DMEA 2964

DOCKET INDEX

ACTION DOCUMENTS

1	APPLICATION		DATE RECEIVED	3-30-53
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3	TERMINATION AGREEMENT		DATE	11-30-55
4	CERTIFICATION		DATE	
5	AUDIT REPORT		DATE	
6	AMENDMENTS - NUMBERS	1	DATE	3/25/54
		2		8/30/54
		3		9/7/54

Docket copy

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TERMINATION AGREEMENT

It is agreed this 30th day of November, 1955, between the United States of America, acting through the Department of the Interior, Defense Minerals Exploration Administration, hereinafter called the "Government," and Schroeder Mining Company, hereinafter called the "Operator," parties to that certain Exploration Project Contract IdM-E578, Docket No. DMEA-2054, dated August 7, 1953, hereinafter called the "Contract," that:

1. Effective September 1, 1955, the Contract and all [illegible] Contract, except as otherwise [illegible] provided, shall be and are hereby terminated.

2. The Government will contribute only to the fixed unit costs of work performed prior to said effective date, provided that the Government may deduct the sum of $500 from any money due the Operator in lieu of the Operator making and rendering the final report and final account required under the Contract.

3. All rights of the Government provided for in the Contract with respect to a certification of discovery or development and a percentage royalty and lien for its payment are preserved.

4. The Operator hereby releases and agrees to save the Government harmless from all claims or demands under or arising out of said Contract, except as otherwise provided in this termination agreement.

Executed in sextuplicate the day and year above written.

THE UNITED STATES OF A[illegible]

By [illegible]
Administrator, Defense Minerals Exploration Administration

Rubin
"Appd. Sol. Off."
Chapman
Martin
Talbut
Lewis
Selfridge
Jefferson

SCHROEDER MINING COMPANY

By C. A. Ramsson

Asst. Secy. Treas.

12/12/55

2864

Mr. Martin:

The unexecuted Amend. 4 should be kept in official docket; also Mr. Chamberlain should see it to note on his records it is no longer in field and won't be executed.

ls

Seems unnecessary to add these claims at this stage unless there is some Legal reason. Please check

Operator's copy

EXPLORATION PROJECT CONTRACT
SCHROEDER MINING CO.
DOCKET NO. DMEA-2964

AMENDMENT NO. 4

It is agreed this 8th day of September, 1954, between the United States of America, acting through the Department of the Interior, Defense Minerals Exploration Administration, and Schroeder Mining Co., that Exploration Project Contract Idm-E578 (Docket No. DMEA-2964), dated August 7, 1953, as amended, is further amended, effective August 7, 1953, as follows:

The following patented mining claims are added to the land referred to in Article 2 of the Contract:

Good Fortune group (Mineral Certificate 140) surveyed under U. S. Survey 194:

Blue Jay Fraction
Golden Rule
Juneau
Valley

Nightingale group (Mineral Certificate 137) surveyed under U. S. Survey 196:

Hoosier
Crown
Mollie Gibson

Executed in sextuplicate the day and year first above written.

THE UNITED STATES OF AMERICA

By C. Mitchendorf
Administrator, Defense Minerals
Exploration Administration

SCHROEDER MINING CO.

By _____

_____

Finance Office copy

EXPLORATION PROJECT CONTRACT
SCHROEDER MINING CO.
DOCKET NO. DMEA-2964

AMENDMENT NO. 3

It is agreed this 8th day of September, 1954, between the United States of America, acting through the Department of the Interior, Defense Minerals Exploration Administration, and Schroeder Mining Co., that Exploration Project Contract Idm-E578 (Docket No. DMEA-2964), dated August 7, 1953, as amended, is further amended, effective August 7, 1953, as follows:

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Blue Jay Fraction
Golden Rule
Juneau
Valley

Nightingale group (Mineral Certificate 137) surveyed under U. S. Survey 196:

Hoosier
Crown
Mollie Gibson

Executed in sextuplicate the day and year first above written.

THE UNITED STATES OF AMERICA

By O. M. Theudorp
Administrator, Defense Minerals
Exploration Administration

SCHROEDER MINING CO.

By _____

_____

Field Team copy

EXPLORATION PROJECT CONTRACT
SCHROEDER MINING CO.
DOCKET NO. DMEA-2964

AMENDMENT NO. 8

It is agreed this 8th day of September, 1954, between the United States of America, acting through the Department of the Interior, Defense Minerals Exploration Administration, and Schroeder Mining Co., that Exploration Project Contract Idm-E578 (Docket No. DMEA-2964), dated August 7, 1953, as amended, is further amended, effective August 7, 1953, as follows:

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Good Fortune group (Mineral Certificate 140) surveyed under U. S. Survey 194:

Blue Jay Fraction
Golden Rule
Juneau
Valley

Nightingale group (Mineral Certificate 137) surveyed under U. S. Survey 196:

Hoosier
Crown
Mollie Gibson

Executed in sextuplicate the day and year first above written.

THE UNITED STATES OF AMERICA

By C. D. Mitchendorf
Administrator, Defense Minerals
Exploration Administration

SCHROEDER MINING CO.

By _____

_____

Docket copy

EXPLORATION PROJECT CONTRACT
SCHROEDER MINING CO.
DOCKET NO. DMEA-2964

AMENDMENT NO. 4

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The following patented mining claims are added to the land referred to in Article 2 of the Contract:

Good Fortune group (Mineral Certificate 140) surveyed under U. S. Survey 194:

Blue Jay Fraction
Golden Rule
Juneau
Valley

Nightingale group (Mineral Certificate 137) surveyed under U. S. Survey 196:

Hoosier
Crown
Mollie Gibson

Executed in sextuplicate the day and year first above written.

THE UNITED STATES OF AMERICA

By O P Mitteidorf
Administrator, Defense Minerals
Exploration Administration

Porter
Rutledge
Martin
Talbut
Selbridge
Johnson

SCHROEDER MINING CO.

By _____

Rubin
10/20/4

No. 3

AMENDMENT OF CONTRACT: No. IDM-E578

Contract Docket No. DMEA 2964, dated August 7, 1953, between the United States of America and Schroeder Mining Company is hereby amended as follows, effective June 15, 1954:

> Referring to EXHIBIT "A" attached to Exploration Project Contract Form MF-200(A) (February 1952) ception "Description of the Work", second paragraph; and subheadings PHASE "B", Stage I, item "1", in lieu of drilling the three churn drill holes as described therein and as shown on "Figure 3" referred to therein, instead two of the holes will be drilled on the Nightingale claim at the approximate locations shown on the map titled "Schroeder Mining Co., Drill Hole Locations, Nightingale Group, Phase B, Stage I, Date: May 18, 1954" which is attached hereto and made a part of this amendment.
>
> The third hole will be drilled in the general locality of the first two holes, its exact location will be established by mutual agreement between the operator and the Defense Minerals Exploration Administration, depending upon results obtained from drilling the first two holes.

This amendment shall not be construed to increase the estimated total cost of the project, the amount of the Government's contribution, or any item of allowable cost which is expressly designated "allowable maximum".

Dated SEP 7 1954

SCHROEDER MINING CO.

By Paul E. Schroeder

UNITED STATES OF AMERICA

By W.H. King
W.H. King, Executive Officer
DMEA Field Team, Region IV

Photo
10/20/2

No. 2

AMENDMENT OF CONTRACT: No. DMEA-2578

Contract Docket No. DMEA 2964, dated August 7, 1953, between the United States of America and Schroeder Mining Company is hereby amended as follows, effective as of the date of the contract:

> Referring to "Article 3. Exploration project" of Exploration Project Contract Form MF-200(A) (February 1952), following the words "and shall bring the project to completion within a period of", delete "twelve (12)" and in lieu thereof substitute "sixteen (16)".

This amendment shall not be construed to increase the estimated total cost of the project, the amount of the Government's contribution, or any item of allowable cost which is expressly designated "allowable maximum".

Dated AUG 30 1954

SCHROEDER MINING COMPANY

By Paul E. Schroeder
President

UNITED STATES OF AMERICA

By W. H. King
W.H. King, Executive Officer
DMEA Field Team, Region IV

Rubin 5/4/54

No. 1

AMENDMENT OF CONTRACT No. IL-E573

Contract Docket No. DMA 2964, dated August 7, 1953, between the United States of America and Schroeder Mining Co., is hereby amended as follows, effective March 10, 1954:

> Referring to EXHIBIT "A" attached to Exploration Project Contract Form EP-200(A) (February 1952), caption "Description of the Work", heading PHASE "A", subheading "Stage I" item "1", in lieu of drilling twelve (12) holes east of the pit as cited at the locations shown on figure 2, referred to and attached to said Exhibit "A", eight (8) holes will be drilled east of the pit and the unexpended balance of the 2000 feet of drilling will be expended in drilling north of the pit in "Area A" shown on Figure 2 which is attached hereto and made a part of this amendment.

This amendment shall not be construed to increase the estimated total cost of the project, the amount of the Government's contribution, or any item of allowable cost which is expressly designated "allowable maximum".

Dated MAR 25 1954

SCHROEDER MINING CO.

By Paul E. Schroeder
President

UNITED STATES OF AMERICA

By W. H. King
W. H. King, Executive Officer
DMA Field Team, Region IV

Docket Copy

ASSIGNMENT OF CONTRACT
ASSIGNEE'S ACCEPTANCE
GOVERNMENT'S CONSENT

WHEREAS, the E. C. Schroeder Co., Inc., an Iowa corporation (hereinafter called the "Operator"), entered into an Exploration Project Contract dated August 7, 1953, Contract No. Idm-E578, Docket No. DMEA-2964, with the United States of America, acting through the Department of the Interior, Defense Minerals Exploration Administration (hereinafter called the "Government"); and

WHEREAS, by an instrument dated December 26, 1952, the Operator leased from W. H. Collins 12 patented mining claims known as:

Nightingale	Good Fortune
Origan	Good Fortune Annex
O. K.	Appex
Rustler	Blue Bird
Columbia	Denver and Gulf
Black Cloud	Cottonwood

and

WHEREAS, the Operator by an instrument dated December 4, 1953, duly assigned all his right, title, and interest in and to the said claims to the Schroeder Mining Co., a corporation duly organized and existing under and by virtue of the laws of the State of Delaware (hereinafter called the "Assignee"), having an office located at 500 Wesley Temple Bldg., Minneapolis 3, Minnesota;

NOW THEREFORE, the Operator in consideration of the sum of One Dollar ($1.00) lawful money of the United States and other good and valuable consideration received from the Assignee, does hereby assign, transfer, and convey to the Assignee all its right, title, and interest in and to the aforesaid Exploration Project Contract including any and all property purchased for, and the right to use any and all property devoted to the exploration work under this Exploration Project Contract, and hereby consents to any and all future amendments to the said contract; Provided, however, That the Government shall pay to the Operator all monies which may be or become due and payable to the Operator before the first day of the second month following the month in which this Assignment is accepted in writing by the Assignee; and upon payment thereof, the Operator agrees

to release and hereby releases the Government from any and all claims, past, present, or future arising out of the said Exploration Project Contract.

This Assignment is subject (1) to the written consent of the Government; (2) to written acceptance by the Assignee; and (3) assumption by the Assignee of the terms, provisions, and conditions of said Exploration Project Contract binding upon the Operator.

Dated December 4, 1953.

E. C. SCHROEDER CO., INC.

By _____

On this 4th day of December, 1953, before me Jessie Ruff, the undersigned officer, personally appeared E. C. Schroeder, who acknowledged himself to be the President of the E. C. Schroeder Co., Inc., a corporation, and that he as President, being duly authorized so to do, executed the foregoing instrument for the purposes therein contained by signing the name of the corporation by himself as President.

IN WITNESS WHEREOF, I have hereunto set my hand and seal.

Jessie Ruff
Notary Public

The Assignee, this 4 day of December, 1953, hereby accepts the above Assignment, and assumes and agrees to be bound by the terms, provisions, and conditions of said Exploration Project Contract that are binding on the Operator.

SCHROEDER MINING CO.

By James R. Ritchay

On this 4 day of December, 1953, before me ROBERT P. WANDER, the undersigned officer, personally appeared James R. Ritchay, who acknowledged himself to be the Vice President of the Schroeder Mining Co., a corporation, and that he as Vice President, being duly authorized so to do, executed the foregoing instrument for the purposes therein contained by signing the name of the corporation by himself as Vice President.

IN WITNESS WHEREOF, I have hereunto set my hand and seal.

ROBERT P. WANDER
Notary Public, Hennepin County, Minn.
My Commission Expires Sept. 16, 1956

Robert P. Wander
Notary Public

The Government, this 28th day of January, 1953, without releasing the Operator from any of the terms, provisions, and conditions of the said Exploration Project Contract, hereby consents to the above Assignment.

THE UNITED STATES OF AMERICA

By C P Mittendorf
Administrator, Defense
Minerals Exploration
Administration

Defense
Minerals
Exploration

MF-200 (A)
(February 1952)

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
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DOCKET NO. DMEA 200

COMMODITY Iron

Docket Copy

IDM-E 578

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

EXPLORATION PROJECT CONTRACT[1]

(Short Form)

IT IS AGREED this 7th day of August, 195-3, between the United States of America, acting through the Department of the Interior, Defense Minerals Exploration Administration, hereinafter called the "Government," and[2] [illegible] Iron Products Co., Inc., a corporation duly organized and existing under and by virtue of the laws of the State of Iowa

hereinafter called the "Operator," as follows: and as set forth in Annexes I, II, and III

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 Wyoming, County of Platte, described as follows:[3] Twenty (20) patented mining claims, six (6) in the Good Fortune Group and six (6) in the Nightingale Group, more particularly described as set forth in Annex I and indicated on the following maps attached hereto and made a part hereof: Fig. 1 — Plant on map, showing relative position of Nightingale and Good Fortune Groups, Fig. 2 — Good Fortune Group, and Fig. 3 — Nightingale Group.

the Operator represents and undertakes:

(*a*) That the Operator is the owner in possession and entitled to possession, and that the property is subject only to the following [illegible] of which the subordination agreement of [illegible]:

the Operator represents and undertakes: Guaranty of the Operator as Annex II, in lieu of the

(*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] iron ore

in or upon the described land; and shall bring the project to completion within a period of twelve (12) months from the date of this contract. The work to be performed is more fully described in Exhibit "A" attached hereto, which, with any maps or drawings thereto attached, are made a part of this contract. The Government will contribute to the cost of this work as hereafter provided. The work shall be performed by the Operator or by independent contractor or contractors efficiently, expertly, in a workmanlike manner, in accordance with good mining standards and State regulations for health and safety and for workmen's compensation and employers' liability insurance, with suitable and adequate equipment, materials, and labor, to bring the project to completion within the time fixed. The Government shall have the right to enter and observe and inspect the work at all reasonable times, and the Operator shall provide the Government with all available means for doing so. The Government may consult with and advise the Operator on all phases of the work.

ARTICLE 4. *Costs of the project.*—The agreed, estimated costs of performing the work, expressed in terms of units of work to be performed (per foot of drifting, per foot of drilling, per cubic yard of material to be moved, etc.) are set forth in Exhibit "A," attached hereto. The Government will pay [illegible] 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 $2,[illegible], which is [illegible] percent of $[illegible] the agreed, estimated total cost of the project in which the Government will participate: *Provided,* That until the Operator's final report and final accounting have been rendered to the Government and any final check or auditing required by the Government has been made, and a final settlement of the contract has been made, the Government may withhold from the last voucher or vouchers such sums as it sees fit not in excess of ten (10) percent of the maximum total which the Government might have been called upon to pay under the terms of the contract. The Government may, as it sees fit, make payments direct to the Operator's independent contractors, if any, for the account of the Operator, rather than to the Operator.

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

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

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

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

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

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

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

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

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

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

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

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

ARTICLE 7. *Assignment, transfer, or loss of Operator's interest.*—Without the written consent of the Government, the Operator shall not assign or otherwise transfer or hypothecate this contract or any rights thereunder. The Operator shall not make any voluntary nor permit any involuntary transfer or conveyance of the Operator's rights in the land described in Article 2, without making suitable provision for the preservation of the Government's right to a percentage royalty on production and lien for the payment thereof; ~~Provided that nor shall the Operator make or permit any transfer or conveyance of the Operator's rights in the land described in Article 2 without the consent of the Government, if the Operator is in default in the payment of any royalty or other obligation to the Government under this contract.~~ 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* _____

Executed in sextuplicate the day and year first above written.

THE UNITED STATES OF AMERICA

By C. W. Mitteder
Administrator, Defense Minerals Exploration Administration

A. A. Kane
Hoglund
Chamberlin

~~S. G. SCHROEDER CO., INC.~~
(Operator)

By Paul E. Schroeder
Vice President

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

Violet M. Schroeder [NO CORPORATE SEAL]
Secretary.

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

U.S. Bureau of Mines
Administration
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EXPLORATION PROJECT CONTRACT
E. C. SCHROEDER CO., INC.
DOCKET NO. DMEA-2964

EXHIBIT "A"

Description of the Work

The exploration work on this project is to be done in two concurrent phases on neighboring areas in the Hartville Mining District. Phase "A" on the Good Fortune group of claims shall consist of two (2) stages as indicated on the attached map entitled "Fig. 2 - Good Fortune group showing approximate location of open cut, holes drilled by E C. Schroeder Co., Inc. . . . "

The second phase, Phase "B", is on the Nightingale group of claims and shall consist of three (3) stages; Stages I and II of Phase "B" are indicated on the attached map entitled "Fig. 3 - Nightingale group showing approximate location of recommended churn drill holes."

In each phase, the work in each successive stage shall be undertaken only upon completion of the prior stage and if in the opinion of the Government, the results thereof warrant it. The location of all roads shall be subject to the prior approval of the Government.

Representative samples shall be taken of all mineralized formations encountered. Each sample shall be divided into not less than two parts, one of which is to go to the Field Team and the other to the Operator. The samples are to be analyzed to the extent below indicated.

PHASE "A"

Stage I

Time Schedule: 0 - 3 months

1. Churn drill seventeen (17) holes with not less than a 6-inch bit for an aggregate length not to exceed 2,000 feet. Five (5) of the holes are to be west of the pit presently being mined and twelve (12) east of this pit as indicated on figure 2. Churn drill holes in barren or waste material shall not exceed 100 feet in length.

2. Construct a maximum of 1,000 feet of access roads to the drill sites.

Stage II

Time Schedule: 4 - 7 months

1. Churn drill eighteen (18) holes with not less than a 6-inch bit for an aggregate length not to exceed 3,000 feet.

2. Construct a maximum of 2,000 feet of access roads to the drill sites.

PHASE "B"

Stage I

Time Schedule: 0 - 2 months

1. Churn drill Holes 1, 2, and 3 as indicated on Fig. 3 with not less than a 6-inch bit for an aggregate length of 600 feet to explore for iron in the Guernsey and Hartville formations.

2. Construct a maximum of 1,000 feet of access roads to the drill sites.

Stage II

Time Schedule: 3 - 4 months

1. Churn drill Holes 4, 5, 6, 7, and 8 as indicated on Fig. 3 with not less than a 6-inch bit for an aggregate length of 1,000 feet to explore for iron in the Guernsey and Hartville formations. Drill holes in order listed.

2. Construct a maximum of 1,000 feet of access roads to the drill sites.

Stage III

Time Schedule: 5 - 6 months

1. Deepen by churn drilling one or two of the holes drilled under Stages I and II of Phase "B" for an aggregate length not to exceed 500 feet.

Estimated Costs of the Project

Agreed Unit Costs

Churn drill 7100 feet @ $6.00/ft. 1/	$42,600.00	
Construct access roads - 5000 feet @ $1.00/ft.	5,000.00	
Analyze 500 samples @ $1.00 per element determined	500.00	
Total Agreed Unit Costs		$48,100.00
Government Participation @ 50%		$24,050.00

1/ Includes all costs of supervision, sampling, drilling, and of hauling water.

RECEIVED

EXPLORATION PROJECT CONTRACT
E. C. SCHROEDER CO., INC.
DOCKET NO. DMEA-2964

ANNEX I

Nightingale Group

The six patented mining claims Nightingale, Origan, O. K., Rustler, Columbia, and Black Cloud (Mineral Certificate 137) surveyed under U. S. Survey 196.

Good Fortune Group

The six patented mining claims Good Fortune, Good Fortune Annex, Appex, Blue Bird, Denver and Gulf, and Cottonwood (Mineral Certificate 140) surveyed under U. S. Survey 194.

EXPLORATION PROJECT CONTRACT
E. C. SCHROEDER CO., INC.
DOCKET NO. DMEA-2964

ANNEX II

G U A R A N T Y

In consideration of the waiver, by the United States of America of the requirement of the Owner's Consent to Lien, as set forth in paragraph 2(b) of the attached Exploration Project Contract between the undersigned and the United States of America, the undersigned hereby guarantees the payment to the United States of America of royalties, as specified in said Contract and any amendment thereof, upon any and all ore discovered or developed as a result of said Contract and any amendment thereof, which is mined within 10 years from the date of said Contract, whether or not the undersigned has any interest in the property, covered by the said Contract, or any part in the mining operations at the time said ore is mined. If for any reason the net smelter returns, or other net amounts, from operations that would be subject, under said Contract and any amendments thereof, to such payments to the United States of America, are not available as a means of measuring the amount of such payment, then the undersigned agrees and undertakes to make such payment according to the best estimates of the amount that can reasonably be made, and in the event of dispute as to such estimate, the undersigned agrees that the determination thereof by either the Administrator of Defense Minerals Exploration Administration, or his designee, shall be final and binding upon the undersigned.

Dated September 18, 1953.

E. C. SCHROEDER CO., INC.

By E. C. Schroeder
President

I, Violet M. Schroeder, certify that I am the secretary of the corporation named as Guarantor herein; that E. C. Schroeder, who signed this guaranty, was then President of said corporation; that said guaranty 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.

Violet M. Schroeder

NO
CORPORATE
SEAL

EXPLORATION PROJECT CONTRACT
E. C. SCHROEDER CO., INC.
DOCKET NO. DMEA-2964

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
OCT - 2 1953

ANNEX III

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:

MF-500

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS ADMINISTRATION

REFERENCE SLIP

DATE 1/16/56

REFERRED TO:

1. Miss Curtin
2.
3.
4.

FOR:

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

Detach

REMARKS:

For official docket; unexecuted
Amend. 4.

Check (X) before the items needing attention.

L. Scott

Initials of sender.

GPO 16—63815-1

DMA Form 1

DEFENSE MINERALS ADMINISTRATION
Control Slip

CONTROLLED DOCUMENT

DMA Docket No. DMEA-2964

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.

Routing Slip
CYS TO USGS, USBM AND REGION IV.

To:	CODE 400 Rm 3538	Date	4/1/53
To:	Oper Com	Date	4-10-53
To:	Code 400 Rm. 3538	Date	8-7-53
To:	Oper. Com.	Date	8-21-53
To:	Oper. Com	Date	8-26-53
To:	Code 400	Date	8-28-53
To:	Oper Com	Date	2- -54
To:	Oper Com	Date	9- 8-54
To:	Oper Com	Date	12-8-54
To:		Date	
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DMEA
RECEIVED JUN 27 1957

DATE	INITIALS	CODE
6/27	C	220
		225

Memorandum

IN REPLY REFER TO:

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

June 26, 1957
Re: DMEA 2964 Idm-E578
Schroeder Mining Company
Good Fortune, etc. groups
Platte County, Wyoming
Iron

To: W. R. Griswold, Defense Minerals Exploration Administration

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

Subject: Review of Field Team Final Report.

The contract, awarded August 7, 1953, approved a multi-stage churn drilling program, the estimated cost of which was $48,100 for 7,100 feet of drilling.

Only $13,554.00 was spent and in the opinion of the examiners, any reserves which might be calculated would be insignificant in size and low in grade.

The groups adjoin the Sunrise iron ore property from which a large tonnage (25,000,000 tons) of iron ore has been mined, but drilling of the project areas indicates they contain only remnants of the fringes of the main ore-bearing schistose zone. During the term of the contract, concentrate to the value of $95,398.38 was produced but only $560.18 seems to have been paid the Government as royalty. The contract was terminated September 1, 1954.

The examiners recommend that no more Government funds be spent on the claims.

I concur with the recommendation.

N. E. Nelson

N. E. Nelson

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

RECEIVED
SEP 17 1956

224 New Customhouse
Denvee 2, Colorado

September 14, 1956

Memorandum

To: J. F. Shaw (2)

From: Executive Officer, DMEA Field Team, Region III

Subject: Docket DMEA 2964 (Iron), Contract Idm-E578, Schroeder Mining Company (Good Fortune and Nightingale Mines), Platte County, Wyoming

We are returning herein the original and eight (8) copies of a Statement in Lieu of Semiannual Report for period January 1, 1956 through June 30, 1956.

The Administrator, in a letter dated April 25, 1956 to Mr. C. A. Thompson, Assistant Secretary-Treasurer, Schroeder Mining Company, Guernsey, Wyoming, stated the DMEA does not intend to issue a Certificate of Discovery or Development. Two copies of this letter was sent to you April 30, 1956.

Since the subject project was not certified, semiannual reports for this contract are not required.

W. M. TRAVER

W. M. Traver

Enclosure

MHM/vj

cc: Semiannual Report File E578
Sec. Opr. Comm. (2)
Marshall
Chron.

2964

ACTION ON INTE[illegible]
OR FINAL FIELD TEA[illegible] REPORT

Date 6-1

Referred to:

1. ~~Mr. Mittendorf~~
2. ~~Mr. Johnson~~
3. ~~Mr. Chamberlin~~
4. Docket Control Mails and Files
5. Division
6. Docket Control Mails and Files

Note comments in report regarding:

1. Inactive

2.

3.

4.

and take appropriate action.

- - - - - - - -

Action taken by Division:

Robert E. Adams

UNITED STATES
DEPARTMENT OF THE INTERIOR
Defense Minerals Exploration Administration
Washington 25, D. C.

RECEIVED
JUN - 1 1956

224 New Customhouse
Denver 2, Colorado

Date: May 29, 1956

Memorandum

To: Chairman, Operating Committee, DMEA

From: Executive Officer, DMEA Field Team, Region III

Subject: Semiannual Report of Certified Project for the period July 1 through December 31, 1955
DMEA Docket 2964 (Iron)
Contract Idm-E 578 Schroeder Mining Company (Good Fortune and Nightingale Groups), Platte County, Wyoming

Enclosed are the original and three copies of the subject report prepared in conformance with instructions contained in memorandum of January 6, 1956 from this office and Memorandum 29.

NOTE - Semiannual Report on this contract unnecessary.

for W. M. Traver
Executive Officer, DMEA
Field Team, Region III

Enclosures
MHM/vj
cc: Semiannual Report File E 578
J. F. Shaw (2)
E. N. Harshman
Chron.

Semi-Annual Report of Certified Projects

DMEA
Date Rec'd.
MAY 23 1956
BUREAU OF MINES
Denver, Colorado

RECEIVED
JUN - 1 1956

Reporting Period July 1, 1955 to December 31, 1955

Docket and Contract Number DMEA 2964, Contract Idm-E578

Operator Schroeder Mining Co.

Commodity Iron

Mine Name Good Fortune and Nightingale groups

County and State Platte County, Wyoming

Date of Contract August 7, 1953

Date of Certification none

Expiration Date of Royalty Payments August 7, 1963

Date of Examination for this Report April 12, 1956

Total Amount of Contract $48,100.00

Total Expenditures under Contract $13,054.00

Amount of Government Participation at 50 % $6,527.00

Royalty Payments this Period None

Previous Royalty Payments $560.18

Total Royalty Payments to Date $560.18

% Loan Repayment Completed 8.58

Amount of Royalty Due none

Royalty Remarks The property has been shut down completely since Sept. 18, 1954.

Original Estimate of Reserves (from Final Engr.-Geol. Report): Indicated Ore: 200,000 long tons of ±50% iron
Measured Ore: 8,000 long tons of ±50% iron in stockpiles

Increase of Reserves by work performed subsequent to expiration or termination of contract: None

Revised Estimate of Reserves: Same as original estimate.

RECEIVED
JUN - 1 1956

Production this Period (Ore or Concentrates) none

Amount of Previous Production (since date of contract) 10,952.452 long tons of dry iron ore concentrates.

Total DMEA Production to date 10,952.46 dry, long tons of iron ore concentrates; estimated as approximately 22,000 tons crude ore.

% of Revised Reserves Mined 10%

Production Remarks: Ore was mined by open pit methods and trucked to a Heavy media concentrator.

Note: On Uranium projects check with AEC to assure that our records are in agreement with theirs.

Other Remarks: Mining of ore was discontinued on May 16, 1954 and was shut down on Sept. 18, 1954.

Signed C. M. Harrer (Engineer)
C. M. Harrer

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

May 2, 1956

Memorandum

To: W. S. Martin, Chief, Iron & Ferroalloys Division, DMEA

From: Assistant Chief, Branch of Ferrous Metals & Ferroalloys

Subject: Docket DMEA 2964 - Iron
Schroeder Mining Company
Good Fortune and Nightingale Group
Platte County, Wyoming
Final Report, Contract No. Idm-E578

The exploration work did not develop enough iron ore in thoroughly exploring the deposit to prove a significant reserve. I concur with the Field Team that certification of discovery is not warranted.

Horace T. Reno

Horace T. Reno

RECEIVED
MAY 3 - 1956

Talbert

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

APR 26 1956

Mr. Thomas H. Bruding
DMEA Auditor
224 New Customhouse Building
Denver 2, Colorado

Re: Report of Royalty Review
Ida-2576, DMEA-2964
K. C. Schroeder Company

Dear Mr. Bruding:

The recently submitted revised Report of Royalty Review, covering the referenced project, is acceptable and normal distribution is authorized.

The Washington copies of this revised report were not accompanied, however, by the required copies of the Check Sheet of Examining Engineer. Please forward two copies of the check sheet.

Sincerely yours,

(Signed) J. L. Chambers

Jay L. Chambers, Chief
Contract Administration
and Audit Division

EDTalbert/wb
April 25, 1956

Copy to: Docket
Admr. Reading File
Mr. Chambers

R.C.R.

DOCKET
SURNAME
400 Chapman
martin
Chambers
Selfridge
Johnson

Mr. C. A. Thompson
Assistant Secretary-Treasurer
Schroeder Mining Company
Guernsey, Wyoming

Re: Docket No. DMEA 2964 - Iron
Good Fortune and Nightingale Mines
Platte County, Wyoming
Contract No. Idm-E578

Dear Mr. Thompson:

This is with reference to the subject exploration contract between you and the Government.

It is not our intention to issue a certification of discovery or development which would create a lien against the subject property. We are, therefore, closing our books and records with respect to this project. Your attention is called, however, to the provisions of the contract which require the operator to keep and preserve certain records for the period indicated.

We regret that the exploration work performed did not result in a discovery or development. Your participation in the exploration program, however, is sincerely appreciated.

Sincerely yours,

C. O. Mittendorf

Administrator

TLChapman/foc
4-23-56
cc to: Docket
Code 400
Admr. Read. File
Operating Comm.
FT. REG. III
Walter Lewis, USBM
Thor Kiilsgaard, USGS

Talbert
Chambers

J.

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

Mr. Thomas H. Breding
DMEA Auditor
224 New Customhouse Building
Denver 2, Colorado

APR 20 1956

Re: Report of Royalty Review
Idm-8578, DMEA-2964
Schroeder Mining Company

Dear Mr. Breding:

The recently submitted copies of your Report of Royalty Review covering the referenced project are returned herewith for such revision as may be necessary to conform with the general format described on pages 17 and 18, and shown by examples on pages 36 and 47, of the royalty audit manual.

In particular you have not included the required informational paragraph specifying the authority for the collection of royalty, the status of certification, and the costs of the exploration. An example of such a paragraph, which appears to fit the status of this contract, is given on page 45 of the manual. In this example, however, the paragraph was furnished as an attached exhibit, but appropriately referenced in the report of royalty review, because the length of the report precluded its inclusion in the prescribed single page format.

Reason number 1, as given in the third paragraph of your report, is not a justification for the review in lieu of an audit, but is more appropriately for inclusion in your present second paragraph giving the scope or extent of your review. Possibly, a reason similar to (a) in the example on page 44 of the manual should be used in lieu of this deleted reason.

The schedule number 1, which is attached to your report of royalty review, should be referenced in the report itself. Furthermore, the schedule itself needs amplification or additional explanation. It is presumed, although not specifically so stated, that the last five credit memoranda listed on the schedule represent the differences between estimated freight costs deducted by the purchaser on settlement sheets and the subsequently determined actual freight costs. The first listed credit memorandum (No. 304) is not understood. From the way it is stated it appears to be a debit memorandum, or an additional settlement sheet, rather than a credit memorandum.

Sincerely yours,

(Signed) J. L. Chambers

Jay L. Chambers, Chief
Contract Administration
and Audit Division

cc to: Docket
Admr. Reading File
Mr. Chambers

Enclosure

EDTalbert/wb 4-20-56

R.C.S.

[illegible]

Date 4-13

Referred to:

1. [illegible]
2. [illegible]
3. [illegible]
4. [illegible] Central Files and Files
5. [illegible] Division
6. Central Files and Files

Note comments in report regarding:

1. Question here about propriety of non-certification

2.

[illegible] information as [illegible]

[illegible] by [illegible]

ROBERT H. ADAMS

Initials

It seems to me that we have built up enough record on this in the file so that there ought to be no question of propriety. It will have to be discussed with FBI & CSS. WSA 4/17/56

C

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

RECEIVED
APR 9 - 1956

224 New Customhouse
Denver 2, Colorado

March 30, 1956

Memorandum

To: Secretary to the Operating Committee, DMEA

From: DMEA Field Team, Region III

Subject: Docket DMEA 2964 (Iron) Contract No. Idm-E578, Schroeder Mining Company (Good Fortune and Nightingale Group), Platte County, Wyoming

Enclosed are the original and three copies of a final joint engineering and geologic report from D. R. MacLaren, Geologist, Geological Survey, and C. M. Harrer, Mining Engineer, Bureau of Mines, and memorandum in transmittal thereof dated March 27, 1956, from E. N. Harshman and John F. Shaw.

The contract was terminated prior to the completion of all the work authorized, by a Termination Agreement effective September 1, 1954, which was executed November 30, 1955.

Final payment to the Operator was processed by this office March 30, 1956, in conformance with the final Report of Review by the Contract Administration and Audit Division, dated February 6, 1956.

The exploration work completed consisted of 2,000 feet of access roads and 1,994 feet of churn drilling at a total accepted cost of $13,054.00, in which the Government participated to the extent of 50%, or an amount of $6,527.00.

The exploration work did not result in a discovery or development of significant reserves of iron ore. Therefore, no certification of such is recommended.

W. M. Traver

Enclosures

E. N. Harshman

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

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF MINES

Region III

Building 20
Denver Federal Center
Denver 2, Colorado
March 27, 1956

RECEIVED
APR 9 - 1956

DMEA
Date Rec'd
MAR 30 1956
BUREAU OF MINES
Denver, Colorado

Memorandum

To: Executive Officer, DMEA Field Team, Region III

From: E. N. Harshman
John F. Shaw

Subject: Final Examination Report, Docket DMEA 2964, Contract Idm-E578, Schroeder Mining Co., (Iron), Platte County, Wyoming

Enclosed are the original and 7 copies of the Joint Final Report by D. R. MacLaren, Geologist and C. M. Harrer, Mining Engineer covering the work done under Contract Idm-E578.

Contract Idm-E578 provided for churn drilling a total of 7,100 feet at an estimated cost of $48,100.00. Stage I of Phase A, which provided for churn drilling on the Good Fortune group of claims was completed with 15 churn drill holes totaling 1,762 feet. Stage I of Phase B which provided for churn drilling on the Nightingale group of claims was completed with 3 churn drill holes totalling 232 feet.

The contract was terminated by mutual consent on Sept. 1, 1954. The amount of Government participation was $6,777.00. The operator paid the Government $560.18 in royalties from ore mined during the life of the contract. The property is inactive at the present time.

It is concluded that the target areas on the Good Fortune and Nightingale group of claims have been thoroughly explored and no significant reserves of iron ore have been disclosed as a result of the exploration work.

E. N. Harshman

E. N. Harshman
Member Field Team

Scott W. Hagenp
for John F. Shaw
Supv. Mining Engineer

Enclosures

cc 7
ENHarshman
DMEA 2964
Chron.

JFS/ch

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

UNITED STATES
DEPARTMENT OF THE INTERIOR
DOUGLAS McKAY, SECRETARY

RECEIVED
APR 9 - 1956

DEFENSE MINERALS EXPLORATION ADMINISTRATION

REPORT OF EXAMINATION BY EXAMINING FIELD TEAM
REGION III

DMEA 2964, Exploration Project Contract Idm-E578

SCHROEDER MINING COMPANY

Good Fortune and Nightingale Groups

Platte County, Wyoming

Iron

Final Joint Geologic and Engineering Report

By

D. R. MacLaren, Geologist
Geological Survey

C. M. Harrer, Mining Engineer
Bureau of Mines

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

March 26, 1956

DMEA [illegible]964, Exploration Contract Idm-E[illegible]

SCHROEDER MINING COMPANY
GOOD FORTUNE AND NIGHTINGALE GROUPS
PLATTE COUNTY, WYOMING

RECEIVED
APR 9 - 1965

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Location, topography and physical features 2
History and production 3
Property rights 4
Geology and reserves 5
Work completed under the contract 7
Expenditures under the contract 9
Efficiency of project operations 10
Description of discovery 10
Production from discovery 11
Conclusions and recommendations 11

ILLUSTRATIONS

Figure — Follows Page

1. Location map, Schroeder Mining Co., Good Fortune and Nightingale groups, Platte County, Wyo. 11

2. Claim and Exploration Map, Schroeder Mining Co., Good Fortune and Nightingale groups, Platte County, Wyo. 11

3. Plan showing location of open cut pit, churn drill holes and ore zone, Good Fortune claim group, Schroeder Mining Co., Platte County, Wyo. 11

4. Plan showing location of churn drill holes, Nightingale claim, Schroeder Mining Co., Platte County, Wyo. 11

DMEA 2964, Exploration Contract Idm-E578

SCHROEDER MINING COMPANY
Good Fortune and Nightingale Groups
Platte County, Wyoming

RECEIVED
APR 9 - 1958

Joint Geological and Engineering Final Report

By

D. R. MacLaren and C. M. Harrer

INTRODUCTION AND SUMMARY

Schroeder Mining Co. controls the Good Fortune and Nightingale groups of patented lode claims (figs. 1 and 2) under a 99-year lease arrangement with the owner W. H. Collins. The property is in sec. 1, T. 27 N., R. 66 W., and in secs. 4, 5, 7 and 8, in T. 27 N., R. 65 W., in the Hartville Mining District of Platte County, Wyoming. Altitudes on the property are between 4,800 and 5,000 feet above sea-level.

On August 7, 1953, exploration project contract Idm-E578 was activated between E. C. Schroeder Co., Inc. of McGregor, Iowa and the Defense Minerals Exploration Administration, to explore the Good Fortune and Nightingale groups of claims for iron ore.

A multi-stage program of churn drilling on part of the property totalling 7,100 feet, at an overall cost of $48,100.00 was approved. The project was to be completed within one year.

On December 4, 1953, the E. C. Schroeder Co., Inc. assigned their property and the DMEA Exploration contract to Schroeder Mining Co. of 500 Wesley Temple Bldg., Minneapolis 3, Minn. This arrangement was approved by DMEA on January 28, 1953.

Drilling started on the property during November, 1953. Stage I drilling of Phase A, on the Good Fortune group of claims (fig. 2) was completed with 15 churn drill holes aggregating 1,762 feet, during May, 1954.

Stage I drilling of Phase B, on the Nightingale group of claims (fig. 2) was completed during July 1954 with three churn drill holes, totalling 232 feet.

The contract was terminated by mutual consent on Sept. 1, 1954. Stage II on the Good Fortune group and Stages II and III on the Nightingale group of claims were not accomplished. By the date of termination, the total cost of the contract was $13,554.00 of which the Government's share was $6,777.00. Royalties paid the Government from ore mined during the life of the contract were $560.18.

Rocks of the area are steeply dipping quartzites, schists, and siliceous limestones of the Whalen group, Precambrian in age, overlain by the gently dipping Guernsey and Hartville formations of carboniferous age. These rocks are encircled by Arikaree formation (Miocene), while Pleistocene alluvium and terrace gravels fill erosional depressions. The main iron ore deposits are found as lenses in the schist of the Whalen group while small high grade locallized deposits are found in a hematitic conglomerate at the base of the Guernsey formation and in an iron-stained shale at the base of the Hartville formation.

It is concluded that target areas on the Good Fortune and Nightingale claims groups have been conclusively explored, and that any reserve which might be calculated from the results of this program would be insignificant in size and low in grade.

It is recommended that no more Government funds be spent on these claims.

LOCATION, TOPOGRAPHY AND PHYSICAL FEATURES

Schroeder Mining Company has 43 patented lode claims under lease in T. 27 N., R's. 65-66 W., in the Hartville Mining District of Platte County, Wyoming (fig. 1). The claims are known as the Good Fortune and Nightingale

groups. The Good Fortune group which includes six claims pertinent to the contract (fig. 1 & 2) is in secs. 4, 5, 7 and 8, T. 27 N., R. 65 W. The Nightingale group which includes six claims pertinent to the contract, (fig. 1 & 2) is in secs. 6 and 7, T. 27 N., R. 65 W. and secs. 1 and 12, T. 28 N., R. 66 W. The property is 6 to 9 miles northeast of Guernsey by road and is readily accessible to the Chicago, Burlington and Quincy Railroad. The climate is semi-arid. Power is available in the vicinity of Guernsey, Wyo. The two groups of claims comprising the property are adjacent to the Sunrise iron mine of the Colorado Fuel and Iron Corp., which has produced over 25,000,000 tons of iron ore.

Altitudes on the property are between 4,800 and 5,000 feet above sea-level.

HISTORY AND PRODUCTION

The claims are part of a larger group located during 1857. Attention was directed to the properties as a potential source of iron ore during 1888. Iron ore was first produced from the Good Fortune group during 1897 and 1898 when approximately 30,000 tons of ore was shipped to the iron smelter at Pueblo, Colo.[1]

The Bureau of Mines investigated the Good Fortune property in June 1944.[2] The E. C. Schroeder Co. became interested in the property during 1952 and in 1953 made several shipments of iron ore to Birmingham, Ala. During 1953, a total of 9,540.330 dry, long tons of iron ore concentrates were produced with a smelter value of $89,949.10 and this was subject to DMEA royalty. During 1954, a total of 1,412.122 dry, long tons of iron ore concentrates were produced with a smelter value of $5,449.26, which was also subject to DMEA royalty. There has been no production from the Nightingale group of claims to date.

1/ Ball, S. H., Hartville Iron Ore Range, Wyo.; U.S. Geol. Survey Bulletin 315D, 1907, p. 193.

2/ Frey, Eugene, Hartville Iron Dist., Platte County, Wyo., Bur. of Mines Report of Investigation 4086, June 1947, 3 pp.

PROPERTY RIGHTS

E. C. Schroeder Co. of McGregor, Iowa has a 99 year lease on two large groups of patented lode claims (fig. 1) known as the Good Fortune and Nightingale groups. This lease dates from Dec. 22, 1952 and comprises 43 claims. Owner of the claims is W. H. Collins.

On August 7, 1953, E. C. Schroeder Co., signed an exploration project contract (Idm-E578) with the Defense Minerals Exploration Administration.

On December 4, 1953, E. C. Schroeder Co. assigned all his rights in 12 of the above-mentioned claims to the Schroeder Mining Co. of 500 Wesley Temple Bldg., Minneapolis 3, Minn., together with all his rights in the DMEA exploration project contract Idm-E578 thereon. The Government approved this assignment on Jan. 28, 1953, without releasing E. C. Schroeder Co. from any obligations of the subject contract.

E. C. Schroeder Co. and Schroeder Mining Co. guarantee the payment of royalties to the Government on all production from the following claims for a period of 10 years from the signing of the contract (8/7/53).

The Good Fortune Group (fig. 2)	U.S. Mineral Certificate	U.S. Mineral Survey	Location Sec.	R. T.
Good Fortune claim	140	194	7	65 W.,27 N.
Good Fortune Annex	140	194	7	65 W.,27 N.
Appex claim	140	194	7-8	65 W.,27 N.
Blue Bird claim	140	194	7-8	65 W.,27 N.
Denver and Gulf claim	140	194	8	65 W.,27 N.
Cottonwood claim	140	194	8	65 W.,27 N.
The Nightingale Group (fig. 2)				
Nightingale claim	137	196	6	65 W.,27 N.
Origan claim	137	196	6	65 W.,27 N.
O.K. claim	137	196	6	65 W.,27 N.
Rustler claim	137	196	6-7	65 W.,27 N.
Columbia claim	137	196	6	65 W.,27 N.
			1	66 W.,27 N.
Black Cloud claim	137	196	6	65 W.,27 N.

This is in lieu ~~of a waiver~~ of a "consent to lien" agreement.

GEOLOGY

The rocks of the area are steeply dipping quartzites, schists, and siliceous limestones of the Whalen group (Precambrian) overlain by the gently dipping Guernsey and Hartville formations of Carboniferous age. These rocks are encircled by the Arikaree formation of Miocene age, while Pleistocene alluvium and terrace gravels fill erosional depressions.

The main iron ore deposits are found in the Whalen group as lenses in the schist, from which they appear to have been derived, on a footwall of impervious limestone. The hangingwall is ill-defined, usually being a zone 10 to 15 feet wide in which low grade hematite grades into fairly fresh schist. Localized deposits, some of excellent grade but too small to be of much economic importance, have been found in a hematitic conglomerate at the base of the Guernsey formation. At the base of the Hartville formation is an iron-stained shale on which lies the typical Hartville sandstone. Where the shale has been folded into gentle synclines, iron derived by solution from the sandstone has been redeposited forming blanket beds of low grade hematite.

On the Good Fortune and Blue Bird claims (fig. 3) an open cut about 800 feet long indicates that the main ore zone on those claims is a series of pod-shaped bodies up to 250 feet long and 75 feet wide. The ore consists of a high grade (60 percent or better) core of hard, bluish-black hematite flanked by zones of soft red hematite that decrease in iron content toward the walls. The ore zone, parallel to the foliation of the schist, strikes about N. 80 degrees W. and dips 70 degrees to 85 degrees N. In the open cuts the ore appears to plunge 20 degrees to 25 degrees towards the east, but drilling under the DMEA contract indicates that the apparent plunge is due to the pinching out of the ore body. The east end of the ore body has apparently been offset to the south a distance

of about 110 feet by a fault that strikes N. 10 degrees E. and dips 80 degrees E. The offset portion has been well delineated by churn drill holes Nos. 6 through 13. Of these holes only Nos. 6, 8 and 9 showed an iron content of more than 30 percent. When these three holes are plotted to scale in their proper relationship they show a band of ore averaging about 18 feet thick and about 170 feet long that strikes about N. 60 degrees W. and dips about 60 degrees NE. The average iron content of this band is 33.5 percent.

To test the continuity of the ore down the dip, churn drill holes Nos. 14, 15, and 16 were drilled north of the open-cut pit, in which the best ore was found. Hole No. 14 entered ore at a depth of 298 feet. The ore continued to the bottom of the hole at a depth of 331 feet. The average grade of this 33-foot zone is 33.5 percent iron. Holes Nos. 15 and 16, drilled to depths of 330 feet and 202 feet, respectively, found no material of ore grade. Hole No. 16 was drilled north of the Blue Bird claim and was not included for payment under the contract.

To explore the westward continuation of the ore zone, churn drill holes Nos. 1 through 5 were drilled. None of these holes encountered any material of ore grade, the best being a shallow zone, in hole No. 1, from 12 to 20 feet deep, having an iron content of 17.2 percent, and another in hole No. 3 from 8 to 20 feet deep, having an average iron content of only 15.0 percent.

On the Nightingale claim (fig. 4) only three churn drill holes were drilled. Of these, hole No. 1 penetrated an 18-foot zone, from 14 to 32 feet below the surface, having an average grade of 31.4 percent iron, while holes Nos. 3 and 4 (No. 2 was not drilled) did not encounter any material worth sampling.

Because all holes were churn drilled no lithologic logs were attempted. Sample logs are tabulated in the section describing the work completed under the contract.

WORK COMPLETED UNDER THE CONTRACT

DMEA contract Idm-E578 provided for a maximum of 7,100 feet of churn drilling, 5,000 feet of access road and 500 samples to be analyzed for iron content. The contract was a multi-stage program divided between the Good Fortune group as phase A and the Nightingale group of claims as phase B (fig. 2).

Stage I on the Good Fortune group of claims (phase A) was completed between Nov. 1953 and May 1954. During this time 15 churn drill holes totalling 1,762 feet; 1,000 feet of access road; and 86 churn drill sludge analyses for iron content were completed (fig. 2). There was no further exploration of the Good Fortune group under the contract.

Stage I on the Nightingale group of claims (phase B) was stopped by the operator during July 1954. During the month, 3 churn drill holes totalling 232 feet; 1,000 feet of access road; and 5 churn drill sludge analyses for iron were completed (fig. 2). Although 4 holes were authorized, there was no further exploration of the Nightingale group of claims under the contract.

Total work approved under the terms of the contract included 1,994 feet of churn drilling in 18 holes, 2,000 feet of access road construction and 91 iron assays from sludge samples. Hole No. 16 and 4 iron assays therefrom were disallowed as not conforming to the terms of the contract. This hole was drilled on the Blue Jay Fraction claim (fig. 2) which is not on property included in the contract.

The following is a compilation of data on holes drilled under the contract and includes data on hole 16, which was disallowed as not conforming to the terms of the contract:

Hole[3] No.	Collar Elev.	Depth feet	Claim location	Contract Identity	No. of samples	Iron Content	Contract Status
1	5057.6	100	Good Fortune	Phase A, Stage I	6	9-18%	Approved
2	5047.4	60	" "	" " " "	1	9.6%	"
3	5047.8	114	" "	" " " "	6	8-17%	"
4	5017.2	100	" "	" " " "	6	7-15%	"
5	4499.6	100	" "	" " " "	5	6-18%	"
6	4905.5	102	Appex	" " " "	16	5-42%	"
7	4834.3	34	Blue Bird	" " " "	0	0	"
8	4869.6	100	Blue Bird	" " " "	9	9-45%	"
9	4859.5	100	Appex	" " " "	5	16-35%	"
10	4802.3	95	Blue Bird	" " " "	0	0	"
11	4827.8	61	Appex	" " " "	0	0	"
12	4846.1	65	"	" " " "	3	5-6%	"
13	4964.0	70	"	" " " "	2	19-25%	"
14	4947.9	331	Blue Bird	" " " "	20	4-40%	"
15	4946.8	330	" "	" " " "	7	2-20%	"
16	4954.3	202	Blue Jay Fraction	" " " "	4	3-9%	Disallowed
Hole[4] No.							
1	4890.0	38	Nightingale	Phase B, Stage I	5	14-33%	Approved
2	4890.0	86	"	" " " "	None	None	"
3	4890.0	108	"	" " " "	"	"	"

More specific data on the iron analyses of sludge samples from the respective holes is tabulated as follows:

Hole No.	Sample depth in feet	Percent iron (Fe)	Hole No.	Sample depth in feet	Percent iron (Fe)
Good Fortune group			Good Fortune gr.		
1	0-6	11.0	5	55-61	14.0
	6-12	10.0		79-85	7.8
	12-16	17.0		85-91	10.8
	16-18	17.0		91-97	18.0
	18-20	17.6		97-100	6.2
	20-23	9.4	6	0-12	39.0
2	0-6	9.6		12-18	39.0
3	8-11	16.0		18-24	31.0
	11-14	15.8		24-30	20.6
	14-17	17.0		30-33	18.1
	17-20	11.5		33-39	6.1
	101-104	8.2		39-45	4.8
	104-107	10.3		45-51	6.0
4	0-8	7.6		51-57	20.5
	8-11	7.0		57-63	25.0
	11-14	7.4		63-69	12.2
	14-17	9.4		69-75	20.2
	17-20	14.7		75-81	18.4
	20-23	11.8		81-87	41.8

3/ These holes are designated on fig. 2, by a circle and a central dot.
4/ These holes are designated on fig. 2 by a triangle and central dot.

Hole No.	Sample depth in feet	Percent iron (Fe)
Good Fortune group		
6	87-93	16.2
	93-102	20,6
7	None	None
8	54-60	13.0
	60-63	13.8
	63-66	9.0
	66-72	14.4
	72-78	36.0
	78-81	42.0
	81-84	45.0
	84-87	29.2
	87-90	17.8
9	66-69	26.1
	69-72	35.0
	72-75	34.8
	75-78	24.2
	78-81	16.2
10	None	None
11	"	"
12	6-9	5.0
	9-12	5.2
	12-15	6.2
13	0-6	19.0
	6-12	25.2
14	36-42	4.3
	72-78	7.9
	96-102	12.6
	126-132	4.0
	144-150	7.2
	156-162	6.0
	180-186	9.6

Hole No.	Sample depth in feet	Percent iron (Fe)	
Good Fortune group			
14	198-204	8.2	
	216-222	3.6	
	276-280	18.4	
	298-303	27.8	
	303-306	40.0	
	306-309	30.8	
	309-311	36.2	
	311-314	39.0	
	314-317	37.0	
	317-320	39.2	
	320-323	33.2	
	323-326	35.5	
	326-331	26.0	
15	48-54	6.8	
	96-102	19.6	
	150-156	16.1	
	198-204	2.0	
	246-252	5.0	
	294-300	5.5	
	318-324	5.4	
16	48-54	3.4)	Disallowed
	96-102	6.6)	under the
	144-150	9.3)	contract.
	198-202	4.8)	
Nightingale Group			
1	8-14	18.4	
2	14-20	32.4	
	20-26	29.2	
	26-32	32.6	
	32-38	14.2	
3	None	None	
4	"	"	

EXPENDITURES UNDER THE CONTRACT

Exploration under the contract (Figure Two), was for the period November 1953 through July 1954. Exploration of the Good Fortune group of claims, known as phase A of the contract was completed at the end of May 1954. Exploration of the Nightingale group was completed during July 1954. This work is designated as phase B under the contract.

Total expenditures approved total $13,554.00 and Government participation of 50 percent is $6,777.00. Costs of exploration are distributed as follows:

Items	Contract designation	Located on Claims	Cost	Unit Cost
15-churn drill holes aggregating 1762 ft.	Phase A, Stage I	Good Fortune, Appex, and Blue Bird	$10,572.00	$6.00
1,000 ft. of access road construction	" "	" " "	1,000.00	1.00
85 analyses of churn drill sludges for iron	" "	" " "	85.00	1.00
3-churn drill holes aggregating 232 feet	Phase B, Stage I	Nightingale	1,392.00	6.00
1,000 ft. of access road construction	" "	"	1,000.00	1.00
5 analyses of churn drill sludges for iron	" "	"	5.00	1.00
Total			$14,054.00	
Less deduction for failure to submit a final report			- 500.00	
Total cost of exploration as approved by audit review (T.H.Brading 2/6/56).			$13,554.00	

Iron ore produced during 1953-54 was subject to $560.18 in DMEA royalties. There was no production in 1955. The Government's participating share in exploration costs is reduced by this amount to a remainder of $6,216.82.

EFFICIENCY OF PROJECT OPERATIONS

Exploration drilling was integrated with iron ore production. The engineer writer never visited the operation during the life of the contract and is therefore not familiar with work conditions. Judging from meager information in the monthly reports, the operation was conducted efficiently.

DESCRIPTION OF DISCOVERY

No certificate of discovery has been issued on the property and none is recommended. However, all rights of Government provided for in the contract with respect to a certification of discovery or development and a percentage royalty and lien for its payment are preserved.

PRODUCTION FROM DISCOVERY

A total of 9,540.330 dry long tons of iron ore concentrates were produced during 1953. The ore had a smelter value of $89,949.10. Production was from an existing open pit on the Good Fortune group of claims and was subject to DMEA royalty. During 1954, iron ore concentrates subject to DMEA royalty totalled 1,412.122 dry, long tons. This production was also from the Good Fortune group of claims. The smelter value of the concentrates was $5,449.26. There has been no production from the Nightingale group of claims.

CONCLUSIONS AND RECOMMENDATIONS

It is concluded that the target areas on the Good Fortune and Nightingale claim groups have been conclusively explored and that any reserve which might be calculated from the results of this program would be insignificant in size and low in grade.

It is recommended that no more Government funds be spent on these claims.

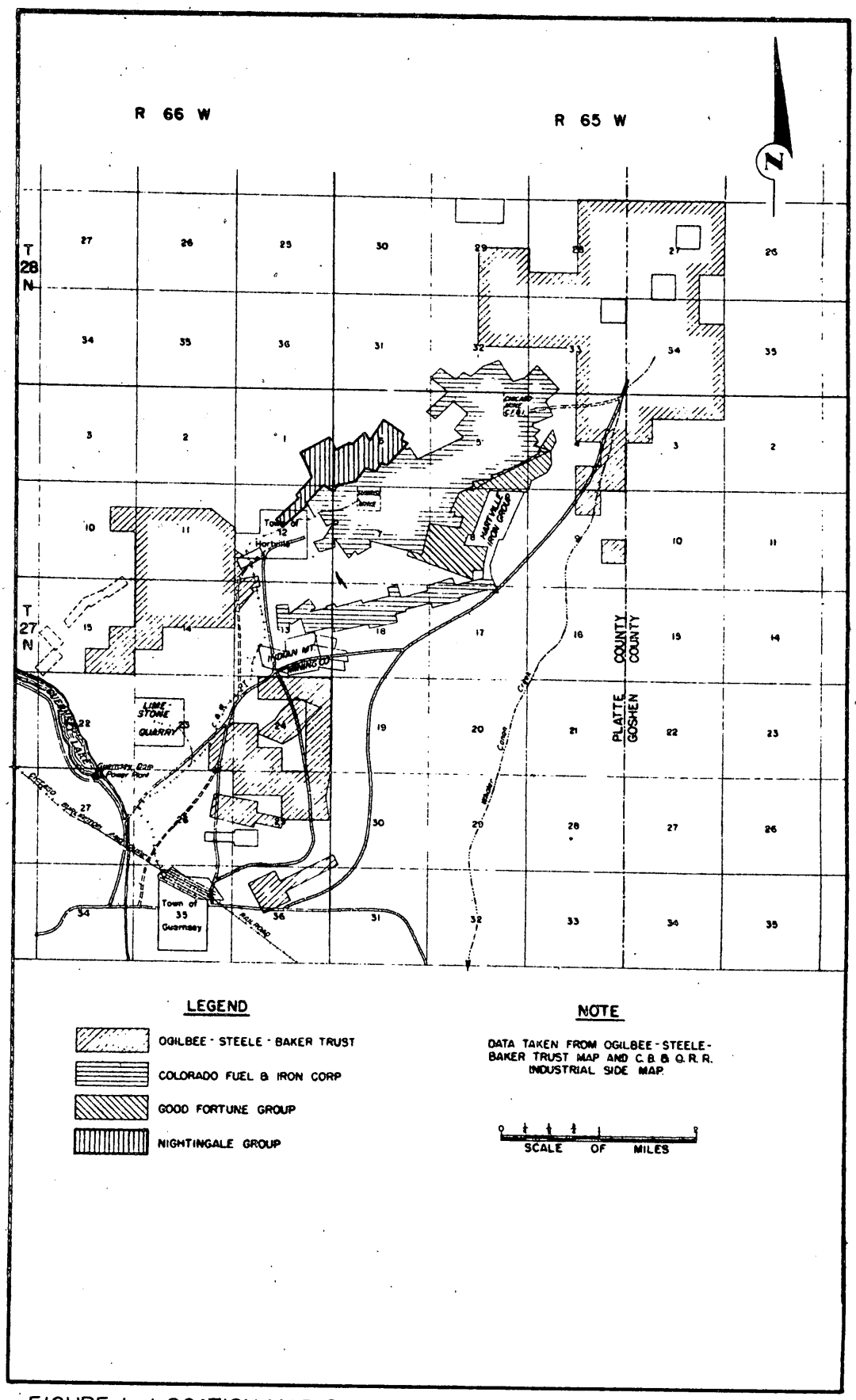

FIGURE 1 - LOCATION MAP, SCHROEDER MINING CO., GOOD FORTUNE AND NIGHTINGALE GROUPS, PLATTE COUNTY, WYO.
DMEA 2964, CONTRACT Idm-E578

Talbert

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

FEB 1 0 1956

Mr. Thomas H. Bruding
DMEA Auditor
224 New Customhouse Building
Denver 2, Colorado

Re: Report of Review
Idm-2578, DMEA-2964
Schroeder Mining Company

Dear Mr. Bruding:

You have unilaterally released your Report of Review, dated February 6, 1956, covering the referenced project, in accordance with the authority granted you by the last paragraph on page 72 of the manual of audit procedure.

It appears, however, that the period covered by the Form MF-104, indicated in the first paragraph of the Report of Review as "November, 1953 to October, 1954" should be "November, 1953 to July, 1954". We have changed the Washington copies accordingly. Please arrange to correct all other copies.

Sincerely yours,

SIGNED

Jay L. Chambers, Chief
Contract Administration
and Audit Division

EDTalbrt/wb
February 10, 1956

Copy to: Docket
Admr. Reading File
Mr. Chambers

R.C.K.

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

RECEIVED
FEB - 9 1956

224 New Customhouse
Denver 2, Colorado

February 6, 1956

Memorandum

To: Chairman, Operating Committee, DMEA

From: Executive Officer, DMEA Field Team, Region III

Subject: Docket DMEA 2964 (Iron) Contract Idm-E578, Schroeder Mining Co. Good Fortune and Nightingale Groups, Platte County, Wyoming

Enclosed are the Government's, Division and Docket copies of the "Termination Agreement" which was forwarded by your letter of December 1, 1955 for signature by the Operator.

W. M. Traver

Encls.

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

RECEIVED
FEB - 9 1956

224 New Customhouse
Denver 2, Colorado

February 6, 1956

Mr. C. A. Thompson, Ass't. Sec.-Treas.
Schroeder Mining Company
P. O. Box 487
Chatfield, Minnesota

Re: Docket DMEA-2964 (Iron)
Contract Idm-E578

Dear Mr. Thompson:

Enclosed is the "Operator's" copy of "Termination Agreement" which effects termination of Contract Idm-E578 by mutual agreement effective September 1, 1954.

Very truly yours,

W. M. Traver
Executive Officer, DMEA
Field Team, Region III

Encl.

JWT:bh
cc-Chair. Op. Comm. (2)
Harshman
Shaw
Townsend
Brading
Corres. File E-578
Chron.

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

RECEIVED
JAN 26 1956

224 New Customhouse
Denver 2, Colorado

January 23, 1956

C. A. Thompson, Asst. Secretary-Treasurer
Schroeder Mining Company
P. O. Box 487
Chatfield, Minnesota

Re: Royalty payments, DMEA Docket 2964 (Iron)
Contract Idm-E578, Schroeder Mining Company, Good Fortune and Nightingale groups, Platte County, Wyoming

Dear Mr. Thompson:

Your letter of January 5, 1956 in reply to ours of November 22, 1955 regarding Credit Memos Nos. 304, 117H, 119H, 123H, 124H and 126H is hereby acknowledged. Royalty due the Government as per these memoranda will be included in the royalty audit of this account which will be completed in the near future.

Upon the release of this audit, final payment to your corporation for work performed under DMEA Contract Idm-E578 will be made with no further request on your part being necessary. DMEA royalty will be deducted from this final payment.

Yours very truly,

W. M. TRAVER

W. M. Traver
Executive Officer, DMEA
Field Team, Region III

RDB/vj

cc: Royalty File E578 w/orig. ltr.
Correspondence File E578
Sec. Opr. Comm. (2)
J. F. Shaw (2)
J. W. Townsend
T. H. Brading
Berkenkotter
Chron.

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

RECEIVED
JAN 12 1956

224 New Customhouse
Denver 2, Colorado

January 10, 1955

Memorandum

To: Chairman, Operating Committee, DMEA

From: Executive Officer, DMEA Field Team, Region III

Subject: Docket DMEA 2964 (Iron) Contract Idm-E578
Schroeder Mining Company, Platte County, Wyoming

In conjunction with the Termination Agreement forwarded by your letter of December 1, 1955, which we forwarded on to the Operator December 7, 1955, we are enclosing original and three copies of the Operator's letter of January 6, 1956.

The Operator indicates in the last paragraph of the letter that they will agree to the termination of the contract by mutual agreement with the understanding that the Government may deduct the sum of $500.00 from monies due them in lieu of making and rendering a final report required under the contract. The Operator is incorrect in the statement in the second paragraph of the letter of January 6, as this office has withheld from payment to the Operator amounts as follows:

Withheld from the Operator's report for the period of June and July, 1954 - - - - - - -	$500.00
Withheld from the Operator's supplemental progress report for July, 1954, dated October 21, 1954 - - - -	78.00
Total Government Contribution Withheld - - - -	$578.00

If it is legally possible to waive the Operator's final report and in lieu thereof to accept the $500.00 offered by the Operator, we recommend that it be done, as it is doubtful that the Operator's report would contribute anything of value not provided in the report of the examining engineer and geologist.

W. M. Traver

W. M. Traver

Enc.

Refer to Wro?

SCHROEDER MINING CO.

P.O. BOX 487
CHATFIELD, MINNESOTA

RECEIVED
JAN 12 1956

DMEA
Date Rec'd.
JAN 10 1956
BUREAU OF MINES
Denver, Colorado

January 6, 1956

Mr. E. N. Harshman
Acting Executive Officer, DMEA
Field Team, Region III
224 New Customhouse
Denver, 2, Colorado,

Re: DMEA 2964, Contract
Idm-E578 - Iron

Dear Mr. Harshman:

Referring to your letter of December 7, 1955, in which you enclosed copies of a Termination Agreement prepared in Washington and signed by the Administrator, DMEA, whereby the contract would be terminated by mutual agreement.

Our records show claims of $568.00 and $156.00 which were held up pending release of Final Audit or Report of Review or mutual termination of the above contract.

We agree to termination of the contract by mutual agreement with the understanding that the Government may deduct the sum of $500.00 from any monies due us in lieu of making and rendering the final report and final account required under the contract.

Very truly yours,

SCHROEDER MINING COMPANY

By C. a. Thompson
Asst. Secy. Treas.

CT/1

Refer to who?

SCHROEDER MINING CO.

P.O. BOX 487

CHATFIELD, MINNESOTA

DMEA
Date Rec'd

JAN 10 1956

BUREAU OF MINES
Denver, Colorado

January 6, 1956

Mr. E. N. Harshman
Acting Executive Officer, DMEA
Field Team, Region III
224 New Customhouse
Denver, 2, Colorado,

Re: DMEA 2954, Contract
Idm-E578 - Iron

Dear Mr. Harshman:

Referring to your letter of December 7, 1955, in which you enclosed copies of a Termination Agreement prepared in Washington and signed by the Administrator, DMEA, whereby the contract would be terminated by mutual agreement.

Our records show claims of $568.00 and $156.00 which were held up pending release of Final Audit or Report of Review or mutual termination of the above contract.

We agree to termination of the contract by mutual agreement with the understanding that the Government may deduct the sum of $500.00 from any monies due us in lieu of making and rendering the final report and final account required under the contract.

Very truly yours,

SCHROEDER MINING COMPANY

By G. A. Kaunz
Asst. Secy. Treas.

CT/1

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

RECEIVED JAN 3 1956

224 New Customhouse
Denver 2, Colorado

December 28, 1955

Memorandum

To: Chairman, Operating Committee, DMEA

From: DMEA Field Team, Region III

Subject: Docket DMEA 2964 (Iron) Contract Idm-E578
Schroeder Mining Company, Platte County, Wyoming

Reference is made to your letter of December 1, 1955, in the last paragraph of which you request that we advise you as to whether this office agrees that the target has been effectively disproved.

The joint memorandum from D. L. McLaren and M. H. Salsbury dated October 4, 1955, which was forwarded by our memorandum of October 7, 1955, outlines the results of the drilling performed in the most favorable areas. This office agrees that the "target" has been effectively disproved by the drilling performed.

By J W Townsend
J. W. Townsend
Acting Executive Officer
DMEA Field Team, Region III

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

RECEIVED
DEC 12 1955

224 New Customhouse
Denver 2, Colorado

December 7, 1955

Memorandum

To: Chairman, Operating Committee, DMEA

From: Acting Executive Officer, DMEA Field Team, Region III

Subject: DMEA Docket 2964 (Iron), Contract Idm-E578, Schroeder Mining Company, Good Fortune and Nightingale mines, Platte County, Wyoming

Enclosed are the original and five copies of Amendment No. 4 to Contract Idm-E578, which was forwarded by your letter of September 9, 1954, for signature by the Operator.

In your letter of September 9, 1954, you instructed us that before the execution of the Amendment it would be necessary for the Operator to furnish copies of an assignment from the Schroeder Mining Company, Inc. to the Schroeder Mining Company of the lease covering the claims involved in the Amendment.

As the assignment requested was never furnished by the Operator, and as the Amendment has been signed by the Administrator, DMEA, for the Government, and, further, because the contract is to be terminated as per the Termination Agreement forwarded by your letter of December 1, 1955, we are returning all copies of the Amendment to you for your disposition.

E. N. Harshman

E. N. Harshman

Enclosures

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

RECEIVED
DEC 12 1955

224 New Customhouse
Denver 2, Colorado

CERTIFIED MAIL

December 7, 1955

Mr. C. A. Thompson
Assistant Secretary-Treasurer
Schroeder Mining Company
Guernsey, Wyoming

Re: DMEA Docket 2964 (Iron)
Contract Idm-E578

Dear Mr. Thompson:

Enclosed are the Governments, Division, Docket, Finance Office and Field Team copies of a Termination Agreement which was prepared in Washington and has been signed by the Administrator, DMEA for the Government to effect termination of Contract Idm-E578 by mutual agreement. If the Termination Agreement is satisfactory to your company, all copies are to be signed by an authorized official of the company and returned to this office. Upon receipt of the properly executed copies of the Termination Agreement, the "Operator's Copy" will be forwarded to you.

Very truly yours,

E. M. Harshman

E. M. Harshman
Acting Executive Officer, DMEA
Field Team, Region III

Enclosures
JWT:jy
cc: Chair. Opr. Comm. (2)
Harshman
Shaw
Townsend
Corresp. File E578
Chron.

DOCKET
SURNAME
400
Chapman
Martin
Talbot
Selfridge

DEC - 1 1955

Mr. W. M. Trever, Executive Officer
DMEA Field Team, Region III
224 New Custom House Building
Denver 2, Colorado

Re: Docket No. DMEA 2964 - Iron
Schroeder Mining Company
Good Fortune & Nightingale Mines
Platte County, Wyoming
Contract No. Idm-2578

Dear Mr. Trever:

Enclosed are the original and five copies of a "Termination Agreement" for the referenced project, signed by the Administrator for the Government.

If the proposed agreement is agreeable to you and the Operator, please have all six copies signed and make the usual distribution.

If any part of the proposed "Termination Agreement" does not have your approval or that of the Operator, the original and all copies are to be returned to this office, together with the proposed changes for consideration.

While the "Termination Agreement" preserves all rights of certification, it is not our present intention to issue a certification of discovery or development.

Judging by M. H. Salsbury's report to you of March 3, 1954, the only mineralization of any interest was found in Hole No. 6; and Holes Nos. 12 and 13, drilled to explore a possible extension of this same mineralization, entered barren limestone a few feet below the surface. Please advise us whether you agree that the "target" has been effectively disproved.

Sincerely yours,

George C. Selfridge

Chairman, Operating Committee (GCB)

APPROVED:

/s/ Robert W. Geehan (GCB)
Member, Bureau of Mines

/s/ N. E. Nelson (GCB)
Member, Geological Survey

cc to: Mr. Lewis, USBM
T. Kilsgaard, USGS

cc to: Adm. Read. File
Operating Comm.
FT. HEG. III

TLCHAPMAN:foc
9-15-55
cc to: Docket
Docket Book

R.C.G.

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

November 28, 1955

MEMORANDUM

To: Administrator, DMEA

From: Iron and Ferro-Alloys Division, DMEA

Subject: Termination of Contract
Docket No. DMEA 2964, Iron
E. C. Schroeder Co., Inc.
(Assigned to: Schroeder Mining Co.)
Good Fortune and Nightingale groups of claims
Platte County, Wyoming
Contract No. Idm-E578

Termination of the subject contract is recommended by this Division based on the following information:

Operator: Schroeder Mining Co., assignee from E. C. Schroeder Co., Inc., McGregor, Iowa.

Contract: Dated August 7, 1953.

To explore for iron ore, churn drill approximately 40 churn drill holes to a maximum of 7,100 feet at an estimated cost of $48,100.00, with Government participation at 50 percent - $24,050.00. A maximum of 5,000 feet of access roads to be bulldozed to drill sites. Three amendments were written to change location of drill holes and time was extended from 12 months to 16 months.

Expiration date, December 7, 1954.

Ownership: The Operator controls by a lease dated December 26, 1952, from the owner, W. H. Collins, the following 12 patented lode mining claims, located in sections 4, 5, 7, and 8, T. 27 N., R. 65 W.:

Nightingale Group, U. S. Survey 196, Certificate 137 - Nightingale, Origan, O. K., Rustler, Columbia, and Black Cloud.

Good Fortune Group, U. S. Survey 194, Certificate 140 - Good Fortune, Good Fortune Annex, Appex, Denver and Gulf, Blue Bird, and Cottonwood.

Work Accomplished:

There were 18 holes drilled to a total depth of 1,994 feet, 2,000 feet of access road constructed, and 90 samples assayed for iron, at a cost of $14,054.00, Government participation at 50 percent, $7,027.00.

Eight holes were barren, 5 holes showed a limited tonnage of marginal ore, and 5 holes showed ore that might be beneficiated, but mining costs would be excessive because of depth of ore and small isolated bodies.

A memorandum dated October 4, 1955, by D. L. MacLaren Geological Survey, and M. H. Salsbury, Bureau of Mines, advises as follows:

" . . . hole No. 6 drilled east of the open pit on the Good Fortune group from 0 to 24 feet penetrated a zone of material having an average grade of 37.0 percent iron, and from 81 to 87 feet penetrated another zone having an average grade of 41.8 percent iron. None of the other samples taken from this hole assayed higher than 20.6 percent iron, while the average for the entire 102 feet of depth of the hole is only 11.1 percent iron. Hole No. 14 drilled north of the open pit penetrated a zone that, from a depth of 298 feet to the bottom of the hole at a depth of 331 feet, ranges in grade from 26 percent to 40 percent iron and has an average grade of 33.5 percent iron. Hole No. 8 penetrated a 12-foot zone, from 72 to 84 feet, having an average grade of 39.7 percent iron, and hole No. 9 penetrated a 6-foot zone with an average grade of 34.9 percent iron. Three holes were drilled on the Nightingale claim. Hole No. 1 penetrated on 18-foot zone, from 14 to 32 feet below the surface, having an average grade of 31.4 percent. All other holes drilled on both claims groups indicated material containing less significant amount of iron.

"Considering the large quantities of ore which must be present to make an iron deposit profitable, any reserve which might be calculated from DMEA drilling results would be insignificant. Moreover the average grade of the mined ore was about 30 percent. The operator was planning to upgrade this ore to about 55 percent in a sink and float plant in which they were treating open pit and dump ore last year. They stated that this ore could be sold profitably because it was a premium grade which supplemented ore they were producing in their Alabama operation. However, it is understood that they sold their Alabama interests and the Wyoming operation could not be operated profitably alone."

"The exploration has not resulted in the discovery of a significant amount of iron ore. It is, therefore, recommended that the project be terminated without a certification of discovery."

The commodity divisions of the Geological Survey and the Bureau of Mines concur in the termination without certification of discovery.

Comments: This Division concurs with the Field Team and believes that there is small probability of making a significant discovery of iron ore by future work at the project site.

W S Martin
W. S. Martin, Chief
Iron and Ferro-Alloys Division

DOCKET
Surname:
Chapman
Martin

November 28, 1955

MEMORANDUM

To: Administrator, DMEA

From: Iron and Ferro-Alloys Division, DMEA

Subject: Termination of Contract
Docket No. DMEA 2964, Iron
E. C. Schroeder Co., Inc.
(Assigned to: Schroeder Mining Co.)
Good Fortune and Nightingale groups of claims
Platte County, Wyoming
Contract No. Idm-E578

Termination of the subject contract is recommended by this Division based on the following information:

Operator: Schroeder Mining Co., assignee from E. C. Schroeder Co., Inc., McGregor, Iowa.

Contract: Dated August 7, 1953.

To explore for iron ore, churn drill approximately 40 churn drill holes to a maximum of 7,100 feet at an estimated cost of $48,100.00, with Government participation at 50 percent - $24,050.00. A maximum of 5,000 feet of access roads to be bulldozed to drill sites. Three amendments were written to change location of drill holes and time was extended from 12 months to 16 months.

Expiration date, December 7, 1954.

Ownership: The Operator controls by a lease dated December 26, 1952, from the owner, W. H. Collins, the following 12 patented lode mining claims, located in sections 4, 5, 7, and 8, T. 27 N., R. 65 W.:

Nightingale Group, U. S. Survey 196, Certificate 137 - Nightingale, Origan, O. K., Rustler, Columbia, and Black Cloud.

Good Fortune Group, U. S. Survey 194, Certificate 140 - Good Fortune, Good Fortune Annex, Appex, Denver and Gulf, Blue Bird, and Cottonwood.

Work Accomplished:

There were 18 holes drilled to a total depth of 1,994 feet, 2,000 feet of access road constructed, and 90 samples assayed for iron, at a cost of $14,054.00, Government participation at 50 percent, $7,027.00.

Eight holes were barren, 5 holes showed a limited tonnage of marginal ore, and 5 holes showed ore that might be beneficiated, but mining costs would be excessive because of depth of ore and small isolated bodies.

A memorandum dated October 4, 1955, by D. L. MacLaren Geological Survey, and M. H. Salsbury, Bureau of Mines, advises as follows:

" . . . hole No. 6 drilled east of the open pit on the Good Fortune group from 0 to 24 feet penetrated a zone of material having an average grade of 37.0 percent iron, and from 81 to 87 feet penetrated another zone having an average grade of 41.8 percent iron. None of the other samples taken from this hole assayed higher than 20.6 percent iron, while the average for the entire 102 feet of depth of the hole is only 11.1 percent iron. Hole No. 14 drilled north of the open pit penetrated a zone that, from a depth of 298 feet to the bottom of the hole at a depth of 331 feet, ranges in grade from 26 percent to 40 percent iron and has an average grade of 33.5 percent iron. Hole No. 8 penetrated a 12-foot zone, from 72 to 84 feet, having an average grade of 39.7 percent iron, and hole No. 9 penetrated a 6-foot zone with an average grade of 34.9 percent iron. Three holes were drilled on the Nightingale claim. Hole No. 1 penetrated on 18-foot zone, from 14 to 32 feet below the surface, having an average grade of 31.4 percent. All other holes drilled on both claims groups indicated material containing less significant amount of iron.

"Considering the large quantities of ore which must be present to make an iron deposit profitable, any reserve which might be calculated from DMEA drilling results would be insignificant. Moreover the average grade of the mined ore was about 30 percent. The operator was planning to upgrade this ore to about 55 percent in a sink and float plant in which they were treating open pit and dump ore last year. They stated that this ore could be sold profitably because it was a premium grade which supplemented ore they were producing in their Alabama operation. However, it is understood that they sold their Alabama interests and the Wyoming operation could not be operated profitably alone."

"The exploration has not resulted in the discovery of a significant amount of iron ore. It is, therefore, recommended that the project be terminated without a certification of discovery."

The commodity divisions of the Geological Survey and the Bureau of Mines concur in the termination without certification of discovery.

Comments: This Division concurs with the Field Team and believes that there is smallprobability of making a significant discovery of iron ore by future work at the project site.

W. S. Martin, Chief
Iron and Ferro-Alloys Division

TLChapman/ls
11/28/55

cc: Docket
Code 400
Oper. Comm.
Adm. Read. File

Mr. G. C. Selfridge

RECEIVED
OCT 13 1955

DN 235 BUR MINES 10-12-55 2-20

G C SELFRIDGE, CHAIRMAN, OPERATING COMMITTEE, DMEA

RE SCHROEDER MINING COMPANY, DOCKET DMEA 2964. JOINT MEMORANDUM BY SALSBURY AND MACLAREN RECOMMENDING TERMINATION WITHOUT CERTIFICATE OF DISCOVERY WITH MEMORANDUM OF TRANSMITTAL AND CONCURRENCE BY W M TRAVER MAILED TO YOUR OFFICE OCTOBER 10.

J W TOWNSEND FOR W M TRAVER

Penner, Colo.

OCT 13 7 46 AM '55
BUREAU OF MINES
MAIL ROOM
WASHINGTON, D. C.

DOCKET
Surname:

Martin
Chapman
Hetherington
Graham
Kiilsgaard
Selfridge

Interior Department
Defense Minerals Expl. Administration
14X5461(01) Revolving Fund
Defense Production Act, Interior
(Allocated Working Fund to the
Office of the Secretary)

TELETYPE

W. M. Traver, Executive Officer
DMEA Field Team, Region 3
224 New Custom House
Denver 2, Colorado

Re Schroeder Mining Company, Docket DMEA 2964. Please advise when we may expect reply ourtt September 20.

George C. Selfridge

Chairman, Operating Committee (GCS)

CC: Docket
Adm. Read. File
Oper. Comm.
Code 400
Thor Kiilsgaard, USGS
Walter E. Lewis, Rm. 3517, USBM
FT, Reg. 3 - confirmation

WSMartin/ls
10/10/55

R.C.F.

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

RECEIVED
OCT 12 1955

224 New Customhouse
Denver 2, Colorado

October 7, 1955

Memorandum

Copy retained 400

To: Chairman of the Operating Committee, DMEA

From: Executive Officer, DMEA Field Team, Region III

WSM

Subject: Docket DMEA 2964 (Iron), Contract IGm-E578, Schroeder Mining Company (Good Fortune and Nightingale Group), Platte County, Wyoming.

Enclosed please find three copies of a joint memorandum, dated October 4, 1955, prepared by the inspecting engineer and geologist with initialed approval by E. H. Marshman, Member, Field Team, Region III, and J. F. Shaw, Supervising Engineer. This memorandum was prepared in conformance with your teletype dated September 20, 1955, whereby you requested additional information relative to possible certification on completed project work and if any worthwhile target remains.

Work completed under the contract consisted of 1,194 feet of churn drilling completed in 18 holes. Eight of these holes encountered essentially barren ground. Five of the holes encountered very low-grade submarginal iron. The remaining five holes encountered mineralization which also must be considered submarginal due to thinness, depth, or lack of continuity between holes. Because the program was initiated to explore the most favorable areas, the chances of finding a worthwhile deposit by future work becomes considerably less.

Relative to any producing deposit, no reserves of consequence can be calculated and Certification of Discovery or Development is not recommended.

The Operator has paid $560.18 in royalty to the Government on 10,952.46 long tons of iron ore produced from land subordinated in the contract. This ore was produced from existing known deposits, 78 percent produced prior to the start of contract work.

