED MOUNTAIN MINING COMPANY
A. L. HOWARD OPERATOR
OCTOBER 1953



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-E379
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	

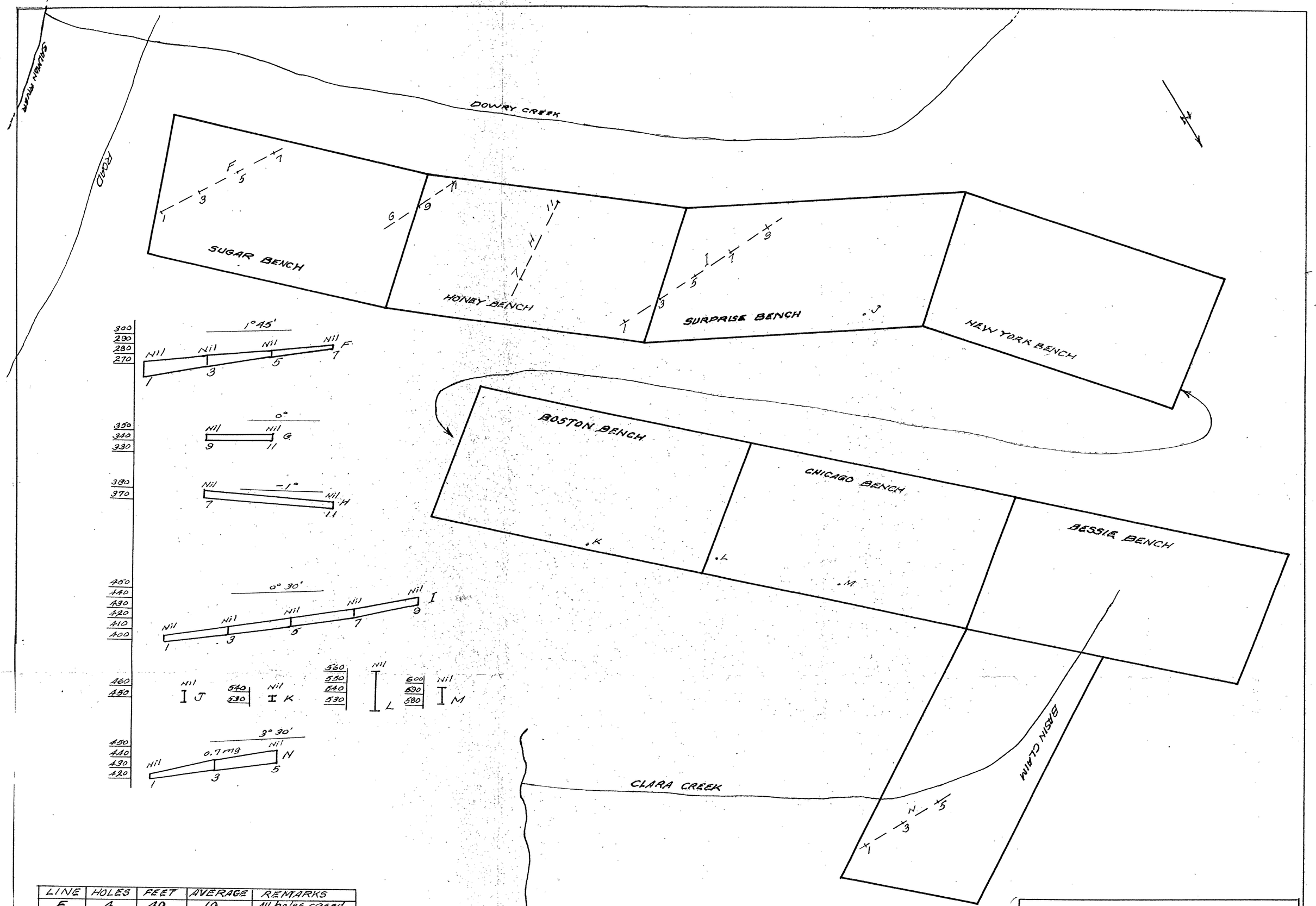
PLAN SCALE 1" = 300'