W. M. Traver

Enclosures
WMTsprl
cc: Marshman
Shaw (2)
Townsend
Corres. file
Chron.

D. chet

Building 20
Denver Federal Center
Denver 2, Colorado

October 4, 1955

RECEIVED
OCT 12 1955

Region III

Memorandum

To: W. M. Traver, Executive Officer

Through: E. N. Harshman, Member Field Team EMH.
John F. Shaw, Supervising Mining Engineer JFS

From: D. L. MacLaren
M. H. Salsbury

Subject: DMEA 2964 Contract Idm-E578 (Iron) Schroeder Mining Company (Good Fortune and Nightingale group) Platte County, Wyoming-Recommendations on Certification of Discovery.

In reference to the teletype on the subject project from the chairman of the Operating Committee to the Executive Officer Region III dated September 20, 1955, hole No. 6 drilled east of the open pit on the Good Fortune group from 0 to 24 feet penetrated a zone of material having an average grade of 37.0 percent iron, and from 81 to 87 feet penetrated another zone having an average grade of 41.8 percent iron. None of the other samples taken from this hole assayed higher than 20.6 percent iron, which the average for the entire 102 feet of depth of the hole is only 11.1 percent iron. Hole No. 14 drilled north of the open pit penetrated a zone that, from a depth of 298 feet to the bottom of the hole at a depth of 331 feet, ranges in grade from 26 percent to 40 percent iron and has an average grade of 33.5 percent iron. Hole No. 8 penetrated a 12-foot zone, from 72 to 84 feet, having an average grade of 39.7 percent iron, and hole No. 9 penetrated a 6-foot zone with an average grade of 34.9 percent iron. Three holes were drilled on the Nightingale claim. Hole No. 1 penetrated on 18-foot zone, from 14 to 32 feet below the surface, having an average grade of 31.4 percent. All other holes drilled on both claims groups indicated material containing less significant amount of iron.

Considering the large quantities of ore which must be present to make an iron deposit profitable, any reserve which might be calculated from DMEA drilling results would be insignificant. Moreover the average grade of the mined ore was about 39 percent. The operator was planning to upgrade this ore to about 55 percent in a sink and float plant in which they were treating open pit and dump ore last year. They stated that this ore could be sold profitably because it was a premium grade which supplemented ore they were producing in their Alabama operation. However, it is understood that they sold their Alabama interests and the Wyoming operation could not be operated profitably alone.

The exploration has not resulted in the discovery of a significant amount of iron ore. It is, therefore, recommended that the project be terminated without a certification of Discovery.

D. L. MacLaren, Geologist

for M. H. Salsbury, Mining Engineer

MHS: vt

cc: 9
E.N.Harshman
E578
Chron.

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

RECEIVED
OCT 12 1955

224 New Customhouse
Denver 2, Colorado

October 7, 1955

Memorandum

To: Chairman of the Operating Committee, DMEA

From: Executive Officer, DMEA Field Team, Region III

Subject: Docket DMEA 2964 (Iron), Contract Idm-E578, Schroeder Mining Company (Good Fortune and Nightingale Group), Platte County, Wyoming.

Enclosed please find three copies of a joint memorandum, dated October 4, 1955, prepared by the inspecting engineer and geologist with initialed approval by E. N. Harshman, Member, Field Team, Region III, and J. F. Shaw, Supervising Engineer. This memorandum was prepared in conformance with your teletype dated September 20, 1955, whereby you requested additional information relative to possible certification on completed project work and if any worthwhile target remains.

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Relative to any producing deposit, no reserves of consequence can be calculated and Certification of Discovery or Development is not recommended.

The Operator has paid $560.18 in royalty to the Government on 10,952.46 long tons of iron ore produced from land subordinated in the contract. This ore was produced from existing known deposits, 78 percent produced prior to the start of contract work.

W. M. Traver

Enclosures

W. M. Traver

Building 20
Denver Federal Center
Denver 2, Colorado

October 4, 1955

RECEIVED
OCT 12 1955

Region III

Memorandum

To: W. M. Traver, Executive Officer

Through: E. N. Harshman, Member Field Team E.N.H.
John F. Shaw, Supervising Mining Engineer JFS

From: D. L. MacLaren
M. H. Salsbury

Subject: DMEA 2964 Contract Idm-E578 (Iron) Schroeder Mining Company (Good Fortune and Nightingale group) Platte County, Wyoming-Recommendations on Certification of Discovery.

In reference to the teletype on the subject project from the chairman of the Operating Committee to the Executive Officer Region III dated September 20, 1955, hole No. 6 drilled east of the open pit on the Good Fortune group from 0 to 24 feet penetrated a zone of material having an average grade of 37.0 percent iron, and from 81 to 87 feet penetrated another zone having an average grade of 41.8 percent iron. None of the other samples taken from this hole assayed higher than 20.6 percent iron, which the average for the entire 102 feet of depth of the hole is only 11.1 percent iron. Hole No. 14 drilled north of the open pit penetrated a zone that, from a depth of 298 feet to the bottom of the hole at a depth of 331 feet, ranges in grade from 26 percent to 40 percent iron and has an average grade of 33.5 percent iron. Hole No. 8 penetrated a 12-foot zone, from 72 to 84 feet, having an average grade of 39.7 percent iron, and hole No. 9 penetrated a 6-foot zone with an average grade of 34.9 percent iron. Three holes were drilled on the Nightingale claim. Hole No. 1 penetrated an 18-foot zone, from 14 to 32 feet below the surface, having an average grade of 31.4 percent. All other holes drilled on both claims groups indicated material containing less significant amount of iron.

Considering the large quantities of ore which must be present to make an iron deposit profitable, any reserve which might be calculated from DMRA drilling results would be insignificant. Moreover the average grade of the mined ore was about 30 percent. The operator was planning to upgrade this ore to about 55 percent in a sink and float plant in which they were treating open pit and dump ore last year. They stated that this ore could be sold profitably because it was a premium grade which supplemented ore they were producing in their Alabama operation. However, it is understood that they sold their Alabama interests and the Wyoming operation could not be operated profitably alone.

The exploration has not resulted in the discovery of a significant amount of iron ore. It is, therefore, recommended that the project be terminated without a certification of Discovery.

D R Maclaren
D. R. MacLaren, Geologist

for Robt F. Salsbury
M. H. Salsbury, Mining Engineer

MHS: vt

cc: 9
E.N.Harshman
E578
Chron.

DOCKET
Surname:
Chapman
Martin
Yost
Nelson
Selfridge
Johnson

Defense Minerals Exploration
Administration
Dept. of the Interior
14X4401(01) Revolving Fund, Defense
Production Act, Interior
(Allocated Working Fund to the
Office of the Secretary)

SEP 20 1955

T E L E T Y P E

Mr. W. M. Traver, Executive Officer
DMEA Field Team, Region 3
224 New Custom House
Denver 2, Colorado

Reference is made to Schroeder Mining Company, Docket DMEA-2964, and M. H. Salsbury's report of March 3, 1954, which states the only mineralization of interest was found in Hole No. 6; and Holes Nos. 12 and 13, drilled to explore possible extension of same mineralization, entered barren limestone close to surface. Please advise if you believe certification is justified and if any worthwhile target remains.

George C. Selfridge

Chairman, Operating Committee

cc: Docket
FT, Reg. 3--confirmation
Code 400
Oper. Comm.
Adm. Read. File
Thor Kiilsgaard, USGS
Walter E. Lewis, Rm 3517, USBM

TLChapman/ls
9/19/55

Docket

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

September 9, 1955

Memorandum

To: W. S. Martin, Chief, Iron and Ferroalloys Division, DMEA

From: Commodity Industry Analyst, Branch of Ferrous Metals and Ferroalloys

Subject: Termination Agreement
Docket No. DMEA 2964
Schroder Mining Company
Good Fortune & Nightingale mines
Platte County, Wyoming
Contract No. Idm-E578

The Executive Office, DMEA, Region III has recommended by a memorandum dated August 8, 1955, that the subject contract be terminated. The memorandum lists four reasons as to why the contract should be terminated. I am in agreement with the reasons for termination.

I approve the Termination Agreement as written and have surnamed two copies indicating my approval.

Walter E. Lewis

Walter E. Lewis

Copy retained 400

400 DOCKET SURNAME
Chapman

August 26, 1955

MEMORANDUM

To: Acting Assistant Solicitor, Defense Minerals

From: Iron and Ferro-Alloys Division, DMEA

Subject: Termination without final report
Docket No. DMEA 2964 - Iron
Schroeder Mining Company
Good Fortune and Nightingale Mine
Platte County, Wyoming
Contract No. Idm-E578

It will be appreciated if you will review the referenced docket and write a termination agreement to cover same.

Many attempts have been made to obtain a final report from the operator, but they continue to ignore our requests. $578.00 has been withheld from payments due. It is suggested that we withhold $500.00 in lieu of final report.

Thos. L. Chapman, Actg. Chief
Iron and Ferro-Alloys Division

TLChapman:foc
8-26-55
cc to: Docket
Code 400
Adm. Read. File

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

224 New Customhouse
Denver, Colorado

August 8, 1955

Memorandum

RECEIVED
AUG 11 1955

To: Chairman of the Operating Committee, DMEA

From: Executive Officer, DMEA, Region III

Subject: Docket DMEA 2964 (Iron), Contract Idm-E578, Schroeder Mining Company (Good Fortune and Nightingale Mine), Platte County, Wyoming

Project work ceased under Contract Idm-E578 in July 1954. Much correspondence has passed between our office, your office and the Operator in an attempt to assist him, learn of his plans and to remind him of certain contract provisions. This contract has never been officially terminated and we believe your office should initiate action to do so at once. To assist you in quickly reviewing past correspondence relative to this recommendation we outline the following:

9-9-54: Letter from Chairman to Executive Officer, Region III, forwarding Amendment No. 3 for signature of Operator. This amendment provided for the addition of seven mining claims to Article 2 of the contract. Your instructions were to have the Operator furnish the necessary assignment of these claims, as in the original Assignment of Contract, before execution of the amendment.

9-16-54: Letter from Executive Officer, Region III, to Operator notifying them of the amendment and requesting the assignment. (No reply.)

10-21-54: Letter from Executive Officer, Region III, to Operator again requesting the assignment with the reminder of the contract expiration date. (No reply.)

12-7-54: Memorandum from Executive Officer, Region III, to the Chairman suggesting that Washington write the Operator for information regarding the assignment, and to learn of the Operator's plans for continuing work under the contract.

12-8-54: Letter from Chairman to Executive Officer, Region III, asking what the status of royalty payments were, questioning the reason why the amendment was still in the field, and asking that this office expedite the completion or closing out of the contract.

12-13-54: Memorandum from Executive Officer, Region III, to Chairman with same information as in our letter of December 7, 1954.

12-17-54: Administrator's letter to Operator requesting the same information. (No reply.)

12-21-54: Washington's letter to M. M. Cooney requesting the same information.

1-25-55: Letter from M. M. Cooney to Washington explaining that the original contract holder or assignor had died. He also stated that the "operation has been shut down for some time due to the company's inability to sell the ore at a profit...."

1-31-55 and 2-11-55: Washington's letters to Cooney acknowledging letters from Cooney which stated that the Operator's auditor from Guernsey, Wyoming would contact Region III and supply requested information.

4-20-55: Memorandum from Executive Officer, Region III, to the Chairman informing him that Region III had not heard from the Operator's auditor.

4-29-55: Letter from Washington to Cooney with same information.

4-26-55: Letter to Executive Officer, Region III, from C. A. Thompson, Assistant Secretary-Treasurer, with Operator's check for all of royalty payments due the Government.

4-26-55: Letter from Thompson to fiscal office, Region III, requesting release of $500.00 withheld from June and July 1954 progress report pending receipt of Operator's final report.

4-29-55: Letter from Executive Officer, Region III, to Thompson explaining why $500.00 was withheld and requesting their final report. We are actually withholding $578.00; the additional $78.00 was claimed in a supplemental progress report dated October 21, 1954.

6-1-55: Letter from Executive Officer, Region III, to Thompson again requesting the Operator's final report and account.

Although we have asked the Operator for a final report and accounting, the contract has never been officially terminated. We will continue to withhold the $578.00 until the Operator's final report is received, but believe that the contract should be officially terminated for the following reasons:

1) The original contract holder or assignor is deceased, and to incorporate the seven additional claims in the contract with an assignment may now involve considerable legal difficulties.

2) The completion period of the contract expired on December 7, 1954 and the Operator has not shown any interest in an extension.

3) Cooney reports that the Operator has not been able to sell any ore at a profit for some time, so we assume that he no longer is interested in continuing the project.

4) The indifferent attitude of the Operator toward DMEA assistance and failure to reply to recent correspondence.

W. M. Traver

Rutledge
Martin
Hofflund
Martin

Rewritten by

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

AUG - 2 1955

Hon. Frank A. Barrett
United States Senate
Washington 25, D. C.

Re: Docket No. DMEA-2964 (Iron)
Schroeder Mining Co.
Platte County, Wyoming
Contract Idm-E578

My dear Senator Barrett:

Under date of June 25 you referred to us a letter dated July 23 to you from D. N. Sherard, an attorney representing W. H. Collins. The letter states that Dr. Collins is the owner of certain mining claims that are the subject of the exploration project contract above referred to, which contract is now held by Schroeder Mining Co. by assignment from the original operator, E. C. Schroeder Co., Inc. The attorney, in behalf of Dr. Collins, expresses doubt as to whether the exploration work described in the contract has been performed, and asks if it was performed that he be advised of the results.

The facts are that the estimated cost of the work provided for in the contract is the sum of $48,100.00 to which the Government agreed to contribute 50 per cent or $24,050.00; that work under the contract has been discontinued by the operator since August 1954; that up to that time only a part of the work had been performed at a cost represented by the operator at $13,898.00; and that the operator remains in default with respect to performance.

In view of the limited amount of work that has been performed, and the failure of the operator to achieve the goals fixed by the contract, this administration cannot at this time supply any worthwhile information with respect to the results of the work. If the project is ever completed this agency may be able to provide Dr. Collins with the factual results of the work performed.

Mr. Sherard's letter is returned herewith.

Sincerely yours,

C. O. Mittendorf

Administrator

FARutledge/JLHofflund/emd
7/29/55
Copy to: DMEA Docket
Adm. R. File
Op. Comm.
W. S. Martin (2)
Field Team, Reg. III
Enclosure
J. L. Hofflund
chron. pending

R.C.S.

C O P Y

D. N. SHERARD

Attorney at Law

Wheatland, Wyoming

July 23, 1955

The Honorable Frank Barrett
United States Senator
Washington, D. C.

Dear Senator Barrett:

I represent W. H. Collins of Wheatland, Wyoming whom I think you know quite well. At the present time Dr. Collins is very ill from a heart attack and is confined in a hospital here in Wheatland.

Dr. Collins is the owner of what is known as the Nightingale and Good Fortune Iron Mining Claims here in Platte County which comprise approximately 700 acres.

Several years ago Dr. Collins leased these mining claims to the E. C. Schroder Company, Inc. whereby the latter was to mine the iron therefrom. Since that time this company has apparently abandoned these claims, so they did not furnish the Doctor with any core drilling data or other exploratory results.

We noticed in an issue of the Denver Post dated December 30, 1953, it was reported that the United States had advanced to this company the sum of $24,500.00, which sum was to be matched by the company, for exploratory work and core drilling on these claims.

The Doctor is doubtful that this exploratory work or core drilling was ever done and he would appreciate any assistance that you might be able to give in determining whether or not $49,000.00 worth of exploration was carried on and if so we would very much like to know the results of it.

Kindest personal regards.

Sincerely yours,

/s/ D. N. Sherard

D.N. Sherard
DNS:wfa

United States Senate

July 25, 1955

Respectfully referred to

Mr. Williams S. Martin, Director
Iron and Ferro-Alloys Division
Defense Minerals Exploration Administration
Department of Interior
Washington, 25, D. C.

with thanks for such favorable consideration as the communication herewith submitted warrants, and for a report thereon, to accompany return of inclosure.

By direction of

Frank A. Barrett
U. S. S.

MAILS & FILES

400

Rutledge
Martin

Hon. Frank A. Barrett
United States Senate
Washington 25, D. C.

My dear Senator Barrett:

This will acknowledge receipt of your letter of July 25, 1955, and an attached letter from Mr. D. H. Sherrard, Wheatland, Wyoming, inquiring about the exploration completed under Contract No. IdA-1578, Schroeder Mining Co., Assignee, our Docket No. DMEA 296h, on the Good Fortune and Nightingale properties. The referenced information was requested in behalf of Dr. W. H. Collins, Wheatland, Wyoming, owner of the Nightingale and Good Fortune claims.

The Defense Minerals Exploration Administration entered into a contract with the K. C. Schroeder Co., Inc. on August 7, 1953, that authorized the drilling of 7300 feet of churn drill holes for the exploration of iron. Total cost of the exploration project was $48,100.00. Of this amount the Government would contribute 50 percent of the approved costs or $24,050.00, and the project work was to be completed within twelve months of the date of the contract.

On January 28, 1953, the Government consented to the assignment of Contract No. IdA-1578 to the Schroeder Mining Co., 500 Wesley Temple Building, Minneapolis 3, Minnesota.

By Amendment No. 2, dated August 30, 1954, the period for completion of the exploration was extended to sixteen months from the date of the contract.

Since August 1954, no project has been in unauthorized focess. By that time, 1968 feet of the authorized drilling had been completed at a total cost of 13,898.00.

At the completion of the project if the owner or someone having his power of attorney will apply directly to us, we can probably furnish him for his personal use but not for publication the factual results of the exploration.

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

RECEIVED
JUN - 6 1955

224 New Customhouse
Denver 2, Colorado

June 1, 1955

Mr. C. A. Thompson
Assistant Secretary-Treasurer
Schroeder Mining Company
Guernsey, Wyoming

Re: Docket DMEA 2964 (Iron)
Contract Idm-E578

Dear Mr. Thompson:

Your attention is directed to the provisions of Article 3 of Exploration Project Contract Idm-E578, as amended by Amendment No. 2, which establishes the period within which the project work is to be completed as 16 months from the date of the contract, or in effect by December 7, 1954.

Inasmuch as the contract has expired, and apparently you are not desirous of continuing operations under the contract, your attention is therefore directed to the provisions of Article 5(b) regarding your responsibility for the rendering of a final engineering and geologic report pertaining to work completed under the contract.

We are desirous of closing this account at an early date, therefore we will appreciate your rendering the final engineering and geologic report at your earliest convenience.

Very truly yours,

W. M. TRAVER

W. M. Traver
Executive Officer, DMEA
Field Team, Region III

JWT:jp
cc Subject
Chron
Chairman, Op. Comm.
Harshman
Shaw
Townsend

Copy made for Alec

Dinea 2964

Copied from MINING WORLD, May 1955- Vol. 17 No. 6, Page 91

The Schroeder Mining Company of McGregor, Iowa has announced plans for opening an iron ore strip mine 6½ miles west of Chatfield, Minnesota, about 18 miles southeast of Rochester, Schroeder recently sold properties they were operating in Alabama and Wyoming. Plans are to ship about 15 cars of washed ore a day starting July 1. The grade of ore and type of operation will be similar to that now handled by M. A. Hanna Company at Spring Valley, Minnesota.

Docket
Martin
Mittendorf

MAY - 4 1955

Mr. M. M. Cooney
Clewell, Cooney & Fuerste
705 Roshek Building
Dubuque, Iowa

Re: Docket No. DMEA 2964 - Iron
Schroeder Mining Co. (Assignee)
Good Fortune & Nightingale mines
Platte County, Wyoming
Contract No. Idm-E578

Dear Judge Cooney:

Please disregard our letter of April 29, 1955. We have received from the Field Team, Region III, copy of an acknowledgment bearing that same date of a letter of April 26 from Mr. C. A. Thompson, Assistant Secretary-Treasurer, Schroeder Mining Co., Guernsey, Wyoming.

From the tone of the above-mentioned copy, we assume that no further intervention from your office or this office will be necessary.

Sincerely yours,

W. S. Martin

W. S. Martin, Chief
Iron and Ferro-Alloys Division

cc: Docket
Code 400
Adm. Read. File
Robt. Holliday, USBM
Thor Kiilsgaard, USGS
FT, Reg. 3, Denver

WSMartin/ls
5/3/55

R.C.S.

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

224 New Customhouse
Denver 2, Colorado

April 29, 1955

Mr. C. A. Thompson
Assistant Secretary-Treasurer
Schroeder Mining Co.
Guernsey, Wyoming

Re: Docket DMEA 2964 (Iron)
Contract Idm-E578

Dear Mr. Thompson

Receipt is acknowledged of your letter of April 26, 1955, and your check in the amount of $560.18 in payment of royalties as per our calculation sheet of February 24, 1955.

In the last paragraph of your letter of April 26 you request that we release the sum of $500.00 withheld from reimbursement to you on Forms MF-104 for the months of June and July 1954.

The sum of $500.00 was withheld for the reason stated on the Administrative Audit Difference Statement which is returned herewith for your records.

Upon resumption of drilling under the contract or receipt of your final engineering and geologic report, the amount withheld will be released for reimbursement to you.

Very truly yours,

W. M. TRAVER

W. M. Traver
Executive Officer, DMEA
Field Team, Region III

JWT:jp
cc Subject
Royalty
Chron
Chairman, Op. Comm. (3)
Harshman
Shaw
Townsend

400

DOCKET
Surname:
Martin
Chambers
Mitchell

APR 29 1955

Mr. M. M. Cooney
Clewell, Cooney & Fuerste
705 Roshek Building
Dubuque, Iowa

Re: Docket No. DMEA 2964 - Iron
Schroeder Mining Co. (Assignee)
Good Fortune & Nightingale mines
Platte County, Wyoming
Contract No. Idm-E578

Dear Judge Cooney:

A review of our files on the subject contract shows that Mr. W. M. Traver, Executive Officer, DMEA Field Team, Region III, 224 New Custom House, Denver, Colorado, has not yet heard from the auditor at Guernsey, as outlined in your letter to us of February 4, 1955.

We feel sure that you will agree that by this time Mr. Traver should have had some word from the auditor, as Mr. Schroeder instructed.

Sincerely yours,

SIGN

W. S. Martin, Chief
Iron and Ferro-Alloys Division

cc: Docket
Code 400
Adm. Read. File
R. Holliday, USBM
T. Kiilsgaard, USGS
FT, Reg. 3 - Denver

WSMartin/ls
4/29/55

R.C.B.

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

224 New Customhouse
Denver 2, Colorado

April 20, 1955

Memorandum

To: Chairman, Operating Committee, DMEA

From: Executive Officer, DMEA Field Team, Region III

Subject: Docket DMEA 2964 (Iron), Contract Idm-E578, Schroeder Mining Co., Good Fortune and Nightingale Mine, Platte County, Wyoming

Reference is made to the post script instructions to this office in the letter dated February 11, 1955 from W.S. Martin, Chief, Iron and Ferro Alloy Division, to Mr. M. M. Cooney.

The data to be furnished this office by the auditor at Gurnsey has never been received, therefore the matter is again referred to you for appropriate action.

W. M. Traver

W. M. Traver

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

224 [illegible]
[illegible], Colorado

[illegible] 1, [illegible]

Registered Mail

Mr. [illegible] Thompson
Assistant Secretary-Treasurer
Schroeder Mining Company
Guernsey, Wyoming

Re: Royalty payments, DMEA Docket 994
(Iron) Contract IDm-85[illegible], Schroeder
Mining Co., Cook Fortune and
Mingtaingale groups, Platte County,
Wyoming

Dear Mr. Thompson:

Reference is made to our letter to you concerning royalty payments under DMEA Contract IDm-85[illegible], Schroeder Mining Company, dated February [illegible], 19[illegible]. As we have not received a reply to this letter we are enclosing another copy for your convenience. Please give this matter your immediate attention.

If we do not hear from you by May 10, 1955, it will be necessary [illegible] to refer this matter to the Washington office for appropriate action.

Yours very truly,

W. M. TRAVER

W. M. Traver
Executive Officer
DMEA Field Team, Region III

Enclosures

Copy to: Mr. David Schroeder, Manager, Schroeder Mining Company,
McGregor, Iowa (with copy of circulation sheet and letter)
[illegible]
[illegible]
[illegible]
[illegible]
[illegible]
[illegible]

Copy retained 400

Docked

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

224 New Customhouse
Denver 2, Colorado

February 24, 1955

Mr. C. A. Thompson
Assistant Secretary-Treasurer
Schroeder Mining Company
Guernsey, Wyoming

Re: Royalty payments, DMEA Docket 29-4, (Iron)
Contract Idm-2570, Schroeder Mining Co.,
Good Fortune and Nightingale Groups,
Platte County, Wyoming

Dear Mr. Thompson:

We acknowledge receipt of your letter dated February 15, 1955, with which you transmitted the original and four copies of settlement sheets pertaining to the sale of iron ore produced under Contract Idm-2570.

We have verified the accuracy of the copies and have calculated the total royalty due on these shipments to be $560.10 as shown on the attached copy of our calculation sheet. We are returning the original settlement sheets to you as per your request in your transmittal letter of February 15, 1955.

Please send your check in the amount of $560.10 in payment of royalties due on these shipments to the Executive Officer, DMEA Field Team, Region III, Room 224 New Customhouse, Denver 2, Colorado. All checks should be made payable to the Defense Minerals Exploration Administration.

Yours very truly,

W. M. TRAVER

W. M. Traver
Executive Officer
DMEA Field Team, Region III

Enclosures
[illegible]
Copy to: Mr. Paul Schroeder, Manager
Schroeder Mining Co., McGregor, Iowa (with copy calculation sheet)
[illegible] w/copy calculation sheet
J. E. Shaw w/copy calculation sheet
[illegible]
[illegible] w/copy calculation sheet
[illegible]
[illegible]
Royalty [illegible]

DOCKET
SURNAME
400 Rutledge
Martin
Matthewson

FEB 1 1 1955

Mr. M. M. Cooney
Clewell, Cooney & Fuerste
705 Roshek Building
Dubuque, Iowa

Re: Docket No. DMEA 296h - Iron
Schroeder Mining Co. (Assignee)
Good Fortune & Nightingale mines
Platte County, Wyoming
Contract No. Idm-2578

Dear Judge Cooney:

This will acknowledge your reply of February h, 1955, to our letter of January 21, 1955. We note that Mr. Schroeder has instructed the auditor at Guernsey to furnish Mr. King with the information requested and trust that the difficulties pertaining to the subject contract will soon be resolved.

Sincerely yours,

SIGNED
W. S. Martin, Chief
Iron and Ferro-Alloys Division

FARutledge:foc
2-9-55
cc to: Docket
Code 400
Adm. Reading File
FT. REG. III**
WxxM R. Holliday, USBM
Thor H. Kiilsgaard, USGS

(**) If you do not receive the requested data from the auditor within a reasonable period, please advise us so that we can write again to Judge Cooney.

R.C.F.

CLEWELL, COONEY AND FUERSTE
LAW OFFICES
705 ROSHEK BUILDING
DUBUQUE, IOWA

ROBT. W. CLEWELL
M. M. COONEY
WILLIAM C. FUERSTE

DEPARTMENT OF THE INTERIOR
DIAL 3-5749
Loans Minerals Administration
RECEIVED
FEB 7 1955

February 4, 1955

Mr. W. S. Martin, Chief
Iron and Ferro-Alloys Division
U.S. Department of the Interior, DMEA
Washington 25, D.C.

WSM

Re: Docket No. DMEA 2964 - Iron
Schroeder Mining Co.(Assignee)
Good Fortune & Nightingale mines
Platte County, Wyoming
Contract No. Idm-E578

Dear Mr. Martin:

This will acknowledge receipt of your letter of January 31, 1955, with copies of Mr. King's letters of September 8, September 16 and October 21 and October 22, 1954, enclosed. Mr. Schroeder has instructed the auditor at Guernsey to furnish Mr. King with the information requested.

Very truly yours,

CLEWELL, COONEY & FUERSTE,

BY M. M. Cooney

MMC:C

400

DOCKET
Surname:
Rutledge
Martin
Mostendorf

JAN 31 1955

Mr. M. M. Cooney
Clewell, Cooney & Fuerste
705 Roshek Building
Dubuque, Iowa

Re: Docket No. DMEA 2964 - Iron
Schroeder Mining Co.(Assignee)
Good Fortune & Nightingale mines
Platte County, Wyoming
Contract No. Ida-K578

Dear Judge Cooney:

This is to thank you for your reply of January 25, 1955, to our letter of January 21. Your cooperation in this matter is certainly appreciated. Please give our condolences to Mr. Paul E. Schroeder.

For your convenience we are enclosing two copies of each of the letters referred to in our letter of December 17, 1954, and dated as follows: September 8, September 16, October 21, and October 22, 1954.

Sincerely yours,

W. S. Martin, Chief
Iron and Ferro-Alloys Division

Enclosures

cc: DOCKET
FT. REG. III-Denver, Colo.
CODE 400
ADM. READ. FILE
T. KIILSGAARD, USGS
R. HOLLIDAY, USBM

FARutledge/WSMartin/ls
1-28-55

R.C.G.

CLEWELL, COONEY AND FUERSTE
LAW OFFICES
705 ROSHEK BUILDING
DUBUQUE, IOWA

ROBT. W. CLEWELL
M. M. COONEY
WILLIAM C. FUERSTE

DIAL 3-5749

DEPARTMENT OF INTERIOR
Defense Minerals
RECEIVED
JAN 27 1955

January 25, 1955

WSM

Mr. W. S. Martin, Chief
Iron and Ferro-Alloys Division
Defense Minerals Exploration
Administration
United States Department of Interior
Washington 25, D.C.

Re: Docket No. DMEA 2964 - Iron
Schroeder Mining Co. (Assignee)
Good Fortune and Nightingale mines
Platte County, Wyoming
Contract No. Idm-E578

Dear Mr. Martin:

I have your letter of January 21, 1955, together with the copy of Mr. Mittendorf's letter to Paul E. Schroeder dated December 17, 1954. Mr. Schroeder does not have any recollection of receiving any letters that he has not answered except Mr. Mittendorf's letter of December 17, 1954, which came to the McGregor office of E. C. Schroeder Co., Inc. while he was in Kansas on a job and the letter was not forwarded to him.

The Wyoming operation has been shut down for some time due to the Company's inability to sell the ore at a profit and it is possible that the letters in question came to the Guernsey office of the Schroeder Mining Co. and were not forwarded to Mr. Schroeder. During this period Mr. Schroeder states that he or some Company representative had various conferences with members of the Denver DMEA office.

I am assuming that the letters of September 16, October 21, and October 22, 1954, came out of your office, and if you will send me copies I will see that you get an answer by return mail.

Mr. E. C. Schroeder, who was in charge of the E. C. Schroeder Co., Inc. and Schroeder Co. operations, died during the holidays and Paul Schroeder has been on the road most of the time since.

When I receive copies of your letters I will get Mr. Schroeder in and get you the information you desire.

Sincerely,

M. M. Cooney

M. M. COONEY

MMC:C

made + also copies sent to F.T. - Denver.

DOCKET
Surname:

Rutledge
Martin
Mitchell

400

JAN 21 1955

Mr. M. M. Cooney
Clewell, Cooney & Fuerste
705 Roshek Building
Dubuque, Iowa

Re: Docket No. DMKA 2964 - Iron
Schroeder Mining Co. (Assignee)
Good Fortune and Nightingale mines
Platte County, Wyoming
Contract No. Idm-K578

Dear Judge Cooney:

Enclosed is a copy of our letter of December 17, 1954, to Mr. Paul C. Schroeder, President, Schroeder Mining Company, with regard to the above-referenced exploration contract. No reply has been received from Mr. Schroeder.

Considering the interest which you showed in obtaining the contract for E. C. Schroeder Co., Inc., we believe it is now in order to mention this matter to you. We chiefly need to determine:

When replies will be received to the referenced letters;
When royalty payments will be made; and
Whether continuation of the exploration program is planned.

Your comments on any or all of the foregoing questions will be appreciated.

Sincerely yours,

S/

W. S. Martin, Chief
Iron and Ferro-Alloys Division

Enclosure

cc: Docket
FT, Reg. 3 - Denver, Colo.
Code 400
Adm. Read. File
T. Kiilsgaard, USGS
Robert Holliday, USBM

FARutledge/WSMartin/ls
1-21-55

R.C.H.

DOCKET
SURNAME
Rutledge
Martin

400

DEC 17 1954

Mr. Paul C. Schroeder, President
Schroeder Mining Company
McGregor, Iowa

Re: Docket No. DMEA 2964 - Iron
Good Fortune and Nightingale mines
Platte County, Wyoming
Contract No. Idm-E578

Dear Mr. Schroeder:

Reference is made to the subject docket. Records in this office indicate that the last correspondence received relating to the exploration program under Contract No. Idm-E578 was the progress report and voucher for July 1954. We have had no answers to our letters of September 8, September 16, October 21, and October 22, 1954.

In the interest of expediting the DMEA program, it will be appreciated if you will give these matters your prompt attention.

Sincerely yours,

C. O. Mittendorf

Administrator

FARutledge:foc
12-16-54
cc to: Docket
Code 400
Adm. Reading File
FT. REG. IV
Robert Holliday, USBM
Thor H. Kiilsgaard, USGS

case
12-17

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

Defense Minerals Administration
RECEIVED
DEC 15 1954

224 New Customhouse
Denver 2, Colorado

December 13, 1954

AIRMAIL

Memorandum

To: Chairman, Operating Committee, DMEA

From: Executive Officer, DMEA Field Team, Region IV

Subject: Docket DMEA 2964 (Iron), Contract Idm-E578, Schroeder Mining Company (Assignee), Good Fortune and Nightingale Mines, Platte County, Wyoming

Reference is made to your letter of December 8, 1954 and our memorandum of the same date, which passed enroute, relative to matters concerning the subject contract.

As we have been unable to obtain a reply to any of our letters to the operator, or settlement of the matters concerned, we recommend that the Washington office, DMEA, contact the operator in an effort to obtain a solution of the problems involving work and payment of delinquent royalty due the Government under the terms of the contract.

In conjunction with royalty matters we are enclosing for your information two copies each of our letters to the operator dated September 8 and October 22 to which we have received no reply.

W. H. King

W. H. King

Encls.

[illegible] New Centennial
Denver 2, Colorado

[illegible] 2, 1974

Mr. Paul C. Schreiber, Manager
Schreiber Mining Company
Keokuk, Iowa

Re: [illegible]
[illegible]
[illegible]
[illegible]

Dear [illegible]

[illegible]

[illegible]

[illegible]

[illegible]

Enclosure

221 New Customhouse
Denver 2, Colorado

September 6, 1951

Mr. Paul E. Schroeder, Manager
Schroeder Mining Company
McGregor, Iowa

Re: Roy Ray Payment
MMM Docket 2914 (Iron) Contract [illegible]
Schroeder Mining Company
Great Fortune and Lightning Groups
Idaho County, Idaho

Dear Mr. Schroeder:

[illegible]

[illegible]

[illegible] stockpiled before August 7, 1951. Also, [illegible] group prior to August 7, 1951, [illegible] royalty [illegible] required [illegible] stockpile of this material. You should also state that it was not your intention for at the time the contract was signed that material already stockpiled would be subject to the Government's royalty. If this request is received, we will forward it to our Washington office for their consideration [illegible] your contract may be amended to exclude from royalty payments all material stockpiled before August 7, 1951.

If royalty is paid on all concentrates produced since August 7, 1951, we will require four copies of all settlement sheets. If part of your production is excluded from royalty payments by an amendment as stated above, we will require four copies certified, a breakdown sheet which shows total production of concentrates from the date of the contract to date, and the portion of this total production which is subject to MMM royalty payments.

We are enclosing four copies of DMA Order 1 Amendment, Section 10 of which explains the method of royalty calculation under DMA Contracts.

Please make your check payable to the Defense Minerals Exploration Administration and send it with copies of settlement sheets, etc. to L. H. King, Executive Officer, DMA, Region IV, Room 224 New Customhouse, Denver 2, Colorado.

Yours very truly,

[illegible]

L. H. King
Executive Officer, [illegible]
[illegible]

Enclosures

DOCKET
Surname:
Rutledge
Martin
Jaffrey
Selfridge
Johnson
Rutledge

DEC - 8 1954

Mr. W. H. King, Executive Officer
DMEA Field Team, Region IV
224 New Custom House
Denver 2, Colorado

Re: Docket No. DMEA 2964 - Iron
Schroeder Mining Co. (Assignee)
Good Fortune & Nightingale mines
Platte County, Wyoming
Contract No. Idm-2578

Dear Mr. King:

Reference is made to the subject docket. To date we have received no payments of royalty under this contract though Mr. N. H. Salsbury stated in his memorandum of June 10, 1954, to the Chief, Mineral Resources Branch, Mining Division, Region IV, that production had been made from the lands set forth in the referenced contract.

In addition, we have received no further correspondence relating to our letter of August 4, 1954, to the Field Team on the question of royalty.

On September 9, 1954, Amendment No. 4 adding several claims to the land set forth in the contract was forwarded to you for execution by the Operator. This amendment is still in the field.

It will be appreciated, therefore, if you will again call these matters to the attention of the Operator and expedite the completion or closing out of the subject contract.

Sincerely yours,

George C. Selfridge

Chairman, Operating Committee (JHS)

Approved:

J. H. Hedges

Member, Bureau of Mines (JHS)

Thor H. Kiilsgaard

Member, Geological Survey (JHS)

cc: Docket
FT, Region 4
Code 400
Oper. Comm.
Adm. Read. File
Robert Holliday, USBM
Thor Kiilsgaard, USGS

FARutledge/ls
12/7/54

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

224 New Customhouse
Denver 2, Colorado

December 7, 1954

Memorandum

To: Chairman, Operating Committee, DMEA

From: Executive Officer, DMEA Field Team, Region IV

Subject: Docket DMEA 2964 (Iron), Contract Idm-E578, Schroeder Mining Company, Platte County, Wyoming

Reference is made to our letters to the operator dated September 16 and October 21, 1954, copies of which were forwarded to you, relative to the proposed amendment to add additional ground under Article 2 of the contract, which was prepared in Washington and forwarded by your letter of September 9, 1954 for signature by the operator.

In our letter of October 21, 1954 we also requested to be advised as to the status of work under the contract.

Inasmuch as we have received no reply to our letters of September 16 and October 21, and as the contract expires today, it appears that some action by the Government is indicated. Therefore, it is suggested that the Washington office, DMEA, contact the operator in an effort to obtain information relative to future work under the contract.

W. H. King

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

224 New Customhouse
Denver 2, Colorado

October 21, 1954

Mr. Paul E. Schroeder
Schroeder Mining Company
Douglas, Wyoming

Re: Docket DMEA 2964 (Iron)
Contract Idm-E578

Dear Mr. Schroeder:

Reference is made to our letter of September 16, 1954 wherein we requested advice and data in conjunction with a proposed amendment to Contract Idm-E578 prepared by the Washington office, DMEA, to include additional ground under Article 2 of the contract.

As to date we have received no reply to our letter of September 16 we will appreciate it if the matter be given prompt attention.

Records in this office indicate that Form MF-104 Operator's Monthly Progress Report and Voucher for the period June and July 1954 is the last accounting report submitted relative to work performed under the contract. In that regard please advise as to the status of work under the contract. In the event work has been suspended, an unauthorized suspension of work operations under the contract which will necessitate or involve an extension of the period for completion of the project work is a default of the contract.

In that respect, the contract expires December 7, 1954 and it appears that there will be insufficient time prior to that date in which to complete the balance of work authorized. Therefore, any suspension will in effect involve an extension of the completion period which is permissible under justifiable circumstances.

We will appreciate advice on all of the above matters at your earliest convenience.

Very truly yours,

W H King

W. H. King
Executive Officer, DMEA
Field Team, Region IV

JWT:jp
cc Subject
Chron
Chairman, Op. Comm.
Koschmann
Traver
Townsend

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

Docket

224 New Customhouse
Denver 2, Colorado

September 16, 1954

Mr. Paul E. Schroeder
Schroeder Mining Company
Douglas, Wyoming

Re: Docket DMEA 2964 (Iron)
Contract Idm-E578

Dear Mr. Schroeder:

The Washington office, DMEA, have deemed it to be in the best interests of both parties to the contract that additional ground be included under Article 2 of the contract.

In conjunction therewith they have prepared an amendment to add the following claims to the ground presently described under Article 2:

Good Fortune Group

Blue Jay Fraction
Golden Rule
Juneau
Valley

Nightingale Group

Hoosier
Crown
Mollie Gibson

Before the amendment can be executed to include the additional ground it is necessary that this office be supplied with a signed copy, or photostat thereof, of the assignment of the lease on the above claims from E. C. Schroeder Company, Inc., to the Schroeder Mining Company.

If an amendment of the nature outlined above is satisfactory to you please supply the copy of the assignment of the lease as mentioned above or advise us relative to your objections to including the additional ground. In any event, we will appreciate a reply at your earliest convenience.

Very truly yours,

John F. Shaw
John F. Shaw
For W. H. King
Executive Officer, DMEA
Field Team, Region IV

JWT:jp
cc Subject
Chron
WMTraver
AHKoschmann
Chairman, Oper. Comm.
JWTownsend

Interior Department

Defense Minerals Exploration Adm.

XXXXXXXXXXXXXXXXXXXXX

14X4401(01) Revolving Fund,
Defense Production Act, Interior
(Allocated Working Fund to the Office of
the Secretary)

T E L E T Y P E

Martin
Selfridge
H Johnson

SEP 1 4 1954

To: W. H. King, DMEA Executive Officer, Region IV, Denver, Colorado

Rett September 13, Contract Idm-E578, Schroeder Mining Company, Docket No. DMEA 2964, our proposed Amendment No. 3, prepared without knowledge of Operator should be renumbered 4 as requested by ourtt September 10. To accord with W. M. Traver's memorandum to you of June 21 - your progress report for May - we checked leases against General Land Office survey plats and added additional claims.

George C. Selfridge

Chairman, Operating Committee

CC: Docket
Confirmation - FT, REG. III
Code 400
Adm. Reading File
Operating Comm.
J. M. Forbes, USBM
Thor H. Kilsgaard, USGS

R.C.G.

Chairman, Oper. Committee
DMEA
9-13-54
3:55 PM

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
SEP 14 1954

BUR MINES DN 235 9-13-54 1-04 PM

CHAIRMAN OPERATING COMMITTEE DMEA

RE AMENDMENT NO.3 CONTRACT OXXX NO. IDM-E578, DOCKET NO. DMEA 2964, SCHROEDER MINING COMPANY, COPIES OF WHICH WERE RECEIVED TODAY. THIS OFFICE HAD NO KNOWLEDGE OF PROPOSED AMENDMENT. PLEASE ADVISE BY TELETYPE IF AMENDMENT WAS PREPARED AT REQUEST OF OR WITH CONCURRENCE OF OPERATOR. THE MANNER IN WHICH THE MATTER IS PRESENTED TO THE OPERATOR IS DEPENDENT ON YOUR REPLY.

JOHN F SHAW FOR W H KING

Denver, Colo.

Docket
Martin
Selfridge
Johnson
Mitchell

Interior Dept.
Defense Minerals Expl. Adm.

SEP 10 1954

14X4401(01) Revolving Fund,
Defense Production Act,
Interior (Allocated Working Fund to
the Office of the Secretary)

TELETYPE

To: W. H. King, DMEA Executive Officer, Region IV
Denver, Colorado

Reourlet September 9, Docket DMEA 2964-Iron,
Schroeder Mining Co.

Please change our Amendment No. 3 to Amendment No. 4 prior to execution thereof in order to avoid confusion with your executed Amendment No. 3 received here subsequently.

George C. Selfridge
Chairman, Operating Committee (HB)

cc: DOCKET
FT, REG. IV
OPER. COMM.
ADM. READ. FILE
CODE 400
J. M. FORBES, USBM
THOR KIILSGAARD, USGS

WSMartin/ls
9-10-54

R.C.S.

400

Docket
Surname
Rutledge
Martin
Talbot
Selfridge
K Johnson

SEP 9 1954

Mr. W. H. King, Executive Officer
DMEA Field Team, Region IV
224 New Customhouse Building
Denver 2, Colorado

Re: Docket No. DMEA 2964 - Iron
Schroeder Mining Co. (Assignee)
Good Fortune & Nightingale mines
Platte County, Wyoming
Contract No. Idm-E578

Dear Mr. King:

Enclosed are the original and five copies of Amendment No. 3 to the subject contract signed by the Administrator for the Government.

If the terms and conditions of this proposed amendment are satisfactory to you and the Operator, all six copies should be signed and the usual distribution made. However before execution of the subject amendment, it will be necessary for the Operator to furnish copies of an assignment from the Schroeder Mining Co., Inc., to the Schroeder Mining Co., of the lease covering the following seven claims:

Blue Jay Fraction, Golden Rule, Juneau, Valley, Hoosier, Crown, and Mollie Gibson.

In reviewing the land holdings covered by the Operator's leases, copies of the General Land Office survey plats were examined. The additional claims were included with the land covered by the contract because it was believed to be in the best interest of both parties to the contract.

Sincerely yours,

George C. Selfridge
Chairman, Operating Committee (246)

Enclosures

APPROVED:

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

Thor H. Kilsgaard
Member, Geological Survey (246)

FARutledge:foc 9-3-54
cc to: Docket
Code 400
Adm. Reading File
Operating Comm.
FT. Reg. IV
J. M. Frobes, USBM
Thor H. Kilsgaard, USGS

R.C.S.

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

224 New Customhouse
Denver 2, Colorado

September 7, 1954

Memorandum

To: Chairman, Operating Committee, DMEA

From: Executive Officer, DMEA Field Team, Region IV

Subject: Docket DMEA 2964 (Iron), Contract IDM-E578, Schroeder Mining Company, Platte County, Wyoming

Enclosed are the original and two copies of Amendment No. 3 to Contract IDM-E578 which has been executed to modify the description of the work to be performed under Phase B, Stage I, item 1 of the contract. Also enclosed are three sets of data relevant to the amendment.

Copies of the amendment have been given to the operator, the Fiscal Officer, Region IV, and a copy has been retained for our files.

W H King
W. H. King

Enclosures

RECEIVED
OCT 7 - 1954
GENERAL COUNSEL
DEFENSE MINERALS
ADMINISTRATION

August 30, 1954

Memorandum

To: Mr. A. H. Koschmann E.M.H. to A.H.K.

From: D. R. MacLaren

Subject: DMEA Docket 2963, 2964, Contract Idm-8378, Schroeder Mining Company, Nightengale - Good Fortune Groups, Platte County, Wyoming

In a letter dated June 3, 1954, R. S. Langsacher, superintendent for the subject operator requested authorization to begin churn drilling under Phase B of the subject contract. Accompanying the letter were five copies of a map showing the proposed location of two drill holes.

In the original geologic report, the recommendations were to drill three holes to find out whether or not the ore body in the Whalen formation, now being mined by the Colorado Fuel and Iron Company, extends beneath the Rustler, Nightengale, and Origan claims of the subject operator. Additional drilling was recommended if this should prove to be the case. The contract was set up to provide for this drilling.

In the same report mention was made of the existence of localized deposits, some of excellent grade but usually too small to be of much economic importance, that have been found in a hematitic conglomerate at the base of the Gurnsey formation. On the first visit to the property evidence of a conglomeratic deposit was found in a short tunnel and in the dump of an inaccessible shaft. Due to a lack of a suitable map, Mr. Schroeder estimated the workings to be about one quarter of a mile west of the Nightengale claim, but a subsequent survey showed that they are on that claim.

February 25, 1954, in anticipation of completion of Phase A and the start of Phase B, a second visit was made to the Nightengale claim

in company of Mr. Schroeder and M. M. Salsbury of the U. S. Bureau of Mines. This time suitable maps were available and Mr. Schroeder expressed a desire to test the shallow deposit indicated in the tunnel and winze by drilling two or three holes. The proposal was discussed and tentative drill sites were indicated by Mr. Schroeder. He was advised to prepare a map showing the exact location of the proposed holes and to submit it with an application for an amendment to the contract to allow this drilling before starting the holes provided for in the original contract.

It is therefore recommended that the holes requested in Mr. Langnacher's letter of June 3, 1954, be approved.

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF MINES

Region IV

Building 20, Room 137
Denver Federal Center
Denver 2, Colorado
August 25, 1954

Memorandum

To: Executive Officer, DMEA Field Team, Region IV

From: Chief, Mineral Resources Branch, Mining Division, Region IV

Subject: DMEA 2964, Contract IDM-2578 (Iron) Schroeder Mining Co. (Nightingale and Good Fortune groups), Platte County, Wyo.

Transmitted herewith are the original and three copies of a letter with accompanying plat maps from the contractor on the captioned docket, stating that Phase "A" under Stage I has been completed and stating that he is prepared to start within 3 weeks of June 3, 1954, Phase "B" under Stage I. One copy is being retained in our files.

You will note from the date stamp on the original copy of the letter that we received it on June 8, 1954, and for some unknown reason the copies were not transmitted to you in the usual manner.

In the interim, the contractor started Phase "B", Stage I, on the assumption and with the assurance of this office through its representatives that it would receive Field Team approval.

There is transmitted also the original and eight copies of a memorandum prepared by M. M. Salsbury, recommending approval of the revised churn drill hole locations for the two holes requested and shown on the operator's sketch. The third hole was located and authorized subject to Field Team approval as shown on the operator's last or July progress report. It is also now recommended to the Field Team for approval. If it is your interpretation that an amendment is required to the contract, Salsbury's memorandum will also serve this purpose.

With regard to the possibility that these three holes, all located on the Nightingale claim, might be considered as in conflict with holes under Stage II of Phase "B"-- The results achieved so far on the project have not been encouraging, and anticipating that we

would be required to make a reappraisal of the outcome before authorization of Stage II of Phase "B" or possibly a revised proposal which the contractor indicated he might request, we decided upon the location of the three holes partly to facilitate our reappraisal of the matter with the intention of recommending elimination at least of Stage II of Phase "B" or possibly suggesting termination of the contract.

W. M. Traver

W. M. Traver

enclosures

WMT/kp

cc/ 8
E578
Chron

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF MINES

Region IV

Building 20, Room 137
Denver Federal Center
Denver 2, Colorado
August 24, 1954

Memorandum

To: Chief, Mineral Resources Branch, Mining Division, Region IV

From: M. K. Salsbury

Subject: DMEA 2964, Contract IDM-2578 (Iron) Schroeder Mining Co. (Nightingale and Good Fortune groups), Platte County, Wyo.--Request of the operator for approval of or a contract amendment authorizing Stage I, Phase "B"

Under date of June 3, 1954, the Schroeder Mining Co. submitted a map and covering letter requesting a change in churn drill hole sites called for under Stage I, Phase "B", of the subject contract.

The new sites for the first two holes are near the center of the Nightingale claim and on an iron ore outcrop where a tunnel, shaft, and several pits have been dug some time in the past.

The original sites as shown on the map in the engineering report on the original application, and as used in the contract, were decided upon solely to form a pattern to cover the entire property as shown on a claim map, and not in relation to a known ore occurrence on the property. The location of the ore outcrop was uncertain at the time the examination was made, prior to a survey of the claims.

The purpose of the exploratory drilling is to determine if there is any commercial iron ore in the potential ore-bearing, pre-Cambrian Whalen formation which is capped by an estimated 75 to 200 feet of sediments of the Guernsey and Hartville formations. An occurrence similar to the nearby Sunrise ore deposit is sought.

However, there is some possibility of commercial ore in the capping formations. The contractor wishes to do the first work at a point where ore is exposed to investigate the possibility of worthwhile ore at surface as well as at depth.

A DMEA examining team made up of Bureau of Mines and Geological Survey members made a field inspection of the proposed drill sites in March 1954.

The DMEA team does not see any objection to locating holes under Stage I, Phase "B", of the contract as indicated by the two holes shown on the map submitted. There is a possibility that mineralization in the underlying Whalen formation might be indicated by mineralization in the cap rock immediately above, and a location where some mineralization is showing at surface appears to be a logical place to start drilling.

It is recommended that the contract be amended to permit drilling two of the holes in Stage I, Phase "B", at the locations shown on the map submitted by the contractor, with the third hole to be located depending on the results of drilling the first two.

F. A. Everett, for
M. H. Salisbury
Mining Engineer

MHS/kp

cc / 8
2578
Chron

June 3, 1954

Mr. W. M. Traver, Chief
Mineral Resources Branch
Mining Division, Region IV
Denver Federal Center
Denver, 14, Colorado,

Dear Sir:

Re: DMEA 2964, Contract IDM E 578
Schroeder Mining Company,
Platte County, Wyoming,

We wish to advise you that we have completed drilling on Phase A on the Good Fortune group of mining claims.

We will be in position to commence drilling on Phase B on the Nightingale group of claims in about three weeks from today.

Enclosed herewith are five copies of plat showing proposed locations of holes 1 and 2.

Plat was drawn from Mineral Survey number 196.

Very truly yours,

SCHROEDER MINING COMPANY

By R. G. Langmacher

R. G. Langmacher, Supt.

RGL/t

Encl.

DMEA
File copy

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

August 31, 1954

Memorandum

To: The Administrator, DMEA
Through: Mr. W. S. Martin

From: Acting Assistant Solicitor, Defense Minerals

Subject: Schroeder Mining Co., Docket No. DMEA-2964 (Iron), Contract Idm-E578, Amendment No. 3

Attached is Amendment No. 3 to the above-described contract in satisfactory legal form for execution.

A copy of the assignment transferring the claims set forth in Amendment No. 3 from E. C. Schroeder Co., Inc., to Schroeder Mining Co., is required.

/S/ Henry C. Rubin

For J. L. Hofflund
Acting Assistant Solicitor
Defense Minerals

Attachments 9

HCRubin/emd

Copy to: Solicitor's Docket
DMEA Docket
W. S. Martin (2)
J. L. Hofflund
H. C. Rubin
chron.

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

August 31, 1954

Memorandum

To: The Administrator, DMEA
Through: Mr. W. S. Martin

WSM

From: Acting Assistant Solicitor, Defense Minerals

Subject: Schroeder Mining Co., Docket No. DMEA-2964 (Iron), Contract Idm-E578, Amendment No. 3

Attached is Amendment No. 3 to the above-described contract in satisfactory legal form for execution.

A copy of the assignment transferring the claims set forth in Amendment No. 3 from E. C. Schroeder Co., Inc., to Schroeder Mining Co., is required.

Henry C. Pinty
For J. L. Hofflund
Acting Assistant Solicitor
Defense Minerals

Attachments 9

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

224 New Customhouse
Denver 2, Colorado

August 30, 1954

Memorandum

To: Chairman, Operating Committee, DMEA

From: Executive Officer, DMEA Field Team, Region IV

Subject: Docket DMEA 2964 (Iron), Contract Idm-E578, Schroeder Mining Company, Platte County, Wyoming

Enclosed are the original and two copies of Amendment No. 2 to Contract Idm-E578 which has been executed to extend the period for completion of the project work from 12 months to 16 months. Also enclosed are three copies of the operator's letter requesting the amendment.

Copies of the amendment have been given to the operator, the Fiscal Officer, Region IV, and a copy has been retained for our files.

W. H. King

Enclosures

RECEIVED
OCT 7 - 1954
GENERAL COUNSEL
DEFENSE MINERALS
ADMINISTRATION

COPY

SCHROEDER MINING CO.
Guernsey, Wyoming

August 1, 1954

Mr. W. M. Trevor, Jr.
Chief Mineral Resources Branch
Mining Division, Region IV
U.S. Bureau of Mines
Denver Federal Center
Denver 14, Colorado

Dear Sir:

Re: IBEA 2964, Contract IBM-8578
Iron, Schroeder Mining Company
Platte County, Wyoming,
(Nightingale Group).

In the past several months we have been considerably delayed in commencing drilling operations on the Nightingale Group of claims under the above captioned project dueto our inability to secure necessary easement for right-of-way for access road to the claims.

We therefore ask you to give full consideration to our request, herewith made, for an extension of term of contract for a further period of four months.

Very truly yours,

SCHROEDER MINING COMPANY

By /s/ R. G. Langmacher, Supt.
R. G. Langmacher

RGL/t

COPY

SCHROEDER MINING CO.
Guernsey, Wyoming

August 1, 1954

Mr. W. M. Traver, Jr.
Chief Mineral Resources Branch
Mining Division, Region IV
U.S. Bureau of Mines
Denver Federal Center
Denver 14, Colorado

Dear Sir:

Re: DMEA 2964, Contract IDM-2578
Iron, Schroeder Mining Company
Platte County, Wyoming,
(Nightingale Group).

In the past several months we have been considerably delayed in commencing drilling operations on the Nightingale Group of claims under the above captioned project dueto our inability to secure necessary easement for right-of-way for access road to the claims.

We therefore ask you to give full consideration to our request, herewith made, for an extension of term of contract for a further period of four months.

Very truly yours,

SCHROEDER MINING COMPANY

By /s/ R. G. Langmacher, Supt.
R. G. Langmacher

RGL/t

DOCKET

Rutledge
Martin

August 17, 1954

MEMORANDUM

To: Acting Assistant Solicitor, Defense Minerals

From: Chief, Iron and Ferro-Alloys Division, DMEA

Subject: Preparation of amendment adding additional claims to the subject contract
Docket No. DMEA 2964 - Iron
Schroeder Mining Co. (Assignee)
Good Fortune & Nightingale mines
Platte County, Wyoming
Contract No. Idm-8576

INTERIOR DEPT.
AUG 17 1954
SOLICITOR

A review of the subject docket has indicated that the addition of more claims would be in the interest of both parties to the referenced contract. The following claims should be added:

Good Fortune group

a. Blue Jay Fraction
b. Golden Rule
c. Juneau
d. Valley

Nightingale group

a. Hoosier
b. Crown
c. Mollie Gibson

An assignment of lease on the above claims by the Schroeder Mining Co., Inc., to the Assignee will also be required.

W. S. Martin, Chief
Iron and Ferro-Alloys Division

cc: Docket
Adm. Reading File
Code 400

FARutledge/ls 8/17/54

DOCKET
Surname

Rutledge
Hoffland
Chamberlin
Selfridge
Montenegro

AUG 4 1954

Mr. W. H. King, Executive Officer
DMEA Field Team, Region IV
224 New Customhouse Building
Denver 2, Colorado

Re: Docket No. DMEA 2964 - Iron
Schroeder Mining Co. (Assignee)
Good Fortune & Nightingale mines
Platte County, Wyoming
Contract No. I6r-5578

Dear Mr. King:

Reference is made to your memorandum of June 14, 1954, transmitting a memorandum dated June 10, 1954, from M. H. Salsbury, Bureau of Mines, to W. M. Traver, Bureau of Mines, on certain production under the subject contract.

In our letter of June 10, 1954, you are requested to advise the Operator that all production from the property set forth in Article 2 of the contract is subject to royalty payments. Production in this case resulting from the treatment of a stockpile of low-grade overburden stripped from the ore deposit is considered the same as that coming from a waste dump.

In several cases similar to the present one, where it was not the intention of either the Government or the Operator that the production from such sources would be subject to royalty payments, production from the waste dumps or detrital material have been excluded by suitable amendments from that on which royalty is to be paid. Therefore, as the low-grade material stripped was stockpiled prior to commencement of work under the subject exploration contract and did not benefit in any fashion from the DMEA program, the production resulting therefrom may be excluded from that on which the Government's percentage royalty is due by an amendment to carry out the real intention of both parties. Such exclusion, however, should be requested by the Operator, accompanied by the reasons for the exclusion and stating that, when the contract was executed, it was not the Operator's belief that the production from the stockpiled material would be subject to the Government's percentage royalty.

R.C.H.

The Operator's request should then be forwarded to Washington with the Field Team's recommendations. If exclusion of this production or any other production from that on which royalty is due the Government is recommended by the Field Team, the Field Team's recommendations should be accompanied by justifications for the exclusion.

Sincerely yours,

George C. Selfridge

Chairman, Operating Committee (2HB)

Approved:

J. H. Hedges

Member, Bureau of Mines (2HB)

E. T. Thayer

Member, Geological Survey (2HB)

cc: DOCKET
CODE 400
FIELD TEAM, REG. IV
OPER. COMMITTEE
MR. CHAMBERS
J. M. FORBES, USBM
E. L. NEWCOMB, USGS
ADM. READING FILE

FARutledge/ls
7/23/54

P.S. Attached hereto are copies of Counsel's memorandum dated July 19, which was prepared pursuant to the initial draft reply to your memorandum dated June 14. The text of the foregoing does not contain the "waiver of royalty claim" which Counsel objected to. He has surnamed the docket copy of this letter.

DOCKET
Surname:
Rutledge

JUL 23 1954

Not issued
Reviewed by
HC Rutledge

Mr. W. H. King, Executive Officer
DMEA Field Team, Region IV
224 New Customhouse Building
Denver 2, Colorado

Re: Docket No. DMEA 2964 - Iron
Scarcerder Mining Co. (Assignee)
Good Fortune and Nightingale mines
Platte County, Wyoming
Contract No. Idm-7578

Dear Mr. King:

Reference is made to your memorandum of June 14, 1954, transmitting a memorandum dated June 10, 1954, from W. H. Salsbury, Bureau of Mines, to . . Traver, Bureau of Mines, on certain production under the subject contract.

In our letter of June 10, 1954, you are requested to advise the Operator that all production from the property set forth in Article 2 of the contract is subject to royalty payments. Production in this case resulting from the treatment of a stockpile of low-grade overburden stripped from the ore deposit is considered the same as that coming from a waste dump.

In several cases similar to the present one, where it was not the intention of either the Government or the Operator that the production from such sources would be subject to royalty payments, production from the waste dumps or detrital material have been excluded from that on which royalty is to be paid. Therefore, as the low-grade material stripped was stockpiled prior to commencement of work under the subject exploration contract and did not benefit in any fashion from the DMEA program, the production resulting therefrom may be excluded from that on which the Government's percentage royalty is due. Such exclusion, however, should be requested by the Operator accompanied by the reasons for such exclusion and stating that, when the contract was executed, it was not the Operator's belief that the production from the stockpiled material would be subject to the Government's percentage royalty.

400

Docket
Surname

Rutledge
Martin

INTERIOR DEPT.

JUL 15 1954

SOLICITOR

Mr. W. H. King, Executive Officer
DMEA Field Team, Region IV
224 New Customhouse Building
Denver 2, Colorado

Re: Docket No. DMEA 2964 - Iron
Schroeder Mining Co., (Assignee)
Good Fortune and Nightingale mines
Platte County, Wyoming
Contract No. Idm-E578

Dear Mr. King:

Reference is made to your memorandum of June 14, 1954, transmitting a memorandum dated June 10, 1954, from M. H. Salisbury to W. M. Traver, Bureau of Mines, on certain production under the subject contract.

Enclosed are two copies of a memorandum dated July 2, 1954, from the Acting Assistant Solicitor, Defense Minerals, to The Administrator, DMEA, covering the question of royalty on production prior to the execution of the subject contract - August 7, 1953.

The above-referenced memorandum by Hafflund, however, does not cover the production from the material that was stripped after August 7. See 5th paragraph Salisbury's memorandum as follows: "However, R. G. Landmacher, the superintendent, believes that a small amount was stripped after August 7, but they do not have a record of the tonnage." Royalty would normally be due the Government on the production from the material stripped after the date of the contract. In the present case, if it is determined that such production is insignificant, or if there is no way to determine the ratio between the material stripped subsequently and that stripped prior to the contract's execution, royalty on the stockpiled stripped material may be waved.

In addition, all of the mine-run ore produced since the date of the contract is subject to the Government's royalty.

Sincerely yours,

Chairman, Operating Committee

Enclosures

FARutledge:foc
7-15-54
cc to: Docket
Code 400
Adm. Reading File
Operating Committee
FT. Reg. IV
J. M. Forbes, USBM
Mrs. Martha Carr, USGS

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

July 19, 1954

Memorandum

To: The Administrator, DMEA
Through: Mr. W. S. Martin

From: Acting Assistant Solicitor, Defense Minerals

Subject: Docket No. DMEA-2964 (Iron), Schroeder Mining Company, Contract Idm-E578

I have not surnamed the attached memorandum for the signature of the Chairman of the Operating Committee to the Executive Officer, Region IV, because it seems erroneous to me. This letter would advise Mr. King that the Government may waive its claim to royalty on certain production—

> "... if it is determined that such production is insignificant, or if there is no way to determine the ratio between the material stripped subsequently and that stripped prior to the contract's execution ..."

Under no circumstances has the DMEA any authority to waive royalty that may have accrued and become due to the Government, except pursuant to some new consideration running to the Government.

The proposed letter is intended to supplement my memorandum to you of July 2 in which I pointed out that stockpiled ore produced before the date of the exploration contract is not subject to the Government's royalty claim. The mere fact that ore which is subject to the Government's royalty claim may have been so handled as to make the computation of the royalty difficult, does not justify a waiver of the Government's claim. The last paragraph of the letter of Mr. M. H. Salsbury, Mining Engineer, to Region IV, dated June 10, states:

> "If it is determined that either or both classes of ore ... are subject to royalty, demand for settlement data should be made through the management."

In my opinion this suggestion should be carried out. It is the Operator's duty to keep a proper record and accounting of the production and disposition of ore in which the Government has a royalty interest. If no such record or accounting has been kept, the Government need not necessarily accept the Operator's estimate of the amounts, but at least demand should be made upon the Operator for the purpose of forming some basis for determining what may be due to the Government.

J. L. Hofflund

J. L. Hofflund
Acting Assistant Solicitor
Defense Minerals

Attachment

DMEA
File Copy

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

H.S. in B.E.

July 19, 1954

Memorandum

To: The Administrator, DMEA
Through: Mr. W. S. Martin

From: Acting Assistant Solicitor, Defense Minerals

Subject: Docket No. DMEA-2964 (Iron), Schroeder Mining Company, Contract Idm-E578

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J. L. Hofflund

J. L. Hofflund
Acting Assistant Solicitor
Defense Minerals

Attachment

JLHofflund:ep

Copy to: Solicitor's Docket
DMEA Docket
Mr. Martin (2)
Mr. Hofflund
Chron.

DMEA
File Copy
Surname

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

July 2, 1954

Memorandum

To: The Administrator, DMEA
Through: Mr. W. S. Martin

From: Acting Assistant Solicitor, Defense Minerals

Subject: Docket No. DMEA-2964 (Iron), Schroeder Mining Company, Contract Idm-E578

A memorandum from the Executive Officer, Region IV, to the Administrator of June 14 to which is attached a memorandum from Mr. M. H. Salsbury, Mining Engineer, to the Chief, Mineral Resources Branch, Mining Division, Region IV, raises some questions as to the liability of the Operator for royalty on the proceeds from certain ore.

INTERIOR DEPT
JUL 6 - 1954
SOLICITOR

The contract is dated August 7, 1953, is on the short form, and contains a royalty annex which provides that the Operator shall pay royalty "...on all minerals mined or produced from the land described in Article 2 ..." It appears from the correspondence that the ore in question was produced before the date of the contract by stripping operations from land described in Article 2, was stockpiled on land described in Article 2, and after the date of the contract was shipped to a concentrator, blended with ore produced from land not described in Article 2.

The legal question is whether ore produced before the date of the contract from land described in the contract, and stockpiled on that land, can thereafter be subject to the Government's royalty claim.

In my opinion, it cannot. I think that the ore was "mined or produced" within the meaning of the contract when it was stockpiled, and that nothing that occurs thereafter can subject it to the Government's royalty claim. I realize that this ore was not sold in its raw form, but was first shipped to a mill for concentrating. Under these circumstances, any royalty that might be due to the Government would be computed upon the returns from the concentrates, but this is not to say that the process of milling and concentrating is in itself mining or production within the

meaning of the contract. Rather, the milled and concentrated product is used as the basis for computing the royalty on the ores that were "mined or produced."

I believe that this covers the only matter in the correspondence for legal consideration.

J. L. Hofflund

J. L. Hofflund
Acting Assistant Solicitor
Defense Minerals

JLHofflund:ep

Copy to: DMEA Docket
Solicitor
Mr. Martin
Mr. Hofflund
Chron.

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

July 2, 1954

Memorandum

To: The Administrator, DMEA
Through: Mr. W. S. Martin

From: Acting Assistant Solicitor, Defense Minerals

Subject: Docket No. DMEA-2964 (Iron), Schroeder Mining Company, Contract Idm-E578

A memorandum from the Executive Officer, Region IV, to the Administrator of June 14 to which is attached a memorandum from Mr. M. H. Salsbury, Mining Engineer, to the Chief, Mineral Resources Branch, Mining Division, Region IV, raises some questions as to the liability of the Operator for royalty on the proceeds from certain ore.

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meaning of the contract. Rather, the milled and concentrated product is used as the basis for computing the royalty on the ores that were "mined or produced."

I believe that this covers the only matter in the correspondence for legal consideration.

J. L. Hoffmund
Acting Assistant Solicitor
Defense Minerals

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

224 New Customhouse
Denver 2, Colorado

June 14, 1954

Memorandum

To: C. O. Mittendorf, Administrator, DMEA

From: Executive Officer, DMEA Field Team, Region IV

Subject: Royalty payments, DMEA Docket 2964 (Iron) Contract Idm-E578, Schroeder Mining Company (Good Fortune and Nightingale groups) Platte County, Wyoming.

Enclosed is a copy of our memorandum dated May 27, 1954 requesting information concerning shipment of concentrates produced under DMEA Contract Idm-E578, and a copy of an answering memorandum prepared by M. H. Salsbury, mining engineer from the Colorado Branch Office of the Bureau of Mines.

Please review Salsbury's memorandum and advise us as to what royalty requests should be made to this operator.

We believe that ore produced before the date of the contract, August 7, 1953, and shipped at a later date does not require royalty payments. Your official ruling in this case will be appreciated.

W. H. King

Enclosures

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

224 New Customhouse
Denver 2, Colorado

June 14, 1954

Memorandum

To: C. O. Mittendorf, Administrator, DMEA

From: Executive Officer, DMEA Field Team, Region IV

Subject: Royalty payments, DMEA Docket 2964 (Iron) Contract Idm-E578, Schroeder Mining Company (Good Fortune and Nightingale groups) Platte County, Wyoming.

Enclosed is a copy of our memorandum dated May 27, 1954 requesting information concerning shipment of concentrates produced under DMEA Contract Idm-E578, and a copy of an answering memorandum prepared by M. H. Salsbury, mining engineer from the Colorado Branch Office of the Bureau of Mines.

Please review Salsbury's memorandum and advise us as to what royalty requests should be made to this operator.

We believe that ore produced before the date of the contract, August 7, 1953, and shipped at a later date does not require royalty payments. Your official ruling in this case will be appreciated.

W. H. King

Enclosures

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF MINES

Region IV

Building 20, Room 137
Denver Federal Center
Denver 14, Colorado
June 10, 1954

Memorandum

To: Executive Officer, DMEA Field Team

From: Chief, Mineral Resources Branch, Mining Division, Region IV

Subject: DMEA 2984, Contract Idm-E578 (Iron), Schroeder Mining Company (Good Fortune and Nightingale groups) Platte County, Wyoming

Enclosed are the original and seven copies of a memorandum by M. H. Salsbury regarding royalty payments on the above contract in response to your memorandum of May 27, 1954.

The memorandum requires no comment.

W. M. Traver

W. M. Traver

enclosures

cc 7
E578
DMEA Chron.

WMT/pam

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF MINES

Region IV

Building 20, Room 137
Denver Federal Center
Denver 14, Colorado
June 10, 1954

Memorandum

To: Chief, Mineral Resources Branch, Mining Division, Region IV

From: M. K. Salsbury

Subject: DMMA 2964, contract I4m-X578 (Iron), Schroeder Mining Company (Good Fortune and Nightingale groups), Platte County, Wyoming - Royalty payments

The source and amount of ore shipments made from the contractor's operation on the subject property was checked during a regular progress examination on June 8, 1954.

The new heavy media concentration plant has been in operation since the middle of March 1954, at first on a one shift per day basis, but later on two shifts per day. Two sources of ore have been used, an old Sunrise mine dump located on property controlled by the contractors, and stockpiled low-grade ore from the Good Fortune group. The amount of ore coming into the plant is estimated by tabulating truck deliveries and using an average weight for each load. Prior to May 18, 1954, ore from both the Sunrise dump and the Good Fortune was being blended, but since that date only Sunrise dump ore has been treated. Following are the estimated tonnages of mill feed through May 31, 1954, and the source:

Source	Amount (tons)	Percent of total feed
Sunrise dump	20,181	67.65
Good Fortune stockpile	9,654	32.35
Total	29,835	100.00

Shipments of concentrates through May 31, 1954, with weights of shipments during the last few weeks estimated, totaled 7,336.8 tons. Seven cars, or an estimated 800 tons, went to an Illinois plant, and the balance to Birmingham, Alabama. Presumably the concentrate shipments should be credited to the sources in proportion to the raw ore obtained from each.

The Sunrise dump ore was hauled from the Clipper and Monitor claims, which are not included in contract Idm-E578, and are definitely not subject to DMEA royalty.

The ore from the Good Fortune group came from claims included in the DMEA contract. It was low-grade material stockpiled from stripping operations, largely carried on before August 7, 1953, the date of the contract. However, R. G. Landmacher, the superintendent, believes that a small amount was stripped after August 7, but they do not have a record of the tonnage. Whether or not this material is subject to Government royalty, inasmuch as most of it was produced prior to August 7, 1953, is a matter for determination by the Field Team, Region IV. The amount involved is 9,654 tons or 32.35 percent of the mill feed through May 31, 1954.

In addition to the ore treated and shipped in 1954, a considerable tonnage of mine run ore was excavated and shipped between August 7 and November 1, 1953, when operations were suspended for the winter. This ore was shipped under the original company, E. C. Schroeder Company, Incorporated. It came from claims of the Good Fortune group which are included in contract Idm-E578, and is probably subject to DMEA royalty.

The financial records of the E. C. Schroeder Company, Incorporated, were kept at the home office in MacGregor, Iowa. Landmacher only has the daily report sheets for the period which he agreed to tabulate and furnish this office.

The records of current ore shipments are kept at the plant office in Guernsey, Wyoming, and the tonnage records were furnished the Government representative without question. Landmacher or the accountant would not, however, furnish any financial data on ore settlements without authorization from Paul C. Schroeder, the manager, who was not in Wyoming at the time of the inspection.

If it is determined that either or both classes of ore from the Good Fortune group are subject to royalty, demand for settlement data should be made through the management.

M. H. Salsbury
M. H. Salsbury
Mining Engineer

cc 7
E578
DMEA Chron.

MHS/pam

224 New Customhouse
Denver 2, Colorado

May 27, 1954

Memorandum

To: W. M. Traver

From: Executive Officer, DMEA Field Team, Region IV

Subject: Royalty Payments - DMEA Docket 2964 (Iron), Contract Idm-E578, Schroeder Mining Company, Platte County, Wyoming.

Reference is made to the inspecting engineer's memorandum accompanying MF-104 forms for the month of April 1954, which states in part:

"Four thousand tons of concentrates were shipped in April."

According to Annex III of the subject contract, royalty is to be paid on all production from the twelve claims listed in Article 2 and described in Annex I from the date of the contract, August 7, 1954.

Please have your engineer determine for us if any production has been made from lands described in the contract since August 7, 1954, and also tonnage approximate grade, and destination of the shipments.

This can be handled at the time of the next regular inspection.

(signed) W. H. King

400

DOCKET
Surname:

Hopkins
Martin
Thayer
Johnson
Mattendorf

JUN 9 1954

Mr. W. H. King, Executive Officer
DMEA Field Team, Region IV
224 New Customhouse Building
Denver 2, Colorado

Re: Docket No. DMEA 2964 - Iron
Schroeder Mining Company
Good Fortune Group
Platte County, Wyoming
Contract No. Idm-E578

Dear Mr. King:

The engineer's narrative report for April 1954 states that the Heavy Media plant recently installed by the Operator has been in operation for more than a month treating low-grade ore previously stockpiled and material from an old Colorado Fuel and Iron Corporation dump that is located on property controlled by the contractor.

Will you kindly advise the Operator that all of this production is subject to royalty payments to the Government under the terms of the contract.

Sincerely yours,

George C. Selfridge

Chairman, Operating Committee (JHO)

APPROVED:

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

T. P. Thayer (JHO)
Member, Geological Survey

cc: Docket
Code 400
Oper. Committee
Adm. Read. File
J. M. Forbes, USBM
Mrs. Martha Carr, USGS

JHopkins/ls
6/9/54

R.C.S.

400

Docket
Surname

Hopkins
Martin

Renewed

Mr. W. E. King
Executive Officer
DMEA Field Team, Region IV
2th New Customhouse Building
Denver 2, Colorado

Re: Docket No. DMEA 2964 - Iron
Schwendeg Mining Company
Good Hope Group
Fremont County, Wyoming
Contract No. Idm-E578

Dear Mr. King:

The engineer's narrative report for April 1954 states that the Heavy Media plant recently installed by the Operator has been in operation for more than a month treating low-grade ore previously stockpiled and material from an old Colorado Fuel and Iron Corporation dump that is located on property controlled by the contractor.

Will you kindly advise us if any of this ore is to be considered subject to royalty payments to the Government.

Sincerely yours,

Chairman, Operating Committee

APPROVED:

Member, Bureau of Mines

Member, Geological Survey

JHopkins:fcc
6-8-54
cc to: Docket
Code 400
Adm. Reading File
Operating Comm.
J. M. Forbes, USBM
Mrs. Martha Carr, USGS

Docket

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

224 New Customhouse
Denver 2, Colorado

May 27, 1954.

Memorandum

To: W. M. Traver

From: Executive Officer, DMEA Field Team, Region IV

Subject: Royalty Payments - DMEA Docket 2964 (Iron), Contract Idm-E578, Schroeder Mining Company, Platte County, Wyoming.

Reference is made to the inspecting engineer's memorandum accompanying MF-104 forms for the month of April 1954, which states in part:

"Four thousand tons of concentrates were shipped in April."

According to Annex III of the subject contract, royalty is to be paid on all production from the twelve claims listed in Article 2 and described in Annex I from the date of the contract, August 7, 1954.

Please have your engineer determine for us if any production has been made from lands described in the contract since August 7, 1954, and also tonnage approximate grade, and destination of the shipments.

This can be handled at the time of the next regular inspection.

W. H. King

RDB:cwm

cc: Royalty File E578
Secretary to the Oper. Comm. (2)
Chron.
RDBerkenkotter

Copy received

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

224 New Customhouse
Denver 2, Colorado

April 8, 1954

Memorandum

To: C. O. Mittendorf, Administrator, DMEA

From: Executive Officer, DMEA Field Team, Region IV

Subject: Docket DMEA 2964 (Iron), Contract IDM-E578, Schroeder Mining Co., Platte County, Wyoming

Enclosed are the original and two copies of Amendment No. 1 to Contract IDM-E578 which has been executed to authorize a change in the location of drilling four holes under Phase "A", Stage I, item 1 of the contract. Also enclosed are three sets of data relevant to the amendment.

Copies of this amendment have been given to the operator, the Fiscal Officer, Region IV, and a copy has been retained for our files.

W. H. King

Enclosures

RECEIVED
APR 30 1954
GENERAL COUNSEL
DEFENSE MINERALS
ADMINISTRATION

17

March 8, 1954

Memorandum

To: Mr. A. H. Koschmann A.H.K. by E.M.H.

From: D. R. MacLaren

Subject: DMEA Docket 2964 (iron), Contract idm-E578, Schroeder Mining Company, Platte County, Wyoming

In a letter dated February 23, 1954, Mr. Paul Schroeder, vice-president of the subject company, asked that a field examination be made to justify certain radical changes in the locations of the four holes remaining to be drilled under Phase A, Stage I of the subject contract. On February 24 and 25, 1954, accompanied by M. H. Salsbury of the U. S. Bureau of Mines and Paul Schroeder of the subject company, I visited the property, checked churn drill cuttings, and made a reappraisal of the geologic picture in the light of new exposures in cuts along roads for drill-rig access. It appears that the east end of the ore body in the main pit has been offset to the south a distance of about 110 feet. The offset portion has been well delineated by churn drilling and it is not likely that any more holes in the pattern originally laid out will result in the discovery of more ore. Mr. Schroeder requested that authorization be given to drill the remaining four holes north of the main pit to see if the ore extends in that direction or, if not, to look for another ore body to the north. Schroeder indicated three locations for drilling and asked that the fourth hole location be dependent upon the results in the first three, or that the footage of the fourth hole be made available for deepening one or more of the first three, depending on the results of the drilling. For purposes of reference, one site was marked by a double-jack hammer and the other two holes were located respectively about 150 feet southwesterly and 150 feet easterly from the [redacted] hammer.

It is recommended that authorization be given to drill these holes at the locations indicated by Schroeder and that the hole east of the jack hammer be drilled only after completion of the first two holes.

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF MINES

Region IV

Building 20, Room 137
Denver Federal Center
Denver 14, Colorado
March 5, 1954

Memorandum

To: Executive Officer, DMEA Field Team, Region IV

From: Chief, Mineral Resources Branch, Mining Division, Region IV

Subject: Docket DMEA 2964, Contract Idm-E578 (Iron), Schroeder Mining Company, Platte County, Wyoming

Enclosed are the original and seven copies of M. H. Salsbury's memorandum recommending an amendment to the subject contract. The recommendation has my approval.

W. M. Traver

W. M. Traver

enclosure

WMT/kp

cc 7
E578
Chron

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF MINES

Region IV

Building 20, Room 137
Denver Federal Center
Denver 14, Colorado
March 3, 1954

Memorandum

To: Chief, Mineral Resources Branch, Mining Division, Region IV

From: M. H. Salsbury

Subject: Docket DMEA 2964, Contract Idm-E578 (Iron), Schroeder Mining Company, Platte County, Wyoming--Request for amendment

Schroeder Mining Company has requested an amendment to the subject contract to permit a change in the location of the remaining churn drill holes allowed under Phase A, Stage I.

The property was visited on February 24 and 25, 1954, by Region IV Defense Minerals Exploration Administration representatives to check the advisability of the proposed change. Phase A, Stage I drilling, 5 holes west of the open pits, has been completed. East of the open pits, 8 of 12 projected holes have been drilled. The possibility of finding more ore by drilling the remaining 4 designated holes here is remote. Hole No. 6 is the only one which has encountered worthwhile mineralization; holes Nos. 8 and 9 encountered mineralization at depth, but it is overlain by as much as 66 feet of overburden. Three holes, Nos. 7, 10, and 11, drilled to explore a possible eastward extension of the ore in the pits were all in barren material. The last 2 holes, Nos. 12 and 13, drilled to explore a possible extension of the ore encountered in hole No. 6, which was not in the projected ore trend, encountered a few feet of low-grade material at surface

and then entered barren limestone, probably in the footwall.

North of the eastern pit, the operators have stripped 20 to 30 feet of overburden, and mineralization extending to the north is indicated. The proposed holes, which were tentatively located by Paul Schroeder, in company with the examining team, would determine if there is a lens in the probably favorable schist structure paralleling the known ore body. While there is no surface evidence of such a lens of ore, it is possible that another ore body does occur here, and it could be determined at comparatively small cost.

It is recommended that the Region IV Field Team approve an amendment to permit churn drilling of 3 holes at locations approximating the sites shown the examining team by Schroeder on the north side of the east pit. No hole is to be deeper than 150 feet, unless in ore, and the aggregate footage is not to exceed the amount remaining in Phase A, Stage I, or 899 feet.

A 4th hole should be permitted if the results of the other 3 justify it. This would also apply to the 18 holes in Phase A, Stage II, which are not now advisable at the locations specified in the contract.

L. H. Everett, for
M. H. Salsbury
Mining Engineer

MHS/kp

cc 7
E578
Chron

C
O
P
Y

E. C. SCHROEDER CO., INC.
Guernsey, Wyoming

Feb. 23, 1954

Mr. W. H. King, Executive Officer
DMEA Field Team, Region IV
224 New Customhouse
Denver 2, Colorado

Dear Sir:

Re: Exploration Project Contract
No. IDM-E 578, Docket No. DMEA 2964

As explained in our telephoned conversation this morning we have come to the conclusion that we will have to make some radical changes in our drilling program and believe that same should be inspected at your earliest convenience.

Very truly yours,

E. C. SCHROEDER COMPANY, INC.,

By /s/ Paul E. Schroeder

Paul E. Schroeder, Vice Pres.

PES/t

Rutledge
Martin
Hodges
Smith
Selfridge
Helgeson

JAN 28 1954

Schroeder Mining Company
c/o Mr. M. M. Cooney
Clewell, Cooney & Fuerste
705 Roshek Building
Dubuque, Iowa

Re: Docket No. DMEA 2964 - Iron
Schroeder Mining Co. (Assignee)
Good Fortune and
Nightingale mines
Platte County, Wyoming
Contract No. Idm-E578

Dear Mr. Cooney:

Enclosed is the Operator's copy of an "Assignment of Contract, Assignee's Acceptance, and Government's Consent" executed by the Government.

Sincerely yours,

C. O. Mittendorf

Administrator

Enclosure

FARutledge/ls

1/27/54

cc: Docket
FT, Reg. 4
Code 400
Adm. Read. File
J. M. Forbes, USBM
Martha Carr, USGS

RC 1-28-54

400

Rutledge
Martin
Selfridge
RJ

JAN 28 1954

Mr. W. H. King, Executive Officer
DMEA Field Team, Region IV
224 New Customhouse Building
Denver 2, Colorado

Re: Docket No. DMEA 2964 - Iron
Schroeder Mining Co. (Assignee)
Good Fortune and
Nightingale Mines
Platte County, Wyoming
Contract No. Idm-E578

Dear Mr. King:

Enclosed are the Field Team copy and the Finance Office copy of an "Assignment of Contract, Assignee's Acceptance, and Government's Consent" executed in full. The Operator's copy has been sent direct to the Schroeder Mining Co., c/o Mr. M. M. Cooney, Clewell, Cooney & Fuerste, 705 Roshek Building, Dubuque, Iowa.

Sincerely yours,

George C. Selfridge

Chairman, Operating Committee (216)

Enclosures

cc; Docket
FT, Reg. 4
Code 400
Adm. Read. File
Operating Comm.
J. M. Forbes, USBM
Martha Carr, USGS

APPROVED:

J. H. Hedges (216)
Member, Bureau of Mines

s/ Philip W. Smith (216)
Member, Geological Survey

FARutledge/ls
1/27/54

R.C.S. 1-28-54

CLEWELL, COONEY AND FUERSTE
LAW OFFICES
705 ROSHEK BUILDING
DUBUQUE, IOWA

ROBT. W. CLEWELL
M. M. COONEY
WILLIAM C. FUERSTE

DIAL 3-5749

Docket

WSM

January 21, 1954

Mr. C. O. Mittendorf, Administrator
Defense Minerals Exploration Administration
U.S. Department of Interior
Washington 25, D.C.

Dear Sir:

On October 30, 1953, I wrote you as attorney for the E. C. Schroeder Co., Inc. of McGregor, Iowa, for authority to assign Exploration Contract No. IDM-E578, Docket No. DMEA 2964, dated August 7, 1953, which provided for the exploration for iron ore on the Good Fortune and Nightingale Groups in Platte County, Wyoming. On November 9, 1953 you authorized the E. C. Schroeder Co., Inc. to assign said contract to the Horizon Mining Co. provided the documents of assignment were properly executed and returned to you for signature.

The sale of the E. C. Schroeder Co., Inc.'s Wyoming assets to the Horizon Mining Co. has now been completed, however the name of the Horizon Mining Co. has been changed to Schroeder Mining Co. and we have inserted the name of Schroeder Mining Co. in the assignments in lieu of Horizon Mining Co. The interest of the E. C. Schroeder Co., Inc. in the twelve leased mining claims has been duly assigned to the Schroeder Mining Co., formerly Horizon Mining Co.

We are enclosing herewith the original and five copies of the assignment duly executed by the officers of both corporations. When you have executed the assignment we will appreciate your returning the Operator's copy to us.

Thanking you for the favor, we are,

Yours very truly,
CLEWELL, COONEY & FUERSTE,

BY M. M. Cooney

MMC:C
Enc.

RECEIVED
Nov 2 1953

CLEWELL, COONEY AND FUERSTE
LAW OFFICES
705 ROSHEK BUILDING
DUBUQUE, IOWA

ROBT. W. CLEWELL
M. M. COONEY
WILLIAM C. FUERSTE

DIAL 3-5749

October 30, 1953.

Mr. C. O. Mittendorf, Administrator
Defense Minerals Exploration Administration
U.S. Department of Interior
Washington 25, D.C.

Dear Sir:

I am the attorney for the E. C. Schroeder Co., Inc. of McGregor, Iowa, who entered into an Exploration Project Contract, Number IDM-E578, Docket No. DMEA 2964, on August 7, 1953, providing for the exploration for iron ore on the Good Fortune and Nightingale Groups of mining claims in Platte County, Wyoming.

The Company has been operating the Good Fortune mine situated on the Good Fortune group for a period of more than a year. The ore is being mined by the open pit method. It is crushed and shipped to the furnaces without beneficiation. The ore that is presently being shipped averages approximately 58% iron content. There is a considerable amount of iron ore in the deposit which, if beneficiated and the rock removed, would test up around 58% or 59%. Consequently the Company has decided to erect a beneficiation plant. This necessitates a considerable outlay of money and in order not to take working capital from its other operations the Company has decided to sell a one-half interest in its Wyoming operation and assets to the S. J. Groves & Sons Company, contractors and engineers of Minneapolis, Minnesota, who have had considerable mining experience. The assets of the Wyoming operation will be exchanged for stock in the Horizon Mining Co., a Delaware corporation. One-half of the outstanding stock will be owned by E. C. Schroeder Co., Inc. and one-half by the S. J. Groves & Sons Company. The management will continue the same and the corporation will have adequate working capital.

In view of the proposed sale of its Wyoming assets to the Horizon Mining Co. the E. C. Schroeder Co., Inc. respectfully requests permission to assign its Exploration Project Contract to the said Horizon Mining Co.

We will appreciate hearing from you.

E. C. SCHROEDER CO., INC.

By M. M. Cooney
M. M. Cooney
Its Attorney

MMC:C

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

mds

RECEIVED
OCT 2 1953

224 New Customhouse
Denver 2, Colorado

September 29, 1953

Memorandum

To: C. O. Mittendorf, Administrator, DMEA

From: Executive Officer, DMEA Field Team, Region IV

Subject: Contract Idm-E578, Docket No. DMEA 2964, E. C. Schroeder Co., Inc., Platte County, Wyoming

Enclosed are three copies of Contract Idm-E578.

Copies of this contract have been given to the Operator, the Fiscal Officer, Region IV, and a copy has been retained for our files.

The E. C. Schroeder, Co., Inc. does not have a corporate seal. The company is incorporated in the State of Iowa, and a corporate seal is optional according to the laws of that State.

W. H. King
W. H. King

Enclosures

cc
10-7

FILE COPY
SURNAME:

400

Rutledge
Talbert
Selfridge

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

AUG 27 1953

Mr. W. H. King, Executive Officer
DMEA Field Team, Region IV
224 New Customhouse Building
Denver 2, Colorado

Re: Docket No. DMEA 2964 - Iron
E. C. Schroeder Co., Inc.
Good Fortune & Nightingale mines
Platte County, Wyoming

Dear Mr. King:

We are returning the original and five copies of the above referenced proposed contract signed by the Administrator for the Government, together with Exhibit "A" (3 pages), Annex I (1 page), Annex II (1 page), Annex III (1 page), and three maps.

If the terms and conditions of this proposed contract are satisfactory to you and the Operator, all six copies should be signed and the usual distribution made. Execution of the contract for the E. C. Schroeder Co., Inc., will be arranged through Mr. M. M. Cooney. Because of the delay due to the requested revisions it will be appreciated if you will expedite the delivery via air mail of the proposed contract to Mr. Cooney, % Clewell, Cooney and Fuerste, 705 Roshek Building, Dubuque, Iowa.

In reviewing the docket, we are unable to determine the reasons behind the requested changes. Your letter of August 14, 1953, returning the proposed contract, requested that the statement qualifying the depth of holes under Stage I, Phase A, "holes to be drilled to footwall of ore zone" also be applied to the work under Stage II, Phase A. However, your teletype dated August 18, 1953, requested deletion of all references to bottoming holes in footwall of ore zone. This deletion has been made, but we believe that the Field Team should make sure all holes are carried through the ore zone where practicable.

To expedite the execution of the proposed contract, the reference 1/ at the end of Exhibit "A" has been amended to include supervision and sampling as you requested. This change was unnecessary as the contract is on the short form and, therefore, the unit costs reflect all costs except as otherwise shown. Our reason in having the footnote was to clarify the item, hauling water, as a part of the drilling costs.

Your suggested addition to the description of work, "The location of the drill holes should be at the approximate locations shown on the map" was not used as the description of work already included such reference.

Under Article 3, the starting date has been left blank and is to be filled in when the contract is executed.

Sincerely yours,

Ernest Wm. Ellis

Chairman, Operating Committee

ACTING

APPROVED:

M. H. Kline

Member, Bureau of Mines

D. M. Larrabee

Member, Geological Survey

FARUTLEDGE:foc
8-25-53
cc: Docket
Code 400
Adm. Reading File
Operating Comm.
FT. Reg. 4
J. M. Forbes, USBM
Mrs. Martha Carr, USGS

Enclosures

8-27-53

1-1027
(April 1946)

UNITED STATES
DEPARTMENT OF THE INTERIOR

AGENCY DMEA REGION IV

TELETYPE

Originator:
Ext.: Room:

Appro.:
Date: 8/18/53
Time:
No.:
To: C. O. MITTENDORF DMEA WASH

Subject: RE OUR MEMO AUGUST 14, 1953, DOCKET NUMBER DMEA 2964, CONTRACT IDM-E578, E. C. SCHROEDER COMPANY (IRON). A FURTHER REVIEW OF THE PROPOSED CONTRACT INDICATES ADDITIONAL CHANGES DESIRABLE-- UNDER STAGE I ALL REFERENCE TO BOTTOMING OF DRILL HOLES IN IMPERVIOUS LIMESTONE SHOULD BE ELIMINATED. SUGGEST SUBSTITUTING THE FOLLOWING-- CHURN DRILL HOLES DRILLED IN BARREN WASTE MATERIAL SHALL NOT EXCEED 100 FEET IN DEPTH. UNDER STAGE II THERE SHOULD NOT BE ANY LIMITATION ON THE DEPTH OF THE HOLES. UNDER THE DESCRIPTION OF THE WORK, THE LOCATION OF THE DRILL HOLES SHOULD BE AT THE APPROXIMATE LOCATIONS SHOWN ON THE MAP.

Authorized: W. H. King
W. H. KING

CONFIRMATION

Sign original message and transmit to Room in duplicate

U. S. GOVERNMENT PRINTING OFFICE 16—50915-1

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

224 New Customhouse
Denver 2, Colorado

August 14, 1953

REGISTERED MAIL

Memorandum

To: Administrator, DMEA

From: Executive Officer, DMEA Field Team, Region IV

Subject: Docket No. DMEA 2964 (Iron), Contract Idm-E578, E. C. Schroeder Co.

Enclosed are the original and five copies of Contract Idm-E578, which were transmitted to this office on August 7, 1953.

We believe that certain changes that are not within our delegation of authority should be made in this contract. Under Exhibit "A", Description of the Work, Phase "A", Stage I, last sentence, page 1, the following is stated:

> "Drill holes are to be bottomed in the impervious limestone forming the footwall of the ore zone with the exception that holes in barren or waste material shall not exceed 100 feet in length."

We believe that the same statement should be included in paragraph 1, Stage II of Phase "A" on page 2. The following should be added to this paragraph:

> "with the exception that holes in barren or waste material shall not exceed 100 feet in length."

The transmittal of the Chairman of the Operating Committee dated August 7, 1953 states that the agreed unit costs for churn drilling includes supervision and sampling. We believe that the reference at the end of Exhibit "A" should be as follows:

> "Includes all costs of supervision, sampling, drilling, and hauling water."

W. H. King
W. H. King

Enclosures

Coe
8-17

EXPLORATION PROJECT CONTRACT
E. C. SCHROEDER CO., INC.
DOCKET NO. DMEA-2964

EXHIBIT "A"

Description of the Work

The exploration work on this project is to be done in two concurrent phases on neighboring areas in the Hartville Mining District. Phase "A" on the Good Fortune group of claims shall consist of two (2) stages as indicated on the attached map entitled "Fig. 2 - Good Fortune group showing approximate location of open cut, holes drilled by E. C. Schroeder Co., Inc. . . "

The second phase, Phase "B", is on the Nightingale group of claims and shall consist of three (3) stages; Stages I and II of Phase "B" are indicated on the attached map entitled "Fig. 3 - Nightingale group showing approximate location of recommended churn drill holes."

In each phase, the work in each successive stage shall be undertaken only upon completion of the prior stage and if in the opinion of the Government, the results thereof warrant it. The location of all roads shall be subject to the prior approval of the Government.

Representative samples shall be taken of all mineralized formations encountered. Each sample shall be divided into not less than two parts, one of which is to go to the Field Team and the other to the Operator. The samples are to be analyzed to the extent below indicated.

PHASE "A"

Stage I

Time Schedule: 0 - 3 months

1. Churn drill seventeen (17) holes with not less than a 6-inch bit for an aggregate length not to exceed 2,000 feet. Five (5) of the holes are to be west of the pit presently being mined and twelve (12) east of this pit as indicated on figure 2. ~~Drill holes are to be bottomed in the impervious limestone forming the footwall of the ore zone with~~ the exceptions that holes in barren or waste material shall not exceed 100 feet in length.

Churn drill

2. Construct a maximum of 1,000 feet of access roads to the drill sites.

Stage II

Time Schedule: 4 - 7 months

1. Churn drill eighteen (18) holes with not less than a 6-inch bit for an aggregate length not to exceed 3,000 feet. ~~Drill holes are to be bottomed in the impervious lime-stone forming the footwall of the [illegible] zone.~~

2. Construct a maximum of 2,000 feet of access roads to the drill sites.

PHASE "B"

Stage I

Time Schedule: 0 - 2 months

1. Churn drill Holes 1, 2, and 3 as indicated on Fig. 3 with not less than a 6-inch bit for an aggregate length of 600 feet to explore for iron in the Guernsey and Hartville formations.

2. Construct a maximum of 1,000 feet of access roads to the drill sites.

Stage II

Time Schedule: 3 - 4 months

1. Churn drill Holes 4, 5, 6, 7, and 8 as indicated on Fig. 3 with not less than a 6-inch bit for an aggregate length of 1,000 feet to explore for iron in the Guernsey and Hartville formations. Drill holes in order listed.

2. Construct a maximum of 1,000 feet of access roads to the drill sites.

Stage III

Time Schedule: 5 - 6 months

1. Deepen by churn drilling one or two of the holes drilled under Stages I and II of Phase "B" for an aggregate length not to exceed 500 feet.

Estimated Costs of the Project

Agreed Unit Costs

Churn drill 7100 feet @ $6.00/ft. 1/	$42,600.00	
Construct access roads - 5000 feet @ $1.00/ft.	5,000.00	
Analyze 500 samples @ $1.00 per element determined	500.00	
Total Agreed Unit Costs		$48,100.00
Government Participation @ 50%		$24,050.00

1/ Includes all costs of drilling, and of hauling water.

1-1027
(April 1946)

UNITED STATES
DEPARTMENT OF THE INTERIOR

AGENCY DEFENSE MINERALS EXPLORATION ADMINISTRATION

Originator: FARutledge/ls

TELETYPE

Ext.: 5285 Room: 3538

Appro.: 14X3923.970 - Working Fund - DMEA
Date: August 19, 1953
Time:
No.:
To: W. H. King, DMEA Executive Officer, Region 4, Denver, Colorado

Subject:

Reurtt August 18, 1953, E. C. Schroeder Company, Docket DMEA 2964. We are agreeable to elimination of reference to impervious limestone in description of work under Stages I and II of Phase "A" but new description of work must still require drill holes to be drilled to footwall of ore zone.

W S Martin

W. S. Martin, Acting Chairman
Operating Committee

Authorized:

Sign original message and transmit to Room ..... in duplicate

U. S. GOVERNMENT PRINTING OFFICE 16—50915-1

FILE COPY
SURNAME:

Rutledge
Martin
Chamberlin
Ortin
Hoffman
Lapraire
Pierson

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

DEFENSE MINERALS EXPLORATION ADMINISTRATION
FARutledge/ls
5285 3538

14X3923.970 - Working Fund - DMEA
August 19, 1953

W. H. King, DMEA Executive Officer, Region 4, Denver, Colorado

Report August 18, 1953, E. C. Schroeder Company, Docket DMEA 2964. We are agreeable to elimination of reference to impervious limestone in description of work under Stages I and II of Phase "A" but new description of work must still require drill holes to be drilled to footwall of ore zone.

W. S. Martin

W. S. Martin, Acting Chairman
Operating Committee

CC: DOCKET
FIELD TEAM, REG. IV, CONFIRMATION
CODE 400
ADM. READ. FILE
AUDITS DIVN., BUR. MINES
OPER. COMM.
J. M. FORBES, USBM
MARTHA CARR, USGS

FARutledge/ls
8/19/53

Mr. C. O. Mittendorf
Aug 18, 1953
2:40 PM.

Docket

DN 235 BUREAU MINES 8-1-8-53 XXX 8-18-53 11-07 AM

C O MITTENDORF

RE OUR MEMO AUGUST 14,1953, DOCKET NUMBER DMEA 2964, CONTRACT IDM-E 578, E. C. SCHROEDER COMPANY /IRON/. A FURTHER REVIEW OF THE PROPOSED CONTRACT INDICATES ADDITIONAL CHANGES DESIRABLE--
UNDER STAGE I ALL REFERENCE TO BOTTOMING OF DRILL HOLES IN IMPERVIOUS LIMESTONE SHOULD BE ELIMINATED. SUGGEST SUBSTITUTING THE FOLLOWING--
CHRUN XXXX CHURN DRILL HOLES IN BARREN WASTE MATERIAL SHALL NOT EXCEED 100 FEET IN DEPTH. UNDER STAGE II THERE SHOULD NOT BE ANY LIMITATION ON THE DEPTH OF THE HOLES. UNDER THE DESCRIPTION OF THE WORJXXX WORK, THE LOCATION OF THE DRILL HOLES SHOULD BE AT THE APPROXIMATE LOCATIONS SHOWN ON THE MAP.

W H KING

Denver, Colo.

FILE COPY
SURNAME:

140

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

N.S. in R.R.

August 3, 1953

Memorandum

To: The Administrator

Through: W. S. Martin

From: Chief Counsel

Subject: E. C. Schroeder Co., Inc. - Docket No. DMEA-2964

There is attached, in satisfactory legal form for execution, a contract covering the above-described project.

There is a Guaranty by the operator attached as Annex II. This is really unnecessary because of the elimination of the "proviso" in Article 7 in the contract. However the Guaranty has been allowed to remain at the request of the Division mainly for psychological reasons because a similar Guaranty was previously required from the operator in an earlier exploration project contract made with it.

J. L. Hofflund

J. L. Hofflund
Chief Counsel

Attachment

AEKane/ema
cc: Mails & Files
W. S. Martin
J. L. Hofflund
A. E. Kane
Chron.

DARD FORM NO. 64

Rec'd 7/30

Office Memorandum • UNITED STATES GOVERNMENT

TO : Mr. Robert E. Adams, Chief
Oper. Controls & Statistics Division

DATE: July 30, 1953

FROM : Iron and Ferro-Alloys Division

SUBJECT: Consolidation of Dockets Nos. DMEA 2963 and 2964 - Iron - Schroeder Company

The Field Team recommended that these two applications be consolidated and a single contract prepared covering both.

This Division concurs with the Field Team recommendation, and suggests that DMEA 2963 be consolidated into DMEA 2964.

W S Martin
W. S. Martin, Acting Chief
Iron and Ferro-Alloys Division

400

M 400

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS ADMINISTRATION

REFERENCE SLIP

DATE 8/5/53

REFERRED TO:

1. ~~Mr. Adams~~ ~~4070~~
2. ~~Mr. Forbes~~ ~~3517~~
3. ~~Mrs. Carr 2421-63A~~ Bldg.
4. ~~Operating Comm.~~ 4624
5. ~~Administrator~~ 4624
6. Mail Room 4539

CH 4-7-53

FOR:

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

REMARKS: Committee thought costs high

Check (X) before the items needing attention.

F. A. Rutledge
Initials of sender.

GPO 16—63815-1

FILE COPY
SURNAME:

400

Rutledge
Martin
Farbar
Cooney

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

AUG 7 1953

Mr. W. H. King, Executive Officer
DMEA Field Team, Region IV
224 New Customhouse Building
Denver 2, Colorado

Re: Docket No. DMEA 2964 - Iron
E. C. Schroeder Co., Inc.
Good Fortune & Nightingale mines
Platte County, Wyoming

Dear Mr. King:

We are enclosing the original and five copies of the above referenced contract signed by the Administrator for the Government, together with Exhibit "A" (3 pages), Annex I (1 page), Annex II (1 page), Annex III (1 page), and three maps.

If the terms and conditions of this contract are satisfactory to you and the Operator, all six copies should be signed and the usual distribution made. Execution of the contract for the E. C. Schroeder Co., Inc., will be arranged through Mr. M. M. Coonsy. It will be appreciated if you will expedite the delivery of the proposed contract to Mr. Coonsy, % Clewell, Coonsy and Fuerste, 705 Roshek Building, Dubuque, Iowa.

If any part of this contract does not have either your approval or that of the Operator and cannot be amended within your delegated authority, the original and all copies of the contract are to be returned to this office, together with the proposed changes for consideration.

Please note that the agreed unit cost for churn drilling now includes supervision and sampling, which has increased the unit cost from $5.00 a foot to $6.00 a foot. Total number of determinations has been increased to 500.

The above changes have increased the amount of the proposed contract from $47,415.00 to $48,100.00.

BAB
8/7/53

Under Article 3, the starting date has been left blank and is to be filled in when the contract is signed by the Operator.

Sincerely yours,

SIGNED

Chairman, Operating Committee

APPROVED:

Member, Bureau of Mines

Member, Geological Survey

Enclosures

FARutledge:foc
8-5-53

cc: Docket
Code 400
Adm. Reading File
Operating Comm.
FT. Reg. IV
J. M. Forbes, USBM
Martha Carr, USGS

P. S. If you have not already determined whether the proposed drilling is actually on the Nightingale claim, as questioned by W. M. Traver's memorandum to you of July 8, 1953, please have the applicant verify this to your satisfaction.

400 FILE COPY
SURNAME:

Rutledge
Martin
Selfridge
Hedges
Kinkel
Attorney

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

AUG 6 1953

W. H. King, Executive Officer
DMEA Field Team, Region IV
224 New Customhouse
Denver 2, Colorado

Re: Docket No. 2963 - Iron
E. C. Schroeder Co. Inc.
Nightingale mine
Platte County, Wyoming

Dear Mr. King:

Reference is made to the subject docket and the Field Team's recommendations that the referenced application be combined with that under Docket No. 2964, Iron, E. C. Schroeder Company, Inc., Good Fortune Group, for the purpose of preparing an exploration project contract.

Such a contract is now being prepared. You should therefore combine the two referenced dockets and withdraw No. DMEA 2963.

Sincerely yours,

George C. Selfridge

Chairman, Operating Committee

APPROVED:

J. H. Hedges

Member, Bureau of Mines

A. R. Kinkel, Jr.

Member, Geological Survey

FARutledge:foc
8-5-53

cc: Docket
Code 400
Adm. Reading File
Operating Comm.
FT. REG. IV
J. M. Forbes, USBM
Mrs. Martha Carr, USGS

R.C. 8-6-53

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

August 3, 1953

Memorandum

To: The Administrator

Through: W. S. Martin

From: Chief Counsel

Subject: E. C. Schroeder Co., Inc. - Docket No. DMEA-2964

There is attached, in satisfactory legal form for execution, a contract covering the above-described project.

There is a Guaranty by the operator attached as Annex II. This is really unnecessary because of the elimination of the "proviso" in Article 7 in the contract. However the Guaranty has been allowed to remain at the request of the Division mainly for psychological reasons because a similar Guaranty was previously required from the operator in an earlier exploration project contract made with it.

J. L. Hofflund
J. L. Hofflund
Chief Counsel

Attachment

MF-200 (A)
(February 1952)

DOCKET NO. DMEA [redacted] - ~~2963~~ 2964

COMMODITY Iron

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] E. C. Schroeder Co., Inc., A Corporation organized and existing under the laws of the State of Iowa, McGregor, Iowa

hereinafter called the "Operator," as follows:

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

ARTICLE 2. *Operator's property rights.*—With respect to that certain land situated in the State of Wyoming County of Platte, described as follows:[3] Twelve (12) patented mining claims, six (6) in the Good Fortune Group and six in the Nightingale Group, more particularly described as set forth in Annex I and indicated on the following maps attached hereto: Fig. 1 - Location map, showing relative position of Nightingale and Good Fortune Groups, Fig. 2 - Good Fortune Group, and Fig. 3 - Nightingale Group.

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: _____

Guaranty of E. C. Schroeder Co. Inc. ~~Annex~~ II, in lieu of the

(*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 _____ days from the date of this contract shall commence work on a project of exploration for[5] iron ore

in or upon the described land; and shall bring the project to completion within a period of Twelve (12) months from the date of this contract. The work to be performed is more fully described in Exhibit "A" attached hereto, which, with any maps or drawings thereto attached, are made a part of this contract. The Government will contribute to the cost of this work as hereafter provided. The work shall be performed by the Operator or by independent contractor or contractors efficiently, expertly, in a workmanlike manner, in accordance with good mining standards and State regulations for health and safety and for workmen's compensation and employers' liability insurance, with suitable and adequate equipment, materials, and labor, to bring the project to completion within the time fixed. The Government shall have the right to enter and observe and inspect the work at all reasonable times, and the Operator shall provide the Government with all available means for doing so. The Government may consult with and advise the Operator on all phases of the work.

ARTICLE 4. *Costs of the project.*—The agreed, estimated costs of performing the work, expressed in terms of units of work to be performed (per foot of drifting, per foot of drilling, per cubic yard of material to be moved, etc.) are set forth in Exhibit "A," attached hereto. The Government will pay 50 percent of these agreed, estimated costs, as they accrue, for units of work actually performed that conform with the description or specifications for the work set forth in this contract, in an aggregate total amount not in excess of $ 24,050.00, which is 50 percent of $ 48,100.00, 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* _____

_____

_____

_____

_____

Executed in sextuplicate the day and year first above written.

THE UNITED STATES OF AMERICA

_____
(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

Annex I

EXPLORATION PROJECT CONTRACT
E. C. SCHROEDER CO., INC.
DOCKETS DEMA ~~2963~~ and 2964

NIGHTINGALE GROUP

The six following patented mining claims (Mineral Certificate 137) surveyed under U. S. Survey 196:

Nightingale, Origan, O. K., Rustler, Columbia, and Black Cloud.

GOOD FORTUNE GROUP

The six following patented mining claims (Mineral Certificate 140) surveyed under U. S. Survey 194:

Good Fortune, Good Fortune Annex, Appex, Blue Bird, Denver and Gulf, and Cottonwood.

EXPLORATION PROJECT CONTRACT
E. C. SCHROEDER CO., INC.
DOCKETS DEMA ~~2963~~ and 2964

ANNEX II

G U A R A N T Y

In consideration of the waiver, by the United States of America of the requirement of the Owner's Consent to Lien, as set forth in paragraph 2(b) of the attached Exploration Project Contract between the undersigned and the United States of America, the undersigned hereby guarantees the payment to the United States of America of royalties, as specified in said Contract and any amendment, thereof, upon any and all ore discovered or developed as a result of said Contract and any amendment thereof, which is mined within 10 years from the date of said Contract, whether or not the undersigned has any interest in the property, covered by the said Contract, or any part in the mining operations at the time said ore is mined. If for any reason the net smelter returns or other net amounts, from operations that would be subject, under said Contract and any amendments thereof, to such payments to the United States of America, are not available as a means of measuring the amount of such payment, then the undersigned agrees and undertakes to make such payment according to the best estimates of the amount that can reasonably be made, and in the event of dispute as to such estimate, the undersigned agrees that the determination thereof by either the Administrator or Defense Minerals Exploration Administration, or his designee, shall be final and binding upon the undersigned.

Dated this _____ day of _____, 1953.

E. C. SCHROEDER CO., INC.

By_____
President

EXPLORATION PROJECT CONTRACT
E. C. SCHROEDER CO., INC.
DOCKETS DEMA ~~2963~~ and 2964

EXHIBIT "A"

Description of the Work

The exploration work on this project is to be done ~~as~~ in two concurrent phases on neighboring areas in the Hartville Mining District. Phase "A" on the Good Fortune group of claims shall consist of two (2) stages as indicated on the attached map entitled "Fig. 2 - Good Fortune group showing approximate location of open cut, holes drilled by E. C. Schroeder Co., Inc.."

The second phase, Phase "B", is on the Nightingale group of claims and shall consist of three (3) stages; Stages I and II of Phase "B" are indicated on the attached map entitled "Fig. 3 - Nightingale group showing approximate location of recommended churn drill holes."

(X) Representative samples shall be taken of all mineralized formations encountered. Each sample shall be divided into not less than two parts, one of which is to go to the Field Team and the other to the Operator. The samples are to be analyzed.

PHASE "A"

Stage I

Time Schedule: 0 - 3 months

1. Churn drill seventeen (17) holes with not less than a 6-inch bit for an aggregate length not to exceed 2,000 feet. Five (5) of the holes are to be west of the pit

presently being mined and twelve (12) east of this pit as indicated on figure 2. Drill holes are to be bottomed in the impervious limestone forming the footwall of the ore zone with the exception that holes in barren or waste material shall not exceed 100 feet in length.

2. Construct a maximum of 1,000 feet of access roads to the drill sites. [redacted] the prior appr[redacted].

Stage II

Time Schedule: 4 - 7 months

Stage II is to be undertaken only after completion of Stage I to the satisfaction of and approval by the Government, dependent upon the results of Stage I.

1. Churn drill eighteen (18) holes with not less than a 6-inch bit for an aggregate length not to exceed 3,000 feet. Drill holes are to be bottomed in the impervious limestone forming the footwall of the ore zone.

2. Construct a maximum of 2,000 feet of access roads to the drill sites. [redacted] the [redacted]ent.

Phase "B"

Stage I

Time Schedule: 0 - 2 months

1. Churn drill Holes 1, 2, and 3 as indicated on Fig. 3 with not less than a 6-inch bit for an aggregate length of 600 feet to explore for iron in the Guernsey and Hartville formations.

2. Construct a maximum of 1,000 feet of access roads to the drill sites. [redacted] to the prior [redacted].

Stage II

Time Schedule: 3 - 4 months

Stage II of Phase "B" is to be undertaken only after completion of Stage I to the satisfaction of and approval by the Government, dependent upon the results of Stage I.

1. Churn drill Holes 4, 5, 6, 7, and 8 in the order listed as indicated on Fig. 3 with not less than a 6-inch bit for an aggregate length of 1,000 feet to explore for iron in the Guernsey and Hartville formations.

2. Construct a maximum of 1,000 feet of access roads to the drill sites. [redacted] to the prior [redacted].

Stage III

Time Schedule: 5 - 6 months

Stage III of [redacted] only after the completion of Stages I and II [redacted] to the satisfaction of and approval by the [redacted].

1. Deepen by churn drilling one or two of the holes drilled under Stages I and II of Phase "B" for an aggregate length not to exceed 500 feet.

ESTIMATED COSTS OF PROJECT

AGREED UNIT COSTS

Phase "A"

Stage I

Churn drill 2,000 feet @ $6.00 per foot ~~which includes all drilling costs and the hauling of water.~~ 1/	$12,000.00	
Construct 1,000 feet of access roads @ $1.00 per foot	1,000.00	
Analyze 140 samples @ $1.00 per element determined	140.00	$13,140.00

Stage II

Churn drill 3,000 feet @ $6.00 per foot ~~which includes all drilling costs and hauling of water~~ 1/	$18,000.00	
Construct 2,000 feet of access roads @ $1.00 per foot	2,000.00	
Analyze 160 samples @ $1.00 per elements determined	160.00	$20,160.00

Phase "B"

Stage I

Churn drill 600 feet @ $6.00 per foot ~~which includes all drilling costs and hauling of water.~~ 1/	$3,600.00	
Construct 1,000 feet of access roads at $1.00 per foot	1,000.00	
Analyze 60 samples @ $1.00 per element determined	60.00	$4,660.00

Stage II

Churn drill 1,000 feet @ $6.00 per foot ~~which includes all drilling costs and the hauling of water.~~ 1/	$6,000.00	
Construct 1,000 feet of access roads @ $1.00 per foot	1,000.00	
Analyze 80 samples @ $1.00 per element determined	80.00	$7,080.00

Stage III

Churn drill 500 feet @ $6.00 ~~per foot which includes all drilling costs and the hauling of water.~~ 1/	$3,000.00	
Analyze 60 samples @ $1.00 per element determined	60.00	$3,060.00
TOTAL AGREED UNIT COSTS	$48,100.00	
GOVERNMENT PARTICIPATION @ 50 PERCENT	24,050.00	

1/ includes all drilling costs & hauling water

In each phase, the work in each successive stage shall be undertaken only upon completion of the prior stage and if in the opinion of the Government, the results thereof warrant it.

"~~ot more than 1000 feet of access roads to the drill sites shall be constructed in Stages I and II of phase B, Stage I of phase "A" and not more than 2000 feet in Stage II of phase "A".~~ The location of all roads shall be subject to the prior approval of the Government.

Agreed Unit Costs

Churn drill 7100 feet @ $6.00/ft. 1/ $42,600

Construct access roads-5000 feet @ $1.00/ft. 5,000

Analyze 500 samples @ $1.00 per element determined 500

Total agreed Unit Costs $48,100

gen. Porterfield @ 50% 24,050

1/ includes all costs of drilling and of hauling water.

~~Total agreed Unit Costs~~

MF-200
(June 1951)
(Revised Feb. 1952)

DOCKET NO. DMEA 2964 & 2963

COMMODITY Iron

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

EXPLORATION PROJECT CONTRACT[1]

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] E. C. Schroeder Co., Inc., a Corporation organized and existing under the laws of the State of Iowa, McGregor, Iowa.

hereinafter called the "Operator," as follows:

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

ARTICLE 2. *Operator's property rights.*—With respect to that certain land situated in the State of Wyoming, County of Platte, described as follows:[3] Twelve (12) patented mining claims, six (6) in the Good Fortune Group and six in the Nightingale Group, more particularly described as set forth in Annex I and indicated on the following maps attached hereto: Fig. 1 - Location map, showing relative position of Nightingale and Good Fortune Groups, Fig. 2 - Good Fortune Group, and Fig. 3 - Nightingale Group.
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:~~

Guaranty of E. C. Schroeder Co., Inc., Annex II, in lieu of the

(*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 _____ days from the date of this contract shall commence work on a project of exploration for[5] iron ore

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

ARTICLE 4. *Performance of the work.*—(*a*) *Operator's responsibility.* The work shall be performed efficiently, expertly, in a workmanlike manner, in accordance with good mining standards and State regulations for health and safety and for workmens' compensation and employers' liability insurance, with suitable and adequate equipment, materials, and labor, to bring the project to completion within the time fixed. To the extent specified in Exhibit "A," attached hereto, the work may be performed by independent contractor or contractors; and work not specified in Exhibit "A" for performance by independent contractor may nevertheless be so performed upon amendment of Exhibit "A," as agreed to by the parties, to state the work to be so performed and the estimated unit costs thereof, as provided hereafter.

(*b*) *Independent contracts.*—Any independent contract for the performance of work shall be on a unit-price basis (such as per foot of drilling, per foot of drifting, per hour of bulldozer operations, per cubic yard of material moved), or on some basis that will indicate the amount due for work performed at any stage of the work to be performed under such independent contract. The Government shall not be nor be considered to be a party to any such independent contract, and the Government's right to terminate the exploration project contract under any of its provisions shall not in any manner be affected by reason of any such independent contract. If the reference in Exhibit "A" to any such independent contract states that the Government's approval thereof is required, the Government may refuse to participate in the cost thereof unless and until it has given its written approval of the independent contract.

(*c*) *Government may inspect.*—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 5. *Estimated costs of the project.*—A statement of the estimated cost of the project is set forth in Exhibit "A," attached hereto. Except insofar as any item of requirement or the estimated cost thereof set forth in Exhibit "A" is there or elsewhere designated as an "allowable maximum," such items of requirement and of related cost are estimates only, and may be exceeded to the extent that the Government may from time to time approve for the most economic and beneficial performance of the work within the limitation of the total aggregate estimate of costs. The Government's approval of any such excess over the estimate for an item of requirement or related cost will be signified by its approval and payment of any invoice or voucher for payment which expressly calls attention to such excess. Items expressly designated in Exhibit "A" or elsewhere as "allowable maximum," and the total aggregate estimated cost are limitations, and any excess therein will be for the sole account of the Operator in which the Government will not participate.

ARTICLE 6. *Allowable costs of the project.*—(*a*) The costs of the project in which the Government will participate are limited to the following:

(1) *Independent contracts.*—Payments to independent contractors under independent contracts listed in Exhibit "A." The estimated cost of any work to be performed under an independent contract is or shall be included in the estimate of costs in Exhibit "A" in terms of the estimated numbers of units of work to be performed, the estimated amount to be paid per unit, and the estimated total amount to be paid to the independent contractor, and such estimates shall be allowable maximums above which the Government will not contribute. Regardless of the provisions of any such independent contract, the Government will participate in the payments to the independent contractor only on account of work actually performed and that conforms with the provisions of the exploration project contract, and only to the extent that the Government deems the unit prices for the work under the independent contract to be reasonable and necessary. No such independent contract shall have the effect of increasing the estimated total cost of the exploration project contract nor the maximum amount which the Government will pay as provided in the exploration project contract.

(2) *Labor, supervision, consultants.*—Labor, supervision and technical services (including engineering and geological consultants), a schedule of which is included in the estimate of costs set forth in Exhibit "A." The requirements and related estimated costs for supervision and technical services are allowable maximums.

(3) *Operating materials and supplies.*—Necessary materials and supplies including items of equipment costing less than $50.00 each, and power, water, and fuel, a schedule of which is included in the estimate of costs in Exhibit "A."

(4) *Operating equipment.*—Any operating equipment to be rented or purchased, or which is owned and will be furnished by the Operator, with the estimated rental, purchase price, or the allowable depreciation, as the case may be, a schedule of which is included in Exhibit "A." Any items listed as owned and to be furnished by the Operator, and related initial allowable depreciation, are allowable maximums.

(5) *Rehabilitation and repairs.*—Any necessary initial rehabilitation or repairs of existing buildings, installations, fixtures, and movable operating equipment, now owned by the Operator and to be devoted to the purposes of the exploration contract, a schedule of which is included in the estimate of costs set forth in Exhibit "A." These items are allowable maximums.

(6) *New buildings, improvements, installations.*—Any necessary buildings, fixed improvements, or installations to be purchased, installed, or constructed for the purposes of the exploration work, with the estimated cost of each, a schedule of which is included in the estimate of costs in Exhibit "A." All of these items are allowable maximums.

(7) *Miscellaneous.*—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.

(8) *Contingencies.*—Such other necessary, reasonable direct costs of performing the exploration work, within the limit of the total aggregate estimate of costs, whether or not included in any schedule of costs in Exhibit "A," as may be approved by the Government in the course of the work, as indicated by its approval and payment of invoices and vouchers.

[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*) The Government's payments in all cases will be based on actual, necessary costs (including contract unit prices) incurred not in excess of any "allowable maximum," and not in excess of the fixed percentage of the total aggregate estimated cost. Costs will be considered to be incurred only as they are or become due and payable.

(*c*) 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 this contract, shall be allowed as costs of the project in which the Government will participate.

ARTICLE 7. *Reports, accounts, audits.*—(*a*) *Progress reports.* The Operators shall provide the Government with monthly reports of work performed and costs (including contract unit prices) incurred 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 costs incurred 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.

(*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 operations, which the Government may inspect and audit at any time. The Government may at any time require an audit of the Operator's records and accounts by a certified public accountant, the cost thereof to be treated as a cost of the project. The Operator shall keep and preserve said records and accounts for at least 3 years after the completion of the project or the termination of this contract. Upon the completion of the project or termination of the contract the Operator shall render a final account as provided in Article 12.

ARTICLE 8. *Payments by the Government.*—(*a*) The Government will pay 50 percent of the allowable costs incurred, as they accrue, in an aggregate total amount not in excess of $24,050.00, which is 50 percent of $48,100.00, 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 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.

(*b*) The Government may make any payment or payments direct to independent contractors and to suppliers, for the account of the Operator, rather than to the Operator.

ARTICLE 9. *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 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 10. *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 11. *Title to and disposition of property.*—All facilities, buildings, fixtures, equipment, or other items costing more than $50.00 each, paid for or purchased with funds contributed jointly by the Operator and the Government, although title may be taken in the name of the Operator, shall belong to the Operator and the Government jointly, in proportion to their respective contributions, and upon the completion of the work or the termination of the contract shall be disposed of promptly by the Operator for the joint account of the Government and the Operator, either by return to the vendor, by sale to others, or purchase by the Operator at a price at least as high as could otherwise be obtained, as may appear to be for the best interest of the Government, unless the Government, in writing, waives its interest in any such item. If necessary to accomplish such disposition, the Operator shall dismantle, sever from the land, and remove any such item, the cost thereof to be for the joint account of the parties in proportion to their respective interests. If the Operator, within 90 days after the receipt of written notice from the Government, fails, neglects, or refuses to dispose of such property, the Government may itself enter upon the land, take possession of, and remove and dispose of any such property as above provided.

ARTICLE 12. *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. Upon the completion of the project or any termination of the contract the Operator shall dispose of any remaining materials, supplies, facilities, buildings, fixtures, and equipment in which the Government has an interest, for the joint account of the Operator and the Government in the proportion of their respective interests; shall render to the Government a full and final accounting of his operations under the contract and his expenditures of money; and shall pay to the Government its pro rata share of any money remaining.

ARTICLE 13. *Changes and added provisions.* _____

_____

_____

_____

Executed in sextuplicate the day and year first above written.

THE UNITED STATES OF AMERICA

_____
(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—66328-1

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LPC

EXPLORATION PROJECT CONTRACT
E. C. SCHROEDER CO., INC.
DOCKETS DMEA 2963 and 2964

ANNEX I

NIGHTINGALE GROUP

The six following patented mining claims (Mineral Certificate 137) surveyed under U. S. Survey 196:

Nightingale, Origan, O. K., Rustler, Columbia, and Black Cloud.

GOOD FORTUNE GROUP

The six following patented mining claims (Mineral Certificate 140) surveyed under U. S. Survey 194:

Good Fortune, Good Fortune Annex, Appex, Blue Bird, Denver and Gulf, and Cottonwood.

EXPLORATION PROJECT CONTRACT
E. C. SCHROEDER CO., INC.
DOCKETS DMEA 2963 and 2964

ANNEX II

G U A R A N T Y

In consideration of the waiver by the United States of America of the requirement of the Owner's Consent to Lien, as set forth in paragraph 2(b) of the attached Exploration Project Contract. ~~the undersigned hereby guarantees the payment to the United States of America of royalties, as spec~~ between the undersigned and the United States of America, the undersigned hereby guarantees the payment to the United States of America of royalties, as specified in said Contract and any amendment, thereof, upon any and all ore discovered or developed as a result of said Contract and any amendment thereof, which is mined within 10 years from the date of said Contract, whether or not the undersigned has any interest in the property, covered by the said Contract, or any part in the mining operations at the time said ore is mined. If for any reason the net smelter returns or other net amounts, from operations that would be subject, under said Contract and any amendments thereof, to such payments to the United States of America, are not available as a means of measuring the amount of such payment, then the undersigned agrees and undertakes to make such payment according to the best estimates of the amount that can reasonably be made, and in the event of dispute as to such estimate, the undersigned agrees that the determination thereof by either the Administrator of Defense Minerals Exploration Administration, or his designee, shall be final and binding upon the undersigned.

Dated this _____ day of _____, 1953.

E. C. SCHROEDER CO., INC.

By_____
President

EXPLORATION PROJECT CONTRACT
E. C. SCHROEDER CO., INC.
DOCKETS DMEA 2963 and 2964

EXHIBIT "A"

Description of the Work

The exploration work on this project is to be done as two concurrent phases on ~~two~~ neighboring areas in the Hartville Mining District. Phase "A" on the Good Fortune group of claims shall consist of two (2) stages as indicated on Fig. 2 - Good Fortune group showing approximate location of open cut, holes drilled by E. C. Schroder Co. Inc., All costs for supervision, bookkeeping, and other allowable overhead costs for both phases have been included in the costs for Phase "A".

The second phase, Phase "B", is on the Nightingale group of claims and shall consist of three (3) stages; Stages I and II of Phase "B" are indicated on Fig. 3 - Nightingale group showing approximate location of recommended churn drill holes.

Representative samples shall be taken of all mineralized formations encountered. Each sample shall be divided into not less than two parts, one of which is to go to the Field Team and the other to the Operator.

Phase "A"

Stage I

Time Schedule: 0 - 3 months

1. Churn drill seventeen (17) holes with not less than a 6-inch bit for an aggregate length not to exceed 2,000 feet. Five (5) of the holes are to be west of the pit

presently being mined and twelve (12) east of this pit as indicated on figure 2. Drill holes are to be bottomed in the impervious limestone forming the footwall of the ore zone with the exception that holes in barren or waste material shall not exceed 100 feet in length.

2. Construct a maximum of 1,000 feet of access roads to the drill sites. Location of all roads subject to the prior approval of the Government.

Stage II

Time Schedule: 4 - 7 months

Stage II is to be undertaken only after completion of Stage I to the satisfaction of and approval by the Government, dependent upon the results of Stage I.

1. Churn drill eighteen (18) holes with not less than a 6-inch bit for an aggregate length not to exceed 3,000 feet. Drill holes are to be bottomed in the impervious limestone forming the footwall of the ore zone.

2. Construct a maximum of 2,000 feet of access roads to the drill sites. Location of all roads subject to the prior approval of the Government.

Phase "B"

Stage I

Time Schedule: 0 - 2 months

1. Churn drill Holes 1, 2, and 3 as indicated on Fig. 3 with not less than a 6-inch bit for an aggregate length of 600 feet to explore for iron in the ~~Gurney~~ Guernsey and Hartville formations.

2. Construct a maximum of 1,000 feet of access roads to the drill sites. Location of all roads subject to the prior approval of the Government.

Stage II

Time Schedule: 3 - 4 months

Stage II of Phase "B" is to be undertaken only after completion of Stage I to the satisfaction of and approval by the Government, dependent upon the results of Stage I.

1. Churn drill Holes 4, 5, 6, 7, and 8 in the order listed and as indicated on Fig. 3 with not less than a 6-inch bit for an aggregate length of 1,000 feet to explore for iron in the ~~Guirnsey~~ Guernsey and Hartville formations.

2. Construct a maximum of 1,000 feet of access roads to the drill sites. Location of all roads subject to the prior approval of the Government.

Stage III

Time Schedule: 5-6 months

Stage III of Phase "B" is to be undertaken only after the completion of Stages I and II of Phase "B" to the satisfaction of and approval by the Government.

1. Deepen by churn drilling one or two of the holes drilled under Stages I and II of Phase "B" for an aggregate length not to exceed 500 feet.

ESTIMATED COSTS OF PROJECT

AGREED UNIT COSTS

Phase "A"

Stage I

Churn drill 2,000 feet @ $5.00 per foot which includes all drilling costs and the hauling of water.	$10,000.00	
Construct 1,000 feet of access roads @ $1.00 per foot	1,000.00	
Analyze 140 samples ~~for iron~~ @ $1.00 per ~~sample~~ element determined	140.00	$11,140.00

Stage II

Churn drill 3,000 feet @ ~~$5.00~~ per foot which includes all drilling costs and the hauling of water.	~~$15,000.00~~	
Construct 2,000 feet of access roads @ $1.00 per foot	2,000.00	
Analyze 160 samples @ $1.00 per element determined	160.00	~~$17,160.00~~

Phase "B"

Stage I

Churn drill 600 feet @ ~~$5.00~~ per foot which includes all drilling costs and the hauling of water.	~~3,000.00~~	
Construct 1,000 feet of access roads @ $1.00 per foot	1,000.00	
Analyze 60 samples @ $1.00 per element determined	60.00	$4,060.00

Stage II

Churn drill 1,000 feet @ ~~$5.00~~ per foot which includes all drilling costs and the hauling of water.	~~5,000.00~~	
Construct 1,000 feet of access roads @ $1.00 per foot	1,000.00	
Analyze ~~25~~ 80 samples @ $1.00 per element	~~25.00~~ 80.00	~~6,025.00~~ 6,075.00

Stage III

Churn drill 500 feet @ ~~$5.00~~ per foot which includes all drilling costs and the hauling of water.	~~2,500.00~~	
Analyze ~~50~~ samples @ $1.00 per element determined	50.00	~~2,550.00~~

The Government will contribute to the costs of the churn drilling, construction of access roads, and analyses on the basis of the above agreed unit costs, as they accrue for the units of work actually performed, in lieu of actual costs. These unit costs include all costs incident to completing the work except sampling, supervision, and accounting. Work to the costs of which the Government will contribute on the basis of agreed unit costs may be performed by independent contractor without reference to the provisions relating to independent contracts and contractors in Articles 4(a) and (b) and 6(a) (1) of the contract form.

The rest of the described work and that item of the cost of the above work which is excluded therefrom will be contributed to by the Government on the basis of the actual costs specified in Article 6 (a) of the contract form for which schedules are set forth below:

ACTUAL COSTS
(*Indicates allowable maximum)

Phase "A"

(2) Labor, Supervision, and Consultants

Stage I

1 Engineer or geologist @ $20.00 per day, or less, as worked not to exceed $500.00 a month, 2½ months	$1,250.00	
1 Sampler at $1.35 an hour, or less, as worked not to exceed $70.20* a week including overtime	700.00	$1,950.00

Stage II

1 Engineer or geologist @ $20.00 per day, or less, as worked not to exceed $500.00 a month, 3½ months	1,750.00	
1 Sampler at $1.35 an hour, or less, as worked not to exceed $70.20* a week including overtime	900.00	2,650.00

Phase "B"

Stage I

1 Sampler at $1.35 an hour, or less, as worked not to exceed $70.20* a week including overtime	570.00

Stage II

1 Sampler at $1.35 an hour, or less, as worked not to exceed $70.20* a week including overtime	570.00

Stage III

1 Sampler at $1.37 an hour, or less, as worked not to exceed $70.20* a week including overtime	570.00

(7) Miscellaneous

Phase "A"

Stage I

Proportionate share of salary of bookkeeper and office expense at $50.00* per month, 3 months	$ 150.00	
Workmen's compensation and employers' liability insurance and payroll taxes	250.00	$400.00

Stage II

Proportionate share of salary of bookkeeper and office expense at $50.00* per month, 4 months	200.00	
Workmen's compensation and employers' liability insurance and payroll taxes	300.00	500.00

Phase "B"

Stage I

Workmen's compensation and employers' liability insurance and payroll taxes	60.00

Stage II

Workmen's compensation and employers' liability insurance and payroll taxes	60.00

Stage III

Workmen's compensation and employers' liability insurance and payroll taxes	60.00

TOTAL ESTIMATED COST OF PROJECT	$48,~~4~~3~~80~~.00
GOVERNMENT PARTICIPATION @ 50 PERCENT	24,~~240~~190.00

Total Agreed Unit Costs $48,100.00
$24,050.00

FILE COPY
SURNAME:

Rutledge
Martin

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

July 27, 1953

MEMORANDUM

To: Chief Counsel, DMEA

From: Iron and Ferro-Alloys Division, DMEA

Subject: Review and preparation of Exploration Project Contract
Dockets DMEA 2963 and 2964
E. C. Schroeder Co., Inc.
Good Fortune and Nightingale mines
Platte County, Wyoming

Transmitted herewith is the rough draft of a proposed exploration project contract for your use in preparing the contract in final form.

W. S. Martin, Acting Chief
Iron and Ferro-Alloys Division

Enclosures

FARutledge:foc
cc: Docket
Code 400

FILE COPY
SURNAME:

Rutledge
Martin
Selfridge.

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

Defense Minerals Exploration Administration

F. A. Rutledge
3538

5205

14 [illegible] - Working Fund - DMEA
July 17, 1953

[illegible] DMEA Field Team, Region 4, Denver, Colorado

[illegible] geologic report DMEA 2963 and [illegible] 2 from geologic report [illegible] 2964, [illegible] Schroeter Co., Inc., not [illegible] reports. [illegible] two copies of each with [illegible] to follow [illegible] regular mail.

George C. Selfridge

[illegible] Selfridge, Chairman
Operating Committee, DMEA

Copy to: Docket 2963

Docket 2964

Confirmation to FT, Reg. 4
Code 400
Adm. Reading File
Operating Committee
Audits Division, Bur. of Mines
J. M. Forbes, USBM
Martha Carr, USGS

FARutledge/ls
7/17/53

SENT
JUL 17 1953
Clerical Service Section

R.H. 7-17-53

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(ril 1946)

UNITED STATES
DEPARTMENT OF THE INTERIOR

AGENCY DMEA - REG IV

TELETYPE

Originator:
Ext.: Room:

Appro.:
Date: 7/2/53
Time:
No.:
To: C. O. MITTENDORF DMEA WASH

Subject: RE TELEPHONE CALL W. S. MARTIN JULY 2, DOCKETS NOS. DMEA 2963 and 2964, E. C. SCHROEDER, IRON, LARAMIE COUNTY, WYOMING. DOCKET 2963 APPROVED AT ESTIMATED COST OF $14,395. RECOMMEND DRILLING IN 3 STAGES, FIRST STAGE CONSISTING OF THREE HOLES TOTAL DEPTH 600 FEET, SECOND STAGE FIVE HOLES TOTAL DEPTH 1000 FEET, THIRD STAGE DEEPENING ANY HOLES WHERE NECESSARY, TOTAL LENGTH 500 FEET: ESTIMATED COST OF DRILLING $5.00 PER FOOT. REMAINDER OF MONEY TO BE USED IN SUPERVISION, SAMPLING, AND ROAD CONSTRUCTION. APPLICATION DMEA 2964 CONSISTS OF TWO STAGES. FIRST STAGE, 17 DRILL HOLES TOTAL DEPTH 2000 FEET, SECOND STAGE, 18 DRILL HOLES TOTAL DEPTH 3000 FEET, COST $5.00 PER FOOT. REMAINDER OF MONEY TO BE USED FOR SUPERVISION, SAMPLING AND ROAD CONSTRUCTION. ALL HOLES ARE TO BE DRILLED TO TEST EXTENSION OF THE KNOWN DEPOSIT. IT IS RECOMMEND THAT ONE CONTRACT BE PREPARED COVERING BOTH APPLICATIONS.

Authorized:

John F. Shaw

JOHN F. SHAW for W. H. KING

Sign original message and transmit to Room ..... in duplicate

CONFIRMATION

U. S. GOVERNMENT PRINTING OFFICE 16—50915-1

1027
(April 1946)

UNITED STATES
DEPARTMENT OF THE INTERIOR

DEPARTMENT OF THE INTERIOR
RECEIVED
JUL 6 1953

AGENCY DMEA REG IV

Originator:

TELETYPE

Ext.: Room:

Appro.:
Date: 7/3/53
Time:
No.:
To: G C SELFRIDGE,
CHAIRMAN, OPERATING COMMITTEE, DMEA WASH

Subject:

REURTT JULY 3, DOCKET DMEA 2964, E. C. Schroeder, IRON, ESTIMATED COST OF PROJECT $33020. OWING TO INCREASE IN WORKLOAD WE WILL BE UNABLE TO COMPLETE FINAL REPORT BEFORE JULY 15, 1953.

W. H. King
W. H. KING

CONFIRMATION

Authorized:

Sign original message and transmit to Room in duplicate

U. S. GOVERNMENT PRINTING OFFICE 16—50915-1

Docket 2963

DEPARTMENT OF THE INTERIOR
Defense Minerals Admin
RECEIVED
JUL 20 1953

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

224 New Customhouse
Denver 2, Colorado

July 17, 1953

AIRMAIL

Memorandum

To: George C. Selfridge, Chairman, Operating Committee

From: Executive Officer, DMEA Field Team, Region IV

Subject: Docket No. DMEA 2963 and 2964, E. C. Schroeder Company

In reference to your telegram of this date, enclosed are two copies of Figure 2 from the Geologic Report on DMEA-2963 and two copies of Figure 2 from the Geologic Report on DMEA-2964.

Two more copies are being forwarded you this date under separate cover by regular mail.

W. H. King
W. H. King

Enclosures

2964

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

224 New Customhouse
Denver 2, Colorado

July 9, 1953.

Memorandum

To: Secretary to the Operating Committee, Defense Minerals Exploration Administration

From: Field Team, Region IV

Subject: Final Report, DMEA Docket 2964 (Iron), E. C. Schroeder Company, Inc., Good Fortune Group, Platte County, Wyoming.

Enclosed are the original and three copies of the report pertaining to the above application.

We recommend approval of a two stage exploration program as outlined in the report. We also recommend that the work be done in conjunction with the work on the Nightingale group (DMEA-2963), and that all work be administered under one contract.

Because of the desirability of combining the two projects under one contract, we recommend that the contract be made by the Washington office.

W. H. King
W. H. King

A. H. Koschmann
A. H. Koschmann

Enclosures

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF MINES

Mining Division
Region IV

July 9, 1953.

Memorandum

To: Field Team, Region IV

From: Chief, Mining Division, Region IV

Subject: Final Report, DMEA Docket 2964 (Iron), E. C. Schroeder Company, Inc., Good Fortune Group, Platte County, Wyoming.

Enclosed are eight copies of the final engineering report on the subject docket. The applicant requested $223,085.00 for an elaborate drilling program.

The examining engineer believes that a modified drilling project is warranted and recommends that it be combined with DMEA-2963 under one contract.

We concur in this recommendation.

W. H. King
W. H. King

Enclosures

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF MINES

Region IV

Building 20, Room 137
Denver Federal Center
Denver 14, Colorado
July 6, 1953

Memorandum

To: Executive Officer, Field Team, Region IV

From: Chief, Mineral Resources Branch, Mining Division, Region IV

Subject: DMEA 2964, Good Fortune group (Iron), Platte County, Wyoming

Please find enclosed the original and eight copies of the "Summary, Conclusions, and Recommendations," by F. D. Everett and D. R. MacLaren, and F. D. Everett's final engineering report on the subject docket.

The applicant requested $223,085.00 for an elaborate program of churn drilling on a closely spaced pattern and road building of a comparative magnitude, the whole involving complete development of the deposit as well as exploration.

Everett considers the area well worth exploration to determine extensions of the present-known ore body and recommends a modified program set up in two stages, the second stage contingent upon results of the first. Stage 1 comprises churn drilling 17 holes totaling 2,000 feet, including road building, supervision, and sampling, and stage 2, churn drilling 18 holes for a total of 3,000 feet with the same complementary work. The costs are estimated at $33,020.00, and a short-form contract is suggested.

I concur with his recommendations.

A report is in preparation recommending a project on the nearby Nightingale group submitted by the same applicant (DMEA 2963). The recommendations on both are for carrying them on concurrently and combining the contracts in one if possible.

W. M. Traver

W. M. Traver

enclosures

WMT/pam

cc 8
DMEA 2964
DMEA Chron.

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

200 New Customhouse
Denver 2, Colorado

July 3, 1953

Memorandum

To: DMEA Field Team, Region IV

From: A. H. Koschmann

Subject: DMEA Docket 2964, E. C. Schroeder & Company (The Good Fortune Group), Platte County, Wyoming

Attached are 8 copies of the geologic report by D. R. MacLaren covering DMEA Docket 2964, E. C. Schroeder & Company (The Good Fortune Group), Platte County, Wyoming.

The applicant proposes to explore for iron ore by churn drilling 345 holes to an average depth of 100 feet, or a total of 34,500 feet, at an estimated cost of $223,085.

The claims are in the Hartville mining district, adjacent to the southeast boundary of the Sunrise property of the Colorado Fuel and Iron Company. The rocks in the area are quartzites, schists, and siliceous limestones of pre-Cambrian age. Ore occurs in lenses in the schist. MacLaren concludes that exploration for iron ore on subject property is warranted and recommends approval of an exploration loan, but the recommended program is considerably modified from that of the applicant and is estimated to cost $33,020.

I concur in his recommendation.

A. H. Koschmann

A. H. Koschmann
Supervising Geologist
Colorado-Wyoming

Enclosures (8)

UNITED STATES
DEPARTMENT OF THE INTERIOR
DOUGLAS McKAY, SECRETARY

DEFENSE MINERALS EXPLORATION ADMINISTRATION

REPORT OF EXAMINATION BY FIELD TEAM
REGION IV

DMEA 2964, E. C. Schroeder Company, Inc.

Good Fortune Group

Platte County, Wyoming

Iron

F. D. Everett
Bureau of Mines

July 6, 1953

DMEA 2964

E. C. SCHROEDER COMPANY, INC.
GOOD FORTUNE GROUP
PLATTE COUNTY, WYOMING

Summary, Conclusions, and Recommendations

By F. D. Everett
Mining Engineer
Bureau of Mines

and

D. R. MacLaren
Geologist
Geological Survey

DMEA 2964

E. C. SCHROEDER COMPANY, INC.
GOOD FORTUNE GROUP
PLATTE COUNTY, WYOMING

SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS

By F. D. Everett and D. R. MacLaren

E. C. Schroeder Company, Inc., of McGregor, Iowa, has applied to the Defense Minerals Exploration Administration for financial assistance to explore the Good Fortune group of claims, Platte County, Wyo., for iron. The applicant proposed to churn drill 345 holes on six claims at 100-foot intervals for an average depth of 100 feet. The total cost of the program was estimated at $223,085.00--Government participation $111,542.50, or 50 percent.

An examination of the property revealed that the iron occurs in a series of connected pod-shaped bodies ranging in width from 25 to 75 feet. Ore has been mined in an open pit about 800 feet long which contained iron ore for 700 feet. The ore, comprising a hard, bluish hematite, occurs in schist and lies upon a well-defined footwall of siliceous limestone. The hanging wall consists of a zone about 10 to 15 feet wide in which low-grade hematite grades into fairly fresh schist. The ore zone appears to have a definite east-west trend and to dip 70° to 85° north. Therefore, drilling for new bodies or extensions on a 100-foot-square grid system, as proposed throughout the claims by the applicant, is considered unnecessary.

A program is suggested to be performed in two stages, the second dependent upon the results of the first, as approved by a representative

of the Region IV Field Team. Stage 1 consists of churn drilling 17 holes for a maximum aggregate length of 2,000 feet, and stage 2, if approved by the Region IV Field Team, consists of churn drilling 18 holes for a maximum aggregate length of 3,000 feet. The spacing and location of the holes are fully described in the engineering and geologic reports and are shown on accompanying maps. Necessary road building, sampling, assaying, supervision by an engineer or geologist, proportionate bookkeeping, and office expenses are allowed.

It is recommended that this program be carried on concurrently with a similar project recommended on the nearby Nightingale group (DMEA 2963). Short-form contracts are suggested for both. The total cost of the Good Fortune program is estimated as $33,020.00--Government participation 50 percent, or $16,510.00.

E. C. Schroeder Company, Inc., is currently shipping about 450 tons of ore containing over 53 percent iron, about 11 percent insoluble, and 0.075 percent phosphorus to Sloss-Sheffield Iron and Steel Company at Birmingham, Ala. Ore is mined for about $2.50 a ton, and freight charges are $8.30 a ton. A profit is indicated on ore shipped containing over 53 percent iron.

THE GOOD FORTUNE GROUP

PLATTE COUNTY, WYOMING

DMEA DOCKET 2964

Geologic Report

By D. R. MacLaren
U. S. Geological Survey

THE GOOD FORTUNE GROUP
PLATTE COUNTY, WYOMING

INTRODUCTION

E. C. Schroeder Company, Inc., of McGregor, Iowa, has applied to the Defense Minerals Exploration Administration for assistance to explore for iron on the Good Fortune group of mining claims in Platte County (prior to 1911 a part of Laramie County) Wyoming. The applicant proposes to churn drill 345 holes to an average depth of 100 feet, or a total of 34,500 feet, estimated to cost $223,085 (the Government's share 50 percent or $111,542.50).

The property was examined June 11, 1953, in the company of Mr. Floyd D. Everett of the U. S. Bureau of Mines, and Mr. Paul Schroeder, vice-president of the applicant company. The claims are in the Hartville mining district, about 9 miles north of the town of Gurnsey, and are adjacent to the southeast boundary of the Sunrise property of the Colorado Fuel and Iron Company. They are easily accessible from Gurnsey over paved State Highway and good gravel surfaced county road.

It is concluded that this is a good prospect, but that the amount of drilling requested by the applicant is excessive. It is recommended that a modified program, estimated by the Bureau of Mines to cost $33,020 (the Government's share 50 percent or $16,510) be approved.

GEOLOGY

The rocks of the area are steeply dipping quartzites, schists, and siliceous limestones of the Whalen group (pre-Cambrian) overlain by

the gently-dipping Gurnsey and Hartville formations of Carboniferous age. These rocks are encircled by the Arikaree formation of Miocene age, while Pleistocene alluvium and terrace gravels fill erosional depressions.

On the Good Fortune claims (Figure 2) the Whalen group comprises the economically important rocks. The ore lies in the schist from which it appears to have been derived, and has a well defined footwall of impervious limestone. The hangingwall is much less well defined, being a zone about 10 to 15 feet wide in which low grade hematite grades into fairly fresh schist. An open cut about 800 feet long, from which the applicant is now mining ore, indicates that the main ore zone is a series of pod-shaped bodies ranging in width from 10 to 75 feet. The ore consists of a high grade (60 percent iron or better) core of hard, bluish-black hematite flanked by zones of soft red hematite that decreases in iron content toward the walls. The ore zone, parallel to the foliation of the schist, strikes about N. 80° W. and dips 70° to 85° N. It appears to plunge 20° to 25° towards the east. Diamond drilling previously done by the applicant has disclosed two or more narrow ore zones, 2 to 5 feet thick, in the hangingwall either parallel to or branching from the main ore body. In general, the width of the ore zone appears to decrease upward from the floor of the open cut to a saddle in the north-south ridge to the west where it is not more than 10 feet wide. About 200 feet west of the saddle, the ore outcrops and is up to 50 feet wide. East of the open cut the ore cannot be traced as here the Whalen group is overlain by the Arikaree formation.

CONCLUSIONS

It is concluded that a zone up to 200 feet wide extending from the open cut to the east and west limits of the property is a good area in which to prospect. No other favorable area was indicated by Mr. Schroeder or seen by the examiners.

RECOMMENDATIONS

It is recommended that the following program, estimated by the Bureau of Mines to cost $33,020 (the Government's share 50 percent or $16,510) be approved.

1. Seventeen churn drill holes should be drilled to an average depth of 100 feet. As shown on figure 2, five holes are between the west end of the open cut and the area in which ore outcrops, and twelve are between the east end of the open cut and the east end line of the Blue Bird and Appex claims. An additional 300 feet of holes should be provided to allow for the deepening of one or two holes in this group should it be desirable.

2. Should the results of the drilling recommended in 1. be favorable, drilling should be continued, as shown in figure 2, from west to east either until no more ore is encountered or until a total of 18 holes averaging 100 feet in depth have been drilled. As it is not possible to determine the rate at which the Arikaree formation may thicken, it is recommended that an additional 1200 feet of drilling be authorized in this group to deepen two or three holes as conditions may warrant.

3. It should be permissible for the examiners to move any undrilled holes to more favorable locations within the claims as results of the drilling may indicate. The drilling recommended in 2. should not be allowed to start until authorized by a DMEA representative.

DMEA 2964

E. C. SCHROEDER COMPANY, INC.
GOOD FORTUNE GROUP
PLATTE COUNTY, WYOMING

Engineering Report

By F. D. Everett
Mining Engineer
Bureau of Mines

DMEA 2964

E. C. SCHROEDER COMPANY, INC.
GOOD FORTUNE GROUP
PLATTE COUNTY, WYOMING

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ILLUSTRATIONS

Figure	Follows Page
1. Location map, showing relative position of Good Fortune iron claims, Platte County, Wyoming	2
2. Good Fortune group showing approximate location of open cut, holes drilled by E. C. Schroeder Company, Inc., and recommended churn drill holes	*

*See figure with geologic report.

DMEA 2964

E. C. SCHROEDER COMPANY, INC.
GOOD FORTUNE GROUP
PLATTE COUNTY, WYOMING

ENGINEERING REPORT

By F. D. Everett

INTRODUCTION

The Good Fortune group of iron claims in Platte County, Wyo., has been proposed for a Defense Minerals Exploration Administration loan of $223,085.00 by E. C. Schroeder Company, Inc. (DMEA 2964). The exploration proposed was to churn drill 34,500 feet in 345 holes, construct 34,500 feet of access road to drill sites, and assay about 2,760 samples. Work, as originally proposed, consisted of exploring extensions of a known ore body or finding new ore bodies by churn drilling at 100-foot intervals.

An ore body on the Good Fortune group of claims is presently being worked, with the current daily production of iron ore amounting to about 450 tons a day, which is shipped to Birmingham, Ala., for smelting.

The property is in an area favorable for iron deposition. However, the program proposed by the applicant constitutes both exploration and development, and a program costing less appears more feasible.

ACKNOWLEDGEMENTS

Paul C. Schroeder, vice-president and manager of the Wyoming operation, accompanied the examining team over both the Good Fortune and Nightingale group of iron claims on June 11, 1953, and furnished all

data for the report. Donald Maclaren, geologist, was the Geological Survey representative of the examining team.

LOCATION, TOPOGRAPHY, AND PHYSICAL FEATURES

The Good Fortune group of claims is in secs. 4, 5, 7, and 8, T. 27 N., R. 65 W., sixth principal meridian in the Hartville Mining District, Platte County, Wyo. (fig. 1). Roughly, the property is 6 to 7 miles by road northeast of the town of Guernsey, Wyo.

Topography at the Good Fortune mine grades from plains to a rough but low range of hills. A good graveled road has been constructed between the company crushing and loading plant on a siding of the Chicago, Burlington, and Quincy Railroad. The altitude ranges between 4,800 and 5,000 feet.

The climate is semiarid; summers are hot, and winter temperatures drop below zero for short periods. Water is hauled from a well drilled in the plains about a mile from the main pit.

The E. C. Schroeder Company, Inc. operated a rock-crushing plant 2 miles east of Guernsey prior to 1951 and thereby are familiar with the labor and supply sources.

HISTORY AND PRODUCTION

Early history of the district started with the Indians using the red hematite ore for war paint. The Good Fortune group of claims is part of several claims located in 1857. From 1880 to 1887, copper was mined, but in 1888 attention was directed to iron ore.

Iron ore was first mined at the Good Fortune property in 1897 and 1898, when approximately 30,000 tons of ore were shipped to the iron smelter at Pueblo, Colo.[1/]

1/ Ball, S. H., Hartville Iron Ore Range, Wyo.; U. S. Geol. Survey Bulletin 315 D, 1907, p. 193.

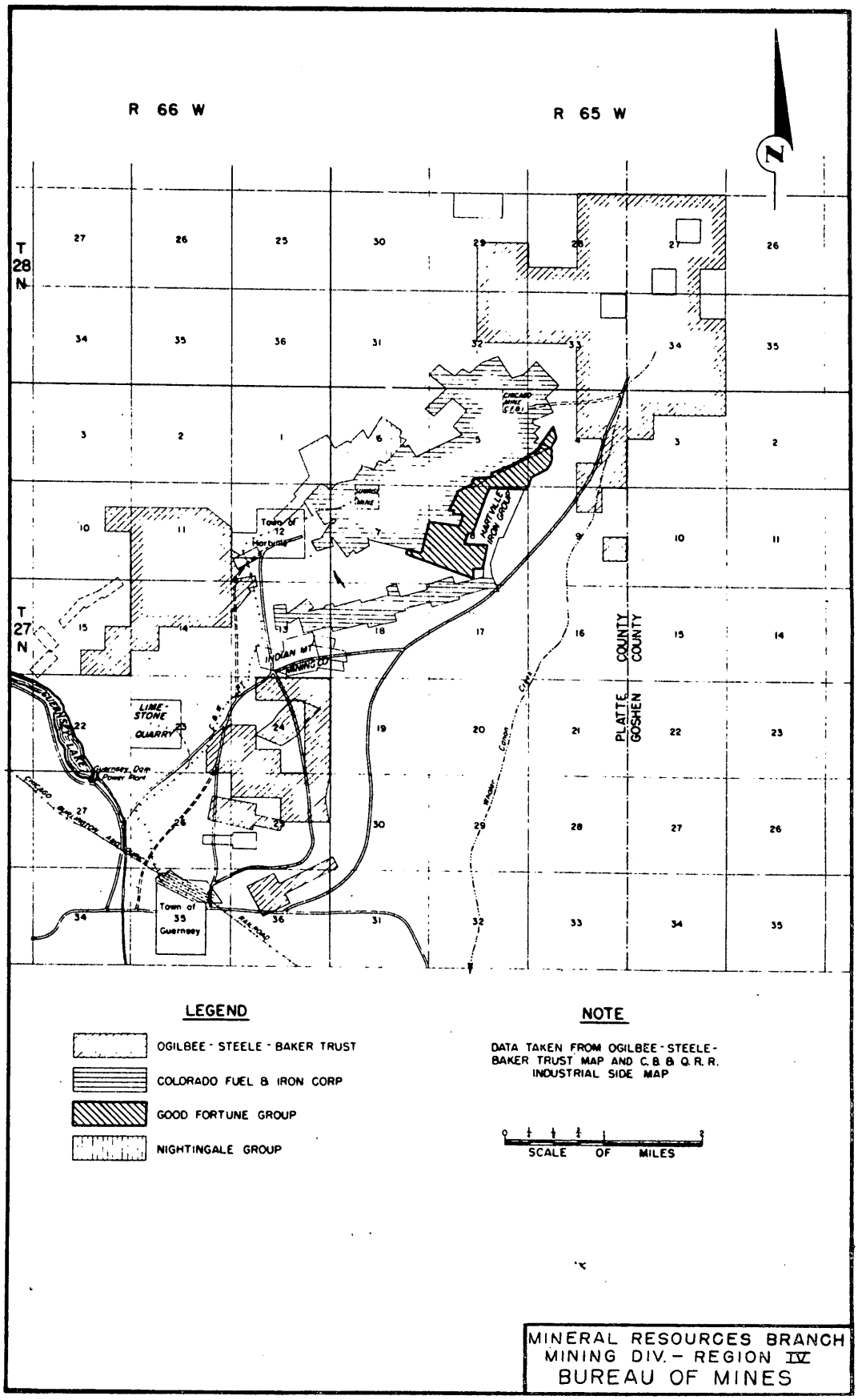

FIGURE 1. - LOCATION MAP, SHOWING RELATIVE POSITION OF GOOD FORTUNE IRON CLAIMS, PLATTE COUNTY, WYO. (DMEA 2964).

The Bureau of Mines investigated the Good Fortune property by mapping and sampling the accessible workings in June 1944.[2/] The E. C. Schroeder Company, Inc. became interested in 1952 and later made several shipments of iron ore to iron and steel plants in Birmingham, Ala., starting in January 1953.

Production during January and February 1953 was 144 cars of iron ore which averaged in excess of 60 percent iron, less than 10 percent silica, and less than 0.10 percent phosphorus.

Paul C. Schroeder, vice-president and manager of the property, stated that production through May and June 1953, would average about 450 tons a day. Assay returns from 4,390 tons shipped in May 1953, averaged, on a dry basis, 59.28 percent iron, 11.1 percent insoluble, 0.072 percent phosphorus, 0.107 percent manganese, and 1.67 percent lime.

The Good Fortune property is southeast of and within a mile of the Sunrise mine of the Colorado Fuel and Iron Corporation. This mine has been worked continuously since 1900, and the past production is about 25,000,000 tons of iron ore, which has been shipped to iron and steel smelting facilities at Pueblo, Colo.

OWNERSHIP AND EXTENT

The property being considered, commonly referred to as the Good Fortune group, contains the following patented lode claims as listed, with specific exceptions, in exhibit "1" of the application:

2/ Frey, Eugene, Hartville Iron District, Platte County, Wyo., Bureau of Mines Report of Investigation 4086, June 1947, 3 pp.

(Certificate 139)	(Certificate 140)
Summit	Bonded
Connection	Good Fortune
Moonlight	Good Fortune Annex
Rip Van Winkle	Golden Rule
Otto	Apex
Giant	Blue Bird
Pigmy	Denver and Gulf
Appendix	Cottonwood
Iron Spike	Whalen
Miners Luck	Anaconda
Hexagon	Valley
Reserve	Juneau
Iron Wheel	Rudy L.
Iron Slope	Gracia Ellen
	Blue Jay Fraction

The above lode mining claims are leased by E. C. Schroeder Company, Inc., of McGregor, Iowa, from W. H. Collins, according to exhibit "2" of the application. The lease, which contains several provisions, is for 99 years, starting December 26, 1952.

Exploration for iron would be conducted on the Good Fortune, Blue Bird, Cottonwood, Good Fortune Annex, Apex, and Denver and Gulf lode claims. Paul C. Schroeder stated that if the loan was granted any ore discovered or ore shipped from any of the claims in the lease would constitute a discovery and would be subject to repayment of loan by royalties to the Government.

DESCRIPTION OF THE DEPOSITS

Iron deposits in the Hartville Mining District have been described in several publications; a few, which in addition to those previously mentioned in footnotes, are: Smith, W. S. T., Hartville Folio, Wyoming, U. S. Geological Survey Folio 91, 1903, 12 pages; and Chases, H. M., The Iron Mines of Hartville, Wyoming; A. I. M. E. Transactions volume 30, 1900, pages 987-1003.

The ore deposits occur in lenticular masses, usually in schist, and apparently are controlled somewhat by folding and faulting of the schist immediately above the uppermost limestone of the pre-Cambrian complex.

The Good Fortune ore body can be traced across the Good Fortune and Blue Bird claims for about 800 feet, and in the place presently mined it averages 75 to 80 feet wide.

The ore is soft and hard hematite. Care is practiced in the mining not to include any unnecessary waste with the ore. The ore lenses apparently plunge into the hillside at about an 80° angle, and surface mining will be confined to about 200 feet of depth at the lower end, much less toward the upper end. It has not been ascertained whether the ore body constitutes one long or several disconnected lenses but as developed, appears to constitute separate pods all in a general linear zone.

The depth to which surface mining methods are applicable is limited to about 100 to 200 feet. Underground methods could be used to mine any ore below this surface zone.

MINEABLE ORE RESERVES

The Sunrise deposit, adjacent to the Good Fortune deposit, has been mined to about 700 feet below the surface. Eleven diamond drill holes have been drilled in or near the open pit being mined (fig. 2 with the geologic report), and logs of holes GF-5, -6, -7, and -10 were made available to the examining team. Hole GF-6 was drilled 40 feet, and samples assayed between 19 and 46 percent iron. The depth and range of iron assays are given in the following table:

Table 1. - Depth and range of iron assays from a few diamond drill holes drilled in the Good Fortune ore body.

Hole	Depth, feet	Range of iron assays percent low	Range of iron assays percent high
GF-5	55	19-22 (0 to 9 feet)	49-63 (9-55 feet)
GF-7	65	39	52
GF-10	115	40-44 (110-115 feet)	59-66 (0-105 feet)

Indicated ore reserves for 100 feet of depth in the pit currently being mined $\left(\frac{\text{150 feet by 75 feet by 100 feet}}{\text{9 cubic feet}}\right)$ are estimated as 125,000 tons. Indicated reserves in the area west of the pit being mined $\left(\frac{\text{300 feet by 20 feet by 100 feet}}{\text{9 cubic feet}}\right)$ are estimated as 66,600 tons for 100 feet of depth. Thus a total of 200,000 long tons, as given in the application, is probable. This tonnage would include ore averaging more than 50 percent iron. This estimate could be greatly increased with exploration at depth and probably by exploration along linear projections.

About 4,000 tons of ore is stockpiled at the mine, and a similar amount is stockpiled at the railroad loading site.

PRESENT STATUS

Exploration and Development

The ore body, or bodies, have been mined in two places, one being higher and narrower than the other. As known, the ore extends in depth at least 100 feet.

The company produced ore in January and February 1953, and more or less steadily since May 1, 1953. Eleven diamond drill holes aggregating 1,400 feet have been core drilled in the vicinity of the present open-pit mining operation.

Ore mined is transported in trucks to the railroad where it is crushed, screened, and loaded by conveyor into railroad cars. The

large size, plus 4 inch, is hand picked, the waste pieces being discarded.

The ore is shipped to Birmingham, Ala., where it is blended with brown ore having a lower iron content and ultimately is sold to Sloss-Sheffield Steel and Iron Company.

According to Paul E. Schroeder, the same railroad freight rate applies to iron ore shipments from Guernsey, Wyo., to Birmingham, Ala., as for iron ore shipped from Minnesota to Alabama and is $8.30 a long ton. The current purchase schedule of this Wyoming ore, as furnished by Schroeder, after railroad freight has been paid is as follows:

53 percent iron	$2.40
54	2.50
55	2.60
56	2.80
57	3.00
58	3.20
59	3.60
60	3.90
61	4.50
62	5.12

The E. C. Schroeder Company, Inc., anticipates mining costs to be between $2.40 and $2.50 a ton, and hence a profit is indicated on all ore shipped having an average iron content over 53 percent.