1.0'	6.8'	1.6'
MUCK	GRAVEL	BEDROCK

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

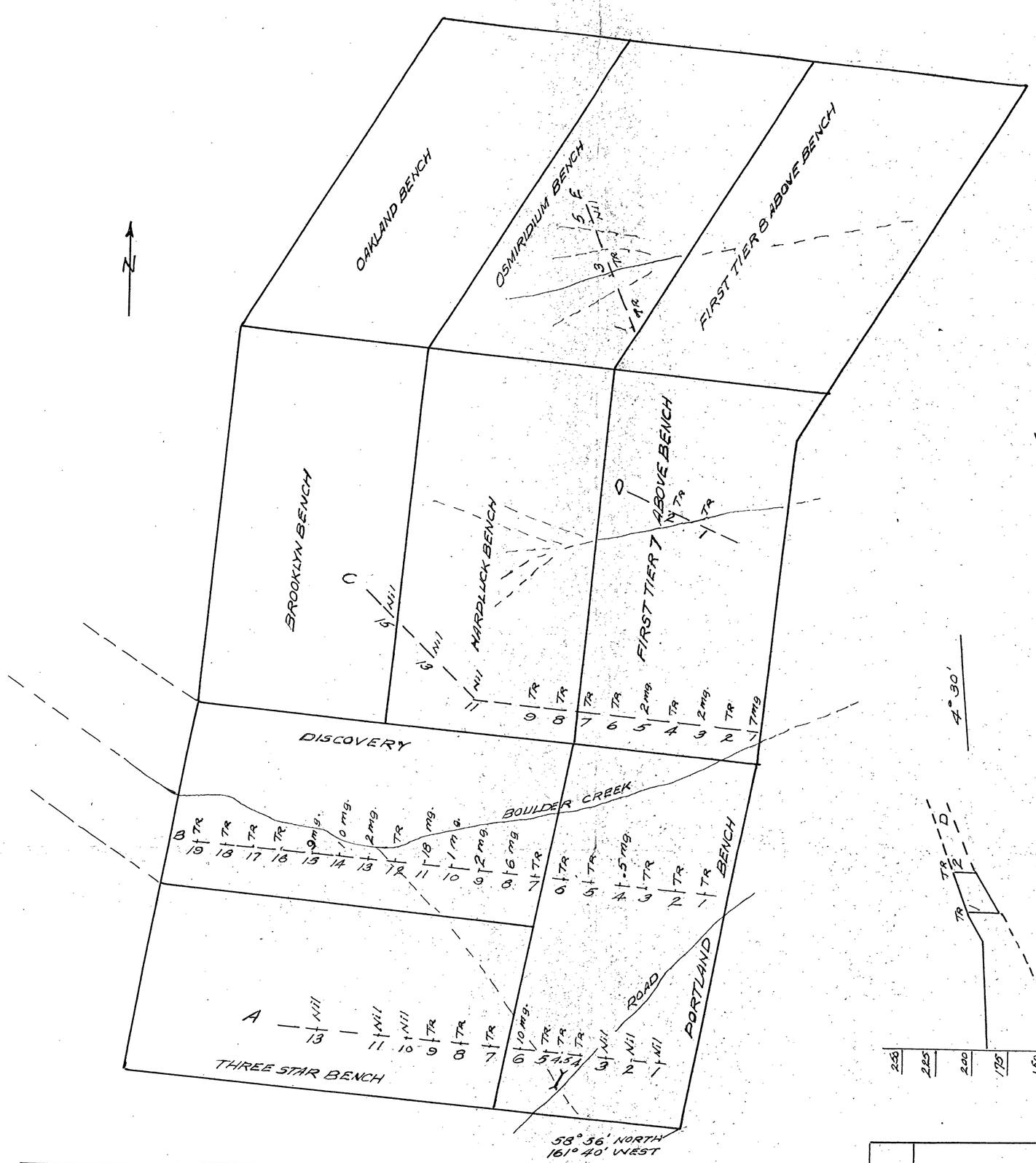
DOCKET No. 2931 Idm - E579
GOODNEWS BAY MINING DISTRICT
FOURTH JUDICIAL DIVISION ALASKA
RED MOUNTAIN MINING COMPANY
A. L. HOWARD OPERATOR
OCTOBER 1953