Mining and Milling Equipment and Other Facilities

The company contemplates mining and shipping about 100,000 long tons of ore a year. Equipment from their former rock mining and crushing operation at the railroad loading site is used. This equipment, consisting in part of two 1-3/4-cubic-yard diesel shovels, bulldozer, five dump trucks, crusher, screens, conveyers, electric motors, et cetera, is used in the present operation. Electric energy is obtained from Bureau of Reclamation facilities at Guernsey. Ore is

shipped over the Chicago, Burlington, and Quincy Railroad to St. Louis, where it is transferred to other lines.

Schroeder stated that if sufficient ore reserves can be developed, a heavy media beneficiation plant will be erected.

PROPOSED EXPLORATION AND DEVELOPMENT PROGRAM

The applicant proposed a program to explore the area covered by six claims at 100-foot intervals (exhibit "5" of the application). This type of project is thorough but appears excessive, especially as the ore deposits, as known, follow definite trends. A modified program is suggested, which, if approved, should be combined with the suggested program in DMEA 2963 on the Nightingale group of claims, in one Defense Minerals Exploration Administration contract. The modified program for the Good Fortune group will be accomplished in two stages according to a suggested plan illustrated on figure 2 with the geologic report and will consist of (1) churn drill 17 holes, 5 west of the pit presently being mined and 12 east of this pit for an aggregate length not to exceed 2,000 feet, and, depending upon the results found in these holes, and as approved by representatives of the Region IV Field Team, (2) churn drill 18 holes for an aggregate length not to exceed 3,000 feet. Total time for completion is estimated at 7 months.

Unspecified road building is allowed to drill sites for hauling water and moving the drill. An engineer or geologist is approved for general supervisor and a sampler to care for sludge samples. A bookkeeper is allowed on a proportionate basis.

ESTIMATED COST OF PROJECT

The cost of the program is estimated as follows:

Stage 1:

Maximum of 2,000 feet of churn drilling (6-inch bits or larger) in 17 holes, including hauling of water, at $5.00 a foot	$10,000.00
Maximum of 1,000 feet of road building, as approved by a representative of the Region IV Field Team, at $1.00 a linear foot	1,000.00
An engineer or geologist to supervise the project at $20.00 per day, or less, as worked not to exceed $500.00 a month for 2-1/2 months	1,250.00
A sampler at $1.35 an hour, or less, as worked and whose services are not to exceed 2 months at $70.20 a week, including overtime	570.00
Proportionate share of salary of bookkeeper and office expense at $50.00 a month for 2 months	100.00
Assaying 140 samples for iron at $1.00 each	140.00
Total stage 1	$13,060.00

Stage 2, if approved after results of stage 1 are known:

Maximum of 3,000 feet of churn drilling in 18 holes at $5.00 a foot, including hauling water	$15,000.00
Maximum of 2,000 feet of road building at $1.00 per linear foot, as approved by a representative of the Region IV Field Team	2,000.00
An engineer or geologist to supervise the project at $20.00 per day, or less, as worked not to exceed $500.00 a month for 3-1/2 months	1,750.00

A sampler at $1.35 an hour or less, as worked whose services are not to exceed 3 months at $70.20 a week, including overtime	$ 900.00
Proportionate share of salary of bookkeeper and office expense at $50.00 a month for 3 months	150.00
Assaying 160 samples at $1.00 each	160.00
Total stage 2	$19,960.00
Total estimated cost of stage 1 and 2	$33,020.00

Churn drilling is preferred by the applicant to diamond drilling because of unsatisfactory experience with diamond drilling at this deposit in 1952.

Holes in barren or waste material drilled in stage 1 of the program are not to exceed 100 feet in length. Holes having good iron values at 100 feet below the surface may be deepened as desired but must be in accordance with the maximum limitation of aggregate length of drilling.

PROPOSED FINANCING

The applicant has indicated the ability to participate financially in a much larger program than the one proposed.

CONCLUSIONS

The E. C. Schroeder Company, Inc. has the facilities to produce 100,000 long tons of iron ore a year. Supposedly they have a reliable market for Wyoming low-phosphorus iron ore at Birmingham, Ala., and can make a profit if ore shipped can be maintained with an iron content above 53 percent. If the Alabama market should ever fail, this ore

might be shipped to iron and steel facilities at either Pueblo, Colo., or Geneva, Utah.

The suggested program has a very good possibility for increasing high-grade iron ore reserves in Wyoming.

About 7 months should be allowed for completion of the program.

RECOMMENDATIONS

It is recommended that a program of exploration by churn drilling be approved to be conducted in two stages, the second stage depending on the results of the first, as suggested in the report. The total cost of the program is estimated at $33,020.00, of which $16,510.00 would be the Government participation.

This program is to be combined with one recommended on the Nightingale group (DMEA 2963), the two projects to be conducted concurrently.

2963

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

224 New Customhouse
Denver 2, Colorado

July 9, 1953.

Memorandum

To: Secretary to the Operating Committee, Defense Minerals Exploration Administration

From: Field Team, Region IV

Subject: Final Report, DMEA Docket 2963 (Iron), E. C. Schroeder Company, Inc., Nightingale Group, Platte County, Wyoming.

Enclosed are the original and three copies of the report pertaining to the above application.

We recommend the modified exploration project as outlined in this report and also that it be combined into one contract with the Good Fortune group (DMEA-2964).

Because of the desirability of combining the two projects under one contract we recommend that the contract be made by the Washington office.

W. H. King
W. H. King

A. H. Koschmann
A. H. Koschmann

Enclosures

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF MINES

Mining Division
Region IV

July 9, 1953.

Memorandum

To: Field Team, Region IV

From: Chief, Mining Division, Region IV

Subject: Final Report, DMEA Docket 2963 (Iron), E. C. Schroeder Company, Inc., Nightingale Group, Platte County, Wyoming.

Enclosed are eight copies of the final engineering report on the subject docket.

The applicant proposed a churn drilling project which he estimated to cost $212,749.00. The field examiners recommend a modified drilling project to be combined with the applicant's Good Fortune Group (DMEA-2964).

We concur in this recommendation.

W. H. King
W. H. King

Enclosures

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF MINES

Region IV

Building 20, Room 137
Denver Federal Center
Denver 14, Colo.
July 8, 1953

Memorandum

To: Executive Officer, Field Team, Region IV

From: Chief, Mineral Resources Branch, Mining Division, Region IV

Subject: DMEA 2963, Nightingale group (Iron), Platte County, Wyo.

Please find enclosed the original and eight copies of the "Summary, Conclusions, and Recommendations", by F. D. Everett, Bureau of Mines, and D. R. Maclaren, Geological Survey, and of Everett's engineering report on the subject docket.

Everett concludes the property has certain merit for developing a substantial iron reserve by judicious exploration. He suggests a modified project comprising three stages, the second stage dependent on the results of the first stage, and the third stage dependent on the results of the two preceding stages. Stage 1 includes drilling of three preliminary churn drill holes for a total of 600 feet, stage 2, if approved, would allow five additional holes for a total of 1,000 feet, and stage 3 would permit deepening any of the holes drilled in the first two stages a total of 500 feet as authorized by representatives of the Region IV Field Team. The total estimated cost if the entire project is completed will be $14,395.00--Government participation 50 percent, or $7,197.50.

The suggested project is in contrast with a much more elaborate one requested by the applicant, which is considered as development, and proposed churn drilling 388 holes with an average depth of 100 feet on a 100-foot grid pattern and a comparable road building program--total cost $212.749.00.

Everett recommends a short-form contract combining the Nightingale project with a similar program recommended on the Good Fortune group (DMEA 2964) in which he included the cost of supervision, bookkeeping, and office expense of both projects. If this is done, the combined cost will total $47,415.00--Government participation $23,707.50, or 50 percent.

I approve the recommendations.

There is apparently some question as to whether the mine openings around which the drilling is recommended are actually on the Nightingale claim, and you may consider it necessary to have the applicant verify this before a contract is drawn up.

W. M. Traver

W. M. Traver

enclosures

WMT:amh

cc: 8
DMMA 2963
Chron.

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

200 New Customhouse
Denver 2, Colorado

July 3, 1953

Memorandum

To: DMEA Field Team, Region IV

From: A. H. Koschmann

Subject: DMEA Docket 2963, E. C. Schroeder & Company (The Nightingale Group), Platte County, Colorado

Attached are 8 copies of the geologic report by D. R. MacLaren covering DMEA Docket 2963, E. C. Schroeder & Company (The Nightingale Group), Platte County, Colorado.

The applicant proposes to explore for iron ore by churn drilling 328 holes to an average depth of 100 feet, or a total of 32,800 feet, at an estimated cost of $212,749.

The subject property lies in the Hartville mining district and adjoins the Sunrise mine of the Colorado Fuel and Iron Company on the northwest.

The most productive ore deposits occur as leases in pre-Cambrian schist on a limestone footwall, but small and low grade iron ore deposits also occur in younger formations. MacLaren concludes that there is a possibility that the Sunrise ore body may extend laterally beneath the Nightingale claims at relatively shallow depths. He therefore recommends that a limited exploration program be approved, considerably modified, however, from that of the applicant.

I concur in his recommendation.

A. H. Koschmann
A. H. Koschmann
Supervising Geologist
Colorado-Wyoming

Enclosures (8)

UNITED STATES
DEPARTMENT OF THE INTERIOR
DOUGLAS McKAY, SECRETARY

DEFENSE MINERALS EXPLORATION ADMINISTRATION

REPORT OF EXAMINATION BY FIELD TEAM
REGION IV

DMEA 2963, E. C. Schroeder Company, Inc.

Nightingale Group

Platte County, Wyo.

Iron

D. R. MacLaren, Geologist
Geological Survey

F. D. Everett, Mining Engineer
Bureau of Mines

July 7, 1953

DMEA 2963

E. C. SCHROEDER COMPANY, INC.
NIGHTINGALE GROUP
PLATTE COUNTY, WYO.

Summary, Conclusions, and Recommendations

By D. R. MacLaren
Geologist
Geological Survey

and

F. D. Everett
Mining Engineer
Bureau of Mines

DMEA 2963

E. C. SCHROEDER COMPANY, INC.
NIGHTINGALE GROUP
PLATTE COUNTY, WYO.

SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS

By D. R. MacLaren and F. D. Everett

INTRODUCTION

E. C. Schroeder Company, Inc., of McGregor, Iowa, has applied to the Defense Minerals Exploration Administration for financial assistance to explore the Nightingale group of claims, Platte County, Wyo., for iron (DMEA 2963). The applicant proposed to churn drill 328 holes for an average depth of 100 feet on five claims on a 100-foot grid pattern and to build 32,800 feet of road for transporting the churn drill and hauling water. The total cost of the program was estimated as $212,749.00--Government participation $106,374.50, or 50 percent.

An examination of the property revealed that soft and hard iron ore occurs in four small development workings on the Nightingale claim. In this area, schist of the Whalen formation, which contains most of the economic deposits, is capped by sandstone, limestone, and conglomerate of the Guernsey and Hartville formations. Small deposits of low-grade iron ore occur at the base of both the Guernsey and Hartville. The ore seen at the Nightingale claim is at the base of the Hartville formation. However, similar conditions existed at

the Sunrise mine, which is within a mile to the southeast. The Sunrise mine has produced about 25,000,000 tons of high-grade iron ore since 1900, and on the possibility that ore from this mine might extend onto the Nightingale property, a program of exploration is recommended.

The program suggested is to be performed in three stages, stage 2 being dependent upon stage 1, and stage 3 on both stage 1 and 2. Stage 1 consists of drilling three churn drill holes for a maximum aggregate length of 600 feet to penetrate the schist of the Whalen formation below the iron-bearing sandstone. Stage 2, if approved, would allow the churn drilling of five additional holes for a maximum aggregate length of 1,000 feet. Stage 3 would allow deepening any of the holes drilled in stages 1 and 2, if approved by a representative of the Region IV Field Team, for a maximum aggregate length of 500 feet. The expense of road building and a sampler would also be provided.

It is recommended that the program be set up as a short-form contract combined with a similar program of the same company on the Good Fortune group (DMEA 2964). Supervision, bookkeeping, and office expenses were provided in DMEA 2964 to cover both projects and should not be duplicated. The project should be completed in 7 months. The cost of the Nightingale group program is estimated as $14,395.00—Government participation 50 percent, or $7,197.50.

The cost of the combined projects will total $47,415.00—Government participation, $23,707.50.

THE NIGHTINGALE GROUP

PLATTE COUNTY, WYOMING

DMEA DOCKET 2963

Geologic Report

By D. R. MacLaren
U. S. Geological Survey

THE NIGHTINGALE GROUP
PLATTE COUNTY, WYOMING

INTRODUCTION

The E. C. Schroeder Company, Inc., of McGregor, Iowa, has applied to the Defense Minerals Exploration Administration for assistance to explore for iron ore on the Nightingale group of mining claims in Platte County (prior to 1911 a part of Laramie County) Wyoming. The applicant proposes to churn drill 328 holes to an average depth of 100 feet, or a total of 32,800 feet, at an estimated cost of $212,749 (Government's share 50 percent of $106,374.50).

The property was examined June 11, 1953, in the company of Mr. Floyd D. Everett of the U. S. Bureau of Mines and Mr. Paul E. Schroeder, vice-president of the applicant company. The claims are adjacent to the northwest boundary of the Sunrise mine of the Colorado Fuel and Iron Company in the Hartville mining district. They are easily accessible from the town of Gurnsey over 8½ miles of good State Highway and fair dirt road.

It is concluded that this is a fair prospect since the ore being mined at Sunrise may extend to the Nightingale group. The amount of drilling requested by the applicant is excessive. It is recommended that a modified program estimated by the U. S. Bureau of Mines to cost $14,395 (the Government's share 50 percent or $7,197.50) be approved.

GEOLOGY

The rocks of the area are steeply dipping quartzites, schists, and siliceous limestones of the Whalen group (pre-Cambrian) overlain by the

gently-dipping Gurnsey and Hartville formations of Carboniferous age. These rocks are encircled by the Arikaree formation (Miocene) and terrace gravels and alluvium (Pleistocene) that fill erosional depressions.

The main iron ore deposits are found in the Whalen group as lenses in schist on a limestone footwall. Localized deposits, some of excellent grade but too small to be of much economic importance, have been found in a hematitic conglomerate at the base of the Gurnsey formation. At the base of the Hartville formation is an iron-stained shale on which lies the typical Hartville sandstone. Where the shale has been folded into gentle synclines, iron from the sandstone has been redeposited forming blanket beds of low grade hematite.

On the Nightingale group, in the southern part of the Rustler claim and near the southeast boundary of the Origan and Nightingale claims, the Gurnsey formation is exposed. Its maximum thickness in this area is 150 feet. Above the Gurnsey and comprising most of the surface within the limits of the group, is the Hartville formation with a maximum thickness of about 100 feet. Thus, on these claims, the Whalen group is as much as 250 feet below the surface. About three quarters of a mile west of the Nightingale claim, two tunnels, two shallow pits, and a cribbed shaft, now inaccessible, expose a deposit of hematite at the base of the Hartville formation. This deposit appears to be small and rather low grade. Mr. Schroeder stated that this exposure was on the Nightingale claim, but a subsequent check of topographic and geologic maps show it to be in sec. 1, R. 66 W., while the Nightingale claim is in sec. 6, R. 65 W. The claims were also entered from the north and a traverse was made across most of the Origan claim. Here the surface is a broad flat area in the Hartville formation.

CONCLUSIONS

It is concluded that most of the commercial ore in the area comes from the Whalen group, and that on the Nightingale claims this formation is overlain by as much as 250 feet of the Gurnsey and Hartville formations. Although it is doubtful that any significant amount of ore will be found in either the Gurnsey or the Hartville formations, it is concluded that there is sufficient possibility of the Sunrise ore body extending laterally beneath the Nightingale claims at relatively shallow depths to justify limited exploratory drilling.

RECOMMENDATIONS

It is recommended that the following program, estimated by the Bureau of Mines to cost $14,395 (the Government's share 50 percent or $7,197.50) be approved.

1. Holes No. 1, 2, and 3 (figure 2) are to be drilled first. Due to lack of suitable topographic maps, it is impossible to give an exact depth for each hole but it is believed that about 75 feet for No. 1, 200 feet for No. 2, and 225 feet for No. 3 should be enough to penetrate the ore if it is present on the claims.

2. Contingent upon the Sunrise ore body extending laterally to the line of Holes No. 1, 2, and 3, Holes No. 4, 5, and 6 should be drilled to an estimated depth of 200 feet each. Should the Sunrise ore body be found to extend to these holes, then No. 7 and 8 should be drilled to a depth of 200 feet.

3. Allowance should be made for 500 feet of additional drilling to deepen one or two holes to test the thickness of the ore should the

drilling in steps 1 and 2 indicate the presence of ore over a sufficient area.

The approximate location of the proposed holes is shown in figure 2.

DMEA 2963

E. C. SCHROEDER COMPANY, INC.
NIGHTINGALE GROUP
PLATTE COUNTY, WYO.

Engineering Report

By F. D. Everett
Mining Engineer
Bureau of Mines

DMEA 2963

E. C. SCHROEDER COMPANY, INC.
NIGHTINGALE GROUP
PLATTE COUNTY, WYO.

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ILLUSTRATIONS

Figure	Follows page
1. Location map, showing relative position of Nightingale iron claims, Platte County, Wyo.	2
2. Nightingale group showing approximate location of recommended churn drill holes	*

*See figure with geological report.

DMEA 2963

E. C. SCHROEDER COMPANY, INC.
NIGHTINGALE GROUP
PLATTE COUNTY, WYO.

ENGINEERING REPORT

By

F. D. Everett

INTRODUCTION

The Nightingale group of iron claims in Platte County, Wyo., has been proposed for a Defense Minerals Exploration Administration loan of $212,749.00 by E. C. Schroeder Company, Inc. (DMEA 2963). The exploration proposed was to churn drill 32,800 feet in 328 holes, construct 32,800 feet of access road to drill sites, and assay about 2,624 samples. Work, as originally proposed, consisted of exploring for an ore body by churn drilling on five claims at 100-foot intervals. These claims lie adjacent to the property of the Sunrise mine, which is owned and operated by the Colorado Fuel and Iron Corporation. Four small prospect holes, supposedly on the Nightingale claim, contained soft hematite ore.

E. C. Schroeder Company, Inc., plans to explore, develop, mine, and ship ore to Birmingham, Ala., for smelting.

The property is in an area which is known to be favorable for iron deposition. However, the program proposed by the applicant constitutes both exploration and development, and a program costing less appears feasible.

ACKNOWLEDGMENTS

Paul C. Schroeder, vice-president and manager of the Wyoming operation, accompanied the examining team over both the Nightingale and Good Fortune groups of iron claims on June 11, 1953, and furnished all data for the report. D. R. MacLaren, geologist, was the Geological Survey representative on the examining team.

LOCATION, TOPOGRAPHY, AND PHYSICAL FEATURES

The Nightingale group of claims is in the SW1/4 and NW1/4 sec. 6 and a small part of the NW1/4 sec. 7, T. 27 N., R. 65 W., and part of SE1/4 sec. 1, T. 27 N., R. 66 W., Hartville Mining District, Platte County, Wyo. The property is northwest of Sunrise and about 8 to 9 miles north and a little east of the town of Guernsey (fig. 1).

The mineralized area of the Nightingale group of claims is on the side of a fairly steep hill, the top of which is flat tableland and the bottom terminating in a narrow creek valley. About 2 miles of graveled road have been constructed between the company crushing and loading plant and a black top road, which connects Guernsey, Hartville, and Sunrise. A rough dirt road extends from Sunrise for about 2 miles to the top of the tableland, from which access could readily be made to the Nightingale group of claims. The altitude at the claims is about 5,000 feet.

The crushing and loading plant is located on a siding of the Chicago, Burlington, and Quincy Railroad.

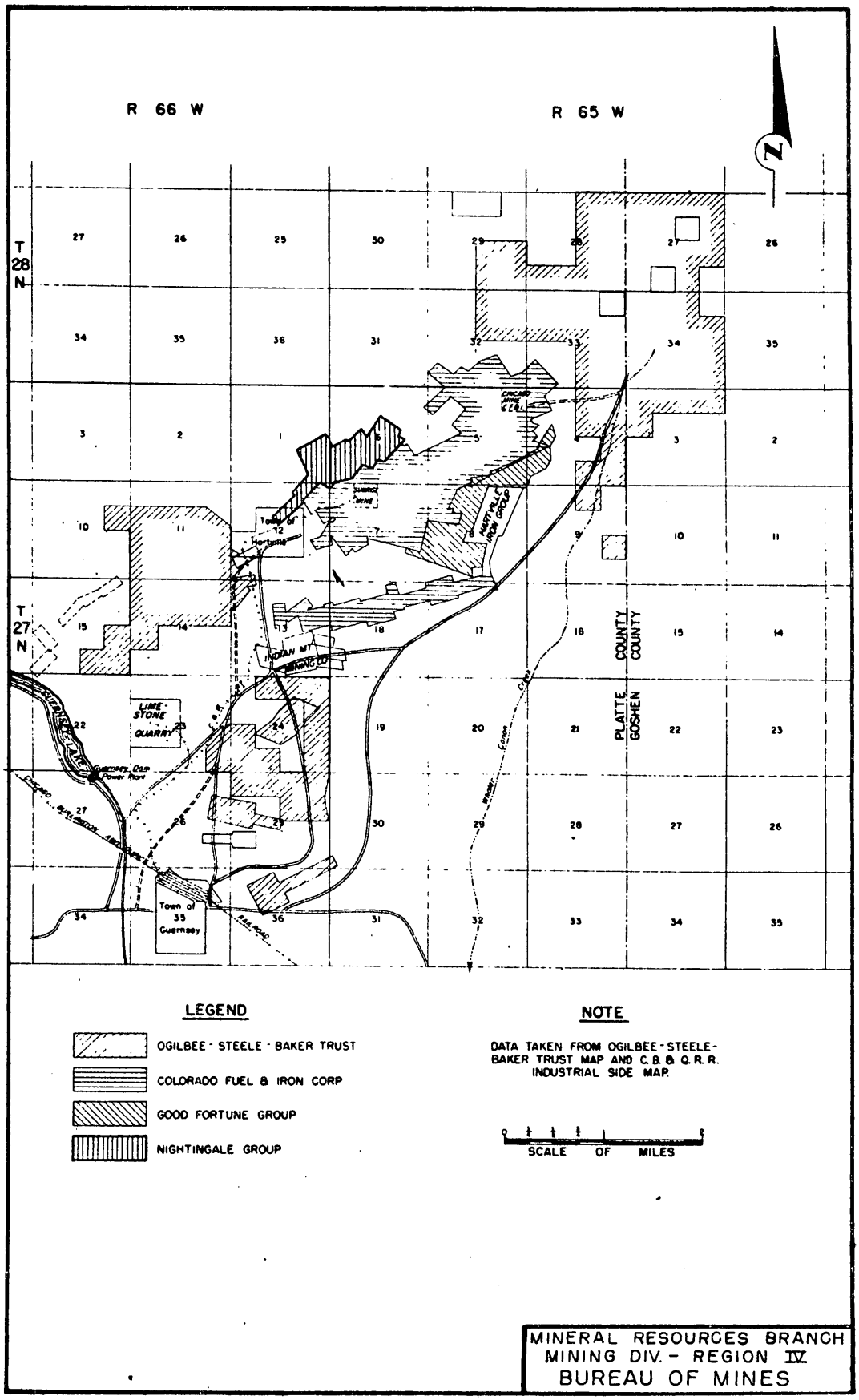

FIGURE 1. - LOCATION MAP, SHOWING RELATIVE POSITION OF NIGHTINGALE IRON CLAIMS, PLATTE COUNTY, WYO. (DMEA 2963).

The climate is semiarid; summers are hot, and winter temperatures drop below zero for short periods. Water would have to be hauled from Sunrise or Hartville; Paul C. Schroeder stated a well might be drilled.

The E. C. Schroeder Company, Inc., operated a rock crushing plant 2 miles east of Guernsey prior to 1951 and thereby is familiar with labor and supply sources.

HISTORY AND PRODUCTION

Early history of the district started with the Indians using red hematite ore for war paint. The early history of these claims is not known to the writer, but Chance[1/] gives a description of the Nightingale group as of 1900.

There has been no production from the Nightingale group of claims. The group is northwest of, and within a mile of, the Sunrise mine of the Colorado Fuel and Iron Corporation. This mine has been worked continuously since 1900 and the past production is about 25,000,000 tons of iron ore, which has been shipped to iron and steel smelting facilities at Pueblo, Colo.

OWNERSHIP AND EXTENT

The property being considered, commonly referred to as the Nightingale group of iron claims, contains the following patented lode claims as listed, with specific exceptions, in exhibit "1" of the application.

1/ Chance, H. M., The Iron-Mines of Hartville, Wyoming: AIME Transactions Vol. 30, 1900, p. 998.

Certificate 137	Certificate 137	Certificate 138
Nightingale	El Paso	Terrible
Origan	Standard	
O. K.	Hoosier	
Rustler	Clipper	
Columbia	Humbolt	
Black Cloud	Iron Clad	
Monitor		

On the claim map, exhibit "3" of the application, the Crown claim is indicated as being with the above group of claims, according to mineral survey 196. The Crown claim and description do not appear in exhibit "1".

The above mining claims are leased by E. C. Schroeder Company, Inc., of McGregor, Iowa, from W. H. Collins, according to exhibit "2" of the application. The lease, which contains several limiting provisions, is for 99 years starting December 26, 1952.

Exploration for iron would be conducted on the Nightingale, Origan, Black Cloud, Columbia, and Rustler, providing the adit, adit-pit, and shaft, all of which contained iron ore of fair quality, are on the Nightingale claim as indicated by Paul C. Schroeder, vice-president and manager of the Wyoming operation. (The reason for this provision is that the area containing these workings, as indicated by Schroeder, does not appear to be in the right location on the topographic map contained in Geological Survey Folio 91, the Hartville Folio, 1903).

Paul C. Schroeder stated that, if a loan is granted, any ore found or ore shipped from any of the claims in the lease would constitute a discovery and would be subject to loan repayment by royalties to the Government.

DESCRIPTION OF THE DEPOSITS

Iron deposits in the Hartville Mining District have been described in several publications, the principal one being by Ball.[2/]

The Bureau of Mines conducted geophysical surveys over a portion of the area in 1943-45 without finding any appreciable anomalies.[3/]

The ore deposits occur in lenticular masses, usually in schist, and apparently are controlled somewhat by folding and faulting of the schist immediately above the uppermost limestone of the pre-Cambrian complex. In places a near horizontal cap rock of sandstone or quartzite covers the older metamorphic rocks. This cap rock has been replaced, or partially replaced, by hematite ore in a few places, one of which is in the workings supposedly on the Nightingale claim.

Chance[4/] describes the workings as of 1900 on the Nightingale claim as follows:

> "About one-half mile northwest from No. 36 (just beyond the limits of the map) is the Nightingale claim. It consists of a drift into the hillside about 40 feet long, and high up on the hill. Limestone appears in the hill below the ore, with sandstone at the level of the ore openings. The dip isapparently 30° W. There is, here, apparently about 8 to 12 feet of ore, a little being of fair quality, but most of it looking like 30 percent stuff. It is exceedingly doubtful whether this is the outcrop of a vein or not. It looks like a replacement deposit. Besides the drift, there is a shaft nearby, about 40 feet deep, which passed through some good ore. There are about 4 tons of 62 percent ore on the dump."

2/ Ball, S. H., The Hartville Iron-Ore Range: Geol. Survey Bull. 315, 1907, pp. 190-205.

3/ Frey, Eugene, Hartville Iron District, Platte County, Wyo.: Bureau of Mines Report of Investigation 4086, June 1947, 3 pp.

4/ Reference cited in footnote 1.

The two drifts and shaft described here are probably two of the four workings observed by the examining team. The ore near the surface may or may not have much significance. However, the proximity of the claims to the Sunrise mine gives the possibility credence.

The ore observed in the workings on the Nightingale claim was soft and hard hematite, most of which would have to be beneficiated for profitable utilization.

MINEABLE ORE RESERVES

Some ore reserve estimate could probably be calculated for the Nightingale claim, but it would be small and insignificant.

PRESENT STATUS

Exploration and Development

The Nightingale group of claims has not been developed sufficiently to establish the occurrence of a worthwhile iron ore body.

There are four small workings on the Nightingale claim, one being an inaccessible shaft.

Roads would have to be built to the area, some of which would require considerable rock work.

Any ore produced as the result of a successful exploration program would probably be shipped to Birmingham, Ala., for utilization (see Good Fortune group, DMEA 2964, for present ore schedules and freight rates).

No estimate is possible at this time as to the most applicable mining method and cost of mining.

Mining and Milling Equipment and Facilities

The applicant company currently is engaged in surface pit mining at the Good Fortune mine in the same area in Wyoming, at a rock crushing quarry in Wisconsin, and a brown-iron mining operation in Alabama. It apparently has adequate equipment and finances to develop and mine any ore deposit found.

Paul C. Schroeder stated that if adequate reserves are developed, a heavy media beneficiation plant, similar to one used by the company in Alabama, would be constructed.

PROPOSED EXPLORATION AND DEVELOPMENT PROGRAM

The applicant proposed a program to explore the area covered by five claims at 100-foot intervals (exhibit "5" of the application). This type of project would be excellent for a development program, but could not be considered as exploration of the property, which can probably be accomplished to give a sufficient evaluation by a much less costly program involving fewer drill holes.

A modified program is suggested, which, if approved, should be combined with a program similar to one suggested in DMEA 2964 on the Good Fortune group in the same area by the same applicant.

The suggested program would be conducted in three stages, the second dependent upon the findings of the first, because if appreciable ore is not found in the first three holes drilled it would be improbable that any ore would be found by subsequent drilling.

Stage 1 of the suggested program would include drilling three churn drill holes for an aggregate length of 600 feet in a program similar to one illustrated on figure 2 with the geological report for proposed holes 1 to 3, inclusive. Access roads must be constructed to the drill sites for transporting the drilling equipment and water.

If the results of stage 1 are encouraging, in the opinion of representatives of Region IV Field Team, stage 2 would be allowed, consisting of churn drilling five additional holes (4 to 8, inclusive, as shown on figure 2 with the geological report) for an aggregate length of 1,000 feet. Access roads would be constructed to the drill sites.

If the results of stage 1 and 2 are sufficiently encouraging, in the opinion of Region IV Field Team representatives, stage 3 would be allowed, consisting of an additional 500 feet of drilling to deepen one or two of the previously drilled holes, as desired by the applicant and approved by a Region IV Field Team representative.

This program should be conducted concurrently with a similar one on the Good Fortune group (DMEA 2964). The same time period of 7 months should be allowed for completion of both projects.

The road-building phase of the program cannot be specifically described, as suitable topographic maps of the area are not available. These roads can be laid out on the ground by a representative of the company with the approval of a representative of the Region IV Field Team.

A sampler is allowed to care for drill samples. Assay charges for samples are also included.

The proportionate share of bookkeeping and office expense is also included but is allowed in the Good Fortune report and is not duplicated in this project.

ESTIMATED COST OF PROJECT

The cost of the program for the Nightingale group of claims is estimated as follows:

Stage 1

Maximum of 600 feet of churn drilling (6-inch or larger bits) in three holes, including hauling water, at $5.00 per foot	$3,000.00	
Maximum of 1,000 feet of road building, as approved by a representative of the Region IV Field Team, at $1.00 per linear foot	1,000.00	
An engineer or geologist is provided for in the Good Fortune (DMEA 2964) recommendations and is not duplicated.	-	
One sampler at $1.35 per hour, or less, as worked, not to exceed 2 months at $70.20 per week, including overtime	570.00	
Proportionate share of salary of bookkeeper and office expense is included in the Good Fortune (DMEA 2964) project.	-	
Assaying 60 samples for iron at $1.00 each	60.00	
Estimated cost, stage 1		$ 4,630.00

Stage 2

Maximum of 1,000 feet of churn drilling in five holes, including hauling water, at $5.00 per foot	$5,000.00	
Maximum of 1,000 feet of road building, as approved by a representative of the Region IV Field Team, at $1.00 per linear foot	1,000.00	
One sampler at $1.35 per hour, or less, as worked, not to exceed 2 months at $70.20 per week, including overtime	570.00	
Assaying 75 samples for iron at $1.00 each	75.00	
Estimated cost, stage 2		$ 6,645.00

Stage 3

Maximum of 500 feet of churn drilling, including hauling water, at $5.00 per foot,	$2,500.00	
One sampler at $1.35 per hour, or less, as worked, or $70.20 per week including overtime, for 2 months	570.00	
Assaying 50 samples at $1.00 each	50.00	
Estimated cost, stage 3		3,120.00
Estimated cost of project		$14,395.00

PROPOSED FINANCING

The applicant has indicated the ability to participate financially in a much larger program than the one suggested.

CONCLUSIONS

The E. C. Schroeder Company, Inc., is currently producing iron ore from the Good Fortune group of claims in the same general area, which is also being considered for a Defense Minerals Exploration Administration loan.

The present plan of production is to ship the ore to Birmingham, Ala., for smelting. The ore is high in iron and low in silica and phosphorus. For shipping purpose, the grade must be maintained above 53 percent iron.

The applicant is operating other open-pit properties and has the necessary "know-how" for an iron mining operation.

The Nightingale group of claims is in an area favorable for iron deposition. The program suggested by the examining team has good possibilities for increasing the high-grade iron reserves in Wyoming.

RECOMMENDATIONS

It is recommended that a program of exploration by churn drilling be approved to be conducted in three stages, each successive stage depending on the results of the preceding stage, as suggested in the report.

The total cost of the program is estimated as $14,395.00—Government participation, $7,197.50.

This should be combined with a similar one on the Good Fortune group (DMEA 2964) and they should be carried on concurrently. It is suggested the two be incorporated in one short-form contract.

If this procedure is followed, the total cost of a combined program on the Good Fortune and Nightingale groups will be $47,415.00--Government participation 50 percent, or $23,707.50.

cb

FILE COPY
SURNAME:

Martin
Hedges
Schroeder
Selfridge
Johnson
Mattendorf

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

DEFENSE MINERALS EXPLORATION
ADMINISTRATION

WSMartin/ls
5285 3538

July 8, 1953

W. H. King, DMEA Field Team, Region 4, Denver, Colorado

Reurtt July 3, Dockets DMEA 2963 and 2964, E. C. Schroeder.

Please airmail one page summary covering your field examination of subject property on June 10 - 11 in order to allow us to expedite contract. Should change in your work load allow you to send us complete report before July 15, we shall appreciate it.

George C. Selfridge
(346)

G. C. Selfridge, Chairman
Operating Committee

WSMartin/ls
7/7/53

Copy to: FT, Region 4 - Confirmation
Docket 2963
Docket 2964
Code 400
Audits Divn., Bur. Mines
Operating Committee
Adm. Read. File
J. M. Forbes, USBM
Martha Carr, USGS

SENT
JUL 8 1953
Clerical Service Section

R. C. H.
7-8-53

Mr. G. C. Selfridge
7-6-53
7:45 A.M.

WSM

BUR MINES DN 235 7-3-53 4-08 PM

G C SELFRIDGE, CHAIRMAN OPERATING COMMITTEE DMEA

REURTT JULY 3, DOCKET DMEA 2964, E. C. SCHROEDER, IRON, ESTIMATED COST OF PROJECT $33,020. OWING TO INCREASE IN WORKLOAD WE WILL BE UNABLE T O COMPLETE FINAL REPORT BEFORE JULY 15,1953.

W H KING

Denver, Colo.

FILE COPY
SURNAME

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

DEFENSE MINERALS EXPLORATION
ADMINISTRATION

WSMartin/la
5285 3538

July 3, 1953

W. H. King, DMEA Field Team, Region 4, Denver, Colorado

Urtt July 2, E. C. Schroeder, Iron, Laramie County, Wyoming.

Please wire approved estimated cost project Docket DMEA 2964.

Can we still expect Field Team's report not later than July 10?

G. C. Selfridge
Chairman, Operating Committee

Copy to: Docket 2964
Code 400
Accounts Divn., Bur. Mines
Oper. Committee
Adm. Reading File
Confirmation to FT, Reg. 4

SENT
JUL 8 1953
Service Section

J.L.

R.C.S.
7-3-53

Mr. C. O. Mittendorf
July 2, 1953
2:23 P.M.

DN 235 BUREAU MINES 7-2-53 11-15 AM

C O MITTENDORF

RE TELEPHONE CALL W. S. MARTIN JULY 2, DOCKETS NOS. DMEA 2963 AND 2964, E. C. SCRXXX SCHROEDER, IRON, LARAMIE COUNTY, WYOMING. DOCKET 2963 APPROVED AT ESTIMATED COST OF $14,395. RECOMMEND DRILLING IN 3 STAGES, DXX FIRST STAGE CONSISTING OF THREE HOLES TOTAL DEPTH 600 FEET, SECOND STAGE FIVE HOLES TOTAL DEPTH 1000 FEET, THIRD STAGE DEEPENING ANY HOLES WHERE NECESSARY, TOTAL LENGT H 500 FEET. ESTIMATED COST OF DRILLING $5.00 PER FOOT. REMAINDER OF MONEY TO BE USED IN SUPERVISION., SAMPLING, AND ROAD CONSTRUCTION. APPLICATION DMEA 2964 CONSISTS OF TWO STAGES. FIRST STAGE, 17 DRILL HOLES TOTAL DEPTH 2000 FEET, SECOND STAGE 18 DRILL HOLES TOTAL DEPTH 3000 FEET, COST $5.00 PER FOOT. REMAINDER OF MONEY TO BE USED FOR SUPERVISION, SAMPLING AND ROAD CONSTRUCTION. ALL HOLES ARE TO BE DRILLED TO TEST EXTENSION OF THE KNOWN DEPOSIT. IT IS RECOMMENDED THAT ONE CONTRACT BE PREPARED COVERING BOTH APPLICATIONS.

JOHN F. SHAW FOR W. H . KING

Copy made retained 400

W. S. Martin

Denver, Colo.

docket

COPY

DN 235 Bureau Mines 7-2-35 11-15 AM

C O Mittendorf

Re telephone call W. S. Martin July 2, Dockets DMEA 2963 and 2964

E. C. Schroeder, Iron, Laramie County, Wyoming.

Docket 2963 approved at estimated cost of $14,395. Recommended drilling in 3 stages, first stage consisting of 3 holes total depth 600 feet, second stage 5 holes total depth 1000 feet, third stage deepening any holes where necessary, total length 500 feet. Estimated cost of drilling $5.00 per foot. Remainder of money to be used in supervision, sampling, and road construction.

Application DMEA 2964 consists of 2 stages. First stage, 17 drill holes total depth 2000 feet, second stage 18 drill holes total depth 3000 feet, cost $5.00 per foot. Remainder of money to be used for supervision, sampling and road construction. All holes are to be drilled to test extension of the known deposit. It is recommended that one contract be prepared covering both applications.

JOHN F. SHAW FOR W. H. KING

CONFIRMATION COPY OF TELETYPE

UNITED STATES DEPARTMENT OF INTERIOR

AGENCY DMEA * REG IV

7/2/53

C. O. MITTENDORF DMEA WASH

SUBJECT: RE TELEPHONE CALL W. S. MARTIN JULY 2, DOCKETS NOS. DMEA 2963 and 2964, E. C. SCHROEDER, IRON, LARAMIE COUNTY, WYOMING. DOCKET 2963 APPROVED AT ESTIMATED COST OF $14,395. RECOMMEND DRILLING IN 3 STAGES, FIRST STAGE CONSISTING OF THREE HOLES TOTAL DEPTH 600 FEET, SECOND STAGE FIVE HOLES TOTAL LENGTH 500 FT.. ESTIMATED COST OF DRILLING $5.00 PER FOOT. REMAINDER OF MONEY TO BE USED IN SUPERVISION, SAMPLING, AND ROAD CONSTRUCTION. APPLICATION DMEA 2964 CONSISTS OF TWO STAGES. FIRST STAGE, 17 DRILL HOLES TOTAL DEPTH 2000 FEET, SECOND STAGE, 18 DRILL HOLES TOTAL DEPTH 3000 FEET, COST $5.00 PER FOOT. REMAINDER OF MONEY TO BE USED FOR SUPERVISION, SAMPLING AND ROAD CONSTRUCTION. ALL HOLES ARE TO BE DRILLED TO TEST EXTENSION OF THE KNOWN DEPOSIT. IT IS RECOMMEND THAT ONR CONTRACT BE PREPARED COVERING BOTH APPLICATIONS.

JOHN F. SHAW for W. H. KING

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

Defense Minerals Exploration Administration
Exploration

Martin/orf
3538

[illegible] 3923.[illegible] - Working [illegible] - [illegible]
June 2[illegible], 1953

[illegible] Executive Officer, Region 4, Denver, Colorado

Report June 23, 1953, Contracts [illegible] 2963 and 2964, [illegible] Schroeder.

Please give summary of modifications recommended. ~~We also note and approve your present policy of deferring action on denial reports for the present and concentrating now completing all possible approvals.~~

/s/ Geo. C. Selfridge

George C. Selfridge
Chairman, Operating Committee

cc: Chief
Code 400
Admr. Reading File
Operating Committee
M. Reg. 4 - CONFIDENTIAL
J. M. Forbes, USGS
Mrs. Martha Carr
Audits Div. Bureau of Mines

Phoned Kring July 7, 1953
Talked to John F. Shaw who says
he will get off a teletype same day
/s/ W.S.M.

FILE COPY
SURNAME:

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

WSMartin/usf
5284
3530
Martin
Selfridge

14 X 3923.970 - Working Fund - DMEA
June 24, 1953

W. H. King, DMEA Executive Officer, Region 4, Denver, Colorado

Reurtt June 23, 1953, Dockets DMEA 2963 and 2964, E. C. Schroeder.

Please wire summary of modifications recommended. ~~We also note and approve your present policy of deferring action on denial reports for the present and concentrating now completing all possible approvals.~~

George C. Selfridge (2163)

George C. Selfridge
Chairman, Operating Committee

cc: Docket
Code 400
Admr. Reading File
Operating Committee
FT Reg. 4 - CONFIRMATION
J. M. Forbes, USBM
Mrs. Martha Carr
Audits Div. Bureau of Mines

n.s. in R.V.R.

Phoned King July 2, 1953
Talked to John F. Shaw who says
he will get off a letter some time
WSM

SENT
JUN 25 1953
Clerical Service Section

Chairman, Operating Comm.
DMEA
June 24, 1953
7:45 AM.

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
JUN 2 1953

DN 235 BUREAU MINES 6-23-53 4-08 PM

CHAIRMAN, OPERATING C OMMITTEE - DMEA

REURTT JUNE 23,1953 DOCKETS DMEA 2963 AND 2964, E. C. SCHROEDER. PROPERTY EXAMINED JUNE 10-11,1953. WE ARE ENDEAVORING TO PROCESS APPLICATOXXXXX APPLICATIONS IN THE ORDER THAT THEY ARE RECEIVED. WE ANTICIPATE THE DRAFT OF THIS REPORT WILL BE COMPLETED JUNE 2XXX 30,1953 FINAL REPORT SHOULD BE IN YOUR HANDS BY JULY 10,1953 SUBJECT TO WORKLOAD OF TYPISTS. MODIFIED PROGRAM BEING APPROVED. IN ORDER TO COMPLETE AS MANY APPROVALS AS POSSIBLE BEFORE END OF FISCAL YEAR WE ARE NOTIXXX NOT COMPLETING DENIAL REPORTS AT THIS TIME.

W H KING

Denver, Colo.

JUN 24 8 27 AM '53
BUREAU OF MINES
MAIL ROOM
WASHINGTON, D. C.

1-1027
(April 1946)

Defense Minerals Administration
RECEIVED
12 - 1953

UNITED STATES
DEPARTMENT OF THE INTERIOR

AGENCY DMEA - REG IV

Originator:

TELETYPE

Ext.: Room:

Appro.:
Date: 6/23/53
Time:
No.:
To: CHAIRMAN, OPERATING COMMITTEE - DMEA

Subject:

REURTT JUNE 23, 1953 DOCKETS DMEA 2963 and 2964, E. C. SCHROEDER. PROPERTY EXAMINED JUNE 10 - 11, 1953. WE ARE ENDEAVORING TO PROCESS APPLICATIONS IN THE ORDER THAT THEY ARE RECEIVED. WE ANTICIPATE THE DRAFT OF THIS REPORT WILL BE COMPLETED JUNE 30, 1953. FINAL REPORT SHOULD BE IN YOUR HANDS BY JULY 10, 1953 SUBJECT TO WORKLOAD OF TYPISTS. MODIFIED PROGRAM BEING APPROVED. IN ORDER TO COMPLETE AS MANY APPROVALS AS POSSIBLE BEFORE END OF FISCAL YEAR WE ARE NOT COMPLETING DENIAL REPORTS AT THIS TIME.

W. H. King
W. H. KING

Authorized:
CONFIRMATION

Sign original message and transmit to Room ..... in duplicate

U. S. GOVERNMENT PRINTING OFFICE 16—50915-1

FILE COPY
SURNAME:

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

Defense Minerals Exploration Administration

WSMartin/foc
5284
3538

14 X 3923.970 - Working Fund - DMEA
June 22, 1953

W. H. King, DMEA Executive Officer, Region 4, Denver, Colorado

Please wire date we may expect to receive field reports and your recommendations DMEA Dockets 2963 and 2964, Iron, E. C. Schroeder Company, Inc. Laramie County, Wyoming.

George C. Selfridge

George C. Selfridge (JHB)
Chairman, Operating Committee

N.S. in R. v R.

cc: Docket
Code 400
Adm. Reading File
Oper. Comm.
FT. Reg. 4 - CONFIRMATION
J. M. Forbes, USBM
Mrs. Martha Carr, USGS
Audits Div. Bu. Mines

SENT
JUN 23 1953
Clerical Service Section

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

1201

(41)

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 3 AM 10 44

WP021 PD=DUBUQUE IOWA 3 921 A=

C O MITTENDORF, ADMINISTRATOR DEFENSE MINERALS
EXPLORATION ADMN=UNITED STATES DEPT OF INTERIOR=

WSM

IN ACCORDANCE WITH YOUR TELEGRAM OF JUNE SECOND WE RESPECTFULLY REQUEST THAT OUR APPLICATIONS DOCKET NUMBER 2963 AND 2964 IRON BE REACTIVATED=

E C SCHROEDER CO INC BY M M COONEY ITS ATTORNEY=

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
JUN 3 1953

2963 2964 ITS=

THE COMPANY WILL APPRECIATE SUGGESTIONS FROM ITS PATRONS CONCERNING ITS SERVICE

COPY

1953 JUNE 3 A.M. 10 44

WP 021 PD DUBUQUE IOWA 3 921 A-

C O MITTENDORF, ADMINISTRATOR DEFENSE MINERALS
EXPLORATION ADMN - UNI ED STATES DEPT OF INTERIOR

IN ACCORDANCE WITH YOUR TELEGRAM OF JUNE SECOND WE RESPECTFULLY REQUEST THAT OUR APPLICATIONS DOCKET NUMBERS 2963 AND 2964 IRON BE REACTIVATED

E. C. SCHROEDER CO. INC

BY M M COONEY ITS ATTORNEY

W. S. Martin, Ext.5284

Interior Department

Defense Minerals Exploration
Administration
14X 3923.970 - Working Fund
DMEA
Martin

~~AIRMAIL~~ LETTER

JUNE 2, 1953

E.C. SCHROEDER CO., INC.
CARE OF M. M. COONEY
705 ROSHEK BUILDING
DUBUQUE, IOWA

REOURTEL MAY 15 DENYING YOUR APPLICATIONS DOCKET NUMBERS 2963 AND 2964, IRON. THIS IS TO ADVISE YOU THAT RESTRICTED PROGRAM DIRECTIVE DATED APRIL 15 MODIFIED ON JUNE 1 GIVING DMEA AUTHORITY TO CONTINUE PROCESSING YOUR APPLICATIONSWHICH WERE PENDING PRIOR TO DATE REFTEL. KINDLY ADVISE THIS OFFICE AND EXECUTIVE OFFICER AT DENVER WHETHER OR NOT YOU DESIRE SUBJECT APPLICATIONS TO BE REACTIVATED.

C. O. Mittendorf

C. O. MITTENDORF
ADMINISTRATOR,
DEFENSE MINERALS EXPLORATION
ADMINISTRATION

S.N.
6-2-53

WSMartin/foc 6-2-53

Copy to: Mr. Cooney - CONFIRMATION
Docket 2963
Docket 2964
Code 400
Operating Committee
Adm. Reading File
Martha Carr- USGS
J. M. Frobes - USBM
Audits Div., Bur. Mines
Field Team, Reg. IV

W. S. Martin, Ext. 5284

Interior Department

Defense Minerals Exploration
Administration
14X 3923.970 - Working Fund -
DMEA

(copy also in dmea 2363 folder)

NIGHT LETTER

E. C. Schroeder Co., Inc.
Care of M. M. Cooney
705 Roshek Building
Dubuque, Iowa

May 15, 1953

RE YOUR EXPLORATION APPLICATIONS DOCKET NUMBERS 2963 and 2964, IRON. THIS IS TO ADVISE YOU THAT EFFECTIVE APRIL 15, 1953, EXPLORATION FUNDS RESTRICTED TO ASSISTANCE ONLY FOR SPECIFIED MINERALS STILL IN SHORT SUPPLY. IRON NO LONGER INCLUDED. CONSEQUENTLY WE DO NOT HAVE AUTHORITY OR FUNDS TO EXECUTE CONTRACTS FOR EXPLORATION PROJECTS ON YOUR PROPERTY AND YOUR APPLICATIONS THEREFORE ARE DENIED. THIS IS WITHOUT PREJUDICE TO THE MERITS OF YOUR PROPOSED PROJECTS. WE REGRET THE NECESSITY OF THIS ACTION AND EXPRESS APPRECIATION FOR YOUR INTEREST IN THE EXPLORATION PROGRAM AND COOPERATION DURING PERIOD YOUR APPLICATIONS UNDER CONSIDERATION.

C. O. Mittendorf

C. O. Mittendorf
Administrator, DMEA

WSMartin/foc 5-15-53

Copy to: Mr. Cooney - CONFIRMATION
Docket 2963
Docket 2964
Code 400
Operating Committee
Adm. Reading File
Martha Carr- USGS
J. M. Forbes - USBM
Audits Div., Bur. Mines
Field Team, Reg. IV

P.N.
5-15-53

W. S. Martin, Ext. 5284

Interior Department

FILE COPY
SURNAME:

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

Prior Minerals Exploration Administration
14X 3923.970 - Working Fund - DMEA

Martin
Rutledge

NIGHT LETTER

E. C. Schroeder Co., Inc.
Care of M. M. Cooney
705 Roshek Building
Dubuque, Iowa

May 15, 1953

RE YOUR EXPLORATION APPLICATIONS DOCKET NUMBERS 2963 and 2964, IRON. ~~THIS IS TO~~ ADVISE YOU THAT EFFECTIVE APRIL 15, 1953, EXPLORATION FUNDS RESTRICTED TO ASSISTANCE ONLY FOR SPECIFIED MINERALS STILL IN SHORT SUPPLY. IRON NO LONGER INCLUDED. CONSEQUENTLY WE DO NOT HAVE AUTHORITY OR FUNDS TO EXECUTE CONTRACTS FOR EXPLORATION PROJECTS ON YOUR PROPERTY AND YOUR APPLICATIONS THEREFORE ARE DENIED. THIS IS WITHOUT PREJUDICE TO THE MERITS OF YOUR PROPOSED PROJECTS. WE REGRET THE NECESSITY OF THIS ACTION AND EXPRESS APPRECIATION FOR YOUR INTEREST IN THE EXPLORATION PROGRAM AND COOPERATION DURING PERIOD YOUR APPLICATIONS UNDER CONSIDERATION.

C. O. Mittendorf

C. O. Mittendorf
Administrator, DMEA

WSMartin/foc 5-15-53

Copy to: Mr. Cooney - CONFIRMATION
Docket 2963
Docket 2964
Code 400
Operating Committee
Adm. Reading File
Martha Carr- USGS
J. M. Forbes - USBM
Audits Div., Bur. Mines
Field Team, Reg. IV

J.H.
5-15-53

Docket.

CLEWELL, COONEY AND FUERSTE
LAW OFFICES
705 ROSHEK BUILDING
DUBUQUE, IOWA

ROBT. W. CLEWELL
M. M. COONEY
WILLIAM C. FUERSTE

DIAL 3-5749

April 28, 1953.

WSM

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
APR 30 1953

Mr. W. S. Martin, Acting Chief,
Iron & Ferro Alloys Division,
Defense Minerals Exploration Administration,
Department of the Interior,
Washington 25, D.C.

Re: DMEA - 2963 & 2964
Exploration Assistance - Good Fortune
and Nightingale Groups

Dear Mr. Martin:

Thank you very much for your letters advising us that the applications of the E. C. Schroeder Co., Inc. had been referred to the Denver office. When I returned from Arizona I had a letter from Mr. King advising us that the field team would be sent to view the property next week for which we are very grateful.

Yours very truly,

CLEWELL, COONEY & FUERSTE,

BY M. M. Cooney

MMC:C

Docket

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

224 New Customhouse
Denver 2, Colorado

April 17, 1953

WSM

Memorandum

To: C. O. Mittendorf, Administrator
Defense Minerals Exploration Administration

From: Executive Officer, DMEA Field Team, Region IV

Subject: DMEA Dockets 2963 and 2964, E. C. Schroeder Company, Inc., Laramie County, Wyoming (Iron)

The subject dockets were received from your office yesterday, April 16.

Mr. Paul Schroeder called from Douglas, Wyoming this morning and indicated that he was expecting the field examiners to visit the property on Monday. When he was advised that this would not be possible he intimated in a more or less threatening way that he would telephone the Washington office.

When we took stock of our committments we found that it would not be possible for examiners to visit the property before May 4. We informed Mr. Schroeder of this by telegram, copy of which is enclosed.

W. H. King
W. H. King

Enclosure

Copy retained 400

STANDARD FORM No. 14
APPROVED BY THE PRESIDENT
MARCH 10, 1926

WESTERN UNION

TELEGRAM

OFFICIAL BUSINESS—GOVERNMENT RATES

FROM 224 Customhouse, Denver, Colo.

BUREAU of Mines (DMEA)

CHG. APPROPRIATION CHARGE-Straight Telegram

April 17, 1953

U. S. GOVERNMENT PRINTING OFFICE 10—1723

Mr. Paul Schroder
Douglas, Wyoming Telephone: 296W

Reurtel conversation today with King of the Denver DMEA Office.

Because of prior commitments, it will not be possible for field examiners to visit your property in connection with DMEA Dockets 2963 and 2964 before week beginning May 4 providing the area is accessible.

DMEA Field Team, Region IV

W. H. King

W. H. King

A. H. Koschmann

A. H. Koschmann

Copy to C. O. Mittendorf
A. H. Koschmann (2)
W. M. Traver
Accounts
Sub
Chron

WHK:ld

400

FILE COPY
SURNAME:

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

Hopkins
Martin
Forbes
Selfridge
Feldmann
Whittemore

APR 13 1953

Mr. W. H. King, Executive Officer
DMEA Field Team, Region IV
224 New Customhouse Building
Denver 2, Colorado

Re: Docket No. DMEA-2964 - Iron
H. C. Schroeder Co.
Good Fortune group
Laramie County, Wyoming (?)

Dear Mr. King:

Reference is made to the subject application for exploration assistance which is being referred to your office for review and field examination.

The applicant, H. C. Schroeder Co., is presently mining iron ore from a deposit on this group, and to date of the application has shipped 144 cars of ore which had an average iron analysis in excess of 60 percent and a silica content below 10 percent. It is not stated that this is approximately the average analysis of the estimated 200,000 tons in this deposit or if it is the average analysis of selectively mined or beneficiated ore. We believe this should be checked during field examination.

Under item 5(b) of the application form MF-103 you will note that it is proposed to churn drill on 100-foot centers throughout the area, except the area immediately adjoining present mining operations. It is our belief that spacing holes so closely does not actually constitute exploration work but in reality approaches what might be termed development work. We suggest that in your field examination consideration be given to the spacing of drill holes on 200-foot centers. If this is found to be feasible and will accomplish the desired purpose, the number of drill holes and ultimate cost of the project will be materially reduced.

In a letter from the attorneys for the applicant, it is stated that this group of claims is located in Platte County, Wyoming, while the mineral certificate shows Laramie County. We believe this discrepancy should be checked.

Sincerely yours,

Chairman, Operating Committee (JHB)

Copy to: Docket
Field Team, Reg. 4
Admr. Read. File
Code 400
Oper. Comm.
Martha Carr - USGS
J. M. Forbes - USBM

J. C. 4/13/53

JHopkins/ls
4/9/53

APPROVED:

Member, Bureau of Mines (JHB)

Member, Geological Survey (JHB)

FILE COPY
SURNAME:

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

Hopkins
Martin
Forbes
Schroeder
Thompson
Anderson

Air Mail

Mr. W. H. King, Executive Officer
DMEA Field Team, Region IV
224 New Customhouse Building
Denver 2, Colorado

APR 13 1953

Re: Docket No. DMEA-2963 - From
E. C. Schroeder Co.
Nightingale Group
Laramie County, Wyoming (?)

Dear Mr. King:

J.C. 4/13/53

Reference is made to the subject application for exploration assistance which is being referred to your office for review and field examination. The E. C. Schroeder Co. has applied for similar exploration assistance on the Good Fortune Group of claims under Docket No. DMEA-2964.

Under item 5(b) of the application (Form-MF-103), you will note that it is proposed to churn drill on 100-foot centers throughout the area, except the area adjoining mining operations. It is our belief that spacing drill holes so closely does not actually constitute exploration work but in reality approaches what might be termed development work. We suggest that in your field examination, consideration be given to the spacing of drill holes on 200-foot centers. If this is found to be feasible and will accomplish the desired purpose, the number of drill holes and ultimate cost of the project will be materially reduced.

In a letter from the attorneys for the applicant, it is stated that this group of claims is located in Platte County, Wyoming, while the mineral certificate shows Laramie County. We believe this discrepancy should be checked.

Sincerely yours,

[illegible] (JHS)
Chairman, Operating Committee

APPROVED:

[illegible] (JHS)
Member, Bureau of Mines

A. B. King, Jr. (JHS)
Member, Geological Survey

Copy to: Docket
Field Team, Reg. 4
Code 400
Oper. Comm.
Admr. Read. File
Martha Carr - USGS
J. M. Forbes - USBM

JHopkins/ls
4/9/53

SURNAME
FILE COPY
Stephen
Martin
Forbes
Selfridge

Interior Department

Defense Minerals Exploration
Administration

14X3923.970 - Working Fund - DMEA

APR 9 1953

DAY LETTER

M. M. COONEY
OLIWELL, COONEY AND TIERSTE
705 ROSHEK BUILDING
DUBUQUE, IOWA

DOCKETS NO. DMEA 2963 AND NO. DMEA 2964 - E. C. SCHROEDER CO., MC GREGOR, IOWA. APPLICATIONS BEING REFERRED ~~TODAY~~ TO FIELD TEAM, DENVER, COLORADO, FOR EXAMINATION.

C. O. Mittendorf (fw)

C. O. MITTENDORF
ADMINISTRATOR, DMEA

S.N.
4/9/53

cc: Docket
Field Team, Reg. 4
Code 400
Admr. Read. File
Oper. Committee
Audits Divn., Bur. of Mines
Martha Carr, USGS
J. M. Forbes, USBM
Confirmation Copy to M. M. Cooney

JHopkins/ls
4/8/53

Docket

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

April 9, 1953

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
APR 10 1953

Memorandum

To: W. S. Martin, DMEA

From: Jachin M. Forbes, Ferrous Metals and Alloys Branch

Subject: Application for Exploration Assistance: E. C. Schroeder Inc. DMEA 2963 - Iron Ore

The subject application has been reviewed together with an analytical statement by Miss Martha Carr, United States Geological Survey. I concur with the recommendation to submit the proposal to the field team and suggest clarification of one or two particular points in order to obtain a realistic perspective of the entire project.

The Schroeder Co. is an established iron ore producer in Wyoming and Alabama and enjoys a good reputation as to reliability and competent management. However, the current market for a substantial portion of the output from Wyoming is in Alabama where consumers contemplate ample supplies of high-grade imported ore within the next few years. Although approval of the exploration proposal need not be contingent upon a firm market for the output, some understanding of economic prospects should be obtained. Obviously, transportation costs for Wyoming ore going to Alabama permit only the narrowest of operating margins.

The application lists several analyses indicating ore of high iron content, and the accuracy of these cannot be doubted. However, it is interesting to note that Colorado Fuel and Iron Corp. has been mining ore of substantially lower iron content from the nearby Sunrise mine. The field team should find out why C.F.&I. has not chosen to acquire the ore properties concerned.

I am informed that buyers in Alabama place a rejection limit of 55 percent content iron on this ore, and it seems probable that current mining is highly selective.

JMF

Jachin M. Forbes

Copy retained 400 & 2 copies sent to F.T. on 2/14/53.
L.S.

Enclosure

IN REPLY REFER TO:

G-MD-MC

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

April 7, 1953

To: W. S. Martin, DMEA.

From: Martha Carr, USGS.

WSM

Subject: Exploration Application $223,085 DMEA 2964 (Soft and hard hematite)

E. C. Schroeder Co., Inc.
McGregor, Iowa.

Property: Parts of the Good Fortune and Bluebird Mining Claims, the Good Fortune Annex, Apex, Cottonwood, and Denver & Gulf Mining Claims, known as the Good Fortune group, embracing parts of the SE¼ sec. 7 and SW¼ sec. 8 (as well as a very small part of the SE¼ sec. 8), T. 27 N., R. 65 W., Platte Valley Mining District, Platte County, Wyoming. The property has good access roads and is located approximately 8 miles from its railroad supply and shipping point and about 9 miles from Guernsey, Wyo., the resident point. This group of claims is 7-8 miles from the Nightingale group (DMEA 2963).

Proposal: It is proposed that churn drilling be done on 100-foot centers throughout the property included in this application, except the area immediately adjoining present mining operations. The proposed area of exploration is shown in Exhibit "5", and approximately 345 holes with an average depth of 100 feet would be drilled. Some of the holes will be shallow while others will exceed the 100-foot average. The depth of drilling each hole will be determined as the drilling and geological investigation proceed. The applicant, who is mining the Good Fortune and Bluebird Mining Claims, proposes to start exploration on the portions of these claims that are not included in the present mining operations. As the drilling and geological exploration proceed, it will be determined which claim will be explored next, and maps of the proposed drilling and exploration will be furnished. The work would start within 30 days and be completed within 22 months from the date of an exploration project contract.

Copy sent to T. with ltr of regarding.

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Geology: The rocks of the area comprise the steeply dipping pre-Cambrian rocks of the Hartville Range which are overlain by the flat-lying or gently dipping Carboniferous and Mesozoic rocks. Rocks of Tertiary and Recent age encircling the older rocks fill depressions of erosion.

The main iron ore deposits are lenses that occur in the Whalen group (pre-Cambrian) in schist on a limestone foot wall. The ore largely replaces schist although it partially fills cavities in the schist which are due to jointing, faulting, and brecciation. Less important deposits occur in the limestone. The conditions that apparently determine the presence of large ore bodies along the limestone-schist contact appear to be (1) the folding to which the rocks have been subjected and (2) the presence of a thick body of schist—to serve as a source of ore—above an impervious body of limestone. Small local deposits of hematitic conglomerate occur at the base of the Guernsey formation (Carboniferous) resting on the Whalen group.

The ore bodies that occur as lenses range in width from 100 feet or more, and some are over 1,000 feet long. One ore body is reported to have reached a depth of 900 feet. One of the principal deposits of this type is said to be the Good Fortune.

The chief ore is high-grade hematite which is either a hard bluish gray ore known as "blue ore" or a soft greasy ore of brownish-red color known as "paint ore." The "blue ore" is more valuable. Minor amounts of siderite and limonite are associated with the hematite. Magnetite is present in very minor amounts. The ore as a whole may average about 60 percent iron. In some ore the phosphorus and silica are detrimental constituents.

The property described in this application appears to be immediately underlain by rocks of the Whalen group (which contains the main iron ore bodies), and is more promising than the property outlined in DMEA 2963.

Publications:

Smith, W. S. T., Hartville folio, Wyo.: U. S. Geol. Survey Geol. Folio 91, 12 pp., 1903.

Ball, S. H., The Hartville iron-ore range: U. S. Geol. Survey Bull. 315, pp. 190-205, 1907.

Frey, Eugene, Hartville iron district, Platte County, Wyo.: U. S. Bureau of Mines R. I. 4086, 3 pp., June 1947.

———————— Good Fortune iron mine, Platte County, Wyo.: U. S. Bureau of Mines R. I. 4089, 7 pp., August 1947.

Condra, G. E. and Reed, E. C., Permo-Pennsylvanian section of the Hartville area of Wyoming: Nebraska Geological Survey Paper No. 9, 46 pp., 1935.

Recommendations: The property described as the Good Fortune group appears to be promising, but inasmuch as the Geological Survey has made no recent examinations of the area, it is suggested that the application, together with DMEA 2963, be referred to the field team for advice.

Martha Carr

IN REPLY REFER TO:

G-MD-MC

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

April 7, 1953

To: W. S. Martin, DMEA.

From: Martha Carr, USGS.

Subject: Exploration Application $212,749 DMEA 2963 (Soft and hard hematite)

E. C. Schroeder Co., Inc.,
McGregor, Iowa

Property: Nightingale, Origan, Columbia, Rustler, and Black Cloud Mining Claims, known as the Nightingale group, embracing parts of the SW¼ and NW¼, sec. 6, and a very small part of the NW¼ sec. 7, T. 27 N., R. 65 W.; and a part of the SE¼ sec. 1, T. 27 N., R. 66 W., Platte Valley Mining District, Platte County, Wyoming. The property, which has good access roads, is approximately 8½ miles from its railroad supply and shipping point and 7 miles from Guernsey, Wyo., the resident point. It is adjacent to the Colorado Fuel and Iron Co.'s Sunrise Iron Mine; and is 7-8 miles from the Good Fortune Group (DMEA 2964) by the nearest access road.

Proposal: It is proposed that churn drilling be done on 100-foot centers throughout the property included in this application, except the area immediately adjoining present mining operations. Exploration would start on the Nightingale mining claim in the proposed area shown in Exhibit 5, and approximately 328 holes with an average depth of 100 feet would be drilled. The depth of the holes is to be determined as drilling and geological investigations proceed; some will be shallow while others will exceed the 100-foot average. Also as work progresses, the claims to be explored next will be determined, and maps of the proposed drilling and exploration will be furnished. The work would start within 60 days and be completed within 22 months from the date of an exploration project contract.

copy sent FT
with ltr of referral.

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Geology: The rocks of the area comprise the steeply dipping pre-Cambrian rocks of the Hartville Range which are overlain by the flat-lying or gently dipping Carboniferous and Mesozoic rocks. Rocks of Tertiary and Recent age encircling the older rocks fill depressions of erosion.

The main iron ore deposits are lenses that occur in the Whalen group (pre-Cambrian) in schist on a limestone foot wall. The ore largely replaces schist although it partially fills cavities in the schist which are due to jointing, faulting, and brecciation. Less important deposits occur in the limestone. The conditions that apparently determine the presence of large ore bodies along the limestone-schist contact appear to be (1) the folding to which the rocks have been subjected and (2) the presence of a thick body of schist--to serve as a source of ore--above an impervious body of limestone. Small local deposits of hematitic conglomerate occur at the base of the Guernsey formation (Carboniferous) resting on the Whalen group.

The ore bodies that occur as lenses range in width from 100 feet or more, and some are over 1,000 feet long. One ore body is reported to have reached a depth of 900 feet.

The chief ore is high-grade hematite which is either a hard bluish gray ore known as "blue ore" or a soft greasy ore of brownish-red color known as "paint ore." The "blue ore" is more valuable. Minor amounts of siderite and limonite are associated with the hematite. Magnetite is present in very minor amounts. The ore as a whole may average about 60 percent iron. In some ore the phosphorus and silica are detrimental constituents.

Only the southeastern most part of the Nightingale group of claims appears to be immediately underlain by the rocks of the Whalen group, which contains the main iron ore bodies. The areas to the north and northwest are underlain by the Guernsey and Hartville formations, which overlie the Whalen rocks. Important ore bodies in this area would therefore probably lie at greater depth than those in the Good Fortune Group.

Publications:

Smith, W. S. T., Hartville folio, Wyo.: U. S. Geol. Survey Geologic Folio 91, 12 pp., 1903.
Ball, S. H., The Hartville iron-ore range: U. S. Geol. Survey Bull. 315, pp. 190-205, 1907.

Frey, Eugene, Hartville iron district, Platte County, Wyo.: U. S. Bureau of Mines R. I. 4086, 3 pp., June 1947.
Condra, G. E. and Reed, E. C., Permo-Pennsylvanian section of the Hartville area of Wyoming: Nebraska Geological Survey Paper No. 9, 46 pp., 1935.

Recommendations: The southeasternmost part of the property described appears to be immediately underlain by the Whalen group (which contains the main ore bodies) and therefore seems to have most promise. The remainder of the property appears to be underlain by the Guernsey and Hartville formations in which no important bodies can be expected. The economic possibilities of this part of the property therefore depends largely upon the depth of the Guernsey and Hartville formations to the Whalen group. (See Folio 91)

As the Geological Survey has made no recent examinations in the area, it is suggested that this application, together with DMEA 2964, be referred to the field team for advice.

Martha Carr

April 6, 1953

MEMORANDUM FOR THE FILE

Re: Dockets Nos. 2963 and 2964 - Iron
Schroeder Co., McGregor, Iowa
Nightingale group & Good Fortune group of claims
Platte County, Wyoming

Judge Cooney telephoned from Dubuque, Iowa, to Mr. Martin to ask when above-noted applications will reach Field Team. Cooney leaves Sunday night, April 12, for Arizona, for a couple of weeks. He stated there is no telephone at the mine and Paul Schroeder lives at Douglas about 100 miles away. Cooney asked that we wire him instead of sending a letter if the cases are referred to the Field Team for examinations this week, and he will phone Mr. King in Denver about contact Paul Schroeder relative to the examinations. Cooney asked that we phone him collect if we find need for any further data besides the data submitted with the applications.

From shorthand notes by
Letha Scott

Noted: WSM

FILE COPY
SURNAME:

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

April 6, 1953

4/6/53

MEMORANDUM FOR THE FILE

Re: Dockets Nos. 2963 and 2964 - Iron
Schroeder Co., McGregor, Iowa
Nightingale group & Good Fortune group of claims
Platte County, Wyoming

Judge Cooney telephoned from Dubuque, Iowa, to Mr. Martin to ask when above-noted applications will reach Field Team. Cooney leaves Sunday night, April 12, for Arizona, for a couple of weeks. He stated there is no telephone at the mine and Paul Schroeder lives at Douglas about 100 miles away. Cooney asked that we wire him instead of sending a letter if the cases are referred to the Field Team for examinations this week, and he will phone Mr. King in Denver about contact Paul Schroeder relative to the examinations. Cooney asked that we phone him collect if we find need for any further data besides the data submitted with the applications.

From shorthand notes by
Letha Scott

Noted: _____

April 1, 1953

Mr. M. M. Cooney
Clewell, Cooney and Fuerste
Law Offices
705 Roshek Bldg.
Dubuque, Iowa

Subject: DMEA-2963
Re: Exploration Assistance
Nightingale Group

My dear Mr. Cooney:

The receipt of your application dated March 28, 1953 for exploration assistance under the Defense Production Act of 1950, as amended, is hereby acknowledged.

Your application has been assigned Docket Number DMEA-2963 and referred to the Iron and Ferro-Alloys Division.

Kindly refer to DMEA-2963 in any future correspondence relating to your application.

Sincerely yours,

ROBERT E. ADAMS

Robert E. Adams, Chief
Operations Control and
Statistics Division

CLEWELL, COONEY AND FUERSTE
LAW OFFICES
705 ROSHEK BUILDING
DUBUQUE, IOWA

ROBT. W. CLEWELL
M. M. COONEY
WILLIAM C. FUERSTE

DIAL 3-5749

March 30, 1953

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
MAR 30 1953

Administrator
Defense Minerals Exploration Administration
Washington, D. C.

Attention: W. S. Martin, Acting Chief
Iron and Ferro Alloys Division

Dear Sir:

We are enclosing herewith the application, in quadruplicate, of the E. C. Schroeder Co., Inc., for aid in an iron ore Exploration Project pursuant to DMEA Order 1 under the Defense Production Act of 1950 as amended.

This application pertains to what is known as the Nightingale group of mining claims near Guernsey in Platte County, Wyoming.

Please address any correspondence concerning this application to this office.

Very truly yours,

Clewell, Cooney, & Fuerste

By M. M. Cooney

MMC/js
Enclosures

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

MAR 30 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-2965
Metal or Mineral
Date Received 3-30-53
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: E. C. Schroeder Co., Inc., McGregor, Iowa, an Iowa corporation
Mining operations at Guernsey, Wyoming

(*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 The property involved in the proposed exploration consists of the Nightingale, Origan, Columbia, Rustler and Black Cloud mining claims. The legal description of each of said claims is set out in Exhibit "1" hereto attached.

(*b*) State any mine name by which the property is known. Nightingale group.

(*c*) State your interest in the land, whether owner, lessee, purchaser under contract, or otherwise Applicant is lessee of the property

(*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. See Exhibit "2" hereto attached.

(*e*) If you own the land, describe any liens or encumbrances on it

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

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.

(*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.

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

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

5. *The exploration project.*—(*a*) State the mineral or minerals for which you wish to explore Iron ore

(*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.

(*c*) The work will start within 60 days and be completed within 22 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.

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.).

(*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.

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

(*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.

(*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.

(*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.

(*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.

(*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.

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

(*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 28, 1953

E. C. SCHROEDER CO., INC.
(Applicant)

By E. C. Schroeder
President

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

Form MF-103
E. C. Schroeder Co.,Inc., McGregor, Iowa.
Mining Operations, Guernsey, Wyoming.

1. (c) President - E. C. Schroeder, McGregor, Iowa.
Vice President - Paul E. Schroeder, Douglas, Wyoming.
Secretary & Treasurer - Violet M. Schroeder, McGregor, Iowa.

4.(a) The Nightingale group of mining claims is adjacent to the Colorado Fuel and Iron Company's Sunrise Iron Mine which is presently being mined. The claims in question are approximately two and one-half to three miles, as the crow flies, from the Good Fortune Iron Mine and between seven and eight miles by the nearest access road. The Colorado Fuel and Iron Company mine separates the two properties as shown by Exhibit "3" attached hereto.

The Good Fortune Iron Mine was investigated by Mr. Eugene Frey of the Bureau of Mines and a Report of Investigation was made in August, 1947, and is contained in R.I. 4089. The applicant is presently mining by open pit method, parts of the Good Fortune and Bluebird mining claims which is the site of the old Good Fortune Iron Mine. The production facilities consist of power shovels, trucks, drills, crushers and railroad loading facilities. The applicant is the owner of the mining facilities and the mine is readily accessible for examination purposes. The Nightingale claim of the Nightingale group which the applicant desires to explore was formerly mined. The records of the ore removed are not accessible to this applicant. The applicant has sampled the ore found in the abandoned shaft and the analysis shows an average better than 60% Fe and was low in both silica and phosphorous. The property is readily accessible for examination purposes.

(b) The Good Fortune Iron Mine is a part of the Good Fortune group of claims which were located in 1857. In the winter of 1897-98, five thousand tons of ore were shipped from the Good Fortune deposit to the Colorado smelters. The average rate of smelter analysis on the shipments was 62.4% iron and 6.2% silica. As shown by Mr. Frey's report in 1947, R.I. 4089, the property was explored and sampled at that time by the Bureau of Mines. The applicant commenced production from said mine during December, 1952, after exploring an area of approximately four acres. It is estimated that the reserves from the area explored are in excess of two hundred thousand tons of iron ore. During December and January the applicant shipped 144 cars of iron ore which had an average Fe analysis in excess of 60% and a silica content below 10%.

Form NF-103
E. C. Schroeder Co.,Inc., McGregor, Iowa.
Mining Operations, Guernsey, Wyoming.

4. (c) The property proposed for prospecting lies in the Hartville iron range. The rocks of the range are usually steeply dipping pre-Cambrian rocks overlain by flat-line or gently dipping carboniferous and Mesozoic rocks and rocks of Tertiary and Recent age. The country rock of the ore is schist and impure flint which is stained by either limonite or hematite, evidently a relatively shallow alteration product of the schist.

The red ore deposits of the area occur in lenticular bodies of varying thickness enclosed in a slate formation. The iron ore lenses lie in schist immediately above the uppermost limestone of the older pre-Cambrian series. A thin shell of siliceous iron-stained schist separates the ore from the underlying limestone. All indications show that the deposit is but a replacement of the schist, since no hard and fast line can be drawn between unaltered schist, iron-stained schist, siliceous ore, and high-grade ore.

The ore consists of two varieties of hematite, one soft and the other hard. The soft ore is generally a schistose, fine-grained, light red ore. This variety is commonly known as "paint ore". The harder variety is a dark bluish-gray. It is fine-grained and compact, with a rather smooth, even fracture.

The Colorado Fuel and Iron Company has been mining iron ore on the property adjoining the applicant's for many years, their mines being known as the Sunrise and the Chicago Mines which have produced thousands of tons of high grade ore.

Attached hereto marked Exhibit "3" is a map of the area showing the applicant's property as related to the Colorado Fuel and Iron Company property.

The applicant does not have a geologic report on the property but does have a report on the Good Fortune property which it will submit to the field team. As heretofore stated the samples taken from the shaft on the Nightingale claim had an average analysis of 60% Fe and were low in silica and phosphorous. The iron ore presently being mined from the Good Fortune Iron Mine is similar to that contained on the Nightingale and for that reason the applicant is attaching hereto marked Exhibit"4", the assaying report on the ore mined and shipped from the Good Fortune Iron Mine for the period from January 28, 1953 to February 20, 1953.

(d) The property has good access roads and is located approximately eight and one-half miles from its railroad supply and shipping point and about seven miles from Guernsey, Wyoming, the resident point.

(e) The necessary manpower, materials, supplies, equipment, water and power are available to the applicant. The ore from this property will be transported in trucks to the processing plant which is situated at its railroad supply and shipping point and is the same

4.(e) continued.

point to which the ore from the Good Fortune mine is transported and processed. The Good Fortune mine is located approximately eight miles from this point.

5. (b) It is proposed that churn drilling be done on 100 ft. centers throughout the property included in this application, except the area immediately adjoining present mining operations. The proposed area of exploration is shown in Exhibit "5" attached hereto. It is proposed to start exploration in the area shown in Exhibit "5". It is proposed to drill approximately 328 holes with an average depth of 100 ft. Some of the holes will be shallow while others will exceed the 100 ft. average. This will be determined as the drilling and geological investigation proceeds.

(d) The E. C. Schroeder Co.,Inc., is an Iowa corporation, which has been mining and quarrying stone products for several years. The Schroeder Co. which is a wholly owned subsidiary of the applicant herein is engaged in the mining of brown iron ore in the Russellville area of Franklin County, Alabama. The officers of both companies are the same. The president, E. C. Schroeder, has had several years experience in iron ore mining on the Mesabi Range in Northern Minnesota and in the rock mining business in Iowa, Wisconsin, Alabama, and various other places. The vice president, Paul E. Schroeder, has had several years experience in the rock mining business, and is in charge of the Wyoming operation. He was in charge of erection of the Russellville beneficiation plant. An engineer-geologist is available and will be in charge of the proposed exploration work. The supervisory help and plant operators are experienced in their field.

6. The applicant proposes that if this application is approved that it be set up on the short form contract and the estimated costs of the project are as follows:

32,800 ft. of churn drilling @ $6.48 per ft..... $212,749.00

The breakdown on the costs of the project is as follows:

Churn Drilling (including water hauling)
$5.00 per ft.....$164,000.00

Form MF-103
E. C. Schroeder Co.,Inc., McGregor, Iowa.
Mining Operations, Guernsey, Wyoming.

6. (continued)

The applicant arrived at the price per ft. by securing bids from three drilling contractors as follows:

R. L. Mills, P.O. Box 1109, Casper, Wyoming, 6" hole, $6.25 per ft.

Al Herman, Windover, Wyoming, 6" hole, $5.00 per ft. and $10.00 per ft. for drilling quartzite.

McChesney Drilling Co., 1214 S. David St., Casper, Wyoming, 6" hole $5.00 per ft.

(The applicant to furnish roads and access in connection with all three bids.)

Bulldozing and road building including blasting, $1.00 per ft.....	$32,800.00
One- half salary of exploratory engineer or $275.00 per month for 22 months.....	6,050.00
Assaying, 8 samples per hold at $1.00 per element; 328 holes or 2624 samples at $1.00 per sample..... (Majority of samples will be assayed for Fe only.)	2,624.00
One Sampler at $65.00 per week for 95 weeks.....	6,175.00
Proportionate share of salary of bookkeeper and office expense, $50.00 per month for 22 months....	1,100.00
Total	$212,749.00

It is to be noted that only one-half the salary of the exploratory engineer is included in the cost. This is for the reason that the Company is making application for exploratory aid on the Good Fortune Group of mining claims which is between seven and eight miles from the Nightingale group of mining claims and it is the thought of the applicant that the exploratory engineer can look after both projects.

Form MF-103
E. C. Schroeder Co., Inc., McGregor, Iowa.
Mining Operations, Guernsey, Wyoming.

The exploration map Exhibit "5" shows the mining claims that are proposed to be explored but does not show the sequence of drilling. The applicant proposes to start exploration on the Nightingale mining claim and as the drilling and geological exploration proceed it will determine which claim will be explored next and will furnish maps of the proposed drilling and exploration.

The applicant will furnish a statement of guaranty in lieu of subordination agreement from owner in a form acceptable to the United States of America.

The applicant herewith states and certifies that the lease, Exhibit "2" under which it is operating is a valid lease and in full force and effect.

UNITED STATES OF AMERICA PATENT
General Land Office No. 36487 Mineral Certificate 137
Dated March 17, 1903
Recorded in Book 124, Page 558, Laramie County, Wyoming

From The United States of America to Charles A. Guernsey.

Certain mining claim or premises known as the Nightingale, Origan, O. K., Rustler, El Paso, Standard, Hoosier, Clipper, Humboldt, Iron Clad, Columbia, Black Cloud and Monitor No. 2, lode mining claims designated by the Surveyor-General as Lot No. 196, embracing a portion of sections six and seven in township 27 north of range 65 west, and sections 1 and 12, in township 27 north of range 66 west Sixth Principal meridian in the Platte Canon Mining District, in the County of Laramie and State of Wyoming, in the District of Lands subject to sale at Cheyenne and bounded, described, and platted as follows, with magnetic variation 14° and 58' east.

Beginning for the description of the Nightingale lode claim at corner No. 1, a quartzite stone 28x10x8 inches, chiseled 1-1-196, with mound of stone, from which a pine 14" in diameter blazed and marked B.T. 1-196 bears north 28° and 30' east 61' distant, a pine 12" in diameter blazed and marked B.T. 1-1-196 bears south 88° and 5' west 36.5' distant and the south quarter corner of section 6, in township 27 north of range 65 west, Sixth Principal meridian, bears south 49° east 1,202.3' distant.

Thence, first course, south 45° and 24' west 300' to a point from which discovery cut bears north 49° and 12' west 1,200' distant; 600' to corner No. 2.

Thence, second course, north 49° and 12' west 1,500' to corner No. 3.

Thence, third course, north 45° and 24' east 600' to corner No. 4.

Thence, fourth course, south 49° and 12' east 1,500' to corner No. 1, the place of beginning, the survey of the lode claim as above described extending 1,500' in length along said Nightingale vein or lode.

Beginning for the description of the Origan lode claim at corner No. 1, identical with corner No. 1 of said Nightingale lode claim, situate on line 3-4 of said Crown lode claim.

Thence, first course, north 45° and 24' east 600' to corner No. 2, situate on line 3-4 of said Crown lode claim.

Thence, second course, north 49° and 12' west 1,500' to corner No. 3.

Thence, third course, south 45° and 24' west 300' to a point from which discovery shaft bears south 49° and 12' east 400' distant; 600' to corner No. 4, identical with corner No. 4 of said Nightingale lode claim.

Thence, fourth course, south 49° and 12' east 1,500' to corner No. 1, the place of beginning, the survey of the lode claim as above described extending 1,500' in length along said Origan vein or lode.

Beginning for the description of the O. K. lode claim at corner No. 1, a limestone 24x12x8 inches, chiseled 2-1-196, with mound of stone, identical with corner No. 2 of said Origan lode claim situate on line 3-4 of said Crown lode claim, from which said quarter section corner bears south 21° and 38' east 1,302' distant.

Thence, first course, north 45° and 24' east 154' to corner No. 3 of said Crown lode claim; 600' to corner No. 2.

Thence, second course, north 49° and 12' west 1,500' to corner No. 3.

Thence, third course, south 45° and 24' west 300' to a point from which discovery cut bears south 49° and 12' east 400' distant; 600' to corner No. 4, identical with corner No. 3 of said Origan lode claim.

Thence, fourth course, south 49° and 12' east 1,500' to corner No. 1, the place of beginning; the survey of the lode claim as above described extending 1,500' in length along said O. K. vein or lode.

Beginning for the description of the Rustler lode claim at corner No. 1, a quartzite stone 24x12x8 inches, chiseled 1-196, with mound of stone, from which the southwest corner of said section 6 bears south 89° and 11' west 172.1' distant.

Thence, first course, south 66° and 8' east 135.68' intersect line 54-55 of the Alaska lode claim survey No. 49, at south 80° west 496.5' from corner No. 55; 160.95' intersect line 60-57 of the Old Sledge lode claim survey No. 49, at south 59° and 10' west 839.66' from corner No. 60; 215.47' to corner No. 2.

Thence, second course, north 80° and 22' east 448.6' intersect line 8-5 of the Moore lode claim survey No. 53, at south 37° and 48' east 62.96' from corner No. 8; 455.24' intersect line 55-56 of said Alaska lode claim at south 37° and 48' east 53.56' from corner No. 55; 1,091.6' to corner No. 3.

Thence, third course, north 56° and 55' east 31.8' intersect line 6-7 of said Moore lode claim and 12-9 of said Maine lode claim at south 37° and 48' east 25.8' from corners Nos. 7 and 9 of said claims respectively; 200' to corner No. 4, identical with corner No. 1 of said Crown lode claim.

Thence, third course, south 25° east 1,500' to corner No. 4, situate on line 3-4 of said Hoosier lode claim.

Thence, fourth course, south 59° and 10' west 300' to a point from which discovery cut bears north 25° west 100' distant; 600' to corner No. 1, the place of beginning; the survey of the lode claim as above described extending 1,500' in length along said Iron Clad vein or lode.

Beginning for the description of the Columbia lode claim at corner No. 1, a quartzite stone 28-10-7 inches, chiseled 4-1-196, with mound of stone, identical with corner No. 4 of said Iron Clad lode claim, from which said section corner bears south 5° and 16' west 893.12' distant; a pine 12" in diameter blazed and marked B.T. 4-1-196 bears north 1° and 21' west 48' distant and a pine 6" in diameter blazed and marked B.T. 4-1-196 bears south 52° and 7' east 43' distant.

Thence, first course, north 25° west 1,500' to corner No. 2, identical with corner No. 3 of said Iron Clad lode claim.

Thence, second course, north 59° and 10' east 300' to a point from which discovery cut bears south 25° east 700' distant; 600' to corner No. 3.

Thence, third course, south 25° east 1,500' to corner No. 4.

Thence, fourth course, south 59° and 10' west 315.24' to corner No. 3 of said Hoosier lode claim; 600' to corner No. 1, the place of beginning; the survey of the lode claim as above described extending 1,500' in length along said Columbia vein or lode.

Beginning for the description of the Black Cloud lode claim at corner No. 1, a quartzite stone 24x14x7 inches, chiseled 1-196, with mound of stone situate on line 3-4 of said Columbia lode claim, from which said section corner bears south 12° and 18' west 1,727.98' distant.

Thence, first course, north 45° and 24' east 76.89' to corners Nos. 4 of said Nightingale and Origan lode claims; 676.89' to corner No. 3 of said Origan, and corner No. 4 of said O. K. lode claims; 1,276.89' to corner No. 2, identical with corner No. 3 of said O. K. and corner No. 2 of said Standard lode claims.

Thence, second course, north 29° and 8' east 259.36' to corner No. 3, situate on line 2-3 of said Standard lode claim.

Thence, third course, north 25° west 559.78' to corner No. 4.

Thence, fourth course, south 45° and 24' west 1,500' to corner No. 5, situate on line 3-4 of said Columbia lode claim.

Thence, fifth course, south 25° east 318.45' to a point from which discovery cut bears north 45° and 24' east 1,400' distant; 636.9' to corner No. 1, the place of beginning; the survey of the lode claim as above described extending 1,500' in length along said Black Cloud vein or lode.

Beginning for the description of the Monitor No. 2 lode claim at corner No. 1, a quartzite stone 24x12x10 inches, chiseled 1-196, with mound of stone situate on line 2-3 of said Clipper lode claim, from which said section corner bears north 67° and 6' east 2,091.9' distant.

Thence, first course, south 49° and 12' east 300' to corner No. 2 of said Clipper lode claim from which discovery cut bears south 48° and 43' west 180' distant; 600' to corner No. 2.

Thence, second course, south 48° and 43' west 1,498' to corner No. 3.

Thence, third course, north 49° and 12' west 600' to corner No. 4.

Thence, fourth course, north 48° and 43' east 1,498' to corner No. 1, the place of beginning; the survey of the lode claim as above described extending 1,498' in length along said Monitor No. 2 vein or lode. Expressly excepting and excluding from these presents all that portion of the ground hereinbefore described embraced in said mining claim or survey No. 121; said Old Sledge and Alaska lode claims survey No. 49; said Moore, Maine and Lone Jack lode claims survey No. 53, and said Pacific lode claim survey No. 53 Am, and also all veins, lodes and ledges throughout their entire depth, the tops or apexes of which lie inside of such excluded ground; the granted premises in said lot No. 196 containing 289 acres and .094 of an acre of land, more or less.

Thence, fourth course north 66° and 8' west 95.14' intersect line 9-10 of said Maine lode claim at north 32° and 24' east 130.25' from corner No. 9; 366.905' to a point from which discovery shaft bears south 68° and 36' west 25' distant; 733.81' to corner No. 5, situate on line 2-3 of said Nightingale lode claim.

Thence, fifth course, south 56° and 55' west 71.71' intersect line 59-60 of said Old Sledge lode claim at north 58° and 30' west 185.86' from corner No. 60, 918.73' to corner No. 1, the place of beginning; the survey of the lode claims above described extending 1,011.8' in length along said Rustler vein or lode.

Beginning for the description of the El Paso lode claim at corner No. 1, a quartzite stone 30x14x6 inches, chiseled 1-1-196, with mound of stone, situate on line 2-3 of said O. K. lode claim, from which a pine 12" in diameter blazed and marked B.T. 1-196 bears south 87° and 54' west 51' distant; a pine 18" in diameter blazed and marked B.T. 1-196 bears south 80° and 27' west 48' distant and said quarter section corner bears south 19° and 4' east 2,392.62' distant.

Thence, first course, south 49° and 12' east 300' to a point from which the face of discovery cut bears north 29° and 8' east 700' distant; 600' to corner No. 2, situate on line 2-3 of said O. K. and Mollie Gibson lode claims respectively,

Thence, second course, north 29° and 8' east 942.8' to corner No. 3 of said Mollie Gibson lode claim; 1,500' to corner No. 3.

Thence, third course, north 49° and 12' west 600' to corner No. 4.

Thence, fourth course, south 29° and 8' west 1,500' to corner No. 1, the place of beginning; the survey of the lode claim as above described extending 1,500' in length along said El Paso vein or lode.

Beginning for the description of the Standard lode claim at corner No. 1, identical with corner No. 1 of said El Paso lode claim, from which the center of face of discovery cut bears north 11° and 14' west 467 and 100' distant.

Thence, first course, north 49° and 12' west 537.73' to corner No. 2, identical with corner No. 3 of said O. K. lode claim.

Thence, second course, north 29° and 8' east 1,500' to corner No. 3.

Thence, third course, south 49° and 12' east 537.73' to corner No. 4, identical with corner No. 4 of said El Paso lode claim.

Thence, fourth course, south 29° and 8' west 1,500' to corner No. 1, the place of beginning; the survey of the lode claim as above described extending 1,500' in length along said Standard vein or lode.

Beginning for the description of the Hoosier lode claim at corner No. 1, a limestone 25x12x10 inches, chiseled 1-196, with mound of stone, from which a pine 8" in diameter blazed and marked B.T. 1-196 bears north 33° and 30' west 26' distant and said section corner bears north 76° and 35' east 507.97' distant.

Thence, first course, north 59° and 10' east 1,484.7' to corner No. 2, situate on line 2-3 of said Nightingale lode claim.

Thence, second course, north 49° and 12' west 600' to corner No. 3, situate on line 2-3 of said Nightingale lode claim.

Thence, third course, south 59° and 10' west 1,484.7' to corner No. 4.

Thence, fourth course, south 49° and 12' east 300' to a point from which the face of discovery cut bears north 59° and 10' east 300' distant; 600' to corner No. 1, the place of beginning; the survey of the lode claim as above described extending 1,484.7' in length along said Hoosier vein or lode.

Beginning for the description of the Clipper lode claim at corner No. 1, identical with corner No. 1 of said Hoosier lode claim.

Thence, first course, south 53° and 30' west 1,500' to corner No. 2.

Thence, second course, north 49° and 12' west 300' to a point from which discovery cut bears north 53° and 30' east 300' distant; 600' to corner No. 3.

Thence, third course, north 53° and 30' east 1,500' to corner No. 4.

Thence, fourth course, south 49° and 12' east 600' to corner No. 1, the place of beginning; the survey of the lode claim as above described extending 1,500' in length along said Clipper vein or lode.

Beginning for the description of the Humboldt lode claim at corner No. 1, a red quartzite stone 28x10x7 inches chiseled 1-1-196, with mound of stone, situate on line 3-4 of said Hoosier lode claim, from which said section corner bears south 36° and 40' east 725.35' distant.

Thence, first course, north 25° west 1,500' to corner No. 2.

Thence, second course, south 59° and 10' west 600' to corner No. 3.

Thence, third course, south 25° east 1,500' to corner No. 4, identical with corners Nos. 4 of said Hoosier and Clipper lode claims, respectively.

Thence, fourth course, north 59° and 10' east 300' to a point from which discovery cut bears north 25° west 300' distant; 600' to corner No. 1, the place of beginning; the survey of the lode claim as above described extending 1,500' in length along said Humboldt vein or lode.

Beginning for the description of the Iron Clad lode claim at corner No. 1, identical with corner No. 1 of said Humboldt lode claim.

Thence, first course, north 25° west 1,500' to corner No. 2, identical with corner No. 2, of said Humboldt lode claim.

Thence, second course, north 59° and 10' east 600' to corner No. 3.

UNITED STATES OF AMERICA PATENT
General Land Office No. 36492
Dated March 21, 1903
Recorded in Book 44, Page 608, Laramie County

Mineral Certificate No. 138

From The United States of America to Charles A. Guernsey.

Certain mining claim or premises, known as the Terrible lode mining claim, designated by the Surveyor-General as Lot No. 199, embracing a portion of section 13 in township 27 north of range 66 west and of section 18 in township 27 north of range 65 west, Sixth Principal meridian, in the Platte Canon Mining District, in the County of Laramie and State of Wyoming, in the District of Lands subject to sale at Cheyenne and bounded, described, and platted as follows, with magnetic variation 14° and 5' east.

Beginning at corner No. 1, a quartzite rock 30x12x10 inches, chiseled 1-199, with mound of stone, from which the east quarter corner of section 13, in township 27 north of range 66 west, Sixth Principal meridian bears north 59° and 55' east 926' distant.

Thence, first course, south 82° east 1,200' to corner No. 2.

Thence, second course, south 2° and 23' east 600' to corner No. 3.

Thence, third course, north 82° west 1,200' to corner No. 4.

Thence, fourth course, north 2° and 23' west 300' to a point from which discovery cut bears south 82° east 750' distant; 600' to corner No. 1, the place of beginning said lot No. 199 extending 1,200' in length along said Terrible vein or lode, and containing 16 acres, and .258 of an acre of land, more or less.

UNITED STATES OF AMERICA PATENT
General Land Office No. 36488 Mineral Certificate 139
Dated March 17, 1903
Recorded in Book 44, Page 611

From The United States of America to Charles A. Guernsey

Certain mining claim or premises, known as the Summit, Connection, Moonlight, Rip Van Winkle, Otto, Giant, Pigmy, Appendix, Iron Spike, Miners Luck, Hexagon, Reserve, Iron Wheel and Iron Slope lode mining claims, designated by the Surveyor-General as Lot No. 197, embracing a portion of sections 4, 5 and 8, in township 27 north of range 65 and west Sixth Principal meridian, in the Platte Canon Mining District, in the County of Laramie and State of Wyoming, in the District of Lands subject to sale at Cheyenne and bounded, described, and platted as follows, with magnetic variation 14° and 58' east.

Beginning for the description of the Summit lode claim at corner No. 1, a quartzite rock, 24x12x10 inches, chiseled 1-1-197, with a mound of stone, situate on line 1-2 of the Juneau lode claim survey No. 194, from which a pine six inches in diameter blazed and marked B.T. 1-197 bears north 79° and 10' west 49' distant; a pine 5" in diameter blazed and marked B.T. 1-197 bears south 82° and 30' west 29' distant, and the west quarter corner of section 8, in township 27 north of range 65 west, Sixth Principal meridian, bears north 83° and 23' west 1,312.89' distant.

Thence, first course, north 26° and 5' east 1,261.43' to corner No. 2.

Thence, second course, north 83° west 539.88' to corner No. 3.

Thence, third course, south 27° and 55' west 1,339' to corner No. 4.

Thence, fourth course, south 83° east 280' to a point from which the entrance of discovery tunnel bears north 27° and 55' east 1,219' distant; 300' to corner No. 5.

Thence, fifth course, north 66° and 13' east 88.5' to corner No. 6.

Thence, sixth course, south 86° and 20' east 230' to corner No. 1, the place of beginning; the survey of the lode claim as above described extending 1,339' in length along said Summit vein or lode.

Beginning for the description of the Connection lode claim at corner No. 1, identical with corner No. 1 of said Summit lode claim.

Thence, first course, north 26° and 5' east 1,261.43' to corner No. 2 of said Summit lode claim; 1,379.49' to corner No. 2.

Thence, second course, south 86° and 20' east 531.81' to corner No. 3, situate on line 1-2 of the Central No. 1 lode claim survey No. 107; from a point on line 2-3 discovery on lode line bears south 20° and 50' west 200' distant.

Thence, third course, south 20° and 50' west 958.65' to corner No. 4, situate on line 1-2 of said Central No. 1 lode claim.

Thence, fourth course, north 87° and 35' west 235.2' to corner No. 5.

Thence, fifth course, south 20° and 50' west 201.4' to corner No. 6.

Thence, sixth course, south 59° and 44' west 289.8' to corner No. 7.

Thence, seventh course, north 86° and 20' west 240' to corner No. 1, the place of beginning; the survey of the lode claim as above described extending 1,411.05' in length along said Connection vein or lode.

Beginning for the description of the Moonlight lode claim at corner No. 1, a slate stone 28x14x3 inches, chiseled 1-197, with mound of stone, situate on line 4-1 of the Iron Tiger lode claim survey No. 107, from which a pine 7" in diameter blazed and marked B.T. 1-197 bears south 21° and 42' west 14' distant, and the north quarter corner of said section 8 bears north 3° and 19' west 1,456.43' distant.

Thence, first course, south 14° and 35' west 94.78' intersect lines 3-4 and 4-1 of said Iron Tiger and Central No. 1 lode claims, at south 87° and 35' east 10.88' from corners Nos. 4 and 1 of said claims, respectively; 503.26' to corner No. 2.

Thence, second course, north 86° and 20' west 57.34' to corner No. 3 of said Connection lode claim; also intersect line 1-2 of said Central No. 1 lode claim, at south 20° and 50' west 419.55' from corner No. 1; 589.15' to corner No. 3, identical with corner No. 2 of said Connection lode claim.

Thence, third course, south 26° and 5' west 118.06' to corner No. 4, identical with corner No. 2 of said Summit lode claim, and situate on line 1-2 of said Connection lode claim.

Thence, fourth course, north 83° west 244.62' to corner No. 5, situate on line 2-3 of said Summit lode claim.

Thence, fifth course, north 14° and 35' east 300' to a point from which the face of discovery cut bears south 86° and 20' east 100' distant; 600' to corner No. 6.

Thence, sixth course, south 86° and 20' east 860.08' to corner No. 1, the place of beginning; the survey of the lode claim as above described extending 860.08' in length along said Moonlight vein or lode.

Beginning for the description of the Rip Van Winkle lode claim at corner No. 1, a quartzite rock 24x14x10 inches, chiseled 1-1-197, with mound of stone, situate on line 4-1 of said Iron Tiger lode claim, from which the north quarter corner of said section 8 bears north 15° and 31' west 1,005.1' distant.

Thence, first course, north 20° and 50' east 883' to corner No. 1 of said Iron Tiger lode claim; 1,344' to corner No. 2.

Thence, second course, north 14° and 42' west 152.5' to corner No. 3, identical with the southeast corner of the Champion lode claim unsurveyed.

Thence, third course, north 86° and 20' west 520.13' to corner No. 4.

Thence, fourth course, south 21° and 23' west 110.04' intersect the south side line of said Champion lode claim, at south 82° and 33' west 567.1' from the southeast corner of said claim; 1,500' to corner No. 5.

Thence, fifth course, south 86° and 20' east 314' to a point from which the center of north end of discovery cut bears north 20° and 50' east 350' distant; 628' to corner No. 1, the place of beginning; the survey of the lode claim as above described extending 1,500' in length along said Rip Van Winkle vein or lode.

Beginning for the description of the Otto lode claim at corner No. 1, a sandstone 24x12x8 inches, chiseled 1-197, with mound of stone, situate on line 4-5 of said Rip Van Winkle lode claim and on the south side line of said Champion lode claim, from which the north quarter corner of said section 8 bears south 22° and 9' west 2,[illegible].26' distant.

Thence, first course, south 82° and 33' west 300' to a point from which the breast of discovery tunnel bears south 21° and 23' west 750' distant; 482' to corner No. 2, identical with the southwest corner of said Champion lode claim.

Thence, second course, south 37° and 52' east 135' to corner No. 3.

Thence, third course, south 26° and 24' west 1,325.67' to corner No. 4.

Thence, fourth course, north 82° and 33' east 482' to corner No. 5, identical with corner No. 5 of said Rip Van Winkle lode claim.

Thence, fifth course, north 21° and 23' east 1,389.6' to corner No. 1, the place of beginning; the survey of the lode claim as above described extending 1,389.6' in length along said Otto vein or lode.

Beginning for the description of the Giant lode claim at corner No. 1, a sandstone 38x14x8 inches chiseled 3-197 and 1-197, with mound of stone, identical with corner No. 3 of said Otto lode claim, from which the north quarter corner of said section 8 bears south 51° and 24' east 315.05' distant.

Thence, first course, south 26° and 24' west 1,325.67' to corner No. 2, identical with corner No. 4 of said Otto lode claim.

Thence, second course, south 66° and 53' west 402.19' to a point from which the center of face of discovery cut bears north 26° and 24' east 200' distant, also intersect line 7-8 of the Black Bill lode claim survey No. 55, at south 18° west 55.45' from corner No. 7; 783' to corner No. 3.

Thence, third course, north 26° and 24' east 289.58' intersect line 6-7 of said Black Bill lode claim, and line 12-9 of the Silver Steele lode claim survey No. [illegible] am., at north 76° and 32' west 245.36' from corners No. 7 and 12 of said claims, respectively; [illegible] intersect line 11-12 of said Silver Steele lode claim, at north [illegible] and 11' west [illegible] from corner No. 12; 903.09' intersect line 16-13 of the Red Bill lode claim survey No. 55, at north 76° and 32' west 315.26' from corner No. 16; 1,325.67' to corner No. 4.

Thence, fourth course, north 66° and 53' east 168.91' intersect line 15-16 of said Red Bill lode claim, at north 3° and 40' east 529.86' from corner No. 16; 783' to corner No. 1, the place of beginning; the survey of the lode claim as above described extending 1,325.67' in length along said Giant vein or lode.

Beginning for the description of the Pigmy lode claim at corner No. 1, identical with corner No. 1 of said Rip Van Winkle lode claim, and situate on line 4-1 of said Iron Tiger lode claim.

Thence, first course, south 18° west 512.26' to corner No. 2.

Thence, second course, north 86° and 20' west 26.5' to corner No. 1 of said Moonlight lode claim, situate on line 4-1 of said Iron Tiger lode claim; 886.58' to corner No. 3, identical with corner No. 6 of said Moonlight lode claim.

Thence, third course, south 88° west 518.97' to corner No. 4, situate on line 7-8 of said Black Bill lode claim.

Thence, fourth course, north 18° east 210' to a point from which the breast of discovery tunnel bears south 89° and 18' east 710.46' distant; 282.12' to corner No. 5, situate on line 2-3 of said Giant lode claim.

Thence, fifth course, north 66° and 53' east 402.19' to corner No. 6, identical with corners Nos. 2 and 4 of said Giant and Otto lode claims, respectively.

Thence, sixth course, north 82° and 33' east 482' to corner No. 7, identical with corners Nos. 5 of said Otto and Rip Van Winkle lode claims.

Thence, seventh course, south 86° and 20' east 628' to corner No. 1, the place of beginning; the survey of the lode claim as above described extending 1,410.46' in length along said Pigmy vein or lode.

Beginning for the description of the Appendix lode claim at corner No. 1, a granite rock 30x14x8 inches chiseled 1-197 and 5-197, with mound of stone, from which the north quarter corner of said section 8 bears south 85° and 33' west 808.1' distant.

Thence, first course, north 14° and 42' west 232.5' to corner No. 2 of said Rip Van Winkle lode claim; 385' to corner No. 3 of said Rip Van Winkle lode claim; 600' to corner No. 2.

Thence, second course, north 66° and 55' east 1,500' to corner No. 3.

Thence, third course, south 14° and 42' east 300' to a point from which discovery shaft bears south 66° and 55' west 350' distant; 600' to corner No. 4.

Thence, fourth course, south 66° and 55' west 1,500' to corner No. 1, the place of beginning; the survey of the lode claim as above described extending 1,500' in length along said Appendix vein or lode.

Beginning for the description of the Iron Spike lode claim at corner No. 1, a quartzite rock 26x12x10 inches, chiseled 1-197 and 1-107, with mound of stone, identical with corner No. 1 of said Iron Tiger lode claim and situate on line 1-2 of said Rip Van Winkle lode claim, from which the north quarter corner of said section 8 bears north 76° and 12' west 600' distant.

Thence, first course, south 87° and 35' east 632.4' to corner No. 2 of said Iron Tiger lode claim; 900' to corner No. 2.

Thence, second course, north 20° and 50' east 302' to corner No. 3.

Thence, third course, north 14° and 42' west 274.92' to corner No. 4, situate on line 4-1 of said Appendix lode claim.

Thence, fourth course, south 66° and 55' west 776.02' to corner No. 5, identical with corner No. 1 of said Appendix lode claim.

Thence, fifth course, north 14° and 42' west 232.5' to corner No. 6, identical with corner No. 2 of said Rip Van Winkle lode claim, and situate on line 1-2 of said Appendix lode claim.

Thence, sixth course, south 20° and 50' west 461' to corner No. 1, the place of beginning; from a point on line 6-1 discovery shaft on lode line bears south 87° and 35' east 600' distant; the survey of the lode claim as above described extending 900' in length along said Iron Spike vein or lode.

Beginning for the description of the Miners Luck lode claim at corner No. 1, a quartzite rock 24x12x10 inches, chiseled 1-197 - 1-197 and 5-197, with mound of stone, from which the southeast corner of section five, said township and range, bears south 35° and 35' west 473.37' distant.

Thence, first course, south 77° and 52' west ~~1,365.6'~~ 1,356.6' to corner No. 2, identical with corner No. 3 of said Iron Spike lode claim.

Thence, second course, north 14° and 42' west 274.92' to corner No. 3, identical with corner No. 4 of said Iron Spike lode claim, and situate on line 4-1 of said Appendix lode claim.

Thence, third course, north 66° and 55' east 723.98' to corner No. 4, identical with corner No. 4 of said Appendix lode claim.

Thence, fourth course, north 61° and 20' east 659' to corner No. 5.

Thence, fifth course, south 14° and 42' east 300' to a point from which the center of discovery shaft bears south 70° and 53' west 735.75' distant; 600' to corner No. 1, the place of beginning; thesurvey of the lode claim as above described extending 1,359.75' in length along said Miners Luck vein or lode.

Beginning for the description of the Hexagon lode claim at corner No. 1, a slate stone 30x12x6 inches, chiseled 1-197, with mound of stone, identical with the southeast corner of said section 5.

Thence, first course, south 231.33' to corner No. 2.

Thence, second course, north 87° and 35' west 1,159.64' to corner No. 3, identical with corner No. 2 of said Iron Spike lode claim.

Thence, third course, north 20° and 50' east 2' to a point from which the face of discovery cut bears north 79° and 40' east 630.2' distant; 302' to corner No. 4 identical with corners Nos. 2 and 3 of said Miners Luck and Iron Spike lode claim, respectively.

Thence, fourth course, north 77° and 52' east 1,356.6' to corner No. 5, identical with corner No. 1 of said Miners Luck lode claim.

Thence, fifth course, south 20° and 50' west 413.31' to corner No. 6.

Thence, sixth course, north 89° and 25' west 130.08' to corner No. 1, the place of beginning; the survey of the lode claim as above described extending 1,330.2' in length along said Hexagon vein or lode.

Beginning for the description of the Reserve lode claim at corner No. 1, a quartzite rock 24x14x8 inches, chiseled 4-4-197 and 1-197, with mound of stone, identical with corner No. 4 of said Appendix lode claim, from which the southeast corner of said section 5 bears south 35° and 2' east 792.86' distant.

Thence, first course, north 14° and 42' west 600' to corner No. 2, identical with corner No. 3 of said Appendix lode claim.

Thence, second course, north 61° and 20' east 1,500' to corner No. 3.

Thence, third course, south 14° and 42' east 300' to a point from which discovery shaft bears south 61° and 20' west 300' distant; 600' to corner No. 4.

Thence, fourth course, south 61° and 20' west 841' to corner No. 5 of said Miners Luck lode claim; 1,500' to corner No. 1, the place of beginning; the survey of the lode claim as above described extending 1,500' in length along said Reserve vein or lode.

Beginning for the description of the Iron Wheel lode claim at corner No. 1, identical with corner No. 1 of said Miners Luck lode claim.

Thence, first course, north 14° and 42' west 300' to a point from which discovery shaft bears north 61° and 20' east 50' distant; 600' to corner No. 2, identical with corner No. 5 of said Miners Luck lode claim, and situate on line 4-1 of said Reserve lode claim.

Thence, second course, north 61° and 20' east 841' to corner No. 3, identical with corner No. 4 of said Reserve lode claim.

Thence, third course, north 32° and 58' east 659' to corner No. 4.
Thence, fourth course, south 14° and 42' east 600' to corner No. 5.
Thence, fifth course, south 32° and 58' west 659' to corner No. 6.
Thence, sixth course, south 61° and 20' west 841' to corner No. 1, the place of beginning; the survey of the lode claim as above described extending 1,500' in length along said Iron Wheel vein or lode.

Beginning for the description of the Iron Slope lode claim at corner No. 1, a slate stone 28x10x8 inches chiseled 4-197, 1-197 and 3-197, with mound of stone, identical with corner No. 4 of said Reserve lode claim, from which the southwest corner of section 4, said township and range, bears south 32° and 11' west 1,617.3' distant.

Thence, first course, north 32° and 58' east 659' to corner No. 4 of said Iron Wheel lode claim; 1,500' to corner No. 2.
Thence, second course, north 14° and 42' west 811' to corner No. 3.
Thence, third course, south 32° and 58' west 1,500' to corner No. 4.
Thence, fourth course, south 14° and 42' east 211' to corner No. 3 of said Reserve lode claim; 405.5' to a point from which discovery shaft bears north 32° and 58' east 100' distant; 811' to corner No. 1, the place of beginning the survey of the lode claim as above described extending 1,500' in length along said Iron Slope vein or lode. Expressly excepting and excluding from these presents all that portion of the ground, hereinbefore described, embraced in said Iron Tiger and Central No. 1 lode claims survey No. 107; said Black Bill and Red Bill lode claims survey No. 55; said Silver Steele lode claim survey No. 55 am., and said Champion lode claim unsurveyed, and also all veins, lodes and ledges throughout their entire depth, the tops or apexes of which lie inside of each excluded ground; the granted premises in said lot No. 197 containing 209 acres and .052 of an acre of land, more or less.

UNITED STATES OF AMERICA PATENT
General Land Office No. 36489
Dated March 17, 1903
Recorded in Book 106, Page 436

Mineral Certificate 140

From The United States of America to Charles A. Guernsey

Certain mining claims or premises known as the Bonded, Good Fortune, Good Fortune Annex, Golden Rule, Appex, Blue Bird, Denver & Gulf Cottonwood, Whalen, Anaconda, Valley, Juneau, Rudy L, Gracia Ellen, and Blue Jay Fraction lode mining claims. Designated by the Surveyor-General as Lot No. 194, embracing a portion of sections seven and eight in township twenty-seven north of range sixty-five west, Sixth Principal meridian, in the Platte Canon Mining District in the County of Laramie and State of Wyoming, in the District of Lands subject to sale at Cheyenne and bounded, described, and platted as follows, with magnetic variation fourteen degrees and fifty-five minutes east.

Beginning for the description of the Bonded lode claim at corner No. 1, a sandstone 25x8x6 inches, chiseled 1-194 and 3-3-194, with mound of stone from which the quarter corner between sections seven and eight in township 27 north of range 65 west, Sixth Principal meridian, bears north 55° and 47' east 1,445' distant.

Thence, first course, north 74° west 742.3' intersect line 13-14 of the Republic lode claim survey No. 49, and line 17-18 of the Douglas lode claim survey No. 49, at north 21° and 30' east 35.2' from corners Nos. 14 and 18 respectively; 792' to corner No. 2.

Thence, second course, north 66° and 10' west 282' to corner No. 3.

Thence, third course south 10° and 40' west 29.2' intersect lines 14-15 of said Republic lode claim and 24-21 of the Fairview lode claim survey No. 49, at North 66° and 10' west 326' from corner No. 14 of said Republic lode claim and 44' from corner No. 24 of said Fairview lode claim 480.7' to corner No. 4, from which the east end of discovery cut bears north 66° and 37' east 481.7' distant.

Thence, fourth course, south 83° and 35' east 43' intersect line 23-24 of said Fairview lode claims at south 10° and 40' west 438.3' from corner No. 24; 1,066.1' to corner No. 5.

Thence, fifth course, north 10° and 40' east 228.5' intersect line 18-19 of said Douglas lode claim at south 74° east 749' from corner No. 18; 263.7' to corner No. 1, the place of beginning, the survey of the lode claim as above described extending 1,066.1' in length along said Bonded vein or lode.

Beginning for the description of the Good Fortune lode claim at corner No. 1, a red quartzite rock 26x14x6 inches, chiseled 1-194, 1-194, 4-194 and 7-194, with mound of stone, from which said quarter section corner bears north 1° and 32' west 516.93' distant, a cross (x) and B.R. 1-194, chiseled on a red quartzsite rock in place 4x4x2 feet, above ground bears north 22° and 50' east 30' distant, and a cross (x) and B.R. 1-194 chiseled on a red quartzite rock in place 3x3x2 feet above ground bears south 5° west 10' distant.

Thence, first course, north 74° and 56' west ~~1,025'~~ ~~1,023'~~ to corner No. 2.

Thence, second course, south 21° and 30' west 134.3' intersect line 20-17 of said Douglas lode claim at north 68° and 34' west 49.5' from corner No. 20; 603.8' to corner No. 3, identical with corner No. 1 of said Bonded lode claim.

Thence, third course, south 74° and 56' east 49.8' intersect line 19-20 of said Douglas lode claim at south 21° and 30' west 463.95' from corner No. 20; 1,023' to corner No. 4.

Thence, fourth course, north 21° and 30' east 301.9' to a point from which the center of east side of discovery cut bears north 74° and 56' west 98' distant; 603.8' to corner No. 1, the place of beginning; the survey of the lode claim as above described extending 1,023' in length along said Good Fortune vein or lode.

Beginning for the description of the Good Fortune Annex lode claim at corner No. 1, a quartzite rock 28x10x8 inches, chiseled 1-194, with mound of stone, from which the southwest corner of said section eight, bears south 20° and 41' east 958.32' distant; a pine 6" in diameter blazed and marked B.T. 1-194, bears south 49° and 2' west 8' distant; a pine 18" in diameter blazed and marked B.T. 1-194 bears north 55° east 29.5' distant and a pine 9" in diameter blazed and marked B.T. 1-194 bears north 14° and 26' west 32.8' distant.

Thence, first course, north 74° and 56' west 1,023' to corner No.2, from which the face of discovery cut bears north 72° and 52' east 561.3' distant

Thence, second course, north 10° and 40' east 247.3' to corner No. 5 of said Bonded lode claim; 475.8' intersect line 18-19 of said Douglas lode claim at north 74° west 43' from CORNER No. 19; 511' to corner No. 3, identical with corners Nos. 1 and 3 of said Bonded and Good Fortune lode claims, respectively.

Thence, third course, south 74° and 56' east 49.8' intersect line 19-20 of said Douglas lode claim at north 21° and 30' east 36.05' from corner No. 19; 1,023' to corner No. 4, identical with corner No. 4 of said Good Fortune lode claim.

Thence, fourth course, south 10° and 40' west 511' to corner No. 1, the place of beginning; the survey of the lode claim as above described extending 1,023' in length along said Good Fortune Annex vein or lode.

Beginning for the description of the Golden Rule lode claim at corner No. 1, a red sandstone 26x16x8 inches, chiseled 1-194 and 8-194, with mound of stone, from which the west quarter corner of said section eight, bears north 14° and 45' west 341.94' distant; a cross (x) and B.R. 1-194, chiseled on a red sandstone rock in place 4x3x1 feet above ground, bears north 78° west 28' distant, and a cross (x) and B.R. 1-194, chiseled on a quartzite rock in place 4x4x2 feet above ground bears north 39° and 40' west 14.5' distant.

Thence, first course, north 74° and 56' west 1,023' to corner No. 2, from which discovery tunnel bears south 44° and 56' east 357.8' distant.

Thence, second course, south 21° and 30' west 200' to corner No. 3, identical with corner No. 2 of said Good Fortune lode claim.

Thence, third course, south 74° and 56' east 1,023' to corner No. 4, identical with corner No. 1 of said Good Fortune lode claim.

Thence, fourth course, north 21° and 30' east 200' to corner No. 1, the place of beginning; the survey of the lode claims as above described extending 1,023' in length along said Golden Rule vein or lode.

Beginning for the description of the Appex lode claim at corner No. 1, a quartzite rock 30x16x8 inches, chiseled 1-194 with mound of stone from which the southeast corner of said section seven, bears south 23° and 43' east 875.55' distant.

Thence, first course, south 86° and 37' east 1,500' to corner No. 2.

Thence, second course, north 10° and 40' east 600' to corner No. 3.

Thence, third course, north 86° and 37' west 1,500' to corner No. 4, identical with corners Nos. 4 of said Good Fortune and Good Fortune Annex lode claims.

Thence, fourth course, south 10° and 40' west 300' to a point from which discovery shaft bears south 86° and 37' east 515' distant; 511' to corner No. 1 of said Good Fortune Annex lode claim; 600' to corner No. 1, the place of beginning; the survey of the lode claim as above described extending 1,500' in length along said Appex vein or lode.

Beginning for the description of the Blue Bird lode claim at corner No. 1, identical with corner No. 1 of said Good Fortune, and corner No. 4 of said Golden Rule lode claims.

Thence, first course, south 86° and 29' east 1,498.8' to corner No. 2.

Thence, second course, south 21° and 30' west 600' to corner No. 3.

Thence, third course, north 86° and 37' west 1,500' to corner No. 4, identical with corners Nos. 4 of said Good Fortune, Good Fortune Annex and Appex lode claims.

Thence, fourth course, north 21° and 30' east 301.9' to a point from which discovery shaft bears south 86° and 37' east 120' distant; 603.8' to corner No. 1 the place of beginning; the survey of the lode claim as above described extending 1,500' in length along said Blue Bird vein or lode.

Beginning for the description of the Denver & Gulf lode claims at corner No. 1, a quartzite rock 24x10x6 inches, chiseled 3-194 and 1-194, with mound of stone identical with corners Nos. 3 of said Appex and Blue Bird lode claims, from which the west quarter corner of said section eight, bears north 47° and 52' west 1,739.4' distant.

Thence, first course, south 69° and 39' east 1,500' to corner No. 2.

Thence, second course, south 10° and 40' west 600' to corner No. 3.

Thence, third course, north 69° and 39' west 1,500' to corner No. 4, identical with corner No. 2 of said Appex lode claim.

Thence, fourth course, north 10° and 40' east 300' to a point from which discovery shaft bears south 69° and 39' east 43' distant; 600' to corner No. 1, the place of beginning; the survey of the lode claim as above described extending 1,500' in length along said Denver & Gulf vein or lode.

Beginning for the description of the Cottonwood lode claim at corner No. 1, identical with corner No. 1 of said Denver & Gulf, and corners Nos. 3 of said Appex and Blue Bird lode claims.

Thence, first course, north 21° and 30' east 300' to a point from which discovery shaft bears south 69° and 39' east 300' distant; 600' to corner No. 2, identical with corner No. 2 of said Blue Bird lode claim.

Thence, second course, south 69° and 39' east 1,500' to corner No. 3.

Thence, third course, south 21° and 30' west 600' to corner No. 4, identical with corner No. 2 of said Denver & Gulf lode claim.

Thence, fourth course, north 69° and 39' west 1,500' to corner No. 1, the place of beginning the survey of the lode claim as above described extending 1,500' in length along said Cottonwood vein or lode.

Beginning for the description of the Whalen lode claim at corner No. 1, a sandstone 24x10x10 inches, chiseled 1-194 and 2-194 with mound of stone, situate on line 3-4 of survey No. 107, the Central No. 2 lode claim, from which said quarter section corner bears north 79° and 58' west 2,677.1' distant.

Thence, first course, south 87° and 35' east 249.25' to a point from which discovery shaft bears south 13° west 500' distant; 498.5' to corner No. 2.

Thence, second course, south 13° west 1,500' to corner No. 3.

Thence, third course, north 87° and 35' west 498.5' to corner No. 4, from which corners Nos. 2 and 4 of said Denver & Gulf and Cottonwood lode claims, respectively, bear north 59° and 15' east 462.12' distant.

Thence, fourth course, north 13° east 1,500' to corner No. 1, the place of beginning;the survey of the lode claim as above described extending 1,500' in length along said Whalen vein or lode.

Beginning for the description of the Anaconda lode claim at corner No. 1, a quartzite stone 30x10x6 inches, chiseled 1-194, with mound of stone situate on line 3-4 of said survey No. 107 from which a cross (x) and B.R. 1-194, chiseled on a quartzite rock in place 12x10x8 feet, above ground bears north 13° east 31' distant, and said quarter section corner bears north seventy-six degrees and 52' west 1,907.8' distant.

Thence, first course, south 87° and 35' east 779' to corner No. 2, identical with corner No. 1,of said Whalen lode claim.

Thence, second course, south 13° west 266.25' to a point from which discovery cut bears north 87° and 35' west 100' distant; 532.5' to corner No. 3, situate on line 4-1 of said Whalen lode claim.

Thence, third course, north 69° and 39' west 772' to corner No. 4, situate on line 2-3 of said Cottonwood lode claim.

Thence, fourth course, north 13° east 288' to corner No. 1, the place of beginning; the survey lode claim as above described extending 779' in length along said Anaconda vein or lode.

Beginning for the description of the Valley lode claim at corner No. 1, a quartzite rock 24x12x8 inches chiseled 1-194 and 3-194 with mound of stone situate on line 1-2 of said Blue Bird lode claim, from which a pine eight inches in diameter blazed and marked B.T. 1-194, bears south 21° and 30' east 28' distant, and said quarter section corner bears north 56° and 22' west 1,026.9' distant.

Thence, first course, north 59° and 44' east 1,086.8' to corner No. 2, situate on line 2-3 of said survey No. 107, at north 20° and 50' east 431.3' from corner No. 3.

Thence, second course, south 25° and 45' east 464.2' intersect line 3-4 of said survey No. 107 at south 87° and 35' east 355.4' from corner No. 3; 600' to corner No. 3.

Thence, third course, south 59° and 44' west 302.6' to corner No. 4 of said Anaconda lode claim; 1,086.8' to corner No. 4.

Thence, fourth course, north 25° and 45' west 300' to a point from which discovery cut bears north 59° and 44' east 525' distant; 600' to corner No. 1, the place of beginning the survey of the lode claim as above described extending 1,086.8' in length along said Valley vein or lode.

Beginning for the description of the Juneau lode claim at corner No. 1, a red quartzite rock 26x10x8 inches, chiseled 1-194 and 5-194, with mound of stone from which a pine ten inches in diameter blazed and marked B.T. 5-194, bears south 55° and 6' west 28.9' distant, and said quarter section corner bears north 82° and 44' west 1,083.3' distant.

Thence, first course, south 86° and 20' east 235' to a point from which discovery cut bears south 48° and 30' west 160' distant; 470' to corner No. 2, situate on line 1-2 of said Valley lode claim.

Thence, second course south 59° and 44' west 797' to corner No. 3, identical with corner No. 1 of said Valley lode claim.

Thence, third course, north 86° and 20' west 61.5' to corner No. 4.

Thence, fourth course, north 33° and 15' east 511.84' to corner No. 1, the place of beginning; the survey of the lode claim as above described extending 627.52' in length along said Juneau vein or lode.

Beginning for the description of the Rudy L. lode claim at corner No. 1, a red quartzite rock 28x10x9 inches, chiseled 1-194, on the northeast and northwest faces, from which a pine six inches in diameter blazed and marked B.T. 1-194 bears north 29° and 10' east 61' distant, and said quarter section corner bears north 19° and 30' west 160.5' distant.

Thence, first course, north 27° and 55' east 1,439' to corner No. 2.

Thence, second course, south 83° east 600' to corner No. 3.

Thence, third course, south 27° and 55' west 1,439' to corner No. 4.

Thence, fourth course, north 83° west 300' to a point from which discovery shaft bears north 27° and 55' east 1,039' distant; 600' to corner No. 1, the place of beginning; the survey of the lode claim as above described extending 1,439' in length along said Rudy L. vein or lode.

Beginning for the description of the Gracia Allen lode claim at corner No. 1, identical with corner No. 1 of said Rudy L. lode claim, from which discovery tunnel bears north 4° and 51' west 208.9' distant.

Thence, first course, north 27° and 55' east 1,439' to corner No. 2, identical with corner No. 2 of said Rudy L. lode claim.

Thence, second course, north 83° west 555' to corner No. 3.

Thence, third course, south 19° and 35' west 600' to corner No. 4.

Thence, fourth course, south 18° and 22' west 296.86' to corner No. 5.

Thence, fifth course, south 8° west 332' to corner No. 6.

Thence, sixth course, west 114.8' to corner No. 7.

Thence, seventh course, south 35° and 15' west 135.5' to corner No. 8.

Thence, eighth course, south 83° east 410' to corner No. 1, the place of beginning; the survey of the lode claim as above described extending 1,393.8' in length along said Gracia Ellen vein or lode.

Beginning for the description of the Blue Jay Fraction lode claim at corner No. 1, a quartzite rock 30x10x10 inches, chiseled 1-194 and 8-194, with mound of stone identical with corner No. 8 of said Gracia Ellen lode claim from which a pine 12 inches in diameter blazed and marked B.T. 8-194, bears north 30° and 32' east 54' distant; a pine 10" in diameter blazed and marked 1-194 bears south 5° and 37' east 47' distant, and said quarter section corner bears north 74° east 367.6' distant.

Thence, first course, south 83° east 410' to corners Nos. 1 of said Gracia Ellen and Rudy L. Lode claims; 1,010' to corner No. 2, identical with corner No. 4 of said Rudy L. lode claim.

Thence, second course, north 27° and 55' east 100' to corner No. 3, situate on line 3-4 of said Rudy L. lode claim.

Thence, third course, south 83° east 300' to corner No. 4.

Thence, fourth course, north 66° and 13' east 88.5' to corner No. 5, identical with corner No. 1 of said Juneau lode claim.

Thence, fifth course, south 33° and 15' west 256' to a point from which discovery shaft bears north 82° and 2' west 600' distant; 511.84' to corner No. 4 of said Juneau lode claim; 512' to corner No. 6, situate on line 1-2 of said Blue Bird lode claim.

Thence, sixth course, north 86° and 29' west 781.08' to corner No. 7, identical with corners Nos. 1, of said Good Fortune and Blue Bird lode claims.

Thence, seventh course, north 21° and 30' east 200' to corner No. 8, identical with corner No. 1 of said Golden Rule lode claim.

Thence, eighth course, north 74° and 56' west 520' to corner No. 9.

Thence, ninth course, north 33° and 15' east 112.6' to corner No. 1, the place of beginning; the survey of the lode claim as above described extending 1,342.33' in length along said Blue Jay Fraction vein or lode. Expressly excepting and excluding from these presents all that portion of the ground hereinbefore described embraced said mining claim or survey No. 107 and said Douglas, Republic and Fairview lode claims survey No. 49, and also all veins, lodes and ledges throughout their entire depth, the tops or apexes of which lie inside of such excluded ground; the granted premises in said lot No. 194 containing 185 acres and .175 of an acre of land more or less.

UNITED STATES OF AMERICA PATENT
General Land Office No. 36441
Dated March 10, 1903
Recorded in Book 106, Page 433, Laramie County, Wyoming

Mineral Certificate No. 142

From The United States of America to Charles A. Guernsey.

Certain mining claim or premises, known as the Celtic lode mining claim designated by the Surveyor-General as Lot No. 201, embracing a portion of sections 12 and 13, in township 27 north of range 66 west, Sixth Principal meridian, in the Platte Canon Mining district, in the County of Laramie and State of Wyoming, in the District of Lands subject to sale at Cheyenne and Bounded, described, and platted as follows, with magnetic variation 15° and 55' east.

Beginning at corner No. 1, a quartzite rock 30x14x7 inches, chiseled 1-201, with mound of stone, identical with the south quarter corner of section 12, in township 27 north of range 66 west, Sixth Principal meridian.

Thence, first course, south 87° and 59' west 273.04' to corner No. 2.

Thence, second course, south 21° and 39' west 282.86' to corner No. 3.

Thence, third course, south 54° and 55' east 1,205' to corner No. 4.

Thence, fourth course, north 21° and 39' east 282' to a point from which the entrance of discovery tunnel bears north 54° and 55' west 200' distant; 584' to corner No. 5.

Thence, fifth course, north 54° and 55' west 1,007.32' to corner No. 6.

Thence, sixth course, south 156.67' to corner No. 1, the place of beginning; said lot No. 201 extending 1,205' in length along said Celtic vein or lode and containing 14 acres and .~~565~~ .556 of an acre of land, more or less.

OPTION LEASE

THIS AGREEMENT, made and entered into on this 26th day of December, A.D. 1952, by and between W. H. Collins, hereinafter designated as "Lessor", and E. C. Schroeder Co., Inc., a corporation, hereinafter designated as "Lessee", WITNESSETH:

WHEREAS, Lessor is the owner of certain real estate situated in Platte County, State of Wyoming, described in Exhibit "1" hereto attached and by this reference made a part hereof, together with the minerals, mineral interests, mining rights and privileges, in and under the above described real estate, and

WHEREAS the Lessee desires to mine and remove the minerals, if any, on and under said real estate.

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

1. In consideration of the sum of One Dollar ($1.00) paid to Lessor by Lessee, receipt whereof is hereby acknowledged, of the royalties herein provided, and of the covenants of Lessee herein contained, hereby grants and leases exclusively unto Lessee the above described real estate and mining rights for the purpose of
W.H.C. prospecting, drilling, mining for and removing minerals by stripping
E.C.S. operations, or any other process which Lessee may elect, building roads, power lines and stations, telephone lines, slush ponds, and the maintenance thereof, building other structures thereon to mine, wash, process, treat, transport and stock pile minerals, house employees, and all other necessary purposes incidental to the mining and selling of minerals.

2. Except as herein provided this lease shall continue for a period of ninety nine years after the date hereof, except that Lessee shall have the right to terminate the lease at any time when in the opinion of Lessee the mining operations are not profitable, provided that, Lessee shall not have a right to terminate this lease until the Lessee has paid to or credited Lessor with the sum of $67,900.00 in royalties from the sale of iron ore mined from the premises described herein.

3. Lessor hereby warrants and agrees to defend the title of said lands. The Lessee at its option may discharge any tax, mortgage or other lien upon the premises, either in whole or in part, and in the event Lessee does so, it shall be subrogated to such lien with right to enforce same and apply royalties accruing hereunder toward satisfying same. Without impairment of Lessee's rights under the warranty in event of failure of title, it is agreed that if Lessor owns an interest in said land, less than the entire fee simple estate, then the royalties to be paid Lessor shall be reduced proportionately.

4. Should Lessee be prevented from complying with any of the covenants of this lease by reason of scarcity or inability to obtain or to use equipment or materials or be prevented or delayed due to strikes, slow-downs or other labor trouble, and/or by any statute, regulation or directive of the federal, state or municipal government or any agency or division thereof, and/or conditions beyond the control of Lessee, then while so prevented, Lessee's obligation to comply with such covenants shall be suspended, while and so long as the Lessee is prevented by such cause from performing the terms and covenants hereof; and the time while Lessee is so prevented shall not be counted against Lessee, anything in this lease to the contrary notwithstanding, except that Lessee shall pay, in any event, the minimum royalties as set forth in paragraph eight hereof.

5. All machinery, tracks, buildings, structures, improvements and other property of every kind whatsoever placed by the Lessee on or under said lands shall remain the property of Lessee, and Lessee shall have and is hereby granted the right and privilege of entering upon and removing from said lands within ninety days following the expiration or termination of said lease all of said property of every kind whatsoever; and failing to do so, the title thereto shall vest in Lessor.

6. Lessee shall have the right to mine and remove such iron ore, or other minerals, from the lands above described as Lessee may elect, and at such time or times, within the term of this agreement, as Lessee may elect, Lessee being the sole judge of what iron ore shall be mined or removed, and when the same shall be mined or removed, except as provided herein, and for each ton of
W.H.C. iron ore produced by the ore plant of Lessee from ore mined and
E.C.S. removed by Lessee from the lands above described, Lessee shall pay to Lessor twenty-five cents (25¢) per long ton of 2,240 lbs. each, the furnace weights of ore as delivered to the purchaser thereof, as evidenced by the invoices received from said purchaser by the Lessee, to govern, all payments of royalty herein provided. All payments of royalty herein provided shall be made to the Lessor at the place designated by the Lessor, in monthly installments, on or before the last day of each month for all royalty due for ore so mined during the preceding calendar month. Lessee shall keep accurate records showing true and correct statements of account of all ore so mined and removed and shall render to Lessor monthly, on or before the last day of each month, a statement showing the amount of ore so mined, and removed during the preceding calendar month. Lessor shall have the right to examine the invoices received from the purchaser of ore for the purpose of determining whether Lessor has received the proper amount of royalty.

7. Lessee shall have the right to mine and remove all minerals that are on or under the land described herein, and the Lessee shall pay to Lessor such royalties for said minerals that are mined and removed from said premises as shall be agreed upon by the parties hereto.

8. It is stipulated and agreed that the Lessee shall not pay to Lessor any royalty for any months during which no ore is removed from said land by Lessee, except that commencing with January 1, 1953 Lessee shall pay to Lessor a minimum royalty of $5,000.00 per year. If the royalties from the ore mined by Lessee on said premises do not exceed the minimum provided for herein, then the minimum royalty shall become due and payable within thirty (30) days after the end of the year.

It is agreed that Lessee has heretofore advanced the sum of Ten Thousand Nine Hundred Dollars ($10,900.00) to Lessor and will advance to Lessor upon his request a further sum for the purpose of paying to Helen A. Sackett a sum sufficient to pay the balance of the purchase price with interest due from the sale of the property described herein to Lessor by the said Helen A. Sackett. All of said sums of money so advanced or any other sums of money that may be advanced by Lessee to Lessor shall be first deducted from any and all royalties due Lessor from Lessee before payment of any royalty is made to Lessor or his assigns.

9. If for five successive years from and after the date of this contract, Lessee shall not conduct active mining operations, as defined herein, on said land, Lessor at his option may then declare this lease forfeited and terminated as provided herein. "Active mining operations" within the meaning of this lease shall mean the mining and shipping of a minimum of 20,000 long tons of ore or the payment of a minimum royalty of $5,000.00 per year on a calendar year basis.

10. Lessee agrees that it will indemnify and hold harmless Helen A. Sackett, seller in a certain contract between her and Lessor, and Lessor from and against all damages to or destruction of property, and injury to or death of any person or persons caused by or arising out of any act or thing done, or omitted to be done, in, about or incidental to the preparation for mining and the mining and removal of said minerals and shall carry all necessary compensation and/or liability insurance in connection therewith in such amounts as shall be agreed upon by the parties hereto.

11. Lessor hereby waives all claims for injuries or damages done to said land, timber, or improvements by reason of the mining and removal of the minerals and/or in the washing and/or processing
W.H.C. thereof, except as provided otherwise herein. Fences that are
E.C.S. damaged or removed by Lessee shall be replaced by Lessee.

12. This lease shall be assignable by either party without consent of the other.

13. The Lessor and Lessee agree to perform in all things the covenants, conditions and agreements herein set forth to be performed by each of them, and agree that in event of default by either of them in the performance of any of the covenants, conditions and agreements herein contained, and such default shallcontinue for a period of sixty days after written notice of such default is

given by one to the other (such notice setting out the particulars of such default and making demand upon the other to make good the alleged default), then and in that event it shall be lawful for the party giving the notice of his or its election, to terminate and forfeit this contract.

14. All notices, requests, demands and other communications hereunder shall be in writing and shall be delivered or mailed first class postage prepaid; if to the Lessor at his present address, or at such other address as Lessor may specify to Lessee in writing; if to Lessee at McGregor, Iowa, or at such other address as Lessee may specify to Lessor in writing.

15. Should there be any difference of opinion or controversy between the parties hereto as to the amount of royalty to be paid hereunder or regarding any other question of fact that may arise, the Lessor shall appoint a mining engineer or other qualified person and the Lessee shall likewise appoint a mining engineer or other competent person, which two persons so appointed, shall arbitrate said matter of difference, and if the two shall not be able to agree then they shall name a third person and the decision of any two of the said persons on the question raised by said difference of opinion or controversy, shall be final and binding upon the parties hereto. The expense of such arbitration shall be paid one-half by the Lessor and one-half by the Lessee.

16. The covenants, terms and conditions of this lease shall run with the land and shall inure to benefit of and be binding upon the successors, assigns, administrators, executors and heirs of the parties hereto.

IN WITNESS WHEREOF, the parties hereunto have set their hands and seals, the day and year first above written.

Witness to signature of
Lessor.

M. M. Cooney

M. H. Collins, M.D.
Lessor

Witness to signature of
Lessee

D. R. Sherard

S. C. SCHROEDER CO., INC.

By A. C. Schroeder
Lessee President

STATE OF WYOMING,)
) SS:
COUNTY OF LARAMIE)

G.F.C. On this 26th day of December, 1952, before me personally
E.C.S. appeared W. H. Collins, to me personally known to be the person described in and who executed the foregoing instrument, and acknowledged that he executed the same as his free act and deed thereby relinquishing any and all rights thereunto under and by virtue of the Homestead Exemption Laws of Wyoming.

Mary Lou Phillips Shepherd
Notary Public

(SEAL)

My commission expires December 15, 1954.

STATE OF WYOMING)
) SS:
COUNTY OF LARAMIE)

On this 26th day of December, 1952, before me appeared E. C. Schroeder to me personally known who, being by me duly sworn did say that he is President of E. C. Schroeder Co., Inc., a corporation; that said corporation has no corporate seal and that said instrument was signed in behalf of said corporation by authority of its board of directors; and the said E. C. Schroeder as such President acknowledged said instrument to be the free act and deed of said corporation.

Mary Lou Phillips Shepherd
Notary Public

(SEAL)

My commission expires December 15, 1954.

Assaying Report on Ore Mined and
Shipped from the Good Fortune Iron Mine
for the period from Jan. 28, 1953 to Feb. 20, 1953

Gross Tons	Moist.	Mang.	Iron	Comb.	Moist.	Insol.	Phos.
53,750	2,688	.06	63.63	63.69	5.00	8.60	.08
50,000	3,400	.10	60.02	60.12	6.80	8.85	.08
55,491	3,773	.08	60.92	61.00	6.80	8.65	.12
52,545	3,573	.11	60.32	60.43	6.80	8.70	.08
50,536	3,639	.12	61.42	61.54	7.20	8.74	.09
49,643	3,376	.13	61.22	61.35	6.80	9.25	.10
56,607	3,849	.11	59.72	59.83	6.80	8.20	.11
50,045	3,403	.14	59.32	59.46	6.80	9.00	.10
50,848	3,458	.11	60.62	60.73	6.80	9.14	.09
101,607	6,096	.10	60.02	60.12	6.00	8.52	.08
99,955	5,997	.10	59.82	59.92	6.00	10.80	.08
99,018	5,941	.11	59.22	59.33	6.00	10.20	.10
109,509	6,571	.12	61.81	61.93	6.00	6.65	.10
90,223	6,767	.09	58.82	58.91	7.50	12.50	.09
93,080	6,981	.10	57.23	57.33	7.50	13.10	.08
105,134	7,885	.08	60.42	60.50	7.50	8.10	.10
97,812	5,869	.09	62.41	62.50	6.00	9.24	.09
105,446	7,908	.09	60.82	60.91	7.50	8.00	.11
103,080	6,185	.11	60.12	60.23	6.00	8.60	.09
68,661	4,669	.10	60.42	60.52	6.80	8.72	.12
66,429	4,517	.08	59.62	59.70	6.80	9.86	.15
98,929	5,738	.10	60.82	60.92	5.80	9.00	.11
108,571	6,297	.10	60.32	60.42	5.80	8.94	.10
53,571	3,107	.09	59.22	59.31	5.80	8.96	.08
51,161	3,070	.07	54.24	54.31	6.00	16.84	.08
44,598	2,676	.07	54.24	54.31	6.00	16.84	.08
103,661	5,183	.11	62.41	62.52	5.00	6.40	.11
109,598	6,576	.09	62.41	62.50	6.00	6.30	.10
55,312	3,319	.10	62.41	62.51	6.00	7.00	.09
113,482	6,809	.12	61.61	61.73	6.00	8.00	.11
102,679	5,134	.09	62.01	62.10	5.00	6.26	.09
98,527	4,926	.12	62.21	62.33	5.00	6.32	.10
114,018	5,701	.08	62.81	62.89	5.00	7.84	.07
118,616	5,931	.11	60.62	60.73	5.00	7.00	.10
102,991	5,253	.08	62.61	62.69	5.10	5.65	.07
104,687	5,339	.10	62.21	62.31	5.10	9.56	.08
103,080	5,257	.08	63.21	63.29	5.10	6.08	.07
92,634	4,632	.11	62.41	62.52	5.00	6.00	.09
101,607	5,080	.08	61.81	61.89	5.00	8.90	.10
103,304	5,165	.10	62.81	62.91	5.00	8.35	.10

Exhibit "4"

Gross Tons	Moist.	Manz.	Iron	Comb.	Moist.	Insol.	Phos.
55,357	3,321	.10	61.32	61.42	6.00	8.10	.08
97,545	4,097	.09	59.62	59.71	4.20	9.20	.10
111,071	6,664	.10	63.21	63.31	6.00	6.35	.10
108,795	6,528	.10	60.42	60.52	6.00	7.36	.11
111,116	6,667	.09	60.22	60.31	6.00	8.50	.10
107,902	6,474	.11	60.20	60.31	6.00	7.60	.11
51,518	3,091	.10	60.40	60.50	6.00	7.00	.11
100,000	5,800	.12	60.00	60.12	5.80	8.14	.10
98,036	3,921	.10	63.80	63.90	4.00	5.76	.11
98,125	3,925	.08	62.20	62.28	4.00	6.59	.08
103,482	4,139	.10	61.80	61.90	4.00	6.94	.09
122,545	4,902	.08	62.80	62.88	4.00	6.16	.11
99,732	3,989	.10	61.60	61.70	4.00	7.30	.10
95,982	3,839	.10	62.80	62.90	4.00	6.10	.10
102,054	4,082	.08	62.20	62.28	4.00	5.62	.12
102,277	4,091	.09	62.00	62.09	4.00	6.04	.07
106,696	4,268	.11	62.00	62.11	4.00	6.16	.08
98,036	3,921	.10	63.80	63.90	4.00	5.76	.11
98,125	3,925	.08	62.20	62.28	4.00	6.59	.08
103,482	4,139	.10	61.80	61.90	4.00	6.94	.09
122,545	4,902	.08	62.80	62.88	4.00	6.16	.11
99,732	3,989	.10	61.60	61.70	4.00	7.30	.10
95,982	3,839	.10	62.80	62.90	4.00	6.10	.10
102,054	4,082	.08	62.20	62.28	4.00	5.62	.12
102,277	4,091	.09	62.00	62.09	4.00	6.04	.07
106,696	4,268	.11	62.00	62.11	4.00	6.16	.08
54,598	3,276	.10	62.40	62.50	6.00	7.40	.10
99,152	4,958	.08	62.60	62.68	5.00	7.50	.10
95,045	4,752	.10	62.00	62.10	5.00	6.14	.07
105,134	5,257	.11	58.80	58.91	5.00	10.00	.10
92,589	4,629	.10	59.60	59.70	5.00	8.66	.10
93,884	4,694	.12	61.80	61.92	5.00	6.50	.10

MF-103
(Revised April 1952)

UNITED STATES DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION

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

Defense Minerals Administration
RECEIVED
MAR 30 1953

Extra

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-2963
Metal or Mineral
Date Received 3-30-53
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: W. G. Schroeder Co., Inc., Gregor, Iowa, an Iowa mining operations at Guernsey, Wyoming corporation

(*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. The property involved in the proposed exploration consists of the Nightingale, Origan, Columbia, Pustier and Blue Cloud mining claims. The legal description of each of said claims is set out in Exhibit "1" hereto attached.

(*b*) State any mine name by which the property is known. Nightingale group.

(*c*) State your interest in the land, whether owner, lessee, purchaser under contract, or otherwise Applicant is lessee of the property

(*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. See Exhibit "2" hereto attached.

(*e*) If you own the land, describe any liens or encumbrances on it

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

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.

(*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.

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

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

5. *The exploration project.*—(*a*) State the mineral or minerals for which you wish to explore Iron ore

(*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.

(*c*) The work will start within 60 days and be completed within 22 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.

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.).

(*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.

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

(*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.

(*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.

(*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.

(*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.

(*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.

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

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

☒ 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 28, 1953

[illegible] Co., Inc.
(Applicant)

By E. G. [illegible]
President

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

Form MP-103
R. C. Schroeder Co.,Inc., McGregor, Iowa.
Mining Operations, Guernsey, Wyoming.

1. (c) President - R. C. Schroeder, McGregor, Iowa.
Vice President - Paul R. Schroeder, Douglas, Wyoming.
Secretary & Treasurer - Violet M. Schroeder, McGregor, Iowa.

4.(a) The Nightingale group of mining claims is adjacent to the Colorado Fuel and Iron Company's Sunrise Iron Mine which is presently being mined. The claims in question are approximately two and one-half to three miles, as the crow flies, from the Good Fortune Iron Mine and between seven and eight miles by the nearest access road. The Colorado Fuel and Iron Company mine separates the two properties as shown by Exhibit "3" attached hereto.

The Good Fortune Iron Mine was investigated by Mr. Eugene Frey of the Bureau of Mines and a Report of Investigation was made in August, 1947, and is contained in R.I. 4089. The applicant is presently mining by open pit method, parts of the Good Fortune and Bluebird mining claims which is the site of the old Good Fortune Iron Mine. The production facilities consist of power shovels, trucks, drills, crushers and railroad loading facilities. The applicant is the owner of the mining facilities and the mine is readily accessible for examination purposes. The Nightingale claim of the Nightingale group which the applicant desires to explore was formerly mined. The records of the ore removed are not accessible to this applicant. The applicant has sampled the ore found in the abandoned shaft and the analysis shows an average better than 60% Fe and was low in both silica and phosphorous. The property is readily accessible for examination purposes.

(b) The Good Fortune Iron Mine is a part of the Good Fortune group of claims which were located in 1857. In the winter of 1897-98, five thousand tons of ore were shipped from the Good Fortune deposit to the Colorado smelters. The average rate of smelter analysis on the shipments was 62.4% iron and 6.2% silica. As shown by Mr. Frey's report in 1947, R.I. 4089, the property was explored and sampled at that time by the Bureau of Mines. The applicant commenced production from said mine during December, 1952, after exploring an area of approximately four acres. It is estimated that the reserves from the area explored are in excess of two hundred thousand tons of iron ore. During December and January the applicant shipped 144 cars of iron ore which had an average Fe analysis in excess of 60% and a silica content below 10%.

Form NP-103
E. C. Schroeder Co.,Inc., McGregor, Iowa.
Mining Operations, Guernsey, Wyoming.

4. (c) The property proposed for prospecting lies in the Hartville iron range. The rocks of the range are usually steeply dipping pre-Cambrian rocks overlain by flat-line or gently dipping carboniferous and Mesozoic rocks and rocks of Tertiary and Recent age. The country rock of the ore is schist and impure flint which is stained by either limonite or hematite, evidently a relatively shallow alteration product of the schist.

The red ore deposits of the area occur in lenticular bodies of varying thickness enclosed in a slate formation. The iron ore lenses lie in schist immediately above the uppermost limestone of the older pre-Cambrian series. A thin shell of siliceous iron-stained schist separates the ore from the underlying limestone. All indications show that the deposit is but a replacement of the schist, since no hard and fast line can be drawn between unaltered schist, iron-stained schist, siliceous ore, and high-grade ore.

The ore consists of two varieties of hematite, one soft and the other hard. The soft ore is generally a schistose, fine-grained, light red ore. This variety is commonly known as "paint ore". The harder variety is a dark bluish-gray. It is fine-grained and compact, with a rather smooth, even fracture.

The Colorado Fuel and Iron Company has been mining iron ore on the property adjoining the applicant's for many years, their mines being known as the Sunrise and the Chicago Mines which have produced thousands of tons of high grade ore.

Attached hereto marked Exhibit "3" is a map of the area showing the applicant's property as related to the Colorado Fuel and Iron Company property.

The applicant does not have a geologic report on the property but does have a report on the Good Fortune property which it will submit to the field team. As heretofore stated the samples taken from the shaft on the Nightingale claim had an average analysis of 60% Fe and were low in silica and phosphorous. The iron ore presently being mined from the Good Fortune Iron Mine is similar to that contained on the Nightingale and for that reason the applicant is attaching hereto marked Exhibit"4", the assaying report on the ore mined and shipped from the Good Fortune Iron Mine for the period from January 28, 1953 to February 20, 1953.

(d) The property has good access roads and is located approximately eight and one-half miles from its railroad supply and shipping point and about seven miles from Guernsey, Wyoming, the resident point.

(e) The necessary manpower, materials, supplies, equipment, water and power are available to the applicant. The ore from this property will be transported in trucks to the processing plant which is situated at its railroad supply and shipping point and is the same

4.(e) continued.

point to which the ore from the Good Fortune mine is transported and processed. The Good Fortune mine is located approximately eight miles from this point.

5. (b) It is proposed that churn drilling be done on 100 ft. centers throughout the property included in this application, except the area immediately adjoining present mining operations. The proposed area of exploration is shown in Exhibit "5" attached hereto. It is proposed to start exploration in the area shown in Exhibit "5". It is proposed to drill approximately 328 holes with an average depth of 100 ft. Some of the holes will be shallow while others will exceed the 100 ft. average. This will be determined as the drilling and geological investigation proceeds.

(d) The E. C. Schroeder Co.,Inc., is an Iowa corporation, which has been mining and quarrying stone products for several years. The Schroeder Co. which is a wholly owned subsidiary of the applicant herein is engaged in the mining of brown iron ore in the Russellville area of Franklin County, Alabama. The officers of both companies are the same. The president, E. C. Schroeder, has had several years experience in iron ore mining on the Mesabi Range in Northern Minnesota and in the rock mining business in Iowa, Wisconsin, Alabama, and various other places. The vice president, Paul E. Schroeder, has had several years experience in the rock mining business, and is in charge of the Wyoming operation. He was in charge of erection of the Russellville beneficiation plant. An engineer-geologist is available and will be in charge of the proposed exploration work. The supervisory help and plant operators are experienced in their field.

6. The applicant proposes that if this application is approved that it be set up on the short form contract and the estimated costs of the project are as follows:

32,800 ft. of churn drilling @6.48 per ft..... $212,749.00

The breakdown on the costs of the project is as follows:

Churn Drilling (including water hauling)
@5.00 per ft.....$164,000.00

Form MF-103
E. C. Schroeder Co.,Inc., McGregor, Iowa.
Mining Operations, Guernsey, Wyoming.

6. (continued)

The applicant arrived at the price per ft. by securing bids from three drilling contractors as follows:

S. L. Mills, P.O. Box 1103, Casper, Wyoming, 6" hole, $6.25 per ft.

Al Herman, Windover, Wyoming, 6" hole, $5.00 per ft. and $10.00 per ft. for drilling quartzite.

McChesney Drilling Co., 1214 E. David St., Casper, Wyoming, 6" hole $5.00 per ft.

(The applicant to furnish roads and access in connection with all three bids.)

Bulldozing and road building including blasting, $1.00 per ft.....	$32,800.00
One- half salary of exploratory engineer or $275.00 per month for 22 months.....	6,050.00
Assaying, 8 samples per hold at $1.00 per element; 328 holes or 2624 samples at $1.00 per sample..... (Majority of samples will be assayed for Fe only.)	2,624.00
One sampler at $65.00 per week for 95 weeks.....	6,175.00
Proportionate share of salary of bookkeeper and office expense, $50.00 per month for 22 months....	1,100.00
Total	$212,749.00

It is to be noted that only one-half the salary of the exploratory engineer is included in the cost. This is for the reason that the Company is making application for exploratory aid on the Good Fortune Group of mining claims which is between seven and eight miles from the Nightingale group of mining claims and it is the thought of the applicant that the exploratory engineer can look after both projects.

Form MF-103
A. C. Schroeder Co., Inc., McGregor, Iowa.
Mining Operations, Guernsey, Wyoming.

The exploration map Exhibit "5" shows the mining claims that are proposed to be explored but does not show the sequence of drilling. The applicant proposes to start exploration on the Nightingale mining claim and as the drilling and geological exploration proceed it will determine which claim will be explored next and will furnish maps of the proposed drilling and exploration.

The applicant will furnish a statement of guaranty in lieu of subordination agreement from owner in a form acceptable to the United States of America.

The applicant herewith states and certifies that the lease, Exhibit "2" under which it is operating is a valid lease and in full force and effect.

UNITED STATES OF AMERICA PATENT
General Land Office No. 36487 Mineral Certificate 137
Dated March 17, 1903
Recorded in Book 124, Page 558, Laramie County, Wyoming

From The United States of America to Charles A. Guernsey.

Certain mining claim or premises known as the Nightingale, Origan, O. K., Rustler, El Paso, Standard, Hoosier, Clipper, Humboldt, Iron Clad, Columbia, Black Cloud and Monitor No. 2, lode mining claims designated by the Surveyor-General as Lot No. 196, embracing a portion of sections six and seven in township 27 north of range 65 west, and sections 1 and 12, in township 27 north of range 66 west Sixth Principal meridian in the Platte Canon Mining District, in the County of Laramie and State of Wyoming, in the District of Lands subject to sale at Cheyenne and bounded, described, and platted as follows, with magnetic variation 14° and 58' east.

Beginning for the description of the Nightingale lode claim at corner No. 1, a quartzite stone 28x10x8 inches, chiseled 1-1-196, with mound of stone, from which a pine 14" in diameter blazed and marked B.T. 1-196 bears north 28° and 30' east 61' distant, a pine 12" in diameter blazed and marked B.T. 1-1-196 bears south 88° and 5' west 36.5' distant and the south quarter corner of section 6, in township 27 north of range 65 west, Sixth Principal meridian, bears south 49° east 1,202.3' distant.

Thence, first course, south 45° and 24' west 300' to a point from which discovery cut bears north 49° and 12' west 1,200' distant; 600' to corner No. 2.

Thence, second course, north 49° and 12' west 1,500' to corner No. 3.

Thence, third course, north 45° and 24' east 600' to corner No. 4.

Thence, fourth course, south 49° and 12' east 1,500' to corner No. 1, the place of beginning, the survey of the lode claim as above described extending 1,500' in length along said Nightingale vein or lode.

Beginning for the description of the Origan lode claim at corner No. 1, identical with corner No. 1 of said Nightingale lode claim, situate on line 3-4 of said Crown lode claim.

Thence, first course, north 45° and 24' east 600' to corner No. 2, situate on line 3-4 of said Crown lode claim.

Thence, second course, north 49° and 12' west 1,500' to corner No. 3.

Thence, third course, south 45° and 24' west 300' to a point from which discovery shaft bears south 49° and 12' east 400' distant; 600' to corner No. 4, identical with corner No. 4 of said Nightingale lode claim.

Thence, fourth course, south 49° and 12' east 1,500' to corner No. 1, the place of beginning, the survey of the lode claim as above described extending 1,500' in length along said Origan vein or lode.

Beginning for the description of the O. K. lode claim at corner No. 1, a limestone 24x12x8 inches, chiseled 2-1-196, with mound of stone, identical with corner No. 2 of said Origan lode claim situate on line 3-4 of said Crown lode claim, from which said quarter section corner bears south 21° and 38' east 1,302' distant.

Thence, first course, north 45° and 24' east 154' to corner No. 3 of said Crown lode claim; 600' to corner No. 2.

Thence, second course, north 49° and 12' west 1,500' to corner No. 3.

Thence, third course, south 45° and 24' west 300' to a point from which discovery cut bears south 49° and 12' east 400' distant; 600' to corner No. 4, identical with corner No. 3 of said Origan lode claim.

Thence, fourth course, south 49° and 12' east 1,500' to corner No. 1, the place of beginning; the survey of the lode claim as above described extending 1,500' in length along said O. K. vein or lode.

Beginning for the description of the Rustler lode claim at corner No. 1, a quartzite stone 24x12x8 inches, chiseled 1-196, with mound of stone, from which the southwest corner of said section 6 bears south 89° and 11' west 172.1' distant.

Thence, first course, south 66° and 8' east 135.68' intersect line 54-55 of the Alaska lode claim survey No. 49, at south 80° west 496.5' from corner No. 55; 160.95' intersect line 60-57 of the Old Sledge lode claim survey No. 49, at south 59° and 10' west 839.66' from corner No. 60; 215.47' to corner No. 2.

Thence, second course, north 80° and 22' east 448.6' intersect line 8-5 of the Moore lode claim survey No. 53, at south 37° and 48' east 62.96' from corner No. 8; 455.24' intersect line 55-56 of said Alaska lode claim at south 37° and 48' east 53.56' from corner No. 55; 1,091.6' to corner No. 3.

Thence, third course, north 56° and 55' east 31.8' intersect line 6-7 of said Moore lode claim and 12-9 of said Maine lode claim at south 37° and 48' east 25.8' from corners Nos. 7 and 9 of said claims respectively; 200' to corner No. 4, identical with corner No. 1 of said Crown lode claim.

Thence, third course, south 25° east 1,500' to corner No. 4, situate on line 3-4 of said Hoosier lode claim.

Thence, fourth course, south 59° and 10' west 300' to a point from which discovery cut bears north 25° west 100' distant; 600' to corner No. 1, the place of beginning; the survey of the lode claim as above described extending 1,500' in length along said Iron Clad vein or lode.

Beginning for the description of the Columbia lode claim at corner No. 1, a quartzite stone 28-10-7 inches, chiseled 4-1-196, with mound of stone, identical with corner No. 4 of said Iron Clad lode claim, from which said section corner bears south 5° and 16' west 893.12' distant; a pine 12" in diameter blazed and marked B.T. 4-1-196 bears north 1° and 21' west 48' distant and a pine 6" in diameter blazed and marked B.T. 4-1-196 bears south 52° and 7' east 43' distant.

Thence, first course, north 25° west 1,500' to corner No. 2, identical with corner No. 3 of said Iron Clad lode claim.

Thence, second course, north 59° and 10' east 300' to a point from which discovery cut bears south 25° east 700' distant; 600' to corner No. 3.

Thence, third course, south 25° east 1,500' to corner No. 4.

Thence, fourth course, south 59° and 10' west 315.24' to corner No. 3 of said Hoosier lode claim; 600' to corner No. 1, the place of beginning; the survey of the lode claim as above described extending 1,500' in length along said Columbia vein or lode.

Beginning for the description of the Black Cloud lode claim at corner No. 1, a quartzite stone 24x14x7 inches, chiseled 1-196, with mound of stone situate on line 3-4 of said Columbia lode claim, from which said section corner bears south 12° and 18' west 1,727.98' distant.

Thence, first course, north 45° and 24' east 76.89' to corners Nos. 4 of said Nightingale and Origan lode claims; 676.89' to corner No. 3 of said Origan, and corner No. 4 of said O. K. lode claims; 1,276.89' to corner No. 2, identical with corner No. 3 of said O. K. and corner No. 2 of said Standard lode claims.

Thence, second course, north 29° and 8' east 259.36' to corner No. 3, situate on line 2-3 of said Standard lode claim.

Thence, third course, north 25° west 559.78' to corner No. 4.

Thence, fourth course, south 45° and 24' west 1,500' to corner No. 5, situate on line 3-4 of said Columbia lode claim.

Thence, fifth course, south 25° east 318.45' to a point from which discovery cut bears north 45° and 24' east 1,400' distant; 636.9' to corner No. 1, the place of beginning; the survey of the lode claim as above described extending 1,500' in length along said Black Cloud vein or lode.

Beginning for the description of the Monitor No. 2 lode claim at corner No. 1, a quartzite stone 24x12x10 inches, chiseled 1-196, with mound of stone situate on line 2-3 of said Clipper lode claim, from which said section corner bears north 67° and 6' east 2,091.9' distant.

Thence, first course, south 49° and 12' east 300' to corner No. 2 of said Clipper lode claim from which discovery cut bears south 48° and 43' west 180' distant; 600' to corner No. 2.

Thence, second course, south 48° and 43' west 1,498' to corner No. 3.

Thence, third course, north 49° and 12' west 600' to corner No. 4.

Thence, fourth course, north 48° and 43' east 1,498' to corner No. 1, the place of beginning; the survey of the lode claim as above described extending 1,498' in length along said Monitor No. 2 vein or lode. Expressly excepting and excluding from these presents all that portion of the ground hereinbefore described embraced in said mining claim or survey No. 121; said Old Sledge and Alaska lode claims survey No. 49; said Moore, Maine and Lone Jack lode claims survey No. 53, and said Pacific lode claim survey No. 53 Am, and also all veins, lodes and ledges throughout their entire depth, the tops or apexes of which lie inside of such excluded ground; the granted premises in said lot No. 196 containing 289 acres and .094 of an acre of land, more or less.

Thence, fourth course north 66° and 8' west 95.14' intersect line 9-10 of said Maine lode claim at north 32° and 24' east 130.25' from corner No. 9; 366.905' to a point from which discovery shaft bears south 68° and 36' west 25' distant; 733.81' to corner No. 5, situate on line 2-3 of said Nightingale lode claim.

Thence, fifth course, south 56° and 55' west 71.71' intersect line 59-60 of said Old Sledge lode claim at north 58° and 30' west 185.86' from corner No. 60, 918.73' to corner No. 1, the place of beginning; the survey of the lode claims above described extending 1,011.8' in length along said Rustler vein or lode.

Beginning for the description of the El Paso lode claim at corner No. 1, a quartzite stone 30x14x6 inches, chiseled 1-1-196, with mound of stone, situate on line 2-3 of said O. K. lode claim, from which a pine 12" in diameter blazed and marked B.T. 1-196 bears south 87° and 54' west 51' distant; a pine 18" in diameter blazed and marked B.T. 1-196 bears south 80° and 27' west 48' distant and said quarter section corner bears south 19° and 4' east 2,392.62' distant.

Thence, first course, south 49° and 12' east 300' to a point from which the face of discovery cut bears north 29° and 8' east 700' distant; 600' to corner No. 2, situate on line 2-3 of said O. K. and Mollie Gibson lode claims respectively,

Thence, second course, north 29° and 8' east 942.8' to corner No. 3 of said Mollie Gibson lode claim; 1,500' to corner No. 3.

Thence, third course, north 49° and 12' west 600' to corner No. 4.

Thence, fourth course, south 29° and 8' west 1,500' to corner No. 1, the place of beginning; the survey of the lode claim as above described extending 1,500' in length along said El Paso vein or lode.

Beginning for the description of the Standard lode claim at corner No. 1, identical with corner No. 1 of said El Paso lode claim, from which the center of face of discovery cut bears north 11° and 14' west 467 and 100' distant.

Thence, first course, north 49° and 12' west 537.73' to corner No. 2, identical with corner No. 3 of said O. K. lode claim.

Thence, second course, north 29° and 8' east 1,500' to corner No. 3.

Thence, third course, south 49° and 12' east 537.73' to corner No. 4, identical with corner No. 4 of said El Paso lode claim.

Thence, fourth course, south 29° and 8' west 1,500' to corner No. 1, the place of beginning; the survey of the lode claim as above described extending 1,500' in length along said Standard vein or lode.