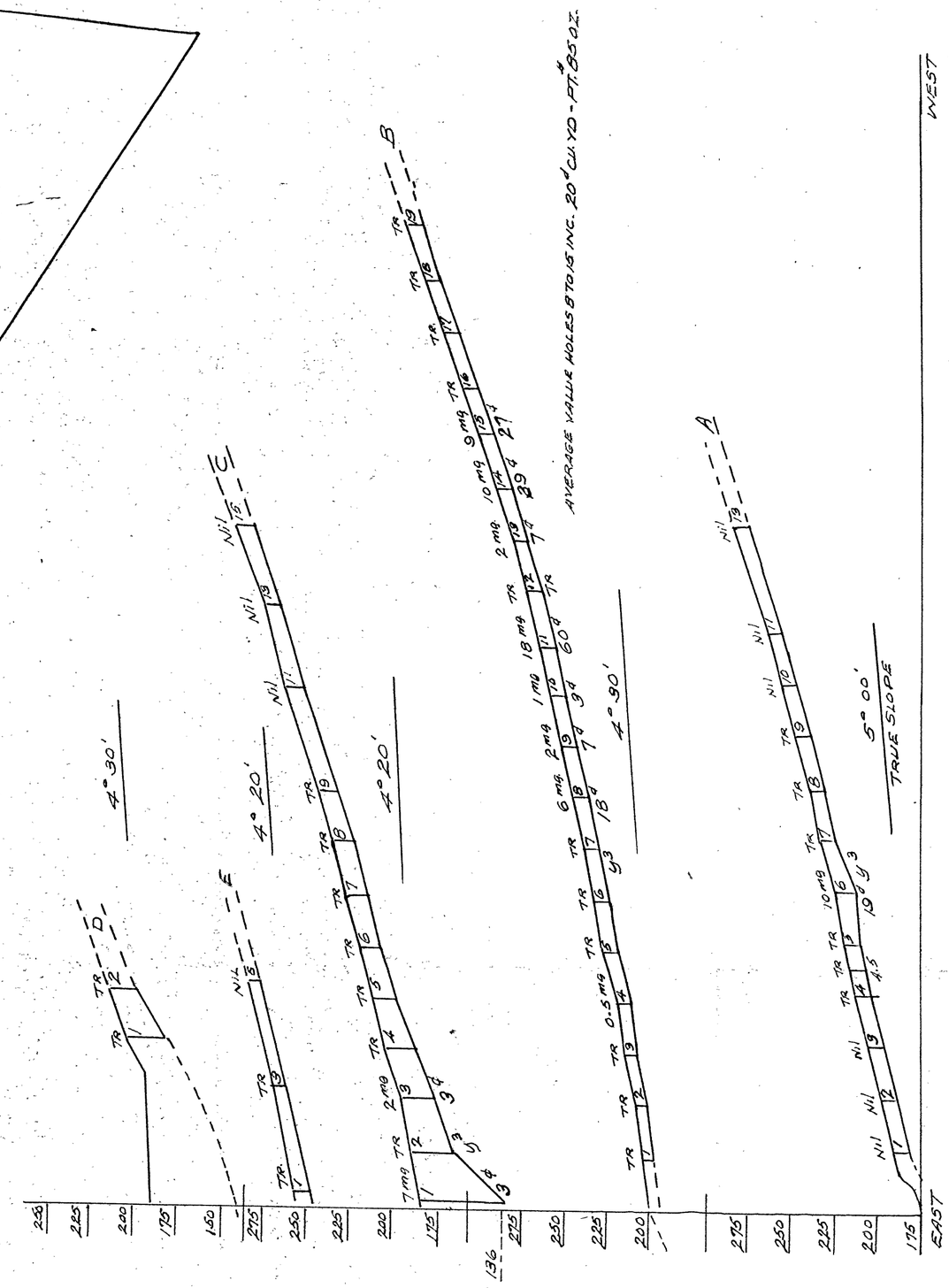


LINE	HOLES	FEET	AVERAGE	REMARKS
F	4	40	10	All holes cased
G	2	10	5	In. diameter 6"
H	2	12	6	O. diameter of
I	5	34	6.8	shoe 7½"
J	1	9	9	Bucyrus-Arm-
K	1	5	5	strong churn
L	1	36	36	drill
M	1	15	15	
N	3	26	8.67	
Totals	20	187	9.35	

PLAN SCALE 1" = 300' PROFILE - VERT. 1" = 60' HOR. 1" = 200'

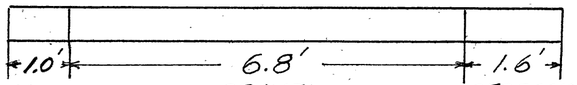
EXPLORATION PROJECT
FOR
PLATINUM GROUP METALS
RED MOUNTAIN MINING CO. PROPERTY
GOODNEWS BAY MINING DISTRICT
SOUTHWESTERN ALASKA
DOCKET NO. 2931 IDM-E479
A. L. HOWARD - OPERATOR - OCTOBER 1953





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-E579
GOODNEWS BAY MINING DISTRICT
FOURTH JUDICIAL DIVISION ALASKA
RED MOUNTAIN MINING COMPANY
A. L. HOWARD OPERATOR
OCTOBER 1933