Beginning for the description of the Hoosier lode claim at corner No. 1, a limestone 25x12x10 inches, chiseled 1-196, with mound of stone, from which a pine 8" in diameter blazed and marked B.T. 1-196 bears north 33° and 30' west 26' distant and said section corner bears north 76° and 35' east 507.97' distant.

Thence, first course, north 59° and 10' east 1,484.7' to corner No. 2, situate on line 2-3 of said Nightingale lode claim.

Thence, second course, north 49° and 12' west 600' to corner No. 3, situate on line 2-3 of said Nightingale lode claim.

Thence, third course, south 59° and 10' west 1,484.7' to corner No. 4.

Thence, fourth course, south 49° and 12' east 300' to a point from which the face of discovery cut bears north 59° and 10' east 300' distant; 600' to corner No. 1, the place of beginning; the survey of the lode claim as above described extending 1,484.7' in length along said Hoosier vein or lode.

Beginning for the description of the Clipper lode claim at corner No. 1, identical with corner No. 1 of said Hoosier lode claim.

Thence, first course, south 53° and 30' west 1,500' to corner No. 2.

Thence, second course, north 49° and 12' west 300' to a point from which discovery cut bears north 53° and 30' east 300' distant; 600' to corner No. 3.

Thence, third course, north 53° and 30' east 1,500' to corner No. 4.

Thence, fourth course, south 49° and 12' east 600' to corner No. 1, the place of beginning; the survey of the lode claim as above described extending 1,500' in length along said Clipper vein or lode.

Beginning for the description of the Humboldt lode claim at corner No. 1, a red quartzite stone 28x10x7 inches chiseled 1-1-196, with mound of stone, situate on line 3-4 of said Hoosier lode claim, from which said section corner bears south 36° and 40' east 725.35' distant.

Thence, first course, north 25° west 1,500' to corner No. 2.

Thence, second course, south 59° and 10' west 600' to corner No. 3.

Thence, third course, south 25° east 1,500' to corner No. 4, identical with corners Nos. 4 of said Hoosier and Clipper lode claims, respectively.

Thence, fourth course, north 59° and 10' east 300' to a point from which discovery cut bears north 25° west 300' distant; 600' to corner No. 1, the place of beginning; the survey of the lode claim as above described extending 1,500' in length along said Humboldt vein or lode.

Beginning for the description of the Iron Clad lode claim at corner No. 1, identical with corner No. 1 of said Humboldt lode claim.

Thence, first course, north 25° west 1,500' to corner No. 2, identical with corner No. 2, of said Humboldt lode claim.

Thence, second course, north 59° and 10' east 600' to corner No. 3.

UNITED STATES OF AMERICA PATENT
General Land Office No. 36488
Dated March [illegible], 1903
Recorded in Book 44, Page 608, Laramie County

Mineral Certificate No. 138

From The United States of America to Charles A. Guernsey.

A certain mining claim or premises, known as the Terrible lode mining claim, designated by the Surveyor-General as Lot No. 199, embracing a portion of section 13 in township 27 north of range 66 west and of section 18 in township 27 north of range 65 west, Sixth Principal meridian, in the Platte Canon Mining District, in the County of Laramie and State of Wyoming, in the District of Lande subject to entry at Cheyenne and bounded, described, and platted as follows, with magnetic variation 14° and 5' east.

Beginning at corner No. 1, a quartzite rock 30x12x10 inches, chiseled 1-199, with mound of stone, from which the east quarter corner of section 13, in township 27 north of range 66 west, Sixth Principal meridian bears north 59° and 55' east 906' distant.

Thence, first course, south 82° east 1,200' to corner No. 2.

Thence, second course, south 8° and 23' east 600' to corner No. 3.

Thence, third course, north 82° west 1,200' to corner No. 4.

Thence, fourth course, north 8° and 23' west 300' to a point from which discovery cut bears south 82° east 750' distant; 600' to corner No. 1, the place of beginning, said lot No. 199 extending 1,200' in length along said Terrible vein or lode, and containing 16 acres, and .258 of an acre of land, more or less.

UNITED STATES OF AMERICA PATENT
General Land Office No. 36488
Dated March 17, 1903
Recorded in Book 44, Page 611

Mineral Certificate 139

From The United States of America to Charles A. Guernsey.

Certain mining claim or premises, known as the Summit, Connection, Moonlight, Rip Van Winkle, Otto, Giant, Pigmy, Appendix, Iron Spike, Miners Luck, Hexagon, Reserve, Iron Wheel and Iron Slope lode mining claims, designated by the Surveyor-General as Lot No. 197, embracing a portion of sections 4, 5 and 8, in township 27 north of range 65 and west Sixth Principal meridian, in the Platte Canon Mining District, in the County of Laramie and State of Wyoming, in the District of Lands subject to sale at Cheyenne and bounded, described, and platted as follows, with magnetic variation 14° and 58' east.

Beginning for the description of the Summit lode claim at corner No. 1, a quartzite rock, 24x12x10 inches, chiseled 1-1-197, with a mound of stone, situate on line 1-2 of the Juneau lode claim survey No. 194, from which a pine six inches in diameter blazed and marked B.T. 1-197 bears north 79° and 10' west 49' distant; a pine 5" in diameter blazed and marked B.T. 1-197 bears south 82° and 30' west 29' distant, and the west quarter corner of section 8, in township 27 north of range 65 west, Sixth Principal meridian, bears north 83° and 23' west 1,312.89' distant.

Thence, first course, north 26° and 5' east 1,261.43' to corner No. 2.

Thence, second course, north 83° west 539.88' to corner No. 3.

Thence, third course, south 27° and 55' west 1,339' to corner No. 4.

Thence, fourth course, south 83° east 280' to a point from which the entrance of discovery tunnel bears north 27° and 55' east 1,219' distant; 300' to corner No. 5.

Thence, fifth course, north 66° and 13' east 88.5' to corner No. 6.

Thence, sixth course, south 86° and 20' east 230' to corner No. 1, the place of beginning; the survey of the lode claim as above described extending 1,339' in length along said Summit vein or lode.

Beginning for the description of the Connection lode claim at corner No. 1, identical with corner No. 1 of said Summit lode claim.

Thence, first course, north 26° and 5' east 1,261.43' to corner No. 2 of said Summit lode claim; 1,379.49' to corner No. 2.

Thence, second course, south 86° and 20' east 531.81' to corner No. 3, situate on line 1-2 of the Central No. 1 lode claim survey No. 107; from a point on line 2-3 discovery on lode line bears south 20° and 50' west 200' distant.

Thence, third course, south 20° and 50' west 958.65' to corner No. 4, situate on line 1-2 of said Central No. 1 lode claim.

Thence, fourth course, north 87° and 35' west 235.2' to corner No. 5.

Thence, fifth course, south 20° and 50' west 201.4' to corner No. 6.

Thence, sixth course, south 59° and 44' west 289.8' to corner No. 7.

Thence, seventh course, north 86° and 20' west 240' to corner No. 1, the place of beginning; the survey of the lode claim as above described extending 1,411.05' in length along said Connection vein or lode.

Beginning for the description of the Moonlight lode claim at corner No. 1, a slate stone 28x14x8 inches, chiseled 1-197, with mound of stone, situate on line 4-1 of the Iron Tiger lode claim survey No. 107, from which a pine 7" in diameter blazed and marked B.T. 1-197 bears south 21° and 42' west 14' distant, and the north quarter corner of said section 8 bears north 3° and 19' west 1,456.43' distant.

Thence, first course, south 14° and 35' west 94.78' intersect lines 3-4 and 4-1 of said Iron Tiger and Central No. 1 lode claims, at south 87° and 35' east 10.88' from corners Nos. 4 and 1 of said claims, respectively; 503.26' to corner No. 2.

Thence, second course, north 86° and 20' west 57.34' to corner No. 3 of said Connection lode claim; also intersect line 1-2 of said Central No. 1 lode claim, at south 20° and 50' west 419.55' from corner No. 1; 589.15' to corner No. 3, identical with corner No. 2 of said Connection lode claim.

Thence, third course, south 26° and 5' west 118.06' to corner No. 4, identical with corner No. 2 of said Summit lode claim, and situate on line 1-2 of said Connection lode claim.

Thence, fourth course, north 83° west 244.62' to corner No. 5, situate on line 2-3 of said Summit lode claim.

Thence, fifth course, north 14° and 35' east 300' to a point from which the face of discovery cut bears south 86° and 20' east 100' distant; 600' to corner No. 6.

Thence, sixth course, south 86° and 20' east 860.08' to corner No. 1, the place of beginning; the survey of the lode claim as above described extending 860.08' in length along said Moonlight vein or lode.

Beginning for the description of the Rip Van Winkle lode claim at corner No. 1, a quartzite rock 24x14x10 inches, chiseled 1-1-197, with mound of stone, situate on line 4-1 of said Iron Tiger lode claim, from which the north quarter corner of said section 8 bears north 15° and 31' west 1,005.1' distant.

Thence, first course, north 20° and 50' east 883' to corner No. 1 of said Iron Tiger lode claim; 1,344' to corner No. 2.

Thence, second course, north 14° and 42' west 152.5' to corner No. 3, identical with the southwest corner of the Champion lode claim unsurveyed.

Thence, third course, north 86° and 20' west 520.13' to corner No. 4.

Thence, fourth course, south 21° and 23' west 110.04' intersect the south side line of said Champion lode claim, at south 82° and 33' west 567.1' from the southeast corner of said claim; 1,500' to corner No. 5.

Thence, fifth course, south 86° and 20' east 314' to a point from which the center of north end of discovery cut bears north 20° and 50' east 350' distant; 628' to corner No. 1, the place of beginning; the survey of the lode claim as above described extending 1,512' in length along said Rip Van Winkle vein or lode.

Beginning for the description of the Otto lode claim at corner No. 1, a sandstone 26x12x8 inches, chiseled 1-197, with mound of stone, situate on line 4-5 of said Rip Van Winkle lode claim and on the south side line of said Champion lode claim, from which the north quarter corner of said section 8 bears south 22° and 9' west 314.76' distant.

Thence, first course, south 82° and 33' west 300' to a point from which the breast of discovery tunnel bears south 21° and 23' west 750' distant; 482' to corner No. 2, identical with the southwest corner of said Champion lode claim.

Thence, second course, south 37° and 52' east 135' to corner No. 3.

Thence, third course, south 26° and 24' west 1,325.67' to corner No. 4.

Thence, fourth course, north 82° and 33' east 482' to corner No. 5, identical with corner No. 5 of said Rip Van Winkle lode claim.

Thence, fifth course, north 21° and 23' east 1,389.6' to corner No. 1, the place of beginning; the survey of the lode claim as above described extending 1,389.6' in length along said Otto vein or lode.

Beginning for the description of the Giant lode claim at corner No. 1, a sandstone 30x14x8 inches chiseled 3-197 and 1-197, with mound of stone, identical with corner No. 3 of said Otto lode claim, from which the north quarter corner of said section 8 bears south 51° and 24' east 315.05' distant.

Thence, first course, south 26° and 24' west 1,325.67' to corner No. 2, identical with corner No. 4 of said Otto lode claim.

Thence, second course, south 66° and 53' west 402.19' to a point from which the center of face of discovery cut bears north 26° and 24' east 200' distant, also intersect line 7-8 of the Black Bill lode claim survey No. 55, at south 18° west 55.45' from corner No. 7; 783' to corner No. 3.

Thence, third course, north 26° and 24' east 289.58' intersect line 6-7 of said Black Bill lode claim, and line 12-9 of the Silver Steele lode claim survey No. 55 am., at north 76° and 32' west 245.36' from corners No. 7 and 12 of said claims, respectively; 476.16' intersect line 11-12 of said Silver Steele lode claim, at north 2° and 11' east 582.97' from corner No. 12; 903.09' intersect line 16-13 of the Red Bill lode claim survey No. 55, at north 76° and 32' west 315.26' from corner No. 16; 1,325.67' to corner No. 4.

Thence, fourth course, north 66° and 53' east 168.91' intersect line 15-16 of said Red Bill lode claim, at north 3° and 40' east 529.86' from corner No. 16; 783' to corner No. 1, the place of beginning; the survey of the lode claim as above described extending 1,325.67' in length along said Giant vein or lode.

Beginning for the description of the Pigmy lode claim at corner No. 1, identical with corner No. 1 of said Rip Van Winkle lode claim, and situate on line 4-1 of said Iron Tiger lode claim.

Thence, first course, south 18° west 512.26' to corner No. 2.

Thence, second course, north 86° and 20' west 26.5' to corner No. 1 of said Moonlight lode claim, situate on line 4-1 of said Iron Tiger lode claim; 886.58' to corner No. 3, identical with corner No. 6 of said Moonlight lode claim.

Thence, third course, south 88° west 518.97' to corner No. 4, situate on line 7-8 of said Black Bill lode claim.

Thence, fourth course, north 18° east 210' to a point from which the breast of discovery tunnel bears south 89° and 18' east 710.46' distant; 282.12' to corner No. 5, situate on line 2-3 of said Giant lode claim.

Thence, fifth course, north 66° and 53' east 402.19' to corner No. 6, identical with corners Nos. 2 and 4 of said Giant and Otto lode claims, respectively.

Thence, sixth course, north 82° and 33' east 482' to corner No. 7, identical with corners Nos. 5 of said Otto and Rip Van Winkle lode claims.

Thence, seventh course, south 86° and 20' east 628' to corner No. 1, the place of beginning; the survey of the lode claim as above described extending 1,410.46' in length along said Pigmy vein or lode.

Beginning for the description of the Appendix lode claim at corner No. 1, a granite rock 30x14x8 inches chiseled 1-197 and 5-197, with mound of stone, from which the north quarter corner of said section 8 bears south 85° and 33' west 808.1' distant.

Thence, first course, north 14° and 42' west 232.5' to corner No. 2 of said Rip Van Winkle lode claim; 385' to corner No. 3 of said Rip Van Winkle lode claim, 600' to corner No. 2.

Thence, second course, north 66° and 55' east 1,500' to corner No. 3.

Thence, third course, south 14° and 42' east 300' to a point from which discovery shaft bears south 66° and 55' west 350' distant; 600' to corner No. 4.

Thence, fourth course, south 66° and 55' west 1,500' to corner No. 1, the place of beginning; the survey of the lode claim as above described extending 1,500' in length along said Appendix vein or lode.

Beginning for the description of the Iron Spike lode claim at corner No. 1, a quartzite rock 26x12x10 inches, chiseled 1-197 and 1-107, with mound of stone, identical with corner No. 1 of said Iron Tiger lode claim and situate on line 1-2 of said Rip Van Winkle lode claim, from which the north quarter corner of said section 8 bears north 76° and 12' west 600' distant.

Thence, first course, south 87° and 35' east 632.4' to corner No. 2 of said Iron Tiger lode claim; 900' to corner No. 2.

Thence, second course, north 20° and 50' east 302' to corner No. 3.

Thence, third course, north 14° and 42' west 274.92' to corner No. 4, situate on line 4-1 of said Appendix lode claim.

Thence, fourth course, south 66° and 55' west 776.02' to corner No. 5, identical with corner No. 1 of said Appendix lode claim.

Thence, fifth course, north 14° and 42' west 232.5' to corner No. 6, identical with corner No. 2 of said Rip Van Winkle lode claim, and situate on line 1-2 of said Appendix lode claim.

Thence, sixth course, south 20° and 50' west 461' to corner No. 1, the place of beginning; from a point on line 6-1 discovery shaft on lode line bears south 87° and 35' east 600' distant; the survey of the lode claim as above described extending 900' in length along said Iron Spike vein or lode.

Beginning for the description of the Miners Luck lode claim at corner No. 1, a quartzite rock 24x12x10 inches, chiseled 1-197 - 1-197 and 5-197, with mound of stone, from which the southeast corner of section five, said township and range, bears south 35° and 35' west 473.37' distant.

Thence, first course, south 77° and 52' west ~~1,365.6'~~ 1,356.6' to corner No. 2, identical with corner No. 3 of said Iron Spike lode claim,

Thence, second course, north 14° and 42' west 274.92' to corner No. 3, identical with corner No. 4 of said Iron Spike lode claim, and situate on line 4-1 of said Appendix lode claim.

Thence, third course, north 66° and 55' east 723.98' to corner No. 4, identical with corner No. 4 of said Appendix lode claim.

Thence, fourth course, north 61° and 20' east 659' to corner No. 5.

Thence, fifth course, south 14° and 42' east 300' to a point from which the center of discovery shaft bears south 70° and 53' west 735.75' distant; 600' to corner No. 1, the place of beginning; thesurvey of the lode claim as above described extending 1,359.75' in length along said Miners Luck vein or lode.

Beginning for the description of the Hexagon lode claim at corner No. 1, a slate stone 30x12x6 inches, chiseled 1-197, with mound of stone, identical with the southeast corner of said section 5.

Thence, first course, south 231.33' to corner No. 2.

Thence, second course, north 87° and 35' west 1,159.64' to corner No. 3, identical with corner No. 2 of said Iron Spike lode claim.

Thence, third course, north 20° and 50' east 2' to a point from which the face of discovery cut bears north 79° and 40' east 630.2' distant; 302' to corner No. 4 identical with corners Nos. 2 and 3 of said Miners Luck and Iron Spike lode claim, respectively.

Thence, fourth course, north 77° and 52' east 1,356.6' to corner No. 5, identical with corner No. 1 of said Miners Luck lode claim.

Thence, fifth course, south 20° and 50' west 413.31' to corner No. 6.

Thence, sixth course, north 89° and 25' west 130.08' to corner No. 1, the place of beginning; the survey of the lode claim as above described extending 1,330.2' in length along said Hexagon vein or lode.

Beginning for the description of the Reserve lode claim at corner No. 1, a quartzite rock 24x14x8 inches, chiseled 4-4-197 and 1-197, with mound of stone, identical with corner No. 4 of said Appendix lode claim, from which the southeast corner of said section 5 bears south 35° and 2' east 792.86' distant.

Thence, first course, north 14° and 42' west 600' to corner No. 2, identical with corner No. 3 of said Appendix lode claim.

Thence, second course, north 61° and 20' east 1,500' to corner No. 3.

Thence, third course, south 14° and 42' east 300' to a point from which discovery shaft bears south 61° and 20' west 300' distant; 600' to corner No. 4.

Thence, fourth course, south 61° and 20' west 841' to corner No. 5 of said Miners Luck lode claim; 1,500' to corner No. 1, the place of beginning; the survey of the lode claim as above described extending 1,500' in length along said Reserve vein or lode.

Beginning for the description of the Iron Wheel lode claim at corner No. 1, identical with corner No. 1 of said Miners Luck lode claim.

Thence, first course, north 14° and 42' west 300' to a point from which discovery shaft bears north 61° and 20' east 50' distant; 600' to corner No. 2, identical with corner No. 5 of said Miners Luck lode claim, and situate on line 4-1 of said Reserve lode claim.

Thence, second course, north 61° and 20' east 841' to corner No. 3, identical with corner No. 4 of said Reserve lode claim.

Thence, third course, north 32° and 58' east 659' to corner No. 4.

Thence, fourth course, south 14° and 42' east 600' to corner No. 5.

Thence, fifth course, south 32° and 58' west 659' to corner No. 6.

Thence, sixth course, south 61° and 20' west 841' to corner No. 1, the place of beginning; the survey of the lode claim as above described extending 1,500' in length along said Iron Wheel vein or lode.

Beginning for the description of the Iron Slope lode claim at corner No. 1, a slate stone 28x10x8 inches chiseled 4-197, 1-197 and 3-197, with mound of stone, identical with corner No. 4 of said Reserve lode claim, from which the southwest corner of section 4, said township and range, bears south 32° and 11' west 1,617.3' distant.

Thence, first course, north 32° and 58' east 659' to corner No. 4 of said Iron Wheel lode claim; 1,500' to corner No. 2.

Thence, second course, north 14° and 42' west 811' to corner No. 3.

Thence, third course, south 32° and 58' west 1,500' to corner No. 4.

Thence, fourth course, south 14° and 42' east 211' to corner No. 3 of said Reserve lode claim; 405.5' to a point from which discovery shaft bears north 32° and 58' east 100' distant; 811' to corner No. 1, the place of beginning the survey of the lode claim as above described extending 1,500' in length along said Iron Slope vein or lode. Expressly excepting and excluding from these presents all that portion of the ground, hereinbefore described, embraced in said Iron Tiger and Central No. 1 lode claims survey No. 107; said Black Bill and Red Bill lode claims survey No. 55; said Silver Steele lode claim survey No. 55 am., and said Champion lode claim unsurveyed, and also all veins, lodes and ledges throughout their entire depth, the tops or apexes of which lie inside of each excluded ground; the granted premises in said lot No. 197 containing 209 acres and .052 of an acre of land, more or less.

UNITED STATES OF AMERICA PATENT
General Land Office No. 36489
Dated March 17, 1903
Recorded in Book 106, Page 436

Mineral Certificate 140

From The United States of America to Charles A. Guernsey

Certain mining claims or premises known as the Bonded, Good Fortune, Good Fortune Annex, Golden Rule, Appex, Blue Bird, Denver & Gulf Cottonwood, Whalen, Anaconda, Valley, Juneau, Rudy L, Gracia Ellen, and Blue Jay Fraction lode mining claims. Designated by the Surveyor-General as Lot No. 194, embracing a portion of sections seven and eight in township twenty-seven north of range sixty-five west, Sixth Principal meridian, in the Platte Canon Mining District in the County of Laramie and State of Wyoming, in the District of Lands subject to sale at Cheyenne and bounded, described, and platted as follows, with magnetic variation fourteen degrees and fifty-five minutes east.

Beginning for the description of the Bonded lode claim at corner No. 1, a sandstone 25x8x6 inches, chiseled 1-194 and 3-3-194, with mound of stone from which the quarter corner between sections seven and eight in township 27 north of range 65 west, Sixth Principal meridian, bears north 55° and 47' east 1,445' distant.

Thence, first course, north 74° west 742.3' intersect line 13-14 of the Republic lode claim survey No. 49, and line 17-18 of the Douglas lode claim survey No. 49, at north 21° and 30' east 35.2' from corners Nos. 14 and 18 respectively; 792' to corner No. 2.

Thence, second course, north 66° and 10' west 282' to corner No. 3.

Thence, third course south 10° and 40' west 29.2' intersect lines 14-15 of said Republic lode claim and 24-21 of the Fairview lode claim survey No. 49, at North 66° and 10' west 326' from corner No. 14 of said Republic lode claim and 44' from corner No. 24 of said Fairview lode claim 480.7' to corner No. 4, from which the east end of discovery cut bears north 66° and 37' east 481.7' distant.

Thence, fourth course, south 83° and 35' east 43' intersect line 23-24 of said Fairview lode claims at south 10° and 40' west 438.3' from corner No. 24; 1,066.1' to corner No. 5.

Thence, fifth course, north 10° and 40' east 228.5' intersect line 18-19 of said Douglas lode claim at south 74° east 749' from corner No. 18; 263.7' to corner No. 1, the place of beginning, the survey of the lode claim as above described extending 1,066.1' in length along said Bonded vein or lode.

Beginning for the description of the Good Fortune lode claim at corner No. 1, a red quartzite rock 20x14x6 inches, chiseled 1-194, 1-194, 4-194 and 3-194, with mound of stone, from which said quarter section corner bears north 1° and 30' west 516.93' distant, a cross (x) and B.R. 1-194, chiseled on a red quartzsite rock in place 4x4x2 feet, above ground bears north 22° and 50' east 30' distant, and a cross (x) and B.R. 1-194 chiseled on a red quartzite rock in place 3x3x2 feet above ground bears south 5° west 10' distant.

Thence, first course, north 74° and 56' west ~~1,023'~~ 1023' to corner No. 2.

Thence, second course, south 21° and 30' west 134.3' intersect line 20-17 of said Douglas lode claim at north 68° and 34' west 49.5' from corner No. 20; 603.8' to corner No. 3, identical with corner No. 1 of said Bonded lode claim.

Thence, third course, south 74° and 56' east 49.8' intersect line 19-20 of said Douglas lode claim at south 21° and 30' west 467.95' from corner No. 20; 1,023' to corner No. 4.

Thence, fourth course, north 21° and 30' east 301.9' to a point from which the center of east side of discovery cut bears north 74° and 56' west 98' distant; 603.8' to corner No. 1, the place of beginning; the survey of the lode claim as above described extending 1,023' in length along said Good Fortune vein or lode.

Beginning for the description of the Good Fortune Annex lode claim at corner No. 1, a quartzite rock 28x10x8 inches, chiseled 1-194, with mound of stone, from which the southwest corner of said section eight, bears south 20° and 41' east 650.32' distant; a pine 6" in diameter blazed and marked B.T. 1-194, bears south 49° and 21' west 31' distant; a pine 18" in diameter blazed and marked B.T. 1-194 bears north 55° east 39.5' distant and a pine 9" in diameter blazed and marked B.T. 1-194 bears north 14° and 36' west 32.8' distant.

Thence, first course, north 74° and 56' west 1,023' to corner No.2, from which the face of discovery cut bears north 72° and 52' east 561.3' distant

Thence, second course, north 10° and 40' east 247.3' to corner No. 5 of said Bonded lode claim; 475.8' intersect line 18-19 of said Douglas lode claim at north 74° west 43' from CORNER No. 19; 511' to corner No. 3, identical with corners Nos. 1 and 3 of said Bonded and Good Fortune lode claims, respectively.

Thence, third course, south 74° and 56' east 49.8' intersect line 19-20 of said Douglas lode claim at north 21° and 30' east 36.05' from corner No. 19; 1,023' to corner No. 4, identical with corner No. 4 of said Good Fortune lode claim.

Thence, fourth course, south 10° and 40' west 511' to corner No. 1, the place of beginning; the survey of the lode claim as above described extending 1,023' in length along said Good Fortune Annex vein or lode.

Beginning for the description of the Golden Rule lode claim at corner No. 1, a red sandstone 26x16x8 inches, chiseled 1-194 and 8-194, with mound of stone, from which the west quarter corner of said section eight, bears north 14° and 45' west 341.94' distant; a cross (x) and B.R. 1-194, chiseled on a red sandstone rock in place 4x3x1 feet above ground, bears north 78° west 28' distant, and a cross (x) and B.R. 1-194, chiseled on a quartzite rock in place 4x4x2 feet above ground bears north 39° and 40' west 14.5' distant.

Thence, first course, north 74° and 56' west 1,023' to corner No. 2, from which discovery tunnel bears south 44° and 56' east 357.8' distant.

Thence, second course, south 21° and 30' west 200' to corner No. 3, identical with corner No. 2 of said Good Fortune lode claim.

Thence, third course, south 74° and 56' east 1,023' to corner No. 4, identical with corner No. 1 of said Good Fortune lode claim.

Thence, fourth course, north 21° and 30' east 200' to corner No. 1, the place of beginning; the survey of the lode claims as above described extending 1,023' in length along said Golden Rule vein or lode.

Beginning for the description of the Appex lode claim at corner No. 1, a quartzite rock 30x16x8 inches, chiseled 1-194 with mound of stone from which the southeast corner of said section seven, bears south 23° and 43' east 875.55' distant.

Thence, first course, south 86° and 37' east 1,500' to corner No. 2.

Thence, second course, north 10° and 40' east 600' to corner No. 3.

Thence, third course, north 86° and 37' west 1,500' to corner No. 4, identical with corners Nos. 4 of said Good Fortune and Good Fortune Annex lode claims.

Thence, fourth course, south 10° and 40' west 300' to a point from which discovery shaft bears south 86° and 37' east 515' distant; 511' to corner No. 1 of said Good Fortune Annex lode claim; 600' to corner No. 1, the place of beginning; the survey of the lode claim as above described extending 1,500' in length along said Appex vein or lode.

Beginning for the description of the Blue Bird lode claim at corner No. 1, identical with corner No. 1 of said Good Fortune, and corner No. 4 of said Golden Rule lode claims.

Thence, first course, south 86° and 29' east 1,498.8' to corner No. 2.

Thence, second course, south 21° and 30' west 600' to corner No. 3.

Thence, third course, north 86° and 37' west 1,500' to corner No. 4, identical with corners Nos. 4 of said Good Fortune, Good Fortune Annex and Appex lode claims.

Thence, fourth course, north 21° and 30' east 301.9' to a point from which discovery shaft bears south 86° and 37' east 120' distant; 603.8' to corner No. 1 the place of beginning; the survey of the lode claim as above described extending 1,500' in length along said Blue Bird vein or lode.

Beginning for the description of the Denver & Gulf lode claims at corner No. 1, a quartzite rock 24x10x6 inches, chiseled 3-194 and 1-194, with mound of stone identical with corners Nos. 3 of said Appex and Blue Bird lode claims, from which the west quarter corner of said section eight, bears north 47° and 52' west 1,739.4' distant.

Thence, first course, south 69° and 39' east 1,500' to corner No. 2.

Thence, second course, south 10° and 40' west 600' to corner No. 3.

Thence, third course, north 69° and 39' west 1,500' to corner No. 4, identical with corner No. 2 of said Appex lode claim.

Thence, fourth course, north 10° and 40' east 300' to a point from which discovery shaft bears south 69° and 39' east 43' distant; 600' to corner No. 1, the place of beginning; the survey of the lode claim as above described extending 1,500' in length along said Denver & Gulf vein or lode.

Beginning for the description of the Cottonwood lode claim at corner No. 1, identical with corner No. 1 of said Denver & Gulf, and corners Nos. 3 of said Appex and Blue Bird lode claims.

Thence, first course, north 21° and 30' east 300' to a point from which discovery shaft bears south 69° and 39' east 300' distant; 600' to corner No. 2, identical with corner No. 2 of said Blue Bird lode claim.

Thence, second course, south 69° and 39' east 1,500' to corner No. 3.

Thence, third course, south 21° and 30' west 600' to corner No. 4, identical with corner No. 2 of said Denver & Gulf lode claim.

Thence, fourth course, north 69° and 39' west 1,500' to corner No. 1, the place of beginning the survey of the lode claim as above described extending 1,500' in length along said Cottonwood vein or lode.

Beginning for the description of the Whalen lode claim at corner No. 1, a sandstone 24x10x10 inches, chiseled 1-194 and 2-194 with mound of stone, situate on line 3-4 of survey No. 107, the Central No. 2 lode claim, from which said quarter section corner bears north 79° and 58' west 2,677.1' distant.

Thence, first course, south 87° and 35' east 249.25' to a point from which discovery shaft bears south 13° west 500' distant; 498.5' to corner No. 2.

Thence, second course, south 13° west 1,500' to corner No. 3.

Thence, third course, north 87° and 35' west 498.5' to corner No. 4, from which corners Nos. 2 and 4 of said Denver & Gulf and Cottonwood lode claims, respectively, bear north 59° and 15' east 462.12' distant.

Thence, fourth course, north 13° east 1,500' to corner No. 1, the place of beginning;the survey of the lode claim as above described extending 1,500' in length along said Whalen vein or lode.

Beginning for the description of the Anaconda lode claim at corner No. 1, a quartzite stone 30x10x6 inches, chiseled 1-194, with mound of stone situate on line 3-4 of said survey No. 107 from which a cross (x) and B.R. 1-194, chiseled on a quartzite rock in place 12x10x8 feet, above ground bears north 13° east 31' distant, and said quarter section corner bears north seventy-six degrees and 52' west 1,907.8' distant.

Thence, first course, south 87° and 35' east 779' to corner No. 2, identical with corner No. 1,of said Whalen lode claim.

Thence, second course, south 13° west 266.25' to a point from which discovery cut bears north 87° and 35' west 100' distant; 532.5' to corner No. 3, situate on line 4-1 of said Whalen lode claim.

Thence, third course, north 69° and 39' west 772' to corner No. 4, situate on line 2-3 of said Cottonwood lode claim.

Thence, fourth course, north 13° east 288' to corner No. 1, the place of beginning; the survey lode claim as above described extending 779' in length along said Anaconda vein or lode.

Beginning for the description of the Valley lode claim at corner No. 1, a quartzite rock 24x12x8 inches chiseled 1-194 and 3-194 with mound of stone situate on line 1-2 of said Blue Bird lode claim, from which a pine eight inches in diameter blazed and marked B.T. 1-194, bears south 21° and 30' east 28' distant, and said quarter section corner bears north 56° and 22' west 1,026.9' distant.

Thence, first course, north 59° and 44' east 1,086.8' to corner No. 2, situate on line 2-3 of said survey No. 107, at north 20° and 50' east 431.3' from corner No. 3.

Thence, second course, south 25° and 45' east 464.2' intersect line 3-4 of said survey No. 107 at south 87° and 35' east 355.4' from corner No. 3; 600' to corner No. 3.

Thence, third course, south 59° and 44' west 302.6' to corner No. 4 of said Anaconda lode claim; 1,086.8' to corner No. 4.

Thence, fourth course, north 25° and 45' west 300' to a point from which discovery cut bears north 59° and 44' east 525' distant; 600' to corner No. 1, the place of beginning the survey of the lode claim as above described extending 1,086.8' in length along said Valley vein or lode.

Beginning for the description of the Juneau lode claim at corner No. 1, a red quartzite rock 26x10x8 inches, chiseled 1-194 and 5-194, with mound of stone from which a pine ten inches in diameter blazed and marked B.T. 5-194, bears south 55° and 6' west 28.9' distant, and said quarter section corner bears north 82° and 44' west 1,083.3' distant.

Thence, first course, south 86° and 20' east 235' to a point from which discovery cut bears south 48° and 30' west 160' distant; 470' to corner No. 2, situate on line 1-2 of said Valley lode claim.

Thence, second course south 59° and 44' west 797' to corner No. 3, identical with corner No. 1 of said Valley lode claim.

Thence, third course, north 86° and 20' west 61.5' to corner No. 4.

Thence, fourth course, north 33° and 15' east 511.84' to corner No. 1, the place of beginning; the survey of the lode claim as above described extending 627.52' in length along said Juneau vein or lode.

Beginning for the description of the Rudy L. lode claim at corner No. 1, a red quartzite rock 28x10x9 inches, chiseled 1-194, on the northeast and northwest faces, from which a pine six inches in diameter blazed and marked B.T. 1-194 bears north 29° and 10' east 61' distant, and said quarter section corner bears north 19° and 30' west 160.5' distant.

Thence, first course, north 27° and 55' east 1,439' to corner No. 2.

Thence, second course, south 83° east 600' to corner No. 3.

Thence, third course, south 27° and 55' west 1,439' to corner No. 4.

Thence, fourth course, north 83° west 300' to a point from which discovery shaft bears north 27° and 55' east 1,039' distant; 600' to corner No. 1, the place of beginning; the survey of the lode claim as above described extending 1,439' in length along said Rudy L. vein or lode.

Beginning for the description of the Gracia Ellen lode claim at corner No. 1, identical with corner No. 1, of said Rudy L. lode claim, from which discovery tunnel bears north 4° and 51' west 208.9' distant.

Thence, first course, north 27° and 55' east 1,439' to corner No. 2, identical with corner No. 2 of said Rudy L. lode claim.

Thence, second course, north 83° west 555' to corner No. 3.

Thence, third course, south 19° and 35' west 600' to corner No. 4.

Thence, fourth course, south 18° and 22' west 296.86' to corner No. 5.

Thence, fifth course, south 8° west 332' to corner No. 6.

Thence, sixth course, west 114.8' to corner No. 7.

Thence, seventh course, south 33° and 15' west 135.5' to corner No. 8.

Thence, eighth course, south 83° east 410' to corner No. 1, the place of beginning; the survey of the lode claim as above described extending 1,393.8' in length along said Gracia Ellen vein or lode.

Beginning for the description of the Blue Jay Fraction lode claim at corner No. 1, a quartzite rock 30x10x10 inches, chiseled 1-194 and 8-194, with mound of stone identical with corner No. 8 of said Gracia Ellen lode claim from which a pine 12 inches in diameter blazed and marked B.T. 8-194, bears north 30° and 32' east 54' distant; a pine 10" in diameter blazed and marked 1-194 bears south 5° and 37' east 47' distant, and said quarter section corner bears north 74° east 367.6' distant.

Thence, first course, south 83° east 410' to corners Nos. 1 of said Gracia Ellen and Rudy L. Lode claims; 1,010' to corner No. 2, identical with corner No. 4 of said Rudy L. lode claim.

Thence, second course, north 27° and 55' east 100' to corner No. 3, situate on line 3-4 of said Rudy L. lode claim.

Thence, third course, south 83° east 300' to corner No. 4.

Thence, fourth course, north 66° and 13' east 88.5' to corner No. 5, identical with corner No. 1 of said Juneau lode claim.

Thence, fifth course, south 33° and 15' west 956' to a point from which discovery shaft bears north 82° and 2' west 600' distant; 511.84' to corner No. 4 of said Juneau lode claim; 512' to corner No. 6, situate on line 1-2 of said Blue Bird lode claim.

Thence, sixth course, north 56° and 29' west 781.08' to corner No. 7, identical with corners Nos. 1, of said Good Fortune and Blue Bird lode claims.

Thence, seventh course, north 21° and 30' east 200' to corner No. 8, identical with corner No. 1 of said Golden Rule lode claim.

Thence, eighth course, north 74° and 56' west 520' to corner No. 9.

Thence, ninth course, north 33° and 15' east 112.6' to corner No. 1, the place of beginning; the survey of the lode claim as above described extending 1,342.33' in length along said Blue Jay Fraction vein or lode. Expressly excepting and excluding from these presents all that portion of the ground hereinbefore described embraced said mining claim or survey No. 107 and said Douglas, Republic and Fairview lode claims survey No. 49, and also all veins, lodes and ledges throughout their entire depth, the tops or apexes of which lie inside of such excluded ground; the granted premises in said lot No. 194 containing 185 acres and .175 of an acre of land more or less.

UNITED STATES OF AMERICA PATENT
General Land Office No. 36441
Dated March 10, 1903
Recorded in Book 106, Page 433, Laramie County, Wyoming

Mineral Certificate No. 142

From The United States of America to Charles A. Guernsey.

Certain mining claim or premises, known as the Celtic lode mining claim designated by the Surveyor-General as Lot No. 201, embracing a portion of sections 12 and 13, in township 27 north of range 66 west, Sixth Principal meridian, in the Platte Canon Mining district, in the County of Laramie and State of Wyoming, in the District of Lands subject to sale at Cheyenne and Bounded, described, and platted as follows, with magnetic variation 15° and 55' east.

Beginning at corner No. 1, a quartzite rock 30x14x7 inches, chiseled 1-201, with mound of stone, identical with the south quarter corner of section 12, in township 27 north of range 66 west, Sixth Principal meridian.

Thence, first course, south 87° and 59' west 273.04' to corner No. 2.

Thence, second course, south 21° and 39' west 282.86' to corner No. 3.

Thence, third course, south 54° and 55' east 1,205' to corner No. 4.

Thence, fourth course, north 21° and 39' east 282' to a point from which the entrance of discovery tunnel bears north 54° and 55' west 200' distant; 584' to corner No. 5.

Thence, fifth course, north 54° and 55' west 1,007.32' to corner No. 6.

Thence, sixth course, south 156.67' to corner No. 1, the place of beginning; said lot No. 201 extending 1,205' in length along said Celtic vein or lode and containing 14 acres and ~~.565~~ .556 of an acre of land, more or less.

ORE LEASE

THIS AGREEMENT, made and entered into on this 26th day of December, A.D. 1952, by and between W. H. Colline, hereinafter designated as "Lessor", and E. C. Schroeder Co., Inc., a corporation, hereinafter designated as "Lessee", WITNESSETH:

WHEREAS, Lessor is the owner of certain real estate situated in Platte County, State of Wyoming, described in Exhibit "1" hereto attached and by this reference made a part hereof, together with the minerals, mineral interests, mining rights and privileges, in and under the above described real estate, and

WHEREAS the Lessee desires to mine and remove the minerals, if any, on and under said real estate.

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

1. In consideration of the sum of One Dollar ($1.00) paid to Lessor by Lessee, receipt whereof is hereby acknowledged, of the royalties herein provided, and of the covenants of Lessee herein contained, hereby grants and leases exclusively unto Lessee the above described real estate and mining rights for the purpose of prospecting, drilling, mining for and removing minerals by stripping operations, or any other process which Lessee may elect, building roads, power lines and stations, telephone lines, slush ponds, and the maintenance thereof, building other structures thereon to mine, wash, process, treat, transport and stock pile minerals, house employees, and all other necessary purposes incidental to the mining and selling of minerals.

W.H.C.
E.C.S.

2. Except as herein provided this lease shall continue for a period of ninety nine years after the date hereof, except that Lessee shall have the right to terminate the lease at any time when in the opinion of Lessee the mining operations are not profitable, provided that, Lessee shall not have a right to terminate this lease until the Lessee has paid to or credited Lessor with the sum of $67,900.00 in royalties from the sale of iron ore mined from the premises described herein.

3. Lessor hereby warrants and agrees to defend the title of said lands. The Lessee at its option may discharge any tax, mortgage or other lien upon the premises, either in whole or in part, and in the event Lessee does so, it shall be subrogated to such lien with right to enforce same and apply royalties accruing hereunder toward satisfying same. Without impairment of Lessee's rights under the warranty in event of failure of title, it is agreed that if Lessor owns an interest in said land, less than the entire fee simple estate, then the royalties to be paid Lessor shall be reduced proportionately.

Exhibit "2"

4. Should Lessee be prevented from complying with any of the covenants of this lease by reason of scarcity or inability to obtain or to use equipment or materials or be prevented or delayed due to strikes, slow-downs or other labor trouble, and/or by any statute, regulation or directive of the federal, state or municipal government or any agency or division thereof, and/or conditions beyond the control of Lessee, then while so prevented, Lessee's obligation to comply with such covenants shall be suspended, while and so long as the Lessee is prevented by such cause from performing the terms and covenants hereof; and the time while Lessee is so prevented shall not be counted against Lessee, anything in this lease to the contrary notwithstanding, except that Lessee shall pay, in any event, the minimum royalties as set forth in paragraph eight hereof.

5. All machinery, tracks, buildings, structures, improvements and other property of every kind whatsoever placed by the Lessee on or under said lands shall remain the property of Lessee, and Lessee shall have and is hereby granted the right and privilege of entering upon and removing from said lands within ninety days following the expiration or termination of said lease all of said property of every kind whatsoever; and failing to do so, the title thereto shall vest in Lessor.

6. Lessee shall have the right to mine and remove such iron ore, or other minerals, from the lands above described as Lessee may elect, and at such time or times, within the term of this agreement, as Lessee may elect, Lessee being the sole judge of what iron ore shall be mined or removed, and when the same shall be mined or removed, except as provided herein, and for each ton of
W.H.C. iron ore produced by the ore plant of Lessee from ore mined and
E.C.S. removed by Lessee from the lands above described, Lessee shall pay to Lessor twenty-five cents (25¢) per long ton of 2,240 lbs. each, the furnace weights of ore as delivered to the purchaser thereof, as evidenced by the invoices received from said purchaser by the Lessee, to govern, all payments of royalty herein provided. All payments of royalty herein provided shall be made to the Lessor at the place designated by the Lessor, in monthly installments, on or before the last day of each month for all royalty due for ore so mined during the preceding calendar month. Lessee shall keep accurate records showing true and correct statements of account of all ore so mined and removed and shall render to Lessor monthly, on or before the last day of each month, a statement showing the amount of ore so mined, and removed during the preceding calendar month. Lessor shall have the right to examine the invoices received from the purchaser of ore for the purpose of determining whether Lessor has received the proper amount of royalty.

7. Lessee shall have the right to mine and remove all minerals that are on or under the land described herein, and the Lessee shall pay to Lessor such royalties for said minerals that are mined and removed from said premises as shall be agreed upon by the parties hereto.

8. It is stipulated and agreed that the Lessee shall not pay to Lessor any royalty for any months during which no ore is removed from said land by Lessee, except that commencing with January 1, 1953 Lessee shall pay to Lessor a minimum royalty of $5,000.00 per year. If the royalties from the ore mined by Lessee on said premises do not exceed the minimum provided for herein, then the minimum royalty shall become due and payable within thirty (30) days after the end of the year.

It is agreed that Lessee has heretofore advanced the sum of Ten Thousand Nine Hundred Dollars ($10,900.00) to Lessor and will advance to Lessor upon his request a further sum for the purpose of paying to Helen A. Sackett a sum sufficient to pay the balance of the purchase price with interest due from the sale of the property described herein to Lessor by the said Helen A. Sackett. All of said sums of money so advanced or any other sums of money that may be advanced by Lessee to Lessor shall be first deducted from any and all royalties due Lessor from Lessee before payment of any royalty is made to Lessor or his assigns.

9. If for five successive years from and after the date of this contract, Lessee shall not conduct active mining operations, as defined herein, on said land, Lessor at his option may then declare this lease forfeited and terminated as provided herein. "Active mining operations" within the meaning of this lease shall mean the mining and shipping of a minimum of 20,000 long tons of ore or the payment of a minimum royalty of $5,000.00 per year on a calendar year basis.

10. Lessee agrees that it will indemnify and hold harmless Helen A. Sackett, seller in a certain contract between her and Lessor, and Lessor from and against all damages to or destruction of property, and injury to or death of any person or persons caused by or arising out of any act or thing done, or omitted to be done, in, about or incidental to the preparation for mining and the mining and removal of said minerals and shall carry all necessary compensation and/or liability insurance in connection therewith in such amounts as shall be agreed upon by the parties hereto.

11. Lessor hereby waives all claims for injuries or damages done to said land, timber, or improvements by reason of the mining and removal of the minerals and/or in the washing and/or processing thereof, except as provided otherwise herein. Fences that are damaged or removed by Lessee shall be replaced by Lessee.

W.H.C.
E.C.S.

12. This lease shall be assignable by either party without consent of the other.

13. The Lessor and Lessee agree to perform in all things the covenants, conditions and agreements herein set forth to be performed by each of them, and agree that in event of default by either of them in the performance of any of the covenants, conditions and agreements herein contained, and such default shall continue for a period of sixty days after written notice of such default is

given by one to the other (such notice setting out the particulars of such default and making demand upon the other to make good the alleged default), then and in that event it shall be lawful for the party giving the notice of his or its election, to terminate and forfeit this contract.

14. All notices, requests, demands and other communications hereunder shall be in writing and shall be delivered or mailed first class postage prepaid; if to the Lessor at his present address, or at such other address as Lessor may specify to Lessee in writing; if to Lessee at McGregor, Iowa, or at such other address as Lessee may specify to Lessor in writing.

15. Should there be any difference of opinion or controversy between the parties hereto as to the amount of royalty to be paid hereunder or regarding any other question of fact that may arise, the Lessor shall appoint a mining engineer or other qualified person and the Lessee shall likewise appoint a mining engineer or other competent person, which two persons so appointed, shall arbitrate said matter of difference, and if the two shall not be able to agree then they shall name a third person and the decision of any two of the said persons on the question raised by said difference of opinion or controversy, shall be final and binding upon the parties hereto. The expense of such arbitration shall be paid one-half by the Lessor and one-half by the Lessee.

16. The covenants, terms and conditions of this lease shall run with the land and shall inure to benefit of and be binding upon the successors, assigns, administrators, executors and heirs of the parties hereto.

IN WITNESS WHEREOF, the parties hereunto have set their hands and seals, the day and year first above written.

Witness to signature of
Lessor

M. M. Cooney

W. H. Collins, M.D.
Lessor

Witness to signature of
Lessee

D. N. Sherard

E. C. SCHROEDER CO., INC.

By E. C. Schroeder
Lessee President

STATE OF WYOMING,)
SS:
COUNTY OF LARAMIE)

W.H.C.
E.C.S.

On this 26th day of December, 1952, before me personally appeared W. H. Collins, to me personally known to be the person described in and who executed the foregoing instrument, and acknowledged that he executed the same as his free act and deed thereby relinquishing any and all rights thereunto under and by virtue of the Homestead Exemption Laws of Wyoming.

Mary Lou Phillips Shepherd
Notary Public

(SEAL)

My commission expires December 15, 1954.

STATE OF WYOMING)
SS:
COUNTY OF LARAMIE)

On this 26th day of December, 1952, before me appeared E. C. Schroeder to me personally known who, being by me duly sworn did say that he is President of E. C. Schroeder Co., Inc., a corporation; that said corporation has no corporate seal and that said instrument was signed in behalf of said corporation by authority of its board of directors; and the said E. C. Schroeder as such President acknowledged said instrument to be the free act and deed of said corporation.

Mary Lou Phillips Shepherd
Notary Public

(SEAL)

My commission expires December 15, 1954.

Assaying Report on Ore Mined and
Shipped from the Good Fortune Iron Mine
for the period from Jan. 28, 1953 to Feb. 20, 1953

Gross Tons	Moist.	Mang.	Iron	Comb.	Moist.	Insol.	Phos.
53,750	2,688	.06	63.63	63.69	5.00	8.60	.08
50,000	3,400	.10	60.02	60.12	6.80	8.85	.08
55,491	3,773	.08	60.92	61.00	6.80	8.65	.12
52,545	3,573	.11	60.32	60.43	6.80	8.70	.08
50,536	3,639	.12	61.42	61.54	7.20	8.74	.09
49,643	3,376	.13	61.22	61.35	6.80	9.25	.10
56,607	3,849	.11	59.72	59.83	6.80	8.20	.11
50,045	3,403	.14	59.32	59.46	6.80	9.00	.10
50,848	3,458	.11	60.62	60.73	6.80	9.14	.09
101,607	6,096	.10	60.02	60.12	6.00	8.52	.08
99,955	5,997	.10	59.82	59.92	6.00	10.80	.08
99,018	5,941	.11	59.22	59.33	6.00	10.20	.10
109,509	6,571	.12	61.81	61.93	6.00	6.65	.10
90,223	6,767	.09	58.82	58.91	7.50	12.50	.09
93,080	6,981	.10	57.23	57.33	7.50	13.10	.08
105,134	7,885	.08	60.42	60.50	7.50	8.10	.10
97,812	5,869	.09	62.41	62.50	6.00	9.24	.09
105,446	7,908	.09	60.82	60.91	7.50	8.00	.11
103,080	6,185	.11	60.12	60.23	6.00	8.60	.09
68,661	4,669	.10	60.42	60.52	6.80	8.72	.12
66,429	4,517	.08	59.62	59.70	6.80	9.86	.15
98,929	5,738	.10	60.82	60.92	5.80	9.00	.11
108,571	6,297	.10	60.32	60.42	5.80	8.94	.10
53,571	3,107	.09	59.22	59.31	5.80	8.96	.08
51,161	3,070	.07	54.24	54.31	6.00	16.84	.08
44,598	2,676	.07	54.24	54.31	6.00	16.84	.08
103,661	5,183	.11	62.41	62.52	5.00	6.40	.11
109,598	6,576	.09	62.41	62.50	6.00	6.30	.10
55,312	3,319	.10	62.41	62.51	6.00	7.00	.09
113,482	6,809	.12	61.61	61.73	6.00	8.00	.11
102,679	5,134	.09	62.01	62.10	5.00	6.26	.09
98,527	4,926	.12	62.21	62.33	5.00	6.32	.10
114,018	5,701	.08	62.81	62.89	5.00	7.84	.07
118,616	5,931	.11	60.62	60.73	5.00	7.00	.10
102,991	5,253	.08	62.61	62.69	5.10	5.65	.07
104,687	5,339	.10	62.21	62.31	5.10	9.56	.08
103,080	5,257	.08	62.21	62.29	5.10	6.08	.07
92,634	4,632	.11	62.41	62.52	5.00	6.00	.09
101,607	5,080	.08	61.81	61.89	5.00	8.90	.10
103,304	5,165	.10	62.81	62.91	5.00	8.35	.10

Exhibit "4"

Gross Tons	Moist.	Sulp.	Iron	Comb.	Volat.	Ignol.	Phos.
55,357	3,321	.10	61.32	61.42	6.00	8.10	.08
97,545	4,097	.09	59.62	59.71	4.20	9.20	.10
111,071	6,664	.10	63.21	63.31	6.00	6.35	.10
108,795	6,528	.10	60.42	60.52	6.00	7.36	.11
111,116	6,667	.09	60.22	60.31	6.00	8.50	.10
107,902	6,474	.11	60.20	60.31	6.00	7.60	.11
51,518	3,091	.10	60.40	60.50	6.00	7.00	.11
100,000	5,800	.12	60.00	60.12	5.80	8.14	.10
98,036	3,921	.10	63.80	63.90	4.00	5.76	.11
98,125	3,925	.08	62.20	62.28	4.00	6.59	.08
103,482	4,139	.10	61.80	61.90	4.00	6.94	.09
122,545	4,902	.08	62.80	62.88	4.00	6.16	.11
99,732	3,989	.10	61.60	61.70	4.00	7.30	.10
95,982	3,839	.10	62.80	62.90	4.00	6.10	.10
102,054	4,082	.08	62.20	62.28	4.00	5.62	.12
102,277	4,091	.09	62.00	62.09	4.00	6.04	.07
106,696	4,268	.11	62.00	62.11	4.00	6.16	.08
98,036	3,921	.10	63.80	63.90	4.00	5.76	.11
98,125	3,925	.08	62.20	62.28	4.00	6.59	.08
103,482	4,139	.10	61.80	61.90	4.00	6.94	.09
122,545	4,902	.08	62.80	62.88	4.00	6.16	.11
99,732	3,989	.10	61.60	61.70	4.00	7.30	.10
95,982	3,839	.10	62.80	62.90	4.00	6.10	.10
102,054	4,082	.08	62.20	62.28	4.00	5.62	.12
102,277	4,091	.09	62.00	62.09	4.00	6.04	.07
106,696	4,268	.11	62.00	62.11	4.00	6.16	.08
54,598	3,276	.10	62.40	62.50	6.00	7.40	.10
99,152	4,958	.08	62.60	62.68	5.00	7.50	.10
95,045	4,752	.10	62.00	62.10	5.00	6.14	.07
105,134	5,257	.11	58.80	58.91	5.00	10.00	.10
92,589	4,629	.10	59.60	59.70	5.00	8.66	.10
93,884	4,694	.12	61.80	61.92	5.00	6.50	.10

April 1, 1953

Mr. M. M. Cooney
Clewell, Cooney and Fuerste
Law Offices
705 Roshek Building
Dubuque, Iowa

DMEA-2964
Sub Exploration Assistance
Reed Fortune Group

My dear Mr. Cooney:

The receipt of your application dated March 28, 1953 for exploration assistance under the Defense Production Act of 1950, as amended, is hereby acknowledged.

Your application has been assigned Docket Number DMEA-2964 and referred to the Iron and Ferro-Alloys Division.

Kindly refer to DMEA-2964 in any future correspondence relating to your application.

Sincerely yours,

ROBERT E. ADAMS
Robert E. Adams, Chief
Operations Control and
Statistics Division

CLEWELL, COONEY AND FUERSTE
LAW OFFICES
705 ROSHEK BUILDING
DUBUQUE, IOWA

ROBT. W. CLEWELL
M. M. COONEY
WILLIAM C. FUERSTE

DIAL 3-5749

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
MAR 30 1953

March 30, 1953

Administrator
Defense Minerals Exploration Administration
Washington, D. C.

Attention: W. S. Martin, Acting Chief
Iron and Ferro Alloys Division

Dear Sir:

We are enclosing herewith the application, in quadruplicate, of the E. C. Schroeder Co., Inc., for aid in an iron ore Exploration Project pursuant to DMEA Order 1 under the Defense Production Act of 1950 as amended.

This application pertains to what is known as the Good Fortune group of mining claims near Guernsey in Platte County, Wyoming.

Please address any correspondence concerning this application to this office.

Very truly yours,

Clewell, Cooney, & Fuerste
By M. M. Cooney

MMC/js
Enclosures

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 30 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-2964
Metal or Mineral
Date Received 3-30-53
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: E. C. SCHROEDER CO., INC., McGregor, Iowa, an Iowa corporation
Mining operations at Guernsey, Wyoming

(*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 The property involved in the proposed exploration consists of parts of the Good Fortune and Bluebird mining claims, the Good Fortune Annex, Apex, Cottonwood and Denver & Gulf mining claims. The legal description of each of said claims is set out in Exhibit "1" hereto attached.

(*b*) State any mine name by which the property is known. Good Fortune group.

(*c*) State your interest in the land, whether owner, lessee, purchaser under contract, or otherwise Applicant is lessee of the property

(*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. See Exhibit "2" hereto attached.

(*e*) If you own the land, describe any liens or encumbrances on it

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

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.

(*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.

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

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

5. *The exploration project.*—(*a*) State the mineral or minerals for which you wish to explore Iron Ore

(*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.

(*c*) The work will start within 30 days and be completed within 22 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.

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.).

(*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.

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

(*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.

(*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.

(*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.

(*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.

(*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.

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

(*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 28, 1953

E. C. SCHROEDER CO., INC.
(Applicant)

By E. C. Schroeder
President

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

Form MF-103
E. C. Schroeder Co.,Inc., McGregor, Iowa.
Mining Operations, Guernsey, Wyoming.

1. (c) President - E. C. Schroeder, McGregor, Iowa.
Vice President - Paul E. Schroeder, Douglas, Wyoming.
Secretary & Treasurer - Violet M. Schroeder, McGregor, Iowa.

4. (a) The Good Fortune Iron Mine was investigated by Mr. Eugene Frey of the Bureau of Mines and a Report of Investigation was made in August, 1947, and is contained in R.I. 4089. The applicant is presently mining by open pit method, parts of the Good Fortune and Bluebird mining claims which is the site of the old Good Fortune Iron Mine. The production facilities consist of power shovels, trucks, drills, crusher and railroad loading facilities. The applicant is the owner of the mining facilities. The mine is readily accessible for examination purposes.

(b) The Good Fortune Iron Mine is a part of the Good Fortune group of claims which were located in 1857. In the winter of 1897-98, five thousand tons of ore were shipped from the Good Fortune deposit to the Colorado smelters. The average rate of smelter analysis on the shipments was 62.4% iron and 6.2% silica. As shown by Mr. Frey's report in 1947, R.I. 4089, the property was explored and sampled at that time by the Bureau of Mines. The applicant commenced production from said mine during December, 1952, after exploring an area of approximately four acres. It is estimated that the reserves from the area explored are in excess of two hundred thousand tons of iron ore. During December and January the applicant shipped 144 cars of iron ore which had an average Fe analysis in excess of 60% and a silica content below 10%.

(c) The property proposed for prospecting lies in the Hartville iron range. The rocks of the range are usually steeply dipping pre-Cambrian rocks overlain by flat-line or gently dipping carboniferous and Mesozoic rocks and rocks of Tertiary and Recent age. The country rock of the ore is schist and impure flint which is stained by either limonite or hematite, evidently a relatively shallow alteration product of the schist.

The red ore deposits of the area occur in lenticular bodies of varying thickness enclosed in a slate formation. The iron ore lenses lie in schist immediately above the uppermost limestone of the older pre-Cambrian series. A thin shell of siliceous iron-stained schist separates the ore from the underlying limestone. All indications show that the deposit is but a replacement of the schist,

Form MF-103
E. C. Schroeder Co.,Inc., McGregor, Iowa.
Mining Operations, Guernsey, Wyoming.

4.(c) continued.

since no hard and fast line can be drawn between unaltered schist, iron-stained schist, siliceous ore, and high-grade ore.

The ore consists of two varieties of hematite, one soft and the other hard. The soft ore is generally a schistose, fine-grained, light red ore. This variety is commonly known as "paint ore". The harder variety is a dark bluish-gray. It is fine-grained and compact, with a rather smooth, even fracture.

The Colorado Fuel and Iron Company has been mining iron ore on the property adjoining the applicant's for many years, their mines being known as the Sunrise and the Chicago Mines which have produced thousands of tons of high grade ore.

Attached hereto marked Exhibit "3" is a map of the area showing the applicant's property as related to the Colorado Fuel and Iron Company property.

The applicant has a geologic report on the property explored to date which it will submit to the field team. Attached hereto marked Exhibit "4" is the assaying report on the ore mined and shipped from the Good Fortune Iron Mine for the period from January 28, 1953 to February 20, 1953.

(d) The property has good access roads and the mine is located approximately eight miles from its railroad supply and shipping point and about nine miles from Guernsey, Wyoming, the resident point.

(e) The necessary manpower, materials, supplies, equipment, water and power are available to the applicant.

5. (b) It is proposed that churn drilling be done on 100 ft. centers throughout the property included in this application, except the area immediately adjoining present mining operations. The proposed area of exploration is shown in Exhibit "5" attached hereto. It is proposed to start exploration in the area shown in Exhibit "5". It is proposed to drill approximately 345 holes with an average depth of 100 ft. Some of the holes will be shallow while others will exceed the 100 ft. average. This will be determined as the drilling and geological investigation proceeds.

Form MF-103
E. C. Schroeder Co.,Inc., McGregor, Iowa.
Mining Operations, Guernsey, Wyoming.

5. (d) The E. C. Schroeder Co.,Inc., is an Iowa corporation, which has been mining and quarrying stone products for several years. The Schroeder Co. which is a wholly owned subsidiary of the applicant herein is engaged in the mining of brown iron ore in the Russellville area of Franklin County, Alabama. The officers of both companies are the same. The president, E. C. Schroeder, has had several years experience in iron ore mining on the Mesabi Range in northern Minnesota and in the rock mining business in Iowa, Wisconsin, Alabama, and various other places. The vice president, Paul E. Schroeder, has had several years experience in the rock mining business, and is in charge of the Wyoming operation. He was in charge of erection of the Russellville beneficiation plant. An engineer-geologist is available and will be in charge of the proposed exploration work. The supervisory help and plant operators are experienced in their field.

6. The applicant proposes that if this application is approved that it be set up on the short form contract and the estimated costs of the project are as follows:

34,500 ft. of churn drilling @ $6.47 per ft..... $223,085.00

The breakdown on the costs of the project is as follows:

Churn Drilling (including water hauling)
$5.00 per ft..... $172,500.00

The applicant arrived at the price per ft. by securing bids from three drilling contractors as follows:

R. L. Mills, P.O. Box 1109, Casper, Wyoming, 6" hole, $6.25 per ft.

Al Herman, Windover, Wyoming, 6" hole, $5.00 per ft. and $10.00 per ft. for drilling quartzite.

McChesney Drilling Co., 1214 S. David St., Casper, Wyoming, 6" hole, $5.00 per ft.

The applicant to furnish roads and access in connection with all three bids.

Form MF-103
E. C. Schroeder Co.,Inc., McGregor, Iowa.
Mining Operations, Guernsey, Wyoming.

6. (continued)

Bulldozing and road building including blasting, $1.00 per ft.....	$34,500.00
One-half salary of exploratory engineer or $275.00 per month for 22 months.....	6,050.00
Assaying, 8 samples per hole at $1.00 per element; 345 holes or 2760 samples at $1.00 per sample.. (Majority of samples will be assayed for Fe only.)	2,760.00
One Sampler at $65.00 per week for 95 weeks.....	6,175.00
Proportionate share of salary of bookkeeper and office expense, $50.00 per month for 22 months....	1,100.00
Total	$223,085.00

345 8
$2760

It is to be noted that only one-half the salary of the exploratory engineer is included in the cost. This is for the reason that the Company is making application for exploratory aid on the Nightingale group of mining claims which is between seven and eight miles from the Good Fortune group of mining claims and it is the thought of the applicant that the exploratory engineer can look after both projects.

The exploration map Exhibit "5" shows the mining claims that are proposed to be explored but does not show the sequence of drilling. The applicant proposes to start exploration on the portions of the Good Fortune and Bluebird mining claims which are not included in the present mining operations. As the drilling and geological exploration proceed, it will determine which claim will be explored next and will furnish maps of the proposed drilling and exploration.

The applicant will furnish a statement of guaranty in lieu of subordination agreement from owner in a form acceptable to the United States of America.

The applicant herewith states and certifies that the lease, Exhibit "2" under which it is operating is a valid lease and in full force and effect.

ORE LEASE

THIS AGREEMENT, made and entered into on this 26th day of December, A.D. 1952, by and between W. H. Collins, hereinafter designated as "Lessor", and E. C. Schroeder Co., Inc., a corporation, hereinafter designated as "Lessee", WITNESSETH:

WHEREAS, Lessor is the owner of certain real estate situated in Platte County, State of Wyoming, described in Exhibit "1" hereto attached and by this reference made a part hereof, together with the minerals, mineral interests, mining rights and privileges, in and under the above described real estate, and

WHEREAS the Lessee desires to mine and remove the minerals, if any, on and under said real estate.

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

1. In consideration of the sum of One Dollar ($1.00) paid to Lessor by Lessee, receipt whereof is hereby acknowledged, of the royalties herein provided, and of the covenants of Lessee herein contained, hereby grants and leases exclusively unto Lessee the above described real estate and mining rights for the purpose of prospecting, drilling, mining for and removing minerals by stripping operations, or any other process which Lessee may elect, building roads, power lines and stations, telephone lines, slush ponds, and the maintenance thereof, building other structures thereon to mine, wash, process, treat, transport and stock pile minerals, house employees, and all other necessary purposes incidental to the mining and selling of minerals.

W.H.C.
E.C.S.

2. Except as herein provided this lease shall continue for a period of ninety nine years after the date hereof, except that Lessee shall have the right to terminate the lease at any time when in the opinion of Lessee the mining operations are not profitable, provided that, Lessee shall not have a right to terminate this lease until the Lessee has paid to or credited Lessor with the sum of $67,900.00 in royalties from the sale of iron ore mined from the premises described herein.

3. Lessor hereby warrants and agrees to defend the title of said lands. The Lessee at its option may discharge any tax, mortgage or other lien upon the premises, either in whole or in part, and in the event Lessee does so, it shall be subrogated to such lien with right to enforce same and apply royalties accruing hereunder toward satisfying same. Without impairment of Lessee's rights under the warranty in event of failure of title, it is agreed that if Lessor owns an interest in said land, less than the entire fee simple estate, then the royalties to be paid Lessor shall be reduced proportionately.

4. Should Lessee be prevented from complying with any of the covenants of this lease by reason of scarcity or inability to obtain or to use equipment or materials or be prevented or delayed due to strikes, slow-downs or other labor trouble, and/or by any statute, regulation or directive of the federal, state or municipal government or any agency or division thereof, and/or conditions beyond the control of Lessee, then while so prevented, Lessee's obligation to comply with such covenants shall be suspended, while and so long as the Lessee is prevented by such cause from performing the terms and covenants hereof; and the time while Lessee is so prevented shall not be counted against Lessee, anything in this lease to the contrary notwithstanding, except that Lessee shall pay, in any event, the minimum royalties as set forth in paragraph eight hereof.

5. All machinery, tracks, buildings, structures, improvements and other property of every kind whatsoever placed by the Lessee on or under said lands shall remain the property of Lessee, and Lessee shall have and is hereby granted the right and privilege of entering upon and removing from said lands within ninety days following the expiration or termination of said lease all of said property of every kind whatsoever; and failing to do so, the title thereto shall vest in Lessor.

6. Lessee shall have the right to mine and remove such iron ore, or other minerals, from the lands above described as Lessee may elect, and at such time or times, within the term of this agreement, as Lessee may elect, Lessee being the sole judge of what iron ore shall be mined or removed, and when the same shall be mined or removed, except as provided herein, and for each ton of iron ore produced by the ore plant of Lessee from ore mined and removed by Lessee from the lands above described, Lessee shall pay to Lessor twenty-five cents (25¢) per long ton of 2,240 lbs. each, the furnace weights of ore as delivered to the purchaser thereof, as evidenced by the invoices received from said purchaser by the Lessee, to govern, all payments of royalty herein provided. All payments of royalty herein provided shall be made to the Lessor at the place designated by the Lessor, in monthly installments, on or before the last day of each month for all royalty due for ore so mined during the preceding calendar month. Lessee shall keep accurate records showing true and correct statements of account of all ore so mined and removed and shall render to Lessor monthly, on or before the last day of each month, a statement showing the amount of ore so mined, and removed during the preceding calendar month. Lessor shall have the right to examine the invoices received from the purchaser of ore for the purpose of determining whether Lessor has received the proper amount of royalty.

W.H.C.
E.C.S.

7. Lessee shall have the right to mine and remove all minerals that are on or under the land described herein, and the Lessee shall pay to Lessor such royalties for said minerals that are mined and removed from said premises as shall be agreed upon by the parties hereto.

8. It is stipulated and agreed that the Lessee shall not pay to Lessor any royalty for any months during which no ore is removed from said land by Lessee, except that commencing with January 1, 1953 Lessee shall pay to Lessor a minimum royalty of $5,000.00 per year. If the royalties from the ore mined by Lessee on said premises do not exceed the minimum provided for herein, then the minimum royalty shall become due and payable within thirty (30) days after the end of the year.

It is agreed that Lessee has heretofore advanced the sum of Ten Thousand Nine Hundred Dollars ($10,900.00) to Lessor and will advance to Lessor upon his request a further sum for the purpose of paying to Helen A. Sackett a sum sufficient to pay the balance of the purchase price with interest due from the sale of the property described herein to Lessor by the said Helen A. Sackett. All of said sums of money so advanced or any other sums of money that may be advanced by Lessee to Lessor shall be first deducted from any and all royalties due Lessor from Lessee before payment of any royalty is made to Lessor or his assigns.

9. If for five successive years from and after the date of this contract, Lessee shall not conduct active mining operations, as defined herein, on said land, Lessor at his option may then declare this lease forfeited and terminated as provided herein. "Active mining operations" within the meaning of this lease shall mean the mining and shipping of a minimum of 20,000 long tons of ore or the payment of a minimum royalty of $5,000.00 per year on a calendar year basis.

10. Lessee agrees that it will indemnify and hold harmless Helen A. Sackett, seller in a certain contract between her and Lessor, and Lessor from and against all damages to or destruction of property, and injury to or death of any person or persons caused by or arising out of any act or thing done, or omitted to be done, in, about or incidental to the preparation for mining and the mining and removal of said minerals and shall carry all necessary compensation and/or liability insurance in connection therewith in such amounts as shall be agreed upon by the parties hereto.

11. Lessor hereby waives all claims for injuries or damages done to said land, timber, or improvements by reason of the mining and removal of the minerals and/or in the washing and/or processing thereof, except as provided otherwise herein. Fences that are damaged or removed by Lessee shall be replaced by Lessee.

W.H.C.
E.C.S.

12. This lease shall be assignable by either party without consent of the other.

13. The Lessor and Lessee agree to perform in all things the covenants, conditions and agreements herein set forth to be performed by each of them, and agree that in event of default by either of them in the performance of any of the covenants, conditions and agreements herein contained, and such default shallcontinue for a period of sixty days after written notice of such default is

given by one to the other (such notice setting out the particulars of such default and making demand upon the other to make good the alleged default), then and in that event it shall be lawful for the party giving the notice of his or its election, to terminate and forfeit this contract.

14. All notices, requests, demands and other communications hereunder shall be in writing and shall be delivered or mailed first class postage prepaid; if to the Lessor at his present address, or at such other address as Lessor may specify to Lessee in writing; if to Lessee at McGregor, Iowa, or at such other address as Lessee may specify to Lessor in writing.

15. Should there be any difference of opinion or controversy between the parties hereto as to the amount of royalty to be paid hereunder or regarding any other question of fact that may arise, the Lessor shall appoint a mining engineer or other qualified person and the Lessee shall likewise appoint a mining engineer or other competent person, which two persons so appointed, shall arbitrate said matter of difference, and if the two shall not be able to agree then they shall name a third person and the decision of any two of the said persons on the question raised by said difference of opinion or controversy, shall be final and binding upon the parties hereto. The expense of such arbitration shall be paid one-half by the Lessor and one-half by the Lessee.

16. The covenants, terms and conditions of this lease shall run with the land and shall inure to benefit of and be binding upon the successors, assigns, administrators, executors and heirs of the parties hereto.

IN WITNESS WHEREOF, the parties hereunto have set their hands and seals, the day and year first above written.

Witness to signature of
Lessor.

M. M. Cooney

W. H. Collins, M.D.
Lessor

Witness to signature of
Lessee

D. N. Sherard

E. C. SCHROEDER CO., INC.

By E. C. Schroeder
Lessee President

STATE OF WYOMING,)
SS:
COUNTY OF LARAMIE)

W.H.C.
E.C.S.

On this 26th day of December, 1952, before me personally appeared W. H. Collins, to me personally known to be the person described in and who executed the foregoing instrument, and acknowledged that he executed the same as his free act and deed thereby relinquishing any and all rights thereunto under and by virtue of the Homestead Exemption Laws of Wyoming.

Mary Lou Phillips Shepherd
Notary Public

(SEAL)

My commission expires December 15, 1954.

STATE OF WYOMING)
SS:
COUNTY OF LARAMIE)

On this 26th day of December, 1952, before me appeared E. C. Schroeder to me personally known who, being by me duly sworn did say that he is President of E. C. Schroeder Co., Inc., a corporation; that said corporation has no corporate seal and that said instrument was signed in behalf of said corporation by authority of its board of directors; and the said E. C. Schroeder as such President acknowledged said instrument to be the free act and deed of said corporation.

Mary Lou Phillips Shepherd
Notary Public

(SEAL)

My commission expires December 15, 1954.

UNITED STATES OF AMERICA PATENT
General Land Office No. 36487
Dated March 17, 1903
Recorded in Book 124, Page 558, Laramie County, Wyoming

Mineral Certificate 137

From The United States of America to Charles A. Guernsey.

Certain mining claim or premises known as the Nightingale, Origan, O. K., Rustler, El Paso, Standard, Hoosier, Clipper, Humboldt, Iron Clad, Columbia, Black Cloud and Monitor No. 2, lode mining claims designated by the Surveyor-General as Lot No. 196, embracing a portion of sections six and seven in township 27 north of range 65 west, and sections 1 and 12, in township 27 north of range 66 west Sixth Principal meridian in the Platte Canon Mining District, in the County of Laramie and State of Wyoming, in the District of Lands subject to sale at Cheyenne and bounded, described, and platted as follows, with magnetic variation 14° and 58' east.

Beginning for the description of the Nightingale lode claim at corner No. 1, a quartzite stone 28x10x8 inches, chiseled 1-1-196, with mound of stone, from which a pine 14" in diameter blazed and marked B.T. 1-196 bears north 28° and 30' east 61' distant, a pine 12" in diameter blazed and marked B.T. 1-1-196 bears south 88° and 5' west 36.5' distant and the south quarter corner of section 6, in township 27 north of range 65 west, Sixth Principal meridian, bears south 49° east 1,202.3' distant.

Thence, first course, south 45° and 24' west 300' to a point from which discovery cut bears north 49° and 12' west 1,200' distant; 600' to corner No. 2.

Thence, second course, north 49° and 12' west 1,500' to corner No. 3.

Thence, third course, north 45° and 24' east 600' to corner No. 4.

Thence, fourth course, south 49° and 12' east 1,500' to corner No. 1, the place of beginning, the survey of the lode claim as above described extending 1,500' in length along said Nightingale vein or lode.

Beginning for the description of the Origan lode claim at corner No. 1, identical with corner No. 1 of said Nightingale lode claim, situate on line 3-4 of said Crown lode claim.

Thence, first course, north 45° and 24' east 600' to corner No. 2, situate on line 3-4 of said Crown lode claim.

Thence, second course, north 49° and 12' west 1,500' to corner No. 3.

Thence, third course, south 45° and 24' west 300' to a point from which discovery shaft bears south 49° and 12' east 400' distant; 600' to corner No. 4, identical with corner No. 4 of said Nightingale lode claim.

Thence, fourth course, south 49° and 12' east 1,500' to corner No. 1, the place of beginning, the survey of the lode claim as above described extending 1,500' in length along said Origan vein or lode.

Beginning for the description of the O. K. lode claim at corner No. 1, a limestone 24x12x8 inches, chiseled 2-1-196, with mound of stone, identical with corner No. 2 of said Origan lode claim situate on line 3-4 of said Crown lode claim, from which said quarter section corner bears south 21° and 38' east 1,302' distant.

Thence, first course, north 45° and 24' east 154' to corner No. 3 of said Crown lode claim; 600' to corner No. 2.

Thence, second course, north 49° and 12' west 1,500' to corner No. 3.

Thence, third course, south 45° and 24' west 300' to a point from which discovery cut bears south 49° and 12' east 400' distant; 600' to corner No. 4, identical with corner No. 3 of said Origan lode claim.

Thence, fourth course, south 49° and 12' east 1,500' to corner No. 1, the place of beginning; the survey of the lode claim as above described extending 1,500' in length along said O. K. vein or lode.

Beginning for the description of the Rustler lode claim at corner No. 1, a quartzite stone 24x12x8 inches, chiseled 1-196, with mound of stone, from which the southwest corner of said section 6 bears south 89° and 11' west 172.1' distant.

Thence, first course, south 66° and 8' east 135.68' intersect line 54-55 of the Alaska lode claim survey No. 49, at south 80° west 196.5' from corner No. 55; 160.95' intersect line 60-37 of the Old Sledge lode claim survey No. 49, at south 59° and 10' west 839.66' from corner No. 60; 215.47' to corner No. 2.

Thence, second course, north 80° and 22' east 448.6' intersect line 8-5 of the Moore lode claim survey No. 53, at south 37° and 48' east 62.96' from corner No. 8; 455.24' intersect line 55-56 of said Alaska lode claim at south 37° and 48' east 53.56' from corner No. 55; 1,091.6' to corner No. 3.

Thence, third course, north 56° and 55' east 31.8' intersect line 6-7 of said Moore lode claim and 12-9 of said Maine lode claim at south 37° and 48' east 25.8' from corners Nos. 7 and 9 of said claims respectively; 200' to corner No. 4, identical with corner No. 1 of said Crown lode claim.

Thence, third course, south 25° east 1,500' to corner No. 4, situate on line 3-4 of said Hoosier lode claim.

Thence, fourth course, south 59° and 10' west 300' to a point from which discovery cut bears north 25° west 100' distant; 600' to corner No. 1, the place of beginning; the survey of the lode claim as above described extending 1,500' in length along said Iron Clad vein or lode.

Beginning for the description of the Columbia lode claim at corner No. 1, a quartzite stone 28-10-7 inches, chiseled 4-1-196, with mound of stone, identical with corner No. 4 of said Iron Clad lode claim, from which said section corner bears south 5° and 16' west 893.12' distant; a pine 12" in diameter blazed and marked B.T. 4-1-196 bears north 1° and 21' west 48' distant and a pine 6" in diameter blazed and marked B.T. 4-1-196 bears south 52° and 7' east 43' distant.

Thence, first course, north 25° west 1,500' to corner No. 2, identical with corner No. 3 of said Iron Clad lode claim.

Thence, second course, north 59° and 10' east 300' to a point from which discovery cut bears south 25° east 700' distant; 600' to corner No. 3.

Thence, third course, south 25° east 1,500' to corner No. 4.

Thence, fourth course, south 59° and 10' west 315.24' to corner No. 3 of said Hoosier lode claim; 600' to corner No. 1, the place of beginning; the survey of the lode claim as above described extending 1,500' in length along said Columbia vein or lode.

Beginning for the description of the Black Cloud lode claim at corner No. 1, a quartzite stone 24x14x7 inches, chiseled 1-196, with mound of stone situate on line 3-4 of said Columbia lode claim, from which said section corner bears south 12° and 18' west 1,727.98' distant.

Thence, first course, north 45° and 24' east 76.89' to corners Nos. 4 of said Nightingale and Origan lode claims; 676.89' to corner No. 3 of said Origan, and corner No. 4 of said O. K. lode claims; 1,276.89' to corner No. 2, identical with corner No. 3 of said O. K. and corner No. 2 of said Standard lode claims.

Thence, second course, north 29° and 8' east 259.36' to corner No. 3, situate on line 2-3 of said Standard lode claim.

Thence, third course, north 25° west 559.78' to corner No. 4.

Thence, fourth course, south 45° and 24' west 1,500' to corner No. 5, situate on line 3-4 of said Columbia lode claim.

Thence, fifth course, south 25° east 318.45' to a point from which discovery cut bears north 45° and 24' east 1,400' distant; 636.9' to corner No. 1, the place of beginning; the survey of the lode claim as above described extending 1,500' in length along said Black Cloud vein or lode.

Beginning for the description of the Monitor No. 2 lode claim at corner No. 1, a quartzite stone 24x12x10 inches, chiseled 1-196, with mound of stone situate on line 2-3 of said Clipper lode claim, from which said section corner bears north 67° and 6' east 2,091.9' distant.

Thence, first course, south 49° and 12' east 300' to corner No. 2 of said Clipper lode claim from which discovery cut bears south 48° and 43' west 180' distant; 600' to corner No. 2.

Thence, second course, south 48° and 43' west 1,498' to corner No. 3.

Thence, third course, north 49° and 12' west 600' to corner No. 4.

Thence, fourth course, north 48° and 43' east 1,498' to corner No. 1, the place of beginning; the survey of the lode claim as above described extending 1,498' in length along said Monitor No. 2 vein or lode. Expressly excepting and excluding from these presents all that portion of the ground hereinbefore described embraced in said mining claim or survey No. 121; said Old Sledge and Alaska lode claims survey No. 49; said Moore, Maine and Lone Jack lode claims survey No. 53, and said Pacific lode claim survey No. 53 Am, and also all veins, lodes and ledges throughout their entire depth, the tops or apexes of which lie inside of such excluded ground; the granted premises in said lot No. 196 containing 289 acres and .094 of an acre of land, more or less.

Thence, fourth course north 66° and 8' west 95.14' intersect line 9-10 of said Maine lode claim at north 32° and 24' east 130.25' from corner No. 9; 366.905' to a point from which discovery shaft bears south 68° and 36' west 25' distant; 733.81' to corner No. 5, situate on line 2-3 of said Nightingale lode claim.

Thence, fifth course, south 56° and 55' west 71.71' intersect line 59-60 of said Old Sledge lode claim at north 58° and 30' west 185.86' from corner No. 60, 918.73' to corner No. 1, the place of beginning; the survey of the lode claims above described extending 1,011.8' in length along said Rustler vein or lode.

Beginning for the description of the El Paso lode claim at corner No. 1, a quartzite stone 30x14x6 inches, chiseled 1-1-196, with mound of stone, situate on line 2-3 of said O. K. lode claim, from which a pine 12" in diameter blazed and marked B.T. 1-196 bears south 87° and 54' west 51' distant; a pine 18" in diameter blazed and marked B.T. 1-196 bears south 80° and 27' west 48' distant and said quarter section corner bears south 19° and 4' east 2,392.62' distant.

Thence, first course, south 49° and 12' east 300' to a point from which the face of discovery cut bears north 29° and 8' east 700' distant; 600' to corner No. 2, situate on line 2-3 of said O. K. and Mollie Gibson lode claims respectively,

Thence, second course, north 29° and 8' east 942.8' to corner No. 3 of said Mollie Gibson lode claim; 1,500' to corner No. 3.

Thence, third course, north 49° and 12' west 600' to corner No. 4.

Thence, fourth course, south 29° and 8' west 1,500' to corner No. 1, the place of beginning; the survey of the lode claim as above described extending 1,500' in length along said El Paso vein or lode.

Beginning for the description of the Standard lode claim at corner No. 1, identical with corner No. 1 of said El Paso lode claim, from which the center of face of discovery cut bears north 11° and 14' west 467 and 100' distant.

Thence, first course, north 49° and 12' west 537.73' to corner No. 2, identical with corner No. 3 of said O. K. lode claim.

Thence, second course, north 29° and 8' east 1,500' to corner No. 3.

Thence, third course, south 49° and 12' east 537.73' to corner No. 4, identical with corner No. 4 of said El Paso lode claim.

Thence, fourth course, south 29° and 8' west 1,500' to corner No. 1, the place of beginning; the survey of the lode claim as above described extending 1,500' in length along said Standard vein or lode.

Beginning for the description of the Hoosier lode claim at corner No. 1, a limestone 25x12x10 inches, chiseled 1-196, with mound of stone, from which a pine 8" in diameter blazed and marked B.T. 1-196 bears north 33° and 30' west 26' distant and said section corner bears north 76° and 35' east 507.97' distant.

Thence, first course, north 59° and 10' east 1,484.7' to corner No. 2, situate on line 2-3 of said Nightingale lode claim.

Thence, second course, north 49° and 12' west 600' to corner No. 3, situate on line 2-3 of said Nightingale lode claim.

Thence, third course, south 59° and 10' west 1,484.7' to corner No. 4.

Thence, fourth course, south 49° and 12' east 300' to a point from which the face of discovery cut bears north 59° and 10' east 300' distant; 600' to corner No. 1, the place of beginning; the survey of the lode claim as above described extending 1,484.7' in length along said Hoosier vein or lode.

Beginning for the description of the Clipper lode claim at corner No. 1, identical with corner No. 1 of said Hoosier lode claim.

Thence, first course, south 53° and 30' west 1,500' to corner No. 2.

Thence, second course, north 49° and 12' west 300' to a point from which discovery cut bears north 53° and 30' east 300' distant; 600' to corner No. 3.

Thence, third course, north 53° and 30' east 1,500' to corner No. 4.

Thence, fourth course, south 49° and 12' east 600' to corner No. 1, the place of beginning; the survey of the lode claim as above described extending 1,500' in length along said Clipper vein or lode.

Beginning for the description of the Humboldt lode claim at corner No. 1, a red quartzite stone 28x10x7 inches chiseled 1-1-196, with mound of stone, situate on line 3-4 of said Hoosier lode claim, from which said section corner bears south 36° and 40' east 725.35' distant.

Thence, first course, north 25° west 1,500' to corner No. 2.

Thence, second course, south 59° and 10' west 600' to corner No. 3.

Thence, third course, south 25° east 1,500' to corner No. 4, identical with corners Nos. 4 of said Hoosier and Clipper lode claims, respectively.

Thence, fourth course, north 59° and 10' east 300' to a point from which discovery cut bears north 25° west 300' distant; 600' to corner No. 1, the place of beginning; the survey of the lode claim as above described extending 1,500' in length along said Humboldt vein or lode.

Beginning for the description of the Iron Clad lode claim at corner No. 1, identical with corner No. 1 of said Humboldt lode claim.

Thence, first course, north 25° west 1,500' to corner No. 2, identical with corner No. 2, of said Humboldt lode claim.

Thence, second course, north 59° and 10' east 600' to corner No. 3.

UNITED STATES OF AMERICA PATENT
General Land Office No. 36492
Dated March 21, 1903
Recorded in Book 44, Page 608, Laramie County

Mineral Certificate No. 138

From The United States of America to Charles A. Guernsey.

Certain mining claim or premises, known as the Terrible lode mining claim, designated by the Surveyor-General as Lot No. 199, embracing a portion of section 13 in township 27 north of range 66 west and of section 18 in township 27 north of range 65 west, Sixth Principal meridian, in the Platte Canon Mining District, in the County of Laramie and State of Wyoming, in the District of Lands subject to sale at Cheyenne and bounded, described, and platted as follows, with magnetic variation 14° and 55' east.

Beginning at corner No. 1, a quartzite rock 30x12x10 inches, chiseled 1-199, with mound of stone, from which the east quarter corner of section 13, in township 27 north of range 66 west, Sixth Principal meridian bears north 59° and 55' east 926' distant.

Thence, first course, south 82° east 1,200' to corner No. 2.

Thence, second course, south 2° and 23' east 600' to corner No. 3.

Thence, third course, north 82° west 1,200' to corner No. 4.

Thence, fourth course, north 2° and 23' west 600' to a point from which discovery cut bears south 82° east 750' distant; 600' to corner No. 1, the place of beginning; said lot No. 199 extending 1,200' in length along said Terrible vein or lode, and containing 16 acres, and .258 of an acre of land, more or less.

UNITED STATES OF AMERICA PATENT
General Land Office No. 36488
Dated March 17, 1903
Recorded in Book 44, Page 611

Mineral Certificate 139

From The United States of America to Charles A. Guernsey.

Certain mining claim or premises, known as the Summit, Connection, Moonlight, Rip Van Winkle, Otto, Giant, Pigmy, Appendix, Iron Spike, Miners Luck, Hexagon, Reserve, Iron Wheel and Iron Slope lode mining claims, designated by the Surveyor-General as Lot No. 197, embracing a portion of sections 4, 5 and 8, in township 27 north of range 65 and west Sixth Principal meridian, in the Platte Canon Mining District, in the County of Laramie and State of Wyoming, in the District of Lands subject to sale at Cheyenne and bounded, described, and platted as follows, with magnetic variation 14° and 58' east.

Beginning for the description of the Summit lode claim at corner No. 1, a quartzite rock, 24x19x10 inches, chiseled 1-1-197, with a mound of stone, situate on line 1-2 of the Juneau lode claim survey No. 194, from which a pine six inches in diameter blazed and marked B.T. 1-197 bears north 79° and 10' west 49' distant; a pine 5" in diameter blazed and marked B.T. 1-197 bears south 82° and 30' west 29' distant, and the west quarter corner of section 8, in township 27 north of range 65 west, Sixth Principal meridian, bears north 83° and 23' west 1,312.89' distant.

Thence, first course, north 86° and 5' east 1,261.43' to corner No. 2.

Thence, second course, north 83° west 539.88' to corner No. 3.

Thence, third course, south 27° and 55' west 1,339' to corner No. 4.

Thence, fourth course, south 83° east 280' to a point from which the entrance of discovery tunnel bears north 27° and 55' east 1,219' distant; 300' to corner No. 5.

Thence, fifth course, north 66° and 13' east 88.5' to corner No. 6.

Thence, sixth course, south 86° and 20' east 930' to corner No. 1, the place of beginning; the survey of the lode claim as above described extending 1,339' in length along said Summit vein or lode.

Beginning for the description of the Connection lode claim at corner No. 1, identical with corner No. 1 of said Summit lode claim.

Thence, first course, north 86° and 5' east 1,261.43' to corner No. 2 of said Summit lode claim; 1,379.49' to corner No. 2.

Thence, second course, south 86° and 20' east 531.81' to corner No. 3, situate on line 1-2 of the Central No. 1 lode claim survey No. 107; from a point on line 2-3 discovery on lode line bears south 20° and 50' west 200' distant.

Thence, third course, south 20° and 50' west 958.65' to corner No. 4, situate on line 1-2 of said Central No. 1 lode claim.

Thence, fourth course, north 87° and 35' west 935.0' to corner No. 5.

Thence, fifth course, south 20° and 50' west 201.4' to corner No. 6.

Thence, sixth course, south 56° and 44' west 289.8' to corner No. 7.

Thence, seventh course, north 86° and 20' west 240' to corner No. 1, the place of beginning; the survey of the lode claim as above described extending 1,411.05' in length along said Connection vein or lode.

Beginning for the description of the Moonlight lode claim at corner No. 1, a slate stone 25x14x8 inches, chiseled 1-197, with mound of stone, situate on line 4-1 of the Iron Tiger lode claim survey No. 107, from which a pine 7" in diameter blazed and marked B.T. 1-197 bears south 21° and 42' west 14' distant, and the north quarter corner of said section 8 bears north 3° and 19' west 1,456.43' distant.

Thence, first course, south 14° and 35' west 94.78' intersect lines 3-4 and 4-1 of said Iron Tiger and Central No. 1 lode claims, at south 87° and 35' east 10.88' from corners Nos. 4 and 1 of said claims, respectively; 503.06' to corner No. 2.

Thence, second course, north 86° and 20' west 57.34' to corner No. 3 of said Connection lode claim; also intersect line 1-2 of said Central No. 1 lode claim, at south 20° and 50' west 410.55' from corner No. 1; 589.15' to corner No. 3, identical with corner No. 2 of said Connection lode claim.

Thence, third course, south 86° and 5' west 115.06' to corner No. 4, identical with corner No. 2 of said Summit lode claim, and situate on line 1-2 of said Connection lode claim.

Thence, fourth course, north 83° west 244.62' to corner No. 5, situate on line 2-3 of said Summit lode claim.

Thence, fifth course, north 14° and 35' east 300' to a point from which the face of discovery cut bears south 56° and 20' east 100' distant; 600' to corner No. 6.

Thence, sixth course, south 86° and 20' east 860.08' to corner No. 1, the place of beginning; the survey of the lode claim as above described extending 860.08' in length along said Moonlight vein or lode.

Beginning for the description of the Rip Van Winkle lode claim at corner No. 1, a quartzite rock 24x14x10 inches, chiseled 1-1-197, with mound of stone, situate on line 4-1 of said Iron Tiger lode claim, from which the north quarter corner of said section 8 bears north 15° and 31' west 1,005.1' distant.

Thence, first course, north 10° and 50' east 383' to corner No. 1 of said Iron Tiger lode claim; 1,344' to corner No. 2.

Thence, second course, north 14° and 42' west 152.5' to corner No. 3, identical with the southeast corner of the Champion lode claim unsurveyed.

Thence, third course, north 86° and 20' west 520.13' to corner No. 4.

Thence, fourth course, south 21° and 23' west 110.04' intersect the south [illegible] of said Champion lode claim, at south 86° and 33' west 567.1' from the southeast corner of said claim; 1,[illegible]' to corner No. 5.

Thence, fifth course, south 86° and 20' east 314' to a point from which the [illegible] of north end of discovery cut bears north 20° and 50' east 350' distant; 608' to corner No. 1, the place of beginning; the survey of the lode claim as above described extending 1,[illegible]' in length along said Rip Van Winkle vein or lode.

Beginning for the description of the Otto lode claim at corner No. 1, a sandstone [illegible] inches, chiseled 1-197, with mound of stone, situate on line 4-5 of said Rip Van Winkle lode claim and on the south side line of said Champion lode claim, from which the north quarter corner of said section 8 bears south 22° and 9' west [illegible]' distant.

Thence, first course, south 86° and 33' west 300' to a point from which the breast of discovery tunnel bears south 21° and 23' west 750' distant; 480' to corner No. 2, identical with the southwest corner of said Champion lode claim.

Thence, second course, south 37° and 56' east 139' to corner No. 3.

Thence, third course, south 66° and 24' west 1,305.67' to corner No. 4.

Thence, fourth course, north 86° and 33' east 480' to corner No. 5, identical with corner No. [illegible] said Rip Van Winkle lode claim.

Thence, fifth course, north 66° and 24' east 1,389.6' to corner No. 1, the place of beginning; the survey of the lode claim as above described extending 1,389.6' in length along said Otto vein or lode.

Beginning for the description of the Giant lode claim at corner No. 1, a sandstone [illegible] inches chiseled 3-197 and 1-197, with mound of stone, identical with corner No. [illegible] of said Otto lode claim, from which the north quarter corner of said section 8 bears south 50° and 24' east 315.09' distant.

Thence, first course, south 66° and 24' west 1,305.67' to corner No. 2, identical with corner No. [illegible] said Otto lode claim.

Thence, second course, south 66° and 53' west 402.19' to a point from which the east end of discovery cut bears north 66° and 24' east 200' distant, also [illegible] the Black Bill lode claim survey No. 55, at south 18° west 55.45' from corner No. 2; [illegible]' to corner No. 3.

Thence, third course, north 66° and 24' east 289.58' intersect line 6-7 of said Black Bill lode claim, and line 12-9 of the Silver Steele lode claim survey No. [illegible], at north [illegible] and 32' west 845.36' from corners No. 7 and 12 of said claims, [illegible] intersect line 11-12 of said Silver Steele lode claim, at north [illegible]' from corner No. 12; 903.09' intersect line 16-13 of the Red Bill lode claim survey No. 55, at north 76° and 32' west 315.26' from corner No. 16; [illegible] to corner No. 4.

Thence, fourth course, north 66° and 53' east 169.91' intersect line 15-16 of said Red Bill lode claim, at north 3° and 40' east 529.96' from corner No. 16; 783' to corner No. 1, the place of beginning; the survey of the lode claim as above described extending 1,[illegible] in length along said Giant vein or lode.

Beginning for the description of the Pigmy lode claim at corner No. 1, identical with corner No. [illegible] said Rip Van Winkle lode claim, and situate on line 4-1 of said Iron Tiger lode claim.

Thence, first course, south 18° west 312.26' to corner No. 2.

Thence, second course, north 86° and 20' west 26.5' to corner No. 1 of said Moonlight lode claim, situate on line 4-1 of said Iron Tiger lode claim; 886.58' to corner No. 3, identical with corner No. 6 of said Moonlight lode claim.

Thence, third course, south 88° west 518.97' to corner No. 4, situate on line 7-[illegible] of said Black Bill lode claim.

Thence, fourth course, north 18° east 210' to a point from which the breast of discovery tunnel bears south 49° and 18' east 710.46' distant; 282.12' to corner No. [illegible], situate on line 9-3 of said Giant lode claim.

Thence, fifth course, north 66° and 53' east 402.19' to corner No. 6, identical with corners Nos. 2 and 4 of said Giant and Otto lode claims, respectively

Thence, sixth course, north 82° and 33' east 482' to corner No. 7, identical with corners Nos. 5 of said Otto and Rip Van Winkle lode claims.

Thence, seventh course, south 86° and 20' east 628' to corner No. 1, the place of beginning; the survey of the lode claim as above described extending 1,410.46' in length along said Pigmy vein or lode.

Beginning for the description of the Appendix lode claim at corner No. 1, a granite rock 30x14x8 inches chiseled 1-197 and 5-197, with mound of stone, from which the north quarter corner of said section 8 bears south 85° and 33' west 808.1' distant.

Thence, first course, north 14° and 42' west 232.5' to corner No. 2 of said Rip Van Winkle lode claim; 385' to corner No. 3 of said Rip Van Winkle lode claim; 600' to corner No. 2.

Thence, second course, north 66° and 55' east 1,500' to corner No. 3.

Thence, third course, south 14° and 42' east 300' to a point from which discovery shaft bears south 66° and 55' west 350' distant; 600' to corner No. 4.

Thence, fourth course, south 66° and 55' west 1,500' to corner No. 1, the place of beginning; the survey of the lode claim as above described extending 1,500' in length along said Appendix vein or lode.

Beginning for the description of the Iron Spike lode claim at corner No. 1, a quartzite rock 26x12x10 inches, chiseled 1-197 and 1-107, with mound of stone, identical with corner No. 1 of said Iron Tiger lode claim and situate on line 1-2 of said Rip Van Winkle lode claim, from which the north quarter corner of said section 8 bears north 76° and 12' west 600' distant.

Thence, first course, south 87° and 35' east 632.4' to corner No. 2 of said Iron Tiger lode claim; 900' to corner No. 2.

Thence, second course, north 20° and 50' east 302' to corner No. 3.

Thence, third course, north 14° and 42' west 274.92' to corner No. 4, situate on line 4-1 of said Appendix lode claim.

Thence, fourth course, south 66° and 55' west 776.02' to corner No. 5, identical with corner No. 1 of said Appendix lode claim.

Thence, fifth course, north 14° and 42' west 232.5' to corner No. 6, identical with corner No. 2 of said Rip Van Winkle lode claim, and situate on line 1-2 of said Appendix lode claim.

Thence, sixth course, south 20° and 50' west 461' to corner No. 1, the place of beginning; from a point on line 6-1 discovery shaft on lode line bears south 87° and 35' east 600' distant; the survey of the lode claim as above described extending 900' in length along said Iron Spike vein or lode.

Beginning for the description of the Miners Luck lode claim at corner No. 1, a quartzite rock 24x12x10 inches, chiseled 1-197 - 1-197 and 5-197, with mound of stone, from which the southeast corner of section five, said township and range, bears south 35° and 35' west 473.37' distant.

Thence, first course, south 77° and 52' west ~~1,365.6'~~ 56.6' to corner No. 2, identical with corner No. 3 of said Iron Spike lode claim,

Thence, second course, north 14° and 42' west 274.92' to corner No. 3, identical with corner No. 4 of said Iron Spike lode claim, and situate on line 4-1 of said Appendix lode claim.

Thence, third course, north 66° and 55' east 723.98' to corner No. 4, identical with corner No. 4 of said Appendix lode claim.

Thence, fourth course, north 61° and 20' east 659' to corner No. 5.

Thence, fifth course, south 14° and 42' east 300' to a point from which the center of discovery shaft bears south 70° and 53' west 735.75' distant; 600' to corner No. 1, the place of beginning; thesurvey of the lode claim as above described extending 1,359.75' in length along said Miners Luck vein or lode.

Beginning for the description of the Hexagon lode claim at corner No. 1, a slate stone 30x12x6 inches, chiseled 1-197, with mound of stone, identical with the southeast corner of said section 5.

Thence, first course, south 231.33' to corner No. 2.

Thence, second course, north 87° and 35' west 1,159.64' to corner No. 3, identical with corner No. 2 of said Iron Spike lode claim.

Thence, third course, north 20° and 50' east 2' to a point from which the face of discovery cut bears north 79° and 40' east 630.2' distant; 302'to corner No. 4 identical with corners Nos. 2 and 3 of said Miners Luck and Iron Spike lode claim, respectively.

Thence, fourth course, north 77° and 52' east 1,356.6' to corner No. 5, identical with corner No. 1 of said Miners Luck lode claim.

Thence, fifth course, south 20° and 50' west 413.31' to corner No. 6.

Thence, sixth course, north 89° and 25' west 130.08' to corner No. 1, the place of beginning; the survey of the lode claim as above described extending 1,330.2' in length along said Hexagon vein or lode.

Beginning for the description of the Reserve lode claim at corner No. 1, a quartzite rock 24x14x8 inches, chiseled 4-4-197 and 1-197, with mound of stone, identical with corner No. 4 of said Appendix lode claim, from which the southeast corner of said section 5 bears south 35° and 2' east 792.86' distant.

Thence, first course, north 14° and 42' west 600' to corner No. 2, identical with corner No. 3 of said Appendix lode claim.

Thence, second course, north 61° and 20' east 1,500' to corner No. 3.

Thence, third course, south 14° and 42' east 300' to a point from which discovery shaft bears south 61° and 20' west 300' distant; 600' to corner No. 4.

Thence, fourth course, south 61° and 20' west 841' to corner No. 5 of said Miners Luck lode claim; 1,500' to corner No. 1, the place of beginning; the survey of the lode claim as above described extending 1,500' in length along said Reserve vein or lode.

Beginning for the description of the Iron Wheel lode claim at corner No. 1, identical with corner No. 1 of said Miners Luck lode claim.

Thence, first course, north 14° and 42' west 300' to a point from which discovery shaft bears north 61° and 20' east 50' distant; 600' to corner No. 2, identical with corner No. 5 of said Miners Luck lode claim, and situate on line 4-1 of said Reserve lode claim.

Thence, second course, north 61° and 20' east 841' to corner No. 3, identical with corner No. 4 of said Reserve lode claim.

Thence, third course, north 32° and 58' east 659' to corner No. 4.
Thence, fourth course, south 14° and 42' east 600' to corner No. 5.
Thence, fifth course, south 32° and 58' west 659' to corner No. 6.
Thence, sixth course, south 61° and 20' west 841' to corner No. 1, the place of beginning; the survey of the lode claim as above described extending 1,500' in length along said Iron Wheel vein or lode.

Beginning for the description of the Iron Slope lode claim at corner No. 1, a slate stone 28x10x8 inches chiseled 4-197, 1-197 and 3-197, with mound of stone, identical with corner No. 4 of said Reserve lode claim, from which the southwest corner of section 4, said township and range, bears south 32° and 11' west 1,617.3' distant.

Thence, first course, north 32° and 58' east 659' to corner No. 4 of said Iron Wheel lode claim; 1,500' to corner No. 2.
Thence, second course, north 14° and 42' west 811' to corner No. 3.
Thence, third course, south 32° and 58' west 1,500' to corner No. 4.
Thence, fourth course, south 14° and 42' east 211' to corner No. 3 of said Reserve lode claim; 405.5' to a point from which discovery shaft bears north 32° and 58' east 100' distant; 811' to corner No. 1, the place of beginning the survey of the lode claim as above described extending 1,500' in length along said Iron Slope vein or lode. Expressly excepting and excluding from these presents all that portion of the ground, hereinbefore described, embraced in said Iron Tiger and Central No. 1 lode claims survey No. 107; said Black Bill and Red Bill lode claims survey No. 55; said Silver Steele lode claim survey No. 55 am., and said Champion lode claim unsurveyed, and also all veins, lodes and ledges throughout their entire depth, the tops or apexes of which lie inside of each excluded ground; the granted premises in said lot No. 197 containing 209 acres and .052 of an acre of land, more or less.

UNITED STATES OF AMERICA PATENT
General Land Office No. 36489
Dated March 17, 1903
Recorded in Book 106, Page 436

Mineral Certificate 140

From The United States of America to Charles A. Guernsey

Certain mining claims or premises known as the Bonded, Good Fortune, Good Fortune Annex, Golden Rule, Appex, Blue Bird, Denver & Gulf Cottonwood, Whalen, Anaconda, Valley, Juneau, Rudy L, Grecia Ellen, and Blue Jay Fraction lode mining claims. Designated by the Surveyor-General as Lot No. 194, embracing a portion of sections seven and eight in township twenty-seven north of range sixty-five west, Sixth Principal meridian, in the Platte Canon Mining District in the County of Laramie and State of Wyoming, in the District of Lands subject to sale at Cheyenne and bounded, described, and platted as follows, with magnetic variation fourteen degrees and fifty-five minutes east.

Beginning for the description of the Bonded lode claim at corner No. 1, a sandstone 25x8x6 inches, chiseled 1-194 and 3-3-194, with mound of stone from which the quarter corner between sections seven and eight in township 27 north of range 65 west, Sixth Principal meridian, bears north 55° and 47' east 1,445' distant.

Thence, first course, north 74° west 742.3' intersect line 13-14 of the Republic lode claim survey No. 49, and line 17-18 of the Douglas lode claim survey No. 49, at north 21° and 30' east 35.2' from corners Nos. 14 and 18 respectively; 792' to corner No. 2.

Thence, second course, north 66° and 10' west 282' to corner No. 3.

Thence, third course south 10° and 40' west 29.2' intersect lines 14-15 of said Republic lode claim and 24-21 of the Fairview lode claim survey No. 49, at North 66° and 10' west 326' from corner No. 14 of said Republic lode claim and 44' from corner No. 24 of said Fairview lode claim 480.7' to corner No. 4, from which the east end of discovery cut bears north 66° and 37' east 481.7' distant.

Thence, fourth course, south 83° and 35' east 43' intersect line 23-24 of said Fairview lode claims at south 10° and 40' west 438.3' from corner No. 24; 1,066.1' to corner No. 5.

Thence, fifth course, north 10° and 40' east 228.5' intersect line 18-19 of said Douglas lode claim at south 74° east 749' from corner No. 18; 263.7' to corner No. 1, the place of beginning; the survey of the lode claim as above described extending 1,066.1' in length along said Bonded vein or lode.

Beginning for the description of the Good Fortune lode claim at corner No. 1, a red quartzite rock 20x14x6 inches, chiseled 1-194, 1-194, 4-194 and 3-194, with mound of stone, from which said quarter section corner bears north 1° and 32' west 516.03' distant, a cross (x) and B.R. 1-194, chiseled on a red quartzsite rock in place 4x4x2 feet, above ground bears north 22° and 50' east 30' distant, and a cross (x) and B.R. 1-194 chiseled on a red quartzite rock in place 3x3x2 feet above ground bears south 5° west 10' distant.

Thence, first course, north 74° and 56' west ~~1,025'~~ 1023' to corner No. 2.

Thence, second course, south 21° and 30' west 134.3' intersect line 20-17 of said Douglas lode claim at north 68° and 34' west 49.5' from corner No. 20; 603.8' to corner No. 3, identical with corner No. 1 of said Bonded lode claim.

Thence, third course, south 74° and 56' east 49.8' intersect line 19-20 of said Douglas lode claim at south 21° and 30' west 467.95' from corner No. 20; 1,023' to corner No. 4.

Thence, fourth course, north 21° and 30' east 301.9' to a point from which the center of east side of discovery cut bears north 74° and 56' west 98' distant; 603.8' to corner No. 1, the place of beginning; the survey of the lode claim as above described extending 1,023' in length along said Good Fortune vein or lode.

Beginning for the description of the Good Fortune Annex lode claim at corner No. 1, a quartz rock 28x10x8 inches, chiseled 1-194, with mound of stone, from which the southwest corner of said section eight, bears south 20° and 41' east 959.32' distant; a pine 6" in diameter blazed and marked B.T. 1-194, bears south 46° and 21' west 21' distant; a pine 18" in diameter blazed and marked B.T. 1-194 bears north 55° east 36.5' distant and a pine 9" in diameter blazed and marked B.T. 1-194 bears north 14° and 26' west 32.8' distant.

Thence, first course, north 74° and 56' west 1,023' to corner No.2, from which the face of discovery cut bears north 72° and 52' east 561.3' distant

Thence, second course, north 10° and 40' east 247.3' to corner No. 5 of said Bonded lode claim; 475.8' intersect line 18-19 of said Douglas lode claim at north 74° west 43' from CORNER No. 19; 511' to corner No. 3, identical with corners Nos. 1 and 3 of said Bonded and Good Fortune lode claims, respectively.

Thence, third course, south 74° and 56' east 49.8' intersect line 19-20 of said Douglas lode claim at north 21° and 30' east 36.05' from corner No. 19; 1,023' to corner No. 4, identical with corner No. 4 of said Good Fortune lode claim.

Thence, fourth course, south 10° and 40' west 511' to corner No. 1, the place of beginning; the survey of the lode claim as above described extending 1,023' in length along said Good Fortune Annex vein or lode.

Beginning for the description of the Golden Rule lode claim at corner No. 1, a red sandstone 26x16x8 inches, chiseled 1-194 and 8-194, with mound of stone, from which the west quarter corner of said section eight, bears north 14° and 45' west 341.94' distant; a cross (x) and B.R. 1-194, chiseled on a red sandstone rock in place 4x3x1 feet above ground, bears north 78° west 28' distant, and a cross (x) and B.R. 1-194, chiseled on a quartzite rock in place 4x4x2 feet above ground bears north 39° and 40' west 14.5' distant.

Thence, first course, north 74° and 56' west 1,023' to corner No. 2, from which discovery tunnel bears south 44° and 56' east 357.8' distant.

Thence, second course, south 21° and 30' west 200' to corner No. 3, identical with corner No. 2 of said Good Fortune lode claim.

Thence, third course, south 74° and 56' east 1,023' to corner No. 4, identical with corner No. 1 of said Good Fortune lode claim.

Thence, fourth course, north 21° and 30' east 200' to corner No. 1, the place of beginning; the survey of the lode claims as above described extending 1,023' in length along said Golden Rule vein or lode.

Beginning for the description of the Appex lode claim at corner No. 1, a quartzite rock 30x16x8 inches, chiseled 1-194 with mound of stone from which the southeast corner of said section seven, bears south 23° and 43' east 875.55' distant.

Thence, first course, south 86° and 37' east 1,500' to corner No. 2.

Thence, second course, north 10° and 40' east 600' to corner No. 3.

Thence, third course, north 86° and 37' west 1,500' to corner No. 4, identical with corners Nos. 4 of said Good Fortune and Good Fortune Annex lode claims.

Thence, fourth course, south 10° and 40' west 300' to a point from which discovery shaft bears south 86° and 37' east 515' distant; 511' to corner No. 1 of said Good Fortune Annex lode claim; 600' to corner No. 1, the place of beginning; the survey of the lode claim as above described extending 1,500' in length along said Appex vein or lode.

Beginning for the description of the Blue Bird lode claim at corner No. 1, identical with corner No. 1 of said Good Fortune, and corner No. 4 of said Golden Rule lode claims.

Thence, first course, south 86° and 29' east 1,498.8' to corner No. 2.

Thence, second course, south 21° and 30' west 600' to corner No. 3.

Thence, third course, north 86° and 37' west 1,500' to corner No. 4, identical with corners Nos. 4 of said Good Fortune, Good Fortune Annex and Appex lode claims.

Thence, fourth course, north 21° and 30' east 301.9' to a point from which discovery shaft bears south 86° and 37' east 120' distant; 603.8' to corner No. 1 the place of beginning; the survey of the lode claim as above described extending 1,500' in length along said Blue Bird vein or lode.

Beginning for the description of the Denver & Gulf lode claims at corner No. 1, a quartzite rock 24x10x6 inches, chiseled 3-194 and 1-194, with mound of stone identical with corners Nos. 3 of said Appex and Blue Bird lode claims, from which the west quarter corner of said section eight, bears north 47° and 52' west 1,739.4' distant.

Thence, first course, south 69° and 39' east 1,500' to corner No. 2.

Thence, second course, south 10° and 40' west 600' to corner No. 3.

Thence, third course, north 69° and 39' west 1,500' to corner No. 4, identical with corner No. 2 of said Appex lode claim.

Thence, fourth course, north 10° and 40' east 300' to a point from which discovery shaft bears south 69° and 39' east 43' distant; 600' to corner No. 1, the place of beginning; the survey of the lode claim as above described extending 1,500' in length along said Denver & Gulf vein or lode.

Beginning for the description of the Cottonwood lode claim at corner No. 1, identical with corner No. 1 of said Denver & Gulf, and corners Nos. 3 of said Appex and Blue Bird lode claims.

Thence, first course, north 21° and 30' east 300' to a point from which discovery shaft bears south 69° and 39' east 300' distant; 600' to corner No. 2, identical with corner No. 2 of said Blue Bird lode claim.

Thence, second course, south 69° and 39' east 1,500' to corner No. 3.

Thence, third course, south 21° and 30' west 600' to corner No. 4, identical with corner No. 2 of said Denver & Gulf lode claim.

Thence, fourth course, north 69° and 39' west 1,500' to corner No. 1, the place of beginning the survey of the lode claim as above described extending 1,500' in length along said Cottonwood vein or lode.

Beginning for the description of the Whelen lode claim at corner No. 1, a sandstone 24x10x10 inches, chiseled 1-194 and 2-194 with mound of stone, situate on line 3-4 of survey No. 107, the Central No. 2 lode claim, from which said quarter section corner bears north 79° and 58' west 2,677.1' distant.

Thence, first course, south 87° and 35' east 249.25' to a point from which discovery shaft bears south 13° west 500' distant; 498.5' to corner No. 2.

Thence, second course, south 13° west 1,500' to corner No. 3.

Thence, third course, north 87° and 35' west 498.5' to corner No. 4, from which corners Nos. 2 and 4 of said Denver & Gulf and Cottonwood lode claims, respectively, bear north 59° and 15' east 462.12' distant.

Thence, fourth course, north 13° east 1,500' to corner No. 1, the place of beginning;the survey of the lode claim as above described extending 1,500' in length along said Whalen vein or lode.

Beginning for the description of the Anaconda lode claim at corner No. 1, a quartzite stone 30x10x6 inches, chiseled 1-194, with mound of stone situate on line 3-4 of said survey No. 107 from which a cross (x) and B.R. 1-194, chiseled on a quartzite rock in place 12x10x8 feet, above ground bears north 13° east 31' distant, and said quarter section corner bears north seventy-six degrees and 52' west 1,907.8' distant.

Thence, first course, south 87° and 35' east 779' to corner No. 2, identical with corner No. 1,of said Whalen lode claim.

Thence, second course, south 13° west 266.25' to a point from which discovery cut bears north 87° and 35' west 100' distant; 532.5' to corner No. 3, situate on line 4-1 of said Whalen lode claim.

Thence, third course, north 69° and 39' west 772' to corner No. 4, situate on line 2-3 of said Cottonwood lode claim.

Thence, fourth course, north 13° east 288' to corner No. 1, the place of beginning; the survey lode claim as above described extending 779' in length along said Anaconda vein or lode.

Beginning for the description of the Valley lode claim at corner No. 1, a quartzite rock 24x12x8 inches chiseled 1-194 and 3-194 with mound of stone situate on line 1-2 of said Blue Bird lode claim, from which a pine eight inches in diameter blazed and marked B.T. 1-194, bears south 21° and 30' east 28' distant, and said quarter section corner bears north 56° and 22' west 1,026.9' distant.

Thence, first course, north 59° and 44' east 1,086.8' to corner No. 2, situate on line 2-3 of said survey No. 107, at north 20° and 50' east 431.3' from corner No. 3.

Thence, second course, south 25° and 45' east 464.2' intersect line 3-4 of said survey No. 107 at south 87° and 35' east 355.4' from corner No. 3; 600' to corner No. 3.

Thence, third course, south 59° and 44' west 302.6' to corner No. 4 of said Anaconda lode claim; 1,086.8' to corner No. 4.

Thence, fourth course, north 25° and 45' west 300' to a point from which discovery cut bears north 59° and 44' east 525' distant; 600' to corner No. 1, the place of beginning the survey of the lode claim as above described extending 1,086.8' in length along said Valley vein or lode.

Beginning for the description of the Juneau lode claim at corner No. 1, a red quartzite rock 26x10x8 inches, chiseled 1-194 and 5-194, with mound of stone from which a pine ten inches in diameter blazed and marked B.T. 5-194, bears south 55° and 6' west 28.9' distant, and said quarter section corner bears north 82° and 44' west 1,083.3' distant.

Thence, first course, south 86° and 20' east 235' to a point from which discovery cut bears south 48° and 30' west 160' distant; 470' to corner No. 2, situate on line 1-2 of said Valley lode claim.

Thence, second course south 59° and 44' west 797' to corner No. 3, identical with corner No. 1 of said Valley lode claim.

Thence, third course, north 86° and 20' west 61.5' to corner No. 4.

Thence, fourth course, north 33° and 15' east 511.84' to corner No. 1, the place of beginning; the survey of the lode claim as above described extending 627.52' in length along said Juneau vein or lode.

Beginning for the description of the Rudy L. lode claim at corner No. 1, a red quartzite rock 28x10x9 inches, chiseled 1-194, on the northeast and northwest faces, from which a pine six inches in diameter blazed and marked B.T. 1-194 bears north 29° and 10' east 61' distant, and said quarter section corner bears north 19° and 30' west 160.5' distant.

Thence, first course, north 27° and 55' east 1,439' to corner No. 2.

Thence, second course, south 83° east 600' to corner No. 3.

Thence, third course, south 27° and 55' west 1,439' to corner No. 4.

Thence, fourth course, north 83° west 300' to a point from which discovery shaft bears north 27° and 55' east 1,039' distant; 600' to corner No. 1, the place of beginning; the survey of the lode claim as above described extending 1,439' in length along said Rudy L. vein or lode.

Beginning for the description of the Gracia Ellen lode claim at corner No. 1, identical with corner No. 1, of said Rudy L. lode claim, from which discovery tunnel bears north 4° and 51' west 208.9' distant.

Thence, first course, north 27° and 55' east 1,439' to corner No. 2, identical with corner No. 2 of said Rudy L. lode claim.

Thence, second course, north 83° west 555' to corner No. 3.

Thence, third course, south 19° and 35' west 600' to corner No. 4.

Thence, fourth course, south 18° and 22' west 296.86' to corner No. 5.

Thence, fifth course, south 8° west 332' to corner No. 6.

Thence, sixth course, west 114.8' to corner No. 7.

Thence, seventh course, south 33° and 15' west 135.5' to corner No. 8.

Thence, eighth course, south 83° east 410' to corner No. 1, the place of beginning; the survey of the lode claim as above described extending 1,393.8' in length along said Gracia Ellen vein or lode.

Beginning for the description of the Blue Jay Fraction lode claim at corner No. 1, a quartzite rock 30x10x10 inches, chiseled 1-194 and 8-194, with mound of stone identical with corner No. 8 of said Gracia Ellen lode claim from which a pine 12 inches in diameter blazed and marked B.T. 8-194, bears north 30° and 32' east 54' distant; a pine 10" in diameter blazed and marked 1-194 bears south 5° and 37' east 47' distant, and said quarter section corner bears north 74° east 367.6' distant.

Thence, first course, south 83° east 410' to corners Nos. 1 of said Gracia Ellen and Rudy L. Lode claims; 1,010' to corner No. 2, identical with corner No. 4 of said Rudy L. lode claim.

Thence, second course, north 27° and 55' east 100' to corner No. 3, situate on line 3-4 of said Rudy L. lode claim.

Thence, third course, south 83° east 300' to corner No. 4.

Thence, fourth course, north 66° and 13' east 88.5' to corner No. 5, identical with corner No. 1 of said Juneau lode claim.

Thence, fifth course, south 33° and 15' west 956' to a point from which discovery shaft bears north 82° and 2' west 600' distant; 511.84' to corner No. 4 of said Juneau lode claim; 512' to corner No. 6, situate on line 1-2 of said Blue Bird lode claim.

Thence, sixth course, north 56° and 29' west 781.08' to corner No. 7, identical with corners Nos. 1, of said Good Fortune and Blue Bird lode claims.

Thence, seventh course, north 21° and 30' east 200' to corner No. 8, identical with corner No. 1 of said Golden Rule lode claim.

Thence, eighth course, north 74° and 56' west 520' to corner No. 9.

Thence, ninth course, north 33° and 15' east 112.6' to corner No. 1, the place of beginning; the survey of the lode claim as above described extending 1,342.33' in length along said Blue Jay Fraction vein or lode. Expressly excepting and excluding from these presents all that portion of the ground hereinbefore described embraced said mining claim or survey No. 107 and said Douglas, Republic and Fairview lode claims Survey No. 49, and also all veins, lodes and ledges throughout their entire depth, the tops or apexes of which lie inside of such excluded ground; the granted premises in said lot No. 194 containing 185 acres and .175 of an acre of land more or less.

UNITED STATES OF AMERICA PATENT
General Land Office No. 36441
Dated March 10, 1903
Recorded in Book 106, Page 433, Laramie County, Wyoming

Mineral Certificate No. 142

From The United States of America to Charles A. Guernsey.

Certain mining claim or premises, known as the Celtic lode mining claim designated by the Surveyor-General as Lot No. 201, embracing a portion of sections 12 and 13, in township 27 north of range 66 west, Sixth Principal meridian, in the Platte Canon Mining district, in the County of Laramie and State of Wyoming, in the District of Lands subject to sale at Cheyenne and Bounded, described, and platted as follows, with magnetic variation 15° and 55' east.

Beginning at corner No. 1, a quartzite rock 30x14x7 inches, chiseled 1-201, with mound of stone, identical with the south quarter corner of section 12, in township 27 north of range 66 west, Sixth Principal meridian.

Thence, first course, south 87° and 59' west 273.04' to corner No. 2.

Thence, second course, south 21° and 39' west 282.86' to corner No. 3.

Thence, third course, south 54° and 55' east 1,205' to corner No. 4.

Thence, fourth course, north 21° and 39' east 282' to a point from which the entrance of discovery tunnel bears north 54° and 55' west 200' distant; 584' to corner No. 5.

Thence, fifth course, north 54° and 55' west 1,007.32' to corner No. 6.

Thence, sixth course, south 156.67' to corner No. 1, the place of beginning; said lot No. 201 extending 1,205' in length along said Celtic vein or lode and containing 14 acres and .~~565~~ .556 of an acre of land, more or less.

Assaying Report on Ore Mined and
Shipped from the Good Fortune Iron Mine
for the period from Jan. 28, 1953 to Feb. 20, 1953

Gross Tons	Moist.	Mang.	Iron	Comb.	Moist.	Insol.	Phos.
53,750	2,688	.06	63.63	63.69	5.00	8.60	.08
50,000	3,400	.10	60.02	60.12	6.80	8.85	.08
55,491	3,773	.08	60.92	61.00	6.80	8.65	.12
52,545	3,573	.11	60.32	60.43	6.80	8.70	.08
50,536	3,639	.12	61.42	61.54	7.20	8.74	.09
49,643	3,376	.13	61.22	61.35	6.80	9.25	.10
56,607	3,849	.11	59.72	59.83	6.80	8.20	.11
50,045	3,403	.14	59.32	59.46	6.80	9.00	.10
50,848	3,458	.11	60.62	60.73	6.80	9.14	.09
101,607	6,096	.10	60.02	60.12	6.00	8.52	.08
99,955	5,997	.10	59.82	59.92	6.00	10.80	.08
99,018	5,941	.11	59.22	59.33	6.00	10.20	.10
109,509	6,571	.12	61.81	61.93	6.00	6.65	.10
90,223	6,767	.09	58.82	58.91	7.50	12.50	.09
93,080	6,981	.10	57.23	57.33	7.50	13.10	.08
105,134	7,885	.08	60.42	60.50	7.50	8.10	.10
97,812	5,869	.09	62.41	62.50	6.00	9.24	.09
105,446	7,908	.09	60.82	60.91	7.50	8.00	.11
103,080	6,185	.11	60.12	60.23	6.00	8.60	.09
68,661	4,669	.10	60.42	60.52	6.80	8.72	.12
66,429	4,517	.08	59.62	59.70	6.80	9.86	.15
98,929	5,738	.10	60.82	60.92	5.80	9.00	.11
108,571	6,297	.10	60.32	60.42	5.80	8.94	.10
53,571	3,107	.09	59.22	59.31	5.80	8.96	.08
51,161	3,070	.07	54.24	54.31	6.00	16.84	.08
44,598	2,676	.07	54.24	54.31	6.00	16.84	.08
103,661	5,183	.11	62.41	62.52	5.00	6.40	.11
109,598	6,576	.09	62.41	62.50	6.00	6.30	.10
55,312	3,319	.10	62.41	62.51	6.00	7.00	.09
113,482	6,809	.12	61.61	61.73	6.00	8.00	.11
102,679	5,134	.09	62.01	62.10	5.00	6.26	.09
98,527	4,926	.12	62.21	62.33	5.00	6.32	.10
114,018	5,701	.08	62.81	62.89	5.00	7.84	.07
118,616	5,931	.11	60.62	60.73	5.00	7.00	.10
102,991	5,253	.08	62.61	62.69	5.10	5.65	.07
104,687	5,339	.10	62.21	62.31	5.10	9.56	.08
103,080	5,257	.08	63.21	63.29	5.10	6.08	.07
92,634	4,632	.11	62.41	62.52	5.00	6.00	.09
101,607	5,080	.08	61.81	61.89	5.00	8.90	.10
103,304	5,165	.10	62.81	62.91	5.00	8.35	.10

Exhibit "4"

Gross Tons	Moist.	Mang.	Iron	Comb.	Moist.	Insol.	Phos.
55,357	3,321	.10	61.32	61.42	6.00	8.10	.08
97,545	4,097	.09	59.62	59.71	4.20	9.20	.10
111,071	6,664	.10	63.21	63.31	6.00	6.35	.10
108,795	6,528	.10	60.42	60.52	6.00	7.36	.11
111,116	6,667	.09	60.22	60.31	6.00	8.50	.10
107,902	6,474	.11	60.20	60.31	6.00	7.60	.11
51,518	3,091	.10	60.40	60.50	6.00	7.00	.11
100,000	5,800	.12	60.00	60.12	5.80	8.14	.10
98,036	3,921	.10	63.80	63.90	4.00	5.76	.11
98,125	3,925	.08	62.20	62.28	4.00	6.59	.08
103,482	4,139	.10	61.80	61.90	4.00	6.94	.09
122,545	4,902	.08	62.80	62.88	4.00	6.16	.11
99,732	3,989	.10	61.60	61.70	4.00	7.30	.10
95,982	3,839	.10	62.80	62.90	4.00	6.10	.10
102,054	4,082	.08	62.20	62.28	4.00	5.62	.12
102,277	4,091	.09	62.00	62.09	4.00	6.04	.07
106,696	4,268	.11	62.00	62.11	4.00	6.16	.08
98,036	3,921	.10	63.80	63.90	4.00	5.76	.11
98,125	3,925	.08	62.20	62.28	4.00	6.59	.08
103,482	4,139	.10	61.80	61.90	4.00	6.94	.09
122,545	4,902	.08	62.80	62.88	4.00	6.16	.11
99,732	3,989	.10	61.60	61.70	4.00	7.30	.10
95,982	3,839	.10	62.80	62.90	4.00	6.10	.10
102,054	4,082	.08	62.20	62.28	4.00	5.62	.12
102,277	4,091	.09	62.00	62.09	4.00	6.04	.07
106,696	4,268	.11	62.00	62.11	4.00	6.16	.08
54,598	3,276	.10	62.40	62.50	6.00	7.40	.10
99,152	4,958	.08	62.60	62.68	5.00	7.50	.10
95,045	4,752	.10	62.00	62.10	5.00	6.14	.07
105,134	5,257	.11	58.80	58.91	5.00	10.00	.10
92,589	4,629	.10	59.60	59.70	5.00	8.66	.10
93,884	4,694	.12	61.80	61.92	5.00	6.50	.10

MF-103
(Revised April 1952)

UNITED STATES DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED

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

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

MAR 30 1953

Not to be filled in by applicant

Docket No. DMEA-2964
Metal or Mineral
Date Received 3-30-53
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: H. C. SCHRONDER CO., INC., McGregor, Iowa, an Iowa corporation
Mining operations at Guernsey, Wyoming

(*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 The property involved in the proposed exploration consists of parts of the Good Fortune and Bluebird mining claims, the Good Fortune Annex, Apex, Cottonwood and Denver & Gulf mining claims. The legal description of each of said claims is set out in Exhibit "1" hereto attached.

(*b*) State any mine name by which the property is known. Good Fortune group.

(*c*) State your interest in the land, whether owner, lessee, purchaser under contract, or otherwise Applicant is lessee of the property

(*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. See Exhibit "2" hereto attached.

(*e*) If you own the land, describe any liens or encumbrances on it

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

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.

(*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.

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

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

5. *The exploration project.*—(*a*) [redacted] the mineral or minerals for which you w[redacted] explore Iron Ore

(*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.

(*c*) The work will start within 30 days and be completed within 22 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.

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.).

(*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.

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

(*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.

(*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.

(*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.

(*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.

(*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.

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

(*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 28, 1953

R. G. SCHROEDER CO., INC.
(Applicant)

By [signature]
President

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

Form MF-103
E. C. Schroeder Co.,Inc., McGregor, Iowa.
Mining Operations, Guernsey, Wyoming.

1. (c) President - E. C. Schroeder, McGregor, Iowa.
Vice President - Paul E. Schroeder, Douglas, Wyoming.
Secretary & Treasurer - Violet M. Schroeder, McGregor, Iowa.

4. (a) The Good Fortune Iron Mine was investigated by Mr. Eugene Frey of the Bureau of Mines and a Report of Investigation was made in August, 1947, and is contained in R.I. 4089. The applicant is presently mining by open pit method, parts of the Good Fortune and Bluebird mining claims which is the site of the old Good Fortune Iron Mine. The production facilities consist of power shovels, trucks, drills, crusher and railroad loading facilities. The applicant is the owner of the mining facilities. The mine is readily accessible for examination purposes.

(b) The Good Fortune Iron Mine is a part of the Good Fortune group of claims which were located in 1857. In the winter of 1897-98, five thousand tons of ore were shipped from the Good Fortune deposit to the Colorado smelters. The average rate of smelter analysis on the shipments was 62.4% iron and 6.2% silica. As shown by Mr. Frey's report in 1947, R.I. 4089, the property was explored and sampled at that time by the Bureau of Mines. The applicant commenced production from said mine during December, 1952, after exploring an area of approximately four acres. It is estimated that the reserves from the area explored are in excess of two hundred thousand tons of iron ore. During December and January the applicant shipped 144 cars of iron ore which had an average Fe analysis in excess of 60% and a silica content below 10%.

(c) The property proposed for prospecting lies in the Hartville iron range. The rocks of the range are usually steeply dipping pre-Cambrian rocks overlain by flat-line or gently dipping carboniferous and Mesozoic rocks and rocks of Tertiary and Recent age. The country rock of the ore is schist and impure flint which is stained by either limonite or hematite, evidently a relatively shallow alteration product of the schist.

The red ore deposits of the area occur in lenticular bodies of varying thickness enclosed in a slate formation. The iron ore lenses lie in schist immediately above the uppermost limestone of the older pre-Cambrian series. A thin shell of siliceous iron-stained schist separates the ore from the underlying limestone. All indications show that the deposit is but a replacement of the schist,

4.(c) continued.

since no hard and fast line can be drawn between unaltered schist, iron-stained schist, siliceous ore, and high-grade ore.

The ore consists of two varieties of hematite, one soft and the other hard. The soft ore is generally a schistose, fine-grained, light red ore. This variety is commonly known as "paint ore". The harder variety is a dark bluish-gray. It is fine-grained and compact, with a rather smooth, even fracture.

The Colorado Fuel and Iron Company has been mining iron ore on the property adjoining the applicant's for many years, their mines being known as the Sunrise and the Chicago Mines which have produced thousands of tons of high grade ore.

Attached hereto marked Exhibit "3" is a map of the area showing the applicant's property as related to the Colorado Fuel and Iron Company property.

The applicant has a geologic report on the property explored to date which it will submit to the field team. Attached hereto marked Exhibit "4" is the assaying report on the ore mined and shipped from the Good Fortune Iron Mine for the period from January 28, 1953 to February 20, 1953.

(d) The property has good access roads and the mine is located approximately eight miles from its railroad supply and shipping point and about nine miles from Guernsey, Wyoming, the resident point.

(e) The necessary manpower, materials, supplies, equipment, water and power are available to the applicant.

5. (b) It is proposed that churn drilling be done on 100 ft. centers throughout the property included in this application, except the area immediately adjoining present mining operations. The proposed area of exploration is shown in Exhibit "5" attached hereto. It is proposed to start exploration in the area shown in Exhibit "5". It is proposed to drill approximately 345 holes with an average depth of 100 ft. Some of the holes will be shallow while others will exceed the 100 ft. average. This will be determined as the drilling and geological investigation proceeds.

Form MF-103
E. C. Schroeder Co.,Inc., McGregor, Iowa.
Mining Operations, Guernsey, Wyoming.

5. (d) The E. C. Schroeder Co.,Inc., is an Iowa corporation, which has been mining and quarrying stone products for several years. The Schroeder Co. which is a wholly owned subsidiary of the applicant herein is engaged in the mining of brown iron ore in the Russellville area of Franklin County, Alabama. The officers of both companies are the same. The president, E. C. Schroeder, has had several years experience in iron ore mining on the Mesabi Range in northern Minnesota and in the rock mining business in Iowa, Wisconsin, Alabama, and various other places. The vice president, Paul E. Schroeder, has had several years experience in the rock mining business, and is in charge of the Wyoming operation. He was in charge of erection of the Russellville beneficiation plant. An engineer-geologist is available and will be in charge of the proposed exploration work. The supervisory help and plant operators are experienced in their field.

6. The applicant proposes that if this application is approved that it be set up on the short form contract and the estimated costs of the project are as follows:

34,500 ft. of churn drilling @ $6.47 per ft..... $223,085.00

The breakdown on the costs of the project is as follows:

Churn Drilling (including water hauling)
$5.00 per ft..... $172,500.00

The applicant arrived at the price per ft. by securing bids from three drilling contractors as follows:

R. L. Mills, P.O. Box 1109, Casper, Wyoming, 6" hole, $6.25 per ft.

Al Herman, Windover, Wyoming, 6" hole, $5.00 per ft. and $10.00 per ft. for drilling quartzite.

McChesney Drilling Co., 1214 S. David St., Casper, Wyoming, 6" hole, $5.00 per ft.

The applicant to furnish roads and access in connection with all three bids.

Form MF-103
E. C. Schroeder Co., Inc., McGregor, Iowa.
Mining Operations, Guernsey, Wyoming.

6. (continued)

Bulldozing and road building including blasting, $1.00 per ft.....	$34,500.00
One-half salary of exploratory engineer or $275.00 per month for 22 months.....	6,050.00
Assaying, 8 samples per hole at $1.00 per element; 345 holes or 2760 samples at $1.00 per sample.. (Majority of samples will be assayed for Fe only.)	2,760.00
One Sampler at $65.00 per week for 95 weeks.....	6,175.00
Proportionate share of salary of bookkeeper and office expense, $50.00 per month for 22 months....	1,100.00
Total	$223,085.00

It is to be noted that only one-half the salary of the exploratory engineer is included in the cost. This is for the reason that the Company is making application for exploratory aid on the Nightingale group of mining claims which is between seven and eight miles from the Good Fortune group of mining claims and it is the thought of the applicant that the exploratory engineer can look after both projects.

The exploration map Exhibit "5" shows the mining claims that are proposed to be explored but does not show the sequence of drilling. The applicant proposes to start exploration on the portions of the Good Fortune and Bluebird mining claims which are not included in the present mining operations. As the drilling and geological exploration proceed, it will determine which claim will be explored next and will furnish maps of the proposed drilling and exploration.

The applicant will furnish a statement of guaranty in lieu of subordination agreement from owner in a form acceptable to the United States of America.

The applicant herewith states and certifies that the lease, Exhibit "2" under which it is operating is a valid lease and in full force and effect.

UNITED STATES OF AMERICA PATENT
General Land Office No. 36487 Mineral Certificate 137
Dated March 17, 1903
Recorded in Book 124, Page 558, Laramie County, Wyoming

From The United States of America to Charles A. Guernsey.

Certain mining claim or premises known as the Nightingale, Origan, O. K., Rustler, El Paso, Standard, Hoosier, Clipper, Humboldt, Iron Clad, Columbia, Black Cloud and Monitor No. 2, lode mining claims designated by the Surveyor-General as Lot No. 196, embracing a portion of sections six and seven in township 27 north of range 65 west, and sections 1 and 12, in township 27 north of range 66 west Sixth Principal meridian in the Platte Canon Mining District, in the County of Laramie and State of Wyoming, in the District of Lands subject to sale at Cheyenne and bounded, described, and platted as follows, with magnetic variation 14° and 58' east.

Beginning for the description of the Nightingale lode claim at corner No. 1, a quartzite stone 28x10x8 inches, chiseled 1-1-196, with mound of stone, from which a pine 14" in diameter blazed and marked B.T. 1-196 bears north 28° and 30' east 61' distant, a pine 12" in diameter blazed and marked B.T. 1-1-196 bears south 88° and 5' west 36.5' distant and the south quarter corner of section 6, in township 27 north of range 65 west, Sixth Principal meridian, bears south 49° east 1,202.3' distant.

Thence, first course, south 45° and 24' west 300' to a point from which discovery cut bears north 49° and 12' west 1,200' distant; 600' to corner No. 2.

Thence, second course, north 49° and 12' west 1,500' to corner No. 3.

Thence, third course, north 45° and 24' east 600' to corner No. 4.

Thence, fourth course, south 49° and 12' east 1,500' to corner No. 1, the place of beginning, the survey of the lode claim as above described extending 1,500' in length along said Nightingale vein or lode.

Beginning for the description of the Origan lode claim at corner No. 1, identical with corner No. 1 of said Nightingale lode claim, situate on line 3-4 of said Crown lode claim.

Thence, first course, north 45° and 24' east 600' to corner No. 2, situate on line 3-4 of said Crown lode claim.

Thence, second course, north 49° and 12' west 1,500' to corner No. 3.

Thence, third course, south 45° and 24' west 300' to a point from which discovery shaft bears south 49° and 12' east 400' distant; 600' to corner No. 4, identical with corner No. 4 of said Nightingale lode claim.

Thence, fourth course, south 49° and 12' east 1,500' to corner No. 1, the place of beginning, the survey of the lode claim as above described extending 1,500' in length along said Origan vein or lode.

Beginning for the description of the O. K. lode claim at corner No. 1, a limestone 24x12x8 inches, chiseled 2-1-196, with mound of stone, identical with corner No. 2 of said Origan lode claim situate on line 3-4 of said Crown lode claim, from which said quarter section corner bears south 21° and 38' east 1,302' distant.

Thence, first course, north 45° and 24' east 154' to corner No. 3 of said Crown lode claim; 600' to corner No. 2.

Thence, second course, north 49° and 12' west 1,500' to corner No. 3.

Thence, third course, south 45° and 24' west 300' to a point from which discovery cut bears south 49° and 12' east 400' distant; 600' to corner No. 4, identical with corner No. 3 of said Origan lode claim.

Thence, fourth course, south 49° and 12' east 1,500' to corner No. 1, the place of beginning; the survey of the lode claim as above described extending 1,500' in length along said O. K. vein or lode.

Beginning for the description of the Rustler lode claim at corner No. 1, a quartzite stone 24x12x8 inches, chiseled 1-196, with mound of stone, from which the southwest corner of said section 6 bears south 89° and 11' west 172.1' distant.

Thence, first course, south 66° and 8' east 135.68' intersect line 54-55 of the Alaska lode claim survey No. 49, at south 80° west 496.5' from corner No. 55; 160.95' intersect line 60-57 of the Old Sledge lode claim survey No. 49, at south 59° and 10' west 839.66' from corner No. 60; 215.47' to corner No. 2.

Thence, second course, north 80° and 22' east 148.6' intersect line 8-5 of the Moore lode claim survey No. 53, at south 37° and 48' east 62.96' from corner No. 8; 455.24' intersect line 55-56 of said Alaska lode claim at south 37° and 48' east 53.56' from corner No. 55; 1,091.6' to corner No. 3.

Thence, third course, north 56° and 55' east 31.8' intersect line 6-7 of said Moore lode claim and 12-9 of said Maine lode claim at south 37° and 48' east 23.8' from corners Nos. 7 and 9 of said claims respectively; 200' to corner No. 4, identical with corner No. 1 of said Crown lode claim.

[redacted]

Thence, third course, south 25° east 1,500' to corner No. 4, situate on line 3-4 of said Hoosier lode claim.

Thence, fourth course, south 59° and 10' west 300' to a point from which discovery cut bears north 25° west 100' distant; 600' to corner No. 1, the place of beginning; the survey of the lode claim as above described extending 1,500' in length along said Iron Clad vein or lode.

Beginning for the description of the Columbia lode claim at corner No. 1, a quartzite stone 28-10-7 inches, chiseled 4-1-196, with mound of stone, identical with corner No. 4 of said Iron Clad lode claim, from which said section corner bears south 5° and 16' west 893.12' distant; a pine 12" in diameter blazed and marked B.T. 4-1-196 bears north 1° and 21' west 48' distant and a pine 6" in diameter blazed and marked B.T. 4-1-196 bears south 52° and 7' east 43' distant.

Thence, first course, north 25° west 1,500' to corner No. 2, identical with corner No. 3 of said Iron Clad lode claim.

Thence, second course, north 59° and 10' east 300' to a point from which discovery cut bears south 25° east 700' distant; 600' to corner No. 3.

Thence, third course, south 25° east 1,500' to corner No. 4.

Thence, fourth course, south 59° and 10' west 315.24' to corner No. 3 of said Hoosier lode claim; 600' to corner No. 1, the place of beginning; the survey of the lode claim as above described extending 1,500' in length along said Columbia vein or lode.

Beginning for the description of the Black Cloud lode claim at corner No. 1, a quartzite stone 24x14x7 inches, chiseled 1-196, with mound of stone situate on line 3-4 of said Columbia lode claim, from which said section corner bears south 12° and 18' west 1,727.98' distant.

Thence, first course, north 45° and 24' east 76.89' to corners Nos. 4 of said Nightingale and Origan lode claims; 676.89' to corner No. 3 of said Origan, and corner No. 4 of said O. K. lode claims; 1,276.89' to corner No. 2, identical with corner No. 3 of said O. K. and corner No. 2 of said Standard lode claims.

Thence, second course, north 29° and 8' east 259.36' to corner No. 3, situate on line 2-3 of said Standard lode claim.

Thence, third course, north 25° west 559.78' to corner No. 4.

Thence, fourth course, south 45° and 24' west 1,500' to corner No. 5, situate on line 3-4 of said Columbia lode claim.

Thence, fifth course, south 25° east 318.45' to a point from which discovery cut bears north 45° and 24' east 1,400' distant; 636.9' to corner No. 1, the place of beginning; the survey of the lode claim as above described extending 1,500' in length along said Black Cloud vein or lode.

Beginning for the description of the Monitor No. 2 lode claim at corner No. 1, a quartzite stone 24x12x10 inches, chiseled 1-196, with mound of stone situate on line 2-3 of said Clipper lode claim, from which said section corner bears north 67° and 6' east 2,091.9' distant.

Thence, first course, south 49° and 12' east 300' to corner No. 2 of said Clipper lode claim from which discovery cut bears south 48° and 43' west 180' distant; 600' to corner No. 2.

Thence, second course, south 48° and 43' west 1,498' to corner No. 3.

Thence, third course, north 49° and 12' west 600' to corner No. 4.

Thence, fourth course, north 48° and 43' east 1,498' to corner No. 1, the place of beginning; the survey of the lode claim as above described extending 1,498' in length along said Monitor No. 2 vein or lode. Expressly excepting and excluding from these presents all that portion of the ground hereinbefore described embraced in said mining claim or survey No. 121; said Old Sledge and Alaska lode claims survey No. 49; said Moore, Maine and Lone Jack lode claims survey No. 53, and said Pacific lode claim survey No. 53 Am, and also all veins, lodes and ledges throughout their entire depth, the tops or apexes of which lie inside of such excluded ground; the granted premises in said lot No. 196 containing 289 acres and .094 of an acre of land, more or less.

Thence, fo[illegible] course north 66° and 8' west 95.14' i[illegible]sect line 9-10 of said Maine lode claim at north 32° and 24' east 130.25' from corner No. 9; 366.905' to a point from which discovery shaft bears south 68° and 36' west 25' distant; 733.81' to corner No. 5, situate on line 2-3 of said Nightingale lode claim.

Thence, fifth course, south 56° and 53' west 71.71' intersect line 59-60 of said Old Sledge lode claim at north 58° and 30' west 185.86' from corner No. 60; 918.73' to corner No. 1, the place of beginning; the survey of the lode claims above described extending 1,011.8' in length along said Rustler vein or lode.

Beginning for the description of the El Paso lode claim at corner No. 1, a quartzite stone 30x14x6 inches, chiseled 1-1-196, with mound of stone, situate on line 2-3 of said O. K. lode claim, from which a pine 12" in diameter blazed and marked B.T. 1-196 bears south 87° and 54' west 51' distant; a pine 18" in diameter blazed and marked B.T. 1-196 bears south 80° and 27' west 48' distant and said quarter section corner bears south 19° and 4' east 2,392.62' distant.

Thence, first course, south 49° and 12' east 300' to a point from which the face of discovery cut bears north 29° and 8' east 700' distant; 600' to corner No. 2, situate on line 2-3 of said O. K. and Mollie Gibson lode claims respectively,

Thence, second course, north 29° and 8' east 942.8' to corner No. 3 of said Mollie Gibson lode claim; 1,500' to corner No. 3.

Thence, third course, north 49° and 12' west 600' to corner No. 4.

Thence, fourth course, south 29° and 8' west 1,500' to corner No. 1, the place of beginning; the survey of the lode claim as above described extending 1,500' in length along said El Paso vein or lode.

Beginning for the description of the Standard lode claim at corner No. 1, identical with corner No. 1 of said El Paso lode claim, from which the center of face of discovery cut bears north 11° and 14' west 467 and 100' distant.

Thence, first course, north 49° and 12' west 537.73' to corner No. 2, identical with corner No. 3 of said O. K. lode claim.

Thence, second course, north 29° and 8' east 1,500' to corner No. 3.

Thence, third course, south 49° and 12' east 537.73' to corner No. 4, identical with corner No. 4 of said El Paso lode claim.

Thence, fourth course, south 29° and 8' west 1,500' to corner No. 1, the place of beginning; the survey of the lode claim as above described extending 1,500' in length along said Standard vein or lode.

Beginning for the description of the Hoosier lode claim at corner No. 1, a limestone 25x12x10 inches, chiseled 1-196, with mound of stone, from which a pine 8" in diameter blazed and marked B.T. 1-196 bears north 33° and 30' west 26' distant and said section corner bears north 76° and 35' east 507.97' distant.

Thence, first course, north 59° and 10' east 1,484.7' to corner No. 2, situate on line 2-3 of said Nightingale lode claim.

Thence, second course, north 49° and 12' west 600' to corner No. 3, situate on line 2-3 of said Nightingale lode claim.

Thence, third course, south 59° and 10' west 1,484.7' to corner No. 4.

Thence, fourth course, south 49° and 12' east 300' to a point from which the face of discovery cut bears north 59° and 10' east 300' distant; 600' to corner No. 1, the place of beginning; the survey of the lode claim as above described extending 1,484.7' in length along said Hoosier vein or lode.

Beginning for the description of the Clipper lode claim at corner No. 1, identical with corner No. 1 of said Hoosier lode claim.

Thence, first course, south 53° and 30' west 1,500' to corner No. 2.

Thence, second course, north 49° and 12' west 300' to a point from which discovery cut bears north 53° and 30' east 300' distant; 600' to corner No. 3.

Thence, third course, north 53° and 30' east 1,500' to corner No. 4.

Thence, fourth course, south 49° and 12' east 600' to corner No. 1, the place of beginning; the survey of the lode claim as above described extending 1,500' in length along said Clipper vein or lode.

Beginning for the description of the Humboldt lode claim at corner No. 1, a red quartzite stone 28x10x7 inches chiseled 1-1-196, with mound of stone, situate on line 3-4 of said Hoosier lode claim, from which said section corner bears south 36° and 40' east 725.35' distant.

Thence, first course, north 25° west 1,500' to corner No. 2.

Thence, second course, south 59° and 10' west 600' to corner No. 3.

Thence, third course, south 25° east 1,500' to corner No. 4, identical with corners Nos. 4 of said Hoosier and Clipper lode claims, respectively.

Thence, fourth course, north 59° and 10' east 300' to a point from which discovery cut bears north 25° west 300' distant; 600' to corner No. 1, the place of beginning; the survey of the lode claim as above described extending 1,500' in length along said Humboldt vein or lode.

Beginning for the description of the Iron Clad lode claim at corner No. 1, identical with corner No. 1 of said Humboldt lode claim.

Thence, first course, north 25° west 1,500' to corner No. 2, identical with corner No. 2, of said Humboldt lode claim.

Thence, second course, north 59° and 10' east 600' to corner No. 3.

UNITED STATES OF AMERICA PATENT
General Land Office No. 36492
Dated March 21, 1903
Recorded in Book 44, Page 608, Laramie County

Mineral Certificate No. 138

From The United States of America to Charles A. Guernsey.

Certain mining claim or premises, known as the Terrible lode mining claim, designated by the Surveyor-General as Lot No. 199, embracing a portion of section 13 in township 27 north of range 66 west and of section 18 in township 27 north of range 65 west, Sixth Principal meridian, in the Platte Canon Mining District, in the County of Laramie and State of Wyoming, in the District of Lands subject to sale at Cheyenne and bounded, described, and platted as follows, with magnetic variation 14° and 55' east.

Beginning at corner No. 1, a quartzite rock 30x12x10 inches, chiseled 1-199, with mound of stone, from which the east quarter corner of section 13, in township 27 north of range 66 west, Sixth Principal meridian bears north 59° and 55' east 926' distant.

Thence, first course, south 82° east 1,200' to corner No. 2.

Thence, second course, south 2° and 23' east 600' to corner No. 3.

Thence, third course, north 82° west 1,200' to corner No. 4.

Thence, fourth course, north 2° and 23' west 300' to a point from which discovery cut bears south 82° east 750' distant; 600' to corner No. 1, the place of beginning: said lot No. 199 extending 1,200' in length along said Terrible vein or lode, and containing 16 acres, and .258 of an acre of land, more or less.

UNITED STATES OF AMERICA PATENT
General Land Office No. 36488
Dated March 17, 1903
Recorded in Book 44, Page 611

Mineral Certificate 139

From The United States of America to Charles A. Guernsey.

Certain mining claim or premises, known as the Summit, Connection, Moonlight, Rip Van Winkle, Otto, Giant, Pigmy, Appendix, Iron Spike, Miners Luck, Hexagon, Reserve, Iron Wheel and Iron Slope lode mining claims, designated by the Surveyor-General as Lot No. 197, embracing a portion of sections 4, 5 and 8, in township 27 north of range 65 and west Sixth Principal meridian, in the Platte Canon Mining District, in the County of Laramie and State of Wyoming, in the District of Lands subject to sale at Cheyenne and bounded, described, and platted as follows, with magnetic variation 14° and 58' east.

Beginning for the description of the Summit lode claim at corner No. 1, a quartzite rock, 24x12x10 inches, chiseled 1-1-197, with a mound of stone, situate on line 1-2 of the Juneau lode claim survey No. 194, from which a pine six inches in diameter blazed and marked B.T. 1-197 bears north 79° and 10' west 49' distant; a pine 5" in diameter blazed and marked B.T. 1-197 bears south 82° and 30' west 29' distant, and the west quarter corner of section 8, in township 27 north of range 65 west, Sixth Principal meridian, bears north 83° and 23' west 1,312.89' distant.

Thence, first course, north 26° and 5' east 1,261.43' to corner No. 2.

Thence, second course, north 83° west 539.88' to corner No. 3.

Thence, third course, south 27° and 55' west 1,339' to corner No. 4.

Thence, fourth course, south 83° east 280' to a point from which the entrance of discovery tunnel bears north 27° and 55' east 1,219' distant; 300' to corner No. 5.

Thence, fifth course, north 66° and 13' east 88.5' to corner No. 6.

Thence, sixth course, south 86° and 20' east 230' to corner No. 1, the place of beginning; the survey of the lode claim as above described extending 1,339' in length along said Summit vein or lode.

Beginning for the description of the Connection lode claim at corner No. 1, identical with corner No. 1 of said Summit lode claim.

Thence, first course, north 26° and 5' east 1,261.43' to corner No. 2 of said Summit lode claim; 1,379.49' to corner No. 2.

Thence, second course, south 86° and 20' east 531.81' to corner No. 3, situate on line 1-2 of the Central No. 1 lode claim survey No. 107; from a point on line 2-3 discovery on lode line bears south 20° and 50' west 200' distant.

Thence, third course, south 20° and 50' west 958.65' to corner No. 4, situate on line 1-2 of said Central No. 1 lode claim.

Thence, fourth course, north 87° and 35' west 235.2' to corner No. 5.

Thence, fifth course, south 20° and 50' west 201.4' to corner No. 6.

Thence, sixth course, south 59° and 44' west 289.8' to corner No. 7.

Thence, seventh course, north 86° and 20' west 240' to corner No. 1, the place of beginning; the survey of the lode claim as above described extending 1,411.05' in length along said Connection vein or lode.

Beginning for the description of the Moonlight lode claim at corner No. 1, a slate stone 28x14x3 inches, chiseled 1-197, with mound of stone, situate on line 4-1 of the Iron Tiger lode claim survey No. 107, from which a pine 7" in diameter blazed and marked B.T. 1-197 bears south 21° and 42' west 14' distant, and the north quarter corner of said section 8 bears north 3° and 19' west 1,456.43' distant.

Thence, first course, south 14° and 35' west 94.78' intersect lines 3-4 and 4-1 of said Iron Tiger and Central No. 1 lode claims, at south 87° and 35' east 10.88' from corners Nos. 4 and 1 of said claims, respectively; 503.26' to corner No. 2.

Thence, second course, north 86° and 20' west 57.34' to corner No. 3 of said Connection lode claim; also intersect line 1-2 of said Central No. 1 lode claim, at south 20° and 50' west 419.55' from corner No. 1; 589.15' to corner No. 3, identical with corner No. 2 of said Connection lode claim.

Thence, third course, south 26° and 5' west 118.06' to corner No. 4, identical with corner No. 2 of said Summit lode claim, and situate on line 1-2 of said Connection lode claim.

Thence, fourth course, north 83° west 244.62' to corner No. 5, situate on line 2-3 of said Summit lode claim.

Thence, fifth course, north 14° and 35' east 300' to a point from which the face of discovery cut bears south 86° and 20' east 100' distant; 600' to corner No. 6.

Thence, sixth course, south 86° and 20' east 860.08' to corner No. 1, the place of beginning; the survey of the lode claim as above described extending 860.08' in length along said Moonlight vein or lode.

Beginning for the description of the Rip Van Winkle lode claim at corner No. 1, a quartzite rock 24x14x10 inches, chiseled 1-1-197, with mound of stone, situate on line 4-1 of said Iron Tiger lode claim, from which the north quarter corner of said section 8 bears north 15° and 31' west 1,005.1' distant.

Thence, first course, north 29° and 50' east 883' to corner No. 1 of said Iron Tiger lode claim; 1,344' to corner No. 2.

Thence, second course, north 14° and 42' west 152.5' to corner No. 3, identical with the southwest corner of the Champion lode claim unsurveyed.

Thence, third course, north 86° and 20' west 520.13' to corner No. 4.

Thence, fourth course, south 21° and 23' west 110.04' intersect the south side line of said Champion lode claim, at south 82° and 33' west 567.1' from the southeast corner of said claim; 1,500' to corner No. 5.

Thence, fifth course, south 86° and 20' east 314' to a point from which the center of north end of discovery cut bears north 20° and 50' east 350' distant; 628' to corner No. 1, the place of beginning; the survey of the lode claim as above described extending 1,500' in length along said Rip Van Winkle vein or lode.

Beginning for the description of the Otto lode claim at corner No. 1, a sandstone 26x12x8 inches, chiseled 1-197, with mound of stone, situate on line 4-5 of said Rip Van Winkle lode claim and on the south side line of said Champion lode claim, from which the north quarter corner of said section 8 bears south 22° and 9' west 344.76' distant.

Thence, first course, south 82° and 33' west 300' to a point from which the breast of discovery tunnel bears south 21° and 23' west 750' distant; 482' to corner No. 2, identical with the southwest corner of said Champion lode claim.

Thence, second course, south 37° and 52' east 135' to corner No. 3.

Thence, third course, south 26° and 24' west 1,325.67' to corner No. 4.

Thence, fourth course, north 82° and 33' east 482' to corner No. 5, identical with corner No. 5 of said Rip Van Winkle lode claim.

Thence, fifth course, north 21° and 23' east 1,389.6' to corner No. 1, the place of beginning; the survey of the lode claim as above described extending 1,389.6' in length along said Otto vein or lode.

Beginning for the description of the Giant lode claim at corner No. 1, a sandstone 30x14x8 inches chiseled 3-197 and 1-197, with mound of stone, identical with corner No. 3 of said Otto lode claim, from which the north quarter corner of said section 8 bears south 51° and 24' east 315.05' distant.

Thence, first course, south 26° and 24' west 1,325.67' to corner No. 2, identical with corner No. 4 of said Otto lode claim.

Thence, second course, south 66° and 53' west 402.19' to a point from which the center of face of discovery cut bears north 26° and 24' east 200' distant, also intersect line 7-8 of the Black Bill lode claim survey No. 55, at south 18° west 55.45' from corner No. 7; 783' to corner No. 3.

Thence, third course, north 26° and 24' east 289.58' intersect line 6-7 of said Black Bill lode claim, and line 12-9 of the Silver Steele lode claim survey No. 56 am., at north 76° and 32' west 245.36' from corners No. 7 and 12 of said claims, respectively; 996.16' intersect line 11-12 of said Silver Steele lode claim, at north 6° and 13' east 868.97' from corner No. 12; 903.09' intersect line 16-13 of the Red Bill lode claim survey No. 55, at north 76° and 32' west 315.26' from corner No. 16; 1,325.67' to corner No. 4.

Thence, fourth course, north 66° and 53' east 168.91' intersect line 15-16 of said Red Bill lode claim, at north 3° and 40' east 529.86' from corner No. 16; 783' to corner No. 1, the place of beginning; the survey of the lode claim as above described extending 1,325.67' in length along said Giant vein or lode.

Beginning for the description of the Pigmy lode claim at corner No. 1, identical with corner No. 1 of said Rip Van Winkle lode claim, and situate on line 4-1 of said Iron Tiger lode claim.

Thence, first course, south 18° west 512.26' to corner No. 2.

Thence, second course, north 86° and 20' west 26.5' to corner No. 1 of said Moonlight lode claim, situate on line 4-1 of said Iron Tiger lode claim; 886.58' to corner No. 3, identical with corner No. 6 of said Moonlight lode claim.

Thence, third course, south 88° west 518.97' to corner No. 4, situate on line 7-8 of said Black Bill lode claim.

Thence, fourth course, north 18° east 210' to a point from which the breast of discovery tunnel bears south 89° and 18' east 710.46' distant; 282.12' to corner No. 5, situate on line 2-3 of said Giant lode claim.

Thence, fifth course, north 66° and 53' east 402.19' to corner No. 6, identical with corners Nos. 2 and 4 of said Giant and Otto lode claims, respectively.

Thence, sixth course, north 82° and 33' east 482' to corner No. 7, identical with corners Nos. 5 of said Otto and Rip Van Winkle lode claims.

Thence, seventh course, south 86° and 20' east 628' to corner No. 1, the place of beginning; the survey of the lode claim as above described extending 1,410.46' in length along said Pigmy vein or lode.

Beginning for the description of the Appendix lode claim at corner No. 1, a granite rock 30x14x8 inches chiseled 1-197 and 5-197, with mound of stone, from which the north quarter corner of said section 8 bears south 85° and 33' west 808.1' distant.

Thence, first course, north 14° and 42' west 232.5' to corner No. 2 of said Rip Van Winkle lode claim; 385' to corner No. 3 of said Rip Van Winkle lode claim; 600' to corner No. 2.

Thence, second course, north 66° and 53' east 1,500' to corner No. 3.

Thence, third course, south 14° and 42' east 300' to a point from which discovery shaft bears south 66° and 53' west 350' distant; 600' to corner No. 4.

Thence, fourth course, south 66° and 55' west 1,500' to corner No. 1, the place of beginning; the survey of the lode claim as above described extending 1,500' in length along said Appendix vein or lode.

Beginning for the description of the Iron Spike lode claim at corner No. 1, a quartzite rock 26x12x10 inches, chiseled 1-197 and 1-107, with mound of stone, identical with corner No. 1 of said Iron Tiger lode claim and situate on line 1-2 of said Rip Van Winkle lode claim, from which the north quarter corner of said section 8 bears north 76° and 12' west 600' distant.

Thence, first course, south 87° and 35' east 632.4' to corner No. 2 of said Iron Tiger lode claim; 900' to corner No. 2.

Thence, second course, north 20° and 50' east 302' to corner No. 3.

Thence, third course, north 14° and 42' west 274.92' to corner No. 4, situate on line 4-1 of said Appendix lode claim.

Thence, fourth course, south 66° and 55' west 776.02' to corner No. 5, identical with corner No. 1 of said Appendix lode claim.

Thence, fifth course, north 14° and 42' west 232.5' to corner No. 6, identical with corner No. 2 of said Rip Van Winkle lode claim, and situate on line 1-2 of said Appendix lode claim.

Thence, sixth course, south 20° and 50' west 461' to corner No. 1, the place of beginning; from a point on line 6-1 discovery shaft on lode line bears south 87° and 35' east 600' distant; the survey of the lode claim as above described extending 900' in length along said Iron Spike vein or lode.

Beginning for the description of the Miners Luck lode claim at corner No. 1, a quartzite rock 24x12x10 inches, chiseled 1-197 - 1-197 and 5-197, with mound of stone, from which the southeast corner of section five, said township and range, bears south 35° and 35' west 473.37' distant.

Thence, first course, south 77° and 52' west ~~1,365.6'~~ 356.6' to corner No. 2, identical with corner No. 3 of said Iron Spike lode claim,

Thence, second course, north 14° and 42' west 274.92' to corner No. 3, identical with corner No. 4 of said Iron Spike lode claim, and situate on line 4-1 of said Appendix lode claim.

Thence, third course, north 66° and 55' east 723.98' to corner No. 4, identical with corner No. 4 of said Appendix lode claim.

Thence, fourth course, north 61° and 20' east 659' to corner No. 5.

Thence, fifth course, south 14° and 42' east 300' to a point from which the center of discovery shaft bears south 70° and 53' west 735.75' distant; 600' to corner No. 1, the place of beginning; thesurvey of the lode claim as above described extending 1,359.75' in length along said Miners Luck vein or lode.

Beginning for the description of the Hexagon lode claim at corner No. 1, a slate stone 30x12x6 inches, chiseled 1-197, with mound of stone, identical with the southeast corner of said section 5.

Thence, first course, south 231.33' to corner No. 2.

Thence, second course, north 87° and 35' west 1,159.64' to corner No. 3, identical with corner No. 2 of said Iron Spike lode claim.

Thence, third course, north 20° and 50' east 2' to a point from which the face of discovery cut bears north 79° and 40' east 630.2' distant; 302'to corner No. 4 identical with corners Nos. 2 and 3 of said Miners Luck and Iron Spike lode claim, respectively.

Thence, fourth course, north 77° and 52' east 1,356.6' to corner No. 5, identical with corner No. 1 of said Miners Luck lode claim.

Thence, fifth course, south 20° and 50' west 413.31' to corner No. 6.

Thence, sixth course, north 89° and 25' west 130.08' to corner No. 1, the place of beginning; the survey of the lode claim as above described extending 1,330.2' in length along said Hexagon vein or lode.

Beginning for the description of the Reserve lode claim at corner No. 1, a quartzite rock 24x14x8 inches, chiseled 4-4-197 and 1-197, with mound of stone, identical with corner No. 4 of said Appendix lode claim, from which the southeast corner of said section 5 bears south 35° and 2' east 792.86' distant.

Thence, first course, north 14° and 42' west 600' to corner No. 2, identical with corner No. 3 of said Appendix lode claim.

Thence, second course, north 61° and 20' east 1,500' to corner No. 3.

Thence, third course, south 14° and 42' east 300' to a point from which discovery shaft bears south 61° and 20' west 300' distant; 600' to corner No. 4.

Thence, fourth course, south 61° and 20' west 841' to corner No. 5 of said Miners Luck lode claim; 1,500' to corner No. 1, the place of beginning; the survey of the lode claim as above described extending 1,500' in length along said Reserve vein or lode.

Beginning for the description of the Iron Wheel lode claim at corner No. 1, identical with corner No. 1 of said Miners Luck lode claim.

Thence, first course, north 14° and 42' west 300' to a point from which discovery shaft bears north 61° and 20' east 50' distant; 600' to corner No. 2, identical with corner No. 5 of said Miners Luck lode claim, and situate on line 4-1 of said Reserve lode claim.

Thence, second course, north 61° and 20' east 841' to corner No. 3, identical with corner No. 4 of said Reserve lode claim.

Thence, third course, north 32° and 58' east 659' to corner No. 4.

Thence, fourth course, south 14° and 42' east 600' to corner No. 5.

Thence, fifth course, south 32° and 58' west 659' to corner No. 6.

Thence, sixth course, south 61° and 20' west 841' to corner No. 1, the place of beginning; the survey of the lode claim as above described extending 1,500' in length along said Iron Wheel vein or lode.

Beginning for the description of the Iron Slope lode claim at corner No. 1, a slate stone 28x10x8 inches chiseled 4-197, 1-197 and 3-197, with mound of stone, identical with corner No. 4 of said Reserve lode claim, from which the southwest corner of section 4, said township and range, bears south 32° and 11' west 1,617.3' distant.

Thence, first course, north 32° and 58' east 659' to corner No. 4 of said Iron Wheel lode claim; 1,500' to corner No. 2.

Thence, second course, north 14° and 42' west 811' to corner No. 3.

Thence, third course, south 32° and 58' west 1,500' to corner No. 4.

Thence, fourth course, south 14° and 42' east 211' to corner No. 3 of said Reserve lode claim; 405.5' to a point from which discovery shaft bears north 32° and 58' east 100' distant; 811' to corner No. 1, the place of beginning the survey of the lode claim as above described extending 1,500' in length along said Iron Slope vein or lode. Expressly excepting and excluding from these presents all that portion of the ground, hereinbefore described, embraced in said Iron Tiger and Central No. 1 lode claims survey No. 107; said Black Bill and Red Bill lode claims survey No. 55; said Silver Steele lode claim survey No. 55 am., and said Champion lode claim unsurveyed, and also all veins, lodes and ledges throughout their entire depth, the tops or apexes of which lie inside of each excluded ground; the granted premises in said lot No. 197 containing 209 acres and .052 of an acre of land, more or less.

UNITED STATES OF AMERICA PATENT
General Land Office No. 36489
Dated March 17, 1903
Recorded in Book 106, Page 436

Mineral Certificate 140

From The United States of America to Charles A. Guernsey

Certain mining claims or premises known as the Bonded, Good Fortune, Good Fortune Annex, Golden Rule, Appex, Blue Bird, Denver & Gulf Cottonwood, Whalen, Anaconda, Valley, Juneau, Rudy L, Gracia Ellen, and Blue Jay Fraction lode mining claims. Designated by the Surveyor-General as Lot No. 194, embracing a portion of sections seven and eight in township twenty-seven north of range sixty-five west, Sixth Principal meridian, in the Platte Canon Mining District in the County of Laramie and State of Wyoming, in the District of Lands subject to sale at Cheyenne and bounded, described, and platted as follows, with magnetic variation fourteen degrees and fifty-five minutes east.

Beginning for the description of the Bonded lode claim at corner No. 1, a sandstone 25x8x6 inches, chiseled 1-194 and 3-3-194, with mound of stone from which the quarter corner between sections seven and eight in township 27 north of range 65 west, Sixth Principal meridian, bears north 55° and 47' east 1,445' distant.

Thence, first course, north 74° west 742.3' intersect line 13-14 of the Republic lode claim survey No. 49, and line 17-18 of the Douglas lode claim survey No. 49, at north 21° and 30' east 35.2' from corners Nos. 14 and 18 respectively; 792' to corner No. 2.

Thence, second course, north 66° and 10' west 282' to corner No. 3.

Thence, third course south 10° and 40' west 29.2' intersect lines 14-15 of said Republic lode claim and 24-21 of the Fairview lode claim survey No. 49, at North 66° and 10' west 326' from corner No. 14 of said Republic lode claim and 44' from corner No. 24 of said Fairview lode claim 480.7' to corner No. 4, from which the east end of discovery cut bears north 66° and 37' east 481.7' distant.

Thence, fourth course, south 83° and 35' east 43' intersect line 23-24 of said Fairview lode claims at south 10° and 40' west 438.3' from corner No. 24; 1,066.1' to corner No. 5.

Thence, fifth course, north 10° and 40' east 228.5' intersect line 18-19 of said Douglas lode claim at south 74° east 749' from corner No. 18; 263.7' to corner No. 1, the place of beginning, the survey of the lode claim as above described extending 1,066.1' in length along said Bonded vein or lode.

Beginning for the description of the Good Fortune lode claim at corner No. 1, a red quartzite rock 26x14x6 inches, chiseled 1-194, 1-194, 4-194 and 7-194, with mound of stone, from which said quarter section corner bears north 1° and 32' west 516.93' distant, a cross (x) and B.R. 1-194, chiseled on a red quartzsite rock in place 4x4x2 feet, above ground bears north 22° and 50' east 30' distant, and a cross (x) and B.R. 1-194 chiseled on a red quartzite rock in place 3x3x2 feet above ground bears south 5° west 10' distant.

Thence, first course, north 74° and 56' west ~~1,025'~~ 1023' to corner No. 2.

Thence, second course, south 21° and 30' west 134.3' intersect line 20-17 of said Douglas lode claim at north 68° and 34' west 49.5' from corner No. 20; 603.8' to corner No. 3, identical with corner No. 1 of said Bonded lode claim.

Thence, third course, south 74° and 56' east 49.8' intersect line 19-20 of said Douglas lode claim at south 21° and 30' west 463.95' from corner No. 20; 1,023' to corner No. 4.

Thence, fourth course, north 21° and 30' east 301.9' to a point from which the center of east side of discovery cut bears north 74° and 56' west 98' distant; 603.8' to corner No. 1, the place of beginning; the survey of the lode claim as above described extending 1,023' in length along said Good Fortune vein or lode.

Beginning for the description of the Good Fortune Annex lode claim at corner No. 1, a quartz ta rock 28x10x8 inches, chiseled 1-194, with mound of stone, from which the southwest corner of said section eight, bears south 20° and 41' east 950.32' distant; a pine 6" in diameter blazed and marked B.T. 1-194, bears south 49° and 2' west 8' distant; a pine 18" in diameter blazed and marked B.T. 1-194 bears north 55° east 29.5' distant and a pine 9" in diameter blazed and marked B.T. 1-194 bears north 14° and 26' west 32.8' distant.

Thence, first course, north 74° and 56' west 1,023' to corner No.2, from which the face of discovery cut bears north 72° and 52' east 561.3' distant

Thence, second course, north 10° and 40' east 247.3' to corner No. 5 of said Bonded lode claim; 475.8' intersect line 18-19 of said Douglas lode claim at north 74° west 43' from CORNER No. 19; 511' to corner No. 3, identical with corners Nos. 1 and 3 of said Bonded and Good Fortune lode claims, respectively.

Thence, third course, south 74° and 56' east 49.8' intersect line 19-20 of said Douglas lode claim at north 21° and 30' east 36.05' from corner No. 19; 1,023' to corner No. 4, identical with corner No. 4 of said Good Fortune lode claim.

Thence, fourth course, south 10° and 40' west 511' to corner No. 1, the place of beginning; the survey of the lode claim as above described extending 1,023' in length along said Good Fortune Annex vein or lode.

Beginning for the description of the Golden Rule lode claim at corner No. 1, a red sandstone 26x16x8 inches, chiseled 1-194 and 8-194, with mound of stone, from which the west quarter corner of said section eight, bears north 14° and 45' west 341.94' distant; a cross (x) and B.R. 1-194, chiseled on a red sandstone rock in place 4x3x1 feet above ground, bears north 78° west 28' distant, and a cross (x) and B.R. 1-194, chiseled on a quartzite rock in place 4x4x2 feet above ground bears north 39° and 40' west 14.5' distant.

Thence, first course, north 74° and 56' west 1,023' to corner No. 2, from which discovery tunnel bears south 44° and 56' east 357.8' distant.

Thence, second course, south 21° and 30' west 200' to corner No. 3, identical with corner No. 2 of said Good Fortune lode claim.

Thence, third course, south 74° and 56' east 1,023' to corner No. 4, identical with corner No. 1 of said Good Fortune lode claim.

Thence, fourth course, north 21° and 30' east 200' to corner No. 1, the place of beginning; the survey of the lode claims as above described extending 1,023' in length along said Golden Rule vein or lode.

Beginning for the description of the Appex lode claim at corner No. 1, a quartzite rock 30x16x8 inches, chiseled 1-194 with mound of stone from which the southeast corner of said section seven, bears south 23° and 43' east 875.55' distant.

Thence, first course, south 86° and 37' east 1,500' to corner No. 2.

Thence, second course, north 10° and 40' east 600' to corner No. 3.

Thence, third course, north 86° and 37' west 1,500' to corner No. 4, identical with corners Nos. 4 of said Good Fortune and Good Fortune Annex lode claims.

Thence, fourth course, south 10° and 40' west 300' to a point from which discovery shaft bears south 86° and 37' east 515' distant; 511' to corner No. 1 of said Good Fortune Annex lode claim; 600' to corner No. 1, the place of beginning; the survey of the lode claim as above described extending 1,500' in length along said Appex vein or lode.

Beginning for the description of the Blue Bird lode claim at corner No. 1, identical with corner No. 1 of said Good Fortune, and corner No. 4 of said Golden Rule lode claims.

Thence, first course, south 86° and 29' east 1,498.8' to corner No. 2.

Thence, second course, south 21° and 30' west 600' to corner No. 3.

Thence, third course, north 86° and 37' west 1,500' to corner No. 4, identical with corners Nos. 4 of said Good Fortune, Good Fortune Annex and Appex lode claims.

Thence, fourth course, north 21° and 30' east 301.9' to a point from which discovery shaft bears south 86° and 37' east 120' distant; 603.8' to corner No. 1 the place of beginning; the survey of the lode claim as above described extending 1,500' in length along said Blue Bird vein or lode.

Beginning for the description of the Denver & Gulf lode claims at corner No. 1, a quartzite rock 24x10x6 inches, chiseled 3-194 and 1-194, with mound of stone identical with corners Nos. 3 of said Appex and Blue Bird lode claims, from which the west quarter corner of said section eight, bears north 47° and 52' west 1,739.4' distant.

Thence, first course, south 69° and 39' east 1,500' to corner No. 2.

Thence, second course, south 10° and 40' west 600' to corner No. 3.

Thence, third course, north 69° and 39' west 1,500' to corner No. 4, identical with corner No. 2 of said Appex lode claim.

Thence, fourth course, north 10° and 40' east 300' to a point from which discovery shaft bears south 69° and 39' east 43' distant; 600' to corner No. 1, the place of beginning; the survey of the lode claim as above described extending 1,500' in length along said Denver & Gulf vein or lode.

Beginning for the description of the Cottonwood lode claim at corner No. 1, identical with corner No. 1 of said Denver & Gulf, and corners Nos. 3 of said Appex and Blue Bird lode claims.

Thence, first course, north 21° and 30' east 300' to a point from which discovery shaft bears south 69° and 39' east 300' distant; 600' to corner No. 2, identical with corner No. 2 of said Blue Bird lode claim.

Thence, second course, south 69° and 39' east 1,500' to corner No. 3.

Thence, third course, south 21° and 30' west 600' to corner No. 4, identical with corner No. 2 of said Denver & Gulf lode claim.

Thence, fourth course, north 69° and 39' west 1,500' to corner No. 1, the place of beginning the survey of the lode claim as above described extending 1,500' in length along said Cottonwood vein or lode.

Beginning for the description of the Whalen lode claim at corner No. 1, a sandstone 24x10x10 inches, chiseled 1-194 and 2-194 with mound of stone, situate on line 3-4 of survey No. 107, the Central No. 2 lode claim, from which said quarter section corner bears north 79° and 58' west 2,677.1' distant.

Thence, first course, south 87° and 35' east 249.25' to a point from which discovery shaft bears south 13° west 500' distant; 498.5' to corner No. 2.

Thence, second course, south 13° west 1,500' to corner No. 3.

Thence, third course, north 87° and 35' west 498.5' to corner No. 4, from which corners Nos. 2 and 4 of said Denver & Gulf and Cottonwood lode claims, respectively, bear north 59° and 15' east 462.12' distant.

Thence, fourth course, north 13° east 1,500' to corner No. 1, the place of beginning;the survey of the lode claim as above described extending 1,500' in length along said Whalen vein or lode.

Beginning for the description of the Anaconda lode claim at corner No. 1, a quartzite stone 30x10x6 inches, chiseled 1-194, with mound of stone situate on line 3-4 of said survey No. 107 from which a cross (x) and B.R. 1-194, chiseled on a quartzite rock in place 12x10x8 feet, above ground bears north 13° east 31' distant, and said quarter section corner bears north seventy-six degrees and 52' west 1,907.8' distant.

Thence, first course, south 87° and 35' east 779' to corner No. 2, identical with corner No. 1,of said Whalen lode claim.

Thence, second course, south 13° west 266.25' to a point from which discovery cut bears north 87° and 35' west 100' distant; 532.5' to corner No. 3, situate on line 4-1 of said Whalen lode claim.

Thence, third course, north 69° and 39' west 772' to corner No. 4, situate on line 2-3 of said Cottonwood lode claim.

Thence, fourth course, north 13° east 288' to corner No. 1, the place of beginning; the survey lode claim as above described extending 779' in length along said Anaconda vein or lode.

Beginning for the description of the Valley lode claim at corner No. 1, a quartzite rock 24x12x8 inches chiseled 1-194 and 3-194 with mound of stone situate on line 1-2 of said Blue Bird lode claim, from which a pine eight inches in diameter blazed and marked B.T. 1-194, bears south 21° and 30' east 28' distant, and said quarter section corner bears north 56° and 22' west 1,026.9' distant.

Thence, first course, north 59° and 44' east 1,086.8' to corner No. 2, situate on line 2-3 of said survey No. 107, at north 20° and 50' east 431.3' from corner No. 3.

Thence, second course, south 25° and 45' east 464.2' intersect line 3-4 of said survey No. 107 at south 87° and 35' east 355.4' from corner No. 3; 600' to corner No. 3.

Thence, third course, south 59° and 44' west 302.6' to corner No. 4 of said Anaconda lode claim; 1,086.8' to corner No. 4.

Thence, fourth course, north 25° and 45' west 300' to a point from which discovery cut bears north 59° and 44' east 525' distant; 600' to corner No. 1, the place of beginning the survey of the lode claim as above described extending 1,086.8' in length along said Valley vein or lode.

Beginning for the description of the Juneau lode claim at corner No. 1, a red quartzite rock 26x10x8 inches, chiseled 1-194 and 5-194, with mound of stone from which a pine ten inches in diameter blazed and marked B.T. 5-194, bears south 55° and 6' west 28.9' distant, and said quarter section corner bears north 82° and 44' west 1,083.3' distant.

Thence, first course, south 86° and 20' east 235' to a point from which discovery cut bears south 48° and 30' west 160' distant; 470' to corner No. 2, situate on line 1-2 of said Valley lode claim.

Thence, second course south 59° and 44' west 797' to corner No. 3, identical with corner No. 1 of said Valley lode claim.

Thence, third course, north 86° and 20' west 61.5' to corner No. 4.

Thence, fourth course, north 33° and 15' east 511.84' to corner No. 1, the place of beginning; the survey of the lode claim as above described extending 627.52' in length along said Juneau vein or lode.

Beginning for the description of the Rudy L. lode claim at corner No. 1, a red quartzite rock 28x10x9 inches, chiseled 1-194, on the northeast and northwest faces, from which a pine six inches in diameter blazed and marked B.T. 1-194 bears north 29° and 10' east 61' distant, and said quarter section corner bears north 19° and 30' west 160.5' distant.

Thence, first course, north 27° and 55' east 1,439' to corner No. 2.

Thence, second course, south 83° east 600' to corner No. 3.

Thence, third course, south 27° and 55' west 1,439' to corner No. 4.

Thence, fourth course, north 83° west 300' to a point from which discovery shaft bears north 27° and 55' east 1,039' distant; 600' to corner No. 1, the place of beginning; the survey of the lode claim as above described extending 1,439' in length along said Rudy L. vein or lode.

Beginning for the description of the Gracia Ellen lode claim at corner No. 1, identical with corner No. 1, of said Rudy L. lode claim, from which discovery tunnel bears north 4° and 51' west 208.9' distant.

Thence, first course, north 27° and 55' east 1,439' to corner No. 2, identical with corner No. 2 of said Rudy L. lode claim.

Thence, second course, north 83° west 555' to corner No. 3.

Thence, third course, south 19° and 35' west 600' to corner No. 4.

Thence, fourth course, south 18° and 22' west 296.86' to corner No. 5.

Thence, fifth course, south 8° west 332' to corner No. 6.

Thence, sixth course, west 114.8' to corner No. 7.

Thence, seventh course, south 33° and 15' west 135.5' to corner No. 8.

Thence, eighth course, south 83° east 410' to corner No. 1, the place of beginning; the survey of the lode claim as above described extending 1,393.8' in length along said Gracia Ellen vein or lode.

Beginning for the description of the Blue Jay Fraction lode claim at corner No. 1, a quartzite rock 30x10x10 inches, chiseled 1-194 and 8-194, with mound of stone identical with corner No. 8 of said Gracia Ellen lode claim from which a pine 12 inches in diameter blazed and marked B.T. 8-194, bears north 30° and 32' east 54' distant; a pine 10" in diameter blazed and marked 1-194 bears south 5° and 37' east 47' distant, and said quarter section corner bears north 74° east 367.6' distant.

Thence, first course, south 83° east 410' to corners Nos. 1 of said Gracia Ellen and Rudy L. Lode claims; 1,010' to corner No. 2, identical with corner No. 4 of said Rudy L. lode claim.

Thence, second course, north 27° and 55' east 100' to corner No. 3, situate on line 3-4 of said Rudy L. lode claim.

Thence, third course, south 83° east 300' to corner No. 4.

Thence, fourth course, north 66° and 13' east 88.5' to corner No. 5, identical with corner No. 1 of said Juneau lode claim.

Thence, fifth course, south 33° and 15' west 256' to a point from which discovery shaft bears north 82° and 2' west 600' distant; 511.84' to corner No. 4 of said Juneau lode claim; 512' to corner No. 6, situate on line 1-2 of said Blue Bird lode claim.

Thence, sixth course, north 86° and 29' west 781.08' to corner No. 7, identical with corners Nos. 1, of said Good Fortune and Blue Bird lode claims.

Thence, seventh course, north 21° and 30' east 200' to corner No. 8, identical with corner No. 1 of said Golden Rule lode claim.

Thence, eighth course, north 74° and 56' west 520' to corner No. 9.

Thence, ninth course, north 33° and 15' east 112.6' to corner No. 1, the place of beginning; the survey of the lode claim as above described extending 1,342.33' in length along said Blue Jay Fraction vein or lode. Expressly excepting and excluding from these presents all that portion of the ground hereinbefore described embraced said mining claim or survey No. 107 and said Douglas, Republic and Fairview lode claims survey No. 49, and also all veins, lodes and ledges throughout their entire depth, the tops or apexes of which lie inside of such excluded ground; the granted premises in said lot No. 194 containing 185 acres and ..175 of an acre of land more or less.

UNITED STATES OF AMERICA PATENT
General Land Office No. 36441
Dated March 10, 1903
Recorded in Book 106, Page 433, Laramie County, Wyoming

Mineral Certificate No. 142

From The United States of America to Charles A. Guernsey.

Certain mining claim or premises, known as the Celtic lode mining claim designated by the Surveyor-General as Lot No. 201, embracing a portion of sections 12 and 13, in township 27 north of range 66 west, Sixth Principal meridian, in the Platte Canon Mining district, in the County of Laramie and State of Wyoming, in the District of Lands subject to sale at Cheyenne and Bounded, described, and platted as follows, with magnetic variation 15° and 55' east.

Beginning at corner No. 1, a quartzite rock 30x14x7 inches, chiseled 1-201, with mound of stone, identical with the south quarter corner of section 12, in township 27 north of range 66 west, Sixth Principal meridian.

Thence, first course, south 87° and 59' west 273.04' to corner No. 2.

Thence, second course, south 21° and 39' west 282.86' to corner No. 3.

Thence, third course, south 54° and 55' east 1,205' to corner No. 4.

Thence, fourth course, north 21° and 39' east 282' to a point from which the entrance of discovery tunnel bears north 54° and 55' west 200' distant; 584' to corner No. 5.

Thence, fifth course, north 54° and 55' west 1,007.32' to corner No. 6.

Thence, sixth course, south 156.67' to corner No. 1, the place of beginning; said lot No. 201 extending 1,205' in length along said Celtic vein or lode and containing 14 acres and .~~565~~ .556 of an acre of land, more or less.

ORE LEASE

THIS AGREEMENT, made and entered into on this 26th day of December, A.D. 1952, by and between W. H. Collins, hereinafter designated as "Lessor", and E. C. Schroeder Co., Inc., a corporation, hereinafter designated as "Lessee", WITNESSETH:

WHEREAS, Lessor is the owner of certain real estate situated in Platte County, State of Wyoming, described in Exhibit "1" hereto attached and by this reference made a part hereof, together with the minerals, mineral interests, mining rights and privileges, in and under the above described real estate, and

WHEREAS the Lessee desires to mine and remove the minerals, if any, on and under said real estate.

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

1. In consideration of the sum of One Dollar ($1.00) paid to Lessor by Lessee, receipt whereof is hereby acknowledged, of the royalties herein provided, and of the covenants of Lessee herein contained, hereby grants and leases exclusively unto Lessee the above described real estate and mining rights for the purpose of prospecting, drilling, mining for and removing minerals by stripping operations, or any other process which Lessee may elect, building roads, power lines and stations, telephone lines, slush ponds, and the maintenance thereof, building other structures thereon to mine, wash, process, treat, transport and stock pile minerals, house employees, and all other necessary purposes incidental to the mining and selling of minerals.

W.H.C.
E.C.S.

2. Except as herein provided this lease shall continue for a period of ninety nine years after the date hereof, except that Lessee shall have the right to terminate the lease at any time when in the opinion of Lessee the mining operations are not profitable, provided that, Lessee shall not have a right to terminate this lease until the Lessee has paid to or credited Lessor with the sum of $67,900.00 in royalties from the sale of iron ore mined from the premises described herein.

3. Lessor hereby warrants and agrees to defend the title of said lands. The Lessee at its option may discharge any tax, mortgage or other lien upon the premises, either in whole or in part, and in the event Lessee does so, it shall be subrogated to such lien with right to enforce same and apply royalties accruing hereunder toward satisfying same. Without impairment of Lessee's rights under the warranty in event of failure of title, it is agreed that if Lessor owns an interest in said land, less than the entire fee simple estate, then the royalties to be paid Lessor shall be reduced proportionately,

4. Should Lessee be prevented from complying with any of the covenants of this lease by reason of scarcity or inability to obtain or to use equipment or materials or be prevented or delayed due to strikes, slow-downs or other labor trouble, and/or by any statute, regulation or directive of the federal, state or municipal government or any agency or division thereof, and/or conditions beyond the control of Lessee, then while so prevented, Lessee's obligation to comply with such covenants shall be suspended, while and so long as the Lessee is prevented by such cause from performing the terms and covenants hereof; and the time while Lessee is so prevented shall not be counted against Lessee, anything in this lease to the contrary notwithstanding, except that Lessee shall pay, in any event, the minimum royalties as set forth in paragraph eight hereof.

5. All machinery, tracks, buildings, structures, improvements and other property of every kind whatsoever placed by the Lessee on or under said lands shall remain the property of Lessee, and Lessee shall have and is hereby granted the right and privilege of entering upon and removing from said lands within ninety days following the expiration or termination of said lease all of said property of every kind whatsoever; and failing to do so, the title thereto shall vest in Lessor.

6. Lessee shall have the right to mine and remove such iron ore, or other minerals, from the lands above described as Lessee may elect, and at such time or times, within the term of this agreement, as Lessee may elect, Lessee being the sole judge of what iron ore shall be mined or removed, and when the same shall be mined or removed, except as provided herein, and for each ton of
W.H.C. iron ore produced by the ore plant of Lessee from ore mined and
E.C.S. removed by Lessee from the lands above described, Lessee shall pay to Lessor twenty-five cents (25¢) per long ton of 2,240 lbs. each, the furnace weights of ore as delivered to the purchaser thereof, as evidenced by the invoices received from said purchaser by the Lessee, to govern, all payments of royalty herein provided. All payments of royalty herein provided shall be made to the Lessor at the place designated by the Lessor, in monthly installments, on or before the last day of each month for all royalty due for ore so mined during the preceding calendar month. Lessee shall keep accurate records showing true and correct statements of account of all ore so mined and removed and shall render to Lessor monthly, on or before the last day of each month, a statement showing the amount of ore so mined, and removed during the preceding calendar month. Lessor shall have the right to examine the invoices received from the purchaser of ore for the purpose of determining whether Lessor has received the proper amount of royalty.

7. Lessee shall have the right to mine and remove all minerals that are on or under the land described herein, and the Lessee shall pay to Lessor such royalties for said minerals that are mined and removed from said premises as shall be agreed upon by the parties hereto.

8. It is stipulated and agreed that the Lessee shall not pay to Lessor any royalty for any months during which no ore is removed from said land by Lessee, except that commencing with January 1, 1953 Lessee shall pay to Lessor a minimum royalty of $5,000.00 per year. If the royalties from the ore mined by Lessee on said premises do not exceed the minimum provided for herein, then the minimum royalty shall become due and payable within thirty (30) days after the end of the year.

It is agreed that Lessee has heretofore advanced the sum of Ten Thousand Nine Hundred Dollars ($10,900.00) to Lessor and will advance to Lessor upon his request a further sum for the purpose of paying to Helen A. Sackett a sum sufficient to pay the balance of the purchase price with interest due from the sale of the property described herein to Lessor by the said Helen A. Sackett. All of said sums of money so advanced or any other sums of money that may be advanced by Lessee to Lessor shall be first deducted from any and all royalties due Lessor from Lessee before payment of any royalty is made to Lessor or his assigns.

9. If for five successive years from and after the date of this contract, Lessee shall not conduct active mining operations, as defined herein, on said land, Lessor at his option may then declare this lease forfeited and terminated as provided herein. "Active mining operations" within the meaning of this lease shall mean the mining and shipping of a minimum of 20,000 long tons of ore or the payment of a minimum royalty of $5,000.00 per year on a calendar year basis.

10. Lessee agrees that it will indemnify and hold harmless Helen A. Sackett, seller in a certain contract between her and Lessor, and Lessor from and against all damages to or destruction of property, and injury to or death of any person or persons caused by or arising out of any act or thing done, or omitted to be done, in, about or incidental to the preparation for mining and the mining and removal of said minerals and shall carry all necessary compensation and/or liability insurance in connection therewith in such amounts as shall be agreed upon by the parties hereto.

11. Lessor hereby waives all claims for injuries or damages done to said land, timber, or improvements by reason of the mining and removal of the minerals and/or in the washing and/or processing
W.H.C. thereof, except as provided otherwise herein. Fences that are
H.C.S. damaged or removed by Lessee shall be replaced by Lessee.

12. This lease shall be assignable by either party without consent of the other.

13. The Lessor and Lessee agree to perform in all things the covenants, conditions and agreements herein set forth to be performed by each of them, and agree that in event of default by either of them in the performance of any of the covenants, conditions and agreements herein contained, and such default shallcontinue for a period of sixty days after written notice of such default is

given by one to the other (such notice setting out the particulars of such default and making demand upon the other to make good the alleged default), then and in that event it shall be lawful for the party giving the notice of his or its election, to terminate and forfeit this contract.

14. All notices, requests, demands and other communications hereunder shall be in writing and shall be delivered or mailed first class postage prepaid; if to the Lessor at his present address, or at such other address as Lessor may specify to Lessee in writing; if to Lessee at McGregor, Iowa, or at such other address as Lessee may specify to Lessor in writing.

15. Should there be any difference of opinion or controversy between the parties hereto as to the amount of royalty to be paid hereunder or regarding any other question of fact that may arise, the Lessor shall appoint a mining engineer or other qualified person and the Lessee shall likewise appoint a mining engineer or other competent person, which two persons so appointed, shall arbitrate said matter of difference, and if the two shall not be able to agree then they shall name a third person and the decision of any two of the said persons on the question raised by said difference of opinion or controversy, shall be final and binding upon the parties hereto. The expense of such arbitration shall be paid one-half by the Lessor and one-half by the Lessee.

16. The covenants, terms and conditions of this lease shall run with the land and shall inure to benefit of and be binding upon the successors, assigns, administrators, executors and heirs of the parties hereto.

IN WITNESS WHEREOF, the parties hereunto have set their hands and seals, the day and year first above written.

Witness to signature of
Lessor.

M. M. Cooney

W. H. Collins, M.D.
Lessor

Witness to signature of
Lessee

D. N. Sherard

N. C. SCHROEDER CO., INC.

By E. C. Schroeder
Lessee President

STATE OF WYOMING,)
ss:
COUNTY OF LARAMIE)

W.H.C.
E.C.S. On this 26th day of December, 1952, before me personally appeared W. H. Collins, to me personally known to be the person described in and who executed the foregoing instrument, and acknowledged that he executed the same as his free act and deed thereby relinquishing any and all rights thereunto under and by virtue of the Homestead Exemption Laws of Wyoming.

Mary Lou Phillips Shepherd
Notary Public

(SEAL)

My commission expires December 15, 1954.

STATE OF WYOMING)
ss:
COUNTY OF LARAMIE)

On this 26th day of December, 1952, before me appeared E. C. Schroeder to me personally known who, being by me duly sworn did say that he is President of E. C. Schroeder Co., Inc., a corporation; that said corporation has no corporate seal and that said instrument was signed in behalf of said corporation by authority of its board of directors; and the said E. C. Schroeder as such President acknowledged said instrument to be the free act and deed of said corporation.

Mary Lou Phillips Shepherd
Notary Public

(SEAL)

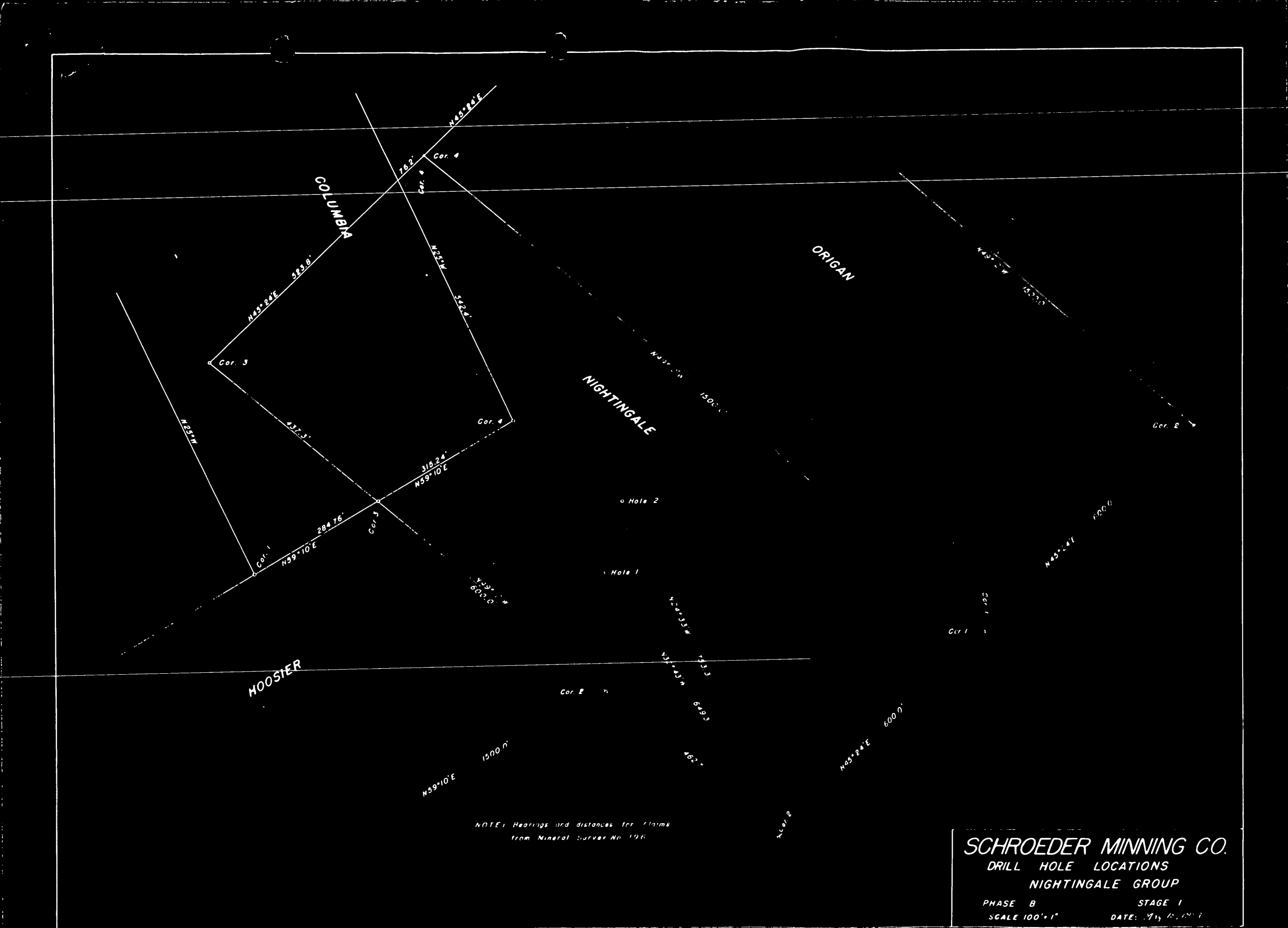
My commission expires December 15, 1954.

Assaying Report on Ore Mined and
Shipped from the Good Fortune Iron Mine
for the period from Jan. 28, 1953 to Feb. 20, 1953

Gross Tons	Moist.	Mang.	Iron	Comb.	Moist.	Insol.	Phos.
53,750	2,688	.06	63.63	63.69	5.00	8.60	.08
50,000	3,400	.10	60.02	60.12	6.80	8.85	.08
55,491	3,773	.08	60.92	61.00	6.80	8.65	.12
52,545	3,573	.11	60.32	60.43	6.80	8.70	.08
50,536	3,639	.12	61.42	61.54	7.20	8.74	.09
49,643	3,376	.13	61.22	61.35	6.80	9.25	.10
56,607	3,849	.11	59.72	59.83	6.80	8.20	.11
50,045	3,403	.14	59.32	59.46	6.80	9.00	.10
50,848	3,458	.11	60.62	60.73	6.80	9.14	.09
101,607	6,096	.10	60.02	60.12	6.00	8.52	.08
99,955	5,997	.10	59.82	59.92	6.00	10.80	.08
99,018	5,941	.11	59.22	59.33	6.00	10.20	.10
109,509	6,571	.12	61.81	61.93	6.00	6.65	.10
90,223	6,767	.09	58.82	58.91	7.50	12.50	.09
93,080	6,981	.10	57.23	57.33	7.50	13.10	.08
105,134	7,885	.08	60.42	60.50	7.50	8.10	.10
97,812	5,869	.09	62.41	62.50	6.00	9.24	.09
105,446	7,908	.09	60.82	60.91	7.50	8.00	.11
103,080	6,185	.11	60.12	60.23	6.00	8.60	.09
68,661	4,669	.10	60.42	60.52	6.80	8.72	.12
66,429	4,517	.08	59.62	59.70	6.80	9.86	.15
98,929	5,738	.10	60.82	60.92	5.80	9.00	.11
108,571	6,297	.10	60.32	60.42	5.80	8.94	.10
53,571	3,107	.09	59.22	59.31	5.80	8.96	.08
51,161	3,070	.07	54.24	54.31	6.00	16.84	.08
44,598	2,676	.07	54.24	54.31	6.00	16.84	.08
103,661	5,183	.11	62.41	62.52	5.00	6.40	.11
109,598	5,576	.09	62.41	62.50	6.00	6.30	.10
55,312	3,319	.10	62.41	62.51	6.00	7.00	.09
113,482	5,809	.12	61.61	61.73	6.00	8.00	.11
102,679	5,134	.09	62.01	62.10	5.00	6.26	.09
98,527	4,926	.12	62.21	62.33	5.00	6.32	.10
114,018	5,701	.08	62.81	62.89	5.00	7.84	.07
118,616	5,931	.11	60.62	60.73	5.00	7.00	.10
102,991	5,253	.08	62.61	62.69	5.10	5.65	.07
104,687	5,339	.10	62.21	62.31	5.10	9.56	.08
103,080	5,257	.08	63.21	63.29	5.10	6.08	.07
92,634	4,632	.11	62.41	62.52	5.00	6.00	.09
101,607	5,080	.08	61.81	61.89	5.00	8.90	.10
103,304	5,165	.10	62.81	62.91	5.00	8.35	.10

Exhibit "4"

Gross Tons	Moist.	Mang.	Iron	Comb.	Moist.	Insol.	Phos.
55,357	3,321	.10	61.32	61.42	6.00	8.10	.08
97,545	4,097	.09	59.62	59.71	4.20	9.20	.10
111,071	6,664	.10	63.21	63.31	6.00	6.35	.10
108,795	6,528	.10	60.42	60.52	6.00	7.36	.11
111,116	6,667	.09	60.22	60.31	6.00	8.50	.10
107,902	6,474	.11	60.20	60.31	6.00	7.60	.11
51,518	3,091	.10	60.40	60.50	6.00	7.00	.11
100,000	5,800	.12	60.00	60.12	5.80	8.14	.10
98,036	3,921	.10	63.80	63.90	4.00	5.76	.11
98,125	3,925	.08	62.20	62.28	4.00	6.59	.08
103,482	4,139	.10	61.80	61.90	4.00	6.94	.09
122,545	4,902	.08	62.80	62.88	4.00	6.16	.11
99,732	3,989	.10	61.60	61.70	4.00	7.30	.10
95,982	3,839	.10	62.80	62.90	4.00	6.10	.10
102,054	4,082	.08	62.20	62.28	4.00	5.62	.12
102,277	4,091	.09	62.00	62.09	4.00	6.04	.07
106,696	4,268	.11	62.00	62.11	4.00	6.16	.08
98,036	3,921	.10	63.80	63.90	4.00	5.76	.11
98,125	3,925	.08	62.20	62.28	4.00	6.59	.08
103,482	4,139	.10	61.80	61.90	4.00	6.94	.09
122,545	4,902	.08	62.80	62.88	4.00	6.16	.11
99,732	3,989	.10	61.60	61.70	4.00	7.30	.10
95,982	3,839	.10	62.80	62.90	4.00	6.10	.10
102,054	4,082	.08	62.20	62.28	4.00	5.62	.12
102,277	4,091	.09	62.00	62.09	4.00	6.04	.07
106,696	4,268	.11	62.00	62.11	4.00	6.16	.08
54,598	3,276	.10	62.40	62.50	6.00	7.40	.10
99,152	4,958	.08	62.60	62.68	5.00	7.50	.10
95,045	4,752	.10	62.00	62.10	5.00	6.14	.07
105,134	5,257	.11	58.80	58.91	5.00	10.00	.10
92,589	4,629	.10	59.60	59.70	5.00	8.66	.10
93,884	4,694	.12	61.80	61.92	5.00	6.50	.10



NOTE: Bearings and distances for claims from Mineral Survey No. 196

SCHROEDER MINNING CO.

DRILL HOLE LOCATIONS

NIGHTINGALE GROUP

PHASE B — STAGE 1

SCALE 100' = 1" — DATE: May 15, 19[illegible]

map to
296 ~ 296

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

OFFICIAL BUSINESS

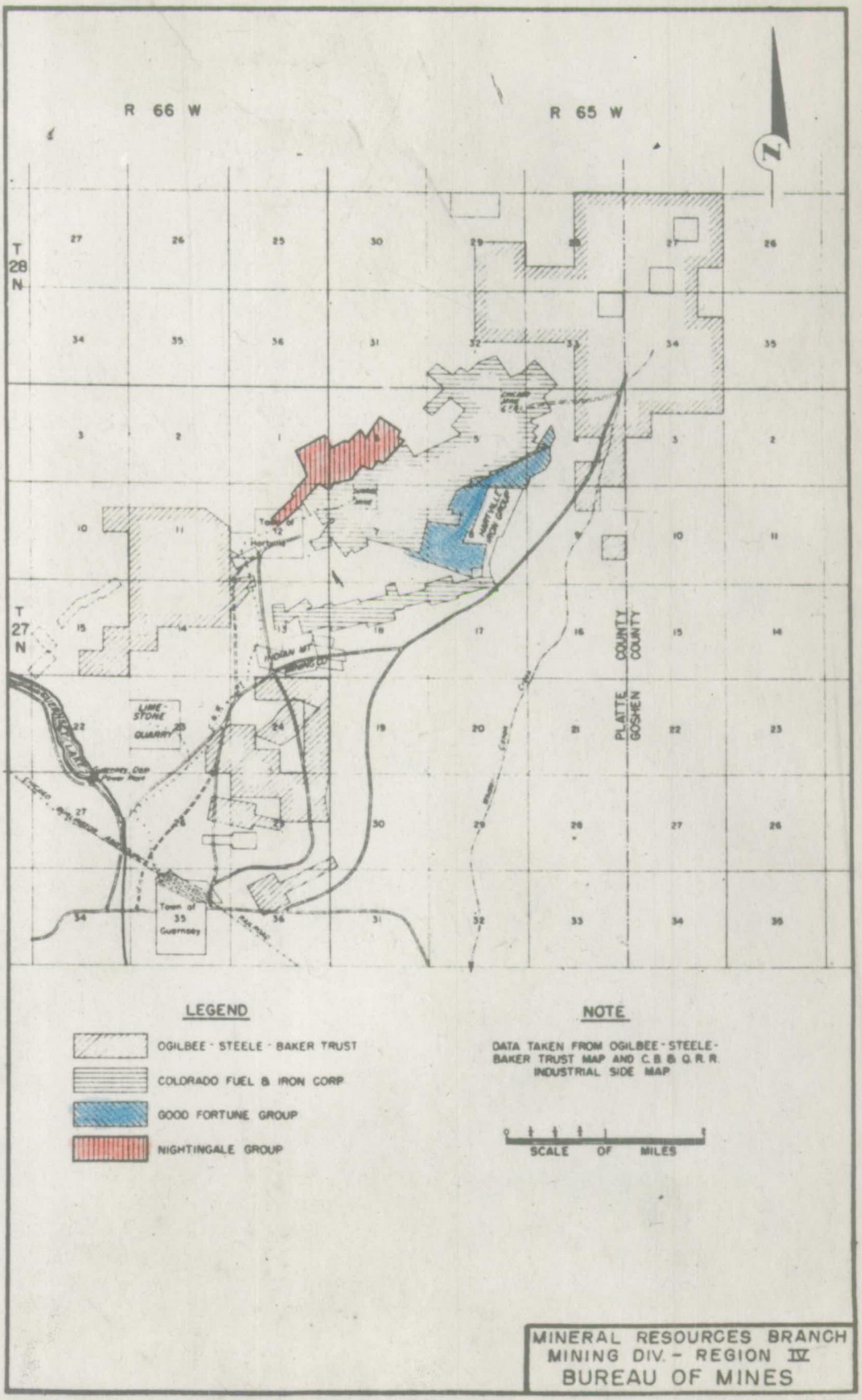


FIGURE 1. - LOCATION MAP, SHOWING RELATIVE POSITION OF NIGHTINGALE AND GOOD FORTUNE GROUPS, PLATTE COUNTY, WYOMING

UNITED STATES DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

D.M.E.A. DOCKET 2964

By D.R. MacLaren June, 1953

FIGURE 2.— GOOD FORTUNE GROUP SHOWING APPROXIMATE LOCATION OF OPEN CUT, HOLES DRILLED BY E.C.SCHRODER CO.INC., AND RECOMMENDED CHURN DRILL HOLES.

200 100 0 200 Feet

By D.R. Mac Laren June, 1953

FIGURE 3.—NIGHTINGALE GROUP SHOWING APPROXIMATE LOCATION OF RECOMMENDED CHURN DRILL HOLES

200 100 0 200 Feet

Mineral Resources Branch

Date Rec'd
SEP 1 1953
BUREAU OF MINES
Denver, Colorado

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

OFFICIAL BUSINESS

KNOXVILLE
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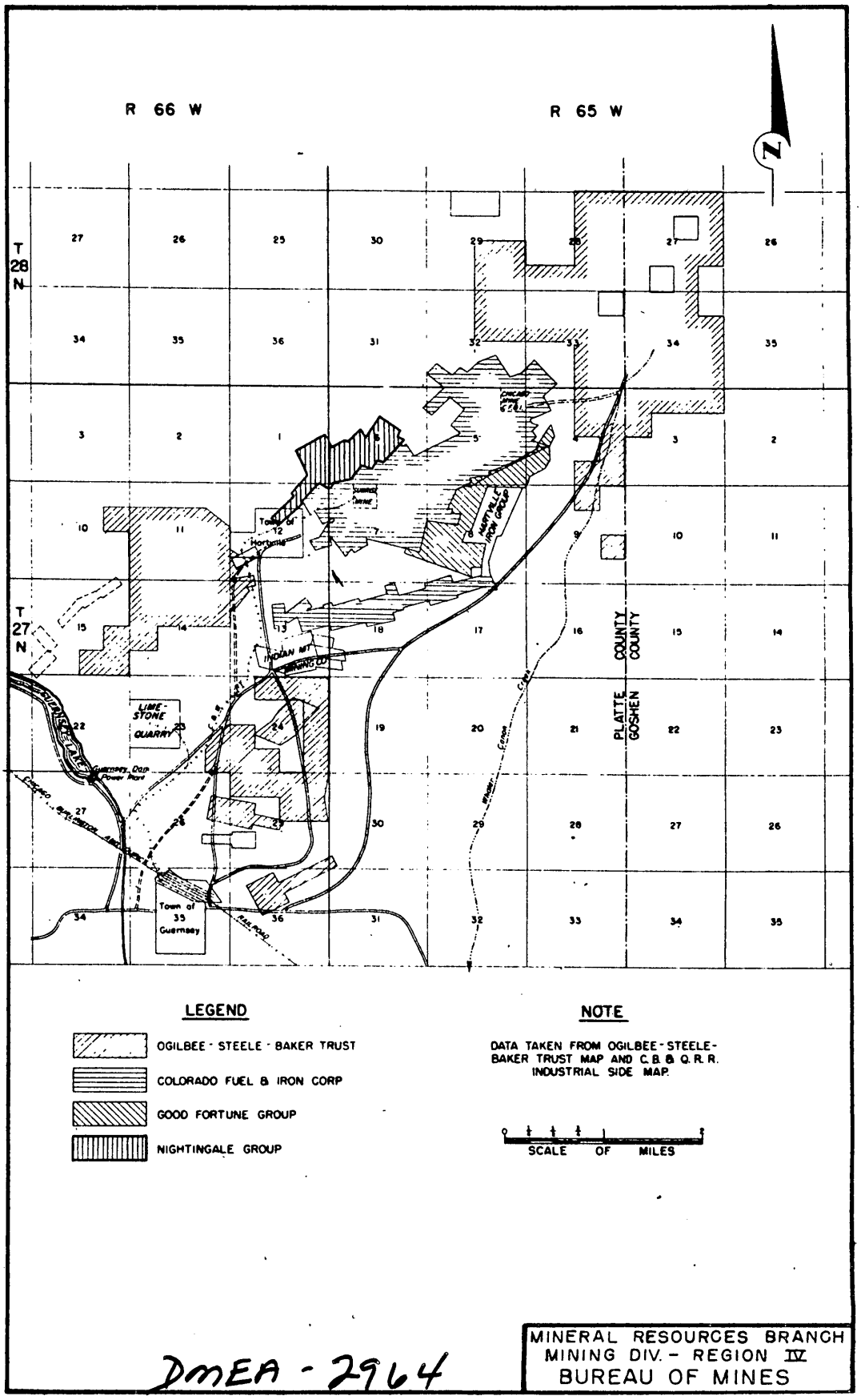
George C. Selfridge, Chairman
Operating Committee, D. M. E. A.
Dept. of the Interior
Washington 25, D. C.



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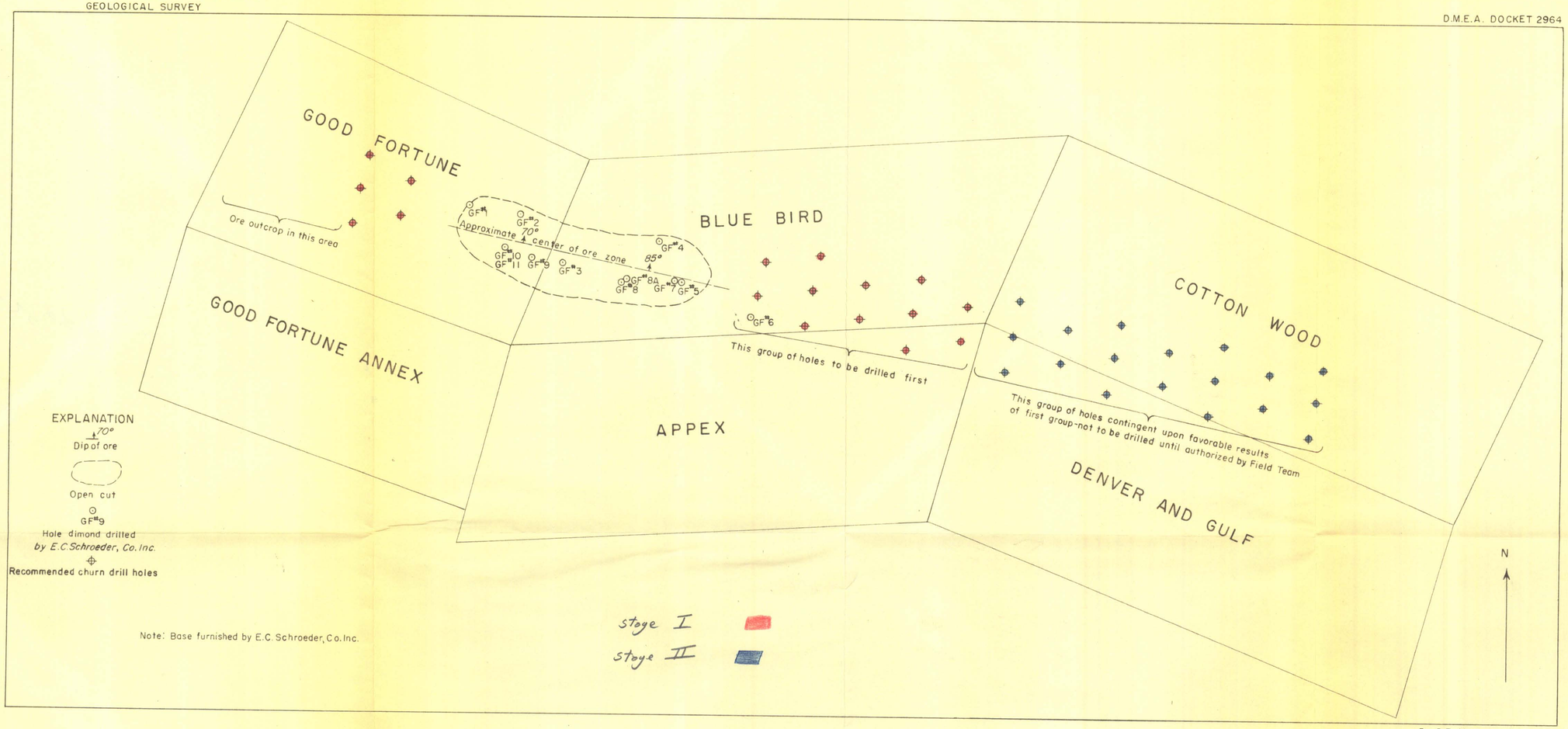
UNITED STATES DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

D.M.E.A. DOCKET 2964



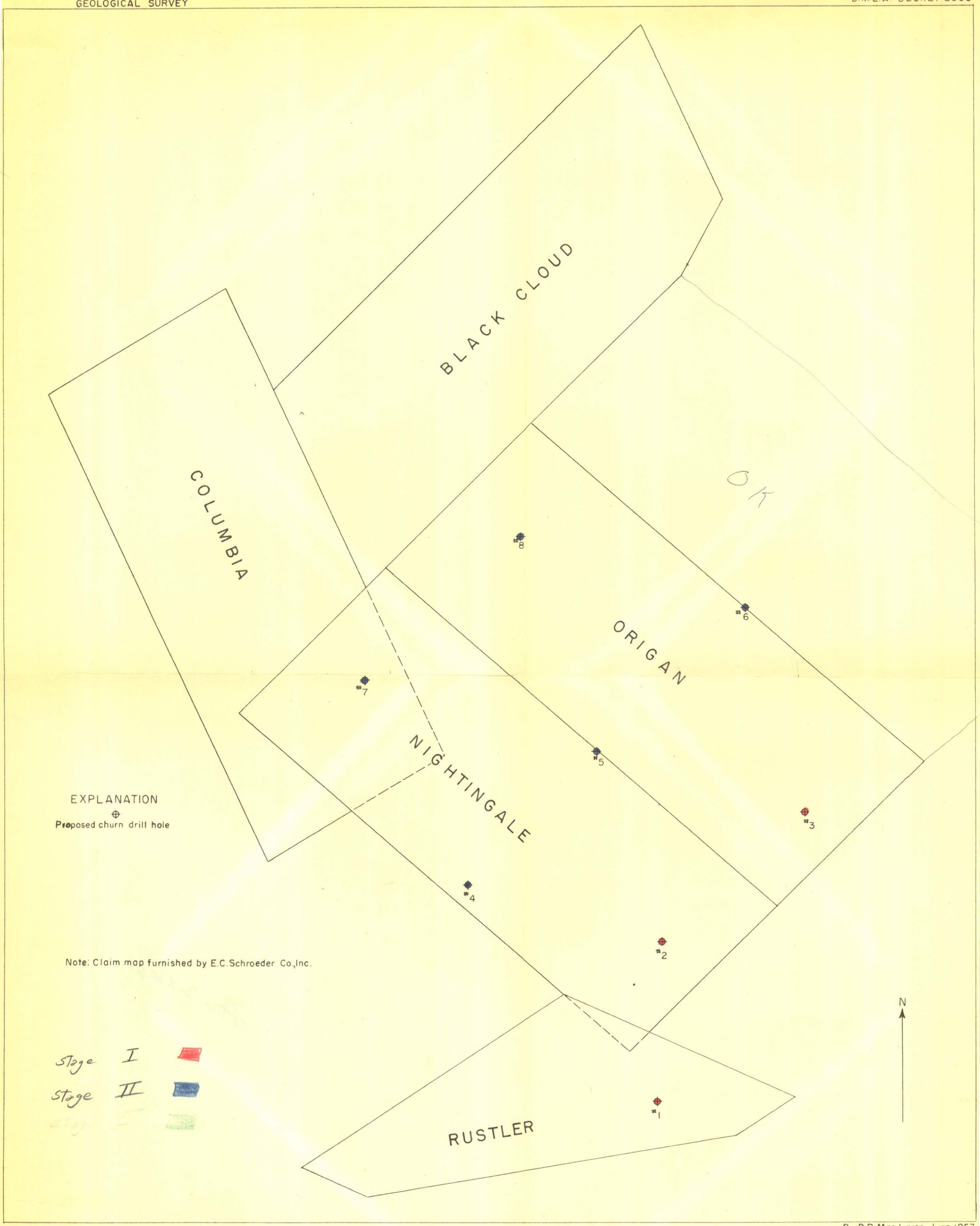
By D.R. MacLaren June, 1953

FIGURE 2.— GOOD FORTUNE GROUP SHOWING APPROXIMATE LOCATION OF OPEN CUT, HOLES DRILLED BY E.C. SCHRODER CO. INC., AND RECOMMENDED CHURN DRILL HOLES.

200 100 0 200 Feet

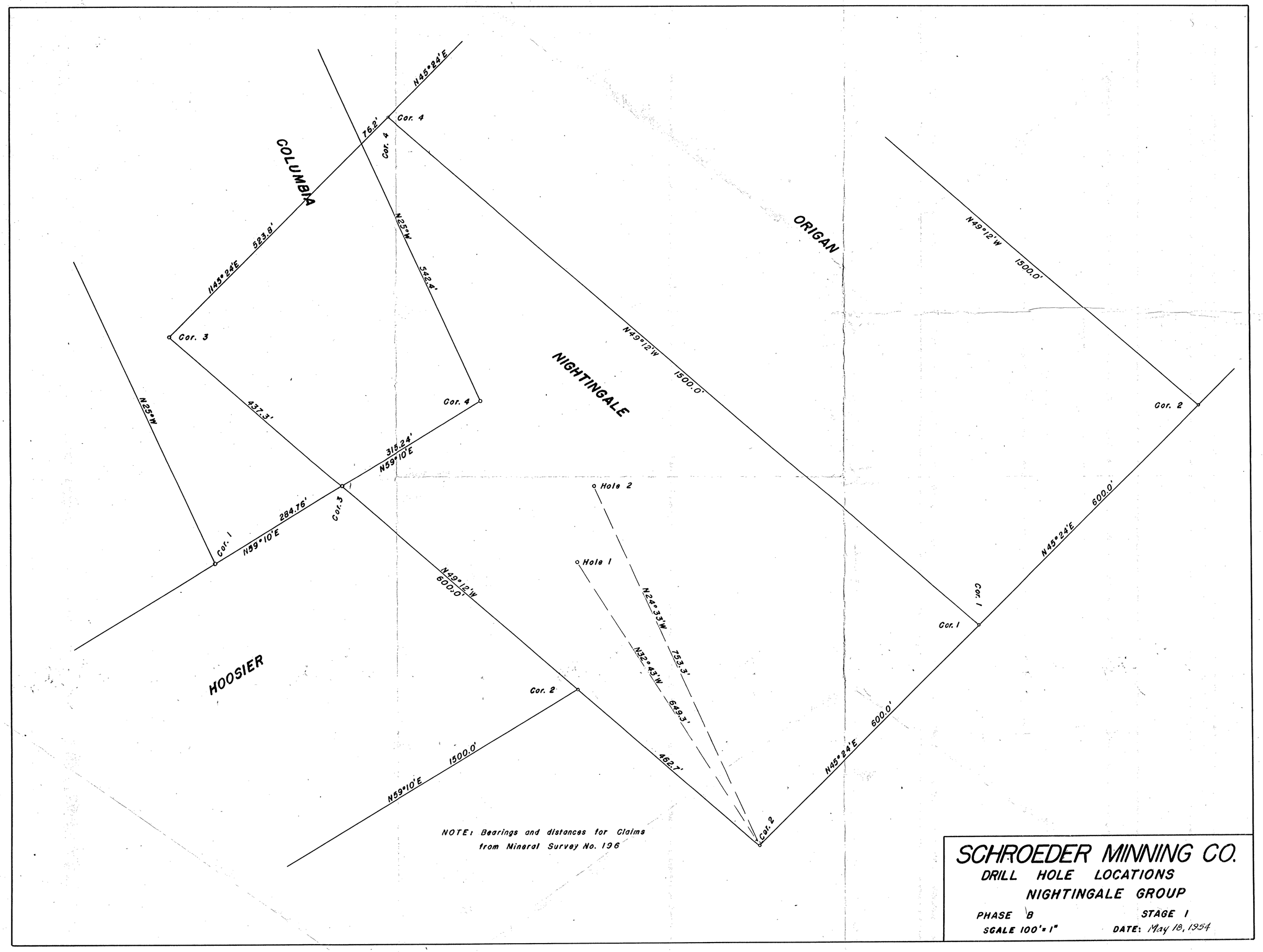
UNITED STATES DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

D.M.E.A. DOCKET 2963



By D.R. Mac Laren June, 1953

FIGURE 2.—NIGHTINGALE GROUP SHOWING APPROXIMATE LOCATION OF RECOMMENDED CHURN DRILL HOLES



NOTE: Bearings and distances for Claims from Mineral Survey No. 196

SCHROEDER MINNING CO.

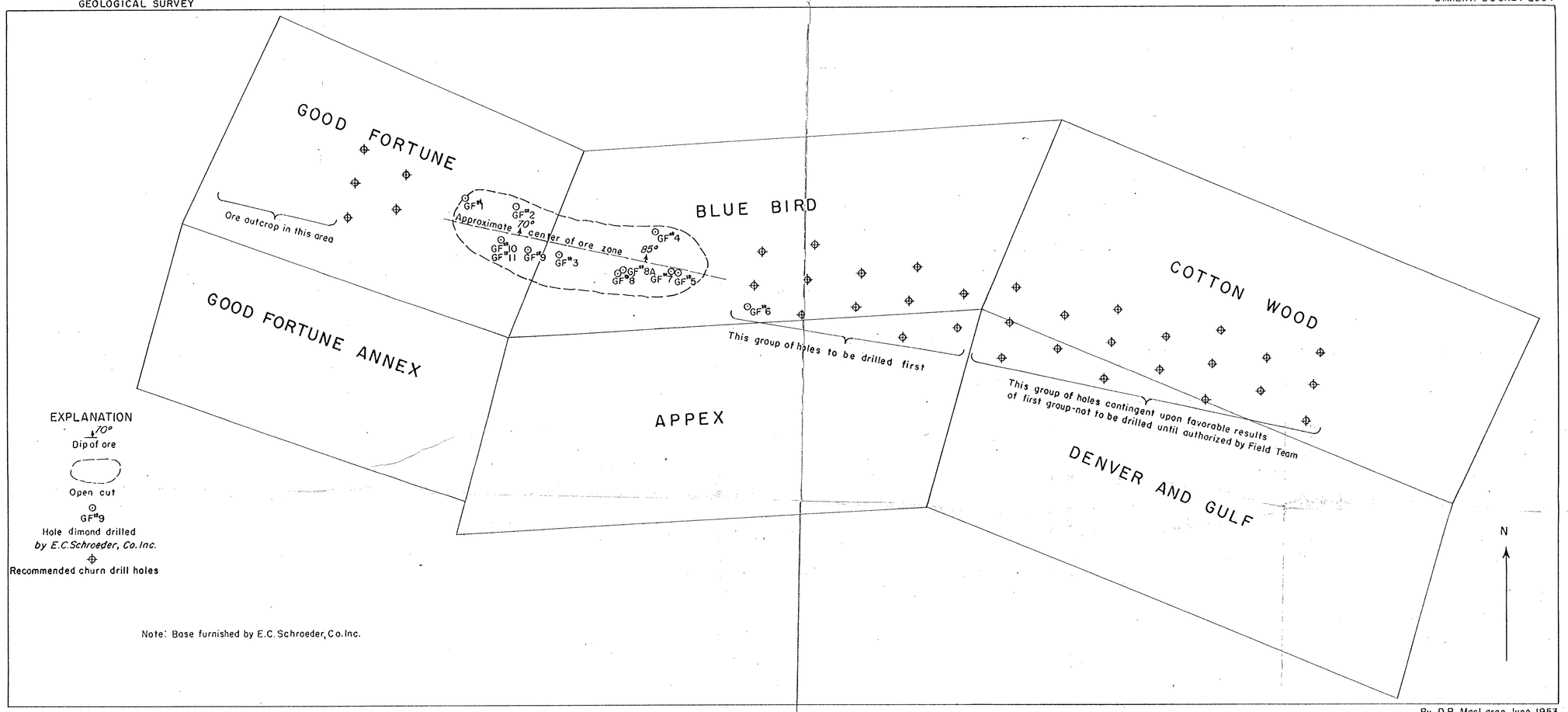
DRILL HOLE LOCATIONS
NIGHTINGALE GROUP

PHASE B — STAGE I

SCALE 100' = 1" — DATE: May 18, 1954

UNITED STATES DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

D.M.E.A. DOCKET 2964

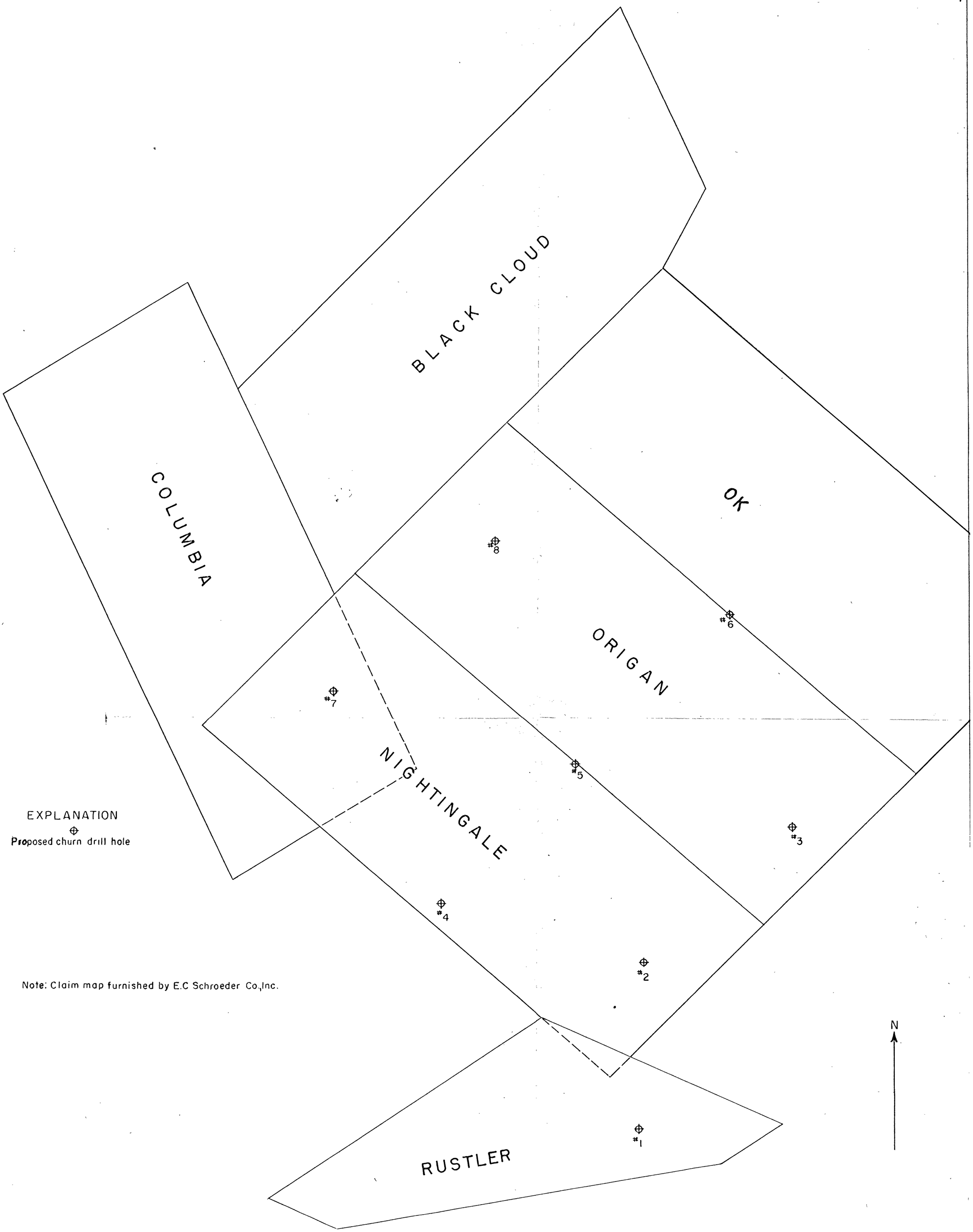


By D.R. MacLaren June, 1953

FIGURE 2.— GOOD FORTUNE GROUP SHOWING APPROXIMATE LOCATION OF OPEN CUT, HOLES DRILLED BY E.C.SCHRODER CO.INC., AND RECOMMENDED CHURN DRILL HOLES.

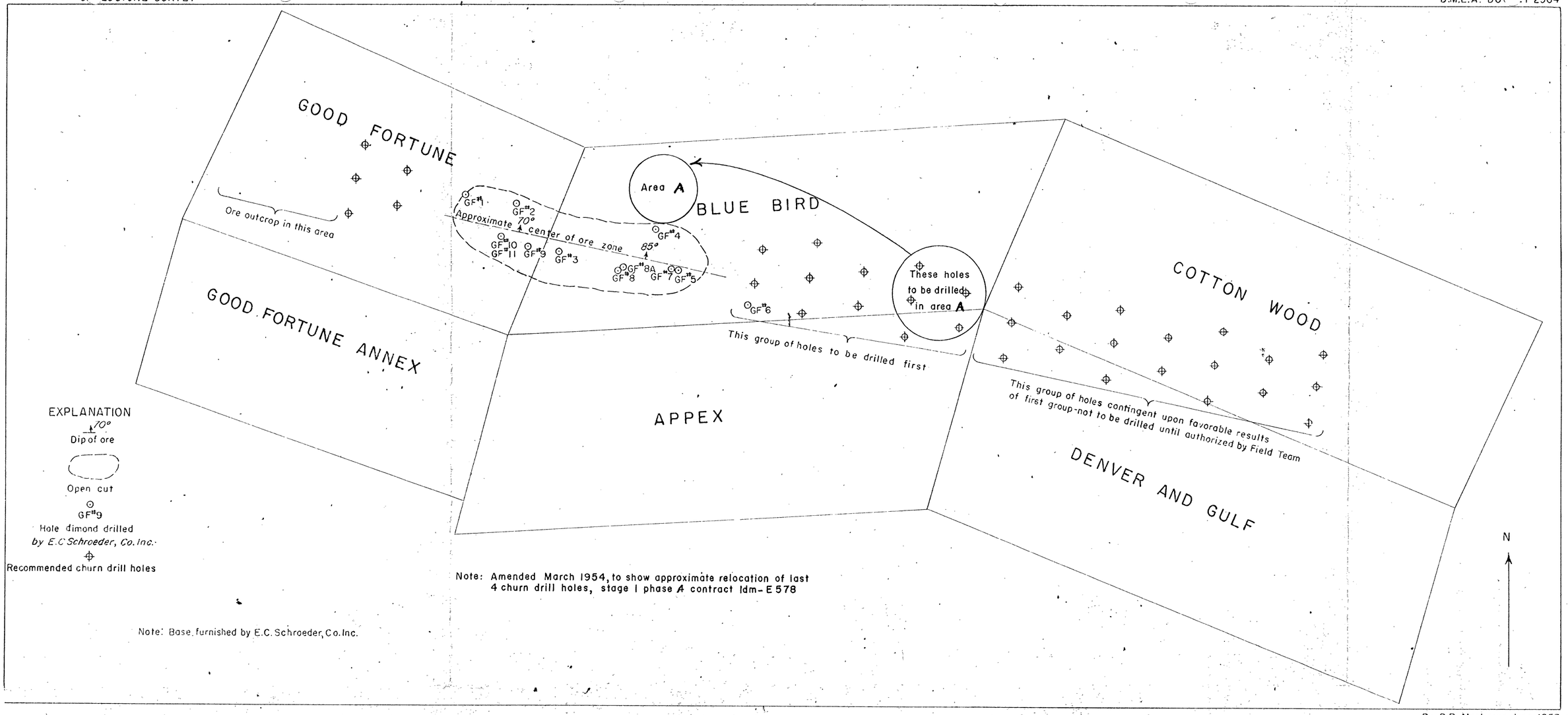
200 100 0 200 Feet

2964



By D.R.Mac Laren June,1953

FIGURE 3.—NIGHTINGALE GROUP SHOWING APPROXIMATE LOCATION OF RECOMMENDED CHURN DRILL HOLES



By D.R. MacLaren June, 1953

FIGURE 2.— GOOD FORTUNE GROUP SHOWING APPROXIMATE LOCATION OF OPEN CUT, HOLES DRILLED BY E.C. SCHRODER CO. INC., AND RECOMMENDED CHURN DRILL HOLES.

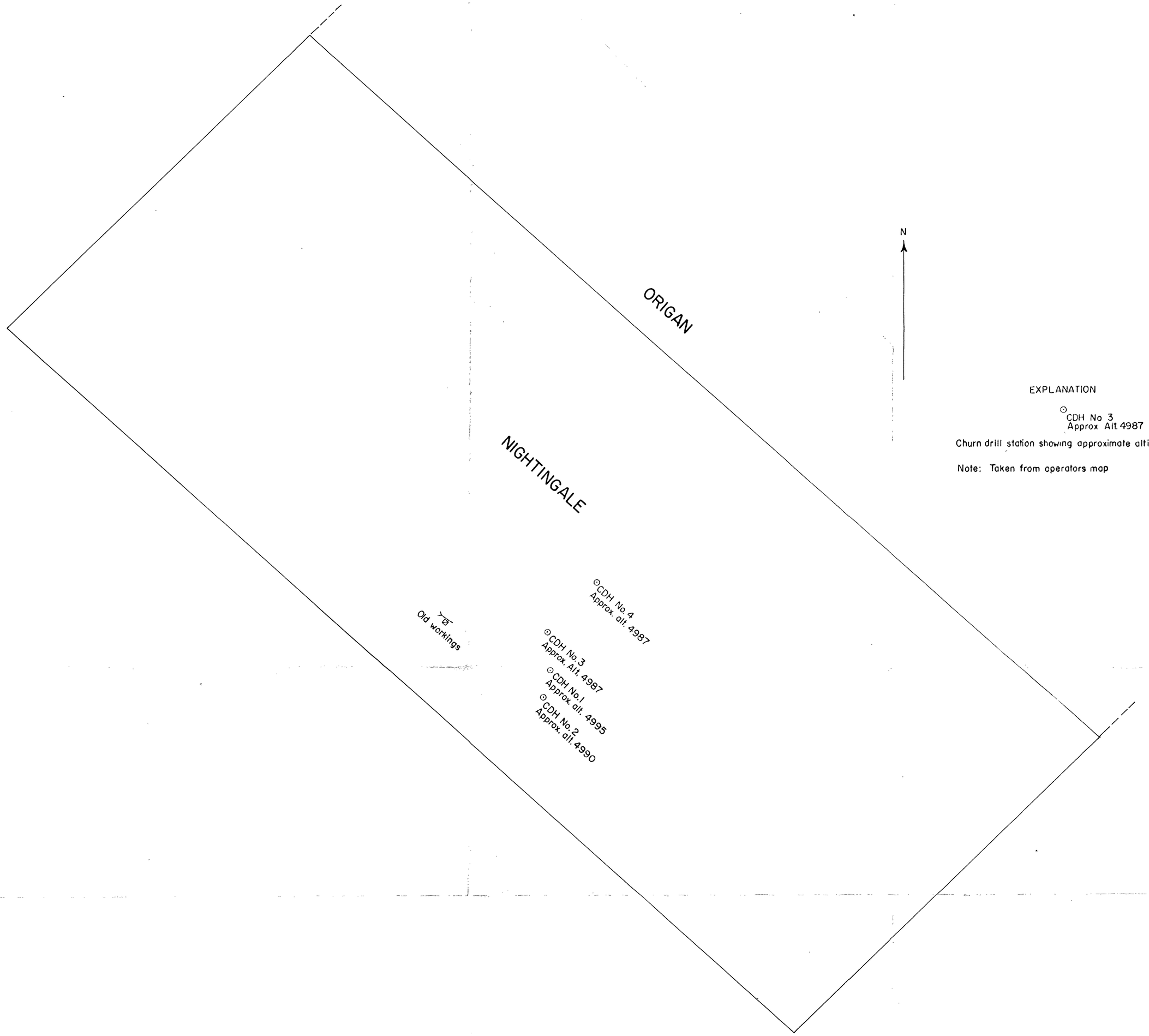


FIGURE 4—PLAN SHOWING LOCATION OF CHURN DRILL HOLES, NIGHTINGALE CLAIM, SCHROEDER MINING COMPANY, PLATTE COUNTY, WYOMING

100 50 0 100 Feet

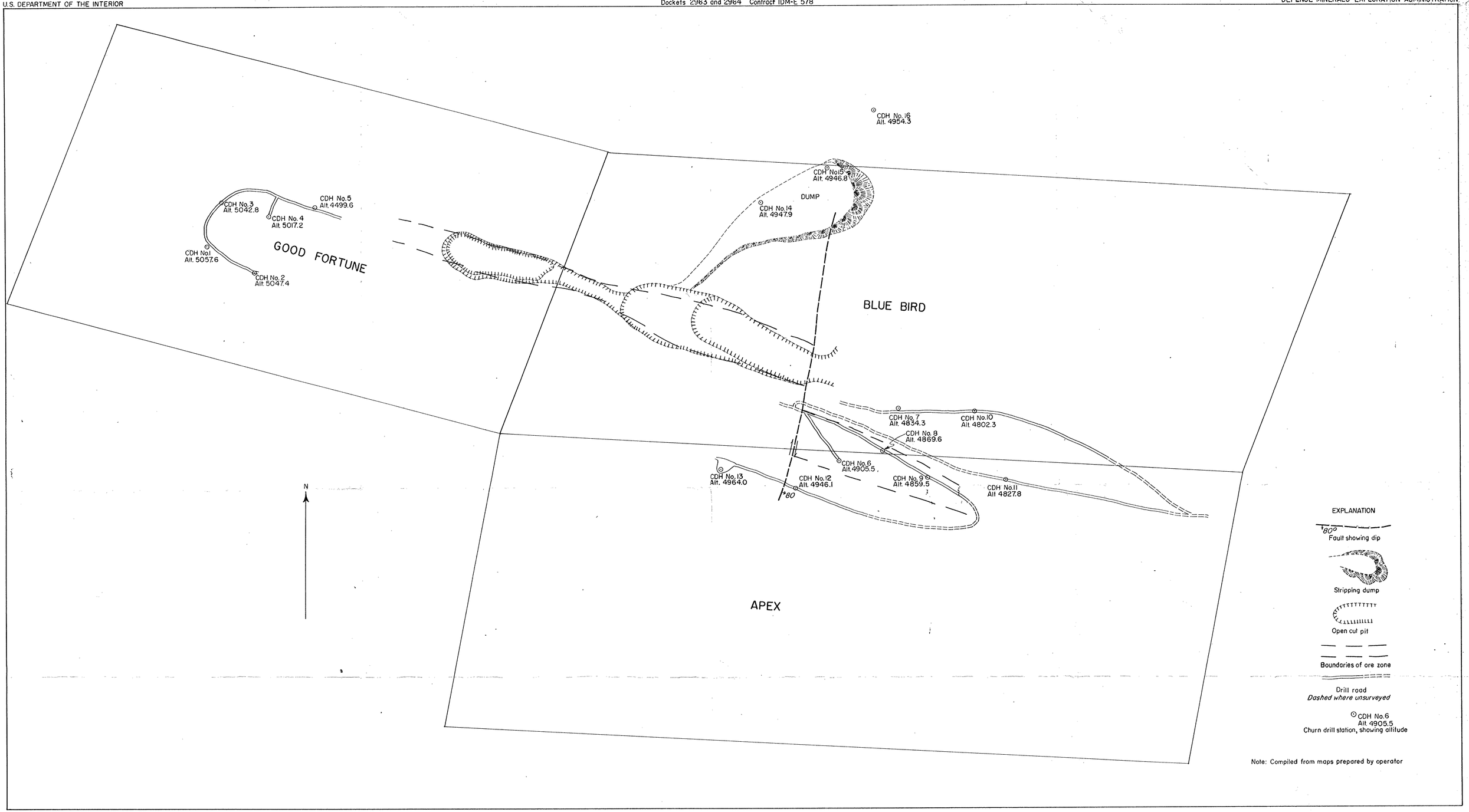


FIGURE 3 —. MAP SHOWING LOCATION OF OPEN CUT PIT, CHURN DRILL HOLES, AND ORE ZONE, GOOD FORTUNE CLAIM GROUP, SCHROEDER MINING COMPANY, PLATTE COUNTY, WYOMING

100 50 0 100 Feet

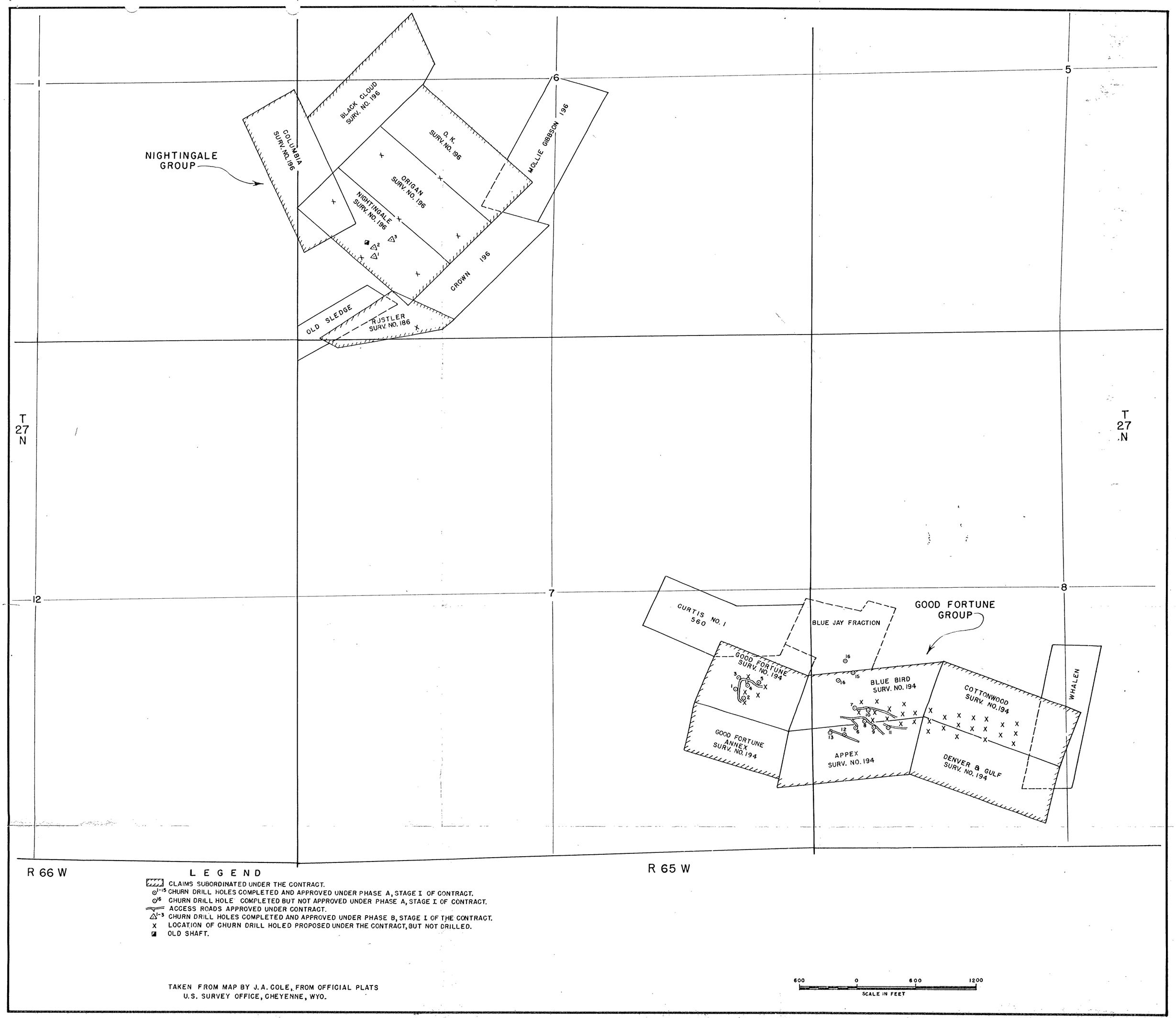


FIGURE 2 – CLAIM AND EXPLORATION MAP, SCHROEDER MINING CO., GOOD FORTUNE AND NIGHTINGALE GROUPS, PLATTE COUNTY, WYO. DMEA 2964